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Reports

— State of Colorado —

— of the —

State Engineer

(J. P. MAXWELL)

— for —

1891, 1892



SIXTH BIENNIAL REPORT

OF THE

STATE ENGINEER

TO THE

Governor of Colorado

FOR THE

YEARS 1891 AND 1892



DENVER, COLORADO:  
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS.  
1892

1891-1892





## LETTER OF TRANSMITTAL.

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DENVER, COLO., Dec. 1, 1892.

GOVERNOR :—I have the honor to transmit herewith the report of the transactions of the Department of the State Engineer for the fiscal years ending November 30, 1892. I am, sir, very respectfully,

Your obedient servant,

J. P. MAXWELL,  
*State Engineer.*

TO HIS EXCELLENCY,

JOHN L. ROUTT,

*Governor of Colorado.*



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## INTRODUCTION.

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In presenting the Sixth Biennial Report of the State Engineer to the public it is gratifying to be able to state that the duties of the office have been performed under much more favorable auspices than during the two preceding years. This is largely due to the more generous volume of our streams, supplemented by opportune rains, but in no small degree to the more efficient use of water and the increased facilities for its storage. While different localities have at times experienced a deficiency in supply, with a resultant shrinkage in crops, as a rule the streams have responded to the demands made upon them during the growing season without serious drawbacks, and a healthy tone has been given to irrigation and its accompanying interests not known for several years.

The rainfall during the season of 1891 was from twenty to fifty per cent., according to locality, greater than the average for several years, and the flow of the streams during the irrigating season was increased in like proportion. While in 1892 the precipitation has been somewhat less on the valleys, the streams have generally carried a volume equal to that of 1891, as a result of greater snowfall on the ranges, and more or less from the precipitation in the mountains during the previous year.

The marked improvement in the water supply has materially reduced the number of vexatious disputes in the allotments of water, the settlement of which has

heretofore occupied much of the time of the State Engineer, and has relieved him of the necessity of giving that close attention to the distribution formerly required.

Several causes of contention have also been removed by their determination in the Supreme Court of the State, such as "the status of priorities on a natural stream with reference to its tributaries," "the right to water for domestic use under the Constitution," "property rights in water," "the rights to transfer," etc., mention of which will be found in a subsequent part of this report.

As a consequence, the State Engineer has been able to give that closer attention to the various internal improvements provided for by the Eighth General Assembly which their magnitude and importance demanded.

Appropriations were made by the last General Assembly from the internal improvement and income funds amounting in the aggregate to \$223,000.00 for the construction of state roads, bridges and reservoirs in different and generally remote parts of the State; and while a Board of Construction was provided in each case, of which the Governor and State Engineer were members, the examination of the grounds, location of sites, preparation of plans, specifications and contracts, and the general supervision of the works naturally devolved upon the latter official. In the expenditure of this large sum of money it was, of course, contemplated that the best interests of the State and the several localities would be jointly consulted. This could only be done by devoting such time to the preliminary examination and surveys of routes, sites and locations as would result in securing those most favorable for the purposes intended, within the limits prescribed, due consideration being given to economy in construction.

A detailed account of this stewardship will be found in an appendix to this report.

As required by law, the State Engineer has also given attention and services to matters connected with the other departments of State whenever called upon by the Governor so to do, notably in the laying off and platting of a townsite on school lands at Creede, in the examination of canals constructed for the supply of

water to State lands, in the examination of grounds for Mesa County State canal, and in the general supervision of State Canal No. 1, at Canon City.

The establishment of indefinite and uncertain county boundaries has also demanded more or less attention, under the law of 1887, this duty devolving upon the State Engineer in connection with the County Surveyors of interested counties.

From the above summary of the various requirements made upon this office by the more recent enactments of the Legislature, it will be come apparent that the original scope designed for the "State Hydraulic Engineer" has become so extended and diversified that the hydraulic department is, to a certain extent, made incidental and subordinate to the special duties imposed, and that but little time is given for a personal inspection of the different water districts and irrigation projects, or for a systematic study of the important questions connected with the supply, conservation and economical uses of the waters of the State.

Adjudications of water rights have taken place since the last report in the second, third and fifth water divisions, embracing a number of water districts. The importance of these decrees and the information therein contained renders their publication in concise and tabulated form a matter of general interest and of special importance to the several localities.

They will be found under the headings of their respective districts.

## CHAPTER I.

## INSTRUCTIONS.

During the early part of the season of 1891 the water supply in the streams of the State met the demands made upon it very generally, and little friction was encountered in the administration of the department. On some of the smaller streams, however, whose heads do not reach back into the ranges of snow supply, a shortage was experienced, and the ever-recurring question of water for domestic use was raised by numerous letters of inquiry. An impression prevailed that a recent enactment of the Legislature gave a preference right for this purpose in times of scarcity as against older claims for irrigation. Many applications were also made by Water Commissioners in remote districts for the rating of ditches, it being claimed that flumes had been constructed in compliance with instructions, and it being assumed that such measurements were to be made at the expense of the State. Unfortunately, however, the law does not contemplate such measurements by this department except at the expense of the owners of ditches, and the owners are generally unwilling to incur any considerable expense of this kind, especially when the benefit inures principally to the Water Commissioner in facilitating the distribution of water.

It has been the practice to furnish an assistant for this purpose whenever the parties in interest were willing to pay the traveling expenses, and the Water Commissioners have been instructed to secure the construction of as many measuring flumes as practicable in one locality, and then urge a pooling among the owners to lighten the expense per ditch, but indifferent success has been met with.

In a large majority of cases throughout the State the distribution of water to ditches is a matter of guess work, and how wide they come of the mark may be seen from some of the Commissioners' reports, wherein it is shown that the ditches have carried during the irrigating season several times the greatest volume of the streams from which the waters are taken.



It is my conviction that a far more equitable distribution of water would be obtained, and the interests of irrigation better subserved, if the work of rating all ditches whose rights have been adjudicated was made a duty of this department, and the expense thereof borne entirely by the State, and especially is this the case where, under the present system of appointments, Water Commissioners are selected without regard to that technical knowledge necessary to insure any degree of accuracy in the work of measuring water. The Commissioners may possess general intelligence and honesty of purpose, but these alone will not suffice, and unless they are well versed in the higher mathematics, the intricate formula furnished them by this department for estimating the velocity and volume of flowing water will be as full of mysteries and surprises as a bucking broncho will develop in the tenderfoot who attempts to elucidate his motions while on his back. It is not every man of good horse sense who can ride a cavorting broncho, and the more horse sense he has the less he will care to. Nor can it be expected that a person who has spent his life in "whacking bulls," or engaged in some other exclusively manual pursuit, will take Kutter's formula

$$V = \left( \frac{\frac{1.811}{n} - 41.6 - \frac{.00281}{s}}{1 - \left( 41.6 - \frac{.00281}{s} \right) \times \frac{n}{V^r}} \right) \times V^r s,$$

determine therefrom the coefficient of mean velocity, ratio of fall to distance, area of cross section, wetted perimter, hydraulic mean depth, then guess at the coefficient of roughness, extract the square root of one factor and raise another to the powers that be, and evolve from this labyrinth of Greek literature the velocity of water per second—at least without indulging in a degree of profanity that should not be encouraged.

With well constructed measuring flumes, having proper ratings indicated thereon, an intimate acquaintance with Mr. Kutter will not be necessary to secure an equitable distribution of water. There is little benefit

to be derived, however, from an enforcement of the law requiring such flumes to be constructed by the owners of ditches unless the further work of rating is done to enable the Water Commissioners to determine the quantity carried for a given depth of water.

In reply to the inquiries and applications above indicated and for other purposes the following circular letter was issued :

Letter of instructions to Superintendents of Irrigation and Water Commissioners :

ISSUED FROM THE STATE ENGINEER'S OFFICE, }  
DENVER, COLO., July 1, 1891. }

GENTLEMEN—Following will be found for your information an Act in relation to "Water for Domestic Purposes," passed by the Eighth General Assembly :

"SECTION 1. Water claimed and appropriated for domestic purposes shall not be employed or used for irrigation or for application to land or plants in any manner to any extent whatever ; *Provided*, That the provisions of this section shall not prohibit any citizen or town or corporation, organized solely for the purpose of supplying water to the inhabitants of such city or town, from supplying water thereto for sprinkling streets and extinguishing fires or for household purposes.

"SEC. 2. Any person claiming the right to divert water for domestic purposes from any natural stream who shall apply or knowingly permit the water so diverted to be applied for other than domestic purposes, to the injury of any other person entitled to use such water for irrigation, shall be deemed guilty of a misdemeanor, and, upon conviction, shall pay a fine of not less than \$50 and not exceeding \$200, in the discretion of the Court wherein conviction is had. Each day of such improper application of water obtained in the manner aforesaid shall be deemed a separate offense. Justices of the Peace in their several precincts shall have jurisdiction of the aforesaid offense, subject to the right of appeal, as in cases of assault and battery."

There being no statutory provisions governing the distribution of water for domestic purposes, it will not be permitted to carry water in ditches exclusively for such purposes, outside of the order of priorities as established by judicial decrees for irrigation, where such carriage will injuriously affect parties having older rights for irrigation, unless a special order of the Court is obtained for such diversion. Further than the above no laws were enacted by the Eighth General Assembly pertaining to irrigation or affecting the duties of the officers of this Department.

The very limited assistants' fund provided for this Department by the last General Assembly will render it impracticable to do any rating of ditches where traveling expenses are involved, except as such expenses are paid by the owners of ditches to be rated.

Water Commissioners will therefore be compelled to exercise their best judgment in the measurement and distribution of water to ditches under decrees until such time as a fund can be provided for proper ratings.



It is especially desired that Water Commissioners in the exercise of their duties will collect from all available sources as complete and accurate data as possible relative to the number of acres of land that can be irrigated from each ditch, the number of acres in each of alfalfa, seeded grasses, natural grasses and fruit trees; also, the acreage in all other crops combined. The information thus obtained will be published in the report from this Department, and will be of value to each County, as showing the variety and extent of productions therein.

Blanks will be furnished to Water Commissioners on application to the State Engineer for the collection of information regarding existing reservoirs and reservoir sites—a sample of which will accompany this circular—and, where lands are irrigated by stored waters, it is important to know the number of acres under each reservoir.

In artesian well districts blanks will also be furnished for statements in relation thereto.

Water Commissioners having copies of the Fourth Biennial Report from this office will carefully preserve the same, as the supply is entirely exhausted, and many of the laws relative to their duties and other information of especial importance in the discharge of their duties are therein contained.

Each Water Commissioner will make a statistical report to the Superintendent of Irrigation of the division embracing his district at the close of each irrigation season, and will accompany the same with a full account of his labors during such season.

In all matters not herein mentioned you will be governed by the instructions heretofore given and embraced in the reports from this office.

J. P. MAXWELL.  
*State Engineer.*

#### WATER COMMISSIONERS.

This Department has sought to obtain through the Water Commissioners such statistical information relative to irrigation and acreage of crops as would be of value to the several sections and the State at large in showing up the agricultural resources and the advancement made therein each year. It would seem that such statistics could be obtained by the Commissioners while engaged in their routine duties without serious inroads upon their time. A general apathy on the subject, however, prevails in many of the districts. This is manifested in some localities by a disinclination on the part of the County Commissioners to allow for the time necessary to collect such data and make report thereon, in others to a refusal of the Superintendents of ditches to give the information sought, and not a few Water Commissioners are reported by the Superintendents of the divisions as derelict in making any reports whatever. The reports from some of the divisions are therefore very incomplete.

This suggests that the method of appointing these officers, and the conditions attending their tenure of office, are subject to serious criticism.

The appointments are made by the Governor upon recommendations of the County Commissioners of one or more of the Counties embraced in the water district. The Governor has no definite information as to the qualification of the parties recommended and no discretion in the matter, except to refuse to make the appointment or remove for cause after the appointments are made. This department is not advised in the matter until the bond of the appointee is transmitted for approval, and in some instances no bonds are presented.

Thus it will be seen that the County Commissioners alone can recommend, but cannot remove for cause, the Governor appoints but cannot designate the party, and the State Engineer, who under the law has supervisory control, has nothing to say in either case, but must take such timber as political and other influences dictate, and accept such services as the appointee sees fit to render. The principal objection to the method arises from the fact that no responsibility for the appointment rests upon any department, and the machinery is so complicated that a removal for incompetency or neglect of duty is practically impossible.

A change of Water Commissioners with each change of administration is also detrimental to the service. An efficient Water Commissioner should be kept in place so long as there is mutual satisfaction. His duties are peculiar, requiring a special knowledge of the flow of water and the streams and ditches of his district, such as will take the two years of service to thoroughly acquire. The first term only qualifies him to fill the position acceptably, and thereafter his proficiency and judgment become of importance to the district.

The method of paying the Commissioners is also open to objection, and renders it difficult to secure and retain competent assistants in some of the districts. The monthly bill for services is apportioned among the several Counties embraced in the district. Some decline or neglect to issue the warrants for various reasons assigned, in other Counties the warrants are at a discount, so that by the time collections are made the officer has earned

his salary a second time, or suffers a serious diminution in the amount due. To insure the retention of an efficient Commissioner his pay should be prompt and for the full amount of an equitable bill. If he is not performing good service there should be some effective means of getting rid of him.

## TRANSFERS OF WATER RIGHTS.

In the spring of 1891, the New Mercer Ditch Company filed with the State Engineer a certificate of purchase of the water rights of the Yeager ditch, District No. 3, Larimer County, Colorado, consisting of priorities numbers one and eight for a decreed volume of thirty-three and one-half cubic feet of water per second, diverted from the Cache la Poudre River. This certificate was accompanied by application for an order to the Water Commissioner of said District to permit of the transfer of said quantity of water to the New Mercer ditch upon demand of the parties in interest.

To satisfy the department as to the rights of the Yeager ditch to the thirty-three and one-half cubic feet per second decreed to it, an assistant was dispatched to Fort Collins for the purpose of measuring and determining the carrying capacity of said ditch.

From the measurements taken, and information obtained, it was ascertained that the ditch had never been constructed to carry a flow of water exceeding three and four-tenths cubic feet per second, and that from long disuse and the filling of its channel near the head with sand and *debris*, it was not in condition to permit of the diversion of any quantity of water from the river; furthermore, that the ditch did not exceed one mile in length nor cover more than 120 acres of land, and could not therefore use beneficially its limited capacity.

Upon this finding the application for an order permitting the transfer was denied, whereupon a temporary injunction was obtained from the County Court of Larimer County restraining the Water Commissioner from interfering with the diversion of the thirty-three and one-half cubic feet purchased into the New Mercer ditch.

Hearing was had before Judge Allen of the District Court for Arapahoe County, on a motion to dissolve the injunction, and upon showing of the facts the motion was sustained and the Water Commissioner instructed to shut the disputed appropriations out of the New Mercer ditch.

The above was the first of several applications for the transfer of water rights, in part and as a whole, from one ditch to another following, and based upon the enunciation of that right by the Supreme Court of the State of Colorado in the case of *Strickler vs. Colorado Springs*.

In the syllabus of that opinion two important principles are enunciated and by the decision established :

*First.* That "a prior appropriator of water from a stream may change the point of diversion and the place of use without losing his priority, provided the rights of others are not injuriously affected by such change."

*Second.* That "a priority to the use of water for irrigation is a property right, and may be sold and transferred separately from the land in connection with which the right ripened."

The right of sale and transfer to a different point of diversion being settled, it becomes important to know under what regulation it is to be effected, and who is to determine the question of injury to others.

In the opinion quoted, it is evidently assumed that the adjudications of water rights were uniformly based upon correct statements of facts as to dimensions and capacity of ditches, which, in a large number of cases, is unfortunately not true, and possibly contemplates only such injurious effects as might result from a change of use, as from mechanical to agricultural purposes.

Under the law, this department has the general supervising control of the public waters of the State, and the distribution of those waters is regulated by the priority and quantity allotted to each ditch by the decree of the court; that is, the decrees as tabulated and placed in the hands of the Water Commissioners, are made the basis for distribution.

The quantity decreed in very many cases exceeds several fold the capacity of the respective ditches to



carry, but so long as such excessive quantity is attached to the ditch with which the right is alleged to have ripened, there is little danger of injury to others from a misappropriation of water, as the quantity diverted would be controlled by the capacity of the ditch. When, however, it is sought to transfer in such cases, to a ditch of larger dimensions, the full quantity decreed to a ditch or the excess above its carrying capacity, it at once becomes apparent that injurious consequences will result to some one.

It is claimed that the decrees are *prima facie* evidence of the rights of the parties holding them; that a court only has the right to go behind the adjudication and make inquiry as to the actual diversion and use of the water; and that upon presentation of a proper certificate of purchase, this department, without considering the equities in the case, should permit of the transfer. Such a course would work serious injury to the parties who have appropriated and used for a series of years the excess of waters claimed by the erroneous decrees, and to prevent this, so far as possible, it has been the practice of this department to permit of no transfers from one ditch to another without first making a careful measurement of the ditch from which the right is sought to be alienated and an examination of the surrounding conditions connected therewith. In a majority of the cases presented the priorities are among the oldest in the district, the ditches small and frequently in disuse and the area of cultivated lands under them so limited as to render it impracticable to use the quantity of water decreed beneficially upon them.

In most cases a sufficient quantity of water is retained with the ditch—generally its full capacity—to irrigate all lands under it. In one or two instances the ditches had ample dimensions for the amount decreed, but it is very questionable whether such amount had ever been or could be put to a beneficial use on the small areas under their lines.

As an illustration of the latter, on July 7, 1892, notice was received by this office of the purchase by the City of Fort Collins from A. T. Gilkerson of four cubic feet of water per second of time, "the same being part and parcel of the appropriation of the John R. Brown ditch, known as priority number fourteen ac-

ording to the decree of the District Court of the Second Judicial District of Colorado.

It was expressly agreed and understood in the deed conveying the said four cubic feet of water per second to the city of Fort Collins, "that it is that particular part of said appropriation which had been used for a beneficial purpose by the party of the first part and his grantor, each and every year since the rendering of said decree, more particularly described as the four feet which by the Water Commission of District No. 3, Division No. 1 of Colorado, is reported as having been used."

The John R. Brown ditch has a priority dating back to May 1, 1865, for eight cubic feet per second, and is one mile in length.

In 1887 the Water Commissioner reported 200 acres as having been irrigated therefrom. In 1890 he reported the average amount carried in the ditch during the season at four cubic feet per second.

|  |     |
|--|-----|
| Number of acres possible to irrigate.....                      | 280 |
| Number of acres irrigated.....                                 | 266 |
| In 1892, average number cubic feet per second<br>carried ..... | 3½  |
| Number of acres possible to irrigate.....                      | 280 |
| Number of acres irrigated.....                                 | 266 |

Upon receipt of the above notice of transfer the Water Commissioner was instructed in part and effect as follows: "If the statement in the deed is true that four cubic feet of water per second have been carried through said ditch each year and used for a beneficial purpose, you will permit the transfer of such quantity to the city conduits. If my conclusions are correct that the above quantity transferred is all that has been diverted and beneficially used through said ditch, you will close the same down, to remain closed during all times of scarcity of water in the river, or when there is a demand for all the water by other ditches, \* \* \* It being the purpose in permitting such transfer to guard against others being injuriously affected thereby, through the future diversion of water under an old decree, the right to which up to this time may never have been asserted." The Water Commissioner replying, reported that the ditch would carry the full amount of the decree and that the quantity actually diverted

and used was so uncertain he did not feel warranted in closing.

Cases of this kind should be matters of judicial inquiry and settlement ; and it is questionable whether, with the uncertain status of rights under the old decrees, all applications for a change in the point of diversion from the actual stream, under sale, should not be submitted to a competent court for the determination of the question of injury to others. At all events there should be some statutory regulation of the matter, by which the parties in interest would be required to furnish some official certificate that the ditch from which the water rights in part or as a whole are sought to be alienated is entitled by appropriation and use to the same, setting forth the quantity sold and the rights, if any, remaining in the ditch. Such a document filed in the office of the State Engineer would enable this department to keep a record of such transfers and furnish the warrant of authority for the distribution in conformity therewith.

## GAUGING STATIONS.

The importance to irrigation of continuing observations on the discharge of the principal streams of the State is fully recognized, and the gaugings have been kept up to the fullest extent practicable with the means at command ; but the efficiency of the work has been somewhat impaired from the want of permanent and unchangeable stations, and quite a percentage of allowance will have to be made for the results obtained.

The limited appropriation for the State Engineer's assistant fund has rendered it impossible to make such improvements as could be desired for the more accurate measurements of the streams heretofore gauged, and has precluded the possibility of establishing new observation stations on some of the water channels of the western slope, where their importance would seem equally as apparent. Nor has it been practicable to continue the observations beyond the irrigating season for the same reason, excepting in the case of the Cache la Poudre river, where there is a register which requires attention but once a week.

It is a matter of regret that these measurements cannot be continued on all the streams in the South Platte division throughout the year, in order that a close estimate might be made of the annual discharge, and some basis given for the storage of water during the non-irrigating season.

A thorough knowledge of the water supply is essential in determining the area that can be irrigated therefrom, and enterprises looking to the conservation of the supply will be prosecuted with much more confidence when its extent is definitely known.

That the irrigable area can be largely extended from the flow in the streams during those portions of the year when not applied directly to the lands, can be readily seen from the rough estimates following in a table of winter discharges, which are based upon the gaugings of the Cache la Poudre during the winter months and the early and late gaugings on the other streams, the proportionate increase or decrease being given to the latter streams that their volumes at such gaugings bear to the former.

Of course, there are opportunities for storage at the high stages of the streams during the irrigating season and following heavy rainfalls which are not included in these estimates.

For the table of discharges of the Arkansas and Rio Grande rivers this office is indebted to the continued courtesies of Prof. F. H. Newell, of the United States Geological Survey, the stations on those rivers having been thus far kept up by that department, and for the past season on the Cache la Poudre to Prof. L. G. Carpenter, of the Agricultural College; the registering instrument and all appurtenances at the latter station belonging to the State, having been destroyed during the heavy flood in 1891, occasioned by the breaking of the Chambers lake dam, and another instrument substituted by Prof. Carpenter.

For the payment of observers during the year 1891 and 1892, at all the gauging stations maintained by this department, there has been expended the sum of \$545.35, the list embracing nine stations and different observers, as shown in the itemized statement of expenditures from the assistant fund.



Following will be found the report in detail on gauging stations made by Assistant L. R. Hope, in charge of field-work, together with estimated cost of constructing permanent stations on the several streams:

*Gauging Station No. 1, Cache la Poudre River.* Location about twelve miles above Fort Collins, consists of rubble masonry side walls, with natural boulder and gravel bed of river for floor, instrument-house and clock work register. The area of cross-section varies from nothing to twenty-five square feet, due to scouring as volume increases. To place the station in good working order, there should be laid a stone or concrete floor between the walls, the banks rip-rapped above and below for about 100 feet, and some small bowlders removed from bed of stream to prevent cross-currents and eddies. Estimated cost, \$1,200.00.

June 9, 1891, the instrument-house and clock work register were washed away by a flood, caused by the breaking of the waste-way to the Chambers Lake reservoir at the head of the Cache la Poudre River. The house was rebuilt at a cost of \$30.00, and a new instrument supplied at a cost of \$75.00. Fair results are obtained from this station, with the exception of the scouring before mentioned.

*Gauging Station No. 2, Arkansas River, at Canon City.* All records taken by the General Government.

*Gauging Station No. 3, South Platte River.* Location in 1891, about twenty-seven miles above Denver, removed in 1892 to Platte Canon, to get under the protecting wing of a new observer, the old one having moved away. This station has a plain gauge rod which demands three readings daily, has a modified form of cross-section, with each radical change in volume, and requires frequent visits on the part of an Engineer, to make measurements and note of changes.

The stream from its importance would seem to merit a permanently constructed station not kept on wheels, with an instrument for registering that would require attention but once a week. A suitable location can be obtained above all ditches in the canon, and a structure built at a total cost of about \$800.

*Gauging Station No. 3, "B."* Location, South Platte River at foot of Sixteenth street, Denver. Obser-

vations were taken at this station for the season of 1891 as a check on the amount of water flowing into District No. 2, but owing to its shifting sand bed the results were not reliable and the observations were discontinued.

*Gauging Station No. 4, Clear Creek.* Location, five miles above Golden. Readings taken from the plain rod.

The difficulties attending observations on this stream were fully set forth in the Fifth Biennial Report to the Governor. The unfavorable conditions have not improved with time. Observations were taken during the season of 1891, but were so unreliable as not to be worthy of tabulation, and they were discontinued the following season. A permanent station will cost about \$700.

*Gauging Station No. 5, St. Vrain Creek.* Location in 1891, just below the junction of the North and South Forks, where observations were taken for that season. The results not being entirely satisfactory, it was deemed advisable to change the location, and in order to get above the head-gates of all ditches it was found necessary to establish a station on both the North and South branches. This was done in May, 1892. The station on the North branch was located at the upper wagon-road bridge at Lyons, the abutments of the bridge forming the side walls, the floor consisting of broken rock dumped in when the bridge was built. This can be made a reliable and permanent station by flagging the creek bed, rip-rapping the banks above and below, and including instrument house and register will cost about \$300.

*Gauging Station No. 5 "A," South Branch St. Vrain.* Located two and one-half miles above Lyons, for the convenience of an observer. The banks and bed are composed of bowlders and gravel and are open to the criticisms heretofore made on channels with similar conditions.

*Gauging Station No. 6, Bear Creek.* Located at Morrison. Observations were taken in 1891, but on account of its minor importance and in the interest of economy were discontinued in 1892.

*Gauging Station No. 7, Boulder Creek.* Location two and one-half miles above Boulder City. No change has been made in this station since last report. It has dry masonry walls, an instrument house and register, and gives very fair satisfaction. At small expense in removing a few bowlders it can be put in good order.

*Gauging Station No. 8, Big Thompson Creek.* Occupies old site about ten miles west of Loveland. Permanent improvements with register, etc., will cost about \$800.00.

*Gauging Station No. 9, South Boulder Creek,* is maintained at old location and has proven fairly satisfactory.

Following will be found tabulated statements showing the results of observations taken at the several stations during the years 1891 and 1892. Also a comparative table showing the mean discharge from June 1 to September 30 for the years 1889, 1890, 1891 and 1892:

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF THE CACHE LA POUDRE RIVER, AT GAUGING STATION  
No. 1, FOR

1891.

| Day. | Jan. | Feb. | Mar. | Apr. | May  | June  | July | Aug. | Sep. | Oct. | Nov. | Dec. | Day  |
|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| 1    | 86   | 131  | 70   | 39   | 355  | 2005  | 784  | 292  | 148  | 151  | 100  | 84   | 1    |
| 2    | 83   | 118  | 63   | 50   | 394  | 1979  | 849  | 284  | 151  | 148  | 98   | 95   | 2    |
| 3    | 61   | 109  | 59   | 59   | 441  | 1790  | 864  | 273  | 155  | 145  | 98   | 72   | 3    |
| 4    | 50   | 100  | 52   | 48   | 565  | 1542  | 824  | 269  | 158  | 128  | 95   | 54   | 4    |
| 5    | 50   | 89   | 50   | 48   | 806  | 1634  | 768  | 269  | 151  | 131  | 84   | 60   | 5    |
| 6    | 46   | 83   | 50   | 54   | 1053 | *1840 | 832  | 251  | 134  | 134  | 84   | 72   | 6    |
| 7    | 44   | 66   | 55   | 59   | 1160 | 1902  | 1003 | 233  | 131  | 141  | 77   | 72   | 7    |
| 8    | 46   | 63   | 71   | 75   | 1239 | 2436  | 907  | 212  | 138  | 134  | 72   | 77   | 8    |
| 9    | 52   | 66   | 73   | 86   | 1179 | 5060  | 768  | 200  | 138  | 122  | 72   | 77   | 9    |
| 10   | 52   | 66   | 68   | 97   | 1044 | 3600  | 699  | *200 | 138  | 115  | 77   | 82   | 10   |
| 11   | 66   | 68   | 66   | 109  | 823  | 3065  | 626  | 192  | 138  | 112  | 82   | 109  | 11   |
| 12   | 76   | 68   | 66   | 109  | 908  | 2635  | 558  | 184  | 138  | 112  | 82   | 100  | 12   |
| 13   | 76   | 68   | 61   | 103  | 710  | 2190  | 531  | 180  | 138  | 112  | 87   | 100  | 13   |
| 14   | 78   | 66   | 55   | 81   | 766  | 1860  | 524  | 173  | 128  | 112  | 84   | 100  | 14   |
| 15   | 86   | 66   | 52   | 71   | 710  | 1728  | 512  | 208  | 125  | 112  | 79   | 98   | 15   |
| 16   | 109  | 57   | 52   | 68   | 970  | 1624  | 492  | 225  | 125  | 112  | 67   | 100  | 16   |
| 17   | 109  | 57   | 54   | 78   | 1092 | 1501  | 462  | 220  | 125  | 115  | 72   | 92   | 17   |
| 18   | 112  | 57   | 54   | 134  | 1130 | 1373  | 432  | 233  | 122  | 122  | 72   | 74   | 18   |
| 19   | 145  | 57   | 57   | 166  | 1208 | 1752  | 426  | 238  | 118  | 112  | 70   | 72   | 19   |
| 20   | 131  | 59   | 63   | 166  | 1250 | 1579  | 415  | 238  | 115  | 112  | 82   | 72   | 20   |
| 21   | 131  | 66   | 73   | 159  | 1312 | 1545  | 392  | 242  | 138  | 112  | 100  | 72   | 21   |
| 22   | 131  | 71   | 76   | 159  | 1355 | 1479  | 381  | 269  | 138  | 112  | 95   | 72   | 22   |
| 23   | 145  | 73   | 73   | 194  | 1409 | 1534  | 354  | 288  | 138  | 115  | 84   | 74   | 23   |
| 24   | 131  | 68   | 70   | 214  | 1858 | 1545  | 322  | 273  | 141  | 112  | 84   | 92   | 24   |
| 25   | 131  | 83   | 66   | 258  | 2499 | 1848  | 302  | 229  | 141  | 109  | 82   | 87   | 25   |
| 26   | 141  | 86   | 57   | 296  | 2273 | 1579  | 283  | 229  | 141  | 106  | 87   | 56   | 26   |
| 27   | 115  | 86   | 52   | 338  | 2173 | 1260  | 278  | 220  | 141  | 107  | 84   | 56   | 27   |
| 28   | 83   | 83   | 46   | 323  | 1979 | 1049  | 288  | 217  | 148  | 106  | 84   | 72   | 28   |
| 29   | 88   | ---- | 42   | 323  | 2018 | 1076  | 307  | 192  | 151  | 104  | 82   | 72   | 29   |
| 30   | 88   | ---- | 40   | 344  | 2044 | 985   | 307  | 173  | 151  | 104  | 84   | 72   | 30   |
| 31   | 109  | ---  | 32   | ---- | ---- | ----  | 298  | 155  | ---- | 104  | ---- | 72   | 31   |
| Mean | 92   | 79   | 59   | 144  | 1221 | 1900  | 541  | 228  | 171  | 118  | 83   | 79   | Mean |

\*NOTE—From June 7 to August 10 gauge heights were measured by J. L. Armstrong, Water Commissioner of District No. 3. The instrument house, including self-recording register, was carried away on June 9 by floods, caused by cutting or breaking of the waste-way of Chamber's Lake reservoir, the maximum discharge of which approximated 21,000 cubic feet per second.

## TABLE

SHOWING DAILY MEAN DISCHARGE, IN CUBIC FEET PER SECOND OF TIME, OF THE CACHE LA POUDRE RIVER, AT GAUGING STATION NO. 1, FOR

1892.

| Day  | Jan. | Feb. | Mch. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Day  |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| 1    | 70   | 98   | 128  | 60   | ---- | 750  | 1392 | 327  | ----  | ---- | ---- | ---- | 1    |
| 2    | 65   | 98   | 134  | 67   | ---- | 786  | 1340 | 322  | ----  | ---- | ---- | ---- | 2    |
| 3    | 54   | 98   | 134  | 60   | ---- | 1112 | 870  | 307  | ----  | ---- | ---- | ---- | 3    |
| 4    | 50   | 104  | 128  | 60   | ---- | 1415 | 1020 | 293  | ----  | ---- | ---- | ---- | 4    |
| 5    | 52   | 104  | 122  | 72   | ---- | 1002 | 993  | 272  | ----  | ---- | ---- | ---- | 5    |
| 6    | 52   | 104  | 106  | 72   | ---- | 960  | 950  | 268  | ----  | ---- | ---- | ---- | 6    |
| 7    | 50   | 112  | 98   | 72   | ---- | 1084 | 908  | 288  | ----  | ---- | ---- | ---- | 7    |
| 8    | 54   | 104  | 92   | 72   | ---- | 1260 | 984  | 271  | ----  | ---- | ---- | ---- | 8    |
| 9    | 60   | 112  | 94   | 84   | ---- | 1468 | 1084 | 302  | ----  | ---- | ---- | ---- | 9    |
| 10   | 60   | 112  | 60   | 92   | ---- | 1636 | 1000 | 288  | ----  | ---- | ---- | ---- | 10   |
| 11   | 60   | 122  | 60   | 98   | ---- | 1522 | 960  | 251  | ----  | ---- | ---- | ---- | 11   |
| 12   | 60   | 122  | 62   | 98   | ---- | 1260 | 857  | 232  | ----  | ---- | ---- | ---- | 12   |
| 13   | 58   | 115  | 72   | 98   | ---- | 1114 | 822  | 202  | ----  | ---- | ---- | ---- | 13   |
| 14   | 58   | 128  | 72   | 98   | ---- | 1200 | 784  | 228  | ----  | ---- | ---- | ---- | 14   |
| 15   | 54   | 128  | 72   | 98   | ---- | 1457 | 736  | 202  | ----  | ---- | ---- | ---- | 15   |
| 16   | 50   | 128  | 72   | 112  | ---- | 1360 | 698  | 192  | ----  | ---- | ---- | ---- | 16   |
| 17   | 50   | 128  | 40   | 112  | ---- | 1658 | 648  | ---- | ----  | ---- | ---- | ---- | 17   |
| 18   | 54   | 128  | 60   | ---- | 276  | 1444 | 639  | ---- | ----  | ---- | ---- | ---- | 18   |
| 19   | 56   | 134  | 72   | ---- | 282  | 1645 | 564  | ---- | ----  | ---- | ---- | ---- | 19   |
| 20   | 63   | 125  | 72   | ---- | 278  | 1579 | 530  | ---- | ----  | ---- | ---- | ---- | 20   |
| 21   | 72   | 112  | 72   | ---- | 270  | 2535 | 584  | ---- | ----  | ---- | ---- | ---- | 21   |
| 22   | 72   | 109  | 72   | ---- | 292  | 2450 | 558  | ---- | ----  | ---- | ---- | ---- | 22   |
| 23   | 72   | 109  | 72   | ---- | 388  | 2285 | 512  | ---- | ----  | ---- | ---- | ---- | 23   |
| 24   | 72   | 112  | 72   | ---- | 570  | 2312 | 538  | ---- | ----  | ---- | ---- | ---- | 24   |
| 25   | 72   | 112  | 67   | ---- | 618  | 2178 | 493  | ---- | ----  | ---- | ---- | ---- | 25   |
| 26   | 72   | 128  | 50   | ---- | 847  | 2165 | 443  | ---- | ----  | ---- | ---- | ---- | 26   |
| 27   | 72   | 128  | 50   | ---- | 1067 | 1564 | 402  | ---- | ----  | ---- | ---- | ---- | 27   |
| 28   | 72   | 134  | 50   | ---- | 1084 | 1445 | 396  | ---- | ----  | ---- | ---- | ---- | 28   |
| 29   | 83   | 128  | 50   | ---- | 1067 | 1392 | 380  | ---- | ----  | ---- | ---- | ---- | 29   |
| 30   | 92   | ---- | 50   | ---- | 1075 | 1332 | 348  | ---- | ----  | ---- | ---- | ---- | 30   |
| 31   | 98   | ---- | 56   | ---- | 872  | ---- | 342  | ---- | ----  | ---- | ---- | ---- | 31   |
| Mean | 64   | 119  | 80   | 84   | 642  | 1512 | 741  | 265  | ----  | ---- | ---- | ---- | Mean |

NOTE—From January 1 to April 17, river heights were measured by J. L. Armstrong, Water Commissioner of District No. 3.

From May 18 to August 16, record and gaugings were taken by Prof. L. G. Carpenter, of the State Agricultural College, after which time, the river fell so low that the float ceased to work and all further records were stopped.



## TABLE.

SHOWING DAILY MEAN DISCHARGE, IN CUBIC FEET PER SECOND OF  
TIME OF THE ARKANSAS RIVER, AT CANON CITY, FURNISHED BY  
THE U. S. GEOLOGICAL SURVEY., FOR

1891.

| Day. | Jan. | Feb. | Mch. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Day. |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| 1    | 480  | 480  | 555  | 580  | 1340 | 2190 | 2390 | 1925 | 505   | 715  | 505  | 505  | 1    |
| 2    | 455  | 480  | 630  | 605  | 1600 | 2025 | 2190 | 1690 | 530   | 825  | 505  | 455  | 2    |
| 3    | 410  | 480  | 685  | 605  | 1645 | 1735 | 2080 | 1510 | 505   | 795  | 505  | 555  | 3    |
| 4    | 345  | 430  | 660  | 605  | 1600 | 1600 | 1925 | 1340 | 505   | 770  | 530  | 555  | 4    |
| 5    | 365  | 410  | 630  | 605  | 1875 | 1600 | 1975 | 1175 | 480   | 740  | 480  | 345  | 5    |
| 6    | 430  | 530  | 580  | 605  | 2515 | 1780 | 1975 | 1100 | 480   | 715  | 480  | 345  | 6    |
| 7    | 410  | 505  | 555  | 685  | 2990 | 1922 | 1975 | 1065 | 480   | 685  | 480  | 365  | 7    |
| 8    | 365  | 505  | 530  | 795  | 3370 | 2190 | 1820 | 1215 | 480   | 660  | 480  | 345  | 8    |
| 9    | 430  | 365  | 505  | 795  | 2990 | 3295 | 1690 | 1065 | 480   | 660  | 480  | 530  | 9    |
| 10   | 385  | 365  | 530  | 740  | 2735 | 3635 | 1465 | 1175 | 480   | 630  | 480  | 505  | 10   |
| 11   | 305  | 365  | 555  | 885  | 2515 | 3550 | 1340 | 1025 | 455   | 630  | 505  | 530  | 11   |
| 12   | 345  | 430  | 555  | 1060 | 2660 | 3890 | 1175 | 955  | 430   | 630  | 480  | 530  | 12   |
| 13   | 365  | 430  | 530  | 955  | 2315 | 4230 | 1140 | 955  | 430   | 660  | 505  | 555  | 13   |
| 14   | 430  | 505  | 555  | 885  | 2585 | 3720 | 1100 | 885  | 410   | 660  | 530  | 605  | 14   |
| 15   | 505  | 480  | 580  | 885  | 2250 | 3070 | 1100 | 855  | 385   | 605  | 530  | 530  | 15   |
| 16   | 505  | 530  | 605  | 855  | 1922 | 2990 | 1065 | 795  | 385   | 580  | 505  | 505  | 16   |
| 17   | 480  | 580  | 580  | 825  | 1875 | 2735 | 1025 | 770  | 365   | 580  | 430  | 480  | 17   |
| 18   | 430  | 530  | 580  | 795  | 1820 | 3070 | 955  | 740  | 365   | 580  | 480  | 505  | 18   |
| 19   | 430  | 505  | 580  | 740  | 1735 | 3380 | 955  | 795  | 365   | 580  | 530  | 480  | 19   |
| 20   | 505  | 480  | 580  | 685  | 1690 | 3635 | 920  | 795  | 345   | 580  | 530  | 505  | 20   |
| 21   | 480  | 480  | 555  | 660  | 2025 | 3635 | 920  | 740  | 345   | 580  | 530  | 505  | 21   |
| 22   | 480  | 505  | 605  | 660  | 1922 | 3635 | 795  | 630  | 345   | 580  | 505  | 530  | 22   |
| 23   | 480  | 505  | 605  | 795  | 1510 | 3720 | 770  | 630  | 365   | 555  | 455  | 480  | 23   |
| 24   | 480  | 505  | 685  | 855  | 1340 | 3550 | 885  | 660  | 480   | 555  | 530  | 345  | 24   |
| 25   | 505  | 530  | 580  | 1140 | 1465 | 3465 | 920  | 605  | 555   | 530  | 505  | 345  | 25   |
| 26   | 480  | 430  | 580  | 1100 | 1425 | 3295 | 1255 | 580  | 715   | 555  | 505  | 365  | 26   |
| 27   | 455  | 430  | 580  | 1600 | 1510 | 3050 | 1380 | 580  | 685   | 555  | 505  | 455  | 27   |
| 28   | 430  | 505  | 630  | 990  | 1555 | 2810 | 1215 | 555  | 630   | 530  | 480  | 555  | 28   |
| 29   | 385  | ---- | 605  | 1340 | 1645 | 2735 | 1735 | 580  | 630   | 530  | 530  | 480  | 29   |
| 30   | 385  | ---- | 605  | 1380 | 1875 | 2585 | 2810 | 555  | 605   | 530  | 455  | 455  | 30   |
| 31   | 410  | ---- | 580  | ---- | 2080 | ---- | 2585 | 530  | ----  | 555  | ---- | 530  | 31   |
| Mean | 431  | 474  | 586  | 857  | 2012 | 3291 | 1468 | 951  | 473   | 624  | 498  | 476  | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME, OF THE ARKANSAS RIVER, AT CANON CITY, FURNISHED BY THE U. S. GEOLOGICAL SURVEY, FOR

1892.

| Day. | Jan. | Feb. | Mar. | April | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Day. |
|------|------|------|------|-------|------|-------|-------|------|-------|------|------|------|------|
| 1    | 530  | 555  | 505  | 455   | 1215 | 1925  | 3050  | 1100 | 480   | 455  | 605  | ---- | 1    |
| 2    | 530  | 505  | 505  | 455   | 1140 | 2025  | 2990  | 990  | 455   | 455  | 580  | ---- | 2    |
| 3    | 385  | 530  | 555  | 480   | 1060 | 1975  | 2735  | 885  | 480   | 455  | 530  | ---- | 3    |
| 4    | 555  | 530  | 555  | 505   | 955  | 1780  | 2515  | 855  | 530   | 480  | 555  | ---- | 4    |
| 5    | 430  | 505  | 580  | 385   | 795  | 1975  | 2250  | 855  | 505   | 455  | 580  | ---- | 5    |
| 6    | 480  | 505  | 555  | 365   | 715  | 2025  | 1975  | 800  | 455   | 480  | 605  | ---- | 6    |
| 7    | 530  | 505  | 505  | 410   | 685  | 1875  | 1925  | 740  | 455   | 455  | 505  | ---- | 7    |
| 8    | 530  | 430  | 505  | 410   | 885  | 2135  | 2025  | 1130 | 455   | 480  | 480  | ---- | 8    |
| 9    | 555  | 430  | 553  | 410   | 795  | 2515  | 2735  | ---- | 455   | 455  | 480  | ---- | 9    |
| 10   | 530  | 455  | 555  | 455   | 770  | 2585  | 2380  | ---- | 430   | 410  | 455  | ---- | 10   |
| 11   | 345  | 480  | 530  | 505   | 740  | 2735  | 2250  | ---- | 410   | 455  | 455  | ---- | 11   |
| 12   | 430  | 530  | 505  | 480   | 825  | 2080  | 2025  | 825  | 385   | 480  | 605  | ---- | 12   |
| 13   | 430  | 505  | 580  | 480   | 955  | 2080  | 1925  | 740  | 385   | 505  | 555  | ---- | 13   |
| 14   | 345  | 505  | 580  | 555   | 1060 | 2480  | 1925  | 770  | 365   | 505  | 530  | ---- | 14   |
| 15   | 345  | 480  | 605  | 555   | 1060 | 2515  | 1825  | 715  | 430   | 530  | 580  | ---- | 15   |
| 16   | 430  | 430  | 580  | 530   | 1025 | 2190  | 1710  | 660  | 365   | 530  | 555  | ---- | 16   |
| 17   | 480  | 455  | 455  | 480   | 1135 | 2250  | 1600  | 580  | 365   | 530  | 530  | ---- | 17   |
| 18   | 505  | 505  | 410  | 530   | 1060 | 2480  | 1510  | 555  | 430   | 530  | 505  | ---- | 18   |
| 19   | 505  | 505  | 580  | 580   | 1060 | 2810  | 1255  | 580  | 480   | 530  | 505  | ---- | 19   |
| 20   | 530  | 530  | 605  | 605   | 1175 | 2990  | 1175  | 530  | 430   | 555  | 530  | ---- | 20   |
| 21   | 530  | 555  | 605  | 630   | 1255 | 3465  | 1135  | 530  | 455   | 580  | 555  | ---- | 21   |
| 22   | 530  | 530  | 555  | 605   | 1255 | 3805  | 1060  | 530  | 430   | 605  | 555  | ---- | 22   |
| 23   | 505  | 480  | 530  | 605   | 1380 | 3805  | 1060  | 555  | 385   | 605  | 555  | ---- | 23   |
| 24   | 530  | 455  | 505  | 605   | 1690 | 3890  | 1175  | 715  | 480   | 580  | 530  | ---- | 24   |
| 25   | 530  | 480  | 530  | 505   | 2135 | 4750  | 1060  | 1135 | 385   | 555  | 505  | ---- | 25   |
| 26   | 555  | 480  | 480  | 505   | 2080 | 4570  | 1215  | 770  | 385   | 530  | ---- | ---- | 26   |
| 27   | 530  | 505  | 480  | 580   | 2135 | 4145  | 1380  | 660  | 455   | 555  | ---- | ---- | 27   |
| 28   | 555  | 455  | 480  | 630   | 2250 | 3465  | 1780  | 580  | 430   | 580  | ---- | ---- | 28   |
| 29   | 555  | 480  | 480  | 660   | 2135 | 3895  | 1555  | 530  | 455   | 580  | ---- | ---- | 29   |
| 30   | 530  | ---- | 455  | 715   | 2080 | 2990  | 1340  | 480  | 455   | 555  | ---- | ---- | 30   |
| 31   | 630  | ---- | 430  | ----  | 1975 | ----  | 1175  | 455  | ----  | 580  | ---- | ---- | 31   |
| Mean | 496  | 480  | 527  | 522   | 1593 | 2803  | 1798  | 726  | 435   | 511  | 533  | ---- | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND  
OF TIME OF THE SOUTH PLATTE RIVER, AT GAUGING STATION  
NO. 3, FOR

1891.

| Day.  | April. | May.  | June. | July. | Aug.  | Sept. | Oct.  | Day. |
|-------|--------|-------|-------|-------|-------|-------|-------|------|
| 1     | -----  | ----- | 1316  | 814   | ----- | 247   | ----- | 1    |
| 2     | -----  | ----- | 1214  | 775   | ----- | 260   | ----- | 2    |
| 3     | -----  | ----- | 1150  | 744   | ----- | 265   | ----- | 3    |
| 4     | -----  | ----- | 1097  | 732   | 525   | 232   | ----- | 4    |
| 5     | 121    | ----- | 1290  | 725   | 477   | 230   | ----- | 5    |
| 6     | 125    | ----- | 1425  | 832   | 453   | 212   | ----- | 6    |
| 7     | 126    | 1078  | 1406  | 775   | 434   | 198   | ----- | 7    |
| 8     | 140    | 1157  | 1483  | 882   | 400   | 189   | ----- | 8    |
| 9     | 135    | 1176  | 1495  | 814   | 562   | 184   | ----- | 9    |
| 10    | 140    | 1147  | 1470  | 720   | 543   | 221   | ----- | 10   |
| 11    | 148    | 1078  | 1418  | 624   | 509   | 221   | ----- | 11   |
| 12    | 165    | 1014  | 1476  | 562   | 453   | 212   | ----- | 12   |
| 13    | -----  | 939   | 1413  | 527   | 406   | 202   | ----- | 13   |
| 14    | -----  | 927   | 1440  | 487   | 434   | 198   | ----- | 14   |
| 15    | -----  | 970   | 1322  | 552   | 397   | 189   | ----- | 15   |
| 16    | -----  | 950   | 1387  | 568   | 453   | 179   | ----- | 16   |
| 17    | -----  | 901   | 1387  | 537   | 400   | 165   | ----- | 17   |
| 18    | -----  | 939   | 1290  | 384   | 497   | 146   | ----- | 18   |
| 19    | -----  | 901   | 1271  | 453   | 471   | 156   | ----- | 19   |
| 20    | -----  | 890   | 1220  | 436   | 455   | 151   | ----- | 20   |
| 21    | -----  | 964   | 1187  | 406   | 430   | 170   | ----- | 21   |
| 22    | -----  | 1014  | 1157  | 344   | 409   | 175   | ----- | 22   |
| 23    | -----  | 1220  | 1135  | 328   | 416   | 202   | ----- | 23   |
| 24    | -----  | 1157  | 1102  | 359   | 400   | 221   | ----- | 24   |
| 25    | -----  | 1090  | 1068  | 384   | 347   | 254   | ----- | 25   |
| 26    | -----  | 1207  | 1038  | 525   | 282   | 273   | ----- | 26   |
| 27    | -----  | 1457  | 968   | 584   | 270   | 314   | ----- | 27   |
| 28    | -----  | 1483  | 927   | 610   | 273   | 324   | ----- | 28   |
| 29    | -----  | 1483  | 895   | 568   | 263   | 305   | ----- | 29   |
| 30    | -----  | 1413  | 857   | 732   | 266   | 286   | ----- | 30   |
| 31    | -----  | 1360  | ----- | 2195  | 347   | ----- | ----- | 31   |
| Mean. | -----  | 1117  | 1243  | 645   | 373   | 219   | ----- | Mean |



## TABLE.

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND  
OF TIME OF THE SOUTH PLATTE RIVER AT GAUGING STATION  
NO. 3, FOR

1892.

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct. | Day  |
|------|--------|-------|-------|-------|------|-------|------|------|
| 1    | -----  | ----- | 649   | 817   | 779  | 341   | 280  | 1    |
| 2    | -----  | ----- | 672   | 883   | 727  | 324   | 280  | 2    |
| 3    | -----  | ----- | 500   | 838   | 719  | 300   | 280  | 3    |
| 4    | -----  | ----- | 435   | 790   | 710  | 332   | 280  | 4    |
| 5    | -----  | ----- | 384   | 745   | 685  | 324   | 270  | 5    |
| 6    | -----  | ----- | 387   | 717   | 715  | 341   | 270  | 6    |
| 7    | -----  | ----- | 376   | 723   | 830  | 335   | 270  | 7    |
| 8    | -----  | ----- | 414   | 901   | 747  | 335   | 270  | 8    |
| 9    | -----  | ----- | 439   | 955   | 782  | 350   | 270  | 9    |
| 10   | -----  | ----- | 450   | 973   | 767  | 335   | 270  | 10   |
| 11   | -----  | ----- | 425   | 920   | 768  | 335   | 280  | 11   |
| 12   | -----  | ----- | 506   | 852   | 700  | 318   | 295  | 12   |
| 13   | -----  | ----- | 520   | 841   | 648  | 295   | 318  | 13   |
| 14   | -----  | ----- | 551   | 820   | 616  | 287   | 437  | 14   |
| 15   | -----  | ----- | 613   | 830   | 607  | 297   | 449  | 15   |
| 16   | -----  | ----- | 580   | 916   | 453  | 290   | 416  | 16   |
| 17   | -----  | ----- | 633   | 873   | 412  | 295   | 482  | 17   |
| 18   | -----  | ----- | 661   | 916   | 374  | 307   | 527  | 18   |
| 19   | -----  | ----- | 711   | 836   | 377  | 303   | 468  | 19   |
| 20   | -----  | ----- | 713   | 745   | 365  | 300   | 472  | 20   |
| 21   | -----  | ----- | 768   | 761   | 365  | 297   | 458  | 21   |
| 22   | -----  | ----- | 752   | 809   | 365  | 290   | 464  | 22   |
| 23   | -----  | ----- | 786   | 792   | 362  | 275   | 479  | 23   |
| 24   | -----  | ----- | 826   | 847   | 360  | 280   | 472  | 24   |
| 25   | -----  | ----- | 823   | 833   | 297  | 764   | 472  | 25   |
| 26   | -----  | ----- | 962   | 847   | 320  | 478   | 481  | 26   |
| 27   | -----  | ----- | 941   | 878   | 350  | 280   | 481  | 27   |
| 28   | -----  | ----- | 827   | 927   | 355  | 280   | 492  | 28   |
| 29   | -----  | 620   | 769   | 923   | 350  | 280   | 492  | 29   |
| 30   | -----  | 620   | 769   | 901   | 345  | 280   | 492  | 30   |
| 31   | -----  | 637   | ----- | 844   | 345  | ----- | 492  | 31   |
| Mean | -----  | ----- | 628   | 847   | 535  | 328   | 392  | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF ST. VRAIN CREEK, AT GAUGING STATION No. 5, FOR

1891.

| Day. | April. | May. | June. | July. | August. | Sept. | Oct.  | Day. |
|------|--------|------|-------|-------|---------|-------|-------|------|
| 1    | 38     | 400  | 937   | 886   | 205     | 71    | ----- | 1    |
| 2    | 43     | 433  | 922   | 857   | 205     | 71    | ----- | 2    |
| 3    | 33     | 355  | 740   | 814   | 220     | 68    | ----- | 3    |
| 4    | 38     | 400  | 755   | 901   | 174     | 61    | ----- | 4    |
| 5    | 31     | 450  | 888   | 916   | 174     | 57    | ----- | 5    |
| 6    | 43     | 433  | 855   | 901   | 181     | 54    | ----- | 6    |
| 7    | 50     | 467  | 922   | 988   | 164     | 50    | ----- | 7    |
| 8    | 50     | 580  | 946   | 828   | 152     | 117   | ----- | 8    |
| 9    | 46     | 598  | 969   | 785   | 158     | 89    | ----- | 9    |
| 10   | 43     | 547  | 1159  | 741   | 152     | 83    | ----- | 10   |
| 11   | 63     | 515  | 1195  | 622   | 152     | 83    | ----- | 11   |
| 12   | 58     | 498  | 1253  | 515   | 132     | 83    | ----- | 12   |
| 13   | 64     | 433  | 1282  | 433   | 112     | 83    | ----- | 13   |
| 14   | 64     | 433  | 1253  | 460   | 108     | 79    | ----- | 14   |
| 15   | 73     | 370  | 1133  | 390   | 126     | 71    | ----- | 15   |
| 16   | 73     | 387  | 1038  | 375   | 141     | 68    | ----- | 16   |
| 17   | 79     | 400  | 973   | 344   | 169     | 75    | ----- | 17   |
| 18   | 273    | 370  | 1120  | 328   | 220     | 96    | ----- | 18   |
| 19   | 210    | 433  | 1253  | 285   | 230     | 108   | ----- | 19   |
| 20   | 210    | 420  | 1159  | 344   | 174     | 87    | ----- | 20   |
| 21   | 260    | 433  | 1060  | 300   | 174     | 71    | ----- | 21   |
| 22   | 245    | 533  | 1045  | 230   | 196     | 75    | ----- | 22   |
| 23   | 260    | 598  | 1159  | 240   | 181     | 136   | ----- | 23   |
| 24   | 210    | 615  | 1165  | 258   | 152     | 164   | ----- | 24   |
| 25   | 387    | 1081 | 1297  | 314   | 117     | 164   | ----- | 25   |
| 26   | 387    | 1350 | 1195  | 445   | 92      | 164   | ----- | 26   |
| 27   | 400    | 1397 | 1045  | 390   | 112     | 152   | ----- | 27   |
| 28   | 433    | 1397 | 988   | 314   | 83      | 147   | ----- | 28   |
| 29   | 418    | 1223 | 872   | 314   | 75      | 122   | ----- | 29   |
| 30   | 387    | 983  | 814   | 258   | 83      | 112   | ----- | 30   |
| 31   | -----  | 969  | ----- | 230   | 79      | 110   | ----- | 31   |
| Mean | 165    | 629  | 1046  | 516   | 151     | 96    | ----- | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND  
OF TIME OF THE SOUTH FORK OF ST. VRAIN CREEK, AT GAUGING  
STATION, NO. 5 A, FOR

1892.

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct. | Day. |
|------|--------|-------|-------|-------|------|-------|------|------|
| 1    | -----  | ----- | 169   | 592   | 81   | 34    | 24   | 1    |
| 2    | -----  | ----- | 182   | 530   | 79   | 34    | 24   | 2    |
| 3    | -----  | ----- | 323   | 412   | 85   | 60    | 24   | 3    |
| 4    | -----  | ----- | 463   | 388   | 79   | 42    | 28   | 4    |
| 5    | -----  | ----- | 278   | 351   | 74   | 38    | 24   | 5    |
| 6    | -----  | ----- | 216   | 362   | 85   | 38    | 22   | 6    |
| 7    | -----  | ----- | 230   | 438   | 81   | 34    | 22   | 7    |
| 8    | -----  | ----- | 351   | 463   | 100  | 34    | 24   | 8    |
| 9    | -----  | ----- | 490   | 376   | 116  | 34    | 24   | 9    |
| 10   | -----  | ----- | 504   | 452   | 85   | 30    | 24   | 10   |
| 11   | -----  | ----- | 463   | 362   | 72   | 30    | 24   | 11   |
| 12   | -----  | ----- | 351   | 312   | 62   | 30    | 24   | 12   |
| 13   | -----  | ----- | 286   | 278   | 57   | 28    | 24   | 13   |
| 14   | -----  | ----- | 362   | 240   | 57   | 28    | 30   | 14   |
| 15   | -----  | ----- | 401   | 240   | 60   | 28    | 30   | 15   |
| 16   | -----  | ----- | 323   | 266   | 57   | 28    | 28   | 16   |
| 17   | -----  | ----- | 300   | 300   | 52   | 24    | 28   | 17   |
| 18   | -----  | ----- | 351   | 193   | 52   | 28    | 30   | 18   |
| 19   | -----  | ----- | 504   | 158   | 55   | 24    | 30   | 19   |
| 20   | -----  | ----- | 635   | 148   | 50   | 24    | 29   | 20   |
| 21   | -----  | ----- | 740   | 158   | 52   | 24    | 29   | 21   |
| 22   | -----  | ----- | 876   | 216   | 57   | 24    | 29   | 22   |
| 23   | -----  | ----- | 876   | 176   | 52   | 24    | 24   | 23   |
| 24   | -----  | ----- | 860   | 169   | 47   | 24    | 24   | 24   |
| 25   | -----  | ----- | 796   | 138   | 47   | 22    | 22   | 25   |
| 26   | -----  | ----- | 660   | 135   | 42   | 22    | 22   | 26   |
| 27   | -----  | ----- | 582   | 169   | 42   | 23    | 22   | 27   |
| 28   | -----  | ----- | 514   | 148   | 42   | 24    | 19   | 28   |
| 29   | -----  | 463   | 463   | 119   | 38   | 24    | 19   | 29   |
| 30   | -----  | 428   | 660   | 108   | 38   | 24    | 19   | 30   |
| 31   | -----  | 230   | ----- | 100   | 34   | ----- | 19   | 31   |
| Mean | -----  | 373   | 474   | 274   | 60   | 30    | 25   | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME, OF THE NORTH FORK OF ST. VRAIN CREEK, AT GAUGING  
STATION NO. 5, FOR

1892.

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct. | Day. |
|------|--------|-------|-------|-------|------|-------|------|------|
| 1    | -----  | ----- | 166   | 540   | 167  | 59    | 33   | 1    |
| 2    | -----  | ----- | 166   | 456   | 140  | 59    | 33   | 2    |
| 3    | -----  | ----- | 229   | 363   | 130  | 59    | 33   | 3    |
| 4    | -----  | ----- | 335   | 363   | 132  | 54    | 33   | 4    |
| 5    | -----  | ----- | 229   | 349   | 130  | 54    | 33   | 5    |
| 6    | -----  | ----- | 203   | 320   | 130  | 54    | 33   | 6    |
| 7    | -----  | ----- | 185   | 380   | 130  | 48    | 33   | 7    |
|      | -----  | ----- | 380   | 465   | 145  | 48    | 33   | 8    |
| 9    | -----  | ----- | 312   | 415   | 136  | 46    | 33   | 9    |
| 10   | -----  | ----- | 489   | 355   | 105  | 44    | 32   | 10   |
| 11   | -----  | ----- | 340   | 387   | 105  | 87    | 32   | 11   |
| 12   | -----  | ----- | 290   | 340   | 105  | 87    | 48   | 12   |
| 13   | -----  | ----- | 340   | 340   | 96   | 87    | 40   | 13   |
| 14   | -----  | ----- | 303   | 349   | 87   | 87    | 40   | 14   |
| 15   | -----  | ----- | 380   | 303   | 87   | 87    | 40   | 15   |
| 16   | -----  | ----- | 327   | 355   | 87   | 87    | 40   | 16   |
| 17   | -----  | ----- | 363   | 307   | 79   | 87    | 40   | 17   |
| 18   | -----  | ----- | 375   | 327   | 79   | 87    | 40   | 18   |
| 19   | -----  | ----- | 450   | 225   | 82   | 87    | 44   | 19   |
| 20   | -----  | ----- | 489   | 215   | 76   | 87    | 44   | 20   |
| 21   | -----  | ----- | 570   | 225   | 72   | 59    | 44   | 21   |
| 22   | -----  | ----- | 597   | 251   | 72   | 59    | 44   | 22   |
| 23   | -----  | ----- | 550   | 225   | 72   | 33    | 54   | 23   |
| 24   | -----  | ----- | 620   | 303   | 72   | 34    | 87   | 24   |
| 25   | -----  | ----- | 597   | 290   | 67   | 33    | 87   | 25   |
| 26   | -----  | 190   | 527   | 210   | 61   | 33    | 33   | 26   |
| 27   | -----  | 303   | 456   | 295   | 59   | 33    | 33   | 27   |
| 28   | -----  | 237   | 415   | 215   | 72   | 33    | 34   | 28   |
| 29   | -----  | 244   | 380   | 220   | 65   | 33    | 34   | 29   |
| 30   | -----  | 225   | 387   | 160   | 63   | 33    | 33   | 30   |
| 31   | -----  | 190   | ----- | 156   | 59   | ----- | 34   | 31   |
| Mean | -----  | 231   | 382   | 313   | 95   | 59    | 40   | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF BEAR CREEK, AT GAUGING STATION NO. 6 FOR

1891.

| Day. | April. | May. | June. | July. | August. | Sept. | Oct.  | Day. |
|------|--------|------|-------|-------|---------|-------|-------|------|
| 1    | -----  | 107  | 330   | 204   | 68      | 23    | ----- | 1    |
| 2    | -----  | 107  | 280   | 180   | 57      | 23    | ----- | 2    |
| 3    | -----  | 107  | 255   | 147   | 52      | 20    | ----- | 3    |
| 4    | -----  | 107  | 230   | 155 * | 41      | 20    | ----- | 4    |
| 5    | 12     | 136  | 605   | 170   | 34      | 20    | ----- | 5    |
| 6    | 19     | 107  | 263   | 155   | 33      | 20    | ----- | 6    |
| 7    | 22     | 125  | 375   | 197   | 29      | 18    | ----- | 7    |
| 8    | 22     | 107  | 375   | 155   | 29      | 18    | ----- | 8    |
| 9    | 17     | 107  | 476   | 107   | 29      | 18    | ----- | 9    |
| 10   | 21     | 107  | 460   | 90    | 26      | 18    | ----- | 10   |
| 11   | 32     | 94   | 390   | 90    | 26      | 16    | ----- | 11   |
| 12   | 30     | 90   | 375   | 90    | 26      | 16    | ----- | 12   |
| 13   | 32     | 71   | 330   | 81    | 26      | 16    | ----- | 13   |
| 14   | 28     | 68   | 280   | 71    | 26      | 16    | ----- | 14   |
| 15   | 36     | 68   | 280   | 62    | 26      | 14    | ----- | 15   |
| 16   | 29     | 68   | 330   | 59    | 30      | 14    | ----- | 16   |
| 17   | 33     | 68   | 280   | 56    | 35      | 14    | ----- | 17   |
| 18   | 36     | 68   | 280   | 52    | 41      | 13    | ----- | 18   |
| 19   | 41     | 68   | 280   | 52    | 41      | 13    | ----- | 19   |
| 20   | 42     | 90   | 330   | 52    | 41      | 12    | ----- | 20   |
| 21   | 42     | 136  | 330   | 48    | 37      | 12    | ----- | 21   |
| 22   | 47     | 180  | 336   | 46    | 33      | 12    | ----- | 22   |
| 23   | 52     | 180  | 330   | 41    | 26      | 20    | ----- | 23   |
| 24   | 75     | 230  | 330   | 41    | 26      | 52    | ----- | 24   |
| 25   | 90     | 410  | 330   | 41    | 23      | 52    | ----- | 25   |
| 26   | 100    | 476  | 280   | 52    | 23      | 52    | ----- | 26   |
| 27   | 107    | 622  | 230   | 52    | 20      | 52    | ----- | 27   |
| 28   | 125    | 599  | 230   | 52    | 20      | 52    | ----- | 28   |
| 29   | 107    | 518  | 230   | 52    | 20      | 52    | ----- | 29   |
| 30   | 107    | 452  | 230   | 62    | 26      | 52    | ----- | 30   |
| 31   | -----  | 375  | ---   | 68    | 26      | ----- | ----- | 31   |
| Mean | 50     | 195  | 289   | 90    | 32      | 25    | ----- | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF BOULDER CREEK, AT GAUGING STATION NO. 7, FOR

1891.

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct.  | Day. |
|------|--------|-------|-------|-------|------|-------|-------|------|
| 1    | -----  | ----- | 404   | 326   | 177  | 81    | ----- | 1    |
| 2    | -----  | ----- | 373   | 329   | 160  | 69    | ----- | 2    |
| 3    | -----  | ----- | 354   | 332   | 138  | 69    | ----- | 3    |
| 4    | -----  | ----- | 332   | 332   | 123  | 64    | ----- | 4    |
| 5    | -----  | ----- | 344   | 332   | 121  | 69    | ----- | 5    |
| 6    | -----  | ----- | 363   | 354   | 121  | 64    | ----- | 6    |
| 7    | -----  | ----- | 456   | 373   | 121  | 59    | ----- | 7    |
| 8    | -----  | ----- | 540   | 367   | 115  | 68    | ----- | 8    |
| 9    | -----  | ----- | 529   | 354   | 121  | 64    | ----- | 9    |
| 10   | -----  | ----- | 529   | 280   | 118  | 57    | ----- | 10   |
| 11   | -----  | ----- | 467   | 264   | 114  | 57    | ----- | 11   |
| 12   | -----  | ----- | 467   | 233   | 107  | 57    | ----- | 12   |
| 13   | -----  | ----- | 456   | 253   | 100  | 57    | ----- | 13   |
| 14   | -----  | ----- | 467   | 233   | 96   | 57    | ----- | 14   |
| 15   | -----  | ----- | 424   | 227   | 100  | 55    | ----- | 15   |
| 16   | -----  | ----- | 394   | 224   | 135  | 54    | ----- | 16   |
| 17   | -----  | ----- | 354   | 202   | 125  | 54    | ----- | 17   |
| 18   | -----  | 224   | 384   | 186   | 186  | 54    | ----- | 18   |
| 19   | -----  | 233   | 467   | 186   | 153  | 54    | ----- | 19   |
| 20   | -----  | 253   | 470   | 186   | 121  | 55    | ----- | 20   |
| 21   | -----  | 264   | 467   | 177   | 118  | ----- | ----- | 21   |
| 22   | -----  | 253   | 467   | 160   | 128  | ----- | ----- | 22   |
| 23   | -----  | 264   | 467   | 150   | 107  | ----- | ----- | 23   |
| 24   | -----  | 282   | 467   | 146   | 118  | ----- | ----- | 24   |
| 25   | -----  | 363   | 467   | 146   | 81   | ----- | ----- | 25   |
| 26   | -----  | 435   | 414   | 177   | 83   | ----- | ----- | 26   |
| 27   | -----  | 414   | 400   | 214   | 83   | ----- | ----- | 27   |
| 28   | -----  | 394   | 363   | 188   | 87   | ----- | ----- | 28   |
| 29   | -----  | 404   | 384   | 169   | 81   | ----- | ----- | 29   |
| 30   | -----  | 404   | 354   | 169   | 79   | ----- | ----- | 30   |
| 31   | -----  | 394   | ----- | 181   | 69   | ----- | ----- | 31   |
| Mean | -----  | 327   | 427   | 240   | 116  | 61    | ----- | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF BOULDER CREEK, AT GAUGING STATION NO. 7, FOR

1892.

| Day. | April. | May.  | June. | July. | August | Sept. | Oct. | Day. |
|------|--------|-------|-------|-------|--------|-------|------|------|
| 1    | -----  | ----- | 354   | 529   | 224    | 64    | 48   | 1    |
| 2    | -----  | ----- | 394   | 518   | 214    | 64    | 45   | 2    |
| 3    | -----  | ----- | 313   | 445   | 205    | 64    | 40   | 3    |
| 4    | -----  | ----- | 363   | 445   | 195    | 69    | 37   | 4    |
| 5    | -----  | ----- | 354   | 414   | 195    | 64    | 35   | 5    |
| 6    | -----  | ----- | 313   | 404   | 186    | 64    | 40   | 6    |
| 7    | -----  | ----- | 292   | 445   | 186    | 64    | 41   | 7    |
| 8    | -----  | ----- | 344   | 497   | 205    | 64    | 42   | 8    |
| 9    | -----  | ----- | 384   | 445   | 214    | 64    | 42   | 9    |
| 10   | -----  | ----- | 404   | 435   | 186    | 64    | 41   | 10   |
| 11   | -----  | ----- | 404   | 424   | 177    | 64    | 50   | 11   |
| 12   | -----  | ----- | 354   | 414   | 169    | 59    | 45   | 12   |
| 13   | -----  | ----- | 313   | 373   | 160    | 54    | 41   | 13   |
| 14   | -----  | ----- | 344   | 373   | 160    | 49    | 50   | 14   |
| 15   | -----  | ----- | 424   | 404   | 144    | 49    | 50   | 15   |
| 16   | -----  | ----- | 404   | 363   | 135    | 49    | 50   | 16   |
| 17   | -----  | ----- | 394   | 363   | 135    | 49    | 49   | 17   |
| 18   | -----  | ----- | 424   | 322   | 153    | 49    | 38   | 18   |
| 19   | -----  | ----- | 508   | 322   | 135    | 54    | 27   | 19   |
| 20   | -----  | ----- | 612   | 313   | 121    | 49    | 45   | 20   |
| 21   | -----  | ----- | 633   | 322   | 121    | 49    | 45   | 21   |
| 22   | -----  | ----- | 633   | 384   | 121    | 49    | 48   | 22   |
| 23   | -----  | 300   | 646   | 354   | 114    | 48    | 49   | 23   |
| 24   | -----  | 313   | 633   | 322   | 107    | 45    | 40   | 24   |
| 25   | -----  | 313   | 612   | 303   | 100    | 41    | 41   | 25   |
| 26   | -----  | 322   | 581   | 282   | 93     | 42    | 41   | 26   |
| 27   | -----  | 363   | 508   | 303   | 93     | 42    | 45   | 27   |
| 28   | -----  | 373   | 497   | 303   | 93     | 45    | 42   | 28   |
| 29   | -----  | 373   | 487   | 264   | 87     | 45    | 42   | 29   |
| 30   | -----  | 344   | 487   | 233   | 75     | 48    | 45   | 30   |
| 31   | -----  | 322   | ----- | 224   | 69     | ----- | 37   | 31   |
| Mean | -----  | 336   | 447   | 372   | 148    | 47    | 43   | Mean |



## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF BIG THOMPSON CREEK, AT GAUGING STATION NO. 8, FOR

1891.

| Day. | April. | May.  | June. | July. | August. | Sept. | Oct.  | Day. |
|------|--------|-------|-------|-------|---------|-------|-------|------|
| 1    | -----  | ----- | ----- | 634   | 176     | 91    | 93    | 1    |
| 2    | -----  | ----- | ----- | 589   | 179     | 105   | ----- | 2    |
| 3    | -----  | ----- | ----- | 612   | 165     | 105   | ----- | 3    |
| 4    | -----  | ----- | 523   | 631   | 157     | 99    | ----- | 4    |
| 5    | -----  | ----- | 583   | 565   | 142     | 96    | ----- | 5    |
| 6    | -----  | ----- | 563   | 584   | 140     | 92    | ----- | 6    |
| 7    | -----  | ----- | 739   | 608   | 140     | 94    | ----- | 7    |
| 8    | -----  | ----- | 1040  | 574   | 140     | 98    | ----- | 8    |
| 9    | -----  | ----- | 1084  | 517   | 150     | 85    | ----- | 9    |
| 10   | -----  | ----- | 970   | 446   | 150     | 83    | ----- | 10   |
| 11   | -----  | ----- | 841   | 388   | 145     | 85    | ----- | 11   |
| 12   | -----  | ----- | 810   | 370   | 153     | 85    | ----- | 12   |
| 13   | -----  | ----- | 974   | 388   | 157     | 105   | ----- | 13   |
| 14   | -----  | ----- | 954   | 333   | 137     | 94    | ----- | 14   |
| 15   | -----  | ----- | 857   | 339   | 140     | 77    | ----- | 15   |
| 16   | -----  | ----- | 772   | 327   | 227     | 69    | ----- | 16   |
| 17   | -----  | ----- | 614   | 314   | 235     | 69    | ----- | 17   |
| 18   | -----  | ----- | 841   | 314   | 218     | 69    | ----- | 18   |
| 19   | -----  | ----- | 971   | 314   | 214     | 69    | ----- | 19   |
| 20   | -----  | ----- | 978   | 301   | 225     | 71    | ----- | 20   |
| 21   | -----  | ----- | 825   | 314   | 198     | 76    | ----- | 21   |
| 22   | -----  | ----- | 800   | 270   | 239     | 102   | ----- | 22   |
| 23   | -----  | ----- | 891   | 263   | 168     | 134   | ----- | 23   |
| 24   | -----  | ----- | 984   | 253   | 143     | 134   | ----- | 24   |
| 25   | -----  | ----- | 1182  | 253   | 107     | 127   | ----- | 25   |
| 26   | -----  | ----- | 1078  | 224   | 142     | 137   | ----- | 26   |
| 27   | -----  | ----- | 858   | 244   | 105     | 99    | ----- | 27   |
| 28   | -----  | ----- | 701   | 235   | 105     | 99    | ----- | 28   |
| 29   | -----  | ----- | 865   | 219   | 105     | 99    | ----- | 29   |
| 30   | -----  | ----- | 602   | 227   | 114     | 93    | ----- | 30   |
| 31   | -----  | ----- | ----- | 224   | 107     | ----- | ----- | 31   |
| Mean | -----  | ----- | 817   | 383   | 159     | 95    | ----- | Mean |



## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND  
OF TIME OF BIG THOMPSON CREEK, AT GAUGING STATION  
NO. 8, FOR

1892.

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct.  | Day. |
|------|--------|-------|-------|-------|------|-------|-------|------|
| 1    | -----  | ----- | 403   | 864   | 247  | 90    | ----- | 1    |
| 2    | -----  | ----- | 415   | 791   | 225  | 87    | ----- | 2    |
| 3    | -----  | ----- | 490   | 603   | 200  | 71    | ----- | 3    |
| 4    | -----  | ----- | 547   | 550   | 200  | 72    | ----- | 4    |
| 5    | -----  | ----- | 342   | 617   | 195  | 72    | ----- | 5    |
| 6    | -----  | ----- | 329   | 559   | 195  | 75    | ----- | 6    |
| 7    | -----  | ----- | 480   | 563   | 200  | 72    | ----- | 7    |
| 8    | -----  | ----- | 518   | 656   | 206  | 58    | ----- | 8    |
| 9    | -----  | ----- | 630   | 590   | 217  | 53    | ----- | 9    |
| 10   | -----  | ----- | 710   | 609   | 206  | 53    | ----- | 10   |
| 11   | -----  | ----- | 663   | 543   | 186  | 48    | ----- | 11   |
| 12   | -----  | ----- | 526   | 503   | 130  | 44    | ----- | 12   |
| 13   | -----  | ----- | 421   | 489   | 155  | 44    | ----- | 13   |
| 14   | -----  | ----- | 445   | 529   | 165  | 43    | ----- | 14   |
| 15   | -----  | 348   | 579   | 529   | 148  | 45    | ----- | 15   |
| 16   | -----  | 261   | 587   | 552   | 143  | 45    | ----- | 16   |
| 17   | -----  | 224   | 618   | 529   | 136  | 45    | ----- | 17   |
| 18   | -----  | 195   | 699   | 531   | 136  | 44    | ----- | 18   |
| 19   | -----  | 232   | 958   | 531   | 118  | 44    | ----- | 19   |
| 20   | -----  | 231   | 1022  | 485   | 118  | 42    | ----- | 20   |
| 21   | -----  | 231   | 1195  | 471   | 123  | 41    | ----- | 21   |
| 22   | -----  | 232   | 1140  | 380   | 123  | 41    | ----- | 22   |
| 23   | -----  | 232   | 1030  | 378   | 123  | 41    | ----- | 23   |
| 24   | -----  | 266   | 1182  | 461   | 114  | 41    | ----- | 24   |
| 25   | -----  | 377   | 1102  | 315   | 108  | 40    | ----- | 25   |
| 26   | -----  | 394   | 933   | 344   | 108  | 40    | ----- | 26   |
| 27   | -----  | 460   | 828   | 308   | 108  | 40    | ----- | 27   |
| 28   | -----  | 482   | 879   | 294   | 90   | 40    | ----- | 28   |
| 29   | -----  | 379   | 774   | 309   | 87   | 39    | ----- | 29   |
| 30   | -----  | 396   | 684   | 280   | 81   | 39    | ----- | 30   |
| 31   | -----  | 368   | ----- | 259   | 81   | ----- | ----- | 31   |
| Mean | -----  | 312   | 704   | 498   | 150  | 49    | ----- | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME OF SOUTH BOULDER CREEK, AT GAUGING STATION NO. 9, FOR  
1891.

| Day. | April. | May. | June. | July. | August. | Sept. | Oct.  | Day. |
|------|--------|------|-------|-------|---------|-------|-------|------|
| 1    | 28     | 151  | 464   | 244   | 74      | 23    | 19    | 1    |
| 2    | 28     | 141  | 448   | 220   | 73      | 26    | 21    | 2    |
| 3    | 28     | 156  | 389   | 197   | 70      | 26    | 18    | 3    |
| 4    | 16     | 156  | 348   | 190   | 61      | 24    | ----- | 4    |
| 5    | 16     | 170  | 371   | 226   | 55      | 23    | ----- | 5    |
| 6    | 15     | 179  | 338   | 256   | 57      | 25    | ----- | 6    |
| 7    | 18     | 170  | 371   | 220   | 51      | 20    | ----- | 7    |
| 8    | 25     | 410  | 441   | 197   | 55      | 20    | ----- | 8    |
| 9    | 24     | 458  | 453   | 186   | 57      | 20    | ----- | 9    |
| 10   | 18     | 405  | 464   | 175   | 48      | 19    | ----- | 10   |
| 11   | 20     | 365  | 393   | 151   | 45      | 20    | ----- | 11   |
| 12   | 92     | 348  | 371   | 147   | 39      | 20    | ----- | 12   |
| 13   | 99     | 331  | 365   | 137   | 37      | 21    | ----- | 13   |
| 14   | 93     | 371  | 371   | 129   | 37      | 18    | ----- | 14   |
| 15   | 93     | 417  | 365   | 120   | 31      | 17    | ----- | 15   |
| 16   | 99     | 367  | 373   | 120   | 35      | 17    | ----- | 16   |
| 17   | 129    | 565  | 345   | 108   | 36      | 16    | ----- | 17   |
| 18   | 144    | 377  | 315   | 103   | 55      | 16    | ----- | 18   |
| 19   | 92     | 405  | 367   | 111   | 48      | 15    | ----- | 19   |
| 20   | 99     | 400  | 342   | 108   | 33      | 16    | ----- | 20   |
| 21   | 92     | 434  | 331   | 96    | 37      | 16    | ----- | 21   |
| 22   | 99     | 434  | 315   | 89    | 67      | 16    | ----- | 22   |
| 23   | 103    | 470  | 315   | 79    | 50      | 16    | ----- | 23   |
| 24   | 129    | 458  | 331   | 76    | 36      | 18    | ----- | 24   |
| 25   | 144    | 500  | 331   | 76    | 31      | 22    | ----- | 25   |
| 26   | 115    | 488  | 322   | 126   | 28      | 28    | ----- | 26   |
| 27   | 151    | 483  | 297   | 93    | 30      | 25    | ----- | 27   |
| 28   | 165    | 488  | 256   | 92    | 31      | 22    | ----- | 28   |
| 29   | 147    | 476  | 244   | 85    | 30      | 22    | ----- | 29   |
| 30   | 137    | 493  | 238   | 92    | 27      | 18    | ----- | 30   |
| 31   | -----  | 483  | ----- | 89    | 24      | ----- | ----- | 31   |
| Mean | 58     | 366  | 356   | 140   | 45      | 20    | 19    | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE IN CUBIC FEET PER SECOND OF  
TIME, OF SOUTH BOULDER CREEK, AT GAUGING STATION NO. 9,  
FOR

1892

| Day. | April. | May.  | June. | July. | Aug. | Sept. | Oct. | Day. |
|------|--------|-------|-------|-------|------|-------|------|------|
| 1    | -----  | ----- | 275   | 401   | 107  | 26    | 16   | 1    |
| 2    | -----  | ----- | 264   | 393   | 86   | 26    | 16   | 2    |
| 3    | -----  | ----- | 286   | 338   | 101  | 26    | 16   | 3    |
| 4    | -----  | ----- | 387   | 315   | 92   | 30    | 15   | 4    |
| 5    | -----  | ----- | 303   | 297   | 86   | 27    | 16   | 5    |
| 6    | -----  | ----- | 244   | 286   | 86   | 24    | 16   | 6    |
| 7    | -----  | ----- | 272   | 260   | 85   | 21    | 16   | 7    |
| 8    | -----  | ----- | 287   | 342   | 96   | 25    | 16   | 8    |
| 9    | -----  | ----- | 315   | 297   | 101  | 26    | 16   | 9    |
| 10   | -----  | ----- | 342   | 264   | 82   | 21    | 16   | 10   |
| 11   | -----  | ----- | 345   | 480   | 79   | 23    | 15   | 11   |
| 12   | -----  | ----- | 319   | 238   | 74   | 25    | 18   | 12   |
| 13   | -----  | 89    | 287   | 216   | 64   | 25    | 15   | 13   |
| 14   | -----  | 180   | 287   | 202   | 64   | 21    | 24   | 14   |
| 15   | -----  | 180   | 365   | 216   | 59   | 18    | 26   | 15   |
| 16   | -----  | 161   | 348   | 213   | 52   | 20    | 30   | 16   |
| 17   | -----  | 155   | 345   | 208   | 52   | 19    | 27   | 17   |
| 18   | -----  | 161   | 345   | 197   | 59   | 19    | 21   | 18   |
| 19   | -----  | 180   | 449   | 186   | 52   | 19    | 18   | 19   |
| 20   | -----  | 197   | 488   | 165   | 41   | 19    | 18   | 20   |
| 21   | -----  | 208   | 512   | 165   | 38   | 18    | 19   | 21   |
| 22   | -----  | 202   | 521   | 190   | 41   | 17    | 16   | 22   |
| 23   | -----  | 231   | 542   | 186   | 40   | 16    | 19   | 23   |
| 24   | -----  | 275   | 561   | 161   | 37   | 17    | 16   | 24   |
| 25   | -----  | 287   | 493   | 151   | 40   | 15    | 16   | 25   |
| 26   | -----  | 298   | 448   | 147   | 36   | 15    | 16   | 26   |
| 27   | -----  | 308   | 434   | 165   | 32   | 15    | 16   | 27   |
| 28   | -----  | 360   | 387   | 147   | 37   | 15    | 16   | 28   |
| 29   | -----  | 371   | 382   | 126   | 39   | 15    | 16   | 29   |
| 30   | -----  | 345   | 389   | 117   | 36   | 16    | 20   | 30   |
| 31   | -----  | 315   | ----- | 111   | 31   | ----- | 20   | 31   |
| Mean | -----  | 237   | 374   | 232   | 62   | 21    | 18   | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE OF THE RIO GRANDE, AT DEL NORTE, FURNISHED BY U. S. GEOLOGICAL SURVEY, FOR

1891.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Day. |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 670  | 1320 | 1410 | 896  | 3240 | 2925 | 3565 | 1460 | 384  | 2260 | 450  | 326  | 1    |
| 2    | 670  | 1277 | 1410 | 896  | 3480 | 2550 | 3240 | 1320 | 364  | 2475 | 450  | 326  | 2    |
| 3    | 670  | 1277 | 1460 | 862  | 3650 | 2400 | 3000 | 1152 | 364  | 2120 | 427  | 326  | 3    |
| 4    | 700  | 1277 | 1460 | 862  | 3905 | 2260 | 2775 | 1037 | 364  | 1680 | 427  | 326  | 4    |
| 5    | 700  | 1234 | 1460 | 829  | 4350 | 2260 | 2550 | 896  | 364  | 1410 | 404  | 326  | 5    |
| 6    | 732  | 1234 | 1460 | 829  | 4800 | 2190 | 2475 | 829  | 345  | 1277 | 404  | ---- | 6    |
| 7    | 732  | 1234 | 1410 | 796  | 5650 | 2400 | 2400 | 764  | 364  | 1113 | 404  | ---- | 7    |
| 8    | 965  | 1234 | 1410 | 796  | 5555 | 2850 | 2260 | 796  | 404  | 1074 | 384  | ---- | 8    |
| 9    | 965  | 1234 | 1410 | 796  | 5460 | 3480 | 2120 | 796  | 404  | 1074 | 404  | ---- | 9    |
| 10   | 965  | 1234 | 1365 | 796  | 5125 | 4080 | 1990 | 764  | 385  | 965  | 404  | ---- | 10   |
| 11   | 965  | 1193 | 1365 | 862  | 4710 | 4710 | 1740 | 732  | 364  | 930  | 450  | ---- | 11   |
| 12   | 1000 | 1234 | 1320 | 1000 | 4170 | 5270 | 1565 | 640  | 345  | 896  | 427  | ---- | 12   |
| 13   | 1000 | 1234 | 1320 | 1074 | 3650 | 5555 | 1460 | 670  | 326  | 862  | 404  | ---- | 13   |
| 14   | 1000 | 1234 | 1320 | 1193 | 3400 | 4980 | 1410 | 640  | 326  | 829  | 404  | ---- | 14   |
| 15   | 1035 | 1277 | 1320 | 1410 | 3220 | 4890 | 1740 | 610  | 368  | 766  | 384  | ---- | 15   |
| 16   | 1000 | 1277 | 1320 | 1460 | 2850 | 3930 | 1460 | 554  | 308  | 732  | 384  | ---- | 16   |
| 17   | 1000 | 1277 | 1320 | 1410 | 2550 | 3820 | 1277 | 554  | 290  | 732  | 364  | ---- | 17   |
| 18   | 1035 | 1320 | 1320 | 1365 | 2330 | 3820 | 1152 | 527  | 308  | 670  | 364  | ---- | 18   |
| 19   | 1035 | 1320 | 1320 | 1320 | 2190 | 4620 | 1037 | 527  | 326  | 640  | 345  | ---- | 19   |
| 20   | 1035 | 1320 | 1320 | 1277 | 2120 | 4710 | 1074 | 527  | 345  | 610  | 326  | ---- | 20   |
| 21   | 1000 | 1320 | 1365 | 1234 | 2055 | 4985 | 1000 | 500  | 345  | 610  | 326  | ---- | 21   |
| 22   | 1035 | 1320 | 1320 | 1277 | 2550 | 5175 | 1000 | 500  | 364  | 582  | 326  | ---- | 22   |
| 23   | 1035 | 1365 | 1320 | 1277 | 2260 | 5270 | 965  | 475  | 500  | 582  | 308  | ---- | 23   |
| 24   | 1035 | 1365 | 1320 | 1320 | 2120 | 5460 | 930  | 450  | 896  | 554  | 308  | ---- | 24   |
| 25   | 1074 | 1410 | 1035 | 2120 | 1990 | 5175 | 896  | 427  | 1074 | 554  | 326  | ---- | 25   |
| 26   | 1074 | 1410 | 1000 | 2700 | 1860 | 5080 | 862  | 404  | 1234 | 527  | 326  | ---- | 26   |
| 27   | 1074 | 1410 | 1000 | 2700 | 2190 | 5080 | 862  | 384  | 1113 | 500  | 326  | ---- | 27   |
| 28   | 1234 | 1410 | 1000 | 2850 | 2260 | 4800 | 896  | 404  | 1075 | 500  | 326  | ---- | 28   |
| 29   | 1320 | ---- | 965  | 2925 | 2400 | 4530 | 1000 | 404  | 1037 | 475  | 326  | ---- | 29   |
| 30   | 1320 | ---- | 930  | 3160 | 2775 | 4260 | 1990 | 404  | 1193 | 450  | 326  | ---- | 30   |
| 31   | 1277 | ---- | 913  | ---- | 3000 | ---- | 1800 | 404  | ---- | 450  | ---- | ---- | 31   |
| Mean | 990  | 1294 | 1280 | 1410 | 3285 | 4146 | 1693 | 663  | 527  | 844  | 374  | 326  | Mean |

## TABLE

SHOWING DAILY MEAN DISCHARGE OF THE RIO GRANDE AT DEL NORTE, FURNISHED BY U. S. GEOLOGICAL SURVEY, FOR

1892.

| Day. | Jan. | Feb. | Mch. | April | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Day. |
|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| 1    | ---- | ---- | ---- | 345   | 2260 | 2260 | 1074 | 610  | 308   | 243  | 274  | ---- | 1    |
| 2    | ---- | ---- | ---- | 364   | 2055 | 2055 | 1000 | 582  | 290   | 243  | 274  | ---- | 2    |
| 3    | ---- | ---- | ---- | 404   | 1990 | 2260 | 965  | 582  | 290   | 243  | 258  | ---- | 3    |
| 4    | ---- | ---- | ---- | 385   | 1925 | 2475 | 896  | 554  | 290   | 243  | 258  | ---- | 4    |
| 5    | ---- | ---- | ---- | 364   | 1860 | 2400 | 796  | 527  | 290   | 243  | 258  | ---- | 5    |
| 6    | ---- | ---- | ---- | 385   | 1800 | 2400 | 640  | 527  | 290   | 243  | 258  | ---- | 6    |
| 7    | ---- | ---- | ---- | 450   | 1800 | 2625 | 670  | 500  | 274   | 243  | 258  | ---- | 7    |
| 8    | ---- | ---- | ---- | 640   | 1740 | 3160 | 764  | 475  | 274   | 243  | 274  | ---- | 8    |
| 9    | ---- | ---- | ---- | 732   | 1565 | 3080 | 1000 | 554  | 274   | 243  | 258  | ---- | 9    |
| 10   | ---- | ---- | ---- | 862   | 1510 | 2700 | 829  | 527  | 258   | 243  | 258  | ---- | 10   |
| 11   | ---- | ---- | ---- | 930   | 1620 | 2120 | 732  | 500  | 258   | 243  | 258  | ---- | 11   |
| 12   | ---- | ---- | ---- | 965   | 1925 | 2055 | 701  | 500  | 258   | 243  | 243  | ---- | 12   |
| 13   | ---- | ---- | ---- | 1000  | 2055 | 1990 | 701  | 475  | 258   | 258  | 243  | ---- | 13   |
| 14   | ---- | ---- | ---- | 1037  | 2120 | 2120 | 670  | 450  | 258   | 258  | 243  | ---- | 14   |
| 15   | ---- | ---- | ---- | 1320  | 2120 | 2260 | 640  | 447  | 258   | 258  | 258  | ---- | 15   |
| 16   | ---- | ---- | ---- | 1620  | 2120 | 2055 | 610  | 404  | 258   | 258  | 258  | ---- | 16   |
| 17   | ---- | ---- | ---- | 1740  | 2055 | 2190 | 610  | 404  | 258   | 258  | 308  | ---- | 17   |
| 18   | ---- | ---- | ---- | 1565  | 2190 | 2120 | 670  | 404  | 258   | 258  | 384  | ---- | 18   |
| 19   | ---- | ---- | ---- | 1320  | 2400 | 2260 | 582  | 404  | 258   | 258  | 404  | ---- | 19   |
| 20   | ---- | ---- | ---- | 1277  | 3080 | 2400 | 582  | 384  | 258   | 258  | ---- | ---- | 20   |
| 21   | ---- | ---- | ---- | 1193  | 3160 | 2550 | 554  | 384  | 243   | 274  | ---- | ---- | 21   |
| 22   | ---- | ---- | 290  | 1113  | 3400 | 2330 | 610  | 384  | 243   | 290  | ---- | ---- | 22   |
| 23   | ---- | ---- | 290  | 1074  | 3905 | 2120 | 582  | 364  | 243   | 290  | ---- | ---- | 23   |
| 24   | ---- | ---- | 310  | 1000  | 4710 | 2055 | 640  | 364  | 243   | 290  | ---- | ---- | 24   |
| 25   | ---- | ---- | 310  | 1074  | 4530 | 1990 | 700  | 364  | 243   | 290  | ---- | ---- | 25   |
| 26   | ---- | ---- | 310  | 1152  | 4350 | 1860 | 732  | 364  | 243   | 274  | ---- | ---- | 26   |
| 27   | ---- | ---- | 326  | 1277  | 3820 | 1740 | 764  | 345  | 243   | 258  | ---- | ---- | 27   |
| 28   | ---- | ---- | 326  | 1565  | 3565 | 1510 | 930  | 326  | 243   | 274  | ---- | ---- | 28   |
| 29   | ---- | ---- | 326  | 1860  | 3400 | 1320 | 862  | 326  | 243   | 274  | ---- | ---- | 29   |
| 30   | ---- | ---- | 345  | 2400  | 3160 | 1152 | 732  | 326  | 243   | 274  | ---- | ---- | 30   |
| 31   | ---- | ---- | 326  | ----  | 2550 | ---- | 670  | 308  | ----  | 258  | ---- | ---- | 31   |
| Mean | ---- | ---- | 316  | 1047  | 2605 | 2187 | 740  | 444  | 262   | 259  | ---- | ---- | Mean |

## TABLE

SHOWING THE MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE, FOR THE SEASONS OF 1889, 1890, 1891 AND 1892.

| STREAMS                        | 1889 | 1890 | 1891 | 1892 |
|--------------------------------|------|------|------|------|
| Cache la Poudre.....           | 524  | 588  | 710  | 669  |
| Big Thompson Creek.....        | 179  | 382  | 364  | 350  |
| St. Vrain Creek.....           | 178  | 243  | 452  | 421  |
| North and South Boulder.....   | 377  | 355  | 351  | 425  |
| Bear Creek.....                | 60   | 27   | 109  | ---- |
| South Platte.....              | 280  | 419  | 620  | 585  |
| Arkansas (at Canon City).....  | 634  | 1338 | 1546 | 1440 |
| Rio Grande (at Del Norte)..... | ---- | 1579 | 1757 | 907  |

## TABLE

SHOWING APPROXIMATE MEAN DISCHARGE IN CUBIC FEET PER SECOND OF TIME OF THE FOLLOWING NAMED STREAMS FOR WINTER MONTHS FROM NOVEMBER 1 TO MARCH 31, AS DERIVED FROM ACTUAL GAUGINGS ON THE CACHE LA POUDE RIVER FOR THE LAST FOUR YEARS, AND SOME WINTER GAUGINGS ON OTHER STREAMS, THE SAME PERCENTAGE BEING TAKEN FOR STREAMS NOT GAUGED.

| NAME OF STREAM.                  | APPROXIMATE MEAN DISCHARGE NOV. 1 TO MARCH 31 IN CUBIC FEET PER SECOND. |
|----------------------------------|---|
| Cache la Poudre River.....       | 83.00=24,858 Acre Feet.   |
| Big Thompson Creek.....          | 35.00=10,483 " "  |
| St. Vrain Creek.....             | 66.00=19,767 " "  |
| North and South Boulder Creeks.. | 54.00=16,173 " "  |
| Clear Creek.....                 | 49.00=14,675 " "  |
| Bear Creek.....                  | 22.00=6,589 " "   |
| South Platte River.....          | 163.00=48,819 " "   |
| Arkansas River.....              | 500.00 (mean for 1891 and '92)=153,000                                  |
| Rio Grande.....                  | 855.00 (mean for 1891)=266,000  |

## COUNTY BOUNDARIES.

During the great mining excitement at Creede, in the midst of a wonderful building boom, and while mining locations were fast covering the adjoining hills, the question of "where are we at?" became of primary im-



portance to that camp, not only in the interest of a proper record of claims, but also, in securing recognition of official authority and in the administration of justice.

The close proximity of the camp to the common boundaries of Rio Grande, Saguache and Hinsdale Counties, as indicated by the various maps of the State, rendered its exact location with reference to either a matter of great uncertainty.

Realizing the importance of an early determination of the question, the County Commissioners of each of the Counties named petitioned the State Engineer to take such action, in accordance with the law of 1887, providing for such emergencies, as would establish the indefinite boundaries. These applications were made in the early part of February, 1892, and at a time when, on account of the high altitude and great depth of snow, it would be impracticable to do any field work for some months to come.

After a careful study of the several acts relating to said Counties and defining their boundaries, it became apparent that a solution of the problem was to be found not so much in a survey on the ground, as in a construction of the statutes, and in fixing the *locus* of one controlling point therein mentioned, to wit: "The mouth of the Canon of the Snowy Range from whence flows the Rio Grande River."

For reasons assigned in the report to the interested Counties hereto appended, and as best harmonizing with the description of the lines given in the acts alluded to, this controverted point was determined to be on the Rio Grande River at the town of Del Norte. And as a further evidence of the correctness of this location, and as indicating the general impression in early days regarding its *locus*, my attention has been called to the "Hand Book of Colorado" issued by J. A. Blake in 1874, wherein allusion is made to the location of the town of Del Norte as follows, to wit: "Del Norte: The towns of Del Norte, West Del Norte and Loma are situated on the western edge of the San Luis Valley, at the mouth of the canon of the Snowy Range of the Rocky Mountains, from whence flows the Rio Grande Del Norte."

With the fixing of the "mouth of the canon, etc.," mentioned, at Del Norte, all conflicting descriptions in

the statutes became reconciled, and the disputed boundaries became adjusted to well established government lines or natural monuments, whose identification will not admit of a doubt, and a survey on the ground was entirely unnecessary to fix the exact position of the camp over which the controversy had arisen.

Aside from the impracticability of making a survey on the ground at that time, the heavy expense attending such survey, involving from \$1,000 to \$2,000, was avoided, at least until the courts, if resort was had thereto, should pass upon the question, and the correctness of the boundaries so established was affirmed or denied.

It is true that the conclusions arrived at, as to the boundaries between Rio Grande and Saguache Counties, are not in accord with the views of the people of Saguache, as large portions of the territory claimed and heretofore conceded as belonging to that County have been placed in Rio Grande. An equitable adjustment would probably modify and change this line quite materially, but such a change can only be effected by remedial legislation, if my conclusions are sustained.

The findings in the case are herewith submitted.

#### BOUNDARY LINES

between the Counties of Hinsdale, Rio Grande and Saguache, in the State of Colorado, as established and defined March, 1892.

*To the Board of Commissioners of the Counties of Saguache, Rio Grande and Hinsdale :*

GENTLEMEN—Answering the prayer of the petitions from each of your respective Counties, which petitions are now file in this office, asking for a survey and the establishment of the uncertain and indefinite boundary lines between the Counties of Saguache, Rio Grande and Hinsdale, under the provisions of an act entitled: "An act to provide for the settlement of disputed County boundaries in this State," approved April 4, 1887, I have the honor to report the following action and conclusions :

Pursuant to a notice duly given to the County Surveyors and the County Commissioners of each of the interested counties, and setting forth the object thereof, a

meeting was held at the town of Creede on the 16th and 17th days of March, 1892, at which meeting there were present:

J. P. Maxwell, State Engineer; William McCree, County Surveyor of Saguache County; Geo. T. Nickel, Deputy County Surveyor of Rio Grande County, and J. J. Abbott, County Surveyor of Hinsdale County.

Whereupon, it was unanimously agreed that, on account of the unsettled condition of affair in the new mining camp of Creede, resulting from the uncertainty as to the exact location of the County boundaries, and in the interest of the administration of justice in said new mining camp, an emergency existed, requiring an early determination of the question of boundaries, and that, on account of the great depth of snow at that season of the year, it was impracticable to make a survey on the ground of the various disputed lines; and further, that such survey, and the heavy expense involved therein, would be entirely unnecessary in fixing and defining said boundaries to the extent and for the purposes contemplated by the petition from the Board of Commissioners of the respective Counties.

The various acts of the Legislature consulted in establishing and defining the boundaries under consideration will be found following:

The Revised Statutes of 1868, enacted and authorized by the Seventh General Assembly of the Territory of Colorado, defines the boundaries of Conejos and Saguache Counties as follows:

#### FOR CONEJOS COUNTY.

"Commencing on the southern boundary of the Territory in the center of the Rio Grande del Norte; thence up the center of said stream to where it leaves the canon of the Snowy Range at the corner of Saguache County; thence in a northwesterly direction along the western boundary of said Saguache County to the Cochetopa Pass; thence in a southwesterly direction on the summit of the Uncompahgre Mountains and the Sierra la Plata, forming the southern boundary of Lake County to the western line of the Territory; thence along the western boundary of the Territory to its southwest corner; thence along the southern boundary of the Territory to the place of beginning."

## FOR SAGUACHE COUNTY.

Commencing at the most easterly point of La Loma del Norte ; thence in an easterly direction to the point where the Mosco Creek enters into the San Luis valley ; thence up the center of said creek to the boundary line of Fremont County on the summit of the Sangre de Christo Range ; thence in a northwesterly direction along the summit of said range to the southwest corner of Fremont County ; thence in southwesterly direction along said range to the Cochetopa Pass ; thence on a produced southeasterly line to the mouth of the Canon of the Snowy Range, from whence flows the Rio Grande del Norte ; thence down the center of said stream to the place of beginning.

The act of the First General Assembly of 1861 creating Guadalupe County, afterward changed to Conejos, and the act of the Fifth General Assembly, approved Dec. 29, 1866, establishing the County of Saguache from Costilla County, were also by the Seventh General Assembly duly repealed.

It will be observed from the above contemporaneous acts that the counties of Conejos and Saguache had the two points, the "Cochetopa Pass" and the "mouth of canon of the Snowy Range from whence flows the Rio Grande del Norte," in common, and a common boundary between said points ; that in the case of Conejos it is given as a "northwesterly direction" from the latter to the former point, and called the "western boundary of Saguache County ;" and that in the case of Saguache County it is given as a "southeasterly direction" from the former to the latter point, the descriptions running to the right around each of the Counties.

Also that by this act, Cochetopa Pass was the extreme westerly limit of Saguache County. It also appears that, from Cochetopa Pass, the northern boundary of Conejos County followed in a southwesterly direction on the summit of the range to a point beyond the 107th degree of west longitude, and in no place passed to the south of said summit.

A reasonable construction of the language above quoted, defining the boundaries of the two Counties, would locate the "mouth of the canon of the Snowy Range" at some point on the Rio Grande River south and east of Cochetopa Pass ; and after a careful exami-



nation of ground and consideration of the circumstances, no more favorable point could be found than near the town of Del Norte at the base of the general range of mountains north and south, and where the waters of the Rio Grande River debouche on the plains of the San Luis Valley.

By reference to Thayer's map of Colorado, published in 1871, a copy of which is in the possession of Judge E. T. Wells, of Denver, it will be seen that the "mouth of the canon" is located at the base of the mountains in close proximity to the present town of Del Norte, and that the boundaries of the two Counties are mapped as herein indicated, and as shown by the accompanying tracing, which, while not conclusive, as the map was not official, is at least confirmatory of the conclusions herein set forth.

It might be further mentioned that the opinion of the Hon. Adair Wilson, for many years a resident of Del Norte, had much to do with the conclusions arrived at.

The location of the Cochetopa Pass and the La Loma Del Norte have not been disputed, and are conceded to be as shown on the map herewith presented.

By an act of the General Assembly, approved February 9, 1872, the boundaries of Saguache County were modified as follows :

Commencing at Poncha Pass, on its north boundary, and running " thence in a direct line west to the 107th degree of longitude ; thence south, following said degree to the north boundary line of Conejos County ; thence east along the north boundary line of Conejos County to where it intersects the southwest boundary of Saguache County."

The north line of Conejos, as heretofore defined, would be the summit of the range, following which east, would lead to Cochetopa Pass, where it would intersect the old boundary of Saguache, as established by the act of 1887, then called the "western" boundary, and by the act of 1872, called the " southwest boundary of Saguache County."

From Cochetopa Pass southeasterly, the boundary line is identical with that of the act of 1867, and the phraseology the same.

The effect of the act of 1872 was to add to Saguache County a triangular tract, bounded on the north by a line running due west from Poncha Pass to the 107th meridian of longitude, on the west by said meridian, and on the south by the summit of the range, extending from the 107th meridian to Poncha Pass; but nowhere can I find that any portion of the County, lying south of said range and west of Cochetopa Pass, has, by the acts above quoted, been made a part of said County.

Rio Grande and Hinsdale Counties were established by an act of the Legislature in 1874.

The boundary lines of Rio Grande County were, by said act, defined as follows:

"Commencing at a point where the ninth correction line north intersects the New Mexico first guide meridian east; thence north along said guide meridian to the point where it intersects the boundary line between the Counties of Costilla and Saguache; thence westerly along the southern boundary of Saguache County to the point where it intersects the New Mexico principal meridian; thence south along said principal meridian to the point where it intersects the ninth correction line north; thence east to the place of beginning."

"The boundary line between the Counties of Costilla and Saguache," referred to, is a line from the most easterly point of La Loma del Norte to the point where Mosco Creek enters into the San Luis Valley, indicated on tracing herewith by a broken line marked "line of 1867." From the intersection of this line with the first guide meridian east a westerly course "along the southern boundary of Saguache County" would lead directly to La Loma del Norte; thence up the center of the Rio Grande River to the mouth of the Canon of the Snowy Range as located at Del Norte; thence to Cochetopa Pass; thence southwesterly along the summit of the range to intersection with the New Mexico principal meridian, which, under the act of 1874, would constitute the northern boundary of Rio Grande County. Its west boundary would be the New Mexico principal meridian, from the intersection of said meridian with the summit of the range on the south line of Saguache County, south to the ninth correction line north.

A portion of the north boundary line of Rio Grande County was, later, modified by an act entitled "An Act



to strike off a portion of the County of Saguache and add the same to the County of Rio Grande," approved February 12, 1879, which reads as follows: "That all that portion of the County of Saguache situate south of a line commencing where the tenth correction line crosses the first guide meridian east, New Mexico principal meridian; thence west along said tenth correction line thirty miles; thence north on the west line of township forty north, range four east, six miles; thence directly west to the east line of Hinsdale County, be, and the same is hereby stricken off and added to the County of Rio Grande; *providing*, the requirements of the Constitution have been complied with."

The line above described runs partly through Saguache County and partly through Rio Grande County, that part in Rio Grande being indicated in the tracing herewith by a broken colored margin marked "Line described in Act of 1879." In the published maps of the State this line has been assumed to be the boundary between Rio Grande and Saguache Counties throughout its entire length; but I find nothing, in a reasonable construction of the Act, to warrant such an assumption. The Act does not recite that such line shall constitute the boundary between the two Counties, nor that any portion of Rio Grande County lying north of said line shall be stricken off and added to Saguache County. The line would, therefore, in my opinion, only operate as a boundary to the extent that it passed through Saguache County; and the effect of the Act would be to add to Rio Grande County all that part of Saguache County lying within the following described boundaries: Commencing at the intersection of the tenth correction line north with the New Mexico first guide meridian east; thence running west along said tenth correction line to the intersection of said line with a true line from the mouth of the Canon of the Snowy Range, as located at Del Norte, to Cochetopa Pass; thence southeasterly along said last described line to the mouth of said canon; thence down the center of the Rio Grande River to the most easterly point of the La Loma Del Norte; thence easterly along a true line, toward the point where Mosco Creek enters into the San Luis Valley, to the said guide meridian east; thence north along said guide meridian to the place of beginning.

The boundary lines of Hinsdale County, so far as they are under consideration, are described by the Act of 1874, as follows: "Commencing at the point of intersection of the ninth correction line north with the New Mexico principal meridian, and running thence north along said principal meridian to the southern boundary of Saguache County; thence westerly along the southern boundary of Saguache County to the 107th meridian of longitude west from Greenwich; thence north along said meridian to a point ten miles north of the thirty-eighth parallel of north latitude."

It will be observed from this and the former acts quoted that the Counties of Hinsdale and Saguache have a common boundary from the last mentioned point to the intersection of the New Mexico principal meridian with the southern boundary of Saguache County; that the southern boundary of Saguache County was established along the northern boundary of Conejos County, and that the northern boundary of Conejos County was located along the summit of the range running southwesterly from Cochetopa Pass. The conclusion is therefore warranted that the intersection last mentioned is at the summit of said range, and that the east boundary of Hinsdale County follows the New Mexico principal meridian north to said summit, as in the case of the west boundary of Rio Grande County.

Having, as we believe, fully set forth the various acts of the Legislature, bearing upon the boundaries under consideration, and our construction of them, following will be found the conclusions arrived at:

*First.* That for the purpose of affording a basis for the fixing and settlement of the boundary lines in question, and as, in the opinion of a majority of the Board of Surveyors, best harmonizing with the language and intention of the several legislative enactments, "The mouth of the Canon of the Snowy Range from whence flows the Rio Grande Del Norte," mentioned in the general statutes defining the boundaries of Conejos and Saguache Counties, was determined to be, and fixed, at the present town of Del Norte, in Rio Grande County; and more definitely at the intersection of the west boundary of the Del Norte town site produced north, with the center of the Rio Grande River; and that "The Cochetopa Pass" therein mentioned is situated

in the southwestern portion of Township 46 north, Range 4 east of the New Mexico principal meridian, on the Continental Divide, and where indicated by the topographical maps prepared by F. V. Hayden from U. S. surveys made in 1874-5, and further and more definitely located by the subdivisional survey of said Township, made in 1880, as being at the intersection of the wagon road with the line between the northeast and southeast quarters of section 30, in said township; and further that "La Loma del Norte" is a well-known bluff situated in Township 39 north, Range 7 east, of the New Mexico principal meridian, near its northwest corner.

*Second.* That the following was determined to be and established as the boundary line between Rio Grande and Saguache Counties, to wit: Commencing at the intersection of the first New Mexico guide meridian east with the tenth correction line north; thence west along said tenth correction line north to its intersection with a true line from "the mouth of the Canon of the Snowy Range" (to Cochetopa Pass), as above defined. Thence in a northwesterly direction along said true line (to Cochetopa Pass). Thence in a southwesterly direction along the summit of the Continental Divide to the intersection of said divide with the New Mexico principal Meridian; and that said boundary is fixed and defined:

1st—By the government monuments placed along the tenth correction line north.

2d—By the mouth of the Canon of the Snowy Range and Cochetopa Pass, above defined, as the extreme points of a true line between the same.

3d—By the Continental Divide constituting a continuous natural monument from Cochetopa Pass to the New Mexico principal meridian.

*Third.* That the boundary line between Hinsdale and Rio Grande Counties was determined to be, and was established, as commencing at the intersection of the ninth correction line north with the New Mexico principal meridian; thence following said meridian north to its intersection with the Continental Divide and to the southern boundary of Saguache County; and, that said boundary is fixed and defined by the monuments and

corners placed on the New Mexico principal meridian by the U. S. Government in the official survey of the same.

*Fourth.* That the boundary line between the Counties of Hinsdale and Saguache was determined to be, and established, as commencing on the southern boundary of Saguache County, at the intersection of the New Mexico principal meridian with said southern boundary of Saguache County, on the summit of the Continental Divide.

Thence westerly, following said Continental Divide to its intersection with the 107th meridian of west longitude. Thence north along said 107th meridian to a point ten miles north of the 38th parallel of north latitude; and that said boundary is fixed and defined,

1st—By the Continental Divide constituting a continuous natural monument from its intersection with the New Mexico principal meridian westerly to its intersection with the 107th meridian of west longitude. And

2d—By such monuments as have been established on the 107th meridian of west longitude in defining the eastern boundary of the old Indian reservation, and the boundaries of Gunnison and Saguache Counties, notably, at the northeast corner of Hinsdale County.

Respectfully submitted,

J. P. MAXWELL,

*State Engineer.*

J. J. ABBOTT,

*County Surveyor Hinsdale County.*

GEORGE T. NICKEL,

*Deputy County Surveyor Rio Grande County.*



## SEEPAGE WATER.

Measurements for return or waste and seepage waters have been continued on the South Platte and Cache la Poudre rivers during the years 1891-1892. The observations have been taken in the month of October of each year, as heretofore. Unfortunately, for 1892 the measurements on the Platte were made on a rapidly falling stream immediately following a heavy storm. There being no uniformity of flow from one day to another, due to the intervening night, when measurements could not be taken, the results were entirely unreliable and no table was made of them.

In 1891 an excellent showing was made, the increase exceeding that of any previous year in which observations were made, due to more copious rains and a freer use of water in irrigation. The gain was found to be continuous from the Canon of the Platte to a point near Merino, a distance of 150 miles. Here a loss of 20.27 cubic feet per second occurred, which it is difficult to account for, as there is no evidence of unusual percolation into the sand bed of the river, unless an increased quantity was diverted into ditches immediately above after measurements of the same were made, and the decreased flow in the river had reached the station before measurement was made there, which was altogether probable.

Thence the gain continues to Iliff, the 175 mile point, where the greatest increase is found, being 611.76 cubic feet per second. Between this point and the eastern boundary of the State at Julesburg, a distance of fifty-one miles, a small loss occurs, which is accounted for by the sandy nature of the river bed. Nor can it be expected there would be any accession to the supply from a drainage of the adjoining lands, as there are no canals taken out east of Iliff and irrigation is not practiced.

This table, briefly summarized, shows as follows at Iliff:

|   |        |        |
|---|--------|--------|
| Amount of water diverted from river<br>by canals .....            |        | 883.16 |
| Amount in river at Canon.....                                     | 204.35 |        |
| Less amount in river at Iliff.....                                | 52.72  |        |
|   | <hr/>  |        |
|   | 151.63 |        |
| Added amount of inflow from natural<br>tributaries.....           | 119.77 |        |
|   | <hr/>  |        |
|   | 271.40 | 271.40 |
|   | <hr/>  |        |
| Balance due to return by waste and<br>seepage in second feet..... |        | 611.76 |

The percentage of increase is 299.37, or practically three times the flow at South Platte canon. The average increase per mile is 3.24 second feet.

These measurements having been taken for each year, soon after the irrigation season was over, it was reasonable to assume that the results were larger than would be given some months later, or in the spring of the year. With a view of determining to what extent and with what uniformity this drainage from irrigation continued throughout the year, similar measurements were made in March, 1892, a table of which is herewith presented.

The work was prosecuted as far down the Platte as Fort Morgan, 123 miles, at which point an increase of 431.74 second feet is shown as against 472.14 feet in the previous October, the difference being about forty feet. The percentage of increase is 281.83, as against 212.45, the larger percentage being due to the smaller quantity carried in the river at the initial point in the March observations.

From an examination of the comparative table of increases it will be observed that the showing made in the March measurements compares very favorably with the October measurements of 1889-90, and the disparity is not great as compared with 1891.

The measurements of the Cache la Poudre river were made under the direction of Prof. L. G. Carpenter, of the department of "Irrigation Engineering," Colorado Agricultural College, co-operating with this department, the time corresponding to that of the Platte measurements, tables of which are herewith submitted.

The showing is not so favorable as for the same number of miles on the Platte, nor can this be expected, for the reason that a portion of the return waters from



some of the more extended Cache la Poudre canals find their way directly to the Platte channel, and it may be said also that the Platte receives directly the drainage from some of the ditches taking water out of Clear Creek, St. Vrain and Big Thompson Creeks.

It will be observed, however, that the accessions to the river supply from return water in October, 1891, correspond very closely with the amount in the following March of 1892, showing, so far as any deductions can be made from the limited observations, that the supply from this source is quite uniform.

TABLE OF MEASUREMENTS OF SEEPAGE WATER

IN THE SOUTH PLATE RIVER, COLORADO, OCTOBER 23 TO NOVEMBER 5, 1891.

| NAMES OF STREAMS<br>AND DITCHES<br>WHERE<br>MEASUREMENTS<br>WERE TAKEN. | Amount of water in<br>river. | Amount of water di-<br>verted from river<br>by canal. | Amount of inflow<br>from natural trib-<br>utaries. | Amount of water in<br>river at points meas-<br>ured, plus that di-<br>verted by canals &<br>— the inflow from<br>natural tributaries. | Amount of increase<br>in volume of river<br>between points<br>measured. | Decrease in volume<br>of river between<br>points measured. | Amount of increase<br>in volume of river<br>from the gauging<br>station at Canon, to<br>point where last<br>gauged. | Per cent. of increase<br>in volume from<br>Canon, to point last<br>measured. | Amount of increase<br>per mile between<br>points measured. | REMARKS.                          |
|---|------------------------------|---|--|---|---|--|---|--|--|-----------------------------------|
| South Platte River  | 204.35                       | ---   | ---  | ---   | ---   | ---  | ---   | ---  | ---  | { Above Dam of High<br>Line Canal |
| High Line Canal   | ---                          | 99.10   | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| Platte Canon Ditch  | ---                          | 49.39   | ---  | ---   | ---   | ---  | ---   | ---  | ---  | In underground works              |
| The Citizens' Water Co.   | ---                          | 8.00  | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| Last Chance Ditch   | ---                          | 0.20  | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| City Ditch  | ---                          | 29.07   | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| South Platte River  | 46.16                        | ---   | ---  | 231.92  | 27.57   | ---  | 27.57   | 13.45  | 6 M=4.93   | Below City Ditch                  |
| Plum Creek  | ---                          | ---   | 2.98   | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| Nevada Ditch  | ---                          | 16.89   | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| South Platte River  | 84.86                        | ---   | ---  | 284.53  | 53.61   | ---  | 80.18   | 39.24  | 6 M=8.93   | At Littleton                      |
| So. Denver Water Works  | ---                          | 2.32  | ---  | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |
| Bear Creek  | ---                          | ---   | 7.26   | ---   | ---   | ---  | ---   | ---  | ---  | ---                               |

| American Water Co.       | 21.54 | 5.59  | 300.73 | 16.20 | 96.38  | 47.15  | 10 M=1.62 | At all pumping stations  |
|--------------------------|-------|-------|--------|-------|--------|--------|-----------|--------------------------|
| Cherry Creek             |       |       |        |       |        |        |           |                          |
| South Platte River       | 90.05 |       |        | 16.20 | 96.38  | 47.15  | 10 M=1.62 | At foot 16th st., Denver |
| Burlington Ditch         |       |       |        |       |        |        |           |                          |
| Clear Creek              | 53.98 | 1.04  |        |       |        |        |           |                          |
| South Platte River       | 79.58 |       | 343.20 | 42.47 | 138.85 | 67.94  | 11 M=3.86 | Below Fulton Ditch       |
| Brantner Ditch           | 29.98 |       |        |       |        |        |           |                          |
| Brighton Ditch           | 11.98 |       |        |       |        |        |           |                          |
| South Platte River       | 73.96 |       | 379.54 | 36.34 | 175.19 | 85.24  | 7 M=5.19  | Below Brighton Ditch     |
| Platteville Ditch        |       | 6.04  |        |       |        |        |           |                          |
| Evans No. 2 Ditch        | 21.14 |       |        |       |        |        |           |                          |
| South Platte River       | 90.28 |       | 423.04 | 43.50 | 218.69 | 107.01 | 9 M=4.83  | Below Ryans No. 2 D'ch   |
| Meadow Isl'd Ditch No. 1 |       | 2.09  |        |       |        |        |           |                          |
| Side Hill Ditch          |       | 6.50  |        |       |        |        |           |                          |
| Meadow Island No. 2      |       | 6.41  |        |       |        |        |           |                          |
| Beaver Lake Ditch        | 14.27 |       |        |       |        |        |           |                          |
| Farmers Indep't Ditch    | 58.16 |       |        |       |        |        |           |                          |
| South Platte River       | 11.09 |       | 431.23 | 8.14  | 226.93 | 111.05 | 7 M=1.16  | Below Farm's Ind. D'ch   |
| South Platte River       | 17.48 |       | 437.67 | 6.39  | 233.32 | 114.12 | 5 M=1.29  | Above St. Vrain Creek    |
| St. Vrain Creek          |       | 28.94 |        |       |        |        |           |                          |
| Union Ditch              |       |       |        |       |        |        |           |                          |
| Big Thompson Creek       | 37.48 | 12.85 |        |       |        |        |           |                          |



|                                |        |        |        |        |       |       |        |        |                     |                                 |
|--------------------------------|--------|--------|--------|--------|-------|-------|--------|--------|---------------------|---------------------------------|
| South Platte River             | 134.81 | ---    | ---    | 676.76 | 38.36 | ---   | 472.41 | 231.17 | 9 M=4.37            | { Below Platte and Beaver Ditch |
| Platte and Beaver Supply Ditch | ---    | 46.21  | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| South Platte River             | 186.79 | ---    | ---    | 774.95 | 98.19 | ---   | 570.60 | 279.22 | 14½ M=6.77          | { Above Smith Ditch at Snyder   |
| Smith Ditch                    | ---    | 1.36   | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| Edwards Ditch                  | ---    | 18.27  | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| South Platte Ditch             | ---    | 35.51  | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| Pawnee Ditch                   | ---    | 64.70  | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| South Platte River             | 46.68  | ---    | ---    | 754.68 | ---   | 20.27 | 550.33 | 269.30 | { 17½ M= Loss, 1.16 | Above Merino                    |
| Schneider Ditch                | ---    | 3.46   | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| Springdale Ditch               | ---    | 9.85   | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| South Platte River             | 66.73  | ---    | ---    | 788.04 | 33.36 | ---   | 583.69 | 285.63 | 13 M=2.59           | At Sterling                     |
| Smith & Henderson Ditch        | ---    | 6.74   | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| Low Line Ditch                 | ---    | 2.12   | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| Iliff and Platte Valley Ditch  | ---    | 33.22  | ---    | ---    | ---   | ---   | ---    | ---    | ---                 | ---                             |
| South Platte River             | 52.72  | ---    | ---    | 816.11 | 28.07 | ---   | 611.76 | 299.37 | 9 M=3.12            | At Iliff                        |
| South Platte River             | 39.65  | ---    | ---    | 803.04 | ---   | 13.07 | 598.69 | 292.97 | { 15 M= Loss, 0.87  | Two miles above Crook           |
| South Platte River             | 47.70  | ---    | ---    | 811.09 | 8.05  | ---   | 606.74 | 296.91 | 20 M=0.42           | Below Sedgewick                 |
| South Platte River             | 42.96  | ---    | ---    | 806.35 | ---   | 4.74  | 602.00 | 294.59 | { 16 M= Loss, 0.29  | At Julesburg                    |
| Totals                         | ---    | 883.16 | 119.77 | ---    | ---   | ---   | ---    | ---    | ---                 | Average increase per Mile=3.24  |





|                          |        |  |  |  |        |       |        |        |               |  |  |  |                                       |
|--------------------------|--------|--|--|--|--------|-------|--------|--------|---------------|--|--|--|---------------------------------------|
| Bear Creek               | 12.64  |  |  |  |        |       |        |        |               |  |  |  | { At all Pumping Stations.            |
| Lee Gulch                | 0.85   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| American Water Co.       | 18.59  |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Cherry Creek             | 5.03   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 284.22 |  |  |  | 282.75 | 59.61 | 129.56 | 84.57  | 10 M=5.96     |  |  |  | { At foot of Sixteenth street, Denver |
| Burlington Ditch         | 67.25  |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Clear Creek              | 68.36  |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 297.28 |  |  |  | 294.70 | 11.95 | 141.51 | 92.37  | 11 M=1.09     |  |  |  | { Below head of Fulton Ditch          |
| South Platte River       | 272.44 |  |  |  | 269.86 |       | 24.84  | 76.16  | 7 M=loss 3.55 |  |  |  | { At Brighton Bridge                  |
| Dry Creek                | 1.49   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 292.59 |  |  |  | 289.52 | 19.66 | 136.33 | 88.99  | 8 M=2.46      |  |  |  | Opposite Fort Lupton                  |
| Buckers' Ditch           | 4.03   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Farmers' Indep'd't Ditch | 1.55   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 332.22 |  |  |  | 333.73 | 44.21 | 180.54 | 117.86 | 7 M=6.32      |  |  |  | Opposite Platteville                  |
| St. Vrain Creek          |        |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Big Thompson Creek       |        |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Evans' Ditch No. 1       | 0.96   |  |  |  |        |       |        |        |               |  |  |  |                                       |
| Dry Creek                |        |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 449.78 |  |  |  | 346.05 | 12.32 | 192.86 | 125.54 | 17 M=0.72     |  |  |  | { At Evans Bridge                     |
| South Platte River       | 473.09 |  |  |  | 369.36 | 23.31 | 216.17 | 141.11 | 6 M=3.88      |  |  |  | { Above mouth Cache la Poudre River   |
| Cache la Poudre River    |        |  |  |  |        |       |        |        |               |  |  |  |                                       |
| South Platte River       | 687.73 |  |  |  | 438.44 | 69.08 | 285.25 | 186.27 | 10 M=6.908    |  |  |  | { One-half mile below Hardin          |



## MEASUREMENT OF RETURN WATERS OF CACHE LA POWDRE RIVER, OCTOBER, 1891.

MEASUREMENT MADE BY DEPARTMENT OF IRRIGATION ENGINEERING, COLORADO AGRICULTURAL COLLEGE, CO-OPERATING WITH STATE ENGINEER. OCTOBER, 1891.

| NAMES OF STREAMS<br>AND DITCHES<br>WHERE<br>MEASUREMENTS<br>WERE TAKEN | Amount of water in<br>river. | Amount of water di-<br>verted from river<br>by canals. | Amount of inflow<br>from natural tribu-<br>taries. | Amount of water in<br>river at points meas-<br>ured, plus that di-<br>verted by canals &<br>— the inflow from<br>natural tributaries. | Amount of increase<br>in volume of river<br>between points<br>measured. | Decrease in volume<br>of river between<br>points measured. | Amount of increase<br>in volume of river<br>from the gauging<br>station at Canon,<br>to point where last<br>gauged. | Per cent. of increase<br>in volume from<br>gauging station at<br>Canon to point last<br>measured. | Amount of increase<br>per mile between<br>points measured. | REMARKS.                              |
|--|------------------------------|--|--|---|---|--|---|---|--|---------------------------------------|
|  |                              |  |  |   |   |  |   |   |  |                                       |
| Cache la Poudre River  | 97.58                        | ---  | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Canon Ditch  | ---                          | 0.03   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Taylor & Gill Ditch  | ---                          | 2.16   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Little Cache la Poudre<br>Ditch  | ---                          | 5.21   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Larimer County Ditch   | ---                          | 1.00   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Fort Collins Water Works   | ---                          | 0.30   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Pleasant Valley and Lake<br>Canal                                      | ---                          | 6.99   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Larimer County, No. 2,<br>Canal  | ---                          | 0.64   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Larimer and Weld Canal   | ---                          | 43.30  | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Cache la Poudre River  | 54.39                        | ---  | ---  | 114.02  | 16.44   | ---  | 16.44   | 16.85   | 8 M=2.05   | { Below head of Larimer & Weld Canal. |
| Josh Ames Ditch  | ---                          | 0.50   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |
| Lake Ditch   | ---                          | 0.24   | ---  | ---   | ---   | ---  | ---   | ---   | ---  |                                       |

## MEASUREMENT OF RETURN WATERS OF CACHE LA Poudre RIVER—Concluded.

| NAMES OF STREAMS<br>AND DITCHES<br>WHERE<br>MEASUREMENTS<br>WERE TAKEN. | Amount of water in<br>river. | Amount of water di-<br>verted from river<br>by canals. | Amount of inflow<br>from natural tribu-<br>taries. | Amount of water in<br>river at points meas-<br>ured, plus that di-<br>verted by canals &<br>the inflow from<br>natural tributaries. | Amount of increase<br>in volume of river<br>between points<br>measured. | Decrease in volume<br>of river between<br>points measured. | Amount of increase<br>in volume of river<br>from the gauging<br>station at Canon to<br>point where last<br>gauged. | Per cent. of increase<br>in volume from<br>gauging station at<br>Canon to point last<br>measured. | Amount of increase<br>per mile between<br>points measured. | REMARKS.                                     |
|---|------------------------------|--|--|---|---|--|--|---|--|--|
| Coy Ditch.....  | ---                          | 1.60   | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Box Elder Ditch.....  | ---                          | 3.78   | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Cache la Poudre Canal<br>No. 2.....                                     | ---                          | 0.50   | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Cache la Poudre River..   | 56.48                        | ---  | ---  | 122.73  | 8.71  | ---  | 25.15  | 25.77   | 18 M=0.49  | { At head of Cache la<br>Poudre No. 2 Canal. |
| Eaton Ditch.....  | ---                          | 1.42   | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Union Colony Ditch..  | ---                          | 32.24  | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Boyd & Freeman Ditch..  | ---                          | 2.42   | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Cache la Poudre River..   | 15.30                        | ---  | ---  | 117.63  | ---   | 5.10   | 20.05  | 20.54   | 19 M=loss 0.26   | { Opposite Greeley<br>pump house.            |
| Cache la Poudre River..   | 53.56                        | ---  | ---  | 155.89  | 38.26   | ---  | 58.31  | 59.65   | 2 M=19.13  | Below Greeley                                |
| Ogilvy Ditch.....   | ---                          | 18.12  | ---  | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Waste from Ogilvy Ditch   | ---                          | ---  | 5.88   | ---   | ---   | ---  | ---  | ---   | ---  | ---  |
| Cache la Poudre River..   | 60.72                        | ---  | ---  | 175.29  | 19.40   | ---  | 77.71  | 79.63   | 6 M=3.23   | { At Junction with So.<br>Platte River.      |
| Totals.....   | ---                          | 120.45   | 5.88   | ---   | ---   | ---  | ---  | ---   | ---  | ---  |

# RETURN WATERS OF CACHE LA POUDDRE RIVER, COLORADO.

MEASUREMENT MADE BY L. G. CARPENTER, PROFESSOR OF IRRIGATION ENGINEERING, MARCH, 1892.

| NAMES OF STREAMS<br>AND DITCHER<br>WHERE<br>MEASUREMENTS<br>WERE TAKEN. | Amount of water in<br>river. | Amount of water di-<br>verted from river<br>by canals. | Amount of inflow<br>from natural trib-<br>utaries. | Amount of water in<br>river at points meas-<br>ured, plus that di-<br>verted by canals &<br>the inflow from<br>natural tributaries. | Amount of increase<br>in volume of river<br>between points<br>measured. | Decrease in volume<br>of river between<br>points measured. | Amount of increase<br>in volume of river<br>from the gauging<br>station at Canon, to<br>point where last<br>gauged. | Percent of increase<br>in volume from<br>gauging station, at<br>Canon, to point last<br>measured. | Amount of increase<br>per mile between<br>points measured. | REMARKS. | { At Canon Gauging<br>Station. |
|---|------------------------------|--|--|---|---|--|---|---|--|----------|--------------------------------|
| Cache la Poudre River.  | 65.02                        | ---  | 0.50   | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| New Stone Creek   | ---                          | ---  | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Pleasant Valley and Lake<br>Canal                                       | ---                          | 4.38   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Jackson Ditch   | ---                          | 2.07   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Little Cache la Poudre<br>Canal   | ---                          | 1.08   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Taylor & Gill Ditch   | ---                          | 0.59   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Pt. Collins Water Works   | ---                          | 0.22   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Larimer County No. 2<br>Ditch   | ---                          | 10.10  | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| New Mercer Ditch  | ---                          | 0.28   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Larimer & Weld Canal  | ---                          | 0.72   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Box Elder Ditch.  | ---                          | 0.75   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |
| Eaton Ditch   | ---                          | 0.10   | ---  | ---   | ---   | ---  | ---   | ---   | ---  | ---      | ---                            |

RETURN WATERS OF CACHE LA POUDDRE RIVER, COLORADO.—*Concluded.*

| NAMES OF STREAMS<br>AND DITCHES<br>WHERE<br>MEASUREMENTS<br>WERE TAKEN. | Amount of water in<br>river. | Amount of water di-<br>verted from river<br>by canals. | Amount of inflow<br>from natural tribu-<br>taries. | Amount of water in<br>river at points meas-<br>ured, plus that di-<br>verted by canals &<br>— the inflow from<br>natural tributaries. | Amount of increase<br>in volume of river<br>between points<br>measured. | Decrease in volume<br>of river between<br>points measured | Amount of increase<br>in volume of river<br>from the gauging<br>station at Canon,<br>to point where last<br>gauged. | Per cent. of increase<br>in volume from<br>gauging station at<br>Canon to point last<br>measured. | Amount of increase<br>per mile between<br>points measured. | REMARKS.                        |
|---|------------------------------|--|--|---|---|---|---|---|--|---------------------------------|
|   |                              |  |  |   |   |   |   |   |  |                                 |
| Whitney Ditch.....  | ---                          | 0.06   | ---  | ---   | ---   | ---   | ---   | ---   | ---  | { Near head of Eaton<br>Ditch.  |
| Cache la Poudre River.....  | 102.54                       | ---  | ---  | 122.39  | 57.37   | ---   | 57.37   | 88.23   | 30 M=1.91  |                                 |
| Near Fuller Bridge.....   | ---                          | ---  | 1.15   | ---   | ---   | ---   | ---   | ---   | ---  | { Near Greeley Pump<br>Station. |
| Cache la Poudre River.....  | 132.75                       | ---  | ---  | 152.45  | 29.06   | ---   | 87.43   | 134.47  | 15 M=1.96  |                                 |
| Ogilvy Ditch.....   | ---                          | 1.00   | ---  | ---   | ---   | ---   | ---   | ---   | ---  |                                 |
| Cache la Poudre River.....  | 141.49                       | ---  | ---  | 161.19  | 9.74  | ---   | 96.17   | 147.91  | 3 M=3.24   | Below Ogilvy Ditch.             |
| Cache la Poudre River.....  | 145.56                       | ---  | ---  | 165.26  | 4.07  | ---   | 100.24  | 154.17  | 3 M=1.36   | At mouth.                       |
| Totals.....   | ---                          | 21.35  | 1.65   | ---   | ---   | ---   | ---   | ---   | ---  |                                 |



## COMPARATIVE TABLE

SHOWING THE INCREASE IN VOLUME OF THE SOUTH PLATTE RIVER,  
AND RETURN OF WASTE OR SEEPAGE WATER.

| PLACES WHERE<br>MEASUREMENTS<br>WERE TAKEN.    | Amount of increase in volume of river, from<br>the Canon to point where measured, mi-<br>nus the inflow from natural tributaries. |                  |                  |                |
|--|---|------------------|------------------|----------------|
|  | October<br>1889.  | October<br>1890. | October<br>1891. | March<br>1892. |
| River below head of City Ditch.                | -----   | -----            | 27.57            | 25.32          |
| River at Littleton                             | 49.91   | 11.73            | 80.18            | 69.95          |
| River at Denver                                | 50.91   | 55.61            | 96.38            | 129.56         |
| River below head of Fulton Ditch               | -----   | 94.41            | 138.85           | 141.51         |
| River at Brighton                              | 77.07   | 98.91            | 175.19           | 116.17         |
| River below Elwood & Wheeler<br>Ditch          | 119.10  | 172.35           | 218.69           | 136.33         |
| River at Platteville                           | 133.38  | -----            | 226.93           | 180.54         |
| River above mouth of St. Vrain                 | -----   | 155.80           | 233.32           | -----          |
| River below Latham Ditch                       | 197.00  | 176.91           | 299.21           | 192.86         |
| River above Cachela Poudre R'vr                | -----   | 215.20           | 326.13           | 216.17         |
| River below Hardin Ditch                       | 277.10  | 351.66           | 392.66           | 285.25         |
| River below Putman Ditch                       | -----   | 333.60           | 418.86           | 330.61         |
| River above Orchard                            | 276.13  | 356.79           | -----            | -----          |
| River above Fort Morgan Canal                  | 305.92  | 360.58           | 434.05           | 360.09         |
| River above head of Platte and<br>Beaver Canal | 307.03  | 367.09           | 472.14           | 431.74         |
| River above head of Smith Ditch<br>at Snyder   | -----   | 384.18           | 570.60           | -----          |
| River at Merino                                | 385.54  | 405.71           | 550.33           | -----          |
| River at Sterling                              | 418.33  | 435.16           | 553.69           | -----          |
| River 2 miles above Iliff                      | 422.77  | 449.21           | 611.76           | -----          |



## CHAPTER II.

## IRRIGATION DIVISION NO. 1.

## SOUTH PLATTE DIVISION.

Mr. I. H. Batchellor, Superintendent. Appointed April 23, 1889. Reappointed July 18, 1891. Residence, Denver, Colorado.

Mr. Batchellor's concise report upon the workings of his division, which follows, requires little comment or elaboration.

The total area irrigated, as shown by the statements from ten districts, is 763,105 acres, which, as compared with 693,372 acres reported from the same districts in 1890, gives an increase of 69,733 acres.

Four districts are not included in this summary, three (Nos. 46, 47, 48) embraced in North Park, which have a combined record of 265 ditches, and the fourth (No. 65), embracing the north and middle forks of the Republican River, where there is a record of fourteen ditches.

Total miles ditch line reported, 2,651.54, covering 882,853 acres of land. The average amount of water reported as carried in the ditches of some of the districts is undoubtedly too high, as the sources of supply would not furnish the water. However, taking the total average amount carried as given (5,103 cubic feet per second) and the number of acres supplied therefrom, to wit: 678,620, and a duty is given to the water of 130 acres to each second feet.

In order to abridge the report as much as practicable, and yet give the general information desired, the statistical statements of the Water Commissioners will not be published, but the summarized statement of the Superintendent will show the totals from each district under the respective headings and the number of ditches in each district carrying water, as shown by the Commissioners' reports.

The ditch and reservoir statements, filed in the office of the State Engineer, during the years of 1891-1892, are given under the headings of their respective districts.

HON. J. P. MAXWELL,  
*State Engineer,*  
Denver, Colo.

I herewith hand you a condensed tabulated statement of the reports of the Water Commissioners, for the districts comprising the Division of the Platte, for the year 1892 (the information for 1891 being so meager that it is impossible to make a correct report for that year).

This has been a very favorable year for farmers, gardeners and fruit growers, having been ample water in the streams nearly the whole season, supplemented by late rain. The crops were nearly all (if not all) matured.

*District No. 1.* James Hurly, Commissioner for District No. 1, reports 43,730 acres irrigated, being 26,950 acres more than 1890. There has been a good flow of water in this district, which must be largely due to seepage, as the Platte, as well as other streams above Greeley, were drawn dry to furnish water for the districts through which they run.

Mr. Hurley says he "has a great deal of trouble to get the ditch owners and superintendents to furnish data for reports." Has been on duty forty-one days to date (September 28).

*District No. 2.* J. H. Hodgson, Commissioner for District No. 2, reports 58,328 acres irrigated, 7,322 in excess of 1890. Was called out to distribute water on the 20th day of April. Had good supply until August 1. More than average crops were secured.

The manager of the Evans Ditch, No. 2, made complaint that the Bucker Ditch Company had constructed what they called a seepage ditch up through the Platte bottom "and several miles above the head of their own ditch and excavated about two feet below the channel of the river, a clear encroachment upon other ditches' rights" I called Mr. Hodgson's attention to it and he immediately shut it off, but other parties claimed and re-

moved the gate between the seepage and Bucker ditches, and thereby left the Commissioner powerless.

*District No. 3.* J. L. Armstrong, Commissioner District No. 3, reports 162,239 acres irrigated, 3,959 acres of seepage, and 17,750 acres from reservoirs, being 12,192 more more than 1890.

*District No. 4.* W. A. Bean, Commissioner District No. 4, gives 101,907 acres irrigated, 1,500 acres by seepage and 10,840 as from reservoirs, making 12,117 acres more than 1890. As no complaints have come from this district, it is reasonable to suppose that the water supply was good.

*District No. 5.* From District No. 5 we get 77,803 acres irrigated, being 16,762 acres less than 1890. Mr. J. W. Daniels, Commissioner, says that he is "convinced that reports made in former years are erroneous," which must account for the falling off of acreage in that district.

*District No. 6.* A. C. Stillwell, Commissioner of District No. 6, reports 74,779 acres irrigated, 2,903 less than 1890, 1,400 by seepage. "I was called out April 25, and was employed up to date (October 1), seventy days, and an assistant sixty days, second assistant on reservoirs twenty-two days. The stream kept up to a later date than usual owing to less heavy rains in the mountains allowing the snow to melt more gradually.

"Farmers are very slack about keeping up their head-gates and rating flumes.

I would suggest that the tax schedule of each County of the State be so arranged that the number of acres of the different crops could be placed thereon, and the name of the ditch given from which they were irrigated.

"It would be but very little additional work for the Assessors and would save a vast amount of time on the part of the Water Commissioners."

*District No. 7.* M. J. Clark reports fifty-one ditches (eighty-six being the whole number decreed) as irrigating 108,487 acres, 3,810 acres more than 1890, 2,670 by seepage. In this district much attention has been given to fruit cultivation, with good success, as I have been informed, but as no report is made of it by the Commissioners there is no basis to make an estimate of the products.



The injunction which prohibits me from performing my duty according to the law enacted by the Legislature is still in force, notwithstanding the decision of the Supreme Court in several similar cases to the contrary.

*District No. 8.* D. W. Stevens, Commissioner District No. 8, reports 39,472 acres irrigated, being 20,115 more than 1890. 700 acres by seepage. The excess of this year over 1890 is accounted for by the fact that the former Commissioners did not understand that that portion of the Northern Colorado Irrigating Company's ditch, which lies north of Cherry Creek, was in their district, and consequently did not report the land lying under it.

*District No. 9.* Frank Ewers, Commissioner District No. 9, reports 4,573 acres irrigated by ditches, and 5,674 by reservoirs, being 2,135 acres over 1890.

It will be seen by the above that over one-half the land in this district is irrigated by stored water. Bear Creek, which furnishes the water, is only a small stream, but with a good system of reservoirs and due diligence in securing the water, full crops are generally secured.

Mr. Ewers complains of the lack of rating flumes and head-gates, there being but one of the former in the district.

*District No. 23.* The Commissioner for District No. 23, M. R. Hanlin, for some (to me) unknown reason made no report, but I have substituted that of 1891, which shows 75,681 acres irrigated, 75,542 of which was natural grass.

*District No. 46.* District 46 has had no adjudication of water rights. The Commissioner, C. F. Staples, reports an abundance of water through the whole irrigating season.

*District No. 47.* This District has had no water rights granted by the courts. W. D. Beckwith, the Commissioner, reports plenty of water and no complaints. Hay crop unusually good. Some trials of timothy have proved a fair success, also winter rye and oats with results that both can be raised at this altitude (8,300 feet).

*District No. 48.* No adjudication or Water Commissioner.

*District No. 64.* R. J. Patterson, Commissioner District No. 64, reports 11,875 acres irrigated, which is 915 acres more than 1890.

This district is the last on the Platte River in the State, and being a long distance from the source of supply, with all the water drawn from the river and its feeders during the latter part of the irrigating season, the question arises, where do they get water for irrigation? It has been satisfactorily demonstrated that a large portion of the water used sinks into the earth and finds its way back to the stream lower down, arising to the surface, and flowing on as if nothing had happened. Therefore, people living on the lower Platte River need have no fear of shortage, with nine districts above them forming immense underground reservoirs.

With the help of occasional rains this district has secured good crops.

*District No. 65.* No decrees and no Commissioner.

As shown by the tabulated statement, there were 11,474 acres of land irrigated by seepage water in districts near the mountains, which, considered in connection with districts further down the streams, it must certainly supply an unlimited amount continuously.

Districts Nos. 3, 4 and 9 report an aggregate of 34,264 acres of land which was irrigated from stored waters.

The above figures most certainly represent but a small part of the land irrigated thereby, for many large reservoirs are known to be constructed and in use in Districts No. 2, 5, 6 and 7, but as no reports are made by the Commissioners I have no data to work upon.



[illegible]

\*Water rights not adjudicated.

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 1, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER JAMES HURLEY, ORCHARD, COLO., APPOINTED IN 1889.

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of filing in the State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.   |
|--|---|--|---------------------------------------|--|---|
| The Banner Ditch, No. 1.....   | Box Elder creek.....                      | May 1, 1891                                    | Jan. 31, 1891                         | 262.40                                     | Banner Ditch and Reservoir Co.<br>.....<br>A. M. Fahringer, <i>et als</i> |
| The Banner Ditch, No. 2.....   | Box Elder creek.....                      | May 1, 1891                                    | Feb. 10, 1891                         | 130.00                                     |   |
| The Bennett Ditch.....   | Kiowa creek.....                          | June 1, 1891                                   | Apr. 18, 1891                         | 40.00                                      |   |
| The Lone Tree Ditch and Reservoir Company's Ditch West from Dam..... | Box Elder creek.....                      | June 2, 1891                                   | Not stated.                           | Not given                                  | Lone Tree Ditch and Reservoir Co.<br>.....                                |
| The Lone Tree Ditch and Reservoir Company's Ditch East from Dam..... | Box Elder creek.....                      | June 2, 1891                                   | Not stated.                           | Not given                                  |   |
| The Wolf Creek Ditch.....  | Wolf and Comanche creeks.....             | June 22, 1891                                  | June 19, 1891                         | 200.00                                     |   |
| The Oscar Sherrer Ditch.....   | A well.....                               | June 25, 1891                                  | June 1, 1891                          | 6.00                                       | Henry N. Bellows<br>Mrs. Frank Sheffer                                    |
| The Bijou Ditch.....   | Bijou creek.....                          | July 18, 1891                                  | Apr. 27, 1891                         | 65.00                                      | Chas. S. Owens  |
| The C. E. Kuhn Ditch.....  | Beaver creek.....                         | Oct. 14, 1891                                  | July 15, 1889                         | 2.90                                       | C. E. Kuhn  |
| The East Bijou Ditch.....  | East Bijou creek.....                     | Oct. 14, 1891                                  | July 18, 1891                         | 400.00                                     | Adams H. Fahringer<br>Geo. H. and Ida E. Raymond                          |
| The Middle Bijou Big Ditch.....                                      | Middle Bijou creek.....                   | Oct. 14, 1891                                  | July 18, 1891                         | 400.00                                     |   |
| The West Bijou Ditch.....  | West Bijou creek.....                     | Oct. 14, 1891                                  | July 18, 1891                         | 400.00                                     |   |
| The Comanche Big Ditch.....  | Comanche creek.....                       | Oct. 14, 1891                                  | July 18, 1891                         | 400.00                                     |   |



|  |   |                |               |                   |  |
|--|---|----------------|---------------|-------------------|--|
| The Kiowa Big Ditch.....                                 | Kiowa creek.....  | Oct. 14, 1891  | July 18, 1891 | 400.00            | Adams H. Fahringer                         |
| The Wolf Big Ditch.....                                  | Wolf creek.....   | Oct. 14, 1891  | July 18, 1891 | All of Wolf creek | Geo. H. and Ida E. Raymond                 |
| The Lawless Underflow.....                               | West Bijou creek.....                                     | Nov. 18, 1891  | Aug. 20, 1891 | 50.00             |  |
| The Lawless Ditch.....                                   | West Bijou creek.....                                     | Nov. 18, 1891  | Oct. 28, 1891 | 100.00            | Mary Lawless                               |
| The Extension of the Page and Foster Ditch.....          | Bijou creek.....  | Dec. 8, 1891   | Oct. 26, 1891 | 50.00             |  |
| The Wolf Creek Ditch.....                                | Wolf creek.....   | Jan. 16, 1892  | Dec. 15, 1891 | 200.00            | Henry N. Bellows <i>et al</i>              |
| The Lone Tree Ditch and Reservoir Company's Ditches..... | Box Elder creek.....                                      | Feb. 3, 1892   | Plat only.    | -----             |  |
| The Lone Tree Ditch and Reservoir Co.'s Ditch No. 2..... | Box Elder creek.....                                      | Feb. 11, 1892  | Jan. 19, 1891 | 1,200.00          |  |
| The Lone Tree Ditch and Reservoir Co.'s Ditch No. 3..... | Box Elder creek.....                                      | Feb. 11, 1891  | Jan. 19, 1891 | 1,500.00          | The Lone Tree Ditch and Reservoir Co.      |
| The Lone Tree Ditch and Reservoir Co.'s Ditch No. 5..... | Box Elder creek.....                                      | Feb. 11, 1891  | Jan. 19, 1891 | 50.00             |  |
| The John H. O'Connor's Ditch or Cut.....                 | First creek.....  | Feb. 15, 1892  | Dec. 11, 1888 | 240.00            | John H. O'Connor                           |
| The Bramkamp East Ditch.....                             | Deer Trail creek.....                                     | May 14, 1892   | Feb. 15, 1892 | 3.21              | William Bramkamp                           |
| The Bramkamp West Ditch.....                             | Deer Trail creek.....                                     | May 14, 1892   | Feb. 15, 1892 | 3.21              |  |
| The David Howard Ditch.....                              | Box Elder creek }<br>and Cottonwood }<br>Gulch.....       | Aug. 11, 1892  | Feb. 1, 1890  | 12.00             | David Howard                               |
| The William B. Miller Ditch.....                         | Box Elder creek.....                                      | Aug. 11, 1892  | Aug. 3, 1892  | 12.00             | William B. Miller                          |
| The Fort Morgan Land and Reservoir Co.'s Canal.....      | South Platte R. }<br>and Kiowa and }<br>Bijou creeks..... | Sept. 3, 1892  | Sep. 1, 1892  | 450.00            | The Fort Morgan Land and Reservoir Company |
| The Clinton Ditch.....                                   | Deer Trail creek.....                                     | Sept. 12, 1892 | July 11, 1892 | 9.80              | Clinton W. Weatherbee                      |
| The Gibson Ditch No. 2.....                              | Kiowa creek.....  | Oct. 11, 1892  | July 14, 1892 | 165.00            | J. W. Gibson                               |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 1, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                                     | Name of stream supplying water therefor. | Name of ditch conveying water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                          |
|--|--|--|--|---------------------------------------|---------------------------------|--|
| The Bunker & Coggin's Reservoir                        | Little Crow Creek                        | Built on stream.                       | Dec. 2, 1890                               | Nov. 12, 1890                         | 12,000,000                      | Bunker & Coggin's.                           |
| The Banner Reservoir No. 1                             | Box Elder Creek                          | Banner Ditch No. 1                     | May 1, 1891                                | Not Stated                            | 17,289,000                      | The Banner Ditch & Reservoir Company.        |
| The Banner Reservoir No. 2                             | Box Elder Creek                          | Banner Ditch No. 1                     | May 1, 1891                                | Not Stated                            | 20,217,000                      |  |
| The Bennett Reservoir                                  | Kiowa Creek                              | Bennett Ditch                          | June 1, 1891                               | April 18, 1891                        | Not given                       | A. H. Fahringer <i>et al.</i>                |
| The Lone Tree Ditch and Reservoir Co's West Reservoir  | Box Elder Creek                          | Ditch west from dam                    | June 2, 1891                               | -----                                 | Not given                       | Lone Tree Ditch & Reservoir Company.         |
| Same, East Reservoir                                   | Box Elder Creek                          | Ditch east from dam                    | June 2, 1891                               | Not Stated                            | Not given                       |  |
| The Comanche Reservoir                                 | Wolf & Comanche Creeks                   | Wolf Creek Ditch                       | June 22, 1891                              | June 19, 1891                         | Not given                       | Henry N. Bellows <i>et al.</i>               |
| The L. A. Watkins Reservoir                            | Station and Trout Gulches                | Built on stream                        | June 30, 1891                              | Dec. 22, 1891                         | 1,882,000                       | Leonard A. Watkins.                          |
| The Bijou Reservoir                                    | Bijou Creek                              | Bijou Ditch                            | July 18, 1891                              | April 22, 1891                        | 10,000,000                      | Chas. S. Owens.                              |
| The Bare Gulch Reservoir                               | Bare Gulch                               | Built on stream.                       | Aug. 10, 1891                              | May 22, 1891                          | 535,000                         | Leonard A. Watkins                           |
| The Enterprise Reservoir                               | Not given                                | Built on gulch                         | Aug. 10, 1891                              | May 22, 1891                          | 1,425,000                       |  |
| The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 1. |  |  |  |                                       | 36,000,000                      |  |
| The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 2  | Bijou Creek                              | Inlet or supply Ditch                  | Sep. 19, 1891                              | June 5, 1891                          | 150,000,000                     | The Fort Morgan Ditch and Reservoir Company. |
| The Ft. Morgan Ditch & Reservoir Co's Reservoir No. 3. |  |  |  |                                       | 30,000,000                      |  |

|  |                                    |  |               |  |                          |  |
|--|------------------------------------|--|---------------|--|--------------------------|--|
| The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 4 | Bijou Creek                        | Inlet or supply Ditch.                             |               |  | 175,000,000              | The Fort Morgan Ditch and Reservoir Company.   |
| The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 5 | { East and Middle Bijou Creeks.    | { East and Middle Bijou Ditches                    |               |  | 900,000,000              |  |
| The Ft. Morgan Ditch & Reservoir Co.'s Reservoir No. 6 | West Bijou Creek                   | West Bijou Ditch                                   | Aug. 1, 1891  |  | 140,000,000              |  |
| The Middle Bijou Reservoir                             | { Kiowa, Comanche and Wolf Creeks. | { Kiowa, C'm'uch & Wolf Creek Big Ditches          | Aug. 2, 1891  |  | 548,856,000              | Adams H. Fahringer, Geo. H and Ida E. Raymond. |
| The West Bijou Reservoir                               | Kiowa Creek                        | Kiowa Big Ditch                                    | Sep. 5, 1891  |  | 304,820,000              |  |
| The Kiowa Reservoir                                    | West Bijou Creek                   | Lawless Ditch                                      | Sep. 5, 1891  |  | 21,780,000               |  |
| The Little Kiowa Reservoir                             | West Bijou Creek                   | Paige & Foster Ditch through the extension of same | Oct. 23, 1891 |  | 2,289,000                | Mary Lawless                                   |
| The Lawless Reservoir                                  | Bijou Creek                        | Wadlin Ditch                                       | Oct. 26, 1891 |  | 4,275,000                | Mary Lawless                                   |
| The Lawless Reservoir No. 1.                           | Crow Creek                         | Wolf Creek D'ch                                    | Not Stated.   |  | { 44,000,000 as enlarged | John M. G. Wadlin                              |
| The Lawless Reservoir No. 2                            | Wolf Creek                         | Built on stream.                                   | Dec. 15, 1891 |  | Not Given                | Henry N. Bellows <i>et al</i>                  |
| Amended statement of the Wadlin Reservoir              | Crow Creek                         | Co.'s Ditch No. 3                                  | Oct. 5, 1891  |  | 157,000                  | Daniel Camfield                                |
| The Comanche Reservoir No. 1                           | Crow Creek                         | Co.'s Ditch No. 1                                  | Jan. 16, 1892 |  | { 20,908,000             | The Lone Tree Ditch and Reservoir Company      |
| The Camfield Reservoir                                 | Box Elder Creek                    | Built on stream                                    | Jan. 28, 1892 |  | 7,396,000                | William Bramkamp                               |
| The Lone Tree Ditch & Reservoir Co.'s Reservoir No. 1. | Deer Trail Creek                   | Built on stream                                    | Feb. 11, 1891 |  | 5,197,000                |  |
| The Lone Tree Ditch & Reservoir Co.'s Reservoir No. 2  | Walker Gulch                       | Built on stream                                    | May 14, 1892  |  | { 3,251,000              |  |
| The Bramkamp Reservoir                                 | Coolehan Gulch                     | Built on stream                                    | Oct. 11, 1892 |  | 12,853,000               | J. W. Gibson                                   |
| The Gibson Reservoir No. 1                             | Hoffer Gulch                       | Built on stream                                    |               |  | 16,324,000               |  |
| The Gibson Reservoir No. 2                             |                                    |  |               |  |                          |  |
| The Gibson Reservoir No. 3                             |                                    |  |               |  |                          |  |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 2, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER JOS. H. HODGSON, DENVER, COLO., APPOINTED JULY, 1891.

| NAME OF DITCH OR CANAL.                           | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed<br>in cubic<br>feet per<br>second. | NAMES OF CLAIMANTS.          |
|---|---|---|--|--|------------------------------|
| The Frank Ditch .....                             | Station gulch.....                              | March 7, 1891                                       | Mar. 15, 1890                                    | 0.56   | Fred F. Frank                |
| The L. A. Watkins Ditch No. 1 ..                  | Station creek .....                             | March 7, 1891                                       | Dec. 20, 1890                                    | 3.00   | L. A. Watkins                |
| The L. A. Watkins Ditch No. 2 ..                  | Station creek .....                             | March 7, 1891                                       | Dec. 20, 1890                                    | 3.00   |                              |
| The L. A. Watkins Ditch No. 3 ..                  | Station creek .....                             | March 7, 1891                                       | Dec. 20, 1890                                    | 3.00   |                              |
| The Albee & Warden Ditch .....                    | South Platte river.                             | June 3, 1891  | May 11, 1891                                     | 20.00  | A. C. Albee                  |
| The Fulton Development &<br>Supply Ditch.....     | Subterranean, sec-<br>page & sp'g wat }         | June 11, 1891                                       | March 1, 1890                                    | 212.00   | Geo. W. Twombly <i>et al</i> |
| The Burlington Development &<br>Supply Ditch..... | Same sources .....                              | July 6, 1891  | Jan. 17, 1891                                    | 63.60  |                              |
| The Reno & Stanley Ditch .....                    | Dry creek.....                                  | Feb. 3, 1892  | Oct. 28, 1891                                    | 2.00   |                              |
| The Sacramento Ditch.....                         | South Platte river.                             | April 6, 1892                                       | Jan. 15, 1892                                    | 8.00   | Thomas T. Reno               |
| The Leonard Ditch .....                           | Murphey creek .....                             | April 16, 1892                                      | April 4, 1892                                    | 20.00  | Wall & Purcell               |
| The McCanne Ditch .....                           | South Platte river.                             | Aug. 3, 1892  | Mar. 15, 1892                                    | 20.00  | J. H. Leonard                |
|   |   |   |  |  | D. J. McCanne                |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 2, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.   | Name of stream supplying water therefor.         | Name of Ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                    |
|--|--|--------------------------------------|--|---------------------------------------|---------------------------------|--|
| The Dodge Reservoir .....                                  | Dry Creek .....                                  | German Ditch ..                      | Mar. 27, 1891                              | July 1, 1888                          | 3,310,000                       | ..... John K. Dodge                    |
| The Second Creek Reservoir ...                             | South Platte River ...                           | Burlington Ditch                     | May 15, 1891                               | April 3, 1891                         | 4,573,800                       | ..... Chas. E. Day <i>et al.</i>       |
| The Twombly Reservoir No. 1,                               |  |                                      |  |                                       | { 25,000,000 }                  |  |
| The Twombly Reservoir No. 2,                               |  |                                      |  |                                       |                                 |  |
| The Twombly Reservoir No. 3,                               | South Platte River ...                           | Fulton Ditch ....                    | June 11, 1891                              | June 9, 1891                          | { 2,500,000 }                   | ..... Geo. W. Twombly                  |
| The Irondale Ditch and Reservoir Company's Reservoir ..... | Long Branch .....                                | Comp'y's Feeder                      | July 11, 1891                              | April 13, 1891                        | 45,000,000                      | { The Irondale Ditch and Reservoir Co. |
| The Draper Reservoir .....                                 | South Platte River ..                            | Burlington D'ch & Brighton Lat }     | July 23, 1891                              | June 3, 1891                          | 522,720                         |  |
| The Little Western Reservoir                               | South Platte River ..                            | Burlington Ditch                     | Oct. 19, 1891                              | May 2, 1891                           | 5,500,000                       | ..... Not given                        |
| The Evans Reservoir No. 1                                  | { Ravines in Sec. 10,<br>T. 3 N, R. 68 W. .... } | Built on streams                     | Nov. 16, 1891                              | Nov. 1890                             | 2,613,600                       | ..... Olive O. Nye                     |
| The Evans Reservoir No. 2                                  |  |                                      |  | { Nov. 12, 1891 }                     | 5,227,200                       |  |
| The Kalooga Reservoir, Amended Statement .....             | South Platte River ..                            | Burlington Ditch                     | Feb. 15, 1892                              | Feb. 20, 1890                         | 13,068,000                      | ..... J. A. Manfull <i>et al.</i>      |
| The Vaile Reservoir .....                                  | South Platte River ..                            | Burlington Ditch                     | Mar. 17, 1892                              | Mar. 11, 1892                         | 4,000,000                       | ..... Joel F. Vaile                    |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 3, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DEC. 1, 1890, TO DEC. 1, 1892.—COMMISSIONER J. L. ARMSTRONG, FT. COLLINS, COLORADO. APPOINTED JULY, 1890.

| NAME OF DITCH OR CANAL.   | Name of Stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                       |
|---|---|--|---------------------------------------|--|---|
| The Sickman & Davy Ditch.....                                   | Dry Creek.....                            | Dec. 9, 1890                               | June 15, 1889                         | 4.28                                       | Thomas H. Davy and Jonathan Sickman       |
| The Gibson Ditch.....   | Dry Creek.....                            | Dec. 18, 1890                              | Nov. 15, 1890                         | 15.38                                      | A. O. Gibson                              |
| The Lambert Lateral.....  | Cache la Poudre.....                      | Jan. 3, 1891                               | Mar. 1, 1890                          | 30.00                                      | John Lambert, <i>et al</i>                |
| The Arthur Irrigating Co. Feeder                                | Marsh.....                                | Jan. 8, 1891                               | Oct. 14, 1890                         | 6.16                                       | The Arthur Irrigation Company             |
| Same No. 2.....   | Marsh.....                                | Jan. 8, 1891                               | Oct. 14, 1890                         | 6.16                                       |   |
| The Dennis Ditch.....   | Cache la Poudre.....                      | Apr. 21, 1891                              | Mar. 25, 1891                         | 3.50                                       | Richard S. Dennis                         |
| The Dry Creek Feeder.....                                       | Rains and Snows.....                      | June 18, 1891                              | June 15, 1891                         | Not given.                                 | Frank Harrison and Elisa S. Darrough      |
| The Garrett Ditch.....  | Howe's Slough.....                        | July 25, 1891                              | Apr. 15, 1881                         | 15.00                                      | F. W. Garrett                             |
| The Gibson Ditch (statement of completion).....                 | Dry Creek.....                            | Nov. 12, 1891                              | Nov. 12, 1891                         | Not given.                                 | A. O. Gibson                              |
| The North Poudre Land & Canal Co.'s Feeder to Reservoir No. 1 } | North Poudre.....                         | Dec. 2, 1891                               | Aug. 1883                             | 134.55                                     | The North Poudre Land and Canal Company   |
| Same to Reservoir No. 2.....                                    | North Poudre.....                         | Dec. 2, 1891                               | 1884                                  | 81.28                                      |   |
| Same to Reservoir No. 3.....                                    | North Poudre.....                         | Dec. 2, 1891                               | Dec. 1883                             | 269.10                                     |   |
| Same to Reservoir No. 4.....                                    | North Poudre.....                         | Dec. 2, 1891                               | Feb. 1890                             | 44.48                                      |   |
| The Owl Creek Ditch.....  | Owl Creek.....                            | Jan. 28, 1892                              | Oct. 14, 1891                         | 120.00                                     | The Owl Creek Ditch and Reservoir Company |

|  |   |                |                |        |                                       |
|--|---|----------------|----------------|--------|---------------------------------------|
| The Isaac D. Miller Ditch                                  | Lone Tree Creek                             | Feb. 1, 1892   | Feb. 1, 1882   | 1.00   | Isaac D. Miller                       |
| The Isaac D. Miller Irrigation, }<br>Well and Supply Ditch | Lone Tree Creek                             | Feb. 1, 1892   | June 1, 1889   | 4.50   |                                       |
| The Decker & Pearce Ditch                                  | Dry Gully                                   | Feb. 3, 1892   | Jan. 8, 1892   | 120.00 | Scott Decker and John Pearce          |
| The J. L. Thomas Ditch                                     | Fossil Creek                                | April 28, 1892 | Jan. 28, 1892  | 14.05  | John L. Thomas                        |
| The Cache la Poudre Reservoir }<br>and Supply Ditch        | Cache la Poudre                             | May 2, 1892    | Feb. 10, 1892  | 140.00 | The Cache la Poudre Reservoir Company |
| The Feeder to the Ricketts Reservoir }                     | Soldier Creek                               | May 24, 1892   | Mar. 18, 1892  | 100.00 | Philander Ricketts                    |
| Same   | Soldier Creek                               | June 7, 1892   | Mar. 18, 1892  | 100.00 | Philander Ricketts, amended statement |
| The Coal Bank Draw Seepage Ditch                           | Coal Bank Draw                              | Aug. 17, 1892  | May 15, 1892   | 10.00  | Cyrenus D. Neff                       |
| The Lookout Reservoir Feeder                               | Cache la Poudre                             | Sept. 10, 1892 | July 7, 1892   | 22.00  | A. H. Meyers                          |
| The Feeder to Darling Reservoir                            | { Cache la Poudre, }<br>{ waste & Seepage } | Sept. 27, 1892 | 1890           | 18.00  | Willard M. Darling                    |
| The McGinley Seepage Ditch                                 | Seepage                                     | Oct. 1, 1892   | Sept. 28, 1892 | 50.00  | A. A. McGinley                        |
| The Hill Seepage Ditch                                     | Waste and seepage                           | Oct. 5, 1892   | Sept. 27, 1892 | 3.00   | Simcoir Hill                          |
| The Abram Washburn Ditch No. 3                             | Box Elder Creek                             | Oct. 18, 1892  | July 8, 1892   | 27.00  | Abram Washburn                        |
| The Coal Lake Reservoir Feeder                             | Cache la Poudre                             | Oct. 31, 1892  | Aug. 1, 1892   | 6.00   | L. N. Cole <i>et al.</i>              |
| The Query Ditch  | A slough, unnamed                           | Nov. 23, 1892  | Oct. 17, 1892  | 5.19   | O. V. Query                           |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 3, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.  | Name of stream supplying water therefor. | Name of ditch leading water thereto.                    | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                          |
|---|--|---|--|---------------------------------------|---------------------------------|--|
| The Lambert Reservoir.....                                | Cache la Poudre.....                     | Larimer County.   | Jan. 3, 1891                               | Mar. 1, 1890                          | 2,170,000                       | John Laubert <i>et al.</i>                   |
| The Dennis Reservoir.....                                 | Cache la Poudre.....                     | Larimer County.   | Apr. 21, 1891                              | Mar. 25, 1891                         | 4 870,000                       | Richard S. Dennis                            |
| The Hill Brothers Reservoir...                            | Cache la Poudre.....                     | Larimer & Weld  | June 26, 1891                              | June 2, 1891                          | 4,000,000                       | Henry C. and A. L. Hill                      |
| The Horner Reservoir.....                                 | Cache la Poudre.....                     | Lake canal.....   | July 6, 1891                               | April 25, 1891                        | 19,220,000                      | Alfred Latson <i>et al.</i>                  |
| The Jameson Reservoir.....                                | Box Elder creek.....                     | Feeder to same.....                                     | July 15, 1891                              | June 1, 1891                          | 3,525,218                       | George L. Jameson                            |
| The Terry Lake Reservoir.....                             | Dry creek.....                           | Feeder to same.....                                     | July 20, 1891                              | Dec. 18 1890                          | 356,000,000                     | Larimer & Weld Res. Co.                      |
| The Cuthbertson Reservoir....                             | Not given.....                           | Not given.....  | Oct. 26, 1891                              | Oct. 14, 1891                         | Not stated                      | James Cuthbertson                            |
| The North Poudre Land & Canal Co.'s Reservoir No. 1.      | North Poudre.....                        | North Poudre canal.....                                 | Dec. 2, 1891                               | { Aug. 1883                           | 29,345,591                      | The North Poudre Land and Canal Company.     |
| The North Poudre Land & Canal Co.'s Reservoir No. 2.      |  |   |  | { 1884                                | 145,355,180                     |  |
| The North Poudre Land & Canal Co.'s Reservoir No. 3.      |  |   |  | { Dec. 1883                           | 111,057,813                     |  |
| The North Poudre Land & Canal Co.'s Reservoir No. 4.      | Owl creek.....                           | Owl Creek ditch   | Jan. 28, 1892                              | { Feb. 1890                           | 46,766,420                      | The Owl Creek Ditch and Reservoir Company.   |
| The Decker & Pearce Reservoir                             |  |   |  | { Oct. 19, 1891                       | 8,623,000                       |  |
| The Box Elder Ditch & Reservoir Co.'s Reservoir No. 1.... | Lone Tree Creek.....                     | { Decker & Pearce ditch                                 | Feb. 3, 1892                               | Jan. 8, 1892                          | 16,000,000                      | Scott Decker and Juno Pearce                 |
|   | Box Elder creek.....                     | { The Box Elder Ditch & Reservoir Co.'s D. & R. Co.'s D | Feb. 10, 1892                              | Nov. 15, 1891                         | 4,136,000                       | { The Box Elder Ditch and Reservoir Company. |

|   |   |               |               |             |
|---|---|---------------|---------------|-------------|
| The Box Elder Ditch & Reservoir Co.'s Reservoir No. 2           | { The Box Elder ditch & Reservoir Co.'s ditch } | Feb. 10, 1892 | Nov. 15, 1891 | 1,712,600   |
| The Box Elder Ditch & Reservoir Co.'s Reservoir No. 3           | Larimer & Weld                                  | Mar. 14, 1892 | June, 1884    | 7,702,679   |
| The T. W. & A. E. Montgomery Reservoir                          | Larimer & Weld                                  | Mar. 24, 1892 | Dec. 23, 1891 | 2,000,000   |
| The Eaton-Law Reservoir   | Supply ditch                                    | May 2, 1892   | Feb. 10, 1892 | 22,751,212  |
| The Cache la Poudre Reservoir                                   | Box Elder ditch                                 | May 4, 1892   | Feb. 3, 1892  | 358,000,000 |
| The Smith Reservoir   | Feeder to same                                  | May 24, 1892  | Mar. 18, 1892 | 11,452,000  |
| The Ricketts Reservoir  | Feeder to same                                  | June 7, 1892  | Mar. 18, 1892 | 18,808,620  |
| The Ricketts Reservoir  | Larimer & Weld                                  | Sep. 10, 1892 | July 7, 1892  | 18,808,620  |
| The Lookout Reservoir   | Not st  | Sep. 27, 1892 | Not stated    | 2,185,240   |
| The Mountain View Reservoir                                     | Larimer & Weld                                  | Sep. 27, 1892 | 1890          | Not given   |
| The Darling Reservoir   | Waste, Seep. & C. la P.                         | Sep. 27, 1892 | July 18, 1892 | 4,604,000   |
| The James Reservoir   | Waste, Seep. & C. la P.                         | Oct. 5, 1892  |               | 2,135,000   |
| The Water Supply & Storage Co.'s Reservoir No. 1                | Larimer County                                  | Oct. 11, 1892 | 1892          | 167,869,300 |
| The Water Supply & Storage Co.'s Reservoir No. 2                |   |               |               | 44,695,086  |
| The Water Supply & Storage Co.'s Reservoir No. 3                |   |               |               | 43,369,500  |
| The Water Supply & Storage Co.'s Reservoir No. 4                |   |               |               | 170,855,000 |
| The Water Supply & Storage Co.'s Long Pond; or, Reservoir No. 5 |   |               |               | 31,218,500  |
| The Water Supply & Storage Co.'s Lindenmier's Lake              | Rouillard's lateral                             | Oct. 28, 1892 | Sept. 5, 1892 | 3,660,000   |
| The Rouillard Reservoir   | No. 2 canal                                     | Oct. 31, 1892 | Aug. 1, 1892  | 7,057,000   |
| The Cole Lake Reservoir   | Cache la Poudre                                 | Nov. 22, 1892 | June 1, 1873  | 90,000,000  |
| The Seeley's Lake Reservoir                                     |   |               |               |             |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 4. SHOWING MODIFICATIONS OF THE DECREES GOVERNING APPROPRIATIONS IN SAID DISTRICT, FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE, MARCH 18, 1892.

| NAME OF DITCH OR CANAL.    | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|----------------------------|---|------------------------|--|--|--|--------------------------------|
| The Pioneer Ditch.....     | Big Thompson river.                       | Dec. 1, 1872           | 5.00   | .....  | 618.42   | 24 A                           |
| The Handy Ditch.....       | Big Thompson river.                       | Oct. 15, 1877          | 198.00   | .....  | 1195.25  | 39 A                           |
| The Home Supply Ditch..... | Big Thompson river.                       | Mich. 15, 1881         | 286.52   | .....  | 1949.61  | 50 A                           |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 4, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER WM. A. BEAN, LOVELAND, COLORADO, APPOINTED MAY, 1888.

| NAME OF DITCH OR CANAL.                   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                       |
|---|---|--|---------------------------------------|--|---|
| The North Loudon Ditch                    | { Big Thompson }<br>creek                 | Jan. 22, 1891                              | Nov. 20, 1883                         | 65.20                                      | The Fairport Lake & Canal Company         |
| The Charles L. Martin Irrigating Ditch.   | Buckhorn creek                            | May 6, 1891                                | Not stated                            | Not given                                  | Charles L. Martin                         |
| The Extension of The Perkins Ditch No. 17 | Buckhorn creek                            | Aug. 8, 1891                               | Aug. 5, 1891                          | 6.00                                       | J. R. Mason <i>et al</i> (enlargement of) |
| The Peterson Ditch                        | { Supply Waste }<br>{ Gulch }             | Feb. 25, 1892                              | Feb. 15, 1892                         | 8.00                                       | Jens Peterson                             |
| The Butler-White Ditch.                   | Hubbel Run creek                          | Oct. 20, 1892                              | May 1, 1892                           | 2.00                                       | T. Butler & F. White                      |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO 4, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR,         | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                             |
|----------------------------|--|--|---|--|---------------------------------------|---|
| The Rist Reservoir         | Big Thompson Creek                             | Geo. Rist Ditch.                           | Jan. 12, 1891                                       | Sept. 15, 1874                                   | 5,210,865                             | Chas. G. Buckingham                             |
| The Fairport Lake          | Big Thompson Creek                             | Louden Canal                               | Jan. 22, 1891                                       | Nov. 20, 1883                                    | 25,473,016                            | {The Fairport Lake and Ca-<br>nal Company}      |
| The Hummel Reservoir       | Big Thompson Creek                             | Handy Ditch                                | Feb. 17, 1891                                       | Nov. 20, 1882                                    | 12,806,640                            | John C. Hummel                                  |
| The Darrough Reservoir     | Big Thompson Creek                             | { Loveland and<br>Greeley }                | Feb. 18, 1891                                       | Feb. 6, 1891                                     | 18,060,000                            | { Frank Harrison and Eliza S.<br>Darrough }     |
| The De France Reservoir    | Big Thompson Creek                             | Handy Ditch                                | Mar. 16, 1891                                       | May 10, 1883                                     | 11,325,600                            | A. H. De France                                 |
| The Hays Reservoir         | Big Thompson Creek                             | Barnes Ditch                               | Apr. 18, 1891                                       | Not stated.                                      | 563,715,512                           | {The Farmers Irrigating &<br>Reservoir Company} |
| The Huppe Reservoir        | Big Thompson Creek                             | Handy Ditch                                | Aug. 7, 1891  | May 1, 1882                                      | 3,168,990                             | Huppe Bros.                                     |
| The S. J. Wilson Reservoir | Big Thompson Creek                             | Handy Ditch                                | Aug. 7, 1891  | Apr. 1, 1881                                     | 6,511,280                             | S. J. Wilson                                    |
| The Darrough Reservoir     | Big Thompson Creek                             | { Loveland and<br>Greeley }                | Jan. 9, 1892  | Oct. 10, 1891                                    | 18,060,000                            | { Frank Harrison and Eliza S.<br>Darrough }     |
| The Bosch Reservoir        | Carwyle Gulch                                  | Built on Gulch                             | June 4, 1892  | Dec. 29, 1891                                    | 1,468,710                             | Charles H. Bosch                                |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 5, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892. —COMMISSIONER J. W. DANIELS, LONGMONT, COLO., APPOINTED IN 1889.

| NAME OF DITCH OR CANAL.                     | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.                       |
|---|---|---|--|---|---|
| The Left Hand Ditch Co.'s Ditch             | South St. Vrain.                                | Sept. 29, 1891                                      | July 20, 1891                                    | 208.33  | The Left Hand Ditch and Reservoir Company |
| The Eli Evans Ditch.                        | Evans creek                                     | Nov. 20 1891  | 1885   | 6.60  | Eli L. Evans                              |
| The Golden Rule Mining<br>Company's Ditches | South St. Vrain<br>Middle St. Vrain.            | Oct. 27, 1892                                       | Sept. 7, 1892                                    | 130.20<br>130.20                                    | Milton N. Campbell                        |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 5, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                                       | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                       |
|--|--|--|---|--|---------------------------------------|---|
| The Clennon Reservoir .....                              | St. Vrain Creek .....                          | Highland Ditch.                            | Jan. 19, 1891                                       | Oct. 22, 1890                                    | 4,144,734                             | ..... C. J. Clennon                       |
| The Mulligan Reservoir .....                             | St. Vrain Creek .....                          | Highland Ditch.                            | Feb. 19, 1891                                       | Nov. 1878  | 6,033,060                             | ..... Lawrence T. Mulligan                |
| The Pettit Reservoir No. 1 .....                         | St. Vrain Creek .....                          | Highland Ditch.                            | June 15, 1891                                       | June 14, 1891                                    | 6,534,000                             | ..... James A. Howze                      |
| The Davis Reservoir .....                                | St. Vrain Creek .....                          | Highland Ditch.                            | July 14, 1891                                       | June 19, 1891                                    | 3,484,800                             | ..... F. P. Woodby                        |
| The Beaver Park Reservoir .....                          | Beaver Creek .....                             | Built on stream.                           | July 21, 1891                                       | June 1, 1882                                     | 108,900,000                           | { Highland and Supply Ditch<br>Companies. |
| The Audubon Reservoir No. 1 }                            |  |  |   |  | 1,500,000                             | {   |
| The Audubon Reservoir No. 2 }                            | St. Vrain Creek .....                          | On the Stream .....                        | July 25, 1891                                       | Not stated...                                    | 418,000,000                           | { E. J. Parker and                        |
| The Audubon Reservoir No. 3 }                            |  |  |   |  | 2,000,000                             | { E. M. Albertson                         |
| The Left-hand Ditch Com-<br>pany's Reservoir No. 2 ..... | South St. Vrain .....                          | On the Stream .....                        | Sept. 29, 1891                                      | July 20, 1891                                    | 39,000,000                            | ..... The Left-hand Ditch Co.             |
| The Winger Reservoirs .....                              | St. Vrain Creek .....                          | Highland Ditch.                            | Oct. 24, 1891                                       | Oct. 6, 1891                                     | 1,000,000                             | ..... Henry H. Winger                     |
| The Werden Reservoir .....                               | St. Vrain Creek .....                          | Highland Ditch.                            | Aug. 5, 1891  | May 10, 1891                                     | 8,712,000                             | ..... Werden & Holaday                    |
| The Ballinger Reservoir .....                            | { Ballinger & John-<br>son Creeks .....        | Built on Stream .....                      | Dec. 12, 1891                                       | Sept. 15, 1891                                   | 2,178,000                             | ..... Harnen Ballinger                    |
| The Lake Minnie Reservoir .....                          | St. Vrain Creek .....                          | Highland Ditch.                            | Dec. 21, 1891                                       | Mar 1882   | 8,229,080                             | ..... J. W. Erkenbeck                     |
| The Abe Ballinger Reservoir .....                        | Morrison Creek .....                           | Feeder to same .....                       | Feb. 29, 1892                                       | Dec. 10, 1891                                    | 1,568,160                             | { James Carroll and<br>Frank Ballinger.   |

|  |                 |                 |               |               |             |  |
|--|-----------------|-----------------|---------------|---------------|-------------|--|
| The Walker Reservoir                         | St. Vrain Creek | Highland Ditch  | May 9, 1892   | Apr. 27, 1892 | 8,363,520   | ----- Wm. C. Walker                                  |
| The Crystal Lake Reservoir                   | St. Vrain Creek | Highland Ditch  | May 14, 1892  | Spring 1873   | 10,160,000  | ----- { Wm. Atwood and<br>M. N. Kramer.              |
| The Enlargement of the Beaver Park Reservoir | Beaver Creek    | Built on Stream | Aug. 11, 1892 | June 30, 1892 | 125,888,400 | ----- { The St. Vrain Reservoir<br>and Fish Company. |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 6, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER A. C. STILLWELL, BOULDER, COLO. APPOINTED MAY 13, 1891.

| NAME OF DITCH OR CANAL.         | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                           |
|---------------------------------|---|--|---------------------------------------|--|---|
| The Eggleston Ditch No. 3.----- | Coal creek-----                           | Dec. 22, 1890                              | June 1, 1874                          | 9.00                                       | George W. and E. M. Eggleston                 |
| The Eggleston Ditch No. 4.----- | Coal creek-----                           | Dec. 22, 1890                              | Oct. 1, 1879                          | 9.00                                       |   |
| The High Line Ditch-----        | Middle Boulder c'k-----                   | March 2, 1891                              | Nov. 10, 1890                         | 150.55                                     | George W. Giggey <i>et al.</i> (Am'd Statm't) |
| The Mount Ogden Ditch-----      | Coal creek-----                           | June 2, 1891                               | March 4, 1891                         | Not given                                  | The Mount Ogden Ditch and Reservoir Co.       |
| The Autrey-McCammon Ditch--     | Goose creek-----                          | Sept. 18, 1891                             | Not stated                            | 8.50                                       | Elijah Autrey <i>et al.</i>                   |
| The Kneale Ditch-----           | Dry creek-----                            | June 15, 1892                              | April 2, 1892                         | 40.00                                      | C. A. Kneale & P. H. Kneale                   |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 6, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                       | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                                  |
|--|--|--|---|--|---------------------------------------|--|
| The Eggleston Reservoir No. 3            | { Coal Creek                                   | { Eggleston Ditch                          | { Dec. 22, 1890                                     | Oct. 1, 1874                                     | 1,015,860                             | ..... Geo. W. Eggleston <i>et al.</i>                |
| The Eggleston Reservoir No. 4            |  | { Eggleston Ditch                          | { Dec. 22, 1890                                     | Nov. 1, 1879                                     | 8,000,000                             | ..... G. W. and F. W. Eggleston                      |
| The Jasper Reservoir                     |  | { Built on the                             | Mar. 2, 1891  | Nov. 6, 1890                                     | { 99,800,000                          | ..... Geo. W. Giggey <i>et al.</i>                   |
| The Diamond Reservoir                    |  | { Gulches                                  |   |  | { 33,200,000                          |  |
| The Ruby Reservoir                       | Ruby Gulch                                     |  |   |  | { 36,000,000                          |  |
| The Jenny Lind Reservoir                 | Natural Drainage:                              | { Built on the                             | May 26, 1891  | May 13, 1891                                     | { 11,600,000                          | The Boulder High Line Can-<br>al Company             |
| The Peterson Reservoir                   |  | { Gulches                                  |   |  | { 27,000,000                          |  |
| The Mount Ogden Reservoir                | Coal Creek                                     | { Mount Ogden                              | June 2, 1891  | Mar. 4, 1891                                     | 4,627,360                             | Mount Ogden D. & R. Co.                              |
| The South Boulder Reservoir              | South Boulder Creek                            | { Built on the                             | June 16, 1891                                       | May 29, 1891                                     | 175,650,000                           | { The Boulder High Line<br>Canal Company             |
| The Lower Boulder Extension<br>Reservoir | Boulder Creek                                  | { Lower Boulder                            |   | Nov. 29, 1891                                    | 29,838,600                            |  |
| The Six Mile Reservoir                   | Boulder Creek                                  | { Boulder and                              | Mar. 19, 1892                                       | Dec. 20, 1891                                    | 65,862,720                            | { The Lower Boulder Exten-<br>sion Reservoir Company |
| The Last Chance Reservoir                |  | { White Rock                               |   |  |                                       |  |
| No. 1                                    |  | { Ditch                                    |   |  |                                       |  |
| The Last Chance Reservoir                | Coal Creek                                     | Last Chance Ditch                          | Apr. 22, 1892                                       | May 20, 1870                                     | { 3,034,515                           | ..... R. J. and Carrie S. Allison                    |
| No. 2                                    |  |  |   |  | { 4,866,330                           |  |
| The Kneale Reservoir                     | Boulder Creek                                  | { Feeder to Res-<br>ervoir                 | June 15, 1892                                       | Jan. 29, 1891                                    | 7,103,100                             | ..... C. A. and P. H. Kneale                         |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 7, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, MATTHEW J. CLARK, GOLDEN, COLO., APPOINTED MAY 13, 1891.

| NAME OF DITCH OR CANAL.                              | Name of stream from which water is taken.                 | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.               |
|--|---|--|---------------------------------------|---------------------------------|-----------------------------------|
| Underground Conduit (unnamed)                        | Seepage Water....   | Dec. 18, 1890                              | Sep. 20, 1890                         | 100.00                          | A. McL. Hawks                     |
| The Highland Pipe Line.....                          | Golden Gate Gulch   | Dec. 20, 1890                              | Dec. 15, 1890                         | 200.00                          | R. G. Webster                     |
| The Clear Creek Underground Pipe Line and Ditch..... | Undergr'd. Spring Seepage & Waste                         | } Jan. 3, 1891                             | } Nov. 4, 1890                        | 30.00                           | Benjamin D. Spencer <i>et al.</i> |
| The Clear Creek Pipe Line.....                       | Clear Creek.....  |  |                                       | 8.00                            |                                   |
| The Max Baer Lateral Ditch.....                      | { Clear Creek through Rocky Mt. Ditch                     | } Mar. 27, 1891                            | } Mar. 2, 1891                        | 3.00                            | Max Baer                          |
| The Bowles Ditch.....                                | Dry Creek.....  |  |                                       | 5.00                            |                                   |
| The Golden City Water Works.....                     | Seepage Water.....  | June 3, 1891                               | Mar. 1, 1891                          | Not given                       | E. Bruce Bowles <i>et al.</i>     |
| The Stormfield Ditch.....                            | Clear Creek.....  | Oct. 13, 1891                              | April 3, 1878                         | 4.00                            | City of Golden                    |
| The Terry Ditch.....                                 | Spring & Seepage.....                                     | Nov. 23, 1891                              | June 20 1886                          | 2.00                            | F. D. Storm                       |
| The Storm Ditch.....                                 | { Clear Creek through Farmers, H. L. & Allen Ditches..... | } Feb. 26, 1892                            | } Dec. 1, 1891                        | 2.72                            | Charles H. Terry                  |
|  |   |  |                                       |                                 | The Storm Reservoir Company       |

# STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 7, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                     | Name of stream supplying water therefor. | Name of Ditch leading water thereto.  | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.              |
|--|--|---------------------------------------|--|---------------------------------------|---------------------------------|----------------------------------|
| The George Richardson Reservoir No. 1. | Clear creek                              | Farmers' high line and signal ditches | Dec. 22, 1890                              | Nov. 15, 1889                         | 1,203,000                       | George Richardson                |
| The George Richardson Reservoir No. 2  | Clear creek                              | Farmers' high line and signal ditches | Dec. 22, 1890                              | Nov. 20, 1889                         | 1,034,000                       | George Richardson                |
| The Chioyenda Reservoir                | Clear creek                              | Farmers' high line                    | Dec. 30, 1890                              | Dec. 15, 1890                         | 2,132,500                       | Benjamin D. Spencer <i>et al</i> |
| The Whittemore Reservoir               | Clear creek                              | Farmers' high line                    | Jan. 22, 1891                              | Nov. 10, 1890                         | 462,500                         | O. A. Whittemore                 |
| The Risdon Reservoir                   | Seepage water                            | Dam in gulch                          | Jan. 24, 1891                              | July 16, 1889                         | 1,235,000                       | John S. Risdon                   |
| The George Richardson Reservoir No. 3  | Clear creek                              | Farmers' high line and signal ditches | Jan. 24, 1891                              | Dec. 29, 1890                         | 4,800,000                       | George Richardson                |
| The George Richardson Reservoir No. 4  | Clear creek                              | Farmers' high line and signal ditches | Jan. 24, 1891                              | Dec. 29, 1890                         | 300,000                         | George Richardson                |
| The George Richardson Reservoir No. 5  | Clear creek                              | Farmers' high line and signal ditches | Jan. 24, 1891                              | Dec. 29, 1890                         | 438,000                         | George Richardson                |
| The George Richardson Reservoir No. 6  | Clear creek                              | Farmers' high line and signal ditches | Jan. 24, 1891                              | Dec. 29, 1890                         | 440,000                         | George Richardson                |
| The Quimby Reservoir                   | Clear creek                              | Farmers' high line                    | Feb. 17, 1891                              | Dec. 29, 1890                         | 756,000                         | M. M. Quimby                     |
| The Whittemore Reservoir No. 2         | Clear creek                              | Farmers' high line                    | May 22, 1891                               | May 20, 1891                          | 421,475                         | O. A. Whittemore                 |

## STATEMENT CONCERNING RESERVOIRS—Concluded.

| NAME OF RESERVOIR.                 | Name of stream supplying water therefor. | Name of Ditch leading water thereto.           | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.            |
|------------------------------------|--|--|--|---------------------------------------|---------------------------------|--------------------------------|
| The Swayze Reservoir .....         | { Branch of Arapahoe creek .....         | Built on stream.                               | Dec. 1, 1890                               | Nov. 24, 1890                         | 217,000                         | Walter J. Swayze               |
| The Storm Reservoir .....          | Clear creek .....                        | { Farmers' high line, Allen and Storm Ditches. | { Feb. 26, 1892                            | Dec. 1, 1891                          | 2,335,750                       | The Storm Reservoir Co.        |
| The Porter Reservoir .....         | Clear creek .....                        | { Farmers' high line and signal ditches .....  | { Mar. 19, 1892                            | Dec. 6, 1890                          | { 4,755,900<br>7,311,238        | { W. W. Porter<br>W. W. Porter |
| Enlargement of same .....          |  | Same .....                                     |  |                                       |                                 |                                |
| The Mayham Lake or Reservoir ..... | { Waste water, seepage and springs ..... | Collects direct .....                          | Mar. 29, 1892                              | May, 1890                             | 10,000,000                      | C. H. Mayham, S. L. Haycox     |



# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 8, GIVING THE DATE, ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE FOURTH JUDICIAL DISTRICT, SINCE THE STATEMENT PUBLISHED IN THE "FOURTH BIENNIAL REPORT."

| NAME OF DITCH, CANAL OR RESERVOIR.  | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per sec. and decreed to each priority. | Summation of decrees to each ditch, canal or reservoir. | Cubic feet per sec. and previously appropriated in district. | Order of priority in district. |
|-------------------------------------|-----------------------------------|------------------------|--|---|--|--------------------------------|
| The Ditch of Ahimaz Gove            | West Plum creek                   | May 31, 1867           | 2.52   | -----   | 411.38   | 41                             |
| The Alfred G. Perry Ditch           | Plum creek                        | Dec. 31, 1868          | 1.70   | -----   | -----  | 42½                            |
| The Disbrow Extension of Gove Ditch | West Plum creek                   | Sept. 31, 1871         | 0.40   | -----   | -----  | 58½                            |
| The Ratcliff Plum Creek Ditch       | West Plum creek                   | April 1, 1872          | 7.50   | -----   | -----  | 61                             |
| The Heiser Ditch                    | East Cherry creek                 | April 30, 1874         | 0.985  | -----   | -----  | 95A                            |
| The James Ditch                     | West Plum creek                   | Jan. 1, 1883           | 4.20   | -----   | -----  | 139                            |
| The Schultz Ditch                   | Russellville branch.              | Jan. 1, 1883           | 2.00   | -----   | -----  | 140                            |
| The Eureka Ditch                    | East Plum creek                   | Mar. 31, 1883          | 7.00   | -----   | -----  | 141                            |
| The Ratcliff & Dillon Ditch         | Spring creek                      | Mar. 1, 1883           | 4.50   | -----   | -----  | 142                            |
| The Herzog Ditch                    | Cherry creek                      | Sept. 10, 1883         | 10.32  | -----   | -----  | 143                            |
| The Rawley Ditch                    | Cherry creek                      | Mar. 31, 1884          | 4.00   | -----   | -----  | 144                            |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH, CANAL OR RESERVOIR. | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch, canal or reservoir. | Cubic feet per second previously appropriated in district. | Order of Priority in district |
|------------------------------------|-----------------------------------|------------------------|--|---|--|-------------------------------|
| The Hawkey Ditch                   | Cherry creek                      | Aug. 25, 1884          | 3.00   | -----   | -----  | 145                           |
| The Parker Ditch                   | Cherry creek                      | Jan. 1, 1885           | 3.00   | -----   | -----  | 146                           |
| The Barnes Ditch                   | Cherry creek                      | Mar. 31, 1885          | 4.50   | -----   | -----  | 147                           |
| The Parker No. 2 Ditch             | Cherry creek                      | Mar. 31, 1885          | 3.00   | -----   | -----  | 148                           |
| The Gregg Ditch                    | Cherry creek                      | Mar. 31, 1885          | 14.00  | -----   | -----  | 149                           |
| The John Kinner Ditch              | West Plum creek                   | April 1, 1885          | 3.52   | -----   | -----  | 150                           |
| The Glenn Grove Feeder Ditch       | West Plum creek                   | Sept. 10, 1885         | 7.00   | -----   | -----  | 151                           |
| The Locust Grove Ditch             | Indian creek                      | May 3, 1886            | 3.00   | -----   | -----  | 152                           |
| The Welch Ditch                    | Cherry creek                      | April 28, 1886         | 14.25  | -----   | -----  | 152½                          |
| The Green Meadow Ditch             | Indian creek                      | May 15, 1886           | 2.79   | -----   | -----  | 153                           |
| The Sellers Ditch                  | Sellers gulch                     | May 18, 1886           | 2.50   | -----   | -----  | 154                           |
| The Bouldorf Ditch                 | Cherry creek                      | Mar. 31, 1886          | 6.00   | -----   | -----  | 155                           |
| The Melvin Ditch                   | Cherry creek                      | Feb. 17, 1887          | 12.00  | -----   | -----  | 157                           |
| The Stevens & Jackson Ditch        | Jackson creek                     | March 1, 1887          | 7.80   | -----   | -----  | 158                           |
| The Feeder of Stevens Reservoir    | West Plum creek                   | May 1, 1888            | -----  | -----   | -----  | 159                           |

|  |                       |               |       |       |     |
|--|-----------------------|---------------|-------|-------|-----|
| The Lambert Ditch .....                            | Indian creek .....    | Feb. 8, 1888  | 10.00 | ----- | 160 |
| The King Ditch .....                               | East Plum creek ..... | Feb. 23, 1888 | 1.40  | ----- | 161 |
| The Middleton Ditch .....                          | West Plum creek ..... | March 3, 1888 | 7.00  | ----- | 162 |
| The West Plum Creek & Bottom Reservoir Ditch ..... | West Plum creek ..... | Oct. 1, 1888  | 8.67  | ----- | 164 |
| The Arapahoe Ditch .....                           | Cherry creek .....    | Sept. 1, 1889 | 50.00 | ----- | 168 |
| The Wakeman Ditch No. 1. ....                      | Willow creek .....    | April 1, 1891 | 3.60  | ----- | 169 |
| The Wakeman Ditch No. 2. ....                      | Willow creek .....    | April 1, 1891 | 0.80  | ----- | 170 |
| The Cottonwood Ditch No. 1. ....                   | Willow creek .....    | April 1, 1891 | 2.00  | ----- | 171 |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 8, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER D. W. STEVENS, DENVER, COLO. APPOINTED APRIL, 21, 1891.

| NAME OF DITCH OR CANAL.          | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon.                            | Capacity claimed in Cubic feet.    | NAMES OF CLAIMANTS.              |
|----------------------------------|---|--|--|------------------------------------|----------------------------------|
| The Chamberlain Ditch or Lateral | Cherry creek                              | Dec. 5, 1890                               | Aug. 18, 1890  | 85.50                              | The Denver Water Storage Company |
| The Nelly Bly Ditch              | South Platte                              | Jan. 12, 1891                              | Dec. 23, 1890  | 333.10                             | J. D. Brown                      |
| The Newton Lateral or Ditch      | Cherry creek                              | Oct. 31, 1890                              | { Oct. 31, 1890<br>Nov. 4, 1890                                  | { 85.50<br>85.50                   | The Denver Water Storage Company |
| The Wild Cat Lateral or Ditch    | Cherry creek                              | Oct. 31, 1890                              | { Oct. 31, 1890<br>Nov. 4, 1890                                  | { 85.50<br>85.50                   | The Denver Water Storage Company |
| The Arapahoe Canal               | Cherry creek                              | April 23, 1891                             | Jan. 25, 1890  | 140.00                             | The Denver Water Storage Company |
| The Horans Ditch                 | Devinuey ravine                           | May 9, 1891                                | 1889   | Less than 1                        | Timothy Horan                    |
| Washington Park Ditch            | Indian creek                              | July 23, 1891                              | July 21, 1891  | 13.12                              | Alexander Walker                 |
| The Stoner and Milsap Ditch      | Plum creek                                | Aug. 6, 1891                               | May 15, 1869   | 20.00                              | G. Stoner, <i>et al.</i>         |
| The Burke Ditch                  | East Plum creek                           | Aug. 19, 1891                              | Not stated.  | 6.00                               | John Burke                       |
| The Wakeman Ditch                | Willow creek                              | Aug. 28, 1891                              | { July 8, 1891<br>July 31, 1891<br>July 7, 1891<br>Aug. 16, 1891 | { 42.00<br>34.00<br>54.00<br>34.00 | C. B. Kountze                    |
| The Wakeman Ditch No. 2          |   |  |  |                                    |                                  |
| The Cottonwood Ditch             |   |  |  |                                    |                                  |
| The Cottonwood Ditch No. 2       |   |  |  |                                    |                                  |

|                               |   |                 |                |                       |                                |
|-------------------------------|---|-----------------|----------------|-----------------------|--------------------------------|
| The Leonora Ditch.....        | Little Willow Creek                                       | Dec. 21, 1891   | Oct. 5, 1891   | { not given }<br>3.00 | John W. Ash                    |
| The Ash Ditch.....            |   |                 |                |                       |                                |
| The Tinker North Ditch.....   | Natural Ravines..   | May 10, 1892    | May 4, 1892    | { 20.00 }<br>20.00    | Robert H. Tinker               |
| The Tinker South Ditch.....   |   |                 |                |                       |                                |
| The Wolhurst Ditch No. 1..... | Waste and Seepage<br>from Ravines with-<br>out names..... | { May 10, 1892  | April 16, 1892 | { 3.00 }<br>3.00      | Edward O. Wolcott              |
| The Wolhurst Ditch No. 2..... |   |                 |                |                       |                                |
| The Sanderson Ditch .....     | Creek in 4 S. 68 W.                                       | May 16, 1892    | 1882           | 5.50                  | J. Fernley & A. A. Higinbotham |
| The Couch Ditch.....          | Olmstead Gulch...   | July 5, 1892    | 1867           | 68.00                 | Samuel F. Couch                |
| The Conehay Ditch.....        | Cherry Creek.....   | { Aug. 24, 1892 | { June 8, 1892 | { 4.25 }<br>4.25      | Frank M. Conehay               |
| The Conehay Ditch No. 2.....  | Antelope Creek...   |                 | { June 1, 1892 |                       |                                |
| The Rock Ridge Ditch.....     | Cherry Creek.....   | Sept. 1, 1892   | July 1, 1887   | 3.00                  | Catherine A. Colburn           |



## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 8, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.           | Name of stream supplying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.         |
|------------------------------|--|--------------------------------------|--|---------------------------------------|---------------------------------|-----------------------------|
| The Diamond H'g'ts Reservoir | South Platte river                       | { N. Colo. I. Co.'s }<br>canal       | April 1, 1891                              | Jan. 22, 1891                         | 2,387,096                       | James Leonard <i>et al.</i> |
| The Willow Creek Reservoir   | Not stated                               | Not given                            | Aug. 26, 1891                              | Aug. 12, 1891                         | 5,351,340                       | C. B. Kountze               |
| The Leonora Ditch Reservoir  | Little Willow creek                      | Leonora ditch                        | } Dec. 21, '91                             | Oct. 5, 1891                          | 87,120                          | } John W. Ash               |
| The Ash Ditch Reservoir      |  | Ash ditch                            |  | Nov. 30, 1891                         | 653,000                         |                             |
| The Armor Reservoir          | South Platte river                       | Fassett & Weir ditch                 | Jan. 18, 1892                              | Oct. 23, 1891                         | 989,850                         | Independent Ice Co.         |
| The Tinker Reservoir         | Seepage, etc.                            | Tinker N. & S. ditch                 | May 10, 1892                               | May 4, 1892                           | 640,000                         | Robert H. Tinker            |
| The Couch Reservoir          | Olmstead gulch                           | Couch ditch                          | July 5, 1892                               | 1867                                  | 1,667,950                       | Samuel F Couch              |
| The Conehay Reservoir        | Antelope creek                           | Conehay No. 2                        | Aug. 24, 1892                              | June 1, 1892                          | 550,000                         | Frank M. Conehay            |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 23, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, M. R. HAMLIN, FAIRPLAY, COLO. APPOINTED SPRING OF 1889.

| NAME OF DITCH OR CANAL.                     | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                             |
|---|---|--|---------------------------------------|---------------------------------|---|
| The Maxwell Ditch.....                      | Little Roland C'k.                        | May 13, 1891                               | June, 1875                            | 7.81                            | ..... Rufus E. Maxwell                          |
| The Runner Ditch.....                       | Wigwam Creek...                           | May 16, 1891                               | Nov. 16, 1889                         | .85                             | ..... Wm. D. Runner                             |
| The Jasper Ditch.....                       | South Platte River                        | } June 20, 1891                            | June 13, 1891                         | 30.00                           | } Lars Nelson <i>et al.</i>                     |
| The Malice Ditch.....                       | Four Mile Creek...                        |  | May 5, 1890                           | 30.00                           |   |
| The Crow Hill Ditch.....                    | Deer Creek.....                           | July 13, 1891                              | April 4, 1891                         | 30.00                           | ..... W. W. Hooper <i>et al.</i>                |
| The Edmiston Ditch.....                     | Buffalo Creek.....                        | July 27, 1891                              | 1874                                  | 10.00                           | } J. L. Sweet                                   |
| The Harry L. Sweet Ditch.....               | Buffalo Creek.....                        |  | 1873                                  | 30.00                           |   |
| The Jackson Ditch.....                      | Buffalo Creek.....                        |  | 1874                                  | 10.00                           |   |
| The Hames Ditch.....                        | Trout Creek.....                          | Aug. 22, 1891                              | July 3, 1891                          | 3.00                            | ..... J. C. Hames                               |
| The Trout Creek Ditch.....                  | Trout Creek.....                          | Oct. 3, 1891                               | 1873                                  | 22.00                           | ..... Miz & Armstrong                           |
| The Inlet Ditch to Michigan Reservoirs..... | Michigan Creek...                         | Jan. 1, 1892                               | Sept. 23, 1889                        | 17.00                           | ..... Geo. M. Ohler <i>et al.</i>               |
| The Enlargement of Hot Springs Ditch.....   | { South Fork of }<br>South Platte....     | May 17, 1892                               | Jan. 19, 1892                         | 408.00                          | ..... The Hartzel Hot Springs Reservoir Company |
| The Andrews Ditch, No. 1.....               | Rule Creek.....                           | June 9, 1892                               | May 27, 1892                          | 4.60                            | ..... A. L. Andrews                             |
| The Ferndale Water Works Pipe Lines.....    | { Little and Big }<br>Spring Creek...     | June 29, 1892                              | June 11 & 20 1892                     | All the flow                    | ..... H. L. Aulls                               |

# STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 23, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.              | Name of Stream<br>supplying<br>water therefor. | Name of Ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.               |
|---------------------------------|--|--|---|--|---------------------------------------|-----------------------------------|
| The Lost Canon Reservoir.....   | Lost Park creek.....                           | Natural site.....                          | Jan. 27, 1891                                       | Jan. 5, 1891                                     | 900,000,000                           | .....E. P. Martin <i>et al.</i>   |
| The Lost Canon Reservoir.....   | Lost Park creek.....                           | Natural site.....                          | Jan. 29, 1891                                       | Jan. 1, 1891                                     | 2,000,000,000                         | .....Stephen R. Pratt             |
| The South Park Reservoir.....   | South Fork of South<br>Platte river.....       | On the stream.....                         | Mar. 7, 1891  | Feb. 1, 1891                                     | 2,214,000,000                         | .....Cyrus G. Richardson          |
| The Lost Park Reservoir.....    | Lost Park creek.....                           | Natural site.....                          | Mar. 13, 1891                                       | Jan. 1, 1891                                     | 2,000,000,000                         | .....The High Line Reser. Co.     |
| The Castle Lake Reservoir.....  | Waterfall creek, etc.                          | On the stream.....                         | Apr. 24, 1891                                       | Feb. 1, 1891                                     | 500,000,000                           | .....The Castle Lake Reser. Co.   |
| The Tarryall Reservoir.....     | Tarryall creek.....                            | On the stream.....                         | May 18, 1891  | Apr. 28, 1891                                    | 1,510,000,000                         | .....The Tarryall D. & Reser. Co. |
| The Geneva Reservoir No. 1..... | Geneva gulch.....                              | On the stream.....                         | July 13, 1891                                       | May 30, 1891                                     | 975,000,000                           | .....Barney & Owen                |
| The Geneva Reservoir No. 2..... |  |  |   |  | 350,000,000                           |                                   |
| The Geneva Reservoir No. 3..... |  |  |   |  | 432,000,000                           |                                   |
| The Tarryall Reservoir.....     | Tarryall creek.....                            | On the stream.....                         | Aug. 21, 1891                                       | Not stated....                                   | 1,679,090,000                         | .....The Tarryall Reservoir Co.   |
| The Trout Creek Reservoir.....  | Trout creek.....                               | Trout creek dit'h                          | Oct. 3, 1891  | 1889   | 1,154,000,000                         | .....Miz & Armstrong              |
| The Michigan Upper Reserv'r     | Michigan creek.....                            | Inlet ditch.....                           | Jan. 11, 1892                                       | Sep. 23, 1889                                    | 5,500,000                             | .....Geo. W. Ohler <i>et al.</i>  |
| The Michigan Lower Reserv'r     |  |  |   |  | 2,700,000                             |                                   |
| The Quick Reservoir.....        | Jefferson creek.....                           | On the stream.....                         | Jan. 11, 1892                                       | Aug. 6, 1891                                     | 7,310,000                             | .....David Baker                  |

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

| NAME OF RESERVOIR.                      | Name of stream supplying water therefor.  | Name of Ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                          |
|---|---|--------------------------------------|--|---------------------------------------|---------------------------------|--|
| The Hartzel Hot Springs Reservoir ..... | { So. Platte, M. F'k S. Pl. & 4 mile c'k. | Hot Sp. Thompson & E Alden D         | { May 17, 1892                             | Jan. 19, 1892                         | 1,111,622,000                   | { The Hartzel Hot Springs Reservoir Company. |
| The Geneva Reservoir No. 1.             | Geneva gulch .....                        | On the stream..                      | June 1, 1892                               | May 30, 1892                          | { 975,000,000                   | { ..... E. M. Albertson                      |
| The Geneva Reservoir No. 2 .....        |   |                                      |  |                                       | { 350,000,000                   |  |
| The Geneva Reservoir No. 3 .....        |   |                                      |  |                                       | { 432,000,000                   |  |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 46, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, FRANK STAPLES, HEBRON, COLO. APPOINTED AUGUST 10, 1889.

| NAME OF DITCH OR CANAL.                                 | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.            |
|---|---|--|---------------------------------------|---------------------------------|--------------------------------|
| The Saint Joseph Ditch.....                             | Beaver Creek.....                         | Feb. 11, 1891                              | May 1, 1889                           | 12.00                           | ..... Silas Haskins            |
| The Buckeye Ditch.....                                  | Little Grizzly.....                       | Feb. 11, 1891                              | April 1, 1890                         | 18.00                           | ..... Fletcher Campbell        |
| The Jessie Ditch.....                                   | Beaver Creek.....                         | Feb. 11, 1891                              | June, 1882                            | 9.00                            | ..... Silas Haskins            |
| The Jay Bird Ditch.....                                 | Bennett Creek.....                        | Feb. 11, 1891                              | July 15, 1887                         | 20.00                           | ..... William R. Monahan       |
| The Monahan Ditch.....                                  | Bear Creek.....                           | Feb. 11, 1891                              | Dec. 8, 1890                          | 12.00                           | ..... James Marr <i>et al.</i> |
| The Enlargement and Extension of the Staples Ditch..... | North Fork of Little Grizzly.....         | Feb. 11, 1891                              | April 4, 1889                         | 23.00                           | ..... Jacob Reithmayer         |
| The Reithmayer Ditch.....                               | North Fork River.....                     | Feb. 18, 1891                              | June 11, 1888                         | 18.00                           | ..... John L. Spotts           |
| The Boulder Ditch.....                                  | Lone Pine Creek.....                      | Feb. 18, 1891                              | June 15, 1885                         | 20.00                           | ..... Elton Mansfield          |
| The Stormy Ditch, No. 1.....                            | No Name Creek.....                        | April 1, 1892                              | Oct. 16, 1890                         | Not given                       | .....                          |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 47, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, W. D. BECKWITH, WALDEN, COLO. APPOINTED AUGUST 10, 1889.

| NAME OF DITCH OR CANAL.       | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.     |
|-------------------------------|---|--|---------------------------------------|---------------------------------|-------------------------|
| The Gould Ditch.....          | Michigan creek.....                       | May 1, 1891                                | Sep. 10, 1890                         | 20.00                           | Edward B. Gould         |
| The Kermode Ditch Enlargment  | Canadian river.....                       | June 12, 1891                              | Sep. 1, 1890                          | 7.50                            | Griffith Kermode        |
| The Teller Ditch.....         | Jack creek.....                           | June 12, 1891                              | Oct. 14, 1889                         | 9.00                            | John D. Shearer         |
| The Terrill Ditch.....        | Michigan river.....                       | June 12, 1891                              | June 1, 1888                          | 9.00                            | Martha E. Brannel       |
| The Richmond Ditch.....       | Michigan river.....                       | June 12, 1891                              | May 10, 1888                          | 10.00                           | N. P. Richmond          |
| The Jakey Ditch.....          | Michigan river.....                       | June 12, 1891                              | Not stated                            | 10.00                           | I. C. Ish <i>et al.</i> |
| The Ish & Everhard Ditch..... | Illinois river.....                       | June 12, 1891                              | July 16, 1886                         | 15.00                           | Samuel P. Carden        |
| The Lowland Ditch.....        | Owl creek.....                            | June 12, 1891                              | April 15, 1888                        | 12.00                           | Leslie Gillett          |
| The John Fleck Ditch.....     | Muddy creek.....                          | Mar. 21, 1892                              | June 1885                             | Not given                       |                         |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 48, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, ANSON D. HOUSE, P. O. LARAMIE, WYO. APPOINTED 1890.

| NAME OF DITCH OR CANAL.                           | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                     |
|---|---|--|---------------------------------------|---------------------------------|---|
| The Water Supply and Storage Company's Ditch..... | West branch of }<br>Laramie river. }      | Nov. 2, 1891                               | Aug. 7, 1891                          | 400.00                          | -----The Water Supply & Storage Company |
| The Jim Creek Ditch.....                          | Jim creek.....                            | April 8, 1892                              | Mar. 23, 1892                         | 9.00                            | -----Robert Ferguson                    |
| The Reservoir Ditch.....                          | Jim creek.....                            | April 8, 1892                              | Mar. 22, 1892                         | 8.00                            | -----Robert Ferguson                    |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 64, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER R. J. PATTERSON, STERLING, COLO. APPOINTED JANUARY 26, 1891.

| NAME OF DITCH OR CANAL.         | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                 |
|---------------------------------|---|--|---------------------------------------|---------------------------------|-------------------------------------|
| The Lillian Springs Ditch.....  | South Platte river.                       | July 20, 1891                              | April 20, 1891                        | 23.90                           | ..... Sam B. Rice                   |
| The Liddle Ditch.....           | Spring creek.....                         | Feb. 15, 1892                              | Oct. 21, 1891                         | 10.00                           | ..... Thomas R. Liddle              |
| The South Reservation Ditch.... | South Platte river.                       | Nov. 15, 1892                              | Sep. 14, 1892                         | 60.00                           | ..... P. P. Hargraves <i>et al.</i> |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 65, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                                     | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                      |
|---|---|--|---------------------------------------|---------------------------------|--|
| The Haigler Land and Canal Company's Ditch.....             | North fork of Republican river...         | Jan. 14, 1891                              | Oct. 20, 1890                         | 91.00                           | ----- Haigler Land and Canal Company     |
| The Daniel Shields Ditch.....                               | { North fork of Republican river.         | Jan. 24, 1891                              | -----                                 | 14.58                           | ----- Daniel Shields                     |
| The ----- II Ditch.....                                     | { North fork of Republican river.         | April 8, 1891                              | Jan. 30, 1891                         | 12.93                           | ----- J. W. Bowles                       |
| The Charles Donnelly Ditch.....                             | { Arickaree river....                     | May 14, 1891                               | Mar. 17, 1891                         | 13.00                           | ----- Charles Donnelly                   |
| The Charles Donnelly Ditch, amended statement.....          | Arickaree river....                       | Nov. 12, 1891                              | Mar. 17, 1891                         | 13.00                           | ----- Charles Donnelly                   |
| The Donnelly Ditch No. 2.....                               | Arickaree river....                       | Mar. 1, 1892                               | Feb. 29, 1892                         | 12.00                           | ----- Charles Donnelly                   |
| The Extension of the Haigler Land and Canal Co.'s Ditch.... | Arickaree river....                       | Mar. 1, 1892                               | Dec. 10, 1891                         | 91.00                           | ----- The Haigler Land and Canal Company |
| The Wray High Line Ditch.....                               | { North fork of Republican river.         | June 15, 1892                              | Mar. 24, 1892                         | 91.00                           | ----- The Haigler Land and Canal Company |

## CHAPTER III.

## IRRIGATION DIVISION NO. 2.

## ARKANSAS DIVISION.

J. W. McDaniel, Superintendent of Irrigation. Residence, Nepesta, Colorado.

This division presents an anomalous condition of affairs.

The Arkansas river has a mountain drainage area of over 3,000 square miles, and stands second only to the Rio Grande, on the eastern slope, in the volume of its water supply. The valley is noted for the completeness and extent of its system of canals. The Bob creek, Arkansas river, Laguna, Amity, Bessemer, Otero and many others, in size, length and in the great outlay of capital in their construction, are monuments to the enterprise of their projectors and their faith in the possibilities of that section of country.

They are known to cover many hundred thousand acres of most fertile lands all favorably adapted for economical irrigation.

In the extent and variety of its products the soil is not excelled in any section of the State. Fruit culture is prosecuted with remarkable success.

Canon City is noted for its peaches, pears and small fruits. "Watermelon Day" is an annual event of State interest at Rocky Ford, "Potato Bake Day" at Monument.

Irrigation has been practiced to a greater or less extent for many years. Large areas are known to be placed under cultivation each year. And yet, notwithstanding its unbounded resources and the indomitable energy displayed in their development, the report from the Superintendent of the division is one of the most doleful that could emanate from the abode of "Lost Souls."

Thirteen Water Districts are embraced in the division, in ten of which Water Commissioners have been appointed, and are presumed to have been in active service during the irrigating season; but at this date, December 20, there is no documentary evidence in this office showing that four of them have not been drowned in some of their ditches.

Mr. Geo. Peck, Water Commissioner of District No. 17—one of the most important in the division—in a letter to the Superintendent of Irrigation, bearing date December 17, 1892, states: "I have gathered no statistics, as it would about double the expense of my office, and it was a question with the County Commissioners whether there was any law authorizing them to pay for such work." A majority of the more prominent canals heretofore noted are in this district, and cover an area of 300,000 acres. In 1890, 46,062 acres were reported as irrigated therefrom, no lands under the Otero and Bob creek canals being included in these figures. The President of the Colorado Land and Water Company recently gave the information at this office that about 16,000 acres were now in cultivation under the Bob creek.

Mr. Thomas Shideler, Water Commissioner of District No. 10, and Mr. J. F. Ramey, of District No. 19, make some pertinent remarks relative to defects in the irrigation laws, and the proneness of individuals to ignore the distinction between *meum* and *teum* when the officer's back is turned, which will be found under the headings of their respective districts.

Mr. McDaniel's report, as to existing conditions in his division, are herewith submitted:

HON. J. P. MAXWELL,  
*State Engineer,*  
Denver, Colorado.

SIR—I would respectfully refer you to my report of 1890, as still giving a resume of the embryotic status of affairs in this division.

I can scarcely qualify it in any particular, and the necessities for remedial legislation are glaringly apparent.

*Districts No. 10, 11, 12 and 13.* Conditions practically unchanged.

*District No. 14.* Decrees for this district were issued in May, 1892, some of which are subject to revision in the immediate future.

*District No. 15.* Decrees for this district were made in April, 1892, but a re-hearing has been ordered by the court, and the whole matter reopened for revision.



*District No. 16.* Decrees for that portion of this district, lying in the County of Pueblo, were issued in September, 1891.

*Districts No. 17, 18, 19, 66 and 67* remain unchanged from my last report.

The supply of water from the Arkansas river and its tributaries has been unusually small during the past season, and early in August it became necessary through the active vigilance of the Water Commissioners to exercise the greatest economy in the distribution, which was continued quite to the end of a late irrigating season.

The Water Commissioners in Districts 14 and 17, were unable to make a just apportionment of water according to decrees on account of injunctions issued against the exercise of their manifest duties, as well as those of the Superintendent.

The existing laws are virtually inoperative from the fact that irrigation officers may be enjoined from a performance of their official duties during the time of a water famine, to the great damage and detriment of innocent and passive citizens, who are entitled to the protection of the State in the exercise of their manifest rights as declared in the Constitution of the State.

I would also respectfully submit that Superintendents and Water Commissioners should be given the legal counsel and aid of the respective District Attorneys, in order that important legal rights affecting vital interests of the people should not suffer from default or enforced inaction.

I remain your obedient servant,

JOHN W. MCDANIEL,

*Superintendent Water Division No. 2.*

Nepesta, Colo., December 1, 1892.

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HON. J. P. MAXWELL,

*State Engineer,*

Denver, Colorado.

SIR—Supplemental to my report, and referring to legal obstructions to the performance of my necessary duty as Superintendent of Water Division No. 2, I would state that during the latter part of August an injunction was obtained in the District Court of Pueblo

County by The Colorado Land & Water Company restraining me from ordering any distribution of the water then being used by the said The Colorado Land & Water Company, on the grounds that it was needful for the crops then in process of seeding and maturing under the canal belonging to the said The Colorado Land & Water Company, and that there was sufficient water for all ditches of prior rights over and above the amount then being used by the said company, which said injunction being contested by The Rocky Ford, The Rocky Ford Highline, The Catlin and The Oxford Farmers' Canal Companies was dissolved in the latter part of September.

Also, Commissioner John W. Horgan, of Water District No. 14, was during the month of September served with writs of injunction from the Bessemer Ditch Company, the Pueblo Water Works, and the Pueblo Water Company, which he duly turned over to me.

Having no authority specific for such emergencies, and not being empowered to call upon the proper official attorneys for a defense of the interests and the rights of the people, I was powerless to properly execute the duties appertaining to my office, as well as protect rights guaranteed to the people who had in good faith complied with all the requirements defined within the statutes.

Before the expiration of the time for answering said injunction the Bessemer ditch closed for the necessary cleaning and repairs, and in that case no action was taken.

Regarding the suits of the Pueblo Water Works and the Pueblo Water Company, by the courtesy of the Attorney General, I was enabled to make answer, *the first*, denying capacity and appropriation equal to decree of priority, and to *the second*, demurrer that complaint does not show any decree from any court of jurisdiction, giving any priority to said company or ditch.

These cases are still undecided.

Therefore, it will be noted, that in and during a period of the least supply of water, I was, to a great, ex-

tent, estopped from a full and satisfactory performance of such duties as properly devolve upon this office.

I am, sir, very respectfully,

Your obedient servant,

JOHN. W. MCDANIEL,

*Superintendent.*

Nepesta, Colorado, December 20, 1892.

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REPORT OF COMMISSIONER OF DISTRICT TEN.

COLORADO SPRINGS, Colo., October 29, 1892.

"I would respectfully report that I was called out on the 14th day of April, 1892, and served one hundred and thirteen (113) days, and had assistance eighty-seven (87) days.

"We had a small flow of water this season up to the 12th of October. I have had a great deal of trouble on account of ranchmen taking water in the night, when it was not due them. Locks are of no use in this District.

"In making up my report on crops I have to guess at it, as the ditch owners appear to think that I am trying to find out something to raise their taxes, and will not give me correct answers. So I have done the best I could on what ditches I have been called upon to look after. There are a great many ditches that I have not mentioned, from the fact that I have not been called upon to look after them, and because there is so much fault found about the expense of a Water Commissioner.

"This report is not satisfactory to me, and it may not be to you, but it is more than the people want to pay for."

THOMAS SHIDELER,

*Commissioner.*

# IRRIGATION STATISTICS OF DIVISION NO. 2.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1892.

| NO. OF DISTRICT. | Number of Ditches reported. | Total length as reported. | Average amount of water carried during the season, in cubic feet per second of time. | Number of acres that can be irrigated therefrom. | Number of acres of alfalfa irrigated. | Number of acres of seeded grasses other than alfalfa irrigated. | Number of acres of natural grasses irrigated. | Number of acres of other crops irrigated. | Number of acres of orchard irrigated. | Number of acres irrigated by seepage. | Number of acres irrigated from reservoirs. | Total number of acres irrigated. |
|------------------|-----------------------------|---------------------------|--|--|---------------------------------------|---|---|---|---------------------------------------|---------------------------------------|--|----------------------------------|
| 10               | 65                          | 172.75                    | 272.50   | 22,138   | 3,970                                 | 2,026   | 5,826   | 4,682                                     | ---                                   | 175                                   | ---  | 16,679                           |
| 11*              | ---                         | ---                       | ---  | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 12               | 43                          | 60.00                     | 45.75  | 3,899  | 1,290                                 | None  | 489   | 1,262                                     | ---                                   | ---                                   | ---  | 3,041                            |
| 13*              | ---                         | ---                       | ---  | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 14               | 31                          | 236.10                    | 811.00   | 52,784   | 4,542                                 | 520   | 4,438   | 5,340                                     | ---                                   | 22                                    | ---  | 14,862                           |
| 15               | 51                          | 89.50                     | 103.20   | 12,865   | 1,468                                 | 253   | 1,511   | 1,986                                     | ---                                   | ---                                   | ---  | 5,218                            |
| 16*              | ---                         | ---                       | ---  | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 17*              | ---                         | ---                       | ---  | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |

\*No report from Commissioner.

IRRIGATION STATISTICS OF DIVISION NO. 2.—*Concluded.*

| NO. OF DISTRICT.  | Number of ditches reported. | Total length as reported. | Average amount of water carried during the season in cubic feet per second of time. | Number of acres that can be irrigated therefrom. | Number of acres of alfalfa irrigated. | Number of acres of seeded grasses other than alfalfa irrigated. | Number of acres of natural grasses irrigated. | Number of acres of other crops irrigated. | Number of acres of orchard irrigated. | Number of acres irrigated by seepage. | Number of acres irrigated from reservoirs. | Total number of acres irrigated. |
|-------------------|-----------------------------|---------------------------|---|--|---------------------------------------|---|---|---|---------------------------------------|---------------------------------------|--|----------------------------------|
| 18*               | ---                         | ---                       | ---   | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 19                | 22                          | 106.50                    | No measuring flumes   | 27,010   | 3,315                                 | ---   | 1,205   | 5,125                                     | ---                                   | ---                                   | ---  | 9,645                            |
| 49†               | ---                         | ---                       | ---   | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 66†               | ---                         | ---                       | ---   | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| 67†               | ---                         | ---                       | ---   | ---  | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| Totals<br>5 dist. | 212                         | 664.85                    | 1,232.45  | 118,696  | 14,585                                | 2,799   | 13,469  | 18,395                                    | ---                                   | 197                                   | ---  | 49,445                           |

\*No report from Commissioner.

†Water rights not yet adjudicated. No Commissioner appointed.



# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 10, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, THOMAS SHIDLER, COLORADO SPRINGS, COLO. APPOINTED 1887.

| NAME OF DITCH OR CANAL.                                     | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.          |
|---|---|--|---------------------------------------|---------------------------------|------------------------------|
| The Underground Feeders to the Tom Wanless Ditch.....       | Underground water                         | Jan. 3, 1891                               | Mar. 1, 1890                          | 3.98                            | Wm. A. Strickler             |
| The Underground Feeders to the Enterprise Ditch.....        | Underflow of Monument creek }             | Jan. 5, 1891                               | Dec. 28, 1890                         | 29.70                           | The Enterprise Ditch Company |
| The enlargement and extension of the Frank Smith Ditch..... | Monument creek..                          | Jan. 10, 1891                              | Aug. 22, 1889                         | 26.00                           | The Cascade Ice Company      |
| The Cropper Ditch.....                                      | East Squirrel creek                       | Jan. 27, 1891                              | Jan. 2, 1891                          | 11.00                           | S. C. Stout                  |
| The Jones Park Ditch.....                                   | North Fork of Cheyenne creek }            | Jan. 27, 1891                              | Feb. 20, 1890                         | 23.80                           | The City of Colorado Springs |
| The Womack Ditch.....                                       | Little Fountain.....                      | Jan. 31, 1891                              | May 3, 1863                           | 5.61                            | Eliza G. Womack              |
| The Pike View Ditch and Pipe Line.....                      | Silver creek.....                         | April 3, 1891                              | Oct. 1, 1888                          | 2.00                            | James Pope                   |
| The Button Ditch.....                                       | West Monument creek.....                  | April 13, 1891                             | Feb. 20, 1891                         | 7.10                            | C. B. Burton                 |
| The Granite Ditch.....                                      | Deadman's creek.....                      | April 13, 1891                             | Jan. 16, 1891                         | 28.35                           | James S. Shumacher           |
| The Robey Ditch.....  | Fountain creek.....                       | April 22, 1891                             | Feb. 18, 1891                         | 41.63                           | Frank F. Roby                |
| The Bruening Feeder No. 1.....                              | Cheyenne slough.....                      | May 22, 1891                               | April 14, 1891                        | 5.32                            | John H. Bruening             |
| The Bruening Feeder No. 2.....                              | Cheyenne slough.....                      | May 22, 1891                               | April 14, 1891                        | 5.32                            | John H. Bruening             |
| The Woolery Ditch, No. 1.....                               | Sand creek.....                           | May 22, 1891                               | Feb. 19, 1890                         | 6.32                            | Henry J. Woolery             |



## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                                       | Name of stream from which water is taken.  | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.          |
|---|--|--|---------------------------------------|---------------------------------|------------------------------|
| The Sterling Ditch, No. 1.....                                | Springs .....                              | July 23, 1891                              | May 15, 1891                          | Not given.                      | Walter H. Sterling           |
| The Sterling Ditch, No. 2.....                                | Springs .....                              | July 23, 1891                              | May 15, 1891                          | Not given                       | Walter H. Sterling           |
| The Cornau Ditch, No. 2.....                                  | Little Fountain ..                         | Aug. 4, 1891                               | July 3, 1890                          | 7.80                            | A. H. Corman                 |
| The Crabb, No. 2.....   | Seepage waters ..                          | Sept. 2, 1891                              | Aug. 1888                             | 3.00                            | G. N. Crabb                  |
| The Crabb, No. 3.....   | Seepage waters ..                          | Sept. 2, 1891                              | April, 1891                           | 3.00                            | G. N. Crabb                  |
| The Malloy, No. 1.....  | Springs .....                              | Sept. 2, 1891                              | April 16, 1891                        | 12.77                           | Andrew Malloy                |
| The Malloy, No. 2.....  | Springs .....                              | Sept. 2, 1891                              | April 16, 1891                        | 12.77                           | Andrew Malloy                |
| The Fairview Ditch.....                                       | Deadman's creek ..                         | Oct. 6, 1891                               | April 7, 1891                         | 13.40                           | Mrs. A. G. Conrad            |
| The Jones Park Ditch.....                                     | North Cheyenne {<br>creek .....            | Nov. 14, 1891                              | Feb. 20, 1890                         | 23.80                           | The City of Colorado Springs |
| The Fountain Underground Ditch and Pipe Line.....             | Underground Res {<br>ervoir Springs, etc } | Dec. 28, 1891                              | Dec. 23, 1891                         | 50.00                           | E. B. Durfee                 |
| The Colorado Springs Water Works, Extension of Pipe Line..... | Ruxton creek.....                          | Feb. 13, 1892                              | Nov. 6,                               | 26.84                           |                              |
| The Hoehing Ditch.....  | Creek fed by sprgs.                        | Mar. 28, 1892                              | Mar. 19, 1892                         | 4.00                            | Henrietta Hoehing            |
| The R. B. Sharp Ditch.....                                    | McIntyre gulch ..                          | Apr. 18, 1892                              | Feb. 28, 1892                         | 29.50                           | R. B. Sharp                  |
| The Grover Ditch.....   | Talcot gulch creek                         | May 12, 1892                               | Feb. 15, 1892                         | 4.20                            | Henrietta Hoehing            |
| The Dixon Ditch .....   | A spring.....                              | Nov. 28, 1892                              | Sep. 22, 1892                         | 1.00                            | William Dixon                |

# STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 10. RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAMES OF RESERVOIR.                | Name of stream supplying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS. |
|------------------------------------|--|--------------------------------------|--|---------------------------------------|---------------------------------|---------------------|
| The Lake Joy Storage Reservoir     | Fountain qui Bouille                     | Tom Wanless...                       | Jan. 3, 1891                               | Mar. 1, 1890                          | 5,220,000                       | Wm. A. Strickler    |
| The Kieffler Reservoir             | Springs                                  | Direct                               | Feb. 17, 1891                              | Jan. 5, 1891                          | 1,620,000                       | A. R. Kieffler      |
| The Pipe View Reservoir            | Silver creek                             | Pike view                            | April 3, 1891                              | Oct. 1, 1888                          | 275,654                         | James Pope          |
| The Robey Reservoir                | Fountain                                 | Robey                                | April 22, 1891                             | Feb. 18, 1891                         | 8,790,300                       | Frank F. Robey      |
| The Bruening Reservoir No. 1.      | Cheyenne slough                          | { Bruening feed-<br>er No. 1. }      | May 22, 1891                               | Dec. 11, 1890                         | 18,744                          | John H. Bruening    |
| The Bruening Reservoir No. 2.      | Cheyenne slough                          | { Bruening feed-<br>er No. 2. }      | May 22, 1891                               | Dec. 11, 1890                         | 265,280                         | John H. Bruening    |
| The Woolery Reservoir No. 1.       | Sand creek                               | Woolery No. 1.                       | May 22, 1891                               | Feb. 18, 1890                         | 87,180                          | Henry J. Woolery    |
| The Woolery Reservoir No. 2.       | Spring branch                            | Built on stream.                     | May 22, 1891                               | Feb. 19, 1891                         | 349,260                         | Henry J. Woolery    |
| The Fountain Underground Reservoir | Underground waters                       | { Fountain un-<br>der ground. }      | Dec. 28, 1891                              | Dec. 23, 1891                         | 6,000                           | E. B. Durfee        |
| The R. B. Sharp Reservoir No. 1    | McIntyre gulch                           | Built on stream.                     | April 18, 1892                             | Feb. 28, 1892                         | 975,000                         | R. B. Sharp         |
| The R. B. Sharp Reservoir No. 2    | McIntyre gulch                           | Built on stream.                     | April 18, 1892                             | Feb. 28, 1892                         | 180,000                         | R. B. Sharp         |
| The Dixon Reservoir                | A Spring                                 | Dixon                                | Nov. 28, 1892                              | Sep. 22, 1892                         | 50,000                          | William Dixon       |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 11, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, C. H. DEMAREST, PONCHA SPRINGS, COLO., APPOINTED AUGUST 19, 1891.

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.   |
|-------------------------------------|---|--|---------------------------------------|---------------------------------|---|
| The McCann Ditch.....               | Spring gulch.....                         | Jan. 6, 1891                               | Oct. 13, 1890                         | 2.50                            | James McCann  |
| The Silver Heel Ditch.....          | Silver Heel creek.....                    | Feb. 24, 1891                              | Jan. 6, 1891                          | 2.00                            | Leonard Adams   |
| The Sebring Ditch.....              | Chalk creek.....                          | March 5, 1891                              | Oct. 12, 1888                         | 12.63                           | G. W. Sebring   |
| The Spring Ditch.....               | Springs 11-49-8.....                      | May 13, 1891                               | Mar. 21, 1891                         | 6.00                            | Anna Bell Hutchinson  |
| The Gustaph Shultz Ditch.....       | Hudson creek.....                         | May 22, 1891                               | May 1, 1891                           | 2.50                            | Gustaph Shultz  |
| The Cramer Ditch.....               | Half Moon creek.....                      | Sept. 4, 1891                              | June 8, 1891                          | 10.00                           | H. H. Cramer  |
| The Collins Ditch.....              | Silver creek.....                         | Sept. 9, 1891                              | Nov. 1890                             | { All of Sil-<br>ver creek }    | Wilkinson & Briggs  |
| The Cramer Ditch.....               | Half Moon creek.....                      | Sept. 17, 1891                             | June 8, 1891                          | 10.00                           | H. E. and H. H. Cramer  |
| The Lake Fork Pipe Line.....        | Lake Fork.....                            | Sept. 19, 1891                             | June 19, 1891                         | 10.00                           | { The Leadville and Evergreen Lakes Electric<br>Railway Company } |
| The Electric Railway Pipe Line..... | Arkansas river.....                       | Sept. 19, 1891                             | June 24, 1891                         | 10.00                           |   |
| The Malta Pipe Line.....            | California gulch.....                     | Sept. 19, 1891                             | June 15, 1861                         | 25.00                           | George Morrison   |
| The Park Ditch.....                 | Morrison creek.....                       | Oct. 30, 1891                              | Oct. 21, 1891                         | 4.79                            |   |
| The Muddy Ditch.....                | { Seepage & waste<br>from Spald'g gulch } | { Dec. 16, 1891<br>Feb. 2, 1892 }          | Oct. 15, 1891                         | 2.00                            | Henry C. Donnell  |
| The Thomas Jackson Ditch.....       | Clear creek.....                          |  | Not stated                            | 26.04                           | Thomas Jackson  |
| The Vincent Ditch.....              | Gas creek.....                            | Feb. 17, 1892                              | Feb. 10, 1892                         | 3.00                            | Vinton E. Fletcher  |

|  |                |               |               |                                   |   |                                  |
|--|----------------|---------------|---------------|-----------------------------------|---|----------------------------------|
| The Sunnyside Park Ditch, enlargement of the H. I. D. Ditch and Pipe Line..... | Arkansas river | May 16, 1892  | Feb. 20, 1892 | Orig. 1500 in.<br>En. 52.00 c. f. | { | The Sunnyside Park Ditch Company |
|  | Lake creek     | June 1, 1892  | May 23, 1892  |                                   |   |                                  |
|  | Stream unnamed | Sept. 3, 1892 | Feb. 10, 1882 |                                   |   |                                  |
| The Princeton Ditch.....   | Arkansas river | Oct. 14, 1892 | Nov. 17, 1891 | 150.00                            | { | A. R. Black                      |
|  | Dry creek      | Oct. 14, 1892 | Oct. 4, 1892  |                                   |   |                                  |
| The Reformatory Ditch.....   | Maxwell creek  | Nov. 9, 1892  | Nov. 7, 1888  | 1.00                              | { | Edward Prince <i>et al.</i>      |
|  | Dry creek      | Nov. 9, 1892  | Nov. 17, 1891 |                                   |   |                                  |
| The Ira DeWitt Ditch.....  | Arkansas river | Oct. 14, 1892 | Nov. 17, 1891 | 30.00                             | { | The State of Colorado            |
|  | Dry creek      | Oct. 14, 1892 | Oct. 4, 1892  |                                   |   |                                  |
| The Tompkins Ditch.....  | Maxwell creek  | Nov. 9, 1892  | Nov. 7, 1888  | 4.00                              | { | Ira DeWitt                       |
|  | Dry creek      | Nov. 9, 1892  | Nov. 17, 1891 |                                   |   |                                  |
| The Tompkins Ditch.....  | Maxwell creek  | Nov. 9, 1892  | Nov. 7, 1888  | 3.33                              | { | H. S. Tompkins                   |
|  | Dry creek      | Nov. 9, 1892  | Nov. 17, 1891 |                                   |   |                                  |
| The Tompkins Ditch.....  | Maxwell creek  | Nov. 9, 1892  | Nov. 7, 1888  | 6.75                              | { | H. S. Tompkins                   |
|  | Dry creek      | Nov. 9, 1892  | Nov. 17, 1891 |                                   |   |                                  |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 11, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.              | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>conveying<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                                     |
|---------------------------------|--|--|---|--|---------------------------------------|---|
| The Silver Creek Reservoir .... | Silver creek .....                             | Collin's extens'n                            | Sep. 9, 1891  | Nov. 1890  | Not given                             | ..... Wilkinson & Briggs                                |
| The Sugar Loaf Reservoir .....  | Lake Fork .....                                | Built on stream..                            | Sep. 19, 1891                                       | June 15, 1891                                    | 1,413,745,000                         | The Leadville & Evergreen<br>Lakes Electric Railway Co. |
| The Upper Sugar Loaf Reserv'r   | Lake Fork .....                                | Built on stream..                            | July 2, 1892  | May 25, 1892                                     | 135,907,200                           | ..... R. E. Goodale <i>et al.</i>                       |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO 12, RELATIVE TO WHICH, STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892—COMMISSIONER, JAMES T. LOCKE, CANON CITY, COLO. APPOINTED, 1889.

| NAME OF DITCH OR CANAL.                                  | Name of Stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                            |
|--|---|--|---------------------------------------|--|--|
| The Beaver Creek Pipe Line.....                          | { Beaver and Boehmer creeks.....          | Dec. 22, 1890                              | Sep. 27, 1890                         | 5.57                                       | -----The City of Colorado Springs              |
| The Royal Gorge Canal.....                               | Arkansas river.....                       | Mar. 5, 1891                               | Feb. 25, 1891                         | 460.00                                     | -----A. R. Black                               |
| The Royal Gorge Canal.....                               | Arkansas river.....                       | May 23, 1891                               | May 19, 1891                          | 594.00                                     | -----A. R. Black, Amended Statement            |
| The W. R. Voris Ditch.....                               | Brush creek.....                          | Aug. 10, 1891                              | July 1878                             | 3.67                                       | -----Thos. D. Balman                           |
| The Houle Ditch No. 4.....                               | West Brush creek.....                     | Jan. 21, 1892                              | June 1, 1866                          | 0.54                                       | -----Elizabeth Houle                           |
| The Houle Ditch No. 5.....                               | West Brush creek.....                     | Jan. 21, 1892                              | Jan. 15, 1890                         | 4.80                                       | -----Elizabeth Houle                           |
| The John Stoltz Irrigating Ditch.....                    | Oak creek.....                            | Jan. 27, 1892                              | May 31, 1881                          | 1.50                                       | -----John Stoltz                               |
| The Beaver Creek Mining and Milling Company's Ditch..... | West Beaver creek.....                    | Jan. 29, 1892                              | Jan. 9, 1892                          | 10.00                                      | -----The Beaver Creek Mining and Milling Co.   |
| The Hancock Ditch.....                                   | East Beaver creek.....                    | Feb. 13, 1892                              | Jan. 26, 1892                         | 10.00                                      | -----C. H. Hancock                             |
| The Mt. Rosa Ditch.....                                  | Wilson creek.....                         | Mar. 2, 1892                               | Feb. 3, 1892                          | 10.00                                      | -----The Mt. Rosa Mining, Milling and Lard Co. |
| The Bodfish Ditch.....                                   | { East branch of West Beaver c'k }        | Mar. 18, 1892                              | Feb. 13, 1892                         | 10.00                                      | -----Geo. H. Bodfish                           |
| The Mullen Ditch.....                                    | Springs.....                              | Apr. 13, 1892                              | Mar. 9, 1892                          | 10.00                                      | -----M. W. Mullen <i>et al.</i>                |
| The Pueblo Canal.....                                    | Arkansas river.....                       | Apr. 11, 1892                              | Jan. 15, 1892                         | 1,536.00                                   | -----C. H. Blake and sixteen others            |
| The Jackson Ditch.....                                   | Cherry creek.....                         | Apr. 18, 1892                              | Mar. 1, 1876                          | 3.00                                       | -----Geo. W. Jackson                           |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.                      | Name of stream from which water is taken. | Date of filing in the State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                         |
|--|---|--|---------------------------------------|--|---|
| The Mound City Ditch.....                    | Squaw creek.....                          | Aug. 5, 1892                                   | May 11, 1892                          | 6.12                                       | .....Louis Youngmark, <i>et al.</i>         |
| The King Ditch.....                          | Cottonwood creek                          | Aug. 12, 1892                                  | April 10, 1888                        | 1.50                                       | .....Herman King                            |
| The Hyssong Ditch No. 1.....                 | Cottonwood creek                          | Aug. 12, 1892                                  | June 1, 1890                          | 2.00                                       | .....John C. Hyssong                        |
| Amended Statement of the Mt. Rosa Ditch..... | Wilson creek.....                         | Sept. 16, 1892                                 | May 26, 1892                          | 10.00                                      | The Mt. Rosa Mining, Milling & Land Company |
| The I. J. Dawson & J. C. Erickson Ditch..... | Texas creek.....                          | Nov. 21, 1892                                  | May 24, 1892                          | 2.00                                       | .....I. J. Dawson & J. C. Erickson          |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 12, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                         | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.   |
|--|--|--|---|--|---------------------------------------|---|
| The Beaver Creek Reservoir }<br>No. 1..... | Beaver creek.....                              | Built on stream.                           | April 22, 1892                                      | Jan. 20, 1891                                    | 4,177,268                             | {<br>The Building, Loan,<br>Town Lot, Water and<br>Investment Company |
| The Dead Lake Reservoir.....               | Beaver creek.....                              | Feeder ditch and<br>pipe line.....         | April 22, 1892                                      | Jan. 21, 1891                                    | 945,000                               |   |
| The Seven Lakes Reservoir.....             | Drainage and nat-<br>ural springs.....         | Built on stream.                           | April 22, 1892                                      | Jan. 19, 1891                                    | 85,987,439                            |   |
| The Prospect Reservoir.....                | W. Fork Wilson c'k                             | Built on stream.                           | Aug. 20, 1892                                       | Aug. 19, 1892                                    | 9,217,760                             | Frederick A. Raynolds   |
| The Fairview Reservoir.....                | E. Fork Wilson c'k.                            | Built on stream.                           | Aug. 20, 1892                                       | Aug. 19, 1892                                    | 6,882,880                             | Frederick A. Raynolds   |
| The Ute Park Reservoir.....                | Not stated.....                                | Not stated.....                            | Oct. 18, 1892                                       | Feb. 10, 1892                                    | Not given..                           | The Ute Park Imp. Co.   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 13, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, WILL. J. ORANGE, SILVER CLIFF, COLO. APPOINTED 1889.

| NAME OF DITCH OR CANAL.  | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed<br>in cubic<br>feet per<br>second. | NAMES OF CLAIMANTS. |
|--|---|---|--|--|---------------------|
| The Grape Creek Water Works<br>and Irrigation Canal.....       | Grape creek.....                                | Mar. 14, 1891                                       | Mar. 9, 1891                                     | 60.00  | -----A. R. Black    |
| The Grape Creek Water Works<br>and Irr'n Canal. Amen. State. } | Grape creek.....                                | May 23, 1891  | Not stated...                                    | Not given..  | -----A. R. Black    |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 13, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR,        | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.           |
|---------------------------|--|--|---|--|---------------------------------------|-------------------------------|
| The Freers Reservoir..... | Not stated .....                               | Not stated .....                           | Oct. 4, 1892  | Not stated ...                                   | 933.333                               | .....L. H. Freer, (plat only) |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 14, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.              | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decree to each ditch or canal. | Cubic feet of water previously appropriated in district. | Number on stream. | Order of priority in district. |
|--------------------------------------|-----------------------------------|------------------------|--|---|--|-------------------|--------------------------------|
| The Toof Ditch                       | Fontaine qui Bouille              | Feb. 20, 1860          | 4.00   | ---   | ---  | ---               | 1                              |
| The Warrant, Barnes and Baxter Ditch | Arkansas river                    | April, 1861            | 15.00  | ---   | 4.00   | ---               | 2                              |
| The Excelsior Ditch                  | Arkansas river                    | Dec. 1861              | 56.00  | ---   | 19.00  | ---               | 3                              |
| The Eder Ditch                       | Fontaine qui Bouille              | Jan. 1, 1862           | 20.00  | ---   | 75.00  | ---               | 4                              |
| The Whipple Ditch                    | Fontaine qui Bouille              | Mar. 15, 1862          | 4.00   | ---   | 95.00  | ---               | 5                              |
| The Greenview Ditch                  | Fontaine qui Bouille              | Spring, 1862           | 2.50   | ---   | 99.00  | ---               | 6                              |
| The M. W. Steel Ditch                | Fontaine qui Bouille              | Mar. 1, 1863           | 1.00   | ---   | 101.50   | ---               | 7                              |
| The Keith, Warrant and Barnes Ditch  | Arkansas river                    | April, 1863            | 30.00  | ---   | 102.50   | ---               | 8                              |
| The C. L. Barnard Ditch              | Fontaine qui Bouille              | Feb'y, 1864            | 0.50   | ---   | 132.50   | ---               | 9                              |
| The Booth Ditch                      | Arkansas river                    | April 1, 1864          | 23.80  | ---   | 133.00   | ---               | 10                             |
| The H. R. Steele Ditch               | Fontaine qui Bouille              | Feb. 1, 1865           | 2.00   | ---   | 156.80   | ---               | 11                             |
| The Cozzens Ditch                    | Fontaine qui Bouille              | Feb. 10, 1866          | 2.00   | ---   | 158.80   | ---               | 12                             |

|   |                      |                     |       |        |    |
|---|----------------------|---------------------|-------|--------|----|
| The Wood Valley Ditch                       | Fontaine qui Bouille | Mar. 1, 1866        | 9.00  | 166.80 | 13 |
| The J. W. Caulfield Ditch                   | Fontaine qui Bouille | Mar. 15, 1866       | 4.50  | 169.80 | 14 |
| The Bannister Ditch                         | Fontaine qui Bouille | Latter part of 1866 | 7.00  | 174.30 | 15 |
| The Arkansas Ditch                          | Arkansas river       | Jan. 8, 1867        | 5.00  | 181.30 | 16 |
| The Beuesch Ditch                           | Fontaine qui Bouille | Feb. 12, 1867       | 2.50  | 186.30 | 17 |
| The Enterprise Ditch                        | Arkansas river       | Fall. of 1867       | 20.00 | 188.80 | 18 |
| The Sutherland Ditch                        | Fontaine qui Bouille | Feb. 15, 1868       | 3.00  | 208.80 | 19 |
| The Olin Ditch                              | Fontaine qui Bouille | Dec. 15, 1868       | 2.66  | 211.80 | 20 |
| The Cactus Ditch                            | Fontaine qui Bouille | Jan. 9, 1869        | 2.00  | 214.46 | 21 |
| The McNeil Ditch                            | Fontaine qui Bouille | Feb'y, 1869         | 1.50  | 216.46 | 22 |
| The Ballow Hill Ditch                       | Arkansas river       | July 1, 1869        | 10.00 | 217.96 | 23 |
| The Richie Ditch                            | Arkansas river       | Spring, 1870        | 3.00  | 227.96 | 24 |
| The Hamp-Bell Ditch                         | Arkansas river       | Nov., 1870          | 6.00  | 230.96 | 25 |
| The Barnum (also called Lewis Barnum) Ditch | Arkansas river       | 1870                | 6.00  | 236.96 | 26 |
| The Brooks Ditch                            | Arkansas river       | January, 1871       | 2.00  | 242.96 | 27 |
| The Hobson Ditch                            | Arkansas river       | March, 1871         | 2.00  | 244.96 | 28 |
| The West Pueblo, formerly Mahoney, Ditch    | Arkansas river       | April 1, 1872       | 2.00  | 246.96 | 29 |
| The Fields Ditch                            | Arkansas river       | Spring, 1872        | 6.00  | 248.96 | 30 |
| The Morey Ditch                             | Arkansas river       | April 1, 1874       | 0.95  | 254.96 | 31 |
| The Haden Ditch                             | Arkansas river       | Oct. 1, 1878        | 0.95  | 255.91 | 32 |
| The T. J. Steele Ditch                      | Fontaine qui Bouille | Feb. 1, 1880        | 1.00  | 256.86 | 33 |
| The Collier Ditch                           | Arkansas river       | May 4, 1881         | 19.00 | 257.86 | 34 |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.   | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Number on stream. | Order of priority in district. |
|---|-----------------------------------|------------------------|--|--|--|-------------------|--------------------------------|
| The I. N. Sater Ditch   | Arkansas river                    | June 20, 1881          | 3.00   |  | 276.86   | —                 | 35                             |
| The Greenview Ditch, enlargement  | Fontaine qui Bouille              | April, 1882            | 2.00   | 4.50   | 279.86   | —                 | 36                             |
| The Riverside Dairy Ditch   | Arkansas river                    | Feb. 1, 1883           | 0.83   |  | 281.86   | —                 | 37                             |
| The Pueblo Water Company's Ditch  | Arkansas river                    | April 22, 1884         | 22.66  |  | 282.69   | —                 | 38                             |
| The Chilcott Ditch  | Fontaine qui Bouille              | Mar. 10, 1885          | 5.00   |  | 305.35   | —                 | 39                             |
| The Ballow Hill Ditch, enlargement  | Arkansas river                    | June, 1885             | 36.00  | 46.00  | 310.35   | —                 | 40                             |
| The Allen Ditch   | Arkansas river                    | Mar. 1, 1886           | 6.00   |  | 346.35   | —                 | 41                             |
| The Hobson Ditch, enlargement   | Arkansas river                    | April 1, 1886          | 4.00   | 6.00   | 352.35   | —                 | 42                             |
| The Oxford Farmers' Ditch, (an enlargement and extension of the Enterprise Ditch) | Arkansas river                    | Feb. 26, 1887          | 147.00   |  | 356.35   | —                 | 43                             |
| The Collier Ditch, extension  | Arkansas river                    | Mar. 10, 1887          | 21.00  | 40.00  | 503.35   | —                 | 44                             |
| The McElroy Ditch   | Fontaine qui Bouille              | April 4, 1887          | 2.00   |  | 524.35   | —                 | 45                             |
| The Bessemer Ditch  | Arkansas river                    | May 1, 1887            | 400.00   |  | 526.35   | —                 | 46                             |
| The Hobson No. 2 Ditch  | Fontaine qui Bouille              | June 10, 1887          | 23.20  |  | 926.35   | —                 | 47                             |
| The West Pueblo Ditch, Extension  | Arkansas river                    | Dec. 17, 1887          | 16.00  | 18.00  | 949.55   | —                 | 48                             |

|  |                |               |        |       |          |    |
|--|----------------|---------------|--------|-------|----------|----|
| The Muller & Goldsmith enlargement and extension of the Booth Ditch<br>The Christian Fink enlargement of the Booth Ditch<br>The Rocky Ford High Line Canal<br>The Colorado Canal | Arkansas river | Mar. 30, 1888 | 7.00   | 13.00 | 965.55   | 49 |
|  | Arkansas river | Dec. 15, 1889 | 6.00   | ----- | 972.55   | 50 |
|  | Arkansas river | Jan. 6, 1890  | 418.00 | ----- | 978.55   | 51 |
|  | Arkansas river | June 9, 1890  | 756.28 | ----- | 1,396.55 | 52 |
| Total decreed in District  |                |               |        |       | 2,152.83 |    |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 14, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE. DATE, OF DECREE, MAY 9, 1892.

| NAME OF RESERVOIR.                         | Name of Stream from which water is taken. | Name of Ditch leading water thereto. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--|---|--------------------------------------|------------------------|--|--|--------------------------------|
| The Greenview Reservoir                    | Fontaine qui Bouille                      | Greenview Ditch                      | 1870                   | 2,613,000  | ---  | 1                              |
| The Pueblo Water Company's Reservoir No. 1 | Arkansas River                            | The Pueblo                           | Spring, 1885           | 679,000  | 2,613,000  | 2                              |
| The Pueblo Water Company's Reservoir No. 2 | Arkansas River                            | Water Company's Ditch.               |                        | 767,180  | 3,292,000  | 3                              |
| The Pueblo Water Company's Reservoir No. 3 | Arkansas River                            |                                      |                        | 955,441  | 4,059,180  | 4                              |
| The McElroy Reservoir                      | Fontaine qui Bouille                      | The McElroy Ditch                    | April 4, 1887          | 150,000  | 5,014,621  | 5                              |
| The Christian Fink Reservoir No. 1         | Arkansas River                            | The Booth and                        | Dec. 15, 1889          | 1,609,973  | 5,164,621  | 6                              |
| The Christian Fink Reservoir No. 2         | Arkansas River                            | Christian Fink                       |                        | 163,390  | 5,328,011  | 7                              |
| The Christian Fink Reservoir No. 3         | Arkansas River                            | Extension Ditch.                     |                        | 234,703  | 5,562,714  | 8                              |
| The Bessemer No. 9 Reservoir               | Arkansas River                            | The Bessemer Ditch                   | Feb. 7, 1891           | 38,500,000   | 5,797,417  | 9                              |
| The Olin Reservoir No. 1                   | Fontaine qui Bouille                      | The Olin Ditch                       | Novem. 1891            | 180,000  | 44,297,417   | 10                             |
| The Olin Reservoir No. 2                   | Fontaine qui Bouille                      |                                      |                        | 180,000  | 44,477,417   | 11                             |
| Total decreed in District                  |   |                                      |                        | 44,657,417   | ---  |                                |

## STATEMENT CONCERNING DITCHES

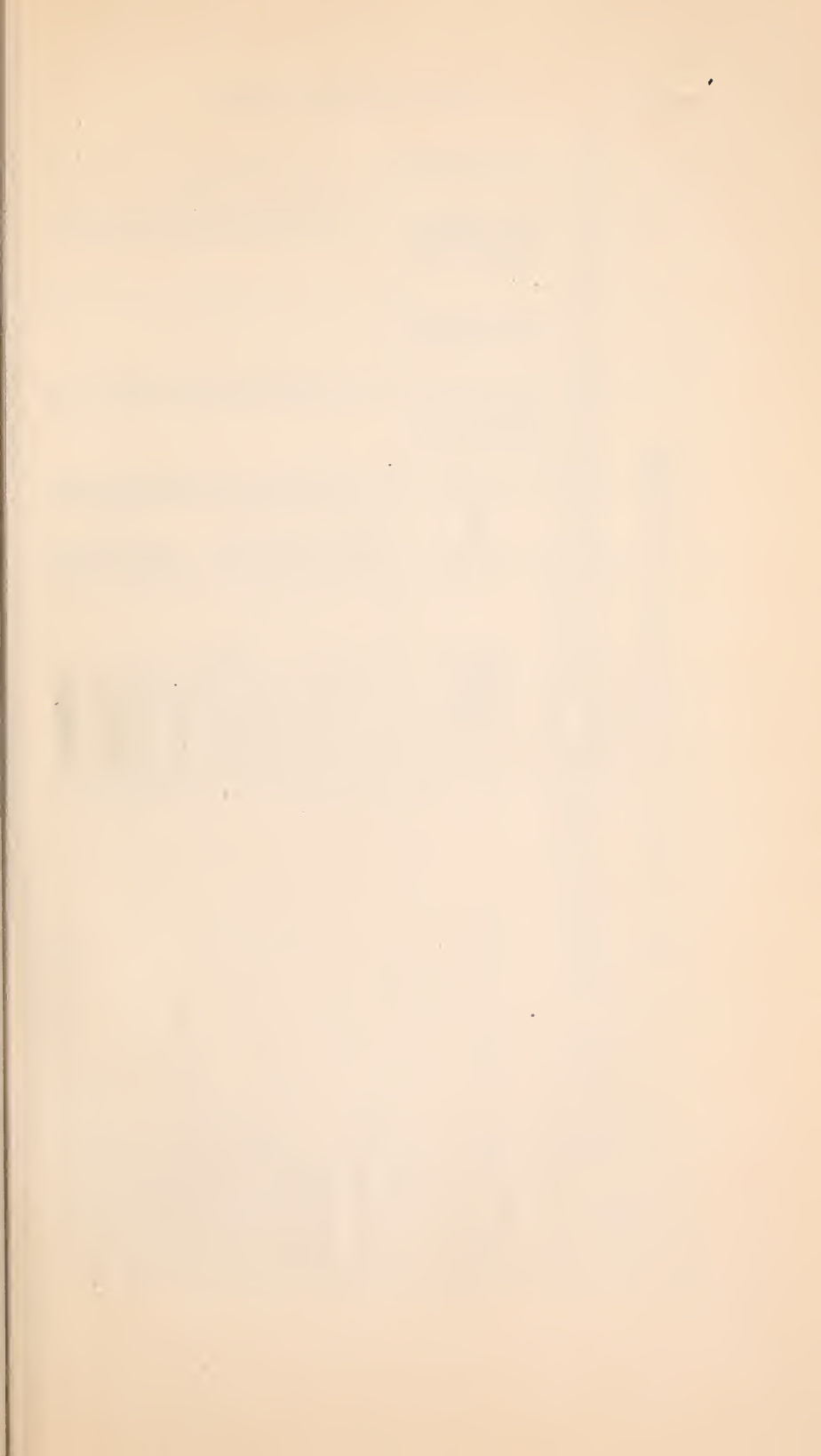
IN WATER DISTRICT NO. 14, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED—COMMISSIONER, W. HORGAN, PUEBLO, COLO. APPOINTED 1889.

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS. |
|--------------------------|---|--|---------------------------------------|---------------------------------|---------------------|
| The Upper Long Branch    | Springs in Long Branch                    | April 30, 1891                             | Mar. 1891                             | 3.30                            | J. J. Haruff        |
| The Long Branch Ditch    |   |  | 1884                                  | 3.30                            |                     |
| The Hill Ditch           |   |  | 1872                                  | 3.30                            |                     |
| The Squirrel Creek Ditch | Squirrel creek                            | May 25, 1892                               | April 13, 1892                        | 13.20                           | F. L. Rouse         |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 14, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.

| NAME OF RESERVOIR.            | Name of stream<br>supplying<br>water therefor. | Name of Ditch<br>leading<br>water thereto.           | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAME'S OF CLAIMANTS. |
|-------------------------------|--|--|---|--|---------------------------------------|----------------------|
| The White Reservoir           | Springs.                                       | Feeder ditch   | Jan. 27, 1891                                       | Not stated                                       | 94,000                                | R. H. White          |
| The Haruff Reservoir System   | { Long Branch and<br>springs                   | { Lg. Branch, Up-<br>per Lg. Branch<br>and Hill Dchs | April 30, 1891                                      | Not stated.                                      | 2,158,750                             | J. J. Haruff         |
| The Squirrel Creek Reservoir. | Squirrel creek.                                | { Squirrel creek<br>ditch                            | May 25, 1892  | April 13, 1892                                   | 1,200,000                             | F. L. Rouse          |





## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT No. 15, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.                    | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--|-----------------------------------|------------------------|---|--|--|--------------------------------|
| The Hicklin Ditch "A"                      | Greenhorn creek                   | Spring, 1859           | 0.60  | ---  | ---  | 1                              |
| The Hicklin Ditch "B"                      | Greenhorn creek                   | Spring, 1859           | 1.80  | ---  | 0.60   | 2                              |
| The Suttles Ditch                          | St. Charles river                 | Fall, 1861             | 2.00  | ---  | 2.40   | 3                              |
| The Eagle Ditch                            | St. Charles river                 | Winter 1861-2          | 2.00  | ---  | 4.40   | 4                              |
| The McDowell Ditch                         | St. Charles river                 | Feb. 28, 1862          | 3.00  | ---  | 6.40   | 5                              |
| The McDaniel Ditch No. 2                   | Big Graneros creek                | June 1, 1862           | 0.40  | ---  | 9.40   | 6                              |
| The Hicklin Ditch "D"                      | Greenhorn creek                   | 1862                   | 0.40  | ---  | 9.80   | 7                              |
| The Fairhurst Ditch (formerly Babcock).    | St. Charles river                 | June, 1863             | 1.80  | ---  | 10.20  | 8                              |
| The Tucker Ditch                           | St. Charles river                 | April 1, 1864          | 1.00  | ---  | 12.00  | 9                              |
| The Fisher Ditch                           | St. Charles river                 | May 1, 1864            | 0.70  | ---  | 13.00  | 10                             |
| The Greenhorn Canon Ditch                  | Greenhorn creek                   | April, 1865            | 2.00  | ---  | 13.70  | 11                             |
| The Extension of the Greenhorn Canon Ditch | Greenhorn creek                   | April, 1865            | 1.30  | 3.30   | 15.70  | 12                             |

|  |                    |               |       |        |    |
|--|--------------------|---------------|-------|--------|----|
| The Dotson Ditch No. 1                     | St. Charles river  | May, 1865     | 3.00  | 17.00  | 13 |
| The Grayback Ditch                         | St. Charles river  | Spring, 1865  | 2.00  | 20.00  | 14 |
| The Hickland Ditch                         | Big Graneros creek | March 5, 1866 | 5.00  | 22.00  | 15 |
| The Wagner Ditch                           | St. Charles river  | March, 1866   | 2.00  | 27.00  | 16 |
| The Rautschler Ditch                       | Greenhorn creek    | April 1, 1866 | 4.00  | 29.00  | 17 |
| The Hicklin Ditch "C"                      | Greenhorn creek    | Spring, 1866  | 2.00  | 33.00  | 18 |
| The First Enlargement of the Dotson Ditch  | St. Charles river  | Spring, 1866  | 3.00  | 35.00  | 19 |
| The Pioneer Ditch (on Middle Creek)        | Middle creek       | June, 1866    | 5.00  | 38.00  | 20 |
| The Sease Ditch                            | Middle creek       | June, 1866    | 1.60  | 43.00  | 21 |
| The Pollard Ditch                          | St. Charles river  | Dec. 15, 1866 | 6.00  | 44.60  | 22 |
| The Zoeller Ditch                          | St. Charles river  | Winter 1866-7 | 5.00  | 50.60  | 23 |
| The Blunt Ditch No. 1                      | St. Charles river  | Jan. 8, 1867  | 4.00  | 55.00  | 24 |
| The Blunt Ditch No. 2                      | St. Charles river  | Jan. 8, 1867  | 2.50  | 59.00  | 25 |
| The Chase Ditch                            | St. Charles river  | Dec. 1867     | 2.00  | 61.50  | 26 |
| The Edson Ditch                            | St. Charles river  | Winter 1867-8 | 1.20  | 63.50  | 27 |
| The Jamison Ditch                          | Greenhorn creek    | April 1, 1868 | 2.30  | 64.70  | 28 |
| The Lloyd Ditch                            | Greenhorn creek    | April 1, 1868 | 3.40  | 67.00  | 29 |
| The Marshall Ditch                         | Greenhorn creek    | April 1, 1868 | 1.70  | 70.40  | 30 |
| The Scroggs Ditch                          | Greenhorn creek    | Mid Apr, 1868 | 2.20  | 72.10  | 31 |
| The Smith, Austin & Pierson Ditch          | Big Graneros creek | May, 1868     | 7.00  | 74.30  | 32 |
| The Second Enlargement of the Dotson Ditch | St. Charles river  | Spring, 1868  | 30.00 | 81.30  | 33 |
| The Finlay Ditch                           | Greenhorn creek    | Spring, 1868  | 0.80  | 101.30 | 34 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                          | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--|-----------------------------------|------------------------|--|--|--|--------------------------------|
| The Mexican Ditch                                | St. Charles river                 | June, 1868             | 4.00   |  | 102.10   | 35                             |
| The Anderson Ditch                               | St. Charles river                 | Jan. 15, 1869          | 3.00   |  | 106.10   | 36                             |
| The High Line Ditch                              | Greenhorn creek                   | March 1, 1869          | 10.00  |  | 109.10   | 37                             |
| The Bruner Ditch                                 | St. Charles river                 | Spring, 1869           | 1.60   |  | 119.10   | 38                             |
| The Crawford & Smythe (formerly O'Donnell) Ditch | Greenhorn creek                   | July 1, 1869           | 2.00   |  | 120.70   | 39                             |
| The A. J. Lamb Ditch                             | Greenhorn creek                   | July 1, 1869           | 4.00   |  | 122.70   | 40                             |
| The Bryson No. 1 Ditch                           | St. Charles river                 | Jan. 2, 1870           | 6.00   |  | 126.70   | 41                             |
| The Graneros Canon Ditch                         | Graneros creek                    | May 1, 1870            | 2.00   |  | 132.70   | 42                             |
| The Porcupine Ditch                              | Middle creek                      | April 1, 1871          | 0.40   |  | 134.70   | 43                             |
| The Woodlawn Ditch                               | Big Graneros creek                | April 1, 1871          | 10.00  |  | 135.10   | 44                             |
| The Greenhorn Valley Ditch                       | Greenhorn creek                   | April 1, 1871          | 2.40   |  | 145.10   | 45                             |
| The McDaniel No. 1 Ditch                         | Big Graneros creek                | April 15, 1871         | 1.00   |  | 147.50   | 46                             |
| The Pioneer (on Little Graneros) Ditch           | Little Graneros creek             | April 25, 1871         | 0.60   |  | 148.50   | 47                             |
| The Carter Ditch                                 | Big Graneros creek                | May 16, 1871           | 1.80   |  | 149.10   | 48                             |
| The Ashbaugh Ditch                               | North Muddy creek                 | Spring, 1871           | 0.25   |  | 150.90   | 49                             |

|   |                        |                |      |        |    |
|---|------------------------|----------------|------|--------|----|
| The Dean Ditch                                | North Branch Muddy ck  | June 1, 1871   | 1.60 | 151.15 | 50 |
| The Nichols Ditch "A"                         | South Branch Muddy ck  | Aug. 1, 1871   | 1.50 | 152.75 | 51 |
| The Nichols Ditch "C"                         | South Branch Muddy ck  | Fall, 1871     | 4.00 | 154.25 | 52 |
| The Blunt Ditch No. 3                         | St. Charles river      | Fall, 1871     | 4.00 | 158.25 | 53 |
| The Stanley Ditch No. 1                       | Greenhorn creek        | March, 1872    | 3.00 | 162.25 | 54 |
| The Mesa Ditch                                | A Spring branch        | May 15, 1872   | 0.80 | 165.25 | 55 |
| The Nichols Ditch "B"                         | South Fork Muddy creek | May, 1872      | 0.60 | 166.05 | 56 |
| The Stanley Ditch No. 2                       | Greenhorn creek        | Spring, 1872   | 4.00 | 166.65 | 57 |
| The Pioneer (on Middle Creek) Extension Ditch | Middle creek           | Spring, 1872   | 1.20 | 170.65 | 58 |
| The Schurtz Ditch                             | Greenhorn creek        | June 10, 1872  | 2.80 | 171.85 | 59 |
| The Dunbaugh Ditch                            | Greenhorn creek        | Oct. 15, 1872  | 1.30 | 174.65 | 60 |
| The Mills Ditch                               | Greenhorn creek        | Oct. 15, 1872  | 0.70 | 175.95 | 61 |
| The Crawford & Smythe Ditch (enlargement)     | Greenhorn creek        | Nov. 1, 1872   | 1.80 | 176.65 | 62 |
| The Monitor Ditch (formerly Bryson & Nichols) | Greenhorn creek        | Fall, 1872     | 3.00 | 178.40 | 63 |
| The South Muddy Ditch                         | South Muddy creek      | 1872           | 0.40 | 181.40 | 64 |
| The Waldron Ditch                             | Little Graneros creek  | May 1, 1873    | 1.00 | 181.80 | 65 |
| The McCarty Ditch                             | Middle Muddy creek     | May, 1873      | 0.25 | 182.80 | 66 |
| The Davis Ditch                               | Greenhorn creek        | June 1, 1873   | 2.00 | 183.05 | 67 |
| The Robinson Ditch                            | Greenhorn creek        | June 1, 1873   | 5.50 | 185.05 | 68 |
| The Standard Ditch                            | North Muddy creek      | Last of Jun 73 | 4.00 | 190.55 | 69 |
| The Sease Ditch                               | Middle creek           | Nov. 1, 1873   | 1.60 | 194.55 | 70 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.       | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water appropriated previously in district. | Order of priority in district. |
|-------------------------------|-----------------------------------|------------------------|---|--|--|--------------------------------|
| The James E. Smith Ditch      | Greenhorn creek                   | Nov. 1, 1873           | 4.00  | —  | 196.15   | 71                             |
| The Dotson No. 2 Ditch        | St. Charles river                 | March 1, 1874          | 3.00  | —  | 200.15   | 72                             |
| The Yellow Bank Ditch         | South Muddy creek                 | June 1, 1874           | 0.25  | —  | 203.15   | 73                             |
| The Evergreen Ditch           | Big Graneros creek                | June 15, 1874          | 4.00  | —  | 203.40   | 74                             |
| The Cold Spring Ditch         | Spring branch                     | Summer 1874            | 0.40  | —  | 207.40   | 75                             |
| The McCausland Ditch          | St. Charles river                 | Dec. 1874              | 2.00  | —  | 207.80   | 76                             |
| The Middle Muddy Ditch        | Middle Muddy creek                | May, 1875              | 0.80  | —  | 208.60   | 77                             |
| The Goss Ditch                | Greenhorn & Spring bh             | April, 1876            | 0.33  | —  | 209.40   | 78                             |
| The Centennial Ditch          | Greenhorn creek                   | May 19, 1876           | 1.60  | —  | 209.73   | 79                             |
| The J. B. Garrish Ditch       | St. Charles river                 | June 1, 1876           | 0.50  | —  | 211.33   | 80                             |
| The St. Charles Ditch         | St. Charles river                 | August, 1876           | 120.00  | —  | 211.83   | 81                             |
| The Standard Ditch, extension | North Muddy creek                 | May 15, 1877           | 1.20  | —  | 331.83   | 82                             |
| The Domestic Ditch            | South Muddy creek                 | May, 1877              | 0.25  | —  | 333.03   | 83                             |
| The Brannan-Crawford Ditch    | Greenhorn creek                   | F. or Mc, 1878         | 1.80  | —  | 333.28   | 84                             |
| The Greenhorn High Line Ditch | Greenhorn creek                   | March 1, 1879          | 8.00  | —  | 335.08   | 85                             |

|   |                         |                |       |        |     |
|---|-------------------------|----------------|-------|--------|-----|
| The Mesa Ditch, extension                               | A Spring branch         | May 1, 1879    | 1.60  | 343.08 | 86  |
| The McDaniel Ditch, No. 3                               | Little Graneros creek   | Lat. part 1879 | 0.50  | 344.68 | 87  |
| The Garden Ditch  | Spring branch           | May 15, 1880   | 1.00  | 345.18 | 88  |
| The Merrimac Ditch                                      | Greenhorn creek         | May 16, 1880   | 1.00  | 346.18 | 89  |
| The North Muddy Ditch                                   | North Muddy creek       | April, 1881    | 0.25  | 347.18 | 90  |
| The Bryson Ditch  | St. Charles river       | October, 1883  | 20.00 | 347.43 | 91  |
| The Braunan Ditch (formerly Taylor)                     | Greenhorn creek         | March 1, 1884  | 1.40  | 357.43 | 92  |
| The Graneros Ditch                                      | Little Graneros creek   | April 1, 1884  | 1.25  | 368.83 | 93  |
| The Bonniemeade Extension of the Greenhorn Valley Ditch | Greenhorn creek         | April 1, 1884  | 2.70  | 370.03 | 94  |
| The Smythe Ditch  | Greenhorn creek         | Dec. 1, 1884   | 2.50  | 372.73 | 95  |
| The Tucker Ditch, enlargement                           | St. Charles river       | March 1, 1885  | 1.00  | 374.23 | 96  |
| The Hicklin Grant Ditch "A," extension                  | Greenhorn creek         | April, 1885    | 1.20  | 375.23 | 97  |
| The O'Brien & Harrison Ditch                            | Little Muddy creek      | January, 1886  | 3.00  | 376.43 | 98  |
| The Stanley Ditch, No. 3                                | Muddy creek             | Spring, 1887   | 2.40  | 379.43 | 99  |
| The Snow Slide Ditch                                    | South St. Charles river | July 6, 1888   | 15.00 | 381.83 | 100 |
| The Cold Spring Ditch, enlargement                      | Spring branch           | Summer, 1888   | 0.40  | 396.83 | 101 |
| The Brown Ditch   | St. Charles river       | Feb., 1890     | 1.40  | 397.23 | 102 |
| The Patton Ditch  | Middle creek            | May 1, 1891    | 0.50  | 398.63 | 103 |



## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO 15, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE. DATE OF DECREE, APRIL 16, 1892.

| NAME OF RESERVOIR                           | Name of stream from which water is taken. | Name of ditch leading water thereto. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|---|--------------------------------------|------------------------|--|--|--------------------------------|
| The Chase Reservoir                         | St. Charles river                         | The Chase ditch                      | 1868                   | 100,000  |  | 1                              |
| The Minnequa Reservoir                      | St. Charles river                         | The St. Charles ditch                | 1876                   | 60,000,000   | 100,000  | 2                              |
| The Hickland } No. 2<br>Reservoirs, } No. 3 | Big Graneros creek                        | The Hickland ditch                   | Mar. 1, 1885           | 266,672  | 60,100,000   | 3                              |
|   |   |                                      | Mar. 15, 1885          | 113,400  | 60,366,672   | 4                              |
| The Bonniemeade Lake Reservoir.             | Greenhorn creek                           | The Greenhorn and Bonniemeade exten. | 1886                   | 8,574,160  | 60,580,672   | 5                              |
|   |   |                                      | Summer 1890            | 1,000,000  | 69,154,232   | 6                              |
| The St. Charles No. 2 Reservoir             | St. Charles ditch                         | St. Charles river                    |                        |  |  |                                |
| Total decreed in district                   |   |                                      |                        |  | 70,154,232   |                                |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 15, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER A. H. SMITH, PUEBLO, COLORADO. APPOINTED 1889.

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.              |
|-------------------------------------|---|--|---------------------------------------|--|----------------------------------|
| The Savage Ditch.....               | St. Charles river.....                    | June 19, 1891                              | June 18, 1891                         | 10.00                                      | ..... Savage and McCarthy        |
| The Snowslide Ditch.....            | Squirrel creek.....                       | Nov. 27, 1891                              | June 6, 1889                          | 40.00                                      | ..... Alex. Miller <i>et al.</i> |
| The Bonniemeade Extens'n Ditch..... | Greenhorn creek.....                      | Dec. 11, 1891                              | April 1, 1886                         | 16.31                                      | ..... Ella and Z. T. McDaniel    |

## STATEMENT CONCERNING DITCHES

IN THAT PART OF WATER DISTRICT No. 16, LYING IN PUEBLO COUNTY, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THAT PART OF SAID DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.                  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--|---|------------------------|---|--|--|--------------------------------|
| The Doyle Ditch.....                     | Huerfano river.....                       | Spring, 1859           | 11.00   | -----  | -----  | A                              |
| The Daggett Ditch.....                   | Huerfano river.....                       | Spring, 1860           | 31.00   | -----  | 11.00  | B                              |
| The Fryer Ditch.....                     | Huerfano river.....                       | Spring, 1862           | 24.61   | -----  | 45.20  | 3 <sup>a</sup>                 |
| The Dog Town Ditch.....                  | Huerfano river.....                       | Winter, 1862           | 14.30   | -----  | 71.11  | 4 <sup>a</sup>                 |
| The Field Ditch.....                     | Huerfano river.....                       | January, 1863          | 8.00  | -----  | 85.41  | 4 <sup>b</sup>                 |
| The Welton Ditch.....                    | Huerfano river.....                       | Early winter, 1863     | 42.00   | -----  | 93.41  | 4 <sup>c</sup>                 |
| The Hermosilla Ditch.....                | Huerfano river.....                       | April 25, 1863         | 72.00   | -----  | 138.61   | 5 <sup>a</sup>                 |
| The Kinsey Ditch.....                    | Huerfano river.....                       | April 15, 1874         | 8.50  | -----  | 410.43   | 97 <sup>a</sup>                |
| The Kinsey Ditch, first enlargement..... | Huerfano river.....                       | April, 1885            | 10.50   | -----  | 514.73   | 156 <sup>a</sup>               |
| The Field Ditch, enlargement.....        | Huerfano river.....                       | August, 1885           | 17.16   | -----  | 525.23   | 156 <sup>b</sup>               |

STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.              | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--------------------------------------|---|------------------------|---|--|--|--------------------------------|
| The Huerfano Valley Ditch            | Huerfano river                            | Dec. 31, 1887          | 74.00   | .....  | 564.65   | 167 <sup>a</sup>               |
| The Ellis Ditch                      | Huerfano river                            | Dec. 12, 1888          | 22.00   | .....  | 714.81   | 178                            |
| Total decreed to Ditches in district |   |                        | .....   |  | 736.81   |                                |

NOTE.—The last two columns in the above table were compiled in the State Engineer's office, in connection with the decree for that part of this district lying in Huerfano County. See page 300, Fifth Biennial Report of State Engineer, 1889-90.

## STATEMENT CONCERNING RESERVOIRS

IN THAT PART OF WATER DISTRICT NO. 16, LYING IN PUEBLO COUNTY, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF RESERVOIR.                           | Name of stream from which water is taken. | Name of ditch leading water thereto. | Date of appropriation. | Cubic feet of water per second decreed to each priority. |  | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|--|---|--------------------------------------|------------------------|--|--|--|--------------------------------|
|  |   |                                      |                        |  |  |  |                                |
| The Huerfano Valley Reservoir                | Huerfano river                            | Huerfano Val. Ditch                  | Dec. 31, 1887          | 87,855,600   |  | 1,682,991  | 3                              |
| The "J. J. Ellis" Reservoir                  | Huerfano river                            | Ellis ditch                          | Fall, 1889             | 450,000  |  | 89,537,991   | 4                              |
| The "Fields & McMillan" Reservoir            | Huerfano river                            | Ellis ditch                          | Fall, 1889             | 1,045,000  |  | 89,987,991   | 5                              |
| Total decreed to Reservoirs in this district |   |                                      |                        |  |  |  | 91,032,991                     |

NOTE.—The last two columns in the above table were compiled in the State Engineer's office, in connection with the decree for that part of this district lying in Huerfano County. See page 311, Fifth Biennial Report of State Engineer, 1889-90.

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 16, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER, H. B. JONES, ST. MARYS, COLO. APPOINTED JULY 19, 1891.

| NAME OF DITCH OR CANAL.                                    | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.           |
|--|---|--|---------------------------------------|---------------------------------|-------------------------------|
| The Pachaco Ditch  | Cuecharas creek                           | Dec. 11, 1890                              | Nov. 1884                             | 17.40                           | John B. Pachaco <i>et al.</i> |
| The Vigil Ditch  | Cuecharas creek                           | Dec. 11, 1890                              | 1874                                  | 35.14                           | Francisco Vigil <i>et al.</i> |
| The Botts Ditch  | Muddy creek                               | Jan. 23, 1891                              | Not stated                            | Not given                       | David Botts                   |
| The Emerson Ditch  | Bluff creek                               | April 8, 1891                              | Not stated                            | 1.25                            | J. W. Emerson                 |
| The Emerson Reservoir Ditch                                | Bluff creek                               | April 8, 1891                              | Not stated                            | 1.50                            | J. W. Emerson                 |
| The Pope Brothers Ditch                                    | Huerfano river through Boyce D            | April 16, 1891                             | Oct. 15, 1888                         | 12.00                           | Hamilton Pope and J W Pope    |
| The Pope Brothers Enlargement of the Boyce Ditch           | Huerfano River                            | April 16, 1891                             | Not stated                            | 12.00                           | Hamilton Pope and J W Pope    |
| The Petty & Robinson Ditch                                 | Greaser ditch                             | April 22, 1891                             | Not stated                            | 3.00                            | Robinson & Petty              |
| The Robinson Ditch   | Muddy creek                               | April 22, 1891                             | Not stated                            | Not given                       | J W Robinson                  |
| The Tom Branch Ditch                                       | Tom Branch creek                          | April 23, 1891                             | July 15, 1890                         | 68.00                           | Pope & Beckwith               |
| The Mexican Branch Ditch                                   | Mexican Br'ch c'k                         | April 23, 1891                             | July 13, 1890                         | 68.00                           | Pope & Beckwith               |
| The Extension of the Tom Branch and Mexican Branch Ditches | Tom and Mexican Branch creeks             | April 23, 1891                             | July 18, 1890                         | Not given                       | Pope & Beckwith               |
| The Greasewood Hollow Ditch                                | Springs on 17.20 S                        | April 23, 1891                             | Oct. 15, 1890                         | All the flow of springs         | Henry Showman                 |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.       |
|---|---|--|---------------------------------------|---------------------------------|---------------------------|
| The Gomez First Enlargement Ditch         | Cucharas creek                            | June 6, 1891                               | April 20, 1891                        | 40.00                           | John F. Read              |
| The Davis Botts Ditch                     | Muddy creek                               | June 11, 1891                              | Nov. 1, 1888                          | 3.00                            | David F. Botts            |
| The St. Clair Ditch                       | Cucharas creek                            | June 13, 1891                              | June 3, 1891                          | 5.42                            | Clara C. Martin           |
| The Edmiston Ditch                        | Cucharas creek                            | June 22, 1891                              | 1872                                  | 2.00                            | A. H. Edmiston            |
| The Hogback Ditch                         | Cucharas creek                            | June 22, 1891                              | March 1, 1890                         | 3.00                            | Hayes & Crumley           |
| The Lone Pine Ditch                       | Cucharas creek                            | June 22, 1891                              | May, 1876                             | Not given                       | George W. Kitchen         |
| The Edmiston & Estes Ditch                | Cucharas creek                            | June 22, 1891                              | April, 1872                           | 2.25                            | Edmiston & Estes          |
| The Mexican Ditch                         | Mexican B'nch c'k                         | June 26, 1891                              | July 13, 1890                         | 68.00                           | James Beckwith            |
| The Mexican Ditch and Tom Ditch Extension | Mexican B'nch c'k                         | June 26, 1891                              | July 17, 1890                         | 72.50                           | James Beckwith            |
| The Tom Branch Ditch                      | Tom Branch creek                          | June 26, 1891                              | July 19, 1890                         | 68.00                           | James Beckwith            |
| The Lamb Ditch                            | Huerfano river thro' Martinez ditch.      | { July 1, 1891                             | April 11, 1891                        | 6.50                            | Thomas Lamb <i>et al.</i> |
| The Enlargement of the Martinez Ditch     | Huerfano river                            | July 1, 1891                               | April 11, 1891                        | 6.50                            | Thomas Lamb <i>et al.</i> |
| The Sheep Mountain Ditch                  | Spring Run creek                          | July 1, 1891                               | Jan. 3, 1891                          | 4.10                            | Candido Garcia            |
| The Piedras Amarillas Ditch               | Oak creek                                 | July 18, 1891                              | April 1867                            | 12.86                           | Antonio Maria Martinez    |
| The Gonzalez Ditch                        | Oak creek                                 | July 20, 1891                              | July 11, 1891                         | 12.86                           | Henry Gordon              |

|  |  |  |                |                |        |                            |
|--|--|--|----------------|----------------|--------|----------------------------|
| The Louis Sporleder Ditch                      |  |  |                | Oct. 27, 1890  | 36.33  | August F. Unfug            |
| The Northside Ditch                            | { North fork of Santa Clara creek }          |  |                | Oct. 27, 1890  | 4.53   | August F. Unfug            |
| The Southside Ditch                            |  |  |                | Oct. 27, 1890  | 4.53   | August F. Unfug            |
| The Extension of Mahan Ditch                   |  |  | Aug. 8, 1891   | Jan. 7, 1889   | 5.37   | Jones & Patterson          |
| The Denis Pass Creek Ditch                     | Huerfano river                               |  | Aug. 11, 1891  | May 1, 1870    | 2.00   | Charles Deus               |
| The Canon Colorow Ditch                        | Pass creek                                   |  | Aug. 18, 1891  | April, 1884    | 12.86  | Manuel Pino                |
| The Vigil Ditch                                | Arroya Colorow                               |  | Aug. 18, 1891  | 1866           | 12.66  | Edwin W. Baxter            |
| The Gross Canal                                | Oak creek                                    |  | Aug. 18, 1891  | July 7, 1891   | 228.00 | W. A. Gross                |
| The Mountain View Ditch                        | Huerfano river                               |  | Aug. 18, 1891  | June, 1885     | 4.00   | F. M. Owenburg             |
| The Mountain View Ditch, First Extension       | Middle creek                                 |  | Sept. 3, 1891  | Aug. 18, 1891  | 3.36   | F. M. Owenburg             |
|  | Middle creek                                 |  | Sept. 3, 1891  | Spring, 1875   | .50    | Win. Lazendorfer           |
| The Poison Canon Ditch                         | Poison Canon creek                           |  | Sept. 21, 1891 | Oct. 26, 1891  | 7.25   | L. B. Sporleder            |
| The Sporleder Ditch                            | Cucharas river                               |  | Nov. 25, 1891  | Aug. 18, 1891  | 3.36   | F. M. Owenburg             |
| The First Extension of the Mountain View Ditch | Middle river                                 |  | Oct. 8, 1891   | July 27, 1891  | 7.61   | Charles E. Armstrong       |
|  | North Apache creek                           |  | Oct. 10, 1891  | July 27, 1891  | 7.61   | Charles E. Armstrong       |
| The Armstrong-Ogle Ditch                       | North Apache creek                           |  | Oct. 10, 1891  | Mar. 20, 1891  | 68.00  | Hamilton Pope              |
| The Armstrong-Ogle Ditch                       | Apache creek                                 |  | Dec. 10, 1891  | May, 1868      | 30.00  | Louis N. Harnes            |
| The Ute Ditch                                  | Springs                                      |  | Mar. 28, 1892  | Feb. 24, 1892  | 167.44 | F. E. Torbit <i>et al.</i> |
| The Louis N. Harnes Ditch                      | Underflow of Huerfano river                  |  | April 8, 1892  | Oct. 28, 1889  | 44.00  | Chas. N. Hockaday          |
| The Junita Canal.                              | Six Mile Arroya                              |  | April 18, 1892 | April 12, 1892 | 5.00   | John Meyer                 |
| The Hockaday Ditch                             | Greaser creek                                |  | May 31, 1892   | June, 1878     | 15.00  | Miguel A. Vigil            |
| The J. M. Ditch                                | { South fork of North Branch of Bear creek } |  | June 2, 1892   | June, 1875     | 15.00  | Miguel A. Vigil            |
| The South Ditch No. 1                          |  |  | June 2, 1892   |                |        |                            |
| The North Ditch No. 2                          |  |  |                |                |        |                            |

STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity, claimed in cubic feet. | NAMES OF CLAIMANTS.          |
|-------------------------------------|---|--|---------------------------------------|----------------------------------|------------------------------|
| The J. S. Mackey Ditch              | Spring creek                              | June 16, 1892                              | June 5, 1888                          | 1.00                             | J. S. Mackey                 |
| The Enlargement of the Hudson Ditch | Medano creek                              | Oct. 17, 1892                              | June 18, 1892                         | 18.97                            | W. L. Murray <i>et al.</i>   |
| The Medano Ditch                    | Medano creek                              | Oct. 17, 1892                              | Sep. 22, 1892                         | 27.92                            | R. M. Brockman <i>et al.</i> |
| The "C. W." Ditch                   | Bruff creek                               | Oct. 17, 1892                              | July 28, 1892                         | 3.00                             | Charles Wolf                 |
| The Fink Ditch                      | Williams creek                            | Nov. 23, 1892                              | March, 1869                           | 2.95                             | William T. Fink              |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 16, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.

| NAME OF RESERVOIR.            | Name of stream<br>supplying<br>water therefor. | Name of Ditch<br>leading<br>water thereto.   | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.  |
|-------------------------------|--|--|---|--|---------------------------------------|----------------------|
| The Stevens Reservoir         | Cucharas creek                                 | Duran ditch  | Jan. 12, 1891                                       | 1887   | 54,885,600                            | W. V. Stevens        |
| The Emerson Reservoir.        | Bluff creek                                    | { Emerson's Re-<br>servoir ditch }<br>{ Boyce and<br>Pope ditch }<br>{ J. W. Robinson<br>ditch } | April 8, 1891                                       | Not stated.                                      | Not given                             | J. W. Emerson        |
| The Pope Reservoir            | Huerfano river                                 |  | April 16, 1891                                      | Oct. 15, 1888                                    | 4,024,238                             | Hamilton Pope        |
| The J. W. Robinson Reservoir  | Muddy creek                                    |  | April 22, 1891                                      | Not stated                                       | 2,000,000                             | J. W. Robinson       |
| The David Botts Reservoir     | Muddy creek                                    | David Botts ditch  | Jan. 11, 1891                                       | Nov. 1, 1888                                     | 96,000                                | David F. Botts       |
| The St. Clair Reservoir       | Cucharas river                                 | St. Clair ditch  | Jan. 13, 1891                                       | Jan. 3, 1891                                     | 2,058,210                             | Clara C. Martin      |
| The Mahan Extension Reservoir | Huerfano river                                 | { Mahan and Ex-<br>tension ditch }   | Aug. 8, 1891  | Jan. 7, 1889                                     | 191,445,034                           | Jones & Pattison     |
| The Gross Reservoir No. 2     | Huerfano river                                 | Gross canal.   | Aug. 18, 1891                                       | July 7, 1891                                     | 52,707,600                            | W. A. Gross          |
| The Gross Reservoir No. 3.    | Huerfano river                                 | Gross canal.   | Aug. 18, 1891                                       | July 7, 1891                                     | 67,953,600                            | W. A. Gross          |
| The Gross Reservoir No. 4     | Huerfano river                                 | Gross canal.   | Aug. 18, 1891                                       | July 7, 1891                                     | 1,672,704,000                         | W. A. Gross          |
| The Mountain View Reservoir   | Middle creek                                   | { Mountain View<br>ditch }   | Sept. 3, 1891                                       | Aug. 18, 1891                                    | 598,545                               |                      |
| The Armstrong Reservoir No. 1 | North Apache creek                             | { Armstrong-<br>Ogle ditch }   | Oct. 10, 1891                                       | July 27, 1891                                    | 879,300                               | Charles E. Armstrong |
| The Armstrong Reservoir No. 2 | North Apache creek                             | Same   | Oct. 10, 1891                                       | July 27, 1891                                    | 555,788                               | Charles E. Armstrong |
| The Armstrong Reservoir No. 3 | North Apache creek                             | Same.  | Oct. 10, 1891                                       | July 27, 1891                                    | 627,927                               | Charles E. Armstrong |

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

| NAME OF RESERVOIR.            | Name of stream supplying water therefor. | Name of ditch conveying water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.  |
|-------------------------------|--|--|--|---------------------------------------|---------------------------------|----------------------|
| The Armstrong Reservoir No. 4 | North Apache creek                       | { Armstrong }<br>Ogle ditch            | Oct. 10, 1891                              | July 27, 1891                         | 531,511                         | Charles F. Armstrong |
| The Hockaday Reservoir        | Six Mile arroyo.                         | Hockaday ditch.                        | April 18, 1892                             | Oct. 29, 1889                         | 250,000                         | Charles N. Hockaday  |
| The J. M. Reservoir           | Greaser creek.                           | J. M. ditch                            | May 31, 1892                               | April 12, 1892                        | 6,547,795                       | John Meyer           |
| The "C. W." Reservoir         | Bruff creek                              | C. W. ditch.                           | Oct. 17, 1892                              | July 28, 1892                         | 1,800,000                       | Charles Wolf         |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 17, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER GEORGE PECK, LAS ANIMAS, COLORADO. APPOINTED, 1889.

| NAME OF DITCH OR CANAL.                     | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                     |
|---|---|--|---------------------------------------|--|---|
| The Bob Creek Canal                         | Bob creek                                 | Dec. 15, 1890                              | Nov. 26, 1890                         | 62.00                                      | The Bob Creek Land & Water Company      |
| The W. J. Barker Ditch                      | Arkansas river                            | Dec. 20, 1890                              | Oct. 20, 1890                         | 15.15                                      | W. J. Barker                            |
| The A. J. Anderson Ditch                    | Crooked arroya                            | Jan. 5, 1891                               | Mar. 10, 1888                         | 6.81                                       | Albert J. Anderson                      |
| The Underground Feeders to the Gilpin Ditch | Horse creek                               | Jan. 10, 1891                              | Mar. 19, 1890                         | 32.50                                      | Francis E. Gilpin                       |
| The Kitchen Ditch                           | Sand Arroya creek                         | Feb. 27, 1891                              | Feb. 6, 1891                          | 5.44                                       | Charles W. Kitchen                      |
| The Arlington Canal                         | Adobe creek                               | Feb. 27, 1891                              | Dec. 7, 1890                          | 26.68                                      | The Arlington Farm & Irrigation Company |
| The Abe Peterson Ditch                      | Arkansas river                            | April 16, 1891                             | April 1873                            | 70.00                                      | A. Peterson                             |
| Holt Live Stock Co.'s Ditch No. 1           | Horse creek                               | April 16, 1891                             | Dec. 20, 1886                         | 4.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 2           | N. Park Horse cr'k                        | April 21, 1891                             | Dec. 20, 1886                         | 9.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 3           | Horse creek                               | April 21, 1891                             | Dec. 20, 1886                         | 4.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 4           | Deadman's creek                           | April 21, 1891                             | Dec. 20, 1886                         | 7.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 5           | Deadman's creek                           | April 21, 1891                             | Dec. 20, 1886                         | 6.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 6           | Horse creek                               | April 21, 1891                             | Dec. 20, 1886                         | 7.00                                       | The Holt Live Stock Company             |
| Holt Live Stock Co.'s Ditch No. 7           | Rush creek                                | April 21, 1891                             | Dec. 20, 1886                         | 5.00                                       | The Holt Live Stock Company             |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.                       | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                   |
|---|---|--|---------------------------------------|---------------------------------|---------------------------------------|
| Holt Live Stock Co.'s Ditch No. 8             | Rush creek                                | April 21, 1891                             | Dec. 20, 1886                         | 5.50                            | The Holt Live Stock Company           |
| Holt Live Stock Co.'s Ditch No. 9             | Roy creek                                 | April 21, 1891                             | Dec. 20, 1886                         | Not given                       | The Holt Live Stock Company           |
| The Poinster Ditch                            | Anderson arroya                           | May 6, 1891                                | May 1, 1891                           | 6.20                            | J. F. Poinster                        |
| The Brooker Arroya Ditch                      | Anderson arroya                           | June 15, 1891                              | April 31, 1891                        | 5.00                            | Alfred Brooker                        |
| The Thurmond Arroya Ditch                     | Thurmond arroya                           | June 15, 1891                              | April 1, 1891                         | 2.00                            | Alfred Brooker                        |
| The Tempas Creek Ditch                        | Tempas creek                              | June 23, 1891                              | May 18, 1891                          | 51.84                           | The Tempas Creek Company              |
| The Floodwater Ditch from—                    | Sand arroya                               | July 2, 1891                               | April 27, 1891                        | 63.00                           | M. F. Houston, <i>et al.</i>          |
| The Poinster Ditch No. 2                      | Anderson arroya                           | Mar. 22, 1892                              | Mar. 11, 1892                         | 3.21                            | Joseph F. Poinster                    |
| The Green Ditch                               | Horse creek                               | Mar. 24, 1892                              | Jan. 29, 1892                         | 100.00                          | A. R. Wait                            |
| The Lauckton Ditch                            | King arroya                               | Mar. 29, 1892                              | Mar. 1, 1892                          | 5.24                            | George L. Lauckton                    |
| The Canaday Ditch                             | Horse creek                               | April 9, 1892                              | Jan. 18, 1892                         | 56.73                           | J. R. Canaday                         |
| The Relief Ditch                              | A ravine                                  | April 23, 1892                             | Feb. 16, 1892                         | 20.00                           | S. W. Cressey                         |
| The Proposed Extension of the Riverside Ditch | Arkansas river                            | April 28, 1892                             | Feb. 14, 1892                         | 11.81                           | The Riverside Extension Ditch Company |
| The Supply Ditch                              | Horse creek                               | Aug. 16, 1892                              | May 18, 1892                          | 575.62                          | S. W. Cressey & J. R. Canaday         |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 17, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.  | Name of stream supplying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                     |
|---|--|--------------------------------------|--|---------------------------------------|---------------------------------|---|
| The Arlington Reservoir                                   | Adobe creek                              | Arlington ditch                      | Feb. 27, 1891                              | Dec. 7, 1890                          | 28,600,000                      | { The Arlington Farm and Irrigation Co. |
| { The Colorado Land and Reservoir Co.'s Reservoir No. 1 } | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April, 9, 1889                        | 133,890,000                     | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Reservoir No. 2 } | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 665,818,630                     | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Reservoir No. 3 } | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 14,869,641,600                  | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Lake May }        | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 32,125,500                      | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Lake Lolita }     | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 75,467,700                      | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Lake Mouse }      | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 5,150,970                       | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Lake Hannah }     | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 51,890,850                      | { The Colorado Land and Reservoir Co.   |
| { The Colorado Land and Reservoir Co.'s Lake Pearl }      | Arkansas river                           | Colorado canal                       | Aug. 26, 1891                              | April 9, 1889                         | 30,910,176                      | { The Colorado Land and Reservoir Co.   |
| the Walters Reservoir                                     | Natural springs                          |                                      | June 10, 1892                              | Mar. 1, 1892                          | 44,318,000                      | Louis W. Walters                        |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 18, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, WINFIELD S. BAYLESS. APPOINTED APRIL 15, 1892.

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                 |
|-------------------------------------|---|--|---------------------------------------|---------------------------------|-------------------------------------|
| The Antonio Sals Ditch              | Apishapa creek                            | Mar. 29, 1891                              | Dec. 15, 1890                         | 17.65                           | Margaret A. Moore                   |
| The Dotson Ditch                    | { Arroya of the<br>{ Canon de Agua        | Mar. 24, 1892                              | Mar. 15, 1887                         | 8.25                            | John M. Dotson                      |
| The Enlargement of the Dotson Ditch | { Arroya of the<br>{ Canon de Agua        | Mar. 24, 1892                              | Jan. 5, 1889                          | 42.75                           | John M. Dotson                      |
| The Feeder Ditch to State Reservoir | { Trujillo creek &<br>{ Mitote canon      | July 30, 1892                              | May 2, 1892                           | 115.28                          | The People of the State of Colorado |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 18, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.   | Name of Stream<br>supplying<br>water therefor. | Name of Ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                       |
|----------------------|--|--|---|--|---------------------------------------|---|
| The Lola Reservoir.  | Apishapa river.                                | Feeder ditch                               | Nov. 16, 1891                                       | Aug. 18, 1891                                    | 525,000                               | J. C. Gunter                              |
| The Dotson Reservoir | Canon de Agua                                  | Dotson ditch                               | Mar. 24, 1892                                       | Jan. 5, 1889                                     | 230,000                               | John M. Dotson                            |
| The State Reservoir  | { Trujillo creek and<br>Mitote canon }         | Feeder ditch                               | July 30, 1892                                       | May 2, 1892                                      | 20,000,000                            | { The People of the State of<br>Colorado. |

## REPORT OF COMMISSIONER OF DISTRICT NINETEEN.

The ditches named being the needful ones when the water in the Las Animas river begins to get low, have been the first to call for a division of water, (and would say the most troublesome). There is not a measuring flume to any ditch in this district. A great many head-gates are so constructed that it is impossible to regulate the flow of water into the ditches, or to lock them when regulated. I go away from them, and returning in a few hours, and find them tampered with; when the dry season sets in, gates without locks, Water Commissioners without power or authority, and laws without penalties, are about on a par.

I believe that Commissioners should have authority to compel ditch owners to construct head-gates that can be locked, when regulated, or to spike down the gates and cut off the water until so constructed.

I believe that there is more than double the water appropriated to the ditches in this district (19) than there is in the Las Animas river, (except the month of May and part—say one-half—of June).

There are quite a number of ditches west, or up the river above Trinidad, that take their water from Las Animas river, including the North, Middle and South Forks, that are in length "short," and soon return the water back into the river; these have been but little troublesome.

The ditches taking water from the Frijoles, San Francisco and San Ysidro Creeks give some trouble, but it is soon over, because the water stops running early in the season, "plays out."

J. F. RAMEY,  
*Commissioner.*

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 19, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, J. F. RAMEY, TRINIDAD, COLORADO. APPOINTED 1891.

| NAME OF DITCH OR CANAL.       | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                     |
|-------------------------------|---|--|---------------------------------------|---------------------------------|---|
| The Sizer Brothers Ditch      | Las Animas river                          | May 13, 1891                               | 1868                                  | 54.50                           | Sizer Brothers                          |
| The Grout Ditch               | Muddy creek                               | June 10, 1891                              | May 16, 1891                          | 4.90                            | E. S. Grout                             |
| The Hall & Sherman Con. Ditch | San Francisco cr'k                        | Jan. 7, 1891                               | Oct. 30, 1891                         | 55.50                           | Wm. Hall and The Sherman Live Stock Co. |
| The Dick Robertson Ditch      | Rito Seco                                 | April 12, 1892                             | Mar. 1, 1891                          | 13.65                           | R. C. Robertson                         |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 49, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in Cubic feet. | NAMES OF CLAIMANT'S.                 |
|--------------------------------|---|--|---------------------------------------|---------------------------------|--------------------------------------|
| The T. C. Cowgers Ditch        | S. F. Republican                          | Dec. 31, 1890                              | Dec. 10, 1890                         | 40.00                           | T. C. Cowgers                        |
| The Moore & Chaffee Ditch      | S. F. Republican                          | Dec. 31, 1890                              | Nov. 22, 1890                         | 10.00                           | Moore & Chaffee                      |
| The Fullers Ditch              | S. F. Republican                          | Feb. 16, 1891                              | Nov. 18, 1890                         | 35.00                           | Emeline R. Fuller <i>et al.</i>      |
| The Emerson Ditch, No. 1       | S. F. Republican                          | June 5, 1891                               | Nov. 10, 1891                         | 222.40                          | Andrew L. Emerson                    |
| The Emerson Ditch, No. 2       | S. F. Republican                          | June 5, 1891                               | Nov. 10, 1891                         | 91.05                           | Andrew L. Emerson                    |
| The Emerson Ditch, No. 3       | S. F. Republican                          | June 5, 1891                               | Nov. 10, 1891                         | 91.05                           | Andrew L. Emerson                    |
| The McCrillis Ditch, No. 1     | Landsman creek                            | June 18, 1891                              | Mar. 24, 1891                         | 22.74                           | M. A. McCrillis                      |
| The McCrillis Ditch, No. 2     | Landsman creek                            | June 18, 1891                              | Mar. 24, 1891                         | 22.74                           | M. A. McCrillis                      |
| The Ragan Ditch                | Republican river                          | July 12, 1891                              | April 3, 1891                         | 23.51                           | Burt Ragan <i>et al.</i>             |
| The S. H. Running Ditch, No. 1 | S. F. Republican                          | Aug. 15, 1891                              | May 28, 1891                          | 16.08                           | S. H. Running                        |
| The S. H. Running Ditch, No. 2 | S. F. Republican                          | Aug. 15, 1891                              | July 16, 1891                         | 16.08                           | S. H. Running                        |
| The Youngson Ditch             | Republican river                          | Nov. 5, 1891                               | Sept. 21, 1891                        | 16.41                           | John P. Youngson                     |
| The Newberry Ditch             | Spring creek                              | Mar. 8, 1892                               | Spring, 1887                          | 9.25                            | J. C. Newberry                       |
| The Rock Island Ditch, No. 1   | S. F. Republican                          | July 1, 1892                               | May 6, 1892                           | 200.00                          | Thomas Hayden & Charles E. Dickinson |

|                              |   |               |               |        |                                      |
|------------------------------|---|---------------|---------------|--------|--------------------------------------|
| The Rock Island Ditch, No. 2 | S. F. Republican  | July 1, 1892  | May 30, 1892  | 200.00 | Thomas Hayden & Charles E. Dickinson |
| The Farr Ditch               | { S. F. Republican<br>through Rum-<br>ming, No. 1 ... } | July 23, 1892 | July 24, 1892 | 17.91  | Charles J. Farr                      |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 49, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                          | Name of stream<br>supplying<br>water therefor.  | Name of ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.      |
|---|---|--|---|--|---------------------------------------|--------------------------|
| The Ragan Reservoir.....                    | Republican river.....                           | Ragan ditch.....                           | July 12, 1891                                       | Apr. 3, 1891                                     | 108,300                               | Burt Ragan <i>et al.</i> |
| The S. H. Rumming Reser-<br>voir No. 1..... | S. fork Republican<br>river spring.....         | Built on stream.                           | Aug. 15, 1891                                       | May 28, 1891                                     | 467,187                               | S. H. Rumming            |
| The S. H. Rumming Reser-<br>voir No. 2..... | S. fork Republican<br>river spring.....         | Built in gulch.                            | Aug. 15, 1891                                       | July 16, 1891                                    | 535,000                               | S. H. Rumming            |
| The Rock Island Reservoir<br>No. 1.....     | S. fork Republican<br>river.....                | Rock Island<br>ditch No. 1.....            | July 1, 1892  | May 6, 1892                                      | 340,086,720                           | Charles F. Dickenson     |
| The Rock Island Reservoir<br>No. 2.....     | S. fork Republican<br>river & Spring creek..... | Rock Island<br>ditch No. 2.....            | July 1, 1892  | May 30, 1892                                     | 234,436,000                           | Charles F. Dickenson     |
| The Farr Reservoir.....                     | S. fork Republican<br>river.....                | Rumming<br>ditch No. 1.....                | July 7, 1892  | Apr. 24, 1892                                    | 323,000                               | Charles J. Farr          |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 67, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                               | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.   |
|---|---|--|---------------------------------------|---------------------------------|---|
| The Fewget Ditch.....                                 | Big Sand creek.....                       | Dec. 17, 1890                              | Sept. 17, 1890                        | 8.00                            | George W. Fewget  |
| The Wm. A. Hill Ditch.....                            | Springs and ravine.....                   | Feb. 7, 1891                               | Dec. 25, 1890                         | Not given.                      | Wm. A. Hill   |
| The Grant Newman Canal.....                           | Clay Band creek.....                      | April 8, 1891                              | Mar. 19, 1891                         | 13.20                           | U. S. Grant Newman  |
| The Water Valley Ditch.....                           | Big Sandy creek.....                      | May 8, 1891                                | Feb. 22, 1891                         | 208.00                          | { The Big Sandy and Eureka Creek Land and<br>Water Company. |
| The Colorado Irrigation Canal.....                    | Arkansas river.....                       | July 3, 1891                               | April 6, 1891                         | 280.80                          | Powell C. Teed  |
| The Graham Ditch Co.'s Canal.....                     | Arkansas river.....                       | Aug. 25, 1891                              | Oct. 2, 1889                          | 80.00                           | The Graham Ditch Company                                    |
| The Serrento Canal.....                               | Big Sandy creek.....                      | Sept. 5, 1891                              | June 22, 1891                         | 13.00                           | Lundley S. Cox  |
| The J. A. Pierce Ditch.....                           | Donlon ravine.....                        | Oct. 1, 1891                               | Sept. 16, 1891                        | 3.00                            | J. A. Pierce  |
| The Colorado Irrigation and Land Company's Ditch..... | Arkansas river.....                       | Oct. 5, 1891                               | April 6, 1891                         | 280.81                          | The Colorado Irrigation and Land Company                    |
| The Forder Ditch.....                                 | Horse creek.....                          | Oct. 10, 1891                              | April 12, 1891                        | 13.00                           | Adolph Forder   |
| The M. R. McCauley Irrigation Ditch.....              | Donlon draw.....                          | Oct. 27, 1891                              | April 25, 1891                        | 2.86                            | M. R. McCauley  |
| The Santa Fe Canal.....                               | Arkansas river.....                       | Dec. 17, 1891                              | Sept. 22, 1891                        | 283.50                          | The Santa Fe Land and Canal Company                         |
| The Mowry Ditch.....                                  | Clay creek.....                           | Jan. 15, 1892                              | Jan. 7, 1892                          | 15.00                           | J. E. Mowry   |
| The Mowry Ditch No. 2.....                            | Clay creek.....                           | Jan. 27, 1892                              | Jan. 7, 1892                          | 30.00                           | J. E. Mowry   |

STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.                                     | Name of stream from which water is taken. | Date of filing in the State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.   |
|---|---|--|---------------------------------------|--|---|
| The Pleasant Valley Farmers' Mutual Canal & L'd Co.'s Ca. { | Big Sandy creek                           | Feb. 16, 1892                                  | Jan. 5, 1891                          | 40.00                                      | { The Pleasant Valley Farmers' Mutual Canal and Land Company. |
| The Simpson Ditch.....                                      | Limestone creek                           | Feb. 26, 1892                                  | Dec. 1891                             | 3.00                                       | George Simpson  |
| The Lone Supply Reserv'r Canal                              | Big Sandy creek                           | Mar. 19, 1892                                  | Dec. 20, 1891                         | 100.00                                     | John F. Hester  |
| The Powers & Kiowa Ditch and Reservoir Co.'s Canal.....     | Big Sandy creek                           | May 11, 1892                                   | Feb. 13, 1892                         | 37.50                                      | The Powers & Kiowa Ditch & Reservoir Co.                      |
| The Christ Sohlers Ditch.....                               | Seepage waters                            | June 25, 1892                                  | May 5, 1892                           | 2.00                                       | Christ Sohlers  |
| The S. N. Canfield Ditch.....                               | Wild Horse creek                          | Sep. 6, 1892                                   | Aug. 1, 1892                          | 23.50                                      | S. N. Canfield  |
| The Hines Ditch.....  | Springs & seepage                         | Oct. 10, 1892                                  | Oct. 5, 1892                          | 23.50                                      | Henderson Hines   |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 67, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.   | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto.               | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                              |
|--|--|--|---|--|---------------------------------------|--|
| The Caddoa Reservoir   | Arkansas river                                 | { Arkansas River }                                       | Feb. 19, 1891                                       | May 11, 1890                                     | 30,492,000                            | Sydney Flinn                                     |
| The Riverdale Reservoir  | Grave Yard creek                               | { L. K. & C. Co.'s C }                                   | Aug. 27, 1891                                       | July 15, 1891                                    | 10,000,000                            | Lindley S. Cox                                   |
| The Lone Supply Reservoir  | Big Sandy creek                                | L. S. Res'r canal.                                       | Mar. 19, 1892                                       | Dec. 20, 1891                                    | 6,715,775                             | John T. Hester                                   |
| The Prowers & Kiowa Ditch<br>& Reservoir Co.'s Reservoir<br>No. 1. | Big Sandy creek                                | { Prowers & Kiowa<br>Ditch & Reservoir<br>Co.'s ditch. } | May 11, 1892  | Feb. 13, 1892                                    | 3,484,800                             | The Powers & Kiowa Ditch<br>& Reservoir Company. |
| The Prowers & Kiowa Ditch<br>& Reservoir Co.'s Reservoir<br>No. 2. |  |  | May 11, 1892  | Feb. 13, 1892                                    | 5,227,200                             |  |
| The Prowers & Kiowa Ditch<br>& Reservoir Co.'s Reservoir<br>No. 3. |  |  | May 11, 1892  | Feb. 13, 1892                                    | 9,408,960                             |  |



## CHAPTER IV.

## IRRIGATION DIVISION NO. 3.

## RIO GRANDE DIVISION.

Superintendent, George Neidhardt, Cotton Creek, Colorado.

I take pleasure in commending the Superintendent of this division, Mr. Neidhardt, for his untiring efforts, during his incumbency, in reducing to some order and system, the fragments of an unsatisfactory administration of that office left on his hands by the former incumbent.

Assuming the duties of the office June 15th, 1891, in the midst of active irrigation, and being unable to get an accounting from his predecessor, for the books and records of the department, he labored under a great disadvantage during the first season in not having the necessary data for an intelligent execution of his work.

His report for 1891, briefly abstracted, shows for District No. 20, an abundant supply of water in the Rio Grande river throughout the season, and no regulation required on the part of the Water Commissioner. Thirteen calls were made for his services in Upper and Lower Rock creek.

In District No. 21, the Alamosa and La Jara creeks meet all demands for water until the latter part of June, when a shortage occurred which lasted until the early part of August, and again occurred during September.

Crops below an average, excepting hay.

In District No. 22, the Conejos failed to meet the requirements in May and June, but owing to copious rains, responded to all demands for the balance of the season.

In District No. 24, watered by the Culebra and Costilla creeks, the supply was fair. Rotation of the water was practised, and general satisfaction expressed with the results.

In District No. 25, supplied from San Luis and Cotton creeks, no complaints of scarcity were made, but the Commissioner intimates that certain parties were so inconsiderate of the rights of others as to divert water from its legitimate channels when his back was turned, and misappropriated the same to their own uses. He calls it "stealing water," and is doubtless correct.

The grain and potato crops were below an average and the hay crop above.

In District No. 26, irrigated from Saguache creek, the Commissioner reported a fair supply of water, crops of all kinds above an average, and favors the rotation of water in times of scarcity.

In District No. 27, supplied from Turtle, Carnero and La Garita creeks, the Commissioner makes no comment on his work.

Following will be found a statistical summary of the Water Commissioner's reports :

Mr. Neidhardt's report for 1892, makes a remarkable showing in the increased acreage irrigated and cultivated, and if his information is reasonably accurate, wonderful progress has been made within the past year in extending the cultivated areas of the San Luis valley.

This showing is especially remarkable when it is considered that the water supply in the Rio Grande and its tributaries were unusually short, as will be seen from the reports of Water Commissioners, as also the table of gaugings of the Rio Grande.

Limited space forbids the publication of the tabulated statistical statement of each Water Commissioner, although they are of interest as giving the name of each ditch, the average amount of water carried by it, and the acreage irrigated, under each classification given in the general summary of the division herewith submitted.

A summation of these detailed statements gives a grand total of 552,644 acres irrigated, and cultivated to grasses and cereals, or other products of the soil. This is largely in excess of the irrigated area as estimated for 1890, which was placed by this Department at 393,953 acres, based partially upon personal interviews, there being little reliable data available for some portions of the valley.

The estimate of the area under ditches does not include the extensive stretch of country under the Rio Grande canal, that being omitted by the Water Commissioner for some reason; and it must be admitted that some of the figures giving the average quantity of water carried in the ditches are far wide of the mark. The reason of this has already been mentioned under the heading of "Water Commissioners."

The San Luis valley is possessed of several features which render it in a measure the ideal irrigation section of Colorado. Its elliptical boundaries embrace something more than a million acres of arable lands, with such uniform and gentle inclination to their surface that the most favorable conditions for rapid and economical irrigation are presented. Laterals from some of its principal canals will follow tangent lines for miles without meeting a depression or undue elevations to break the uniformity of their grades. An understratum of impervious clay lying from three to five feet below the surface over large areas intercepts the percolating waters, and creates an underflow so near the surface as to render sub-irrigation an important feature. The surface flowing of 160 acres will frequently sub-irrigate the 160 lying adjacent and below.

The fertility of its soil is attested by the yields of 50 bushels of wheat and 100 bushels of oats per acre over quite extensive areas.

Surrounded by high ranges, whose lofty summits intercept the moisture-laden clouds and precipitate their contents on the mountain slopes, numberless perennial streams are formed, whose waters when properly conserved will afford an ample supply for all demands for irrigation. An apparently inexhaustible storage of artesian water, brought to the surface at trifling cost, over an extensive area, gives assurance of pure domestic supply and healthful sanitary conditions.

Its system of caual is comprehensive, and the more extensive of them so systematically planned with reference to future requirements as to enable them to perform a maximum service at a minimum of cost.

Large areas, uncultivated and unoccupied, are provided with a complete net work of laterals, and present peculiar advantages for colonization.

Following will be found Mr. Neidhardt's report in full for 1892 :

OFFICE OF GEORGE NEIDHARDT,  
SUPERINTENDENT OF WATER DIVISION NO. 3. }  
COTTON CREEK, SAGUACHE CO., COLO., Dec. 10, '92. }

HON. J. P. MAXWELL,

*State Engineer,*

Denver, Colorado :

DEAR SIR—I have the honor to submit the following report from Water Division No. 3, State of Colorado :

Water Division No. 3 includes all water districts consisting of lands watered from the Rio Grande river and its tributaries.

This water division embraces water districts numbered 20, 21, 22, 24, 25, 26, 27 and 35.

The reports from the Water Commissioners of the different districts are as follows :

*Water District No. 20.* John D. McDonald, Water Commissioner, Monte Vista, Colorado.

Mr. McDonald reports there was irrigated in this district, during the year 1892, 135 acres of alfalfa, 6,837 acres of seeded grasses, 71,115 acres of native grasses and 246,009 acres of grain, potatoes, etc.

There was a greater scarcity of water in this district than had been known for a number of years and but for opportune rains, so that the water could be changed from one portion of the district to another, great damage would have occurred to the crops, but beneficial rains came and but little damage was done.

*Water District No. 21.* Romualdo Ortiz, Water Commissioner, Capulin, Colorado.

Water District No. 21 consists of all land irrigated from ditches or canals taking water from the Alamosa and La Jara creeks and their tributaries.



Mr. Ortiz reports that there are  $202\frac{1}{4}$  miles of ditches in District No. 21, and an average of 849 cubic feet of water per second of time, during the irrigating season; that there were 1,575 acres of alfalfa, 965 acres of seeded grasses, 34,106 acres of native grasses and 12,500 acres of other crops irrigated.

He also reports great scarcity of water during the past season, and at the time of his report, November 28, 1892, says: "The water has been so scarce here that even now, people come to ask for water for domestic use and stock, and I have to give it in turns in order to supply them on the upper Alamosa."

Mr. Ortiz was employed during the season 113 days.

*Water District No. 22.* A. M. Vigil, Water Commissioner, Conejos, Conejos County, Colorado.

Water District No. 22 consists of all lands in the State of Colorado irrigated from ditches or canals taking water from the Conejos creek and its tributaries.

Mr. Vigil says there are ——— miles of ditches in District No. 22, and an average of 3,487.77 cubic feet of water per second of time; that there were 1,215 acres of alfalfa, 3,850 acres of seeded grasses, 37,978 acres of native grasses, and 34,027 acres of other crops irrigated during the past season.

Mr. Vigil in his report says: "I have been employed during the season 103 days in attending to the duties of Water Commissioner, and my assistant, Mr. Jos. Smith, was employed twenty-five days; under the statutes I have been able to receive pay for only eighty days, which is a great hardship towards an officer who attempts to perform his duties faithfully.

"The season has been a very hard one upon all officers connected with the service owing to the scarcity of water in the natural streams in the district, and also to the increased acreage under cultivation. The scarcity of water compelled constant care on the part of the Water Commissioner to enable all users of water to obtain at least a partial supply for their crops, and even after all my efforts in that direction, several farmers were unable to receive sufficient water for their crops.

"I believe the Legislature should come to the relief of the farmer and enact more stringent laws regulating the use of water."

*Water District No. 24.* A. Chavez, Water Commissioner San Luis, Costilla County, Colorado.

Mr. Chavez's Statistical Report shows 30.75 miles of ditches, 176 cubic feet of water per second of time; twenty-five acres of alfalfa, twenty acres of seeded grasses, 886 acres of native grasses, and 9,607 acres of other crops.

*Water District No. 25.* J. C. Braley, Water Commissioner, and Tom I. Atwood, Deputy, Cotton Creek, Saguache County, Colorado.

Water District No. 25 consists of all lands irrigated from ditches or canals taking water from the San Luis creek and its tributaries.

Mr. Atwood reports "That there was an average of about 900 cubic feet of water per second, sufficient to irrigate 45,000 acres of land. During the season 170 acres of alfalfa, fourteen acres of seeded grasses, 44,385½ acres of native grasses, and 1,961 acres of other crops were irrigated. We had this year a scarcity of water, but by judicious distribution and economical use of the water, help by the fall rains, there were but few complaints, and the most of them from partners in company ditches."

"I would earnestly recommend that a law would be passed by the next Legislature, giving the Water Commissioner power to shut off the water from ditches until the owners have put in good head-gates, and when necessary, rating flumes; the lack of head-gates has been the cause of most of the trouble in this district for the past three years, and it occurs mostly with the old priorities."

"I was employed eighty days during the season of 1892.

*Water District No. 26.* R. M. Edwards, Water Commissioner, Saguache, Colorado.

Water District No. 26 consists of all lands irrigated from ditches or canals taking water from the Saguache creek and its tributaries.

Mr. Edwards' report shows 165.14 miles of ditches and an average of 561.36 cubic feet of water per second of time; 460 acres of alfalfa, 79 acres of seeded grasses, 21,656 acres of native grasses and 2,794 acres of other crops irrigated during the season of 1892.



*Water District No. 27.* Mark Biedell, Water Commissioner, La Garita, Saguache Co., Colorado.

Water District No. 27, consists of all lands irrigated from ditches or canals taking water from Turtle, Carnero, La Garita, and all other creeks and their tributaries, which have their sources of water supply in the La Garita mountains and flow eastward into the San Luis valley.

Mr. Biedell's statistical report shows 30.88 miles of ditches in the district, an average of 52 cubic feet of water per second of time; 210 acres of alfalfa, 2,710 acres of native grasses, and 530 acres of other crops were irrigated during the season.

He made no other report.

*Water District No. 35.* No Commissioner appointed.

Water District No. 35, consists of all lands in Costilla County, irrigated from ditches or canals taking water from the Trinchera and its tributaries.

No report.

I was called out on the 11th day of April, 1892, and was employed 132 days during the season on the road visiting the different districts, and about 100 days office work, copying decrees, making register, &c., &c. At the time I took the office no work had been done, all books turned over to me were blanks. Last year and the first part of this, we all labored under great disadvantage in not having the decrees until about the middle of May, 1892. I at once notified the Water Commissioners and at their request furnished them with either a complete copy or a tabulated statement. At the present time all the districts are supplied, but some of the counties do not wish to pay for the work.

I would recommend that the next Legislature amend the law concerning the office of Water Superintendent so he will be paid by the State, and also, that he be paid a salary, in that case he could devote his whole time to the work and not be hampered by the County Commissioners; I see it is absolutely necessary that the Superintendent should be constantly on the move or the office will be a perfect failure, as more or less of the Commissioners cannot say *No*.

I would suggest that specific instructions be sent to the Water Superintendents and Water Commissioners

by the State Engineer at the commencement of the season for the collection of data as to crops, artesian wells, etc., etc., to be taken by the Commissioners while in discharge of their official duties, and so put a stop to so much guesswork and obtain a true statement of affairs.

You must excuse delay in receiving my report, but, with the exception of one, did not receive the Commissioners' reports until the latter part of November, and some in December; one is still *non est*.

With many thanks for the kind co-operation on your part and your assistants, and the assistance I received from most of the Water Commissioners in the division,

I remain yours respectfully,

GEO. NEIDHARDT,  
*Superintendent Water Division No. 3.*

## IRRIGATION STATISTICS OF DIVISION NO. 3.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1891.

|                  | Miles of ditches. | Average number of cubic feet of water per second of time. | Number of acres that can be irrigated therefrom. | Number of acres of alfalfa irrigated therefrom. | Number of acres of seeded grasses irrigated therefrom. | Number of acres of natural grasses irrigated therefrom. | Number of acres of other crops irrigated therefrom. | Number of acres irrigated by seepage. |
|------------------|-------------------|---|--|---|--|---|---|---------------------------------------|
| District No. 20. | 336.50            | *23,866.08  | 416,360  | 890   | 1,350  | 72,150  | 26,235  | ---                                   |
| District No. 21. | 164.50            | 930.00  | 61,733   | 868   | 605  | 19,761  | 9,623   | 1,039                                 |
| District No. 22. | 153.25            | 600.75  | 68,814   | 69  | 235  | 19,940  | 19,989  | ---                                   |
| District No. 24. | 38.40             | 175.00  | 10,538   | 60  | 16   | 1,456   | 9,006   | 955                                   |
| District No. 25. | 201.22            | 827.04  | 41,352   | 142   | ---  | 39,130½   | 1,784   | ---                                   |
| District No. 26. | 147.43            | 588.12  | 29,406   | 474   | 169  | 19,253½   | 2,417   | 270                                   |
| District No. 27. | 20.00             | 700.00  | 3,500  | 350   | ---  | 2,000   | 900   | ---                                   |
| District No. 35. | ---               | ---   | ---  | ---   | ---  | ---   | ---   | ---                                   |
| Totals.          | 1,061.40          | *37,686.99  | 631,703  | 2,853   | 2,375  | 173,691   | 39,954  | 2,164                                 |

\*NOTE.—The Average No. of cubic feet per second appears to be wrong in District No. 20 and in the total, but is given here as reported. See report of 1892 in the following table.

# IRRIGATION STATISTICS OF DIVISION NO. 3.

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEAR 1892.

| No. of District. | Number of ditches reported. | Total length as reported. | Average amount of water carried during the season in cubic feet per second of time. | Number of acres that can be irrigated. | Number of acres of alfalfa irrigated. | Number of acres of seeded grasses other than alfalfa irrigated. | Number of acres of natural grasses irrigated. | Number of acres of other crops irrigated. | Number of acres of orchard irrigated. | Number of acres irrigated by seepage. | Number of acres irrigated from reservoirs. | Total number of acres irrigated. |
|------------------|-----------------------------|---------------------------|---|--|---------------------------------------|---|---|---|---------------------------------------|---------------------------------------|--|----------------------------------|
| 20               | 274                         | 466.57                    | 2,521.54  | 344,546                                | 135                                   | 6,837   | 71,115  | 246,009                                   | ---                                   | 11,820                                | ---  | 335,916                          |
| 21               | 75                          | 202.50                    | 849.00  | 67,706                                 | 1,575                                 | 965   | 34,106  | 12,500                                    | ---                                   | 604                                   | ---  | 49,750                           |
| 22               | 110                         | 440.25                    | 3,489.77  | 152,811                                | 1,215                                 | 3,850   | 37,978  | 34,027                                    | ---                                   | 4,401                                 | ---  | 81,471                           |
| 24               | 23                          | 30.75                     | 176.00  | 10,538                                 | 25                                    | 20  | 886   | 9,607                                     | ---                                   | ---                                   | ---  | 10,538                           |
| 25               | 180                         | 245.00                    | 900.37  | 44,998                                 | 170                                   | 14  | 44,385  | 1,961                                     | ---                                   | ---                                   | ---  | 46,530                           |
| 26               | 185                         | 175.00                    | 561.36  | 28,068                                 | 460                                   | 79  | 21,656  | 2,794                                     | ---                                   | ---                                   | ---  | 24,989                           |
| 27               | 51                          | 30.88                     | 52.00   | 4,840                                  | 210                                   | ---   | 2,710   | 530                                       | ---                                   | ---                                   | ---  | 3,450                            |
| *35              | ---                         | ---                       | ---   | ---                                    | ---                                   | ---   | ---   | ---                                       | ---                                   | ---                                   | ---  | ---                              |
| Totals,          | 898                         | 1,590.95                  | 8,550.04  | 635,507                                | 3,790                                 | 11,765  | 212,836                                       | 307,428                                   | ---                                   | 16,825                                | ---  | 552,644                          |

\*Water rights not adjudicated. No Commissioner appointed. No report.

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 26, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE TWELFTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of appropriation | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|-------------------------------------|---|-----------------------|--|--|---|--------------------------------|
| Sylva Ditch                         | Rio Grande river                          | Mar. 12, 1866         | 3.00   |  |   | 1                              |
| Atencio Ditch                       | Rio Grande river                          | April 21, 1866        | 0.74   |  | 3.00  | 2                              |
| San Jose or Lucero Ditch            | Rio Grande river                          | April 30, 1866        | 0.90   |  | 3.74  | 3                              |
| Montoya Ditch                       | Pinos creek                               | Mar. 10, 1867         | 3.00   |  | 4.64  | 4                              |
| Montoya Ditch, second appropriation | Pinos creek                               | Aug. 1, 1867          | 0.86   | 3.86   | 7.64  | 4½                             |
| Montoya Ditch No. 3                 | Pinos creek                               | April 30, 1870        | 0.90   |  | 8.44  | 5                              |
| Montoya Ditch No. 4                 | Pinos creek                               | April 30, 1870        | 1.00   |  | 9.34  | 6                              |
| Sylva Ditch, second appropriation   | Rio Grande river                          | May 31, 1870          | 11.00  | 14.00  | 10.34   | 7                              |
| Rio Grande Ditch No. 1              | Rio Grande river                          | Aug. 1, 1870          | 12.86  |  | 21.34   | 8                              |
| Mexican Ditch                       | Pinos creek                               | June 1, 1871          | 1.70   |  | 34.14   | 9                              |
| James McLeary Ditch                 | San Francisco creek                       | May 1, 1872           | 2.00   |  | 35.84   | 10                             |

|                                      |                     |                |       |        |    |
|--------------------------------------|---------------------|----------------|-------|--------|----|
| McDonald Ditch                       | Rio Grande river    | May 1, 1872    | 12.80 | 37.84  | 11 |
| College Ditch                        | San Francisco creek | May 30, 1872   | 1.50  | 50.64  | 12 |
| Cochrane Pioneer Ditch               | Rio Grande river    | June 9, 1872   | 4.20  | 52.14  | 13 |
| Horner Ditch                         | Rio Grande river    | April 25, 1873 | 2.20  | 56.34  | 14 |
| Dyer Ditch                           | Rio Grande river    | April 30, 1873 | 1.00  | 58.54  | 15 |
| San Francisco Overflow Ditch         | San Francisco creek | May 1, 1873    | 1.60  | 59.54  | 16 |
| McDonald Ditch, second appropriation | Rio Grande river    | May 1, 1873    | 9.60  | 61.14  | 17 |
| Valdez Ditch No. 2                   | San Francisco creek | May 31, 1873   | 1.20  | 70.74  | 18 |
| Pace Ditch                           | Rio Grande river    | May 31, 1873   | 1.40  | 71.94  | 19 |
| Martinez Ditch                       | San Francisco creek | May 31, 1873   | 2.40  | 73.34  | 20 |
| Valdez Ditch No. 1                   | San Francisco creek | May 31, 1873   | 3.10  | 75.74  | 21 |
| Robran Ditch                         | Pinos creek         | May 31, 1873   | 4.60  | 78.84  | 22 |
| Atencio Ditch, second appropriation  | Rio Grande river    | May 31, 1873   | 5.20  | 83.44  | 23 |
| Jemison No. 6                        | Pinos creek         | June 30, 1873  | 0.70  | 88.64  | 24 |
| Jemison Ditch No. 4                  | Pinos creek         | July 17, 1873  | 1.00  | 89.34  | 25 |
| Beran Ditch No. 6                    | Pinos creek         | July 17, 1873  | 0.66  | 90.34  | 26 |
| Lavatto Ditch                        | San Francisco creek | Sept. 13, 1873 | 1.00  | 91.00  | 27 |
| Schrader Ditch No. 1                 | Schrader creek      | Sept. 30, 1873 | 1.60  | 92.00  | 28 |
| Jemison and Beran Ditch No. 2        | Pinos creek         | Dec. 31, 1873  | 2.20  | 93.60  | 29 |
| Loma Ditch                           | Rio Grande river    | Dec. 31, 1873  | 2.00  | 95.80  | 30 |
| Pinos Creek Ditch No. 1              | Pinos creek         | Dec. 31, 1873  | 13.40 | 97.80  | 31 |
| Hubbard No. 2, Overflow Ditch        | Rio Grande river    | Mar. 27, 1874  | 1.00  | 111.20 | 32 |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.             | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|-------------------------------------|---|------------------------|--|--|--|--------------------------------|
| Hubbard Ditch                       | Rio Grande river                          | Mar. 27, 1874          | 1.60   |  | 112.20   | 33                             |
| Centennial Ditch                    | Rio Grande river                          | April 20, 1874         | 35.80  |  | 113.80   | 34                             |
| Mexican Ditch, second appropriation | Pinos creek                               | April 22, 1874         | 0.50   | 2.20   | 149.60   | 34½                            |
| Schrader Ditch, No. 2               | Schrader creek                            | April 30, 1874         | 1.60   |  | 150.10   | 35                             |
| Fish Ditch                          | Rio Grande river                          | April 30, 1874         | 3.00   |  | 151.70   | 36                             |
| Alder Creek Ditch, No. 1            | Alder creek                               | May 1, 1874            | 2.00   |  | 154.70   | 37                             |
| Kane & Callen Ditch                 | Rio Grande river                          | May 1, 1874            | 1.60   |  | 156.70   | 38                             |
| Larick Ditch, No. 5                 | Rock creek                                | May 1, 1874            | 2.60   |  | 158.30   | 39                             |
| Butler Irrigating Ditch             | Rio Grande river                          | May 1, 1874            | 4.00   |  | 160.90   | 40                             |
| Sylva Ditch, third Appropriation    | Rio Grande river                          | May 12, 1874           | 2.80   | 16.80  | 164.90   | 41                             |
| Rienau Ditch, No. 2                 | San Francisco creek                       | May 14, 1874           | 1.00   |  | 167.70   | 42                             |
| Rienau Ditch No. 1                  | San Francisco creek                       | May 28, 1874           | 1.00   |  | 168.70   | 43                             |
| Jemison Ditch, No. 9                | Pinos creek                               | May 30, 1874           | 0.70   |  | 169.70   | 44                             |
| Alder Creek Ditch, No. 2            | Alder creek                               | May 30, 1874           | 2.00   |  | 170.40   | 45                             |
| Jemison Ditch, No. 7                | Pinos creek                               | May 31, 1874           | 0.80   |  | 172.40   | 46                             |

|                                    |                     |               |      |       |        |    |
|------------------------------------|---------------------|---------------|------|-------|--------|----|
| Burns, Larsen & Kiel Ditch         | San Francisco creek | May 31, 1874  | 1.00 | ----- | 173.20 | 47 |
| Jemison Ditch No. 5                | Pinos creek         | May 31, 1874  | 0.54 | ----- | 174.20 | 48 |
| Jemison Ditch No. 8                | Pinos creek         | May 31, 1874  | 0.74 | ----- | 174.74 | 49 |
| Larick Ditch No. 4                 | Rock creek          | May 31, 1874  | 2.60 | ----- | 175.48 | 50 |
| Hornor Ditch, second appropriation | Rio Grande river    | May 31, 1874  | 4.40 | 6.60  | 178.08 | 51 |
| Atencio Ditch, third appropriation | Rio Grande river    | May 31, 1874  | 1.60 | 7.54  | 182.48 | 52 |
| Dupke Ditch No. 2                  | Rock creek          | June 1, 1874  | 1.30 | ----- | 184.08 | 53 |
| Dupke Ditch No. 3                  | Rock creek          | June 1, 1874  | 1.24 | ----- | 185.38 | 54 |
| Dupke Ditch No. 4                  | Rock creek          | June 2, 1874  | 2.08 | ----- | 186.62 | 55 |
| Dupke Ditch No. 6                  | Rock creek          | June 3, 1874  | 1.00 | ----- | 188.70 | 56 |
| Dupke Ditch No. 5                  | Rock creek          | June 3, 1874  | 2.08 | ----- | 189.70 | 57 |
| Burns Ditch                        | San Francisco creek | June 14, 1874 | 2.00 | ----- | 191.78 | 58 |
| Anderson Ditch                     | Rio Grande river    | June 15, 1874 | 3.20 | ----- | 193.78 | 59 |
| Grubb Ditch No. 2                  | Bear creek          | June 21, 1874 | 1.00 | ----- | 196.98 | 60 |
| Shaw Ditch No. 2                   | Spring creek        | June 21, 1874 | 1.20 | ----- | 197.98 | 61 |
| Grubb Ditch No. 1                  | Bear creek          | June 21, 1874 | 0.80 | ----- | 199.18 | 62 |
| Hoecker Ditch No. 1                | Rock creek          | June 30, 1874 | 1.82 | ----- | 199.98 | 63 |
| Elliott Ditch No. 1                | Pinos creek         | July 17, 1874 | 1.50 | ----- | 201.80 | 64 |
| Elliott Ditch No. 4                | Pinos creek         | July 17, 1874 | 2.00 | ----- | 203.30 | 65 |
| Elliott Ditch No. 3                | Pinos creek         | July 17, 1874 | 1.00 | ----- | 205.30 | 66 |
| Elliott Ditch No. 2                | Pinos creek         | July 17, 1874 | 1.00 | ----- | 206.30 | 67 |
| Elliott Ditch No. 5                | Pinos creek         | July 17, 1874 | 1.00 | ----- | 207.30 | 68 |

## STATEMENT CONCERNING DITCHES—Continued.

| NANE OF DITCH OR CANAL.          | Nature of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet previously appropriated in the district. | Order of priority in district. |
|----------------------------------|---|------------------------|--|--|---|--------------------------------|
| Jemison No. 2                    | Pinos creek                                 | July 18, 1874          | 0.80   | -----  | 208.30  | 69                             |
| Meadow Overflow Ditch            | Rio Grande river                            | Sep. 30, 1874          | 3.20   | -----  | 209.10  | 70                             |
| Poole-Jemison Ditch              | Pinos creek                                 | Nov. 1, 1874           | 1.00   | -----  | 212.30  | 71                             |
| Poole-Meadow Ditch               | Pinos creek                                 | Nov. 1, 1874           | 1.00   | -----  | 213.30  | 72                             |
| Lease, Davis & Bingle Ditch      | Rio Grande river                            | Dec. 31, 1874          | 6.08   | -----  | 214.30  | 73                             |
| Ewing Ditch No. 2                | Embargo creek                               | Jan. 1, 1875           | 1.40   | -----  | 220.38  | 74                             |
| Raber Ditch                      | Rio Grande river                            | Mar. 31, 1875          | 2.80   | -----  | 221.78  | 75                             |
| San Luis Valley Irrigating Ditch | Rio Grande river                            | April 1, 1875          | 8.40   | -----  | 224.58  | 76                             |
| Chadwick Ditch No. 1             | Willow creek                                | April 1, 1875          | 2.00   | -----  | 232.98  | 77                             |
| Poole-Fairchild Ditch            | Pinos creek                                 | April 16, 1875         | 1.80   | -----  | 234.98  | 78                             |
| Hucker Ditch No. 2               | Rock creek                                  | April 18, 1875         | 2.08   | -----  | 236.78  | 79                             |
| Smith Ditch No. 4                | Rock creek                                  | April 29, 1875         | 0.52   | -----  | 238.86  | 80                             |
| Jemison Ditch No. 1              | Pinos creek                                 | April 30, 1875         | 0.74   | -----  | 239.38  | 81                             |
| Ewing Ditch No. 3                | Embargo creek                               | April 30, 1875         | 2.00   | -----  | 240.12  | 82                             |
| Off Ditch                        | Rio Grande river                            | May 1, 1875            | 7.00   | -----  | 242.12  | 83                             |

|  |                  |       |          |       |        |     |
|--|------------------|-------|----------|-------|--------|-----|
| Rough and Ready Ditch                  | Rock creek       | May   | 2, 1875  | 16.67 | 249.12 | 84  |
| McIntosh Arroya Ditch                  | Rio Grande river | May   | 3, 1875  | 3.80  | 265.79 | 85  |
| McDonald and Gleason Ditch             | Rock creek       | May   | 5, 1875  | 10.29 | 269.59 | 86  |
| Larick Ditch No. 7                     | Rock creek       | May   | 7, 1875  | 1.00  | 279.87 | 87  |
| Yarnel Ditch                           | Pinos creek      | May   | 7, 1875  | 6.00  | 280.87 | 88  |
| Larick Ditch No. 8                     | Rock creek       | May   | 9, 1875  | 0.68  | 286.87 | 89  |
| Larick Ditch No. 6                     | Rock creek       | May   | 11, 1875 | 0.76  | 287.55 | 90  |
| Smith Ditch No. 3                      | Rock creek       | May   | 15, 1875 | 1.00  | 288.31 | 91  |
| Cadle Ditch No. 1                      | Rock creek       | May   | 31, 1875 | 1.50  | 289.31 | 92  |
| Hanna Ditch No. 1                      | Pinos creek      | May   | 31, 1875 | 0.70  | 290.81 | 93  |
| Anderson Ditch, second appropriation   | Rio Grande river | May   | 31, 1875 | 8.30  | 291.51 | 94  |
| Berau Ditch No. 2                      | Pinos creek      | June  | 1, 1875  | 0.70  | 299.81 | 95  |
| Ewing Ditch No. 1                      | Embargo creek    | June  | 1, 1875  | 0.80  | 300.51 | 96  |
| Hanna Ditch No. 2                      | Pinos creek      | June  | 2, 1875  | 1.00  | 301.31 | 97  |
| Little Anna Ditch                      | Pinos creek      | June  | 6, 1875  | 1.00  | 302.31 | 98  |
| Off Ditch, second appropriation        | Rio Grande river | June  | 7, 1875  | 1.40  | 303.31 | 99  |
| Centennial Ditch, second appropriation | Rio Grande river | June  | 23, 1875 | 4.10  | 304.71 | 100 |
| Beran Ditch No. 3                      | Pinos creek      | June  | 30, 1875 | 1.00  | 308.81 | 101 |
| Poole-Brush Ditch                      | Pinos creek      | July  | 1, 1875  | 0.90  | 309.81 | 102 |
| Poole-Bachle Ditch                     | Pinos creek      | July  | 1, 1875  | 0.70  | 310.71 | 103 |
| O'Connell Ditch                        | Pinos creek      | July  | 30, 1875 | 1.00  | 311.41 | 104 |
| Chadwich Ditch No. 4                   | Willow creek     | Sept. | 21, 1875 | 1.40  | 312.41 | 105 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.      | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|------------------------------|---|------------------------|---|--|--|--------------------------------|
| Embargo Ditch.....           | Embargo creek                             | Dec. 31, 1875          | 3.50  | -----  | 313.81   | 106                            |
| Elliott & Bevan Ditch.....   | Pinos creek                               | Dec. 31, 1875          | 1.00  | -----  | 317.31   | 107                            |
| Independent Ditch No. 2..... | Rio Grande river                          | Mar. 16, 1876          | 25.60   | -----  | 318.31   | 108                            |
| High Water Ditch.....        | Rio Grande river                          | April 1, 1876          | 2.00  | -----  | 343.91   | 109                            |
| Bishop & Larick Ditch.....   | Rock creek                                | April 17, 1876         | 2.60  | -----  | 345.91   | 110                            |
| Bevan Ditch No. 5.....       | Pinos creek                               | May 1, 1876            | 1.20  | -----  | 348.51   | 111                            |
| Fairchild Ditch No. 2.....   | Pinos creek                               | May 31, 1876           | .90   | -----  | 349.71   | 112                            |
| Barklay Ditch.....           | Pinos creek                               | May 31, 1876           | 1.50  | -----  | 550.61   | 113                            |
| Bennett Ditch No. 1.....     | Pinos creek                               | May 31, 1876           | 1.20  | -----  | 352.11   | 114                            |
| Bennett Creek Ditch.....     | Bennett creek                             | May 31, 1876           | 1.00  | -----  | 353.31   | 115                            |
| Norris Ditch.....            | Pinos creek                               | May 31, 1876           | .90   | -----  | 354.31   | 116                            |
| Bevan Ditch No. 4.....       | Pinos creek                               | May 31, 1876           | .80   | -----  | 355.21   | 117                            |
| San Francisco Ditch.....     | San Francisco creek                       | May 31, 1876           | 1.00  | -----  | 356.01   | 118                            |
| Bennett Ditch No. 2.....     | Pinos creek                               | May 31, 1876           | 1.00  | -----  | 357.01   | 119                            |
| Tryon Ditch.....             | Rock creek                                | May 31, 1876           | 6.25  | -----  | 358.01   | 120                            |



|   |                     |                |      |        |     |
|---|---------------------|----------------|------|--------|-----|
| Fairchild Ditch No. 1                       | Pinos creek         | May 30, 1876   | 1.00 | 364.26 | 121 |
| Little Danube Ditch                         | Pinos creek         | May 30, 1876   | 2.50 | 365.26 | 122 |
| Kiel & Larsen Ditch                         | San Francisco creek | June 1, 1876   | 1.00 | 367.76 | 123 |
| Phillips Ditch No. 1                        | Elk creek           | June 16, 1876  | 1.20 | 368.76 | 124 |
| Chadwick Ditch No. 2                        | Willow creek        | June 21, 1876  | 1.00 | 369.96 | 125 |
| Chadwick Ditch No. 3                        | Willow creek        | June 21, 1876  | 2.00 | 370.96 | 126 |
| Todd Ditch                                  | Cherry creek        | June 30, 1876  | .90  | 372.96 | 127 |
| Phillips Ditch No. 2                        | Elk creek           | June 30, 1876  | 1.00 | 373.86 | 128 |
| Town Ditch of Del Norte                     | Rio Grande river    | July 1, 1876   | 9.20 | 374.86 | 129 |
| Centennial Ditch, third appropriation       | Rio Grande river    | July 5, 1876   | 3.60 | 384.06 | 130 |
| Rough and Ready Ditch, second appropriation | Rock creek          | July 20, 1876  | 8.33 | 387.66 | 131 |
| Ward Ditch No. 1                            | San Francisco creek | Oct. 18, 1876  | 1.60 | 395.99 | 132 |
| Ward Ditch No. 3                            | San Francisco creek | Oct. 31, 1876  | 1.00 | 397.59 | 133 |
| Cochran Bros. Ditch No. 1                   | San Francisco creek | Oct. 31, 1876  | 2.30 | 398.59 | 134 |
| Cochran Bros. Ditch No. 2                   | San Francisco creek | Oct. 31, 1876  | 3.00 | 400.89 | 135 |
| Ward Ditch No. 2                            | San Francisco creek | Oct. 31, 1876  | 1.00 | 403.89 | 136 |
| Bachle Ditch                                | Pinos creek         | Nov. 30, 1876  | .86  | 404.89 | 137 |
| Wolf Creek Ditch No. 2                      | Wolf creek          | Dec. 31, 1876  | 4.00 | 405.75 | 138 |
| Wolf Creek Ditch No. 1                      | Wolf creek          | Dec. 31, 1876  | 4.00 | 409.75 | 139 |
| Smith Ditch No. 2                           | Rock creek          | Dec. 31, 1876  | 1.82 | 413.75 | 140 |
| Living Creek Ditch No. 4                    | Embargo creek       | April 1, 1877  | 2.00 | 415.57 | 141 |
| James Peterson Ditch                        | Rio Grande river    | April 30, 1877 | 3.60 | 417.57 | 142 |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                                       | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| Smith Ditch, No. 1.....                                       | Rock creek.....                           | April 30, 1877.....    | 1.00.....  | .....  | 421.17.....  | 143                            |
| Jemison & Bevan Ditch, No. 1.....                             | Pinos creek.....                          | May 1, 1876.....       | 1.00.....  | .....  | 422.17.....  | 144                            |
| Horner Ditch, third appropriation.....                        | Rio Grande river.....                     | May 15, 1876.....      | 5.00.....  | 11.60.....                                   | 423.17.....  | 145                            |
| Horner Ditch, fourth appropriation.....                       | Rio Grande river.....                     | May 15, 1876.....      | 3.20.....  | 14.80.....                                   | 428.17.....  | 146                            |
| Jemison Ditch, No. 3.....                                     | Pinos creek.....                          | May 30, 1876.....      | .90.....   | .....  | 431.37.....  | 147                            |
| Atencio Ditch, No. 2.....                                     | Rio Grande river.....                     | May 31, 1876.....      | 4.00.....  | .....  | 432.27.....  | 148                            |
| Atencio Ditch, fourth appropriation.....                      | Rio Grande river.....                     | May 31, 1876.....      | 3.80.....  | 11.34.....                                   | 436.27.....  | 149                            |
| Anderson Ditch, third appropriation.....                      | Rio Grande river.....                     | May 31, 1876.....      | 9.60.....  | 21.10.....                                   | 440.07.....  | 150                            |
| Centennial Ditch, fourth appropriation.....                   | Rio Grande river.....                     | June 23, 1876.....     | 4.00.....  | 47.50.....                                   | 449.67.....  | 151                            |
| Mill Ditch.....   | Rock creek.....                           | Sept. 21, 1876.....    | 2.60.....  | .....  | 453.67.....  | 152                            |
| Rio Grande and Piedra Valley Ditch.....                       | Rio Grande river.....                     | Nov. 30, 1876.....     | 4.00.....  | .....  | 456.27.....  | 153                            |
| Rio Grande and Piedra Valley Ditch, second appropriation..... | Rio Grande river.....                     | Nov. 30, 1876.....     | 12.60.....   | 16.60.....                                   | 460.27.....  | 154                            |
| MacLeod Ditch, No. 5.....                                     | San Francisco creek.....                  | April 1, 1878.....     | 1.00.....  | .....  | 472.87.....  | 155                            |
| Shaw Ditch, No. 1.....  | Spring creek.....                         | April 30, 1878.....    | 4.00.....  | .....  | 473.87.....  | 156                            |
| Shaw Ditch, No. 3.....  | Spring creek.....                         | April 30, 1878.....    | 1.20.....  | .....  | 477.87.....  | 157                            |

|   |                          |                |       |       |        |     |
|---|--------------------------|----------------|-------|-------|--------|-----|
| McLeod Ditch No. 1.....                         | San Francisco creek..... | May 1, 1876    | 1.00  | ---   | 479.07 | 158 |
| Rough and Ready Ditch, third appropriation..... | Rock creek.....          | May 1, 1876    | 8.33  | 33.33 | 480.07 | 159 |
| Larick Ditch No. 9.....                         | Rock creek.....          | May 2, 1876    | .89   | ---   | 488.40 | 160 |
| Heilman & Larick Ditch.....                     | Rock creek.....          | May 15, 1876   | 1.00  | ---   | 489.29 | 161 |
| Compos Ditch.....                               | Willow creek.....        | May 30, 1876   | .80   | ---   | 490.29 | 162 |
| Larick Ditch No. 2.....                         | Rock creek.....          | May 31, 1876   | 1.00  | ---   | 491.09 | 163 |
| Mallet Ditch.....                               | Pinos creek.....         | May 31, 1876   | 2.00  | ---   | 492.09 | 164 |
| Davies Ditch No. 1.....                         | Embargo creek.....       | June 1, 1878   | 2.60  | ---   | 494.09 | 165 |
| Field Ditch.....                                | Rock creek.....          | June 30, 1878  | 1.00  | ---   | 496.69 | 166 |
| Garden Ditch.....                               | Rock creek.....          | June 30, 1878  | 1.30  | ---   | 497.69 | 167 |
| Larick Ditch No. 1.....                         | Rock creek.....          | July 1, 1878   | 1.04  | ---   | 498.99 | 168 |
| Larick Ditch No. 3.....                         | Rock creek.....          | July 10, 1878  | .70   | ---   | 500.03 | 169 |
| Bevan Ditch No. 1.....                          | Pinos creek.....         | July 17, 1878  | 3.20  | ---   | 500.73 | 170 |
| Excelsior Ditch.....                            | Rio Grande river.....    | Sept. 30, 1878 | 45.70 | ---   | 503.93 | 171 |
| Pfeiffer Ditch.....                             | Rio Grande river.....    | Dec. 1, 1878   | 3.20  | ---   | 549.63 | 172 |
| West Side Ditch.....                            | Rio Grande river.....    | Dec. 31, 1878  | 2.40  | ---   | 552.83 | 173 |
| Independent Ditch.....                          | Rio Grande river.....    | Mar. 24, 1879  | 12.00 | ---   | 555.23 | 174 |
| Ward Ditch No. 4.....                           | San Francisco creek..... | Apr. 14, 1879  | 1.00  | ---   | 567.23 | 175 |
| Wassen Ditch.....                               | Willow creek.....        | May 31, 1879   | 7.00  | ---   | 568.23 | 176 |
| Montoya Ditch, third appropriation.....         | Pinos creek.....         | May 31, 1879   | 2.40  | 6.20  | 575.23 | 177 |
| William Peachy Ditch.....                       | Rock creek.....          | May 31, 1879   | 4.17  | ---   | 577.63 | 178 |
| Charlesworth Ditch No. 1.....                   | Embargo creek.....       | June 1, 1879   | 1.00  | ---   | 581.80 | 179 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|---|--------------------------------|
| Breen Ditch.....   | Embargo creek.....                        | June 21, 1879          | .90  | -----  | 582.80  | 180                            |
| Centennial Ditch, fifth appropriation.....                         | Rio Grande river.....                     | June 23, 1879          | 19.37  | 66.87  | 583.70  | 181                            |
| Rio Grande Ditch.....  | Rio Grande river.....                     | July 15, 1879          | 23.20  | -----  | 603.07  | 182                            |
| Star Ditch.....  | Rio Grande river.....                     | Aug. 20, 1879          | 12.57  | -----  | 626.27  | 183                            |
| Ehrowitz Ditch.....  | Rio Grande river.....                     | Aug. 31, 1879          | 1.60   | -----  | 638.84  | 184                            |
| Hermanthal Ditch.....  | Rio Grande river.....                     | Aug. 31, 1879          | 2.80   | -----  | 640.44  | 185                            |
| Park & Green Ditch.....  | Rio Grande river.....                     | Oct. 31, 1879          | 3.40   | -----  | 643.24  | 186                            |
| Kiel & Larsen Spring Ditch.....                                    | Spring creek.....                         | Nov. 1, 1879           | 1.00   | -----  | 646.64  | 187                            |
| D. H. Dunn private right in Scotch Ditch and Rio Grande Canal..... | Rio Grande river.....                     | Nov. 30, 1879          | 11.20  | -----  | 647.64  | 188                            |
| Schuch & Schmidt Ditch.....  | Rio Grande river.....                     | Dec. 30, 1879          | 2.50   | -----  | 658.84  | 189                            |
| Rock Creek, Anderson & Cadle Anderson Ditch Consolidated.....      | Rock creek.....                           | Mar. 21, 1880          | 1.00   | -----  | 661.34  | 190                            |
| Cadle Ditch No. 3.....   | Rock creek.....                           | April 30, 1880         | 1.82   | -----  | 662.34  | 191                            |
| Bachman Ditch No. 1.....   | Embargo creek.....                        | April 30, 1880         | 1.00   | -----  | 664.16  | 192                            |

|   |                     |                |       |       |        |     |
|---|---------------------|----------------|-------|-------|--------|-----|
| Cole Ditch No. 2 and Extension                                      | Rock creek          | April 30, 1880 | 5.20  | ----- | 665.16 | 193 |
| Henderson Overflow  | Rio Grande river    | May 1, 1880    | 2.20  | ----- | 670.36 | 194 |
| Alder Creek Ditch No. 3   | Alder creek         | May 1, 1880    | 4.00  | ----- | 672.56 | 195 |
| Charlesworth Ditch No. 2  | Embargo creek       | May 1, 1880    | 1.00  | ----- | 676.56 | 196 |
| Deekman Ditch No. 1   | Spring creek        | May 6, 1880    | .90   | ----- | 677.56 | 197 |
| Bauer Ditch   | Rio Grande river    | May 16, 1880   | 8.40  | ----- | 678.46 | 198 |
| Schacherl Ditch   | Rio Grande river    | May 20, 1880   | 1.20  | ----- | 686.86 | 199 |
| Cole Ditch No. 1 and Extension                                      | Rock creek          | May 31, 1880   | .90   | ----- | 688.06 | 200 |
| Minor Ditch   | Rio Grande river    | June 1, 1880   | 1.60  | ----- | 688.96 | 201 |
| Embargo Ditch, second appropriation                                 | Embargo creek       | June 2, 1880   | 1.60  | 5.10  | 690.56 | 202 |
| Nichol Ditch  | Rio Grande river    | June 15, 1880  | 8.00  | ----- | 692.16 | 203 |
| Centennial Ditch, sixth appropriation                               | Rio Grande river    | June 23, 1880  | 10.40 | 77.27 | 700.16 | 204 |
| Rio Grande & Piedra Valley Ditch, third appropriation               | Rio Grande river    | June 30, 1880  | 25.80 | 42.40 | 710.56 | 205 |
| Horne Ditch, fifth appropriation                                    | Rio Grande river    | Sep. 5, 1880   | 7.73  | 22.53 | 736.36 | 206 |
| John Anderson Ditch   | Rio Grande river    | Sep. 15, 1880  | 1.40  | ----- | 744.09 | 207 |
| Ward Ditch No. 4, second appropriation                              | San Francisco creek | Dec. 31, 1880  | 1.10  | 2.10  | 745.49 | 208 |
| Rio Grande Ditch, second appropriation                              | Rio Grande river    | Dec. 31, 1880  | 3.20  | 26.40 | 746.59 | 209 |
| Kane & Callen Ditch, second appropriation                           | Rio Grande river    | Dec. 31, 1880  | 4.00  | 5.60  | 749.79 | 210 |
| Biedell Ditch   | Rio Grande river    | Dec. 31, 1880  | 20.00 | ----- | 753.79 | 211 |
| Mike White's private right in Enterprise Ditch and Rio Grande Canal | Rio Grande river    | Jan. 31, 1881  | 13.20 | ----- | 773.79 | 212 |
| Park & Green Ditch, second appropriation                            | Rio Grande river    | Mar. 1, 1881   | 3.20  | 6.60  | 786.99 | 213 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.               | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---------------------------------------|---|------------------------|--|--|--|--------------------------------|
| Rio Grande Ditch No. 2                | Rio Grande river                          | Mar. 31, 1881          | 3.20   | .....  | 790.19   | 214                            |
| Bachman Ditch No. 2                   | Embargo creek                             | Mar. 31, 1881          | 3.20   | .....  | 793.39   | 215                            |
| Schacherl Ditch, second appropriation | Rio Grande river                          | April 1, 1881          | 2.00   | 3.20   | 796.59   | 216                            |
| Loma Ditch, second appropriation      | Rio Grande river                          | April 2, 1881          | 6.00   | 8.00   | 798.59   | 217                            |
| Rio Grande and San Luis Ditch         | Rio Grande river                          | April 2, 1881          | 21.60  | .....  | 804.59   | 218                            |
| Mentoya Ditch, fourth appropriation   | Pinos creek                               | April 8, 1881          | .80  | 7.00   | 826.19   | 219                            |
| Davies Ditch No. 2                    | Embargo creek                             | April 10, 1881         | 2.00   | .....  | 826.99   | 220                            |
| Cadle Ditch No. 1                     | Rock creek                                | April 15, 1881         | 1.50   | .....  | 828.99   | 221                            |
| Ladd Ditch                            | Embargo creek                             | April 30, 1881         | .90  | .....  | 830.49   | 222                            |
| Beiger Ditch                          | Embargo creek                             | April 30, 1881         | 1.00   | .....  | 831.39   | 223                            |
| Fish Ditch, second appropriation      | Rio Grande river                          | April 30, 1881         | 15.60  | 18.60  | 832.39   | 224                            |
| Bachman & Seitz Ditch                 | Embargo creek                             | April 30, 1881         | 1.00   | .....  | 847.99   | 225                            |
| Deckman Ditch                         | Spring creek                              | May 8, 1881            | .90  | .....  | 848.99   | 226                            |
| Montoya Ditch No. 6                   | Pinos creek                               | May 8, 1881            | 1.00   | .....  | 849.89   | 227                            |
| Seitz Ditch                           | Embargo creek                             | May 10, 1881           | 1.00   | .....  | 850.89   | 228                            |



|   |                     |                |        |        |          |     |
|---|---------------------|----------------|--------|--------|----------|-----|
| Excelsior Ditch, second appropriation   | Rio Grande river    | May 30, 1881   | 13.70  | 59.40  | 851.89   | 229 |
| McIntosh Arroya Ditch, second appropriation   | Rio Grande river    | May 30, 1881   | 1.20   | 5.00   | 865.59   | 230 |
| D. H. Dunn's private right in Enterprise Ditch and Rio Grande Canal, second appropriation | Rio Grande river    | May 31, 1881   | 6.40   | 17.60  | 866.79   | 231 |
| Leese, Davis & Bingle Ditch, second appropriation   | Rio Grande river    | May 31, 1881   | 4.26   | 10.34  | 873.19   | 232 |
| John Anderson Ditch, second appropriation   | Rio Grande river    | May 31, 1881   | 1.80   | 3.20   | 877.45   | 233 |
| Church Ditch  | Rio Grande river    | May 31, 1881   | 1.00   |        | 879.25   | 234 |
| Centennial Ditch, seventh appropriation   | Rio Grande river    | June 23, 1881  | 2.60   | 79.87  | 880.25   | 235 |
| Rio Grande and Piedra Valley, fourth appropriation  | Rio Grande river    | June 30, 1881  | 4.00   | 46.40  | 882.85   | 236 |
| Rio Grande Canal  | Rio Grande river    | Sept. 2, 1881  | 318.40 |        | 886.85   | 237 |
| Rio Grande Canal, second appropriation  | Rio Grande river    | Sept. 2, 1881  | 197.00 | 515.40 | 1,205.25 | 238 |
| John Nelson Ditch   | Rio Grande river    | Oct. 3, 1881   | 8.00   |        | 1,402.25 | 239 |
| Rio Grande and Larlet   | Rio Grande river    | Oct. 13, 1881  | 29.30  |        | 1,410.25 | 240 |
| Butler Irrigating Ditch, second appropriation   | Rio Grande river    | April 5, 1882  | 4.80   | 8.80   | 1,439.55 | 241 |
| Marajo Ditch  | Rio Grande river    | April 15, 1882 | 4.80   |        | 1,444.35 | 242 |
| Schuch & Schmidt Ditch, second appropriation  | Rio Grande river    | April 15, 1882 | 2.20   | 4.70   | 1,449.15 | 243 |
| Poole-Mesa Ditch  | Pinos creek         | May 1, 1882    | 1.00   |        | 1,451.35 | 244 |
| Atencio Ditch, fifth appropriation  | Rio Grande river    | May 31, 1882   | 3.20   | 14.54  | 1,452.35 | 245 |
| McLeod Ditch No. 2  | San Francisco creek | May 31, 1882   | 1.00   |        | 1,455.55 | 246 |
| Monte Vista Canal   | Rio Grande river    | May 31, 1882   | 92.70  |        | 1,456.55 | 247 |
| Kernan Ditch  | Pinos creek         | May 31, 1882   | 0.70   |        | 1,549.25 | 248 |
| McLeod Ditch No. 4  | San Francisco creek | May 31, 1882   | 0.70   |        | 1,549.95 | 249 |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                                | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each property. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| Sprague Ditch.....                                     | Pinos creek.....                          | May 31, 1882           | .80  | .....  | 1,550.65   | 250                            |
| McLeod Ditch No. 3.....                                | San Francisco creek.....                  | May 31, 1882           | 1.00   | .....  | 1,551.45   | 251                            |
| McLeod Ditch No. 6.....                                | San Francisco creek.....                  | May 31, 1882           | 1.00   | .....  | 1,552.45   | 252                            |
| Cole Ditch No. 6.....                                  | Rock creek.....                           | May 31, 1882           | .70  | .....  | 1,553.45   | 253                            |
| Rio Grande and Lariat Ditch, second appropriation..... | Rio Grande river.....                     | June 1, 1882           | 1.86   | 31.16  | 1,554.15   | 254                            |
| Hillsdale Ditch.....                                   | Rio Grande river.....                     | June 15, 1882          | 1.60   | .....  | 1,556.01   | 255                            |
| Cemetery Ditch.....                                    | San Francisco creek.....                  | June 23, 1882          | .30  | .....  | 1,557.61   | 256                            |
| Centennial Ditch, eighth appropriation.....            | Rio Grande river.....                     | June 23, 1882          | 1.50   | 81.37  | 1,557.91   | 257                            |
| West Side Ditch, second appropriation.....             | Rio Grande river.....                     | June 30, 1882          | 10.00  | 12.40  | 1,559.41   | 258                            |
| Dunning Mill Ditch.....                                | Rio Grande river.....                     | July 1, 1882           | .60  | .....  | 1,569.41   | 259                            |
| San Francisco Ditch, second appropriation.....         | San Francisco creek.....                  | July 2, 1882           | 6.00   | 7.00   | 1,570.01   | 260                            |
| Empire Canal.....                                      | Rio Grande river.....                     | Aug. 10, 1882          | 312.30   | .....  | 1,576.01   | 261                            |
| Empire Canal, second appropriation.....                | Rio Grande river.....                     | Aug. 10, 1882          | 62.50  | 374.80                                       | 1,888.31   | 262                            |
| Alamosa Town Ditch.....                                | Rio Grande river.....                     | Sep. 30, 1882.         | 12.80  | .....  | 1,950.81   | 263                            |
| Sheridan South Ditch.....                              | Spring creek.....                         | Sep. 30, 1882          | 1.00   | .....  | 1,963.61   | 264                            |

|   |                  |                |       |       |          |     |
|---|------------------|----------------|-------|-------|----------|-----|
| Corson Ditch  | Rio Grande river | Dec. 31, 1882  | 1.00  | ----- | 1,964.61 | 265 |
| Sylva Ditch, fourth appropriation                       | Rio Grande river | Mar. 1, 1883   | 1.40  | 18.20 | 1,965.61 | 266 |
| Voss Ditch  | Rio Grande river | Mar. 30, 1883  | 1.00  | ----- | 1,967.01 | 267 |
| Sheridan North Ditch                                    | Spring creek     | Mar. 31, 1883  | 2.00  | ----- | 1,968.01 | 268 |
| Finch's Ditch   | Pinos creek      | Mar. 31, 1883  | 2.20  | ----- | 1,970.01 | 269 |
| Extension of Smith Ditch                                | Rock creek       | April 18, 1883 | 4.17  | ----- | 1,972.21 | 270 |
| Cole Ditch No. 5  | Rock creek       | May 31, 1883   | .65   | ----- | 1,976.38 | 271 |
| San Luis Valley Irrigation Ditch, second appropriation  | Rio Grande river | May 31, 1883   | 6.20  | 14.60 | 1,977.03 | 272 |
| San Luis Valley Irrigation Ditch, third appropriation   | Rio Grande river | May 31, 1883   | 9.40  | 24.00 | 1,983.23 | 273 |
| San Jose or Lucero Ditch, second appropriation          | Rio Grande river | May 31, 1883   | 8.60  | 9.50  | 1,992.63 | 274 |
| Little Anna Ditch, second appropriation                 | Rio Grande river | May 31, 1883   | .60   | 1.60  | 2,001.23 | 275 |
| Sylva Ditch, fifth appropriation                        | Rio Grande river | June 10, 1883  | .80   | 19.00 | 2,001.83 | 276 |
| Bachman & Seitz Ditch, second appropriation             | Embargo creek    | June 21, 1883  | 1.00  | 2.00  | 2,002.63 | 277 |
| Centennial Ditch, ninth appropriation                   | Rio Grande river | June 23, 1883  | 1.60  | 82.97 | 2,003.63 | 278 |
| Cole Ditch No. 4  | Rock creek       | July 31, 1883  | .60   | ----- | 2,005.23 | 279 |
| Rio Grande and Piedra Valley Ditch, fifth appropriation | Rio Grande river | Sept. 21, 1883 | 2.50  | 48.90 | 2,005.83 | 280 |
| Knoblauch Ditch   | Rio Grande river | Oct. 5, 1883   | 1.20  | ----- | 2,008.33 | 281 |
| San Luis Valley Canal                                   | Rio Grande river | Dec. 12, 1883  | 50.30 | ----- | 2,009.53 | 282 |
| Meadow (overflow Ditch, second appropriation            | Rio Grande river | Dec. 31, 1883  | .80   | 4.00  | 2,059.83 | 283 |
| Hickory Jackson Ditch                                   | Rio Grande river | Dec. 31, 1883  | 19.00 | ----- | 2,060.63 | 284 |
| Spring Creek Ditch No. 1                                | Spring creek     | Mar. 20, 1884  | 6.40  | ----- | 2,079.63 | 285 |
| Dupke Ditch No. 1                                       | Rock creek       | May 1, 1884    | 1.04  | ----- | 2,086.03 | 286 |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.                                 | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|---|--|--|--------------------------------|
| Kiel, Larsen & Gardner Ditch                            | San Francisco creek.                      | May 2, 1884            | 1.00  | —  | 2,087.07   | 287                            |
| Excelsior Ditch, third appropriation.                   | Rio Grande river                          | May 30, 1884           | 11.60   | 71.00  | 2,088.07   | 288                            |
| Barricklow Ditch  | Pinos creek                               | May 31, 1884           | 1.00  | —  | 2,099.67   | 289                            |
| Rio Grande and Lariat Ditch, third appropriation        | Rio Grande river                          | June 1, 1884           | 7.20  | 38.36  | 2,100.67   | 290                            |
| Shotwell Ditch  | Rock creek                                | June 15, 1884          | 2.08  | —  | 2,107.87   | 291                            |
| Kiel, Larsen & Gardner Ditch, second appropriation      | San Francisco creek                       | June 16, 1884          | .30   | 1.30   | 2,109.95   | 292                            |
| Ryan Ditch  | Cat creek                                 | June 20, 1884          | 1.60  | —  | 2,110.25   | 293                            |
| Arroya Ditch, from Rock Creek                           | Rock creek                                | Aug. 1, 1884           | 7.80  | —  | 2,111.85   | 294                            |
| Clover Leaf Ditch                                       | Rock creek                                | Aug. 4, 1884           | 2.08  | —  | 2,119.65   | 295                            |
| Rio Grande and Piedra Valley Ditch, sixth appropriation | Rio Grande river                          | Sept. 21, 1884         | 2.40  | 51.30  | 2,121.73   | 296                            |
| Meadow Glen Ditch                                       | Rio Grande river                          | Dec. 25, 1884          | 3.00  | —  | 2,124.13   | 297                            |
| Meadow Glen Ditch, second appropriation                 | Rio Grande river                          | Dec. 25, 1884          | 22.00   | 25.00  | 2,127.13   | 298                            |
| Billings Ditch  | Rio Grande river                          | Feb. 23, 1885          | 36.54   | —  | 2,149.13   | 299                            |
| Hall Ditch  | Rio Grande river                          | Mar. 1, 1885           | 1.00  | —  | 2,185.67   | 300                            |
| Larick Ditch No. 2, second appropriation.               | Rock creek                                | May 31, 1885           | 4.17  | 5.17   | 2,186.67   | 301                            |

|   |                     |                |        |        |          |     |
|---|---------------------|----------------|--------|--------|----------|-----|
| Rio Grande & Lariet Ditch, fourth appropriation                                   | Rio Grande river    | June 4, 1885   | 11.20  | 49.56  | 2,190.84 | 302 |
| Rio Grande Canal, third appropriation   | Rio Grande river    | June 10, 1885  | 22.80  | 538.20 | 2,202.04 | 303 |
| Clegthorn Ditch   | Rio Grande river    | June 15, 1885  | 1.00   | ---    | 2,224.84 | 304 |
| Rio Grande & Pedra Valley Ditch, seventh appropriation                            | Rio Grande river    | Sept. 21, 1885 | 6.70   | 58.00  | 2,225.84 | 305 |
| Costilla Ditch  | Rio Grande river    | March 1, 1886  | 172.80 | ---    | 2,232.54 | 306 |
| Brook Farm Ditch  | Rock creek          | April 30, 1886 | 2.60   | ---    | 2,405.34 | 307 |
| Mexican Ditch, third appropriation  | Pinos creek         | April 30, 1886 | 1.50   | 3.70   | 2,407.94 | 308 |
| Brook Farm Ditch, second appropriation  | Rock creek          | April 30, 1886 | 3.12   | 5.72   | 2,409.44 | 309 |
| Rio Grande Ditch No. 4  | Rio Grande river    | May 10, 1886   | 12.00  | ---    | 2,412.56 | 310 |
| Cemetery Ditch, second appropriation  | San Francisco creek | May 15, 1886   | 1.20   | 1.50   | 2,424.56 | 311 |
| Rio Grande & Lariet Ditch, fifth appropriation                                    | Rio Grande river    | May 24, 1886   | 4.30   | 53.86  | 2,435.76 | 312 |
| Excelsior Ditch, fourth appropriation   | Rio Grande river    | May 30, 1886   | 4.50   | 75.50  | 2,430.06 | 313 |
| Cole Ditch No. 1, second appropriation  | Rock creek          | May 31, 1886   | 1.56   | 2.46   | 2,434.56 | 314 |
| Grubb Ditch No. 3   | Bear creek          | June 1, 1886   | 1.00   | ---    | 2,436.12 | 315 |
| Embargo Ditch, third appropriation  | Embargo creek       | June 3, 1886   | 1.60   | 6.70   | 2,437.12 | 316 |
| Rock Creek, Anderson and Cadle-Anderson Ditch, Consolidated, second appropriation | Rock creek          | June 6, 1886   | 4.17   | 5.17   | 2,438.72 | 317 |
| Rio Grande Canal, fourth appropriation  | Rio Grande river    | June 10, 1886  | 22.70  | 560.90 | 2,442.89 | 318 |
| Monte Vista Canal, second appropriation   | Rio Grande river    | June 10, 1886  | 7.24   | 99.94  | 2,465.59 | 319 |
| Meadow Ditch  | Spring creek        | June 24, 1886  | 3.06   | ---    | 2,472.83 | 320 |
| Cooley & Stammert Ditch   | Spring creek        | June 30, 1886  | 3.20   | ---    | 2,475.89 | 321 |
| South Fork High Line Ditch  | Rio Grande river    | June 30, 1886  | 17.60  | ---    | 2,479.09 | 322 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                                       | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in District. |
|---|---|------------------------|--|--|---|--------------------------------|
| Hoselkuss Ditch.....  | Rio Grande river.....                     | June 30, 1886          | 2.40   | .....  | 2,496.69  | 323                            |
| Kane & Callen Ditch, third appropriation.....                 | Rio Grande river.....                     | June 30, 1886          | 2.60   | 8.20   | 2,499.09  | 324                            |
| Deitrich & La Cass Ditch.....                                 | Rio Grande river.....                     | Aug. 31, 1886          | 10.40  | .....  | 2,501.69  | 325                            |
| Deitrich & La Cass Ditch, second appropriation.....           | Rio Grande river.....                     | Aug. 31, 1886          | 2.40   | 12.80  | 2,512.09  | 326                            |
| Cochran Bros. Ditch No. 3.....                                | San Francisco creek.....                  | Sept. 2, 1886          | 2.00   | .....  | 2,514.49  | 327                            |
| Rio Grande and Piedra Valley Ditch, eighth appropriation..... | Rio Grande river.....                     | Sept. 21, 1886         | 2.80   | 60.80  | 2,516.49  | 328                            |
| O'Connell Ditch, second appropriation.....                    | Pinos creek.....                          | Oct. 1, 1886           | .70  | 1.70   | 2,519.29  | 329                            |
| Prairie Ditch.....  | Rio Grande river.....                     | Nov. 1, 1886           | 192.00   | .....  | 2,519.99  | 330                            |
| Rough and Ready Ditch, fourth appropriation.....              | Rock creek.....                           | Dec. 31, 1886          | 1.04   | 34.37  | 2,711.99  | 331                            |
| Myers Ditch.....  | Embargo creek.....                        | Jan. 1, 1887           | 1.30   | .....  | 2,713.03  | 332                            |
| Star Enlargement Company's Ditch.....                         | Rio Grande river.....                     | Mar. 21, 1887          | 10.00  | .....  | 2,714.33  | 333                            |
| Star Enlargement Company's Ditch, second appropriation.....   | Rio Grande river.....                     | Mar. 21, 1887          | 78.10  | 88.10  | 2,724.33  | 334                            |
| Sheridan South Ditch, second appropriation.....               | Spring creek.....                         | Mar. 31, 1887          | 2.00   | 3.00   | 2,802.43  | 335                            |
| Pfeiffer Ditch, second appropriation.....                     | Rio Grande river.....                     | Apr. 1, 1887           | 3.20   | 6.40   | 2,804.43  | 536                            |
| Ryan Ditch No. 2.....   | Cat creek.....                            | Apr. 30, 1887          | 1.60   | .....  | 2,807.63  | 337                            |



|   |                  |               |        |        |          |                  |
|---|------------------|---------------|--------|--------|----------|------------------|
| Empire Canal, fourth appropriation                      | Rio Grande river | May 16, 1887  | 6.00   | 380.80 | 2,809.23 | 338              |
| Meadow Ditch, second appropriation                      | Spring creek     | May 16, 1887  | 1.20   | 4.26   | 2,815.23 | 339              |
| Excelsior Ditch, fourth appropriation                   | Rio Grande river | May 30, 1887  | .66    | 76.16  | 2,816.43 | 340              |
| Cooley & Staunert Ditch, second appropriation           | Spring creek     | May 31, 1887  | 14.80  | 18.00  | 2,817.09 | 341              |
| Howlett Ditch   | Pinos creek      | May 31, 1887  | 1.20   | -----  | 2,831.89 | 342              |
| Rio Grande and Lariat Ditch, sixth appropriation        | Rio Grande river | June 1, 1887  | 2.60   | 56.46  | 2,833.09 | 343              |
| Rio Grande Canal, fifth appropriation                   | Rio Grande river | June 10, 1887 | 26.00  | 586.90 | 2,835.69 | 344              |
| Monte Vista Canal, third appropriation                  | Rio Grande river | June 10, 1887 | 30.80  | 130.74 | 2,861.69 | 345              |
| Rio Grande and Piedra Valley Ditch, ninth appropriation | Rio Grande river | Sep. 21, 1887 | 3.25   | 64.05  | 2,892.49 | 346              |
| Farmers' Union Ditch                                    | Rio Grande river | Nov. 9, 1887  | 183.90 | -----  | 2,895.74 | 347              |
| Farmers' Union Ditch, second appropriation              | Rio Grande river | Nov. 9, 1887  | 83.30  | 267.20 | 3,079.64 | 348              |
| Spring Creek Ditch No. 1, second appropriation          | Spring creek     | Nov. 30, 1887 | 6.40   | 12.80  | 3,162.94 | 349              |
| Monte Vista Canal, fourth appropriation                 | Rio Grande river | Nov. 30, 1887 | 219.60 | 350.34 | 3,169.34 | 350              |
| Spruce Lawn Ditch                                       | Spring creek     | Feb. 10, 1888 | 1.00   | -----  | 3,388.94 | 351              |
| Spruce Lawn Ditch, second appropriation                 | Spring creek     | Feb. 10, 1888 | 15.30  | 16.30  | 3,389.94 | 352              |
| Schuch & Schmidt Ditch, third appropriation             | Rio Grande river | Mar. 1, 1888  | 3.20   | 7.90   | 3,405.24 | 353              |
| San Luis Valley Canal, second appropriation             | Rio Grande river | Mar. 9, 1888  | 45.20  | 95.50  | 3,408.44 | 354              |
| San Luis Valley Canal, third appropriation              | Rio Grande river | Mar. 13, 1888 | 19.90  | 115.40 | 3,453.64 | 355              |
| Excelsior Ditch, sixth appropriation                    | Rio Grande river | Mar. 31, 1888 | 9.10   | 85.26  | 3,473.54 | 356              |
| Spring Ranch Ditch                                      | Rio Grande river | April 1, 1888 | 4.80   | -----  | 3,482.64 | 357              |
| Spring Ranch Ditch, second appropriation                | Rio Grande river | April 1, 1888 | 4.80   | 9.60   | 3,487.44 | 357 <sup>1</sup> |
| Empire Canal, sixth appropriation                       | Rio Grande river | April 2, 1888 | 15.60  | 398.70 | 3,492.24 | 358              |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                            | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|---|--------------------------------|
| Murray Ditch                                       | Dry creek                                 | April 17, 1888         | 6.40   | ---  | 3,507.84  | 359                            |
| Eagle Ditch  | Rock creek                                | April 23, 1888         | 6.25   | ---  | 3,514.24  | 360                            |
| San Luis Valley Canal, fourth appropriation        | Rio Grande river                          | April 24, 1888         | 20.80  | 136.20                                       | 3,520.49  | 361                            |
| Larick Ditch No. 2, third appropriation            | Rock creek                                | May 1, 1888            | 4.16   | 9.33   | 3,541.29  | 362                            |
| Swartz Ditch                                       | Rock creek                                | May 1, 1888            | 3.64   | ---  | 3,545.45  | 363                            |
| Perkins' Ditch                                     | Pinos creek                               | May 1, 1888            | 5.60   | ---  | 3,549.09  | 364                            |
| Empire Canal, fifth appropriation                  | Rio Grande river                          | May 16, 1888           | 2.30   | 383.10                                       | 3,554.69  | 365                            |
| Bennett Ditch No. 3                                | Cherry creek                              | May 30, 1888           | .80  | ---  | 3,556.99  | 366                            |
| Little Daube Ditch, second appropriation           | Pinos creek                               | May 31, 1888           | .80  | 3.30   | 3,557.79  | 367                            |
| Cole Ditch No. 3                                   | Rock creek                                | May 31, 1888           | .76  | ---  | 3,558.59  | 368                            |
| Rio Grande and Lariet Ditch, seventh appropriation | Rio Grande river                          | June 1, 1888           | 3.50   | 59.96  | 3,559.35  | 369                            |
| Newton Ditch                                       | Rock creek                                | June 1, 1888           | 10.00  | ---  | 3,562.85  | 370                            |
| Rio Grande Canal, sixth appropriation              | Rio Grande river                          | June 10, 1888          | 33.60  | 620.50                                       | 3,572.85  | 371                            |
| Monte Vista, fifth appropriation                   | Rio Grande river                          | June 10, 1888          | 28.00  | 378.34                                       | 3,606.45  | 372                            |
| Spring Branch Ditch                                | Spring Branch creek                       | June 14, 1888          | .90  | ---  | 3,634.45  | 373                            |

|   |                  |                |        |        |          |      |
|---|------------------|----------------|--------|--------|----------|------|
| Beiger Ditch, second appropriation                      | Embargo creek    | June 30, 1888  | 0.80   | 1.80   | 3,635.35 | 374  |
| Kenilworth Canal  | Rio Grande river | July 3, 1888   | 4.10   |        | 3,636.15 | 375  |
| Kenilworth Canal, second appropriation                  | Rio Grande river | July 3, 1888   | 192.95 | 197.05 | 3,640.25 | 575½ |
| Brey Ditch  | Rio Grande river | Aug. 1, 1888   | 1.00   |        | 3,833.20 | 376  |
| San Luis Valley Canal, fifth appropriation              | Rio Grande river | Sept. 1, 1888  | 104.10 | 240.30 | 3,834.20 | 377  |
| Minor Ditch, second appropriation                       | Rio Grande river | Sept. 21, 1888 | 14.00  | 15.60  | 3,938.30 | 378  |
| Rio Grande and Piedra Valley Ditch, tenth appropriation | Rio Grande river | Sept. 21, 1888 | 6.70   | 70.75  | 3,952.30 | 379  |
| Bellows Creek Ditch, No. 1                              | Bellows' creek   | Dec. 1, 1888   | 3.00   |        | 3,959.00 | 380  |
| Bellows Creek Ditch, No. 2                              | Bellows' creek   | Dec. 10, 1888  | 3.20   |        | 3,962.00 | 381  |
| Bellows Creek Ditch, No. 3                              | Bellows' creek   | Dec. 10, 1888  | 1.60   |        | 3,965.20 | 382  |
| Bellows Creek Ditch, No. 4                              | Bellows' creek   | Dec. 10, 1888  | 1.50   |        | 3,966.80 | 383  |
| Farmers' Union Ditch, third appropriation               | Rio Grande river | Dec. 31, 1888  | 277.30 | 544.50 | 3,968.30 | 383½ |
| San Luis Valley Canal, sixth appropriation              | Rio Grande river | Feb. 7, 1889   | 13.00  | 253.30 | 4,245.60 | 384  |
| San Luis Valley Canal, seventh appropriation            | Rio Grande river | Feb. 15, 1889  | 45.60  | 298.90 | 4,258.60 | 385  |
| Rio Grande Canal, seventh appropriation                 | Rio Grande river | Mar. 30, 1889  | 24.40  | 644.90 | 4,304.20 | 386  |
| Cole Ditch, No. 1, third appropriation                  | Rock creek       | May 1, 1889    | 3.90   | 6.36   | 4,328.60 | 387  |
| Excelsior Ditch, seventh appropriation                  | Rio Grande river | May 30, 1889   | 2.00   | 87.26  | 4,332.50 | 388  |
| Rio Grande Canal, eighth appropriation                  | Rio Grande river | June 10, 1889  | 16.60  | 661.50 | 4,334.50 | 389  |
| Monte Vista Canal, sixth appropriation                  | Rio Grande river | June 10, 1889  | 14.20  | 392.54 | 4,351.10 | 390  |
| Independent Ditch, No. 2, second appropriation          | Rio Grande river | June 21, 1889  | 4.80   | 30.40  | 4,365.30 | 391  |
| Church Ditch, second appropriation                      | Rio Grande river | July 31, 1889  | 0.02   | 1.02   | 4,370.10 | 392  |
| Mesa Ditch  | Rio Grande river | Sept. 5, 1889  | 2.00   |        | 4,370.12 | 393  |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.   | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second allotted to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|---|------------------------|---|--|--|--------------------------------|
| Rio Grande and Piedra Valley Ditch, eleventh appropriation..... | Rio Grande river.....                     | Sept. 21, 1889         | 5.70  | 76.45  | 4,372.12   | 394                            |
| Costilla Ditch, second appropriation.....                       | Rio Grande river.....                     | Sept. 25, 1889         | 54.70   | 227.50                                       | 4,377.82   | 395                            |
| Beaver Creek Ditch.....   | Beaver creek.....                         | Oct. 16, 1889          | 1.00  | .....  | 4,432.52   | 396                            |
| Empire Canal, seventh appropriation.....                        | Rio Grande river.....                     | Oct. 30, 1889          | 92.00   | 497.38                                       | 4,433.52   | 397                            |
| Empire Canal, eighth appropriation.....                         | Rio Grande river.....                     | Oct. 30, 1889          | 118.50  | 615.88                                       | 4,525.52   | 398                            |
| Corson Ditch, second appropriation.....                         | Rio Grande river.....                     | Dec. 31, 1889          | 2.80  | 3.80   | 4,644.02   | 399                            |
| Empire Canal, ninth appropriation.....                          | Rio Grande river.....                     | Jan. 31, 1890          | 219.30  | 835.18                                       | 4,646.82   | 400                            |
| Prairie Ditch, second appropriation.....                        | Rio Grande river.....                     | Feb. 12, 1890          | 43.00   | 235.00                                       | 4,866.12   | 401                            |
| Rio Grande and Lariat Ditch, eighth appropriation.....          | Rio Grande river.....                     | Feb. 13, 1890          | 31.70   | 91.66  | 4,909.12   | 402                            |
| Hickory Jackson Ditch, second appropriation.....                | Rio Grande river.....                     | Mar. 31, 1890          | 6.00  | 25.00  | 4,940.82   | 403                            |
| Hickory Jackson Ditch, third appropriation.....                 | Rio Grande river.....                     | Mar. 31, 1890          | 11.00   | 36.00  | 4,946.82   | 404                            |
| Excelsior Ditch, eighth appropriation.....                      | Rio Grande river.....                     | May 30, 1890           | 6.50  | 93.76  | 4,957.82   | 405                            |
| San Luis Valley Canal, eighth appropriation.....                | Rio Grande river.....                     | June 10, 1890          | 6.50  | 305.40                                       | 4,964.32   | 406                            |
| Rio Grande Canal, ninth appropriation.....                      | Rio Grande river.....                     | June 10, 1890          | 43.40   | 704.90                                       | 4,970.82   | 407                            |
| Monte Vista Canal, seventh appropriation.....                   | Rio Grande river.....                     | June 10, 1890          | 49.20   | 441.74                                       | 5,014.22   | 408                            |

|   |                       |                |        |          |          |     |
|---|-----------------------|----------------|--------|----------|----------|-----|
| Rio Grande Canal, tenth appropriation.....  | Rio Grande river..... | July 24, 1890  | 52.00  | 756.90   | 5,063.42 | 409 |
| Empire Canal, tenth appropriation.....  | Rio Grande river..... | Aug. 4, 1890   | 29.00  | 864.18   | 5,115.42 | 410 |
| Rio Grande Canal, eleventh appropriation.....   | Rio Grande river..... | Date of decree | 293.70 | 1,050.60 | 5,144.42 | 411 |
| San Luis Valley, ninth appropriation.....   | Rio Grande river..... | Date of decree | 110.90 | 416.30   | 5,438.12 | 412 |
| McIntosh Arroya Ditch, third appropriation.....                                       | Rio Grande river..... | Date of decree | 1.40   | 6.40     | 5,549.02 | 413 |
| James Peterson Ditch, second appropriation.....                                       | Rio Grande river..... | Date of decree | 1.20   | 4.80     | 5,550.42 | 414 |
| Rock Creek, Anderson and Cadle-Anderson Ditch, Consolidated, third appropriation..... | Rock creek.....       | Date of decree | 6.25   | 11.42    | 5,551.62 | 415 |
| Sheridan South Ditch, third appropriation.....  | Spring creek.....     | Date of decree | 5.00   | 8.00     | 5,557.87 | 416 |
| Little Anna Ditch, third appropriation.....   | Pinos creek.....      | Date of decree | 1.20   | 2.80     | 5,562.87 | 417 |
| Little Daunbe Ditch, third appropriation.....   | Pinos creek.....      | Date of decree | 2.30   | 5.60     | 5,564.07 | 418 |
| Yarnell Ditch, second appropriation.....  | Pinos creek.....      | Date of decree | 2.00   | 8.00     | 5,566.37 | 419 |
|   |                       |                |        |          | 5,568.37 |     |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 20, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, JOHN D. McDONALD, MONTE VISTA, COLO. APPOINTED JUNE 4, 1891.

| NAME OF DITCH OR CANAL.                     | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                 |
|---|---|--|---------------------------------------|--|-------------------------------------|
| The Miner's Creek Ditch                     | Miner's creek                             | Jan. 29, 1891                              | Oct. 30, 1890                         | 12.00                                      | D. W. Soward                        |
| The Kenilworth Canal Feeder                 | Arroya or slough                          | Mar. 20, 1891                              | Mar. 19, 1891                         | 240.00                                     | The Kenilworth Canal Company        |
| The McKenzie Ditch                          | Miner's creek                             | April 1, 1891                              | Jan. 14, 1891                         | 2.16                                       | J. C. McKenzie                      |
| The Sunnyside Ditch                         | Miner's creek                             | April 1, 1891                              | Jan. 14, 1891                         | 2.16                                       | J. C. McKenzie                      |
| The Creede Water Works Pipe Lines           | Willow and West Willow creek              | Jan. 18, 1892                              | Jan. 12, 1892                         | 40.00<br>40.00                             | George Croft Kirby                  |
| The John Grant Ditch                        | Shallow creek                             | April 6, 1892                              | April 1890                            | 22.00                                      | John Grant                          |
| The Helen and Julia Ditch                   | Rio Grande river                          | June 22, 1892                              | April 25, 1892                        | 15.00                                      | L. E. Campbell                      |
| The Campbell-Bauer Ditch                    | Sunnyside creek                           | June 23, 1892                              | June 26, 1892                         | 15.00                                      | L. E. Campbell and Philip Bauer     |
| The Wason Deep Creek Ditch                  | Deep creek                                | July 5, 1892                               | June 3, 1887                          | 7.00                                       | M. V. B. Wason <i>et al.</i>        |
| The Theo. J. Lakenan Ditch                  | Boulder creek                             | Aug. 1, 1892                               | 1882                                  | 8.00                                       | Theo. J. Lakenan                    |
| The Creede Ditch                            | Rio Grande river                          | Sept. 6, 1892                              | July 7, 1892                          | 10.00                                      | N. C. Creede                        |
| The Denison Rod and Gun Association's Ditch | Clear creek                               | Sept. 29, 1892                             | May 1880                              | 9.25                                       | The Denison Rod and Gun Association |
| The Weiss Deep Creek Ditch                  | Deep creek                                | Oct. 3, 1892                               | June 14, 1892                         | 5.00                                       | F. A. Weiss <i>et al.</i>           |
| The Weiss Sunnyside Ditch                   | Sunnyside creek                           | Oct. 3, 1892                               | May 12, 1892                          | 7.50                                       | J. H. Weiss <i>et al.</i>           |



## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 20, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                                  | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>conveying<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.                        |
|---|--|--|---|--|---------------------------------------|--|
| The Wason Deep Creek Reser-<br>voir                 | Deep creek                                     | { Wason Deep }<br>{ Creek ditch }.           | July 5, 1892  | June 3, 1887                                     | Not given                             | M. V. B. Wason <i>et al.</i>               |
| The Theo. J. Lakenan Reser-<br>voir                 | Boulder creek                                  | { Theo. J. Lake- }<br>{ man ditch }          | Aug. 1, 1892  | 1882   | 10,000,000                            | Theo. J. Lakenan                           |
| The Denison Rod and Gun-<br>Association's Reservoir | Clear creek                                    | An old channel                               | Sept. 29, 1892                                      | May 1880   | 475,200                               | { The Denison Rod and Gun<br>Association } |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 21, GIVING THE DATE AND ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.

| NAME OF DITCH OR CANAL.                  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|---|--------------------------------|
| El Viego Ditch.....                      | Alamosa river.....                        | Aug. 1, 1867           | 19.20  | .....  | .....   | 1                              |
| Gomez Ditch.....                         | Alamosa river.....                        | Aug. 1, 1867           | 4.62   | .....  | 19.20   | 2                              |
| Molino Ditch.....                        | Alamosa river.....                        | May 1, 1869            | 6.93   | .....  | 23.82   | 3                              |
| Hansen La Jara Overflow No. 3 Ditch..... | La Jara river.....                        | March 1, 1870          | 21.28  | .....  | 39.75   | 4                              |
| Swaup Ditch.....                         | La Jara river.....                        | March 1, 1870          | 2.49   | .....  | 52.03   | 5                              |
| Garcia Ditch No. 1.....                  | La Jara river.....                        | March 1, 1870          | 4.62   | .....  | 54.52   | 6                              |
| McCunniff Ditch.....                     | La Jara river.....                        | Mar. 31, 1870          | 16.60  | .....  | 59.14   | 7                              |
| Jose Valdez Ditch.....                   | Alamosa river.....                        | April 8, 1870          | 16.50  | .....  | 76.74   | 8                              |
| Valdez Ditch.....                        | Alamosa river.....                        | April 10, 1870         | 14.00  | .....  | 93.24   | 9                              |
| Capulen Ditch.....                       | Alamosa river.....                        | April 12, 1870         | 31.37  | .....  | 107.24  | 10                             |
| Gabino Gallegos.....                     | Alamosa river.....                        | April 15, 1870         | 16.00  | .....  | 138.61  | 11                             |

|                                     |                    |               |       |        |    |
|-------------------------------------|--------------------|---------------|-------|--------|----|
| Valley Ditch.....                   | La Jara river..... | Apr. 20, 1870 | 21.12 | 154.61 | 12 |
| Garcia Ditch No. 2.....             | Alamosa river..... | Apr. 30, 1871 | 5.54  | 175.73 | 13 |
| San Jose Ditch No. 2.....           | Alamosa river..... | May 31, 1871  | 3.08  | 181.27 | 14 |
| Cristobal Rivera Ditch.....         | Alamosa river..... | Mar. 4, 1873  | 10.08 | 184.35 | 15 |
| Jose E. Atencio Ditch.....          | Hot creek.....     | Apr. 11, 1873 | 6.93  | 194.43 | 16 |
| San Jose No. 1.....                 | Alamosa river..... | Apr. 13, 1873 | 10.39 | 201.36 | 17 |
| Romero Ditch.....                   | La Jara river..... | Apr. 13, 1873 | 7.68  | 211.75 | 18 |
| Gallegos Ditch No. 4.....           | Hot creek.....     | Apr. 15, 1873 | 12.32 | 219.43 | 19 |
| Gallegos Ditch No. 2.....           | La Jara river..... | Apr. 30, 1873 | 11.08 | 231.75 | 20 |
| Juan de Deos Vigil Ditch.....       | Hot creek.....     | May 5, 1873   | 11.08 | 242.83 | 21 |
| Gallegos Ditch No. 1.....           | Hot creek.....     | May 5, 1873   | 11.08 | 253.91 | 22 |
| Newcomb Brothers Ditch.....         | La Jara river..... | May 14, 1873  | 11.52 | 264.99 | 23 |
| Romaldo Valdez Ditch.....           | Alamosa river..... | May 20, 1873  | 4.62  | 276.51 | 24 |
| Le-mita Ditch.....                  | La Jara river..... | Apr. 15, 1874 | 6.93  | 281.13 | 25 |
| Ramona Ditch.....                   | Alamosa river..... | Apr. 20, 1874 | 9.85  | 288.06 | 26 |
| Head Overflow Ditch No. 5.....      | Alamosa river..... | May 3, 1874   | 49.80 | 297.91 | 27 |
| Le-mita Ditch No. 3.....            | Hot creek.....     | June 15, 1874 | 6.16  | 347.71 | 28 |
| Alamoso and Spring Creek Ditch..... | Alamosa river..... | Nov. 30, 1874 | 5.76  | 353.87 | 29 |
| Garden Ditch.....                   | Spring creek.....  | Apr. 1, 1875  | 8.10  | 359.63 | 30 |
| Aqua Caliente Ditch.....            | Hot creek.....     | May 5, 1875   | 15.40 | 367.73 | 31 |
| Ortez Ditch.....                    | Alamosa river..... | May 15, 1875  | 14.02 | 383.13 | 32 |
| Esbridge Spring Creek Ditch.....    | Spring creek.....  | May 16, 1875  | 3.36  | 397.15 | 33 |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.                       | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|---|--------------------------------|
| Sanches No. 1 Ditch                           | Hot creek                                 | June 15, 1875          | 6.93   | .....  | 400.51  | 34                             |
| Sanches No. 2 Ditch                           | Hot creek                                 | July 1, 1875           | 6.93   | .....  | 407.44  | 35                             |
| Arroya Ditch                                  | Alamosa river                             | July 1, 1875           | 53.12  | .....  | 414.37  | 36                             |
| T. K. Walsh Ditch                             | Alamosa river                             | May 1, 1876            | 6.93   | .....  | 467.49  | 37                             |
| Union Ditch                                   | Alamosa river                             | May 20, 1876           | 14.13  | .....  | 474.42  | 38                             |
| Loretto Ditch                                 | Alamosa river                             | June 1, 1876           | 10.83  | .....  | 488.55  | 39                             |
| North Alamosa Ditch                           | Alamosa river                             | June 14, 1877          | 22.40  | .....  | 499.38  | 40                             |
| Alamosa & Spring Creek Ditch, first extension | Alamosa river                             | July 1, 1877           | 18.14  | 23.90  | 521.78  | 41                             |
| Newcomb Brother's Ditch, first extension      | La Jara river                             | Aug. 1, 1877           | 7.16   | 18.68  | 539.92  | 42                             |
| Sauco Ditch                                   | La Jara river                             | April 15, 1878         | 9.60   | .....  | 547.08  | 43                             |
| Cottonwood Ditch                              | Alamosa river                             | May 1, 1879            | 8.46   | .....  | 556.68  | 44                             |
| Walsh Ditch                                   | Alamosa river                             | Mar. 31, 1880          | 12.45  | .....  | 565.14  | 45                             |
| Gallegos No. 3 Ditch                          | Alamosa river                             | April 1, 1880          | 14.94  | .....  | 577.59  | 46                             |
| Penasco Ditch                                 | La Jara river                             | April 2, 1880          | 3.36   | .....  | 592.53  | 47                             |
| La Piedra Ditch                               | La Jara river                             | April 3, 1880          | 4.98   | .....  | 595.89  | 48                             |

|  |               |                |       |        |        |    |
|--|---------------|----------------|-------|--------|--------|----|
| Pino-Réal Ditch                                      | La Jara river | May 1, 1880    | 7.20  | -----  | 600.87 | 49 |
| Thielkeld Ditch                                      | Alamosa river | May 26, 1880   | 7.68  | -----  | 608.07 | 50 |
| Alamosa No. 1 Ditch                                  | Alamosa river | May 31, 1880   | 14.52 | -----  | 615.75 | 51 |
| Fiskridge & Garrett Ditch                            | La Jara river | June 1, 1880   | 7.84  | -----  | 630.27 | 52 |
| Le Mita Ditch No. 2                                  | La Jara river | June 5, 1880   | 7.20  | -----  | 638.11 | 53 |
| Alamosa and Spring Creek Ditch, second appropriation | Alamosa river | July 1, 1880   | 12.62 | 36.52  | 645.31 | 54 |
| Cottonwood Ditch, first appropriation                | Alamosa river | Aug. 1, 1880   | 5.65  | 14.11  | 657.93 | 55 |
| Hard Tack Ditch                                      | La Jara river | Mar. 10, 1881  | 18.45 | -----  | 663.58 | 56 |
| Lowland Ditch  | La Jara river | April 1, 1881  | 14.94 | -----  | 682.03 | 57 |
| Clark Ditch  | Alamosa river | April 10, 1881 | 6.75  | -----  | 696.97 | 58 |
| Alamos Ditch   | La Jara river | April 10, 1881 | 6.93  | -----  | 703.72 | 59 |
| Overflow Ditch No. 4                                 | Alamosa river | May 1, 1881    | 16.00 | -----  | 710.65 | 60 |
| Nate Garrett Ditch                                   | La Jara river | June 14, 1882  | 7.80  | -----  | 726.65 | 61 |
| Union Ditch, first extension                         | Alamosa river | July 25, 1882  | 27.21 | 41.34  | 734.45 | 62 |
| Lower La Jara Ditch                                  | La Jara river | April 15, 1883 | 18.67 | -----  | 775.79 | 63 |
| Worcester Ditch                                      | Alamosa river | May 25, 1883   | 11.83 | -----  | 794.46 | 64 |
| Lower La Jara Ditch, first extension                 | La Jara river | April 5, 1884  | 6.23  | 24.90  | 806.29 | 65 |
| Overflow Ditch No. 2                                 | Alamosa river | May 15, 1884   | 16.00 | -----  | 812.52 | 66 |
| Union Ditch, second extension                        | Alamosa river | May 15, 1884   | 76.30 | 117.64 | 828.52 | 67 |
| Norland Ditch  | Alamosa river | June 12, 1885  | 48.56 | -----  | 904.82 | 68 |
| Flintham Ditch                                       | Alamosa river | June 26, 1885  | 24.90 | -----  | 953.38 | 69 |
| Miller Ditch   | Alamosa river | Aug. 10, 1885  | 34.86 | -----  | 978.28 | 70 |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                              | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch, canal or reservoir. | Cubic feet per second appropriated in district. | Order of Priority in district |
|--|-----------------------------------|------------------------|--|---|---|-------------------------------|
| Overflow Ditch No. 1.....                            | Alamosa river.....                | Oct. 5, 1885           | 112.00   | —   | 1,013.14  | 71                            |
| E.d. Newcomb Ditch.....                              | Alamosa river.....                | June 1, 1886           | 13.28  | —   | 1,125.14  | 72                            |
| Morganville Ditch.....                               | Alamosa river.....                | June 1, 1886           | 20.75  | —   | 1,138.42  | 73                            |
| Plano-Vista Ditch.....                               | Alamosa river.....                | Nov. 10, 1886          | 29.81  | —   | 1,159.17  | 74                            |
| Miller Ditch, first extension.....                   | Alamosa river.....                | Nov. 11, 1886          | 31.54  | 66.40   | 1,188.98  | 75                            |
| Davies-Chapman Ditch.....                            | Alamosa river.....                | Mar. 12, 1887          | 51.87  | —   | 1,220.52  | 76                            |
| North Alamosa Ditch, first extension.....            | Alamosa river.....                | Mar. 31, 1887          | 27.39  | 49.79   | 1,272.39  | 77                            |
| Alamosa Ditch No. 1, first extension.....            | Alamosa river.....                | April 1, 1887          | 5.29   | 19.81   | 1,299.78  | 78                            |
| Nate Garrett Ditch, first extension.....             | La Jara river.....                | April 1, 1887          | 5.65   | 13.45   | 1,305.07  | 79                            |
| Alamosa and Spring Creek Ditch, third extension..... | Alamosa river.....                | April 20, 1887         | 26.22  | 62.74   | 1,310.72  | 80                            |
| Lower La Jara Ditch, second extension.....           | La Jara river.....                | May 1, 1887            | 19.92  | 44.82   | 1,336.94  | 81                            |
| Cottonwood Ditch, second extension.....              | Alamosa river.....                | June 2, 1887           | 21.59  | 35.70   | 1,356.86  | 82                            |
| Union Ditch, third extension.....                    | Alamosa river.....                | June 27, 1887          | 145.00   | 262.64  | 1,378.45  | 83                            |
| Scandinavian Canal.....                              | Alamosa river.....                | July 7, 1887           | 43.58  | —   | 1,523.45  | 84                            |
| Alamosa Creek Canal.....                             | Alamosa river.....                | Aug. 26, 1887          | 166.05   | —   | 1,567.03  | 85                            |

|                                    |                    |                     |       |       |          |    |
|------------------------------------|--------------------|---------------------|-------|-------|----------|----|
| Baker Ditch.....                   | Alamosa river..... | Aug. 30, 1887.....  | 12.45 | ----- | 1,733.08 | 86 |
| Codington Ditch.....               | La Jara river..... | Aug. 30, 1887.....  | 29.88 | ----- | 1,745.53 | 87 |
| Ribera Ditch.....                  | Alamosa river..... | Sept. 23, 1887..... | 28.80 | ----- | 1,775.41 | 88 |
| Madril Ditch.....                  | Alamosa river..... | Sept. 23, 1887..... | 12.45 | ----- | 1,804.21 | 89 |
| Valdez Ditch, first extension..... | Alamosa river..... | Sept. 23, 1887..... | 72.63 | 86 63 | 1,816.66 | 90 |
| Hilario Ditch.....                 | Alamosa river..... | Feb. 20, 1888.....  | 3.61  | ----- | 1,889.29 | 91 |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 21, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892. —COMMISSIONER, ROMALDO ORTIZ, CAPULINA, COLO. APPOINTED 1889.

| NAME OF DITCH OR CANAL.      | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.                     |
|------------------------------|---|---|--|---|---|
| The Arroya Lake Spring Ditch | Springs.....                                    | June 26, 1891                                       | Aug. 31, 1889                                    | 4.00  | ..... James R. Patton                   |
| The J. W. L. Ditch.....      | Alamosa creek....                               | Dec. 29, 1891                                       | June 15, 1891                                    | 116.27  | ..... Wm. B. Wells and Chas. A. Johnson |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 23, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS ESTABLISHED BY THE DECREE OF COURT IN THE JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY THE CLERK OF THE COURT.

| NAME OF DITCH OR CANAL.                    | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| Guadalupe Main Ditch                       | Conejos river                             | Mar. 1, 1855           | 69.82  |  |  | 1                              |
| Head's Mill and Irrigating Ditch           | Conejos river                             | June 1, 1855           | 177.14   |  | 69.82  | 2                              |
| El Coda Ditch                              | San Antonio                               | Aug. 4, 1855           | 25.18  |  | 186.96   | 3                              |
| Llano Ditch                                | Los Pinos creek                           | Aug. 20, 1855          | 31.84  |  | 212.14   | 4                              |
| Garcia Ditch                               | Conejos river                             | Oct. 1, 1855           | 6.23   |  | 243.98   | 4½                             |
| Serrietta Ditch                            | Conejos river                             | Mar. 5, 1856           | 31.77  |  | 250.21   | 5                              |
| Seledonia Valdez Irrigating and Mill Ditch | Conejos river                             | Mar. 20, 1856          | 31.77  |  | 281.98   | 6                              |
| Los Pinos Ditch                            | Los Pinos creek                           | April 1, 1856          | 22.94  |  | 313.75   | 7                              |
| Salazar Ditch                              | Conejos river                             | April 1, 1856          | 12.32  |  | 336.09   | 8                              |
| Mill Ditch                                 | Conejos river                             | April 1, 1865          | 12.67  |  | 349.01   | 9                              |
| San Jose Ditch                             | Conejos river                             | April 15, 1856         | 40.28  |  | 361.68   | 10                             |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| Sincero Ditch.....                       | San Antonio river.....                    | April 15, 1856.....    | 18.31.....   | .....  | 401.96.....  | 11                             |
| Del Fuerticitito Ditch.....              | Conejos river.....                        | April 30, 1856.....    | 8.76.....  | .....  | 420.27.....  | 12                             |
| San Rafael and Conejos Ditch.....        | Conejos river.....                        | May 1, 1856.....       | 8.81.....  | .....  | 429.03.....  | 13                             |
| El Senito Ditch.....                     | Conejos river.....                        | May 30, 1856.....      | 6.19.....  | .....  | 437.84.....  | 14                             |
| Gabriel Martinez Ditch.....              | Conejos river.....                        | Aug. 1, 1856.....      | .71.....   | .....  | 444.03.....  | 15                             |
| Santiago Ditch.....                      | Conejos river.....                        | April 1, 1857.....     | 55.59.....   | .....  | 444.74.....  | 16                             |
| Garcia Ditch, first enlargement.....     | Conejos river.....                        | April 1, 1857.....     | 6.09.....  | 12.32.....                                   | 500.33.....  | 17                             |
| Archuleta and Trujillo Ditch, No. 1..... | Conejos river.....                        | April 1, 1857.....     | 8.81.....  | .....  | 506.42.....  | 18                             |
| Archuleta and Trujillo Ditch, No. 2..... | Natural springs.....                      | April 1, 1857.....     | 14.94.....   | .....  | 515.23.....  | 19                             |
| Overflow Ditch.....                      | Conejos river.....                        | April 10, 1857.....    | 11.79.....   | .....  | 530.17.....  | 20                             |
| Trujillo Ditch.....                      | Conejos river.....                        | April 15, 1857.....    | 29.80.....   | .....  | 541.96.....  | 21                             |
| Cañon Irrigating Ditch.....              | Conejos river.....                        | April 15, 1857.....    | 42.89.....   | .....  | 571.76.....  | 22                             |
| La Del Rio Ditch.....                    | Conejos river.....                        | April 30, 1857.....    | 31.44.....   | .....  | 614.65.....  | 23                             |
| Rincones Ditch.....                      | San Antonio and Conejos rivers.....       | May 15, 1857.....      | 22.25.....   | .....  | 646.09.....  | 24                             |
| Fuerticitos Ditch.....                   | Conejos river.....                        | April 1, 1858.....     | 31.47.....   | .....  | 668.34.....  | 25                             |

|   |               |       |       |          |    |
|---|---------------|-------|-------|----------|----|
| Mecitos Ditch                                   | Sept. 1, 1858 | 38.99 | ----- | 699.81   | 26 |
| San Juan and San Rafael Ditch                   | April 1, 1861 | 47.76 | ----- | 738.80   | 27 |
| San Rafael and Conejos Ditch, first enlargement | April 1, 1862 | 8.81  | 17.62 | 785.56   | 28 |
| Espinosa Ditch                                  | April 1, 1862 | 19.54 | ----- | 795.37   | 29 |
| Trujillo Ditch, first enlargement               | April 1, 1863 | 23.68 | ----- | 814.91   | 30 |
| Chacon Ditch No. 1                              | May 1, 1863   | 18.31 | ----- | 838.59   | 31 |
| La Sauces Ditch                                 | May 20, 1867  | 88.43 | ----- | 856.90   | 32 |
| Larato Irrigating Ditch                         | June 14, 1867 | 27.58 | ----- | 945.33   | 33 |
| Jose Bon facio Romero Ditch                     | Mar. 1, 1870  | 56.97 | ----- | 972.91   | 34 |
| Bernardo Romero Ditch                           | Mar. 15, 1870 | 9.26  | ----- | 1,029.88 | 35 |
| Galbis Ditch                                    | July 1, 1870  | 10.97 | ----- | 1,039.14 | 36 |
| Sanches Ditch                                   | Aug. 20, 1870 | 27.26 | ----- | 1,050.11 | 37 |
| J. F. Chacon Ditch No. 3                        | July 1, 1872  | 18.31 | ----- | 1,077.37 | 38 |
| Sabine School Section Ditch                     | May 1, 1873   | 11.95 | ----- | 1,095.68 | 39 |
| Jose Decedario Martinez Ditch                   | July 31, 1873 | 9.26  | ----- | 1,107.63 | 40 |
| Vega Grande Ditch                               | April 1, 1875 | 5.77  | ----- | 1,116.89 | 41 |
| An Con Irrigating Ditch                         | April 1, 1876 | 10.80 | ----- | 1,122.66 | 42 |
| Wm. Stewart & Co. Irrigating Ditch              | June 30, 1876 | 11.40 | ----- | 1,133.46 | 43 |
| J. F. Chacon Ditch No. 2                        | Oct. 15, 1877 | 7.54  | ----- | 1,144.86 | 44 |
| Lorato Ditch                                    | Mar. 1, 1878  | 7.54  | ----- | 1,152.40 | 45 |
| Vega Grande Ditch, first enlargement            | April 1, 1878 | 5.77  | 11.54 | 1,159.94 | 46 |
| McCarroll Ditch                                 | May 1, 1878   | 13.72 | ----- | 1,165.71 | 47 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                          | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each property. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| Manassa Ditch.....                               | Conejos river.....                        | May 1, 1879.....       | 73.60.....   | -----  | 1,179.43.....  | 48                             |
| J. F. Chacon Ditch No. 2, first enlargement..... | Conejos river.....                        | Nov. 10, 1879.....     | 4.54.....  | 12.08.....                                   | 1,253.03.....  | 49                             |
| William Sabine Ditch No. 1.....                  | Conejos river.....                        | April 1, 1880.....     | 7.71.....  | -----  | 1,257.57.....  | 50                             |
| Martinez Ditch.....                              | Conejos river.....                        | April 1, 1880.....     | 15.84.....   | -----  | 1,265.28.....  | 51                             |
| J. M. Espinosa Ditch.....                        | Natural springs.....                      | April 1, 1880.....     | 26.00.....   | -----  | 1,281.12.....  | 52                             |
| Cordova Ditch.....                               | Conejos river.....                        | April 1, 1880.....     | 6.54.....  | -----  | 1,307.12.....  | 53                             |
| Chaves Ditch.....                                | San Antonio river.....                    | May 1, 1880.....       | 12.72.....   | -----  | 1,313.66.....  | 54                             |
| Jack's Irrigating Ditch.....                     | Conejos river.....                        | Mar. 25, 1881.....     | 8.12.....  | -----  | 1,326.38.....  | 55                             |
| Ephraim Ditch.....                               | Conejos river.....                        | Mar. 28, 1881.....     | 47.00.....   | -----  | 1,334.50.....  | 56                             |
| Martinez Ditch (on San Antonio Creek).....       | San Antonio river.....                    | April 15, 1881.....    | 13.68.....   | -----  | 1,381.50.....  | 57                             |
| Los Ojos Ditch No. 2.....                        | Conejos river.....                        | May 1, 1881.....       | 5.95.....  | -----  | 1,395.18.....  | 58                             |
| Richfield Canal.....                             | Conejos river.....                        | Oct. 12, 1881.....     | \$6.24.....  | -----  | 1,401.13.....  | 59                             |
| Loma Parda Ditch.....                            | Conejos river.....                        | Feb. 15, 1882.....     | 10.31.....   | -----  | 1,457.37.....  | 60                             |
| Beecroft Irrigating Ditch.....                   | Conejos river.....                        | April 15, 1882.....    | 7.54.....  | -----  | 1,467.68.....  | 61                             |
| William Sabine Ditch No. 2.....                  | Conejos river.....                        | May 1, 1882.....       | 7.71.....  | -----  | 1,475.22.....  | 62                             |

|                           |                |       |       |          |    |
|---------------------------|----------------|-------|-------|----------|----|
| Los Ojos Ditch No. 1..... | July 10, 1882  | 44.16 | ----- | 1,482.93 | 63 |
| Elledges Ditch.....       | April 1, 1883  | 7.52  | ----- | 1,527.09 | 64 |
| Augustura Ditch.....      | April 1, 1883  | 42.72 | ----- | 1,534.61 | 65 |
| North Eastern Ditch.....  | April 21, 1883 | 34.71 | ----- | 1,577.33 | 66 |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 22.—ADJUDICATION OF 1890.

| NAME OF DITCH OR CANAL.                               | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|---|--------------------------------|
| La Vega de la Servilleta Ditch.....                   | Conejos river.....                        | Apr. 21, 1883          | 6.75   | -----  | 1,612.04  | 67                             |
| Cruz Chaves Ditch.....                                | Conejos river.....                        | Apr. 21, 1883          | 1.00   | -----  | 1,618.79  | 68                             |
| San Rafael and Conejos Ditch, second enlargement..... | Conejos river.....                        | Apr. 21, 1883          | 4.00   | 21.62  | 1,619.79  | 69                             |
| La Manga Ditch.....                                   | San Antonio river.....                    | Apr. 21, 1883          | 4.00   | -----  | 1,623.79  | 70                             |
| Broyles Overflow Ditch No. 1.....                     | San Antonio river.....                    | Apr. 21, 1883          | 1.50   | -----  | 1,627.79  | 71                             |
| Broyles Overflow Ditch No. 2.....                     | San Antonio river.....                    | Apr. 21, 1883          | 2.50   | -----  | 1,629.29  | 72                             |
| Broyles Overflow Ditch No. 3.....                     | San Antonio river.....                    | Apr. 21, 1883          | 1.50   | -----  | 1,631.79  | 73                             |
| Jaramillo Overflow Ditch No. 1.....                   | San Antonio river.....                    | Apr. 21, 1883          | 2.00   | -----  | 1,633.29  | 74                             |
| Jaramillo Overflow Ditch No. 2.....                   | San Antonio river.....                    | Apr. 21, 1883          | 2.00   | -----  | 1,635.29  | 75                             |
| La Vega Ditch.....                                    | Conejos river.....                        | Apr. 21, 1883          | 6.40   | -----  | 1,637.29  | 76                             |
| McCarroll Ditch.....                                  | Mill creek.....                           | Apr. 21, 1883          | 7.00   | -----  | 1,643.69  | 77                             |
| Le Duc.....   | Conejos river.....                        | Apr. 21, 1883          | 3.00   | -----  | 1,650.69  | 78                             |

|   |                   |                |       |          |     |
|---|-------------------|----------------|-------|----------|-----|
| Home Ditch.....                                   | Conejos river     | April 21, 1883 | 4.50  | 1,653.69 | 79  |
| Ball Bro.'s Overflow Ditch No. 1.....             | Conejos river     | April 21, 1883 | 22.00 | 1,658.19 | 80  |
| Ball Bro.'s Overflow Ditch No. 2.....             | Conejos river     | April 21, 1883 | 20.00 | 1,680.19 | 81  |
| Hughes' Overflow Ditch No. 1.....                 | San Antonio river | April 21, 1883 | 12.00 | 1,700.19 | 82  |
| Hughes' Overflow Ditch No. 2.....                 | San Antonio river | April 21, 1883 | 6.00  | 1,712.19 | 83  |
| Manassa Ditch No. 2.....                          | Conejos river     | April 21, 1883 | 23.25 | 1,718.19 | 84  |
| Floyd Overflow Ditch No. 1.....                   | San Antonio river | April 21, 1883 | 1.50  | 1,741.44 | 85  |
| Floyd Overflow Ditch No. 2.....                   | San Antonio river | April 21, 1883 | 2.25  | 1,742.94 | 86  |
| Floyd Overflow Ditch No. 3.....                   | San Antonio river | April 21, 1883 | 5.00  | 1,745.19 | 87  |
| East Bend Ditch.....                              | Conejos river     | April 21, 1883 | 15.00 | 1,750.19 | 88  |
| Smith Bro.'s Ditch.....                           | Conejos river     | April 21, 1883 | 8.00  | 1,765.19 | 89  |
| Gallegos & Lopez.....                             | San Antonio river | April 21, 1883 | 1.50  | 1,773.19 | 90  |
| La Vega Ditch, first enlargement.....             | Conejos river     | April 23, 1883 | 2.00  | 1,774.69 | 91  |
| Gallegos Northside Ditch.....                     | San Antonio river | April 21, 1883 | 3.50  | 1,776.69 | 92  |
| La Manga Ditch, first enlargement.....            | San Antonio river | Sept. 10, 1883 | 4.00  | 1,780.19 | 93  |
| Punche Ditch.....                                 | San Antonio river | April 23, 1883 | 15.00 | 1,784.19 | 94  |
| Cottonwood Ditch.....                             | Conejos river     | April 10, 1884 | 28.50 | 1,799.19 | 95  |
| A. D. Archuleta Ditch.....                        | Conejos river     | April 20, 1884 | 8.00  | 1,827.69 | 96  |
| J. P. Chacon Ditch No. 2, second enlargement..... | Conejos river     | May 1, 1884    | 2.00  | 1,835.69 | 97  |
| Manassa Westfield Ditch.....                      | Conejos river     | Feb. 15, 1885  | 30.00 | 1,837.69 | 98  |
| Bagwell Ditch.....                                | Conejos river     | Mar. 13, 1885  | 7.00  | 1,867.69 | 99  |
| An Con Ditch, first enlargement.....              | Conejos river     | April 23, 1825 | 8.00  | 1,874.69 | 100 |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.                     | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| East Bend Ditch, first enlargement          | Conejos river.                            | May 20, 1885           | 4.00   | 19.00  | 1,882.69   | 101                            |
| Fox Creek Ditch No. 2.                      | Fox creek                                 | May 30, 1885           | 1.50   | -----  | 1,886.69   | 102                            |
| East Bend Ditch, second enlargement         | Conejos river                             | Aug. 31, 1885          | 3.75   | 22.75  | 1,888.19   | 103                            |
| Sanford Ditch.                              | Conejos river.                            | Oct. 20, 1885          | 107.50   | -----  | 1,891.94   | 104                            |
| Richfield Ditch, first enlargement.         | Conejos river.                            | Oct. 20, 1885          | 112.50   | 168.74                                       | 1,999.44   | 105                            |
| La Vega Ditch, second enlargement           | Conejos river.                            | Dec. 31, 1885          | 3.00   | 11.40  | 2,111.94   | 106                            |
| Fox Creek Ditch No. 1.                      | Fox creek.                                | April 1, 1886          | 2.50   | -----  | 2,114.94   | 107                            |
| Alamo Ditch.                                | Conejos river.                            | April 15, 1886         | 36.00  | -----  | 2,117.44   | 108                            |
| East Bend Ditch, third enlargement.         | Conejos river.                            | Aug. 31, 1886          | 3.65   | 26.40  | 2,153.44   | 109                            |
| East Bend Ditch, fourth enlargement         | Conejos river.                            | Jan. 26, 1887          | 4.00   | 30.40  | 2,157.09   | 110                            |
| Servietta Ditch, first enlargement          | Conejos river.                            | April 1, 1887          | 4.00   | 35.77  | 2,161.09   | 111                            |
| Manassa-Westfield Ditch, first enlargement. | Conejos river.                            | April 11, 1887         | 24.00  | 54.00  | 2,165.09   | 112                            |
| Antonio Ditch.                              | Conejos river.                            | April 25, 1887         | 250.00   | -----  | 2,189.09   | 113                            |
| Lobato & Cordova Ditch.                     | San Antonio river                         | May 10, 1887           | 8.00   | -----  | 2,439.09   | 114                            |
| Magote Ditch.                               | Conejos river.                            | June 2, 1887           | 342.40   | -----  | 2,447.09   | 115                            |

|   |                         |                |        |          |     |
|---|-------------------------|----------------|--------|----------|-----|
| Florida Ditch                                       | San Antonio river       | Aug. 27, 1886  | 20.80  | 2,789.49 | 116 |
| La Manga Ditch, second enlargement                  | San Antonio river       | Sept. 10, 1886 | 2.00   | 10.00    | 117 |
| Gallegos and Lopez Ditch, first enlargement         | San Antonio river       | Sept. 10, 1886 | 2.50   | 4.00     | 118 |
| North Eastern Ditch, first enlargement              | Conejos river           | Oct. 21, 1886  | 41.25  | 75.96    | 119 |
| Branch Ditch  | Conejos river           | Nov. 1, 1886   | 12.00  | 2,856.04 | 120 |
| East Bend Ditch, fifth enlargement                  | Conejos river           | Nov. 8, 1886   | 4.00   | 34.40    | 121 |
| Taos Valley Canal No. 1                             | Conejos river           | Nov. 28, 1886  | 500.00 | 2,872.04 | 122 |
| Paine Ditch No. 1                                   | Conejos river & springs | Feb. 11, 1888  | 1.50   | 3,372.04 | 123 |
| Paine Ditch No. 2                                   | Conejos river & springs | Feb. 11, 1888  | 4.00   | 3,373.54 | 124 |
| East Bend, sixth enlargement                        | Conejos river & springs | Feb. 28, 1888  | 4.00   | 38.40    | 125 |
| Berkshire Farm Ditch                                | Conejos river           | Mar. 15, 1888  | 12.00  | 3,381.54 | 126 |
| North Eastern Ditch, second enlargement             | Conejos river           | Mar. 20, 1888  | 46.84  | 122.80   | 127 |
| Martinez (on San Antonio), Ditch, first enlargement | San Antonio river       | Mar. 24, 1888  | 26.00  | 39.68    | 128 |
| Servietta Ditch, second enlargement                 | Conejos river           | April 1, 1888  | 4.00   | 39.77    | 129 |
| Carpe & Reeker's Canon Ditch                        | Conejos river           | April 5, 1888  | 16.00  | 3,466.38 | 130 |
| Stover Ditch  | Conejos river           | April 20, 1888 | 2.50   | 3,470.38 | 131 |
| Mogales Valley Ditch                                | Conejos river           | June 30, 1888  | 12.00  | 3,486.38 | 132 |
| Au Con Irrigating Ditch, second enlargement         | Conejos river           | Aug. 18, 1888  | 11.04  | 3,488.88 | 133 |
| Taos Valley Ditch No. 2                             | San Antonio river       | Aug. 25, 1888  | 500.00 | 29.84    | 134 |
| East Bend Ditch, seventh enlargement                | Conejos river           | Aug. 31, 1888  | 4.00   | 43.40    | 135 |
| Jose Bonifacio Romero Ditch, first enlargement      | Conejos river           | Oct. 3, 1888   | 25.00  | 81.97    | 136 |
| Alamo Ditch, first enlargement                      | Conejos river           | Oct. 25, 1888  | 16.00  | 52.00    | 137 |

STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.                          | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| East Bend Ditch, eighth enlargement              | Conejos river                             | Aug. 31, 1889          | 3.00   | 45.40  | 4,056.92   | 138                            |
| Brazos Del Norte Ditch                           | Conejos river                             | Mar. 25, 1889          | 20.00  |  | 4,059.92   | 139                            |
| Le Duc Ditch, first enlargement                  | Conejos river                             | May 1, 1889            | 2.00   | 5.00   | 4,079.92   | 140                            |
| Taos Valley Ditch No. 3                          | San Antonio river                         | May 10, 1889           | 500.00   |  | 4,081.92   | 141                            |
| J. F. Chacon Ditch No. 2, third enlargement      | Conejos river                             | May 15, 1889           | 2.00   | 16.08  | 4,581.92   | 142                            |
| San Juan and San Rafael Ditch, first enlargement | Conejos river                             | July 20, 1889          | 4.00   | 51.76  | 4,583.92   | 143                            |
| Le Duc Ditch, second enlargement                 | Conejos river                             | Aug. 31, 1889          | 1.00   | 6.00   | 4,587.92   | 144                            |
|  |   |                        |  |  | 4,588.92   |                                |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 22, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, A. M. VIGIL, CONEJOS, COLORADO. APPOINTED APRIL  
15, 1887.

| NAME OF DITCH OR CANAL. | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.   |
|-------------------------|---|---|--|---|-----------------------|
| The Peters Ditch .....  | Conejos river .....                             | April 6, 1891                                       | March 1891                                       | 7.00  | ..... Peter Rasmussen |



# STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT No. 22, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                              | Name of stream<br>supplying water<br>therefor. | Name of ditch<br>conveying water<br>thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement of<br>work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.      |
|---|--|--|---|--|---------------------------------------|--------------------------|
| The Enlargement of Cove Lake<br>Reservoir ..... | San Antonio and }<br>Concejos creeks. }        | Toltec canal                                 | Sept. 1, 1892                                       | Feb. 5, 1892                                     | 425,000,000                           | The Toltec Canal Company |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 24, GIVING THE DATE AND ORDER OF PRIORITY AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY THE CLERK OF THE COURT.—COMMISSIONER, A. CHAVEZ, SAN LUIS, COLO. APPOINTED 1890.

| NAME OF DITCH OR CANAL.    | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second priority. | Sum in amount of decrees to each ditch or canal. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|----------------------------|---|------------------------|--|--|--|--------------------------------|
| The San Luis Peoples Ditch | Culebra creek                             | April 10, 1852         | 23.00                                    | —  | —  | 1                              |
| The San Pedro Ditch        | Culebra river                             | April 1852             | 19.50                                    | —  | 23.00  | 2                              |
| The Acequia Madrie Ditch   | Costilla creek                            | 1853                   | 22.50                                    | —  | 42.50  | 3                              |
| The Montez Ditch           | Rito Seco creek                           | Aug. 1853              | 1.00                                     | —  | 65.00  | 4                              |
| The Valjeos Ditch          | Vallejos creek                            | Mar. 1854              | 17.00                                    | —  | 66.00  | 5                              |
| The Manzanaro Ditch        | Costilla creek                            | April 1854             | 23.00                                    | —  | 83.00  | 6                              |
| The Acequiacita Ditch      | Costilla creek                            | April 1855             | 1.00                                     | —  | 106.00   | 7                              |
| The San Acacio Ditch       | Culebra river                             | April 1856             | 46.00                                    | —  | 107.00   | 8                              |
| The Madriles Ditch         | Costilla creek                            | April 1856             | 12.00                                    | —  | 153.00   | 9                              |
| The Chalifa Ditch          | Costilla creek                            | April 1857             | 10.00                                    | —  | 165.00   | 10                             |
| The Cerro Ditch            | Culebra creek                             | Nov. 1857              | 40.00                                    | —  | 175.00   | 11                             |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.          | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|----------------------------------|---|------------------------|--|--|--|--------------------------------|
| The Francisco Sanchez Ditch..... | Culebra creek.....                        | Mar. 1858              | 12.50  |  | 215.00   | 12                             |
| The Mestas Ditch.....            | Vallejos creek.....                       | May 1858               | 4.50   |  | 227.50   | 13                             |
| The San Francisco Ditch.....     | San Francisco creek.....                  | May 1860               | 16.00  |  | 232.00   | 14                             |
| The Trujillo Ditch.....          | Costilla creek.....                       | May 1861               | 1.00   |  | 248.00   | 15                             |
| The Little Rock Ditch.....       | San Francisco creek.....                  | 1873                   | 1.00   |  | 249.00   | 16                             |
| The García Ditch.....            | .....                                     | 1873                   | 1.00   |  | 250.00   | 17                             |
| The Torcido Ditch.....           | .....                                     | 1874                   | 1.00   |  | 251.00   | 18                             |
| The Abando Martin Ditch.....     | Torcido creek.....                        | May 1874               | 3.50   |  | 252.00   | 19                             |
| The Guadalupe Vigri Ditch.....   | Vallejos creek.....                       | May 1880               | 4.00   |  | 255.50   | 20                             |
| The J. M. J. Maez Ditch.....     | Ventero creek.....                        | Mar. 1881              | 1.50   |  | 259.50   | 21                             |
| The Antonio Pando Ditch.....     | Culebra creek.....                        | April 1881             | 1.25   |  | 261.00   | 22                             |
| The Guadalupe Sanchez Ditch..... | Culebra creek.....                        | Nov. 1882              | 3.25   |  | 262.25   | 23                             |
|                                  | .....                                     | .....                  | .....  | .....  | 265.50   | ---                            |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 25, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS ESTABLISHED BY THE DECREE OF COURT, IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY THE CLERK OF THE COURT.

| NAME OF DITCH OR CANAL. | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|-------------------------|---|------------------------|--|--|--|--------------------------------|
| Wells Middle Ditch      | Kerber creek                              | April 1, 1866          | .60  |  |  | 1                              |
| Wells North Ditch       | Kerber creek                              | April 1, 1866          | .40  |  | .60  | 1                              |
| Wells Kerber Ditch      | Kerber creek                              | April 1, 1866          | 2.20   |  | 1.00   | 1                              |
| Dittrich Steele Ditch   | San Luis creek                            | May 1, 1867            | 1.40   |  | 3.20   | 2                              |
| Dittrich Ditch No. 1    | San Luis creek                            | May 1, 1867            | .20  |  | 4.60   | 2                              |
| Dittrich Ditch No. 2    | San Luis creek                            | May 1, 1867            | .20  |  | 4.80   | 2                              |
| Dittrich Ditch No. 3    | San Luis creek                            | May 1, 1867            | 1.00   |  | 5.00   | 2                              |
| Dittrich Ditch No. 4    | San Luis creek                            | May 1, 1867            | .40  |  | 6.00   | 2                              |
| Steele Ditch No. 2      | San Luis creek                            | May 15, 1867           | 1.60   |  | 6.40   | 3                              |
| Hoffman Ditch           | Cotton creek                              | Mar. 15, 1868          | 2.40   |  | 8.00   | 4                              |
| Neidhardt Ditch         | Cotton creek                              | Mar. 15, 1868          | 4.40   |  | 10.40  | 4                              |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.                        | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| Baca Grant No. 4, Irrigating Ditch No. 3.....  | North Crestone arroya                     | June 1, 1869           | 4.00   | -----  | 14.80  | 5                              |
| Baca Grant No. 4, Irrigating Ditch No. 4.....  | South Crestone creek                      | June 1, 1869           | 7.00   | -----  | 18.80  | 5                              |
| Major Creek Ditch.....                         | Major creek                               | Mar. 1, 1870           | 3.90   | -----  | 25.80  | 6                              |
| Neidhardt Ditch, first extension.....          | Cotton creek                              | Mar. 15, 1870          | 1.00   | 5.40   | 29.70  | 7                              |
| Garner Ditch No. 1.....                        | Garner creek                              | April 1, 1870          | 6.40   | -----  | 30.70  | 8                              |
| Cotton Creek Ditch.....                        | Cotton creek                              | May 1, 1870            | 2.90   | -----  | 37.10  | 9                              |
| Beca Grant No. 4, Irrigating Ditch No. 9.....  | Crestone creek                            | May 1, 1870            | 20.00  | -----  | 39.10  | 9                              |
| Baca Grant No. 4, Irrigating Ditch No. 11..... | Crestone creek                            | May 1, 1870            | 9.00   | -----  | 59.10  | 9                              |
| Baca Grant No. 4, Irrigating Ditch No. 12..... | Crestone creek                            | May 1, 1870            | 17.00  | -----  | 68.10  | 9                              |
| Baca Grant No. 4, Irrigating Ditch No. 13..... | Crestone creek                            | May 1, 1870            | 5.40   | -----  | 85.10  | 9                              |
| Wales & Shellabarger Ditch No. 1.....          | Rito Alto                                 | May 1, 1870            | 4.40   | -----  | 90.50  | 9                              |
| Squire's Ditch No. 1.....                      | San Luis creek                            | May 1, 1870            | 4.00   | -----  | 94.90  | 9                              |
| Baca Grant No. 4, Irrigating Ditch No. 5.....  | North Crestone creek                      | May 10, 1870           | 3.20   | -----  | 98.90  | 10                             |
| Baca Grant No. 4, Irrigating Ditch No. 6.....  | North Crestone creek                      | May 10, 1870           | 4.00   | -----  | 102.10   | 10                             |
| Baca Grant No. 4, Irrigating Ditch No. 7.....  | North Crestone creek                      | May 10, 1870           | 4.00   | -----  | 106.10   | 10                             |

|  |                           |              |       |        |    |
|--|---------------------------|--------------|-------|--------|----|
| Baca Grant No. 4, Irrigating Ditch No. 14..... | S. Branch San Isabel cr'k | May 10, 1870 | 3.92  | 110 10 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 15..... | Willow creek              | May 10, 1870 | 29.00 | 114.02 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 16..... | Willow creek              | May 10, 1870 | 26 00 | 143.02 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 17..... | Willow creek              | May 10, 1870 | 11.60 | 169.02 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 18..... | Willow creek              | May 10, 1870 | 2.40  | 180.62 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 19..... | Spanish creek             | May 10, 1870 | 39.80 | 183.02 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 20..... | Spanish creek             | May 10, 1870 | 5.40  | 222.82 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 21..... | Cottonwood creek          | May 10, 1890 | 4.00  | 228.22 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 22..... | Cottonwood creek          | May 10, 1870 | 70.00 | 232 22 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 23..... | Cottonwood creek          | May 10, 1870 | 20.40 | 302.22 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 24..... | Deadman creek             | May 10, 1870 | 10.00 | 322.62 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 25..... | Deadman creek             | May 10, 1870 | 24 00 | 332.62 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 26..... | Deadman creek             | May 10, 1870 | 6.00  | 356.62 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 27..... | Deadman creek             | May 10, 1870 | 2.76  | 362 62 | 10 |
| Baca Grant No. 4, Irrigating Ditch No. 28..... | Deadman creek             | May 10, 1870 | 1.00  | 365.38 | 10 |
| Clayton Ditch "F".....                         | Kerber creek              | May 15, 1870 | .80   | 366.38 | 11 |
| San Isabel Ditch.....                          | San Isabel creek          | June 1, 1870 | 2.80  | 367.18 | 12 |
| The North Ditch.....                           | San Isabel creek          | June 1, 1870 | 1.20  | 369.98 | 12 |
| Baca Grant No. 4, Irrigating Ditch No. 8.....  | South Crestone Arroya     | June 1, 1870 | 3.80  | 371.18 | 12 |
| Wales & Travis Ditch.....                      | Rito Alto creek           | June 1, 1870 | 3.60  | 374.98 | 12 |
| Wales Ditch No. 1.....                         | Rito Alto creek           | June 1, 1870 | 1.00  | 378.58 | 12 |
| Wales Ditch No. 2.....                         | Rio Alto creek            | June 1, 1870 | .80   | 379.58 | 12 |



## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                   | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|-----------------------------------|------------------------|--|--|--|--------------------------------|
| Cotton Creek Ditch, first extension       | Cotton creek                      | June 1, 1870           | 1.60   | 3.60   | 380.38   | 12                             |
| Hoffman Ditch, first extension            | Cotton creek                      | June 15, 1870          | .60  | 3.00   | 381.98   | 13                             |
| Baca Grant No. 40 Irrigating Ditch No. 10 | Crestone creek                    | July 1, 1870           | 22.40  | —  | 382.58   | 14                             |
| Wales & Shellabarger Ditch No. 3          | Rito Alto creek                   | July 1, 1870           | 4.40   | —  | 404.98   | 14                             |
| Schultz-Dittrich Ditch No. 18             | San Luis creek                    | Sept. 1, 1870          | 2.80   | —  | 409.38   | 15                             |
| San Luis Company Ditch                    | San Luis creek                    | Nov. 1, 1870           | 7.29   | —  | 412.18   | 16                             |
| Steele Creek Ditch                        | Steele creek                      | April 1, 1871          | 4.20   | —  | 419.47   | 17                             |
| Hot Spring Creek Ditch                    | Hot Spring creek                  | May 1, 1871            | 3.56   | —  | 423.67   | 18                             |
| Clayton Ditch "E"                         | Cottonwood creek                  | Mar. 25, 1872          | 4.00   | —  | 427.63   | 19                             |
| Clayton Ditch "D"                         | Kerber creek                      | Mar. 25, 1872          | 4.40   | —  | 431.63   | 19                             |
| Petersons Ditch No. 1                     | Wild Cherry creek                 | April 1, 1872          | 3.00   | —  | 436.03   | 20                             |
| Wales Ditch No. 3                         | Rito Alto creek                   | May 1, 1872            | 4.00   | —  | 439.03   | 21                             |
| Neidhardt Ditch, second extension         | Cotton creek                      | May 1, 1872            | 2.20   | 7.60   | 443.03   | 21                             |
| San Isabel Ditch, first extension         | San Isabel creek                  | June 1, 1872           | 2.30   | 5.10   | 445.23   | 22                             |
| Schilling Ditch                           | Spring br'h San Luis c'k          | July 1, 1872           | 2.80   | —  | 447.53   | 23                             |

|  |                      |                |       |       |        |    |
|--|----------------------|----------------|-------|-------|--------|----|
| Cotton Creek Ditch, second extension.....              | Cotton creek.....    | July 10, 1872  | 2.00  | 5.60  | 450.33 | 24 |
| Wales & Shellebarger Ditch No. 2, first extension..... | Rito Alto creek..... | Oct. 1, 1872   | 6.40  | 10.80 | 452.33 | 25 |
| Wales & Shellebarger Ditch No. 1, first extension..... | Rito Alto creek..... | Nov. 1, 1872   | 2.20  | 6.60  | 458.73 | 26 |
| Shellebarger Home Ditch No. 1.....                     | Rito Alto creek..... | Dec. 16, 1872  | 2.40  | ---   | 460.93 | 27 |
| Shellebarger Home Ditch No. 2.....                     | Rito Alto creek..... | Dec. 20, 1872  | 3.00  | ---   | 463.33 | 28 |
| Tobler Ditch.....                                      | San Luis creek.....  | Feb. 15, 1873  | .40   | ---   | 466.33 | 29 |
| H. H. Wales Ditch.....                                 | Rito Alto creek..... | April 1, 1873  | .80   | ---   | 466.73 | 30 |
| Greer Ditch No. 1.....                                 | San Luis creek.....  | April 1, 1873  | 2.80  | ---   | 467.53 | 30 |
| Schultze-Dittrich Ditch, first extension.....          | San Luis creek.....  | April 1, 1873  | 5.40  | 8.20  | 470.33 | 30 |
| Daniels & Fish No. 4 Ditch.....                        | Kerber creek.....    | April 15, 1873 | 2.00  | ---   | 475.73 | 31 |
| Gordon Ditch.....                                      | Cotton creek.....    | May 1, 1873    | 1.40  | ---   | 477.73 | 32 |
| Cotton Creek Ditch, third extension.....               | Cotton creek.....    | May 1, 1873    | 1.80  | 7.40  | 479.13 | 32 |
| Neidhardt Ditch, third extension.....                  | Cotton creek.....    | May 1, 1873    | 2.60  | 10.20 | 480.93 | 32 |
| Kennedy Ditch No. 1.....                               | San Luis creek.....  | May 15, 1873   | 2.00  | ---   | 483.53 | 33 |
| Kennedy Ditch No. 2.....                               | ---                  | May 15, 1873   | 9.80  | ---   | 485.53 | 35 |
| Shellebarger & Eaton Ditch.....                        | ---                  | May 20, 1873   | .50   | ---   | 495.33 | 34 |
| Steele Ditch No. 1.....                                | San Luis creek.....  | June 1, 1873   | 1.00  | ---   | 495.83 | 35 |
| Greer Ditch No. 2.....                                 | San Luis creek.....  | June 1, 1873   | 3.20  | ---   | 496.83 | 35 |
| Steele Ditch No. 2, first extension.....               | San Luis creek.....  | June 1, 1873   | 2.20  | 3.80  | 500.03 | 35 |
| Tobler-Rominger Ditch.....                             | San Luis creek.....  | June 15, 1873  | 10.00 | ---   | 502.23 | 36 |
| San Luis Ditch.....                                    | San Luis creek.....  | July 1, 1873   | 4.00  | ---   | 512.23 | 37 |
| Clayton Old Channel Ditch.....                         | Kerber creek.....    | Aug. 15, 1873  | 2.40  | ---   | 516.23 | 38 |

## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.                    | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated and previously in the district. | Order of priority in district. |
|--|---|------------------------|---|--|--|--------------------------------|
| Wales San Luis Ditch No. 1.....            | San Luis creek.....                       | Sept. 1, 1873.....     | 3.20.....   | -----  | 518.83.....  | 39.....                        |
| Wales San Luis Ditch No. 2.....            | San Luis creek.....                       | Sept. 1, 1873.....     | 1.60.....   | -----  | 521.83.....  | 39.....                        |
| Wales Ditch No. 4.....                     | Rito Alto creek.....                      | Dec. 2, 1873.....      | 1.60.....   | -----  | 523.43.....  | 40.....                        |
| Wales Ditch No. 2, first extension.....    | Rito Alto creek.....                      | Dec. 2, 1873.....      | 1.00.....   | 1.80.....                                    | 525.03.....  | 40.....                        |
| Peterson Ditch No. 1, first extension..... | Wild Cherry creek.....                    | April 1, 1874.....     | 6.50.....   | 9.50.....                                    | 526.03.....  | 41.....                        |
| Hills Ditch No. 1.....                     | Kerber creek.....                         | April 15, 1874.....    | .72.....  | -----  | 532.53.....  | 42.....                        |
| Wales & Travis Ditch, first extension..... | Rito Alto creek.....                      | May 1, 1874.....       | 3.30.....   | 6.90.....                                    | 533.25.....  | 43.....                        |
| Sanchez Ditch.....                         | Cotton creek.....                         | May 15, 1874.....      | .50.....  | -----  | 536.55.....  | 44.....                        |
| Cotton Creek Ditch, fourth extension.....  | Cotton creek.....                         | May 15, 1874.....      | 3.60.....   | 11.00.....                                   | 537.05.....  | 44.....                        |
| The Sanford Ditch.....                     | Rito Alto creek.....                      | June 1, 1874.....      | 2.40.....   | -----  | 540.65.....  | 45.....                        |
| Greer Ditch No. 2.....                     | San Luis creek.....                       | June 1, 1874.....      | 3.20.....   | -----  | 543.05.....  | 45.....                        |
| Hills Ditch No. 2.....                     | Kerber creek.....                         | June 1, 1874.....      | .30.....  | -----  | 546.25.....  | 45.....                        |
| Hills Ditch No. 4.....                     | Kerber creek.....                         | June 1, 1874.....      | .08.....  | -----  | 546.55.....  | 45.....                        |
| San Isabel Ditch, second extension.....    | San Isabel creek.....                     | June 1, 1874.....      | 5.10.....   | 10.20.....                                   | 546.63.....  | 45.....                        |
| North Ditch, first extension.....          | San Isabel creek.....                     | June 1, 1874.....      | 3.60.....   | 4.80.....                                    | 551.73.....  | 45.....                        |

|  |                    |               |       |       |        |    |
|--|--------------------|---------------|-------|-------|--------|----|
| Hills Ditch No. 3.                           | Kerber creek.      | June 10, 1874 | .16   | ----- | 555.33 | 46 |
| Clayton Ditch "A"                            | Kelley creek.      | July 1, 1874  | 2.40  | ----- | 555.49 | 47 |
| Clayton Ditch "B"                            | Kelley creek.      | July 1, 1874  | 4.00  | ----- | 557.89 | 47 |
| San Luis Company Ditch, first extension.     | San Luis creek.    | July 15, 1874 | 5.46  | 12.75 | 561.89 | 48 |
| Garner Ditch No. 2.                          | San Luis creek.    | Aug. 15 1874  | 2.00  | ----- | 567.35 | 49 |
| Hall Ditch No. 1.                            | Kerber creek.      | April 5, 1875 | 5.30  | ----- | 569.35 | 50 |
| Hoffman Ditch No. 2.                         | Major creek.       | May 1, 1875   | .90   | ----- | 574.65 | 51 |
| Spiegel Ditch.                               | San Luis creek.    | May 1, 1875   | 2.25  | ----- | 575.55 | 51 |
| Hice Ditch No. 1.                            | Clover creek.      | May 1, 1875   | 1.50  | ----- | 577.80 | 51 |
| Hice Ditch No. 2.                            | Clover creek.      | May 1, 1875   | 1.20  | ----- | 579.30 | 51 |
| Hice Ditch No. 3.                            | Clover creek.      | May 1, 1875   | 2.00  | ----- | 580.50 | 51 |
| Hice Ditch No. 4.                            | Clover creek.      | May 1, 1875   | .20   | ----- | 582.50 | 51 |
| Hice Ditch No. 5.                            | Clover creek.      | May 1, 1875   | .80   | ----- | 582.70 | 51 |
| Hice Ditch No. 6.                            | San Luis creek.    | May 1, 1875   | .70   | ----- | 583.50 | 51 |
| Hice Ditch No. 7.                            | Gooseberry creek.  | May 1, 1875   | .30   | ----- | 584.20 | 51 |
| Hice Ditch No. 8.                            | San Luis creek.    | May 1, 1875   | .70   | ----- | 584.50 | 51 |
| Peterson Ditch No. 1, second extension.      | Wild Cherry creek. | May 1, 1875   | .70   | 10.50 | 585.20 | 51 |
| Cotton Creek Ditch, fifth extension.         | Cotton creek.      | May 15, 1875  | 6.40  | 17.40 | 585.90 | 52 |
| Hoffman Ditch, second extension.             | Cotton creek.      | Oct. 1, 1875  | .40   | 3.40  | 592.30 | 53 |
| Neidhardt Ditch, fourth extension.           | Cotton creek.      | Oct. 1, 1875  | .20   | 10.40 | 592.70 | 53 |
| Wales San Luis Ditch No. 2, first extension. | San Luis creek.    | Jan. 1, 1876  | 1.60  | 3.20  | 592.90 | 54 |
| Arthur Young.                                | San Luis creek.    | April 1, 1876 | 16.00 | ----- | 594.50 | 55 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                                     | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|-----------------------------------|------------------------|--|--|--|--------------------------------|
| Daniels & Fish Arroya Ditch                                 | Kerber creek                      | Apr. 15, 1876          | 3.20   | ---  | 610.50   | 56                             |
| Daniels & Fish Ditch No. 4, first extension                 | Kerber creek                      | Apr. 15, 1876          | 2.80   | 4.80   | 613.70   | 56                             |
| Allen Ditch No. 1   | Crestone creek                    | May 10, 1876           | 1.60   | ---  | 616.50   | 57                             |
| Baca Grant No. 4, Irrigating Ditch No. 12, first extension  | Crestone creek                    | May 10, 1876           | 11.20  | 28.20  | 618.10   | 57                             |
| B. Clark Ditch  | Alder creek                       | June 1, 1876           | 1.40   | ---  | 629.30   | 58                             |
| Wales San Luis Ditch No. 1, first extension                 | San Luis creek                    | June 1, 1876           | 3.20   | 6.40   | 630.70   | 58                             |
| North Ditch, second extension                               | San Isabel creek                  | June 1, 1876           | 1.50   | 6.30   | 633.90   | 58                             |
| San Isabel Ditch, third extension                           | San Isabel creek                  | June 1, 1876           | 1.50   | 11.70  | 635.40   | 58                             |
| Howard & Hall Ditch   | San Luis creek                    | July 20, 1876          | 1.30   | ---  | 636.90   | 59                             |
| Heukauffer Ditch No. 2                                      | North Crestone creek              | Apr. 1, 1878           | .30  | ---  | 638.20   | 60                             |
| Well Kerber Ditch, first extension                          | ---                               | Apr. 1, 1878           | 2.00   | 4.20   | 638.50   | 60                             |
| Allen Ditch No. 1, first extension                          | ---                               | May 10, 1878           | 1.60   | 3.20   | 640.50   | 61                             |
| Baca Grant No. 4, Irrigating Ditch No. 12, second extension | Crestone creek                    | May 10, 1878           | 3.20   | 31.40  | 642.10   | 61                             |
| Ford Ditch, No. 1   | San Luis creek                    | July 20, 1878          | 1.60   | ---  | 645.30   | 62                             |
| Hills Ditch No. 5   | Kerber creek                      | Sept. 15, 1878         | 2.26   | ---  | 646.90   | 63                             |



|  |  |                     |           |             |    |
|--|--|---------------------|-----------|-------------|----|
| Shewalter Ditch, No. 1.....                                | San Luis creek.....                            | April 25, 1879..... | .70.....  | 649.16..... | 64 |
| Shewalter Ditch, No. 2.....                                | San Luis creek.....                            | April 25, 1879..... | .80.....  | 649.86..... | 64 |
| Ross Ditch.....  | San Luis creek.....                            | June 5, 1879.....   | 4.70..... | 650.66..... | 65 |
| Briley Ditch.....  | Kerber creek.....                              | Oct. 1, 1879.....   | 1.20..... | 655.36..... | 66 |
| Wales and Shellabarger Ditch, No. 2, second extension..... | Rito Alto creek.....                           | Oct. 1, 1879.....   | 6.40..... | 656.56..... | 65 |
| Gash Ditch.....  | North Crestone creek.....                      | Feb. 28, 1880.....  | .60.....  | 662.96..... | 67 |
| Hopkins Ditch.....   | North Crestone creek.....                      | April 1, 1880.....  | .12.....  | 663.56..... | 68 |
| Wales San Luis Ditch, No. 1, second extension.....         | San Luis creek.....                            | April 1, 1880.....  | 2.00..... | 663.68..... | 68 |
| Silver Creek Ditch.....                                    | Silver creek.....                              | April 15, 1880..... | 2.00..... | 665.68..... | 69 |
| Neeland Ditch.....   | Neeland creek.....                             | May 1, 1880.....    | 2.40..... | 667.68..... | 70 |
| Shellabarger Ditch, No. 2.....                             | Rito Alto creek.....                           | May 1, 1880.....    | 4.80..... | 670.08..... | 70 |
| Means Ditch, No. 1.....                                    | Alder creek.....                               | May 1, 1880.....    | .70.....  | 674.88..... | 70 |
| Stump Ditch, No. 1.....                                    | Clover creek.....                              | May 1, 1880.....    | .50.....  | 675.58..... | 70 |
| Stump Ditch, No. 2.....                                    | Clover creek.....                              | May 15, 1880.....   | .12.....  | 676.08..... | 71 |
| Stump Ditch, No. 3.....                                    | Clover creek.....                              | May 15, 1880.....   | .20.....  | 676.20..... | 71 |
| Squires Ditch, No. 2.....                                  | { San Luis-Hot Springs }<br>creek.....         | May 15, 1880.....   | .80.....  | 676.40..... | 71 |
| Allen Ditch.....   | Crestone creek.....                            | July 1, 1880.....   | 1.60..... | 677.20..... | 72 |
| Means Ditch, No. 2.....                                    | San Luis creek.....                            | July 1, 1880.....   | .30.....  | 678.80..... | 72 |
| Schultze-Dittrich Ditch, second extension.....             | San Luis creek.....                            | July 15, 1880.....  | 3.00..... | 679.10..... | 73 |
| Hall Ditch, No. 1, first extension.....                    | Kerber creek.....                              | April 5, 1881.....  | 2.00..... | 682.10..... | 74 |
| McFarland Ditch, "A" and "B".....                          | { Eagle Brook and Int- }<br>terfly creeks..... | April 15, 1881..... | 6.80..... | 684.10..... | 75 |
| Barsch Ditch, No. 1.....                                   | Brook creek.....                               | April 15, 1881..... | 1.60..... | 690.90..... | 75 |



## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|---|--------------------------------|
| Robinson Ditch.....  | Spring creek.....                         | April 15, 1881         | 1.80   | .....  | 692.50  | 75                             |
| Robinson & Reese Ditch.....                                    | Spring creek.....                         | April 15, 1881         | 2.20   | .....  | 694.30  | 75                             |
| Robinson & Reese Irrigating Ditch.....                         | Raspberry creek.....                      | April 15, 1881         | All water in Raspberry c'k.                              | .....  | .....   | 75                             |
| Davison Ditch No. 3.....                                       | Spring creek.....                         | May 1, 1881            | .16  | .....  | 696.50  | 76                             |
| Henry White Ditch.....   | Kerber creek.....                         | May 1, 1881            | 1.00   | .....  | 696.66  | 76                             |
| Clark Ditch, "A".....  | Rock creek.....                           | May 1, 1881            | 4.00   | .....  | 697.66  | 76                             |
| Turner Ditch.....  | Kerber creek.....                         | May 10, 1881           | 1.20   | .....  | 701.66  | 77                             |
| Richard Ditch No. 1.....                                       | West Spring creek.....                    | May 15, 1881           | 1.20   | .....  | 702.86  | 78                             |
| Ridenour Ditch.....  | Spring near Garner c'k.....               | June 1, 1881           | .60  | .....  | 704.06  | 79                             |
| Davison Ditch No. 2.....                                       | Spring creek.....                         | July 1, 1881           | .60  | .....  | 704.66  | 80                             |
| Wells-Kerber Ditch, second extension.....                      | Kerber creek.....                         | April 1, 1882          | 4.00   | 8.20   | 705.26  | 81                             |
| Hall Ditch No. 1, second extension.....                        | Kerber creek.....                         | April 5, 1882          | 2.40   | 9.70   | 709.26  | 82                             |
| Barbary Tobler Ditch.....                                      | Cedar creek.....                          | April 12, 1882         | .80  | .....  | 711.66  | 83                             |
| Baca Grant No. 4 Irrigating Ditch No. 12, third extension..... | Crestone creek.....                       | May 10, 1882           | 3.20   | 34.60  | 712.46  | 84                             |
| Kennedy ditch No. 3.....                                       | San Luis creek.....                       | May 15, 1882           | 1.00   | .....  | 715.66  | 85                             |

|   |                         |                |       |        |    |
|---|-------------------------|----------------|-------|--------|----|
| George C. Travis Ditch                                      | Cedar creek             | June 1, 1882   | .08   | 716.66 | 86 |
| Richard Ditch No. 2   | East Spring creek       | June 1, 1882   | .24   | 716.74 | 86 |
| Clayton Ditch "G"   | Kerber creek            | Aug. 13, 1882  | 2.00  | 716.98 | 87 |
| De Camp Ditch   | San Luis creek          | May 1, 1883    | .60   | 718.98 | 88 |
| Kaufman Ditch   | Kelly creek             | May 10, 1883   | 2.00  | 719.58 | 89 |
| Baca Grant No. 4, Irrigating Ditch No. 12, fourth extension | Crestone creek          | May 10, 1883   | 3.20  | 721.58 | 89 |
| The White Ditch   | Little Kerber creek     | June 1, 1883   | .40   | 724.78 | 90 |
| Baca Grant No. 4, Irrigating Ditch No. 5, first extension   | North Crestone creek    | June 1, 1883   | 2.60  | 725.18 | 90 |
| Wales & Travis Ditch, second extension                      | Rito Alto creek         | June 1, 1883   | 7.50  | 727.78 | 90 |
| Davison Ditch No. 1   | Spring creek            | Aug. 15, 1883  | .80   | 735.28 | 91 |
| Baca Grant No. 4, Irrigating Ditch No. 12, fifth extension  | Crestone creek          | Nov. 15, 1883  | 6.40  | 736.08 | 92 |
| Charles Ditch   | North Crestone creek    | Jan. 1, 1884   | .40   | 742.48 | 93 |
| Wells-Kerber Ditch, third extension                         | Kerber creek            | Feb. 22, 1884  | .80   | 742.88 | 94 |
| Hills Ditch No. 5, first extension                          | Kerber creek            | Feb. 22, 1884  | 1.00  | 743.68 | 94 |
| Peterson Ditch No. 1, third extension                       | Wild Cherry creek       | Feb. 23, 1884  | 4.70  | 744.68 | 95 |
| Malcolm Ditch   | Alder creek             | April 15, 1884 | .70   | 749.38 | 96 |
| Barsch Ditch No. 2  | Brook creek             | April 15, 1884 | 1.60  | 750.08 | 96 |
| Barsch Ditch No. 3  | Brook creek             | April 15, 1884 | 1.60  | 751.68 | 96 |
| Daniels & Fish Arroya Ditch, first extension                | Kerber creek            | April 15, 1884 | 2.80  | 753.28 | 96 |
| Nash Ditch  | San Isabel creek        | April 20, 1884 | 1.50  | 756.08 | 97 |
| Wales & Shellabarger Ditch No. 2, third extension           | Rito Alto creek         | May 15, 1884   | 12.00 | 757.58 | 98 |
| H. C. Ridenour Ditch No. 1                                  | Spring near Major creek | May 25, 1884   | 1.30  | 769.58 | 99 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.              | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water appropriated in district. | Order of priority in district. |
|--------------------------------------|-----------------------------------|------------------------|---|--|---|--------------------------------|
| John De Camp Ditch, "B"              | San Luis creek                    | June 1, 1884           | .60   | .....  | 770.88  | 100                            |
| The Ewing Ditch                      | San Isabel creek                  | June 1, 1884           | 1.90  | .....  | 771.48  | 100                            |
| Clark Ditch, "B"                     | Yankee creek                      | June 15, 1884          | .....   | all water in Yankee crk                      | 773.38  | 101                            |
| Clayton Ditch, "C"                   | Kelly creek                       | June 15, 1884          | 3.60  | .....  | 773.38  | 101                            |
| H. H. Wales Ditch, first extension   | Rito Alto creek                   | Dec. 20, 1884          | 1.60  | 2.40   | 776.98  | 102                            |
| Stump Ditch No. 4                    | Clover creek                      | April 1, 1885          | .20   | .....  | 778.58  | 103                            |
| Clark Ditch, "A," first extension    | Rock creek                        | May 1, 1885            | 3.20  | 7.20   | 778.78  | 104                            |
| Sapp & Braley Ditch                  | San Luis creek                    | May 5, 1885            | 2.80  | .....  | 781.98  | 105                            |
| Stump Ditch                          | Clover creek                      | May 10, 1885           | .20   | .....  | 784.78  | 106                            |
| Prairie Dog Ditch                    | Spring creek                      | May 15, 1885           | .60   | .....  | 784.98  | 107                            |
| Norris Ditch                         | Kerber creek                      | April 15, 1886         | .70   | .....  | 785.58  | 109                            |
| Reese Irrigating Ditch               | Spring creek                      | May 1, 1886            | 2.40  | .....  | 786.28  | 110                            |
| Braley Ditch                         | San Luis creek                    | May 9, 1886            | 1.40  | .....  | 788.68  | 111                            |
| Sapp & Braley Ditch, first extension | San Luis creek                    | May 15, 1886           | .80   | 3.60   | 790.08  | 112                            |

|  |                  |                |       |       |        |     |
|--|------------------|----------------|-------|-------|--------|-----|
| The Sanford Ditch, first extension                         | Rito Alto creek  | June 1, 1886   | 1.80  | 4.20  | 790.88 | 113 |
| San Isabel Ditch, fourth extension                         | San Isabel creek | June 1, 1886   | 3.20  | 14.90 | 792.68 | 113 |
| Jordon Ditch No. 2   | Kerber creek     | April 28, 1887 | .80   | ---   | 795.88 | 114 |
| Wales & Travis Ditch, third extension                      | Rito Alto creek  | May 1, 1887    | 4.46  | 18.86 | 796.68 | 115 |
| Jordon Ditch No. 1   | Kelly creek      | May 12, 1887   | 2.80  | ---   | 801.14 | 116 |
| Wales & Shellabarger Ditch No. 2, fourth extension         | Rito Alto creek  | May 31, 1887   | 6.80  | 36.00 | 803.94 | 117 |
| Alder Creek Ditch  | Alder creek      | June 4, 1887   | 1.50  | ---   | 810.74 | 118 |
| Norris Ditch, first extension                              | Kerber creek     | Aug. 1, 1887   | 2.00  | 2.70  | 812.24 | 119 |
| Wales Ditch No. 3, first extension                         | Rito Alto creek  | Aug. 1, 1887   | 1.50  | 5.50  | 814.24 | 120 |
| North Ditch No. 3, third extension                         | San Isabel creek | Sept. 1, 1887  | 2.60  | 8.90  | 815.74 | 121 |
| H. C. Ridenour Ditch No. 2                                 | Major creek      | April 1, 1888  | 1.30  | ---   | 818.34 | 122 |
| Shellabarger & Eaton Ditch, first extension                | Rito Alto creek  | April 15, 1888 | 2.80  | 3.30  | 819.64 | 123 |
| Frazee Ditch   | San Isabel creek | May 1, 1888    | 4.00  | ---   | 822.44 | 124 |
| Dorcey Ditch No. 1   | Carpenter creek  | May 15, 1888   | .40   | ---   | 826.44 | 125 |
| Dorcey Ditch No. 2   | Carpenter creek  | May 15, 1888   | .40   | ---   | 826.84 | 125 |
| Dorcey Ditch No. 3   | Carpenter creek  | May 15, 1888   | .44   | ---   | 827.24 | 125 |
| Swidensky Ditch  | Gooseberry creek | May 15, 1888   | .60   | ---   | 827.68 | 125 |
| Baca Grant No. 4, Irrigating Ditch No. 9, first extension  | Crestone creek   | June 1, 1888   | 19.00 | 39.00 | 828.28 | 126 |
| Cody Ditch   | Kerber creek     | June 20, 1888  | .30   | ---   | 847.28 | 127 |
| Nash Ditch, first extension                                | San Isabel creek | June 23, 1888  | 3.50  | 5.00  | 847.58 | 128 |
| Baca Grant No. 4, Irrigating Ditch No. 10, first extension | Crestone creek   | July 1, 1888   | 17.00 | 39.40 | 851.08 | 129 |

STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.                                     | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|-----------------------------------|------------------------|--|--|--|--------------------------------|
| Hall Ditch No. 2.   | San Luis creek.                   | Oct. 1, 1888           | 1.60   | -----  | 868.68   | 130                            |
| Carver Ditch.   | Major creek.                      | Mar. 28, 1889          | 1.50   | -----  | 869.68   | 131                            |
| Baca Grant No. 4, Irrigating Ditch No. 24, first extension. | Deadman creek.                    | June 1, 1889           | 29.00  | 39.00  | 871.18   | 132                            |
| Baca Grant No. 4, Irrigating Ditch No. 26, first extension. | Deadman creek.                    | June 15, 1889          | 14.80  | 20.80  | 900.18   | 133                            |
|   | -----                             | -----                  | -----  | -----  | 914.98   | -----                          |



# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 25, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, JOSEPH C. BRALEY, VILLA GROVE, COLO. APPOINTED 1889.

| NAME OF DITCH OR CANAL.                | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon.        | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.  |
|--|---|--|--|--|----------------------|
| The High Line Ditch                    | Black Canon creek                         | Jan. 8, 1891                               | Jan. 5, 1891                                 | 41.02                                      | L. H. Weisbrod       |
| The Extension of Hoffman's Ditch No. 1 | Cotton creek                              | May 21, 1891                               | Claimed for }<br>priorities }<br>Nos. 12-217 | 10.58                                      | Emil Tabler          |
| The Extension of Hoffman's Ditch No. 2 | Cotton creek                              | May 21, 1891                               |  | 10.58                                      | Emil Tabler          |
| The Valdez Ditch                       | Cotton creek                              | June 16, 1891                              | May 7, 1890                                  | 4.20                                       | Jose Valdez          |
| The Casias Ditch                       | Cotton creek                              | June 16, 1891                              | July 8, 1890                                 | 3.27                                       | Mrs. M. Casias       |
| The Candelaria Ditch                   | Cotton creek                              | June 16, 1891                              | May 1888                                     | 3.33                                       | Mannel S. Candelaria |
| The Dimmick Gulch Ditch                | S. San Isabel creek                       | July 28, 1891                              | June 11, 1891                                | 29.25                                      | H. Nash              |
| The Bennett Ditch                      | Cotton creek                              | July 29, 1891                              | June 15, 1886                                | 3.80                                       | James W. Bennett     |
| The Cope Ditch No. 2                   | Cotton creek                              | Aug. 11, 1891                              | June 1890                                    | 6.25                                       | F. L. Cope           |
| The Schopp Bros. Ditch No. 1           | Horn creek                                | Sept. 10, 1891                             | May 15, 1884                                 | 1.33                                       | A. Schopp & Co.      |
| The Schopp Bros. Ditch No. 2           | Warrick creek                             | Sept. 10, 1891                             | Sept. 1, 1884                                | 2.00                                       | A. Schopp & Co.      |
| The Sapp Ditch, "A"                    | Stream and springs                        | Jan. 11, 1892                              | Spring 1888                                  | Not given                                  | James M. Sapp        |
| The Sapp Ditch "B"                     | Stream and springs                        | Jan. 11, 1892                              | Spring 1888                                  | Not given                                  | James M. Sapp        |
| The Collins Ditch                      | Springs                                   | Jan. 23, 1892                              | Oct. 1891                                    | 14.00                                      | Alfred Collins       |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.                      | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.              |
|--|---|--|---------------------------------------|--|----------------------------------|
| The Nash's Home Ditch.....                   | San Isabel creek..                        | Feb. 29, 1892                              | June 9, 1891                          | 3.60                                       | Harrison Nash                    |
| The Arena Ditch.....                         | Sand creek.....                           | Sept. 19, 1892                             | Sep. 12, 1892                         | 80.00                                      | The Medano Land & Cattle Company |
| The Warrouts Ditch.....                      | Cotton creek.....                         | Oct. 6, 1892                               | Spring 1888                           | 3.20                                       | L. A. Warrouts                   |
| The Cotton Creek Ditch.....                  | Cotton creek.....                         | Oct. 6, 1892                               | April 1892                            | 82.20                                      | The Cotton Creek Ditch Company   |
| The Hammond Ditch, }<br>amended statement. } | Medano creek.....                         | Nov. 7, 1892                               | Nov. 9, 1889                          | 143.22                                     | Francis Hammond <i>et al.</i>    |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 26, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION, TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE AS FURNISHED BY THE CLERK OF THE COURT.—COMMISSIONER, RILEY M. EDWARDS, SAGUACHE, COLORADO. APPOINTED, 1889.

| NAME OF DITCH.                   | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|----------------------------------|---|------------------------|--|-------------------------------------|--|--------------------------------|
| Malone-Sullivan Ditch No. 1..... | Saguache creek                            | Apr. 1, 1866           | 5.20   | —                                   | —  | 1                              |
| Heimberger Ditch No. 1           | Saguache creek                            | Apr. 15, 1866          | .30  | —                                   | 5.20   | 2                              |
| Heimberger Ditch No. 2           | Saguache creek                            | Apr. 15, 1866          | .80  | —                                   | 5.50   | 2                              |
| Cato Ditch                       | Saguache creek                            | Apr. 15, 1866          | .42  | —                                   | 6.30   | 2                              |
| Hazard Ditch No. 1               | Saguache creek                            | Apr. 30, 1866          | .20  | —                                   | 6.72   | 3                              |
| Hazard Ditch No. 2               | Saguache creek                            | Apr. 30, 1866          | —  | —                                   | —  | 3                              |
| Malone Ditch.                    | Saguache creek                            | May 15, 1866           | 2.40   | —                                   | 6.92   | 4                              |
| Lawrence Arroya Ditch            | Saguache creek                            | Mar. 7, 1867           | 9.20   | —                                   | 9.32   | 5                              |
| Malone-Sullivan Ditch No. 2      | Saguache creek                            | Apr. 1, 1867           | 1.56   | —                                   | 18.52  | 6                              |
| Lucingen-Sullivan Ditch          | Saguache creek                            | May 1, 1867            | 3.70   | —                                   | 20.08  | 7                              |
| Gothell Ditch No. 1              | Saguache creek                            | May 1, 1867            | 8.80   | —                                   | 23.78  | 7                              |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH.                             | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water decreed to each priority. | Summation of decrees to each ditch. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|--|---|------------------------|---|-------------------------------------|--|--------------------------------|
| Russell Ditch, No. 4.....                  | Saguache creek.....                       | May 23, 1867.....      | 5.60.....                                     | .....                               | 32.58.....   | 8                              |
| Ashley and Profit Ditch.....               | Saguache creek.....                       | April 1, 1868.....     | 8.20.....                                     | .....                               | 38.18.....   | 9                              |
| Profit Company Ditch.....                  | Saguache creek.....                       | April 15, 1868.....    | 1.20.....                                     | .....                               | 46.38.....   | 10                             |
| Fullerton Ditch, No. 1.....                | Saguache creek.....                       | May 1, 1868.....       | 6.00.....                                     | .....                               | 47.58.....   | 11                             |
| Stubbs & Gallago Ditch.....                | Saguache creek.....                       | April 15, 1869.....    | 7.00.....                                     | .....                               | 53.58.....   | 12                             |
| Chaves' Lateral Ditch.....                 | Saguache creek.....                       | May 1, 1869.....       | 4.40.....                                     | .....                               | 60.58.....   | 13                             |
| Russell Company Ditch.....                 | Saguache creek.....                       | May 1, 1869.....       | 6.20.....                                     | .....                               | 64.98.....   | 13                             |
| Spencer Ditch.....                         | Saguache creek.....                       | April 1, 1870.....     | 6.20.....                                     | .....                               | 71.18.....   | 14                             |
| Ford Ditch.....                            | Saguache creek.....                       | April 15, 1870.....    | 3.40.....                                     | .....                               | 77.38.....   | 15                             |
| Mears Ditch, No. 5.....                    | Saguache creek.....                       | April 15, 1870.....    | 1.00.....                                     | .....                               | 80.78.....   | 15                             |
| Mears Ditch, No. 4.....                    | Saguache creek.....                       | May 1, 1870.....       | 2.00.....                                     | .....                               | 81.78.....   | 16                             |
| Profit Company Ditch, first extension..... | Saguache creek.....                       | May 14, 1870.....      | 2.40.....                                     | 3.60.....                           | 83.78.....   | 17                             |
| Ward Highline Ditch.....                   | Saguache creek.....                       | April 15, 1871.....    | 3.70.....                                     | .....                               | 86.18.....   | 18                             |
| Ford Ditch, first extension.....           | Saguache creek.....                       | April 15, 1871.....    | 5.00.....                                     | 8.40.....                           | 89.88.....   | 18                             |
| Mountfield Ditch.....                      | Saguache creek.....                       | April 20, 1871.....    | 2.90.....                                     | .....                               | 94.88.....   | 19                             |

|  |                     |                     |            |             |    |
|--|---------------------|---------------------|------------|-------------|----|
| Brau Bros. Ditch No. 1.....                  | Saguache creek..... | April 25, 1871..... | 4.00.....  | 97.78.....  | 19 |
| Brau Bros. Ditch No. 2.....                  | Saguache creek..... | April 25, 1871..... | 2.00.....  | 101.78..... | 19 |
| Gothelf Ditch No. 3.....                     | Saguache creek..... | May 1, 1871.....    | 3.20.....  | 103.78..... | 20 |
| Gothelf Ditch No. 4.....                     | Saguache creek..... | May 1, 1871.....    | .30.....   | 106.98..... | 20 |
| Manchego Ditch.....                          | Saguache creek..... | May 1, 1871.....    | 2.20.....  | 107.28..... | 20 |
| Hodding Ditch No. 3.....                     | Hodding creek.....  | May 10, 1871.....   | .20.....   | 109.48..... | 21 |
| Hodding Ditch No. 4.....                     | Saguache creek..... | July 2, 1871.....   | 1.20.....  | 109.68..... | 22 |
| Wall Ditch.....                              | Saguache creek..... | Aug. 1, 1871.....   | 11.90..... | 110.88..... | 23 |
| Proffit-McDonough Ditch.....                 | Saguache creek..... | Sept. 1, 1871.....  | 2.20.....  | 122.78..... | 24 |
| Jeep & Scandrett Ditch.....                  | Saguache creek..... | April 1, 1872.....  | 4.00.....  | 124.98..... | 25 |
| Taylor & Ashley Ditch.....                   | Saguache creek..... | April 1, 1872.....  | 4.60.....  | 128.98..... | 25 |
| Morrison Ditch.....                          | Saguache creek..... | April 15, 1872..... | 2.50.....  | 133.58..... | 26 |
| Ford Ditch, second extension.....            | Saguache creek..... | May 1, 1872.....    | 4.00.....  | 136.08..... | 27 |
| Moses Goff Ditch No. 1.....                  | Saguache creek..... | May 1, 1872.....    | 3.00.....  | 140.08..... | 27 |
| Moses Goff Ditch No. 2.....                  | Saguache creek..... | May 1, 1872.....    | 2.60.....  | 143.08..... | 27 |
| Moses Goff Ditch No. 3.....                  | Saguache creek..... | May 1, 1872.....    | 5.60.....  | 145.68..... | 27 |
| Garcia Ditch No. 1.....                      | Saguache creek..... | May 1, 1872.....    | 2.60.....  | 151.28..... | 27 |
| Van Allen Ditch.....                         | Saguache creek..... | May 1, 1872.....    | 1.20.....  | 153.88..... | 27 |
| Houglan Creek Ditch.....                     | Houglan Creek.....  | May 10, 1872.....   | .40.....   | 155.08..... | 28 |
| Proffit Company Ditch, second extension..... | Saguache creek..... | May 14, 1872.....   | 2.40.....  | 155.48..... | 29 |
| Muuro Ditch No. 1.....                       | Saguache creek..... | May 15, 1872.....   | 2.50.....  | 157.88..... | 30 |
| Slane & Scandrett Ditch.....                 | Saguache creek..... | June 1, 1872.....   | 2.40.....  | 160.38..... | 31 |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH.                | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in district. | Order of priority in district. |
|-------------------------------|---|------------------------|--|--|--|--------------------------------|
| Nehls Co. Ditch               | Saguache creek                            | July 1, 1872           | 1.40   | —  | 162.78   | 32                             |
| Roberts Co. Ditch             | Saguache creek                            | July 1, 1872           | 4.50   | —  | 164.18   | 32                             |
| Hartman Bros. Ditch No. 2     | Saguache creek                            | Jan. 1, 1873           | 3.80   | —  | 168.98   | 33                             |
| Mill Ditch                    | Saguache creek                            | Jan. 15, 1873          | 1.00   | —  | 172.78   | 34                             |
| Seitz, McClure & Ashley Ditch | Saguache creek                            | April 15, 1873         | 4.60   | —  | 173.78   | 35                             |
| Hawkins Ditch                 | Saguache creek                            | May 1, 1873            | 4.00   | —  | 178.38   | 36                             |
| George Ball Ditch             | Saguache creek                            | May 1, 1873            | 3.00   | —  | 182.38   | 36                             |
| Gothelf-Somora Ditch          | Saguache creek                            | May 1, 1873            | 1.50   | —  | 185.38   | 36                             |
| Jones' Ditch                  | Saguache creek                            | May 20, 1873           | .38  | —  | 186.88   | 37                             |
| Munro Ditch No. 2             | Saguache creek                            | Nov. 1, 1873           | 2.18   | —  | 187.26   | 38                             |
| Hartman Bros. Ditch No. 3     | Saguache creek                            | Nov. 1, 1873           | 3.20   | —  | 189.44   | 38                             |
| Houglund Ditch                | Saguache creek                            | Nov. 2, 1873           | 3.40   | —  | 192.64   | 39                             |
| Hartman Bros. Ditch No. 4     | Saguache creek                            | Mar. 1, 1874           | 8.48   | —  | 196.04   | 40                             |
| Ellis & Lamb Ditch            | Saguache creek                            | Mar 15, 1874           | 2.80   | —  | 204.52   | 41                             |
| Russell Ditch                 | Saguache creek                            | April 1, 1874          | 5.20   | —  | 207.32   | 42                             |

|   |                     |               |      |        |    |
|---|---------------------|---------------|------|--------|----|
| Jaques Ditch.....                               | Saguache creek..... | Apr. 2, 1874  | 1.80 | 212.52 | 43 |
| Turnbull & Luengen Ditch.....                   | Saguache creek..... | Apr. 15, 1874 | 1.80 | 214.32 | 44 |
| Hern Ditch.....                                 | Saguache creek..... | Apr. 15, 1874 | 1.00 | 216.12 | 44 |
| Carruthers Ditch.....                           | Saguache creek..... | May 1, 1874   | 1.00 | 217.12 | 45 |
| Russell Ditch No. 2.....                        | Saguache creek..... | May 1, 1874   | 3.00 | 218.12 | 45 |
| North Stubbs Irrigating Ditch No. 2.....        | Saguache creek..... | May 10, 1874  | 1.04 | 221.12 | 46 |
| Hartman Bros. Ditch No. 3, first extension..... | Saguache creek..... | June 1, 1874  | 1.60 | 222.16 | 47 |
| Hodding Ditch No. 2.....                        | Hodding creek.....  | June 10, 1874 | .30  | 223.76 | 48 |
| Piquet Ditch No. 7.....                         | Middle creek.....   | June 10, 1874 | 1.60 | 224.06 | 48 |
| Campbell Ditch No. 1.....                       | Saguache creek..... | Sept. 1, 1874 | 4.00 | 225.66 | 49 |
| Campbell Ditch No. 4.....                       | Saguache creek..... | Sept. 1, 1874 | 2.50 | 229.66 | 49 |
| Monk Ditch No. 1.....                           | Saguache creek..... | Apr. 1, 1875  | 8.40 | 232.16 | 50 |
| Campbell Ditch No. 6.....                       | Saguache creek..... | Apr. 1, 1875  | 6.10 | 240.56 | 50 |
| Hartman Bros. Ditch No. 1.....                  | Saguache creek..... | Apr. 1, 1875  | 3.20 | 246.66 | 50 |
| Hartman Bros. Ditch No. 2, first extension..... | Saguache creek..... | Apr. 1, 1875  | 1.80 | 249.86 | 50 |
| Irwin Ditch.....                                | Saguache creek..... | Apr. 10, 1875 | 9.60 | 251.66 | 51 |
| Werner Ditch, "A".....                          | Saguache creek..... | Apr. 15, 1875 | 2.00 | 261.26 | 52 |
| Downer Ditch No. 1.....                         | Saguache creek..... | Apr. 20, 1875 | 2.80 | 263.26 | 53 |
| Piquet Ditch No. 6.....                         | Middle creek.....   | Apr. 25, 1875 | 1.20 | 266.66 | 54 |
| Leanders Ditch No. 1.....                       | Leanders creek..... | May 1, 1875   | 1.00 | 267.26 | 55 |
| Nehls Company Ditch, first extension.....       | Saguache creek..... | May 1, 1875   | 9.52 | 268.26 | 55 |
| Mears Ditch No. 1.....                          | Saguache creek..... | May 1, 1875   | 1.30 | 277.78 | 55 |



## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH.   | Name of stream from which water is taken. | Date of appropriation | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|-----------------------|--|-------------------------------------|--|--------------------------------|
| Mears Ditch No. 2  | Saguache creek                            | May 1, 1875           | 1.50   | —                                   | 279.08   | 55                             |
| Garcia Ditch No. 2   | Saguache creek                            | May 1, 1875           | 1.40   | —                                   | 280.58   | 55                             |
| Hodding Ditch No. 5  | Saguache creek                            | May 5, 1875           | 1.50   | —                                   | 281.98   | 56                             |
| Piquet Ditch No. 1   | Middle creek                              | June 1, 1875          | 1.60   | —                                   | 283.48   | 57                             |
| John Shore Ditch   | Saguache creek                            | June 15, 1875         | 3.20   | —                                   | 285.08   | 58                             |
| Hartman Bros. Ditch No. 3, second extension  | Saguache creek                            | July 1, 1875          | 2.40   | 7.20                                | 288.28   | 59                             |
| Hautman Bros. Ditch No. 4, first extension   | Saguache creek                            | Aug. 1, 1875          | 1.60   | 10.08                               | 290.68   | 60                             |
| John Slane Arroya Ditch  | Saguache creek                            | Aug. 4, 1875          | 2.76   | —                                   | 292.28   | 61                             |
| Middle Ditch   | Saguache creek                            | Aug. 31, 1875         | 1.60   | —                                   | 295.04   | 62                             |
| Piquet Ditch No. 3   | Middle creek                              | Mar. 20, 1876         | .80  | —                                   | 296.64   | 63                             |
| North Ditch  | Saguache creek                            | April 10, 1876        | 3.20   | —                                   | 297.44   | 64                             |
| Ashley & Means' Ditch  | Saguache creek                            | April 10, 1876        | 3.20   | —                                   | 300.64   | 64                             |
| O'Bergfeld & Werner No. 1, O'Bergfeld & Werner No. 2, and Gow & Dick Ditches, merged | Saguache creek                            | April 15, 1876        | 5.60   | —                                   | 303.84   | 65                             |
| Coleman South Ditch  | Saguache creek                            | April 15, 1876        | 2.40   | —                                   | 309.44   | 65                             |

|  |                |      |       |        |    |
|--|----------------|------|-------|--------|----|
| Campbell Ditch, No. 5                        | May 1, 1876    | 1.56 | ---   | 311.84 | 66 |
| John Shore Ditch, first extension            | June 1, 1876   | 1.00 | 4.20  | 313.40 | 67 |
| William Stowe Ditch                          | June 1, 1876   | 1.08 | ---   | 314.40 | 67 |
| Hartman Bros. Ditch, No. 3, third extension  | Aug. 1, 1876   | .80  | 8.00  | 315.48 | 68 |
| Hartman Bros. Ditch, No. 4, second extension | Aug. 1, 1876   | 1.92 | 12.00 | 316.28 | 68 |
| Campbell Ditch No. 2                         | Aug. 1, 1876   | 1.90 | ---   | 318.20 | 68 |
| Shore Ditch                                  | Aug. 1, 1876   | 6.00 | ---   | 320.10 | 68 |
| Hodgson Ditch No. 1                          | Nov. 1, 1876   | 1.60 | ---   | 326.10 | 69 |
| Turnbull & Luengren Ditch, first extension   | April 1, 1877  | 3.60 | 5.40  | 327.70 | 70 |
| Piquet Ditch No. 2                           | April 1, 1877  | 1.60 | ---   | 331.30 | 70 |
| Piquet Ditch No. 5                           | April 1, 1877  | .80  | ---   | 332.90 | 70 |
| Piquet Ditch No. 4                           | April 20, 1877 | 1.00 | ---   | 333.70 | 71 |
| Jones & Benjamin Ditch No. 1                 | May 1, 1877    | 2.40 | ---   | 334.70 | 72 |
| Hartman Bros. Ditch No. 2, second extension  | May 1, 1877    | 7.20 | 12.80 | 337.10 | 72 |
| Hartman Bros. Ditch No. 4, third extension   | May 1, 1877    | 2.40 | 14.40 | 344.30 | 72 |
| John Shore Ditch, second extension           | May 1, 1877    | .80  | 5.00  | 346.70 | 72 |
| John Shane Ditch                             | June 1, 1877   | 1.40 | ---   | 347.50 | 73 |
| Schaller Ditch No. 1                         | June 1, 1877   | 1.00 | ---   | 348.90 | 73 |
| Schaller Ditch No. 2                         | June 1, 1877   | 1.00 | ---   | 349.90 | 73 |
| Jones & Benjamin Ditch No. 2                 | June 1, 1877   | .50  | ---   | 350.90 | 73 |
| Sullivan Ditch                               | June 1, 1877   | 4.80 | ---   | 351.40 | 73 |
| William Stowe Ditch, first extension         | June 15, 1877  | 2.12 | 3.20  | 356.20 | 74 |

## STATEMENT CONCERNING DITCHES.—Continued.

| NANE OF DITCH                               | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| Piquet Ditch No. 10.                        | Ford creek                                | April 15, 1878         | 1.40   | -----  | 358.32   | 75                             |
| Campbell Ditch No. 7.                       | Saguache creek                            | May 1, 1878            | 4.80   | -----  | 359.72   | 76                             |
| Mears Ditch No. 3.                          | Saguache creek                            | May 1, 1878            | .40  | -----  | 364.52   | 76                             |
| Fullerton Ditch No. 2.                      | Saguache creek                            | May 1, 1878            | 1.80   | -----  | 364.92   | 76                             |
| Laughlin Ditch                              | Saguache creek                            | May 10, 1878           | .90  | -----  | 366.72   | 77                             |
| Piquet Ditch No. 9.                         | Ford creek                                | Sept. 1, 1878          | 1.00   | -----  | 367.62   | 78                             |
| Downer Ditch                                | Saguache creek                            | April 30, 1879         | 1.60   | -----  | 368.62   | 79                             |
| Seitz & Benjamin Ditch                      | Saguache creek                            | May 15, 1879           | 1.20   | -----  | 370.22   | 80                             |
| Lenders Ditch No. 2.                        | Lenders creek                             | June 1, 1879           | 1.20   | -----  | 371.42   | 81                             |
| Chase & Peyton Ditch.                       | Saguache creek                            | June 1, 1879           | 5.60   | -----  | 372.62   | 81                             |
| Farrington Ditch No. 1.                     | Saguache creek                            | June 1, 1879           | 1.40   | -----  | 378.22   | 81                             |
| William Stowe Ditch, second extension       | Sugaache creek                            | June 1, 1879           | 3.20   | 6.40   | 379.62   | 81                             |
| Hartman Bros. Ditch No. 4, fourth extension | Saguache creek                            | July 1, 1879           | 6.40   | 20.80  | 382.82   | 82                             |
| Piquet Ditch No. 14.                        | Skelton creek                             | Sept. 20, 1879         | 1.00   | -----  | 386.22   | 83                             |
| Piquet Ditch No. 13.                        | Skelton creek                             | Oct. 1, 1879           | 1.30   | -----  | 390.22   | 84                             |

|  |                     |                    |           |             |         |
|--|---------------------|--------------------|-----------|-------------|---------|
| Piquet Ditch, No. 16.....                            | Skelton creek.....  | Oct. 10, 1879..... | .40.....  | 391.52..... | 85..... |
| Piquet Ditch, No. 17.....                            | Skelton creek.....  | Oct. 20, 1879..... | 1.40..... | 391.92..... | 86..... |
| Piquet Ditch, No. 18.....                            | Skelton creek.....  | Oct. 21, 1879..... | .10.....  | 393.32..... | 87..... |
| Piquet Ditch, No. 19.....                            | Skelton creek.....  | Oct. 30, 1879..... | .70.....  | 393.42..... | 88..... |
| Piquet Ditch, No. 20.....                            | Skelton creek.....  | Nov. 5, 1879.....  | .60.....  | 394.12..... | 89..... |
| Osgood Ditch.....                                    | Saguache creek..... | April 1, 1880..... | 3.00..... | 394.72..... | 90..... |
| Laughlin Ditch, first extension.....                 | Saguache creek..... | May 1, 1880.....   | 1.00..... | 397.72..... | 91..... |
| McCree Ditch.....                                    | Saguache creek..... | May 1, 1880.....   | 2.00..... | 398.72..... | 91..... |
| Lneugen Ditch.....                                   | Saguache creek..... | May 1, 1880.....   | 9.60..... | 400.72..... | 91..... |
| Marshall & Arter Ditch.....                          | Saguache creek..... | June 1, 1880.....  | 2.20..... | 410.32..... | 92..... |
| Elwes Ditch, No. 1.....                              | Saguache creek..... | June 1, 1880.....  | 1.40..... | 412.52..... | 92..... |
| Elwes Ditch, No. 2.....                              | Saguache creek..... | June 1, 1880.....  | 1.00..... | 413.92..... | 92..... |
| Hartman Brothers Ditch, No. 4, fifth extension.....  | Sagurche creek..... | Aug. 15, 1880..... | 3.20..... | 414.92..... | 93..... |
| Monk Ditch, No. 3.....                               | Saguache creek..... | April 1, 1881..... | 2.50..... | 418.12..... | 94..... |
| Russell Ditch, No. 3.....                            | Saguache creek..... | May 1, 1881.....   | .34.....  | 420.62..... | 95..... |
| Monteith Ditch.....                                  | Saguache creek..... | May 15, 1881.....  | 2.80..... | 420.96..... | 96..... |
| Hayes-Monteith Ditch.....                            | Saguache creek..... | May 15, 1881.....  | .80.....  | 423.76..... | 96..... |
| Redmond-Monteith Ditch.....                          | Saguache creek..... | May 15, 1881.....  | 2.40..... | 424.56..... | 96..... |
| Elwes Ditch, No. 3.....                              | Saguache creek..... | June 1, 1881.....  | 1.20..... | 426.96..... | 97..... |
| Hartman Brothers' Ditch, No. 1, first extension..... | Saguache creek..... | June 1, 1881.....  | 1.60..... | 428.16..... | 97..... |
| Piquet Ditch, No. 15.....                            | Skelton creek.....  | Oct. 20, 1881..... | .50.....  | 429.76..... | 98..... |
| Monk Ditch, No. 2.....                               | Saguache creek..... | April 1, 1882..... | 1.50..... | 430.26..... | 99..... |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                 | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| Jepp Ditch.....                         | Hunts Spring creek.....                   | April 15, 1882.....    | 2.40.....  | -----  | 431.76.....  | 100.....                       |
| Piquet Ditch No. 22.....                | Middle creek.....                         | April 15, 1882.....    | .50.....   | -----  | 434.16.....  | 100.....                       |
| Piquet Ditch No. 23.....                | Middle creek.....                         | April 15, 1882.....    | .10.....   | -----  | 434.66.....  | 100.....                       |
| George Ball Ditch, first extension..... | Saguache creek.....                       | May 1, 1882.....       | 3.00.....  | 6.00.....                                    | 434.76.....  | 101.....                       |
| Sullivan Ditch, first extension.....    | Saguache creek.....                       | July 1, 1882.....      | 2.40.....  | 7.20.....                                    | 437.76.....  | 102.....                       |
| Hodgson Ditch No. 2.....                | Saguache creek.....                       | May 1, 1883.....       | 1.20.....  | -----  | 440.16.....  | 103.....                       |
| Holcomb Ditch.....                      | Saguache creek.....                       | May 1, 1883.....       | 4.80.....  | -----  | 441.36.....  | 103.....                       |
| Lawrence Ditch No. 2.....               | Saguache creek.....                       | May 7, 1883.....       | 4.40.....  | -----  | 446.16.....  | 104.....                       |
| Lawrence Ditch No. 3.....               | Saguache creek.....                       | May 7, 1883.....       | 2.40.....  | -----  | 450.56.....  | 104.....                       |
| Piquet Ditch No. 12.....                | Ford creek.....                           | May 25, 1883.....      | .70.....   | -----  | 552.96.....  | 105.....                       |
| Piquet Ditch No. 21.....                | Saguache creek.....                       | May 25, 1883.....      | .70.....   | -----  | 453.66.....  | 105.....                       |
| Piquet Ditch No. 8.....                 | Middle creek.....                         | May 28, 1882.....      | .80.....   | -----  | 454.36.....  | 106.....                       |
| Arroya Ditch.....                       | Saguache creek.....                       | June 1, 1883.....      | 9.20.....  | -----  | 455.16.....  | 107.....                       |
| Piquet Ditch No. 11.....                | Ford creek.....                           | June 1, 1883.....      | .40.....   | -----  | 464.36.....  | 107.....                       |



|  |                |                |       |       |        |     |
|--|----------------|----------------|-------|-------|--------|-----|
| Goodwin Ditch                              | Saguache creek | June 1, 1883   | 1.60  |       | 464.76 | 107 |
| Travis Ditch                               | Saguache creek | Dec. 25, 1883  | 16.00 |       | 466.36 | 108 |
| Travis Ditch No. 2                         | Saguache creek | Dec. 25, 1883  | 4.00  |       | 482.36 | 108 |
| Travis Ditch No. 3                         | Saguache creek | Dec. 25, 1883  | 5.00  |       | 486.36 | 108 |
| Extension Goodaker Ditch                   | Saguache creek | April 1, 1884  | 1.00  |       | 491.36 | 109 |
| Freise Ditch No. 1                         | Saguache creek | April 20, 1884 | 2.00  |       | 492.36 | 110 |
| David Downer Ditch                         | Saguache creek | April 30, 1884 | .30   |       | 494.36 | 111 |
| Marshall & Arter Ditch, first extension    | Saguache creek | May 1, 1884    | 1.40  | 3.60  | 494.66 | 112 |
| Goodwin Ditch, first extension             | Saguache creek | June 1, 1884   | 7.40  | 9.00  | 496.06 | 113 |
| Ford Creek Ditch No. 1                     | Ford creek     | June 15, 1884  | .50   |       | 503.46 | 114 |
| Tuttle Creek Ditch No. 2                   | Tuttle creek   | June 15, 1884  | .30   |       | 503.96 | 114 |
| Baxter Creek Ditch No. 3                   | Baxter creek   | June 15, 1884  | .20   |       | 504.26 | 114 |
| Sleep Creek Ditch                          | Sleep creek    | July 10, 1884  | 3.20  |       | 504.46 | 115 |
| Kirkendall & Rambo Ditch                   | Saguache creek | May 1, 1885    | 1.60  |       | 507.66 | 116 |
| Holcomb Ditch, first extension             | Saguache creek | May 1, 1885    | 5.20  | 10.00 | 509.26 | 116 |
| Harene Ditch No. 1                         | Mill creek     | April 1, 1886  | 2.00  |       | 514.46 | 117 |
| Harene Ditch No. 2                         | Mill creek     | April 1, 1886  | 2.00  |       | 516.46 | 117 |
| Harene Ditch No. 3                         | Mill creek     | April 1, 1886  | 2.00  |       | 518.46 | 117 |
| Turnbull & Luengen Ditch, second extension | Saguache creek | April 1, 1886  | 5.00  | 10.40 | 520.46 | 117 |
| Carter Ditch No. 4                         | Saguache creek | May 1, 1886    | .80   |       | 525.46 | 118 |
| Bulen Ditch No. 1                          | Saguache creek | May 10, 1886   | 2.40  |       | 526.26 | 119 |



## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL. | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|-------------------------|---|------------------------|--|--|--|--------------------------------|
| Bulen Ditch No. 2       | Saguache creek                            | June 1, 1886           | .50  | .....  | 528.66   | 120                            |
| Phillips Ditch No. 1    | Saguache creek                            | Feb. 16, 1887          | 2.40   | .....  | 529.16   | 121                            |
| Phillips Ditch No. 2    | Saguache creek                            | Mar. 6, 1887           | .40  | .....  | 531.56   | 122                            |
| Kirkendall Ditch No. 2  | Saguache creek                            | Mar. 15, 1887          | .80  | .....  | 531.96   | 123                            |
| Fry Ditch               | Saguache creek                            | Mar. 22, 1887          | 1.00   | .....  | 532.76   | 124                            |
| North Houghland Ditch   | Saguache creek                            | Apr. 15, 1887          | .50  | .....  | 533.76   | 125                            |
| Union Ditch             | Saguache creek                            | Apr. 15, 1887          | .50  | .....  | 534.26   | 125                            |
| Ziegler Ditch           | Saguache creek                            | May 1, 1887            | 10.00  | .....  | 534.76   | 126                            |
| Commodore Ditch         | Saguache creek                            | May 1, 1887            | 3.60   | .....  | 544.76   | 126                            |
| Jays Ditch              | Saguache creek                            | May 5, 1887            | 1.00   | .....  | 548.36   | 127                            |
| Friese Ditch No. 2      | Saguache creek                            | June 11, 1887          | 1.00   | .....  | 549.36   | 128                            |
| Uddell & Means Ditch    | Saguache creek                            | June 15, 1887          | 2.00   | .....  | 550.36   | 129                            |
| Hodding Ditch No. 1     | Hodding creek                             | July 1, 1887           | .70  | .....  | 552.36   | 130                            |
| Miely Ditch             | Saguache creek                            | Mar. 1, 1888           | 4.50   | .....  | 553.06   | 131                            |

|  |                      |               |      |       |         |     |
|--|----------------------|---------------|------|-------|---------|-----|
| Sheek Ditch .....                                    | Saguache creek ..... | Mar. 26, 1888 | 1.20 | ----- | 557.56  | 132 |
| Jays Ditch, first extension .....                    | Saguache creek ..... | May 11, 1888  | .80  | 1.80  | 558.76  | 133 |
| Connard Ditch .....                                  | Saguache creek ..... | July 1, 1888  | .40  | ----- | 559.56  | 134 |
| Farrington Ditch No. 2 .....                         | Saguache creek ..... | July 10, 1888 | .40  | ----- | 559.96* | 135 |
| Scitz, McClure & Ashley Ditch, first extension ..... | Saguache creek ..... | Oct. 25, 1888 | 1.40 | 6.00  | 560.36  | 136 |
|  |                      |               |      |       | 561.76  |     |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 27, GIVING THE DATE AND ORDER OF PRIORITY, AND AMOUNT OF EACH APPROPRIATION TOGETHER WITH THE TOTAL AMOUNT OF EACH PRECEDING APPROPRIATION OF DITCHES AND CANALS IN SAID DISTRICT, AS THEY HAVE BEEN ESTABLISHED BY THE DECREE OF THE COURT IN THE SIXTH JUDICIAL DISTRICT, FROM THE CERTIFIED COPY OF THE DECREE, AS FURNISHED BY CLERK OF THE COURT—COMMISSIONER, MARK BIEDELL, LA GARITA, COLO. APPOINTED 1889

| NAME OF DITCH OR CANAL. | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|-------------------------|---|------------------------|--|--|--|--------------------------------|
| La Loma Ditch.....      | Carnero creek.....                        | April 1, 1870          | .26  | -----  | -----  | 1 A                            |
| Madre Ditch.....        | Carnero creek.....                        | April 1870             | 2.21   | -----  | .26  | 2 A                            |
| Angostura Ditch.....    | Carnero creek.....                        | April 1870             | 1.04   | -----  | 2.47   | 3 A                            |
| La Isla Ditch.....      | Carnero creek.....                        | May 1, 1870            | 1.30   | -----  | 3.51   | 4 A                            |
| La Vega Ditch.....      | Carnero creek.....                        | June 1, 1870           | .52  | -----  | 4.81   | 5 A                            |
| Wilson Ditch No. 1..... | Carnero creek.....                        | April 1, 1871          | .52  | -----  | 5.33   | 6 A                            |
| Wilson Ditch No. 2..... | Carnero creek.....                        | April 1, 1871          | .52  | -----  | 5.85   | 7 A                            |
| Wilson Ditch No. 3..... | Carnero creek.....                        | April 1, 1871          | .52  | -----  | 6.37   | 8 A                            |
| La Magoties Ditch.....  | Carnero creek.....                        | June 1, 1871           | 1.82   | -----  | 6.89   | 9 A                            |
| Beaver Ditch.....       | Carnero creek.....                        | April 1872             | 1.30   | -----  | 8.71   | 10 A                           |
| Wilson Ditch No. 4..... | Carnero creek.....                        | Aug. 1872              | 2.60   | -----  | 10.01  | 11 A                           |

|                 | Oct.   | 1872    | .65  | ----- | 12.61 | 12 A |
|-----------------|--------|---------|------|-------|-------|------|
| Carnero creek   | May    | 1, 1874 | .39  | ----- | 13.26 | 13 A |
| Carnero creek   | Aug.   | 1, 1878 | 1.56 | ----- | 13.65 | 14 A |
| Carnero creek   | Oct.   | 1, 1878 | .78  | ----- | 15.21 | 15 A |
| Carnero creek   | Oct.   | 1, 1878 | 1.04 | ----- | 15.99 | 16 A |
| Carnero creek   | May    | 1, 1879 | .39  | ----- | 17.03 | 17 A |
| Carnero creek   | May    | 1, 1879 | .39  | ----- | 17.42 | 18 A |
| Carnero creek   | May    | 1, 1879 | .78  | ----- | 17.81 | 19 A |
| Carnero creek   | June   | 1, 1879 | .65  | ----- | 18.59 | 20 A |
| Carnero creek   | July   | 1, 1879 | .65  | ----- | 19.24 | 21 A |
| Carnero creek   | April  | 1, 1880 | .52  | ----- | 19.89 | 22 A |
| La Garita creek | May    | 1, 1870 | 1.95 | ----- | ----- | 1 B  |
| La Garita creek | April  | 1, 1871 | 1.30 | ----- | 1.95  | 2 B  |
| La Garita creek | May    | 1, 1871 | .78  | ----- | 3.25  | 3 B  |
| La Garita creek | April  | 1, 1872 | .65  | ----- | 4.03  | 4 B  |
| La Garita creek | Spring | 1872    | .65  | ----- | 4.68  | 5 B  |
| La Garita creek | May    | 1, 1872 | 1.04 | ----- | 5.33  | 6 B  |
| La Garita creek | June   | 1, 1873 | .78  | ----- | 6.37  | 7 B  |
| La Garita creek | June   | 1, 1873 | .40  | ----- | 7.15  | 8 B  |
| La Garita creek | June   | 1, 1873 | .40  | ----- | 7.55  | 9 B  |
| La Garita creek | April  | 1, 1874 | 1.04 | ----- | 7.95  | 10 B |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in District. |
|--------------------------|---|------------------------|--|--|--|--------------------------------|
| Middle Ditch.....        | La Garita creek.....                      | June 1, 1874.....      | .52.....   | .....  | 8.99.....  | 11 B                           |
| Home Ditch No. 1.....    | La Garita creek.....                      | Nov. 1874.....         | 1.30.....  | .....  | 9.51.....  | 12 B                           |
| Garcia Ditch.....        | La Garita creek.....                      | May 1875.....          | .52.....   | .....  | 10.51.....   | 13 B                           |
| Biedell Ditch No. 7..... | La Garita creek.....                      | May 1875.....          | .78.....   | .....  | 11.33.....   | 14 B                           |
| Du Bois Ditch.....       | La Garita creek.....                      | June 1875.....         | 1.04.....  | .....  | 12.11.....   | 15 B                           |
| Biedell Ditch No. 4..... | La Garita creek.....                      | May 1877.....          | .78.....   | .....  | 13.15.....   | 16                             |
| Stewart Ditch No. 4..... | La Garita creek.....                      | April 1878.....        | 1.04.....  | .....  | 13.93.....   | 17                             |
| White Ditch No. 1.....   | La Garita creek.....                      | May 1878.....          | 1.30.....  | .....  | 14.97.....   | 18                             |
| McLeod Ditch No. 3.....  | La Garita creek.....                      | 1878.....              | .65.....   | .....  | 16.27.....   | 19                             |
| Curby Ditch No. 1.....   | La Garita creek.....                      | Feb. 1879.....         | .78.....   | .....  | 16.92.....   | 20                             |
| Curby Ditch No. 2.....   | La Garita creek.....                      | Feb. 1879.....         | .78.....   | .....  | 17.70.....   | 21                             |
| Curby Ditch No. 3.....   | La Garita creek.....                      | 1879.....              | .78.....   | .....  | 18.48.....   | 22                             |
| Curby Ditch No. 4.....   | La Garita creek.....                      | Feb. 1880.....         | 1.04.....  | .....  | 19.26.....   | 23                             |
| Curby Ditch No. 5.....   | La Garita creek.....                      | Feb. 1880.....         | 1.04.....  | .....  | 20.30.....   | 24                             |

|                                 |                 |               |      |       |    |
|---------------------------------|-----------------|---------------|------|-------|----|
| McLeod Ditch No. 4              | La Garita creek | April 22, 188 | 1.56 | 21.34 | 25 |
| McLeod Ditch No. 5              | La Garita creek | May 1880      | 1.56 | 22.90 | 26 |
| Schiffer Ditch                  | La Garita creek |               |      |       | 27 |
| Biedell (overflow) Ditch No. 11 | La Garita creek |               |      |       | 28 |
| Biedell Home Ditch              | La Garita creek |               | 2.55 | 24.46 | 29 |
|                                 |                 |               |      | 27.01 |    |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 35, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—NO COMMISSIONER APPOINTED.

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken.            | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.          |
|--------------------------------|--|--|---------------------------------------|--|------------------------------|
| The Beckwith-Martin Ditch..... | { Sangre de Chris-<br>to creek }<br>U'te creek ..... | Feb. 25, 1891                              | Not stated...                         | 24 00                                      | F. L. Beckwith <i>et al.</i> |
| The Sangre Ditch.....          |  | June 26, 1891                              | May 6, 1890                           | 24 00                                      | F. L. Beckwith <i>et al.</i> |
| The McMullan Ditch.....        |  | Aug. 12, 1891                              | Mar. 31, 1874                         | 4 00                                       | Charles McMullan             |

## CHAPTER V.

## IRRIGATION DIVISION NO. 4.

## SAN JUAN DIVISION.

Superintendent, John P. Coston, Durango, Colorado.  
Appointed June 26, 1890.

This Division comprises Water Districts Nos. 29, 30, 31, 32, 33 and 34.

No appointments of Water Commissioners have been made within this Division, except that of Alonzo P. Edmondson, of Mancos, for District No. 34, in 1890.

No reports have been received from the Superintendent for either 1891 or 1892.

The Commissioner for District No. 34 reports for the year 1892, forty-five ditches, with a total length of 103 miles, and carrying an average of 147.5 cubic feet of water per second for about seventy days.

|   |       |
|---|-------|
| Number of acres that can be irrigated therefrom.....                | 7,354 |
| Number of acres of alfalfa irrigated.....                           | 1,620 |
| Number of acres of seeded grasses other than alfalfa irrigated..... | 303   |
| Number of acres of natural grasses irrigated.....                   | 100   |
| Number of acres of other crops irrigated.....                       | 351   |
| Number of acres irrigated by seepage.....                           | 10    |
| <hr/>   |       |
| Total acres irrigated.....  | 2,384 |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 29, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.   | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.                  |
|---|---|---|--|---|--------------------------------------|
| The Colton & Montroy Ditch.....                                     | Mill creek.....                                 | Dec. 8, 1890.....                                   | Oct. 27, 1890.....                               | 3.00.....   | Colton & Montroy.....                |
| The Midland Ditch.....  | Little Navajo c'k.....                          | Jan. 15, 1891.....                                  | Nov. 3, 1890.....                                | 4.00.....   | Joseph Whittaker <i>et al.</i> ..... |
| The Hallett Ditch.....  | Mill creek.....                                 | Jan. 20, 1891.....                                  | April 10, 1885.....                              | 5.00.....   | J. H. Hallett.....                   |
| The Navajo Milling and Irriga-<br>tion Ditch.....                   | Navajo creek.....                               | Jan. 27, 1891.....                                  | April 1886.....                                  | 62.50.....  | V. M. and Henry Harpst.....          |
| The Harpst, Dogget & Price {<br>Ditch.....                          | Navajo creek.....                               | Jan. 28, 1891.....                                  | Oct. 31, 1890.....                               | 6.00.....   | Henry Harpst <i>et al.</i> .....     |
| The Slim Show Ditch.....  | Mill creek.....                                 | Jan. 28, 1891.....                                  | Aug. 1, 1890.....                                | 11.00.....  | Chas. M. Farrar.....                 |
| The Enlargement of Elmer {<br>Ditch and Nolan Enlarge-<br>ment..... | Little Navajo c'k.....                          | Feb. 17, 1891.....                                  | Nov. 6, 1890.....                                | 3.00.....   | Edward McIntire.....                 |
| The Underwood Ditch.....  | Big Navajo creek.....                           | April 25, 1891.....                                 | May 1, 1888.....                                 | 150.00.....   | L. M. Underwood.....                 |
| The Mason Ditch.....  | Lightner creek.....                             | June 1, 1891.....                                   | April 16, 1891.....                              | 1.00.....   | Thomas Mason.....                    |
| The J. R. Scott Ditch.....  | Yellow Jacket c'k.....                          | June 10, 1891.....                                  | May 20, 1886.....                                | 3.00.....   | J. R. Scott.....                     |
| The Taylor Ditch.....   | Valecito river.....                             | June 10, 1891.....                                  | May 15, 1881.....                                | 7.00.....   | Cora W. Taylor.....                  |
| The Mann & Hall Ditch.....  | Stal Steiner creek.....                         | June 10, 1891.....                                  | April 13, 1891.....                              | 4.00.....   | Enoch Mann <i>et al.</i> .....       |
| The Frederick Lupke Ditch.....                                      | Four springs.....                               | June 17, 1891.....                                  | Nov. 1, 1887.....                                | 3.00.....   | Frederick Lupke.....                 |

|  |                |               |       |                                  |
|--|----------------|---------------|-------|----------------------------------|
| The High Line Ditch .....  | Sept. 15, 1891 | July 1, 1891  | 6.00  | Charles F. Crame .....           |
| The Voorhees Enlargement of<br>the Nolan Enlargement and of<br>McIntire Enlargement of the<br>Elmer Ditch..... | Sept. 15, 1891 | June 13, 1891 | 3.00  | Mrs. M. J. Voorhees .....        |
| The Linn & Clark Ditch .....   | Sept. 15, 1891 | July 17, 1891 | 8.00  | John A. Linn <i>et al.</i> ..... |
| The Underwood Mill and Irri-<br>gating Ditch.....  | Dec. 28, 1891  | Oct. 12, 1891 | 72.00 | Wm. Underwood .....              |
| Little Navajo creek .....  |                |               |       |                                  |
| Little Navajo creek .....  |                |               |       |                                  |
| Dutton creek .....   |                |               |       |                                  |
| Navajo creek .....   |                |               |       |                                  |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 30, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS. |
|--------------------------------|---|--|---------------------------------------|--|---------------------|
| The Thompson Irrigating Ditch. | Fall creek                                | Oct. 21, 1891                              | June 1, 1884                          | 1.00                                       | Samuel H. Thompson  |
| The Water Witch Ditch          | Junction creek                            | Dec. 9, 1891                               | May 5, 1882                           | 1.00                                       | T. E. Peterson      |
| The Duffield Ditch             | Springs                                   | Dec. 26, 1891                              | June 15, 1886                         | 3.00                                       | Robert A. Duffield  |
| The Crystal Springs Pipe Line. | Spring and Deer                           | Feb. 17, 1892                              | Jan. 28, 1892                         | 2.25                                       | Wm. H. C. Folsom    |
| The Spring Creek Feeder        | Spring creek                              | Feb. 17, 1892                              | Jan. 28, 1892                         | 1.125                                      | Wm. H. C. Folsom    |
| The Deer Creek Feeder          | Deer creek                                | Feb. 17, 1892                              | Jan. 28, 1892                         | 1.125                                      | Wm. H. C. Folsom    |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 31, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL. | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS. |
|-------------------------|---|--|---------------------------------------|--|---------------------|
| The Techan Ditch.....   | Dry creek.....                            | May 12, 1892                               | April 21, 1892                        | 2.00                                       | .....John Techan    |
| The Beaver Ditch.....   | Beaver creek.....                         | July 5, 1892                               | April 20, 1884                        | 1.25                                       | .....L. R. Lange    |
| The Lange Ditch.....    | Macks creek.....                          | July 5, 1892                               | April 4, 1890                         | 1.25                                       | .....L. R. Lange    |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 32, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.     | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed<br>in cubic<br>feet per<br>second. | NAMES OF CLAIMANTS.                  |
|-----------------------------|---|---|--|--|--------------------------------------|
| The Ute Ditch.....          | Pine creek.....                                 | Dec. 28, 1891                                       | Feb. 28, 1891                                    | 5.50   | .....John Y. Carpenter <i>et al.</i> |
| The Battle Creek Ditch..... | McElmo creek.....                               | Dec. 28, 1891                                       | Jan. 26, 1891                                    | 8.00   | .....M. G. Carpenter <i>et al.</i>   |
| The El Primo Ditch.....     | McElmo creek.....                               | Mar. 28, 1892                                       | June 1, 1887                                     | 9.00   | .....John S. Wilson                  |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 34, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.       | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.                |
|-------------------------------|---|---|--|---|------------------------------------|
| The French & Hamby Ditch      | Springs   | Mar. 3, 1892  | May 1, 1890                                      | 30.00   | John Hamby <i>et al.</i>           |
| The Extension of Sheek Ditch  | Rio Mancos                                      | April 22, 1892                                      | May 1, 1889                                      | 4.00  | Joseph S. Sheek                    |
| The Reservoir Extension Ditch | Rio Mancos                                      | June 30, 1892                                       | Aug. 9, 1891                                     | 30.00   | Richard Wetherill                  |
| The Long Park Ditch           | Middle Mancos c'k                               | June 30, 1892                                       | Sep. 16, 1888                                    | 5.00  | J. Martin Rush, Jr., <i>et al.</i> |
| The Webber Ditch No. 2        | Rio Mancos                                      | June 30, 1892                                       | May 7, 1889                                      | 33.00   | John Perkins <i>et al.</i>         |

## CHAPTER VI.

## IRRIGATION DIVISION NO. 5.

## GRAND RIVER DIVISION.

E. B. Sawyer, Superintendent of Irrigation. Residence, Montrose, Colorado.

Mr. Sawyer not having favored this office with any detailed report of the transactions of his department, it is assumed the water supply has been such that few controversies have arisen calling for his services. There are nineteen water districts embraced in this division, ten of which are without Commissioners. Of the nine Commissioners in the service, six have furnished statistical statements for 1892, two for 1891, and one, D. F. Webster, of District 39, has failed to report. It may be said for Mr. Webster that his appointment only dates from July 13, 1892, after the season was well advanced, and doubtless the data for a statement were not at his command.

The tabulated statistical summary of eight districts herewith given, shows the distribution of water through 469 ditches, having an aggregate length of 1,414.75 miles, and covering 221,109 acres of land, of which area 111,552 acres, or about one-half, have been irrigated.

District No. 41, comprising the Uncompahgre Valley, in Montrose County, gives a total area irrigated of 53,418 acres, or nearly one-half of the entire acreage reported in the division, and an increase of 36,636 acres over the year 1890. This district also makes a showing of 2,197 acres in orchards, exceeding one half of the total area concerning which statements are made.

District No. 42, embracing a large portion of Mesa County, has a total area irrigated of 19,830 acres; in orchards, 1,843 acres.

District No. 40, embracing Delta County, to whose enterprising citizens frequent awards of premiums have been made for the best and largest display of apples, grapes and stoned fruits at the various horticultural fairs, has no statement of orchard acreage, but shows an increase of 6,861 acres in total area irrigated as compared with 1890.

The statement for District No. 61 includes the statistics of the canal system of "The Colorado Consolidated Land and Water Company," covering the Montezuma Valley, furnished the Water Commissioner, by S. W. Carpenter, General Manager, which are as follows, to wit:

|   |        |
|---|--------|
| Length of canals and laterals in miles.....         | 100    |
| Number of days water was carried.....               | 190    |
| Average amount of water carried in second feet..... | 100    |
| Number of acres that can be irrigated.....          | 75,000 |
| Acreage irrigated in 1892—                          |        |
| Wheat.....  | 1,200  |
| Oats.....   | 900    |
| Corn.....   | 800    |
| Sorghum.....  | 50     |
| Potatoes.....                                       | 200    |
| Alfalfa.....  | 900    |
| Timothy.....  | 125    |
| Wild Hay.....                                       | 150    |
| Orchard.....  | 75     |
| Miscellaneous.....                                  | 100    |
| <hr/>   |        |
| Total acres.....                                    | 5,400  |

It is a pleasure to note the above developments in the charming valley of the Montezuma. With an elaborate canal system, an abundance of water, fertile soils with gentle slopes, an equable climate and picturesque surroundings, its 75,000 acres of arable lands under ditch should meet with rapid settlement, and largely increased cultivation in the near future.

## IRRIGATION STATISTICS OF DIVISION NO. 5,

CONDENSED FROM THE REPORTS OF THE SEVERAL WATER COMMISSIONERS FOR THE YEARS 1891 AND 1892, SHOWING A FAIR AVERAGE FOR THOSE TWO YEARS.

| NO. OF DISTRICT. | Report of | Number of ditches reported. | Total length as reported. | Average amount of water carried during the season in cubic feet per second of time. | Number of acres that can be irrigated. | Number of acres of alfalfa irrigated. | Number of acres of seeded grasses other than alfalfa irrigated. | Number of acres of natural grasses irrigated. | Number of acres of other crops irrigated. | Number of acres of orchard irrigated. | Number of acres irrigated by seepage. | Number of acres irrigated from reservoirs. | Total number of acres irrigated. |
|------------------|-----------|-----------------------------|---------------------------|---|--|---------------------------------------|---|---|---|---------------------------------------|---------------------------------------|--|----------------------------------|
| 28*              |           |                             |                           |   |  |                                       |   |   |   |                                       |                                       |  |                                  |
| 36*              |           |                             |                           |   |  |                                       |   |   |   |                                       |                                       |  |                                  |
| 37               | 1892      | 8                           | 21.75                     | 81.00   | 2,860                                  | 380                                   | 230   | 80  | 1,720                                     |                                       |                                       |  | 2,410                            |
| 38               | 1892      | 111                         | 184.02                    | 1,782.00  | 17,261                                 | 2,309                                 | 1,706   | 1,766   | 3,483                                     | 141                                   |                                       |  | 9,405                            |
| 39†              |           |                             |                           |   |  |                                       |   |   |   |                                       |                                       |  |                                  |
| 40               | 1891      | 71                          | 297.00                    | 214.75  | 26,305                                 | 5,439                                 | 1,467   | 681   | 3,613                                     |                                       | 30                                    |  | 11,230                           |
| 41               | 1892      | 64                          | 374.50                    | 588.38  | 85,282                                 | 13,899                                | 931   | 1,005   | 35,386                                    | 2,197                                 |                                       |  | 53,418                           |
| 42               | 1892      | 110                         | 260.04                    |   |  | 6,823                                 | 295   | 5,381   | 5,488                                     | 1,843                                 |                                       |  | 19,830                           |
| 45               | 1891      | 10                          | 89.00                     | 30.60   |  | 1,665                                 |   | 1,087   | 1,884                                     |                                       |                                       |  | 4,636                            |

[illegible]

\*Water rights not adjudicated. No Commissioner yet. †Commissioner appointed July 13, 1892. No report received.



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 28, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.           | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.           |
|-----------------------------------|---|--|---------------------------------------|--|-------------------------------|
| The Pitkin Town Ditch No. 1.      | Quartz creek.                             | Feb. 2, 1891                               | July 19, 1880                         | 7.45                                       | The Town of Pitkin            |
| The Pitkin Town Ditch No. 2.      | Quartz creek.                             | Feb. 2, 1891                               | Nov. 22, 1890                         | 3.50                                       | The Town of Pitkin            |
| The D. W. Biebel Ditch No. 1.     | Tomichi creek.                            | Mar. 2, 1891                               | Oct. 30, 1890                         | 80.00                                      | D. W. Biebel                  |
| The D. W. Biebel Ditch No. 2.     | Tomichi creek.                            | Mar. 2, 1891                               | Oct. 30, 1890                         | 10.00                                      | D. W. Biebel                  |
| The D. W. Biebel Ditch No. 3.     | Not stated.                               | Mar. 2, 1891                               | Oct. 30, 1890                         | 10.00                                      | D. W. Biebel                  |
| The Chapman Willard Ditch.        | Hot Springs creek                         | June 29, 1891                              | May 13, 1890                          | 4.80                                       | John B. Chapman <i>et al.</i> |
| The Tarkington Irrigating Ditch   | Quartz creek.                             | July 29, 1891                              | May 10, 1891                          | 9.00                                       | Daniel M. Tarkington          |
| The McLeod Ditch.                 | Tomichi creek.                            | July 15, 1891                              | June 12, 1891                         | 18.00                                      | Alexander T. McLeod           |
| The McLeod-Davis Gulch Ditch      | Davis gulch.                              | July 15, 1891                              | June 12, 1891                         | 18.00                                      | Alexander T. McLeod           |
| The Logan Eastside Ditch.         | Tomichi creek.                            | July 15, 1891                              | June 10, 1891                         | 11.00                                      | J. Q. Logan                   |
| The Logan Westside Ditch.         | Tomichi creek.                            | July 15, 1891                              | Sep. 10, 1889                         | 11.00                                      | J. Q. Logan                   |
| The Star Ditch.                   | Marshall creek.                           | July 15, 1881                              | May 15, 1891                          | 18.00                                      | Starr Nelson                  |
| The Nelson Ditch.                 | Marshall creek.                           | July 15, 1891                              | May 15, 1891                          | 18.00                                      | Starr Nelson                  |
| The Razor Creek Ditch.            | Razor creek.                              | July 15, 1891                              | May 25, 1879                          | 11.50                                      | Samuel Parrott                |
| The Prosser Irrigat'g Ditch No. 1 | Razor creek.                              | July 15, 1891                              | Aug. 1, 1870                          | 18.00                                      | W. R. Prosser                 |

|                                      |                                      |               |                |       |                             |
|--------------------------------------|--------------------------------------|---------------|----------------|-------|-----------------------------|
| The Prosser Irrigating Ditch No. 2   | Razor creek                          | July 15, 1891 | Aug. 1, 1870   | 18.00 | W. R. Prosser               |
| The Prosser Irrigating Ditch No. 3   | Razor creek                          | July 15, 1891 | Aug. 1, 1870   | 18.00 | W. R. Prosser               |
| The Prosser Irrigating Ditch No. 4   | Razor creek                          | July 15, 1891 | Aug. 1, 1870   | 18.00 | W. R. Prosser               |
| The Cane Irrigating Ditch            | Tomichi creek                        | Aug. 4, 1891  | May 10, 1882   | 9.00  | Wilson Moore <i>et al.</i>  |
| The Borsum Ditch                     | Tomichi creek                        | Aug. 4, 1891  | May 10, 1882   | 9.00  | Wilson Moore <i>et al.</i>  |
| The Elmer E. Doyle Irrigating Ditch  | Little Doyle creek                   | Aug. 4, 1891  | May 10, 1889   | 9.00  | Elmer E. Doyle              |
| The White East Side Ditch            | Pitkin gulch                         | Aug. 4, 1891  | May 10, 1886   | 11.00 | William D. White            |
| The White West Side Ditch            | Pitkin gulch                         | Aug. 4, 1891  | May 10, 1886   | 11.00 | William D. White            |
| The Gooseberry Mesa Irrigating Ditch | Ohio creek                           | Aug. 4, 1891  | Dec. 14, 1886  | 6.50  | John M. Allen <i>et al.</i> |
| The Slough Ditch                     | { Slough and part }<br>Tomichi creek | Aug. 4, 1891  | Aug. 1, 1892   | 9.00  | Levi Lewis Bush             |
| The McGlashan North Side Mill Creek  | Mill creek                           | Aug. 4, 1891  | Oct. 1, 1883   | 44.00 | J. S. McGlashan             |
| The McGlashan South Side Ditch       | Mill creek                           | Aug. 4, 1891  | Oct. 1, 1883   | 44.00 | J. S. McGlashan             |
| The McGlashan East Side Ohio Creek   | Ohio creek                           | Aug. 4, 1891  | Oct. 1, 1883   | 44.00 | J. S. McGlashan             |
| The McGlashan West Side Ditch        | Ohio creek                           | Aug. 4, 1891  | Oct. 1, 1883   | 44.00 | J. S. McGlashan             |
| The Goodman Ditch                    | { Tributary of To- }<br>michi creek  | Aug. 4, 1891  | June 16, 1891  | 9.00  | Thomas P. Goodman           |
| The Wilson Ohio Creek Ditch          | Ohio creek                           | Aug. 4, 1891  | May 10, 1891   | 22.00 | Joseph W. Wilson            |
| The Flick Irrigating Ditch No. 1     | Quartz creek                         | Oct. 13, 1891 | June 15, 1883  | 9.00  | John M. Flick               |
| The Flick Irrigating Ditch No. 2     | Quartz creek                         | Oct. 13, 1891 | June 15, 1883  | 9.00  | John M. Flick               |
| The Vernay Ditch                     | Tomichi creek                        | Nov. 14, 1891 | Oct. 15, 1890  | 15.00 | Peter Vernay                |
| The Frank Adams Ditch No. 1          | Gunnison river                       | Dec. 7, 1891  | Sept. 1877     | 80.70 | Frank Adams <i>et al.</i>   |
| The Jennings South Ditch             | Tomichi creek                        | Dec. 7, 1891  | Sept. 16, 1891 | 10.00 | J. W. Jennings              |
| The Morton Hot Springs Ditch         | Hot Springs creek                    | Dec. 19, 1891 | June 1, 1878   | 5.00  | Henry J. Morton             |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                            | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.            |
|--|---|--|---------------------------------------|--|--------------------------------|
| The Mortons & Coates Tomichi }<br>Creek Ditch..... | Tomichi creek                             | Dec. 19, 1891                              | July 1, 1879                          | 8.00                                       | Henry J. Morton                |
| The Outcalt Ditch.....                             | Tomichi creek                             | Feb. 18, 1892                              | May 15, 1879                          | 16.93                                      | W. W. Outcalt <i>et al.</i>    |
| The Cutjo Ditch.....                               | Quartz creek                              | Mar. 3, 1892                               | June 15, 1883                         | 31.12                                      | J. W. Long <i>et al.</i>       |
| The McConnell Irrigating Ditch.                    | Quartz creek                              | Mar. 9, 1892                               | May 1, 1888                           | 18.00                                      | William Reed <i>et al.</i>     |
| The G. B. H. Ditch.....                            | Tomichi creek                             | Mar. 24, 1892                              | April, 1889                           | Not given                                  | G. Gilbertson <i>et al.</i>    |
| The Cabin Creek Ditch.....                         | Cabin creek                               | May 5, 1892                                | 1878                                  | 14.00                                      | J. W. Jennings                 |
| The Jennings & Elson Ditch....                     | Tomichi creek                             | May 5, 1892                                | 1885                                  | 18.00                                      | J. W. Jennings and J. P. Elson |
| The Stephenson Ditch.....                          | Tomichi creek                             | June 2, 1892                               | May 1, 1878                           | 10.70                                      | E. Stephenson                  |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 37, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, A. L. FERGUSON GYPSUM. APPOINTED 1889.

| NAME OF DITCH OR CANAL.                       | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.   |
|---|---|--|---------------------------------------|--|---|
| The Graham Ditch.....                         | Willow creek.....                         | Dec. 17, 1890                              | May 1, 1890                           | 5.00                                       | M. E. Graham  |
| The Graham Ditch.....                         | Eagle river.....                          | Dec. 17, 1890                              | June 1, 1889                          | 7.00                                       | M. E. Graham  |
| The Stremme & Gates Ditch.....                | Eagle river.....                          | Mar. 9, 1891                               | Nov. 1, 1888                          | 10.50                                      | John Stremme and J. T. Gates  |
| The Smalley Ditch.....                        | Cottonwood creek.....                     | Sept. 7, 1891                              | April 15, 1888                        | 2.00                                       | T. J. Anderson  |
| The Mesa Ditch.....                           | Brush creek.....                          | Sept. 7, 1891                              | May 1, 1891                           | 18.00                                      | { The Cresive Land & Cattle Company (enlargement of the C. M. White Ditch). |
| The Stremme & Gates Ditch, { enlargement..... | Eagle river.....                          | Oct. 12, 1891                              | Sept. 14, 1891                        | 10.00                                      | { The Cresive Land & Cattle Company (enlargement of the C. M. White Ditch). |
| The Doggett & Parker Ditch.....               | Gypsum creek.....                         | Dec. 15, 1891                              | 1888                                  | 18.00                                      | Edward Slaughter, <i>et al.</i> , (enlargement)                             |
| The Flenner & McBrayer Ditch.....             | Gypsum creek.....                         | Dec. 15, 1891                              | 1882                                  | 6.00                                       | Edward Slaughter, <i>et al.</i> , (enlargement)                             |
| The High Line Ditch.....                      | East Lake creek.....                      | Jan. 5, 1892                               | Nov. 25, 1890                         | 2.00                                       | Isaac W. Porter   |
| The Peter Nelson Ditch.....                   | Grouse creek.....                         | Jan. 8, 1892                               | Sept. 10, 1889                        | 6.00                                       | Peer Nelson   |
| The Hawley & Rees Ditch.....                  | W. fork Lake creek.....                   | Feb. 8, 1892                               | May 1, 1890                           | 5.33                                       | Theodore A. Hawley and David W. Rees  |
| The Pando Ditch.....                          | Voder creek.....                          | Mar. 18, 1892                              | May 15, 1890                          | 2.00                                       | F. S. Yoder   |
| The Grizzly Ditch.....                        | Grizzly creek.....                        | Aug. 10, 1892                              | Aug. 4, 1892                          | 9.25                                       | Frank M. Moorehead  |
| The Booco Ditch.....                          | Alkali creek.....                         | Nov. 23, 1892                              | May 20, 1890                          | 2.00                                       | Thomas N. Evans   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 38, SHOWING MODIFICATIONS IN THE DECREES IN SAID DISTRICT, PREPARED FROM CERTIFIED COPIES FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL                          | Stream from which water is taken. | Date of appropriation | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|-----------------------------------|-----------------------|--|--|--|--------------------------------|
| The Waco Ditch.....                             | Woody creek.....                  | June 18, 1880         | 4.00   | .....  | .....  | 1                              |
| The Prince Ditch.....                           | Antler creek.....                 | April 1, 1881         | 2.60   | .....  | 9.60   | 6                              |
| The Light Ditch.....                            | East Sopris creek.....            | May 15, 1881          | 3.00   | .....  | 24.50  | 10 A                           |
| The Pioneer Ditch.....                          | Thompson creek.....               | Oct. 15, 1881         | .70  | .....  | 35.80  | 18 A                           |
| The Hardwick Ditch.....                         | Hardwick gulch.....               | Mar. 5, 1882          | 1.30   | .....  | 41.90  | 21 A                           |
| The Kendall & Stricklett Ditch.....             | A spring.....                     | May 15, 1882          | .10  | .....  | 58.40  | 28 A                           |
| The Landis No. 1 Ditch.....                     | Landis creek.....                 | June 1, 1882          | 1.60   | .....  | 75.70  | 36 A                           |
| The Landis No. 2. Ditch.....                    | Landis creek.....                 | June 1, 1882          | 1.60   | .....  | 77.30  | 36 B                           |
| The Barger Ditch.....                           | Cattle creek.....                 | June 13, 1882         | .50  | .....  | 79.70  | 37 A                           |
| The O. K. Ditch.....                            | Landis creek.....                 | May 1, 1884           | 1.20   | .....  | 195.50   | 91 A                           |
| The Collins Creek Ditch, first enlargement..... | Collins creek.....                | June 29, 1884         | 1.30   | 3.00   | 203.20   | 97 A                           |
| The Ralston No. 1 Ditch.....                    | Coulter creek.....                | Oct. 1, 1884          | 1.00   | .....  | 213.60   | 194 A                          |
| The Buck Farm Ditch.....                        | Four Mile creek.....              | Oct. 15, 1884         | 2.40   | .....  | 214.60   | 194 B                          |



|   |                        |                |       |                        |        |       |
|---|------------------------|----------------|-------|------------------------|--------|-------|
| The Waco Ditch, first enlargement                 | Woody creek            | Nov. 12, 1884  | 5.75  | 9.75                   | 217.00 | 105   |
| The Forker & Gibson Ditch                         | Landis creek           | April 30, 1885 | 5.50  | -----                  | 254.55 | 117 A |
| The Buffalo Ditch                                 | West Fork Sopris creek | June 5, 1885   | .50   | -----                  | 266.15 | 123 A |
| The Keeton and Emerson Ditch                      | Mesa creek             | June 15, 1885  | 1.20  | -----                  | 271.65 | 124 A |
| The Waddell Ditch                                 | Sunshine creek         | Sept. 15, 1885 | .60   | -----                  | 311.35 | 133 A |
| The Frank Chapman Ditch                           | Landis creek           | April 25, 1886 | 2.00  | -----                  | 342.65 | 143 A |
| The Waco Ditch, second enlargement                | Woody creek            | May 1, 1886    | 1.80  | This priority cancel'd | -----  | 145   |
| The Collins Creek Ditch, second enlargement       | Collins creek          | May 15, 1886   | .30   | 3.30                   | 351.65 | 148 A |
| The Lignite Ditch                                 | Four Mile creek        | May 15, 1886   | 2.40  | -----                  | 352.45 | 149 A |
| The Collins Creek Ditch, extension to Woody Creek | Woody creek            | Aug 14, 1886   | 3.30* | -----                  | 381.65 | 161 A |
| The Waters Ditch                                  | Chippewee run          | Mar. 15, 1887  | .70   | -----                  | 405.05 | 167 A |
| The Lignite Ditch, first enlargement              | Four Mile creek        | June 1, 1887   | .60   | 3.00                   | 445.95 | 179 A |
| The McKown Ditch                                  | Four Mile creek        | July 23, 1887  | 1.50  | -----                  | 450.45 | 181 A |
| The Lynch Ditch                                   | Four Mile creek        | Sept. 1, 1887  | 2.00  | -----                  | 453.45 | 182 A |

\* NOTE.—The total amount to be taken by the Collins creek from Collins creek or Woody creek, or from both of them, shall not exceed 3.30 feet at any one time. Any part of that amount taken from either creek shall be deducted from said 3.30 feet to determine the amount that may, at that time, to be taken from the other creeks.





## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 38, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—WATER COMMISSIONER, S. S. SEARS, CARBONDALE, APPOINTED MARCH 14, 1890.

| NAME OF DITCH OR CANAL.       | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.            |
|-------------------------------|---|--|---------------------------------------|--|--------------------------------|
| The Southard & Cavanagh Ditch | Rock creek                                | Dec. 1, 1890                               | Mar. 23, 1885                         | 5.00                                       | Chas. Frauert <i>et al.</i>    |
| The Hughes Ditch              | Capitol creek                             | Dec. 8, 1890                               | Nov. 4, 1888                          | 8.40                                       | Dennis Hughes                  |
| The Spring Creek Ditch        | Spring creek                              | Jan. 16, 1891                              | Sept. 1, 1885                         | 5.00                                       | Grabriel Luckstinger           |
| The Frying Pan Ditch          | Frying Pan creek.                         | Jan. 16, 1891                              | Sept. 15, 1886                        | 3.00                                       | Grabriel Luckstinger           |
| The Midland Flume             | Castle creek                              | Jan. 29, 1891                              | June 28, 1889                         | 46.00                                      | H. P. Covenhoven <i>et al.</i> |
| The Mawherter Ditch           | { South branch of }<br>{ Roaring Fork. }  | Feb. 4, 1891                               | 1883                                  | Not stated                                 | G. J. Mawherter                |
| The Godwin Ditch              | Spring creek.                             | Feb. 5, 1891                               | July 1, 1886                          | 2.00                                       | Janet Goodwin                  |
| The Arkins Ditch No. 1        | Brush creek                               | Mar. 9, 1891                               | June 1, 1885                          | 8.40                                       | Mitchell Arkins                |
| The Arkins Ditch No. 2        | Brush creek                               | Mar. 9, 1891                               | Mar. 1, 1886                          | 8.40                                       | Mitchell Arkins                |
| The Walter Ditch              | Snow Mass creek.                          | Mar. 12, 1891                              | Apr. 2, 1883                          | 4.00                                       | Charles D. Walter              |
| The Dalton & Robinson Ditch   | Roaring Fork riv'r                        | Mar. 19, 1891                              | May 1, 1882                           | 8.00                                       | F. Frank Dalton <i>et al.</i>  |
| The Cox Ditch                 | Roaring Fork riv'r                        | Mar. 19, 1891                              | June 1, 1883                          | 6.00                                       | T. N. Henry <i>et al.</i>      |
| The Mason Ditch               | Cattle creek                              | Mar. 23, 1891                              | Apr. 1, 1885                          | 1.50                                       | John Gregory <i>et al.</i>     |
| The Elk Creek Ditch           | Elk creek                                 | Apr. 1891                                  | June 15, 1890                         | 8.40                                       | Edwin Powell                   |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                               | Name of stream from which water is taken. | Date of filing in the State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                              |
|---|---|--|---------------------------------------|--|--|
| The East Snow Mass and Brush Creek Ditch.....         | East Snow Mass creek.....                 | April 3, 1891                                  | Jan. 11, 1891                         | 108.20                                     | John Lundgren <i>et al.</i> (Amended statement.) |
| The Station Spring and Spring Ditch.....              | Spring gulch.....                         | April 7, 1891                                  | Mar. 30, 1891                         | 1.00                                       | Hyrcanus Stalon                                  |
| The Union Irrigating Ditch.....                       | Roaring Fork riv'r.....                   | May 8, 1891                                    | April 20, 1884                        | 14.00                                      | J. W. Zimmerman <i>et al.</i>                    |
| The Carbondale Ditch.....                             | Rock creek.....                           | May 11, 1891                                   | April 1, 1887                         | 5.00                                       | August Summicht. (Amended statement.)            |
| The Sunmicht Enlargement of the Carbondale Ditch..... | Rock creek.....                           |  | Feb. 25, 1889                         | 97.50                                      | August Summicht. (Amended statement.)            |
| The Powell Ditch.....                                 | Snow Mass creek.....                      | June 1, 1891                                   | July 1888                             | 12.50                                      | Edwin Powell                                     |
| The F. McNulty Ditch.....                             | Large spring.....                         | June 4, 1891                                   | Sep. 5, 1885                          | .53  | Thomas McNulty                                   |
| The Lewis Enlargement of the C. and M. Ditch.....     | Cattle creek.....                         | June 6, 1891                                   | June 26, 1885                         | 6.00                                       | Wilbert G. Lewis                                 |
| The Van Cleve No. 2 Ditch.....                        | A spring.....                             | June 10, 1891                                  | Sep. 15, 1882                         | 1.50                                       | Philip H. Van Cleve <i>et al.</i>                |
| The Enlargement of same.....                          |   |  | May 15, 1885                          | 2.50                                       | Philip H. Van Cleve <i>et al.</i>                |
| The Powell Ditch.....                                 | Snow Mass creek.....                      | June 10, 1891                                  | June 1887                             | 12.50                                      | Edwin Powell                                     |
| The Green Meadow Ditch.....                           | Capitol creek.....                        | June 20, 1891                                  | Sep. 5, 1882                          | 25.40                                      | Maggie Light <i>et al.</i>                       |
| The Martin Extension of King Ditch.....               | West Sopris creek.....                    | June 23, 1891                                  | May 1, 1886                           | 3.50                                       | James H. Martin                                  |
| The Green Enlargement Ditch Extension.....            | Willow creek.....                         | June 25, 1891                                  | Spring 1885                           | 32.00                                      | R. R. Bowles <i>et al.</i>                       |

|  |                                  |                |               |        |  |
|--|----------------------------------|----------------|---------------|--------|--|
| The Patrick & Waters Springs }<br>Ditch.....             | Springs.....                     | July 28, 1891  | May 1, 1891   | 2.00   | Patrick Waters                             |
| The Ide Ditch.....                                       | Snow Mass creek.....             | Aug. 1, 1891   | July 1, 1891  | 10.40  | James A. Ide                               |
| The Pearson Spring Ditch.....                            | A spring.....                    | Sept. 2, 1891  | Aug. 15, 1888 | 2.00   | John Pearson                               |
| The Needham Ditch.....                                   | Cattle creek.....                | Sept. 14, 1891 | July 4, 1884  | 6.00   | James O. Needham                           |
| The Pattison Ditch.....                                  | Mesa creek.....                  | Sept. 17, 1891 | July 1, 1890  | 1.50   | D. A. Pattison                             |
| The Perham Ditch.....                                    | } South Thompson }<br>creek..... | Oct. 12, 1891  | Aug. 9, 1888  | 5.00   | Elbridge Perham                            |
| The Grub & Thompson Ditch.....                           | Rock creek.....                  | Oct. 12, 1891  | Sept. 2, 1890 | 20.00  | E. H. Grubb <i>et al.</i>                  |
| The Cummings High Line Ditch.....                        | Roaring Fork river.....          | Nov. 7, 1891   | Aug. 5, 1890  | 2.00   | John Cummings                              |
| The Schueler & Stockders Con- }<br>centrating Flume..... | Roaring Fork river.....          | Feb. 1, 1892   | May 1, 1891   | 58.00  | Schueler & Stockders (for concentrator on) |
| The Snow Mass Divide Ditch.....                          | Snow Mass creek.....             | April 26, 1892 | June 25, 1889 | 9.00   | A. B. Foster <i>et al.</i>                 |
| The Bowles & Holland Ditch.....                          | Rock creek.....                  | May 10, 1892   | April 9, 1884 | 28.00  | Samuel Bowles and Oscar Holland            |
| The Lewis Ditch.....                                     | Cattle creek.....                | June 13, 1892  | June 15, 1882 | 1.00   | Wilbert E. Lewis                           |
| The Enlargement of the Vance }<br>Spring Ditch.....      | Vance gulch.....                 | June 21, 1892  | May 1, 1892   | 2.00   | John C. Smith                              |
| The Castle Creek Flume Ditch.....                        | Castle creek.....                | June 25, 1892  | Nov. 16, 1885 | 60.00  | The Castle Creek Water Company             |
| The Midland Flume Ditch.....                             | Castle creek.....                | June 25, 1892  | May 11, 1889  | 100.00 | The Midland Water Power Company            |
| The Maroon Ditch.....                                    | Maroon creek.....                | Aug. 12, 1882  | June 22, 1892 | 65.00  | Henry P. Cowenhowen                        |
| The Clark Ditch.....                                     | A spring.....                    | Nov. 7, 1892   | May 15, 1890  | 1.00   | Wallace Clark                              |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 39, SHOWING THE MODIFICATIONS IN THE DECREES GOVERNING APPROPRIATIONS IN SAID DISTRICT FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREES.

| NAME OF DITCH OR CANAL.                   | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| The Ware & Hinds Ditch                    | Elk creek                                 | Oct. 1, 1883           | 5.00   | ---  | ---  | 15                             |
| The Box Canon Ditch                       | East Fork Rifle creek                     | April 15, 1885         | 1.00   | ---  | ---  | 40 A                           |
| The Rifle Falls Ditch                     | East Fork Rifle creek                     | May 1, 1885            | 1.00   | ---  | ---  | 42 A                           |
| The Burton Ditch                          | Mitchell creek                            | June 20, 1885          | .40  | ---  | ---  | 48 A                           |
| The Ware & Hinds Ditch, first enlargement | Elk creek                                 | Mar. 1, 1886           | 10.30  | ---  | ---  | 57                             |
| The Anderson & Hayes Ditch                | Dry Fork of Roan creek                    | Mar. 28, 1886          | 1.00   | ---  | ---  | 61                             |
| The Pioneer Ditch                         | Rifle creek                               | April 1, 1886          | 1.90   | 6.90   | ---  | 62                             |
| The Clear Creek Ditch                     | Clear creek                               | April 9, 1886          | 7.30   | ---  | ---  | 63                             |
| The Dry Fork Ditch                        | Dry Fork of Roan creek                    | April 12, 1886         | 1.40   | ---  | ---  | 64                             |
| The Mansfield Ditch                       | West Fork of Elk creek                    | April 16, 1886         | 1.00   | ---  | ---  | 65                             |
| The Frasier Ditch                         | Kimball creek                             | April 16, 1886         | 2.90   | ---  | ---  | 66                             |

|                              |                              |                |      |       |       |
|------------------------------|------------------------------|----------------|------|-------|-------|
| The Heinze Ditch.....        | Middle Fork Rifle creek      | April 20, 1886 | 1.00 | ----- | 67    |
| The Manning Ditch.....       | Middle Fork Rifle creek      | April 26, 1886 | 1 60 | ----- | 68    |
| The Crystle Falls Ditch..... | East Fork Rifle creek.....   | May 5, 1886    | 1.50 | ----- | 68 A  |
| The Bridges Ditch.....       | Brush creek.....             | May 10, 1887   | .80  | ----- | 111 A |
| The Waggoner Ditch.....      | East Fork of Elk creek.....  | Mar. 20, 1887  | 2.00 | ----- | 114 A |
| The Hayes Ditch.....         | East Branch Brush creek..... | April 3, 1888  | 2.00 | ----- | 133 A |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 39, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, DANIEL F. WEBSTER, APPOINTED JULY 13, 1892.

| NAME OF DITCH OR CANAL.                                      | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.              |
|--|---|--|---------------------------------------|--|----------------------------------|
| The Red Glen High Line Ditch.                                | E. Fork Elk creek                         | Dec. 24, 1890                              | Nov. 20, 1890                         | 8.00                                       | Charles O. Pierson <i>et al.</i> |
| The Fogarty Ditch.   | Spring creek                              | Jan. 21, 1891                              | Dec. 15, 1890                         | 8.00                                       | Richard Fogarty                  |
| The Diamond Extension Ditch.                                 | Parachute creek                           | Feb. 2, 1891                               | April 23, 1888                        | 7.33                                       | Sarah Brown                      |
| The Andrew Gallo Enlargement of the Rifle Creek Canon Ditch. | Rifle creek                               | Mar. 11, 1891                              | Feb. 13, 1891                         | 2.45                                       | Andrew Gallo                     |
| The Babcock Enlargement of the Rifle Creek Canon Ditch.      | Rifle creek                               | May 5, 1891                                | April 6, 1891                         | 2.00                                       | S. F. Babcock                    |
| The Flyer Ditch  | Grand river                               | May 16, 1891                               | Mar. 1, 1884                          | 13.96                                      | R. H. Zimmerman <i>et al.</i>    |
| The Third Enlargement of Cornell Ditch.                      | Parachute creek                           | June 6, 1891                               | May 26, 1891                          | 11.50                                      | C. M. White                      |
| The Heinze Ditch, First Enlargement.                         | Middle f'k Rifle c'k                      | June 24, 1891                              | Feb. 15, 1888                         | 2.50                                       | Herman Heinze                    |
| The Manning & Ritter Ditch, First Enlargement.               | Middle f'k Rifle c'k                      | June 24, 1891                              | June 25, 1887                         | 2.50                                       | John M. Manning <i>et al.</i>    |
| The Romer Ditch.   | Roan creek                                | Aug. 19, 1891                              | Sept. 15, 1888                        | 1.00                                       | John H. Romer                    |

|  |                                 |               |                |       |   |
|--|---------------------------------|---------------|----------------|-------|---|
| The Benson and Barnett Ditch                                       | Parachute creek.                | Aug. 27, 1891 | Mar. 25, 1890  | 10.00 | Prunia Barnett <i>et al.</i>            |
| The Garden Gulch Ditch   | Garden Gulch cr'k               | Aug. 27, 1891 | Mar. 25, 1890  | 4.00  | Prunia Barnett                          |
| The Carlisle Ditch   | Dry Fork creek                  | Sept. 1, 1891 | Nov. 1, 1890   | 4.00  | Sarah L. Carlisle                       |
| The Evans Ditch  | { Gulch from<br>Grand river }   | Oct. 24, 1891 | Oct. 19, 1891  | 3.00  | Thos. S. Evans                          |
| The Billeter Ditch   | Dry gulch                       | Nov. 10, 1891 | May. 5, 1891   | 3.33  | Martin Billeter                         |
| The Benson Ditch   | Parachute creek                 | Dec. 21, 1891 | April 1, 1891  | 1.50  | Arcadius Benson                         |
| The Benson and Barnett Ditch                                       | Parachute creek                 | Dec. 21, 1891 | Mar. 5, 1890   | 10.00 | Arcadius Benson and Miss Prunia Barnett |
| The Roan Creek No. 3 Ditch   | Roan creek                      | Dec. 21, 1891 | Oct. 15, 1884  | 10.00 | Wesley Burkett <i>et al.</i>            |
| The Clarke Ditch   | { West Fork of<br>Rifle creek } | Jan. 26, 1892 | Mar. 15, 1888  | 2.00  | William L. Clarke                       |
| The Rulison & Miller Ditch   | Grand river                     | Feb. 11, 1892 | Dec. 8, 1891   | 70.00 | Chas. M. Rulison and John F. Miller     |
| The Elmer Cook Ditch   | Cottonwood creek                | Feb. 17, 1892 | Sept. 15, 1888 | 2.60  | Elmer Cook                              |
| The Parachute Ditch  | Parachute creek                 | Feb. 20, 1892 | April 1, 1888  | 3.36  | Marion K. Wall <i>et al.</i>            |
| The Holmes-Morgan Enlargement and Extension of the Parachute Ditch | Parachute creek                 | Mar. 24, 1892 | Nov. 9, 1891   | 5.60  | Walter S. Holmes and John T. Morgan     |
| The Yeoman Enlargement of the Low Cost Ditch                       | Parachute creek                 | June 21, 1892 | April 24, 1889 | 17.00 | Enos F. Yeoman                          |
| The M. C. & Y. Ditch   | Parachute creek                 | June 21, 1892 | Nov. 12, 1891  | 5.00  | Enos F. Yeoman <i>et al.</i>            |
| The Dry Creek Ditch  | Dry creek                       | July 11, 1892 | April 23, 1885 | 10.00 | Peter Kearney                           |
| The Reservoir Enlargement Ditch                                    | Roan creek                      | Aug. 18, 1892 | July 1, 1892   | 5.30  | Wm. McDowell and Bryson P. Blair        |
| The Will Mahan Enlargement of the Roan Creek Ditch No. 3           | Roan creek                      | Nov. 3, 1892  | Aug. 1, 1892   | .50   | Will Mahan                              |
| The Purdy Ditch  | Parachute creek                 | Nov. 7, 1892  | April 5, 1890  | 5.00  | James Wheeler <i>et al.</i>             |

STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.                                | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS. |
|--|---|--|---------------------------------------|--|---------------------|
| The Brenton Enlargement of the Rifle Creek Ditch ..... | Rifle creek                               | Nov. 7, 1892                               | Nov. 14, 1887                         | 3.00                                       | J. C. Acklin        |
| The Emmen Enlargement of the Nott Ditch No. 2. ....    | Mitchell creek                            | Nov. 7, 1892                               | Oct. 19, 1892                         | 1.00                                       | H. W. Emmen         |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 39, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                                     | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>conveying<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS. |
|--|--|--|---|--|---------------------------------------|---------------------|
| The Babcock Reservoir.....                             | Rifle creek.....                               | Rifle creek can-<br>on ditch.....{           | May 5, 1891   | April 6, 1891                                    | 400,000                               | S. E. Babcock       |
| The Evans Reservoir..                                  | Gulch, unnamed.....                            | Evans ditch.....                             | Oct. 24, 1891                                       | Oct. 19, 1891                                    | 875,000                               | Thos. S. Evans      |
| The Thompson Reservoir                                 | West Rifle creek.....                          | Feeder.....                                  | June 22, 1892                                       | April 2, 1888                                    | 140,000                               | L. E. Thompson      |
| The Clarke Enlargement of<br>the Thompson Reservoir. } | West Rifle creek.....                          | Feeder.....                                  | June 22, 1892                                       | June 21, 1891                                    | 135,000                               | William L. Clarke   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 40, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
 DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, HERBERT A. CASTLE, DELTA, COLO. APPOINTED APRIL  
 27, 1891.

| NAME OF DITCH OR CANAL.           | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.            |
|-----------------------------------|---|---|--|---|--------------------------------|
| The Nowland Ditch.....            | Gulch Nos. 1 and 2                              | Dec. 12, 1890                                       | Dec. 8, 1890                                     | 4.00  | John S. Nowland                |
| The Mineral Spring Ditch.....     | Current creek                                   | Dec. 26, 1890                                       | Oct. 31, 1890                                    | 10.00   | George L. Smith                |
| Shindledecker Creek Ditch.....    | Shindledecker cr'k                              | Jan. 8, 1891  | June 15, 1890                                    | 6.00  | Charles H. Gray <i>et al.</i>  |
| The Love Ditch.....               | { North Fork Gun-<br>nison river..... }         | Jan. 29, 1891                                       | May 1, 1884                                      | 3.00  | Robert E. Love <i>et al.</i>   |
| The North Fork Farmers Ditch..... | North Fork river.                               | Feb. 24, 1891                                       | Feb. 3, 1888                                     | 32.04   | W. F. Hawkey <i>et al.</i>     |
| The Peach Ditch.....              | A gulch   | Mar. 28, 1891                                       | Jan. 5, 1891                                     | 5.00  | Lewis L. Biglow                |
| The Catch Ditch.....              | Seepage water                                   | Mar. 30, 1891                                       | Mar. 13, 1891                                    | 7.50  | Lewis L. Biglow <i>et al.</i>  |
| The Daisy Ditch.....              | Big gulch.....                                  | April 4, 1891                                       | Not given  | 4.00  | Harrison W. Bull <i>et al.</i> |
| The G. L. Ditch.....              | Platt gulch.....                                | April 10, 1891                                      | Mar. 21, 1891                                    | 7.35  | John H. Garren <i>et al.</i>   |
| The States Ditch.....             | Waste water                                     | May 16, 1891  | May 1, 1890                                      | 2.00  | George W. States               |
| The Estes Ditch.....              | A gulch   | May 18, 1891  | April 17, 1891                                   | 6.60  | O. A. Estes                    |
| The Omega Ditch.....              | Surface creek.....                              | May 27, 1891  | Feb. 24, 1891                                    | 10.00   | John E. Cole <i>et al.</i>     |
| The Combination Ditch.....        | Big Draw gulch.....                             | June 1, 1891  | Mar. 14, 1891                                    | 6.00  | C. P. Olmstead <i>et al.</i>   |

| The Bona Fide Ditch.         | Gunnison river.                         | June 30, 1891  | Dec. 10, 1891                | 65.00           | The Bona Fide Ditch Company       |
|------------------------------|---|----------------|------------------------------|-----------------|-----------------------------------|
| The Texas Ditch              | { Little Clear Fork }<br>creek          | July 6, 1891   | Not given.                   | 5.00            | V. H. Kennedy and W. H. Taylor    |
| The Gove Ditch Continuation. | Waste water                             | July 23, 1891  | { May 1885 }<br>{ May 1888 } | 2.00 }<br>.50 } | A. M. Gove                        |
| The Riley Ditch              | Bell creek                              | July 27, 1891  | June 10, 1891                | 12.20           | George Riley                      |
| The Big Gulch Ditch          | Big gulch                               | July 28, 1891  | June 8, 1891                 | 4.00            | James W. Cotton                   |
| The Meiberg Ditch            | Bell creek                              | Oct. 2, 1891   | May 1, 1889                  | 3.00            | August Meiberg                    |
| The Roberts Ditch            | { North Fork of }<br>{ Gunnison river } | Oct. 18, 1891  | May 1, 1885                  | 2.50            | C. F. Roberts <i>et al.</i>       |
| The Weir & Johnson Ditch     | Surface creek                           | Nov. 11, 1891  | May 5, 1890                  | 9.00            | Albert A. Weir <i>et al.</i>      |
| The Pleasant View Mesa Ditch | Surface creek                           | Nov. 16, 1891  | Nov. 6, 1891                 | 15.00.          | George Bettinson <i>et al.</i>    |
| The Bonita Ditch             | Surface creek                           | Nov. 23, 1891  | July 30, 1891                | 15.00           | W. C. Strong                      |
| The North Fork Valley Ditch  |   | Dec. 4, 1891   | May 1, 1890                  | 3.75            | Gideon Sutton                     |
| The A. 1 Ditch               | Seepage and waste                       | Jan. 2, 1892   | Dec. 31, 1891                | 2.00            | Abram C. Butler <i>et al.</i>     |
| The Neighbors Ditch          | Willanks gulch                          | Jan. 6, 1892   | Nov. 29, 1891                | 6.00            | H. J. Neighbors                   |
| The Sheppard & Wilnot Ditch  | { North Fork of }<br>{ Gunnison river } | Feb. 10, 1892  | Dec. 5, 1889                 | 14.00           | William A. Sheppard <i>et al.</i> |
| The Eureka Ditch             | Eureka gulch                            | April 14, 1892 | Feb. 18, 1892                | 6.30            | Peter Olson                       |
| The Clipper Lateral Ditch    | Yarnell gulch                           | April 14, 1892 | Fall of 1888.                | 8.00            | Frank E. Wilber                   |
| The Tuff Ditch               | Tuff gulch                              | April 14, 1892 | May 2, 1888                  | 10.50           | Swan J. Alten                     |
| The Fleming Ditch            | Big Gulch creek                         | April 25, 1892 | Mar. 25, 1892                | 6.00            | Isaac G. Fleming                  |
| The Burton Ditch             | Escalante creek                         | June 8, 1892   | Mar. 10, 1892                | 4.00            | James H. Burton                   |
| The Short Ditch              | { North Fork of }<br>{ Gunnison river } | June 14, 1892  | Nov. 18, 1889                | 28.00           | Frank B. Short                    |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.          | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                 |
|----------------------------------|---|--|---------------------------------------|--|-------------------------------------|
| The Ingersoll & Purington Ditch. | Waste and seepage                         | June 28, 1892                              | March, 1892                           | Not given.                                 | H. H. Ingersoll and J. B. Purington |
| The Obert Ditch.....             | Springs and waste                         | Aug. 10, 1892                              | Aug. 8, 1892                          | 12.00                                      | Joseph S. Abert                     |
| The Pleasant View Mesa Ditch..   | Surface creek.....                        | Aug. 16, 1892                              | April 25, 1892                        | 50.00                                      | John W. Gallant <i>et al.</i>       |
| The Roerber Ditch.....           | Lucas creek.....                          | Aug. 24, 1892                              | August, 1890                          | 6.00                                       | Theodore Roerber                    |
| The Duke Ditch.....              | Leroux crk. & wst.                        | Sept. 3, 1892                              | Aug. 20, 1892                         | 8.10                                       | Edward M. Duke                      |
| The Fairview Ditch.....          | Lone Tree creek...                        | Sept. 12, 1892                             | June 24, 1892                         | 16.00                                      | Swan W. Alten                       |
| The Roerber Ditch No. 1. ....    | Inter-Ocean ditch.                        | Sept. 16, 1892                             | August, 1890                          | 6.00                                       | Theodore Roerber                    |
| The Roerber Ditch No. 2.....     | German creek.....                         | Sept. 16, 1892                             | August, 1890                          | 6.00                                       | Theodore Roerber                    |
| The Greggs Ditch.....            | Waste and seepage                         | Sept. 23, 1892                             | Sept. 16, 1892                        | 3.00                                       | Lucy C. Greggs                      |
| The McCarthy Ditch.....          | Escalante creek....                       | Nov. 1, 1892                               | Oct. 29, 1892                         | 6.40                                       | Justin McCarthy                     |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 40, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.          | Name of stream<br>supplying<br>water therefor. | Name of Ditch<br>conveying<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.             |
|-----------------------------|--|--|---|--|---------------------------------------|---------------------------------|
| The Quien Sabe Reservoir    | Not stated.                                    | Built in gulch.                              | Dec. 12, 1890                                       | Oct. 29, 1890                                    | 870,000                               | A. J. Sparr                     |
| The Trichel Park Reservoir  | Surface creek.                                 | Built on stream.                             | Feb. 5, 1891  | June 21, 1887                                    | 30,000,000                            | John H. Barton <i>et al.</i>    |
| The Mount Lamborn Reservoir | Reynolds creek.                                | Built on stream.                             | June 23, 1891                                       | June 10, 1891                                    | 933,000                               | J. D. Miller                    |
| The Soldier Park Reservoir  | Drainage Surface c'k                           | Built in gulch.                              | Nov. 23, 1891                                       | Aug. 9, 1891                                     | 3,750,000                             | Henry Kohler                    |
| The Fribble Reservoir       | Younes creek                                   | Built in gulch.                              | Dec. 14, 1891                                       | July 21, 1891                                    | 3,920,000                             | John C. Pribble                 |
| The Miller Reservoir        | Leroux creek                                   | Built in gulch.                              | Jan. 14, 1892                                       | Sept. 15, 1891                                   | 2,195,000                             | Charles R. Miller <i>et al.</i> |
| The Fisher Reservoir        | Leroux creek                                   | Built in gulch.                              | Jan. 14, 1892                                       | Sept. 15, 1891                                   | 5,018,000                             | Charles R. Miller <i>et al.</i> |
| The Roebor Reservoir No. 1  | { Inter-Ocean ditch                            | Roebor ditches<br>Nos. 1 & No. 2 }           | Sept. 16, 1892                                      | Aug.   | 5,223,200                             | Theodore Roebor                 |
| The Roebor Reservoir No. 2  | { and German creek                             |  |   |  |                                       | Theodore Roebor                 |
| The Stull Reservoir No. 1   | Leroux creek                                   | Built on stream.                             | Sept. 16, 1892                                      | Aug. 5, 1892                                     | 5,188,560                             | David Stull and Jacob Stull     |
| The Stull Reservoir No. 2   | Leroux creek                                   | Built on stream.                             | Sept. 16, 1892                                      | Aug. 5, 1892                                     | 4,878,720                             | David Stull and Jacob Stull     |

STATEMENT CONCERNING RESERVOIRS—*Concluded.*

| NAME OF RESERVOIR,                     | Name of stream supplying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.        |
|--|--|--------------------------------------|--|---------------------------------------|---------------------------------|----------------------------|
| The Pleasant View Mesa Reservoir No. 1 | Drainage, &c.                            | Built on stream                      | Oct. 12, 1892                              | Aug. 10, 1892                         | 2,090,880                       | J. N. Castle <i>et al.</i> |
| The Pleasant View Mesa Reservoir No. 2 | Drainage, &c.                            | Built on stream                      | Oct. 12, 1892                              | Aug. 10, 1892                         | 1,415,700                       | J. N. Castle <i>et al.</i> |
| The Pleasant View Mesa Reservoir No. 3 | Drainage, &c.                            | Built on stream                      | Oct. 12, 1892                              | Aug. 10, 1892                         | 1,742,400                       | J. N. Castle <i>et al.</i> |
| The Pleasant View Mesa Reservoir No. 4 | Drainage, &c.                            | Built on stream                      | Oct. 12, 1892                              | Aug. 10, 1892                         | 1,415,700                       | J. N. Castle <i>et al.</i> |
| The Pleasant View Mesa Reservoir No. 5 | Drainage, &c.                            | Built on stream                      | Oct. 12, 1892                              | Aug. 10, 1892                         | 4,181,760                       | J. N. Castle <i>et al.</i> |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 41, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER, W. J. TOLAND, MONTROSE, COLORADO. APPOINTED JUNE 1, 1891.

| NAME OF DITCH OR CANAL.                   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.             |
|---|---|--|---------------------------------------|--|---------------------------------|
| The Easy Ditch No. 1.                     | Seepage waters                            | Dec. 11, 1890                              | Sept. 23, 1890                        | 4.25                                       | E. L. Young                     |
| The Easy Ditch No. 2.                     | Seepage waters                            | Dec. 11, 1890                              | Sept. 23, 1890                        | 4.25                                       | E. L. Young                     |
| The Ironstone Short Line Ditch.           | Dry creek                                 | Dec. 12, 1890                              | Mar. 1, 1888                          | Not given                                  | D. P. Cook <i>et al.</i>        |
| The Ironstone Short Line Extension Ditch. | Dry creek                                 | Dec. 12, 1890                              | Oct. 24, 1890                         | 11.15                                      | D. P. Cook <i>et al.</i>        |
| The Lower Dry Creek Seepage Ditch.        | Dry creek                                 | Dec. 15, 1890                              | Sept. 28, 1890                        | 6.84                                       | Herman O. Bear <i>et al.</i>    |
| The Rim Rock Ditch                        | Dry creek                                 | Jan. 5, 1891                               | Oct. 15, 1890                         | 24.00                                      | George Ash                      |
| The Subterranean Ditch                    | Dry & Roan creeks                         | Jan. 12, 1891                              | Sept. 20, 1890                        | 17.30                                      | C. E. Ash                       |
| The Subterranean Ditch Feeder             | Seepage waters                            | Jan. 12, 1891                              | Sept. 20, 1890                        | Not given.                                 | C. E. Ash                       |
| The Beaver Ditch                          | Buttermilk gulch                          | Jan. 16, 1891                              | May 1, 1887                           | 3.00                                       | George W. Harris                |
| The Lanes Ditch                           | Dry creek                                 | Feb. 9, 1891                               | Feb. 15, 1884                         | 3.00                                       | William H. Lines                |
| The Fenlon Private Ditches Nos. 1 and 2   | Not stated                                | Mar. 2, 1891                               | Not stated                            | Not given                                  | No owner given. Plat only filed |
| The Enterprise Ditch                      | Snyder gulch                              | Mar. 9, 1891                               | Dec. 10, 1890                         | 18.50                                      | S. W. Warrington <i>et al.</i>  |
| The C. A. Palmer Ditch                    | Spring creek                              | Mar 11, 1891                               | Mar. 1, 1891                          | 3.00                                       | C. A. Palmer                    |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                                   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                   |
|---|---|--|---------------------------------------|--|---------------------------------------|
| The Rubideau Ditch  | Buttermilk gulch                          | Mar. 25, 1891                              | Mar. 4, 1891                          | 5.00                                       | Suteliff and Halley <i>et al.</i>     |
| The Draw Ditch  | McGranahan gulch                          | Mar. 25, 1891                              | Mar. 18, 1891                         | 5.00                                       | Edward L. Kellogg                     |
| The Bly & Hase Ditch                                      | Spring creek                              | April 13, 1891                             | Feb. 24, 1891                         | 11.32                                      | R. J. Bly <i>et al.</i>               |
| The High Mesa Ditch                                       | Uncompahgre riv'r                         | April 15, 1891                             | Mar. 1, 1889                          | 23.00                                      | The High Mesa Ditch Company           |
| The McDonald Ditch  | Uncompahgre riv'r                         | April 18, 1891                             | Feb. 10, 1887                         | 44.00                                      | A. G. McDonald <i>et al.</i>          |
| The Ironstone Extension Ditch                             | Dry creek                                 | April 18, 1891                             | Feb. 1, 1885                          | 61.20                                      | The Ironstone Extension Ditch Company |
| The Solid Muldoon Ditch                                   | Smith's Fork creek                        | April 25, 1891                             | May 4, 1888                           | 12.00                                      | V. B. Piburn <i>et al.</i>            |
| The Mowbray Ditch   | { Seepage and Lo-<br>gan ditch }          | May 6, 1891                                | April 10, 1885                        | 5.00                                       | James Mowbray                         |
| The Uncompahgre and Cedar<br>Creek Valley Extension Ditch | Cedar creek                               | May 1, 1891                                | Dec. 24, 1889                         | 52.00                                      | Aaron Walters <i>et al.</i>           |
| The Dry Creek Feeder to the<br>Uncompahgre Canal          | Dry creek                                 | June 1, 1891                               | Mar. 1, 1887                          | 195.00                                     | The Montrose Canal Company            |
| The Ludlow Ditch  | Dry creek                                 | Nov. 18, 1891                              | July 12, 1891                         | 11.15                                      | Daniel P. Cook                        |

|  |                   |               |               |        |   |
|--|-------------------|---------------|---------------|--------|---|
| The Enlargement of the Uncompahgre (Loutzenheiser) Ditch { | Uncompahgre riv'r | Feb. 28, 1892 | Nov. 25, 1891 | 212.71 | ..... The Loutzenheiser Ditch Company     |
| Company Ditch {  | Uncompahgre riv'r | May 2, 1892   | April 1, 1892 | 70.00  | ..... The Montrose Electric Light Company |
| The Montrose Electric Light Company Ditch {                | Uncompahgre riv'r | May 12, 1892  | May 1, 1891   | 22.00  | ..... Jas. C. Taylor <i>et al.</i>        |
| The East Side Reservation Ditch {                          | Dry creek {       | May 13, 1892  | Mar. 2, 1892  | 56.00  | ..... L. F. Kellogg and H. O. Bear        |
| The Gypsum Ditch {   | Uncompahgre riv'r | May 28, 1892  | Feb. 10, 1892 | 25.00  | ..... Frank Dawson <i>et al.</i>          |
| The Boomers Ditch {  | Waste waters {    | May 29, 1892  | Mar. 31, 1892 | 5.00   | ..... Samuel V. Topliss                   |
| The Topliss Ditch {  | Uncompahgre riv'r | Aug. 12, 1892 | Feb. 3, 1888  | 39.00  | ..... O. D. Smith <i>et al.</i>           |
| The Pinion Ditch {   |                   |               |               |        |   |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 42, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, FRED W. HALBOWER, GRAND JUNCTION. APPOINTED MAY 14, 1892.

| NAME OF DITCH OR CANAL.                      | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.               |
|--|---|--|---------------------------------------|---------------------------------|-----------------------------------|
| The Walter L. Farmer Enlargement Ditch.....  | Kaunah creek.....                         | Dec. 21, 1891                              | Dec. 11, 1891                         | 3.00                            | Walter L. Farmer                  |
| The Spring Reservoir Ditch.....              | Springs.....                              | Jan. 18, 1892                              | July 27, 1886                         | 12.00                           | Norman J. Krusen                  |
| The John Goldsby North East Creek Ditch..... | East creek.....                           | Jan. 28, 1892                              | Dec. 5, 1891                          | 10.00                           | John Goldsby                      |
| The Welsh Ditch.....                         | Coon creek.....                           | Jan. 30, 1892                              | Oct. 28, 1890                         | 3.00                            | David Welsh                       |
| The West Salt Creek Ditch.....               | West Salt creek.....                      | Feb. 12, 1892                              | Dec. 1, 1891                          | 54.00                           | Addis E. Hayes <i>et al.</i>      |
| The Bieser Ditch.....                        | Bieser creek.....                         | Feb. 13, 1892                              | April 1, 1888                         | 2.88                            | Joseph Bieser                     |
| The Knowles Ditch.....                       | Waste and springs.....                    | Feb. 13, 1892                              | June 1, 1889                          | 1.44                            | Chas. R. Sieber                   |
| The Enlargement No. 2 Park View Ditch.....   | Cottonwood and Bull creeks.....           | Feb. 13, 1892                              | Dec. 31, 1890                         | 9.00                            | W. H. Monroe                      |
| The Shaw Ditch.....                          | Plateau creek.....                        | Feb. 13, 1892                              | Mar. 15, 1890                         | 3.00                            | Wm. F. Shaw                       |
| The Overland Ditch.....                      | Plateau creek.....                        | Feb. 13, 1892                              | Dec. 16, 1890                         | 6.00                            | Joseph E. Barker and Eugene Fonda |
| The Enlargement of Snipes Ditch.....         | Cottonwood creek.....                     | Feb. 13, 1892                              | April 28, 1891                        | 6.75                            | Chas. McKinney                    |
| The Lost Time Ditch.....                     | Plateau creek.....                        | Feb. 13, 1892                              | April 28, 1891                        | 4.32                            | Oliver S. Williams                |

|  |               |                |        |                                    |
|--|---------------|----------------|--------|------------------------------------|
| The Hoosier Ditch.....   | Feb. 13, 1892 | May 22, 1891   | 20.16  | J. S. Griffith                     |
| The Avoca Orchards Ditch.....  | Feb. 13, 1892 | July 1, 1891   | 6.00   | H. B. Johnson <i>et al.</i>        |
| The Dandy Ditch.....   | Feb. 13, 1892 | Sept. 1, 1891  | 1.44   | Herschel Sonner                    |
| The Park Creek Ditch.....  | Feb. 13, 1892 | Sept. 7, 1891  | 5.76   | Geo. M. Gibson and J. W. Campbell  |
| The Steele Ditch.....  | Feb. 29, 1892 | Feb. 20, 1892  | 3.00   | Herschel Sonner <i>et al.</i>      |
| The John Stevens Ditch.....  | May 20, 1892  | April 10, 1892 | 6.65   | John W. Stevens                    |
| The Downing North Fork Ditch<br>{ Kannah creek }                             | June 3, 1892  | April 22, 1892 | 1.44   | William C. Downing                 |
| The Hard Scabble Ditch.....  | June 3, 1892  | Feb. 13, 1888  | 6.00   | William Hughes                     |
| The Dandy Ditch.....   | June 3, 1892  | Mar. 7, 1892   | 1.50   | Herschel Sonner                    |
| The Wilcox Ditch No. 1.....  | June 3, 1892  | April 2, 1892  | 6.00   | J. G. Wilcox                       |
| The Wilcox Ditch No. 2.....  | June 3, 1892  | April 2, 1892  | 6.00   | J. G. Wilcox                       |
| The Voge Irrigating Ditch, En-<br>largement of Upper Salt Wash<br>Ditch..... | June 4, 1892  | Mar. 18, 1892  | 7.88   | C. Elisah Voge                     |
| The Enlargement of the Cook<br>Irrigating Ditch.....                         | June 9, 1892  | Mar. 14, 1892  | 4.00   | Lelon J. Crosier                   |
| The Alta Ditch.....  | June 14, 1892 | May 16, 1892   | 14.40  | George Smith <i>et al.</i>         |
| The G. & L. Ditch.....   | June 14, 1892 | Mar. 21, 1892  | 579.48 | Henry C. Long <i>et al.</i>        |
| The Roatcap Extension of the<br>Goldsmith Ditch.....                         | June 22, 1892 | April 13, 1892 | 24.80  | D. S. Roatcap                      |
| The Jackson Ditch.....   | June 25, 1892 | May 1890       | 6.80   | John Jackson                       |
| The Golden Age Ditch.....  | June 28, 1892 | May 1, 1890    | 8.40   | John McGetrick and Megis J. Morris |
|  |               |                |        |                                    |
| Plateau creek.....   |               |                |        |                                    |
| Grand river.....   |               |                |        |                                    |
| Dandy creek.....   |               |                |        |                                    |
| Park creek.....  |               |                |        |                                    |
| Popa creek.....  |               |                |        |                                    |
| Stevens creek.....   |               |                |        |                                    |
| { North Fork of<br>Kannah creek }  |               |                |        |                                    |
| Plateau creek.....   |               |                |        |                                    |
| Dandy creek.....   |               |                |        |                                    |
| Indian creek.....  |               |                |        |                                    |
| Deer creek.....  |               |                |        |                                    |
| East Salt creek.....   |               |                |        |                                    |
| Kimball creek.....   |               |                |        |                                    |
| Grand river.....   |               |                |        |                                    |
| White Water creek.....   |               |                |        |                                    |
| Dry creek.....   |               |                |        |                                    |
| Wallace creek.....   |               |                |        |                                    |
| { Clear Water and<br>Big creek }   |               |                |        |                                    |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.   | Name of stream from which water is taken.  | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                   |
|---|--|--|---------------------------------------|---------------------------------|---------------------------------------|
| The Rio Dominquez Ditch   | Rio Dominquez ck                           | June 28, 1892                              | Feb. 29, 1892                         | 10.00                           | Joseph Reynolds                       |
| The Cliff Lake Ditch  | Reservoir creek                            | July 25, 1892                              | May 14, 1892                          | 4.00                            | George B. Pickett and John R. Pickett |
| The Enlargement of the Pioneer and White Water Ditch No. 1        | White Water creek                          | July 25, 1892                              | May 14, 1892                          | 8.64                            | George B. Pickett and John R. Pickett |
| The Enlargement of the Pioneer and White Water Ditch No. 2        | White Water creek                          | July 25, 1892                              | May 14, 1892                          | 8.64                            | George B. Pickett and John R. Pickett |
| The Pine Mesa Ditches   | Big creek                                  | Aug 31, 1892                               | June 5, 1892                          | 12.00                           | J. R. Snyder                          |
| The Park View and Bull Creek Enlargement Ditch                    | Cottonwood and Bull creeks                 | Sept. 8, 1892                              | Aug 29, 1892                          | 13.00                           | Solomon Myers                         |
| The Coulter Ditch   | { Gulch tributary }<br>{ to Kannah creek } | Sept. 16, 1892                             | July 22, 1892                         | 1.00                            | R. R. Coulter                         |
| The Lake Park Ditch   | White Water creek                          | Sept. 16, 1892                             | 1892                                  | 12.00                           | H. C. Hall and G. W. Hall             |
| The Gavin Ditch   | Waste and seepage                          | Sept. 16, 1892                             | May 1, 1890                           | 4.00                            | Sallie J. Gavin                       |
| The J. C. DeGroot Enlargement of the Kannah Creek Extension Ditch | Kannah creek                               | Sept. 16, 1891                             | June 1, 1891                          | 14.00                           | J. C. DeGroot                         |
| The Grand Mesa Reservoir Ditch                                    | Kannah creek                               | Sept. 16, 1892                             | Aug. 17, 1891                         | 8.00                            | W. J. Ponsford                        |

|   |                   |                |                |            |                             |
|---|-------------------|----------------|----------------|------------|-----------------------------|
| The Garmon Independent Ditch                      | Big Salt wash     | Sept. 16, 1892 | April 20, 1892 | Indefinite | A. R. Garmon                |
| The Dry Lake Reservoir Ditch                      | Spring creek      | Nov. 12, 1892  | March 5, 1892  | 31.00      | J. E. Ellison <i>et al.</i> |
| The Kannah Creek Extension }<br>Waste Water Ditch | Waste and seepage | Nov. 25, 1892  | Aug. 15, 1892  | 9.00       | James R. Snyder             |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 42, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1899, TO DECEMBER 1, 1902.

| NAME OF RESERVOIR.                          | Name of stream supplying water therefor. | Name of Ditch conveying water thereto.    | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                           |
|---|--|---|--|---------------------------------------|---------------------------------|---|
| The Mesa Creek Reservoir                    | Mesa creek                               | Mesa Creek canal                          | Mar. 2, 1891                               | Sept. 20, 1890                        | 14,374,800                      | { The Mesa creek Reservoir and Canal Company. |
| The Spring Canon Reservoir                  | Spring canon                             | Spring Canon d'h                          | Mar. 9, 1891                               | Mar. 2, 1891                          | 4,950,000                       | Charles P. McCary                             |
| The Pedro Reservoir                         | Youngs creek                             | Built on stream                           | Oct. 29, 1891                              | July 21, 1891                         | 4,790,000                       | John J. Travis                                |
| The G. & L. Reservoir No. 1                 | Whitewater creek                         | G. & L. ditch                             | Nov. 25, 1891                              | Nov. 14, 1891                         | 90,000,000                      | H. C. Long <i>et al.</i>                      |
| The G. & L. Reservoir No. 2                 | Whitewater creek                         | G. & L. ditch                             | Nov. 25, 1891                              | Nov. 14, 1891                         | 190,000,000                     | H. C. Long <i>et al.</i>                      |
| The John Goldsby North-East Creek Reservoir | East creek                               | { John Goldsby North - East Creek ditch } | Jan. 28, 1892                              | Dec. 5, 1891                          | 9,000,000                       | John Goldsby                                  |
| The Scales Reservoir                        | Kannah creek                             | Built on stream                           | Feb. 13, 1892                              | Aug. 8, 1891                          | 16,266,000                      | L. N. Farner <i>et al.</i>                    |
| The Haas Reservoir                          | Kannah creek                             | Built on stream                           | Feb. 13, 1892                              | Aug. 8, 1891                          | 9,000,000                       | Ed. Haas <i>et al.</i>                        |
| The John W. Stevens Reservoir               | Stevens creek                            | { John W. Stevens ditch }                 | May 20, 1892                               | April 10, 1892                        | 1,568,000                       | John W. Stevens                               |
| The G. & L. Reservoir                       | Whitewater creek                         | G. & L. Ditch                             | June 7, 1892                               | Mar. 21, 1892                         | 435,600,000                     | Henry C. Long <i>et al.</i>                   |
| The Cliff Lake Reservoir                    | Reservoir creek                          | Cliff Lake ditch                          | July 25, 1892                              | May 14, 1892                          | 4,163,400                       | George B. and John R. Pickett                 |
| The Dry Lake Reservoir                      | Spring creek                             | Dry Lake reservoir                        | Nov. 12, 1892                              | Mar. 5, 1892                          | 4,000,000                       | J. E. Ellison <i>et al.</i>                   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 45, SHOWING THE MODIFICATION IN THE DECREEES GOVERNING APPROPRIATIONS IN SAID DISTRICT,  
FROM THE CERTIFIED COPY FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREEES.

| NAME OF DITCH OR CANAL.   | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet previously appropriated in district. | Order of priority in district. |
|---------------------------|---|------------------------|---|--|---|--------------------------------|
| The Clausen & Byrne Ditch | Porcupine creek                           | Mar. 1, 1883           | 1.17  |  |   | 6                              |
| The Rustler Ditch         | Porcupine creek                           | Mar. 1, 1883           | 1.17  |  |   | 6                              |
| The Clausen Ditch         | Beaver creek                              | Mar. 30, 1883          | 1.37  |  |   | 8                              |
| The Starkie Ditch         | Beaver creek                              | Mar. 30, 1883          | 1.37  |  |   | 8                              |
| The O'Connor Ditch        | Porcupine creek                           | Sep. 1, 1885           | 2.00  |  |   | 36 A                           |
| The Dennis & Barton Ditch | Divide creek                              | Mar. 1, 1887           | 2.40  |  |   | 65 A                           |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 45, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, PETER CHURCHFIELD, CRESTED BUTTE. APPOINTED JULY 21, 1890.

| NAME OF DITCH OR CANAL.                              | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.            |
|--|---|--|---------------------------------------|---------------------------------|--------------------------------|
| The Cram Enlargement of the Hunter & Gant Ditch..... | West Fork Mamm creek.....                 | Jan. 19, 1891                              | July 18, 1885                         | 9.00                            | Amos S. Ramsey                 |
| The Rising Sun Ditch.....                            | Grand river.....                          | Jan. 26, 1891                              | Dec. 5, 1883                          | 200.00                          | Lawrence Sweeney <i>et al.</i> |
| The Rising Sun Ditch Enlargement.....                | Grand river.....                          | Jan. 26, 1891                              | Last of October, 1886 }               | 710.00                          | Lawrence Sweeney <i>et al.</i> |
| The Swan Spring and Waste Water Ditch.....           | A gulch.....                              | Mar. 18, 1891                              | May 1, 1889                           | 2.00                            | Joseph S. Swan                 |
| The Baker Ditch.....                                 | Wallace creek.....                        | June 12, 1891                              | June, 1886                            | 3.00                            | Milton D. Baker                |
| The Swan Enlargement of the Battlement Ditch.....    | Battlement creek.....                     | July 3, 1891                               | May 21, 1891                          | 14.50                           | Joseph S. Swan                 |
| The Daniel Flannery Ditch.....                       | Three Mile creek.....                     | July 22, 1891                              | Dec. 15, 1885                         | 3.50                            | Thomas Flannery                |
| The Divide Creek Ditch.....                          | Divide creek.....                         | Oct. 10, 1891                              | .....                                 | .....                           | .....                          |
| The Hydropathic Ditch.....                           | West branch Mamm creek.....               | Nov. 18, 1891                              | Aug. 1, 1891                          | 6.00                            | Isaac N. Grove                 |
| The Spring Ditch.....                                | Mamm creek.....                           | Nov. 30, 1891                              | Not given.....                        | 1.50                            | Bert Ellis                     |

|  |                   |                |                |        |                   |
|--|-------------------|----------------|----------------|--------|-------------------|
| The Frank Dyer Ditch .....                                       | Seepage and waste | Dec. 26, 1891  | Sept. 8, 1891  | 110.00 | Frank M. Dyer     |
| The Doc. Grove Ditch .....                                       | Seepage and waste | Jan. 18, 1891  | Sept. 3, 1891  | 2.66   | Isaac N. Grove    |
| The Spring Branch Ditch .....                                    | Divide creek      | Jan. 21, 1891  | May 30, 1884   | 3.50   | Jasper Reynolds   |
| The Divide Creek Ditch .....                                     | Divide creek      | Jan. 21, 1891  | April 15, 1886 | 3.50   | Jasper Reynolds   |
| The Little Crann Ditch .....                                     | Waste and seepage | Feb. 18, 1892  | Sept. 7, 1887  | 1.17   | Charles Crann     |
| The Spring Ditch .....   | Springs           | Mar. 3, 1892   | Feb. 27, 1892  | 1.68   | J. J. Clauson     |
| The Homestake Ditch .....  | Wallace creek     | April 14, 1892 | Oct. 8, 1885   | 6.00   | Charles L. Sawyer |
| The Sawyers Grand River Ditch .....                              | Grand river       | April 14, 1892 | Spring, 1892   | 6.00   | Phillip Sawyer    |
| The Jonathan Grant Ditch .....                                   | Quaking creek     | June 23, 1892  | June 4, 1891   | 9.00   | Jonathan Grant    |
| The Allison Ditch .....  | Beaver creek      | Aug. 9, 1892   | April 10, 1890 | 16.66  | Charles Gleason   |
| The Randle Ditch .....   | Dry creek         | Aug. 9, 1892   | May 25, 1892   | 10.00  | James F. Randle   |
| The A. G. Ditch .....  | Beaver creek      | Sept. 26, 1892 | Sept. 11, 1891 | 14.60  | A. G. Anderson    |
| The Lee Enlargement of the<br>J. A. Clark Ditch .....            | Beaver creek      | Nov. 14, 1892  | Oct. 1, 1892   | 6.17   | Albert Lee        |
| The Dennis Enlargement and<br>Extension of Divide Ck Ditch ..... | Divide creek      | Nov. 28, 1892  | May 10, 1889   | 3.00   | John P. Dennis    |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 45, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.             | Name of stream conveying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS. |
|--------------------------------|--|--------------------------------------|--|---------------------------------------|---------------------------------|---------------------|
| The Hydropathic Reservoir..... | { West Branch of Mamun creek..... }      | Hydrapathic d'h                      | Nov. 18, 1891                              | Aug. 1, 1891                          | 1,000,000                       | Isaac N. Grove      |
| The Vaughn Reservoir.....      | Mamun creek.....                         | Enterprise ditch                     | April 25, 1892                             | Mar. 14, 1892                         | 7,000,000                       | William Cramm       |
| The Ida Lux Reservoir.....     | Mamun creek.....                         | Enterprise ditch                     | April 25, 1892                             | Mar. 15, 1892                         | 2,000,000                       | Peter and Ida Lux   |
| The Spring Gulch Reservoir.... | Spring gulch.....                        | Built on gulch...                    | May 13, 1892                               | April 17, 1892                        | 3,000,000                       | William Chadwick    |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO 50, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                  | Name of stream<br>from which water<br>is taken. | Date of filing<br>in the State<br>Engineer's<br>office. | Time of com-<br>mencement of<br>work thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.              |
|--|---|---|---|---|----------------------------------|
| The Serrells Lateral of Ennis }<br>Ditch | Troublesome creek                               | Mar. 6, 1891  | June 10, 1890                                 | 2.00  | George Serrell                   |
| The West Side Ditch                      | -----   | Mar. 6, 1891  | July 1, 1888                                  | 2.30  | George Serrell                   |
| The Pleasant View Ditch                  | Troublesome creek                               | Mar. 6, 1891  | May 15, 1890                                  | 8.00  | George Serrell <i>et al.</i>     |
| The Big Spring Ditch                     | Troublesome creek                               | May 13, 1891  | May 13, 1891                                  | 10.00   | Urban Bickley, (one statement)   |
| The Bickley Ditch                        | Troublesome creek                               | May 13, 1891  | May 23, 1882                                  | 20.00   | Urban Bickley, (one statement)   |
| The Troublesome Ditch                    | North Fork of<br>Troublesome cr'k }             | May 20, 1891  | May 13, 1891                                  | 55.00   | Urban Bickley <i>et al.</i>      |
| The Zwahlen Ditch                        | Troublesome creek                               | Aug. 2, 1892  | May 1889                                      | 9.00  | Peter Zwahlen                    |
| The Cliff Ditch                          | Troublesome creek                               | Sept. 21, 1892  | May 19, 1886                                  | 29.00   | C. H. Johnson <i>et al.</i>      |
| The Six Diamond Ditch                    | Troublesome creek                               | Sept. 21, 1892  | May 18, 1887                                  | 12.00   | C. A. Johnson and Gustaf Pearson |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 51, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.              |
|---------------------------|---|--|---------------------------------------|--|----------------------------------|
| The North Ditch .....     | Grand River .....                         | Jan. 7, 1891                               | Sept. 8, 1890                         | 357.48                                     | The Larimer Water Supply Company |
| The South Ditch .....     | Grand River .....                         | Jan. 7, 1891                               | Sept. 15, 1890                        | 183.26                                     | The Larimer Water Supply Company |
| The Telford Ditch .....   | Pole creek .....                          | Oct. 1, 1892                               | August 1890                           | 9.00                                       | G. H. Church                     |
| The Carl Just Ditch ..... | Pole creek .....                          | Oct. 14, 1892                              | Oct. 1, 1892                          | 200 inches                                 | Carl Just                        |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 52, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.    | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet previously appropriated in the district. | Order of priority in district. |
|----------------------------|---|------------------------|--|--|---|--------------------------------|
| The Wheeler Ditch.....     | Henry creek.....                          | May 1, 1883            | 2.00   | -----  | -----   | 1                              |
| The McCoy No. 1 Ditch..... | Sheephorn creek.....                      | May 1, 1883            | 1.20   | -----  | 2.00  | 2                              |
| The Wilmot Ditch.....      | Cottonwood creek.....                     | Dec. 20, 1883          | 4.00   | -----  | 3.20  | 3                              |
| The Osage Ditch.....       | Sheephorn creek.....                      | July 1, 1885           | 2.00   | -----  | 7.20  | 4                              |
| The Bear Creek Ditch.....  | Bear creek.....                           | May 1, 1886            | .40  | -----  | 9.20  | 5                              |
| The Sava Creek Ditch.....  | Lava creek.....                           | May 15, 1886           | .20  | -----  | 9.60  | 6                              |
| The Dry Park Ditch.....    | Castle creek.....                         | Mar. 20, 1887          | 4.20   | -----  | 9.80  | 7                              |
| The Hartman Ditch.....     | Sheep Mountain creek.....                 | April 20, 1887         | 3.00   | -----  | 14.00   | 8                              |
| The Guzler Ditch.....      | Sheephorn creek.....                      | May 1, 1887            | 2.80   | -----  | 17.00   | 9                              |
| The Harvey Ditch.....      | Sheephorn creek.....                      | May 15, 1887           | 2.00   | -----  | 19.80   | 10                             |
| The McCoy No. 2 Ditch..... | Sheephorn creek.....                      | June 1, 1887           | 1.20   | -----  | 21.80   | 11                             |



STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in district. | Order of priority in district. |
|--------------------------------|---|------------------------|--|--|---|--------------------------------|
| The Guzler Lake Ditch          | Lake Guzel                                | June 30, 1887          | .80  | -----  | 23.00   | 12                             |
| The Wilnot Ditch (by purchase) | Cottonwood creek                          | Nov. 7, 1887           | 1.80   | 5.80   | 23.80   | 13                             |
| The Smalley Ditch              | Cottonwood creek                          | Apr. 15, 1888          | 1.70   | -----  | 25.60   | 14                             |
| The Rundell No. 3 Ditch        | Little Cottonwood creek                   | May 1, 1888            | .10  | -----  | 27.30   | 15                             |
| The South Piney Ditch          | Piney creek                               | July 1, 1888           | 1.00   | -----  | 27.40   | 16                             |
| The North Piney Ditch          | Piney creek                               | July 1, 1888           | 1.20   | -----  | 28.40   | 17                             |
| The Rundell Ditch              | Cottonwood creek                          | Aug. 1, 1888           | 1.80   | -----  | 29.60   | 18                             |
| The Pruett No. 2 Ditch         | Cottonwood creek                          | May 1, 1889            | .40  | -----  | 31.40   | 19                             |
| The Pruett No. 1 Ditch         | Cottonwood creek                          | May 1, 1889            | 1.60   | -----  | 31.80   | 20                             |
| The Hoyt Ditch                 | Sheephorn creek                           | May 1, 1889            | .96  | -----  | 33.40   | 21                             |
| The Hog Eye Ditch              | Sheephorn creek                           | June 15, 1889          | 1.60   | -----  | 34.36   | 22                             |

|   |                              |                     |           |            |         |
|---|------------------------------|---------------------|-----------|------------|---------|
| The Castle Creek Ditch.....               | Castle creek.....            | Aug. 29, 1889.....  | 3.20..... | 35.96..... | 23..... |
| The Ashlock Ditch.....                    | Piney creek.....             | Aug. 27, 1889.....  | 1.80..... | 39.16..... | 24..... |
| The Kuhn Ditch.....                       | Kuhn creek.....              | Aug. 31, 1889.....  | 3.20..... | 40.96..... | 25..... |
| The Graham Ditch.....                     | Cottonwood creek.....        | April 1, 1890.....  | .80.....  | 44.16..... | 26..... |
| The Smalley Creek Ditch.....              | Cottonwood creek.....        | April 15, 1890..... | 1.00..... | 44.96..... | 27..... |
| The McPhee Ditch.....                     | Sheephorn creek.....         | May 1, 1890.....    | 3.30..... | 45.96..... | 28..... |
| The Hartman Ditch, first enlargement..... | Sheep Mountain creek.....    | May 7, 1890.....    | 1.40..... | 49.26..... | 29..... |
| The Willow Creek Ditch.....               | Willow creek.....            | Sept. 10, 1890..... | .60.....  | 50.66..... | 30..... |
| The Guzler No. 2 Ditch.....               | Sheephorn creek.....         | Sept. 10, 1890..... | .20.....  | 51.26..... | 31..... |
| The Rundell No. 2 Ditch.....              | Sheephorn creek.....         | Sept. 11, 1890..... | .16.....  | 51.46..... | 32..... |
| The Mather Ditch.....                     | Sheephorn creek.....         | Sept. 11, 1890..... | 2.50..... | 51.62..... | 33..... |
| The Rundell No. 4 Ditch.....              | Little Cottonwood creek..... | Sept. 11, 1890..... | .50.....  | 54.12..... | 34..... |
| The J. L. Ditch.....                      | Henry creek.....             | Sept. 12, 1890..... | 1.50..... | 54.62..... | 35..... |
| Total Deeded in District.....             | .....                        | .....               | .....     | 56.12..... | .....   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 53, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.           | Stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|-----------------------------------|-----------------------------------|------------------------|---|--|--|--------------------------------|
| The Stewart Irrigating Ditch..... | Grand river.....                  | Aug. 15, 1882          | 2.40  | -----  | -----  | 1                              |
| The Clyde Ditch.....              | Egeria creek.....                 | April 20, 1883         | 1.60  | -----  | 2.40   | 1 A                            |
| The Sutton No. 1 Ditch.....       | King creek.....                   | May 30, 1883           | 2.30  | -----  | 4.00   | 2                              |
| The Cedar Creek No. 1 Ditch.....  | Cedar creek.....                  | June 25, 1883          | 2.50  | -----  | 6.30   | 3                              |
| The Idlewild Ditch.....           | Toponas creek.....                | July 1, 1883           | 3.00  | -----  | 8.80   | 4                              |
| The John Thomas Ditch.....        | Egeria creek.....                 | July 3, 1883           | 4.00  | -----  | 11.80  | 5                              |
| The Moore No. 1 Ditch.....        | Cabin creek.....                  | Aug. 15, 1883          | 1.00  | -----  | 15.80  | 6                              |
| The Link Ditch.....               | Sunnyside creek.....              | Sept. 1, 1883          | .20   | -----  | 16.80  | 7                              |
| The Saunders Ditch.....           | Sunnyside creek.....              | Mar. 31, 1884          | 3.20  | -----  | 17.00  | 9                              |
| The Whiteside No. 1 Ditch.....    | Cabin creek.....                  | April 1, 1884          | .30   | -----  | 20.20  | 10                             |
| The Raven's Nest Ditch.....       | Egeria creek.....                 | July 20, 1884          | 4.00  | -----  | 20.50  | 11                             |
| The Cabin Creek Ditch.....        | Cabin creek.....                  | Aug. 25, 1884          | 2.50  | -----  | 24.50  | 12                             |

|                                     |                        |                |       |       |      |
|-------------------------------------|------------------------|----------------|-------|-------|------|
| The Derby Ditch                     | Derby creek            | Sept. 4, 1884  | 24.00 | 27.00 | 13   |
| The Oak Grove Ditch                 | Cabin creek            | Sept. 1, 1884  | 6.50  | 51.00 | 13 A |
| The Little Dry Gulch Ditch          | Little Dry Gulch creek | Nov. 4, 1884   | 1.40  | 57.50 | 14   |
| The Sunnyside Roberts Ditch         | Sunnyside creek        | Mar. 20, 1885  | 2.00  | 58.90 | 15   |
| The Merriman Ditch                  | Sunnyside creek        | Mar. 23, 1885  | 2.00  | 60.90 | 16   |
| The Cedar Creek No. 2 Ditch         | Cedar creek            | April 15, 1885 | 2.70  | 62.90 | 17   |
| The Buffalo Head Ditch              | King creek             | April 15, 1885 | 5.00  | 65.60 | 18   |
| The Grover Cleveland Ditch          | King ditch             | April 15, 1885 | 7.80  | 70.60 | 19   |
| The Whiteside No. 2 Ditch           | Cabin creek            | April 15, 1885 | .04   | 78.40 | 20   |
| The Sunnyside Ditch                 | Sunnyside creek        | April 30, 1885 | 3.20  | 78.44 | 22   |
| The Sutton No. 1, first enlargement | King creek             | May 15, 1885   | 1.60  | 81.64 | 22 A |
| The Raspberry Gulch Ditch           | Raspberry Gulch creek  | May 15, 1885   | .80   | 83.24 | 23   |
| The Merrimac Ditch                  | Sunnyside creek        | June 21, 1885  | 2.80  | 84.04 | 24   |
| The Baxter Ditch                    | Sunnyside creek        | June 29, 1885  | 3.20  | 86.84 | 25   |
| The Sanders (by purchase)           | Sunnyside creek        | June 30, 1885  | 1.20  | 90.04 | 26   |
| The Sutton No. 2 Ditch              | Sutton creek           | July 11, 1885  | 2.60  | 91.24 | 27   |
| The McKeen No. 1 Ditch              | McKeen creek           | Aug. 15, 1885  | .50   | 93.84 | 28   |
| The McKeen No. 2 Ditch              | McKeen creek           | Aug. 15, 1885  | 2.00  | 94.34 | 29   |
| The Murphy No. 1 Ditch              | Yarmany creek          | Mar. 15, 1886  | 1.60  | 96.34 | 30   |
| The Elliott No. 2 Ditch             | Rock creek             | April 1, 1886  | .12   | 97.94 | 31   |
| The Hart No. 3 Ditch                | Rock creek             | May 1, 1886    | .40   | 98.06 | 32   |
| The Dawson Ditch                    | Sunnyside creek        | May 1, 1886    | 3.60  | 98.46 | 33   |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                         | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district. |
|---|---|------------------------|--|--|--|--------------------------------|
| The S. D. Ditch.....                            | Egeria creek.....                         | May 8, 1886            | 3.00   | .....  | 102.06   | 34                             |
| The Allen No. 1 Ditch.....                      | Mason creek.....                          | May 15, 1886           | .50  | .....  | 105.06   | 35                             |
| The Elliott Ditch.....                          | Rock creek.....                           | May 20, 1886           | 2.70   | .....  | 105.56   | 36                             |
| The Creamery Ditch.....                         | King creek.....                           | May 20, 1886           | 1.20   | .....  | 108.26   | 37                             |
| The North Egeria Ditch.....                     | Egeria creek.....                         | June 10, 1886          | 3.20   | .....  | 109.46   | 38                             |
| The Conger Ditch.....                           | Conger creek.....                         | June 15, 1886          | 8.80   | .....  | 112.66   | 39                             |
| The Stewart No. 1 Ditch.....                    | Stewart creek.....                        | June 15, 1886          | .10  | .....  | 121.46   | 40                             |
| The Stewart No. 2 Ditch.....                    | Stewart creek.....                        | June 15, 1886          | .60  | .....  | 121.56   | 41                             |
| The Stewart No. 3 Ditch.....                    | Stewart creek.....                        | June 15, 1886          | .04  | .....  | 122.16   | 42                             |
| The Stewart No. 4 Ditch.....                    | Stewart creek.....                        | June 15, 1886          | .20  | .....  | 122.20   | 43                             |
| The Elk Creek Ditch.....                        | Elk creek.....                            | Dec. 22, 1886          | 2.00   | .....  | 122.40   | 44                             |
| The Dempsey No. 1 Ditch.....                    | Ohio creek.....                           | Mar. 4, 1887           | .80  | .....  | 124.40   | 45                             |
| The Tucker No. 2 Ditch.....                     | Haak creek.....                           | Mar 15, 1887           | .30  | .....  | 125.20   | 46                             |
| The Stewart Irrigating Ditch (by purchase)..... | Grand river.....                          | Mar. 20, 1887          | .70  | 3.10   | 125.50   | 47                             |
| The Maxwell Ditch.....                          | Rock creek.....                           | Apr. 1, 1887           | .40  | .....  | 126.20   | 48                             |

|  |                |       |       |        |    |
|--|----------------|-------|-------|--------|----|
| The Musgrave Ditch.....                              | April 1, 1887  | 1.20  | ----- | 126.60 | 49 |
| The Waste Waters Ditch.....                          | April 5, 1887  | 1.00  | ----- | 127.80 | 50 |
| The Maxwell No. 2 Ditch.....                         | April 15, 1887 | .40   | ----- | 128.20 | 51 |
| The Kenney No. 1 Ditch.....                          | April 27, 1887 | .20   | ----- | 128.60 | 52 |
| The Willow Ditch.....                                | April 30, 1887 | 4.40  | ----- | 128.80 | 53 |
| The Hart No. 1 Ditch.....                            | May 1, 1887    | 1.20  | ----- | 133.20 | 54 |
| The Hart No. 2 Ditch.....                            | May 1, 1887    | .40   | ----- | 134.40 | 55 |
| The Kenney No. 2 Ditch.....                          | May 5, 1887    | .24   | ----- | 134.80 | 56 |
| The Cyrus No. 1 Ditch.....                           | May 6, 1887    | .20   | ----- | 135.04 | 57 |
| The Skinner Ditch.....                               | May 10, 1887   | .70   | ----- | 135.24 | 58 |
| The Allen No. 2 Ditch.....                           | May 15, 1887   | .30   | ----- | 135.94 | 59 |
| The Haak No. 2 Ditch.....                            | May 15, 1887   | .50   | ----- | 136.24 | 60 |
| The Allen No. 3 Ditch.....                           | May 15, 1887   | .12   | ----- | 136.74 | 61 |
| The Deep Creek Ditch.....                            | June 1, 1887   | 1.80  | ----- | 136.86 | 62 |
| The Simons Ditch.....                                | June 10, 1887  | .10   | ----- | 138.66 | 63 |
| The Spring Ditch.....                                | July 1, 1887   | .20   | ----- | 138.76 | 64 |
| The Oak Knoll Ditch.....                             | July 1, 1887   | 1.20  | ----- | 138.96 | 65 |
| The Grand River Land and Cattle Company Ditch.....   | Sept. 29, 1887 | 18.40 | ----- | 140.16 | 66 |
| The Kenney No. 3 Ditch.....                          | Oct. 20, 1887  | 1.20  | ----- | 158.56 | 67 |
| The Horn No. 1 Ditch.....                            | Nov. 1, 1887   | 1.30  | ----- | 159.76 | 68 |
| The Horn No. 2 Ditch.....                            | Nov. 1, 1887   | .20   | ----- | 161.06 | 69 |
| The Stewart Irrigating Ditch, first enlargement..... | Mar. 15, 1888  | 2.00  | 4.40  | 161.26 | 70 |



## STATEMENT CONCERNING DITCHES.—Continued.

| NAME OF DITCH OR CANAL.         | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | Order of priority in district. |
|---------------------------------|---|------------------------|--|--|---|--------------------------------|
| The Snodgrass & Manners Ditch   | Horse creek                               | April 1, 1888          | 2.00   | —  | 163.26  | 71                             |
| The Tuke No. 1 Ditch            | Horse creek                               | April 4, 1888          | .80  | —  | 165.26  | 72                             |
| The Tuke No. 2 Ditch            | Horse creek                               | April 4, 1888          | .12  | —  | 166.06  | 73                             |
| The Tuke No. 3 Ditch            | Horse creek                               | April 4, 1888          | .32  | —  | 166.18  | 74                             |
| The Tuke No. 4 Ditch            | Horse creek                               | April 4, 1888          | .16  | —  | 166.50  | 75                             |
| The George McClusky Ditch       | Willow and Horse creeks                   | April 15, 1888         | .50  | —  | 166.66  | 76                             |
| The Big Mesa Ditch              | Sunnyside creek                           | April 15, 1888         | .60  | —  | 167.16  | 77                             |
| The Correll Ditch               | Cabin creek                               | April 15, 1888         | .20  | —  | 167.76  | 78                             |
| The Hooper Ditch                | Derby creek                               | May 1, 1888            | 9.00   | —  | 167.96  | 79                             |
| The Toponas-Elliott No. 2 Ditch | Toponas creek                             | June 1, 1888           | 1.20   | —  | 176.96  | 81                             |
| The Elliott No. 1 Ditch         | Wright creek                              | June 10, 1888          | .30  | —  | 178.16  | 82                             |
| The Yarmany Park Ditch          | Yarmany creek                             | July 3, 1888           | 4.80   | —  | 178.46  | 83                             |
| The Cabin Creek No. 3 Ditch     | Cabin creek                               | July 25, 1888          | .40  | —  | 183.26  | 84                             |
| The Summit Ditch                | Antelope creek                            | July 30, 1888          | .20  | —  | 183.66  | 85                             |
| The Nelson Ditch                | Horse creek                               | Oct. 10, 1888          | 1.80   | —  | 183.86  | 86                             |

|   |                             |                     |           |             |     |
|---|-----------------------------|---------------------|-----------|-------------|-----|
| The S. D. Ditch, first enlargement.....       | Egeria creek.....           | Oct. 13, 1888.....  | 5.40..... | 185.66..... | 87  |
| The Russell No. 1 Ditch.....                  | Red Dirt creek.....         | Nov. 25, 1888.....  | .80.....  | 191.06..... | 88  |
| The Antelope Ditch.....                       | Antelope creek.....         | Jan. 13, 1889.....  | .80.....  | 191.86..... | 89  |
| The Red Dirt Ditch.....                       | Red Dirt creek.....         | Feb. 14, 1889.....  | 1.50..... | 192.66..... | 90  |
| The McClusky No. 1 Ditch.....                 | Horse creek.....            | Feb. 14, 1889.....  | .60.....  | 194.16..... | 91  |
| The McClusky No. 2 Ditch.....                 | Horse creek.....            | April 1, 1889.....  | .20.....  | 194.76..... | 92  |
| The Irrigating Ditch No. 2 Ditch.....         | Sheep Canon creek.....      | April 10, 1889..... | .80.....  | 194.96..... | 93  |
| The Big Mesa Ditch, first enlargement.....    | Sunnyside creek.....        | April 15, 1889..... | 1.20..... | 195.76..... | 94  |
| The Oak Knoll Ditch, (purchase).....          | Antelope creek.....         | April 30, 1889..... | .20.....  | 196.96..... | 95  |
| The Armour Ditch.....                         | Egeria creek.....           | May 1, 1889.....    | .80.....  | 197.16..... | 96  |
| The Elliott Ditch, (purchase).....            | Rock creek.....             | May 15, 1889.....   | .50.....  | 197.96..... | 97  |
| The Roberts Ditch.....                        | Sunnyside creek.....        | June 1, 1889.....   | .30.....  | 198.46..... | 98  |
| The Gruner No. 1 Ditch.....                   | Jim creek.....              | June 5, 1889.....   | 1.00..... | 198.76..... | 99  |
| The Trail Ditch.....                          | Trail creek.....            | June 17, 1889.....  | 3.20..... | 199.76..... | 100 |
| The Morse Ditch.....                          | Egeria creek.....           | July 13, 1889.....  | 1.00..... | 202.96..... | 101 |
| The Rogers Ditch.....                         | Little Dry Gulch creek..... | Aug. 5, 1889.....   | 1.80..... | 203.96..... | 102 |
| The Deep Creek Ditch, (purchase).....         | Deep creek.....             | Sept. 18, 1889..... | 2.00..... | 205.76..... | 103 |
| The Rock Creek Ditch.....                     | Rock creek.....             | April 1, 1890.....  | 1.60..... | 207.76..... | 105 |
| The Big Mesa Ditch, second enlargement.....   | Sunnyside creek.....        | April 15, 1890..... | 2.80..... | 209.36..... | 106 |
| The Sanders Ditch, first enlargement.....     | Sunnyside creek.....        | April 15, 1890..... | .06.....  | 212.16..... | 107 |
| The Tucker No. 1 Ditch.....                   | Hank creek.....             | April 20, 1890..... | 1.20..... | 212.22..... | 108 |
| The Allen No. 3 Ditch, first enlargement..... | Sheep creek.....            | May 1, 1890.....    | .12.....  | 213.42..... | 109 |

STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.                            | Name of stream from which water is taken. | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second previously appropriated in the district. | Order of priority in district. |
|--|---|------------------------|--|--|--|--------------------------------|
| The No Name Ditch.....                             | Egeria creek.....                         | May 12, 1890           | .60  | -----  | 213.54   | 110                            |
| The Tucker No. 3 Ditch.....                        | Haak creek.....                           | May 15, 1890           | .80  | -----  | 214.14   | 111                            |
| The Pass Creek Ditch.....                          | Pass creek.....                           | May 15, 1890           | .10  | -----  | 214.94   | 112                            |
| The Dry Ditch.....                                 | Sunnyside creek.....                      | May 20, 1890           | 1.20   | -----  | 215.04   | 113                            |
| The Elliott No. 3 Ditch.....                       | Rock creek.....                           | May 20, 1890           | .50  | -----  | 216.24   | 114                            |
| The Nelson Ditch, first enlargement.....           | Horse creek.....                          | June 13, 1890          | 1.00   | 2.80   | 216.74   | 115                            |
| The Cabin Creek No. 2 Ditch.....                   | Cabin creek.....                          | June 15, 1890          | .60  | -----  | 217.74   | 116                            |
| The Stewart No. 1 Ditch, second appropriation..... | Stewart creek.....                        | June 25, 1890          | 1.50   | 1.60   | 218.34   | 117                            |
| The Frederick Ditch.....                           | Sweetwater creek.....                     | June 27, 1890          | 1.00   | -----  | 219.84   | 118                            |
| The Dempsey No. 2 Ditch.....                       | McKeen creek.....                         | June 28, 1890          | .60  | -----  | 220.84   | 119                            |
| The Gruner No. 2 Ditch.....                        | Jim creek.....                            | June 28, 1890          | .20  | -----  | 221.44   | 120                            |
| The Riland Ditch.....                              | Haak creek.....                           | June 28, 1890          | 1.40   | -----  | 221.64   | 121                            |
| The Gruner No. 1 Ditch, first enlargement.....     | Jim creek.....                            | June 28, 1890          | 1.00   | -----  | 223.04   | 122                            |
| The Cyrus No. 2 Ditch.....                         | Mason creek.....                          | June 30, 1890          | .60  | -----  | 224.04   | 123                            |
| The Cyrus No. 3 Ditch.....                         | Mason creek.....                          | June 30, 1890          | .40  | -----  | 224.64   | 124                            |

|  |                             |               |      |        |       |
|--|-----------------------------|---------------|------|--------|-------|
| The Wilson Gulch Ditch.....                            | Wilson Gulch creek.....     | July 3, 1890  | .80  | 225.04 | 125   |
| The Dome Ranch Ditch.....                              | Cedar creek.....            | July 8, 1890  | 1.00 | 225.84 | 126   |
| The Tanner Ditch.....                                  | Sunnyside creek.....        | July 9, 1890  | 1.20 | 226.84 | 127   |
| The P. K. Ditch.....                                   | King creek.....             | July 14, 1890 | 3.20 | 228.04 | 128   |
| The Highwater Ditch.....                               | Egeria creek.....           | July 16, 1890 | 3.20 | 231.24 | 129   |
| The Wilson Ditch.....                                  | Egeria creek.....           | July 16, 1890 | 2.00 | 234.44 | 130   |
| The J. M. C. Ditch.....                                | Spring creek.....           | July 17, 1890 | 2.40 | 236.44 | 131   |
| The Highland Ditch.....                                | Toponas creek.....          | July 18, 1890 | 5.60 | 238.84 | 132   |
| The Oak Knoll Ditch, first enlargement.....            | Antelope creek.....         | July 21, 1890 | 1.00 | 244.44 | 133   |
| The Spruce Grove Ditch.....                            | Antelope creek.....         | July 23, 1890 | 1.60 | 245.44 | 134   |
| The Russell No. 2 Ditch.....                           | Red Dirt creek.....         | July 24, 1890 | 1.60 | 247.04 | 135   |
| The Horn No. 3 Ditch.....                              | Rock creek.....             | July 24, 1890 | .94  | 248.64 | 136   |
| The Middle Derby Ditch.....                            | Middle Derby creek.....     | July 25, 1890 | 7.20 | 249.58 | 137   |
| The Murphy No. 2 Ditch.....                            | Yarnany creek.....          | July 28, 1890 | 2.00 | 256.78 | 138   |
| The Sunnyside Roberts Ditch, second appropriation..... | Sunnyside creek.....        | July 30, 1890 | 4.00 | 258.78 | 138 A |
| The Whiteside No. 2 Ditch, second appropriation.....   | Cabin creek.....            | July 30, 1890 | 2.36 | 262.78 | 139   |
| The Whiteside No. 3 Ditch.....                         | Little Dry Gulch creek..... | Aug. 9, 1890  | 1.00 | 265.14 | 140   |
| The Elk Head Ditch.....                                | Egeria creek.....           | Sept. 1, 1890 | 1.60 | 266.14 | 141   |
| Total decreed in District.....                         |                             |               |      | 267.74 |       |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 53, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—WATER COMMISSIONER, CHARLES M. MORRIS, TOPMAS, COLO. APPOINTED APRIL, 1892.

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet | NAMES OF CLAIMANTS. |
|--------------------------------|---|--|---------------------------------------|--------------------------------|---------------------|
| The Earl Ditch .....           | Rigeria creek .....                       | Jan. 15, 1892                              | July 7, 1891                          | .64                            | S. D. Wilson        |
| The Wright Waste Water Ditch.. | { Waste seepage }<br>{ and springs.... }  | April 4, 1892                              | Mar. 14, 1892                         | 8.00                           | W. M. Wright        |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 59, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.        | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.            |
|--------------------------------|---|---|--|---|--------------------------------|
| The Castle High Line Ditch     | Castle creek                                    | Dec. 5, 1890  | Nov. 10, 1890                                    | 40.00   | D. S. McGlashan and G. W. Howe |
| The Squirrel Creek Ditch       | Squirrel creek                                  | Dec. 5, 1890  | Nov. 10, 1890                                    | 4.00  | D. S. McGlashan and G. W. Howe |
| The Thos. N. Estes Irr'g Ditch | Ohio creek                                      | Jan. 5, 1891  | Sept. 1, 1883                                    | 18.00   | Thomas W. Estes                |
| The Bourne Ditch               | Carbon creek                                    | Jan. 2, 1891  | June 23, 1886                                    | 9.00  | Emma P. Patch <i>et al.</i>    |
| The Marshall Ditch No. 1       | Gunnison river                                  | Jan. 13, 1891                                       | 1890   | 60.00   | J. Marshall <i>et al.</i>      |
| The Marshall Ditch No. 2       | Gunnison river                                  | Jan. 13, 1891                                       | Dec. 8, 1890                                     | 40.00   | J. Marshall <i>et al.</i>      |
| The Gus Biebel Ditch           | Ohio creek                                      | Jan. 13, 1891                                       | Dec. 18, 1890                                    | 9.00  | Lonisa Biebel                  |
| The Haymaker Ditch             | Lost Canon creek                                | Jan. 13, 1891                                       | Nov. 12, 1890                                    | 20.00   | J. A. Haymaker                 |
| The Gleason Irrigating Ditch   | Ohio creek                                      | Jan. 20, 1891                                       | Jan. 22, 1891                                    | 36.00   | Andrew B. Marston              |
| The Thompson Irrigating Ditch  | Antelope creek                                  | May 13, 1891  | Jan. 7, 1891                                     | 9.00  | Thomas J. Thompson             |
| The D. S. McGlashan Ditch      | Carbon creek                                    | Aug. 3, 1891  | June 10, 1891                                    | 10.00   | D. S. McGlashan                |
| The Elmer Marshall Ditch No. 1 | Gunnison river                                  | Aug. 3, 1891  | Apr. 15, 1891                                    | 10.00   | Elmer Marshall                 |
| The Elmer Marshall Ditch No. 2 | Gunnison river                                  | Aug. 3, 1891  | Apr. 15, 1891                                    | 10.00   | Elmer Marshall                 |
| The Castleton Ditch            | Carbon creek                                    | Aug. 4, 1891  | June 10, 1882                                    | 30.00   | Joseph C. McKee <i>et al.</i>  |



STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL.           | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.              |
|-----------------------------------|---|--|---------------------------------------|--|----------------------------------|
| The Gray Irrigating Ditch         | Grays creek                               | Aug. 10, 1891                              | July 10, 1891                         | 4.90                                       | T. W. Gray                       |
| The Spring Creek Irrigating Ditch | Spring creek                              | Oct. 14, 1891                              | June 15, 1882                         | 25.00                                      | Charles E. Stevens <i>et al.</i> |
| The Gleason Irrigating Ditch      | Ohio creek                                | Oct. 24, 1891                              | Oct. 22, 1891                         | 36.00                                      | Andrew B. Marston                |
| The Bruce Ditch No. 1             | Spring creek                              | Nov. 14, 1891                              | Nov. 20, 1883                         | 33.00                                      | Hiram T. Bruce                   |
| The Bruce Ditch No. 2             | Spring creek                              | Nov. 14, 1891                              | Nov. 20, 1883                         | 13.00                                      | Hiram T. Bruce                   |
| The Wilson Gulch Ditch            | { Bear and Antelope gulches.              | Dec. 7, 1891                               | Dec. 3, 1891                          | 43.00                                      | William Wilson                   |
| The Buckley Ditch                 | Ohio ditch.                               | Dec. 7, 1891                               | Nov. 30, 1891                         | 45.00                                      | William F. Buckley               |
| The Frank Adams Ditch No. 2       | Gunnison river                            | Dec. 7, 1891                               | Mar. 1883                             | 28.60                                      | Frank Adams                      |
| The Sunshine Irrigating Ditch     | West Antelope c'k                         | May 20, 1891                               | May 20, 1891                          | 4.64                                       | E. D. Long                       |
| The Hope Resich Ditch             | Carbon creek                              | June 1, 1892                               | May 6, 1892                           | 27.00                                      | C. Bourne and Hope Resich        |
| The Smith & Wilson Ditch          | Gunnison river                            | Sept. 8, 1892                              | Oct. 1, 1888                          | 12.00                                      | S. S. Wilson and George W. Smith |
| The Goyn & Morelock Ditch         | Unnamed stream.                           | Oct. 20, 1892                              | July 1, 1892                          | 10.00                                      | F. W. Goyn and M. Morelock       |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 60, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.               | Name of stream from which water is taken.   | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                      |
|---------------------------------------|---|--|---------------------------------------|---------------------------------|--|
| The Adams Canal                       | Deep creek                                  | Dec. 6, 1890                               | Oct. 15, 1890                         | 88.00                           | John W. and F. E. Adams                  |
| The East Beaver Water Right and Ditch | { East branch, East fork Main Beaver creek. | Dec. 23, 1891                              | Sept. 24, 1891                        | 61.20                           | The Maturita Canal and Reservoir Company |
| The Lawson Ditch                      | { Wadell and Prospect creeks.               | Mar. 3, 1892                               | June 22, 1891                         | 8.00                            | J. A. Lawson                             |
| The Thompson Ditch                    | Big Bear creek                              | April 29, 1892                             | June 26, 1891                         | 11.00                           | Alex. Thompson                           |
| The Prospect Creek Ditch              | Prospect creek                              | May 7, 1892                                | June 10, 1890                         | 9.50                            | H. Kellock and L. L. Lasselle            |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, PREPARED FROM THE CERTIFIED COPY OF THE DECREE GOVERNING APPROPRIATIONS IN THIS DISTRICT, FURNISHED BY THE CLERK OF THE DISTRICT COURT ISSUING SUCH DECREE.

| NAME OF DITCH OR CANAL.         | Name of stream from which water is taken.                  | Date of appropriation. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | No. on stream. | Order of priority in district. |
|---------------------------------|--|------------------------|--|--|--|----------------|--------------------------------|
| The Goshorn No. 1 Ditch.....    | Paradox creek.....   | June 30, 1878          | .75  | -----  | -----  | 1              | 1                              |
| The Sheek Ditch.....            | Dolores river.....   | May 31, 1879           | 1.00   | -----  | .75  | 1              | 2                              |
| The Illinois Ditch.....         | Dolores river.....   | April 15, 1880         | 3.30   | -----  | 1.75   | 2              | 3                              |
| The Home Ditch.....             | Dolores river.....   | May 1, 1880            | 1.00   | -----  | 5.05   | 3              | 4                              |
| The Italian Ditch.....          | Dolores river.....   | May 1, 1880            | 1.00   | -----  | 6.05   | 4              | 5                              |
| The Moriarity Ditch.....        | Dolores river.....   | Dec. 31, 1880          | 1.00   | -----  | 7.05   | 5              | 6                              |
| The Talbert Ditch.....          | Talbert and Cottonwood creek tributaries of W. Paradox...} | Feb. 14, 1881          | 1.00   | -----  | 8.05   | 2              | 7                              |
| The Huose & Sommers Ditch.....  | Dolores river.....   | Mar. 31, 1881          | 1.00   | -----  | 9.05   | 6              | 8                              |
| The Bean Ditch.....             | Dolores river.....   | April 1, 1881          | 1.00   | -----  | 10.05  | 7              | 9                              |
| The Burch & Longwill Ditch..... | Dolores river.....   | April 30, 1881         | 1.00   | -----  | 11.05  | 8              | 10                             |
| The George P. Moore Ditch.....  | Dolores river.....   | April 30, 1881         | 1.00   | -----  | 12.05  | 9              | 11                             |

|  |                       |                |      |       |       |    |    |
|--|-----------------------|----------------|------|-------|-------|----|----|
| The Neathery Ditch.....                | Paradox creek.....    | April 30, 1881 | .90  | ----- | 13.05 | 3  | 12 |
| The Kuhlman Ditch.....                 | Dolores river.....    | May 1, 1881    | 1.00 | ----- | 13.95 | 10 | 13 |
| The D. D. Williams Ditch.....          | Dolores river.....    | May 1, 1881    | 1.00 | ----- | 14.95 | 11 | 14 |
| The Aztec Ditch.....                   | Dolores river.....    | May 1, 1881    | 1.00 | ----- | 15.95 | 12 | 15 |
| The Hammond & Clark Ditch.....         | Dolores river.....    | May 10, 1881   | 1.00 | ----- | 16.95 | 13 | 16 |
| The Lone Dome Ditch.....               | Dolores river.....    | Feb. 20, 1882  | 1.00 | ----- | 17.95 | 14 | 17 |
| The Stevens or Riley Watson Ditch..... | Springs.....          | Mar. 31, 1882  | 1.75 | ----- | 18.95 | 4  | 18 |
| The Gould & Moriarty Ditch.....        | Dolores river.....    | May 15, 1882   | 1.00 | ----- | 20.70 | 15 | 19 |
| The Giorgetta Ditch.....               | Dolores river.....    | May 31, 1882   | 1.00 | ----- | 21.70 | 16 | 20 |
| The Royce & Risley Ditch.....          | Lost Canon creek..... | July 22, 1882  | 1.00 | ----- | 22.70 | 1  | 21 |
| The Neathery No. 2 Ditch.....          | Paradox creek.....    | April 30, 1883 | 1.00 | ----- | 23.70 | 5  | 22 |
| The Dunham Ditch.....                  | Dolores river.....    | May 31, 1883   | 1.00 | ----- | 24.70 | 18 | 23 |
| The Sebastian Tam Ditch.....           | Dolores river.....    | May 31, 1883   | 1.00 | ----- | 25.70 | 19 | 24 |
| The Prentiss Ditch.....                | Paradox creek.....    | May 31, 1883   | 1.00 | ----- | 26.70 | 6  | 25 |
| The E. C. Hamilton Ditch.....          | Paradox creek.....    | Oct. 5, 1883   | 1.00 | ----- | 27.70 | 7  | 26 |
| The W. D. Hamilton Private Ditch.....  | Huff springs.....     | Dec. 31, 1883  | 1.00 | ----- | 28.70 | 8  | 27 |
| The Swain Ditch.....                   | Paradox creek.....    | Jan. 7, 1884   | 1.00 | ----- | 29.70 | 9  | 28 |
| The Galloway Ditch.....                | Paradox creek.....    | May 10, 1884   | .30  | ----- | 30.70 | 10 | 29 |
| The Nyswoonger Ditch.....              | Paradox creek.....    | May 31, 1884   | 1.00 | ----- | 31.00 | 11 | 30 |
| The Goshorn No. 3 Ditch.....           | Paradox creek.....    | Nov. 30, 1884  | .58  | ----- | 32.00 | 12 | 31 |
| The Leach Ditch.....                   | Paradox creek.....    | Mar. 19, 1885  | .90  | ----- | 32.58 | 13 | 32 |
| The Monument Rock Ditch.....           | Dolores creek.....    | June 1, 1885   | 1.00 | ----- | 33.48 | 20 | 33 |

## STATEMENT CONCERNING DITCHES—Concluded.

| NAME OF DITCH OR CANAL.                                   | Name of stream from which water is taken.          | Date of appropriation. | Cubic feet of water per second decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet per second appropriated in the district. | No. on stream. | Order of priority in District. |
|---|--|------------------------|--|--|---|----------------|--------------------------------|
| The Valentine Ditch                                       | Paradox creek                                      | Aug. 23, 1885          | 1.00   | —  | 34.48   | 14             | 34                             |
| The Colorado Consolidated Land and Water Company's Canals | Dolores river                                      | Nov. 25, 1885          | 64.60  | —  | 35.48   | 21             | 35                             |
| The Turkey Creek Ditch                                    | Lost Canon creek                                   | July 16, 1886          | 26.50  | —  | 100.08  | 2              | 36                             |
| The Turkey Creek Ditch                                    | Turkey creek                                       | July 16, 1886          | 1.00   | —  | 126.58  | 1              | 37                             |
| The Robinson Ditch  | { Arrow H'd, Little Ar-<br>row H'd & Aztec spgs. } | Sept. 30, 1886         | 1.00   | —  | 127.58  | 15             | 38                             |
| The Mary E. Young Ditch                                   | Huff springs                                       | May 1, 1887            | .90  | —  | 128.58  | 16             | 39                             |
| The Swain Ditch, second priority                          | Paradox creek                                      | April 28, 1888         | .33  | 1.33   | 129.48  | 17             | 40                             |
| The Waste Water No. 3 Ditch                               | Waste water  | July 1, 1888           | .33  | —  | 129.81  | 1              | 41                             |
| The Wattler and Freeman Ditch                             | Turkey creek                                       | Sept. 20, 1888         | 1.00   | —  | 130.14  | 2              | 42                             |
| The Mary E. Young No. 2 Ditch                             | Paradox creek                                      | April 1, 1889          | .33  | —  | 131.14  | 18             | 43                             |
| The Woodworth Ditch                                       | Paradox creek                                      | Nov. 7, 1889           | .90  | —  | 131.47  | 19             | 44                             |
| The Nafus Private Ditch                                   | Paradox creek                                      | Mar. 31, 1890          | 1.00   | —  | 132.37  | 20             | 45                             |
| The Lyons Ditch   | Dolores river                                      | April 30, 1891         | 1.00   | —  | 133.37  | 22             | 46                             |

|  |                  |               |      |      |        |    |    |
|--|------------------|---------------|------|------|--------|----|----|
| The D. D. Williams Ditch, second priority        | Dolores river    | Jan. 10, 1891 | 1.00 | 2.00 | 134.37 | 24 | 47 |
| The House & Sommers Ditch, second priority       | Dolores river    | April 6, 1891 | 1.00 | 2.00 | 135.37 | 25 | 48 |
| The Aztec Ditch, second priority                 | Dolores river    | May 23, 1891  | 4.00 | 5.00 | 136.37 | 26 | 49 |
| The Dunham & Johnson Ditch, second priority      | Dolores river    | June 1, 1891  | 1.00 | 2.00 | 140.37 | 27 | 50 |
| The Lone Dome Ditch, second priority             | Dolores river    | June 4, 1891  | 1.20 | 2.20 | 141.37 | 28 | 51 |
| The Italian Ditch, second priority               | Dolores river    | June 12, 1891 | 1.00 | 2.00 | 142.57 | 29 | 52 |
| The Burch & Longwill Ditch, second priority      | Dolores river    | June 17, 1891 | .50  | 1.50 | 143.57 | 30 | 53 |
| The Hammond & Clark Ditch, second priority       | Dolores river    | June 17, 1891 | 1.00 | 2.00 | 144.07 | 31 | 54 |
| The Moriarity Ditch, second priority             | Dolores river    | June 18, 1891 | 2.00 | 3.00 | 145.07 | 32 | 55 |
| The Bean Ditch, second priority                  | Dolores river    | June 24, 1891 | .50  | 1.50 | 147.07 | 33 | 56 |
| The Royce & Riley Ditch, second priority         | Lost Canon creek | June 24, 1891 | .30  | 1.30 | 147.57 | 3  | 57 |
| Total decreed in District, giving definite dates |                  |               |      |      | 147.87 |    |    |



## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, SHOWING THE "CONSTRUCTIVE PRIORITIES" DECREED IN SAID DISTRICT, PREPARED FROM THE CERTIFIED COPY OF THE DECREE FURNISHED BY THE CLERK OF THE CIRCUIT COURT ISSUING SUCH DECREES.

| NAME OF DITCH OR CANAL.                      | Stream from which water is taken. | Date of decree. | Cubic feet of water per second of time decreed to each priority. | Summation of decrees to each ditch or canal. | Cubic feet of water previously appropriated in district. | Order of priority in district |
|--|-----------------------------------|-----------------|--|--|--|-------------------------------|
| The Illinois Ditch, second priority          | Dolores river                     | Feb. 1, 1892    | 1.70   | 5.00   | 147.87   | 58                            |
| The Sheek Ditch, second priority             | Dolores river                     | Feb. 1, 1892    | 2.00   | 3.00   | 149.57   | 59                            |
| The Home Ditch, second priority              | Dolores river                     | Feb. 1, 1892    | 1.00   | 2.00   | 151.57   | 60                            |
| The Moriarity Ditch, third priority          | Dolores river                     | Feb. 1, 1892    | .80  | 3.80   | 152.57   | 61                            |
| The House and Sommers Ditch, third priority  | Dolores river                     | Feb. 1, 1892    | .40  | 2.40   | 153.37   | 62                            |
| The Bean Ditch, third priority               | Dolores river                     | Feb. 1, 1892    | .90  | 2.40   | 153.77   | 63                            |
| The Burch and Longwill Ditch, third priority | Dolores river                     | Feb. 1, 1892    | 1.50   | 3.00   | 154.67   | 64                            |
| The George P. Moore Ditch, second priority   | Dolores river                     | Feb. 1, 1892    | .80  | 1.80   | 156.17   | 65                            |
| The Kuhlman Ditch, second priority           | Dolores river                     | Feb. 1, 1892    | .80  | 1.80   | 156.97   | 66                            |
| The D. D. Williams Ditch, third priority     | Dolores river                     | Feb. 1, 1892    | 1.80   | 3.80   | 157.77   | 67                            |
| The Hammond and Clark Ditch, third priority  | Dolores river                     | Feb. 1, 1892    | 2.60   | 4.60   | 159.57   | 68                            |

|   |               |              |          |          |          |    |
|---|---------------|--------------|----------|----------|----------|----|
| The Lone Dome Ditch, third priority   | Dolores river | Feb. 1, 1892 | 2.40     | 4.60     | 162.17   | 64 |
| The Gould & Moriarity Ditch, second priority                                    | Dolores river | Feb. 1, 1892 | 3.00     | 4.00     | 164.57   | 70 |
| The Giorgetta Ditch, second priority  | Dolores river | Feb. 1, 1892 | .80      | 1.80     | 167.57   | 71 |
| The Sebastian Tam Ditch, second priority  | Dolores river | Feb. 1, 1892 | .60      | 1.60     | 168.37   | 72 |
| The Monument Rock Ditch, second priority  | Dolores river | Feb. 1, 1892 | 1.00     | 2.00     | 168.97   | 73 |
| The Colorado Consolidated Land and Water Company's Canals, }<br>second priority | Dolores river | Feb. 1, 1892 | 1,235.40 | 1,300.00 | 169.97   | 74 |
| Total decreed in District, including "constructive priorities"                  |               |              |          |          | 1,469.97 |    |

NOTE.—The above "constructive priorities" are conditioned on the "actual application" of the water thus decreed to "a beneficial use," due diligence" being prescribed as to such application.

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 61, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892, FOR WHICH NO DECREES HAVE AS YET BEEN ISSUED.—COMMISSIONER, NEAL KING, MONTROSE, COLO. APPOINTED MAY 17, 1892.

| NAME OF DITCH OR CANAL.        | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.            |
|--------------------------------|---|--|---------------------------------------|--|--------------------------------|
| The C. House Ditch.....        | Dolores river.....                        | May 22, 1891                               | Spring 1881                           | Not given                                  | Calvin House                   |
| The Turkey Ditch.....          | { North Fork of }<br>{ Lost Canon creek } | June 24, 1891                              | May 30, 1887                          | 70.00                                      | The Turkey Creek Ditch Company |
| The "vp" Ditch.....            | Dolores river.....                        | Dec. 28, 1891                              | May 15, 1890                          | 1.00                                       | Mary L. Simon                  |
| The Falling Springs Ditch..... | Falling springs.....                      | Aug. 9, 1892                               | Nov. 1890                             | 1.00                                       | Neal King                      |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 61, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.  | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.       |
|---------------------|--|--|---|--|---------------------------------------|---------------------------|
| The Leach Reservoir | Paradox creek                                  | Leach ditch                                | Jan. 16, 1892                                       | Oct. 16, 1891                                    | 28,422,900                            | M. L. Leach <i>et al.</i> |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 62, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE,  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                  | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.         |
|--|---|--|---------------------------------------|---------------------------------|-----------------------------|
| The Mergleman Ditch.....                 | Gunnison river.....                       | Dec. 6, 1890                               | Nov. 15, 1881                         | 40.00                           | A. W. Mergleman             |
| The Powderhorn Irrigating Ditch.....     | Powderhorn creek.....                     | Dec. 23, 1890                              | May 21, 1886                          | 17.00                           | A. M. Carpenter             |
| The Pole Irrigating Ditch.....           | Pole creek.....                           | Dec. 30, 1890                              | Oct. 3, 1890                          | 2.50                            | Joseph Bess                 |
| The Bouviere Ditch.....                  | Willow creek.....                         | Feb. 4, 1891                               | July 3, 1886                          | 9.30                            | Cyprien Bouviere            |
| The Home Run Irrigating Ditch.....       | Powderhorn creek.....                     | June 8, 1891                               | May 10, 1890                          | 6.10                            | A. M. Carpenter             |
| The Dry Powderhorn Irrigating Ditch..... | Powderhorn creek.....                     | Sept. 25, 1891                             | Oct. 5, 1888                          | 15.00                           | James McBride               |
| The Pioneer Ditch.....                   | Tomichi creek.....                        | Oct. 6, 1891                               | 1879                                  | 14.00                           | E. R. Hartman <i>et al.</i> |
| The Schnepf High Line Ditch.....         | Powderhorn creek.....                     | Oct. 6, 1891                               | Sept. 17, 1891                        | 21.00                           | Henry Schnepf <i>et al.</i> |
| The Thompson Irrigating Ditch.....       | Elk creek.....                            | Oct. 22, 1891                              | April 15, 1880                        | 17.50                           | J. N. Thompson              |
| The Youmans Irrigating Ditch.....        | Elk creek.....                            | Oct. 22, 1891                              | April 10, 1881                        | 6.60                            | Vincent Youmans             |
| The McMinn Irrigating Ditch.....         | Big Cinnaron riv.....                     | Oct. 24, 1891                              | April 15, 1883                        | 24.75                           | William P. McMinn           |
| The Brownlee Irrigating Ditch.....       | Brownlee creek.....                       | Nov. 18, 1891                              | April 16, 1882                        | 5.00                            | W. C. Brownlee              |
| The Allen Indian Creek Ditch.....        | Indian creek.....                         | Nov. 18, 1891                              | Oct. 1, 1883                          | 9.00                            | F. M. Mendenhall            |

|  |                                     |               |                                   |           |  |
|--|-------------------------------------|---------------|-----------------------------------|-----------|--|
| The Upper North Ditch                              | Stumpy creek                        | Nov. 25, 1891 | June 15, 1883                     | 2.50      | Peter Fitzpatrick                      |
| The Lower South Ditch                              | Stumpy creek                        | Nov. 25, 1891 | June 15, 1883                     | 2.50      | Peter Fitzpatrick                      |
| The Schield-Brown Irr'ug Ditch                     | Big Cinnaron riv.                   | Nov. 25, 1891 | June 1, 1883                      | 5.00      | Stillman, Schlidt <i>et al.</i>        |
| The Branch of Collier Ditch                        | Big Cinnaron riv.                   | Nov. 25, 1891 | June 1, 1883                      | Not Given | Stillman Schlidt <i>et al.</i>         |
| The Collier Ditch                                  | Little Cinnaron riv.                | Nov. 25, 1891 | May 1, 1889                       | 64.50     | Chas. U. Yohe <i>et al.</i>            |
| The Discombe Nurse Cr'k Ditch                      | Nurse creek                         | Jan. 2, 1892  | May 1, 1879                       | 7.00      | Henry Ernest Discombe                  |
| The Copeland Elk Creek Ditch                       | Elk creek                           | Jan. 2, 1892  | July 1, 1881                      | 7.00      | Chambers Copeland                      |
| The Hunter Elk Creek Ditch                         | Elk creek                           | Jan. 2, 1892  | May 1, 1883                       | 7.00      | Lucien B. Hunter                       |
| The Whinery, Elk Creek and }<br>Narrow Gauge Ditch | Elk and Narrow }<br>Gauge creeks. } | Jan. 2, 1892  | Aug. 27, 1891 }<br>May 15, 1879 } | 12.00     | W. S. Whinery                          |
| The Pastime Irrigating Ditch                       | South Beaver c'k                    | May 10, 1892  | April 25, 1892                    | 4 25      | A. D. Sears                            |
| The Cinnaron Canal                                 | Big Cinnaron riv.                   | July 29, 1892 | July 15, 1892                     | 320.00    | David J. McCann and James A. Doffmeyer |



## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 62, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.  | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of<br>filing in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS. |
|---|--|--|---|--|---------------------------------------|---------------------|
| The Allen Indian Creek Reser-<br>voir<br>.....<br>The Pastime Reservoir | Indian creek                                   | Allen Indian c'k                           | Nov. 18, 1891                                       | Oct. 1, 1883                                     | 261,360                               | F. M. Mendenhall    |
|   | South Beaver creek                             | Pastime irrigat'g                          | May 10, 1892  | April 25, 1892                                   | 1,162,497                             | A. D. Sears         |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 63, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL. | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement of<br>work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS.    |
|-------------------------|---|---|--|---------------------------------------|------------------------|
| The Turner Ditch        | A Spring branch                                 | Feb. 13, 1892                                       | July 31, 1891                                    | 8.00                                  | A. J. and S. H. Turner |
| The Youngs Ditch No. 1  | Springs   | Aug. 8, 1892  | April 1887                                       | .90                                   | Mary E. Young          |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 68, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.    | Name of stream<br>from which water<br>is taken. | Date of filing<br>in the State<br>Engineer's<br>office. | Time of com-<br>mencement of<br>work thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.           |
|----------------------------|---|---|---|---|-------------------------------|
| The Lamont Ditch           | Leopard creek                                   | Dec. 17, 1890   | Sept. 29, 1890                                | 5.00  | Wm. Lamont                    |
| The Cottonwood Creek Ditch | Cottonwood creek                                | Oct. 21, 1891   | 1891  | 18.10   | James Willetts                |
| The White Ditch            | Burro creek                                     | Nov. 4, 1891  | May 1884                                      | 9.00  | Samuel H. Callen              |
| The Taft Ditch             | Burro creek                                     | Nov. 4, 1891  | May 1884                                      | 10.00   | Samuel H. Callen              |
| The Lyon Ditch             | Oak creek                                       | June 3, 1892  | May 30, 1892                                  | 6.00  | Jared S. Lyon                 |
| The Kettle Creek Ditch     | Kettle creek                                    | Nov. 11, 1892   | Oct. 11, 1892                                 | 930.00  | W. E. O'Brien and J. M. Doyle |

## CHAPTER VII.

## IRRIGATION DIVISION NO. 6.

## GREEN RIVER DIVISION.

The Green River Division comprises Water Districts Nos. 43, 44, 54, 55, 56, 57 and 58.

No decrees have as yet been issued in this division so far as is known to this office.

The only Water Commissioner yet appointed in the division is W. H. Clark, Meeker, for District No. 43. Consequently this department has been unable to obtain statistics from the large part of the State embraced in this division.

The total number of ditches, in this division, embraced in the Report of 1889-1890, was 317, with a total length of 518.40 miles.

During the two years up to Dec. 1, 1892, 101 additional filings have been made in this office, making the total number now 418, with a probable length of about 685 miles.

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 43, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE  
FROM DECEMBER 1, 1890, TO DECEMBER 1, 1892.—COMMISSIONER W. H. CLARK, MEETKER. APPOINTED 1889.

| NAME OF DITCH OR CANAL.          | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.         |
|----------------------------------|---|--|---------------------------------------|---------------------------------|-----------------------------|
| The Spaulding Ditch              | Piceance creek                            | Feb. 7, 1891                               | June 22, 1890                         | 4.17                            | John C. Shutte              |
| The Geo. Bretherton Flumed Ditch | { A tributary of Bretherton gulch }       | Feb. 13, 1891                              | Apr. 25, 1890                         | 1.50                            | George Bretherton           |
| The Bawder Ditch                 | Flag creek                                | Feb. 13, 1891                              | May 2, 1889                           | 6.65                            | Mary Q. Bawder              |
| The William McDowell Ditch       | White river                               | Feb. 20, 1891                              | Aug. 25, 1883                         | 5.05                            | H. C. Smith                 |
| The La Kamp Ditch                | White river                               | Mar. 5, 1891                               | May 10, 1884                          | 19.10                           | J. H. La Kamp               |
| The Blair Ditch                  | White river                               | Mar. 5, 1891                               | Apr. 15, 1883                         | 10.00                           | Duncan Blair                |
| The Skelton Ditch                | { North Fork of White river }             | May 18, 1891                               | May 10, 1886                          | 12.00                           | Edward Fxa                  |
| The South Fork Ditch             | Coal spring                               | May 25, 1891                               | Nov. 29, 1890                         | 20.00                           | J. W. Edwards <i>et al.</i> |
| The Bailey Ditch No. 1           | { South Fork of White river }             | May 25, 1891                               | Nov. 29, 1870                         | 10.00                           | Thos. W. Bailey             |
| The Bailey Ditch No. 2           | Oldmans creek                             | May 25, 1891                               | May 15, 1889                          | 10.00                           | Thos. W. Bailey             |
| The Daum Ditch                   | North Elk creek                           | Sept. 21, 1891                             | May 10, 1887                          | 6.84                            | John Daum                   |
| The Extension of Spaulding Ditch | Piceance creek                            | Nov. 23, 1891                              | June 22, 1887                         | 3.00                            | Thomas King                 |
| The Hartke Ditch                 | Hartke springs                            | Dec. 11, 1891                              | May 1, 1889                           | 3.00                            | Reinhold Hartke             |
| The Hay Bretherton Ditch         | White river                               | Jan. 11, 1892                              | Mar. 27, 1889                         | 19.50                           | Henry J. Hay <i>et al.</i>  |

|                                |                |                |                |       |                                |
|--------------------------------|----------------|----------------|----------------|-------|--------------------------------|
| The Thomas Lunny Ditch         | Coal creek     | May 2, 1892    | April 11, 1892 | 1.33  | Thomas Lunny                   |
| The Parish Ditch               | Enreka creek   | June 30, 1892  | June 12, 1892  | 2.10  | Marcellus V. Parish            |
| The Little Colorow Ditch       | White river    | Sept. 6, 1892  | June 14, 1888  | 5.62  | Wm. P. Colthorpe <i>et al.</i> |
| The Steadman Ditch             | White river    | Sept. 12, 1892 | Aug. 18, 1892  | 7.32  | Henry Steadman                 |
| The Rye Grass Enlargem't Ditch | Piceance creek | Sept. 16, 1892 | July 12, 1887  | 10.00 | J. B. Collins <i>et al.</i>    |



### STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 43, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.             | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS. |
|--------------------------------|--|--|---|--|---------------------------------------|---------------------|
| The Parish Reservoir No. 1.... | Eureka gulch .....                             | Parish ditch.                              | June 30, 1892                                       | June 12, 1892                                    | 50,133                                | Marcellus V. Parish |
| The Parish Reservoir No. 2.... | Eureka gulch .....                             | Parish ditch.                              | June 30, 1892                                       | June 12, 1892                                    | 26,666                                | Marcellus V. Parish |

# STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 44, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                 | Name of Stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.        |
|---|---|--|---------------------------------------|---------------------------------|----------------------------|
| The Wise Irrigating Ditch.....          | Williams Fork riv'r                       | Dec. 6, 1890                               | April 15, 1888                        | 10.00                           | Thomas H. Wise             |
| The Juniper Gulch Irrigating Ditch..... | Juniper gulch                             | Mar. 14, 1891                              | Oct. 30, 1890                         | 10.00                           | Stephen Bailey             |
| The Williams Park Irrigating Ditch..... | Fish creek                                | June 4, 1891                               | May 13, 1891                          | 18.75                           | J. W. Rider <i>et al.</i>  |
| The Highland Irrigating Ditch.....      | Fish creek                                | July 13, 1891                              | Sep. 13, 1889                         | 22.50                           | John J. Dunckley           |
| The J. W. Kellogg Ditch.....            | Deer creek                                | Nov. 6, 1891                               | Not given                             | Not stated                      | J. W. Kellogg              |
| The Yellow Jacket Ditch.....            | Little Beaver creek                       | Mar. 12, 1891                              | Dec. 15, 1881                         | 4.75                            | J. A. Martin <i>et al.</i> |
| The Milk Creek Mesa Ditch.....          | Milk creek                                | Mar. 19, 1892                              | Dec. 15, 1891                         | 4.75                            | Richard S. Fuller          |
| The D. D. Ferguson Ditch No. 1.         | Milk creek                                | April 16, 1892                             | June 28, 1890                         | 3.50                            | David D. Ferguson          |
| The D. D. Ferguson Ditch No. 2          | Milk creek                                | April 16, 1892                             | Feb. 1, 1892                          | 4.00                            | David D. Ferguson          |
| The Herrick Ditch No. 1                 | Good Spring creek                         | July 5, 1892                               | May 15, 1889                          | 2.00                            | Wm P. Herrick              |
| The Herrick Ditch No. 2                 | A big spring                              | July 5, 1892                               | May 15, 1889                          | 2.00                            | Wm. P. Herrick             |
| The Sietlaff Ditch                      | Milk creek                                | July 18, 1892                              | April 9, 1892                         | 5.25                            | Chas. and Herman Sietlaff  |
| The Houston Ditch                       | Milk creek                                | Nov. 14, 1892                              | Aug. 10, 1892                         | 3.25                            | Madison Honston            |

STATEMENT CONCERNING DITCHES—*Concluded.*

| NAME OF DITCH OR CANAL. | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS. |
|-------------------------|---|--|---------------------------------------|--|---------------------|
| The Bennett Ditch No. 1 | Mill creek                                | Nov. 14, 1892                              | Oct. 24, 1892                         | 2.25                                       | Mannel Bennett      |
| The Bennett Ditch No. 2 | Little creek                              | Nov. 14, 1892                              | Oct. 24, 1892                         | 3.00                                       | Mannel Bennett      |
| The Givens Ditch.       | Vampa river                               | Nov. 30, 1892                              | Oct. 15, 1892                         | 8.00                                       | George Givens       |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 44, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.    | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>leading<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS. |
|-----------------------|--|--|---|--|---------------------------------------|---------------------|
| The Wolcott Reservoir | Springs  | Feeder ditch                               | May 18, 1892  | Mar. 29, 1892                                    | 125,000                               | Ellen Wolcott       |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 54, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL. | Name of stream<br>from which<br>water is taken. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet<br>per second. | NAMES OF CLAIMANTS.            |
|-------------------------|---|---|--|---|--------------------------------|
| The Robidoux Ditch      | Little Snake river.                             | Jan. 7, 1891  | April 1, 1888                                    | 3.00  | Cynthia A. Robidoux            |
| The Wilson Ditch        | Battle creek                                    | Jan. 19, 1891                                       | Oct. 1, 1884                                     | 3.00  | W. W. Wilson                   |
| The Wilson Ditch        | Wilson creek                                    | Dec. 18, 1891                                       | June 1, 1888                                     | 6.01  | The Leavenworth Cattle Company |
| The Slater Fork Ditch   | Slater Fork creek                               | Dec. 18, 1891                                       | May 1, 1883                                      | 9.70  | The Leavenworth Cattle Company |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 57. RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.   | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.               |
|---------------------------|---|--|---------------------------------------|---------------------------------|-----------------------------------|
| The High Line Ditch       | Fortification creek                       | Dec. 13, 1890                              | Nov. 18, 1889                         | 8.50                            | C. R. Baker. (Amended statement.) |
| The Dever Ditch           | Yampa river                               | May 4, 1891                                | Oct. 1, 1888                          | 17.70                           | Wm. H. Dever <i>et al.</i>        |
| The Wheeler Bros. Ditch   | Elk river                                 | May 21, 1891                               | Fall 1888                             | 7.00                            | Charles and James Wheeler         |
| The Island Home Ditch     | Bear river                                | May 21, 1891                               | April 15, 1889                        | 7.00                            | John Robinson                     |
| The Wiant Ditch           | Yampa river                               | June 17, 1891                              | May 27, 1891                          | Not given                       | John Wiant                        |
| The Lamb Irrigating Ditch | Fortification creek                       | Sept. 11, 1891                             | May 1, 1891                           | 6.00                            | Zeno Lamb                         |



### STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 57, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.        | Name of stream<br>supplying<br>water therefor. | Name of ditch<br>conveying<br>water thereto. | Date of filing<br>in State<br>Engineer's<br>office. | Time of com-<br>mencement<br>of work<br>thereon. | Capacity<br>claimed in<br>cubic feet. | NAMES OF CLAIMANTS. |
|---------------------------|--|--|---|--|---------------------------------------|---------------------|
| The Baker Reservoir ..... | Fortification creek ..                         | Built on creek ...                           | Dec. 30, 1890                                       | Nov. 18, 1889                                    | 2,352,240                             | ..... C. E. Baker   |

## STATEMENT CONCERNING DITCHES

IN WATER DISTRICT NO. 58, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF DITCH OR CANAL.                           | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.           |
|---|---|--|---------------------------------------|--|-------------------------------|
| The Arkhurst Enlarge'm't Ditch                    | Elk river                                 | Dec. 11, 1890                              | Sep. 15, 1888                         | 6.00                                       | A. S. Hutchinson              |
| The Haugs Ditch                                   | Fish Park creek                           | Dec. 23, 1890                              | June 1, 1890                          | 2.00                                       | John J. Haugs                 |
| The Martin Ditch                                  | Yellow Jacket c'k                         | Dec. 29, 1890                              | May 15, 1890                          | 3.00                                       | J. L. Martin                  |
| The Northwestern Colorado Irrigating Canal No. 1. | Yampa river                               | Dec. 31, 1890                              | Dec. 1, 1890                          | 199.20                                     | Robert McIntosh <i>et al.</i> |
| The Northwestern Colorado Irrigating Canal No. 2. | Elk river                                 | Dec. 31, 1890                              | Nov. 1, 1890                          | 150.00                                     | Robert McIntosh <i>et al.</i> |
| The Charles & Arthur Leighton Ditch               | Roaring Fork of Bear river                | Jan. 1, 1891                               | June 15, 1890                         | 12.00                                      | Charles and Arthur Leighton   |
| The Fish Park Ditch                               | Fish Park creek                           | Jan. 15, 1891                              | Sep. 29, 1890                         | 2.60                                       | Peter Withers                 |
| The Cullen Ditch No. 2                            | Elk river                                 | Feb. 5, 1891                               | Jan. 16, 1890                         | 8.00                                       | Patrick Cullen                |
| The Cullen Ditch No. 1                            | Elk river                                 | Feb. 6, 1891                               | May 10, 1890                          | 5.00                                       | Patrick Cullen                |
| The F. D. Hutchinson Ditch                        | Roaring Fork of river                     | Feb. 6, 1891                               | July 15, 1890                         | 10.00                                      | F. D. Hutchinson              |
| The Kopf Ditch                                    | Middle Hunt c'k                           | Feb. 18, 1891                              | May 2, 1890                           | 10.00                                      | Max Kopf                      |
| The Fichings Ditch                                | Middle Hunt c'k                           | Feb. 20, 1891                              | Oct. 14, 1890                         | 17.00                                      | M. Fichinger                  |
| The Brinker Creek Ditch                           | Brinker creek                             | Mar. 13, 1891                              | Dec. 12, 1890                         | 9.66                                       | Thomas B. Gibbs               |

## STATEMENT CONCERNING DITCHES—Continued.

| NAME OF DITCH OR CANAL.                                  | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet per second. | NAMES OF CLAIMANTS.                     |
|--|---|--|---------------------------------------|--|---|
| The Lawson Creek Ditch                                   | Lawson creek                              | Mar. 25, 1891                              | June 20, 1889                         | 5.00                                       | Lawson Bird <i>et al.</i>               |
| The Gibbs & Phillips Ditch                               | { Beaver or Chimney creek }               | April 27, 1891                             | June 10, 1891                         | 10.00                                      | T. B. Gibbs and J. P. Phillips          |
| The Wheeler Brothers Ditch                               | Elk river                                 | May 21, 1891                               | Fall of 1888                          | 7.00                                       | Charles and James Wheeler               |
| The Supply Ditch   | Middle Hunt creek                         | June 17, 1891                              | Dec. 9, 1890                          | 72.00                                      | Peter Simons <i>et al.</i>              |
| The Lawrence Ditch                                       | { South branch of Yampa river }           | June 19, 1891                              | May 27, 1891                          | 10.00                                      | Samuel Lawrence                         |
| The Monroe Ditch   | Trout creek                               | July 1, 1891                               | May 26, 1891                          | 7.00                                       | J. M. Band and John Wyant               |
| The Chipman Ditch  | McKinnie creek                            | Aug. 14, 1891                              | June 14, 1891                         | .90  | Mary Chipman                            |
| The High Line Beaver Ditch                               | Storm King creek                          | Aug. 28, 1891                              | June 26, 1891                         | 11.40                                      | Gottfried Gunter <i>et al.</i>          |
| The Stees Ditch  | Cow creek                                 | Sept. 3, 1891                              | Not given                             | Not stated.                                | Ed. W. Stees. (Map only. No statement)  |
| The Baxter & Summer Enlargement of the Walton Cr'k Ditch | Walton creek                              | Sept. 14, 1891                             | June 28, 1891                         | 2.00                                       | Milo Baxter and John Sumner             |
| The Mager Ditch  | Sage creek                                | Oct. 8, 1891                               | Sept. 1, 1888                         | 4.00                                       | Hugo Mager                              |
| The Asher Ditch  | Elk river                                 | Oct. 28, 1891                              | May 1, 1890                           | 8.00                                       | Charles D. Asher                        |
| The Temke Ditch  | Trout creek                               | Oct. 30, 1891                              | May 26, 1891                          | 12.00                                      | John Temke <i>et al.</i>                |
| The Stees Ditch (amended statement)                      | Cow creek                                 | Nov. 13, 1891                              | May 9, 1891                           | 8.00                                       | E. W. and J. H. Stees. (Statement only) |

|   |                                     |               |               |       |                                   |
|---|-------------------------------------|---------------|---------------|-------|-----------------------------------|
| The Park City Ditch No. 1.....  | Fish creek.....                     | Dec. 16, 1891 | July 8, 1891  | 1.50  | J. C. Kennedy                     |
| The Park City Ditch No. 2.....  | Fish creek.....                     | Dec. 16, 1891 | Aug. 14, 1891 | .50   |                                   |
| The Leckenby Extension and<br>Enlargement of the Priest<br>Ditch and Priest Extension<br>Ditch..... | Priest creek.....                   | Feb. 23, 1892 | Aug. 13, 1891 | 1.00  | A. J. Leckenby                    |
|   | Elk river.....                      | April 4, 1892 | Nov. 10, 1891 | 10.00 |                                   |
| The Enlargement of the Borghi<br>Ditch.....   | Oak creek.....                      | June 6, 1892  | May 27, 1892  | 14.00 | Robert E. Cook and Lloyd F. Bates |
| The Cook Brothers Ditch.....  | Brinker creek.....                  | June 11, 1892 | May 1889      | 9.70  | W. O. Cook and F. H. Cook         |
| The Gibbs Ditch.....  | Phillips creek.....                 | May 1884      | May 1884      | 10.00 | Thomas B. Gibbs                   |
| The Finger Rock Ditch.....  | { South Fork of<br>Phillips creek } | June 11, 1892 | May 1889      | 15.00 | John P. Phillips                  |
|   |                                     | June 16, 1892 | May 1889      | 2.00  |                                   |
| The Powell Ditch No. 1.....   | Watson creek.....                   | June 16, 1892 | May 1, 1891   | 7.50  | Arnold Powell                     |
| The Powell Ditch No. 2.....   | Watson creek.....                   | June 27, 1892 | May 2, 1891   | 4.90  |                                   |
| The Anna's Ditch.....   | Hunt creek.....                     | June 27, 1892 | Spring 1884   | 6.00  | Mark Choate and W. S. Barr        |
| The Hardscrabble Ditch.....   | Watson creek.....                   | June 27, 1892 | May 1, 1887   | 11.00 | J. Albert Bird                    |
| The Enlargement of the Barr<br>Ditch.....   | Hunt creek.....                     | June 27, 1892 | May 10, 1886  | 15.00 | W. S. Barr and Mark Choate        |
| The Ferguson Ditch.....   | Watson creek.....                   | June 27, 1892 | May 2, 1891   | 5.20  | John Ferguson and John Hill       |
| The Willow Spring Ditch.....  | Waste waters.....                   | June 27, 1892 | June 30, 1892 | 10.00 | Mark Choate                       |
| The Crow Creek Ditch No. 4.....   | Crow creek.....                     | July 13, 1892 | June 1, 1892  | 10.00 | J. H. Stees                       |
| The Enlargement of the F. D.<br>Hutchinson Irrigating Ditch.....                                    | { East branch of<br>Yampa river }   | July 14, 1892 | June 1, 1892  | 10.00 | A. F. Hoskinson                   |
|   |                                     | Aug. 11, 1892 | May 12, 1892  | 21.00 |                                   |
| The Scott & Carpenter Ditch.....  | Grouse creek.....                   | Aug. 17, 1892 | Aug. 9, 1892  | 18.00 | D. H. Carpenter and John B. Scott |
| The Brumback Ditch.....   | Oak creek.....                      | Aug. 17, 1892 | Aug. 9, 1892  | 18.00 | Thomas P. Brumback                |

STATEMENT CONCERNING DITCHES.—*Concluded.*

| NAME OF DITCH OR CANAL.  | Name of stream from which water is taken. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                |
|--|---|--|---------------------------------------|---------------------------------|------------------------------------|
| The J. Hart Ditch.....   | Oak creek.....                            | Aug. 18, 1892                              | May 30, 1892                          | 4.00                            | J. Hart                            |
| The Mary Louise Ditch.....                                       | Elk creek.....                            | Sept. 15, 1892                             | June 17, 1892                         | 5.00                            | John E. Turgeon                    |
| The Orme Ditch.....  | Ladds creek.....                          | Sept. 28, 1892                             | May 11, 1888                          | 8.52                            | Joseph B. Male                     |
| The Kernaghan Ditch.....   | { Little Cotton-<br>wood creek..... }     | Oct. 1, 1892                               | July 1, 1892                          | 4.00                            | William Kernaghan                  |
| The Turner Ditch.....  | Elk river.....                            | Nov. 23, 1892                              | Oct. 1, 1892                          | 10.00                           | Hiram E. Turner                    |
| The Smithurst & Spies Enlargement of the Walton Creek Ditch..... | Walton creek.....                         | Nov. 30, 1892                              | July 1, 1892                          | 6.00                            | William Smithurst and Samuel Spies |

## STATEMENT CONCERNING RESERVOIRS

IN WATER DISTRICT NO. 58, RELATIVE TO WHICH STATEMENTS HAVE BEEN FILED IN THE STATE ENGINEER'S OFFICE, FROM  
DECEMBER 1, 1890, TO DECEMBER 1, 1892.

| NAME OF RESERVOIR.                | Name of stream conveying water therefor. | Name of ditch leading water thereto. | Date of filing in State Engineer's office. | Time of commencement of work thereon. | Capacity claimed in cubic feet. | NAMES OF CLAIMANTS.                |
|-----------------------------------|--|--------------------------------------|--|---------------------------------------|---------------------------------|------------------------------------|
| The Crater Reservoir              | Middle Hunt creek                        | Supply ditch                         | June 17, 1891                              | Dec. 9, 1890                          | 314,882.530                     | Peter Simons <i>et al.</i>         |
| The Carpenter and Scott Reservoir | Grouse creek                             | All built on creek                   | Aug. 11, 1892                              | May 12, 1892                          | 862,080                         | D. H. Carpenter and John B. Scott. |
| The Scott Reservoir No. 1.        | Grouse creek                             | All built on creek                   | Aug. 11, 1892                              | May 12, 1892                          | 1,186,500                       |                                    |
| The Scott Reservoir No. 2.        | Grouse creek                             | All built on creek                   | Aug. 11, 1892                              | May 12, 1892                          | 437,406                         |                                    |



## WEIR MEASUREMENTS.

In response to many inquiries as to a simple and yet accurate method of measuring water, the following tables and cautionary notes are published as a matter of general information to those interested in the use of water for irrigation and other industrial pursuits.

They are taken from those compiled by Prof. L. G. Carpenter, of the State Agricultural College, at Fort Collins, and were published in circular No. 13 of that institution.

If the weir be placed so as to meet the following conditions, the tables attached to this bulletin may be used with confidence that the result is correct within one per cent. :

*First*—That the water shall not exceed twenty-four nor be less than three inches in depth.

*Second*—That the depth of water on the crest shall not be more than one-third the length of the weir.

*Third*—The crest of the weir itself should be horizontal ; the sides vertical ; with both crest and sides brought to a sharp edge on the up-stream face. The least rounding increases the discharge. The up-stream face should be vertical.

It is also necessary to secure :

Complete contraction.

Free discharge.

And the approach of water to the weir without perceptible velocity, cross currents or eddies.

Hence the following additional conditions :

*Fourth*—The distance from the side walls to the crest should be at least equal to the depth on the weir, in order to secure contraction.

*Fifth*—The distance of the crest above the bottom of the channel should be at least twice the depth of the water flowing over it, in order to avoid the effect of the bottom on the crest contraction.

*Sixth*—The air must have free access under the falling sheet.

*Seventh*—The approaching channel should be made much larger than the weir opening, to bring the velocity of approach within low limits.

For small depths, the actual discharge may exceed the amount here given by two to five per cent.

DISCHARGE OVER RECTANGULAR WEIRS OF VARIOUS LENGTHS, AND WITH VARIOUS DEPTHS OF WATER, WITH COMPLETE CONTRACTION.

$$\text{Formula, } D = 3\frac{1}{3} \left(1 - .2H\frac{3}{2}\right)$$

| Depth of Water<br>on Crest. |             | DISCHARGE IN CUBIC FEET PER SECOND. |                 |                |                |                |                 |       | Correction to<br>be ADDED to<br>each of the<br>preceding<br>to give dis-<br>charge with<br>NO contr'n. |
|-----------------------------|-------------|-------------------------------------|-----------------|----------------|----------------|----------------|-----------------|-------|--|
|                             |             | With two Complete Contractions.     |                 |                |                |                |                 |       |  |
|                             |             | 1 ft.<br>Long.                      | 1½ ft.<br>Long. | 2 ft.<br>Long. | 3 ft.<br>Long. | 5 ft.<br>Long. | 10 ft.<br>Long. |       |  |
| In<br>Inches.               | In<br>Feet. | .0133                               | .0200           | .0267          | .0400          | .0677          | .133            | .0000 |  |
| 0.3                         | .025        | .0369                               | .0556           | .0743          | .1116          | .1863          | .3726           | .0004 |  |
| 0.6                         | .050        | .0674                               | .1015           | .1350          | .2040          | .3410          | .6830           | .0010 |  |
| 0.9                         | .075        | .1033                               | .1550           | .2078          | .3132          | .5240          | 1.0519          | .0021 |  |
| 1.2                         | .1          | .1438                               | .2175           | .2912          | .4385          | .7332          | 1.4695          | .0037 |  |
| 1.5                         | .125        | .1879                               | .2847           | .3816          | .5743          | .9627          | 1.9312          | .0058 |  |
| 1.8                         | .15         | .2355                               | .3575           | .4795          | .7235          | 1.2115         | 2.4315          | .0085 |  |
| 2.1                         | .175        | .2861                               | .4351           | .5843          | .8824          | 1.4787         | 2.9690          | .0119 |  |
| 2.4                         | .2          | .3399                               | .5177           | .6956          | 1.0513         | 1.7627         | 3.5412          | .0160 |  |
| 2.7                         | .225        | .3959                               | .6042           | .8126          | 1.2293         | 2.0227         | 4.1462          | .0208 |  |
| 3.0                         | .25         | .4543                               | .6946           | .9350          | 1.4157         | 2.3771         | 4.7803          | .0264 |  |
| 3.3                         | .275        | .5149                               | .7287           | 1.0725         | 1.6103         | 2.7057         | 5.4441          | .0328 |  |
| 3.6                         | .3          | .5775                               | .8863           | 1.1952         | 1.8129         | 3.0483         | 6.1368          | .0401 |  |
| 3.9                         | .325        | .6420                               | .9871           | 1.3423         | 2.0226         | 3.4082         | 6.8547          | .0483 |  |
| 4.2                         | .35         | .7079                               | 1.0905          | 1.4732         | 2.2385         | 3.7691         | 7.5956          | .0574 |  |
| 4.5                         | .375        | 1.1974                              | 1.6160          | 2.4623         | 4.1489         | 8.3655         |                 | .0674 |  |
| 4.8                         | .4          | 1.3070                              | 1.7689          | 2.6926         | 4.5400         | 9.1585         |                 | .0785 |  |
| 5.1                         | .425        | 1.4189                              | 1.9221          | 2.9874         | 4.9410         | 9.9725         |                 | .0905 |  |
| 5.4                         | .45         | 1.5333                              | 2.0790          | 3.1703         | 5.3529         | 10.8004        |                 | .1036 |  |
| 5.7                         | .475        | 1.6500                              | 2.2392          | 3.4177         | 5.7748         | 11.6372        |                 | .1178 |  |
| 6.0                         | .5          | 1.7689                              | 2.4029          | 3.6709         | 6.2069         | 12.5469        |                 | .1331 |  |
| 6.3                         | .525        | 1.8899                              | 2.5698          | 3.9295         | 6.6489         | 13.4474        |                 | .1496 |  |
| 6.6                         | .55         | 2.0129                              | 2.7395          | 4.1928         | 7.0995         | 14.3658        |                 | .1671 |  |
| 6.9                         | .575        | 2.1381                              | 2.9128          | 4.4621         | 7.5607         | 15.3072        |                 | .1859 |  |
| 7.2                         | .6          | 2.2646                              | 3.0881          | 4.7351         | 8.0291         | 16.2641        |                 | .2059 |  |
| 7.5                         | .625        | 2.3929                              | 3.2663          | 5.0130         | 8.5064         | 17.2399        |                 | .2271 |  |
| 7.8                         | .65         | 2.5234                              | 3.3478          | 5.2965         | 8.9939         | 18.2374        |                 | .2496 |  |
| 8.1                         | .675        |                                     |                 |                |                |                |                 |       |  |

DISCHARGE OVER RECTANGULAR WEIRS—*Continued.*

| Depth of Water<br>on Crest. |             | DISCHARGE IN CUBIC FEET PER SECOND. |                |                |                 |   |  |
|-----------------------------|-------------|-------------------------------------|----------------|----------------|-----------------|---|--|
|                             |             | With Two Complete Contractions.     |                |                |                 | Correction to be<br>ADDED to each<br>of the preced-<br>ing to give dis-<br>charge with<br>no contr'n. |  |
| In<br>Inches.               | In<br>Feet. | 2 ft.<br>Long.                      | 3 ft.<br>Long. | 5 ft.<br>Long. | 10 ft.<br>Long. |   |  |
| 8.4                         | .7          | 3.6313                              | 5.5536         | 9.4882         | 19.2497         | .2733   |  |
| 8.7                         | .725        | 3.8170                              | 5.7747         | 9.9901         | 20.2786         | .2984   |  |
| 9.0                         | .75         | 4.0052                              | 6.1702         | 10.5002        | 21.3252         | .3248   |  |
| 9.3                         | .775        | 4.1961                              | 6.4704         | 11.0190        | 22.3905         | .3525   |  |
| 9.6                         | .8          | 4.3884                              | 6.7734         | 11.5434        | 23.4684         | .3816   |  |
| 9.9                         | .825        | 4.5833                              | 7.0810         | 12.0764        | 24.5649         | .4121   |  |
| 10.2                        | .85         | 4.7806                              | 7.3929         | 12.6135        | 25.6790         | .4440   |  |
| 10.5                        | .875        | 4.9792                              | 7.7075         | 13.1641        | 26.8056         | .4774   |  |
| 10.8                        | .9          | 5.1792                              | 8.0257         | 13.7177        | 27.9477         | .5123   |  |
| 11.1                        | .925        | 5.3806                              | 8.3473         | 14.2779        | 29.1044         | .5486   |  |
| 11.4                        | .95         | 5.5833                              | 8.6725         | 14.8451        | 30.2766         | .5864   |  |
| 11.7                        | .975        | 5.7872                              | 9.0012         | 15.4192        | 31.4642         | .6258   |  |
| 12.0                        | 1.0         | 5.9922                              | 9.3333         | 16.0000        | 32.6667         | .6667   |  |
| 12.3                        | 1.025       | 6.1983                              | 9.6679         | 16.5859        | 33.8809         | .7091   |  |
| 12.6                        | 1.05        | 6.4052                              | 10.0058        | 17.1784        | 35.1099         | .7531   |  |
| 12.9                        | 1.075       | 6.6133                              | 10.3471        | 17.7777        | 36.3532         | .7988   |  |
| 13.2                        | 1.1         | 6.8222                              | 10.6890        | 18.3825        | 37.6110         | .8460   |  |
| 13.5                        | 1.125       | 7.0322                              | 11.0370        | 18.9916        | 38.9781         | .8949   |  |
| 13.8                        | 1.150       | 7.2433                              | 11.3866        | 19.5080        | 40.1615         | .9455   |  |
| 14.1                        | 1.175       | 7.4552                              | 11.7396        | 20.2308        | 41.4573         | .9977   |  |
| 14.4                        | 1.2         | 7.6683                              | 12.0935        | 20.8569        | 42.7654         | 1.0516  |  |
| 14.7                        | 1.225       | 7.8822                              | 12.4507        | 21.4893        | 44.0856         | 1.1072  |  |
| 15.0                        | 1.25        | 8.0972                              | 12.8103        | 22.1269        | 45.4184         | 1.1646  |  |
| 15.3                        | 1.275       | 8.3133                              | 13.1733        | 22.7713        | 46.7663         | 1.2237  |  |
| 15.6                        | 1.3         | 8.5302                              | 13.5375        | 23.4189        | 48.1224         | 1.2846  |  |
| 15.9                        | 1.325       | 8.7483                              | 13.9047        | 24.0727        | 49.4927         | 1.3473  |  |
| 16.2                        | 1.35        | 8.9672                              | 14.2744        | 24.7318        | 50.8753         | 1.4117  |  |
| 16.5                        | 1.375       | 9.1872                              | 14.6450        | 25.3936        | 52.2651         | 1.4779  |  |

DISCHARGE OVER RECTANGULAR WEIRS. — *Concluded.*

| Depth of Water<br>on Crest. |            | DISCHARGE IN CUBIC FEET PER SECOND. |                  |  |
|-----------------------------|------------|-------------------------------------|------------------|--|
|                             |            | With Two Complete Contractions.     |                  | Correction to be AD-<br>DED to each of the<br>preceding to give<br>discharge with NO<br>contraction. |
| In<br>Inches.               | In<br>Feet | 5 feet<br>Long.                     | 10 feet<br>Long. |  |
| 16.8                        | 1.4        | 26.0625                             | 53.6710          | 1.5460   |
| 17.1                        | 1.425      | 26.6355                             | 55.0870          | 1.6160   |
| 17.4                        | 1.45       | 27.4122                             | 56.5122          | 1.6878   |
| 17.7                        | 1.475      | 28.0950                             | 57.9515          | 1.7615   |
| 18.                         | 1.5        | 28.7814                             | 59.3999          | 1.8371   |
| 18.3                        | 1.525      | 29.4719                             | 60.8584          | 1.9146   |
| 18.6                        | 1.55       | 30.1675                             | 62.3290          | 1.9940   |
| 18.9                        | 1.575      | 30.8681                             | 63.8116          | 2.0754   |
| 19.2                        | 1.6        | 31.5727                             | 65.3042          | 2.1588   |
| 19.5                        | 1.625      | 32.2809                             | 66.8059          | 2.2441   |
| 19.8                        | 1.650      | 32.9935                             | 68.3185          | 2.3315   |
| 20.1                        | 1.675      | 33.7093                             | 69.8393          | 2.4207   |
| 20.4                        | 1.7        | 34.4269                             | 71.3710          | 2.5120   |
| 20.7                        | 1.725      | 35.1546                             | 72.9146          | 2.6054   |
| 21.0                        | 1.75       | 35.8827                             | 74.4662          | 2.7008   |
| 21.3                        | 1.775      | 36.6151                             | 76.0286          | 2.7984   |
| 21.6                        | 1.8        | 37.3520                             | 77.6020          | 2.8980   |
| 21.9                        | 1.825      | 38.0709                             | 79.1814          | 3.0196   |
| 22.2                        | 1.85       | 38.8341                             | 80.7716          | 3.1034   |
| 22.5                        | 1.875      | 39.5812                             | 82.3717          | 3.2093   |
| 22.8                        | 1.9        | 40.3321                             | 83.9816          | 3.3174   |
| 23.1                        | 1.925      | 41.0860                             | 85.5995          | 3.4275   |
| 23.4                        | 1.95       | 41.8436                             | 87.2271          | 3.5399   |
| 23.7                        | 1.975      | 42.6045                             | 88.8635          | 3.6545   |
| 24.                         | 2.0        | 43.3665                             | 90.5061          | 3.771  |
| 27.                         | 2.25       | — — — —                             | 107.44           | 5.06   |
| 30.                         | 2.50       | — — — —                             | 125.16           | 6.59   |
| 36.                         | 3.00       | — — — —                             | 162.79           | 10.39  |

## THE LAW GOVERNING DITCH AND RESERVOIR FILINGS, WITH FORMS FOR SAME.

Letters continue to be received at this office, almost daily, relative to the requirements of the law in making claims to water rights. These come generally from remote parts of the State, where the usual forms are not obtainable, and where copies of the law are not convenient for reference.

Many statements sent for filing are deficient in essential points, others are without the requisite plats, and not a few are so indefinite in statements of facts as to render them practically of no effect. Such are returned for correction and frequently come back without improvement.

To meet these inquiries and to secure, as far as practicable, uniformity in the statements filed, a circular was prepared in the early part of 1892, in which was set forth the law bearing upon the subject, followed by forms for both ditch and reservoir filings.

This law was incorporated in the Fourth Biennial Report from this office, but inasmuch as the copies of that report were long since exhausted, and the demand for information continues, it is deemed advisable to reproduce it in the circular which follows :

### CIRCULAR.

STATE ENGINEER'S OFFICE, }  
DENVER, COLORADO, 1892. }

*To Ditch Owners, and Others Interested in Irrigation Works in Colorado:*

This circular is prepared in response to the many inquiries received at this office, in regard to matters connected with the recording of claims to water rights, and the obtaining of decrees for ditches, canals and reservoirs.

### RECORDING STATEMENTS OF CLAIMS TO WATER RIGHTS.

Session Laws of 1887 amend General Section 1720, of the General Statutes of Colorado, to read as follows :

"SECTION 2. Every person, association or corporation, hereafter constructing or enlarging any ditch, canal or feeder for any ditch or reservoir for irrigation, and taking water directly from any natural stream, and of a carrying capacity of more than one cubic foot of water per second of time, as so constructed or enlarged, shall, within ninety



(90) days after the commencement of such construction or enlargement, file in the office of the County Clerk and Recorder of the county in which the head-gate of such ditch or feeder may be situated, and also in the office of the State Hydraulic Engineer, a map showing the point of the location of such head-gate, the route of such ditch or canal, or the high-water line of such reservoir or reservoirs, and the route of the feeder to, and ditches or canals from such reservoir or reservoirs; the legal subdivisions of the lands upon which such structures are built, or to be built, if on surveyed lands; the names of the owners of such lands, as far as the same are of record in the office of the county clerk of the county in which they are situated; such courses, distances and corners, by reference to legal subdivisions, if on surveyed lands, or to natural objects, if on unsurveyed lands, as will clearly designate the location of such structures. Upon or attached to such map shall be a statement showing:

"*First*—The point of location of the head-gate above mentioned.

"*Second*—The depth, width and grade of such ditch, canal, or feeder.

"*Third*—The carrying capacity of such ditch, canal, or feeder, in cubic feet per second of time, and the capacity of such reservoir or reservoirs in cubic feet, when filled to the high-water mark.

"*Fourth*—The time of commencement of work on such structures, which time may be dated from the commencement of the surveys thereof.

"In case of an enlargement, such statement shall also show the matters required in items second, third and fourth above, as to the enlargement, and state the increased capacity arising from such enlargement. If such statement be filed within the time above limited, priority of right of way and water accordingly shall date from the day named as the day of commencing work; otherwise, only from the date of filing the same: *Provided*, That nothing herein contained shall be taken to dispense with the necessity of due diligence in the prosecution of such structures on the part of the prosecutors of the same. Such statement shall be signed by the person, association, or corporation on whose behalf it is made, and the truth of the matters shown in such map and statement shall be sworn to by some person in whose personal knowledge the truth of the same shall lie." Approved April 20, 1887; in force July 19, 1887.

In order to have an accurate map made, and a full and definite statement drawn up, as required above, it will be necessary to have a proper survey made of the ditch, canal, or reservoir, as the case may be, by a competent engineer; and it is suggested that it will be well to have the survey made at once to the extreme length and to the full size to which it is probable that the same may be constructed. This being done, the map should be drawn on a scale of not less than one



inch to 2,000 feet, and larger if practicable. Then the statement should be drawn up and duly executed and acknowledged.

Following is a form for a ditch or canal statement which covers the requirements of the law above quoted, and which is recommended for use by this department:

STATE OF COLORADO, }  
COUNTY OF..... } ss.

STATEMENT OF CLAIM TO WATER RIGHT.

Irrigation Division No. ....

Water District No. ....

The undersigned, .....

owner.... of the following described ditch, in compliance with the requirements of General Section No. 1720 of the General Statutes of the State of Colorado, and the amendments thereto, do.... hereby make this statement for filing in the proper offices:

1. The name.. of the owner.. of the said ditch, .....  
..... whose postoffice address  
is..... county .....

2. The name of the said ditch is the .....  
ditch.

3. The head-gate of the said ditch is located on the.....  
..... bank of....., from  
which stream said ditch diverts its supply of water, at a point whence  
the..... corner of section.....  
in township..... of range..... west, bears.....,  
..... feet.

From the head-gate the said ditch runs in a general.....  
direction, as shown on the map hereto attached, and made a part of  
this statement; which said map also shows the ownership of the lands  
over which said ditch passes, and distances of the ditch line from the  
government corners.

4. The length of the said ditch is..... miles.
5. The width of the said ditch is..... feet on the bottom,  
and..... feet at the high-water line.
6. The depth of the said ditch is..... feet at high-water  
line.
7. The grade of the said ditch is..... feet per mile.
8. The carrying capacity of the said ditch is..... cubic  
feet of water per second of time.

9. Work was commenced on the said ditch on the \_\_\_\_\_ day of \_\_\_\_\_, A. D., 18\_\_\_\_

10. The \_\_\_\_\_ enlargement of said ditch was commenced on the \_\_\_\_\_ day of \_\_\_\_\_, A. D. 18\_\_\_\_

11. The said ditch, as enlarged, is \_\_\_\_\_ feet wide on the bottom, \_\_\_\_\_ feet wide at high-water mark, \_\_\_\_\_ feet deep at high-water mark, and the increased capacity, arising from such enlargement, is \_\_\_\_\_ cubic feet of water per second of time.

\_\_\_\_\_[SEAL.]

\_\_\_\_\_[SEAL.]

\_\_\_\_\_[SEAL.]

STATE OF COLORADO }  
COUNTY OF \_\_\_\_\_ } ss.

\_\_\_\_\_, being first duly sworn, on his oath deposes and says that he has read the above and the foregoing statement, and has examined the map thereto attached, and that the matters therein set forth are true, of his own knowledge.

Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 18\_\_\_\_

Reservoir statements for filing should be as follows :

STATE OF COLORADO, }  
COUNTY OF \_\_\_\_\_ } ss

STATEMENT OF CLAIM TO WATER RIGHT.

IRRIGATION DIVISION No. \_\_\_\_\_

WATER DISTRICT No. \_\_\_\_\_

The undersigned, \_\_\_\_\_, \_\_\_\_\_ owner of the following described reservoir, in compliance with the requirements of General Section No. 1720 of the General Statutes of the State of Colorado, and the amendments thereto, do hereby make this statement for filing in the proper offices :

1. The name \_\_\_\_\_ of the owner \_\_\_\_\_ of said reservoir \_\_\_\_\_ whose postoffice address is \_\_\_\_\_ county, \_\_\_\_\_

2. The name of said reservoir is The \_\_\_\_\_ reservoir.

3. The said reservoir is situated on the \_\_\_\_\_  $\frac{1}{4}$  of the \_\_\_\_\_  $\frac{1}{4}$  the \_\_\_\_\_  $\frac{1}{4}$  of the \_\_\_\_\_  $\frac{1}{4}$ , the \_\_\_\_\_  $\frac{1}{4}$  of the \_\_\_\_\_  $\frac{1}{4}$ , and the \_\_\_\_\_  $\frac{1}{4}$  of the \_\_\_\_\_  $\frac{1}{4}$  of section \_\_\_\_\_, in township \_\_\_\_\_ of range \_\_\_\_\_, in \_\_\_\_\_ county, aforesaid.

The \_\_\_\_\_ of said reservoir being at a point whence the \_\_\_\_\_ corner of said section \_\_\_\_\_ bears \_\_\_\_\_ feet.

4. The area of said reservoir at the high-water line is \_\_\_\_\_ acres, and at low-water line is \_\_\_\_\_ acres. The depth of water that can be drawn off is \_\_\_\_\_ feet, making the available capacity for storage \_\_\_\_\_ cubic feet, for which claim is hereby made.

5. The said reservoir derives its supply of water from the \_\_\_\_\_, through the \_\_\_\_\_ ditch, the head-gate of which is located at a point whence the \_\_\_\_\_ corner of section \_\_\_\_\_, in township \_\_\_\_\_, of range \_\_\_\_\_, bears \_\_\_\_\_ feet. Said ditch has a carrying capacity of \_\_\_\_\_ cubic feet of water per second of time.

The head-gate of the feeder from said \_\_\_\_\_ ditch to the said reservoir is at a point whence the \_\_\_\_\_ corner of section \_\_\_\_\_, in township \_\_\_\_\_, of range \_\_\_\_\_, bears \_\_\_\_\_ feet.

6. Said feeder is \_\_\_\_\_ feet wide on the bottom, \_\_\_\_\_ feet wide at high-water mark ; is \_\_\_\_\_ feet deep, with a grade of \_\_\_\_\_ feet per mile, and a carrying capacity of \_\_\_\_\_ cubic feet of water per second of time.

7. Work was commenced on said reservoir on the \_\_\_\_\_ day of \_\_\_\_\_ A. D. 18\_\_\_\_, and on the feeder above described, on the \_\_\_\_\_ day of \_\_\_\_\_ A. D. 18\_\_\_\_

8. The outlet ditch from said reservoir \_\_\_\_\_ feet wide on the bottom, \_\_\_\_\_ feet wide at high water mark, is \_\_\_\_\_ feet deep, has a grade of \_\_\_\_\_ feet per mile, and a carrying capacity of \_\_\_\_\_ cubic feet of water per second of time.

9. Work was commenced on said outlet on the \_\_\_\_\_ day of \_\_\_\_\_, A. D. 18\_\_\_\_

\_\_\_\_\_ [SEAL.]

\_\_\_\_\_ [SEAL.]

\_\_\_\_\_ [SEAL.]

STATE OF COLORADO, }  
COUNTY OF \_\_\_\_\_ } ss.

\_\_\_\_\_, being first duly sworn, on his oath deposes and says that he has read the above and foregoing statement,

and has examined the map thereto attached, and that the matters therein set forth are true of his own knowledge.

Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_  
A. D., 18\_\_\_\_\_.

## PLATS.

If a *printed* form is used for the statement, the plat may be made on the inside pages left for that purpose. Otherwise, a tracing is preferable to any other kind of plat, to be attached to the statement.

If a tracing is used for the plat, attach it to the statement so as to fold inside; plats on plain paper, or blue prints may be on the outside.

Statements and plats should be folded so as not to be larger, either way, than the size of letter paper in three folds.

Engineers should place their names on plats, showing by whom the work was done.

J. P. MAXWELL,  
*State Engineer.*

## EXPENDITURES

FROM THE STATE ENGINEER'S ASSISTANTS AND MATERIAL FUND,  
FROM JANUARY 1, 1891, TO DECEMBER 1, 1892.

|  |             |             |
|--|-------------|-------------|
| Appropriation for salaries for assistants and material }<br>fund for the years 1891-1892 . . . . . } |             | \$ 5,750 00 |
| PAID   |             |             |
| John S. Titcomb, Deputy State Engineer, salary . . . . .   | \$ 2,394 00 |             |
| L. R. Hope, assistant for field work, salary . . . . .   | 1,856 55    |             |
| L. R. Hope, traveling expenses . . . . .   | 232 00      |             |
| T. S. Watkins, draughtsman for Fifth Biennial Report . . . . .                                       | 150 00      |             |
| John Titcomb, computer for Fifth Biennial Report . . . . .   | 114 00      |             |
| C. J. Maxwell, copying records and office work . . . . .   | 176 60      |             |
| Typewriting . . . . .  | 29 00       |             |
| Observer at Cache la Poudre Gauging Station No. 1 . . . . .  | 72 00       |             |
| Observer at South Platte Gauging Station No. 3 . . . . .   | 113 04      |             |
| Observer at Clear Creek Gauging Station No. 4 . . . . .  | 23 66       |             |
| Observer at St. Vrain Gauging Station No. 5 . . . . .  | 111 90      |             |
| Observer at Bear Creek Gauging Station No. 6 . . . . .   | 27 55       |             |
| Observer at Boulder Creek Gauging Station No. 7 . . . . .  | 95 00       |             |
| Observer at Big Thompson Gauging Station No. 8 . . . . .   | 46 65       |             |
| Observer at South Boulder Gauging Station No. 9 . . . . .  | 65 55       |             |
|  |             | \$ 5,507 50 |
| Unexpended balance . . . . .   |             | \$ 242 50   |

REPORT

ON

State Bridges, Roads and Reservoirs,

CONSTRUCTED UNDER APPROPRIATIONS

FROM THE

INTERNAL IMPROVEMENT AND INCOME FUNDS

AND

STATE CANAL No. 1.





TO HIS EXCELLENCY,

JOHN L. ROUTT.

*Governor of Colorado.*

SIR—As Secretary and member of the various commissions created by the Eighth General Assembly for the construction of certain State bridges, wagon roads and reservoirs, I have the honor to report the following action by the respective commissions, under the provisions of the several acts.



## CHAPTER VIII.

## BEAR RIVER WAGON ROAD.

Referring to the report of the State Engineer of Colorado for the years 1889-90—subject matter, "Bear River Road," it will be observed that further proceedings looking to the completion of said road were held in abeyance, pending the adjudication of the case of S. L. Smith vs. the Board of Construction, wherein Smith, the contractor, attempted by *mandamus* proceedings to compel the Board to issue a certificate of completion on a claim of compliance with the terms of the contract.

This issue was tried before Judge Goddard in Leadville at the ———— term of the District Court of the ———— District, and resulted in a verdict for the State, from which decision the plaintiff gave notice of appeal.

Thereupon the Board again issued a call for bids for the completion of the road, and on September 11, 1891, awarded the contract to J. L. Norvell, of Craig, for the sum of \$3,250.

December 7, 1891, the completed road was accepted by the Board of Construction, and the contract price paid.

The case of S. L. Smith, on appeal, being still pending, on May 24, 1892, a final adjustment was effected by the payment to him of \$190 in full settlement of all claims against the State for work done on the road and material furnished.

## STATEMENT OF EXPENDITURES.

|   |          |             |
|---|----------|-------------|
| Balance on hand from last report.               |          | \$ 4,170 30 |
| J. S. Titcomb, for maps, etc                    | \$ 12 00 |             |
| Advertising                                     | 39 63    |             |
| P. F. Reinhardt, team hire.                     | 16 50    |             |
| Geo. S. Oliver, superintendence of Construction | 185 00   |             |
| J. L. Norvell, Contractor                       | 3,250 00 |             |
| S. L. Smith, under first contract               | 190 00   |             |
|   |          | 3,693 13    |
| Balance unexpended                              |          | \$ 477 17   |

**BEAR RIVER BRIDGE.**

Provision was made for this bridge by an Act of the Seventh General Assembly, and contract entered into for its construction during the year 1890, but it was not completed at the time of the State Engineer's last report to the Governor, owing to certain causes of delay therein mentioned.

Subsequently, and after notice of completion from the contractors, I made a personal examination of the bridge, and found the masonry abutments and pier to be entirely unsatisfactory, so much so as to require their complete tearing out and rebuilding with new material.

This was done by the contractors in the fall of 1891, under the supervision of a competent engineer from this office, and in December of 1891, the Board of Construction paid the contract price \$6,389.00 for a very acceptable structure.

**STATEMENT OF EXPENDITURES.**

|   |           |             |
|---|-----------|-------------|
| Unexpended balance from last report . . . . .     |           | \$ 6,706 64 |
| J. C. Kennedy, for superintendence . . . . .      | \$ 210 00 |             |
| State Engineer, expense of inspection . . . . .   | 18 15     |             |
| Geo. S. Oliver, for superintendence . . . . .     | 62 00     |             |
| Bullin Bridge Company, account contract . . . . . | 6,389 00  |             |
|   |           | 6,679 15    |
| Balance unexpended . . . . .                      |           | \$ 27 49    |

**WHITE RIVER BRIDGE.**

House Bill No. 179, approved April 8, 1891, provides for the construction of a bridge across White river, in Rio Blanco County, at a point near White River City, appropriates \$5,000 therefor, and designates the Governor, State Engineer and the Chairman of the Board of County Commissioners of Rio Blanco County, as the locating and building Board.

Pursuant to the law a definite site was selected, adjacent to the site of the old bridge, suitable plans

adopted providing for a combination bridge of one ninety-six-foot span, with masonry abutments, and bids called for, of which nine were received.

The award was made to the St. Joseph Bridge and Boiler Works, of St. Joseph, Mo., for the sum of \$2,898, being the lowest bid therefor, which amount was paid in July of 1892, on completion and acceptance by the Board of Construction and the Board of County Commissioners of Rio Blanco County.

The bridge is a substantial structure of wood and iron, ninety-six feet long, with fourteen feet roadway, the upper chords and posts being of Oregon pine, and the floor and joists of native material.

The masonry abutments are built of large sandstone blocks, well bonded and with ample wings projecting well into the banks, and contain about sixty-seven yards of masonry.

The completed structure is well worth the money expended.

## STATEMENT OF EXPENDITURES.

|  |          |             |
|--|----------|-------------|
| Appropriation .....                                      |          | \$5,000 00  |
| John S. Titcomb, for profiles, etc. ....                 | \$ 6 00  |             |
| Advertising for plans and bids .....                     | 54 55    |             |
| Geo. E. King Bridge Co., for plans .....                 | 50 00    |             |
| State Engineer, expense of inspection (two trips).....   | 77 35    |             |
| W. H. Clark, engineer in charge of construction. ....    | 234 00   |             |
| St. Joseph Bridge & Boiler Works, account contract ..... | 2,898 00 |             |
|  |          | 3,319 90    |
| Balance unexpended .....                                 |          | \$ 1,680 10 |

## PITKIN COUNTY BRIDGE.

House Bill No. 355 approved April 9, 1891, provides for the construction of a State bridge across Castle creek in Pitkin County and appropriates \$12,000.00 therefor.

The Board of Construction is composed of the Governor, State Engineer and Chairman of the Board of County Commissioners of Pitkin County.



After the preliminary work of making surveys and calling for plans and bids, the award for the construction was made to the King Iron Bridge and Manufacturing Co., for the sum of \$11,400.00, and contract entered into at that price.

The full price paid for the bridge was \$1,728.00, the Bridge Company having a special contract with the Board of County Commissioners of Pitkin County for the difference.

The bridge was accepted by the Board of Construction December 14, 1891, as being in compliance with the terms of the contract, and a voucher drawn in favor of the Bridge Company for the sum of \$11,400.00.

The spans and approaches of the bridge are as follows:

Beginning at the east end, it consists of three spans of wooden trestle work of fifteen feet each, leading to the iron part of the structure, which is as follows: One tower span of fifteen feet; one bridge span of thirty feet; one tower span of thirty feet; one truss span of seventy-five feet; one tower span of thirty feet; one truss span of seventy-five feet; one tower span of thirty feet; one truss span of thirty feet, and one tower span of fifteen feet, leading to the wooden part at the west end, which consists of nine spans of wooden trestle work of fifteen feet each. Total length of wooden approaches, 180 feet; total length of iron bridge, 330 feet, and total length of entire structure, 510 feet.

The posts of the towers are set on masonry piers and securely anchored thereto.

This bridge is situated about one mile west of Aspen and extends from mesa to mesa across the chasin of Castle creek, the elevation of roadway from creek being about seventy-five feet.

The roadway is eighteen feet in the clear with a four and one-half foot sidewalk one each side.

## STATEMENT OF EXPENDITURES.

|  |           |              |
|--|-----------|--------------|
| Appropriation .....  |           | \$ 12,000 00 |
| Advertising for plans and bids .....                         | \$ 42 70  |              |
| Making profiles and copying specifications .....             | 13 00     |              |
| G. W. G. Ferris & Co., for inspection of iron at shops ..... | 100 00    |              |
| G. W. Nyce, for engineering and superintendence .....        | 304 00    |              |
| State Engineer, expense trip for inspection .....            | 14 25     |              |
| The King Iron Bridge and Manufacturing Co., (Contract) ..... | 11,400 00 |              |
|  |           | 11,873 95    |
| Balance unexpended .....                                     |           | \$ 126 05    |

## ROUTT COUNTY BRIDGE.

"An Act to provide for the construction of a bridge across Bear river, in Routt County, near the town of Craig", and appropriating \$5,000 for the same, approved April 8, 1891.

Board of Construction, the Governor and the State Engineer of this State, with the Chairman of the Board of County Commissioners of Routt County.

Acting under authority of the Board, the State Engineer made a personal examination of the ground and selected a site for the proposed bridge at the ferry crossing of Bear river, in the line of a county road, and just below the town of Craig.

Plans were called for as provided by law, and after the adoption of proper plans, bids were received, of which there were six, the award being made to the Wrought Iron Bridge Company of Canton, Ohio, for the sum of \$4,445, as being the lowest bidder.

Contract was entered into October 24, 1891, and the bridge was completed and accepted February 12, 1892.

This bridge is an iron structure 200 feet long, with a fourteen-foot clear roadway, and consists of three sixty-six-foot spans, center to center, resting on pile piers and abutments.

Owing to the great depth required to secure a solid foundation and the attendant cost, it was not found practicable to put in a masonry substructure.

The bridge is a neat, a serviceable structure, is in the line of extensive travel, and is highly appreciated by the community in which it is located.

## STATEMENT OF EXPENDITURES.

|   |          |             |
|---|----------|-------------|
| Appropriation.....                            |          | \$ 5,000 00 |
| J. C. Kennedy, survey of three sites.....     | \$ 81 50 |             |
| Advertising for plans and bids.....           | 30 34    |             |
| Maps, profiles and copying.....               | 7 20     |             |
| E. Shelton, superintending construction.....  | 74 00    |             |
| State Engineer, expense of locating site..... | 18 15    |             |
| Wrought Iron Bridge Co. (Contract).....       | 4,445 00 |             |
|   |          | 4,656 19    |
| Balance unexpended.....                       |          | \$ 343 81   |

## DE BEQUE BRIDGE.

Senate Bill No. 116, approved April 10, 1891, provides for the construction of a State bridge across the Grand River near the town of De Beque, in Mesa County, and appropriates \$15,000 for the payment of the same.

The Board of Construction is constituted as those heretofore reported upon.

The site selected by the locating committee is situated just above the town of De Beque and adjacent to the ferry crossing of the Grand river, the approaches being more favorable and the length of bridge shorter at this point than at other sites pointed out.

Suitable plans having been adopted, fifteen bids for construction under the same were received, ranging from \$12,490 to \$14,926.

The award was made to the Missouri Valley Bridge and Iron Works of Leavenworth, Kansas, at the first mentioned figures, and contract entered into October 24, 1891.

Work was prosecuted on the piers during the winter months, and they, together with the earth approaches, were completed April 27, 1892, but owing to the continued high stage of water in the river at that

time, and its increasing volume, it was not considered advisable to attempt the erection of the superstructure until a low stage of water, later in the season, would render it safe. Further time was therefore given under the contract.

The entire structure was completed and accepted October 4, 1892.

The bridge is a steel truss, and consists of one span of 250 feet, center to center. The roadway is sixteen and one-quarter feet in the clear between the trusses, which are forty feet in height.

The top chords and posts to trusses are Z bar sections, the plans being designed and furnished by J. W. Hoover, of the Wrought Iron Bridge Company of Canton, Ohio. All material was inspected and passed upon at the shops of the manufacturers.

The piers are masonry resting on a sandstone bed-rock, and were built of the best sandstone obtainable in the vicinity, and under the immediate supervision of A. J. McCune, of Grand Junction, engineer in charge.

The bridge is a very creditable structure, and probably represents a cash outlay of something in excess of the contract price.

## STATEMENT OF EXPENDITURES.

|  |           |              |
|--|-----------|--------------|
| Appropriation .....  |           | \$ 15,000 00 |
| Geo. S. Oliver, for survey of site.....                    | \$ 16 65  |              |
| Advertising for plans and bids. ....                       | 54 75     |              |
| Office work, maps, profiles and typewriting.....           | 14 50     |              |
| Wrought Iron Bridge Co., for plans and specifications..... | 100 00    |              |
| G. W. G. Ferris & Co., inspection at shops .....           | 36 35     |              |
| A. J. McCune, engineer in charge. ....                     | 224 40    |              |
| State Engineer, expenses, two trips to site .....          | 29 40     |              |
| Missouri Valley Bridge & Iron Works, contract price.....   | 12,490 00 |              |
|  |           | 12,666 08    |
| Balance unexpended .....                                   |           | \$ 2,033 92  |

**RIO GRANDE BRIDGE.**

Erected in pursuance of "an Act to construct a State bridge across the Rio Grande river between the counties of Conejos and Costilla at, or near a point known as the Costilla crossing of said Rio Grande river, and making an appropriation of ten thousand dollars therefor," approved April 13, 1891.

The Governor, State Engineer and the Chairmen of the Boards of County Commissioners of the counties of Conejos and Costilla are constituted the Board of Construction.

This act differs from others of similar import in this, that Section 3 and 4 provide that the Board of Construction shall advertise for plans, specifications and bids for constructing said bridge; and from such plans, specifications and bids shall select and accept the best plan and bid according to their judgment.

Thirty-eight plans, modification of plans and bids were submitted under the call; from which the design and bid of the "Wrought Iron Bridge Company," of Canton, Ohio, was selected and accepted by the Board.

Contract was entered into February 12, 1892, at the price bid, \$8,400.00, and the bridge was completed and accepted August 31, 1892.

The site selected for this bridge is about 100 rods below the Costilla crossing of the Rio Grande river, in the head of a box canon, the walls of which rise vertically twenty feet above the bed of the river, and afford a solid and durable foundation for the two ends of the bridge which rest on their crest.

The bridge is an eight-panel Thatcher truss of iron and steel, 313 feet long, with roadway sixteen feet in the clear between trusses. It consists of two spans of 155 feet each, center to center, height of truss twenty-five feet.

The center pier consists of two five feet diameter iron cylinders, twenty-eight feet long, made of five-sixteenths plate, set on a firm foundation and filled with concrete. The tubes are connected by solid web plates, made of three-eighths iron, and extending up for twelve feet to insure rigidity and to prevent the lodgment of driftwood between the tubes.



A strong iron nose twelve feet high, also filled with concrete, faces the up-stream side of the upper cylinder, to act as an ice breaker.

The west end of the bridge has naturally a comparatively level approach. At the east end a cut some 200 feet long was made through rock, with a base sixteen feet wide and greatest depth five feet, to secure an easy grade to and from the bridge.

The structure is substantial, is nicely adjusted in all its details, and the workmanship reflects much credit upon the contractors.

## STATEMENT OF EXPENDITURES.

| Appropriation   |          | \$ 10,000 00 |
|---|----------|--------------|
| J. F. Thomas, for surveys   | \$ 34 50 |              |
| Advertising for plans and bids                                      | 44 78    |              |
| Office work on profiles and specifications                          | 18 00    |              |
| J. F. Thomas, superintendence of construction                       | 171 00   |              |
| State Engineer, expenses of two trips to inspect site<br>and bridge | 28 35    |              |
| Wrought Iron Bridge Co., contract price                             | 8,400 00 | 8,696 63     |
| Balance unexpended  |          | \$ 1,303 37  |

## BERTHOUD PASS ROAD.

"An Act to provide a Public Wagon Road between Empire in Clear Creek County and the Junction Ranch in Grand County, and appropriating twenty thousand dollars therefor," approved April 8, 1891, constitutes the Governor, State Engineer, and Chairmen of the Boards of County Commissioners of Clear Creek and Grand Counties a Board for the purchase, repair, and construction of said road.

At a meeting of the above named Board, held July 24, 1891, the State Engineer was instructed to cause a careful survey to be made between the points designated in the act, and to report the result thereof to the Board, together with estimates of the cost of construction.

From such survey it was ascertained that the most practicable line between the points named, and touch-



ing the intermediate points designated, was already occupied by a toll road owned and operated by the "Georgetown and Middle Park Wagon Road Company;" that the cost of building a road outside of the right of way of said company would far exceed the limit of the appropriation for the purpose; and that the cost of repairing the road of said company and making certain desirable changes therein would approximate the sum of fifteen hundred dollars.

On the 16th day of December, 1891, there was submitted to the Board the following proposition for the sale of the "Georgetown and Middle Park Wagon Road," by the representative of said above named company:

DENVER, COLO., Dec. 16, 1891.

*"To the Honorable Chairman of the Board of Construction of the State Wagon Road between Empire, in Clear Creek County, and Junction Ranch, in Grand County:*

SIR—You are hereby offered the entire stock of the Georgetown and Middle Park Wagon Road, consisting of two hundred and fifty shares of \$100.00 each, fully paid up and free from all encumbrances, said corporation owning the wagon road from Empire, in Clear Creek County, via Berthoud Pass and Cozzins Ranch, and terminating at Junction Ranch in Grand County, a distance of twenty-seven miles, for the sum of \$18,500.00.

(Signed)

J. MILTON COPELAND,

*President Georgetown and Middle Park Wagon Road."*

The Board of Construction, having previously made a personal examination of the road, finding that extensive repairs had been made on all that part in Grand County, and north of the Berthoud pass, and that the same was in good condition, and in compliance with the act as to grade and width, accepted the offer of sale, and upon the delivery to the Board of all the stock of said company, duly assigned, ordered a voucher drawn for the sum of \$18,500.00 in full payment therefor.

The survey of that part of the road in Clear Creek County contemplated the building of about 100 rods of new road, around what is known as the Little Blue hills, thereby avoiding a very steep pitch on bed rock, and two bridges which would require rebuilding; also repairs to certain other bridges and points. The new line of road was necessarily on the steep mountain side, in a

bed of large boulders, and difficult of construction, being principally rock work. This work was performed during the months of July, August and September of 1892, under the superintendence of Thos. Rowe, of Georgetown, and cost \$1,249.43, for which sum a voucher was drawn, after examination and acceptance of the road.

The general line of the road has been kept in repairs by the Counties of Clear Creek and Grand during the season of 1892, and it is reported that the travel over the same has very materially increased since the tolls were taken off and the road placed in repair.

## STATEMENT OF EXPENDITURES.

|  |           |              |
|--|-----------|--------------|
| Appropriation  |           | \$ 79,000 00 |
| F. A. Maxwell, for surveys   | \$ 167 00 |              |
| E. C. Hawkins, for maps and profiles   | 35 00     |              |
| The Georgetown and Middle Park Wagon Road }<br>Company, purchase price of road | 18,500 00 |              |
| Thos. Rowe, for new road and repairing old                                     | 1,249 43  |              |
|  |           | \$ 19,951 43 |
| Balance unexpended   |           | \$ 49 57     |

## GRAND RIVER CANON ROAD

Built pursuant to "An Act to provide for the construction of a State Wagon Road through the Canon of the Grand River, below and from the town of Hot Sulphur Springs to the mouth of said canon, and to provide for the construction of a bridge across said Grand river at the mouth of said canon," and appropriating \$15,000.00 therefor, approved April 8, 1891.

Board of Construction, the Governor, State Engineer and Chairman of the Board of County Commissioners of Grand County.

The act evidently contemplated the construction of the road through the canon on the southeast side of the river, the bridge to be built at the lower end of the canon, in order to make the road accessible to the bulk of the travel, which is on the opposite side of the river.

From a careful examination of the canon made in person, it became apparent that the more desirable location for the road would be on the northwest side of the

river following closely to the high water line, not only on account of economy in construction, but in maintenance as well, thus also doing away largely with the necessity for a bridge at the immediate mouth of the canon.

Under the instructions of the Board, the State Engineer caused a survey to be made of the line, and prepared plans and specifications for the proposed road.

Bids were called for as provided by the act, of which five were received. The award was made to Levy & Moore, contractors, for the sum of \$13,500.00, as being the lowest responsible bidders, and contract entered into October, 1891. Something over five months were consumed in the construction and at times from sixty to 100 men were employed.

The road is only two and two-fifth miles in length, but mostly rock work, several hundred feet of the canon having a vertical wall, with its base at the water's edge, the river being contracted to fifty and seventy-five feet in width, necessitating solid rock cuts, it being impracticable to build up in the river-bed on account of the obstruction to the narrow channel.

In other places heavy rock slides covered the steep mountain side from the river's edge up the slope for several hundred feet, and the excavation of the road-bed at the base precipitated the loose material above into the road-bed, necessitating the removal of several thousands of yards of waste. The work being prosecuted during the winter months, deep falls of snow were encountered and close supervision of the work was required to secure a proper foundation for the road-bed.

The contract was completed and the road accepted April 15, 1892.

A petition from the Commissioners of Grand County was presented to the Board of Construction, asking that the bridge, required by the act, be located and built at a point selected by them on the river some two and one-half miles below the mouth of the canon, the petition maintaining that the site selected would require a shorter bridge, was more accessible, and would accommodate a greater number of people than at the mouth of the canon.

In pursuance of the law the Board advertised for plans for a wooden bridge; but a bridge at the mouth of the canon being of questionable utility, and the people of that section being divided in sentiment as to the most favorable point below; and it further appearing to the Board that the construction of a bridge at any point away from the immediate vicinity of the mouth of the canon would be exceeding its authority, concluded to take no further action in the matter, unless vested with legislative authority to change the location of the site.

## STATEMENT OF EXPENDITURES.

|   |           |              |
|---|-----------|--------------|
| Appropriation .....                         |           | \$ 15,000 00 |
| F. A. Maxwell, for surveys .....            | \$ 148 95 |              |
| Advertising for bids and plans .....        | 28 01     |              |
| George S. Oliver, for superintendence ..... | 675 82    |              |
| Office work in maps and profiles .....      | 18 00     |              |
| Levy & Moore, contractors .....             | 13,500 00 |              |
|   |           | 14,370 78    |
| Balance unexpended .....                    |           | \$ 692 22    |

## HINSDALE AND SAN JUAN COUNTY WAGON ROAD.

"An Act to construct a State Wagon Road from a point near the foot of Lake San Christoval, in Hinsdale County, to a point of intersection with the Silverton and Animas Forks wagon road near Animas Forks," and appropriating \$6,000 therefor; approved April 9, 1891.

This act provides that "said wagon road shall be surveyed and the route selected by the State Engineer, and that the same shall be constructed under the superintendence of the State Engineer and the Chairman of the Board of County Commissioners of the County of Hinsdale."

In the summer of 1891 a survey was made of the route more particularly described in section 1 of the act, by J. J. Abbott, of Lake City, under the direction of the State Engineer, from which it was ascertained that the line was some thirty miles in length, over a mountainous country, most of it quite difficult of construction,



and requiring fifteen bridges. Maps, profiles and estimates were made, the latter far exceeding the appropriation. It was, nevertheless, urged by representatives from Hinsdale County that a call for bids be made, hoping that proposals might be received within the limit, it being stated that the county was not in a financial condition to assist in the construction.

A call was therefore made in July of 1892, but no bids were received, since which time no further action has been taken.

It was further urged that the application of the available fund toward the more difficult portions of the road and important bridges would accommodate extensive travel and materially advance the interests of that section, but such use of the fund could not be considered against the plain terms of the law, which provided that if the appropriation was not sufficient to complete the road no part of it should be used, except for survey, unless the County Commissioners or other responsible parties should agree to furnish the amount required in excess of the appropriation. The matter is therefore held in abeyance, awaiting legislative action.

## STATEMENT OF EXPENDITURES.

|   |           |             |
|---|-----------|-------------|
| Appropriation                           |           | \$ 6,000 00 |
| J. J. Abbott, for survey and maps       | \$ 515 65 |             |
| Office work on plans and specifications | 6 00      |             |
| Advertising                             | 7 80      |             |
|   |           | 529 45      |
| Balance unexpended                      |           | \$ 5,470 55 |

## MONTEZUMA AND DOLORES COUNTY WAGON ROAD.

"An Act to aid the counties of Montezuma and Dolores, Colorado, in constructing a wagon road from Dolores, Montezuma County, to Rico, Dolores County," and appropriating \$10,000.00 therefor, approved April 14, 1891.

The Governor, State Engineer, and Chairman of the Board of County Commissioners, of Montezuma County, are constituted a Board of Construction.

In the month of September, 1891, together with A. S. Samson, Chairman of the Board of County Commissioners of Montezuma County, I made an examination of the route of the above described road, commencing at Dolores, and following thence up the Dolores river to Rico, and selecting in a general way the line of the proposed road. We found something of a road the entire distance, following the valley of the Dolores and crossing the river twenty-five or thirty times.

The Rio Grande Southern Railroad was at that time being constructed through the valley, and had appropriated much of the old road and more of the desirable ground for wagon road construction, making it necessary to locate more or less of the line on steep hill sides where heavy cuts in earth and rock would be required.

A. L. Fellows, an engineer of Cortez, was employed to make the locating survey, which he accomplished during the months of October and November, following.

The distance between the points named in the act was found to be thirty-five miles, and nine bridges were required at crossings of the Dolores river, ranging from fifty to one hundred and fifty feet in length.

Estimates were made from the data thus furnished, which placed the cost of construction at approximately fifteen thousand dollars.

A meeting of the Board of Construction was held April 26, 1892, to which the State Engineer made a report of survey and estimates. It was, however, deemed advisable to call for bids, under plans and specifications to be furnished by the State Engineer, and notice to that effect was duly published.

No proposals were received and the Board has taken no further action in the premises.

## STATEMENT OF EXPENDITURES.

|   |           |              |
|---|-----------|--------------|
| Appropriation .....                               |           | \$ 10,000 00 |
| A. L. Fellows, for survey, levels and plats ..... | \$ 861 85 |              |
| Advertising .....                                 | 63 17     |              |
| State Engineer, expense of inspection .....       | 36 10     |              |
| Office work on plans and specifications .....     | 24 00     |              |
|   |           | 985 12       |
| Balance unexpended .....                          |           | \$ 9,014 88  |



**DOUGLAS COUNTY ROAD,**

Built under "An Act to make an appropriation from the internal improvement fund for the construction of a State road to connect the Sedalia and Caledonia Springs wagon road with the county wagon road between Bergen Park and Florissant," approved April 15, 1891. Appropriation, \$8,000.00.

The survey of this road was made by Deputy State Engineer J. S. Titcomb, during the months of September and October, 1891.

The initial point was on the South Fork of South Platte river at intersection with the Sugar creek road from Sedalia. Thence up the South Fork four and one-half miles; thence up Trout creek three and one-half miles; thence up West creek five and one-half miles to terminus. Total distance thirteen and one-half miles.

Twenty bridges were provided for in the specifications, the longest being 100 feet.

After advertising for proposals, the contract for construction was awarded to the Western Construction Company, of Denver, for the sum of \$6,825.00, and contract entered into November 5, 1891.

The road and all bridges were completed and accepted November 29, 1891.

## STATEMENT OF EXPENDITURES.

|   |           |             |
|---|-----------|-------------|
| Appropriation                                 |           | \$ 8,000 00 |
| J. S. Titcomb, for surveys, maps and profiles | \$ 368 50 |             |
| Advertising                                   | 20 80     |             |
| Katherine Grace, copy of contract and bond    | 1 05      |             |
| J. S. Titcomb, for superintendence            | 83 70     |             |
| Western Construction Co. (contract)           | 6,825 00  |             |
|   |           | \$ 7,299 05 |
| Balance unexpended.                           |           | \$ 700 95   |

**CLEAR CREEK COUNTY ROAD.**

"An Act to amend section 1 of An Act entitled 'An Act to build a wagon road in Clear Creek County from a point near the mouth of Trail run to the Argo mine

and terminate at the Ouida Cabin,' approved April 24, 1889," approved April 16, 1891.

This amendment to the act of 1889 changes the location of a portion of the road and calls for the most practical route from a point near the Ouida mine on the creek, by way of the Argo and Lamartine mines to the head of Spring gulch, there to connect with the Spring gulch wagon road. Section 2 of the act of 1889 provides that "said road shall be built upon a grade not to exceed thirteen feet to the hundred, and with no curvature of less than twenty feet to the hundred, and a solid road-bed of not less than twelve feet wide."

I made an examination of the ground July 20, of this year, and found a well-traveled road from the point in Spring gulch, connecting with the county road, to the Lamartine mine, a distance of about two and one-half miles, and on what seemed to be the most practical route.

The Lamartine mine is situated on the crest of the divide between Spring gulch and the creek and is the highest point on the proposed road.

From the Lamartine mine to the Argo mine the present road follows down a very steep gulch, the distance being about half a mile. From the Argo mine to the Ouida mine a good road was also found, distance about half a mile.

A survey of the route was made in August last, also, estimates based thereon, from both of which it was ascertained:

*First*—That the proposed road would be about four miles in length.

*Second*—That but half of the old road could be utilized and kept within the limit as to grade provided by the act.

*Third*—That to so change the line between the Lamartine mine and the head of Spring gulch that it will not exceed the limit as to grade, and construct a "solid road-bed twelve feet wide," would, as estimated, exceed the appropriation, and furthermore, such changed location would, on account of the peculiar topography of the country and its liability to snow drifts, be on much less favorable ground than the present road.

A "solid road-bed twelve feet wide" is entirely unnecessary in the mountains, where proper turnouts

are provided, and on steep mountain side work such a bed will cost from one-fourth to one-third more than a ten-foot bed, while the latter would answer every purpose.

Plans and specifications were prepared and bids called for, but in view of the facts above set forth, the Board of Construction concluded to take no further action in the matter, unless Clear Creek County or other parties should agree to advance such a sum of money as would, with the appropriation, make a wagon road strictly in compliance with the act.

## STATEMENT OF EXPENDITURES.

|                                       |           |             |
|---------------------------------------|-----------|-------------|
| Appropriation                         |           | \$ 5,000 00 |
| George S. Oliver, account survey      | \$ 143 95 |             |
| Advertising                           | 27 86     |             |
| Typewriting                           | 2 50      |             |
| State Engineer, expense of inspection | 4 00      |             |
|                                       |           | 178 31      |
| Balance unexpended                    |           | \$ 4,821 69 |

## CONEJOS AND ARCHULETA COUNTY ROAD,

Provided for by "An Act to construct a State Wagon Road from a point known as Le Due's toll road, in Conejos County, to a point known as West Fork, in Archuleta County," and appropriating \$12,000 therefor, approved April 9, 1891.

In making a personal examination of the ground and selection of the route for the above described road, I left the Denver & Rio Grande Railroad at Antonito, in Conejos County, thence followed up the Conejos river some ten or twelve miles to the initial point, known as Le Due's toll road. Continuing along the river, the mining camp of Platora was reached at a distance of about thirty-five miles. Thence the route lay in a northwesterly direction, over a road already constructed by the State, from Platora over a high divide into the headwater of Alamosa creek, thence up the Alamosa about three miles, and then following in a northwesterly direction an old United States government road to the

summit of the San Juan mountains, about three miles south of Summitville, in Rio Grande County.

Continuing along the government road a very rapid descent was made onto the headwaters of the South Branch of the San Juan river and down said river to the West Fork and terminus of the proposed road.

While something of a road was found the entire distance, a very small portion was located on favorable ground, or could be utilized in the building of a permanent road. That portion over the range was on very rough and broken ground, exceedingly swampy in places and very difficult to repair, nor was it apparent where a better line could be found.

Two engineer forces were employed to make the survey, one in charge of J. F. Thomas, of Manassa, on the eastern slope, and another in charge of F. W. Robinson on the western slope.

The surveys were completed and returns made about October, 1, 1891. The entire length of road was found to be fifty-eight miles, and twenty-six bridges were required at the various crossings of the Conejos, San Juan, and other streams, ranging from ten to one hundred and fifty feet in length, with a combined length of 1,078 feet. A profile of the entire line was made in this office and careful estimates followed, which placed the cost of construction about \$17,000, and so far above the appropriation that it was found impracticable to proceed further unless the two counties of Conejos and Archuleta would agree to meet any deficiency in excess of the appropriation. In June, 1891, the Board of Construction received assurances that such guarantee would be given, and made a call for bids, based upon specifications to be furnished by the State Engineer.

Two bids were received and that of S. C. Barthelson of Sanford, Colorado, for the sum of \$10,000 was accepted, Mr. Barthelson having a special agreement with the two sureties named for a certain amount above the price bid.

Contract was entered into and the work is now progressing, but will probably not be completed before next season some time, as it will be impracticable to work at high altitudes on the range during the winter months.



## STATEMENT OF EXPENDITURES.

|  |          |              |
|--|----------|--------------|
| Appropriation                                |          | \$ 12,000 00 |
| State Engineer, expense of inspection        | \$ 22 50 |              |
| J. F. Thomas, account survey eastern slope   | 554 50   |              |
| F. W. Robinson, account survey western slope | 595 21   |              |
| Office work, profiles, calculations, etc     | 116 00   |              |
| Advertising                                  | 27 40    |              |
|  |          | 1,315 61     |
| Balance unexpended                           |          | \$ 10,684 39 |

## SAGUACHE RESERVOIR.

Section 1 of An Act passed by the Eighth General Assembly, and approved April 16, 1891, appropriates \$30,000 for the construction of one or more reservoirs on or near Saguache Creek, in Saguache County, at some suitable point, or points, within or near township forty-three (43), north of range two (2), east of the N. M. P. M., or township forty-three (43), north of range three (3), east of N. M. P. M.

Section 3 of said Act provides that the State Engineer shall make such examination and surveys as he shall deem necessary to determine the feasibility of the construction of a reservoir or reservoirs at the place, and make to the Board of Construction report of his proceedings therein and his conclusions.

Such an examination was made in August of 1891, the State Engineer being accompanied by F. M. Hill, Chairman of the Board of County Commissioners of Saguache County, S. E. Kirkendall, County Surveyor, and others, all more or less familiar with that section of country.

His attention was directed to two sites as being those contemplated by the act. They were on the Cochetopa hills, at an elevation of about 11,000 feet, and distant about thirty-five miles southwesterly from Saguache. They appeared to be the most favorable location for storage purposes of any in the townships named.

The first examined was on the Middle Fork of Saguache creek where a granite dyke crossed the creek, forming a short box canon about 200 feet wide, the

walls being irregular and approaching a vertical, with a height of sixty to seventy feet.

The valley widened out to a maximum width of about 1,000 feet, excepting at the confluence of the North and Middle Forks, where it was somewhat wider.

A dam sixty-five feet high would flood an area of about ninety acres, and give a capacity of 120,000,000 cubic feet, approximately, or 2,700 acre feet.

The dam would require solid masonry work, and aside from its other unfavorable features would cost so much in excess of the appropriation that further consideration of the site was at once dropped.

The second site is situated near the South Fork, on sections 30 and 31, township 43 N., R. 3 E. N. M. P. M., and about four miles due south of the first. It has been an old lake bed of contracted area, the rim at the north end being cut through so that it drains to the bottom. An earth embankment built at this outlet with a maximum height of fifty feet would be 1,100 feet long on its crest, would require 119,000 cubic yards of earth, and with proper discharge pipes, valve, well, and rip-rapping would cost approximately \$45,000.00.

The area covered at high-water line would be eighty-two acres, giving a capacity of 70,000,000 cubic feet, or about 1,640 acre feet.

The source of water supply would be the South Fork of the Saguache; length of supply ditch, one and one-third miles; approximate cost of construction \$3,500.00.

Total cost, \$48,500.

To reduce the height of dam sufficiently to bring the cost within the appropriation would of course proportionately decrease the capacity, and would also involve a rock cut in the rim on east side of site for spill-way purposes; whereas, with the dam at the above proposed height, the high-water line in reservoir would be at same elevation as crest of rim and give a natural and safe spill-way.

It did not appear to the Board of Construction that the quantity of water possible to store in such a reservoir would justify the expenditure of so much money, at an altitude where it would be impracticable to store



water during the winter months when not required for irrigation, where the cost of maintenance would be high, requiring the employment of a man a large portion of the year to keep the ditch in repairs, and regulate the intake and discharge of the water, and where the kinds of crops produced would not stand a high tariff on water for irrigating purposes.

Attention was later called to an available site for a reservoir, on the main Saguache creek, some fifteen miles above the town of Saguache, a survey of which was also made; also, a site adjacent to the town; but the two sites were so distant from the townships named in the act that they could not reasonably be construed to be "at" or "near" the same, hence have not been seriously considered by the Board.

A large canal known as the Del Norte has been constructed, taking water from the Rio Grande river near Del Norte, and thence skirting the base of the mountains on the western line of the San Luis valley in a northerly direction and terminating at Saguache creek, about four miles below the town of Saguache, covering practically all the State lands, and from which it would seem possible to supply water for lands in that locality without resort to storage, some years to come, and at much less cost than through a system of reservoirs.

Nor could it be learned that there was an immediate or prospective demand for water in the valley of the Saguache, such as would insure the State the remuneration contemplated by the act.

## STATEMENT OF EXPENDITURES.

|  |          |              |
|--|----------|--------------|
| Appropriation .....  | -----    | \$ 30,000 00 |
| State Engineer for expense of inspection.....  | \$ 22 50 |              |
| L. R. Hope, for survey of site above Saguache.....   | 155 00   |              |
| F. M. Hill for self and team six days, from Villa Grove<br>to reservoir site and return..... | 36 00    |              |
| S. E. Kirkendall, account survey of upper site.....  | -----    | \$ 213 50    |
|  |          | \$ 29,786 50 |

## CUSTER COUNTY RESERVOIR

Senate Bill No. 153, approved April 9, 1891, provides "for the construction of a reservoir at the most convenient and suitable place or places, to be selected by the State Engineer, in township twenty-one (21), range sixty-nine (69) west," and appropriates ten thousand dollars therefor.

Section 2 of the Act provides that the State Engineer "shall make the necessary arrangements for measuring the flow of water in Hardscrabble creek, and shall thereafter calculate and determine the required capacity of such reservoir or reservoirs, to stow the waters flowing in said creek, or so much thereof as may be necessary during the months of April, May and June of each year, and prepare plans and specifications thereof."

Inasmuch as the law did not take effect until July 9, 1891, no observations were made of the flow of said creek during that season, the months designated for such observations having passed. In August, 1891, the State Engineer made an examination of the township named in the act with reference to favorable sites for a reservoir, being accompanied by Mr. Watson, an old resident of that section.

But one site was found to which any consideration could be given, situated on section 14 of said township, in and near the head of a short draw and about one mile easterly from the Wetmore postoffice. A survey was made of this during the following month.

In April of 1892, a gauging station was established on Hardscrabble creek, at Greenwood, and observations taken during the months of April, May, June and July, with the following general results:

|  |       |
|--|-------|
| Monthly mean discharge for April, cubic feet per second            | 33.33 |
| Monthly mean discharge for May, cubic feet per second              | 30.60 |
| Monthly mean discharge for June, cubic feet per second             | 17.71 |
| Monthly mean discharge for July, cubic feet per second             | 6.54  |
| Monthly mean discharge for August (10 days), cubic feet per second | 6.17  |

The above figures include only the minimum discharge of a freshet which occurred June 24, between 5:30 o'clock P. M. and 7:20 o'clock P. M. The maximum

discharge during the period was 350 cubic feet, mean 103 cubic feet, and minimum thirty-seven cubic feet per second.

The available quantity for storage from this freshet would be 410,000 cubic feet = 9.40 acre feet.

The total quantity of water decreed to ditches drawing their supply from Hardscrabble creek is 35.9 cubic feet per second, so that the monthly mean discharge for the months taken will show no surplus available for storage purposes. There were, however, twenty-three days in the month of April and May during which time the mean daily discharge of the stream exceeded the quantity decreed to ditches by from 2 to 15 cubic feet per second each day, giving a total of 14,083,200 cubic feet that would be available for storage, if no claims were made upon the water of the creek other than through the decreed ditches.

Attention was next given to estimates of dam construction and reservoir capacity. Under the instructions of the Board of Construction, the State Engineer drew plans for a dam which were generally as follows, as to form and material: Earth embankment thirty feet high at point of greatest depth, width of crest fifteen feet, inner slope three to one, and outer slope two to one. The discharge pipe to be sixteen inches diameter, of cast iron, laid on a concrete bed, with concrete collars, one foot in thickness at each joint, the ends of pipe to be set in masonry, pipe to be laid in trench cut through earth and rock in place at point 175 feet from east end of dam, and having an elevation of three feet above lowest point of reservoir.

The dam would be 1,285 feet long on crest, and would require 64,000 cubic yards of earth; estimated cost, \$14,000.

The high-water line of reservoir would give twenty-five feet greatest depth of water at dam; area of reservoir at high-water line, 11.74 acres; maximum capacity, 4,253,600 cubic feet, equals 100.22 acre feet.

A ditch 2,500 feet long and costing approximately \$1,000.00 would be required to carry water from Hardscrabble creek into reservoir unless private ditches already constructed could be used for that purpose.

The ground occupied by the reservoir site is held under homestead filing, and a relinquishment of the filing will cost \$300.00.

Upon report of the above estimates to the Board, it was concluded that the limited storage area furnished, would not warrant the expenditure. However, upon the earnest solicitation of interested parties, and upon their representations that the right of way for the land, and for the carriage of water through ditches now covering the site, would be arranged for without cost to the State, and furthermore, that they would guarantee the submission of a bid for construction of dam within the available limit of the appropriation, any excess in cost being subscribed by citizens, the Board agreed to call for bids on the plans furnished by the State Engineer.

Two bids were received under the call, one for \$9,250.00, and the second for \$17,450.00.

## STATEMENT OF EXPENDITURES.

|  |          |              |
|--|----------|--------------|
| Appropriation .....  |          | \$ 10,000 00 |
| E. A. Smith, for surveys .....   | \$ 96 00 |              |
| State Engineer, expense of inspection .....  | 10 60    |              |
| I. R. Hope, two trips to establish gauging station,<br>making plans, calculations, etc ..... | 122 00   |              |
| W. H. Funderburk, observer, four months .....  | 19 15    |              |
| W. S. Harmon, sinking test pits .....  | 13 00    |              |
| Advertising for bids .....   | 25 20    |              |
|  |          | 285 95       |
| Balance unexpended .....   |          | \$ 9,714 05  |

## APISHAPA CREEK RESERVOIR.

Constructed under "An Act in relation to a public reservoir on the Apishapa creek in the County of Las Animas and State of Colorado, and for other purposes." Approved April 6, 1891.

Appropriation therefor \$15,000.00.

The Board of Construction, the Governor, Secretary of State, and State Engineer.

Sec. 2 of the act provides that "said reservoir shall be erected at some suitable place, to be determined by



the State Engineer, west of the Denver and Rio Grande Railway on or near the Apishapa creek."

An examination of the mountain portion of the Apishapa creek, made by the State Engineer in September of 1891, resulted in the selection of a site in what is known as the Metote canon, which lies about midway between the Apishapa and Trojilla creeks, and eight or ten miles westerly in the hills from the base of the mountains. The two creeks above named have their heads in the Spanish Peaks, the former having a drainage area of about 100 square miles and the latter of about thirty square miles above the location of the reservoir site.

The reservoir can be supplied with water from either or both of the above streams by means of short ditches, in the one case about two miles in length, in the other three thousand feet.

Metote canon has a limited catch basin, not exceeding four square miles, and hence is not subject to heavy floods, such as would endanger an embankment placed across its channel.

The ordinary flow of the Apishapa and Trojilla creeks is all appropriated during the irrigating season and diverted through numerous small ditches covering the narrow valley to and beyond the base of the mountains, but assurances were given on every hand of an abundant supply during the early spring for storage purposes, and of heavy flood storms later in the season for a second and third filling of the reservoir.

The site is at an elevation of about 7,000 feet, and favorably situated for the discharge of its waters into the Apishapa creek, for use on the valley below, or its immediate use on lands adjacent thereto; but, while the best obtainable in that section, it is not of such liberal proportions as could be desired for the expenditure. It was, however, represented that crops in the valley were frequently matured without irrigation owing to the generous rainfall and that one irrigation would always insure a good harvest; hence it was argued that the water stored could be made to go much farther and give better results than in localities where two and three irrigations were required.

The valley of the Apishapa has an extensive body of excellent land, for which the normal supply of the

stream is wholly inadequate, all of which can be successfully cultivated if one irrigation could be assured.

The reservoir site is located on the N. W.  $\frac{1}{4}$  and W.  $\frac{1}{2}$  of N. E.  $\frac{1}{4}$ , section 22, township 31 south, range 66 west, on lands owned by William Lindsey, and embraces 52.73 acres, for which amount a warranty deed was made to the State, an abstract showing clear title accompanying the deed.

Plans and specifications were prepared by the State Engineer based upon surveys previously made and test pits sunk in the line of the dam.

The design of the dam is similar to that of the Monument reservoir, the details of which will be found under its proper heading.

The estimates made on the plans submitted placed the cost of construction several thousand dollars in excess of the appropriation, hence the Board of Construction declined to take further action in the matter unless assurances were given by interested parties that a bid would be received within the available limit. Such assurances were given and proposals were called for with the following result:

|                                    |           |
|------------------------------------|-----------|
| J. R. De Remer bid .....           | \$ 13,993 |
| Western Construction Co. bid ..... | 19,750    |

The award was made to Mr. De Remer; contract was entered into November 21, 1891, and work immediately begun. A competent engineer was kept constantly on the ground to see that the specifications were strictly complied with. At one place in the puddle trench, it was found necessary to excavate to a depth of eighteen feet to cut off all underflow and secure a proper foundation.

The trench for discharge pipe was cut well into bed rock and a solid foundation given for the pipe.

It is to the credit of the contractor that no labor was spared to secure a durable structure, notwithstanding the disadvantages of deep snow and severe weather, during which the work was prosecuted.

The contract was completed, including the 33,000 feet of supply ditch, and accepted June 24, 1892.

The supply ditch is eight and ten feet wide on the bottom, will carry four feet in depth of water, has a fall



of seven feet in three thousand, and a capacity to fill the reservoir in about forty hours.

Capacity of reservoir, 20,000,000 cubic feet.

The dam dimensions are as follows :

|                                   | FEET.  |
|-----------------------------------|--------|
| Length on top.....                | 800    |
| Width on top.....                 | 16     |
| Inner Slope.....                  | 3 to 1 |
| Outer slope.....                  | 2 to 1 |
| Crest above bottom.....           | 42     |
| Crest above high water plane..... | 7      |

Inner slope rip-rapped eighteen inches deep to a depth of fifteen feet (vertical measurement) below water line.

For discharge conduit, two sixteen-inch cast iron pipes from inner toe to valve-well; thence cement pipes of same dimensions to outer toe, laid on concrete bed, and with concrete collars at each joint.

Spill-way cut through rock ridge to a depth of eighteen feet from crest of ridge, 170 feet long and twenty feet in width of floor.

#### MATERIALS REQUIRED.

|   | CUBIC YARDS. |
|---|--------------|
| Earth work in dam.....  | 95,650       |
| Excavation trench for foot of puddle well.....                                    | 1,800        |
| Excavation for discharge pipes.....   | 240          |
| Excavation for waste-way (partially rock).....                                    | 1,040        |
| Rip-rap, surface yards.....   | 6,000        |
| Masonry, laid in hydraulic cement.....  | 27           |
| Concrete.....   | 8            |
|   | FEET.        |
| Lumber for gate house.....  | 600          |
| 36-inch well pipe.....  | 22           |
| 16-inch iron pipe.....  | 161          |
| 16-inch Colorado cement pipe.....   | 164          |
| 2 standard 16-inch valves with rods, wheels and braces.....                       |              |
| 1 34-foot iron ladder.....  |              |
| 1 screen 2 ft. 6 in. by 4 ft. 8 in., of $\frac{3}{8}$ by $1\frac{1}{4}$ iron..... |              |

## STATEMENT OF EXPENDITURES.

|  |           |              |
|--|-----------|--------------|
| Appropriation  |           | \$ 15,000 00 |
| State Engineer, expense three trips for inspection             | \$ 26 55  |              |
| Geo. S. Oliver, for surveys and maps                           | 146 95    |              |
| Office work on plans, specifications, copying and calculations | 31 85     |              |
| Advertising  | 23 40     |              |
| A. M. Holt, engineer in charge, six months and seven days      | 476 00    |              |
| J. R. De Remer, contractor                                     | 13,993 00 |              |
| Office work, making plats and estimates and filing same        | 14 00     |              |
|  |           | 14,711 75    |
| Balance unexpended   |           | \$ 288 25    |

## CHAFFEE COUNTY RESERVOIR.

"An Act to provide for the construction of reservoirs, and the storage and supply of water to supplement the supply at certain seasons of the flow of certain natural streams of the State, in Chaffee County, etc." Appropriation, \$15,000.00.

Board of Construction, the Governor, State Engineer, and Chairman of the Board of County Commissioners of Chaffee County.

This act provides for the construction of one or more reservoirs for the storage of the waters of Cottonwood creek, Chalk creek, or the South Arkansas river, as may seem best in the judgment of the Board after an examination made by the State Engineer and its advisability reported thereon. Such examination was made during the month of August, 1891, including Cottonwood lake, Boss lake, Monarch park and Fuses gulch. Preliminary surveys of the above sites were subsequently made with the following general results for earth embankments, to wit:

## MONARCH PARK.

|  |            |
|--|------------|
| Greatest depth of dam, feet            | 55         |
| Greatest depth of water at dam, feet   | 50         |
| Length of crest, feet                  | 593        |
| Cubic yards in dam                     | 69,221     |
| Area covered at high water line, acres | 42.47      |
| Storage capacity, cubic feet           | 30,821,083 |

## FUSES GULCH.

|  |           |
|--|-----------|
| Greatest depth of dam, feet.....                   | 23.40     |
| Greatest depth of water, feet.....                 | 18.40     |
| Length of crest of dam, feet.....                  | 388.00    |
| Cubic yards in dam.....                            | 20,561    |
| Area covered (approximately), acres.....           | 30        |
| Storage capacity, cubic feet, (approximation)..... | 7,000,000 |

## BOSS LAKE.

|   |            |
|---|------------|
| Greatest depth of dam, feet.....                    | 42         |
| Greatest depth of water at dam, feet.....           | 35         |
| Length of crest of dam, feet.....                   | 335        |
| Depth of water over lake, feet.....                 | 20         |
| Area of lake, acres.....                            | 12         |
| Cubic yards in dam.....                             | 23,115     |
| Area covered at high-water line, acres.....         | 32         |
| Storage capacity, cubic feet.....                   | 27,000,000 |
| Storage increased by cut from lake, cubic feet..... | 3,650,000  |

## COTTONWOOD LAKE RESERVOIR.

|  |            |
|--|------------|
| Greatest depth of fill, feet.....                | 37         |
| Length of crest of dam, feet.....                | 240        |
| Depth of water over lake, feet.....              | 10         |
| Surface area of lake, acres.....                 | 40         |
| Area of reservoir at high water line, acres..... | 62.25      |
| Cubic yards in dam.....                          | 15,000     |
| Storage capacity, cubic feet.....                | 22,084,920 |

The site at Monarch park was not considered feasible on account of cost, the estimate exceeding the appropriation, and from the further fact that it lay just above the mining camp of Monarch and would greatly imperil life and property should a casualty occur. Fuses gulch was equally objectionable on account of its limited capacity, and unfavorable location.

With an expenditure of \$25,000 or \$30,000 Cottonwood lake would make a much better showing of storage capacity, proportioned to cost, than either of the sites named, as thirty feet in depth over the lake would cover an area of 121 acres, and give a capacity of 119,000,000 cubic feet, but unfortunately the only site for a dam is on a rim or ridge of *detritis* extending across the narrow canon

of Cottonwood creek, and cut through by the channel to a depth of twenty-five feet. To prepare a proper foundation on such material for a dam, either thirty or fifty feet in height, would be almost equally, and highly expensive, and the same may be said of an ample and safe spillway, such as would be required where a stream like Cottonwood is obstructed for storage purposes. The site is so situated that a giving away of the dam when full would inevitably result in fearful disaster to people at the mouth of the canon, if not to the town of Buena Vista; hence, with the limited appropriation at hand, the members of the Board were not willing to assume the responsibility of placing any structure at the Cottonwood lake site.

Boss lake has none of the objectionable features mentioned in connection with the other sites, and, aside from its somewhat contracted area, possesses unusual advantages for reservoir purposes. The area of its drainage basin will not exceed four square miles, and yet, from its close proximity to the range it is supplied by Lake Fork, which passes through it, with a uniform flow of twenty to thirty cubic feet of water per second. It is surrounded by high granite ridges, excepting at its eastern extremity, where the water has cut a narrow channel through a low place in the rim, and thence precipitated over a rocky ledge for a distance of 100 feet. The depression in the rim is at a suitable elevation for a safe spillway in rock for all surplus waters.

Under the instructions of the Board the State Engineer prepared plans and specifications in detail for the construction of a dam at this site, and upon completion of same a call was made for proposals.

## STATEMENT OF EXPENDITURES.

|   |           |              |
|---|-----------|--------------|
| Appropriation   |           | \$ 15,000 00 |
| C. H. Demarest, account preliminary surveys                   | \$ 135 50 |              |
| L. R. Hope, survey of Cottonwood lake                         | 148 55    |              |
| L. R. Hope, office work                                       | 24 00     |              |
| State Engineer, expense of inspection and livery              | 25 50     |              |
| J. S. Titcomb, survey, plans and specifications for Boss lake | 101 50    |              |
| Advertising for bids  | 39 47     |              |
|   |           | 474 52       |
| Balance unexpended....  |           | 14,525 48    |

### MONUMENT CREEK RESERVOIR.

---

Constructed in compliance with "An Act to provide for the construction of a reservoir near the head of Monument creek, upon, or adjacent to sections fifteen and twenty-two, township eleven, range sixty-seven west, in the County of El Paso, etc."

Appropriation, \$30,000.00.

Board of construction, the Governor, Attorney General and State Engineer.

From an examination of the sections named in the act, made in August, 1891, it became apparent that the most practicable site for a reservoir was to be found on section fifteen, at the confluence of Monument and McShane creeks and just opposite the town of Monument. This location possesses the three prominent and essential features required, namely: A point for the most economical construction of a dam, giving the greatest storage capacity, and affording ample wasteway facilities, the latter being highly important in damming the line of a stream where heavy flood storms are liable to occur.

A careful survey was made of the site with reference to estimates for a dam and storage capacity, assuming top of dam to be forty feet above the low bottom, which gave for dam dimensions:

|  |            |
|--|------------|
| Length on top, feet .....                        | 855        |
| Width on top, feet .....                         | 20         |
| Inner slope .....                                | 3 to 1     |
| Outer slope .....                                | 2 to 1     |
| Crest of dam, feet above high-water line .....   | 7          |
| Area covered by water, acres .....               | 61.94      |
| Storage capacity, cubic feet .....               | 37,289,400 |
| Greatest depth to bed-rock on bottom, feet ..... | 14         |
| And on abutting hillsides, feet .....            | 3 to 4     |

Character of materials, sand, gravel, and a fair proportion of good clay.

The drainage area of the site is approximately twenty-two square miles.



Normal flow of the stream in the spring and early summer from five to ten, and in the fall from two to three cubic feet per second.

Being at an altitude of 7,000 feet, and well up toward the summit of the divide, the catch basin is subject to severe flood storms, and it is estimated the reservoir can be filled from three to four times during the season.

A report embodying the above statements and estimates was made by the State Engineer to the Board of Construction, whereupon, after due consideration, he was instructed to provide plans and specifications for a dam, as above outlined, and call for proposals for the construction of the same. Pursuant to the call, several bids were received, and the award was made to David McShane for the sum of \$25,000, with the understanding that contract would be entered into as soon as the people of El Paso County should furnish, without cost to the State, a good and sufficient title to the land covered by the reservoir site, dam, spillway, etc.

June 25, 1892, something over six months after the award was made, deeds were received and contract entered into, since which time the work has been progressing fairly well.

Much difficulty has been experienced in excavating the puddle trench to bed rock, due to the heavy underflow, two steam pumps being required to lift and discharge the water. A portion of this water is utilized in sprinkling the body of the dam through hose attachments to the pumps. The discharge pipes are two sixteen-inch cast iron, instead of one eighteen-inch, as provided in the specifications, and are laid in a rock excavated trench, with concrete collars at each joint.

A copy of the specifications is hereto appended for general information, as also diagrams of the design of the dam:

SPECIFICATIONS FOR CONSTRUCTION OF DAM AND APPURTENANCES FOR THE STATE STORAGE RESERVOIR, NEAR MONUMENT, EL PASO CO., COLO.

All dead brush, trees, logs or other loose vegetable matter shall be cleared from the reservoir site and burned.

(This does not include growing willows).



The ground to be covered by the dam shall be entirely cleared of boulders, trees, brush, and any perishable matter, and thoroughly plowed to a depth of seven inches.

At, or near the foot of inner slope, and extending the entire length of the dam—on the lines to be designated by the engineer—shall be excavated the trench for base of the puddle wall; this trench to be not less than five feet in width on the bottom, with slope toward center of dam of two to one, and to be cut into the solid bed-rock, clay, or other impervious matter. All such material excavated which, if not suitable for puddle wall, shall be removed to lower portion of dam. The trench shall be entirely cleared of underflow water, either by pumping or drainage, before being filled with the puddled material, and the soil under the base of dam shall be kept free from water during the entire construction.

Under the entire base of the puddle wall the surface material shall be removed to a depth of three feet, unless hard-pan or rock is encountered at a less depth; the material so excavated to be evenly distributed near outer portion of dam.

Along the line shown on the plat (sheet No. 2) as "out-let pipe," shall be excavated a trench, which shall extend across base of dam and into creek bed, and to give free outlet for water from discharge pipe, to the creek or irrigation canal without danger of washing the base of the dam. The portion of the trench which is to receive the discharge pipe shall be two and one-half ( $2\frac{1}{2}$ ) feet wide on bottom, and cut to conform to grades given by the engineer. If soft earth or mud is encountered in the trench it shall be removed, and replaced with rammed gravel or concrete in such a manner as to give full and solid bearing for pipes.

The discharge pipes shall be eighteen inch cast-iron water pipe, free from flaws or breaks, and properly calked with lead and laid true to a line and grade. The first joint of pipe below the valve in the well shall have a two inch tap provided with a screw plug. At intervals of twenty-four feet along the entire length of the pipe shall be placed "collars" of concrete; one foot in thickness and extending one foot in all directions from outside of pipe. The back filling around the pipes shall be of selected clay, well puddled and rammed, and shall extend from bottom of trench under pipes to natural surface of ground.

The valve shall be firmly set in the well, as shown on the plans, and shall be of standard make, brass bearings, eighteen inches diameter and provided with gearing and "valve-rod" with wheel for operating both in gate-house at top of dam, or at bottom of well. The valve shall be thoroughly braced and blocked, and securely joined and calked to discharge pipes.

The masonry work at head wall and discharge end of pipe shall be of form and dimensions shown on the plans. The stone to be a

good quality of sandstone blocks, laid in Portland hydraulic cement mortar. Special care must be taken to form a perfectly water-tight joint around upper end of discharge pipe.

The masonry valve wall shall be circular in form and four and one-half feet inside diameter to a height of eight feet above the floor, and then arching inward to reduce size to three feet diameter, which shall be carried vertically to the desired height. The floor, or bottom of well, shall rest on bed-rock, or if none can be reached, on a concrete foundation two feet in thickness and extending two feet beyond outside walls. The walls shall be one and one-half feet in thickness, of sandstone blocks, laid in mortar of hydraulic cement, and shall be perfectly water-tight. The top of well to be one foot lower than crest of dam, and from a point two feet below top to be enlarged to an outside diameter of nine feet, which shall be the foundation for gate house. The braces and fastenings shall be set in the wall at intervals of six feet as the work progresses. Especial care will be required to form water-tight joints around discharge pipes and valve. The well shall be provided with an iron ladder twenty inches wide and reaching from top to bottom.

The frame work to be two by four joists, and covering to be one inch boards, battened and painted with red fire-proof paint. The sills to be three by ten, securely bedded in the stone foundation at top of gate-chamber or well. A window of twenty by twenty-four shall be placed in the side facing the water. The door shall be on the side facing the dam, and shall be provided with substantial lock and keys. In floor of gate-house shall be a trap door on hinges, twenty-four inches square, for entrance to well.

The inner portion of dam from toe to slope, and along the base, to a line of two to one slope, intersecting top of dam, eight feet from inside crest of same, and including the trench filling, as shown on plans, shall be of the best clay obtainable, thoroughly puddled and carried up in uniform layers of six inches, and harrowed after addition to each layer. This puddled material shall entirely fill the trench at toe of slope, and to be compactly rammed into the underlying clay or hard-pan, so as to exclude all seepage water. This puddle wall shall extend for a thickness of three feet entirely around exterior of well, from foundation to top, and particular care shall be taken to make it a solid and impervious mass. The central portion of dam from line of puddle wall to a line of one to one slope from outer or lower crest of dam shall be of selected earth and fine gravel, thoroughly wet by means of hose or water cart. The lower portion of dam to be composed of earth, sand and gravel, and such coarse material as was excluded from the puddle wall. This portion also to be thoroughly soaked with water, as the material is deposited.

No ice, snow, or lumps of frozen material, or any brush, trees or perishable matter shall be allowed in any portion of the dam. Any

coarse gravel or other material not easily displaced by rain shall be placed on lower face of dam. The entire inner face of dam, from crest to toe of slope, shall be protected by covering of carefully laid slope paving or rip-rap. No excavation for material shall be made within fifty feet of inner toe of dam.

The waste-way shall be cut to a level of high water line, which is seven (7) feet below top of dam, and shall not be less than 200 feet in width on bottom, unless otherwise directed by the engineer. The material so excavated shall be used in construction of the dam.

The entire work shall be of the best possible character, both in material and workmanship, and done in accordance with these specifications and the plans furnished, and to the entire satisfaction and acceptance of the State Engineer of Colorado.

#### MATERIALS REQUIRED.

|  |        |
|--|--------|
| Embankment, cubic yards  | 96,800 |
| Excavation, base of dam and trenches, cubic yards                  | 14,000 |
| Concrete, cubic yards  | 100    |
| Masonry, cubic yards   | 50     |
| Slope paving or rip-rap, square yards                              | 6,342  |
| 18-inch cast-iron pipe, feet                                       | 204    |
| 18-inch valve, with rod and mountings                              | 1      |
| B. M. lumber in gate-house, feet                                   | 550    |
| 20-inch iron ladder, feet  | 40     |
| Window, 20x24 inches.  |        |
| Iron screen for intake of discharge pipe, 3 feet 6 inches in diam. |        |
| Lock for door, large wrench, oil can, and bar in gate-house.       |        |

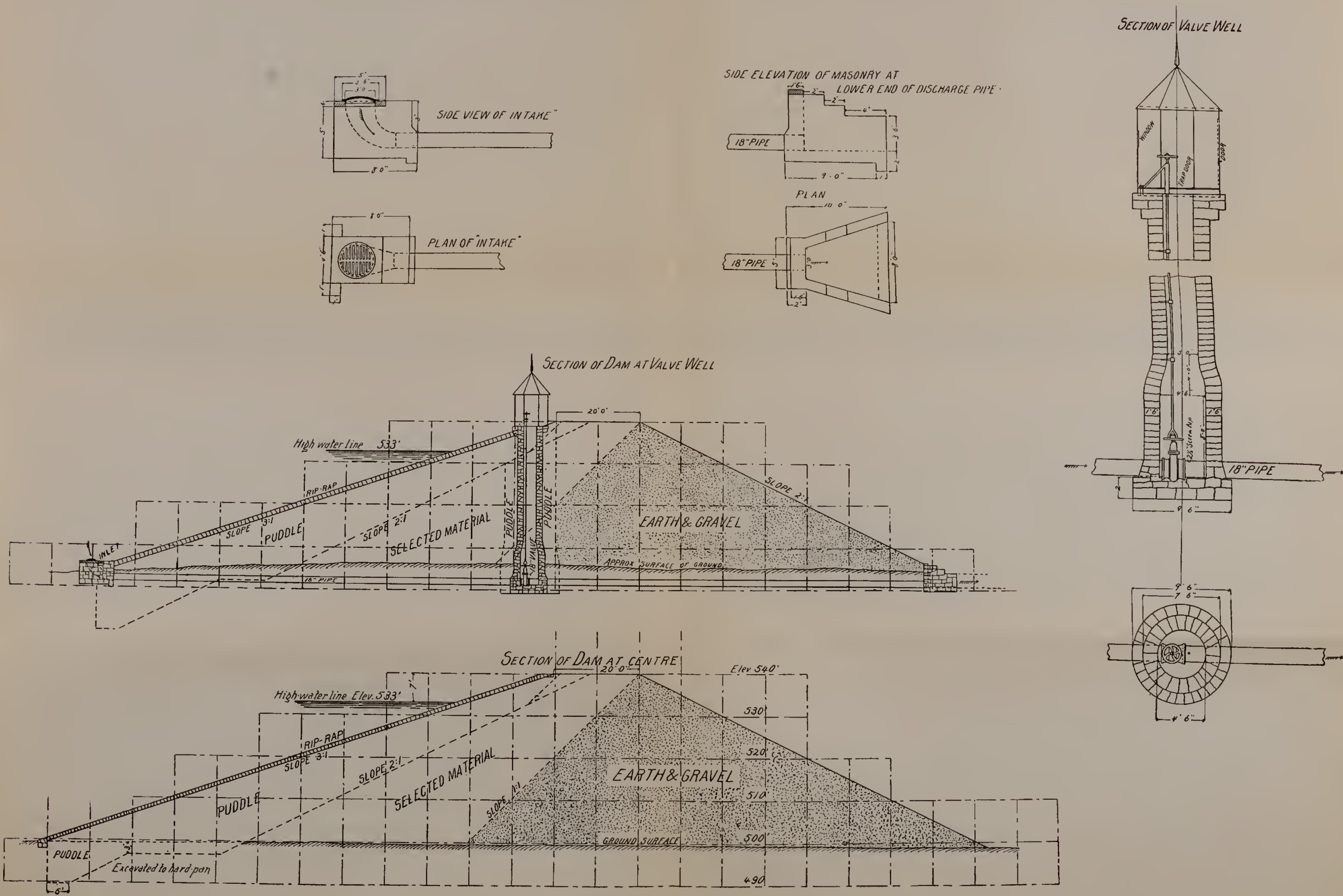
The obstruction of the channel of a stream by means of a dam for the impounding of water is looked upon with more or less distrust, and is apt to be regarded as a constant menace to life and property by people living under its line; hence every precaution consistent with a reasonable economy has been exercised in the erection of the dam, and in providing overflow facilities entirely independent of that structure. An examination of a cross section of the dam will satisfy the most skeptical that, with good material, it has ample body and gravity.

The puddle wall, connected with the inner toe, rests upon a sound bed-rock, and is composed of a very desirable class of clay, the entire inner slope being built of the same material, and made as thoroughly impervious as practicable. Fifty feet in width of spillway will satisfy the most extravagant estimates of possible



# General Plans of Dam and Appurtenances for the State Storage Reservoir

NEAR MONUMENT, EL PASO COUNTY, COLORADO.



THEORY OF THE EARTH AND ITS HISTORY

BY J. H. MURPHY

PLATE I



drainage from the catchment basin. However, two hundred feet in width are provided, the excavated material being utilized in the dam.

## STATEMENT OF EXPENDITURES.

|  |           |              |
|--|-----------|--------------|
| Appropriation .....                                |           | \$ 30,000 00 |
| H. I. Reid, for surveys .....                      | \$ 238 00 |              |
| E. C. Hawkins, for plans and specifications .....  | 34 00     |              |
| Advertising for bids. ....                         | 22 65     |              |
| H. I. Reid, engineer in charge (five months) ..... | 673 00    |              |
|  |           | 1,067 65     |
| Unexpended balance .....                           |           | \$ 28,932 35 |



## SUMMARY

OF APPROPRIATIONS FOR INTERNAL IMPROVEMENTS, WITH UNEXPENDED BALANCES, DECEMBER 1, 1892.

| DESCRIPTION OF THE IMPROVEMENT.   | Amount<br>originally ap-<br>propriated. | Amount<br>expended. | Balance<br>unexpended. | REMARKS.        |
|---|---|---------------------|------------------------|-----------------|
| Bear River Bridge (balance December 1, 1890,) from Appropriation of 1889.....     | \$ 6,706.64                             | \$ 6,679.15         | \$ 27.49               | Completed       |
| Bear River Wagon Road (balance December 1, 1890,) from Appropriation of 1889..... | 4,170.30                                | 3,693.13            | 477.17                 | Completed       |
| APPROPRIATIONS OF 1891.   |   |                     |                        |                 |
| White River Bridge.....   | \$ 5,000.00                             | \$ 3,319.90         | \$ 1,680.10            | Completed       |
| Pitkin County Bridge.....   | 12,000.00                               | 11,873.95           | 126.05                 | Completed       |
| Routt County Bridge.....  | 5,000.00                                | 4,656.19            | 343.81                 | Completed       |
| DeBeque Bridge.....   | 15,000.00                               | 12,966.08           | 2,033.92               | Completed       |
| Rio Grande Bridge.....  | 10,000.00                               | 8,696.63            | 1,303.37               | Completed       |
| Berthoud Pass Wagon Road.....   | 20,000.00                               | 19,950.43           | 49.57                  | Completed       |
| Grand River Canon Wagon Road.....   | 15,000.00                               | 14,307.78           | 692.22                 | Completed       |
| Hinsdale and San Juan County Wagon Road.....                                      | 6,000.00                                | 529.45              | 5,470.55               | No contract let |

SUMMARY.—*Concluded.*

| DESCRIPTION OF THE IMPROVEMENT.         | Amount<br>originally ap-<br>propriated. | Amount<br>expended. | Balance<br>unexpended. | REMARKS.        |
|---|---|---------------------|------------------------|-----------------|
| APPROPRIATIONS OF 1891.                 |   |                     |                        |                 |
| Montezuma and Dolores County Wagon Road | \$ 10,000.00                            | \$ 985.12           | \$ 9,014.88            | No contract let |
| Douglas County Wagon Road               | 8,000.00                                | 7,299.05            | 700.95                 | Completed       |
| Clear Creek County Wagon Road           | 5,000.00                                | 178.31              | 4,821.69               | No contract let |
| Conejos County Wagon Road               | 12,000.00                               | 1,315.61            | 10,684.39              | Under contract  |
| Saguache Reservoir                      | 30,000.00                               | 213.50              | 29,786.50              | No contract let |
| Custer County Reservoir                 | 10,000.00                               | 285.95              | 9,714.05               | No contract let |
| Apishapa Reservoir                      | 15,000.00                               | 14,711.75           | 288.25                 | Completed       |
| Chaffee County Reservoir                | 15,000.00                               | 474.52              | 14,525.48              | No contract let |
| Monument Creek Reservoir                | 30,000.00                               | 1,067.65            | 28,932.35              | Under contract  |
| Totals                                  | \$223,000.00                            | \$102,831.87        | \$120,168.13           |                 |

From the above summary it will be observed that the Eighth General Assembly made appropriations for internal improvements amounting in the aggregate to \$223,000; that of this sum \$102,831.87 have been expended, leaving a balance of \$120,168.13; of this latter sum \$35,000 have been provided for by contracts not yet carried out.

All bridges provided for by the several acts have been constructed, and the various Boards have pursued the policy of securing the best the available means would permit.

All are iron superstructures with the exception of the White River bridge, which is a combination of wood and iron. All have stone or iron substructures, excepting the Routt County bridge, where pile piers were used. In the cases of three, the unexpended balances are quite large owing to close competition for the work.

Of the wagon roads, three have been constructed. Three have been found impracticable with the means at command and under the conditions imposed, and one is in process of construction by the aid of the interested counties. The requirements have been in all cases for ten feet in width of solid road bed, substantial retaining walls, convenient turn-outs, effective drainage culverts, and well constructed wooden bridges at the crossings of streams.

In the matter of State reservoirs provided for, the law has invested the Boards of Construction with certain discretionary powers, which they have deemed it expedient to exercise to a limited extent.

Some problems are presented, which render the construction, operation, and maintenance of these reservoirs by the State, something of an experiment. By the terms of the several acts relating thereto, excepting as to the Custer County reservoir, they are placed upon the same plane as some corporate enterprises, that is, they are to be operated by the State for revenue, the waters stored in them to be sold or leased to parties desiring the same at rates to be fixed by the Boards. The State thereby becomes an appropriator of water, and is subject to the laws which govern in the cases of individuals and corporations, requiring the filing of plats and statements for the unappropriated waters claimed, and the proving up by adjudication of the priorities and quan-

ties. It is thus made a contestant for the water rights of the streams for the purpose of hire or sale. As an investment, their construction cannot be regarded with special favor, for under the most favorable conditions found in connection with the sites selected, the minimum cost of construction, and the maximum capacity acquired, will place the annual rental of water at the rate of \$2.50 to \$3.00 per acre foot, in order to realize seven per cent. on the outlay and pay the necessary cost of maintenance.

Such prices, charged by corporate ditch owners carrying water for hire, would be regarded as exorbitant, and it is questionable whether the production of ordinary farm crops in localities remote from market would justify such rates.

If the purpose is to assist in the conservation of the water supply of the streams, it may be said this is being done through private enterprises whenever it is apparent that the water is available and the demand will warrant.

The irrigation work already constructed and projected along the valley of the Arkansas river have undoubtedly the capacity to carry all the waters of that stream well up to its maximum stages, and the large areas of fertile lands under the more extensive canals will tax their capacities to the utmost, not only during the irrigating season, but at all seasons when it is practicable to carry the water. Under many of them there are numerous natural depressions, large and small, where it is possible to store water at a minimum of cost, and where it will be required to successfully cultivate the tributary lands. Hence, it is reasonable to assume, that in the near future all the waters of that stream and its tributaries will be conserved through private enterprise and without the aid of the State. What has been said of the Arkansas river is measurably true of all the streams on the eastern slope.

The reservoirs constructed and contemplated by the State have a local interest, and no doubt will be highly appreciated by the few who are benefited, but the idea has generally prevailed that the waters stored are to be free and subject to appropriation, or will be distributed pro rata among all ditches having established rights on the stream below. Were such the case, its equitable distribution among the multitude of ditches would be



impracticable, and the quantity allotted to each ditch would be so infinitesimally small that general disappointment would result.

It may be said in their favor, being located near the heads of the streams, that the flood waters stored and applied to lands in the immediate vicinity will largely find their way back to the channels through seepage, and can be again used in the valleys below, and it is further true, that at their altitudes, where the rainfall is greater than on the plains, a given quantity of water will perform a greater service in the saving and maturing of crops than in lower altitudes, where more irrigations are required.

The sites selected for construction are among the most favorable, are in sections noted for heavy flood storms, and where the natural flow of the streams is very light. Fine bodies of irrigable lands are to be found under them without an available water supply excepting from storage of flood waters.

Complete surveys, plans, and specifications have been made for the others, and they are in readiness for contracting, if in the judgment of the Legislature their construction is regarded as expedient. The various Commissioners, however, did not feel warranted in further prosecuting this work without such legislative endorsement, after the facts had been fully laid before that body.

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#### STATE CANAL NO. 1.

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The Progress Report of E. A. Smith, engineer in Charge of construction on State Canal No. 1, at Canon City, for the two years ending November 30, 1892, is herewith submitted.

This work has been confined to that section of the line of survey between Sand creek and the mouth of the Grand canon, a distance of something over two miles. The ground is a succession of broken ridges and sharp canons; the canal following generally along their precipitous slopes. Deep cuts through the points of ridges and heavy fills in the gulches alternate over a large portion of the distance. At one point the top of

the inner slope is sixty-four feet above the floor of the canal. The construction along the steep hill sides has been made largely in cut to insure against the slipping of the lower banks. The materials are conglomerate, cemented gravel and bowlders, coarse red sandstone, shale and heavy clay; a large percentage of them requiring explosives. They have been moved principally with wheelbarrows, small cars being used in some of the longer through cuts; necessarily a slow method.

The sharpest curves of the entire line are to be found on this section, and the largest quantity of material moved per lineal foot of canal.

The work has been of the heaviest and most difficult character, rendered so in a large measure to insure safety and durability.

The prison Hogback tunnel, 750 feet long, all in rock, was constructed in 1890. Tunnel No. 2 at the mouth of the canon, upon which work is now being prosecuted, will be 390 feet long, 270 feet being already driven in a very hard, flinty granite.

The dimensions are twelve feet in width on bottom, and thirteen feet in height to top of arch, vertical walls seven feet.

From tunnel No. 2 up the Grand canon to point of intake, the distance is three and one-fourth miles, the line following along steep mountain sides, and will be largely rock excavation, excepting as fluming may be substituted therefor, the advisability of which, over a portion of the distance, as a temporary expedient, is well worthy of consideration.

It is desirable to divert and appropriate the water at the earliest day practicable in order to avoid complications as to priority of right.

The completion of the canal through the canon and a short extension easterly from the Hogback would render it possible to irrigate some 3,000 acres of land near Canon City, especially valuable, on account of its adaptability to fruit culture. Water for this land would command a high rental and would soon develop into a fair source of revenue.

The State owns some 25,000 or 30,000 acres of land under the line of the canal, to which water rights should



be attached in the immediate future to give value to the rights.

There are also large holdings under the line by individuals and companies, whose interest will be awakened in the construction of the canal along the valley, whenever an assurance is given of its early completion in the canon.

Certain sections in the canon, where the materials will be earth and rock mixed, can be permanently constructed as the work progresses. In other sections, where the material encountered will be solid rock largely, and an extended period required for permanent construction, benches on grade line could be excavated, and wooden structures placed thereon, which will not interfere seriously with building of masonry walls in the future, as the prison labor would be available for that purpose. In the meantime the canal would be carrying water two or three years earlier than under the ordinary conditions, and aside from securing the appropriation and application of the water to land, the revenue derived would doubtless compensate for the extra outlay in temporary flumes.

Some such method as outlined to facilitate the early diversion of water is recommended.

ENGINEER'S OFFICE, STATE CANAL NO. 1, {  
CANON CITY, COLO., Nov. 30, 1892. }

TO THE HON. J. P. MAXWELL,

*State Engineer.*

SIR—I have the honor to submit herewith the first biennial report of progress of State Canal No. 1.

Since November 30, 1890, five hundred and sixty-eight (568) days' work have been done, with an average of one hundred and eight (108) men at work each working day. During this time there has been one and nine-tenths (1.9) miles of ditch built, necessitating 130,099.6 cubic yards of excavation, 47.2 acres of clearing, and 2,500 cubic yards of bowlders removed from the surface of the ground.

During this time there has also been 228 days' work done on a tunnel through point of rock directly opposite mouth of Grape creek, with a daily average of twenty-three men.

There has been built 270 feet of tunnel, in the construction of which there has been 1,950 cubic yards of rock work, 250 cubic yards in making a face and 1,700 cubic yards in tunnel proper.

It has been necessary to use explosives to a very great extent in this work, in fact three-fifths of the work has been of such a nature that it was necessary to use powder.

The cost of earth-work at fair contract prices would have been sixty-six and one-half cents per yard, and of rock-work would have been \$4.80 per yard, making a total of \$95,772.92 exclusive of the customary 10 per cent. for engineering, etc.

The various distributions of this expense are shown by the following table:

| ESTIMATE.  |               |
|--|---------------|
| Clearing and grubbing 47.2 @ \$25.....                       | \$ 1,180 00   |
| Removing bowlders from surface, 2,500 cubic yards @ \$1..... | 2,500 00      |
| Earthwork, 48,709.6 cubic yards @ 25 cents.....              | 12,177 40     |
| Earthwork, 8,326.2 cubic yards @ 50 cents.....               | 4,163 10      |
| Earthwork, 73,063.8 cubic yards @ 90 cents.....              | 65,757 42     |
| Tunnel approach, 250.0 cubic yards @ \$3.50.....             | 875 00        |
| Tunnel approach, 1,700 cubic yards @ \$5.00.....             | 8,500 00      |
|  | \$ 95,152 92  |
| Plus 10 per cent. engineering, etc.....                      | 9,577 29      |
|  | \$ 104,730 21 |

Respectfully submitted,

E. A. SMITH,  
*Engineer in Charge.*

## GENERAL SUMMARY OF IRRIGATED AREA.

Following will be found in tabulated form, a general summary of irrigated areas, so far as reported by the Water Commissioners. This statement embraces but thirty-two districts out of the sixty-seven in the State. Water Commissioners have been appointed in forty-one districts, from nine of which, no reports have been received. In certain parts of the State, such as the Bear River valley, and some of the tributaries of that stream, an abundant supply of water is always available, and no Water Commissioners are required. From such there are no means of obtaining definite statistics, and yet it is known that quite extensive areas are cultivated to oats, wheat, potatoes, timothy and other products. At Steamboat Springs, on the Bear river, a flouring-mill has been constructed, and is in successful operation, indicating that no little attention is being given to the raising of wheat in that valley.

Other sections of the western slope are equally favored as to water supply, and Water Commissioners, when appointed, have not been called out.

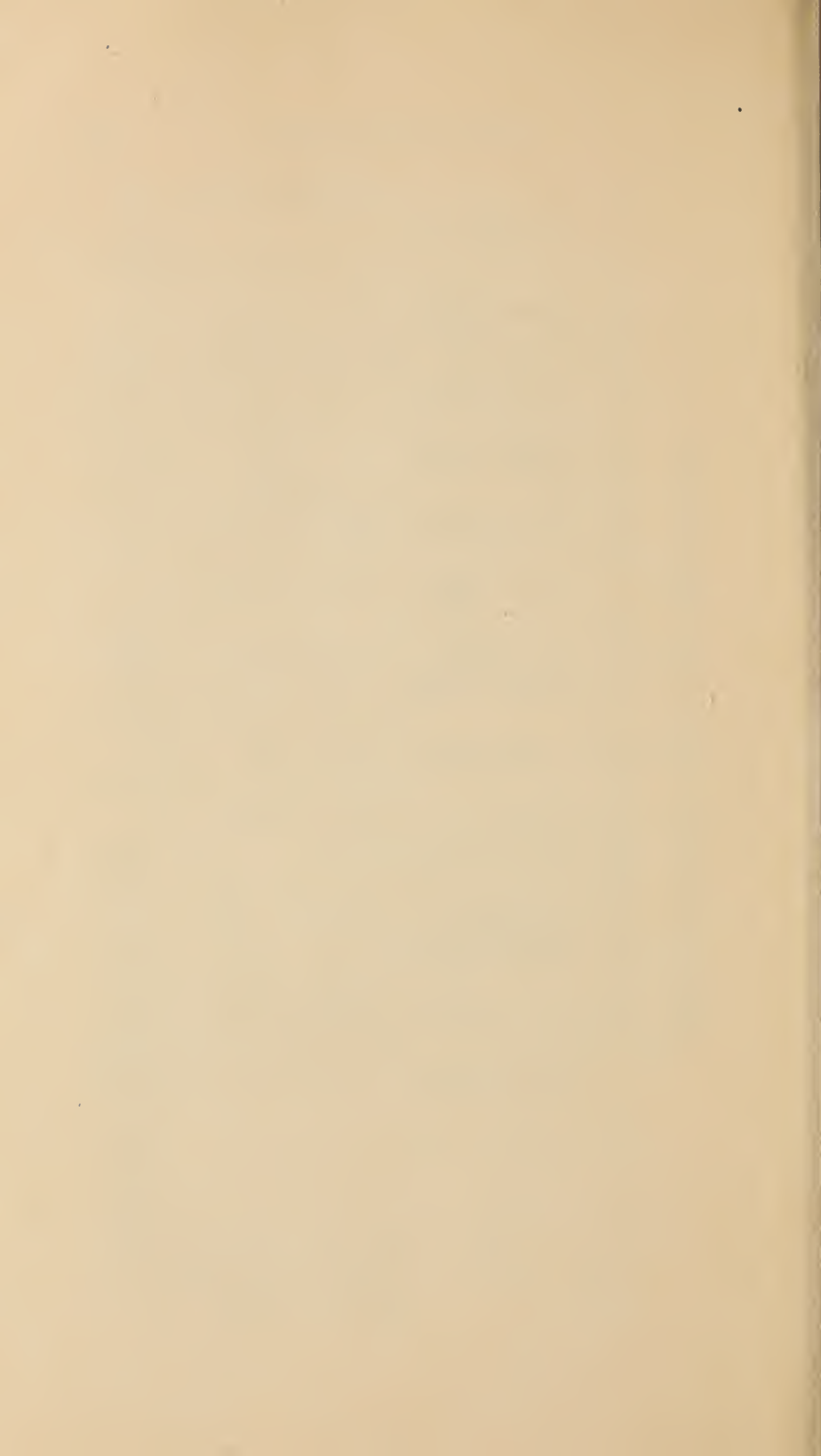
The total area reported as irrigated, is 1,488,164 acres, as against 1,063,304 acres reported for 1890. The area estimated as irrigated throughout the State, in 1890, was 1,544,585 acres. Add to the reported acreage, the estimated area, as irrigated, for 1890, in districts not reported, and where only partial reports have been made, and without allowing the percentage of increase, as shown for the past two years in the statements filed, and the total area irrigated in the State for 1892 can be safely placed at 2,000,000 acres, showing very creditable progress in the reclamation of our arid lands.

## IRRIGATION STATISTICS OF THE STATE

SHOWING THE ACREAGE OF VARIOUS CROPS UNDER IRRIGATION, THE NUMBER AND MILEAGE OF THE DITCHES REPORTED UPON, ETC., FOR 1891 AND 1892.

| NAME OF THE DIVISION. | No. of the division. | Number of ditches reported. | Total length as reported. | Average amount of water carried during the season in cubic feet per second of time. | Number of acres that can be irrigated. | Number of acres of alfalfa irrigated. | Number of acres of seeded grasses other than alfalfa irrigated. | Number of acres of natural grasses irrigated. | Number of acres of other crops irrigated. | Number of acres of orchard irrigated. | Number of acres irrigated by seepage. | Number of acres irrigated from reservoirs. | Total number of acres irrigated. |
|-----------------------|----------------------|-----------------------------|---------------------------|---|--|---------------------------------------|---|---|---|---------------------------------------|---------------------------------------|--|----------------------------------|
| South Platte          | 1                    | 656                         | 2,651.54                  | 5,103.60  | 882,853                                | 142,651                               | 39,981  | 176,450                                       | 363,959                                   | —                                     | 11,474                                | 28,590                                     | 763,105                          |
| Arkansas              | 2                    | 212                         | 664.85                    | 1,232.45  | 118,696                                | 14,585                                | 2,799   | 13,469  | 18,395                                    | —                                     | 197                                   | —  | 49,445                           |
| Rio Grande            | 3                    | 898                         | 1,590.95                  | 8,550.04  | 635,597                                | 3,790                                 | 11,765  | 212,836                                       | 307,428                                   | —                                     | 16,825                                | —  | 552,644                          |
| San Juan              | 4                    | 45                          | 103.00                    | 147.50  | 7,354                                  | 1,620                                 | 303   | 100   | 351                                       | —                                     | 10                                    | —  | 2,384                            |
| Grand River           | 5                    | 463                         | 1,414.75                  | —   | 130,000                                | 32,437                                | 6,842   | 12,236  | 55,701                                    | 4,306                                 | 30                                    | —  | 111,552                          |
| Green River           | 6                    | 87                          | 133.55                    | 191.17  | 16,060                                 | 255                                   | 329   | 4,976   | 3,419                                     | —                                     | 55                                    | —  | 9,034                            |
| Totals                | —                    | 2,361                       | 6,558.64                  | —   | 1,790,470                              | 195,338                               | 62,019  | 420,667                                       | 749,253                                   | 4,306                                 | 28,591                                | 28,590                                     | 1,488,164                        |

The number of districts from which reports were received is as follows: In Division No. 1, from ten; in No. 2, from five, in No. 3, from seven; in No. 4, from one; in No. 5, from eight; and in No. 6, from one.



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