## Colorado Division of Water Resources

## 2006

Annual Report
Water Division VI
Yampa, White \& N. Platte River Basins
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## Introduction

This report summarizes the activities of the Division 6 office of the Colorado Division of Water Resources. It presents an overview of the administration activities that took place during both the calendar and irrigation year 2006 and statistical data for both the water and irrigation year 2006. Please direct any questions regarding the information in this report to the Division 6 office in Steamboat Springs.

## Water Year 2006

## Basin Hydrology

## Snowpack

Water year 2006 started out with plentiful rain and snowfall, but by May the snowpack had dropped significantly as shown in Table 1. The high snowpack in December through March caused concern for many that spring runoff could be significant and potentially cause damage. As a result, monthly flood information updates starting in March and continuing until June were provided to the Denver office. These updates provided an overview of the basin-wide snowpack, a listing of specific gage/SNOTEL sites of interest or concern, preparation activities and meetings, high water and flooding observations, and any other information pertinent to present and predicted flood concerns. Though runoff flows were high in limited areas, very little damage occurred. The more significant flooding was near the City of Craig as seen in the pictures.


TABLE 1
Snow Water Equivalent as Percent of Average
Water Year 2006

| Drainage | Dec | Jan | Feb | Mar | Apr | May |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
| North Platte River | 131 | 120 | 115 | 113 | 89 | 38 |
| White River | 132 | 118 | 106 | 105 | 84 | 58 |
| Yampa River | 132 | 126 | 118 | 117 | 77 | 38 |

Table 2 shows the monthly runoff forecasts developed by the Natural Resources Conservation Service (NRCS) for selected sites and the actual runoff as measured at the USGS gauging stations.

TABLE 2
2006 Total Runoff Forecast for April through July in 1000's of Acre-Feet

| Station Name | 1-Jan |  | 1-Mar |  | 1-May |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Runoff | \% Avg | Runoff | \% Avg | Runoff | \% Avg | Runoff | \% Avg |
| North Platte nr Northgate | 350 | 130 | 360 | 133 | 190 | 83 | 211 | 81 |
| White River nr Meeker | 350 | 121 | 350 | 121 | 300 | 103 | 310 | 110 |
| Little Snake River nr Lily | 455 | 125 | 470 | 129 | 355 | 97 | 228 | 66 |
| Yampa River nr Maybell | 1340 | 135 | 1350 | 135 | 1100 | 111 | 974 | 103 |

## Precipitation

Precipitation amounts varied widely across the Division in 2006 as shown in Table 3. The water year started out with above average precipitation in all three basins (North Platte, White and Yampa Rivers). In the North Platte River Basin, precipitation dropped to well below average in the months of January and February, March rose to near average, and April, May and June were well below average. In July precipitation returned with above average values. In the White River Basin, precipitation dropped to well below average from April through July and then rose above average for the remainder of the water year. In the Yampa River Basin, precipitation dropped below average in February and April, but was above average for the remainder of the water year. Table 4 shows the basin-wide percentages for precipitation measured at the various SNOTEL sites in the Division.

Table 3
Monthly Precipitation Data for Selected Sites Water Year 2006

| Site | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Walden |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (in) | 0.83 | 1.64 | 0.60 | 0.25 | 0.05 | 0.8 | 0.39 | 0.76 | 0.51 | 1.60 | 1.47 | 1.68 | 10.58 |
| \% avg | 93 | 198 | 102 | 40 | 8 | 98 | 36 | 50 | 48 | 125 | 140 | 139 | 96 |
| Meeker |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (in) | 2.17 | 1.39 | $*$ | 1.42 | 0.86 | 2.37 | 0.67 | 0.54 | 0.04 | 1.18 | 2.57 | 3.50 | 16.71 |
| \% avg | 132 | 126 |  | 177 | 115 | 176 | 48 | 36 | 4 | 91 | 206 | 292 | 126 |
| Steamboat <br> (in) | 3.64 | 2.90 | 4.59 | 2.78 | 1.39 | 2.35 | 1.65 | 2.73 | 1.67 | 2.85 | 2.11 | 4.02 | 32.68 |
| \% avg | 190 | 123 | 194 | 108 | 65 | 115 | 71 | 118 | 117 | 195 | 145 | 234 | 136 |

*     - Data Unavailable

Monthly Precipitation Data for Selected Sites Calendar Year 2006

| Site | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Walden |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (in) | 0.25 | 0.05 | 0.80 | 0.39 | 0.76 | 0.51 | 1.60 | 1.47 | 1.68 | 1.86 | 0.65 | 0.66 | 10.68 |
| $\%$ avg | 40 | 8 | 98 | 36 | 50 | 48 | 125 | 140 | 139 | 209 | 78 | 112 | 92 |
| Meeker |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (in) | 1.42 | 0.86 | 2.37 | 0.67 | 0.54 | 0.04 | 1.18 | 2.57 | 3.50 | 4.02 | 1.16 | 0.83 | 19.16 |
| $\%$ avg | 177 | 115 | 176 | 48 | 36 | 4 | 91 | 206 | 292 | 244 | 105 | 92 | 135 |
| Steamboat |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (in) | 2.78 | 1.39 | 2.35 | 1.65 | 2.73 | 1.67 | 2.85 | 2.11 | 4.02 | 4.59 | 2.03 | 1.94 | 30.11 |
| $\%$ avg | 108 | 65 | 115 | 71 | 118 | 117 | 195 | 145 | 234 | 239 | 86 | 82 | 125 |

## Table 4

Basin-Wide Precipitation Data from NRCS SNOTEL Sites
Water Year 2006
(Percent of Average)

| Oct | Nov | $\underline{D e c}$ | $\underline{J a n}$ | Feb | Mar | Apr | Mav | $\underline{\text { Jun }}$ | $\underline{\text { Jul }}$ | Aug | Sep | \% of Avg |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 118 | 138 | 151 | 104 | 76 | 96 | 71 | 58 | 28 | 128 | 108 | 200 | 105 |

## Streamflows

The streamflows at North Platte River near Northgate were below average in October and November, near average in December, above average from January through April and below average for the remainder of the water year. The total runoff for the water year at this site was $84 \%$ of average and the peak occurred on May 25, 2006 at a discharge of 2,030 cfs as shown in Table 5.

Historically, the peak has occurred on May 26 with an average peak discharge of $3,094 \mathrm{cfs}$. Streamflows on the White River below Boise Creek ran just below average from October through March before rising above average in April and May. The flow dropped back to below average and remained there for the remainder of the water year. The total runoff for the water year was $92 \%$ of average. As shown in Table 5, the peak at this gage station occurred on May 24, 2006 at a value of 3,210 cfs. Historically, the peak has occurred on May 28 with an average peak discharge of 3,285 cfs. The Little Snake River near Lily ran near the mean from October through January before dropping below average from February through August and was above average in September. The total runoff for the water year was $67 \%$ of average. As shown in Table 5, the peak occurred at this gage station on May 24, 2006 at a value of 4,640 cfs. Historically, the peak discharge has occurred on May 18 with an average peak discharge of 5,295 cfs. Streamflows on the Yampa River near Maybell ran very close to average in the months of October through January, were below average in February and March and above average in April and May. Streamflow was again below average from June through August. A significant increase in precipitation in September resulted in above average streamflows for this month. The total runoff for the water year was $101 \%$ of average. As shown in Table 5, the peak occurred at this station on May 24, 2006 at a discharge of $11,800 \mathrm{cfs}$. Historically, the peak has occurred on May 25 with an average peak discharge of 10,355 cfs.

## Table 5

Total Runoff for Water Year 2006

| Station Name | Total Flow <br> $(1000 \mathrm{AF})$ | Average <br> $(1000 \mathrm{AF})$ | $\%$ of Average |
| :--- | :---: | :---: | :---: |
| North Platte River near Northgate | 258,800 | 308,200 | 84 |
| White River below Boise Creek | 489,500 | 532,200 | 92 |
| Little Snake River at Lily | 272,600 | 407,700 | 67 |
| Yampa River near Maybell | $1,129,000$ | $1,122,000$ | 101 |

Peak Flow Rate and Date of Occurrence

| Station Name | Peak Flow (cfs) | Date |
| :--- | :---: | :---: |
| North Platte River near Northgate | 2,030 | May 25, 2006 |
| White River below Boise Creek | 3,210 | May 24, 2006 |
| Little Snake River at Lily | 4,640 | May 24, 2006 |
| Yampa River near Maybell | 11,800 | May 24, 2006 |

## Water Administration

Water administration in Division 6 was slightly above average throughout irrigation year 2006. Appendix B lists the calls that occurred in the various water districts.

## Yampa and Green River Drainages

The Yampa River drainage encompasses Water Districts 44, 54, 55, 57 and 58 and the Green River drainage encompasses Water District 56. In irrigation year 2006, water administration occurred within the Upper Yampa River Basin (Water District 58) on Bear River, Hunt Creek, Martin Creek and Oak Creek. Also in this portion of the basin, a minimum in-stream flow call was placed by the Colorado Water Conservation Board (CWCB) on Fish Creek of the Yampa River. In the middle portion of the Yampa River Basin (Water Districts 44 and 57), water administration occurred on West Fish Creek of Trout Creek as well as on Trout Creek in its upper reaches, Fortification Creek, Little Bear Creek of Fortification Creek, Morapas Creek and Milk Creek. A call was placed by a Wyoming water user on the Little Snake River in Wyoming, however this office did not honor the call as it was for a double appropriation. In District 56, a call was placed and water administration occurred on Beaver Creek of the Green River.

As a result of low flows at the Yampa River near Craig gage station in late August and into September, Tri-State Generation was required to make reservoir releases under an agreement with the U.S. Fish and Wildlife Service to supplement flows in the critical habitat area on the Yampa River below Craig. Releases were made from Stagecoach Reservoir starting on August 25 at a rate of 20 cfs. On September 7, the release was reduced to 10 cfs and ceased altogether September 12, due to above average precipitation as indicated earlier in Table 3.

Rather than place a call this summer for their minimum in-stream flow on Willow Creek of the Elk River of the Yampa River, the CWCB worked with Colorado State Parks concerning releases from Steamboat Lake. Colorado State Parks agreed to voluntarily release all inflow into Steamboat Lake up to the decreed minimum in-stream flow of 5.0 cfs.

## White River Drainage

Administration in Water District 43 was confined to the Piceance Creek drainage, running from midApril through mid-August. This basin experienced a very dry year and with so much oil and gas activity occurring within the basin, many difficulties were encountered with administering the call. The biggest problem encountered was water tank trucks simply stopping and pumping water from Piceance Creek or one of its tributaries at any time of the day and at no specific location. Energy exploration continues to grow in the Piceance Creek and Yellow Creek basins at an ever-increasing
pace. Many ranchers have sold their land and water rights to energy companies and these water rights have been changed to include industrial and augmentation uses, among others. The lands are then leased back to the ranchers whereby they can continue ranching operations and irrigation practices until such time that the energy companies need the water for other uses.

Sufficient water on the mainstem of the White River and on the major tributaries upstream of Meeker satisfied the needs of the water users throughout the year.

## North Platte Drainage

The North Platte drainage returned to what has become normal administration in 2006 with the Michigan and Illinois Rivers and many tributaries of the North Platte River under administration. The Michigan River ran very poorly for most of the season and was under administration from May 15 through July 12, with the exception of a five day period at the end of May. By late August, the rivers were very low, with
 only 2.5 cfs at the Michigan River at Walden gage station and 3.5 cfs at the Michigan River near Meadow Creek Reservoir gage station. By the first week of September, ditches running stock water had turned down to the minimum needed in an attempt to avoid a call on the river. By September 10, rains had brought the river back up, but on October 2, the Old SC Ditch, which takes water from the Michigan to the Illinois River and then into Walden Reservoir, placed a call.

The Illinois River was down to less than 30 cfs by May 7 and less than 20 cfs by May 12. The Illinois River or one of its tributaries was on call from May 15 through October 23. From May 30 through June 14, the Illinois River was included in the Michigan River call. On June 15 a call went on the Illinois separate from the Michigan. After July 23, the only call was on Spring Creek, a small tributary of the Illinois River. As with the Michigan, the Illinois was very low and on August 24 there was only 2.5 cfs at the Illinois River near Rand gage station. The flows on September 6 were comparable to those on the same date in 2002. The Illinois River had stopped running at Walden by July 23 and did not begin again until mid-October.

## Compacts and Inter-State Agreements

Following is a brief description of the interstate compacts and agreements administered by Division 6.

## Upper Colorado River Compact

Under Article XIII (a), the State of Colorado will not cause the flow of the Yampa River at the Maybell gage to be depleted below an aggregate amount of 5,000,000 acre-feet for any period of ten consecutive years. For the period 1997 to 2006, the aggregate flow at the Maybell gage was 10,011,483 acre-feet.

The Little Snake River is administered jointly with the State of Wyoming during times of shortage pursuant to Article XI of the Upper Colorado River Compact. There were no calls honored by the State of Colorado on the Little Snake River in 2006.

Our office continues to work with the State of Wyoming on updating the combined administration list for the Little Snake River. This effort seems to be stalled at this time and is in the hands of Wyoming for their final approval of the revised list. The administrative schedule developed many years ago has proved to be sufficient for use in recent administration and will continue to be used until such time that the revised one can be finalized and approved.

## North Platte River (Nebraska v. Wyoming, U.S. Supreme Court Decree)

Under the North Platte River decree, Colorado is limited to a total of 145,000 acres of irrigation, no more than 17,000 acre-feet per year of storage for irrigation purposes and no more than 60,000 acre-feet of transmountain diversions in any period of ten consecutive years in the North Platte drainage of Colorado. In water year 2006, a total of 101,393 acres were irrigated and 7,951 acrefeet were stored for irrigation use. The amount of irrigated acreage was down from 2005 by approximately 14,000 acres, reflecting the return to below normal water availability in the North Platte system. Transmountain diversions out of the basin totaled 2,734 acre-feet - down significantly from the previous year. The ten-year total of transmountain diversions out of the basin was 42,855 acre-feet. None of the limitations of the Supreme Court Decree were exceeded in 2006.

Division representatives attended both of the scheduled meetings of the North Platte Decree Committee held in April and October 2006.

## Pot Creek

Pot Creek is a small tributary to the Green River; the headwaters of which are in Utah and entering the Green River in Colorado. Pot Creek water is apportioned among the users of Utah and Colorado under a Memorandum of Understanding (MOU) last updated and signed by the State Engineers of Utah and Colorado on March 1, 2005. For years, little if any water was available for Colorado users, however for the past two years the winter snowpack has been enough to provide water to the Colorado users. In 2006 all of the major reservoirs in Utah filled and spilled. At the annual water users meeting, the Pot Creek Commissioner reported that during the winter storage
 season, the entire Pot Creek system gained 1,407 acre-feet of storage and Offield Reservoir in Colorado had filled prior to May 1. No release was made this year from the Utah reservoirs to satisfy the Colorado users. Pot Creek at the state line gage began to flow on March 29 and continued to flow until May 16. The flow at this site peaked on April 10 at a discharge of 87.1 cfs . The annual total flow past the gage for water year 2006 was 1,204 acre-feet.

The provisions of the MOU dated March 1, 2005 concerning the installation of headgates and/or measuring devices were waived for the 2005 irrigation season and again in 2006 to allow for further engineering and development of cost estimates of measuring devices to be installed on Pot Creek below Matt Warner Reservoir and above Calder Reservoir, as required by the MOU.

## Dam Safety

The Dam Safety Branch of the Division of Water Resources is responsible for the safety of dams in Colorado while working to protect the loss of property or life and the loss of water supplies due to the failure of a dam. The two primary functions of the Dam Safety Branch are the review of designs for the construction, modification, or repair of a dam with subsequent construction inspections and periodic safety inspections of existing dams to insure their integrity. A full summer of inspections was completed in 2006, including dams in the upper reaches of Division 5.

In the design review and construction area, Division 6 was busy during 2006. Designs were reviewed and approved for repairs of rodent damage at two dams in the White River drainage, and for seepage and spillway repairs at one dam in the Yampa River drainage. Construction inspections were performed as these repairs were completed. The dam safety engineer performed an
inspection of a small low hazard dam in the northwest corner of the state while the owner was lowering the dam to non-jurisdictional size. The cleanup of the rockslide in the emergency spillway channel at Lake Catamount Dam also required a final inspection. With the enlargement of the Elkhead Creek Dam near Craig in full swing, inspections were completed with Mark Haynes from the Denver office as the earthwork progressed up the old dam and the outlet and spillway were completed. This project will add approximately 12,000 acre-feet of storage to the Yampa River drainage downstream of Craig, Colorado. After reaching substantial completion in December 2006, the reservoir was able to begin filling. The Upper Yampa Water Conservancy District continues planning to determine the feasibility of raising the spillway crest of Stagecoach Dam by four feet to increase storage on the upper reach of the Yampa River, with construction now planned for late 2007 and 2008. Finally, a new boom in energy development in the Piceance Creek Basin has resulted in the construction of a new dam and the design for a second dam. The design review engineer from the Grand Junction office is overseeing these projects.

During 2006, the Division 6 Dam Safety Engineer inspected ten high hazard dams, six significant hazard dams, and 15 low hazard dams in the Division in accordance with a long range inspection schedule. In addition, the Federal Energy Regulatory Commission (FERC) completed inspections on two of the remaining high hazard, power generating dams in Division 6. The remaining high hazard dam, Elkhead Creek, received numerous construction inspections of the enlargement project.


The Dam Safety Engineer also inspected four high hazard dams, six significant hazard dams, and six low hazard dams in Division 5. The Bureau of Reclamation is responsible for inspecting three high hazard dams that they own in Division 5.

There were several significant problems found at some of the low hazard dams in Division 6 during inspections in 2006. The State Engineer prepared a breach order for one low hazard dam due to an escalating hazard and a lack of action by the owner. A recommendation was made to breach a second low hazard dam, but the owner
 committed to repair the dam. Of the 15 low hazard dams inspected, four were rated unsatisfactory mainly due to significant seepage and repair issues, ten were rated conditionally satisfactory mainly due to a general lack of maintenance and repair, and only one was rated satisfactory. A similar breakdown in the rating was noted during the last three inspection years. Three owners started repairs in 2006 to bring their dams up to a satisfactory rating, one owner was finishing the final approval process for repairs completed in an earlier year, and one owner lowered his dam to a nonjurisdictional size. Most of the owners seem to lack the necessary resources to hire an engineer and begin the repair process.

There were no erosion control dams and only one livestock water tank constructed in Division 6 during 2006, but applications for nine non-jurisdictional dams were processed; the smallest number in the last few years. So far, the construction of numerous non-jurisdictional dams has not caused any significant water administration issues, but some areas around the Division are experiencing a proliferation of these small dams that could result in future problems. Any of these small dams that are on-channel are required to have adequate outlet pipes capable of passing inflow to help relieve any future issues. Administration of all these structures could be a time consuming process. With the upper section of the Yampa River basin now designated as over-appropriated, the large number of non-jurisdictional dams in this basin could become a substantial administrative workload.

## Hydrographic Program

There are currently 36 active stream gage sites in the Yampa, White, and North Platte River basins. Of these, the USGS operates 24 and Division 6 operates 12. Of the twelve operated by the Division, ten are equipped with satellite monitoring. Of these, two transmit reservoir water surface elevations,
six transmit stream flow gage heights, and two transmit both parameters. The remaining two gages are equipped with a chart recorder and/or a data collection platform (DCP) to record gage heights.

In 2001, the USGS operated 33 stations in the Yampa, White, and North Platte basins, as compared with the 24 stations they are currently operating. Many of the gage stations were discontinued due to lack of available funding for the USGS stream flow program. Reduced funding has resulted in cooperators either paying more for the operation of the gages or discontinuing their cooperation all together.

In addition to operating and maintaining the gage sites, the Division 6 hydrographer, in coordination with the Water Commissioners, conducts flow measurements on ditches, reservoir releases, and streams. There were seventy-nine measurements taken at the gage sites in water year 2006 and approximately 10 to 15 measurements on ditches, reservoir releases, and other streams. Hydrographic records for water year 2006 will be published for seven of the twelve sites: Walton Creek near Steamboat Springs, Yampa River above Lake Catamount, Michigan River near Meadow Creek Reservoir, Michigan River at Walden, Illinois River near Rand, Williams Fork at Mouth near Hamilton, and Pot Creek at Stateline.

Division 6 currently has five gage stations equipped with high data rate (HDR) equipment. One HDR Sutron SatLink2 data logger was installed in 2006 at the Michigan River near Meadow Creek Reservoir. In addition, the Illinois River near Rand site is scheduled for upgrade to HDR in 2007.

During 2006, Division 6 conducted inspection, maintenance, and refurbishment activities at several sites. In August 2006, the Accubar bubbler at the Williams Fork gage station was realigned to prevent further clogging due to a significant amount of sediment build-up over the orifice. A muffler will be installed in 2007 to protect against future build-up of sediment. In October 2006, a photovoltaic battery regulator was installed at the Pearl Lake site and a new solar panel was installed at the Steamboat Lake site. A new solar panel, high data rate DCP and upgraded encoder were installed in October 2006 at the Michigan River near Meadow Creek Reservoir site. Plans to upgrade the Illinois River near Rand site were deferred until 2007.

Replacement of the existing 12-inch stilling well on Willow Creek below Steamboat Lake was initiated in late October 2006. The existing well is hydraulically connected to the stream channel via a pea gravel layer extending from the well to the channel. The new well is larger in size to better accommodate equipment (shaft encoder) and has an intake pipe extending from the well to the channel. Some damage to the new well and pipe occurred during backfill. This station is scheduled for inspection, completion and/or potential re-construction in 2007.

Division 6 acquired survey equipment in 2006, which will be used to run levels at the gage stations and establish benchmarks. In addition, a laptop computer, GPS, and IPAQ Pocket PC, as well as miscellaneous back-up equipment (batteries, staff gages, levels, etc.) were obtained for ongoing operation and maintenance of the gage stations and the hydrographic program.

No new gage installations are planned for the Division 6 hydrographic program in 2007. Ongoing and planned gage station projects include installation of a muffler on the Williams Fork; continued upgrading to high data rate DCPs; completion of construction activities at Willow Creek below Steamboat Lake; evaluation of solar panels/satellite telemetry at Bear River below Bear Lake and Walton Creek near Steamboat Springs; and miscellaneous minor station upgrades and refurbishments.

## Groundwater and Well Permitting

The Division continues to assist the public with questions and concerns relating to the drilling of wells and completing well permit applications. The Division issued two hundred nine exempt well permits in 2006 versus two hundred sixty permitted the previous year. A considerable amount of time is spent educating realtors and water users about the statutes concerning the use of groundwater in Colorado.

This year the Yampa River upstream of the Steamboat Springs RICD structures was designated as over-appropriated, thus changing the well permitting requirements. All future non-exempt well permits will now require a Court approved plan of augmentation and exempt wells permitted on less than 35 acres are limited to in-house use only within one single family dwelling.

## Water Records and Information

Summaries of diversion records for irrigation year 2006 are shown in Appendix A. These numbers show that total diversions for all uses were down by 12,224 acre-feet from 2005 and up 122,523 acre-feet from 2004. Districts 47, 54, 55,56, and 57 experienced decreases in total diversions while Districts 43, 44, and 58 experienced increases from the previous year, with the most significant increase in District 43 of 173,371 acre-feet. In District 43, the increase was primarily in power generation use. Both diversions for irrigation and the number of acres irrigated were down from the previous year with diversions down by 103,216 acre-feet. The number of visits to structures by the Water Commissioners was down by approximately 17 percent. As water administration and other demands on the Water Commissioners increases, the reliance of user-supplied data increases.

The water rights database and diversion records are maintained in Hydrobase. Ownership, decreed water rights, structure information, and structure comments are updated on a regular basis and distributed to all of the Water Commissioners semi-annually. Well data is updated in Well Tools and dam information is kept up-to-date in the DAM_app program. Access to information through Hydrobase and Well View are used significantly when responding to inquiries from the public. Effort is being made to conform to the Hydrobase coding for plans of augmentation and exchange. The Division's goal is to have these properly entered into Hydrobase by the end of the 2008 calendar year.

With the exception of the northern portion of District 47, GPS points have been obtained for all active structures with diversion records. In the winter of 2005/2006, Division 6 took on a daunting project of tabulating locations of all decreed structures for which there are no GPS locations. These locations, which included distances from section lines, were entered into an Excel worksheet that was provided to the Denver office for incorporation into the structures database in Hydrobase. This project resumed where it left off at the end of calendar year 2006. By spring 2007, nearly $100 \%$ of the decreed structures in Division 6 are predicted to have a decreed location, GPS location, or a digitized location from a USGS Quad map on which the structure location had been previously plotted, incorporated into the structures database. The purpose of this project is to be able to reproduce our aging USGS Quad maps used by office staff and Water Commissioners. This project will also make it easy for those with access to Hydrobase, to view any structure they want in any mapping program, such as TOPO!

This office has maintained a lysimeter site on the Colorado Yampa Coal Company property since 1993 and a site on the North Park Wildlife Refuge since 2000. Consumptive use data is calculated using data collected at the two lysimeter sites for the various drainage basins. This data is sometimes used when reviewing water court applications for changes of water rights, as well as for many other purposes.

## Water Court Activities

Water Court activity increased slightly in Division 6 Water Court in 2006, however, the number of 2006 water rights filed was down about 12 percent from the pervious year. The number of 2006 cases filed in Division 5 Water Court for water rights in the White River drainage was up by approximately 31 percent from the previous year. There were 86 new and amended cases filed in Division 6 in 2006 as compared to 81 in 2005, and 26 cases in Division 5 Water Court as compared to 19. The Division Engineer prepared 97 Recommendations of the Division Engineer/ Summaries of Consultation: 72 for the Division 6 Water Court and 25 for the Division 5 Water Court.

In July 2006, Judge Michael O'Hara of the Division 6 Water Court made it mandatory to electronically file all Water Court proceedings through Lexis Nexis. Though the Division 5 Water Court does not yet require electronic filing, for ease and consistency, this office is electronically filing all Recommendations of the Division Engineer/Summary of Consultations and other correspondence in both Water Courts.

This office continues to have a good working relationship with both the Division 5 and 6 Water Courts. Meetings are held once a year between this office and the Division 6 Water Judge, Clerks and Referee to discuss how things are operating between the Court and the Division of Water Resources and whether anything needs to be changed or improved upon. We continue to review new Water Court applications prior to publication in the resume to assure that applicants have provided all the required information. This activity helps save republication costs for the applicants. We also review the rulings of the Referee for accuracy before they are finalized to help reduce the number of rulings that need to be amended because of clerical errors and to assure that the rulings have incorporated or taken into account the concerns raised in the Recommendation of the Engineer/Summary of Consultation. We continue to confer with the Water Referee in Division 5 on a monthly basis via telephone conferencing. This procedure works very well and allows the comments of the Referee to be included in our Recommendations of the Division Engineer/Summary of Consultations.

## Involvement in the Water User Community

The Division staff continues to assist the public in preparing Water Court and well permit applications, provide water right and diversion information, assist water users with the proper selection and installation of water measuring devices, and provide assistance to dam owners with completing Notices of Intent to Construct Non-Jurisdictional Dams and Emergency Action Plans. Our field office in Craig continues to be a vital aspect of our public relations. The Craig office probably handles as many walk-ins as the Steamboat office.

Following is a list of meetings attended by Division staff in 2006.

- Annual meeting of the Pot Creek Distribution System
- All meetings held by the Upper Yampa Water Conservancy District
- Spring and fall meetings of the North Platte Decree Committee
- Bear River Irrigators annual meeting
- Stillwater Ditch Company annual meeting
- Various meetings of the Colorado River Water Conservation District
- Meeting held by this office with water users on Elkhead Creek below Elkhead Creek Reservoir and the Yampa River from its confluence with Elkhead Creek to the Green River
- All HB1177 Roundtable meetings for both the Yampa/White and North Platte

In addition, our staff hosted the annual Colorado Water Officials Association (CWOA) meeting from September 27 through 29, 2006.

Appendix D summarizes other activities of the office staff and Water Commissioners of the Division.

## Issues and Achievements

The construction of the enlargement of Elkhead Creek Reservoir has come to substantial completion and the reservoir is beginning to fill. The total enlargement pool is approximately 12,000 acre-feet. Five thousand acre-feet of this enlargement is designated for flow augmentation in the critical habitat reach of the Yampa River (Yampa River in Craig to the Green River at Echo Park) for the four endangered fish species. An additional 2,000 acre-feet of water will also be available for the fish through a 20-year lease with the Colorado River Water Conservation District (River District). Water not dedicated to the Fish Recovery Program is available for contract through the River District. Provided the enlargement pool fills in the spring of 2007, water could be delivered to and through the critical habitat reach in the summer of 2007. In August, letters requesting the installation of operable headgates and measuring devices were sent to more than sixty water users on Elkhead Creek below Elkhead Creek Reservoir and on the Yampa River from its confluence with Elkhead Creek to the Green River. Administrative procedures will be developed in 2007 to deliver water released from Elkhead Creek Reservoir past numerous structures and through the critical habitat reach. One major problem associated with this delivery is determining the level of transportation loss that will be assessed to the reservoir releases. There has been discussions of potential releases of stored water in the summer of 2007 and 2008 for the purpose of determining losses as well as allow this office the opportunity to develop a workable plan for the delivery and protection of the waters.

Energy development in the Piceance Creek basin of the White River still is and will continue to be an issue for years to come. Piceance Creek is heavily over-appropriated and water short. The major energy companies have purchased many of the senior water rights and have obtained decrees for changes of use, plans of augmentation, and exchanges. Many of these decrees are complicated and the fact that there are more being applied for in court that can be intertwined with one another, complicates matters even further. Understanding how these decrees interrelate and the proper administration of them during periods of shortage, is a task that will have to be undertaken in the
near future. Because the energy company's contract with other companies based outside of Colorado, this office has had to spend a considerable amount of time educating these contractors as to what they can and cannot do when it comes to water usage. A common occurrence in the summer of 2006 that caused problems with water administration was pumping companies dropping a pump into Piceance Creek while under administration to pump whatever water they wanted whenever they wanted, including throughout the night.

As reported for the last several years, the Upper Yampa Water Conservancy District (UYWCD) continues to pursue the Hayden Project on the mainstem of the Yampa River near Hayden. The intent of the project is to combine two very senior ditches into a common headgate. The present holdup is an agreement between the water users on the ditches and UYWCD. The agreement contains a clause whereby the water users are required to not place the first call on the Yampa River (no call agreement). The water users refuse to sign such an agreement and UYWCD refuses to sign an agreement without such language. As a result, it is very possible that the project will never come to fruition.

Completed in 2004, the High Savory Reservoir, located on Savory Creek tributary to the Little Snake River in Wyoming, filled the last two years. The dam was constructed, and is currently owned and operated by the Wyoming Water Development Commission. The State of Wyoming has conducted test releases the last two years to determine transit losses from the dam site to the Little Snake River and part way down the Little Snake River itself. Water released during the tests was available to users on the river at no cost. Contracted reservoir water will be available to water users in both Wyoming and Colorado starting in 2007.

In the spring of 2006, the Yampa River upstream of the City of Steamboat Springs recreational-in-channel-diversion (RICD) structures was designated as over-appropriated. This designation significantly changes well permitting in this area. As a result of this designation, the UYWCD filed an "umbrella" plan of augmentation and exchange. The plan is to establish a framework whereby water users can be included directly into a decreed plan of augmentation that uses UYWCD water rights decreed for augmentation use to replace out-of-priority depletions. The plan is designed to provide augmentation water downstream beyond the RICD structures to the confluence of Elkhead Creek and the Yampa River.

The Water Court decreed the City of Steamboat Springs RICD in December 2005 and amended it in March 2006. Though there was no call for this water right in 2006, flows in the Yampa River did occasionally drop below the decreed RICD flow amounts. Figure 1 shows the average daily flows on the Yampa River at Steamboat Springs, these daily flows plus an additional $20 \%$ which was
assumed as being those flows contributing from Soda Creek between the gage and the RICD structures, and the decreed flows. Before the City of Steamboat Springs can place a call for their water right, they must first install an additional gage station on the Yampa River, or on two tributaries that enter the Yampa River between the Yampa River at Steamboat Springs gage and the RICD structures. A representative of the City of Steamboat Springs contacted this office several times during the summer of 2006 inquiring about the type of measuring device required and who could operate and maintain the device(s).

Figure 1
Actual Flows vs. RICD Flows


The UYWCD is proposing to amend their existing Federal Energy Regulatory Commission (FERC) license to raise the storage level of Stagecoach Reservoir by 4-feet which would increase its capacity by 3,185 acre-feet. The present storage capacity of the reservoir is 33,275 acre-feet. The 4 -foot raise would only be in the spillway and not the dam itself. The justification for this additional storage is water supply, recreation use, threatened and endangered fisheries, increased power generation, and compliance with the Colorado Water Supply for the $21^{\text {st }}$ Century Act. In December 2006, the UYWCD submitted an application for Non-Capacity Related Amendment of Minor Hydropower Project License to FERC.

Some of the accomplishments of the past year for Division 6 include:

- Operated within our budget for 2006.
- Issuance of requests for the installation of operable headgates and measuring devices on Elkhead Creek below Elkhead Creek Reservoir and from the confluence of Elkhead Creek and the Yampa River downstream to the Green River.
- Completion of a full schedule of dam inspections.
- Met all final deadlines for the submittal of diversion and hydrographic records.
- Completed our water right and structure databases to conform to the Hydrobase structure.
- Tabulated all appropriative Federal Reserve water rights.
- Began project to enter all decreed structure locations into Hydrobase.
- Tabulated all newly decreed water rights (no backlog).


## Workload

As demands for more water and the number of new users increase, the workload for the field staff is becoming over-whelming. The time demand on the Water Commissioner has gone beyond just water administration to include more field inspections, public relations and contacts to assist in educating the public about water administration. As for the office staff, the scenario is the same. The hydrographic branch continues to add more gages and be involved with statewide hydrographic issues and activities. The dam safety branch has an increasing amount of design review, plus follow-up inspections of aging dams. The Division Engineer continues to review all proposed rulings and decrees prior to them being signed; provide assistance to the Water Court when needed; review all applications for errors and provide the Water Court with requests for additional information when needed before the application is published; and review all engineering reports and provide comments to Denver or applicant's attorney. While a tremendous amount of effort is put into the review of proposed rulings and decrees and engineering reports it is believed that this effort pays off by obtaining decrees that are accurate, assure no injury to other water users, and are consistent with the agency's policies.

As the workload continues to increase, additional staff will soon be necessary. In 2006 this office submitted a decision item to increase the hours for the Water Commissioner covering Districts 54, 55, and 56. If this decision item passes, the position will also assist in water administration in District 44, particularly when releases from Elkhead Creek Reservoir are being made and need to be protected downstream to the Green River. The decision item is to increase the position from six to nine months. On the Yampa River, growth in the Steamboat Springs area, possible administration of the Steamboat RICD, and the potential reservoir releases from Elkhead Creek Reservoir for the endangered species will increase the workload of the office and field staff. In the White River drainage, energy development on Piceance Creek and Yellow Creek will require an ever-increasing
presence in the area. The Water Commissioner for this area is currently part-time, a situation that will most likely have to change.

Aside from the tabulation of many plans of augmentation and exchanges, the work of standardizing the coding for water rights and diversion records in Hydrobase is complete. Office staff is in the process of tabulating the Federal Reserved water rights, which should be complete by spring 2007.

Although the Water Rights Tabulation Committee did not meet in 2006, efforts continue to be made by the IT branch to incorporate the recommended coding changes. The Committee's goal is to have the IT branch complete the Hydrobase modifications for both the structures and water rights databases by the end of 2007. The Committee also intends to develop a list of diversion record modifications that can hopefully be incorporated into Hydrobase by fall 2008.

## Personnel

Division Engineer Robert Plaska retired on June 30, 2006. Mr. Plaska worked for the Division of Water Resources for over 21 years. After spending two years in the Denver office, he was appointed Assistant Division Engineer for Division 3 in Alamosa. He held that position for 11 years before being appointed the Division Engineer for Water Division 6 in Steamboat Springs.

The Water Commissioner for District 44, Walter Bohrer, retired on August 31, 2006. Mr. Bohrer began working for Division 6 as a well inspector. After the well inspection program was discontinued, Mr. Bohrer became the Water Commissioner for Water District 44 in 1991. Prior to joining the Division of Water Resources team, Mr. Bohrer was an independent well driller.


Top Row L-R Bob Plaska (retired), Lynne Peters, Elvis Iacovetto, Kincaid Waldron, Erin Light, Walt Bohrer, Wes Signs (retired), Kent Holt (retired) Middle row -John Blair, Kathy Bower, Andy Schaffner, Bill Dunham, Rebecca Elder, Jean Ray ~ Bottom row - Sue Petersmann

At the end of July 2006, Hal Simpson appointed Erin Light, former Assistant Division Engineer and Hydrographer, as the Division Engineer. Jean Ray was then hired to take over the hydrographic and other water resource engineering duties. Prior to becoming a member of the Division of Water Resource team, Ms. Ray worked two years as an independent consultant through her company, Environmental Engineering and Evaluation, LLC; thirteen years for MWH in Steamboat Springs as

Senior Engineer, Project Engineer, Environmental/Water Group Manager, and Principal Engineer. She has also worked for Civil Design Consultants and the Denver Water Department.

Kathy Bower, former Water Commissioner for Districts 54, 55, and 56 was appointed the Water Commissioner for District 44 in October. The position for Districts 54, 55, and 56 remains open, but should be filled by the beginning of May 2007.

The Division 6 Water Commissioner of the Year for 2006 was Rebecca Elder. Ms. Elder is responsible for administration on the lower White River including the Piceance Creek watershed. Ms. Elder's personal strength to deal with the water users and ever changing water administration on Piceance Creek demonstrated her capabilities of being a top notch Water Commissioner and deserving of recognition. Mr. Jim Baller, a water user on the Michigan River, was recognized as the Division 6 Water User of the Year.

Appendix C shows the organization chart of Division 6.


Jack Byers, Dick Wolfe, Steve Witte, Mike Sullivan, Frank Kugel, Alan Martellero, Bob Plaska, Hal Simpson, Ken Knox, Bruce Whitehead

## Training

Listed below are specific training opportunities attended by the staff of Division 6.

- Erin Light shadowed under Alan Martellaro (Division Engineer for Division 5) for one week.
- Erin Light participated in a mentoring program with Chief Deputy State Engineer, Ken Knox.
- Lynne Peters attended the Program Assistants training meeting in Ouray.
- The Division 6 office hosted and participated in the annual CWOA meeting.
- Jean Ray obtained hydrographic field training from George Wear and Erin Light.
- Jean Ray attended the NCWCD West to East Slope Tour (Colorado Big Thompson Project).
- Erin Light and Jean Ray attended the CRWCD 2006 Colorado River District Water Seminar.
- Jean Ray attended the annual Hydrographic Branch training.
- Jean Ray obtained CDOT Flagger training.
- Jean Ray obtained DCP/electronics training from David Hutchens.
- Jean Ray obtained hydrographic training (flow measurement and hydrographic records) from Chief Hydrographer, Tom Ley.
- John Blair attended HEC-HMS training in Maryland.
- John Blair and Erin Light attended the Community Ag Alliance 2006 Water Summit in Hayden.

In addition to these specific training sessions, time is set aside at both the spring and fall Division meetings to provide training to all staff on various areas, such an computer programs and water administration issues.

## Water Year 2007

## Key Objectives for 2007

Listed below are some of the key objectives for 2007.

- Fill the vacant Water Commissioner position for Districts 54, 55, and 56.
- Complete tabulation of Federal Reserved Water Rights.
- Substantially complete structure location database entry project.
- Continue working with State of Wyoming to finalize the revised combined administration list for the Little Snake River and submit it to the Upper Colorado River Compact Commission.
- Continue to work on tabulating plans of augmentation and exchanges.
- Evaluate the need for additional staffing and develop necessary background information to support a decision item for future budget consideration.
- Cooperate with Wyoming on identifying and implementing strategies for the delivery of reservoir water from High Savory Dam to users on the Little Snake River.
- Insure compliance with the provisions of the U.S. Supreme Court decision in Nebraska v. Wyoming.
- Complete all scheduled dam inspections.
- Submit all diversion and hydrographic records on time.
- Operate within our allocated budget.
- Provide resources, training and support to allow our office and field staff to perform their required duties in an efficient and professional manner.
- Provide technical assistance to the Yampa/White and North Platte Basin roundtables.
- Work with the water users on the lower Yampa River in understanding the administrative procedures associated with the delivery of reservoir releases for the endangered fish species.
Appendix A
RESERVOIR STORAGE SUMMARY BY DISTRICT
WATER YEAR 2006

| WD | ID | RESERVOIR | SOURCE STREAM | AMOUNT IN STORAGE (AF) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Minimum |  | Maximum |  | End of Year |
|  |  |  |  | Date | AF | Date | AF |  |
| 43 | 3500 | WINDY BILL SPRING POND | EAST BEAVER CK | 11/1/2005 | 6.5 | 7/17/2006 | 6.5 | 6.5 |
| 43 | 3501 | LAKE GLORIA | PAPOOSECK | 11/1/2005 | 4 | 6/16/2006 | 5 | 5 |
| 43 | 3529 | LARSON RES NO 2 | TRIBUTARIES-PICEANCE CK | 8/7/2006 | 2 | 5/3/2006 | 6 | 3 |
| 43 | 3630 | BAILEY LAKE RETAIN POND | SWEDE CK | 11/1/2005 | 22.8 | 6/8/2006 | 22.8 | 22.8 |
| 43 | 3631 | BARBOUR POND | MARVINE CK | 11/1/2005 | 15 | 5/31/2006 | 15 | 15 |
| 43 | 3632 | BEAVER LAKE RESERVOIR | VAUGHN CK | 11/1/2005 | 66.45 | 5/31/2006 | 66.45 | 66.45 |
| 43 | 3633 | BIG BEAVER CK RESERVOIR | BIG BEAVER CK | 8/21/2006 | 7545 | 10/31/2006 | 7658 | 7658 |
| 43 | 3634 | BLACK GULCH RES | BLACKS GULCH | 11/1/2005 | 40.75 | 8/23/2006 | 40.75 | 40.75 |
| 43 | 3636 | CABIN LAKE RESERVOIR | VAUGHN CK | 11/1/2005 | 16.06 | 5/31/2006 | 16.06 | 16.06 |
| 43 | 3638 | GOOSMAN RESERVOIR | ELK CK | 11/1/2005 | 5.6 | 5/15/2006 | 5.6 | 5.6 |
| 43 | 3639 | GREGOR RESERVOIR | VAUGHN CK | 11/1/2005 | 47 | 5/31/2006 | 47 | 47 |
| 43 | 3642 | JOHNNIE JOHNSON RESERVOIR | WHITE RIVER | 10/31/2006 | 747 | 6/19/2006 | 1036 | 747 |
| 43 | 3643 | KEYSTONE RES 2 | PRICE CK | 11/1/2005 | 0 | 3/12/2006 | 0 | 0 |
| 43 | 3644 | KEYSTONE BEN PRICE RES | PRICE CK | 7/26/2006 | 0 | 4/26/2006 | 100 | 0 |


| 43 | 3645 | KEYSTONE RES 3 | DEEP CHANNEL CK | 7/26/2006 | 0 | 4/26/2006 | 31.2 | 18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43 | 3646 | LADY LAKE | VAUGHN CK | 11/1/2005 | 4.41 | 5/31/2006 | 4.41 | 4.41 |
| 43 | 3647 | LARSON RES | TRIBUTARIES-PICEANCE CK | 10/31/2006 | 1 | 11/1/2005 | 6 | 1 |
| 43 | 3649 | LUNNEY RESERVOIR | NINE MILE DRAW | 6/22/2006 | 49 | 11/1/2005 | 82.12 | 82.12 |
| 43 | 3651 | MCGINNIS MEADOW RES | SOUTH SKINNY FISH CK | 11/1/2005 | 87 | 6/2/2006 | 87 | 87 |
| 43 | 3652 | MCHATTEN RESERVOIR | COAL CK | 11/1/2005 | 0 | 5/16/2006 | 64.2 | 0 |
| 43 | 3656 | PROCTER RESERVOIR | CURTIS CK | 11/1/2005 | 0 | 4/13/2006 | 6.66 | 0 |
| 43 | 3657 | SEVENTH LAKE RESERVOIR | VAUGHN CK | 11/1/2005 | 31.62 | 5/31/2006 | 31.62 | 31.62 |
| 43 | 3658 | SHADOW LAKE RESERVOIR | VAUGHN CK | 11/1/2005 | 2.6 | 5/31/2006 | 2.6 | 2.6 |
| 43 | 3659 | SKINNY FISH RESERVOIR | SKINNY FISH CK | 11/1/2005 | 300.7 | 6/2/2006 | 300.7 | 300.7 |
| 43 | 3660 | STUMP LAKE RESERVOIR | VAUGHN CK | 11/1/2005 | 10.23 | 5/31/2006 | 10.23 | 10.23 |
| 43 | 3662 | TRAPPERS LAKE RETAIN PD | NORTH FORK | 11/1/2005 | 0.69 | 6/2/2006 | 0.69 | 0.69 |
| 43 | 3668 | WATKIN RESERVOIR | COAL CK | 11/1/2005 | 8 | 9/16/2006 | 8 | 8 |
| 43 | 3669 | WEST MILLER RESERVOIR | WEST MILLER CK | 11/1/2005 | 70 | 5/15/2006 | 77.8 | 77 |
| 43 | 3671 | WILSON RES | EAST FLAG CK | 9/14/2006 | 50 | 4/20/2006 | 103 | 52 |
| 43 | 3716 | JOY JOY \& WATSON RES | FAWN CK | 11/1/2005 | 5.88 | 8/4/2006 | 5.88 | 5.88 |
| 43 | 3718 | PARSONS POND NO. 1 | TRIBUTARIES-PICEANCE CK | 11/1/2005 | 1.3 | 5/22/2006 | 1.3 | 1.3 |
| 43 | 3719 | PARSONS POND NO. 2 | TRIBUTARIES-PICEANCE CK | 11/1/2005 | 1.3 | 5/22/2006 | 1.3 | 1.3 |
| 43 | 3722 | JESSUP RESERVOIR | PICEANCE CK | 4/3/2006 | 50000 | 9/5/2006 | 50000 | 50000 |
| 43 | 3723 | JONES RESERVOIR | PICEANCE CK | 4/3/2006 | 21000 | 9/5/2006 | 21000 | 21000 |
| 43 | 3731 | STRAWBERRY L\&C POND 2 | STRAWBERRY CK | 11/1/2005 | 0.07 | 5/5/2006 | 0.07 | 0.07 |



| $\begin{aligned} & \text { O} \\ & \hline \mathbf{O} \end{aligned}$ | $\begin{aligned} & 8 \\ & \hline 8 \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { O-p } \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & 0 \end{aligned}$ | $\stackrel{\llcorner }{\sim}$ | $\begin{aligned} & \stackrel{\bullet}{\Gamma} \\ & \stackrel{1}{2} \end{aligned}$ | 10 | $\stackrel{\square}{\square}$ | $\begin{aligned} & \text { O} \\ & \hline \mathbf{N} \end{aligned}$ | $\begin{gathered} \bar{i} \\ \dot{o} \end{gathered}$ | $\begin{aligned} & \hat{e} \\ & \dot{e} \end{aligned}$ | － | $\stackrel{6}{6}$ | $\mathscr{+}$ | の | － | $\stackrel{\sim}{\sim}$ | 10 | $\begin{aligned} & \mathbf{O} \\ & 0 \\ & \end{aligned}$ | $\begin{aligned} & \text { O-O } \\ & \text { N } \end{aligned}$ | $\stackrel{\text { N }}{\text { N }}$ |
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| \％ | $\stackrel{\Im}{7}$ | $\stackrel{\Im}{+}$ | ¢ | ¢ | \％ | $\stackrel{\Im}{7}$ | $\underset{\sim}{\sim}$ | $\underset{\sim}{\text { O}}$ | $\underset{\sim}{*}$ | $\stackrel{\Im}{*}$ | $\stackrel{\Im}{7}$ | $\underset{\sim}{ }$ | $\underset{\sim}{\text { ® }}$ | $\stackrel{\Im}{7}$ | $\underset{\sim}{\sim}$ | $\stackrel{m}{+}$ | $\underset{\sim}{ }$ | $\stackrel{\Im}{7}$ | $\stackrel{\text { º }}{ }$ | $\stackrel{m}{+}$ |


| 43 | 4463 | VANDIVER POND | TRIBUTARIES-NORTH FK | 11/1/2005 | 24.83 | 10/4/2006 | 24.83 | 24.83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43 | 4497 | BLUE MOUNTAIN RES | WOLF CK | 4/5/2006 | 50000 | 5/11/2006 | 50000 | 50000 |
| 43 | 4499 | REEVES RES | WOLF CK | 4/5/2006 | 34000 | 5/11/2006 | 34000 | 34000 |
| 43 | 4504 | TAYLOR RES | HUNTER CK | 4/3/2006 | 81000 | 4/3/2006 | 81000 | 81000 |
|  |  |  | TOTAL FOR DISTRICT 43 |  | 388,670 |  | 429,624 | 428,861 |
| 44 | 3504 | SULLIVAN RES LOWER | CEDAR CK | 8/14/2006 | 37.4 | 8/14/2006 | 37.4 | 37.4 |
| 44 | 3673 | WADDLE CKRES | WADDLE CK | 5/18/2006 | 40.7 | 8/15/2006 | 40.7 | 40.7 |
| 44 | 3674 | WILSON RESERVOIR | GOOD SPRING CK | 6/16/2006 | 68.3 | 5/4/2006 | 69.5 | 68.3 |
| 44 | 3675 | WYMAN RES | LITTLE BEAVER CK | 6/19/2006 | 19.9 | 8/2/2006 | 40.3 | 37.2 |
| 44 | 3677 | ANDERSON RES | NORTH FK of ELKHEAD CK | 8/17/2006 | 45.8 | 5/24/2006 | 127.8 | 45.8 |
| 44 | 3681 | BUNKER LAKE RES | BUNKER CK | 8/10/2006 | 190.9 | 8/10/2006 | 190.9 | 190.9 |
| 44 | 3682 | COVE LAKE RES | MORAPOS CK | 5/12/2006 | 74.7 | 6/2/2006 | 74.7 | 74.7 |
| 44 | 3683 | coveres | MORAPOS CK | 6/2/2006 | 95 | 5/12/2006 | 115 | 98 |
| 44 | 3686 | DRESCHER RES | BASIN GULCH | 7/10/2006 | 155.9 | 4/17/2006 | 242.8 | 155.9 |
| 44 | 3688 | DUNKLEY DEUBEAU RES | WILLOW CK | 7/3/2006 | 36.82 | 5/17/2006 | 49.93 | 42.64 |
| 44 | 3689 | DD\&ERES | MILK CK | 8/15/2006 | 249 | 5/13/2006 | 1259 | 249 |
| 44 | 3701 | POOSE CK RES | POOSECK | 5/17/2006 | 279.8 | 7/27/2006 | 279.8 | 279.8 |
| 44 | 3702 | ROBY RES | MORAPOS CK | 8/23/2006 | 16.5 | 5/12/2006 | 25.9 | 16.5 |
| 44 | 3706 | SELLERS CROWELL RES | WILLOW CK | 5/17/2006 | 105.9 | 7/3/2006 | 105.9 | 105.9 |
| 44 | 3721 | ELLGEN RESERVOIR | BELL ROCK GULCH | 6/23/2006 | 64 | 5/8/2006 | 119.1 | 64 |
| 44 | 3722 | ELLGEN RESERVOIR NO 2 | MC LERNON DRAW | 5/25/2006 | 0 | 5/8/2006 | 20.5 | 0 |


| $\stackrel{N}{\dot{N}}$ | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\dot{N}} \end{aligned}$ | $\stackrel{\infty}{\oplus}$ | $\frac{0}{\dot{F}}$ | $\begin{aligned} & \text { Né } \\ & \hline 8 \end{aligned}$ | \％ | $\begin{aligned} & \text { ti } \\ & \stackrel{\rightharpoonup}{\theta} \end{aligned}$ | $\bigcirc$ | $\begin{aligned} & \text { 毋 } \\ & \underset{\sim}{\infty} \end{aligned}$ | － | $\stackrel{\sim}{\sim}$ | の | $\bigcirc$ | $\stackrel{\infty}{\sim}$ | $\stackrel{\sim}{\sim}$ | ค | $\checkmark$ | a | $\bigcirc$ | － |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { N}}{ }$ | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \infty \\ & \underset{\sim}{N} \end{aligned}$ | $\stackrel{\infty}{\circ}$ | $\stackrel{\Im}{\dot{J}}$ | $\stackrel{\circ}{+}$ | 尔 | ＋ | $\bigcirc$ | $\stackrel{\infty}{\stackrel{\infty}{f}}$ | － | $\stackrel{\square}{\square}$ | \％ | ¢ | ก | $\bar{\sigma}$ | ₹ | $\infty$ | N | $\infty$ | $\bullet$ |
| $\begin{aligned} & \text { B } \\ & \stackrel{0}{N} \\ & \stackrel{N}{N} \end{aligned}$ | $\begin{array}{r}\circ \\ \hline 0 \\ \text { 믄 } \\ \hline 1\end{array}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & \frac{1}{5} \\ & \frac{1}{5} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \text { N } \end{aligned}$ | O N N － |  | $\circ$ <br> 0 <br> N <br> N | $\circ$ <br> 0 <br> 0 <br> 5 <br> 5 <br> 5 | $\begin{aligned} & \circ \\ & 0 \\ & \text { N } \\ & \text { ㅎN } \end{aligned}$ |  | $\begin{aligned} & 0 \\ & 0 \\ & \text { D } \\ & \text { 万 } \end{aligned}$ |  | $\begin{aligned} & \text { LO} \\ & \text { N } \\ & \stackrel{N}{\Sigma} \end{aligned}$ |  | 8 $\stackrel{0}{\mathrm{~N}}$ N N | $\circ$ <br> $\mathbf{N}$ <br>  <br> N | 8 <br> 0 <br> 0 <br> 0 <br> 5 | 8 <br> 0 <br> 0 <br> 0 <br> 5 | $\circ$ 0 0 0 $i$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{\mathcal{N}} \end{aligned}$ | O N N N |
| $\stackrel{\grave{N}}{\dot{N}}$ | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\dot{N}} \end{aligned}$ | $\stackrel{\infty}{\infty}$ | $\stackrel{\Phi}{\dot{J}}$ | $\stackrel{\text { N゙ }}{\text { g }}$ | $\stackrel{\%}{\circ}$ | $\begin{aligned} & \text { t } \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\bigcirc$ | $\stackrel{\infty}{\infty}$ | ก | $\stackrel{\sim}{\mathrm{N}}$ | の | $\bigcirc$ | $\stackrel{\square}{\square}$ | $\stackrel{ }{\sim}$ | N | $\bigcirc$ | $\checkmark$ | $\bigcirc$ | $\bigcirc$ |
| $\begin{aligned} & \text { B } \\ & \stackrel{\rightharpoonup}{N} \\ & \stackrel{N}{7} \end{aligned}$ | 8 <br> 0 <br> N <br> i <br> 1 | $\begin{aligned} & 8 \\ & 0 \\ & \frac{1}{3} \\ & \frac{1}{5} \end{aligned}$ |  | 8 <br> 0 <br> 0 <br> $\vdots$ <br> 5 |  | 8 <br> $\mathbf{N}$ <br> N <br> 15 | 8 <br> 0 <br> N <br> in <br> in | $\begin{aligned} & \text { o} \\ & \text { N } \\ & \text { N } \\ & \text { 하 } \end{aligned}$ |  |  | $\circ$ <br> 0 <br> N <br> 응 <br> － | $\begin{aligned} & \text { B} \\ & \text { N } \\ & \stackrel{1}{N} \\ & \hline- \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \stackrel{0}{5} \\ & \stackrel{y}{5} \end{aligned}$ |  | $\circ$ <br> 0 <br> N <br> 응 <br> － | $\begin{aligned} & \text { ®O } \\ & \stackrel{-}{N} \\ & \underset{\sim}{7} \end{aligned}$ | $\begin{aligned} & \text { ®O } \\ & \text { N } \\ & \underset{\sim}{5} \end{aligned}$ |  | $\begin{aligned} & \text { no } \\ & \stackrel{N}{5} \\ & \underset{N}{7} \end{aligned}$ | － |
|  |  |  | $\begin{aligned} & \text { 등 } \\ & 3 \\ & 3 \\ & \underset{3}{3} \end{aligned}$ | $\begin{aligned} & \text { 드 } \\ & \text { r } \\ & \stackrel{\rightharpoonup}{5} \\ & \text { © } \end{aligned}$ |  |  | $\begin{aligned} & \text { Y } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { y } \\ & \text { z } \\ & 0 \\ & \text { Z } \\ & \text { Z } \\ & \text { D } \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { 등 } \\ & \stackrel{\mathrm{r}}{\mathrm{~W}} \\ & \stackrel{\mathrm{O}}{\mathrm{O}} \end{aligned}$ |  |  |
|  |  |  |  |  |  |  |  |  |  | JODY SPRING AND POND |  |  |  | ㅇ 0 ㄴ y |  |  | 1 0 0 0 2 0 0 3 3 |  |  | O <br> 0 <br> 0 <br> 2 <br> 2 <br> 0 |
| $\stackrel{\sim}{N}$ | $\begin{aligned} & \text { op } \\ & \stackrel{N}{m} \end{aligned}$ | $\stackrel{\infty}{ल}$ | $\stackrel{\sim}{ల}$ | $\underset{\substack{\text { den }}}{ }$ | $\underset{\sim}{\underset{\sim}{0}}$ | $\stackrel{N}{\underset{\sim}{\sim}}$ | N్ల్ల | $\stackrel{N}{\tilde{f}}$ |  | $\stackrel{\underset{\sim}{\sim}}{\stackrel{\infty}{\tau}}$ | $\underset{\sim}{N}$ | $\stackrel{\sim}{\sim}$ | N్ల | O్ల్ల్ల | $\bar{\sim}$ | N్ల్ల | M్ల్ల | 弌 | 䎟 | － |
| \％ | \％ | \％ | \＃ | \％ | \％ | \％ | \％ | F |  | F | F | $\hat{F}$ | $\hat{F}$ | F | F | ＊ | ＇ | F | F | $\hat{\gamma}$ |


| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 6 | $m$ | $\stackrel{\square}{\square}$ | $\bigcirc$ | $\bigcirc$ | $\stackrel{\sim}{\mathrm{N}}$ | $\infty$ | $\bigcirc$ | $\stackrel{0}{0}$ | $\leftharpoondown$ | $\sim$ | $N$ | N | $\stackrel{\infty}{\square}$ | $\bigcirc$ | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | の | O | $\stackrel{\infty}{\sim}$ | 윽 | $\begin{aligned} & \infty \\ & \stackrel{\sim}{\mathrm{N}} \end{aligned}$ | $\bullet$ | $\stackrel{ \pm}{\square}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\Gamma}{\underset{\sim}{\sim}}$ | $\infty$ | F | 10 | $\stackrel{10}{1}$ | $\stackrel{\sim}{\square}$ | 안 | 은 | N | $\stackrel{\infty}{\square}$ | $\bigcirc$ | 은 |
| $\circ$ <br>  <br> $\stackrel{N}{N}$ <br> $\stackrel{\infty}{\infty}$ |  | $\begin{aligned} & 8 \\ & \stackrel{8}{N} \\ & \stackrel{i}{N} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \\ & \\ & \vdots \\ & \end{aligned}$ | 8 <br> 8 <br> $N$ <br> N <br> N | 8 <br> $\mathbf{O}$ <br> $\stackrel{1}{6}$ <br> $\frac{1}{5}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{ } \\ & \underset{~}{2} \end{aligned}$ | $\begin{aligned} & 8 \\ & \stackrel{8}{N} \\ & \frac{1}{6} \end{aligned}$ |  | $\begin{aligned} & 8 \\ & 0 \\ & \vdots \\ & \stackrel{0}{6} \end{aligned}$ | 8 <br>  <br> $N$ <br> $N$ <br> $N$ |  | $\circ$ <br> $\mathbf{N}$ <br> $\stackrel{1}{6}$ <br> $\frac{1}{1}$ | $\begin{aligned} & \circ \\ & \hline \\ & \text { N } \\ & \text { N} \end{aligned}$ | 8 <br>  <br> $N$ <br> $N$ <br> $N$ | $\begin{aligned} & n \\ & 0 \\ & \stackrel{0}{N} \\ & i \\ & i \end{aligned}$ | 8 <br>  <br> $N$ <br> $N$ <br> $N$ <br> $N$ | 8 0 $\stackrel{1}{N}$ $\frac{1}{5}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \frac{N}{6} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & i \\ & i \\ & i \end{aligned}$ | 6 <br> N <br> N <br> N <br> N |
| 0 | - | O | $\bigcirc$ | $\bigcirc$ | * | m | $\bullet$ | O | $\bigcirc$ | $\stackrel{1}{\sim}$ | $N$ | $\bigcirc$ | $0$ | $\checkmark$ | N | $N$ | N | $\stackrel{\infty}{+}$ | $\bigcirc$ | $\bigcirc$ |
| $\begin{aligned} & \text { B } \\ & \stackrel{0}{N} \\ & \stackrel{N}{7} \end{aligned}$ | $\frac{60}{0}$ | $\frac{L_{0}^{0}}{\stackrel{N}{i}}$ | $\frac{L_{0}^{0}}{\substack{N}}$ | $\begin{aligned} & 0 \\ & \hline \\ & N \\ & i \\ & i n \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{N} \\ & \stackrel{1}{N} \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{2} \\ & N \\ & \underset{i}{\prime} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{2} \\ & \stackrel{i}{5} \end{aligned}$ | $\begin{aligned} & \text { OO} \\ & \stackrel{0}{N} \\ & \stackrel{i}{7} \end{aligned}$ |  | $\circ$ <br> 8 <br> N <br> N <br> - | $\begin{aligned} & \otimes \\ & \stackrel{O}{N} \\ & \stackrel{1}{6} \\ & \frac{6}{i} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \text { N } \\ & \stackrel{N}{7} \\ & \end{aligned}$ | 8 <br> 8 <br> N <br>  <br> -2 | $\begin{aligned} & 0 \\ & 0 \\ & N \\ & \text { N} \\ & \text { N } \end{aligned}$ |  | $\circ$ <br> - <br> N <br> - <br> 응 | $\begin{aligned} & 0 \\ & 0 \\ & N \\ & \stackrel{N}{7} \\ & i \end{aligned}$ | $\frac{\stackrel{6}{0}}{\substack{\mathrm{~N} \\ i}}$ | $\frac{00}{0}$ | O <br>  <br> N <br> N <br> N <br> N |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \frac{y}{U} \\ & \underset{\sim}{u} \\ & \stackrel{\rightharpoonup}{E} \\ & 0 \end{aligned}$ |  |  |
|  |  | $I$ <br> 5 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 8 <br> 8 |  |  |  |  |  |  |  |  | CASE RES \#2 ANNEX POND |  |  |  | $\begin{aligned} & 0 \\ & \mathbf{\lambda} \\ & 0 \\ & \mathbf{~} \\ & 0 \\ & 0 \\ & \hline \mathbf{U} \end{aligned}$ |  |  |  |  |  |
| $\underset{N}{N}$ | ${\underset{N}{0}}_{\infty}^{\infty}$ | $\begin{aligned} & \text { O/ } \\ & \stackrel{\sim}{0} \end{aligned}$ | $\stackrel{\circ}{\mathbf{O}}$ | $\underset{\sim}{\mathbf{5}}$ | $\stackrel{\text { N }}{\mathbf{N}}$ | $\stackrel{M}{\mathbf{N}}$ | $\stackrel{ \pm}{\mathbf{G}}$ | $\stackrel{5}{6}$ | $$ | $\stackrel{\mathbf{N}}{\mathbf{N}}$ | $\stackrel{\infty}{\substack{\text { N/ }}}$ | $\stackrel{8}{\mathbf{\circ}}$ |  | $\stackrel{5}{5}$ | $\begin{aligned} & N \\ & \\ & \mathbf{N} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \end{aligned}$ | N | ¢ | ¢ | N00 |
| * | * | - | N | F | § | - | - | * | * | * | F | * | N | § | F | § | § | * | - | * |


| 47 | 3558 | FOX POND | SPRING CK | 11/1/2005 | 0 | 4/10/2006 | 108 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | 3559 | GERM POND | TRIBUTARIES-ILLINOIS R | 11/5/2005 | 28 | 8/17/2006 | 28 | 28 |
| 47 | 3560 | GOOSE POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 34 | 4/25/2006 | 49 | 43 |
| 47 | 3561 | GREASEWOOD POND | TRIBUTARIES-ILLINOIS R | 4/25/2006 | 2.8 | 5/16/2006 | 5.5 | 3.5 |
| 47 | 3562 | HAMPTON NO 1 POND | TRIBUTARIES-ILLINOIS R | 8/17/2006 | 0 | 11/2/2005 | 0.6 | 0 |
| 47 | 3563 | HAMPTON NO 2 POND | TRIBUTARIES-ILLINOIS R | 10/31/2006 | 9 | 5/8/2006 | 16 | 9 |
| 47 | 3564 | HAMPTON NO 3 POND | TRIBUTARIES-ILLINOIS R | 11/2/2005 | 17 | 5/8/2006 | 22 | 20 |
| 47 | 3565 | HOME POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 0 | 4/10/2006 | 13 | 1.5 |
| 47 | 3566 | HORSESHOE POND | TRIBUTARIES-ILLINOIS R | 8/7/2006 | 0 | 10/31/2006 | 0.3 | 0.3 |
| 47 | 3567 | KITCHEN POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 9 | 5/15/2006 | 9 | 9 |
| 47 | 3568 | LIVING ROOM POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 0.8 | 5/16/2006 | 6 | 4.5 |
| 47 | 3569 | MARSH POND | ANTELOPE CK | 8/31/2006 | 0 | 5/16/2006 | 15 | 0 |
| 47 | 3570 | MCCAMMON POND NORTH | TRIBUTARIES-ILLINOIS R | 8/20/2006 | 0 | 4/10/2006 | 8 | 0 |
| 47 | 3571 | MCCAMMON POND SOUTH | TRIBUTARIES-ILLINOIS R | 10/31/2006 | 9.5 | 4/10/2006 | 28 | 9.5 |
| 47 | 3572 | N. TOUR ROUTE POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 0 | 4/25/2006 | 2 | 0.15 |
| 47 | 3573 | OLD ROAD POND | TRIBUTARIES-ILLINOIS R | 10/31/2006 | 0 | 11/1/2005 | 2.5 | 0 |
| 47 | 3574 | ONE TVENTY FIVE POND | TRIBUTARIES-ILLINOIS R | 8/17/2006 | 0 | 4/25/2006 | 6.5 | 0 |
| 47 | 3575 | PATTEN POND | TRIBUTARIES-ILLINOIS R | 10/31/2006 | 3.2 | 4/25/2006 | 9 | 3.2 |
| 47 | 3576 | POTHOLE POND | TRIBUTARIES-ILLINOIS R | 11/1/2005 | 0 | 5/30/2006 | 7 | 0 |
| 47 | 3577 | PRAIRIE DOG POND | ANTELOPE CK | 10/31/2006 | 0.8 | 4/25/2006 | 12 | 0.8 |
| 47 | 3578 | RAT DITCH POND | TRIBUTARIES-ILLINOIS R | 8/20/2006 | 3 | 4/25/2006 | 7.6 | 4.4 |


| $\stackrel{\infty}{\stackrel{-}{+}}$ | － | － | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | － | $\bigcirc$ | N | ＊ | 0 | $\stackrel{1}{\sim}$ | 응 | $\stackrel{18}{8}$ | $\begin{aligned} & \stackrel{\infty}{\infty} \\ & \stackrel{\infty}{\infty} \end{aligned}$ | V | $\bar{\infty}$ | ल | $\stackrel{\odot}{\sim}$ | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N゙ | ＊ | $\bullet$ | － | － | $\stackrel{\sim}{\stackrel{\circ}{N}}$ | $\stackrel{\sim}{\sim}$ | － | N | $\begin{aligned} & \text { م } \\ & \stackrel{\circ}{\circ} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | の | 8 | 응 | ¢ | $\begin{aligned} & \infty \\ & \infty \\ & \infty \\ & \infty \end{aligned}$ | 0 | $\stackrel{\text { ¢ }}{\sim}$ | $\infty$ | ¢ | $\stackrel{m}{\sim}$ |
| 8 <br>  <br> N <br> N <br> N | 8 <br>  <br> $N$ <br> $N$ <br> $N$ | $\begin{aligned} & 8 \\ & \stackrel{O}{N} \\ & \stackrel{N}{N} \\ & \stackrel{N}{V} \end{aligned}$ |  | $\begin{aligned} & 8 \\ & 0 \\ & \stackrel{0}{N} \\ & \frac{15}{7} \end{aligned}$ |  | $\circ$ <br>  <br> $N$ <br> $N$ <br> $N$ <br> $N$ | $\circ$ <br>  <br> $N$ <br> $N$ <br> $N$ | 8 <br>  <br> $N$ <br> $N$ <br>  | $\begin{aligned} & 0 \\ & \stackrel{O}{N} \\ & \stackrel{\rightharpoonup}{0} \\ & \frac{1}{7} \end{aligned}$ | 8 <br>  <br> $N$ <br> $N$ <br>  | $\begin{aligned} & 8 \\ & \stackrel{8}{N} \\ & \stackrel{+}{ \pm} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{\mathrm{~N}} \\ & \stackrel{\rightharpoonup}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \frac{1}{6} \end{aligned}$ | 8 <br>  <br>  |  | $\begin{aligned} & \circ \\ & \stackrel{O}{N} \\ & \stackrel{N}{\top} \\ & \frac{7}{7} \end{aligned}$ | 8 0 N $\stackrel{0}{-}$ | $\begin{aligned} & 8 \\ & \mathbf{0} \\ & \stackrel{y}{6} \\ & \frac{1}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{N} \end{aligned}$ |  |
| $\stackrel{\infty}{\sim}$ | － | － | － | $\bigcirc$ | 0 | $\bigcirc$ | － | 0 | $\infty$ | $\bigcirc$ | 0 | $\stackrel{10}{\sim}$ | － | $\stackrel{6}{8}$ | $\stackrel{\varphi}{\varrho}$ | － | $\bar{\infty}$ | $\cdots$ | 아 | 欠ু |
|  | $\circ$ <br> $\mathbf{O}$ <br> N <br> $\stackrel{m}{0}$ <br> $\infty$ | $\begin{aligned} & 0.0 \\ & \text { N} \\ & \text { N} \\ & \dot{m} \end{aligned}$ | $\begin{aligned} & \text { n} \\ & 0 \\ & N \\ & N \\ & \stackrel{N}{5} \end{aligned}$ | $\begin{aligned} & \text { n} \\ & \text { N} \\ & \text { N } \\ & \underset{\sim}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \mathbf{O} \\ & \stackrel{N}{N} \\ & \stackrel{i}{\infty} \end{aligned}$ | $\begin{aligned} & 0.0 \\ & \text { N} \\ & \text { N } \\ & \text { N } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \stackrel{N}{7} \\ & i \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \text { N } \\ & \stackrel{N}{7} \\ & \vdots \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \stackrel{N}{5} \end{aligned}$ | $\begin{aligned} & \text { n} \\ & \text { N } \\ & \stackrel{N}{5} \\ & \underset{i}{2} \end{aligned}$ | $\stackrel{\circ}{\circ}$ $\stackrel{N}{N}$ $i$ $i$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \stackrel{i}{\circ} \\ & \frac{1}{\sigma} \end{aligned}$ | $\begin{aligned} & \text { n} \\ & \text { N } \\ & \stackrel{N}{5} \\ & \underset{i}{2} \end{aligned}$ | 0 <br>  <br> N <br> $\vdots$ <br> - | $\begin{aligned} & 0 \\ & \mathbf{0} \\ & \text { N } \\ & \text { N } \end{aligned}$ |  |  | $\begin{aligned} & \text { Q} \\ & \text { N } \\ & \text { ì } \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \vdots \\ & -i \end{aligned}$ | O <br>  <br> N <br> － <br> － |
|  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \underset{U}{u} \\ & \underset{~}{\underset{~}{4}} \end{aligned}$ | $\begin{aligned} & \text { y } \\ & 0 \\ & 0 \\ & \underset{\sim}{4} \\ & \stackrel{\rightharpoonup}{u} \\ & \hline 0 \end{aligned}$ |  |  |  | $\begin{aligned} & \frac{y}{U} \\ & \underset{\sim}{u} \\ & \stackrel{\rightharpoonup}{E} \\ & 0 \end{aligned}$ |  |  |
| $\begin{aligned} & \mathrm{O} \\ & 0 \\ & 0 \\ & 0 \\ & \underset{\sim}{O} \\ & \frac{N}{\alpha} \end{aligned}$ |  | $I$ <br> 7 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 1 | $\begin{aligned} & \text { Q } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \boxed{n} \end{aligned}$ |  | $I$ <br> 5 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 1 <br> 0 <br> 0 <br> 0 <br> 1 |  |  |  |  |  | 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 3 <br> 1 <br> 3 |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 9 \\ & \stackrel{9}{9} \end{aligned}$ | $\begin{aligned} & \mathrm{O} \\ & \text { O/ } \end{aligned}$ | $\begin{aligned} & \bar{\infty} \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \mathbb{N} \\ & \underset{N}{N} \end{aligned}$ | $\begin{aligned} & \infty \\ & \substack{\infty \\ 0} \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\infty} \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{aligned} & \infty \\ & \infty \\ & 0 \end{aligned}$ | $\begin{aligned} & \circ \\ & \hline 0 \\ & 0 \end{aligned}$ | $\begin{gathered} \hat{\infty} \\ \stackrel{\sim}{0} \end{gathered}$ | $\begin{aligned} & \infty \\ & \infty \\ & 0 \\ & \hline 0 \end{aligned}$ |  | $\begin{aligned} & \text { 8 } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & \text { J } \\ & \mathbf{N} \end{aligned}$ | $\begin{aligned} & \text { ழ } \\ & \text { N0 } \end{aligned}$ | $\begin{aligned} & \text { N/ } \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{0} \\ & \underset{\sim}{4} \end{aligned}$ | $\begin{aligned} & \stackrel{9}{\circ} \\ & \mathbf{0} \end{aligned}$ | － | \％ | N | \％ |
| $\hat{F}$ | $\hat{*}$ | $\hat{*}$ | $\hat{F}$ | $\hat{*}$ | § | － | $\hat{\sim}$ | $\hat{*}$ | ＊ | $\hat{j}$ | $\hat{*}$ | N | － | 今 | $\hat{*}$ | $\hat{*}$ | N | V | － | § |


| - | - | - | $\stackrel{\text { N}}{\text { N }}$ | $\stackrel{9}{7}$ | $\stackrel{\text { \% }}{\sim}$ | $\begin{aligned} & 0 \\ & \underset{\sim}{+} \end{aligned}$ | ㅇ | 「 | - | $\stackrel{\infty}{\sim}$ | * | $\infty$ | \% | ๑ | $\stackrel{\Gamma}{\top}$ | $\stackrel{\sim}{N}$ | $\bigcirc$ | $\stackrel{\text { }}{ }$ | $\cdots$ | $\stackrel{1}{\sim}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | $\cdots$ | - | $\stackrel{\sim}{\sim}$ | $\stackrel{\circ}{\Gamma}$ | - | $\underset{\text { N }}{\substack{\text { N }}}$ | ㅇ | $\stackrel{N}{\sim}$ | $\stackrel{\sim}{N}$ | N | $\bullet$ | $\stackrel{\text { ® }}{\sim}$ | \% | ¢ | $\stackrel{\Gamma}{N}$ | ¢ | $\infty$ | $\stackrel{m}{+}$ | $\stackrel{3}{9}$ | $\stackrel{1}{\sim}$ |
|  | $\begin{aligned} & 0 \\ & \mathbf{O} \\ & \mathbf{N} \\ & \mathbf{N} \\ & \mathbf{N} \end{aligned}$ |  | $\begin{aligned} & 8 \\ & 0 \\ & \underset{N}{N} \\ & \underset{\sim}{f} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \frac{1}{5} \end{aligned}$ |  | $\begin{aligned} & 8 \\ & \stackrel{8}{N} \\ & \stackrel{N}{i} \\ & i \end{aligned}$ | $\begin{aligned} & 8 \\ & \stackrel{0}{N} \\ & \stackrel{N}{N} \\ & \underset{\sim}{N} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{N} \\ & N \\ & N \\ & N \end{aligned}$ | $\begin{aligned} & 8 \\ & \text { O} \\ & \text { N } \\ & \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{i}{f} \end{aligned}$ | $\begin{aligned} & 8 \\ & \stackrel{0}{\mathrm{~N}} \\ & \stackrel{i}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \text { N } \\ & \stackrel{0}{0} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \text { N} \\ & \stackrel{N}{n} \\ & \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & \stackrel{N}{n} \\ & \stackrel{n}{n} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline 0 \\ & \stackrel{N}{6} \\ & \frac{6}{7} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{i}{i} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \stackrel{0}{i} \end{aligned}$ |  | $\begin{aligned} & \text { O} \\ & \hline \mathbf{N} \\ & \underset{i n}{i} \end{aligned}$ |  |
| - | - | - | $\stackrel{\bigcirc}{N}$ | $F$ | $\underset{N}{N}$ | $\begin{aligned} & \infty \\ & \infty \\ & \infty \end{aligned}$ | $\stackrel{\ominus}{\sim}$ | $\stackrel{\infty}{\sim}$ | - | F | m | $\infty$ | N | $\bigcirc$ | $\stackrel{N}{\infty}$ | $\stackrel{\sim}{N}$ | $\bigcirc$ | $\stackrel{\square}{\square}$ | $\cdots$ | $\stackrel{1}{\sim}$ |
| $\begin{aligned} & 0 \\ & 0 \\ & \text { N } \\ & \vdots \\ & \vdots \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & \stackrel{6}{0} \\ & \text { N } \\ & \stackrel{N}{5} \\ & \underset{~}{2} \end{aligned}$ | $\circ$ <br> 0 <br> N <br> N <br> N | $\begin{aligned} & 8 \\ & \mathbf{O} \\ & \stackrel{N}{N} \\ & \underset{N}{N} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline 0 \\ & N \\ & \vdots \\ & \text { N } \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \text { O} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & n \\ & 0 \\ & \stackrel{0}{N} \\ & \underset{i}{5} \end{aligned}$ | $\begin{aligned} & \text { n} \\ & \text { N } \\ & \stackrel{N}{7} \\ & \vdots \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \text { N} \\ & \stackrel{N}{ } \\ & \underset{ }{2} \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & \text { N } \\ & \stackrel{N}{5} \\ & \underset{~}{2} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \stackrel{0}{N} \\ & \stackrel{N}{7} \end{aligned}$ | $\begin{aligned} & 0 \\ & \mathbf{O} \\ & \underset{N}{N} \\ & \underset{\infty}{N} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \mathbf{O} \\ & \stackrel{N}{7} \\ & \underset{\sim}{7} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \text { y } \\ & \text { 웅 } \end{aligned}$ |  |  | $\begin{aligned} & \text { Q } \\ & \text { N } \\ & \text { N } \\ & \text { N } \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{7} \end{aligned}$ |  |
|  | $\begin{aligned} & y \\ & \vdots \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { y } \\ & 0 \\ & 0 \\ & \underset{\sim}{4} \\ & \underset{\sim}{u} \\ & \stackrel{\rightharpoonup}{u} \end{aligned}$ | $\begin{aligned} & \underset{U}{u} \\ & \dot{u} \\ & \frac{0}{1} \\ & \frac{1}{a} \\ & \frac{1}{\alpha} \\ & \frac{\gamma}{4} \end{aligned}$ | $\begin{aligned} & \underline{u} \\ & \underset{\sim}{u} \\ & \overline{\bar{x}} \end{aligned}$ |  | $\begin{aligned} & \text { y } \\ & \text { n } \\ & \frac{1}{1} \\ & 0 \\ & e \end{aligned}$ |  | $\begin{aligned} & \underset{U}{y} \\ & z \\ & \underset{u}{U} \\ & \frac{1}{X} \\ & \underset{\Sigma}{\omega} \end{aligned}$ |  |  |  | $\begin{aligned} & \text { y } \\ & \text { co } \\ & 0 \\ & 0 \\ & 0 \\ & \text { dy } \end{aligned}$ |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \underset{\sim}{w} \\ & \underset{\sim}{r} \\ & \underset{\sim}{c} \\ & \stackrel{\sim}{c} \end{aligned}$ | $\begin{aligned} & \underset{\sim}{u} \\ & \text { ur } \\ & \underset{\sim}{\underset{u}{u}} \\ & \underset{j}{3} \end{aligned}$ |  |  |  |  | MACFARLANE RES |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \infty \\ & \underset{\sim}{u} \\ & \infty \\ & \vdots \\ & \vdots \end{aligned}$ |  |  |  |
| $\begin{aligned} & \text { İ } \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \hat{0} \\ & \stackrel{0}{0} \end{aligned}$ | $\begin{aligned} & \circ \\ & \hline 0 \\ & \hline 0 \end{aligned}$ | oㅇ | $\stackrel{m}{e}$ | $\underset{i}{\stackrel{\rightharpoonup}{6}}$ | $\frac{6}{6}$ | $\frac{0}{6}$ | $\begin{aligned} & \text { O} \\ & \text { N} \end{aligned}$ | $\stackrel{\bar{N}}{\stackrel{N}{N}}$ | N্ল゙ | $\stackrel{\substack{N \\ \mathbf{N} \\ \hline}}{ }$ | N00 | $\begin{aligned} & \text { O} \\ & \mathbf{N} \end{aligned}$ | $\begin{aligned} & \text { Nop } \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{aligned} & \infty \\ & \hline ్ ల ్ ల ~ \end{aligned}$ | N్ల్లి | $\begin{aligned} & \text { O} \\ & \text { Con } \end{aligned}$ | - | \% |
| $\hat{\forall}$ | $\hat{\forall}$ | $\hat{\sim}$ | $\hat{\forall}$ | $\hat{*}$ | $\hat{*}$ | * | $\hat{\forall}$ | $\hat{\forall}$ | $\hat{*}$ | $\hat{*}$ | $\hat{*}$ | V | § | V | $\hat{\gamma}$ | V | $\hat{*}$ | N | $\hat{\sim}$ | * |


| 8 | $\bigcirc$ | $\bigcirc$ | $\stackrel{ \pm}{*}$ | $\stackrel{10}{0}$ | N | $\stackrel{\square}{\square}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{m}{\Gamma}$ | － | $\stackrel{m}{m}$ | $\bullet$ | $\stackrel{\sim}{*}$ | $\stackrel{m}{\sim}$ | $\stackrel{+}{*}$ | $\bigcirc$ | $\bigcirc$ | $\stackrel{\infty}{\dot{+}}$ |  | － | ＋ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | $\stackrel{\sim}{\sim}$ | $\bigcirc$ | $\stackrel{ \pm}{*}$ | $\stackrel{\square}{\square}$ | N | N | ค | $\stackrel{10}{\square}$ | $m$ | $\stackrel{\odot}{\circ}$ | $\stackrel{\sim}{\infty}$ | N | N | N | － | $\stackrel{\odot}{\circ}$ | $\begin{aligned} & \underset{\sim}{\mathbf{j}} \end{aligned}$ | $\begin{gathered} \stackrel{\Im}{\dot{N}} \\ \underset{\sim}{2} \end{gathered}$ | $\stackrel{\infty}{\circ}$ | $\stackrel{\infty}{\sim}$ |
| 8 <br> $\mathbf{N}$ <br> $\stackrel{0}{6}$ <br> $\frac{1}{i}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \underset{i}{7} \end{aligned}$ | 0 <br>  <br> $N$ <br> $N$ <br> $N$ | 8 <br> 8 <br> N <br> 0 <br> 6 | $\begin{aligned} & \text { O} \\ & \text { O} \\ & \stackrel{N}{N} \end{aligned}$ | $\begin{aligned} & 8 \\ & \hline 0 \\ & N \\ & N \\ & \hline 10 \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \mathbf{O} \\ & \stackrel{N}{N} \\ & \hline 15 \end{aligned}$ |  |  | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & 0 \\ & i \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \frac{1}{6} \\ & \hline 10 \end{aligned}$ | 8 <br> $\mathbf{O}$ <br> $\stackrel{0}{6}$ <br> $\frac{1}{i}$ | $\begin{aligned} & 0.0 \\ & 0 \\ & \text { N } \\ & 0 \\ & \hline 10 \end{aligned}$ | 0 <br>  <br> N <br> N <br> N <br> N | $\circ$ <br> 0 <br> N <br> N <br> N | 0 $\stackrel{0}{2}$ $\stackrel{N}{7}$ $\underset{i}{7}$ | 8 <br> 0 <br> N <br> in | $\begin{aligned} & 8 \\ & \hline \mathbf{O} \\ & \text { N } \\ & \text { N } \end{aligned}$ | 8 <br> 0 <br> $N$ <br> 0 <br> 0 | 8 <br>  <br> N <br> 0 <br> 0 <br> 0 |
| 8 | $\bigcirc$ | 0 | $\stackrel{ \pm}{\square}$ | 10 | N | $\stackrel{\square}{\square}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\sim}{\sim}$ | O | $\stackrel{m}{\infty}$ | $\bullet$ | $\stackrel{\sim}{*}$ | － | 10 | $\bigcirc$ | － | $\stackrel{\infty}{\dot{+}}$ | $\stackrel{\stackrel{N}{\mathrm{O}}}{\underset{\Gamma}{\prime}}$ | $\infty$ $\infty$ | $\stackrel{\infty}{\circ}$ |
| $\begin{aligned} & \text { n } \\ & \text { O} \\ & \stackrel{N}{5} \\ & i \end{aligned}$ | $\circ$ <br> - <br> N <br> N <br> N <br> O | $\begin{aligned} & \text { n O} \\ & \text { N } \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & \text { n O} \\ & \stackrel{0}{N} \\ & \stackrel{i}{7} \end{aligned}$ |  | $\begin{aligned} & 0 \\ & \text { O} \\ & \stackrel{N}{5} \\ & \underset{F}{7} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \stackrel{0}{N} \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & 8 \\ & \stackrel{\circ}{N} \\ & \stackrel{N}{5} \\ & \stackrel{0}{2} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \mathbf{N} \\ & \stackrel{N}{N} \\ & \stackrel{N}{N} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \text { N} \\ & \vdots \\ & \text { N } \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & \text { O} \\ & \text { N } \\ & \vdots \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{N} \\ & \stackrel{N}{m} \\ & \infty \end{aligned}$ | $\circ$ $\stackrel{\circ}{O}$ $\stackrel{N}{N}$ $\underset{\infty}{-}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{2} \\ & N \\ & \underset{i}{N} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{N} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{0}{N} \\ & \stackrel{N}{N} \end{aligned}$ | 0 <br> $\mathbf{O}$ <br> N <br> ì <br> 6 | $\begin{aligned} & 0.0 \\ & \text { N} \\ & \text { N} \\ & \text { N} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{O}{N} \\ & \stackrel{N}{N} \end{aligned}$ | － |
|  |  |  | $\begin{aligned} & \frac{y}{0} \\ & 3 \\ & 0 \\ & \vdots \\ & \vdots \\ & \frac{0}{0} \end{aligned}$ |  | $\begin{gathered} \text { y } \\ \text { 足 } \\ \text { 山̈ه } \end{gathered}$ |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \stackrel{\gamma}{\mu} \\ & \underset{\sim}{\mu} \\ & \underline{\alpha} \\ & \underline{O} \\ & \underline{Z} \\ & \vdots \end{aligned}$ |  |  |  |  |  |
|  |  |  |  | 9 0 0 0 0 0 2 |  | $\begin{aligned} & n \\ & 0 \\ & 0 \\ & 0 \\ & \omega \\ & \underset{\Sigma}{\Sigma} \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 앙 | $$ | $\begin{aligned} & \text { M్ల } \\ & \text { COM } \end{aligned}$ | $\begin{aligned} & \text { H } \\ & \hline 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \dot{8} \\ & \stackrel{0}{9} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \stackrel{0}{e} \end{aligned}$ | $\stackrel{\Gamma}{\hat{e}}$ | $\begin{aligned} & \underset{N}{N} \\ & \underset{M}{2} \end{aligned}$ | $\stackrel{n}{0}$ | $\begin{aligned} & \stackrel{N}{\grave{0}} \\ & \hline \mathbf{N} \end{aligned}$ | $\stackrel{\infty}{\stackrel{\infty}{e}}$ | $\begin{aligned} & \stackrel{9}{2} \\ & \stackrel{e}{0} \end{aligned}$ | $\begin{aligned} & \infty \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \text { + } \\ & \underset{\sim}{\circ} \end{aligned}$ | $\begin{aligned} & \infty \\ & \infty \\ & 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\otimes}{0} \\ & \text { en } \end{aligned}$ | $\begin{aligned} & \infty \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{0} \\ & \text { O} \end{aligned}$ | O | \％ |
| § | N | 才 | $\hat{*}$ | $\hat{\sim}$ | $\hat{\sim}$ | V | F | $\hat{\forall}$ | $\hat{*}$ | ＊ | $\hat{*}$ | $\hat{*}$ | N | V | $\hat{\sim}$ | $\hat{\sim}$ | $\hat{\forall}$ | $\hat{\forall}$ | V | ＊ |


| 47 | 3692 | HOFMANN POND \#5 | NO NAME CK | 11/1/2005 | 0.6 | 5/30/2006 | 1.12 | 1.12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | 3693 | HOFMANN POND \#6 | NO NAME CK | 11/1/2005 | 2.2 | 9/26/2006 | 4.26 | 4.26 |
| 47 | 3694 | EAST TROWNSELL POND | ARAPAHOE CK | 11/1/2005 | 1.9 | 7/26/2006 | 2.4 | 2.4 |
| 47 | 3695 | LOWER TROWNSELL POND | ARAPAHOE CK | 7/26/2006 | 1.3 | 11/1/2005 | 2 | 1.3 |
| 47 | 3696 | MCQUERY POND | BIG GRIZZLY CK | 11/1/2005 | 4.5 | 7/26/2006 | 4.5 | 4.5 |
| 47 | 3697 | SCHROEDER POND | SOAP CK | 8/17/2006 | 0.1 | 5/30/2006 | 0.7 | 0.7 |
| 47 | 3698 | DEER CREEK STOCK POND | DEER CK | 6/30/2006 | 0 | 4/10/2006 | 0.05 | 0 |
| 47 | 3699 | LAKE JOHN ANNEX | LAKE CK | 7/1/2006 | 450 | 11/1/2005 | 900 | 900 |
| 47 | 3700 | HOFMANN POND \#6A | NO NAME CK | 11/1/2005 | 0.15 | 5/15/2006 | 1.16 | 1.11 |
| 47 | 3725 | ADDISON RESERVOIR | BUFFALO CK | 7/12/2006 | 14 | 11/1/2005 | 41.5 | 41.5 |
| 47 | 3726 | AQUA FRIA RES | BEAVER CK of ROARING FK | 11/10/2005 | 846 | 6/20/2006 | 846 | 846 |
| 47 | 3742 | LAUNE RESERVOIR | TRIBUTARIES | 7/10/2006 | 1637 | 9/14/2006 | 2501 | 2501 |
| 47 | 3743 | SEYMOUR RES | BIG GRIZZLY CK | 7/12/2006 | 83 | 4/20/2006 | 525 | 525 |
| 47 | 3744 | COYTE RESERVOIR | ARAPAHOE CK | 11/1/2005 | 24 | 4/24/2006 | 38.5 | 38.5 |
| 47 | 3746 | POLE MOUNTAIN RES | MIDDLE FK of MEXICAN CK | 11/1/2005 | 958 | 6/1/2006 | 1754 | 1545 |
| 47 | 3750 | LAKE JOHN | LAKE CK | 7/15/2006 | 6750 | 11/1/2005 | 7092 | 7092 |
| 47 | 3753 | NORTH MICHIGAN CK RES | NORTH FK of MICHIGAN R | 11/1/2005 | 1283 | 5/2/2006 | 1324 | 1285 |
| 47 | 3756 | HOUSE RES | LOST CK | 11/1/2005 | 45 | 4/11/2006 | 45 | 45 |
| 47 | 3757 | RIDINGS RES | BUFFALO CK | 11/1/2005 | 0 | 4/20/2006 | 46 | 0 |
| 47 | 3766 | ROCK RESERVOIR | NEWCOMB CK | 11/1/2005 | 0 | 6/15/2006 | 18 | 0 |
| 47 | 3777 | NINEGAR RESERVOIR | NINEGAR CK | 6/22/2006 | 0 | 4/20/2006 | 24 | 24 |


| 47 | 3778 | FISCHER LAKE | MICHIGAN RIVER | 4/27/2006 | 49.8 | 5/20/2006 | 58.4 | 58.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | 4335 | MEADOW CREEK RES | MEADOW CK | 9/2/2006 | 1584 | 5/5/2006 | 5015 | 2525 |
| 47 | 4354 | LATHAM RES | NEWCOMB CK | 11/1/2005 | 21 | 6/15/2006 | 21 | 21 |
| 47 | 4356 | MUDDY PASS RES | BIG GRIZZLY CK | 11/1/2005 | 54 | 4/13/2006 | 58 | 58 |
| 47 | 4358 | WADE LAKE | NINEGAR CK | 11/1/2005 | 51 | 4/20/2006 | 51 | 51 |
| 47 | 4432 | SPRING CK RES | SPRING CK | 9/5/2006 | 33 | 4/26/2006 | 50 | 50 |
| 47 | 4433 | MUSKRAT POND | POTTER CK | 10/31/2006 | 3.6 | 5/10/2006 | 378 | 3.6 |
|  |  |  | TOTAL FOR DISTRICT 47 |  | 21,819 |  | 37,622 | 27,667 |
| 54 | 3589 | ELK LAKE RES | WILLOW CK | 8/15/2006 | 0 | 7/1/2006 | 100 | 0 |
| 54 | 3780 | MARTIN CULL RESERVOIR | FOUR MILE CK | 8/15/2006 | 34.84 | 8/15/2006 | 34.84 | 34.84 |
| 54 | 3946 | MCCARGER RES | INDEPENDENCE CK | 6/6/2006 | 64 | 6/6/2006 | 64 | 64 |
|  |  |  | TOTAL FOR DISTRICT 54 |  | 99 |  | 199 | 99 |
| 56 | 3506 | DOUGLAS RESERVOIR | COTTONWOOD CK | 6/24/2006 | 1 | 6/10/2006 | 3 | 1 |
| 56 | 3710 | BASSETT RESERVOIR NO 1 | MATT SPRING CK | 7/21/2006 | 10.9 | 7/21/2006 | 10.9 | 10.9 |
| 56 | 3712 | DRY LAKE RESERVOIR | DRY CK of POT CK | 4/17/2006 | 10 | 4/17/2006 | 10 | 10 |
| 56 | 3713 | HAUNTED SPG RES | HAUNTED SPG GULCH | 3/8/2006 | 0 | 3/7/2006 | 4 | 0 |
| 56 | 3715 | OFFIELD RESERVOIR | POTCK | 4/17/2006 | 300 | 4/17/2006 | 300 | 300 |
| 56 | 3740 | BASSETT RESERVOIR NO 2 | BULL CANYON | 7/21/2006 | 0 | 7/21/2006 | 0 | 0 |
| 56 | 3901 | MATT WERNER RESERVOIR | POT CK | 10/31/2006 | 2800 | 4/17/2006 | 3945 | 2800 |
| 56 | 3903 | CALDER RESERVOIR NO. 2 | POT CK | 10/31/2006 | 1250 | 4/17/2006 | 16000 | 1250 |
| 56 | 3904 | CROUSE RESERVOIR | POTCK | 10/31/2006 | 645 | 4/17/2006 | 1160 | 645 |
| 56 | 4452 | HOUSE RESERVOIR | ANTONE CANYON | 5/16/2006 | 15 | 5/16/2006 | 15 | 15 |
| 56 | 4453 | IRISH LAKE | IRISH LAKE BASIN | 5/16/2006 | 100 | 5/16/2006 | 100 | 100 |
|  |  |  | TOTAL FOR DISTRICT 56 |  | 5132 |  | 21548 | 5132 |


| 57 | 3500 | SENECA MINE POND 006 | HUBBERSON GULCH | 9/7/2006 | 13.05 | 5/4/2006 | 14.23 | 14.23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 | 3501 | SEDIMENTATION POND A | FOIDEL CK | 11/1/2005 | 210 | 10/31/2006 | 210 | 210 |
| 57 | 3516 | WOLF MOUNTAIN RES | WOLF CK | 11/1/2005 | 80 | 4/25/2006 | 82 | 81 |
| 57 | 3523 | PEABODY POND Y-1 | SAGE CK | 11/1/2005 | 14.23 | 10/31/2006 | 14.23 | 14.23 |
| 57 | 3537 | MINE 3 NORTH POND | MIDDLE CK | 11/1/2005 | 11 | 10/31/2006 | 11 | 11 |
| 57 | 3538 | MINE 3 SOUTH POND | MIDDLE CK | 11/1/2005 | 41 | 10/31/2006 | 41 | 41 |
| 57 | 3541 | HUNTER NO 1 RES | MIDDLE CK | 11/1/2005 | 3 | 5/1/2006 | 10 | 3 |
| 57 | 3543 | CAMPSITE RESERVOIR | SMUIN GULCH | 11/1/2005 | 2 | 10/31/2006 | 2 | 2 |
| 57 | 3549 | APPLE RES | DRY FORK | 11/1/2005 | 0 | 5/9/2006 | 11 | 2 |
| 57 | 3551 | BROCK RESERVOIR | BROCK GULCH | 11/1/2005 | 1 | 5/1/2006 | 6 | 4 |
| 57 | 3555 | ECKMAN PARK RES 1 | FOIDEL CK | 11/1/2005 | 2 | 5/1/2006 | 4 | 3 |
| 57 | 3560 | EMRICH RES | TEMPLE GULCH | 11/1/2005 | 0 | 4/8/2006 | 175 | 0 |
| 57 | 3564 | GREASEWOOD FLAT RES | DILL GULCH | 11/1/2005 | 1 | 4/8/2006 | 8 | 1 |
| 57 | 3571 | JAMES MARION YOAST RES | YOAST GULCH | 11/1/2005 | 19 | 5/25/2006 | 201 | 40 |
| 57 | 3572 | J C TEMPLE RES 1 | TEMPLE GULCH | 10/24/2006 | 250 | 4/8/2006 | 454 | 250 |
| 57 | 3574 | MORGAN CREEK RES 1 | MORGAN CK | 11/1/2005 | 0 | 4/17/2006 | 100 | 0 |
| 57 | 3575 | NOFSTGER RES | SCOTCHMANS GULCH | 10/13/2006 | 33 | 4/17/2006 | 95 | 33 |
| 57 | 3576 | NOFSTGER ZEIGLER RES | SCOTCHMANS GULCH | 10/31/2006 | 50 | 4/5/2006 | 67 | 50 |
| 57 | 3577 | SAGE CREEK RES | SAGE CK | 11/1/2005 | 0 | 10/31/2006 | 0 | 0 |
| 57 | 3582 | SEATON RES | MIDDLE FISH CK | 11/1/2005 | 0 | 10/31/2006 | 0 | 0 |


| \% | $\stackrel{\sim}{\sim}$ | - | N | - | $\sim$ | $\stackrel{0}{0}$ | $\stackrel{\underset{F}{*}}{\square}$ | の | $\stackrel{\infty}{0}$ | * | $\bigcirc$ | - | เ | $\stackrel{10}{6}$ | ㅇ | $\infty$ | $\infty$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\infty}{\infty}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | N | $\begin{aligned} & \stackrel{\circ}{\circ} \\ & \stackrel{0}{2} \end{aligned}$ | $\begin{aligned} & \bullet \\ & \stackrel{m}{r} \end{aligned}$ | $\sim$ | $\stackrel{\square}{*}$ | $\stackrel{10}{\circ}$ | $\stackrel{t}{\underset{\sim}{r}}$ | a) | $\stackrel{\infty}{\circ}$ | * | 10 | ㅇ | 10 | $\stackrel{10}{6}$ | ㅇ | ம | $\infty$ | m | 앙 | $\stackrel{\infty}{\infty}$ |
| 0 <br> $\mathbf{O}$ <br> $\stackrel{y}{3}$ <br> $\stackrel{3}{6}$ |  |  | $\circ$ <br>  <br> $N$ <br> $N$ <br>  <br>  | 8 <br> 8 <br> $\frac{1}{5}$ <br> $\frac{5}{7}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \stackrel{N}{N} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \stackrel{0}{N} \\ & \stackrel{i}{5} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \vdots \\ & i \end{aligned}$ | 8 <br> 8 <br> $N$ <br> 10 | 8 <br> 8 <br> N <br> 0 <br> 0 <br> 6 | $\circ$ <br> - <br> N <br> N <br> 응 <br> - | $\begin{aligned} & 0 \\ & \hline \mathbf{O} \\ & N \\ & \underset{N}{\infty} \end{aligned}$ |  |  |  | $\circ$ <br> - <br> N <br> - <br> - | $\begin{aligned} & 0.0 \\ & \text { N } \\ & \frac{5}{6} \end{aligned}$ | $\circ$ <br> O <br> N <br> ले <br> - | 8 0 $N$ $\frac{1}{7}$ | $$ | O N N $\stackrel{1}{2}$ |
| $\underset{\infty}{ \pm}$ | * | - | N | $\checkmark$ | $F$ | $\stackrel{1}{6}$ | $\underset{\underset{\sim}{*}}{\underset{\sim}{2}}$ | の | $\stackrel{\infty}{\circ}$ | * | * | - | 10 | $\stackrel{1}{6}$ | 앙 | $\llcorner$ | $\infty$ | $\stackrel{\sim}{\sim}$ | ம | $\stackrel{\infty}{\infty}$ |
| $\circ$ <br> - <br> N <br> $\vdots$ <br> $\vdots$ <br> - | $\begin{aligned} & \text { n } \\ & \text { N } \\ & \stackrel{N}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & N \\ & \vdots \\ & \vdots \\ & \hline \end{aligned}$ |  |  | $\circ$ $\stackrel{0}{2}$ $\stackrel{N}{7}$ $\stackrel{1}{2}$ | $\begin{aligned} & 0 \\ & 0 \\ & N \\ & \vdots \\ & i \end{aligned}$ | $\begin{aligned} & \text { no } \\ & \text { N } \\ & \stackrel{N}{i} \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \text { N} \\ & \stackrel{N}{7} \\ & 7 \end{aligned}$ |  |  | $\begin{aligned} & 0 \\ & \hline \\ & N \\ & N \\ & N \\ & \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { O} \\ & \text { N } \\ & \text { M } \end{aligned}$ | $\begin{aligned} & \text { no } \\ & \text { N} \\ & \stackrel{N}{5} \end{aligned}$ | O $\stackrel{\circ}{\mathrm{N}}$ $\stackrel{y}{2}$ $i$ | $\circ$ $\stackrel{O}{2}$ $i$ $i$ | $\begin{aligned} & 0 \\ & \mathbf{0} \\ & \stackrel{N}{5} \\ & \stackrel{i}{7} \end{aligned}$ |  | 8 <br> 0 <br> $N$ <br> 0 <br> 0 <br> - | $\begin{aligned} & \text { n} \\ & \stackrel{0}{N} \\ & \underset{i}{5} \end{aligned}$ |  |
| $\begin{aligned} & \underset{U}{y} \\ & \vdash \\ & 0 \\ & \stackrel{\gamma}{\vdash} \end{aligned}$ |  | $I$ <br> 0 <br> 0 <br> 0 <br> 1 <br> 0 <br> 0 <br> 1 |  |  | $\begin{aligned} & \text { y } \\ & u \\ & 0 \\ & 0 \\ & 3 \end{aligned}$ | $\begin{aligned} & \mathrm{y} \\ & 5 \\ & 0 \\ & 0 \\ & \stackrel{\gamma}{1} \end{aligned}$ | $\begin{aligned} & \text { y } \\ & \stackrel{1}{5} \\ & 0 \\ & \stackrel{y}{4} \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \underset{U}{u} \\ & \underset{~}{0} \\ & \underset{\Sigma}{\Sigma} \end{aligned}$ | $\begin{aligned} & \underline{y} \\ & \vec{u} \\ & \bar{O} \\ & \bar{u} \end{aligned}$ | $\begin{aligned} & y \\ & \vdots \\ & \vdots \\ & 0 \\ & 0 \\ & \vdots \\ & \mathbf{y} \end{aligned}$ | 4 0 0 0 0 0 0 0 |  |  | Y U U U ¢ |
|  |  |  |  |  | 0 <br> 2 <br> 0 <br> 0 <br> 0 <br> 0 <br> 1 <br> 1 |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { y } \\ & 0 \\ & 0 \end{aligned}$ |  |  | 1 2 0 0 0 0 0 2 2 0 0 0 |  |  | 8 <br> 0 <br> 0 <br> 0 <br> 4 <br> 0 <br> 0 <br> 1 <br> 1 <br> 6 <br> 1 <br> 1 | 1 0 0 0 0 0 0 0 0 | EAST OF MINE SHOP IMPND |  |  |  |
| $\begin{aligned} & \infty \\ & \substack{\infty \\ \hline 0} \end{aligned}$ | $\begin{aligned} & \infty \\ & \text { م } \\ & \text { Non } \end{aligned}$ | $\begin{aligned} & \mathrm{N} \\ & \mathbf{N} \end{aligned}$ | $\stackrel{\circ}{6}$ | $\underset{\substack{N}}{N}$ | ి్లిలి | $\begin{aligned} & \text { O్ } \\ & \text { Co } \end{aligned}$ | $\begin{aligned} & \text { O+ } \\ & \stackrel{\text { O}}{\mathbf{N}} \end{aligned}$ |  | $\begin{gathered} \text { N } \\ \text { O- } \end{gathered}$ | ষ্ণ | $\begin{aligned} & \mathbf{~} \\ & \stackrel{0}{0} \\ & \end{aligned}$ | $\begin{aligned} & \text { H0 } \\ & \text { He } \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \hat{N} \\ & \text { ê } \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{0} \\ & \end{aligned}$ | $\begin{aligned} & \text { O8} \\ & \stackrel{0}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & N \\ & \underset{\sim}{N} \end{aligned}$ | $\begin{aligned} & \bar{N} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{N}{N}$ | $\stackrel{10}{\stackrel{1}{N}}$ |  |
| ¢ | is | is | in | ก | is | - | is | ¢ | ก | - | E | - | is | ¢ | - | in | N | ก | is | in |


| $\stackrel{\circ}{\circ}$ | - | $N$ | $\begin{aligned} & \text { No } \\ & \underset{\mathbf{N}}{ } \end{aligned}$ | $\stackrel{6}{6}$ | 「 | O $\sim$ i | $\bigcirc$ | - | N | $\stackrel{\sim}{\sim}$ | $\begin{aligned} & \text { N } \\ & \text { O} \end{aligned}$ | ¢ | $\begin{aligned} & \text { م } \\ & \text { + } \end{aligned}$ | $\overline{6}$ | $\begin{aligned} & \infty \\ & \infty \\ & \end{aligned}$ | N/ | - | $\ldots$ | - | $\stackrel{\sim}{\sim}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{6}{6}$ | N | V | $\underset{\sim}{\underset{\sim}{\mathbf{o}}}$ | $\stackrel{\bigcirc}{6}$ | $\frac{\bullet}{N}$ | B $\sim$ $\sim$ | $\bar{\square}$ | $\stackrel{\bullet}{\dot{m}}$ | N | N | $\frac{8}{7}$ | ¢ | ¢ | $\overline{8}$ | $\begin{aligned} & \text { ti } \\ & \stackrel{y}{\sim} \end{aligned}$ | N | $\bigcirc$ | 앙 | -8 | $\stackrel{m}{\sim}$ |
| $\begin{aligned} & 0 \\ & \hline \mathbf{N} \\ & \frac{1}{6} \\ & \frac{1}{7} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \\ & N \\ & \stackrel{N}{6} \end{aligned}$ | $\begin{aligned} & 8 \\ & 0 \\ & N \\ & \frac{1}{6} \end{aligned}$ |  | $\circ$ <br> - <br> N <br> N <br> 응 | $\begin{aligned} & 0.0 \\ & \mathbf{O} \\ & \stackrel{0}{0} \\ & \hline 6 \end{aligned}$ | $\circ$ <br> -C <br> N <br> N <br> 응 | $\circ$ <br> - <br> 응 <br> 은 | $\begin{aligned} & 8 \\ & \stackrel{8}{N} \\ & \stackrel{N}{N} \\ & \stackrel{1}{6} \end{aligned}$ | $\begin{aligned} & 0 \\ & \mathbf{0} \\ & \frac{1}{6} \end{aligned}$ | $\begin{aligned} & 0 \\ & \hline \mathbf{N} \\ & \underset{i}{5} \end{aligned}$ | $\begin{aligned} & 0 \\ & \stackrel{O}{N} \\ & \stackrel{N}{N} \end{aligned}$ | $\circ$ <br> - <br> N <br> N <br> 응 | $\begin{aligned} & 8 \\ & \mathbf{O} \\ & \text { N } \\ & \text { Nin } \end{aligned}$ | $\circ$ <br> - <br> N <br> $\stackrel{y}{m}$ <br> $\stackrel{-}{-}$ | 0 <br> - <br> $N$ <br> 0 <br> 0 <br> 0 |  | $\begin{aligned} & 8 \\ & \text { O} \\ & \stackrel{N}{5} \end{aligned}$ | 8 <br> -8 <br> $\stackrel{y}{5}$ <br> 1 | $\circ$ <br> 8 <br> N <br> O <br> M <br> 0 | O N N N |
| $\stackrel{\circ}{\square}$ | $\ulcorner$ | N | $\stackrel{\underset{N}{N}}{N}$ | $\stackrel{6}{6}$ | O- | $\begin{aligned} & 0 \\ & \stackrel{0}{1} \\ & \mathbf{N} \end{aligned}$ | $\bigcirc$ | - | N | ㅇ | $\begin{aligned} & \stackrel{N}{N} \\ & \stackrel{N}{N} \end{aligned}$ | ¢ | $\begin{aligned} & \text { n } \\ & \substack{0 \\ 6} \end{aligned}$ | $\overline{8}$ | - | N | - | $\bigcirc$ | $\frac{8}{5}$ | $\stackrel{\sim}{\infty}$ |
| $\stackrel{60}{0}$ | $\circ$ $\stackrel{\circ}{\mathrm{O}}$ $\stackrel{y}{2}$ $\underset{i}{2}$ | $\begin{aligned} & \text { n} \\ & \text { N } \\ & \stackrel{N}{7} \\ & \vdots \end{aligned}$ |  | $\begin{aligned} & 0 \\ & \mathbf{0} \\ & \stackrel{N}{5} \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{O}{N} \\ & \stackrel{1}{\infty} \\ & \infty \end{aligned}$ | $\begin{aligned} & \text { n } \\ & 0 \\ & N \\ & i \\ & i \end{aligned}$ |  | $\circ$ $\stackrel{\circ}{\circ}$ $\stackrel{N}{i}$ $i$ | $\circ$ <br> - <br> N <br> - <br> - | $\begin{aligned} & \text { BO} \\ & \stackrel{0}{N} \\ & \underset{i}{7} \end{aligned}$ | $\begin{aligned} & 8 \\ & \stackrel{0}{N} \\ & \stackrel{i}{j} \end{aligned}$ | $\begin{aligned} & \text { n } \\ & \text { N } \\ & \stackrel{N}{5} \\ & \underset{i}{2} \end{aligned}$ |  | $\stackrel{2}{8}$ <br> $\stackrel{2}{N}$ <br> $\stackrel{y}{5}$ | $\begin{aligned} & 0 \\ & \mathrm{O} \\ & \mathrm{~N} \\ & \vdots \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \text { no } \\ & \text { N} \\ & \stackrel{N}{5} \\ & i \end{aligned}$ | $\circ$ <br> - <br> N <br> ㅇ <br> 응 |  | $\stackrel{2}{8}$ $\stackrel{2}{N}$ $\stackrel{y}{5}$ $i$ | O O N - |
| $\begin{aligned} & y \\ & 0 \\ & \vdots \\ & 0 \\ & 07 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \underset{U}{u} \\ & \underset{~}{0} \\ & \underset{\Sigma}{\Sigma} \end{aligned}$ |  |  |  |  | $\begin{aligned} & \frac{Y}{U} \\ & \frac{I}{U S} \\ & \underline{L} \end{aligned}$ | $$ | $$ |  |  |  |  |  | $\begin{aligned} & \text { Y } \\ & 3 \\ & 3 \\ & \vdots \\ & \vdots \\ & 3 \end{aligned}$ | $\begin{aligned} & y \\ & 0 \\ & z \\ & 0 \\ & 0 \\ & E \\ & \vdots \end{aligned}$ |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \stackrel{m}{\infty} \\ & \hline \mathbf{N} \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\Omega} \\ & \stackrel{N}{2} \end{aligned}$ | $\begin{aligned} & \hat{N} \\ & \stackrel{N}{\mathbf{N}} \end{aligned}$ |  | oু | $\begin{aligned} & \mathrm{O} \\ & \text { Nem } \end{aligned}$ | $\begin{aligned} & \overline{\mathrm{O}} \\ & \text { Nen } \end{aligned}$ | గ్ల | $\underset{\sim}{\mathbf{H}}$ | $\begin{aligned} & \circ \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & 8 \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \circ \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \text { O} \\ & \stackrel{0}{0} \end{aligned}$ | $\underset{\sim}{\underset{\sim}{7}}$ | $\underset{\sim}{\underset{\sim}{N}}$ | $\stackrel{m}{\underset{N}{m}}$ | $\stackrel{\infty}{\underset{\sim}{n}}$ | $\frac{9}{6}$ | N | $\stackrel{\text { N}}{\text { N}}$ | N |
| ¢ | ¢ | is |  | $\stackrel{\infty}{\circ}$ | $\propto$ | $\infty$ | $\infty$ | $\infty$ | $\sim$ | $\infty$ | $\propto$ | $\propto$ | $\bigcirc$ | $\infty$ | $\infty$ | $\stackrel{\infty}{\circ}$ | $\stackrel{\sim}{\circ}$ | $\bigcirc$ | $\infty$ | $\infty$ |


| $\stackrel{\curvearrowleft}{\rightleftharpoons}$ | $\stackrel{\text { ® }}{ }$ | $\sim$ | N | ®ٌ | $\stackrel{\infty}{\stackrel{\infty}{N}}$ | Nọ | $\bigcirc$ | 든 | $\hat{m}$ | $\stackrel{\sim}{\sim}$ | $\infty$ | 앙 | $\bigcirc$ | $\stackrel{\%}{0}$ | $\infty$ | ＊ | $\stackrel{\sim}{\sim}$ | $\stackrel{m}{\square}$ | $\stackrel{\infty}{\infty}$ | $\bullet$ |
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| $\stackrel{0}{\sim}$ | $\stackrel{\sim}{\sim}$ | $\sim$ | N | $\stackrel{\circ}{1}$ | Nivin | $\stackrel{\text { Na }}{0}$ | $\stackrel{\text { ¢ }}{+}$ | ํ．ర | ले | จั | $F$ | $\stackrel{N}{\sim}$ | \％ | ¢ | $\infty$ | ＊ | $\stackrel{\bigcirc}{\square}$ | $\stackrel{m}{\square}$ | $\stackrel{\sim}{\infty}$ | $\wedge$ |
|  |  | $\begin{aligned} & 8 \\ & \stackrel{0}{N} \\ & \text { in } \\ & \text { in } \end{aligned}$ |  | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \text { N } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & 8 \\ & \mathbf{N} \\ & \frac{1}{5} \end{aligned}$ |  |  | $\begin{aligned} & \text { ob } \\ & \text { N } \\ & \text { N } \\ & \text { in } \end{aligned}$ |  | $\begin{aligned} & \circ \\ & \stackrel{O}{N} \\ & \underset{\sim}{N} \\ & \underset{V}{2} \end{aligned}$ | 8 0 0 5 5 | $$ | $\circ$ <br> $\mathbf{O}$ <br> N <br>  | $\circ$ <br> 0 <br> $\stackrel{y}{5}$ <br> $\vdots$ <br> 6 | $\circ$ <br> 0 <br> $\vdots$ <br> $\vdots$ <br> - |  |  | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \stackrel{1}{N} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | 8 <br>  <br> N |
| － | $\stackrel{\text { ® }}{ }$ | $\sim$ | N | $\stackrel{\text { N }}{\text { N }}$ | $\stackrel{\sim}{\sim}$ | No | $\bigcirc$ | 응 | ¢ | $\stackrel{\sim}{\sim}$ | $\infty$ | $\infty$ | $\bigcirc$ | $\stackrel{\circ}{0}$ | $\infty$ | ＊ | $\stackrel{\square}{\circ}$ | $\stackrel{m}{\square}$ | $\stackrel{\infty}{\infty}$ | $๑$ |
| $\begin{aligned} & \text { n } \\ & \substack{1 \\ 5} \\ & \end{aligned}$ | $\stackrel{\circ}{0}$ $\stackrel{N}{5}$ $\stackrel{7}{7}$ |  | $\stackrel{\leftrightarrow}{0}$ | $\circ$ $\stackrel{\circ}{0}$ $\stackrel{N}{1}$ $\stackrel{N}{1}$ | $\begin{aligned} & \text { O} \\ & \stackrel{\circ}{N} \\ & \underset{\sim}{7} \end{aligned}$ |  | $\stackrel{4}{0}$ | $\stackrel{0}{0}$ | $\begin{array}{r}\circ \\ \stackrel{0}{0} \\ \underset{y}{7} \\ \hline\end{array}$ | $\begin{gathered} \text { O} \\ \stackrel{0}{\mathrm{~N}} \\ \underset{\infty}{2} \end{gathered}$ | $\stackrel{8}{0}$ | $\stackrel{\circ}{0}$ $\stackrel{1}{N}$ $\underset{\sim}{-}$ |  |  | $\begin{aligned} & \text { OO } \\ & \stackrel{N}{7} \\ & \underset{\sim}{7} \end{aligned}$ |  | $\stackrel{4}{2}$ | $\stackrel{0}{0}$ |  | $\stackrel{\text { O }}{\substack{\text { N }}}$ |
| $\begin{aligned} & \frac{r}{0} \\ & \text { z} \\ & 0 \\ & \vdots \\ & 3 \end{aligned}$ |  | $\begin{aligned} & \text { y } \\ & \text { प } \\ & \text { y } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { ত } \\ & 0 \\ & 0 \\ & \frac{0}{\mathbf{d}} \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \underset{\sim}{\underset{\sim}{c}} \\ & \underset{\sim}{\underset{\alpha}{\alpha}} \\ & \underset{\sim}{\underset{\sim}{u}} \end{aligned}$ |  | $\begin{aligned} & \text { y } \\ & \text { z } \\ & 0 \\ & \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { 드 } \\ & \text { 岂 } \\ & \stackrel{y}{3} \end{aligned}$ | $\begin{aligned} & \text { y } \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 3 \\ & 3 \end{aligned}$ |  |  |  | $\begin{aligned} & \text { J } \\ & 0 \\ & \text { O} \\ & \stackrel{Y}{u} \\ & \underset{\sim}{\underset{\sim}{u}} \end{aligned}$ |  | $\begin{aligned} & \text { J } \\ & \text { I } \\ & \frac{T}{4} \end{aligned}$ |  |  |
|  |  |  |  |  |  |  | $\begin{aligned} & \underset{\sim}{w} \\ & \underset{\sim}{c} \\ & \underset{y}{c} \\ & \underset{~}{1} \\ & \underset{\sim}{r} \end{aligned}$ |  |  |  |  | 0 0 0 0 0 1 0 $\frac{1}{4}$ 2 |  | 8 <br> 0 <br> 0 <br> $\vdots$ <br> $\vdots$ <br> 0 |  |  |  | O 0 0 ㄴ 0 3 0 |  | 2 0 0 0 2 2 0 0 1 S |
| N్ల్ల | $\stackrel{\sim}{\sim}$ | Oiగ్ల | N్ల్ల | Oi/ | 皆 | $\underset{\sim}{\underset{\sim}{f}}$ | 志 | 怣 | $\begin{aligned} & \text { O } \\ & \text { Ner } \end{aligned}$ | 皆 | $\stackrel{i}{0}$ | $\stackrel{\circ}{6}$ | 苍 | $\stackrel{\circ}{\circ}$ | $\stackrel{\pi}{i n}$ | $\stackrel{\otimes}{\circ}$ | $\stackrel{\text { êen }}{\substack{0}}$ | $\stackrel{\leftrightarrow}{0}$ | 冎 | －0\％ |
| ¢ | ¢ | $\stackrel{\circ}{\circ}$ | $\infty$ | $\infty$ | ¢ | $\bigcirc$ | \％ | $\bigcirc$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\infty}{\circ}$ | $\bigcirc$ | \％ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\bigcirc$ | ¢ | $\stackrel{\circ}{\circ}$ | ¢ |


| の | m | $\stackrel{\text { N}}{6}$ | 안 | $\stackrel{7}{0}$ | $\stackrel{\sim}{\sim}$ | N | － | $\infty$ | $\stackrel{7}{m}$ | m | $\stackrel{\circ}{\circ}$ | N | $\stackrel{\text { N }}{6}$ | N | － | $\stackrel{\circ}{\circ}$ | $\stackrel{\bigcirc}{+}$ | $\bar{\sim}$ | ® | $\stackrel{-}{\infty}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 앙 | $\bullet$ | N్ఞু | 안 | $\stackrel{\text { O }}{0}$ | $\stackrel{\sim}{\sim}$ | N | $\stackrel{\curvearrowleft}{\text { Ñ }}$ | の | $\stackrel{\square}{\text { ¢ }}$ | m | $\stackrel{\circ}{\circ}$ | ̇ | ¢ | N | － | \％ | $\stackrel{\bigcirc}{\stackrel{冂}{+}}$ | N | － | $\stackrel{\Gamma}{\infty}$ |
| $\begin{aligned} & 8 \\ & \stackrel{0}{N} \\ & \frac{N}{\hat{1}} \end{aligned}$ | $$ | $\circ$ N N N in |  | $\begin{aligned} & 8 \\ & \text { O} \\ & \stackrel{N}{N} \\ & \text { Non } \end{aligned}$ | $\circ$ $\stackrel{8}{\mathrm{O}}$ $\stackrel{1}{5}$ － | 8 <br>  <br>  | $\circ$ <br> 0 <br> 0 <br> $\vdots$ <br> 1 | $\begin{aligned} & \text { O} \\ & \text { N } \\ & \stackrel{N}{\gamma} \end{aligned}$ | $\circ$ 0 N $\frac{1}{7}$ | $\begin{aligned} & \text { oid } \\ & \stackrel{\rightharpoonup}{N} \\ & \stackrel{N}{0} \end{aligned}$ | 8 <br> 0 <br> N <br> 5 |  |  | $\begin{aligned} & \text { BO } \\ & \stackrel{N}{\Sigma} \\ & \stackrel{N}{5} \end{aligned}$ | 8 0 $N$ $N$ $N$ | $\circ$ $\stackrel{0}{0}$ $\infty$ $\frac{\infty}{7}$ |  | $\circ$ O N N N |  | O O N ¢ － |
| $\infty$ | N | $\stackrel{\infty}{\stackrel{\circ}{\square}}$ | 앙 | O | $\stackrel{\sim}{\sim}$ | $\bigcirc$ | $\stackrel{\infty}{\sim}$ | $\infty$ | N | m | $\stackrel{\circ}{\circ}$ | ̇ | $\stackrel{\text { ¢ }}{6}$ | － | $\bigcirc$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\bigcirc}{\square}$ | $\bar{\sim}$ | － | $\underset{\infty}{\bar{\sim}}$ |
| $\begin{aligned} & \text { OO } \\ & \stackrel{N}{2} \\ & \stackrel{i}{2} \end{aligned}$ | $\begin{aligned} & \text { ®O } \\ & \stackrel{N}{N} \\ & \stackrel{N}{5} \end{aligned}$ |  | $\begin{aligned} & \text { ®O } \\ & \text { N } \\ & \stackrel{N}{5} \end{aligned}$ | $\begin{aligned} & \text { BO } \\ & \stackrel{N}{N} \\ & \stackrel{N}{5} \end{aligned}$ |  | 8 $\stackrel{8}{\mathrm{~N}}$ $\stackrel{y}{5}$ | $\begin{aligned} & \text { O} \\ & \stackrel{\rightharpoonup}{N} \\ & \text { in } \end{aligned}$ | $\stackrel{\text { O}}{\substack{\mathbf{N} \\ \underset{\sim}{7}}}$ |  |  |  | $\begin{aligned} & \text { O} \\ & \stackrel{\circ}{N} \\ & \underset{\sim}{7} \end{aligned}$ |  | $\begin{aligned} & 0.8 \\ & \text { N } \\ & \underset{N}{N} \end{aligned}$ |  | $\begin{array}{r}8 \\ 0 \\ \text { N } \\ \text { N } \\ \text { N } \\ \hline-\end{array}$ |  | $\begin{aligned} & \text { O} \\ & \stackrel{\rightharpoonup}{N} \\ & \underset{~}{5} \end{aligned}$ |  | － |
| $\begin{aligned} & \text { 드 } \\ & 3 \\ & 0 \\ & 1 \\ & 3 \\ & 3 \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & \end{aligned}$ | $\begin{aligned} & \text { ㄱ } \\ & \text { z} \\ & \frac{3}{4} \end{aligned}$ |  |  | $\begin{aligned} & \text { 드 } \\ & \text { a } \\ & \text { O} \\ & \text { in } \end{aligned}$ |  |  | $\begin{aligned} & \frac{y}{0} \\ & \frac{y}{4} \end{aligned}$ |  |  |  |  | $\begin{aligned} & \frac{y}{0} \\ & \underline{Z} \\ & \underline{k} \\ & \frac{\alpha}{x} \end{aligned}$ |  | $\begin{aligned} & \text { ㄴ } \\ & \text { ㄹ } \\ & \text { Ẅ } \end{aligned}$ | $\begin{aligned} & \text { ㄷ } \\ & \text { 를 } \\ & \text { O} \end{aligned}$ | $\begin{aligned} & \text { y } \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { ㅡㅣ } \\ & \text { u} \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { ㄷ } \\ & \text { ru } \\ & \underset{\sim}{\underset{\sim}{x}} \end{aligned}$ |  |  |
|  |  |  |  |  |  |  |  |  | Q 0 2 2 2 $\sum_{3}$ 0 0 | $\begin{aligned} & \text { O} \\ & 0 \\ & \sum_{0}^{n} \\ & \sum_{\infty}^{\infty} \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { O} \\ & \hline 0 \end{aligned}$ | $\stackrel{\text { O్ల }}{\substack{0}}$ | $\overline{\text { 厄/e }}$ | $\begin{aligned} & \text { に/ } \\ & \text { Kin } \end{aligned}$ |  | $\stackrel{\circ}{\circ}$ | $\begin{aligned} & \infty \\ & \stackrel{\circ}{\mathrm{N}} \end{aligned}$ | $\underset{\sim}{N}$ | $\stackrel{\sim}{N}$ | $\stackrel{\sim}{N}$ | ๗లల | $\stackrel{\hat{g}}{\substack{c}}$ | $\underset{\sim}{\text { Non }}$ | $\stackrel{N}{\mathrm{~N}}$ | $\stackrel{\text { N }}{\underset{\sim}{n}}$ | $\begin{aligned} & \stackrel{\otimes}{\mathrm{N}} \\ & \stackrel{1}{2} \end{aligned}$ | $\stackrel{\stackrel{\infty}{\infty}}{\infty}$ | $\stackrel{\infty}{\stackrel{\infty}{ల}}$ | $\stackrel{\sim}{\infty}$ | $\begin{aligned} & \circ \\ & \stackrel{\infty}{0} \end{aligned}$ | ¢ |
| $\stackrel{\sim}{\circ}$ | $\stackrel{\circ}{\circ}$ | ¢ | ¢ | © | ¢ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\bigcirc$ | \％ | $\stackrel{\circ}{\circ}$ | \％ | i | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | ¢ | $\stackrel{\circ}{\circ}$ | $\stackrel{\circ}{\circ}$ | $\infty$ |


| 58 | 3943 | GOOF UP PONDS | TRIBUTARIES-ELK R | 7/19/2006 | 4 | 5/12/2006 | 8.3 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 58 | 4213 | STAGECOACH RESERVOIR | YAMPA RIVER | 3/29/2006 | 26533 | 5/6/2006 | 33612 | 31608 |
| 58 | 4240 | YAMCOLO RES | BEAR RIVER | 9/1/2006 | 4509 | 5/22/2006 | 9749 | 6352 |
| 58 | 4362 | HENDERSON RES | HENDERSON CK | 11/1/2005 | 15 | 6/2/2006 | 31 | 20 |
| 58 | 4366 | MAD RANCH POND | HOT SPRING CK | 11/1/2005 | 10.2 | 10/31/2006 | 10.2 | 10.2 |
| 58 | 4376 | STEAMBOAT WW RECL RES | TRIBUTARIES | 7/24/2006 | 35 | 11/1/2005 | 50 | 40 |
| 58 | 4420 | BROOKIE LAKE | WHEELER, LAKE CK | 11/1/2005 | 32 | 10/31/2006 | 32 | 32 |
| 58 | 5102 | GOTT POND \#1 | ELK RIVER | 11/1/2005 | 3.3 | 5/18/2006 | 3.3 | 3.3 |
|  |  |  | TOTAL FOR DISTRICT 58 |  | 72,063 |  | 100,727 | 83,790 |

WATER DIVERSION SUMMARIES

| STRUCTURES REPORTING |  |  |  |  |  | EST. No. of VIIITSTIODIVERSION structures | TOTALDIVERSIONS |  |  | NUMBER OFACRES IRRIGATED | $\begin{aligned} & \text { AVERAGE } \\ & \text { ACRERERERER } \\ & \text { ACRE } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wo | $\begin{gathered} \text { With } \\ \text { Record } \\ \text { Revailable } \end{gathered}$ | ( $\begin{gathered}\text { Nowater } \\ \text { Available }\end{gathered}$ | $\begin{aligned} & \text { No } \\ & \text { Tater } \\ & \text { Taken } \end{aligned}$ | No Info Available | Active Struct. wiNo Record |  |  |  |  |  |  |
| 43 | 589 | 104 | 141 | 11 | 2,132 | 436 | 683,303 | 840 | 250,280 | 24,824 |  |
| 44 | 246 | ${ }^{36}$ |  |  | 2,952 | 665 | 154,318 |  | 139,5 | 30,0 |  |
| 47 | 492 | \% | 53 |  |  | 421 | 370,332 | 1,373 | 348,380 | 101,9 |  |
| 54 | 4 |  |  | 12 |  | ${ }^{139}$ | ${ }^{73,828}$ | 337 | 62,947 | 3,37 |  |
| 55 | 6 |  |  |  |  | ${ }^{26}$ | 12,435 |  | 12,428 | ,745 |  |
| 56 | 43 |  |  |  |  | ${ }^{22}$ | 9,381 | 596 | 5,386 | 1,863 |  |
| 57 | 93 |  | 69 |  |  | 364 | 46,008 | 182 | 40,93 | 9,029 |  |
| 58 | 441 |  | 122 |  | 1.876 | 2.752 | 217,669 | 804 | 129,17 | 28.82 |  |

[^0] WATER YEAR 2006
WATER DIVERSIONS TO VARIOUS USES

| USES | WD 43 | WD 44 | WD 47 | WD 54 | WD 55 | WD 56 | WD 57 | WD 58 | TOTALS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TRANSMOUNTAIN OUT | 0 | 0 | 2,743 | 0 | 0 | 0 | 0 | 0 | 2,743 |
| TRANSBASIN OUT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,013 | 3,013 |
| MUNICIPAL | 3,067 | 2,232 | 196 | 0 | 0 | 0 | 329 | 3,690 | 9,514 |
| COMMERCIAL | 232 | 0 | 0 | 0 | 0 | 97 | 0 | 14 | 343 |
| INDUSTRIAL | 2,898 | 10,137 | 44 | 0 | 0 | 0 | 2,688 | 18 | 15,785 |
| RECREATION | 818 | 0 | 0 | 0 | 0 | 0 | 0 | 3,162 | 3,980 |
| FISHERY | 45,596 | 54 | 742 | 10,118 | 0 | 0 | 572 | 6,345 | 63,427 |
| DOMESTIC \& HOUSEHOLD | 2,382 | 24 | 1 | 58 | 0 | 55 | 26 | 1,100 | 3,646 |
| LIVESTOCK | 11,310 | 0 | 6,507 | 369 | 6 | 202 | 1,854 | 10,221 | 30,410 |
| AUGMENTATION | 114 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 116 |
| EVAPORATION | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| GEOTHERMAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SNOWMAKING | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 293 | 293 |
| MINIMUM STREAMFLOW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POWER GENERATION | 365,577 | 2,329 | 0 | 0 | 0 | 0 | 0 | 54,007 | 422,382 |
| WILDLIFE | 0 | 22 | 313 | 0 | 0 | 3,047 | 41 | 0 | 3,423 |
| RECHARGE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 577 | 577 |
| ALL BENEFICIAL USES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,246 | 5,246 |
| TOTALS | 432,004 | 14,798 | 10,548 | 10,545 | 6 | 3,401 | 5,510 | 87,686 | 564,908 |

TRANSMOUNTAIN DIVERSION SUMMARY - OUTFLOWS

| SOURCE |  |  |  |  |  |  |  | RECIPIENT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WD | ID | NAME | STREAM | 10-YR AVG |  | CURRENT YEAR |  | WD | ID | STREAM |
|  |  |  |  | AF | DAYS | AF | DAYS |  |  |  |
| 47 | 4602 | Cameron Pass Ditch | Michigan River | 112 | 29 | 162 | 33 | 3 |  | Poudre River |
| 47 | 4603 | Michigan Ditch | Michigan River | 4403 | 325 | 2582 | 335 | 3 |  | Poudre River |
| 58 | 4630 | Dome Creek Ditch | Dome Creek | 146 | 73 | 78 | 65 | 50 |  | Egeria Creek |
| 58 | 4684 | Sarvis Ditch | Sarvis Creek | 472 | 78 | 484 | 47 | 53 |  | Muddy Creek |
| 58 | 4685 | Stillwater Ditch | Bear River | 2262 | 109 | 2451 | 123 | 53 |  | Egeria Creek |
|  |  |  |  |  |  |  |  |  |  |  |

NO TRANSMOUNTAIN DIVERSION INFLOWS
$\overline{\text { ON NIWOV }}$



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RIVER CALLS - WATER YEAR 2006

| WD | STREAM | CALLING STRUCTURE | CALLING PERSON | FIRST |
| :---: | :---: | :---: | :---: | :---: |
| 43 | PICEANCE CREEK | METZ \& REIGAN DITCH | BURKE BROTHERS | 05/17/06 |
| 43 | PICEANCE CREEK | METZ DITCH | BURKE BROTHERS | 05/17/06 |
| 44 | FORTIFICATION CK | WISCONSIN DITCH | TOM GREY | 06/07/06 |
| 44 | LITTLE BEAR CK | LITTLE BEAR DITCH | JANET CAMELITTI | 06/01/06 |
| 44 | MORAPAS CREEK | DEER CREEK \& MORAPAS D. | LARRY OSBORN | 06/02/06 |
| 47 | GOVERNMENT CK | COE DITCH NO. 2 | CARL TRICK | 05/21/06 |
| 47 | PINKHAM CREEK | CAPRON DITCH | STATE LINE RANCHES | 06/12/06 |
| 47 | NEWCOMB CREEK | NEWCOMB DITCH | SANDRA KNOX | 06/29/06 |
| 47 | MICHIGAN RIVER | KIWA DITCH | TRICK, WILFORD, SILVER | 05/15/06 |
| 47 | ILLINOIS RIVER | EVERHARD BALDWIN DITCH | BILL BURR | 05/15/06 |
| 47 | ROCK CREEK | KERR DITCH | D. VERHEUL | 05/16/06 |
| 47 | MICHIGAN RIVER | KIWA DITCH | TRICK, WILFORD, SILVER | 05/30/06 |
| 47 | ILLINOIS RIVER | HOME DITCH NO. 2 | KEN FOSHA | 06/15/06 |
| 47 | SPRING CREEK | NELLIE E DITCH | MARK HUTCHESON | 07/07/06 |
| 47 | MICHIGAN RIVER | OLD SC | WALDEN RES CO | 10/02/06 |
| 56 | BEAVER CREEK | MCKNIGHT DITCH \#1 | BOB HARDING | 06/07/06 |
| 57 | WEST FISH CREEK | HIGHLAND DITCH | ANDY \& STAN PEROULIS | 0526/06 |
| 57 | TROUT CREEK | PINE GROVE DITCH | BERNARD KNOTT | 07/26/06 |
| 58 | OAK CREEK | OAK CREEK DITCH | GREGORY \& CRAWFORD | 06/26/06 |
| 58 | BEAR RIVER | FIX DITCH | JERRY SCHALNUS | 06/22/06 |
| 58 | BEAR RIVER | NICKELL DITCH | DEAN ROSSI | 05/28/06 |
| 58 | BEAR RIVER | NICKELL DITCH | DEAN ROSSI | 06/12/06 |
| 58 | BEAR RIVER | WOOLEY DITCH | JERRY SCHALNUS | 07/31/06 |
| 58 | BEAR RIVER | MANDALL | GARY CLYNCKE | 08/01/06 |
| 58 | BEAR RIVER | BIG MESA DITCH | DOUG GATES | 08/03/06 |
| 58 | BEAR RIVER | STILLWATER DITCH | MULT OWNERS | 08/24/06 |
| 58 | MIDDLE HUNT CREEK | SIMON DITCH | MARK ROSSI | 05/16/06 |
| 58 | SOUTH HUNT CREEK | LAFON DITCH | KIM WINESTEIN | 06/16/06 |
| 58 | MARTIN CREEK | MARTIN DITCH | RICHARD GIBBS | 06/02/06 |

Appendix C
DIVISION 6
ORGANIZATIONAL


## Appendix D

## 2006 OFFICE ADMINISTRATION and WORKLOAD MEASURES

Professional and Technical Staff (FTE) ..... 4.0
Water Commissioners Assigned (FTE) ..... 6.5
Wells Permitted ..... 209
Water Court Appearances ..... 0
Division Engineer Contacts with Water Referee ..... 20
Division Engineer Contacts with Attorneys ..... 100
Meetings with Water Users ..... 25
Meetings to Resolve Water Related Disputes ..... 1
Contacts to Give Public Assistance ..... 8500


[^0]:    (1) Grouped by ID
    (2) Count of Structures with NUC $=B$
    (3) Count of Structures with NUC $=A+C+D$
    (4) Count of Structures with NUC $=E+F+$
    (5) Count of Diversion Structures with $\mathrm{CIU}=\mathrm{U}$ (1) Grouped by ID
    (2) Count of Structures with NUC $=B$
    (3) Count of Structures with NUC $=A+C+D$
    (4) Count of Structures with NUC $=E+F+$
    (5) Count of Diversion Structures with $\mathrm{CIU}=\mathrm{U}$ (1) Grouped by ID
    (2) Count of Structures with NUC $=B$
    (3) Count of Structures with NUC $=A+C+D$
    (4) Count of Structures with NUC $=E+F+$
    (5) Count of Diversion Structures with $\mathrm{CIU}=\mathrm{U}$ (1) Grouped by ID
    (2) Count of Structures with NUC $=B$
    (3) Count of Structures with NUC $=A+C+D$
    (4) Count of Structures with NUC $=E+F+$
    (5) Count of Diversion Structures with $\mathrm{CIU}=\mathrm{U}$

