

*Annual Report to the State Engineer*  
*Water Division Four*  
*1998*



# STATE OF COLORADO

---

**DIVISION OF WATER RESOURCES**  
**WATER DIVISION FOUR**  
Office of the State Engineer  
Department of Natural Resources

1540 E. Niagara  
P.O. Box 456  
Montrose, Colorado 81402  
Phone (970) 249-6622  
Fax (970) 249-8728

<http://water.state.co.us/default.htm>



---

Bill Owens  
Governor

Greg E. Walcher  
Executive Director

Hal D. Simpson, P.E.  
State Engineer

Wayne I. Schieldt  
Division Engineer

March 3, 1999

Mr. Hal Simpson, State Engineer  
Division of Water Resources  
1313 Sherman, Room 818  
Denver, CO 80203

Dear Hal,

On behalf of the staff of Division IV, submitted herewith is the Annual Report for 1998.

Sincere appreciation is extended to yourself, your staff in Denver, and Division IV for the support and dedication provided in fulfillment of our statutory and professional duties.

Sincerely,

Wayne I. Schieldt  
Division Engineer

WIS:jk

# INDEX

## CURRENT WATER YEAR

### ACCOMPLISHMENTS

|                                   | <u>Page</u> |
|-----------------------------------|-------------|
| Water Administration . . . . .    | 1-2         |
| Personal/Budget . . . . .         | 3-4         |
| Hydrography . . . . .             | 4-5         |
| Dam Safety . . . . .              | 5-6         |
| Groundwater . . . . .             | 6-7         |
| Records and Information . . . . . | 7-8         |
| Special Projects . . . . .        | 8           |

### SIGNIFICANT WATER ISSUES

|   |      |
|---|------|
| Subordination Contract. . . . .                               | 8--9 |
| Water Right Change for Grand Mesa Project . . . . .           | 9-10 |
| Application re Upper Gunnison River Water Con. Dist . . . . . | 10   |

### INVOLVEMENT WITH THE COMMUNITY

## COMING WATER YEAR

### KEY OBJECTIVES

### INFLUENTIAL LAW CASE, STATUTES, PROJECTS

12-13

|  |       |
|--|-------|
| Determination re Arapahoe County Board Co. Com. . . . .    | 12-13 |
| Quantification of U.S. Park Service Water Rights . . . . . | 14-15 |
| TRANSMOUNTAIN DIVERSIONS . . . . .                         | 16    |
| STORAGE SUMMARIES . . . . .                                | 17-29 |
| WATER DIVERSIONS . . . . .                                 | 30-32 |
| WATER COURT ACTIVITES . . . . .                            | 33    |
| RIVER CALL . . . . .                                       | 34-39 |

### OFFICE ADMINISTRATION AND WORKLOAD MEASURES

|                      |    |
|----------------------|----|
| STAFFING . . . . .   | 40 |
| STATISTICS . . . . . | 41 |

## CURRENT WATER YEAR

---

### ACCOMPLISHMENTS

---

#### Water Administration

The watershed of the Gunnison River enjoyed a snow pack that was above average again in 1998. It ranged from normal in the San Miguel and Uncompahgre River basins to 150% of average on the Grand Mesa. Hot and dry windy weather in May and June seemed to sap part of the water out of the snow, and the spring runoff didn't materialize as expected. The hot dry weather extended into July and the river flows were dropping steadily. Just when many systems were starting to have shortages, the rains came and supplied the streams with adequate water to get through the rest of the summer. After enjoying the "best year they ever had" last year, many Water Commissioners again found themselves without creek and river administration.

The San Miguel River did not have a call again this year. According to Senior Water Commissioner, Lyman Campbell, the senior water right that usually places the call on the river (the Highline Canal) did not experience water shortages during the entire summer. Naturita Creek, a small tributary of the San Miguel River which usually has a separate call in July had an ample supply of water in 1998.

Water users on the Uncompahgre River were uncertain of water availability during the first part of the summer. The Uncompahgre Valley Water Users Association (UVWUA), which irrigates the majority of the 85,000+ acres in the Uncompahgre Valley, had restricted their users to 90% of full supply during hot dry weather in June and July in an effort to conserve their 10,300 acre feet pool of stored water in Ridgway Reservoir. Finally on August 5<sup>th</sup>, just after the rain started, they started to release their water out of the reservoir. The ensuing rains refilled the reservoir several times, eventually requiring a larger release than the water users required. This resulted in a full water supply in the downstream ditches and canals for the remainder of the irrigation season. This office appreciates the cooperation of the UVWUA and the Tri-County Water Conservation District in the operation of Ridgway Reservoir to benefit the water users in the Uncompahgre Valley.

The Grand Mesa area had extremely high precipitation in the fall of 1997 which

resulted in a large carryover of reservoir storage into the spring of 1998. Reservoirs filled and spilled early and, combined with mild spring temperatures, caused creek flows to run longer than normal. Although there was no spring flooding, irrigation shortages and reservoir releases occurred later than usual. The August rains also helped ease the demand for reservoir water and many reservoirs again had more water than was needed.

In the highly administered Kannah Creek basin, the City of Grand Junction owns and operates numerous reservoirs on the Grand Mesa. In a normal year, they sell stored water to downstream irrigators. The late summer rains increased the flow in Kannah Creek such that, in Water Commissioner Lynne Bixler's words, "they couldn't even give it away".

On the Gunnison River above Blue Mesa Reservoir, there were ample supplies of water to satisfy irrigation and storage demands. Of special note in the basin were the numerous headgates and Parshall measuring flumes that were installed in 1998. This was a continuation of a project that was started back in November of 1995 to secure an operable headgate and flume on every active ditch of 2.0 cfs or greater. At that time, a letter was sent to every ditch owner asking for voluntary cooperation installing these structures. Many owners responded favorably and put in the structures. In September of 1997, in an effort to divide the districts into enforceable amounts, orders were sent to ditch owners on Ohio Creek in District 59 and Cebolla Creek in District 62. The letters gave the owners until October 1998 to install the structures. To date, most every owner has completed the installation. Because of a change in District 28 personnel in 1998, letters were not sent to ditch owners until October 1998. Additional orders will be sent to the remaining areas in Districts 28, 59, and 62 in years 1999 and 2000. To the ditch owners credit, they care deeply about recording their water use accurately and preserving their water rights. This cooperative effort could not have been accomplished without the dedication of Water Commissioners Bonnie Irby, Richard Rozman and Carl Hurst, who personally visited with every ditch owner prior to the orders being sent and assisted them in the sizing and location of the flumes.

#### Personnel/Budget

On August 1, 1998, Division Engineer Ken Knox was promoted to the Denver Office as Assistant State Engineer in charge of the Water Use Branch. Ken is dearly loved by his staff in Division 4 and highly respected in the water user community. Although it was a great loss for the Division 4 staff, it's a gain for the entire Division of Water Resources. Assistant Division Engineer Wayne Schieldt then assumed the

Acting Division Engineer role. On December 21, after a difficult and lengthy examination process, Wayne was named as the new Division Engineer.

An exam was conducted in March to fill three Water Commissioner vacancies. Bonnie Irby was hired for the position in District 28, the Tomichi drainage above Gunnison. The Irby's are long time ranchers in the valley and she brings valuable extensive knowledge of the area and of the people who live there.

In District 68, the Upper Uncompahgre River, Eric Weig was hired to fill the vacancy left by long time Water Commissioner Roger Noble. Eric's background includes a Masters Degree in Petroleum Engineering with a specialty in Water Resources. He has done a great job in the first year without the assistance of the previous Water Commissioner to show him where the structures are.

In the San Miguel basin, District 60, community growth and the increasing workload from new water rights necessitated the addition of a deputy position. Through strategic planning and the reallocation of months to fit administrative needs, the position was created and Aaron Todd was hired. Additionally, Aaron is to train under Senior Commissioner Lyman Campbell in hopes of taking Lyman's position when he retires in spring of 2000. Aaron is hard working, intelligent, conscientious, and has already earned the respect of his water users.



As any manager knows, hiring good people is the key to any organization. The addition of these staff members will benefit Division 4 for years to come. They join a courteous, professional and dedicated staff which provide the highest level of service for the water user community.

The Division offices began entering payment vouchers on the COFRS system in October of 1997, so this past year was the first full year of this additional duty. The administrative assistants and program assistants had several training sessions, and with the assistance of Carol Quintana and Shamaine Ali, learned the many additional quirks of COFRS. Although this system is more time intensive for the Program Assistant Jean Kurtz, it has enabled Division 4 to better track operational expenses.

Division 4 again hired a student for the Youth in Natural Resources (YNR) program. LuAnn Beasley provided training and leadership for this year's student, Mike Tobler. The program was initiated to provide an opportunity for youth to get an inside look at the Department of Natural Resources. Hopefully, it will instill a desire

to gear their education toward the various areas in Natural Resources and eventually become an employee. LuAnn Bealsey was recognized as "Site Supervisor" of the year for her work the YNR students here in Division 4.

### Hydrography

Hydrographer Jerry Thrush continues to provide accurate and reliable stream flow information to staff members, water users, government organizations, and the general public. Jerry is assisted by Water Commissioner Steve Tuck, who devotes part of his time to hydrographic work in addition to his regular duties. Their collaborative effort with the USGS in making additional measurements improves the quality of real-time and historic data at the sites that are owned and operated by the USGS.

The hydrographers also provide a valuable service to the Water Commissioners in rating flumes and ditches, making determinations to the adequacy of measuring devices. The Water Commissioners can then make an informed decision to use the shift or replace the flume. This in turn makes the diversion records more accurate.

The Satellite Monitoring System continues to provide water users and office staff with real-time information that is crucial for day-to-day decisions. The VAX computer system which processes the transmitted gaging station information is aging, and there were numerous times in 1998 when the information could not be accessed. When people become dependent on this information for daily decisions, this becomes a great source of frustration. The Chief Hydrographers office in Denver does a great job of promptly repairing the problem, but this office is looking forward to the conversion from the VAX to the NT processor as a more reliable system.

### Dam Safety

Resident Dam Safety Engineer Jim Norfleet performed 76 quality dam safety inspections in 1998. The program is assisted by Water Commissioners who conduct inspections on class III and IV dams. They are the 'local experts' who see the dams throughout the summer and can often spot problems as they arise based on their experience and knowledge of the structure.

Mr. Norfleet also conducted six outlet inspections this year using a remotely operated camera and sled. This technique provides an inside look at the outlet pipe and has been invaluable in determining potential problems and needs to replace or line the pipe. Serious safety problems were discovered on two outlets.



He also reviewed plans and observed construction projects for Upper Eggleston, Arch Slough, Military Park, Priest Lake, Gurley, and Meridian Lake Park Reservoirs.

On July 17, 1998 the Dam Safety Engineer discovered a large saturated area on the downstream slope of Cedar Mesa Reservoir that had not been noted on previous inspections. The wet area was 65 feet wide and about 15 vertical feet above the toe, the dam being 47 feet tall. A follow-up inspection was conducted by Water Commissioner Jim Boyd, Wayne Schieldt, and Ken Knox on July 21. This seepage area caused serious concern about the stability of the structure. The decision was made to start releasing water out of the reservoir, reduce releases out of other reservoirs, and manipulate the irrigation systems to let irrigators utilize the water being released. The level of the reservoir was eventually lowered about ten feet, where it remained for several months. The seepage area dried up when the water level was lowered. It seemed apparent from the inspections and a study of the water levels during the previous nine months that the dam had become saturated from the large amounts of carryover storage from the year before and the reservoir being full and spilling for three months. This had not been the normal range of operation for the reservoir. Several options were discussed: 1) place an immediate restriction of ten feet below the spillway, require an engineering analysis on the embankment, and require the owner to install piezometers in the dam, or 2) study the previous year's operation of the reservoir that created the saturated condition, compare it to the normal operations, and propose criteria for operating the reservoir in the future which would avoid saturating the embankment while closely monitoring the seepage area. The decision from Ken and Wayne chose the latter. Public safety was not sacrificed and the water users are still able to store the water that they need for irrigation--a win-win situation. However, if the seepage problem persists, option 1 will be initiated immediately.

Of monumental importance in 1998 was the failure of Carl Smith Reservoir on the evening of May 2. Carl Smith Dam is a Class I off-channel reservoir in the Leroux Creek basin north of Hotchkiss, Colorado. The 850 acre-foot reservoir is also used as a regulating reservoir for releases from 27 upstream reservoirs. These reservoirs provide critical late season irrigation for water users on Leroux Creek. The failure was a result of a large slide on the downstream slope which extended across the crest and into the upstream slope. The releasing water swiftly eroded down through the top half of the remaining embankment and quickly released about 500 acre feet of storage. The peak discharge just below the dam was determined to be around 3,300 cfs. As fate would have it, a Delta County employee spotted the high water at a bridge about six miles downstream of Carl Smith Reservoir and alerted the Sheriff's Office and the



Delta County Emergency Manager. Officials notified landowners and several residences were evacuated. Those structures eventually had water in the houses, but they were not washed off the foundations. The only loss of life was livestock. The high water washed out numerous bridges and diversion structures that were quickly rebuilt to restore water to irrigators. Unfortunately, The Leroux Creek Water Users Association, which owns Carl Smith Reservoir, did not have liability insurance on the reservoir. A law suit has been filed by several downstream landowners who sustained damage. Details of the dam failure are contained in an extensive report prepared by Jim Norfleet. He is to be commended for his immediate response to the situation and professional preparation of the report.

### Groundwater

Subdivision growth in the Gunnison basin has escalated the demand for public service with well permits and the associated questions from the public. The Well Commissioner, LuAnn Beasley, has continued to provide the highest level of public service in working with real estate agents, county planning personnel, attorneys, consulting engineers, water users, and personnel from the Denver office. She issues well permits for exempt domestic, livestock, household-use-only, late registrations, replacements, change of locations, and household and domestic/livestock wells that are incorporated within an approved plan for augmentation or substitute supply plan. Turn around time is usually within two days and sometimes the same day. Customers and well drillers continually extend appreciation to this office for issuing the permit so quickly.

As a further decentralization of the permitting process, LuAnn is also anxious to begin processing additional types of well permits. The types of permits to be added to the list is yet to be decided, but this process should begin in the spring of 1999. Of special concern to this office is the development of the new software to access the Denver wells database and issue well permits. Gone will be the days of using Word Perfect 5.1 to process the permits, a program rumored to have been developed shortly after the Dinosaurs became extinct. LuAnn again received an Outstanding Service Award for her courtesy and helpfulness to someone needing a well permit. Her deep concern for the customer is apparent in her daily duties.

### Records and Information

Quality and reliability of diversion records continue to be important in Division 4. The 1997 records for District 68 were not obtained this year with the resignation

of Roger Noble. The new Water Commissioner Eric Weig has done a tremendous job in processing the records in 1998. Diversion records for all districts have been completed for the 1998 irrigation season.

During the winter and early spring of 1998, Water Commissioners and the Assistant Division Engineer completed tabulating of court decrees in preparation of the July 1998 publication. Incorporated in that process was an error checking program which identified mistakes, and all were corrected.



The GIS system through ArcView software has become very useful this year. The office GIS expert, Lynne Bixler, attended advanced training that enabled her to manipulate databases and create topographical maps for various uses. The Division Engineer has used these maps to analyze location of decreed structures for possible injury to nearby or intervening water rights. The locations on the maps were determined by converting quarter/quarter information from the structure file. The conversion process plotted the structure in the center of the closest defined quarter. Obviously, some of the locations did not match the actual location, or were not even on the stream. Some Water Commissioners identified the actual locations on the maps, and Lynne was able to change the location in the database. Using GPS information or distances from section lines for actual locations of diversion structures will definitely work better in the future.

### Special Projects

It has become apparent in this technological world that there are better ways to obtain locations than plotting the point on the map. GPS units have become relatively inexpensive and provide an acceptable level of accuracy for the needs of this office. Carl Hurst in District 62 and Eric Weig in District 68 collected GPS data during the summer of 1998 for most of their active ditches. When the information was plotted using ArcView software, the structures were consistently on the stream and in the correct spot. When the rights and structure databases are converted to Hydrobase in 1999, there will be an area that contains actual GPS locations. This office will be anxious to obtain the GPS units and collect actual locations of wells, reservoirs, ditches, springs, etc.

---

## SIGNIFICANT WATER ISSUES

---

### Subordination Contract

The Wayne N. Aspinall Unit is a federal project that is comprised of three on-channel reservoirs that capture and use the Gunnison River for the purpose of regulating flows for the Colorado River Compact, flood control, irrigation, and hydroelectric power generation among other beneficial uses. The three reservoirs are Crystal Reservoir (30,000 af), Morrow Point Reservoir (114,706 af), and Blue Mesa Reservoir (939,204 af) and they are located between Montrose and Gunnison, Colorado. As part of the 1959 Economic Justification Report, the Bureau of Reclamation (USBR) recognized the potential that up to 60,000 acre-feet of in-basin depletions could occur upstream of the Aspinall Unit without affecting the feasibility of the project. This depletion allowance reflects a commitment by the United States, prior to construction of the Aspinall Unit, to allow said junior upstream in-basin water uses(s) to continue without curtailment. Since completion of the reservoirs and subsequent storage, the depletion allowance has been in effect on an informal basis.

In 1997 and 1998, Division IV and counsel from the Attorney General's office have been meeting with officials from the USBR, the Colorado Water Conservation District and the Upper Gunnison River Water Conservancy District to formalize the depletion allowance commitment into a written contract. In the fall of 1998, the final form of the written contract was presented to the USBR for their signature. To date, the contract has not been signed by the USBR. This office does not foresee any problems with obtaining the appropriate signatures.

### Water Right Change for Grand Mesa Project

In August of 1997, the Grand Mesa Water Conservancy District filed an application for change of water right for the Cactus Park Reservoir. The reservoir had originally been decreed in 1964 as part of a USBR Project called the Grand Mesa Project. It was decreed for 29,000 acre feet of conditional storage, and had never been built. The change requested that 375.84 acre feet be moved to Upper Eggeleston Reservoir and 97.6 acre feet be moved to Arch Slough Reservoir. The adjudicated uses of the reservoir water are irrigation, fishing, recreation, municipal, domestic, stockwater and storage. After submitting a Contemplated Draft Report showing that the water was available and could have been used for the decreed purposes, our office

stipulated and the decree was signed on October 26, 1998.

The important result of this case is the availability of domestic and municipal reservoir water that can be released for augmentation plans in the Cedaredge area. Prior to this case, all of the stored water on the Grand Mesa was decreed for irrigation, and shareholders could not use their reservoir shares for other uses without a water right change, which most reservoir companies resisted. The Grand Mesa Water Conservancy District, through their attorney Mark Hermundstad, is issuing contracts for reservoir water that can be released and delivered to the appropriate creek system to augment irrigation, domestic and municipal uses.

#### Application for changes of conditional water rights of the Upper Gunnison River Water Conservancy District

In December of 1998, the Upper Gunnison River Water Conservancy District (UGRWCD) filed an Application (98CW240) for Changes of Conditional Water Rights. These water rights were originally decreed as part of the Upper Gunnison Basin Project, and the only part of the project built is the Aspinnall Unit. On December 27, 1989, the referee issued a ruling canceling the water rights due to lack of diligence. When UGRWCD protested, Judge Brown reversed the ruling and upheld the diligence. The Board of Arapahoe County Commissioners appealed the Judge's decision and the matter went to the Colorado Supreme Court. On December 17, 1992, the decision by the Colorado Supreme Court reversed the District Court's decision and referred the matter back to Judge Brown for findings of fact, conclusions of law, and judgement based on the record, with instructions to apply the diligence standard set forth in the 1988 statute and appropriate case law. Since neither party wanted to retry the entire case before Judge Brown, they stipulated to accept the Diligence Ruling, but made several canals junior to Union Park Reservoir Decrees. In Judge Brown's Ruling, he made it very clear what the UGRWCD had to do during the next diligence period to perfect the water rights.

The State Engineer's office, through the Attorney General's Office, has filed a Statement of Opposition to this application. The issues are 1) intervening water rights could be injured by the movement of the water rights, 2) these are conditional water rights and the contemplated draft issue will have to be addressed and studied, and 3) there could be a possible expansion of use. Reviewing the issues involved in this case will be a time-intensive effort, and it is unlikely that this will be settled quickly.

---

## INVOLVEMENT WITH THE COMMUNITY

---

The goal of this office is to provide superior public service to water users, our constituents, and the general public. This office must be an active leader in the water user community, and it is essential to build respectful and trusting relationships with members of the community. We do that in a variety of ways, such as teaching at water festivals, attending Water User Association and Conservancy District meetings, giving presentations at Real Estate Agent conferences, meeting with County Planning Personnel, etc. The Water Commissioners are in continual contact with the water users, and they must be open to questions from water users. Many Water Commissioners spend more of their time 'educating' water users that they used to, mainly due to the large number of out-of-state people moving to the Western Slope.

## COMING YEAR

---

### KEY OBJECTIVES

---

Because of the change of leadership of Division Engineer, time needs to be spent with the Division 4 staff to build and foster working relationships. Losing a leader such as Ken Knox is emotionally hard on a staff, and care needs to be given to keep the morale and team spirit in Division 4 at a high level.

The 60,000 acre-foot depletion allowance contract needs to be finalized this year. Subsequent to that being obtained, a means to quantify the depletions must be perfected and accepted by all parties involved. This office initiated the process in 1998 by meeting with Ray Bennett, Ross Bethel, and Tyler Martineau of the UGRWCD. Ray Bennet then contracted Ross Bethel to produce a program to calculate consumptive use in the Upper Gunnison Basin above Blue Mesa Reservoir based on individual priorities of water rights. The project was a natural extension of the CRDSS modeling program that has already been developed. The depletion program, labeled GUN-CU, was built in January of 1998. Since then, Division 4 has spent a considerable amount of time correcting and fine tuning the database to accurately reflect irrigated acreage for each diversion structure and the historic diversion records tied to each. The Colorado River Water Conservation District has hired Helton & Williamsen, P.C. to review the GUN-CU program and determine its adequacy in the

10,000 acre-foot reaches between Blue Mesa Reservoir and Crystal Reservoir. The UGRWCD has hired their former manager, Tyler Martineau, to review the GUN-CU program in the 40,000 acre-foot reach above Blue Mesa Reservoir and explore the different variables built into the program to determine its adequacy for that reach. The goal is to perfect the program sufficiently so that all parties are satisfied that it works properly and establish the program as the standard for the annual consumptive use analysis.



The installation of headgates and flumes in Districts 28, 59, and 62 needs to be continued in 1999 with the goal of getting 100% compliance by October of 2000. The spring of 1999 will be the first opportunity to enforce the orders that were sent out last year, and it was made clear when we sent out the orders that we *will* enforce them. So far, the Water Commissioners have done a tremendous job in informing the ditch owners that orders were coming, explaining to them why we need the structures, and working with them to provide technical and location assistance to install the flume and headgate. Because orders could not practically be enforced for the entire district, the districts were divided up into thirds. Letters were sent out in November of 1997 for the first third, October of 1998 for the second third, and November 1999 for the last third. Each letter will give the owner until fall of the next year to complete the installation. Since the first round of letters were sent, the word seems to be getting out, and owners in other areas are putting the structures in voluntarily.

In the fall of 1998, the Division Engineer became involved in the Selenium Task Force, a group formed to proactively look at the potential problem of selenium in the waters of the Uncompahgre River Valley. Selenium is a mineral washed out of shale formations that has potential to have an impact on endangered fish and other wildlife. Many different federal, state, county, and local agencies as well as private individuals are involved in arriving at solutions that will have the least impact on the community and accomplish the goal of reducing selenium concentrations in the water. It is important that this office stay involved in the process in an effort to protect the water users in the Uncompahgre Valley.

---

#### INFLUENTIAL CASE LAW, STATUTES, PROJECTS

---

Determination by Judge Robert A. Brown on Application for Water Rights by the Arapahoe County Board of Commissioners

Upon remand from the Colorado Supreme Court, Case 88CW178 was reheard

before Division 4 Water Court Judge Robert Brown in Gunnison, Colorado from October 20 through October 24, 1997. On April 6, 1998 Judge Brown issued his Findings of Fact, Conclusions of Law, and Judgement and Decree. The ruling by the court provided clear resolution on the following issues pertaining to the case:

- Arapahoe had argued the USBR's allowance of 60,000 acre-feet of additional depletions in the Upper Gunnison Basin included trans-mountain diversions. The judge concluded the "BUREC's intent is to limit the subordination to in-basin use and development only," #128, P75. This made the modeling of water availability of Arapahoe's water rights subject to the storage and power calls from the Aspinall Unit. The judge also determined that the 60,000 acre-feet was a maximum amount, not minimum allowance.
- A contract for the 60,000 acre feet of in-basin depletions had never been finalized. Judge Brown settled the question whether it was needed by stating "a contract is necessary to implement a junior appropriator's right to rely on the BUREC's depletion allowance . . ." #128 P75. This office reacted to this statement by initiating and leading the process to procure the contract (discussed earlier in this report).
- Arapahoe has claimed there was 113,000 acre-feet of water annually available to Union Park Reservoir. The Judge's previous determination said there was not more than 20,000 acre-feet available. New evidence presented at this trial led the Judge to conclude that "not more than 15,000 acre-feet of unappropriated water as an average annual yield is available to Arapahoe's Union Park Reservoir Project from its points of diversion claimed in this case. Finally, "Because Arapahoe previously confessed that an amount of not more than 20,000 acre-feet of unappropriated water available on an average annual basis would be insufficient to assert feasibility for its Project, the Applications of Arapahoe in this Case 88CW178 as denied and dismissed with prejudice," P89.

The Board of County Commissioners for Arapahoe County has filed an appeal to the Supreme Court of Colorado.

#### Quantification of United States Park Service Water Rights in Black Canyon National Monument

On December 15 and 16, 1998, the United States Park Service presented its plan to quantify their Gunnison River water rights in the Black Canyon National

Monument. These water rights were filed in the Water Court in 1971, but the case was not settled until 1978. The subsequent Colorado Supreme Court Case, U.S. v. Denver, was finally determined in 1983. The rights were decreed as Federal Reserve (original) Water Rights, and the amounts have remained undefined until now.

The U.S. Park Service seeks to restore somewhat of a natural hydrograph and has summarized their flow needs in Black Canyon National Monument as follows:

- Variability, based on the availability of water in the given year,
- Minimum base flow of 300 cfs or more--this ensures survival of aquatic life in the canyon,
- Annual peak between May 1-June 30, three to fourteen days in duration, 3,500-12,000+ cfs flow and ramping rates of 250-500 cfs/day or ten percent/day.
- Shoulder flows on each side of peak.

Given these flow needs, the U.S. Park Service has formalized their proposal as follows:

1. All flow unappropriated as of March 2, 1933,
2. Subordinated to water rights prior to November 13, 1957, (co-equal with the Aspinall water rights),
3. Adopt the same subordination to future depletions in-basin, upstream from Crystal Dam as the Aspinall water right (i.e. 60,000 AF/yr.).

Undoubtedly, the proposal of "all flow unappropriated as of March 2, 1933" has this office concerned. The Division Engineer arranged and directed a meeting among water users in the Upper Gunnison River on January 17, 1999 to facilitate discussion on reaction to the USPS proposal. The attendees included representatives from Upper Gunnison River Water Conservancy District, Colorado Water Conservation Board, Colorado River Water Conservation District, Uncompahgre Valley Water Users Association, Gunnison County, Colorado Attorney General's Office, and the State Engineer's office.

This quantification process will likely take some time, and rightfully so. There



are many competing needs and interests on the Gunnison River. Perhaps the biggest hurdle will be negotiations between the federal agencies involved (USBR, WAPA, USPS, USFWS, BLM). This office will be taking an active role in the process to protect the vested water rights on the Gunnison River.

**A. TRANSMOUNTAIN DIVERSION SUMMARY--INFLOWS**

| RECIPIENT                |     |               |             |                      | SOURCE |        |      |    |      |          |
|--------------------------|-----|---------------|-------------|----------------------|--------|--------|------|----|------|----------|
| 10-YR AVERAGE CURRENT YR |     |               |             |                      |        |        |      |    |      |          |
| WD                       | ID  | NAME          | STREAM      | AF                   | DAYS   | AF     | DAYS | WD | ID   | STREAM   |
| 68                       | N/A | Carbon Lake D | Uncompahgre | 299.0                | 92.*   | 226.0  | 97   | 30 | 4658 | Animas R |
| 68                       | N/A | Mineral Pt D  | Uncompahgre | 194.0 <sup>***</sup> | 58.*   | 188.0  | 63   | 30 | 4659 | Animas R |
| 68                       | N/A | Red Mountain  | Uncompahgre | 67.0                 | 100.*  | 82.0   | 59   | 30 | 4660 | Animas R |
| 40                       | N/A | Leon Lk Tunl  | Surface Cr  | 1405.0               | 57.*   | 1029.0 | 28   | 72 | 4520 | Leon Cr  |

**B. TRANSMOUNTAIN DIVERSION SUMMARY--OUTFLOWS**

|    |     |               |             |        |       |        |      |    |      |           |
|----|-----|---------------|-------------|--------|-------|--------|------|----|------|-----------|
| 17 | N/A | Larkspur D    | Arkansas R  | 122    | 78    | 66     | 73   | 28 | 4655 | Tomichi C |
| 26 | N/A | Tarbell D     | Saguache Cr | 310    | 53    | 774    | 106  | 28 | 4656 | Cochetopa |
| 20 | N/A | Tabor         | Clear Cr    | 791    | 156   | 922    | 111  | 62 | 774  | Cebolla C |
| 45 | 577 | Divide C Hi   | Divide Cr   | 1192   | 42*   | 1371   | 40   | 40 | 4657 | Cl Fk Mud |
| 72 | N/A | City Pipeline | Colorado R  | 2259   | 353*  | 723    | 307  | 42 | 513  | Kannah Cr |
| 72 | N/A | Hollenbeck R  | Colorado R  | 4655   | 346*  | 5021   | 263  | 42 | 3618 | Kannah Cr |
| 72 | N/A | Redlands Can  | Colorado R  | 532372 | 352** | 548908 | 346  | 42 | 541  | Gunnison  |
| 72 | N/A | Fruita Pl     | Colorado R  |        |       | ****   | **** |    | 518  | East Cr   |

\*Six-year average; \*\*Days average based on past 7 years  
 \*\*\*Eight-year average; \*\*\*\*Water taken, no data available

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |                |        |          |         |          |         |
|-------------------|------|----------------|----------------|--------|----------|---------|----------|---------|
|                   |      |                |                |        | MINIMUM  |         | MAXIMUM  |         |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM  | AF     | DATE     | AF      | DATE     | END YR  |
| 28                | 3590 | Hot Sprgs R    | Hot Springs Cr | 119.80 | 10/31/98 | 273.20  | 06/30/98 | 119.80  |
| 28                | 3591 | McDonough #1   | Los Pinos Cr   | 280.40 | 07/30/98 | 805.20  | 06/30/98 | 805.20  |
| 28                | 3592 | McDonough #2   | Los Pinos Cr   | 133.40 | 07/30/98 | 887.00  | 10/31/98 | 887.00  |
| 28                | 3593 | Needle Creek   | Needle Cr      | 594 00 | 11/01/97 | 848.60  | 05/01/98 | 610.50  |
| 28                | 3594 | Upper Dome R   | Cochetopa Cr   | Lake   | leaks    | no irr. | fishery  | only    |
| 28                | 3595 | Vouga Res      | Razor Cr       | 735.00 | 10/31/98 | 910.00  | 06/08/98 | 735.00  |
| 40                | 3412 | Ault Res       | Muddy Cr       | 0.00   | 09/15/98 | 116.00  | 11/01/97 | 0.00    |
| 40                | 3414 | East Beckwith  | Anthracite     | 170.90 | 10/01/98 | 368.90  | 11/01/97 | 170.90  |
| 40                | 3413 | Bruce Park Res | Hubbard Cr     | 29.50  | 11/01/97 | 556.00  | 05/25/98 | 0.00    |
| 40                | 3399 | Overland Res 1 | Muddy Cr       | 0.00   | 11/01/97 | 6198.00 | 05/27/98 | 0.00    |
| 40                | 3416 | Paonia Res     | Muddy Cr       | 1705.0 | 10/09/98 | 17461.0 | 05/28/98 | 1705.00 |
| 40                | 3417 | Spatafora Res  | Muddy Cr       | 0.00   | 09/15/98 | 100.00  | 11/01/97 | 0.00    |
| 40                | 3418 | Tomahawk Res   | Muddy Cr       | 0.00   | 10/02/98 | 87.30   | 11/01/97 | 0.00    |
| 40                | 3419 | Williams Cr R  | Muddy Cr       | 100.00 | 11/01/97 | 100.00  | 08/20/98 | 100.00  |
| 40                | 3391 | Bald Mt Res    | Crystal Cr     | 5.00   | 11/01/97 | 120.00  | 07/30/98 | 5.00    |
| 40                | 3394 | Don Meek 1     | Crystal Cr     | 0.00   | 11/01/97 | 45.00   | 08/03/98 | 0.00    |

RESERVOIR STORAGE SUMMARY

IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |         |          |         |
|-------------------|------|----------------|---------------|--------|----------|---------|----------|---------|
| MINIMUM           |      |                |               |        | MAXIMUM  |         |          |         |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF      | DATE     | END YR  |
| 40                | 3395 | Fruitland Res  | Crystal Cr    | 529.00 | 08/24/98 | 8832.00 | 05/27/98 | 529.00  |
| 40                | 3392 | Bottle Stomp R | Iron Cr       | 0.00   | 11/01/97 | 17.00   | 07/29/98 | 0.00    |
| 40                | 3553 | Crawford Res   | Iron Cr       | 8531.0 | 11/01/97 | 14250.0 | 04/22/98 | 4628.00 |
| 40                | 3397 | Meek Res       | Iron Cr       | 5.00   | 11/01/97 | 29.30   | 07/29/98 | 5.00    |
| 40                | 3401 | Rockwell 1 R   | Iron Cr       | 50.00  | 08/31/98 | 118.00  | 07/30/98 | 50.00   |
| 40                | 3403 | Tyler Res      | Iron Cr       | 80.00  | 08/02/98 | 169.30  | 07/30/98 | 80.00   |
| 40                | 3400 | Poison Spr Res | Gunnison R    | 60.00  | 08/28/98 | 123.00  | 06/25/98 | 60.00   |
| 40                | 3402 | Todd Res       | McDonald Cr   | 0.00   | 11/01/97 | 78.00   | 07/09/98 | 39.0    |
| 40                | 3420 | Bailey Res     | Leroux Cr     | 6.00   | 10/30/98 | 423.00  | 05/29/98 | 6.00    |
| 40                | 3421 | Brockman 1 R   | Leroux Cr     | 0.00   | 11/01/97 | 16.20   | 05/29/98 | 0.00    |
| 40                | 3422 | Brockman 2 R   | Leroux Cr     | 0.00   | 11/01/97 | 41.00   | 05/29/98 | 0.00    |
| 40                | 3423 | Carl Smith R   | Leroux Cr     | 0.00   | 05/02/98 | 780.00  | 11/01/97 | 0.00    |
| 40                | 3424 | Dog Fish Res   | Leroux Cr     | 0.00   | 11/01/97 | 243.00  | 06/05/98 | 0.00    |
| 40                | 3425 | Dowdy Res      | Leroux Cr     | 61.00  | 09/30/98 | 264.00  | 11/01/97 | 61.00   |
| 40                | 3426 | Ella Res       | Leroux Cr     | 0.00   | 11/01/97 | 98.00   | 06/05/98 | 0.00    |
| 40                | 3427 | Elk Wallows R  | Leroux Cr     | 0.00   | 11/01/97 | 218.00  | 05/27/98 | 0.00    |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |        |          |        |  |
|-------------------|------|----------------|---------------|--------|----------|--------|----------|--------|--|
|                   |      |                |               |        | MINIMUM  |        | MAXIMUM  |        |  |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF     | DATE     | END YR |  |
| 40                | 3428 | Ellington Cook | Leroux Cr     | 0.00   | 08/31/98 | 24.50  | 11/01/97 | 0.00   |  |
| 40                | 3429 | Fairmont Park  | Leroux Cr     | 0.00   | 08/31/98 | 30.00  | 11/01/97 | 0.00   |  |
| 40                | 3430 | Fairmont Res   | Leroux Cr     | 0.00   | 11/01/97 | 78.00  | 05/29/98 | 0.00   |  |
| 40                | 3431 | Fisher Res     | Leroux Cr     | 0.00   | 08/31/98 | 10.00  | 11/01/97 | 0.00   |  |
| 40                | 3432 | Goodenough Res | Leroux Cr     | 78.00  | 10/30/98 | 584.00 | 06/15/98 | 78.00  |  |
| 40                | 3433 | Gray Res       | Leroux Cr     | 45.00  | 10/30/98 | 424.00 | 11/01/97 | 45.00  |  |
| 40                | 3435 | Hanson 2 Res   | Leroux Cr     | 0.00   | 11/01/97 | 225.00 | 06/05/98 | 0.00   |  |
| 40                | 3437 | Hunt Res       | Leroux Cr     | 10.00  | 08/30/98 | 124.00 | 06/02/98 | 10.00  |  |
| 40                | 3438 | Lucky Find Res | Leroux Cr     | 0.00   | 11/01/97 | 66.00  | 05/29/98 | 0.00   |  |
| 40                | 3439 | Miller Res     | Leroux Cr     | 0.00   | 11/01/97 | 20.40  | 05/29/98 | 0.00   |  |
| 40                | 3440 | Owens Res      | Leroux Cr     | 0.00   | 11/01/97 | 92.00  | 05/25/98 | 0.00   |  |
| 40                | 3441 | Patterson Res  | Leroux Cr     | 0.00   | 11/01/97 | 78.00  | 05/05/98 | 0.00   |  |
| 40                | 3442 | Patterson 2 R  | Leroux Cr     | 151.00 | 11/01/97 | 151.00 | 05/29/98 | 151.00 |  |
| 40                | 3443 | Pine Cone Res  | Leroux Cr     | 0.00   | 11/01/97 | 37.00  | 06/05/98 | 0.00   |  |
| 40                | 3444 | Reynolds Res   | Leroux Cr     | 15.50  | 08/31/98 | 176.00 | 11/01/97 | 88.00  |  |
| 40                | 3446 | Skim Milk      | Leroux Cr     | 0.00   | 07/31/98 | 90.00  | 11/01/97 | 0.00   |  |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |                |        |          |         |          |        |
|-------------------|------|----------------|----------------|--------|----------|---------|----------|--------|
|                   |      |                |                |        | MINIMUM  |         | MAXIMUM  |        |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM  | AF     | DATE     | AF      | DATE     | END YR |
| 40                | 3447 | Wash Tub Res   | Leroux Cr      | 0.00   | 11/01/97 | 25.00   | 05/29/98 | 0.00   |
| 40                | 3448 | Water Bug R    | Leroux Cr      | 0.00   | 11/01/97 | 40.00   | 05/29/98 | 0.00   |
| 40                | 3449 | Willow Res     | Leroux Cr      | 38.00  | 08/31/98 | 128.00  | 11/01/97 | 38.00  |
| 40                | 3406 | Beaver Res     | Minn Cr        | 0.00   | 11/01/97 | 1527.00 | 07/07/98 | 16.00  |
| 40                | 3407 | Lone Cabin R   | Minn Cr        | 0.00   | 11/01/97 | 150.00  | 05/20/98 | 0.00   |
| 40                | 3408 | Monument Res   | Minn Cr        | 0.00   | 11/01/97 | 461.00  | 07/16/98 | 0.00   |
| 40                | 3410 | Roeber 2 Res   | Minn Cr        | 0.00   | 11/01/97 | 44.00   | 05/20/98 | 0.00   |
| 40                | 3411 | West Res       | Jay Cr         | 0.00   | 11/01/97 | 454.00  | 06/02/98 | 0.00   |
| 40                | 3714 | Lucas Cline R  | North Fork R   | 0.00   | 11/01/97 | 9.50    | 05/20/98 | 0.00   |
| 40                | 3409 | Reynolds Res   | Reynolds Cr    | 15.00  | 09/29/98 | 100.00  | 05/13/98 | 15.00  |
| 40                | 3436 | Holy Terror R  | Terror Cr      | 0.00   | 11/01/97 | 146.00  | 06/05/98 | 0.00   |
| 40                | 3445 | Rex Res        | Terror Cr      | 0.00   | 11/01/97 | 24.00   | 05/29/98 | 0.00   |
| 40                | 3300 | Alexander Lake | Ward Creek     | 157.00 | 11/01/97 | 157.00  | 07/31/98 | 157.00 |
| 40                | 3302 | Barren Lake    | Kiser Cr       | 268.30 | 10/27/98 | 800.00  | 07/31/98 | 268.30 |
| 40                | 3450 | Basin #1       | Dirty George C | 0.00   | 07/01/98 | 65.40   | 11/01/97 | 0.00   |
| 40                | 3451 | Basin #2       | Dirty George C | 0.00   | 08/02/98 | 53.50   | 06/01/98 | 0.00   |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                 |                |        |          |        |          |        |
|-------------------|------|-----------------|----------------|--------|----------|--------|----------|--------|
|                   |      |                 |                |        | MINIMUM  |        | MAXIMUM  |        |
| WD                | ID   | RESERVOIR NAME  | SOURCE STREAM  | AF     | DATE     | AF     | DATE     | END YR |
| 40                | 3452 | Battlement 1    | Dirty George C | 87.40  | 11/01/97 | 87.40  | 07/31/98 | 87.40  |
| 40                | 3453 | Battlement 2    | Dirty George C | 0.00   | 11/01/97 | 0.00   | 07/31/98 | 0.00   |
| 40                | 3341 | Bonita          | Surface Cr     | 113.50 | 11/01/97 | 285.80 | 05/30/98 | 117.30 |
| 40                | 3304 | Bull Finch 1    | Kiser Cr       | 0.00   | 11/01/97 | 0.00   | 07/31/98 | 0.00   |
| 40                | 3305 | Bull Finch 2    | Kiser Cr       | 35.40  | 11/01/97 | 39.20  | 05/31/98 | 39.20  |
| 40                | 3303 | Boulder Lake 1  | Ward Cr        | 0.00   | 11/01/97 | 0.00   | 07/31/98 | 0.00   |
| 40                | 3342 | Cabin Lake      | Surface Cr     | 0.00   | 11/01/97 | 27.00  | 05/30/98 | 0.00   |
| 40                | 3378 | Calumet         | Surface Cr     | 0.00   | 11/01/97 | 16.80  | 06/01/98 | 0.00   |
| 40                | 3366 | Carbonate Cmp 3 | Surface Cr     | 0.00   | 11/01/97 | 13.00  | 05/31/98 | 0.00   |
| 40                | 3306 | Carbonate Cmp 6 | Youngs Cr      | 0.00   | 09/21/98 | 129.60 | 05/31/98 | 0.00   |
| 40                | 3307 | Carbonate Cmp 7 | Youngs Cr      | 0.00   | 08/31/98 | 107.60 | 05/30/98 | 0.00   |
| 40                | 3343 | Cedar Mesa      | Surface Cr     | 12.30  | 10/28/98 | 919.00 | 05/30/98 | 12.30  |
| 40                | 3379 | Cole 1          | Surface Cr     | 0.00   | 11/01/97 | 30.00  | 06/09/98 | 0.00   |
| 40                | 3380 | Cole 2          | Surface Cr     | 0.00   | 11/01/97 | 34.75  | 06/09/98 | 0.00   |
| 40                | 3381 | Cole 3 (Chy Ln) | Surface Cr     | 0.00   | 11/01/97 | 49.30  | 07/01/98 | 0.00   |
| 40                | 3344 | Cole 4          | Surface Cr     | 0.00   | 11/01/97 | 0.00   | 07/31/98 | 0.00   |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |         |          |        |
|-------------------|------|----------------|---------------|--------|----------|---------|----------|--------|
|                   |      |                |               |        | MINIMUM  |         | MAXIMUM  |        |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF      | DATE     | END YR |
| 40                | 3345 | Cole 5         | Surface Cr    | 0.00   | 11/01/97 | 116.20  | 05/30/98 | 0.00   |
| 40                | 3308 | Daniels Sl     | Kiser Cr      | 0.00   | 09/30/98 | 228.00  | 05/31/98 | 0.00   |
| 40                | 3309 | Deep Slough    | Ward Cr       | 0.00   | 11/01/97 | 498.40  | 05/31/98 | 0.00   |
| 40                | 3310 | Deep Ward      | Ward Cr       | 836.00 | 10/27/98 | 1700.00 | 05/31/98 | 836.00 |
| 40                | 3346 | Deserted Park  | Surface Cr    | 0.00   | 11/01/97 | 38.80   | 05/30/98 | 0.00   |
| 40                | 3311 | Donnelly Sl    | Kiser Cr      | 0.00   | 10/31/98 | 277.00  | 05/31/98 | 0.00   |
| 40                | 3382 | Doughty 1      | Surface Cr    | 0.00   | 11/01/97 | 49.50   | 07/01/98 | 0.00   |
| 40                | 3383 | Doughty 2      | Surface Cr    | 0.00   | 11/01/97 | 18.40   | 07/01/98 | 0.00   |
| 40                | 3347 | Dreyfus        | Surface Cr    | 0.00   | 11/01/97 | 42.50   | 05/30/98 | 0.00   |
| 40                | 3312 | Eggleston Lake | Kiser Cr      | 864.40 | 10/27/98 | 2705.00 | 11/01/97 | 864.40 |
| 40                | 3348 | Elk Park       | Surface Cr    | 6.70   | 09/30/98 | 96.80   | 05/30/98 | 6.70   |
| 40                | 3549 | Eureka 1       | Youngs Cr     | 0.00   | 11/01/97 | 27.10   | 05/30/98 | 0.00   |
| 40                | 3349 | Eureka 2       | Youngs Cr     | 0.00   | 11/01/97 | 53.50   | 05/30/98 | 0.00   |
| 40                | 3350 | Fish Lake      | Surface Cr    | 0.00   | 11/01/97 | 76.90   | 05/30/98 | 0.00   |
| 40                | 3313 | Forrest        | Ward Cr       | 0.00   | 08/31/98 | 85.70   | 05/31/98 | 0.00   |
| 40                | 3314 | Goodenough     | Kiser Cr      | 50.70  | 10/27/98 | 152.00  | 11/01/97 | 50.70  |



RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |                |        |          |        |          |         |
|-------------------|------|----------------|----------------|--------|----------|--------|----------|---------|
|                   |      |                |                |        | MINIMUM  |        | MAXIMUM  |         |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM  | AF     | DATE     | AF     | DATE     | END YR  |
| 40                | 3455 | Granby 6       | Dirty George C | 40.70  | 09/01/98 | 46.00  | 11/01/97 | 40.70   |
| 40                | 3456 | Granby 7       | Dirty George C | 35.40  | 11/01/97 | 76.10  | 05/01/98 | 42.70   |
| 40                | 3457 | Granby 8       | Dirty George C | 0.00   | 11/01/97 | 13.30  | 06/01/98 | 0.00    |
| 40                | 3458 | Granby 9       | Dirty George C | 68.50  | 10/01/98 | 72.00  | 05/05/98 | 68.50   |
| 40                | 3454 | Granby 5-11    | Dirty George C | 495.00 | 11/01/97 | 775.00 | 06/01/98 | 495.00  |
| 40                | 3459 | Granby 12      | Dirty George C | 378.20 | 10/01/98 | 523.00 | 05/01/98 | 378.00  |
| 40                | 3351 | Greenwood      | Surface Cr     | 0.00   | 11/01/97 | 0.00   | 07/31/98 | 0.00    |
| 40                | 3384 | Hale           | Surface Cr     | 0.00   | 11/01/97 | 31.00  | 06/02/98 | 0.00    |
| 40                | 3315 | Hotel Twin L   | Ward Creek     | 413.70 | 10/27/98 | 548.70 | 11/01/97 | 413.70  |
| 40                | 3316 | Howard         | Kiser Cr       | 61.40  | 11/01/97 | 72.10  | 05/31/98 | 72.10   |
| 40                | 3317 | Island Lake    | Ward Cr        | 1094.5 | 10/27/98 | 1426.0 | 11/01/97 | 1094.50 |
| 40                | 3352 | Kehmeier       | Surface Cr     | 42.80  | 11/01/97 | 316.90 | 05/30/98 | 61.70   |
| 40                | 3319 | Kiser Slough   | Surface Cr     | 18.10  | 10/27/98 | 512.00 | 05/31/98 | 18.10   |
| 40                | 3318 | Kennicott Sl   | Kiser Cr       | 0.00   | 08/30/98 | 811.50 | 05/31/98 | 0.00    |
| 40                | 3353 | Knox           | Surface Cr     | 41.00  | 08/31/98 | 219.50 | 05/30/98 | 41.00   |
| 40                | 4520 | Leon Lake      | Leon Cr        | 1172.1 | 11/01/97 | 2169.2 | 08/03/98 | 1198.10 |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |         |          |         |  |
|-------------------|------|----------------|---------------|--------|----------|---------|----------|---------|--|
|                   |      |                |               |        | MINIMUM  | MAXIMUM |          |         |  |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF      | DATE     | END YR  |  |
| 40                | 3385 | Leon Park      | Surface Cr    | 0.00   | 11/01/97 | 147.90  | 07/01/98 | 0.00    |  |
| 40                | 3320 | Lilly Pad      | Youngs Cr     | 0.00   | 11/01/97 | 0.00    | 07/31/98 | 0.00    |  |
| 40                | 3386 | Little Giant 1 | Surface Cr    | 0.00   | 11/01/97 | 0.00    | 06/18/98 | 0.00    |  |
| 40                | 3387 | Little Giant 2 | Surface Cr    | 0.00   | 11/01/97 | 12.00   | 07/01/98 | 0.00    |  |
| 40                | 3322 | Little Grouse  | Youngs Cr     | 52.50  | 11/01/97 | 52.50   | 07/31/98 | 52.50   |  |
| 40                | 3321 | Little Gem     | Ward Cr       | 79.80  | 09/30/98 | 219.00  | 11/01/97 | 79.80   |  |
| 40                | 3388 | Marcott        | Surface Cr    | 0.00   | 11/01/97 | 448.00  | 06/01/98 | 0.00    |  |
| 40                | 3323 | McKoon         | Youngs Cr     | 132.40 | 11/01/97 | 147.90  | 05/31/98 | 147.90  |  |
| 40                | 3354 | Military       | Surface Cr    | 0.00   | 11/01/97 | 236.60  | 05/30/98 | 0.00    |  |
| 40                | 3355 | Park           | Surface Cr    | 1081.4 | 10.28.98 | 3383.40 | 05/30/98 | 1081.40 |  |
| 40                | 3324 | P C & G 1      | Kiser Cr      | 19.40  | 11/01/97 | 19.40   | 07/31/98 | 19.40   |  |
| 40                | 3325 | Pedro          | Youngs Cr     | 21.30  | 11/01/97 | 194.90  | 05/31/98 | 52.30   |  |
| 40                | 3326 | Pine           | Youngs Cr     | 0.00   | 11/01/97 | 11.10   | 05/31/98 | 0.00    |  |
| 40                | 3327 | Prebble        | Youngs Cr     | 111.70 | 10.27/98 | 193.10  | 05/31/98 | 111.70  |  |
| 40                | 3328 | Rim Rock Lake  | Ward Cr       | 50.10  | 11/01/97 | 107.90  | 05/31/98 | 107.90  |  |
| 40                | 3329 | Rockland       | Ward Cr       | 0.00   | 11/01/97 | 0.00    | 07/31/98 | 0.00    |  |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |        |          |        |
|-------------------|------|----------------|---------------|--------|----------|--------|----------|--------|
|                   |      |                |               |        | MINIMUM  |        | MAXIMUM  |        |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF     | DATE     | END YR |
| 40                | 3356 | Round Lake     | Surface Cr    | 0.00   | 11/01/97 | 14.50  | 06/30/98 | 0.00   |
| 40                | 3330 | Ryan           | Youngs Cr     | 40.30  | 11/01/97 | 40.30  | 07/31/98 | 40.30  |
| 40                | 3357 | Sackett        | Surface Cr    | 53.10  | 08/31/98 | 108.00 | 05/30/98 | 53.10  |
| 40                | 3331 | Safety 1 & 2   | Cottonwood Cr | 0.00   | 07/31/98 | 20.00  | 05/31/98 | 0.70   |
| 40                | 3332 | Scotland Peak  | Ward Cr       | 0.00   | 11/01/97 | 134.10 | 06/30/98 | 0.00   |
| 40                | 3333 | Sheep Lake     | Ward Cr       | 154.00 | 11/01/97 | 154.00 | 07/31/98 | 154.00 |
| 40                | 3358 | Stell          | Surface Cr    | 23.00  | 08/31/97 | 65.00  | 05/30/98 | 23.00  |
| 40                | 3389 | Trickle        | Surface Cr    | 0.00   | 11/01/97 | 37.50  | 07/01/98 | 0.00   |
| 40                | 3359 | Trio           | Surface Cr    | 46.30  | 08/30/98 | 164.30 | 06/30/98 | 46.30  |
| 40                | 3360 | Twin Lake 1    | Surface Cr    | 0.00   | 11/01/97 | 108.50 | 06/30/98 | 0.00   |
| 40                | 3361 | Twin Lake 2    | Surface Cr    | 7.00   | 11/01/97 | 120.80 | 06/30/98 | 58.50  |
| 40                | 3334 | Upper Hotel L  | Ward Cr       | 105.90 | 11/01/97 | 105.90 | 07/31/98 | 105.90 |
| 40                | 3362 | Vela           | Surface Cr    | 88.60  | 09/30/97 | 436.60 | 05/30/98 | 88.60  |
| 40                | 3335 | Ward Cr        | Ward Cr       | 106.70 | 11/01/97 | 284.40 | 05/31/98 | 106.70 |
| 40                | 3363 | Weir/Johnson 2 | Surface Cr    | 208.10 | 09/30/97 | 593.90 | 06/30/98 | 208.10 |
| 40                | 3364 | Weir Park      | Surface Cr    | 0.00   | 11/01/97 | 40.70  | 05/30/98 | 0.00   |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |        |          |         |
|-------------------|------|----------------|---------------|--------|----------|--------|----------|---------|
|                   |      |                |               |        | MINIMUM  |        | MAXIMUM  |         |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF     | DATE     | END YR  |
| 40                | 3336 | Womack 1       | Ward Cr       | 0.00   | 08/30/98 | 186.30 | 05/31/98 | 0.00    |
| 40                | 3337 | Womack 2 & 3   | Cottonwood Cr | 0.00   | 08/30/98 | 101.50 | 11/01/97 | 0.00    |
| 40                | 3340 | Womack 5       | Cottonwood Cr | 0.00   | 07/31/98 | 18.30  | 06/30/98 | 0.00    |
| 40                | 3338 | Young Cr 1 & 2 | Youngs Cr     | 68.10  | 10/27/98 | 796.90 | 06/30/98 | 68.10   |
| 40                | 3339 | Youngs Cr 3    | Youngs Cr     | 200.00 | 11/01/97 | 200.60 | 07/31/98 | 200.60  |
| 40                | 3390 | Y & S          | Surface Cr    | 48.30  | 11/01/97 | 189.10 | 06/01/98 | 53.80   |
| 40                | 3365 | Fruitgrowers   | Alfallfa Run  | 612.50 | 10/01/98 | 4451.6 | 03/01/98 | 1664.00 |
| 40                | 3368 | Beaver Dam     | Escalante Cr  | 0.00   | 11/01/97 | 396.50 | 06/01/98 | 0.00    |
| 40                | 3370 | Clark Res      | Oak Cr        | 2.50   | 10/22/98 | 50.80  | 05/15/98 | 2.50    |
| 40                | 3373 | Dugger Res     | Oak Cr        | 195.00 | 11/01/97 | 212.10 | 05/15/98 | 195.00  |
| 40                | 3374 | Morris 2       | Oak Cr        | 16.30  | 11/01/97 | 16.30  | 07/31/98 | 16.30   |
| 40                | 3375 | Pitcarin Res   | Doughspoon Cr | 36.00  | 10/22/98 | 76.00  | 05/15/98 | 36.00   |
| 40                | 3376 | Porter 1       | Oak Cr        | 62.80  | 08/13/98 | 214.80 | 11/01/97 | 113.90  |
| 40                | 3377 | Porter 4       | Oak Cr        | 38.00  | 11/01/97 | 38.00  | 07/31/98 | 38.00   |
| 40                | 2301 | Arch Slough    | Ward Cr       | 0.00   | 11/01/97 | 200.80 | 07/31/98 | 7.80    |
|                   |      |                |               |        |          |        |          |         |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |        |          |        |
|-------------------|------|----------------|---------------|--------|----------|--------|----------|--------|
|                   |      |                |               |        | MINIMUM  |        | MAXIMUM  |        |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF     | DATE     | END YR |
| 42                | 3600 | Anderson R 1   | Kannah Cr     | 100.50 | 10/01/98 | 506.00 | 06/01/98 | 326.00 |
| 42                | 3601 | Anderson R 2   | Kannah Cr     | 97.00  | 10/31/98 | 595.00 | 06/01/98 | 97.00  |
| 42                | 3630 | Anderson R 6   | Kannah Cr     | 0.00   | 08/31/98 | 118.00 | 06/01/98 | 0.00   |
| 42                | 3602 | Bolen AJ R     | Kannah Cr     | 0.00   | 11/01/97 | 245.00 | 08/01/98 | 0.00   |
| 42                | 3603 | Bolen Res      | Kannah Cr     | 0.00   | 11/01/97 | 521.00 | 06/01/98 | 26.00  |
| 42                | 3604 | Carson Lake    | Kannah Cr     | 637.00 | 11/01/97 | 637.00 | 10/31/98 | 637.00 |
| 42                | 3606 | Deep Cr R 2    | Kannah Cr     | 0.00   | 08/24/98 | 354.00 | 06/01/98 | 0.00   |
| 42                | 3607 | Dry Cr R Sup   | Kannah Cr     | 0.00   | 09/18/98 | 237.00 | 06/01/98 | 0.00   |
| 42                | 3608 | Flowing Pk R   | Kannah Cr     | 359.00 | 11/01/97 | 777.00 | 06/01/98 | 677.00 |
| 42                | 3609 | Fruita Res 1   | East Cr       | 41.00  | 10/10/98 | 143.00 | 06/30/98 | 53.20  |
| 42                | 3610 | Fruita Res 2   | East Cr       | 40.00  | 10/31/98 | 168.00 | 06/04/98 | 40.00  |
| 42                | 3614 | Grand Mesa R 1 | Kannah Cr     | 102.00 | 09/18/98 | 559.00 | 06/01/98 | 102.40 |
| 42                | 3615 | Grand Mesa R 6 | Kannah Cr     | 0.00   | 09/25/98 | 172.00 | 06/01/98 | 0.00   |
| 42                | 3616 | Grand Mesa R 8 | Kannah Cr     | 0.00   | 11/01/97 | 379.00 | 06/01/98 | 40.70  |
| 42                | 3617 | Grand Mesa R 9 | Kannah Cr     | 0.00   | 11/01/97 | 153.00 | 06/01/98 | 80.70  |
| 42                | 3618 | Hallenbeck R 1 | Kannah Cr     | 531.00 | 12/01/97 | 699.00 | 10/31/98 | 699.00 |

RESERVOIR STORAGE SUMMARY  
IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                |               |        |          |         |          |          |
|-------------------|------|----------------|---------------|--------|----------|---------|----------|----------|
|                   |      |                |               |        | MINIMUM  |         | MAXIMUM  |          |
| WD                | ID   | RESERVOIR NAME | SOURCE STREAM | AF     | DATE     | AF      | DATE     | END YR   |
| 42                | 3619 | Hallenbeck R 2 | Kannah Cr     | 9.70   | 09/01/9/ | 459.00  | 06/01/98 | 54.50    |
| 42                | 3620 | Juniata Res    | Kannah Cr     | 5752.0 | 10/31/97 | 6869.00 | 04/01/98 | 5752.00  |
| 42                | 3623 | Scales Res 1   | Kannah CR     | 0.00   | 10/10/98 | 203.00  | 06/01/98 | 0.00     |
| 42                | 3624 | Scales Res 3   | Kannah Cr     | 0.00   | 11/01/97 | 129.00  | 06/01/98 | 0.00     |
| 42                | 3625 | Somerville R 1 | Whitewater Cr | 0.00   | 11/01/97 | 973.00  | 06/01/98 | 0.00     |
|                   |      |                |               |        |          |         |          |          |
| 59                | 3665 | Spring Creek   | Taylor River  | 1180.0 | 09/22/98 | 1631.00 | 06/25/98 | 1180.00  |
| 59                | 3666 | Taylor Park    | Taylor River  | 72173. | 05/01/98 | 91027.  | 07/01/98 | 66882.00 |
| 59                | 3684 | Lake Grant     | Slate River   | 256.00 | 11/01/98 | 256.00  | 12/31/97 | 256.00   |
| 59                | 2689 | Meridian Lk Pk | Slate River   | 123.00 | 10/31/98 | 123.00  | 06/01/98 | 123.00   |
|                   |      |                |               |        |          |         |          |          |
| 60                | 3507 | Gurley R       | Beaver Cr     | 3156.0 | 10/01/98 | 8409.00 | 06/15/98 | 3580.00  |
| 60                | 3511 | Lone Cone R    | Bennet Cr     | 365.00 | 11/01/97 | 1840.00 | 05/11/98 | 530.00   |
| 60                | 3510 | Lilylands      | Naturita Cr   | 34.60  | 10/31/98 | 494.00  | 05/11/98 | 34.60    |
| 60                | 3512 | Miramonte      | W Naturita Cr | 6851.0 | 11/01/97 | 6851.00 | 06/03/98 | 6851.00  |
| 60                | 3519 | Paxton Res     | Horsefly Cr   | 488.00 | 10/31/98 | 849.00  | 06/01/98 | 488.00   |

RESERVOIR STORAGE SUMMARY

IRRIGATION YEAR - 1998

| AMOUNT OF STORAGE |      |                 |               |        |          |        |          |           |
|-------------------|------|-----------------|---------------|--------|----------|--------|----------|-----------|
| MINIMUM           |      |                 |               |        | MAXIMUM  |        |          |           |
| WD                | ID   | RESERVOIR NAME  | SOURCE STREAM | AF     | DATE     | AF     | DATE     | END YR    |
| 60                | 3509 | Lake Hope Res   | Lake Fork     | 123.00 | 06/01/98 | 2310.0 | 11/01/97 | 2140.00   |
| 60                | 3527 | Trout Lake Res  | Lake Fork     | 1108.0 | 03/23/98 | 3314.0 | 10/31/98 | 3314.00   |
| 60                | 3556 | Hofmann Res #12 | Horsefly Cr   | 45.00  | 11/01/97 | 55.00  | 06/10/98 | 50.00     |
| 61                | 3541 | Buckeye R       | W Paradox Cr  | 1096.0 | 09/09/98 | 2483.0 | 05/26/98 | 1148.00   |
| 62                | 3552 | Blue Mesa       | Gunnison R    | 298343 | 04/17/98 | 816279 | 07/01/98 | 664148.00 |
| 62                | 3578 | Crystal         | Gunnison R    | 13222. | 08/31/98 | 18346. | 06/30/98 | 16353.00  |
| 62                | 3545 | Morrow Pt       | Gunnison R    | 104772 | 03/18/98 | 116082 | 06/24/98 | 111413.00 |
| 62                | 3548 | Silverjack      | Big Cimarron  | 4804.0 | 11/01/97 | 13742. | 06/30/98 | 8906.00   |
| 63                | 3640 | Craig Res 2     | West Cr       | 127.68 | 11/01/97 | 544.00 | 05/31/98 | 103.80    |
| 63                | 3641 | Burg Res        | West Cr       | 0.00   | 11/01/97 | 195.00 | 05/31/98 | 0.00      |
| 63                | 3642 | Casement Res    | West Cr       | 155.00 | 11/01/97 | 155.00 | 05/31/98 | 120.10    |
| 63                | 3643 | Casto Res       | West Cr       | 121.20 | 11/01/97 | 803.00 | 05/31/98 | 126.80    |
| 63                | 3644 | Craig Res 1     | West Cr       | 257.90 | 11/01/97 | 525.00 | 05/31/98 | 100.20    |
| 68                | 3675 | Ridgway         | Uncompahgre R | 56952. | 05/26/98 | 83826. | 07/12/98 | 72208.00  |
| 73                | 3621 | Fruita Res 3    | Chiquito Dol. | 12.80  | 11/01/97 | 45.90  | 05/31/98 | 26.70     |
|                   |      |                 |               |        |          |        |          |           |

WATER DIVERSION SUMMARIES TO VARIOUS USES

| WD  | TRANS<br>MOUNTAIN<br>OUTFLOW | TRANS<br>BASIN<br>OUTFLOW | MUNIC-<br>IPAL | COMMER-<br>CIAL | INDUS-<br>TRIAL | RECRE-<br>ATION | FISH-<br>ERY | DOMES/<br>HOUSE-<br>HOLD | STOCK  |
|-----|------------------------------|---------------------------|----------------|-----------------|-----------------|-----------------|--------------|--------------------------|--------|
| 28  | 840                          | 0                         | 0              | 0               | 0               | 0               | 0            | 0                        | 184    |
| 40  | 705                          | 0                         | 4,899          | 0               | 494             | 0               | 10,820       | 721                      | 14,892 |
| 41  | 0                            | 0                         | 5,886          | 0               | 0               | 0               | 0            | 0                        | 364    |
| 42  | 554,652                      | 992                       | 0              | 0               | 566             | 0               | 0            | 25                       | 106    |
| 59  | 0                            | 0                         | 2,686          | 0               | 0               | 0               | 141,851      | 0                        | 992    |
| 60  | 0                            | 0                         | 1,823          | 1,002           | 0               | 129             | 1,179        | 235                      | 405    |
| 61  | 0                            | 0                         | 55             | 0               | 0               | 0               | 0            | 33                       | 2,595  |
| 62  | 924                          | 365,146                   | 841            | 0               | 0               | 0               | 8,633        | 0                        | 0      |
| 63  | 0                            | 0                         | 0              | 0               | 0               | 0               | 0            | 13                       | 1,442  |
| 68  | 0                            | 0                         | 45             | 0               | 0               | 15              | 0            | 0                        | 2,307  |
| 73  | 0                            | 20                        | 0              | 0               | 0               | 0               | 0            | 0                        | 6      |
| TOT | 557,121                      | 366,158                   | 16,235         | 1,002           | 1060            | 11,639          | 162,483      | 1,027                    | 23,293 |



WATER DIVERSION SUMMARIES TO VARIOUS USES, continued

| WD  | AUG-<br>MENTA-<br>TION | EVAPO-<br>RATION | GEO-<br>THER-<br>MAL | SNOW<br>MAKING | MIN<br>STREAM<br>FLOW | POWER<br>GENERA-<br>TION | WILD-<br>LIFE | RE-<br>CHARG-<br>ES | OTHER   |
|-----|------------------------|------------------|----------------------|----------------|-----------------------|--------------------------|---------------|---------------------|---------|
| 28  | 0                      | 0                | 0                    | 0              | 0                     | 0                        | 0             | 0                   | 0       |
| 40  | 26                     | 2,000            | 0                    | 0              | 0                     | 0                        | 0             | 0                   | 1,764   |
| 41  | 0                      | 0                | 0                    | 0              | 0                     | 0                        | 0             | 0                   | 258,161 |
| 42  | 0                      | 2,213            | 0                    | 0              | 0                     | 0                        | 0             | 0                   | 0       |
| 59  | 0                      | 2,563            | 0                    | 157            | 0                     | 0                        | 0             | 0                   | 0       |
| 60  | 0                      | 0                | 0                    | 0              | 0                     | 16,372                   | 0             | 0                   | 0       |
| 61  | 0                      | 0                | 0                    | 0              | 0                     | 0                        | 0             | 500                 | 0       |
| 62  | 0                      | 53,350           | 0                    | 0              | 0                     | 3,052,553                | 0             | 0                   | 0       |
| 63  | 0                      | 249              | 0                    | 0              | 0                     | 36                       | 0             | 0                   | 137     |
| 68  | 85                     | 1,602            | 0                    | 0              | 0                     | 6,115                    | 0             | 0                   | 4,880   |
| 73  | 0                      | 20               | 0                    | 0              | 0                     | 0                        | 0             | 0                   | 305     |
| TOT | 111                    | 61,997           | 0                    | 157            | 0                     | 3,075,076                | 0             | 500                 | 265,247 |

### WATER DIVERSION SUMMARIES

| WD | STRUCTURES REPORTING |                     |                    | ALL OTHER STRUCTURES |               | TO IRRIGATION               |                     |                                |                     |                           |                     |
|----|----------------------|---------------------|--------------------|----------------------|---------------|-----------------------------|---------------------|--------------------------------|---------------------|---------------------------|---------------------|
|    | With Record (1)      | No Water Avail. (2) | No Water Taken (3) | No Info Avail. (4)   | No Record (5) | Estimate # Visits Structure | Total Diversions AF | Total Diversions to Storage AF | Total Diversions AF | Number of Acres Irrigated | Average AF Per Acre |
| 28 | 162                  | 0                   | 10                 | 111                  | 347           | 1,254                       | 116,402             | 0                              | 115,378             | 23,710                    | 4.87                |
| 40 | 1,575                | 2                   | 210                | 325                  | 1,114         | 14,258                      | 673,566             | 62,671                         | 574,574             | 109,005                   | 5.27                |
| 41 | 79                   | 1                   | 23                 | 35                   | 452           | 3,629                       | 899,779             | 0                              | 635,368             | 71,294                    | 8.91                |
| 42 | 168                  | 0                   | 33                 | 151                  | 243           | 2,781                       | 612,950             | 24,459                         | 29,937              | 5,517                     | 5.43                |
| 59 | 232                  | 0                   | 17                 | 157                  | 980           | 3,022                       | 546,401             | 22,683                         | 375,469             | 31,527                    | 11.91               |
| 60 | 307                  | 4                   | 80                 | 96                   | 972           | 1,703                       | 135,040             | 11,883                         | 102,012             | 30,774                    | 3.31                |
| 61 | 77                   | 1                   | 21                 | 5                    | 20            | 1,677                       | 20,088              | 6,892                          | 10,013              | 3,383                     | 2.96                |
| 62 | 199                  | 0                   | 48                 | 73                   | 857           | 5,813                       | 4,567,446           | 949,212                        | 136,787             | 12,512                    | 10.93               |
| 63 | 113                  | 0                   | 33                 | 122                  | 128           | 1,647                       | 29,661              | 1,681                          | 26,103              | 2,590                     | 10.08               |
| 68 | 182                  | 0                   | 33                 | 94                   | 638           | 2,955                       | 107,439             | 38,869                         | 53,536              | 15,808                    | 3.39                |
| 73 | 41                   | 0                   | 21                 | 100                  | 99            | 422                         | 10,533              | 135                            | 10,067              | 3,048                     | 3.30                |
| TL | 3,135                | 8                   | 519                | 1,259                | 5,860         | 39,161                      | 7,719,358           | 1,118,485                      | 2,069,244           | 309,148                   | 6.69                |

Definitions: (1) Count of structures with CIU=A and NUC=blank (4) Count of structures with CIU=A and NUC=(E,F)  
 (2) Count of structures with CIU=A and NUC=B (5) Count of structures with CIU=U  
 (3) Count of structures with CIU=A and NUC=(A,C,D)=CIU=I

WATER COURT ACTIVITIES

|                               |     |
|-------------------------------|-----|
| Applications for Decrees      | 249 |
| Consultations with Referee    | 121 |
| Decrees Issued by Water Court | 133 |
| Dismissals                    | 7   |
| Complaints                    | 1   |

DECREES

|                                      | #Struc.    | #Cases     |
|--------------------------------------|------------|------------|
| New Conditional Water Rights         |            | 52         |
| Diligence on Conditional Rights      |            | 28         |
| Cancellations of Cond. Rights        |            | 6          |
| Conditional Rights Made Absolute     |            | 22         |
| Underground Water Rights Adjudicated | 40         | 18         |
| Surface Water Rights Adjudicated     | 299        | 189        |
| Water Storage Rights Adjudicated     | 96         | 50         |
| Plans for Augmentation Adjudicated   |            | 18         |
| Change of Water Rights/Location      |            | 8          |
| Change of Water Rights/Use Adj.      |            | 4          |
| Instream Flow Rights Adjudicated     |            | 0          |
| Total                                | <u>435</u> | <u>395</u> |

APPENDIX E  
DIVISION IV  
1998 RIVER CALLS  
Water District 28

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE OF<br/>CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON/<br/>CALLING</u> |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|----------------------------|
| Razor Creek                | Hirdman #1 Ditch             | 10743.00000                   | 6/8/98                  | Season                      | Greg Peterson              |
| Razor Creek                | Hirdman #2 Ditch             | 10743.00000                   | 6/8/98                  | Season                      | Greg Peterson              |
| Razor Creek                | Hirdman #3 Ditch             | 10743.00000                   | 6/8/98                  | Season                      | Greg Peterson              |
| Razor Creek                | Kennedy #1 Ditch             | 10301.00000                   | 6/8/98                  | Season                      | Greg Peterson              |
| Razor Creek                | Kennedy #2 Ditch             | 10301.00000                   | 6/8/98                  | Season                      | Greg Peterson              |

Water District 40

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE OF<br/>CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON/<br/>CALLING</u> |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|----------------------------|
| Clear Fork                 | Ditch #3                     | 21263.17335                   | 8/18/98                 | 9/30/98                     | Larry McIntyre             |
| Cow Creek                  | Overland Ditch               | 21263.15919                   | 7/14/98                 | 9/19/98                     | Pete Kasper                |
| Crystal Creek              | CCIS Ditch                   | 12350.00000                   | 7/13/98                 | 10/30/98                    | LeRoy McLaughlin           |
| Current Creek              | Welch Ditch                  | 25087.33470                   | 7/30/98                 | Season                      | Bud Burgess                |
| Deep Creek                 | Filmore Ditch                | 29260.25001                   | 8/18/98                 | 10/19/98                    | Jon Lee                    |
| Dirty George               | Bourn Ditch                  | 29260.21275                   | 6/28/98                 | Season                      | Stanton Green              |
| Dirty George               | Eagle Ditch                  | 21341.00000                   | 6/28/98                 | Season                      | Stanton Green              |
| Dirty George               | Obert Ditch                  | 21263.16102                   | 6/30/98                 | Season                      | Bud Hawkins                |
| Dirty George               | Perkins Bowerman             | 21263.19311                   | 6/30/98                 | Season                      | Bud Hawkins                |
| Dirty George               | Blake Ditch                  | 20501.13605                   | 7/10/98                 | Season                      | Bud Hawkins                |
| Dirty George               | Bourn Ditch                  | 20501.16496                   | 8/12/98                 | Season                      | Stanton Green              |
| Dirty George               | Cedar Park Ditch             | 20501.14413                   | 8/15/98                 | Season                      | Lynn Sanburg               |
| Hamilton Draw              | McMurry Ditch                | 21263.16679                   | 7/18/98                 | Season                      | Elmer Ferganchick          |
| Kiser Creek                | Roseberry                    | 20501.13301                   | 6/29/98                 | Season                      | Fogg                       |

Water District 40 cont'd

| <u>STREAM</u><br><u>AFFECTED</u> | <u>NAME OF</u><br><u>CALLING STRUCTURE</u> | <u>ADMIN #</u><br><u>CALL STRUC</u> | <u>DATE</u><br><u>OF CALL</u> | <u>DURATION</u><br><u>OF CALL</u> | <u>PERSON</u><br><u>PLACING CALL</u> |
|----------------------------------|--|-------------------------------------|-------------------------------|-----------------------------------|--------------------------------------|
| Lake Fork #22                    | 13356.00000                                | 7/21/98                             | Season                        | W. Bull                           |                                      |
| Kiser Creek                      | Lake Fcrk #9                               | 13356.00000                         | 8/19/98                       | Season                            | W. Bull                              |
| Leroux Creek                     | Stull Ditch                                | 21089.15502                         | 6/29/98                       | Season                            | Fred Burritt                         |
| Leroux Creek                     | Highline D.                                | 21089.14413                         | 7/03/98                       | Season                            | Robert White                         |
| Leroux Creek                     | Cow Creek Ditch                            | 12276.00000                         | 7/14/98                       | Season                            | Wm. Ogburn                           |
| Minnesota Cr                     | Minnesota Canal                            | 14413.13758                         | 7/07/98                       | Season                            | Grant Farnsworth                     |
| Minnesota Cr                     | Minnesota Canal                            | 14413.12218                         | 8/2/98                        | Season                            | Stream                               |
| N.Fk.Gun.                        | Paonia Ditch                               | 14413.12114                         | 7/22/98                       | 10/9/98                           | Bob Lund                             |
| Oak Creek                        | Oak Cr. #2 Ditch                           | 21263.19113                         | 7/1/98                        | Season                            | Toy Simmons                          |
| Roatcap                          | Robert Stucker                             | 22339.00000                         | 6/23/98                       | Season                            | Steve Walcott                        |
| Smith Fork                       | Grandview Ditch                            | 21263.16523                         | 7/3/98                        | 7/14/98                           | Albert Scherrer                      |
| Smith Fork                       | Clipper Ditch                              | 13076.00000                         | 7/10/98                       | 9/22/98                           | Bill Linman                          |
| Smith Fork                       | Clipper Ditch                              | 13076.00000                         | 7/10/98                       | 10/16/98                          | Bill Linman                          |
| Smith Fork                       | Clipper Ditch                              | 13076.00000                         | 7/21/98                       | 9/18/98                           | Bill Linman                          |
| Smith Fork                       | Clipper Ditch                              | 13076.00000                         | 9/22/98                       | 9/18/98                           | Bill Linman                          |
| Surface Cr.                      | Alfalfa Ditch #1                           | 11674.00000                         | 4/7/98                        | Stream chng                       | Rus England                          |
| Surface Cr.                      | Beeson Ditch                               | 29260.19098                         | 5/2/98                        | Stream chng                       | Mack Gorrod                          |
| Surface Cr.                      | Bonita #18                                 | 13514.00000                         | 4/30/98                       | Stream chng                       | Elmer Ferganchick                    |
| Surface Cr.                      | Bonita #18                                 | 13514.00000                         | 7/16/98                       | Stream chng                       | Elmer Ferganchick                    |
| Surface Cr.                      | Butte Ditch 12                             | 13112.00000                         | 4/1/98                        | Stream chng                       | Mel Schroeder                        |
| Surface Cr.                      | Cedar Mesa D.                              | 20501.16329                         | 4/29/98                       | Stream chng                       | Jerry Figueroa                       |
| Surface Cr.                      | Cedar Mesa D.                              | 20501.16329                         | 6/27/98                       | Stream chng                       | Jerry Figueroa                       |
| Surface Cr.                      | Cook Ditch                                 | 11748.00000                         | 4/28/98                       | Stream chng                       | Town of Cedaredge                    |
| Surface Cr.                      | Cook Ditch                                 | 11748.00000                         | 8/21/98                       | Stream chng                       | Town of Cedaredge                    |
| Surface Cr.                      | Eric Johnson #13                           | 13120.00000                         | 5/13/98                       | Stream chng                       | Gene Young                           |
| Surface Cr.                      | Eric Johnson #13                           | 13120.00000                         | 7/17/98                       | Stream chng                       | Gene Young                           |

Water District 40 cont'd

| <u>STREAM AFFECTED</u> | <u>NAME OF CALLING STRUCTURE</u>   | <u>ADMIN # CALL STRUC</u> | <u>DATE OF CALL</u> | <u>DURATION OF CALL</u> | <u>PERSON PLACING CALL</u> |
|------------------------|--|---------------------------|---------------------|-------------------------|----------------------------|
| Surface Cr.            | Fogg Ditch   | 12876.00000               | 4/4/98              | Stream chng             | Mel Schroeder              |
| Surface Cr.            | Fogg Ditch   | 20501.14080               | 7/1/98              | Stream chng             | Mel Schroeder              |
| Surface Cr.            | Forrest Ditch  | 12881.00000               | 4/17/98             | Stream chng             | Steve Tuck                 |
| Surface Cr.            | Gregg Ditch  | 29260.17653               | 4/28/98             | Stream chng             | Merl Reynolds              |
| Surface Cr.            | Gurney Ditch   | 20501.15432               | 4/29/98             | Stream chng             | Melanie Son                |
| Surface Cr.            | Gurney Ditch   | 20501.15432               | 6/28/98             | Stream chng             | Arlo Hanson                |
| Surface Cr.            | Horseshoe D. 19  | 13615.00000               | 4/28/98             | Stream chng             | Willie Barton              |
| Surface Cr.            | Horseshoe D. 19  | 13615.00000               | 7/15/98             | Stream chng             | Willie Barton              |
| Surface Cr.            | Lone Pine D.   | 20501.17790               | 5/1/98              | Stream chng             | Dick Jones                 |
| Surface Cr.            | Lone Pine D.   | 20501.17790               | 6/20/98             | Stream chng             | Dick Jones                 |
| Surface Cr.            | Old Reliable   | 13514.00000               | 4/25/98             | Stream chng             | Benson Palmer              |
| Surface Cr.            | Omega #23  | 20501.15030               | 4/25/98             | Stream chng             | Tongue Creek Or.           |
| Surface Cr.            | Orcharc Ranch #4   | 12182.00000               | 4/21/98             | Stream chng             | Norm Kehmeier              |
| Surface Cr.            | Orcharc Ranch #4   | 12182.00000               | 8/8/98              | Stream chng             | Bob Hamilton               |
| Surface Cr.            | Paradise D.  | 20501.13331               | 5/8/98              | Stream chng.            | Bill Kissner               |
| Surface Cr.            | Rose D. #37  | 20501.16529               | 4/27/98             | Stream chng             | Hans Reusch                |
| Surface Cr.            | Rose D. #37  | 20501.16529               | 6/26/98             | Stream chng             | Hans Reusch                |
| Surface Cr.            | Settle Ditch   | 12053.00000               | 4/20/98             | Stream chng             | Bud Hawkins                |
| Surface Cr.            | Settle Ditch   | 12053.00000               | 8/7/98              | Stream chng             | Bud Hawkins                |
| Surface Cr.            | Sheparc #6 D.  | 12717.00000               | 4/30/98             | Stream chng             | Charles Lutje              |
| Surface Cr.            | Sheparc #6 D.  | 12717.00000               | 8/5/98              | Stream chng             | Charles Lutje              |
| Surface Cr.            | Trickle Ditch  | 20501.13574               | 4/28/98             | Stream chng             | Melba Jones                |
| Surface Cr.            | Trickle Ditch  | 20501.13574               | 7/1/98              | Stream chng             | Melba Jones                |
| Surface Cr.            | Weir & Johnson   | 20501.13223               | 5/4/98              | Stream chng             | Jim Vela                   |
| Surface Cr.            | #1 Decree varied from 100% down to 50% throughout summer re flow changes |                           |                     |                         |                            |

Water District 40 cont'd

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>CALLING STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON<br/>PLACING CALL</u> |
|----------------------------|--------------------------------------|-------------------------------|-------------------------|-----------------------------|--------------------------------|
| Terror Cr.                 | Fawcett Ditch                        | 12370.00000                   | 7/14/98                 | 9/19/98                     | Pete Kasper                    |
| Terror Cr.                 | Fawcett Ditch                        | 12370.00000                   | 7/23/98                 | 10/19/98                    | Richard Rudin                  |
| Ward Creek                 | Wagner Waste                         | 46012.00000                   | 7/12/98                 | Season                      | Doug Frasier                   |
| Ward Creek                 | Lone Friday Ditch                    | 29260.20544                   | 7/15/98                 | Season                      | Larry Dumler                   |
| Ward Creek                 | Carbon Ditch                         | 13685.00000                   | 8/15/98                 | Season                      | Eldon Rusch                    |
| Youngs Cr.                 | Bronchc/Cherokee 38                  | 13254.00000                   | 7/1/98                  | Season                      | Frost                          |
| Youngs Cr.                 | Bronchc/Lookout 44                   | 13254.00000                   | 7/1/98                  | Season                      | Frost                          |
| Youngs Cr.                 | Cherokee                             | 20501.16893                   | 6/20/98                 | Season                      | Chan Fogg                      |
| Youngs Cr.                 | Childs                               | 13141.00000                   | 7/17/98                 | Season                      | Chan Fogg                      |

Water District 41

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u>   |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|-----------------|
| Horsefly                   | Albush Ditch                 | 24221.22524                   | 6/1/98                  | Season                      | Mardell Sanders |

Water District 42

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u> |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|---------------|
| East Creek                 | Lurvey Ditch #1              | 22848.21258                   | 6/2/98                  | Season                      | Ron Tipping   |
| Kannah Creek               | Bowen Private #6             | 13121.00000                   | 7/30/98                 | 8/5/98                      | Steve Bonnell |
| Kannah Creek               | Brown & Campion #8           | 13499.00000                   | 7/20/98                 | 7/30/98                     | Bill Blair    |
| Kannah Creek               | Brown & Campion #5           | 13102.00000                   | 8/5/98                  | 8/14/98                     | Bill Blair    |
| Kannah Creek               | Grand Jct Fl&WW              | 30895.28975                   | 11/1/97                 | 1/15/98                     | Danny Vanover |

Water District 42 ccnt'd.

| <u>STREAM</u><br><u>AFFECTED</u> | <u>NAME OF</u><br><u>STRUCTURE</u> | <u>ADMIN #</u><br><u>CALL STRUC</u> | <u>DATE</u><br><u>OF CALL</u> | <u>DURATION</u><br><u>OF CALL</u> | <u>PERSON</u> |
|----------------------------------|------------------------------------|-------------------------------------|-------------------------------|-----------------------------------|---------------|
| Kannah Cr.                       | K.C. Highline                      | 22848.21251                         | 6/25/98                       | 6/29/98                           | Danny Vanover |
| Kannah Cr.                       | K.C. Highline                      | 13904.00000                         | 6/29/98                       | 7/20/98                           | Mark Miller   |
| Kannah Cr.                       | K.C. Highline                      | 34419.12419                         | 1/15/98                       | 4/1/98                            | Randy Cuciat  |
| Kannah Cr.                       | Kannah Cr.Ext.D.                   | 12724.00000                         | 9/4/98                        | 9/8/98                            | Ed Gardner    |
| Kannah Cr.                       | Kannah Cr.Ext.D.                   | 12724.00000                         | 9/9/98                        | 10/12/98                          | Ed Gardner    |
| Kannah Cr.                       | Northwestern #4                    | 13007.00000                         | 8/14/98                       | 8/24/98                           | John Whiting  |
| Kannah Cr.                       | Smith Ditch #3                     | 13007.00000                         | 8/24/98                       | 9/4/98                            | Bud Bradbury  |
| Kannah Cr.                       | Smith Ditch #3                     | 130007.00000                        | 9/8/98                        | 9/9/98                            | Bud Bradbury  |
| Kannah Cr.                       | Washburn/Downing                   | 13007.00000                         | 8/14/98                       | 8/14/98                           | John Whiting  |
| Kannah Cr.                       | Wm. H. Williams                    | 30895.23597                         | 6/24/98                       | 6/25/98                           | Vic Jensen    |

Water District 59

No calls

Water District 60

No calls

Water District 61

| <u>STREAM</u><br><u>AFFECTED</u> | <u>NAME OF</u><br><u>STRUCTURE</u> | <u>ADMIN #</u><br><u>CALL STRUC</u> | <u>DATE</u><br><u>OF CALL</u> | <u>DURATION</u><br><u>OF CALL</u> | <u>PERSON</u> |
|----------------------------------|------------------------------------|-------------------------------------|-------------------------------|-----------------------------------|---------------|
| Paradox Cr                       | All Structures                     |                                     | 7/10/98                       | 8/17/98                           |               |



Water District 62

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u> |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|---------------|
| Powderhorn                 | Schecker Ditch               | 15120.00000                   | 6/29/98                 | Season                      | Steve Cadwell |
| Trout Creek                | Johnson Ditch                | 23138.20175                   | 7/2/98                  | Season                      | Bill Thomas   |

Water District 63

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u> |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|---------------|
| West Creek                 | Bartholomew & Hatch          | 30079.18294                   | 9/4/98                  | 9/22/98                     | James Boulden |

Water District 68

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u>  |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|----------------|
| Horsefly                   | Tierra Colo. D.              | 27184.21672                   | 5/28/98                 | Season                      | Myna, Bob Voss |
| Horsefly                   | Albush Ditch D.              | 24221.22524                   | 6/1/988                 | Season                      | Mardel Sanders |

Water District 73

| <u>STREAM<br/>AFFECTED</u> | <u>NAME OF<br/>STRUCTURE</u> | <u>ADMIN #<br/>CALL STRUC</u> | <u>DATE<br/>OF CALL</u> | <u>DURATION<br/>OF CALL</u> | <u>PERSON</u>    |
|----------------------------|------------------------------|-------------------------------|-------------------------|-----------------------------|------------------|
| Coates Creek               | Moorland Ditch               | 22848.22088                   | 6/8/98                  | Season                      | Jay Vanloan      |
| Chiquita Dol.              | Upper Saxbury D.             | 22848.17806                   | 6/23/98                 | Season                      | Mtn. Island Rnch |

TABLE OF ORGANIZATION - PERSONNEL  
IRRIGATION DIVISION NO. IV

Division Engineer - Kenneth W. Knox  
Assistant Division Engineer - Wayne Schieldt  
Program Assistant I - Jean Kurtz  
Well Commissioner - LuAnn Beasley  
Dam Safety Engineer - James Norfleet  
Hydrographer - Jerry Thrush

Water District 28

WATER COMMISSIONER  
Bonnie Irby

Water District 40

PR. WATER COMMISSIONER  
Jimmie Boyd

Water District 41

SR. WATER COMMISSIONER  
Crandall Howard

SR. WATER COMMISSIONER  
Robert Starr

Water District 42

SR. WATER COMMISSIONER  
Richard Belden

WATER COMMISSIONER  
Lynne Bixler

Cliff Davis  
Merritt Denison  
James Holiman  
Henry LeValley  
Albert Mahannah  
Kenneth Mahannah  
Jack McHugh  
L. Gregg Scott  
Charles Stein  
Stephen Tuck

Water District 59

WATER COMMISSIONER  
Richard Rozman

Water District 60

SR. WATER COMMISSIONER  
Lyman Campbell  
WATER COMMISSIONER  
Aaron Todd

Water District 61

WATER COMMISSIONER  
Clinton Oliver

Water District 62

SR. WATER COMMISSIONER  
C. Crandall Howard  
WATER COMMISSIONER  
Carl Hurst

Water District 63

SR. WATER COMMISSIONER  
Richard Belden

Water District 68

WATER COMMISSIONER  
Eric Weig

Water District 73

SR. WATER COMMISSIONER  
Richard Belden

OFFICE ADMINISTRATION AND WORKLOAD MEASURES

ACTIVITY SUMMARY

WATER DIVISION NO. IV

1998 CALENDAR YEAR

ACTIVITY SUMMARY

ACTIVITY

TOTALS

|  |         |
|--|---------|
| Professional and Technical Staff         | 3       |
| Clerical Staff                           | 1       |
| Water Commissioners FTE (Full/Part-Time) | 24      |
| 1995 Decreed Surface Rights              | 299     |
| Surface Rights Administered (visits)     | 29,934  |
| Storage Rights Administered (visits)     | 7,590   |
| 1995 Decreed Wells                       | 40      |
| 1995 Decreed Plans of Augmentation       | 28      |
| Consultations with Referee               | 121     |
| Water Court Appearances                  | 29      |
| Meetings with Water Users                | 142     |
| Contacts to Give Public Assistance       | *19,823 |
| *Includes Water Commissioner Contacts    |         |
|  |         |