STATE OF WYOMING

2006

ANNUAL REPORT

OF THE

STATE ENGINEER

STATE BOARD OF CONTROL

BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS

STATE BOARD OF EXAMINING WATER WELL DRILLING CONTRACTORS AND WATER WELL PUMP INSTALLATION CONTRACTORS

October 1, 2005 through September 30, 2006

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REPORT OF THE STATE ENGINEER

Patrick T. Tyrrell, P. E.

Water year 2006 saw a return to the water-short conditions that characterized the years 2000-2004. Only the Snake and Bear River Basins saw runoff that approached normal. The larger drainages, such as the North Platte, Green, and Big Horn River systems, were short again by midsummer and significant regulation activities occurred on their tributaries. The main stem North Platte River reservoirs still have not filled since 1999, and the Laramie River system remains among the worst in the state with Grayrocks Reservoir struggling to store water and Basin Electric Power Company continuing to seek temporary cooling water supplies from local ground water sources.

All this occurred even with statewide snow pack numbers that looked favorable until late spring. In late March, with statewide snow pack at 105 percent of normal, prospects for a reasonable water year were good. From then on, however, a lack of precipitation combined with warm weather led the state on a two-month downward spiral that largely depleted our mountain snows by late May (42 percent of normal by May 22, 2006; 33 percentage points lower than the same date in 2005). Much of the loss of snow pack in those two months occurred with little or no corresponding increase in runoff, indicating the water content was lost to the atmosphere, to the ground, or both. Observance of snow accumulation data in late spring exhibited a continuing trend of early melt-out. This phenomenon leads to a related acceleration in runoff timing, with peak flows generally seen earlier in the spring than normal. The early melt-out/runoff we are seeing is more and more being attributed to global climate change by the many climatologists now following the subject.

The preceding discussion of water supply is intended to provide a very high-level view of the general conditions seen by Wyoming's citizens and our own water administrators in 2006, and to provide some context on drought conditions that can be compared to earlier and subsequent annual reports. Other sections of this report can be reviewed for additional detail and the specific experiences of our staff around the state.

2006 Legislative Budget Session

The 2006 budget session was successful. Critical staff were added in our Ground Water Division (a compliance position), and the Interstate Streams Division (a coordinator for Colorado River Basin consumptive use work), with several other temporary positions getting reclassified as permanent. Additional monies were obtained to assist in performing ground water interference investigations, to upgrade streamflow gaging networks, and for acquisition of continuous ground water level recorders. We also received 900-series (contract) money for assistance in backstopping challenges, should they occur, on Colorado or Yellowstone River Compact issues. While not a complete list, the budget also includes significant funding for a new field radio system, a safety program, and, importantly, continuation of the agency's IT Initiative.

Interstate Streams Issues

The two river basins seeing the most activity from an interstate perspective in 2006 were the Yellowstone and the Colorado.

On July 28, 2006, Montana wrote a letter to Wyoming seeking us to curtail uses relating to the Tongue and Powder Rivers under the Yellowstone River Compact. In essence, Montana asked Wyoming to regulate its post-1950 storage and direct flow uses for the benefit of Montana. Wyoming declined, believing we have stored water appropriately and that we were not compelled by the compact to regulate whatever minor amount of water was being used by post-1950 water rights unless a call for regulation had been received by another Wyoming water right. Montana claimed its inability to fill Tongue River Reservoir was due to Wyoming's inappropriate use of water, when in fact that reservoir saw more than sufficient inflow to have filled had Montana managed it wisely.

In June 2006 Montana was also briefed on a feasibility study that had been funded by the Wyoming legislature to evaluate piping coalbed methane-produced water out of the Yellowstone River Basin (to, perhaps, the North Platte River). That study, while funded, was not completed in 2006. Montana objected to movement of such deep ground water out of the basin, alleging a violation of Article X of the compact if it occurred. Wyoming vehemently disagreed.

The two states continue to disagree on the compact implications of these several issues: whether an interstate priority schedule exists (it does not), whether Wyoming must curtail post-1950 storage or direct flow uses absent proof the post-compact water is not in the system under compact accounting procedures, and whether deep ground water is covered by the compact. At the close of the year Montana was positioning itself, we believe, to undertake some sort of legal challenge on these issues, although the timing and exact nature of such a challenge is unknown. Wyoming has informed Montana that we are available to discuss our differences in state-to-state meetings.

Talks continue among the seven Colorado River Basin States regarding coordinated reservoir operations of Lakes Mead and Powell and the development of Lower Basin shortage guidelines. These issues, prompted by the Department of Interior undertaking a NEPA evaluation on the subject, have raised numerous questions and arguments between the states in general and, in some cases, among just the Lower Basin States. In February 2006, the basin states forwarded a collective plan to the Secretary which stated an approach we could all support. As of this writing, work still needs to be done refining how the Lower Basin will share shortages, and how Mexico will be included in the mix. A draft EIS is expected in late February 2007, by which time a revised plan (based on the February 2006 proposal) and a basin states agreement (intending to commit, as much as possible, the several states to good faith operation under the operating plan) should be finalized.

Even through five years of less than adequate water supply, the 2001 Settlement and Modified Decree on the North Platte River continues to function with Wyoming

performing all the needed compliance tasks. Some disagreements have been encountered relating to interpretation of parts of the settlement, but none have been fatal and the parties meet on occasion to iron out what difficulties we face in an effort to keep things working. In 2006, for example, an allocation of storage was declared very late, and there was much debate on whether such a declaration was properly made under the operative language in the Allocation Stipulation. During the winter of 2006-2007, meetings are planned to address this issue, and others, in an attempt to see if changes need to be made to the controlling documents. In 2007, replacement water needed for ground water pumpage in the "Triangle" near Torrington will be in short supply. It is possible that regulation of these users will be required, for the first time ever, absent significant winter snows and accumulation of storage in Glendo Reservoir.

Personnel Topics

In WY 2006, the agency saw the arrival of two new key employees in the Cheyenne office. In November 2005, Martin Zimmerman came on board as Administrator of the Support Services Division. Martin is a welcome addition to our management team, and his technical knowledge of IT services bodes well as we continue to build our information infrastructure. In the fall of 2006, we welcomed Mr. Steve Winders aboard as the new fiscal officer, replacing Beth Bartholomew. Steve comes with significant experience in managing governmental fiscal affairs having served many similar functions for the U.S. Air Force. Steve is a welcomed addition to our staff, and we wish him well in his service to the State of Wyoming.

Also in 2006, the approval of the Colorado River Coordinator position by the legislature resulted in our hiring of Mr. Steve Wolff, late of the Wyoming Game and Fish Department. Steve brings a wealth of water resources knowledge to the position, and we look forward to great strides being made under his direction in the complicated but important business of better understanding our consumptive uses in the Green and Little Snake River Basins. Steve, we welcome you as well.

With the addition and reclassification of positions approved by the legislature, the State Engineer's Office now employs a total of 144 personnel, 130 of which are full-time.

Coal Bed Natural Gas {CBNG)

The CBNG industry continues to place strong demands on the resources of the agency. Of note in 2006 were the State Engineer's enforcement of laws relating to non-permitted facilities as well as the great strides seen in our Surface Water Division in tackling a huge backlog of applications exacerbated by the permitting demands of that industry.

In 2006, the SEO issued a Notice of Violation, and various orders of the State Engineer, to Pinnacle Gas Resources related to the pumping of unpermitted CBNG wells and the storage of the produced water in unpermitted or improperly permitted reservoirs. The orders and violations were acted upon by the Campbell County Attorney resulting in a settlement of $40,000 that was donated to the Recluse Community Center. This was

the first time a violation was sought under our new penalty statutes (revised in 2005), and the prosecution was successful.

In 2004 and 2005, our Surface Water Division had a growing application backlog. By 2005, that backlog had grown to over 2,500 applications. With the assistance of the legislature in providing funding, and the hard work of that division (including mandatory overtime), the backlog was reduced to near 1,200. Some of the applications remaining in the backlog are very old and are not due to the surge in CBNG activity, so the reduction reflects the handling mainly of newer and more time-critical permit applications.

Miscellaneous

In 2006 the SEO repealed Part V of our Rules and Regulations, a section in our rules that had never been used and served as an impediment to the cancellation of older, speculative water right applications (not permits). This section was repealed partly because the authority to have adopted them in the first place appears not to exist. The repeal of this section should make it easier to remove some of those older, less viable applications whose lack of veracity serves only to clog our system. It is desirable to remove those applications which hold, through sheer longevity alone, the appearance of legitimacy only in the eyes of the applicant (if the applicant is even still around).

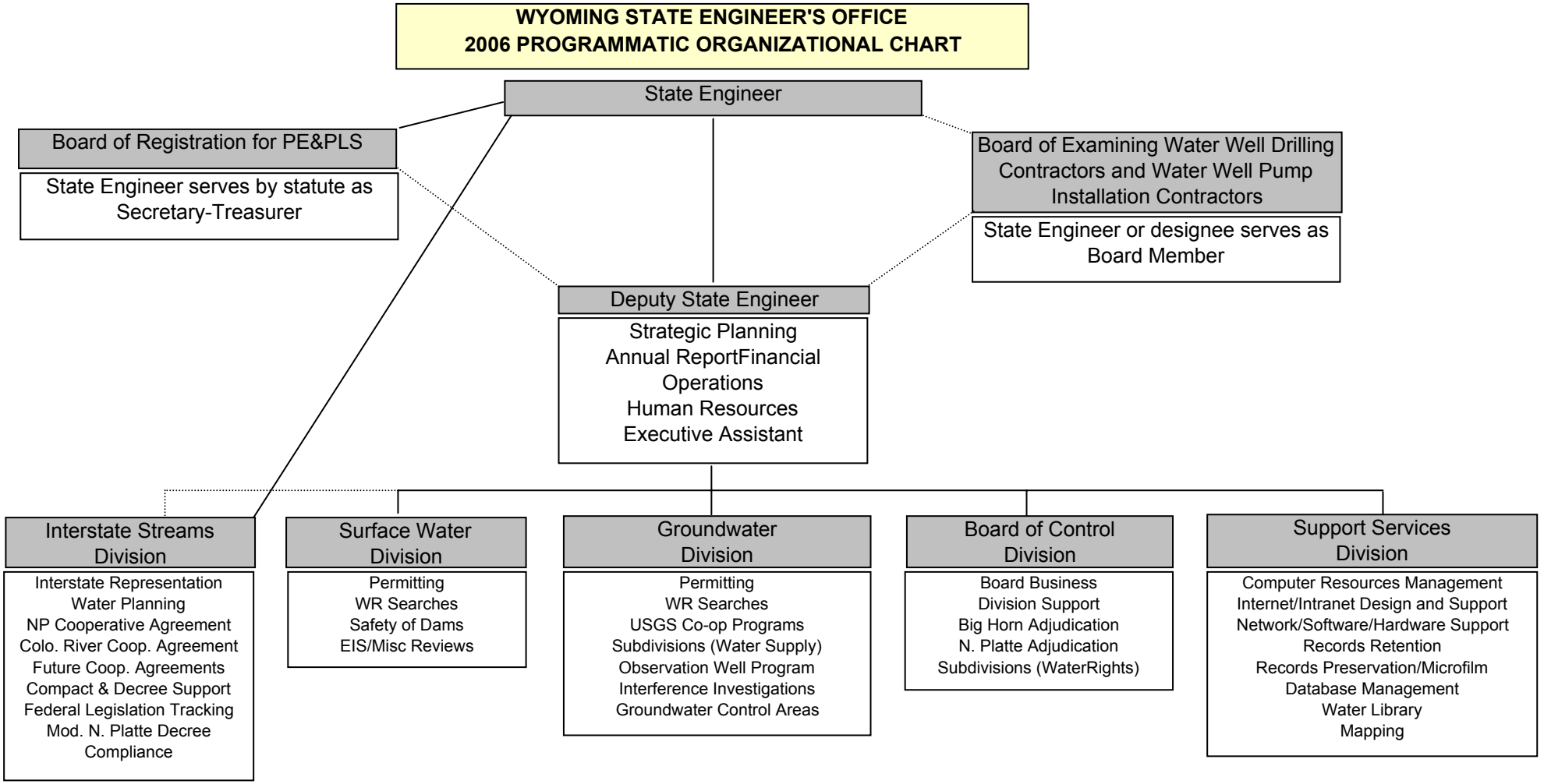
A final note related to the CBNG industry. In the 2006 budget we received an appropriation of $200,000 to create, with significant help from the Wyoming Geological Survey, a contemporaneous ground water monitoring tool. This tool, to be created with existing water level monitoring data, is designed to be a dynamic GIS-based model of the potentiometric effects created by long-term pumping of coal bed water. If successful, it will allow regulators, industry, and the public to visualize the effects on head of the development of this industry, and perhaps reveal areas where continued or expanded drawdowns will pose a threat to other ground water users or to the resource in general. In this way, water and resource administrators will be better informed of the condition of the resource and will be armed to make decisions accordingly.

Summary

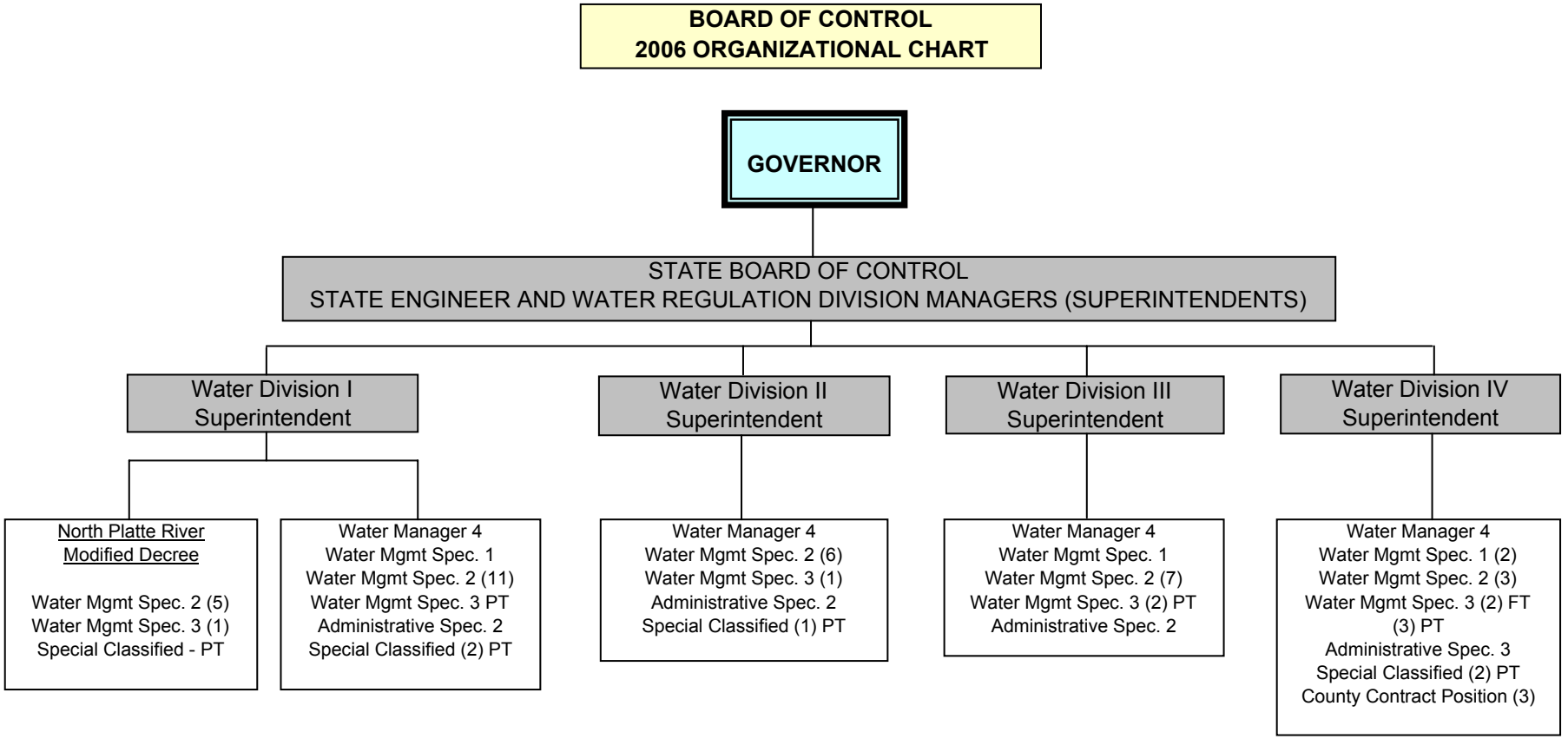
The past year in general saw a return to the water-short conditions we had seen prior to 2005. While this is unfortunate for our constituents, and not a condition we like to see, it was apparent once again that we have a constitutional and statutory system that functions fairly in times of water scarcity. In like manner, the men and women of the agency again have performed in exemplary fashion under less than ideal conditions.

The agency continues to make strides in the application of technology to our everyday business, and while we have grown modestly in numbers we have also increased the ability of each employee to produce by investing in tools to increase the quality and quantity of their work efforts. Our constituent demands are growing faster in some ways than our ability to meet them. As a governmental agency operating on a biennial

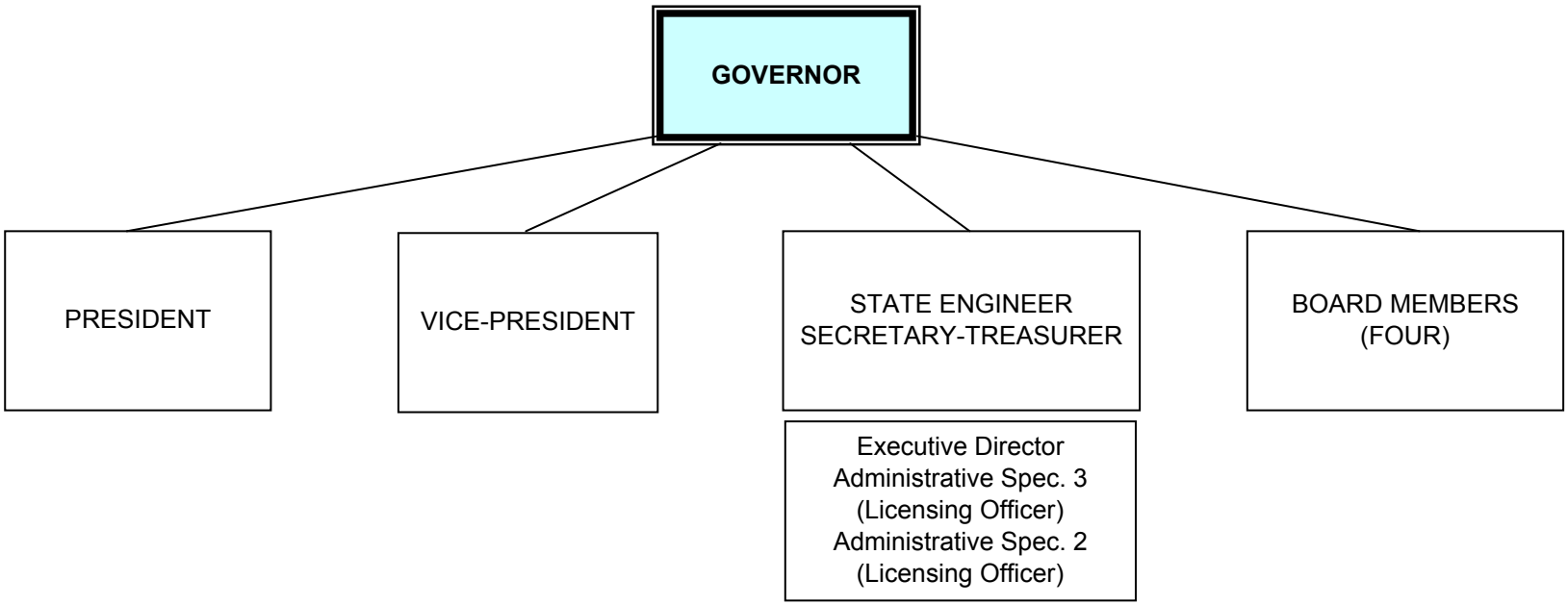
budget, we often are "behind the curve" when it comes to adding staff or technology to respond as immediately as we would like to the demands of the public. Future budgets will reflect those areas where our service continues to need improvement. Nonetheless, our important work is being performed at the high level expected of this agency, and we are serving the core needs of our citizens proudly and tirelessly. Without a doubt, this is among the most interesting and satisfying of places to work in all of state government, and I look forward to another successful and rewarding year in 2007.



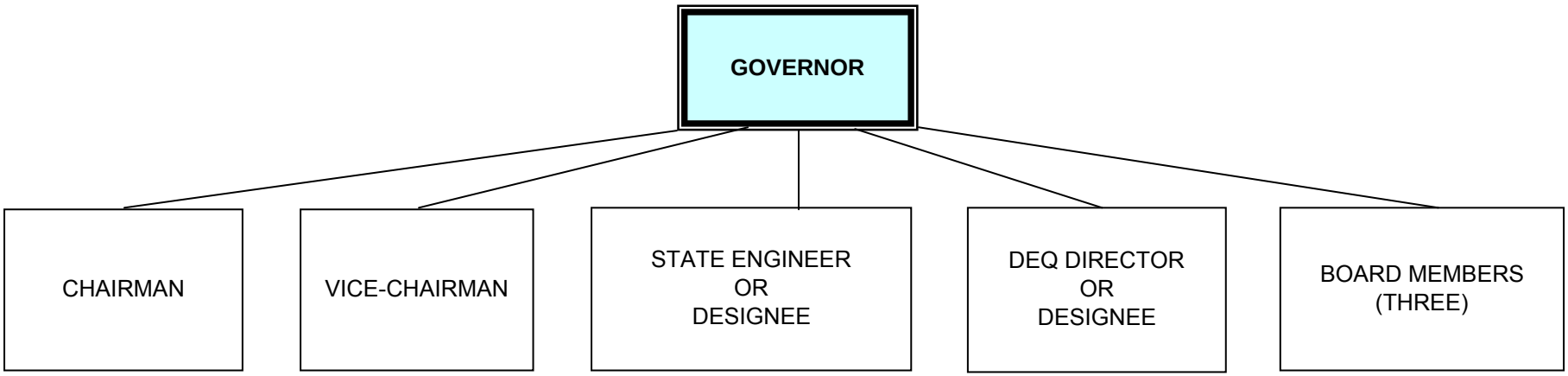
———	Primary Reporting Relationship (performance evaluations, workload determination, leave slips, etc.)
.....	Secondary Reporting Relationship (general agency information dissemination, personnel grievances, etc. - Deputy must be kept informed of important issues routinely, especially in the absence of the State Engineer.)


BOARD OF CONTROL
2006 ORGANIZATIONAL CHART
GOVERNOR
STATE BOARD OF CONTROL
STATE ENGINEER AND WATER REGULATION DIVISION MANAGERS (SUPERINTENDENTS)
Water Division I Superintendent
Water Division II Superintendent
Water Division III Superintendent
Water Division IV Superintendent
North Platte River Modified Decree
Water Mgmt Spec. 2 (5)
Water Mgmt Spec. 3 (1)
Special Classified - PT
Water Manager 4
Water Mgmt Spec. 1
Water Mgmt Spec. 2 (11)
Water Mgmt Spec. 3 PT
Administrative Spec. 2
Special Classified (2) PT
Water Manager 4
Water Mgmt Spec. 2 (6)
Water Mgmt Spec. 3 (1)
Administrative Spec. 2
Special Classified (1) PT
Water Manager 4
Water Mgmt Spec. 1
Water Mgmt Spec. 2 (7)
Water Mgmt Spec. 3 (2) PT
Administrative Spec. 2
Water Manager 4
Water Mgmt Spec. 1 (2)
Water Mgmt Spec. 2 (3)
Water Mgmt Spec. 3 (2) FT
(3) PT
Administrative Spec. 3
Special Classified (2) PT
County Contract Position (3)

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 2006 ORGANIZATIONAL CHART



STATE BOARD OF EXAMINING
WATER WELL DRILLING CONTRACTORS AND
WATER WELL PUMP INSTALLATION CONTRACTORS
2006 ORGANIZATIONAL CHART



ADMINISTRATION DIVISION

Harry C. LaBonde, P.E.
Deputy State Engineer

General

The Administration Division is responsible for three separate functions in support of this agency. They include fiscal operations, human resources/personnel management, and support staff for the State Engineer. This group is also responsible for special agency projects such as the Annual Report, Strategic Planning, IT Initiative and the Agency's Health and Safety Program.

Fiscal Operations

A total of three employees work in this group, which was supervised by Beth Bartholomew until July, 2006. On October 2, 2006 Steve Winders was hired as the agency's new supervisor (financial specialist). Mr. Steve Winders is responsible for all fiscal operations regarding agency financial matters, which total in excess of $27,000,000.00 for the 2007-08 biennium. It is appropriate to recognize the outstanding efforts of Ms. Kelly Adkison who served as the agency's interim fiscal specialist during the July - October transition period. Her hard work and dedication allowed the agency to maintain fiscal operations during this transition in leadership.

Human Resources/Personnel Management

Ms. Melanie Doolin is responsible for the agency's human resource/personnel management programs and is in her second year with the agency. She has worked very hard to become acquainted with agency personnel and educate them about the various benefit programs and personnel policies of the State of Wyoming. Ms. Doolin also is involved with several statewide human resource committees charged with developing new policies and programs for State employees.

Health and Safety Program

Work on the agency's Health and Safety Program continued this year with the implementation of the agency plan. The goal is to help employees become more safety conscious and make safety part of the culture within the agency. The agency was successful in acquiring dedicated funding for safety purchases in the 2007-08 biennium budget.

IT Initiative

The design phase of the IT Initiative project proceeded into it's second year. The design consultant, Weston Solutions, continued to execute it's contract which included the following four project components:

- Development of an e-permitting/petition system including workflow management capabilities
- Design of a new water rights database
- Document Management System
- Development of a prototype Geographic Information System (GIS) for the Rock Creek drainage in Johnson County

It is anticipated that the final system will be ready for full-scale testing and implementation in April, 2007. This is a slight delay from the previously reported November, 2006 completion date but well within the October, 2007 target provided to the Legislature when the project was initially funded in 2005.

In the 2007-08 biennium budget request the agency received an additional $2,760,488.00 to replace existing IT equipment, and acquire new equipment/software for the IT initiative. This request included funds for data conversion once the system is operational as well as new personal computers for hydrographers and superintendents. Funding for a statewide water rights GIS was deferred to the 2009-10 biennium.

INTERSTATE STREAMS DIVISION

by

Sue Lowry
Division Administrator

John W. Shields
Interstate Streams Engineer

Steve Wolff
Colorado River Coordinator

Phil Stump
North Platte Coordinator

Jodee Pring
Water Planning Coordinator

The State Engineer is charged with administering and overseeing all matters involving Wyoming's interstate and intrastate streams and rivers. A primary objective of the agency is to safeguard the State's current and future water supplies by preserving Wyoming's ability to use and develop our water allocations under our interstate compacts and court decrees. Wyoming is party to seven interstate river compacts, and court decrees have been entered in several river basins. The Interstate Streams Division provides technical and policy support for water allocation and administration issues associated with these governing compacts and decrees. The Water Planning and Water Conservation activities of the agency are also coordinated in this Division.

Interstate Streams Activities

The following summarizes notable activities of the Interstate Stream Section by river basin or issue:

Missouri River Basin

Progress was made in the transition of basin organizations from the Missouri River Basin Association (MRBA), which consisted of the water resources officials from each of the 8 basin states, to the Missouri River Association of States and Tribes (MoRAST). MoRAST is comprised of the water officials as well as the state Game and Fish agency director. The State of Missouri has chosen to not participate in MoRAST. The Tribal positions will be held by representatives from the mainstem tribes and one representative each from the upper and lower basin tribes. The first meeting of MoRAST was held on August 31, 2006 in Denver. John Cooper, South Dakota Game, Fish and Parks Director, was elected the first Chair.

The Corps of Engineers (CoE) retained the U.S. Institute for Environmental Conflict Resolution and CDR Associates to complete a Situation Analysis of the basin prior to the kick-off of the Missouri River Recovery Implementation Program (MRRIC). CDR completed that Analysis in March, 2006. The CoE is now implementing the recommendations made by CDR and is convening Drafting and Review Committees to establish the operating procedures for the Program.

The current Biological Opinion (BiOp), for the revised Master Manual required a bi-model spring rise for 2006. The first pulse release was made which raised the river stage about one foot. The trigger for the second pulse is based on March 1 storage and total system storage must be 36.5 Million Acre Feet (MAF) or greater. The second pulse release was not made as total system storage was below the trigger level. Total system storage at the end of the 2006 water year was 35.0 MAF, an all-time low.

The Missouri River basin has had success in getting larger budget requests in the President's request. President Bush had recommended $83 million for the endangered species recovery work in the basin. Interpretation by the Congressional committees, however, has limited the spending of this money in only the lower basin. All the states are in agreement that the authorization should be extended to include the entire basin. The highest priority project is the rehabilitation of the Intake Dam (a Reclamation facility) on the Yellowstone River in Montana. MoRAST will continue in its efforts to get this language passed by Congress.

Platte River Basin

North Platte Settlement Agreement

The U.S. Supreme Court approved the Final Settlement Stipulation and entered the Modified North Platte Decree in Nebraska v. Wyoming on November 13, 2001. The goal of the settlement was protection of existing water rights while providing certainty about the extent of Wyoming's water use and future water development and management. In general, the settlement calls for an increase in monitoring, measurement, accounting, and reporting of water use, as well as future studies to be conducted by the North Platte Decree Committee (NPDC). The NPDC consists of water officials from the Bureau of Reclamation, and Wyoming, Nebraska, and Colorado. The NPDC was created to reestablish trust and cooperation on various issues and to assist the parties in resolving future disputes. The NPDC members will attempt to resolve any disputes through direct negotiations or, as a last resort, through alternative dispute resolution, before returning to Court. NPDC meets in the fall and spring every year. Ms. Ann Bleed, Acting Director of Nebraska Department of Natural Resources, has held the Chair position since January 1, 2006. The NPDC has formed several subcommittees to assist in fulfilling its duties under the Modified Decree: Ground Water Wells, By-Laws, Crest Control, Official Files, Finance, and Consumptive Use.

In 2006 Wyoming carried out the following tasks to comply with the North Platte Settlement Agreement and as a cooperating member of the NPDC:

1.) Wyoming has finalized the adjudication of 179 groundwater well permits used for irrigation purposes in the area from the Whalen Diversion Dam and to the Nebraska State Line know as the "triangle." Wyoming has also adjudicated 175 irrigation well permits hydrologically connected to surface water in the Lower Laramie Basin and in the basin above Guernsey Reservoir. A significant number of permits were cancelled or abandoned; i.e., 35 permits in the triangle area, and 59 permits in the above Guernsey

and Lower Laramie areas. Other wells required a correction to the permit records because the historical beneficial use of the wells was a non-irrigation use; i.e., 16 permits in triangle area, 46 permits in the above Guernsey and Lower Laramie areas.

2.) Wyoming serves on the NPDC Consumptive Use Subcommittee which conducts consumptive use research in the basin upstream of Guernsey Reservoir as required under the Modified North Platte Decree. The NPDC, through the subcommittee, completed a consumptive use appropriator survey above Guernsey Reservoir through the mailing of irrigation questionnaires in January 2006. The survey response rate was very high with 317 surveys completed and returned of the 414 surveys mailed out. The NPDC has contracted with the High Plains Regional Climate Center in Lincoln, Nebraska to install three weather stations before spring 2007 near the towns of Encampment and Elk Mountain and near the City of Douglas. The NPDC is also releasing a Request for Proposals to hire an evapotranspiration expert. The expert will be required to establish at least one Bowen ratio study site in an irrigated area upstream of Guernsey Reservoir. Depending on the success of the first study site, the expert may be establishing up to three Bowen ratio sites in the basin above Guernsey Reservoir.

3.) Wyoming continues to track and report daily water accounting for the Whalen Diversion Dam to the State Line reach. A new telemetry system was installed in 2004 at mainstem diversions below Whalen to improve data collection and accuracy. In 2006 Wyoming added six tributary diversion locations to the existing mainstem telemetry system.

4.) Wyoming replaces the depletions of the river's natural flow during "Trigger Days" caused by active groundwater wells pumping for irrigation in the triangle area. Wyoming was obligated to replace 24.4 acre feet of water for each of the 249 wells reported as active in 2005 (6075.6 acre feet total). In 2006, for the third year Wyoming had to measure and provide replacement water for out-of-priority depletions on tributaries within the triangle area. The out-of-priority tributary obligations were comprised of 20 acre feet for June, 273 acre feet for July, and 339 acre feet for August. Wyoming is carrying over into the 2007 water year, a replacement obligation for September tributary depletions of 21.23 acre feet. These out-of-priority tributary depletions are now included in the 25/75 percent apportionment between Wyoming and Nebraska, respectively, of natural flow in the North Platte River from Guernsey Dam to Tri-State Dam.

5.) For the 2005 irrigation season, Wyoming reported in a February 28, 2006 letter to the NPDC, that the intentionally irrigated acreage for the North Platte River basin above Guernsey Reservoir, exclusive of the Kendrick Project, was 186,248 acres and in the Lower Laramie River basin, exclusive of the Wheatland Irrigation District, was 21,104 acres. In accordance with the Settlement Agreement, the intentionally irrigated acreage caps for these basin areas are 226,000 acres and 39,000 acres, respectively.

6.) During 2005 and 2006 Wyoming installed measuring devices and electronic monitoring equipment to track annual accruals at the eight largest irrigation reservoirs

storing water upstream of Pathfinder Reservoir. The remaining electronic monitoring equipment will be installed over the next year.

Six (6) full-time and (1) part-time field staff and (2) Cheyenne staff within the State Engineer's office carry out the tracking and reporting requirements of the Settlement Agreement. Many existing staff positions continue to be faced with additional responsibilities to comply with the Settlement Agreement. By accurately tracking and reporting Wyoming's water use in the North Platte River Basin, the State of Wyoming is able to protect Wyoming's appropriation of this valuable water resource.

Platte River Cooperative Agreement

The State Engineer's Office tracks the progress of the Cooperative Agreement and the proposed implementation of a Platte River Recovery Implementation Program (Program) to address several Endangered Species Act (ESA) issues affecting water development in the Platte River Basin. Mr. Mike Besson, Director, Wyoming Water Development Commission, represents Wyoming on the Governance Committee and Mr. Mike Purcell, consultant to the WWDC, is actively involved in the negotiations for Wyoming. The State Engineer serves as an alternate to Mr. Besson on the Governance Committee.

The draft Programmatic Environmental Impact Statement (EIS) was released by the Bureau of Reclamation in January 23, 2004 and the public comments were received by September 20, 2004. The Department of Interior contracted with the National Academy of Sciences (NAS) to review and evaluate the science regarding the central Platte River habitat needs and flow recommendations. The NAS report was released on April 28, 2004.

Wyoming's 2006 Legislature approved $6 million in funding for the Program and $8.5 million for an action alternative, the Pathfinder Modification Project, to recover 54,000 acre-feet of space in Pathfinder Reservoir. The Final EIS was filed with the EPA on May 18, 2006 and the U.S. Fish and Wildlife Service released the Biological Opinion on June 20, 2006. The Department of Interior Dirk Kempthorne signed the Record of Decision on September 28, 2006.

Wyoming's Water Depletion Plan addresses Wyoming's responsibilities for new water depletions in the Platte River Basin occurring since July 1, 1997. The anticipated timeline is that the three-state agreement will be signed by all the parties by December 2006. Individual water users do not need to independently seek the federal clearances required under the Endangered Species Act because the Program serves as the reasonable and prudent alternative for existing water related activities as of July 1, 1997. The starting date of the Program is January 1, 2007. The Program will be implemented incrementally, with the First Increment occurring over 13 years.

Wyoming will be tasked with preparing annual reports to satisfy the requirements of Wyoming's Depletions Plan. The Depletions Plan requires Wyoming to extensively

track and report municipal, industrial, and agricultural water uses. The first report addresses water use since July 1, 1997 and must be submitted to the Governance Committee by December 31, 2007.

More information regarding the status of the Platter River Cooperative Agreement is available at the following website: **www.platteriver.org**

Laramie River Basin

The 1922 Laramie River Decree recognizes the amounts of water that may be diverted in Colorado. There had not been much contact or reporting of decree uses between the two states and some water users in Wyoming were questioning whether Colorado's use was within the allocations permitted under the Decree. A meeting was held between Wyoming and Colorado State Engineer's Office staff on May 15, 2006 to discuss a number of administration issues. A tour was held on July 10 to better understand how Colorado measures use and administers individual water rights to assure Decree compliance. Colorado has also submitted to us, several past years of annual reports on water use by diversion.

Yellowstone River Basin

The Yellowstone River Compact Commission met for its annual meeting on November 30, 2005 in Billings, MT. A Technical Committee, which consists of representatives from the two states, the U.S. Geological Survey, the Natural Resources Conservation Service and the National Weather Service from both states has been formed by the Commission. The Technical Committee did not meet in November as Montana did not believe a meeting was warranted. The Technical Committee did meet April 12, 2006 in Thermopolis and reviewed the various long-term steamflow gages and SNOTEL sites in the basin. The full Commission met on April 13, 2006, also in Thermopolis. The USGS has developed a website for the Commission activities and documents. A states meeting was held on June 2 in Sheridan to brief Montana on the Wyoming Legislature's action to analyze the feasibility of a pipeline for transporting coalbed natural gas produced water from the Powder River basin to the Platte River.

Another "call" letter was received from Montana dated July 28, 2006. The issues raised in the letter were similar to those raised by Montana in May, 2004 requesting regulation of water rights in Wyoming for benefit of pre-1950 water rights in Montana. Wyoming maintains its position that pre-Compact water rights were considered and recognized by the Compact, but the Compact does not provide that Wyoming must regulate any pre-Compact water rights for the benefit of Montana. Montana's Tongue River Reservoir storage peaked in early June, 2006 at 73,400 acre feet. The total capacity of the reservoir is 79,000 acre feet. Funding for a joint study with Montana was approved by the 2006 Wyoming Legislature. Montana will be making a similar request to their 2007 Legislature. Jack Stults, Montana's Administrator for the Water Resources Division, submitted his resignation in July, 2006.

Wyoming residents concerned with the low levels of Yellowtail Reservoir in Wyoming have organized and approached the Governor's office about what options they have for influencing management of the reservoir.

Belle Fourche River Basin

The State Engineer's Office, state of South Dakota, the Bureau of Reclamation office in Rapid City and the water users in both states in the Belle Fourche basin held an operations meeting on December 8, 2005 to provide the agencies and the public the opportunity to discuss water forecasting and anticipated deliveries with the Bureau. Doug Yadon with SEH from Ft. Collins gave an summary of the Wyoming Water Development Commission Level I study to review potential reservoir sites in the Belle Fourche Basin below Keyhole Reservoir. Although the Belle Fourche Compact restricts Wyoming to 1,000 AF for any facility solely for use in Wyoming, South Dakota was agreeable to allowing this Level I study review all feasible reservoir sites regardless of size with the understanding that Wyoming would not move forward with any site without concurrence by South Dakota. The study looked at eight (8) reservoir sites ranging in size from 500 acre feet to 16,800 acre feet. Due to high construction and permitting costs, it is unlikely that agricultural water alone would be able to afford their portion of the funding requirement for a new reservoir. The water supply on Redwater Creek is the most reliable of the sites studied and the two states will continue discussions on the feasibility of further analysis of this site. The two states, Reclamation and the irrigation districts agreed to hold a coordination meeting in the spring, which was held on March 31, 2006. All the parties were very complementary of the job done by Kody Steinbrecher, Wyoming's water commissioner in Sundance, in keeping everyone informed of when storage deliveries were being made from Keyhole Reservoir and moving that water through the system.

Niobrara River Basin

The Upper Niobrara Compact provides for additional review of groundwater use in the basin by the states of Nebraska and Wyoming. Nebraska's Natural Resource Districts in the Niobrara basin are completing some water planning efforts and Nebraska has made contact with Wyoming regarding reservoirs completed in the basin since the cutoff date in the Compact of August 1, 1957. Preliminary discussions have been held with Nebraska about re-visiting the provisions in the compact about groundwater reporting, but Nebraska has not made any specific requests at this time.

Colorado River Basin (Green River and Little Snake River Basins)

Hydrologic conditions returned to drier conditions in water year 2006 (October 2005 through September 2006) in the Upper Colorado River Basin after improvement had been seen in 2005. Over the past 7 years (2000 through 2006, inclusive) inflow to Lake Powell has been below average in all but one year (2005). Unregulated inflow to Lake Powell in water year 2006 was 73 percent of average. The combined storage of Lake Powell and Lake Mead at the end of water year 2006 was 25.79 million acre-feet (MAF)

(51% of their combined active capacity), down from 27.24 MAF at the end of the prior water year (54%).

During 2006, Lake Powell reached a low elevation on April 7, 2006, of 3588.7 feet. This minimum level was 33 feet higher than the low elevation reached a year prior to that date, so reservoir storage conditions were improved somewhat in 2006, however, the reservoir was 111 feet below full pool elevation at this time. From 2000 through 2004, the Basin experienced the worst five-year drought in the past 100 years. Inflow into Lake Powell, adjusted for the effect of upstream reservoirs, was 62, 59, 25, 51, and 49 percent of average, in 2000 through 2004 respectively, with the inflow in 2002 being the lowest on record.

Farther upstream and closer to Wyoming, snowpack conditions in the Upper Green River and Yampa River Basins were above average throughout the snow accumulation season (October 2005 through April 2006). The Upper Green River Basin snowpack condition was above normal on January 1, 2006, at 108 percent of average. On April 1, 2006, the snowpack condition in the Upper Green River Basin was 102 percent of average. The Yampa River Basin snowpack condition was well above normal on January 1, 2006, at 135 percent of average and had fallen to 123 percent of average on April 1, 2006, but was still looking much better than average. Early seasonal forecasts indicated that hydrologic conditions would likely fall into the average to moderately wet hydrologic condition during the spring of 2006.

Unfortunately, inflows did not materialize as forecasted. When April 1st arrived, there was essentially no snow precipitation to speak off after that point for the remainder of the season. As shown in the table below, the forecasted inflow into Flaming Gorge Reservoir and streamflow passing the Little Snake River gaging station near Lily, Colorado continued to dive during the succeeding months.

2006 Forecast Progression - April Through July Unregulated Volume in 1000's of Acre-Feet (KAF)

Issuance Month	Flaming Gorge Reservoir		Little Snake River near Lily, CO	
	Volume (KAF)	%of Normal	Volume (KAF)	%of Normal
January	1280	108	455	125
February	1250	105	470	129
March	1330	112	420	115
April	1210	102	420	115
May	1100	92	355	97
June	950	80	280	77
July	765	65	280	77
Actual	725	61	207	57

The Governors' representatives for the Colorado River Basin States and their staff members met multiple times during this reporting period. Notably, a preliminary Basin States' long-term (through 2025) river operations agreement and a compromise, consensus alternative supported by all seven states for analysis in the Department of the Interior's environmental impact statement on Colorado River shortage guidelines and coordinated reservoir operations during low reservoir conditions were reached in Las Vegas, Nevada during meetings on January 30-31st.

Recognizing that the DOI will study other alternatives, the Basin States' recommended proposal was submitted with the expectation that the DOI will adopt it as the preferred alternative in the Shortage Guidelines EIS that is under preparation. The Basin States' proposal is designed to provide input for the Department's consideration as it develops additional operational and water accounting rules to: 1) delay the onset and minimize the extent and duration of shortages in the Lower Basin; 2) maximize the protection afforded the Upper Basin by storage in Lake Powell against possible calls upon the Upper Basin to curtail uses; 3) provide for more efficient, flexible, responsive and reliable operation of the system reservoirs for the benefit of both the Upper and Lower Basins; 4) allow the continued development and use of the Colorado River resource in both the Upper and Lower Basins; 5) allow for development of additional system water supplies through system augmentation and improvements; and 6) allow for development of dedicated water supplies through participation in improvements to system efficiency and clarification of how to proceed with development of non-system water touching on the Lower Basin mainstem.

The second item on which tentative agreement was reached at the end of January 2006 is a preliminary framework agreement between state Colorado River water managers and users designed to be in effect through 2025. This framework agreement is intended to provide additional security and certainty in the water supply of the Colorado River System and avoid claims or controversies over interpretation or implementation of the Colorado River Compact and other applicable provisions of the law of the river. The agreement, among other things, contemplates water supply augmentation through a variety of measures including weather modification and desalination projects, provides for Southern Nevada Water Authority (SNWA) to be provided a "bridge" water supply through its funding of a re-regulatory storage project to be built adjacent to the All-American Canal in California to prevent excess flows from reaching Mexico, and reaffirms compact apportionments, with all states agreeing that additional compact-apportioned water development is supported by one another.

The agreement, if it can actually be put in final form and executed by the parties would be significant. It reflects agreement on the part of all seven states that augmentation of the available Colorado River water supply is an important mechanism to avoid future confrontations - that by increasing the pie the likelihood of fighting over slices of the pie is lessened. The SNWA, in consultation with the Colorado River Basin States, developed a scope of services for the Colorado River Long-Term Augmentation Plan for the Seven Basin States. SNWA entered into a study contract with Colorado River

Water Consultants (CRWC), a joint venture between Black & Veatch and CH2M Hill, and work is proceeding on the development of the augmentation plan that is to be completed in early 2007, The Basin State's technical staff members are collaborating with CRWC's project staff in developing the plan. Input on augmentation options that should be included in the plan was obtained through direct meetings with water users in each state. CRWC personnel met with the Green River Basin Advisory Group in Green River, Wyoming on July 19,2006.

As noted above, the Bureau of Reclamation is proceeding on the development of the Shortage Guidelines and Coordinated Reservoir Operations environmental impact statement. In May 2005, the Secretary of the Interior (Secretary) directed Reclamation to develop additional Colorado River management strategies to address Lower Basin shortage and operations of Lake Powell and Lake Mead under low reservoir conditions. In response, Reclamation initiated a public process to develop and adopt water supply guidelines that can be used when low water conditions exist. As contextual background, the reader is reminded that within each Colorado River Annual Operating Plan, the Secretary is required to declare whether the Colorado River water supply availability condition for the Lower Basin States will be "normal," "surplus," or "shortage." While regulations and operations criteria have been developed for normal and surplus conditions, detailed guidelines for a water supply shortage have never been established. Recent years of drought, decreasing system storage, and growing demands for Colorado River water have increased the need to develop guidelines for how Reclamation, the seven Basin states, and other stakeholders would address limited water availability during times of low reservoir conditions.

By developing additional management strategies, the Secretary will be able to better manage and operate the key Colorado River reservoirs while also providing mainstream users of Colorado River water, particularly those in the Lower Division states of Arizona, California and Nevada, a greater degree of predictability with respect to the amount of annual water deliveries in future years, particularly under low reservoir conditions. These strategies are also designed to delay the onset and magnitude of shortages, and maximize the protection afforded to water supply, hydropower production, recreation, and environmental benefits by water storage in Lakes Mead and Powell. Reclamation is on a schedule to complete the subject draft EIS by the end of February 2007, a final EIS by November 2007, and a Record of Decision no later than December 2007.

In addition to the numerous Basin states' meetings and conference calls held this year, the Upper Colorado River Commission held two regular meetings, several work session meetings and numerous conference calls during this reporting period that provided opportunities for the Upper Division States to formulate positions and discuss common interests in the intervening periods between seven Basin States' meetings. The Upper Colorado River Commission met in Jackson, Wyoming on June 5th and adopted a resolution not objecting to a draft hydrologic determination (replacing one done in 1988) by the Secretary of the Interior finding there is a Upper Colorado River Basin water supply sufficient that New Mexico would be within its Upper Basin Compact apportionment water supply after construction of the proposed Navajo-Gallup Water

Supply Project. These determinations are required by federal law prior to additional contracts for water supply from Navajo Reservoir being implemented. The draft Hydrologic Determination supports a finding that the long-time available Upper Basin annual water supply is at least 200,000 acre-feet greater than the 6.0 maf finding of the 1988 Determination.

Colorado River Compacts Administration Program

During 2005, the State Engineer initiated the Colorado River Compacts Administration Planning Project. The purpose of the project was to identify information and any additional authorities the State Engineer would need if Wyoming is ever required to limit water use (curtail use) as required by the provisions of the Colorado River Compacts (specifically, Article IV of the Upper Colorado River Basin Compact) and to provide recommendations as to how the necessary information might be generated. The report recommended the development of an annual comprehensive water use monitoring program addressing all categories of water use so the State Engineer would have the necessary data to determine prior year consumptive use. To address this recommendation, the State Engineer included in his FY 2007-2008 budget submittal to the Governor a request for one additional staff position, support costs and professional service fees to initiate the Colorado River Compacts Administration Program (CRCAP) within the Interstate Streams Division. Subsequently, the budget item was approved by the 2006 Wyoming Legislature and Mr. Steve Wolff (Colorado River Coordinator) was hired by the State Engineer on 1 September, 2006.

This position is responsible for the CRCAP, including the development and implementation of an annual consumptive use monitoring program in accordance with the report's recommendations. Specifically, responsibilities/tasks outlined to be undertaken by the Colorado River Coordinator as part of the CRCAP, include:

- Oversight for Water Rights Mapping
- Preparation, performance and oversight of consultants as necessary for the Consumptive Use Plan
- Contact industrial and municipal users in the basin and assure annual reporting requirements are being met
- Determine appropriate reservoir evaporation rates for the basin
- Inventory the number and size of stock reservoirs in the basin
- Assure the reporting of water exported from the basin
- Become familiar with the Colorado River Decisions Support system, the North Platte Accounting system and the Snake River accounting to determine which type of data management system is appropriate for the Green River basin in Wyoming
- Become familiar with irrigation practices in the basin
- Work with the Division IV and I field staffs in the implementation of the Consumptive Use Plan

Within the 2006 reporting period, time was primarily spent on activities to become familiar with the program objectives as well as touring the Green River basin with Division IV field staff.

Colorado River Basin Salinity Control Program

The Interstate Streams Division continues to devote a significant amount of time and energy into salinity control measures, including additional salt loading reduction measures at the Big Sandy Unit of the Colorado River Salinity Control Project, which is defined by the boundaries of the Eden Valley Irrigation and Drainage District in the Eden and Farson communities' area of Wyoming. This reporting year was the eighth year during which governmental entities within the states of Colorado, Utah and Wyoming administered the "parallel" salinity control program authorized by the 1996 Farm Bill (Public Law 104-127, "Federal Agriculture Improvement and Reform Act of 1996") That Public Law amended the Colorado River Basin Salinity Control Act to allow up-front cost-sharing as opposed to reimbursement from the Upper and Lower Colorado River Basin Development Funds to the Federal Treasury once expenditures for salinity control had occurred in a preceding year. The Parallel Program is allowing significant leveraging of federal appropriations with Basin Fund monies and has directly and greatly accelerated the rate of salinity control efforts being implemented across the Basin.

Meetings of the Salinity Control Forum, Salinity Control Forum's Work Group, Salinity Control Advisory Council (established as a Federal Advisory Committee Act committee by the 1974 Salinity Control Act) and ad-hoc work groups on cost-share rate for EQIP salinity control contracts were participated in during this reporting period.

As reported in last year's edition of this report, a proposal to achieve additional cost-effective (~$22 per ton of salt loading reduction) salinity control by piping several long laterals traversing very sandy ground within the Eden Valley Irrigation and Drainage District (EVIDD) was considered and approved by the seven state Colorado River Basin Salinity Control Forum. The Eden Valley Irrigation District has been working with the USDA-NRCS to develop a plan for the conversion of their major system components into pipe. The District submitted an application to the Water Development Commission for assistance with this water management/salinity control project and the 2005 Wyoming Legislature appropriated $1,588 million for this project; the remaining 50% of the funding will come from the "parallel" salinity control program. During this year the State Engineer's Office completed the negotiation of a cooperative agreement amendment to provide for the SEO to act as the financial agent transferring the "parallel" program funds to the EVIDD as contractor bills are submitted; and a project funding agreement between the SEO and the EVIDD specific to the funding and providing for approval of all work performed by engineers at the Water Development Commission. The EVIDD has hired Nelson Engineering of Jackson to provide engineering services. Contract document, subsurface investigation along the pipelines routes and easement work has proceeded since the project was initiated this spring. The project should be ready to proceed to bidding on the actual pipeline construction work in early 2007.

Upper Colorado River Endangered Fish Recovery Program

On March 20, 2006, President Bush signed Public Law 109-183. This legislation was developed by the non-federal participants to the Upper Colorado River Endangered Fish Recovery Program and San Juan River Basin Recovery Implementation Program. The law increased the appropriations authorization ceiling to facilitate completion of the capital construction projects for the two subject endangered fish recovery implementation programs - specifically, it provides authorization for the Bureau of Reclamation to expend an additional $15.0 million in cost sharing funds for the Upper Basin Program, while recognizing an additional $11.0 million in non-federal cost sharing; and extends the time allowed for completion of capital construction projects for both programs from FY 2008 through FY 2010.

As now authorized, the federal government will have expended $61.0 million by the time of completion of the capital construction program and the non-federal parties will have provided $65.0 million in cost sharing. The subject legislation was introduced in the House of Representatives on June 30, 2005 by U.S. Representative Cubin and in the U.S. Senate on July 29th by Senator Wayne Allard. The time extension was sought as a means to avoid "bumping" upward the annual appropriations requests in Reclamation's budget, which on average have been about $5.0 million per year for capital expenditures for these two programs. The support and leadership of Governor Freudenthal in submitting letters and testimony supporting this needed legislation, and of Representative Cubin, Vice-Chair of the House Resources Committee (the lead sponsor of the House version of the bill) and Rick Axthelm, Rep. Cubin's Legislative Director, is most gratefully acknowledged and appreciated. The non-federal participants were very pleased to have the opportunity to watch from the Visitors' Gallery within the U.S. House of Representatives chambers in the U.S. Capitol on March 8th as the House enacted this legislation on the suspension calendar during its morning business session.

The non-federal Recovery Program participants again worked to obtain the support of the four affected States' Congressional Delegation in the President's recommended fiscal year 2007 budget items related to the Upper Colorado and San Juan recovery programs within the Bureau of Reclamation and Fish and Wildlife Service budgets prior to and during briefing meetings in Washington, D.C. with the involved States' Congressional Delegations and Congressional Committee staff in March 2006. Joint funding support letters signed by most of the members of the four States' Congressional delegations were delivered to the House and Senate appropriations committees having jurisdiction over the Bureau of Reclamation and the Fish and Wildlife Service budgets.

In March 2005, construction activity was initiated to enlarge the storage capacity of Elkhead Reservoir and will continue through the spring of 2007. The enlargement project is a partnership of the conservation district, the city of Craig, the Craig Station Power Plant, the Upper Colorado Endangered Fish Recovery Program and Colorado State Parks. The Colorado River Water Conservation District awarded a $17.8 million contract to Ames Construction to proceed with enlargement of the dam and related construction at Elkhead Reservoir. The enlargement project will create 12,000 acre-feet

of new water storage to improve streamflow in the Yampa River for endangered fish and to provide additional water for the residents of the Yampa River Basin. The Recovery Program will have 5,000 acre-feet of reservoir storage in perpetuity and has a lease on 7,000 acre-feet of the enlarged reservoir for the next 20 years.

Green River Basin Advisory Group

The Interstate Streams Division continues to actively participate in meetings held by the Green River Basin Advisory Group (GRBAG). While the Green River Basin Water Plan was completed in February 2001, the GRBAG continues to meet three times per year and the presentations and discussions of important policy matters, including the items addressed in this report by the State Engineer and Interstate Streams Engineer remain an integral purpose of those meetings.

Other

The Interstate Streams Division continued to represent the State of Wyoming in other Colorado River basin ongoing efforts that, due to space considerations in this report and lack of notable or extraordinary accomplishments, are only mentioned in passing. These include: serving as Chairman of the Resolutions Committee for the Colorado River Water Users Association; limited, as required, participation on the Technical Work Group and Adaptive Management Work Group for the Glen Canyon Adaptive Management Program; participation on the Colorado River Management Work Group that develops the draft Annual Operating Plan for the Colorado River Reservoir System and serving as the Chairman of the Upper Colorado River Commission's Engineering Committee and as Technical Advisor to the State Engineer in his capacity as the Wyoming Commissioner to the Upper Colorado River Commission.

During this reporting period the Interstate Streams Division recompiled and updated the "Compacts, Treaties and Court Decrees - Documents on the Use and Control of Wyoming's Interstate Streams" document that was last published in 1983. A small number of the books were printed for dissemination and use by State Engineer's Office and Attorney General's Office personnel. In addition, the document has been posted on the agency intranet and internet sites.

Bear River Basin

The Bear River Basin experienced some relief from the several year drought that has settled into the rest of Wyoming. Bear Lake did go above the Compact storage restriction elevation of 5911' in mid-may, 2006. All storage facilities in Wyoming filled during the spring. The Technical Advisory Committee met twice (March 1, 2006 in Montpelier and September 19 in Fish Haven) with the main topic being operations at Bear Lake National Wildlife Refuge. Rob Bundy, Refuge Manager, has completed thorough GIS analyses of vegetation type and water depth in the cells on the Refuge lands. The TAC reviewed the estimated water use of the refuge as of the Compact date of 1976 and compared that use with estimates of today's depletions. Robb Keith,

Wyoming Game and Fish, also attended the Montpelier meeting to make the TAC aware of potential efforts to eradicate walleye from Sulphur Creek Reservoir. The Bear River Commission meetings were held November 1, 2005 and April 19, 2006.

The Bear River Commission applied for and was successful in obtaining an $800,000 water quality grant through the EPA's watershed program, which is now in its second year. Utah State University has made significant progress in the three (3) components of the grant: water quality model development; outreach website; and pollution credits trading.

The Town of Bear River requested an allocation of 1958 Compact storage to provide to the City of Evanston for storage in Sulphur Creek Reservoir in return for Evanston providing Bear River with treated water for a regional system to serve county residents as well as the Town of Bear River. The Town and the County are working setting up a joint powers board for delivering the water from Evanston to Town of Bear River and to the county areas in between. A flood control study is still contemplated by the Corps of Engineers. Both Idaho and Wyoming have appropriated $50,000 each to match with the Corps, but the Corps has been unsuccessful in securing their funding.

Snake River Basin

The Wyoming State Engineer's Office, the Wyoming Game and Fish Department and the Bureau of Reclamation have been meeting each fall and spring since Wyoming purchased 33,000 acre feet of storage in Palisades Reservoir in 1990. Since all of the contracted use out of both Jackson Lake and Palisades Reservoir is to lands downstream of Palisades in Idaho, the Bureau of Reclamation and the State of Idaho—District 01 allows Wyoming through a paper transfer to use the Palisades water right storage out of Jackson Lake. The Snake River basin enjoyed higher snowpack and runoff conditions than most of the rest of Wyoming. Both Jackson Lake and Palisades Reservoir nearly filled physically and from a water rights standpoint. Jackson Lake concluded the irrigation season with storage levels at the maximum amount of carryover allowed under flood space rule curves, that is with 200,000 acre feet of available space. At the fall agency meeting held September 21, Reclamation agreed to a winter release of 500 cfs. This is the highest winter release in several years. Ron Carlson, longtime manager of Idaho's Water District 1 retired at the Annual Meeting on March 7, 2006. Groundwater recharge is currently a huge issue in Idaho as the irrigation districts would like to run water down their canals when they are not irrigating to increase shallow groundwater supplies. There is no concurrence between the State of Idaho and the irrigators on whether this is allowed under their water rights.

Water Organizations and Policy Issues

Water Forum: The State Engineer serves as the Chairman of the Wyoming State Water Forum. The Water Forum meets monthly beginning in September and ending in May and provides state and federal agency personnel a regular opportunity to share information and insight on water activities that are ongoing in their respective agencies.

Each month, a special program is presented providing a more in-depth review of a particular water related issue or topic. During this last season, topics for Water Forum ranged from a presentation on the SEO/DEQ Coalbed Natural Gas Water Planning Map to a presentation from the National Research Program of the U.S. Geological Survey on GSFLOW, a coupled ground water/surface water model. The Forum provides an important information exchange mechanism in an informal setting.

Governor's Planning Office and Army Corps of Engineers Notices: The Interstate Streams Division is responsible for reviewing and responding to all notices received from the Governor's Planning Office and the Army Corps of Engineers. The notices from the Governor's Planning Office include, but are not limited to, proposed actions, scoping statements, environmental impact statements (draft and final) and environmental assessments. The notices from the Army Corps of Engineers are notices of applications for Section 404 permits. During this last reporting period, 53 notices were received from the Governor's Planning Office and 4 were received from the Army Corps of Engineers. The Interstate Streams Division is also responsible for attending any meetings that pertain to projects of special interest to the State Engineer's Office. These meetings often include tours of the affected area, open houses and public meetings. Meetings with the other cooperators to help develop purpose and need statements and alternatives for the project are also attended by this division.

Interstate Council on Water Policy (ICWP): The ICWP is a nation-wide water policy organization with membership made up of state water resource agencies and interstate water management entities. The ICWP continues to spearhead a work group made up of representatives from ICWP, Western State Water Council, National Water Resources Association and the Association of Floodplain Managers to raise the awareness of the continuing erosion of the USGS's streamgaging programs, namely the Cooperative Program and the National Streamflow Information Program (NSIP). ICWP sponsored a national USGS cooperators meeting in Austin, TX on January 31-February 1, 2006. Several recommendations were made by the cooperators on how to improve the program and the relationship with the USGS. ICWP held their annual Federal Roundtable on February 28- March 1 in Washington DC. The focus of the meeting was a recently completed report on interstate organizations and how they could be used more effectively by the federal agencies to carry out programs. ICWP's Annual Meeting was held October 18, 2005 in San Antonio and Sue Lowry assumed the Chair position of ICWP at that meeting for a two year term.

Sue Lowry is ICWP's representative to the Advisory Committee on Water Information (ACWI) which is a Federal Advisory Committee Act-commissioned group to provide public input on water programs of the USGS, EPA, NOAA, and other federal agencies. A Task Force of the ACWI reviewed the USGS's Cooperative Water Program and submitted its list of recommendations for the program in January, 2006

Western States Water Council (WSWC): In addition to its role in coordinating information exchange among the states, the WSWC focuses upon improving the communications between federal water management agencies and the states. WSWC

is participating with the Corps of Engineers on a west-wide watershed study. The focus of the study is implementation of the issues identified in a report completed for the Western Governors Association entitled: "Water Needs and Strategies for a Sustainable Future". In order to get broad stakeholder input for the report, a full day workshop was held in Washington, DC on March 27 with about 100 diverse attendees. The report was presented to the Governors at their June summer meeting in Sedona, AZ. Several work items will be completed by the WSWC over the next couple of years as directed in the report.

Wyoming is preparing to host the WSWC in Sheridan on October 4-6, 2006.

Upper Missouri Water Users: The Upper Missouri annual meeting was held December 2, 2006 in Spearfish, SD, which included a panel on the four states current water issues. The group held their annual Congressional briefing in Washington, DC on April 4, 2006.

Ogallala Aquifer Institute: Related to the Ogallala, the Kansas Water Office provided seed money for the formation of the Ogallala Aquifer Institute in 2001. The Board of Directors for the Institute seeks to have balanced representation from agencies, land owners and environmental educators. Sue Lowry is currently representing Wyoming on the Board, and serving as the Treasurer for the organization. The group has had difficulty raising any additional funds beyond the initial infusion from the Kansas Water Office. The Board agreed to retain the 501(c)(3) IRS status, but the Institute has been mostly inactive during this reporting period.

Other: During this reporting period, the Division also monitored the Bureau of Reclamation's Managing for Excellence efforts, served on the NRCS's State Technical Committee, coordinated the inter-agency meetings with Water Development Commission, NRCS, DEQ and Game and Fish, and coordinated the agency's United Way campaign.

Water Planning

The 1996 Legislature directed the Wyoming Water Development Commission (WWDC) and the State Engineer's Office (SEO) to prepare recommendations for updating the 1973 Wyoming Framework Water Plan. Following this direction, the two agencies submitted a joint recommendation to the Governor, the Select Water Committee, and the WWDC on October 1, 1996. In 1997, the Legislature directed the WWDC to conduct a water-planning feasibility study with the assistance of the SEO and the University of Wyoming (UW). The Bear River Basin was chosen as the site for the feasibility study and a pilot analysis soon began. Throughout the pilot study, the WWDC maintained an intensive public outreach effort, completed a statewide water data inventory, and was advised by a multi-agency scoping group. With the help of an independent consulting firm, under contract to the WWDC, final recommendations for implementing future water plans were drafted for seven planning areas in Wyoming.

The recommendations consisted of time lines, necessary agency staffing, estimated costs, process goals, and vision of the final products.

The products created for each plan consist of a series of technical memorandum describing each topic outlined in the contract with the WWDC. An executive summary and final report, spreadsheet models of the basin's water supply and uses, and various mapping products are also part of the final product. All of these products are on the Water Planning website (**http://waterplan.state.wv.us/**). This enables anyone who is interested access to the data, mapping and modeling.

There are seven planning areas within Wyoming - the Bear, Green/Little Snake, Powder/Tongue, Northeast Wyoming (Little Missouri, Belle Fourche, Cheyenne, and Niobrara basins), Snake/Salt, Wind/Bighorn, and Platte basins. The first round of all of the individual basin plans has been completed. Each of the plans will be updated on approximately five year intervals. It takes a year and a half to finish an individual basin plan. The completion of each water plan is achieved with the help of the public, private consultants, and State and Federal agencies. Public participation is in the form of a local Basin Advisory Group (BAG). BAG membership is comprised of people who reside within the specific basin being studied. The BAG determines membership requirements, meeting rules, meeting dates, times and locations. During a planning period, the BAG meets every other month. When a basin plan is completed, the BAG meets every three to four months (referred to as the Interim BAG period or iBAG) until the update of their basin begins approximately five years later. The iBAG meetings provide a platform for the membership to learn of progress on other basin plans, hear updates from State, Local, and Federal agencies, and to learn of current activities within their basin.

The following table summarizes what has occurred in water planning for each of the basins:

River Basin Plan	Plan Completion	Lead Consultant
Green/Little Snake	December 2000	States West Water Resources
Bear	December 2000	Forsgren and Associates
Powder/Tongue	December 2001	HKM Inc.
Northeast	December 2001	HKM Inc.
Snake/Salt	December 2002	Sunrise Engineering
Wind/Bighorn	December 2002	BRS Inc.
Platte	April 2005	Tri hydro

Framework Water Plan

In 2005, the Wyoming Water Development Commission (WWDC) was appropriated $500,000 by the Legislature to update the 1973 State Framework Water Plan. The updated Framework Water Plan will summarize the work that has been completed over the last 6 years on all seven river basin plans and will serve as a resource for current and future water planning.

The Framework will look at the state as a whole and include GIS coverages to illustrate the information that is in the report. Some of the GIS coverages that may be part of this Framework are: water use and availability, irrigated lands, hydrography, locations of reservoirs, headgates and ground water wells, and water development opportunities, just to name a few. This information will be provided online through the Wyoming State Water Plan homepage using an Internet Map Server (IMS). The Framework will also include models to help examine surface water use and availability throughout the state. The Framework will provide, among other things, recommendations for inclusion of groundwater, how to address water rights, outline any data that needs to be changed or corrected, and provide other recommendations for the next round of individual basin plans. The Framework, like the individual basin plans, will be updated every five years.

In October of 2005, interviews were held with three consulting firms who submitted proposals to complete the Framework Water Plan. WWC Engineering was selected as the firm to complete the Framework Water Plan. The project team consists of WWC Engineering who will handle the overall project management, the overall hydrology, the demands projections and analysis, municipal and industrial uses, and recreation and environmental uses. Hinckley Consulting will look at agricultural consumptive use and groundwater resources. States West Water Resources will look at future water use opportunities, Greenwood Mapping will bring all of the GIS coverages together and develop a web-based presentation tool and Collins Planning Inc. will handle the planning review. Project manager, Murray Schroeder, began work with his team in January of 2006.

Along with the above mentioned contract obligations of the Framework, the consultant is also instructed to hold monthly planning team meetings with the project team and the water planning team. In addition to these planning team meetings, the consultant is to hold 3 progress review meetings at 5%, 50% and 90% completion of the project. These project review meetings are to be held in central locations in the state.

Attendees to the progress review meetings are people who are interested in the Framework project along with Basin Advisory Group (BAG) representatives and alternates from each basin. The BAG process was handled a bit differently for the Framework Water Plan than it was for the first round of water planning. Each of the BAGs was asked to choose a Framework Water Plan representative and alternate. These two people would attend each of the 3 progress review meetings to be held throughout the Framework planning process, represent their basin's views and issues at these meetings, and then report back to their BAG at the next regularly scheduled BAG meeting. Those chosen to represent their basin are as follows:

Bear River BAG representative:	Bridger Feuz;	alternate: Jerry Sage
Green River BAG representative:	Ben Bracken;	alternate: Randy Bolgiano
Snake/Salt BAG representative:	Garry Crook;	alternate: none
Wind/Bighorn BAG representative:	John Joyce;	alternate: Klodette Stroh
Powder/Tongue BAG representative:	Bruce Yates;	alternate: Bob Brug

Northeast BAG representative:	Jim Kruse;	alternate: none
Platte BAG representative:	John Maier;	alternate: Neal Payne

To date, two progress review meetings have been held. The 5% progress review meeting was held in Riverton on March 1, 2006 and the 50% progress review meeting was held in Casper on July 11, 2006. A 90% progress review meeting will be held in the spring of 2007. The final report for the Framework Water Plan along with all of the technical memorandum and GIS coverages will be available in April of 2007.

Water Conservation

Sue Lowry continues to serve as the Western States Water Council's representative to the Bridging the Headgate (BTH) partnership. The partnership's goal is to improve communications between irrigators, state water officials, conservation districts, the Natural Resources Conservation Service and the Bureau of Reclamation to use limited resources as efficiently as possible. Kathy Holley has been serving as Reclamation's Field Services Program coordinator, but she will be taking a different assignment within Reclamation in October, 2006. NRCS has done a nice job of keeping the Partnership going even without strong upper management support from Reclamation. A new Declaration supporting the Partnership was signed adding the Irrigation Association as a partner. BTH members participated on a panel during Reclamation's annual Water Management Workshop in Denver on February 9 and 10, 2006. The BTH partners also met in Boise June 12 and 13 during the western region National Association of Conservation Districts (NACD) meeting. The BTH website is being maintained by NACD and is now up to date with all state contacts and updated completed projects.

SUPPORT SERVICES DIVISION

Support Services Staff

General

The Support Services division has a total of eleven employees and is responsible for the following operations:

- Information Technology and Telecommunications
  - Web - Website, Web Development, Web Content
  - Network - Telecommunications, switches, infrastructure, firewall, and disaster recovery
  - Help Desk & Support - All user issues and problems, all desktop equipment, software and printers
  - Database - SQL & Microsoft Access programming, reports, queries, and database management
- Geographic Information Systems
  - GIS - ArcGIS, ArclMS and ArcSDE application support, development, and data management
- Microfilm & Imaging
  - Maintaining film and appropriate archive procedures
  - Filing of all film
  - Filming all required paper records
  - Scan all required paper records into electronic formats
  - Manage documents systems and storage for scanned documents
  - Maintain quality of scanned records and appropriate and safe archival
- Records Management
  - Maintain organization and access to all records for the agency

Information Technology and Telecommunications

The State Engineers Office is currently involved in a multi-biennium project (IT Initiative) to allow the agency to receive, process, and store all applications, permits, petitions, maps, etc. in a digital form. Phase II is underway with Phase HI funded for the current biennium and Support Services has an instrumental role in preparing and supporting this initiative. IT continued to make infrastructure modification and upgrades over the past year. These included expansion of the IP SAN (Storage Area Network) for centralized file storage, upgrades to the SEO network backbone, WAN connections to division offices, and upgrade of the SEO firewall. A test environment consisting of four servers for the IT Initiative was built. These servers are for incremental builds of the new e-Permit system for testing by the SEO staff.

The database and web groups continue to utilize new technologies to develop system that allow all users the ability to search for and view water rights and associated scanned documents. The transition from Microsoft Access to SQL Server and Visual Basic .net continues to improve performance and reliability.

Geographic Information Systems

GIS continued to create, update and maintain spatial information for SEO technicians. We conducted several training sessions as well as provided numerous training resources for both field and headquarter staff. We continued working with ArcSDE and ArcIMS to disseminate data and maps on our internet site. We are still working collaboratively with the county offices, field personnel, and other agencies to collect LAT/LONG data on SEO points of interest. We hope to continue this progress to have all water rights tabular data depicted in a spatial format using ArcSDE and ArcIMS. Finally, we participated heavily in the Wyoming Geographic Information Advisory Council (WGIAC) to try and get a statewide coordinator position for the state of Wyoming as well as modify the way statewide GIS coordination is currently being handled.

Microfilm & Imaging

Microfilm is currently working on the constant filming of the necessary and required paperwork generated by filing permits and administrating water rights. We continued to monitor and upgrade poor film, correct film that is misfiled or filmed with the wrong permit number. Imaging or scanning of documents continued and more than 244,000 documents scanned to date. The biennium budget included a new Document Management System. The system will consists of document management software, high speed scanner, large format scanner, microfilm scanner, and electronic film recorder. This DMS system will be an integral part of the IT Initiative and will change this group from manual microfilming to electronic imaging.

Records Management

Records management and records retention continued to be evaluated and analyzed as the on going IT Initiative and DMS systems get closer to going online.

Summary

This department continues to undergo major changes and advancements as we evolve to be the technology leader within the State Engineers Office. It is a great opportunity and an exciting time for all of the Support Services Staff.

SURFACE WATER AND ENGINEERING DIVISION

The Surface Water and Engineering Division report includes surface water permit activities, weather modification permits, and dam safety activities. The numbers provided and the comments are for the period from October 1, 2005 through September 30, 2006, which is referred to as Water Year (WY) 2006.

SURFACE WATER RIGHTS SECTION
by

John Barnes, P. E. Administrator,
Surface Water and Engineering Division

Objectives

The objectives of the Surface Water Rights Section are mandated by the requirements of State water law and the State Engineer's Rules and Regulations as well as the goal to be of service to the public. The Section objectives are:

1. To promptly review and process surface water applications and petitions and submit them to the State Engineer for his review and consideration.

2. To maintain and update the status of all unadjudicated water rights records to accurately reflect the current status of these permits. The updated records are entered into the water rights database and microfilmed to keep all records current.

3. To provide a service to the public by promptly filling requests for data on the status of water rights and for copies of records.

4. To provide technical advice and instruction to engineers, surveyors, and the public on the proper procedures for filing applications for permits, petitions and water use agreements and for permit status updating.

5. To provide technical assistance to the State Engineer, office staff, and water administration field personnel in matters requiring interpretation of surface water rights.

Accomplishments

The 2005-2006 winter continued the drought with a below normal snow pack over the State. The reservoirs on the North Platte River were almost empty at the end of the 2005 irrigation season. There continues to be a large number of inquiries regarding water rights, water law, and related matters.

Categorized work submitted to the Surface Water Division during the period included: a) applications for permits - 1413; b) petitions - 22; c) Temporary Water Agreements - 121; d) water rights information searches - 95. In addition, the Dam Safety Section conducted field safety inspections of dams, completed plan reviews and performed other activities as reported in a separate section of this Division report.

Application Reviewing and Processing

A total of 1413 surface water applications were received in the period. The following table gives a comparison of applications and petitions filed with the State Engineer for the past years, beginning with FY 2000 and continuing through WY 2006. The end-of-period backlog is 1347 applications as the number of CBM reservoir applications continues to increase.

FY	APPLICATIONS			PETITIONS		
	No. Reed	Approve/ Reject	EOY Backlog	No. Filed	Approve/ Dismiss	EOY Backlog
00	910	1406	845	19	10	68
01	1067	600	1312	15	6	77
02	1205	661	1856	15	8	84
03*	1504	1208	2271	30	14	100
WY 04	1610	1350	2531	19	17	102
05	1650	2321	1768	23	17	108
06	1413	1610	1347	22	34	96

*Represents a 15-month period: July 1, 2002 to September 30, 2003.

Types of applications fall into several categories. The more complex categories include ditches/pipelines, enlargements, and reservoirs. The less complex applications and those that can easily be reviewed and approved include applications for stock reservoirs and temporary water uses. Applications for permits for instream flows, the first of which was received in FY 1987, include a requirement by law that the State Engineer hold a hearing before granting or rejecting them. Only the state of Wyoming, through the Wyoming Water Development Commission, can file instream flow applications. Three instream flow applications were received during the period and no hearings were held.

COMPARISONS OF TYPES OF APPLICATIONS RECEIVED				
Category	**FY 2003***	**WY2004**	**WY2005**	**WY2006**
Ditches/Pipe-lines	115	146	133	101
Enlargements	30	17	19	19
Reservoirs	305	235	366	402
Stock Reservoirs	672	970	975	787
Temporary Use	147	68	152	101
Instream Flow	235	136**	5	3
Totals	1205	1610	1650	1413

* Represents a 15-month period: July 1, 2002 to September 30, 2003.
**State Instream Flow Applications- 1
Forest Service Instream Flow Recordations - 135

Petition Processing

The first table printed above included data on petitions submitted to the State Engineer to correct or to amend permits. During the reporting period, the number of petitions either filed, granted or dismissed brought the backlog to 96 on hand. Many of these petitions are associated with cleaning up permits in Water Division III so the permits can be reported to the Court for final adjudication under the Big Horn General Adjudication.

Temporary Water Agreements

Where water is not available under a new permit for construction purposes and other temporary uses, the temporary water users can enter into agreements with holders of valid, senior-priority water rights to obtain water for their temporary needs. Water Agreements must be reviewed and approved by the State Engineer's Office and an Order entered to allow the temporary change in use. To meet the needs of the construction and drilling industries, Water Agreements are quickly reviewed and approval Orders are normally issued within a few days of receipt of the Agreement. In the reporting period, a total of 121 Water Agreements were received and approved. A comparison with previous years follows:

FY/WY	Water Agreements
2001	130
2002	179
2003	207* (166)
2004	129
2005	140
2006	121

* Represents a 15-month period: July 1, 2002 to September 30, 2003. (Represents annualized number)

Permit Endorsements

Once a permit is issued, it is recorded in the computer information system and a permanent microfilm record is made. The records must be updated every time a notice for completion of construction or beneficial use is filed with the State Engineer for a given permit. If approved, requests for extensions of time must be endorsed on the permit and the update recorded in the computer and microfilm systems. Eliminations of points of use from a permit, reinstatements of permits, cancellations of permits, assignments, or any other changes by petition to the State Engineer require endorsements to permits and updates of the computer and microfilm records.

Information Searches

Landowners, surveyors, engineers, attorneys, realtors, and others routinely request copies of permits, certificates of appropriation, maps, and other information pertaining to water rights records. During WY 2006, a total of 95 requests were answered requiring records searches. The following table shows the history in the numbers of requests received,

FY/WY	SEARCH REQUESTS
2000	647
2001	778
2002	666
2003	416* (333)
2004	86
2005	120
2006	95

* Represents a 15-month period: July 1, 2002 to September 30, 2003. (Represents annual number)

Some of the information requests are related to the preparation of applications and maps by engineers and surveyors for permits or petitions. Again, in the reporting period, the bulk of the requests appeared to be from realtors and bankers who desired water rights information in real estate sales transactions or for use in real estate loans.

Field Activities

Site visits were made to areas where controversies were occurring. Site visits were also made by the Safety of Dams staff to observe reservoir construction, to inspect reservoirs as part of the dam safety program, and to investigate alleged illegal activities.

Other Activities

The Surface Water and Engineering Division continues to participate in reviewing the activities of the U.S. Board of Geographic Names (USBGN). This review provides for coordination of names used on maps, particularly those of streams, since every year, many streams are given names by issuance of water rights permits.

The Surface Water and Engineering Division maintains a complete file and inventory of all USGS maps in Wyoming for use by the State Engineer's office and field personnel.

Problem Areas

Coal Bed Methane Reservoir Impacts

The number of reservoir applications filed continues at a high level. The large number of reservoir applications is due to reservoir filings by the coal bed natural gas (CBNG) industry in the Powder River Basin. The Division is now at full staff although training is occurring to increase the productivity of our new employees.

Records Rehabilitation

The past Annual Reports detailed the need to upgrade the condition of the permanent records in the Surface Water and Engineering Division. Maps in bad condition are now being scanned and are available electronically so the original map gets used less. Map records that need to be updated and maintained include the paper plats, USGS maps, county maps, and permit maps-all of which are in daily use for supporting the water rights records and in providing information to the public. All current permits and maps are being scanned and then microfilmed.

Upgraded Technology

The computer system is being used by the Division to access the water rights database including scanned documents, word processing, and power point presentations. Searching the water rights database provides another tool in answering information requests. Data processing problems which have occurred are being addressed. New report formats have been developed. Additional access is being developed to help in application reviews and processing. The water rights database and the scanned images are now available to the public.

We continue to update our current computers with new, higher speed computers to be able to use them with the graphic information systems. Documents within the office continued to be scanned. The public now has access to the scanned documents. We need to continue to update our computers as funds are available.

State Engineer's Instructions and Regulations

Work has continued on the State Engineer's Office rules and regulations. We continue to look for time to prepare the final draft and complete the promulgation process.

Weather Modification Permitting Activities

Objectives

The primary objective of the Weather Modification Program is to procure, compile and evaluate information resulting from weather modification experiments, research and related activities conducted in the State of Wyoming. Weather Modification Permits are issued by the State Engineer for each modification program, experiment or activity.

Accomplishments

Three permits were issued for weather modification purposes during this reporting period. Permit Number 88 was issued to Eden Valley Irrigation and Drainage District in Farson, Wyoming, with the objective of continuing their weather modification program to increase the water supply in the Big Sandy River drainage. This is a wintertime operation which operates during proper weather conditions from November 15th through April 15th. The mobile, ground-based, cloud seeding generators are strategically placed along Highway 191 and are operated in accordance with daily weather conditions. The Eden Valley District wintertime project is in its thirty-fourth year of cloud seeding.

Permit No. 89 was issued to North American Weather Consultants for weather modification in the Unita Range south of Lyman. This project would increase flows in the streams flowing into Wyoming on the north side of the Uinta Mountain Range.

Permit No. 90 was issued to Weather Modification, Inc. for aerial seeding over the Snowy Range west of Laramie. This is part of the Wyoming Water Development project for the Snowy and Sierra Madre ranges.

Other Activities

Due to the drought, many inquiries regarding the weather modification process are occurring. The Wyoming Water Development Commission funded project completed the environmental assessment for the Snowy and Sierra Madre ranges. The environmental assessment for the Wind River Range is still in process. A study to begin seeding in the Salt River Range was also completed.

SAFETY OF DAMS SECTION

by

John R. Barnes, P.E.
Administrator, Surface Water and Engineering Division

Introduction

In 1977, the State Legislature, recognizing the potential hazards to public safety due to waters impounded by dams throughout the state, and the economic benefits of well maintained and safely operated dams, authorized the Wyoming Safety of Dams Program, with passage of the Safety of Dams Law (Wyoming Statutes 41-3-307 through 41-3-318). The law was amended in 1992 to clarify inspection requirements, duties of the State Engineer and lien procedures; provided for penalties; and granted rule-making authority.

While a permit from the State Engineer is required for all dams, the Safety of Dams Law mainly pertains to dams which are greater than 20 feet high or impound 50 acre-feet or more, and diversion systems with a capacity of 50 cubic feet per second or greater. However, the State Engineer may enforce any sections of the law on any size facility, when necessary, to insure the public safety or the protection of property.

Objectives

The objective of the Wyoming Safety of Dams (SOD) Program is to protect the public safety by reducing the potential for flooding and loss of life as a result of failure of a dam or diversion system. This objective is accomplished in two ways, as stipulated by the Safety of Dams Law:

1. By reviewing plans and specifications for proposed work, which then results in the issuance of a permit, and by reviewing inspection and progress reports outlining current construction activities.

2. By conducting periodic safety inspections of existing facilities.

Accomplishments

Mr. Dave Benner, long time Safety of Dams Engineer, retired on September 1, 2006. Dave had conducted plan reviews for the safety of dams section. He was Wyoming's representative to the Association of State Dams Safety Officials (ASDSO) and served on ASDSO's Board of Directors. Dave's experience and knowledge will be sorely missed.

During the past year, 90 new jurisdictional size applications and repair projects were received and 120 plan reviews were completed with permits being issued. Almost all of these facilities are associated with storing water produced from coal bed natural gas activities. Construction was completed on 22 safety of dams size facilities.

Enforcement action was taken against one coal bed natural gas producer for not following state law regarding storage of water and construction without a permit.

In addition to the work involved with design review and/or construction monitoring activities, a considerable amount of time is spent on the other aspect of the Safety of Dams Program, the Periodic Inspection Program. Wyoming Statute 41-3-311 states: "Any dam, subject to the terms of this act shall be inspected at least once every ten years or as often as deemed necessary based on the hazards of the dam to insure the continued protection of public safety and property." Only very low hazard dams located in remote areas of the state are inspected less frequently than once every five years.

Currently, 1,444 dams meet the criteria of the Safety of Dams Law (more than 20 feet high and/or impounding 50 acre-feet or more of water). A total of 267 dams were inspected in Water Year 2005-06 and 347 are due for inspection in water year 2006-7.

The quality of the safety inspections is steadily improving. This is due to the increased experience and training level of the state water administration personnel in dam inspections and the greater opportunity for the two Safety of Dams Engineers in Cheyenne to conduct routine periodic inspections of larger, high and significant hazard facilities. In addition, we also continue to coordinate safety inspections with federal agencies such as the Natural Resources Conservation Service, Bureau of Land Management, Bureau of Reclamation, Federal Energy Regulatory Commission and Forest Service to draw on the resources and experience of those agencies. Efforts to coordinate with the Mine Safety and Health Administration have been unsuccessful due to apparent lack of interest on Mine Safety and Health Administration's part.

Problem Areas

A continuing problem area concerns dams located on the Wind River Indian Reservation. Because of disputes over jurisdiction, we have problems obtaining timely information on the present conditions of dams (Washakie Dam in particular, a high hazard structure) on the reservation. We have received no information concerning the present condition of the seepage problem that was discovered when the reservoir was being filled after repairs were performed several years ago. We, therefore, do not know if this potentially serious problem has been corrected. The Bureau of Indian Affairs has indicated that they will not be submitting the plans for the upcoming work at Ray Lake for SOD review either.

Coal Bed Natural Gas (CBNG) development is continuing to have a significant affect on workload due to permitting of new dams. The number of plan reviews remains high.

We are still not receiving construction documentation (notices of completion and the owner's engineer's reports on construction of the dams) on many of these dams.

Due to relatively poor groundwater quality in some areas and DEQ stream discharge standards, much larger CBNG dams are now being constructed than in the past. The purpose is to hold the large quantities of CBNG water being generated so that it can be: permanently retained, piped to areas where it is safe to use or treated prior to release. Some of these facilities are large enough to present a high or significant hazard to downstream development.

Some of the CBNG reservoirs are leaking and pump-back system have been installed to intercept the seepage and pump it back into the reservoir. The facilities are being monitored to insure piping is not occurring which could lead to dam failure.

Other Activities

Work is continuing on the National Inventory of Dams (NID) Project. We have been compiling information for each of the 1,444 dams in the Safety of Dams Program and preparing a computer inventory containing this information. In the past, part of the funding for this project has been provided by the Association of State Dam Safety Officials (ASDSO) through a "pass-a-long" grant from the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers. Data from the state dam safety organizations is compiled by the Corps and published in CD-ROM format periodically. This information is available on their web site. Much of the information requested by the Corps is not readily available and considerable effort has been involved in gathering this essential data to complete our state database and keep it updated.

Considerable assistance to the dam safety program has been provided by FEMA grant funds. The initial three-year of funding has been completed. The project to acquire digital photos of all jurisdictional reservoirs statewide, continued this summer. Approximately 82% of jurisdictional dams have now been photographed.

The grant has also been used to purchase equipment for the field personnel who are involved with inspection of the low hazard dams. This year new GPS units, hand eye levels, digital cameras, and binoculars were purchased.

Some of these FEMA grant funds were also used for training. Two dam safety engineers attended the 2006 Association of State Dam Safety Officials annual conference and another attended the 2006 Western Regional Conference. Four engineers attend the ASDSO "Hydraulics of Spillways" seminar. Two engineers attended the ASDSO "Dam Failure Analysis" seminar.

In our grant application for the up-coming year, we anticipate funding a study of successive failures for dams in a series, begin to look at up-grading the dam hazards

through study of recent aerial photos, continued purchase of equipment, and continuing education for the SOD staff and field inspectors.

FEMA's Flood Insurance Administration implemented a Community Rating System in 1991, which gives flood insurance policyholders, in qualifying cities and counties, a discount on their premiums. Communities can receive a further discount if the state has a qualifying Safety of Dams Program. We first applied for this credit in 1991. We applied for recertification three years ago, but have not been notified as to the decision at this time.

GROUND WATER DIVISION

This WY-06 report comprises two sections; the 1) Ground Water Section, and 2) Cooperative Programs. The Ground Water Section provides an update on the day-today activities of the Ground Water Division; the Cooperative Programs section reports on three programs administered by the Division - Surface and Ground Water Data Collection, Snow Survey and Stream-flow Forecast, and Subdivision Water Rights.

GROUND WATER SECTION
by

Lisa Lindemann, P.G., Administrator,
John Harju, Assistant Administrator,
and the Ground Water Division Staff

Objectives

The objectives of the Ground Water Division (GW) are:

1. To issue, record, maintain, and prepare permits for adjudication which grant the right to appropriate groundwater within the State of Wyoming and maintain a database of approved permits.
2. To resolve conflicts between groundwater users.
3. To conduct Control Area Advisory Board meetings.
4. To coordinate groundwater investigations involving the State Engineer's Office (SEO) and other agencies.
5. To investigate water well construction and enforce the "Water Well Minimum Construction Standards".
6. To protect the State's groundwater resources.
7. To investigate the occurrence of groundwater resources.
8. To monitor ground water levels across the state.

Accomplishments

Application Processing and Recording

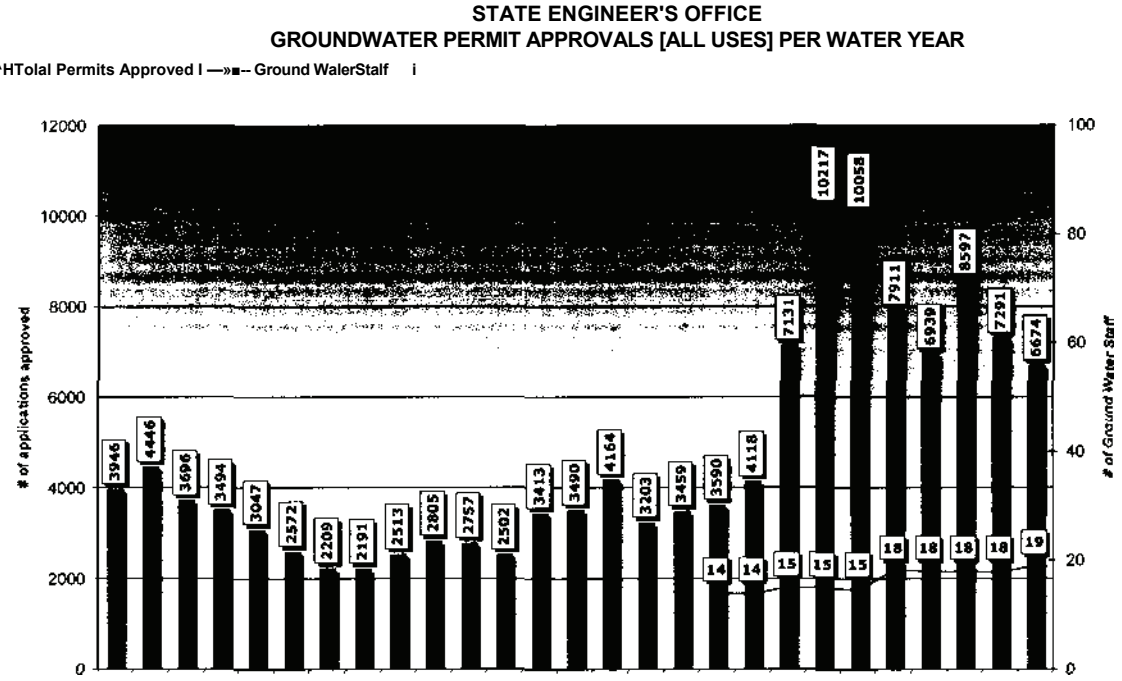
During Water Year 2006 (WY-06), GW received 6,812 applications for permits to appropriate ground water. This represents a decrease of 1,187 applications from WY-05. However, GW is still receiving and processing more applications than it has since the mid-1980's (Figure 1). During WY-06, 6,674 applications were approved to permit status, a decrease of 617 from WY-05. One hundred forty-five (145) applications were rejected in WY-06, an increase of 89 from WY-05. In addition to applications for new appropriations of ground water, 165 requests for relocations of existing wells were also received and processed, an increase of 37 requests from WY-05.

Permit Cancellations

During WY-06, 4,141 permits to appropriate ground water were cancelled because the permittee either failed to submit the required notices (completion and beneficial use forms) within the statutory limits or the permittee requested cancellation of the permit, an increase of 1,889 from WY-05. Abandoned wells for which the attendant water rights were cancelled amounted to 892, an increase of 531 from WY-05. The figure for abandoned/cancelled permits is separate from the count for cancelled permits where the required notices were not filed. These wells were in use and were subsequently abandoned, generally for physical failure.

Seven thousand, seven hundred eighty-five (7,785) certified expiration letters were prepared and mailed notifying applicants that their well permits were about to expire because the statement of completion of construction and the notice of completion of beneficial use of water had not been properly submitted, a decrease of 156 from WY-05.

Figure 1



Permit Maintenance

The ownership of 606 permits to appropriate ground water was assigned to different owners during WY-06, a decrease of 2,095 from WY-05. This decrease of assignment requests and processing of miscellaneous other forms is attributed to a turnover of clerical staff and the redistribution of work duties.

Requests for 1,675 extensions of time to complete construction or put ground water to beneficial use were received, processed and approved. Two (2) requests for additional points of use were received, processed and approved, a decrease of 10 from WY-05. Two thousand seven hundred and eleven (2,711) permits were updated with statements of completion or beneficial use forms. GW received and processed 218 miscellaneous updates.

Water Rights Search Requests

One hundred and seventeen (117) "major" ground water rights searches were conducted for realtors, water resource consultants and other interested parties during WY-06. The availability of our water well data through Internet access has decreased the amount of search requests GW receives throughout the water year. Numerous "small" water right searches requested daily, either by telephone or in person, are not reflected in the number referenced above. It is estimated those requests range from 6,000 to 8,000 per water year.

Two-year Review Letters

During WY-06, no "Two-year Review Letters" were sent to permit holders. These letters are the results of conditions placed on observation and monitor well permits which require a two-year review to determine if the well still exists or if it has been "mined out", plugged and abandoned, etc. Due to other demands on staff time this task was not accomplished.

Adjudications

During WY-06, 205 North Platte water rights and 20 non-North Platte related water rights (225 total) were inspected by GW staff and adjudicated by the Board of Control, including:

- 38 North Platte and 4 non-North Platte water rights at the November 2005 meeting;
- 1 North Platte and 9 non-North Platte water rights at the February 2006 meeting;
- 103 North Platte and 7 non-North Platte water rights at the May 2006 meeting; and
- 63 North Platte water rights at the August 2006 meeting.

One hundred and forty-one (141) Maps to Accompany Proof of Appropriation and Beneficial Use of Ground Water were received during WY-06. Maps may depict more than one (1) well or enlargements of permits. The maps represent a total of 218 water rights to be inspected by Ground Water.

Control Areas

Laramie County Control Area

Three Laramie County Control Area Advisory Board meetings were held during WY-06; on January 20, 2006, March 15, 2006, and May 9, 2006.

In WY-05, the State Engineer received a request for regulation of the Crow Creek Watershed from an appropriator in the Carpenter area. The regulation of ground water, interconnected with surface water, was the topic of Laramie County Control Area Advisory Board meetings in WY-05 and WY-06. Advisory Board members stated they needed additional information before making a decision regarding regulation. The Advisory Board requested additional information on the impacts of potential corrective control scenarios, e.g., installing meters, defining the irrigation season, prohibiting the use of end guns, well spacing, etc., before regulating wells connected with surface water. The Advisory Board also requested additional information on the ground water hydrology of the Crow Creek drainage so they could make more informed decisions and recommendations.

Information was not presented in regard to the advisory boards' request of detailing the impact of each possible corrective control during the meetings held during WY-06, this was due to time constraints of Ground Water staff with other projects. (NOTE: Developments in late WY-06 and early WY-07 relative to a study funded by the Wyoming Water Development Commission may make this task unnecessary).

Ten applications were received and advertised in the Laramie County Control Area.

Six applications were received and approved during WY-06 (irrigation use unless otherwise noted):

- Permit No. U.W. 173371; Torrie #1; 4 Quarters Land and Livestock (Miscellaneous - temporary road construction, fire protection and reservoir supply);
- Permit No. U.W. 178337; Pine Bluffs Lance/Fox Hills #1 Well; Wyoming Water Development Commission and Town of Pine Bluffs (Municipal);
- Permit No. U.W. 174520; Enl. Radke No. 15; Jim Konig;
- Permit No. U.W. 174521; Enl. Radke No. 14; Jim Konig;
- Permit No. U.W. 174522; Enl. Werner No. 8; Jim Konig; and
- Permit No. U.W. 174523; Enl. Radke No. 11; Jim Konig.

The following application was received and advertised during WY-05 (irrigation use unless otherwise noted):

- Permit No. U.W. 174519, Enl. Ragland No. 1; Loyd Farms.

Eleven petitions were received and advertised in the Laramie County Control Area..
The following Board of Control petitions were granted:

- BOC Petition Docket l-U-2006-1-3; Dale A. and Darlene M. Bowman: Petition for change in location of the Beyerle No. 1 Well and its enlargement. This petition was Carried Over by the Board of Control at the February 2006 meeting and Continue-Grant Conditionally at the May 2006 meeting. The condition of granting was met June 8, 2006.
- BOC Petition Docket l-U-2006-1-4; Dale A. and Darlene M. Bowman: Petition for change in location of the Kieler No. 2 Well and its enlargement. This petition was Carried Over by the Board of Control at the February 2006 meeting and Continue-Grant Conditionally at the May 2006 meeting. The condition of granting was met June 8, 2006.
- BOC Petition l-U-2006-2-3; JS Bar Corporation; Jack E. Humphrey, President: Petition for Change in Place of Use for the Humphrey No. 1 Well. This petition was Carried Over at the May 2006 meeting and Granted at the August 2006 meeting.
- BOC Petition l-U-2006-2-18: King Cattle Company: Petition for Change in Place of Use for the King No. 1 Well. This petition was Carried Over at the May 2006 meeting and Granted at the August 2006 meeting.
- BOC Petition l-U-2006-2-19: King Cattle Company: Petition for Change in Place of Use for the Enl. King No. 2 Well. This petition was Carried Over at the May 2006 meeting and Granted at the August 2006 meeting.
- BOC Petition l-U-2006-2-19: King Cattle Company: Petition for Change in Place of Use for the 3rd Enl. King No. 1 Well. This petition was Carried Over at the May 2006 meeting and Granted at the August 2006 meeting.

Platte County Control Area

Two Platte County Control Area Advisory Board meetings were held during WY-06, November 9, 2005, and March 29, 2006.

Ten applications were received and advertised in the Platte County Control Area.

Five permits were approved during WY-06 (irrigation use unless otherwise noted):

- Permit No. U.W. 174194; OSO No. 7; OSO Corporation;
- Permit No. U.W. 174486; Enl. Cundall #1 Irr.; Tyler J. and Sharon L. Cundall;
- Permit No. U.W. 174488; Enl. Goertz No. 1; Bard Ranch Co.;
- Permit No. U.W. 177509; Byers #4; Gary E. Byers; and
- Permit No. U.W. 177537; Enl. Dave Klein #1; Rock Solid Farms.

The following permits were protested upon advertisement. Subsequently, a hearing was conducted February 17, 2005, and the Advisory Board recommended approval of the permits at their June 24, 2005 meeting; An Order of the State Engineer was issued and mailed to the applicant and protestants in WY-06 and they were approved during WY-06 (irrigation use unless otherwise noted):

- Permit No. U.W. 173541; Tana No. 1; Robert Shepard; and
- Permit No. U.W. 173542; Tori No. 1; Robert Shepard.

Three petitions were received, advertised and granted in the Platte County Control Area in WY-06:

- BOC Petition Docket I-U-2005-4-8; Cottonwood Land & Cattle, LLC: Petition for Change in Location of the Russell No. 1 Well. This petition was Carried Over by the Board of Control at the November 2005 meeting; Continued - Carried Over at the February 2006 meeting; and Granted at the May 2006 meeting.
- BOC Petition I-U-2006-1-6; Bard Ranch Company; Petition for Change in Location of the Goertz No. 1 Well. This petition was Carried Over by the Board of Control at the February 2006 meeting and Granted at the May 2006 meeting.
- BOC Petition I-U-2006-2^; Thomas M. and Beverly K. Preuit: Petition for Change in Location of the Roth No. 4 and its enlargement. The petition was Granted at the May 2006 meeting.

The following Board of Control petitions were carried over at the August 2005 meeting to await recommendations from the Advisory Board. The petitions were granted during WY-06 during the November 2005 meeting:

- BOC Petition Docket I-U-2005-3-5; Thomas M. and Beverly K. Preuit: Petition for change in location of the Roth No. 5 Well.
- BOC Petition Docket I-U-2005-3-6; Scissors Ranch Co., Joseph P. Johnson, President: Petition for change in location of the Shelly Johnson Well.
- BOC Petition Docket I-U-2005-3-7; Richard Lee Johnson and Bonnie Lee Johnson, Scissors Ranch Co., Joseph P. Johnson, President, Joe Johnson Co.: Petition for change in location of the Charlene Johnson Well.
- BOC Petition Docket I-U-2005-3-7; Scissors Ranch Co., Joseph P. Johnson, President, Joe Johnson Co.: Petition for change in location of the Jos. P. Johnson No. 1 Well.

Prairie Center Control Area

Elections for Prairie Center Control Area Advisory Board members were conducted on July 12, 2006. The following individuals, whose terms expire in 2010, were elected:

- Angie Babcock [2nd Term]
- Steve Roth [1S1 Term]
- John Ellis [1st Term]

No Prairie Center Control Area Advisory Board meetings were held during WY-06. One

State Engineer petition was received and advertised during WY-06:

- State Engineer Petition Docket No. U.W. 2005-8; Blair J. Merriam; Petition to Correct Errors in the Big Prairie No. 1 and No. 2 Wells. The petitions have been protested. A hearing will be scheduled in WY-07.

In response to a WY-05 request by the Advisory Board, applicants listed on applications for wells located in the Prairie Center Control Area were contacted by certified mail to determine if they were still interested in proceeding with their applications. As a result, eight applications were rejected, including:

- T.F. No. U.W. 13-8-114; Enl. Schneider No. 5;
- T.F. No. U.W. 13-9-180;
- T.F. No. U.W. 13-10-180;
- T.F. No. U.W. 14-2-312; Case No. 1;
- T.F. No. U.W. 14-3-312; Case No. 2;
- T.F. No. U.W. 18-10-145; Enl. Percival#1;
- T.F. No. U.W. 18-5-165; Hilderbrand #1; and
- T.F. No. U.W. 34^-501; Sturman Irrigation #3.

Ground Water Fairs. Outreach Programs, and Conferences

During WY-06, Ground Water staff again attended fairs and conducted outreach programs to provide assistance to the public. This assistance was in the form of presentations, setting up and managing information booths, and answering general questions regarding ground water policy, filing procedures and general agency policy.

Ground Water staff presented information at, or participated in the following events:

- Stake Holders' Meeting, Sydney, Nebraska, "Ground Water Management in the Lodgepole Creek Drainage", October 3, 2005;
- Joint Agriculture, Public Lands and Water Resources Interim Commmittee, Powell, Wyoming, "Challenges Ahead: Effectively Managing Wyoming's Ground Water Resources". October 27, 2005;

- Wyoming Range Service Team, Casper, Wyoming, "Stock Water Development and Springs", December 7, 2005 (sent presentation; could not attend due to 12 degree below zero weather and bad roads);
- Meeting with Town of Thermopolis, Hot Springs Co., WWDC, State Parks, and other agencies and members of the public to discuss monitoring strategies for the Big Spring, Hot Springs State Park, February 16, 2006;
- Wyoming Water Well Association, Casper, Wyoming, "State Engineer's Office Updates", February 23, 2006;
- Wyoming Association of Realtors, Thermopolis and Buffalo, Wyoming, "Water Rights Class", March 14-15, 2006;
- Water Commissioners' School, Cheyenne, Wyoming, "Ground Water and Surface Water Interconnection", March 23, 2006;
- Wyoming Association of Rural Water Systems - April 4-5, 2006 in Casper;
- 2006 Western South Dakota Hydrology Conference - April 17-19, 2006, Rapid City, South Dakota;
- Joint Agriculture, Public Lands and Water Resources Interim Committee, Water Well Drilling Contractors Licenses", April 20, 2006, Torrington, Wyoming;
- Meeting with the Bureau of Land Management in Rawlins to discuss permitting issues, water law and policies, June 6, 2006 in Rawlins;
- Public Meetings in regards to Water Well Drillers Licensing Legislation, September 5-8, 2006, Rock Springs, Riverton and Gillette;
- Wyoming Game & Fish Expo - September 7-10, 2006, Casper;
- Western States Water Council, Water Information Management Systems and Water Availability Workshop, "Observation Well Network", September 13-15, 2006, Albuquerque, New Mexico; and
- Bates Creek Water Users Meeting, October 4, 2006, Casper, Wyoming.

Updates and Improvements in the Ground Water Division

As the SEO continues to implement the "IT Initiative", Ground Water continually looks for changes that we can make now to improve work flow. The following changes or improvements were implemented in WY-06:

- Processing procedures for applications to enlarge existing ground water rights were modified. Ground Water no longer includes the explanation of water rights covered under prior permits issued for the same facility.
- Ground Water no longer verifies microfilm - a huge time saver. As we move towards scanned images, microfilm will no longer be the medium to view records.
- Reapportioning duties of the administrative support staff. Ground Water no longer has one dedicated data entry person. One staff member can no longer keep up with the amount of information requiring data entry. Four staff are now trained and entering data into the database.
- Effective April 1, 2006, the SEO began requiring Global Positioning System [GPS] coordinates on all Statements of Completion (U.W. 6 forms). This will help in creating a statewide geographic information system for water rights in

Wyoming. A field was added to the current database to capture this information until our new e-permit system is deployed. The April policy states that a Statement of Completion is not considered acceptable unless coordinates have been provided. Although this information is valuable, it created a considerable amount of extra work for the Administrative Support Staff.

Modified North Platte Decree

Previous Annual Reports outline the chronology of events that led to the creation of the Modified North Platte Decree. The implementation of the Modified North Platte Decree continues to result in additional duties for the Ground Water staff.

Adjudication

During WY-06, Ground Water staff continued to expend considerable amounts of time to complete the adjudication requirement of the Decree, by conducting a handful of field inspections of the remaining ground water facilities requiring adjudication, and preparing the Proof of Appropriation and Beneficial Use of Ground Water Part III forms which are generated from the field inspection of the facilities to be submitted to the Wyoming State Board of Control for adjudication. Ground Water staff prepared and submitted 205 Proof of Appropriation and Beneficial Use of Ground Water Part III forms to the Wyoming State Board of Control for adjudication during WY-06. It is anticipated that the remaining adjudication activities, including cancellation of unused water rights, will be completed by mid WY-07.

Reporting

During WY-06, Ground Water continued to report to the North Platte Decree Committee (NPDC) on a monthly basis, applications received, and permits approved, for Irrigation use permits within Wheatland Irrigation District, and for Industrial and Municipal use permits within the remainder of the Basin that are subject to these provisions.

During WY-06, five applications for new irrigation use permits within the Wheatland Irrigation District were reported, one application for a municipal use permit, and 22 applications for industrial use permits were reported.

One irrigation use permit within Wheatland Irrigation District, one permit for municipal use, and fifteen permits for industrial use were subsequently reported as approved permits.

Ground Water also reported the annual pumpage of ground water under 42 irrigation use permits within the Wheatland Irrigation District to the NPDC during WY-06.

Green Area Map

Previous Annual Reports outline the purpose and need for the creation of "Green Area" maps. During WY-06, a Green Area map for the above-Alcova basin was approved by the NPDC.

Coalbed Natural Gas

Coalbed natural gas (CBNG) exploration and production applications for new wells decreased slightly during WY-06. Ground Water received 3,632 CBNG applications from 56 companies during WY-06. The following table provides a comparison of CBNG permits approved and the number of companies submitting applications per water year.

Annual Report Year	Total Applications	Number of Companies
WY-06	3,632	56
WY-05	4,784	52
WY-04	4,758	39
WY-03	3,938	48
WY-02	5,663	58
WY-01	6,093	55
WY-00	5,811	86
WY-99	2,532	51

During WY-05 and into WY-06, SEO staff discovered several hundred reservoirs in the Powder River Basin receiving CBNG-produced water without the appropriate permits. Based on this discovery, the State Engineer required each reservoir be properly permitted before permitting any CBNG wells that would produce water to be stored in the reservoirs. This action resulted in holding hundreds of CBNG well applications in a pending status for months, while awaiting the approval of the reservoir applications. This action, along with the corrective procedures to get the wells properly permitted is partially responsible for the decrease observed in WY-06 in total CBNG applications. Several companies focused on correcting past permitting errors by filing miscellaneous and/or stock enlargement applications for their existing CBM wells to add additional uses for stock tanks or reservoir supply. These enlargement applications are not part of the total CBNG application count. However, if they were included in the total, the total would be similar to that observed in past water years.

Also in WY-06, Pinnacle Gas Resources, Inc. was discovered operating 14 unpermitted CBNG wells - producing and discharging water into several unpermitted and/or improperly constructed reservoirs. A Notice of Violation and Order to Cease Production was issued on March 3, 2006 and a field inspection to document and record the violations was completed on March 8, 2006. The State Engineer ultimately sought prosecution of the offenses through the Campbell County Attorney's Office. The case was later settled and the various permit violations were resolved by the company.

Although the number of applications received for CBM uses has declined from the peak in 2001, processing of the applications has become much more complex which has resulted in an increase in staff time required for processing each individual application.

The Powder River Basin continues to be the largest area being developed for CBNG and thus represents the largest proportion of permit applications received. Concerns about water rights and water quality continue to initiate changes in the permitting process and changes in water management plans formulated by the CBM industry. Various water treatment and water use scenarios continue to be explored: including surface discharge, treatment and surface discharge, stock, domestic, reservoir supply, industrial water use, dust abatement, drilling of additional wells, fisheries, irrigation, and injection for aquifer storage and retrieval.

Work continues on the release of the Record of Decision for the Atlantic Rim Natural Gas Project in WY-07 which could authorize the development of 1,800 CBNG wells in the Rawlins/Baggs area and will require a shift of resources from the Powder River Basin to south central Wyoming to oversee this CBM development.

Current industry trends and high natural gas prices indicate that the CBNG-related activities for Ground Water will continue to increase for the foreseeable future.

Observation Wells

Previous Annual Reports outline the development and spatial distribution of the observation well network maintained by the Ground Water Division, comprising approximately 275 observation wells throughout the state.

WY-06 has seen continued improvement to the ground water observation well network and data collection efforts of the Ground Water Division, including continued development of a quality control and quality assurance program for ground water level data program, in-house programming of software for data warehousing and analysis to replace legacy software, acquisition and installation of new recording equipment, and compliance with the health and safety plan that has been implemented.

Much change, use, and dissemination of information relative to the SEO and Cooperative observation well networks occurred in WY-06:

West Bank Snake River Observation Well Network

The West Bank Snake River Observation Well Network was installed to address issues with shallow ground water levels in the Snake River Valley near Wilson and Jackson, Wyoming. Previous Annual Reports outlined the specifics behind the Snake River Hydrology Study. Finalization and dissemination of the report for the West Bank Snake River Project occurred in May 2005. In WY-06, Ground Water staff facilitated a smooth transition of software and monitoring protocols for this set of 50 wells from the SEO to Teton County, cooperators on the original project.

Thermopolis Observation Wells

Two observation wells remain in service in this area, GTW-1 and GTW-3. Site maintenance and data collection activities are conducted by the SEO, data review and publication is done by U.S. Geological Survey (USGS) personnel. These wells continue to provide information in the Thermopolis, WY area related to the flow of the Big Spring and impacts that ground water development may have on that geologic feature. WY-06 saw the use of the monitor wells as part of a ground water exploration program conducted by Weston Engineering under a Wyoming Water Development Commission (WWDC) exploration program.

Albany County Casper Formation Observation Wells

One Cooperative Program and one SEO well are located in the vicinity of Laramie, Wyoming. Both wells are completed in, and used to track water levels in the Casper Formation. Data from these wells were used by the City of Laramie for continued work on their sole source aquifer protection plan, assessment of the potential impacts of a geothermal heat pump system for the newly built Laramie County Community College satellite campus, and individual private ground water development projects in the vicinity. Solar panels and charge controllers have been purchased for installation in these wells in WY-07.

Laramie, Platte, and Goshen County Observation Wells

Data from these wells are utilized for decision support on issues before the Laramie County, Platte County, and Prairie Center Control Area Advisory Boards as well as tracking general trends in ground water levels in the respective areas. Upgrading of monitoring equipment, and sealing of well shelters continued in WY-06, including the installation of Keller pressure transducers equipped with a Stevens AxSys data recorder in the Platte County #6 monitoring well. Another item of interest is the evaluation of a prototype Sutron SDR surface water recorder in a ground water application on a Laramie County observation well. The SEO evaluation should provide input to Sutron for product development and use in ground water level recording.

The Laramie County 6A well was replaced by the Laramie County 6B well during a Wyoming Department of Transportation (WYDOT) road construction project that required abandonment of the original well. The new well provided a chance to collect aquifer test and geologic information in the area. The cooperation of WYDOT in the replacement is appreciated as this is a critical data point for resource decision making in the north-eastern portion of the Laramie County Control Area.

Two wells, the Laramie County #15 and CC Meier wells (in the vicinity of Lagrange, Wyoming, Goshen County) remain in an un-usable state and need rehabilitation, abandonment, and/or replacement.

Prairie Center Control Area and Madison Observation Wells

New ground water monitoring equipment was installed in several monitoring wells across the state. Two, 400-psi Keller pressure transducers equipped with Stevens AxSys data recorders were installed in the CC MOW-3 and CC MOW -6 monitoring wells. The transducers were set to 600 and 850 feet below the monitoring points. The transducers will monitor water levels of the Madison aquifer. Two Sutron 8400 data recorders were installed on the Prairie Center No. 4 and the Niobrara No. 2 monitoring wells. The new recorders replaced outdated equipment.

Rehabilitation of the Prairie Center No. 6, Cole No. 41A, CC MOW-6, and CC MOW-6A, monitoring well shelters was conducted in the WY-06. The existing shelters were removed and new foundations were set. The foundations were enclosed with a concrete floor and the shelters were remounted. Rehabilitation of the float and weight systems for the CCMOW-5A, Cole No. 41A, CC MOW-8, and Weston Co. #1A monitoring wells was conducted to improve data recording activities.

The ETSI T-1 and ETSI T-2 monitoring wells have been capped off since January 7, 2005. The wells were slated for rehabilitated in 2006, however funding was not available.

Interference Investigations

Borie Area

Data analysis continued but was not completed in WY-06. Ground Water staff attended a 2-day meeting in November 2005 organized by WDEQ concerning TCE (trichloroethene) contamination related to Atlas Missile Site 4, west of the area of this investigation, and presented preliminary results of WY-05 pumping tests. The Weber No. 1 well and several nearby Dyno Nobel wells are contaminated by TCE.

USFWS -Saratoga Fish Hatchery Interference Investigation

The U.S. Fish and Wildlife Service (USFWS) - Saratoga Fish Hatchery Interference Investigation continued through WY-06, including compilation and review of available data products and reference materials. A chronology and description of previous events related to this investigation have been chronicled in prior annual reports.

Ground Water Rights have been adjudicated for irrigation wells and wells serving the hatchery as part of the North Platte Modified Decree. A WWWDC ground water exploration and testing project in the area is being finalized and will provide additional information and data that can be used in the investigation.

2006 USFWS -Saratoga Fish Hatchery Interference Investigation

An additional formal interference complaint was filed by the USFWS, claiming injury of water rights associated with the Saratoga National Fish Hatchery by a nearby irrigated agriculture operation. The agricultural ground water appropriations had not been used in previous years and were reactivated by the current owners. Two of the irrigation wells had previously been used for monitoring of water levels under the interference complaint previously filed by the USFWS. Current efforts under that investigation should give information related to the interconnection between the irrigation wells in the vicinity, the flow of Lake Creek, and the discharge of Lake Creek Lake (a natural spring with appropriations to serve the USFWS - Saratoga Fish Hatchery). Data developed for the original interference investigation will be used to investigate this current complaint.

Hydrogeologic Studies

United Medical Center Hospice Wells

The United Medical (UMC) Center applied for two well permits (Permits No. U.W. 164629 and 164630) to supply irrigation water for a hospice in the north Cheyenne area. To determine whether operation of these wells would unduly impact other wells in the neighborhood, Ground Water required pumping tests be conducted. Aquifer testing indicates that although the two wells have similar depths and screened intervals, transmissivities and specific capacities differ by a factor of 3.

The less productive south well was tested for almost 9 hours but due to interruption and changing discharge, there are only 140 minutes of useful data. A preliminary test of almost 9 hours conducted immediately after well construction probably yielded more reliable data. Transmissivity calculated from pumping well data for the earlier test is 375 gal/day-ft, or 50 ft^2/day.

The north well was tested for 7 days but, due to interference, the test yielded only about 4,000 minutes (<3 days) of useful data. Observation wells at distances of 520 and 710 feet yielded data indicating similar transmissivities (1,100 gal/day-ft or 147 ft^2/day) but different storage coefficients (.00018 or .00008). Airline and tape data for the pumping well were inconsistent and too sparse to be helpful. The preliminary 6-hour pumping test conducted after well construction probably yielded more reliable pumping well data than the "long-term" test. Data collected from operational domestic wells in the neighborhood were too sparse and too noisy to allow meaningful conclusions but, did reveal a consistent pattern of interference from an unknown source.

FutureGen Proposal

Ground Water staff supported the FutureGen proposal prepared by the Wyoming State Geological Survey (WGS) with results obtained during the review of the water supply and water yield analysis for Basin Electric's Dry Fork power plant Industrial Siting Permit

(see WY-05 Annual Report). A Lance - Fox Hills well field was proposed for the site southeast of Gillette.

Thermopolis

In response to a request from Hot Springs County Commissioners and the Mayor of Thermopolis to establish a control area to protect the springs in Hot Spring State Park and in preparation of a meeting held in Thermopolis in February 2006, Ground Water compiled and analyzed existing data for Big Horn Hot Spring and two monitor wells on the Thermopolis anticline. A consultant to the Town and County Commissioners had inferred a 650 gal/min decline in Big Horn Hot Spring flows from 1968 to 2002. Ground Water staff found that consideration of data in the Hydrographer's Annual Reports for 1987, 1988, and 1989 rendered the consultant's conclusions statistically untenable. Daily measurements of total (north canal + south canal + user pipe) spring flow vary by up to 800 gal/min within a single month and the monthly average flow actually increased about 600 gal/min from December 1988 to December 1989. Fourteen flow measurements which are not strictly comparable due to different methodologies and which span a period of 34 years do not adequately support a long-term trend whose linear change is less than 75% of the observed annual variation.

Monitor wells GTW-1 and GTW-3 show very similar changes in water level over the period of record from 1984 to 2005, indicating they sample hydraulically connected parts of the Thermopolis hydrothermal system. However, these changes are only modestly correlated with flow rates of Big Horn Hot Spring over the 1987 to 1989 period. Nor do Big Horn Hot Spring flows show a strong correlation with flows for other hot-water wells in the Thermopolis area. Water levels in the monitor wells rose from 1995 to a record peak in early 2000 and dropped about 16 feet by the end of 2004 to a record low. Although there may have been a decline in Big Horn Hot Spring flows over the past few decades, the complexity of the hydrothermal system and inadequate data preclude firm conclusions.

Special Ground Water Projects

Well Completions in the High Plains Aquifer and Lance Formation

In response to questions from those designing and drilling wells in the vicinity of Cheyenne, Ground Water staff clarified SEO policy toward well completions in more than one aquifer. Dual completions in the High Plains aquifer and Lance Formation are specifically prohibited. Completions in multiple aquifers are to be avoided as they allow the higher-head aquifer to drain into the lower-head aquifer and poorer quality water to mix with and degrade higher quality water. A memorandum included a discussion of the lithologic characteristics of, and guidelines for distinguishing between, the formations of the High Plains aquifer and the Lance Formation.

Ground Water Advisory Committees

The SEO's four Ground Water Advisory Committees, revived in WY-04, remained active in WY-06. W.S. 41-3-908 requires one division advisory committee on underground water for each water division of the state. Each committee consists of three persons, appointed by the Governor, who represent the landowners and water users of the division, geographical areas of the division, and public interest. Committee members are appointed for 6-year terms.

Duties of the Ground Water Advisory Committees include:

- Call/supervise election of control area advisory board members;
- Assist/advise State Engineer and the Board of Control on policies affecting ground water - assistance/advice should consider both the interests of ground water users and the general public;
- Assist/advise state engineer and superintendents in solving ground water problems as they arise within the Division;
- Assist/advise the Control Area Advisory Boards - particularly in the development of control measures which are recommended to the State Engineer for adoption; and
- Provide information to ground water users within the Division relative to the State Engineer's and Board of Control's policies and procedures which affect the use of ground water.

WY-06 Ground Water Advisory Committee members include:

Water Division:	Committee Member:	Term Expires:
1	K. James Fornstrom	9/30/06
	Colby Dreschel	9/30/08
	Ben Jordan	9/30/10
2	Harvey Crowe	9/30/10
	Timothy G. Barritt	9/30/06
	Thomas Pilch	9/30/08
3	Dick Steedley, Jr.	9/30/06
	KenSchreuder	9/30/10
	Doyle Ward	9/30/08
4	*Vacant*	9/30/10
	Robert E. Johnson	9/30/06
	Eugene Martin	9/30/08

David A. Stephenson, a geologist from Jackson, submitted his resignation from the Division 4 Ground Water Committee on May 4, 2006 to accept a short-term appointment

to the Geological Society of America Foundation. His willingness to serve on the Committee is greatly appreciated and his participation will be missed.

The Ground Water Advisory Committees chose to continue meeting as a group in WY-06, facilitating the dissemination of "background" information to all committee members. The group met twice on January 11th and July 19th, 2005, at the Wyoming Gas Pipeline Authority Building, 152 North Durbin Street, Suite 230, Casper, Wyoming. Division Superintendents actively participated in the meetings which helped foster an understanding of Division-specific ground water issues. Of particular interest were presentations on water use, shortages and conflicts in the Bates Creek drainage by Randy Tullis, Division 1 Water Superintendent, and on potential interference issues at Hot Springs State Park by Loren Smith, Division 3 Water Superintendent.

Changes in Ground Water Staff

- Roxanne Trujillo and Cyndee Arnold joined the Ground Water staff on November 1, 2005. Both Roxanne and Cyndee have been delightful additions to the staff, providing friendly faces for the Ground Water Division as they are usually first to interface with the public at the front desk.

- Jed Rockweiler was promoted to Ground Water's new position, a Compliance Specialist, in September 2006. The compliance position is new to the Ground Water Division and excitement runs high to see just what Jed will accomplish.

- Ground Water was fortunate to have access to a summer intern, Drew Aldridge. Drew assisted the Ground Water Division in conducting field inspections and reducing our backlog of adjudication work.

Problem Areas and Recommendations

In addition to the daily permitting duties of this office, Ground Water responds to the ever increasing demands of a public suffering from the impacts of a 7-year drought, increasing competition for a decreasing resource, rapid land subdivision growth and rural development, coalbed natural gas development, and conflict resolution between water users. Ground Water continues to address a backlog of work that accumulated over the past many years, including conducting or finishing interference investigations, hydrogeologic investigations, ground water right adjudications and sending out expiration notices. Ground Water's rules and regulations, dated 1974, are also in need of revising - a priority for WY-07. In addition, Ground Water staff is responsible for managing the activities of three Control Areas, four Ground Water Advisory Committees {reactivated in WY-04) and the State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors. Each of these duties is accomplished by a staff that has increased by one position since WY-02.

As noted in the "Objectives" portion of this report, the Ground Water Division's responsibilities include protecting the State's ground water resources. On October 27,

2005, the State Engineer gave a PowerPoint® presentation to the Joint Agriculture, Public Lands and Water Resources Interim Committee in Powell, Wyoming, entitled, "Challenges Ahead: Effectively Managing Wyoming's Ground Water Resources". The ensuing discussion centered around current ground water management issues facing the SEO, the need for the SEO to take a proactive stance relative to ground water management, and the need to develop the management tools necessary to effectively manage Wyoming's ground water resources. Developing an effective ground water management strategy for the state is not a luxury, but a long overdue necessity.

Another objective of the Ground Water Division is to investigate the occurrence of ground water resources. Due to a lack of resources, Ground Water has not been able to accomplish this task on a statewide basis. However, Ground Water has been successful in enlisting the support of other agencies, such as the WGS and WWDC to conduct pertinent hydrogeologic investigations.

Ground Water is also tasked with enforcing the "Water Well Minimum Construction Standards." This is a difficult task due to the lack of dedicated field staff. To some degree, requiring mandatory licensing of well drillers and/or pump installers would help address this concern in that once licensed, the state licensing board would have the authority to revoke a license of an offending contractor. Revocation of a contractor's license would serve as an effective incentive to comply with well construction standards.

Coabed natural gas development presents an ongoing challenge to the Ground Water Division. Besides the statutory permitting requirements, Ground Water addresses complaints of interference, and struggles with how to manage a ground water resource that is perceived as being beneficially used by some and wasted by others. Management of an exploited ground water resource to the maximum beneficial use of all appropriators remains a challenge.

The 7-year drought has created much conflict between ground water and surface water users where the two resources are connected. "Conjunctive use" management of both ground water and surface water is becoming more and more of an issue, especially in the Crow Creek, Bates Creek and Owl Creek drainages. Ground Water is attempting to develop a management tool that can be applied to drainages in the event the State Engineer receives a call for regulation. The University of Wyoming may be instrumental in studying conjunctive use management and providing a much needed tool that the Ground Water Division can then utilize.

COOPERATIVE PROGRAMS SECTION

by

Michael R. Ebsen, Cooperative Programs Coordinator

The Cooperative Programs Section coordinates three ongoing programs and provides technical support in other areas as assigned. The primary objectives of each program are as follows:

Objectives

1. The objective of the Surface and Ground Water Data Program is to provide the State Engineer, other state, local and federal agencies, and all other water users with quality, legally acceptable, hydrologic information for use in crop and other water use planning. This includes regulation, compact administration and the technical analyses required in water related litigation. The program also aids in flood plain planning and flood warning, water quality monitoring and various other types of studies. Continued involvement in this investigation and surveillance activity allows the State Engineer to more effectively address current state priorities as well as gather baseline information as issues evolve.

2. The objective of the Snow Survey and Stream Flow Forecast Program is to provide information for the State Engineer and all water users, managers, and planners on seasonal snowpack and projected snowmelt stream flow runoff. This in turn helps insure that maximum utility can be realized from this limited water resource.

3. The primary objective of the Subdivision Review Program has been to insure that existing water rights appurtenant to lands proposed for subdivision are addressed in compliance with statutory provisions prior to land development. However, subsequent legislation and internal policy directives now focus primary review objectives on proposed water supplies for these subdivisions.

Surface and Ground Water Data Program

Accomplishments

A significant portion of the funding for this Program has historically been provided through cost share agreements between the State Engineer and other entities, including the United States Geological Survey (USGS), the United States Bureau of Reclamation (USBR), the United States Natural Resources Conservation Service (NRCS), and the United States Bureau of Land Management (BLM).

Cooperative Stream Gaging Activities

Accomplishments involving State Engineer personnel working in the surface water data area include the day-to-day operation, maintenance and/or monitoring of a myriad of administrative data stations and sites, including the 54 surface stream gage sites currently being operated in the statewide USGS cooperative network. Other agency and private sector cooperators also assist in this effort; one example of which is the Basin Electric Power Cooperative, which currently assists in the funding of stream flow data collection on the Laramie River, near Grayrocks Reservoir.

WY-06 was a busy year for the field staff and their efforts are appreciated. Activities include regular measurements at the various sites, and communicating essential information to the appropriate parties as the season progresses. Detailed records of stream flow and reservoir stage are gathered, analyzed, and computed. Reconnaissance, safety inspections, and other work are provided. Water use data is collected, assembled and transmitted for inclusion in the records. Worn equipment or instrumentation components are repaired or replaced. Shelters are painted and patched, walkways and cableways are tested and repaired, and riprap is placed around gage houses, stream banks and damaged artificial controls. Maintenance around the state ranges from repairs resulting from the acts of vandals; to the acts of Mother Nature and Father Time.

Statewide Gage Upgrade Activities

The SEO and the U.S. Bureau of Reclamation (USBR) - Mills Office are concluding replacement, repair, and rehabilitation activities on select stream gage stations within the region east of the continental divide. Activities have included the installation of new instrument shelters, the construction of new or the rehabiiitation of existing cableways, the addition of artificial control structures, and the upgrading of some sites with new and improved instrumentation. Some of the new instrumentation allows for the automation of sites with electronic data loggers equipped with remote data telemetry capabilities. This last round of objectives included upgrading ten (10) canal diversion sites between Boysen Reservoir and the Town of Worland with real time GOES satellite telemetry.

A historic perspective of these Mills Office activities can be found in previous reports. However, by cooperating with the USBR at sites of mutual interest, the State Engineer effectively doubled the resources available to upgrade these sites. This in turn allowed for more extensive upgrades, and/or more sites to be considered. This funding, coupled with the USBR's recognition that work performed by State Engineer personnel at sites of mutual interest can be viewed as in-kind service contributions to this cooperative effort enhanced the scope of these activities. These upgrade efforts have and will continue to conserve water, more efficiently distribute the available supply, shorten response times, and provide safer working conditions for State Engineer field personnel.

Also worthy of note are efforts on the Bear River by Water Division 4 staff in cooperation with the USBR - Provo Office, to install real-time telemetry at canal diversion sites

along this interstate river system. The states of Wyoming, Idaho, and Utah each entered into individual agreements with the USBR, with Wyoming being the largest co-operator in this basin wide effort. These activities have been discussed previously and in more detail in the Field Reports section of this Annual Report Series under the Superintendent's Report for Water Division Number 4. Further information and data can also be viewed at the following web location: http://bearriverbasin.org/. These and similar activities have kept State Engineer field staff busy, and their efforts are truly appreciated.

Bear River Compact Stream Gage Activities

The State Engineer continues to participate in the surveillance of the water resources of the Bear River basin in the states of Utah, Idaho, and Wyoming through the Bear River Commission, as provided for in the Bear River Compact. The states of Utah and Idaho also participate at the same funding level as Wyoming for their portion of this activity, which is handled through the Utah District Office of the USGS.

Yellowstone River Compact Stream Gage Activities

The State Engineer continues to participate in the surveillance of the water resources of the Yellowstone River basin in the states of Montana and Wyoming, as provided for in the Yellowstone River Compact. The state of Montana also participates at the same funding level as Wyoming for their portion of this activity, which is handled through the Montana District Office of the USGS.

Belle Fourche River Compact Stream Gage Activities

The State Engineer continues to participate in the surveillance of the water resources of the Belle Fourche River basin, as provided for in the Belle Fourche River Compact. The state of South Dakota also participates at the same funding level as Wyoming for their portion of this activity, which is handled through the South Dakota District Office of the USGS.

Monitor Well Measurement Activities

Accomplishments involving State Engineer personnel in the ground water data area include the day-to-day operation, maintenance and/or monitoring of the 69 observation wells in the USGS cooperative network, as well as 206 State Engineer sites throughout the state. Activities include repairing or replacing worn equipment or instrumentation components. Many of these wells are equipped with float driven digital water-level recorders. However, some wells, including several artesian wells, are equipped with pressure-sensing transducers and electronic data recorders. The remaining wells are measured periodically by hand using a steel drop tape, or airline systems. More detailed information on this activity can be located in the Ground Water Section of this report.

Other Data Activities

Other surveillance and investigation activities are conducted solely by State Engineer personnel for various administrative purposes, and are beyond the scope of the multi-participant cooperative activities outlined above. However, these efforts also provide compiled data on stream flow, reservoir storage and river diversions. One example of these compilations is the Hydrographers' Annual Report series.

Areal Study Activities

The State Engineer and the USGS have a long history of cooperation, which has provided an extensive list of water resource investigation products. These products catalog Wyoming's water resources on a basin-wide or more recently on a county-wide scale. During this report period, two activities were underway. The first, "Water Resources of Carbon County", has been published and is currently available to the public review.

The second, a compilation of data for the High Plains Aquifer southwest of Cheyenne has been reviewed by SEO and is in the final stages of publication as "Selected Hydrogeologic Data for the High Plains Aquifer in Southwestern Laramie County, Wyoming", a 2006 Open-File Report, by Laura L. Hallberg and Jon P. Mason. The final product is primarily a GIS-based database with schematic well logs and other information that will be accessible online or on CD. Funding constraints prevented inclusion of all relevant wells but information on 166 wells is included in the database. More detailed information on this activity can be located in the Ground Water Section of this report.

Problem Areas and Recommendations

In this age of instant communication the need to provide data in a timely manner coupled with the aging condition of the largely un-automated data collection sites in the various State Engineer data networks, poses data availability concerns as well as personnel safety concerns. Meanwhile, the information age has brought with it cutbacks in government programs at all levels. One need only examine past reports to realize that programs have been downsized and activities restricted.

As statewide water planning efforts proceed; the demand for water and its proper administration continues to increase. Changes in the uses of water as well as changes in water usage patterns, along with the resulting conflicts have and will continue to occur. Those involved in resolving these complex issues request increasingly sophisticated information, often on a real time basis. Information to support informed water resource planning decisions also requires many years of records.

Compounding these concerns is the ever increasing annual operational costs associated with continuing to provide basic levels of data. A historic perspective of these funding factors can be found in previous reports. However, several hard to

quantify factors are perpetually involved. One factor being the real value of the cost share dollars that are offered as matching funds. Another factor being the trend toward increased State Engineer cost proportions. For example, the current cost share ratio with the USGS is 65/35 (State/Federal) on studies; and 51/49 (State/Federal) on data collection.

The net result is that SEO personnel are shouldering increasing portions of this data acquisition work. With this increased workload comes a greater number of equipment failure, site maintenance and personnel safety issues. It is also becoming increasingly difficult to keep such basic items as spare equipment on hand; either the newer electronic or conventional equipment.

Given the trend toward increasing costs and decreasing benefits, the State must continue to shift appropriate data collection sites between co-op and State program operation. However, this practice has brought up a new series of issues difficult to evaluate, including Federal/State relations, site/component ownership and maintenance responsibilities, and liability concerns. To continue to maintain, upgrade and automate essential administrative components in the existing State and co-op data networks, an ongoing commitment of resources (a continuous comprehensive statewide effort) is required.

This ongoing, comprehensive statewide endeavor should include provisions to regularly and critically review the need for each existing data site, as well as the resources to implement new sites in areas where data needs exist or are anticipated. It should also provide for additional personnel training in appropriate areas including remote sensing, radio and satellite telemetry, and safety. The current stream gage upgrade activity outlined above has provided the framework for such an ongoing installation, maintenance and upgrade program.

Another problem is the damages associated with vandalism are an ongoing concern; but damage tends to occur only at certain problem sites, and appears a component cost of doing this kind of work. Also, repair costs, as well as timely product repair and product support, from instrumentation and software vendors continues to be of concern, but the solution may lie in selecting new instrumentation vendors when the opportunity to replace these gage components and software arises.

Snow Survey and Stream flow Forecast Program (ok. 12/21/06. me)

Accomplishments

The Natural Resources Conservation Service (NRCS), SEO personnel, and others participate in the Snow Survey Program. Snow surveys are conducted four times each year, beginning February 1st and continuing until May 1st, at the 66 manually measured snow courses, and daily at the 80 automated SNOTEL sites in Wyoming. Snow survey personnel manually measure snow depth and density, as well as provide winter maintenance on SNOTEL sites throughout Wyoming on an as needed basis. The repair

of SNOTEL sites and measurement of snow pack often require snow survey personnel to travel to remote locations under potentially adverse conditions. For these reasons participants are required to complete special training in snow survey and snow survival techniques, maintain current first aid and CPR certifications, and undergo annual physical exams.

SNOTEL sites are automated; radio-telemetered, snow pack data collection sites and are generally located in remote, yet hydrologically significant areas throughout Wyoming. These sites provide equivalent water depth of the snow pack (SWE), as well as precipitation, air temperature, and in some cases soil moisture and temperature. The number of sites that measure snow depth was recently increased to 55. These stations electronically relay data, at regular intervals, to a central collection point in Portland, Oregon. Data is then available to users via a modem or the Internet. A direct link to this data has also been provided from the SEO's Internet home page. Data can be collected at almost any interval, but is generally collected at four to six hour intervals. Data collected once each day is normally adequate for water supply forecasting, but avalanche forecasting and other recreational users may need the data on a more frequent basis. Each site has the capability of handling up to 64 sensors. As more sites are added, and the confidence level of data collected with SNOTEL sites improves, labor intensive, manual snow survey measurements may be reduced.

Stream flow forecasts are an end result of these snow data collection efforts and provide a valuable tool for those involved in water management and planning. Stream flow forecasts are currently available at 54 locations in Wyoming. Flows at these sites are forecast six (6) times per year beginning January 1 and ending on June 1. Virtually all of these stream flow prediction sites have been selected as the direct result of input from local water users. The sites require the presence of an active stream gage at the forecast site to calibrate and refine the prediction models. Complex planning issues involving all areas of the public and private sectors including the administration of interstate compacts and court decrees, flood forecasting, reservoir carryover storage, in stream flow, and power generation require information in advance of the runoff season to be properly addressed. Decisions in areas including agriculture, industry, and municipal water supply are simplified through the availability of these forecasts. The State Engineer again contributed $2,000 to this program, in addition to personnel and equipment, to aid in the collection of snow survey data.

Problem Areas and Recommendations

Because of innate fluctuations in snow pack measurements, and the effects of weather patterns prior to and during the measurement and runoff periods, snow surveying and stream flow forecasting remain inherently inexact. Even so, network and equipment refinements continue to evolve. Replacing manual snow courses with SNOTEL stations and adding additional equipment such as snow depth, soil moisture and evaporation loss sensors would provide improved and almost continuous forecasting capabilities. As funds become available, snow depth sensors are being added to the system by the NRCS.

Certain instrumentation components exhibit some degree of unreliability and may require additional site visits to verify that these sites are operating optimally. Therefore, pre-season planning meetings are held every fall in an attempt to recognize and address these types of concerns prior to the onset of the snow season.

Periodic SEO and NRCS personnel reassignments and retirements can impact snow survey activities. Typically a nearby trained snow surveyor will 'stand by' and assist in areas where they normally may have no involvement, while a new snow surveyor obtains the required training and certifications. This year no candidates attended the formal West Wide Snow Survey and Survival Training. However, four snow surveyors will likely need to attend this training next season. No special in-state snow survey refresher course was offered this past year for the 'old hands', but is being considered for next season.

SEO personnel and others, should recognize and focus on how changes in funding, personnel, and activities within other water data programs (i.e. stream gage discountenances) have and may continue to adversely impact related activities (such as stream flow predictions) in this and other programs. The State Engineer therefore must carefully weigh potential impacts, including impacts on related programs, in the resource allocation process.

Subdivision Review Program (ok. 12/21/06,me)

Accomplishments involving Existing Water Rights

Wyoming Statute 18-5-306 (a) (xi) provides for the disposition of any water rights appurtenant to the lands involved in a proposed subdivision development prior to its approval by county officials. Effective January 1, 2006 all in depth reviews associated with this type of submittal have been turned over to the Board of Control Division of the State Engineers Office. The Surface Water, Ground Water, and Board of Control Divisions of the SEO continue to coordinate activities associated with this statutory obligation.

Accomplishments involving Proposed Water Supply

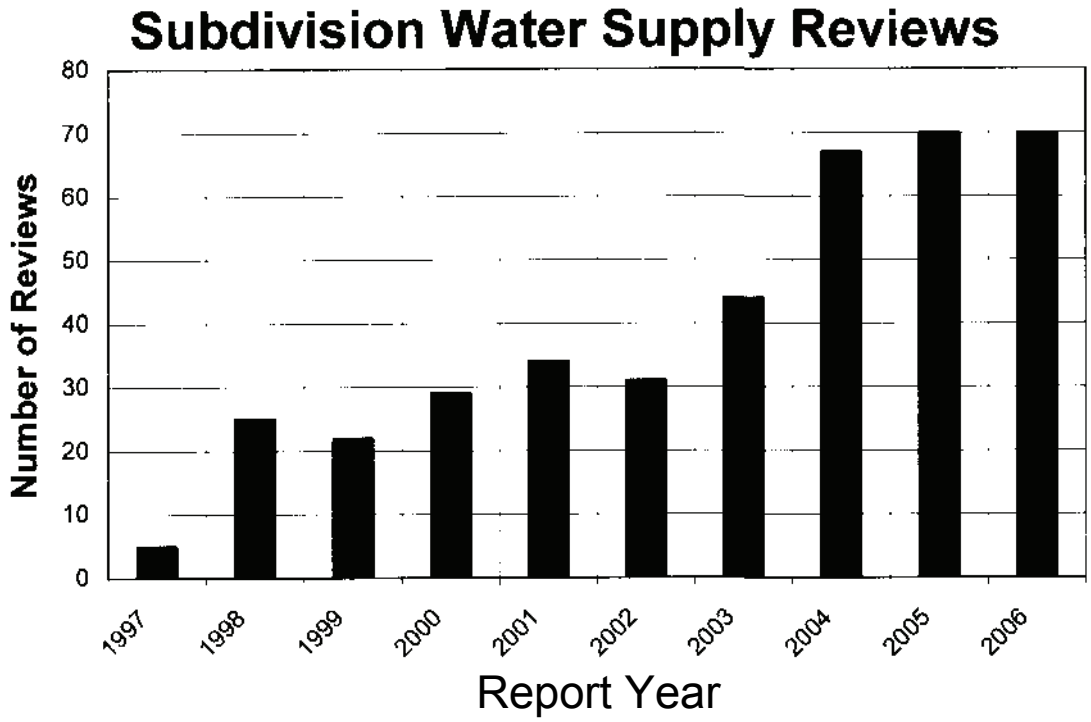
State involvement in the adequacy of a subdivision's proposed water supply first became effective in July of 1997. Past reports discuss how this original legislation has been amended. However, current State Engineer responsibilities in this new area are outlined under Wyoming Statute 18-5-306 (c) (i). These responsibilities remain with the Ground Water Division. Additionally, any reviews requested under this statute also include a preliminary search for existing water rights as discussed above; and if appropriate, a reminder as to the proper disposition.

This legislation required, empowered, and directed the Department of Environmental Quality to become involved in the review of waste water and water supply systems

proposed for new subdivision developments; as they relate to system adequacy and dependability. This directive requires a necessary and unavoidable interface in agency missions to consider issues relating to both water quality and water quantification. Thus, the statute specifically references the potential for expanded State Engineer involvement, to be provided at the request of the Department of Environmental Quality. The Department has and continues to request assistance with such issues as the physical and legal availability of water for the subdivision water supplies as proposed by developers.

The legislation also requires existing water rights on lands surrounding the lands proposed to be subdivided to be considered, as well as interrelationships including potential conflicts produced as the result of changes in current water use patterns and/or new water supply concerns resulting from the subdivision of the land. An integral part of this new planning process will be the filing of the necessary water right applications, which in turn will recognize the proposed subdivision water supply as a legitimate and beneficial use of the waters of the State once perfected.

Since the original enactment of this legislation in 1997, the State Engineer has provided the DEQ with review comments and follow-up reviews as requested. This obligation also requires staff time to be committed to participating in meetings, City/County outreach efforts, conferences, and associated activities. Also worth repeating is the recent decision on the part of the DEQ to shift Department review responsibilities from the Main Office in Cheyenne, to the District Offices throughout the State.



NOTE: All years through 2003 are reported as reviews per Calendar Year, 2004 and subsequent years are reported as reviews per water year.

Problem Areas and Recommendations

With the advent of the newer subdivision water supply legislation, compliance may improve, however, subdivisions continue to be approved by counties before water right issues have been reviewed and resolved by the SEO. Contributing to this problem is the tendency on the part of the DEQ to favorably comment to County Planning entities, prior to State Engineer review and the resolution of State Engineer concerns.

This program historically addressed only issues associated with existing water rights, and the number of this type of subdivision review request continued to rise. This coupled with the increasing workload associated with the more recent subdivision water supply adequacy responsibilities, as well as time commitments in other programs further contributed to review backlogs, lengthened State Engineer response time, and was compromising program integrity. The division of the existing water right and the proposed water supply tasks between the Board of Control and Ground Water Divisions respectively, has resulted in a more responsive and manageable workload.

BOARD OF CONTROL DIVISION

The Board of Control is comprised of two (2) sections: the Board of Control Section and the Water Division No. Ill - General Adjudication Section. The two (2) sections under this Division are incorporated within this Board of Control Division Report.

BOARD OF CONTROL SECTION

by

Allan Cunningham, Adjudication Officer
Board of Control Division

Objectives

1. To promptly process petitions to amend adjudicated water rights and to present these petitions for review and consideration by the Board of Control.

2. To maintain and update the status of all adjudicated water right records to accurately reflect their current status.

3. To continuously evaluate the productivity of staff efforts in addressing the current workload.

4. To respond to inquiries by the public, as well as State and Federal agencies, regarding the current status of adjudicated water rights, and to give instructions and assist appropriators on the methods, procedures and format for filing a petition with the Board of Control.

5. To provide technical and administrative support to the Board of Control members in matters concerning the evaluation of both surface and ground water rights and water administration.

6. To prepare and forward proofs of appropriation for surface and ground water uses to the Division Superintendents for field processing and recommendation.

7. To comply with statutory requirements and publish a tabulation of adjudicated water rights for the four (4) Water Divisions.

Major Accomplishments

During this reporting period (October 1, 2005 to September 30, 2006), the Board received 200 petitions from throughout the State in addition to those already on the agenda. These new petitions are listed by division as follows:

	SURFACE	GROUND	TOTAL
DIVISION NO. 1	68	40	108
DIVISION NO. 2	15	3	18
DIVISION NO. 3	28	13	41
DIVISION NO. 4	33	0	33
TOTAL	144	56	200

Final action was taken on 244 petitions, which were either granted, denied, dismissed or withdrawn. Some of the petitions were carried over from the previous reporting period to allow for the resolution of technical, engineering and legal problems, and in some cases for public hearings. The petitions dealt with by the Board of Control ranged from those with simple issues such as a change of point of diversion to those of a more complex nature such as change of use and declaration of abandonment.

Four hundred forty (440) proofs of appropriation were considered by the Board of Control during this reporting period. Two hundred twenty nine (229) or 52% of these proofs were for ground water rights (wells), and two hundred eleven (211) or 48% were for surface water rights. In addition to these 440 proofs, 108 stock reservoirs were inspected and found to be constructed within the terms of the permit. Under existing Board of Control policy, these stock reservoir permits will be finalized, and a notation made in the water rights tabulation books, but no certificate of construction issued.

During this reporting period, the number of final actions concerning petitions decreased by 32 petitions or 12%. However, during this reporting period, the number of proofs of appropriations considered increased by 217 proofs or an increase of 197%. The number of stock reservoirs inspected and found to be constructed within the terms of the permit increased by 64 facilities or an increase of 245%. The increase of the number of proofs of appropriations considered during this reporting period is the result in Board of Control's compliance with the North Platte Settlement Agreement.

During the reporting period, the State Engineer's Office assisted by its consultant, Weston Solutions, in developing and implementing the SEO IT Initiative The State Board of Control Division through Weston Solutions has continued to participate in a business process review identifying its business process, workflow, and data handling points.

Problem Areas

Wyoming Statute 41-4-208, 1977, requires that the Board of Control compile and edit revised tabulations of adjudicated water rights for all four (4) water divisions of the State. There is a constant demand for these tabulations from engineers, land surveyors, government agencies, and the public. The creation of the new Tabulations of Adjudicated Water Rights is being done using the State Engineer's Office water right database. This database must be proofed for accuracy before these Tabulations can be printed. The task of proofing this database has delayed efforts to timely publish these Tabulations. Hopefully through the SEO IT Initiative, publication of these tabulations will be become more frequent and timely.

The technical staff continues to strive for a complete comprehensive review that each petition deserves. Computer technology has been a great asset in assisting the Board's staff in developing ways of doing more with less. Applications such as word processing and report keeping have made positive strides toward greater effectiveness and production due in large part to the utilization of the computer to its capacity. Although better and faster computers are making some procedures more efficient, ultimately the computer cannot replace the analysis and research capabilities performed by the technical staff. Due to the increasing number of petitions, the technical staffs time is entirely dedicated to petitions and their related activities. Through the SEO IT Initiative, it is hoped that streamlining of Board processes will make time available for cross training or training of new tasks allowing them to grow within the Division.

Wyoming is in a multi-year drought period, and because of this drought, focus of the Board of Control has shifted to water administration from adjudication. As a result, there is a backlog of pending proofs and no dedicated plan is in place to decrease the backlog.

While the concept of removing "paper water rights" from the Agency's records has been around for a long time, and would be both beneficial and in keeping with the multiple facets of our Agency's mission and responsibilities, efforts that have begun with good intentions have been redirected by other demands placed on the Agency due to higher priority issues. Any effort in the future undertaken to deal with "paper water rights" should be solely dedicated to the task without interruption of external influences.

Recommendations

The Division's business process review has revealed a need for additional technical positions within the Division. Upon the completion of the Big Horn General Adjudication, the Big Horn staff has broad skills that can assist the Board of Control Division. Our recommendation is that upon completion of the Big Horn General Adjudication, all Big Horn positions be retained and integrated into the State Board of Control Division. Immediate work efforts will include the following:

1. Develop and implement a unified Board of Control plan to reduce the backlog of proofs. The plan should:

    - Dedicate sufficient Board of Control Division technical staff to adjudications and the backlog of proofs to assure that external issues do not influence the existing workload within the Division. Currently, the Board of Control Division has one (1) technician assigned to proofs;
    - Set priorities to complete the oldest proofs first and those proofs with funds already paid to the Agency;
    - Once current, establish a maintenance plan to keep the backlog of proofs to no more than six (6) months old;
    - Change the Board's policy from reviewing proofs twice per year and alternating between surface and ground water to reviewing both surface water and ground water proofs at every quarterly meeting until the proof backlog is reduced significally.

2. Develop and implement a unified Agency plan to address "paper water rights."

BIG HORN RIVER GENERAL ADJUDICATION

by

Nancy D. McCann
Water Manager

W.S. 1-37-106, General Adjudication Statute, gave authorization to initiate the process through a judicial determination of the rights to use water of all persons on any river system. Subsequently in 1977, the State filed suit for the determination of water rights in the Big Horn River system and all other sources. This lawsuit is known as the Big Horn River General Adjudication and is under the jurisdiction of the Fifth Judicial District in Worland.

The staff continues to serve as technical arm to the district court on all phases of the case. Some of the staffs tasks are ordered by the court while others are necessary functions to maintain proper records at the State Engineers Office (e.g., incorporating decreed rights). As each decision is handed down, there continues to be numerous technical or administrative tasks that must be accomplished to integrate the decisions into the agency records and the county records.

What lies before us

The judicial decisions have set off, and will continue to necessitate, an extraordinary amount of administrative and technical activities that the court requires of the state to undertake at its own expense. We anticipate resolving what issues can be worked out between the parties and to let the unresolved issues move through litigation in the future.

Current Accomplishments

Phase I Decrees

- Tribal Reserved Rights
- Consent Decree/Appurtenancy of the Tribal Reserved Rights
- Walton Rights
- Tribal Ground Water Quantification

The results of these decrees require correction and updates of state records, recording the "permanent rights" at county offices, and database modifications. A process for the final integration into the SEO records will be developed and made available to the agency in the next biennium. We anticipate that training the agency in the understanding of all rights awarded within Phase I will begin in the next biennium.

Phase II Decree

- Federal (non-Indian) Reserved Water Rights

Phase II Interlocutory Decree was revised during the last reporting period with a draft final decree being reviewed by and circulated to all the parties. No objections to the decree were filed; hence the final decree was entered by the District Court on November 29, 2005.

Phase III

- Surface Water Rights

Using the 1997 amended Court procedures; the staff continues the comprehensive review of all unadjudicated State water rights in Water Division III. Over 4000 surface water permits have gone through the court process. Less than forty permits remain to be completed under the court procedures. A major milestone was reached through the reporting of the largest water permit (Permit No. 7300) in the State being sent to the District Court during the last reporting period; however, objections filed continue to demand a significant amount of staff time to provide technical water rights assistance to the legal team. Detailed field inspections included comprehensive analysis of the water rights, obtaining current ownership information from the county, and then conducting on-the-ground inspections with individual appropriators or administrative entity such as an irrigation district. The field office completed field inspections for seven permits including one reinspection. Less than ten permits remain to be investigated in the field. We anticipate a few reinspections may become needed to resolve objections by the appropriator and other clarification issues to further clarify questions on previous inspections.

The staff held meetings during this reporting period with water appropriators, irrigation districts, and the personnel of the Bureau of Reclamation and others to explain the Big Horn Adjudication process along with the pending recommendations for adjudication and elimination of lands, uses etc. described under purported water rights. In some instances, these meetings provided a venue to solve objections in advance of filing of the State's report. The staff continues with their recommendations of the final disposition of water rights subject to the Big Horn General Adjudication to the District Court. The staff is also responsible for all uncontested cases in place of the Special Master in order to alleviate the burden on the Court. When cases are contested, the matter is referred back to the staff for resolving and settling disputes, but when resolution cannot be reached, the case file proceeds through the court's legal procedures. In addition, the staff participated in pre-hearing conferences to provide clarification and assistance to the Special Master. These efforts, put forth by the staff, resolved the issues of concern and avoided the necessity for any hearings before the Court during this reporting period. A total of 59 surface water permits were reported to the District Court. Certificates of Appropriation issued from Court Orders totaled 65.

At the close of the last reporting period, the Big Horn staff was cross-trained to handle the increase of petitions filed within the Board of Control and handled four fifths of the workload of the Board petition processing in addition to their Big Horn

assignments during this reporting period. It is anticipated that upon the close of Big Horn work, the staff will cross-train on other duties within the Board of Control.

Big Horn Problem Areas

Continuous efforts are being made after the Court orders are issued to integrate the decreed rights into the State Engineer records. This integration process involves a lengthy, detailed update of the actual permit records, stream cards, township cards, certificates being issued, amended and canceled, updates of the computer water rights database, microfilm or scanning all records involved, and so on. This process has impacted the flow of work throughout the State Engineer's office. Several permits have petitions pending that require processing by the Surface Water Division prior to the staff reporting their recommendations to the District Court. The staff is assisting the Surface Water Division in the petition processing, permit endorsement preparation and other backlog within that division. Unfortunately, some petitions require consent and when consent cannot be obtained, a hearing is required in order to finalize the petition. The remaining permits left on Phase III of the Big Horn Case are very complex and require in-depth detailed analysis. In addition, several parties are involved in the review of the staffs recommendations, such as Irrigation Districts, Tribal entities, Bureau of Reclamation, Bureau of Indian Affairs and other federal agencies, the United States attorneys, individual land owners and others interested parties.

Big Horn Recommendations

The staff continues their dedication, hard work and patience while dealing with the appropriators and all parties involved in this complex Big Horn water case. The realization of our dream of completing the Big Horn Project is now in reach. Continued cross-training between projects is a necessity to address the increasing workload within the Board of Control. An education plan should be developed and implemented at the close of the Big Horn Adjudication to distribute the knowledge of decrees and reserved rights.

GIS (Geographic Information Systems) Projects

The use of GIS technology has been utilized for the identification of overlapping water rights or conflicts in water rights within the Big Horn Adjudication. Tribal Reserved rights, Consent Decree Rights, Walton Rights and those State rights coexistent with all these rights are contained within the mapping projects in this division. Updated maps depicting these rights were made available to the agency. Numerous requests from interested parties for maps were filled by the staff. The map data and tabular data continue to be used to solve administration issues. The staff assisted other state agencies using Big Horn GIS information, gave technical support and data and/or prepares GIS maps for the Attorney General's Office for Big Horn litigation.

LEGAL ACTIVITIES

by

Water & Natural Resources Division
Wyoming Attorney General's Office

North Platte River

In water year 2006, Wyoming, Nebraska, Colorado and the Bureau of Reclamation managed the North Platte River system according to the Modified North Platte Decree of the United States Supreme Court, and the Final Settlement Stipulation incorporated by that decree, both of which arose out of the 2001 settlement of Nebraska's suit against Wyoming in the Supreme Court. Unfortunately, 2006 was a poor year for inflows into the North Platte system. As inflows diminished in May and June, a question arose under the settlement stipulation as to whether 2006 should be an "allocation" year. The bureau took the position that 2006 should be an allocation year. This office supported the State Engineer's position that an allocation should not have been declared under the terms of the stipulation. Although the Bureau did not formally retreat from its position, Wyoming did not regulate its users who pump water from the river since Wyoming did not recognize the allocation. The disagreement about the allocation language led to negotiations over amendments to that language which aim to prevent future disagreement. As of the end of the 2006 water year, this office continued to assist in those negotiations.

Another issue that becomes urgent during times of water shortage in the North Platte drainage is the proper interpretation of exhibit 10 to the settlement stipulation, under which certain Wyoming groundwater users downstream of the Whalen Diversion Dam must provide system surface water to replace the groundwater they pump. In years of shortage, replacement water is difficult to obtain from storage reservoirs. In 2006, this office assisted the State Engineer in establishing and supporting Wyoming's interpretation of exhibit 10.

In addition to participating in discussions on these two topics, an attorney from this office attended the regular North Platte Decree Committee meeting in April of 2006.

Finally, this office completed the archiving of North Platte litigation documents.

Colorado River

The first half of the water year on the Colorado River led to a very promising snow pack, but a lack of precipitation in the spring of 2006, combined with warm temperatures, led to a disappointing runoff. The serious drought in the Colorado system in all but one of the years of this decade has motivated all parties concerned with the management of the system to try to reach agreement on guidelines for reservoir management in times of shortage. From October 1, 2005 through September 30, 2006, much progress was

made in negotiations by representatives of the seven basin states - Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming - toward an agreement as to how shortages of water should be managed by the Bureau of Reclamation at the Glen Canyon and Hoover Dams on the Colorado River through the year 2025.

The operation of the Glen Canyon Dam is very important to the future protection of Wyoming water users in the Green and Little Snake River drainages consistent with the legal confines of the Colorado River Compact, the Upper Colorado River Compact and other statutes, regulations and judicial decisions that make up the law of the Colorado River.

This office assisted the State Engineer, Wyoming's alternate representatives, and the State Engineer's interstate streams staff in negotiations and technical analysis that led to an initial draft of the agreement in February of 2006, and led to much progress toward a final draft agreement as of the end of the water year.

Yellowstone River Compact

The four major tributaries of the Yellowstone River in Wyoming, the Tongue, Powder, Clark's Fork and Big Horn Rivers are governed by the Yellowstone River Compact. Those rivers suffered from severe drought in 2006. A regular Yellowstone River Compact Commission meeting was held in April of 2006, and this office supplied support to the State Engineer on legal issues relating to that meeting.

Also in the spring of 2006, Montana began to make complaints to the Wyoming State Engineer about water use in the Tongue and Powder River drainages. Montana went so far as to threaten the initiation of a lawsuit in the United States Supreme Court over the interpretation of the Yellowstone River Compact. This office assisted the State Engineer in responding to Montana's complaints, which we believe lack merit.

Berman v. Yarbrough

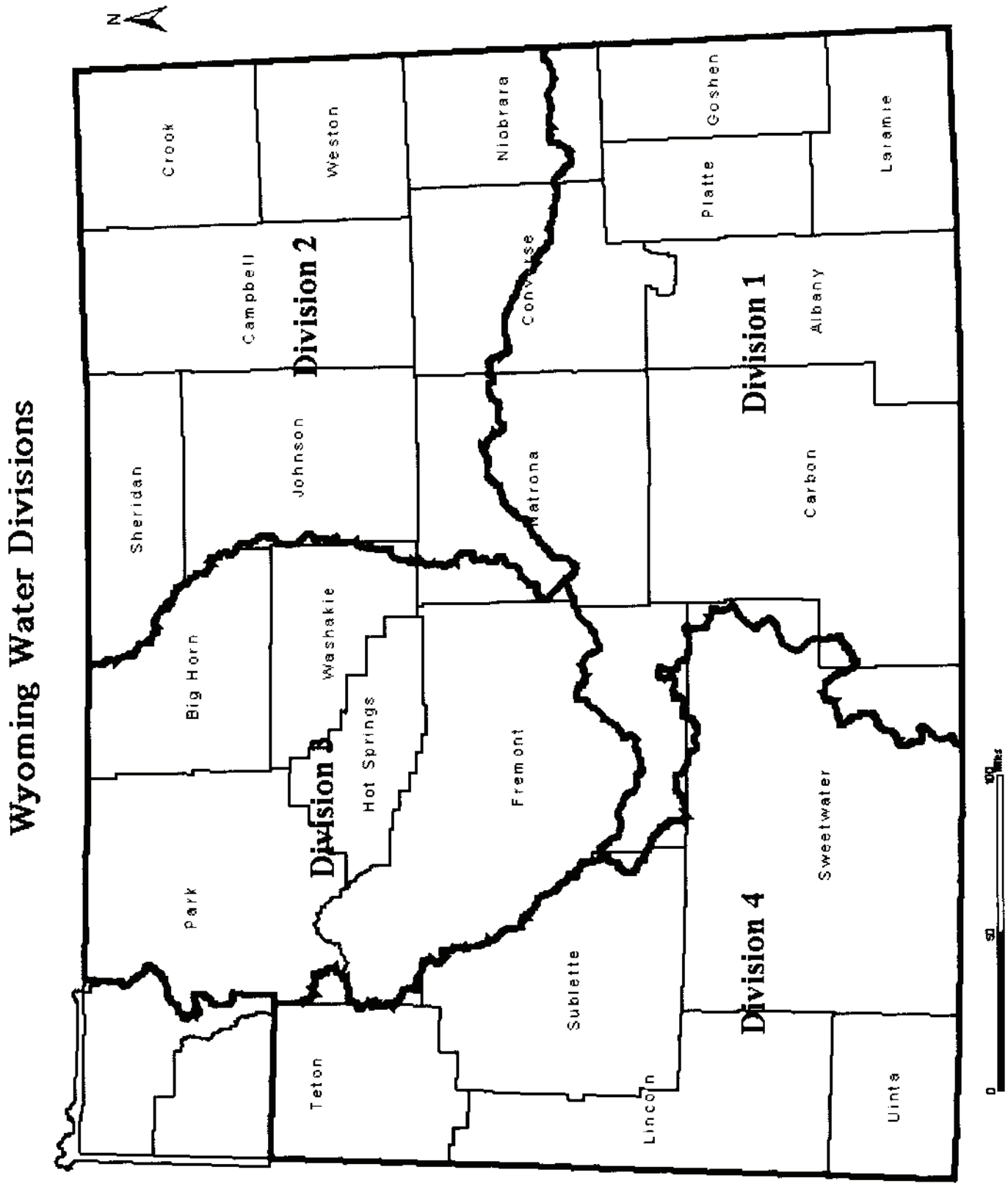
For several years this office has been defending a lawsuit brought by Utah lawyer Dan Berman and his neighbor Steven Bond, who both own ranch properties in Uinta County. Berman and Bond brought the suit in the District Court of Summit County, Utah against Wyoming's Lead Hydrographer-Commissioner John Yarbrough. They alleged that Mr. Yarbrough had failed to deliver from the Smiths Fork in Wyoming the full amount of water that Berman and Bond had stored in a Utah reservoir called China Lake. Berman and Bond also sued the Utah State Engineer in the case, alleging that he had failed to recognize the full extent of their rights to store water in China Lake.

As of September 30, 2006, the case was in the final pretrial stages. On behalf of Mr. Yarbrough, this office and its associated local Utah attorneys submitted a trial brief explaining that Wyoming had the exclusive power to regulate the delivery of both direct flow and stored water in the Smiths Fork once it passes the Utah border into Wyoming. We asked the Utah courts to desist from issuing any injunction that would direct Mr.

Yarbrough to take any actions in Wyoming, since such an injunction would violate the Utah court's jurisdiction.

Big Horn River General Adjudication

The Big Horn River General Adjudication is proceeding in Phase III, the adjudication of all state permitted and decreed water rights. In the 2006 water year, there was an increase in the number of objections to the State Engineer's recommendations, primarily because water rights within some of the larger districts were reported to the special master in the Fifth Judicial District Court. Despite the increase in objections, all objections that were scheduled for decision in water year 2006 were resolved by settlement or withdrawal of the objection.


Wyoming Water Divisions
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Crook
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Division 2
Converse
Albany
Division 1
Sheridan
Johnson
Natrona
Carbon
Big Horn
Washakie
Hot Springs
Division 3
Fremont
Park
Sublette
Sweetwater
Division 4
Teton
Lincoln
Uinta
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REPORT OF THE SUPERINTENDENT
WATER DIVISION I

by

Randy Tullis, Torrington, Wyoming

This report is a summary of water related activities and trends within Water Division No. 1 for the period of October 1, 2005, to September 30, 2006. Water Division I is comprised of the North Platte, South Platte, Niobrara, and Little Snake River drainages of southeastern Wyoming,

General and Climatic Conditions

The challenges of water management and administration during this six year drought of record continue to intensify and become more complicated as the effects involve more water users. On reflection, Water Year 2006 will be remembered as a year of guarded optimism due to the average to above average winter snowpack into March, only to turn into a well below average runoff year due to the premature and reduced overall runoff combined with limited springtime precipitation. A review of this author's past 5 Annual Reports would unfortunately echo those poor climatic conditions.

The water year began with extremely dry conditions related to streamflows, carryover storage, soil moisture, and aquifer water tables. Carryover in North Platte Project, Kendrick, and Glendo ownerships was 402 KAF, 542 KAF, and 54 KAF, respectively. The combined carryover ownership of about 1,000 KAF in a system that can store over 2,500 KAF is a clear indication of the compounding effects of the drought. Largely due to respectable winter snowpacks, a full supply of at least 1,100 KAF was predicted for the below Guernsey irrigation demand in February, March, and April allowing the relaxation of previous year's water regulation above Guernsey Reservoir due to Wyoming obligations in the Modified North Platte Decree. The "non-regulation" during those months was one of the few bright spots experienced, only to be dampened by the later, below normal runoff and little advantage to those water users ready for any kind of relief. Although some limited areas experienced near normal short-term streamflows, the majority of the Division experienced attenuated streamflow peaks 3 to 4 weeks earlier than normal and often less than half of the long term average total volume. Suffice it to say that most Division I staff were busy from late spring to early fall with various types of regulation administration.

In the North Platte drainage the North Platte Project ownership ended up accruing a total of about 575 KAF in Pathfinder, Guernsey, and Inland Lakes ownerships, while Glendo and Kendrick accrued no storage. Kendrick last accrued water in Water Year 2000. The predicted below Guernsey irrigation supply on May 1 was over 1,200 KAF and most Districts decided to utilize an early hay run, something not requested for the past 4 years. This early use of water combined with less than average accruals and lack of summer precipitation resulted in an end of year carryover of only 328 KAF.

In the Laramie River drainage, hopes and expectations were high for an average or better year for both water users and administrators alike, only to experience limited spring moisture, above average dry winds, and limited low to mid elevation snowpack. Wheatland Irrigation District had carried over about 62 KAF into the water year, a promising sign, yet the limited runoff allowed a delivery of 0.75 AF/acre to its members and an end-of-season carryover of only 11 KAF.

Nothing seems to be "normal" during these years of drought and this year the procedure for the declaration of allocation for the North Platte Project followed that theme. The first release of storage was on May 10th, but with the 1,236 KAF predicted supply in early May well above the 1,100 KAF comparison, Reclamation did not declare that an allocation "may be needed" until early June with a 1,074 KAF predicted supply. Wyoming respectfully objected to this declaration "after" the first release of storage, largely because "allocation years" don't affect the North Platte Project solely, but have other implications within the basin. Following cooperative negotiations between the principal parties, it was agreed to enforce and account the North Platte Project supplies according to the Allocation Stipulation yet relax the obligation of Wyoming to limit mainstem irrigation water users between Alcova and Guernsey Reservoirs to 6,600 AF every two weeks. This procedure was appropriate as it encouraged conservative use of North Platte Project supplies without "full allocation year" requirements. The parties agreed to meet in the following year to discuss future options and resolution to this situation.

Wyoming's obligations of replacement water for the previous year's 249 active triangle wells and out-of-priority triangle tributary depletions was fully met with the release in early July of about 6,800 AF. Replacement supplies for Water Year 2007 are very limited and Wyoming continues to develop an administration plan should those supplies be less than the compliance obligation.

Administration

Due to the compounding effects of the current drought, water administration becomes increasingly complex and challenging for field staff. Statutory provisions provide a conservative base from which to start, but interpretations of situations that have never or rarely been experienced seem to be more common. The following synopsis provides some of the new and current challenges faced by Division I field staff.

District I - Crow Creek priority administration, while recognizing several storage facilities and ownerships, limited supply and aquifer recharge, and future re-use of treatment plant effluent by the City of Cheyenne.

District 2 - Year-round priority administration of the Horse/Bear Creek system, limited storage accruals, and ownership accounting of Hawk Springs Reservoir.

Districts 3 and 4C - First time experience with a private investigator hired by a Cottonwood Creek appropriator questioning priority administration, priority-date calls on Chugwater Creek not experienced since the 1950's, Basin Electric's Boughton Transfer administration, and Laramie River regulation in concert with other District 4 field staff.

District 4A - Upper Laramie River administration in relation to downstream direct flow and storage priority regulation, better understanding Colorado's compliance and obligations related to the Laramie River Decree, and Upper Chugwater Creek administration.

District 4B - Little Laramie River administration in relation to downstream direct flow and storage priority administration, encouragement and orders to water users to improve or replace diversion and measurement structures for equitable administration, and Upper North Laramie River administration in combination with the lower section Hydrographer.

Districts 15-5, 13, and 20 - LaPrele Creek direct flow administration with recognition of LaPrele Irrigation District's storage facility and drastically reduced return flows that normally supply down-drainage appropriators, LaBonte Creek administration.

Districts 6, 7, 16, 17, and 18 - North Platte tributary priority administration in areas with multiple (often 4 or 5) supplemental supply sources and reservoir accrual accounting at over 40 storage facilities.

District 8 - Little Snake River priority administration, particularly with a new welcomed supply from the recently completed High Savery Reservoir.

District 9 - Probably the surprising bright spot of the Division with near normal short-term streamflows in the Medicine Bow River and Rock Creek drainages, along with the challenge of time consuming and equitable administration of the Ringsby Transfer.

Districts 10, 11, and 12 - Bates Creek administration with the increasing impact of shallow groundwater withdrawals and limited surface water supplies, and mediation between appropriators in the Sweetwater drainage with limited diversion or measuring controls.

District 14 - Increasing difficulty of meeting Modified North Platte Decree replacement supply obligations and potential regulatory options, North Platte accounting that now includes multiple replacement supply sources, and development of accounting programs to include mainstem Federal storage facilities.

District 19 - The Niobrara River has historically had limited and short-term surface flows but there has been recent interest and continued assessment of the potential for development of a Groundwater Control Area.

Accomplishments

Reporting requirements for Modified North Platte Decree compliance has continued to be completed by Division I staff in a timely and accurate manner. Decree obligations and other milestones properly satisfied this Water Year were:

1. Full replacement due to triangle well activity in WY2005;

2. Final adjudication of numerous North Platte drainage irrigation well permits (kudos to Cheyenne groundwater staff) and triangle area surface water appropriations;

3. Replacement and installation of measuring devices and electronic equipment to better account for irrigation storage accruals at eleven (11) large reservoirs above Pathfinder Reservoir;

4. Cooperatively siting of three (3) weather stations in relation to future NPDC consumptive use studies;

5. Field inspections for proofs of appropriation and construction, for Safety of Dams reports, for Board of Control petition analysis, and general water administration;

6. Selection and training of Mr. Scott Ross as the District 1 Hydrographer;

7. Numerous public outreach opportunities to water user groups and individuals.

Summary

The compounding effects of the continued record drought has affected water users and water administration, in ways not likely to be forgotten. Priority administration has been necessary in almost every major Division I drainage due to the earlier than normal, less than normal, and shorter than normal surface water runoff and supplies. Groundwater supplies are experiencing continued depletion and declining water tables. Even with a return of normal weather patterns, these compounding adverse effects will continue to touch almost every facet of the general public in the future. History has shown droughts of this proportion are not negated for several years due to depleted storage supplies and natural groundwater recharge. The Division I staff has continued to meet the many challenges of water management during these difficult times and I compliment their stamina and perseverance.

The Division I staff and I would like to thank the State Engineer, the Board of Control, and State Engineer's Office staff for their continued support and assistance during the past water year. Our agency should be proud of the great accomplishments that have occurred during less-than-ideal conditions, and continue to encourage field staff to strive for equitable, statutorily allowed, responsible use of this State's waters.

REPORT OF THE SUPERINTENDENT
WATER DIVISION II

by

Michael B. Whitaker, Sheridan, Wyoming

The following annual report submitted for Water Division II is a summary of the individual water administrators within the division.

General Conditions

Fortunately, the 2006 water year began with a decent amount of carry-over storage in most reservoirs. The Tongue River drainage was at 48 percent, while the Powder River drainage was at 84 percent carry-over and Keyhole Reservoir had 38 percent of capacity.

This year on May 1st the snowpack conditions were lower than the previous year. The Tongue River basin averaged 62 percent of normal while the Powder River drainage was at 51 percent of normal. Some years the Belle Fourche basin is melted out by May 1; however, a few inches of snow remained and it showed a high of 78 percent of average.

The irrigation season kicked off in early May at the normal time. The major difference this year was that there was very little snow below the storage reservoirs and stream flows were very low. Some streams went into regulation immediately, while on other streams the irrigators shared the low flows and hoped for increased runoff. Lake DeSmet started releasing water for irrigation on May 19. Fortunately, a few days later we received some rain on the remaining snow which melted it quickly and allowed the reservoirs to fill overnight. Peak flows for the season occurred on May 23. We were at the point where the reservoirs would have been ordered to cease storing and pass all inflows to satisfy downstream senior appropriations. As it was, some streams were in regulation the entire season. Little Goose, for example, was regulated to 1883 and senior all summer.

As the irrigation season progressed, the eastern part of the division in the Black Hills picked up a few more showers. Keyhole Reservoir began releases for the Belle Fourche Irrigation District on June 21st. Releases continued through the summer for both the BFID and CCID water users. Monitoring of diversions along the Belle Fourche seemed to work well this year for the benefit of both districts.

Normally we receive a major portion of our annual precipitation during May and June; however, this year there was very little. Consequently, reservoir usage was up. Carry-over for the 2007 water year for the Tongue River drainage was 37 percent of capacity, the Powder River drainage was 73 percent and Keyhole Reservoir was 25 percent.

This year in our continuing CBNG reservoir inspection program we opted to discontinue contract inspectors and to rely on our state inspector and the hydrographer-commissioners. The reason for this approach was the amount of time spent in review of the contract work. This past year approximately 723 inspections were completed. Many of these required ACR's to be filed to correct the records so that the permit reflects the findings in the field. Each time an ACR is required, a letter must be sent to the CBNG company.

This past year 96 Final Proof of Appropriations were taken and submitted to the Board of Control for adjudication of the water rights, along with the finalization of 91 stock reservoir inspections not to be adjudicated, but included in the Tab Book. In addition, 23 petitions reflecting various changes of water rights were acted upon. On-site inspections, proof of ownership, signatures and fees, and, in the case of petitions, sometimes hearings are required.

The Safety of Dams program involves inspections every five years for reservoirs that exceed 20 feet in fill height or 50 acre-feet in capacity. Of approximately 650 dams in Division II that fall into this program, 120 were scheduled for inspection this year.

Summary

At this time the calendar year is nearly over and we are 4 inches below normal on precipitation for the year. This is after we received nearly 6 inches of rain in October 2006. This fact illustrates just how dry we were through this past water year and how much additional moisture we need to receive to make up the deficit. All indications at this time are that we will be extremely lucky if the next water year is better than the last.

REPORT OF THE SUPERINTENDENT
WATER DIVISION III

by

Loren Smith, Riverton, Wyoming

This report will summarize Water Year 2006 for the Wind River / Big Horn River system as well as that of the Clark's Fork Drainage in North Central Wyoming. Water Division III is made up of thirteen water districts served by a staff of seven hydrographer-commissioners, one field adjudication inspector, one lead hydrographer, one assistant-superintendent and one division secretary.

Carry over storage going into the new water year was a vast improvement over the past several years as evidenced by the substantial changes in volumes of the larger reservoirs in the division. The drought conditions experienced throughout WY2006 depleted those gains from 2005 and left the reservoirs in rather bad shape as the water year drew to a close.

District	Reservoir Name	Usable Capacity	Usable Contents on Sept. 30,2006	% Capacity Sept. 30, 2006	Usable Contents on Sept. 30,2005	% Capacity Sept. 30, 2005	Change in Contents
3	Boysen Reservoir	757,851	466,005	61%	591,900	78%	-125,895
3	Bull Lake	151,951	33,039	22%	66,100	44%	-33,061
3	Pilot Butte Reservoir	34,600	4,158	12%	12,300	36%	-8,142
5	Anchor Reservoir	9,252	0	0%	269	3%	-269
7	Adelaide Reservoir	4,764	450	9%	2,000	42%	-1,550
8	Greybull Valley Reservoir	33,169	322	1%	8,000	24%	-7,678
9	Buffalo Bill Reservoir	644,540	441,121	68%	450,300	70%	-9,179
15	Bighorn Lake	1,312,000	767,787	59%	984,500	75%	-216,713
16	Upper Sunshine Reservoir	52,987	5,960	11%	24,000	45%	-18,040
16	Lower Sunshine Reservoir	58,748	720	1%	21,000	36%	-20,280

Snow pack varied greatly across the division at the beginning of February the Wind River Basin stood at 82% of the long-term average, Big Horn Basin was at 79%, the Shoshone Basin was at 87% while the Clark's Fork held 106% of the long-term average snow pack for that date. By the first of May, these numbers had steadily decreased to alarming levels. The May 1 reports indicated that the Wind River Basin had dropped to 59%, the Big Horn Basin to 65%, the Shoshone Basin to 67% and the Clark's Fork drainage had decreased to only 88% of average. Spring and summer precipitation was nearly non-existent in Water Division III this past season. The National Weather Service in Riverton recorded only 0.53" of precipitation for May through August, that equates to 10.7% of normal for this period.

Crops reflected the severe conditions this season as early reports are of low sugar beet production levels, disease problems as well as drought and heat generated problems with bean production. As normal those lands under substantial reservoir storage facilities did fair much better than those without storage available late season to aide in finishing the crop. Alfalfa production on tributary stream was quite limited as the water supplies didn't hold up to completely finish the second cutting and third cuttings on the smaller tributary systems were not even contemplated this year.

Regulation was the predominant field activity for all of division staff this season. Many times during the year I heard comments to the affect that this is the worst year yet of this prolonged drought cycle and with the amount of regulation activities undertaken this year, I am a firm believer in this theory. Regulation began early and stayed in effect throughout the remainder of the water year on most drainages in Division III this past season. This first call, as usual, came on Owl Creek near Thermopolis. This stream system stayed in administrative regulation until July 21 when I issued an order for instream stock use only on that system. The table below indicates those streams on which there was priority administration during Water Year 2006.

District	Stream System	Calling Ditch	Date of Call	Calling Party	
1	Middle Fork Popo Agie River	Cemetery Ditch	7/17/2006	Joe P. Crofts	
1	Little Popo Agie	Milford, Lyons, Wise	7/31/2006	Bill Hamilton	
3	Lucerne Pumping Plant Canal	Internal Regulation	6/22/2006	Ed Moriarity	Denied
5	Owl Creek	Beaver Ditch	4/2/2006	Denna Sanchez	
5	Owl Creek	Exchange water	4/4/2006	Matt Brown	
5	Owl Creek	Close Badder, Bingham	4/5/2006	Matt Brown	
6	Nowood River	Shafer	7/17/2006	Bob Redland	
6	Nowood River	Harmony	8/21/2006	John Joyce	
7	Shell Creek	McDonald/Shell	7/11/2006	Gary G. Good	

8	Greybull River	Farmers Canal	4/19/2006	Bryan Neves	
9	Canyon Ck. Ditch	Internal Regulation	5/1/2006	Martin Moon	Denied
9	Green Creek	Green Ditch	7/19/2006	William Young	
9	Trout Creek	Thurmond	9/7/2006	Jon Sowerwine	
9	Bull Creek		9/14/2006	George Brown	
10	Line Creek	Badura	4/20/2006	Edward Reed	
10	Bennett/Little Rocky	North Berry	4/21/2006	James B. Cox	
10	Line Creek	Badura	8/8/2006	Edward Reed	
11	Badwater Creek	OSW Supply Ditch	4/3/2006	Robert D. Whitt	Futile
12	Medicine Lodge Creek	George Rud, Bayne Ditch	7/26/2006	Martin Mercer	
12	Paint Rock Creek	Go Ahead Ditch	9/14/2006	Tom Shirren	
13	Gooseberry Creek	Holland	4/5/2006	Mark Nogle	
14	Cottonwood	Tenderfoot	4/10/2006	Beau Jackson	
14	Cottonwood	Brassington	5/1/2006	Jim Butterfield	

This Superintendent dealt with only one official appeal of a hydrographer's decision this past season. In this case, the hydrographer had made a decision based on input from the assistant superintendent to allow water to continue through a pipeline from a spring system on Owl Creek during the period when the stream was in "Instream Stock Use Only" administration. The reasoning for their decision was solid as it was their belief that the conveyance was a less wasteful way to route that water back to the stream than to allow it to flow down natural water courses. On appeal I conducted a field investigation which determined significant losses in the pipeline system and that there did exist a distinct channel from the springs to the Owl Creek channel to effectively transmit that water to the Creek. I overturned the decision of the hydrographer based on the facts that the stream was under "Instream Stock Use Only" administration, that there is to be no diversion from the stream in that case, the pipeline was contributing to a significant waste of water, and that the water would make it to the main channel of Owl Creek if allowed to flow in it's natural channel.

Water Division III felt the crunch of retirement this past season with the retirement of two long term staff members, field inspector Randy Maxwell and division office manager Marie Johnson both opted to begin enjoying life without the daily grind. The wealth of knowledge that walked out the door with those two people has been greatly felt. Liz Toay was hired in December to fill the secretarial position and Mr. Ryan Mikesell was hired in March to fill the void left in the field inspector slot. At the end of July, Ms. Toay moved on, and we once again found ourselves covering the office duties for a couple

months before Ms. Janet Wempen was selected to fill the office manager position. Turn over never comes at an opportune time and I feel lucky to have found excellent and highly qualified personnel to fill these positions. The new hiring guidelines and process which we have been using this past year really helps in finding the right person for the job.

With the recent retirement of Randy Maxwell and the movement of General Adjudication staff into other duties in the Board of Control section in Cheyenne, more field work assistance continues to be requested of the Division III field staff than in past years. Dave, Landis and I have all spent time helping out with inspections, checking on problems, researching questions etc. throughout the season. These tasks do put additional workload on an already taxed staff. We feel it is a necessary evil to have to take on these projects as it will be us who must understand the recommendations and issues within these inspections in an effort to provide the best possible administration not only now but also into the future.

Also, in regard to the general adjudication project has been the work of new hire Ryan Mikesell. Since his first day Ryan has been assigned the task of completing notice, inspections and recommendations on what has been termed "dangling uses". Ryan has worked tirelessly on these files, where for whatever reason all of the permitted uses on a permit were not addressed during previous inspection work. Typically, this entails looking at an unaddressed stock and/or domestic use, contacting multiple landowners, discussing it with them and helping them through the processes to either adjudicate that use if it can be proven to have historically been used, or to eliminate that dangling use from the permit if it can not be proven up. As we work our way through the last few files under the general adjudication we are spending more and more time meeting with objectors, sitting on conference calls with the court and working to draw this process to a close.

Division III staff have continued to work hard on staying current with dam safety inspections, proof inspections and the snow survey program this year. These dry years never seem to leave much time for the other important duties but we always seem to keep up. Once Ryan can conclude the dangling use project, it is expected that he will begin to chip away at the huge backlog of proof inspections which has grown since 1985 when the general adjudication suit cut-off date was set.

Area Highlights

The Wind-Big Horn River system continues to see improvements in accounting, delivery timing and efficient delivery of ordered water all equating to a net gain to the system. This past spring we undertook phase one of a two phase project to automate more of the gaging stations that are used in the daily accounting of the water use. We added real-time data transmission capabilities to ten canal gages between Boysen and Worland. This real time data replaces estimates and weekly reports of the diversion rates in our accounting system thus giving us a much more accurate picture of what is going where and when. The districts involved appreciate knowing when they are

purchasing storage and how much and with this increased accuracy we are able to give them solid informed answers, and not estimates.

The Greybull River began the season with good carry over storage and a very bleak snow pack. Moisture conditions didn't improve and the Greybull Valley Irrigation District relied heavily on their storage to make it through this tough season. An old issue again surfaced in regards to the delivery of all this stored water both through direct diversion and by exchange. The application of shrink was hotly debated during the season and final resolution has yet to be reached. The Hydrographer wants to apply a flat percentage shrink on all the water being released by having the District release that extra water from storage. Essentially, this would allow delivery of exactly what was ordered, it would streamline deliveries and all the users, through decreased water availability would equally shoulder the burden. The District would prefer to have the hydrographer shrink each individual delivery putting the burden of carrying the shrink on each user with those furthest away from the reservoir feeling the greatest effects. This is a very time consuming option and would place a high commitment on the time of a couple already overtaxed hydrographers.

The Shoshone drainage was in a normal mode this season. There seems to be adequate water even on short years to manage the main stem districts. It's the smaller tributary streams where the drought has been felt the most. These streams typically go into administrative regulation early in the season, come out during runoff and go right back into regulation as the flows diminish. The gaging network on the main stem of the Shoshone is quite antiquated and will likely be the next focus for this division to pursue real time data capabilities throughout that system.

The petition bug has seemed to follow the increased level of regulation in the Norwood drainage. The Board of Control has had quite a few large petitions in this drainage come about in the last year all as a result of the hydrographer delivering only what's appropriated through any certain diversion. Regulation tends to do this and it is a good practice for these folks to keep their rights in order and protectable.

Significant effort was expended in the Thermopolis area this year studying all the hot water withdrawals taking place in the area surrounding the thermal hot springs at Hot Springs State Park. It is the contention of many, that the flows of Big Spring are being impacted by other area uses of water from this culturally significant hydrothermal feature. All permitted hot wells or water uses were inventoried and much time was spent with the area landowners in efforts to identify any un-permitted uses occurring in the area. Gaging equipment was ordered in and installed to accurately measure and record the flows of the Big Spring system for the first time in history. This effort is on going as we begin to develop our theories and listen to the multitude of other theories being bantered around.

Summary

When will it ever end? The previous water year was still less than a normal year but it was the only bright spot in what has now been eight long years of drought. It appears that WY2006 may have been the second worse year in this cycle. Base stream flows were down considerably this past season and storage that had rebounded slightly in 2005 was drafted at alarming rates this year. There is very little carry over storage left at this point and that leaves us all looking to the skies for relief once again. Without a significant snow year this coming winter we may be headed for uncharted territory regarding water use in Division III.

The bright spot in this whole picture is the staff in this water division who give their all in carrying out their jobs. The tireless efforts by this fine group of people are what makes it all work. We have no turnover to deal with this year and this only helps all involved as it is this consistency in the mode of operation, application of law and decision making that allows the appropriators to know what to expect. I want to extend kudos to the entire staff of Division III as well as everyone in the Cheyenne office who quickly and without question, respond to our continual requests for information, data and assistance. The rest of the Board of Control who are always willing to offer their savvy advice, share personal experience and their vast wealth of knowledge on any conceivable problem that comes up. Thank you.

REPORT OF THE SUPERINTENDENT
WATER DIVISION IV

by

Jade Henderson, Cokeville, Wyoming

The following annual report is a summary of Water Year 2006 as experienced in the drainages of Wyoming's Green, Snake, and Bear Rivers located west of the Continental Divide. It is written generally from the perspective of field administration of water rights. More detailed accounts of respective local areas can be obtained from the individual Reports of the Hydrographer/Water Commissioners. (The Little Snake drainage, although part of the Green [Colorado River] basin, is administered under Water Division I.) More complete interstate and Board of Control information is found under their separate reports.

General Conditions

Snowpack declined from above average in early winter to below average in the spring. When spring temperatures came early and precipitation essentially stopped for the rest of the season, the snowpack's runoff and streamflow peaks came early as well. Summer weather stayed very dry, but at least saw no hard frosts for agriculture's critical growing season. The snowpack had been better in the west, helping summer streamflow to hold up reasonably well and keeping streams mostly out of official regulation in the Snake and Bear drainages. Reservoirs generally filled to capacity, or came close to full. Un- or mis-permitted aesthetic ponds continue to demand attention for proper water right filings in rapidly-subdividing areas of Water Division IV. We trained two new Water Commissioners, one in each of Mountain View and Big Piney. The Governor and legislature approved three of our part-time positions to become year-round. Perhaps one more - in the lower Green River basin - will make us complete. The front-line field staff (Water and Hydrographer Commissioners, Lead Hydrographers, Assistant Superintendent)were all very effective in handling most issues locally. This kept calls to the Superintendent at a minimum and cut his excess hours in half from last year's record high, allowing more attention to quasi-judicial responsibilities on the Board of Control.

Green River

Analysis continues on the potential threat of interstate regulation in the Green River basin that could impose curtailment of use for the Colorado River, should the severe drought continue. Unpermitted industrial water hauls proliferating in the basin's booming gas fields need compliance and quantification. Pre-rated measuring devices provided by diversion owners will become increasingly necessary in order for the State to supply dataloggers or telemetry information on our water use. All single appropriations pre-dating the original Colorado River Compact of November 24, 1922 are protected from curtailment under its Article VIII.

Pine Creek accounting with Fremont Lake Reservoir required new streamgage ratings on relocated Instream Flow gaging sites, and its diversions now need shift-free measuring devices for instantaneous reading. Telemetry for posting these flows on the internet should be considered for this and administered streams basin-wide. Adjudicating (or eliminating) subdivision irrigation, under the numerous individual proofs and extensions of Canyon Canal's huge enlargement permit, is becoming more burdensome. Hundreds of its lots are now experiencing ownership turnover at least annually. The usual streams near Big Piney were regulated this year, except for Middle Piney Creek. Inactivity/unavailability made a couple proofs near Farson unsuccessful. Eden Valley Irrigation & Drainage District has finally initiated certified mapping for amending their water rights to reflect shifting of irrigated land descriptions into circular pivots. Black's Fork and Smith's Fork Creek are regulated every year as a result of summertime storage and delivery from Meeks Cabin and Stateline reservoirs. And Bridger Valley Water Conservancy District still declines exercising state water law to formally request storage of direct flow rights under their Project members' senior priorities. Ham's Fork irrigators again utilized releases from a negotiated storage pool in Viva Naughton Reservoir under an annual agreement with PacifiCorp, which by consensus kept that stream out of regulation (although the Water Commissioner monitors for over-diversion against PacifiCorp releases of single-appropriation demands).

Workable priority schedules - for both Wyoming and Utah in the Henry's Fork drainage - have yet to be finalized into a comprehensive combined list under the Upper Colorado River Basin Compact, much less edited to flag junior duplicate or overlapping water rights. However, mapping that shows the overlap between Natural Flow rights is essentially complete, with Utah continuing its effort to find staff time for delineating the sole-supply acreages of their overlaps.

Snake River

The challenge by OK Ranch LLP at the state line on Teton Creek, seeking to avoid going out-of-priority in either state, has admirably withdrawn their appeal on this stream that again experienced interstate regulation this year. Wyoming joined with Idaho to encourage the withdrawal of Snake River Basin Adjudication claims in Idaho that duplicated Wyoming diversion rights near Freedom. Not too unusual was the lack of any state regulation again this year in the Salt River drainage, since the users on a number of these streams generally elect to distribute the water themselves. The ongoing struggles on Birch Creek near Etna and Bradshaw Spring Creek near Graver (against changes of use or new development) were partially settled by the Board of Control's overruling of the uninjured protestors, and by requiring proper permitting. Water-well drilling is especially proliferous in Star Valley subdivisions. As usual, there is no stream regulation near Jackson, where our services generally include proofing, recording issues, and answering questions on water-related neighbor disputes.

Bear River

Unusually again this year, interstate regulation of this Compact's Central Division around Cokeville was not imposed at all. While official interstate regulation was also not imposed in the Upper Division around Evanston, voluntary compliance with Compact allocations allowed more flexibility again this year. Wyoming and Utah Sections were thus able to trade surplus within the timing of actual demands, and without having late storage halted by official interstate regulation. At one point Wyoming compliance with those interstate allocations, to meet demands in Utah, did trigger State priority regulation that called-out our juniors. Separate interstate storage restrictions became a non-issue when it was obvious that out-of-state Bear Lake storage would receive its runoff entitlement and surpass the Compact's low-level trigger elevation of 5911. Woodruff Narrows Reservoir ended the Water Year higher than it has in 11 years. We are increasing public education efforts and effective communication between the different river sections on interstate streamflow administration, storage restrictions and accounting, the new Town of Bear River's Compact allocation, and Green River basin imports.

The Interstate Commission continues to encourage internet telemetery on major diversions. So Wyoming is expanding the Bear River radio installations in co-operation with pilot programs of the Bureau of Reclamation from Provo, and is funding the internet posting of real-time diversion information. As effective and useful as this telemetry is for water administration and enforcement, its public posting appears to also be very popular with - and desired by - water users themselves. The conversion of our previous recorders to new Campbell instrumentation is freeing the Design Analysis and Sutron dataloggers for spares elsewhere.

Conclusion

Similar to the publicly-accessible diversion information, internet access to the State Engineer's Office water rights database - and other website information - appears to be slowly reducing the calls to our staff for information, research, and records. This reduction is likely helped also by the public's option to hire records research consultants in the private sector for prioritized attention.

Streamgaging continues to be an expensive and difficult program to maintain. For purposes of expert training on flow measurement and recording, Division IV seeks to operate one formal USGS streamgage by each full-time hydrographer (on streams where we need the flow data anyway). This is funded, and our work credited, under the agency's statewide co-operative streamgage program with the Wyoming District of USGS. We presently need to convert another site for our fifth hydrographer. Our lack of cableways and time still make it difficult to meet the meticulous high-flow standards of the USGS in achieving a federally-publishable gage record. With our attention and accuracy focused at low-flow, other responsibilities demand our time during high-flow. Any additional new streamgaging sites should likely be contracted to the USGS. We anticipate eventual purchase of new substitute technology to measure flows in seven

channels too treacherous to wade (with a single [transportable] less-expensive and safer acoustic doppler "River Surveyor"). So we continue to store some parts, and hold-off purchasing more, which were originally funded for expensive construction of individual bank-cableways. Some of this stored equipment may become spare for use statewide.

Conversion of non-management field staff from exempt employees to non-exempt classification raised some initial apprehensions, particularly when reappointment letters are for a specified limited term. The latter introduces doubt in the State's commitment to valuing the longevity of its human resources, as staff works to earn retirement. A motivated and ambitious team is critical and appreciated as we continue to face both old and new challenges. We have good staff; and our improvements in integrity, work ethic, and attention to accuracy are important.

BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS

by

Christine Turk
Executive Director

Objectives

The primary responsibility of the Board is self-regulation of the engineering and land surveying professions for protection of the public in Wyoming. Careful processing of applications from individuals, corporations and partnerships registered in other states, and administration of examinations for new applicants in Wyoming occupy most of the Board's efforts. In addition, the Board investigates complaints against engineers, land surveyors, corporations and partnerships. It is the Boards goal to reduce the backlog of enforcement cases, and enhance the website by ensuring information is relevant and current,

Major Accomplishments

The Board continues to be efficient in processing applications, and properly completed comity applications are being processed and licenses are granted within a few short weeks of completion. The Board continues to be attentive to its registrants and keeping the public educated to the need of professional registration for protection of the public.

Law Enforcement Activity

The Board has vigorously pursued the requirement that persons offering professional engineering and land surveying services in Wyoming become licensed. Correspondence from the Board Office or the Attorney General's Office has usually been effective in obtaining compliance with the statute.

The Board continues to use the National Council of Examiners for Engineering and Surveying's (NCEES) national database for retrieving information on disciplinary matters, as well as providing information on Wyoming registrants who are disciplined.

The Board continues to investigate every complaint concerning the practice of our registrants. The Board now has the expertise of one investigator who investigates all complaints. This has streamlined the process and in most cases, a resolution has been accomplished without a formal hearing.

Finally, the Board has provided exceptional leadership at the national level with several of its members serving as officers, committee chairs or committee members of the NCEES.

Problems and Recommendations

The Board continues to explore alternatives for providing a swifter means of completing complaint investigations. Due to the Board meeting on a quarterly basis however, some recommended resolutions are delayed due to the meeting schedule.

SUMMARY OF REGISTRANTS AS OF SEPTEMBER 30, 2006				
		RESIDENT	NON-RESIDENT	TOTAL
PROFESSIONAL ENGINEER	INDIVIDUAL	998	3,594	4,592
	CORPORATION	91	363	454
	TOTAL	1,089	3,957	5,046
PROFESSIONAL LAND SURVEYOR	INDIVIDUAL	125	179	304
	CORPORATION	12	10	22
	TOTAL	137	189	326
PROFESSIONAL ENGINEER & LAND SURVEYOR	INDIVIDUAL	84	47	131
	CORPORATION	44	28	72
	TOTAL	128	75	203
ENGINEER-IN-TRAINING		1,212	533	1,745
LAND SURVEYOR-IN-TRAINING		41	10	51
GRAND TOTAL		**2,607**	**4,764**	**7,371**

The purpose of the NCEES is to provide an organization through which state Boards may act and counsel together to better discharge their responsibilities of regulating the practice of engineering and land surveying as it relates to the welfare of the public in safeguarding life, health and property. Serving the NCEES at a national level has been very beneficial to the operations of the Board. While all Member Boards attempt to have uniformity in their requirements, without the involvement and exchange of information from state to state, achieving that uniformity would be essentially impossible.

STATE BOARD OF EXAMINING WATER WELL DRILLING CONTRACTORS AND WATER WELL PUMP INSTALLATION CONTRACTORS

by

Lisa Lindemann, Administrator, Ground Water Division

The State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors (the Board) was created by legislation in the 2003 session. The Board consists of seven members and has been a functioning entity since June 2003.

Current Board members include:

Board Member:	Representing:	Term Expires:
Lisa Lindemann	SEO Designee	3/31/09
Kevin Frederick	DEQ Designee	3/31/07
Jack H. Weber	At-large Water Well Drilling Contractor	3/31/07
Charles W. Wilson	Water Well Driller	3/31/09
Edward D. Finch	Irrigation Well Contractor	3/31/07
Steven R. Barbour	Water Well Pump Installation Contractor	3/31/09
Richard G. Stockdale	Public Who Owns an Active Well	3/31/09

The mission of the Board is to administer a voluntary certification program. The purpose of the certification program is to protect the public from incompetent or unethical water well drilling and water well pump installation contractors, as well as to promote excellence in the practice of their area of expertise.

The Board is responsible for examining the qualifications of anyone desiring to obtain a certification to engage in the business of water well drilling or the business of water well pump installing within the state. Under Wyoming's voluntary certification program, an applicant for a water well drilling contractor or pump installation contractor must:

- be at least 18 years old,
- provide written documentation of financial responsibility,
- pass an examination prescribed by the board (or provide evidence of current certification by the National Groundwater and Wells Association (NGWA), and
- pay the required fees.

Three written water well driller exams must be completed; 1) a general exam, 2) a specialized category exam, and 3) a Wyoming-specific exam. The Board was able to offer their first certification exams by February, 2005.

New Rules

In order for this Board to offer a certification program, they needed to promulgate a set of rules and regulations. The Board approved a draft version of the rules and regulations in July 2004 and the rules and regulations were submitted for public

comment and review. The Board adopted the rules and regulations on October 18, 2004 and they were signed by the Governor and filed by the Secretary of State on December 29, 2004.

Emergency Rules

The NGWA changed their testing procedures on January 1, 2005. Therefore, the Board's new rules and regulations, signed December 29, 2004, had to be revised to reflect NGWA's changes. Changes to the rules were filed as emergency rules since emergency rules would be effective for 120 days, allowing the Board to continue accepting applications for certification while sending the revised rules out for public review and comment. The emergency rules (Chapters 3 and 4) were signed by the Governor on January 19, 2006 and filed by the Secretary of State on January 20, 2006.

Amended Existing Rules

Notice of intended rulemaking (amendments to existing rules (Chapters 3 and 4)) were filed with the Secretary of State on May 16, 2006. Notice of intended rulemaking and proposed rules in strike and underscore format were provided to the Legislative Service Office and courtesy copies of the notice and proposed rules were provided to the Attorney General and the Governor on June 13, 2006. The rules promulgation process continued into WY-07.

The Board met twice in WY-06:

- January 6, 2006 (via phone conference); and
- February 24, 2006 in Casper, Wyoming.

The Board also reviewed and approved Ernest Lucas' (Inberg-Miller, Riverton) application packets for certification in July 2006, and Brett Klein's (Plains Water Well Service, Inc., Cheyenne) application in August 2006.

In WY-06, the Ground Water Division received twenty eight requests for application packets for certification from water well drilling and/or pump installation contractors from Wyoming, Colorado, South Dakota, Nevada, Idaho, Nebraska, and Iowa.

The State Engineer and the Ground Water Division presented information to the Joint Agriculture, Public Lands and Water Resources Interim Committee in April 20, 2006 and asked for the Committee's support in drafting legislation that would require mandatory licensing of water well drilling and pump installation contractors. At the Committee's request, the Ground Water Division hosted three public meetings in September 2006 to present information on proposed legislation to the public and to gather public comment to be used in the development of draft legislation.

Outreach efforts for WY-06 included the Ground Water Division staff presenting information on voluntary certification or mandatory licensing at the following venues:

- "State Engineer's Updates", presented to the Wyoming Water Well Association,
- February 23, 2006, Casper, Wyoming;
- "Water Well Drilling Contractors Licenses", presented to the Joint Agriculture,
- Public Lands and Water Resources Interim Committee, April 20, 2006,
- Torrington, Wyoming;
- "Proposed Legislation: Mandatory Licensing for Water Well Drillers and Pump
- Installers", September 5, 2006, Rock Springs, Wyoming;
- "Proposed Legislation: Mandatory Licensing for Water Well Drillers and Pump
- Installers", September 6, 2006, Gillette, Wyoming; and
- "Proposed Legislation: Mandatory Licensing for Water Well Drillers and Pump
- Installers", September?, 2006, Casper, Wyoming.

PERSONNEL LISTS
STATE ENGINEER'S OFFICE
(As of September 30, 2006)

Tyrrell, Patrick T.....State Engineer
LaBonde,Jr., Harry C .....Deputy State Engineer

ADMINISTRATION

NAME	TITLE
Hutchinson, Anna	Executive Assistant
Doolin, Melanie	Human Resources Manager
Vacant	Financial/Statistical Specialist 2
Adkison, Kelli	Financial/Statistical Specialist 5
Shappell, Madeline	Financial/Statistical Tech. 2

SURFACE WATER

NAME	TITLE
Barnes, John	**Administrator, Surface Water**
Vacant	Safety of Dams Engineer
Bratton, Leah	Water Manager Specialist 1
Couch, Chris	Water Management Specialist 1
Blanks, Danna	Administrative Specialist 2
Geyer, Jeffrey	Water Management Specialist 1
Cameron, Kathy	Water Management Specialist 2
Feltner, Jason	Water Management Specialist 1
Hopkins, Carol	Administrative Specialist 2
Lucero, Linda	Water Management Specialist 2
Mathisen, Rebecca	Water Manager 3
Alexander, Nicole	Administrative Specialist 4
Stockdale, Larry	Safety of Dams Engineer
Toppenberg, Shirley	Administrative Specialist 1
Velez, Phillip A	Water Manager 3
Cowley, Jeff	Water Management Specialist 2
Wright, Cheryl	Water Management Specialist 3
Lesoing, Leif	Water Management 3

SUPPORT SERVICES

NAME	TITLE
Zimmerman, Martin	**Administrator, Support Services**
Castle, Daniela	Administrative Specialist 3
Cavaliere, Libby	Administrative Specialists
Collins, Andrea	Computer Technology Specialist 3
Irwin, Kay	Administrative Specialist 3
Hoobler, Beth	Water Management Specialist 1
Lopez, Joe	Computer Technology Specialist 3
Nathan Rayburn	Computer Technology Specialist 3
Vacant	Computer Technology Specialist 2
Vossler, Steve	Water Management Specialist 3
Haldeman, Jason	Computer Technology Specialist 3

GROUND WATER

NAME	TITLE
Lindemann, Lisa	**Administrator, Ground Water Division**
Miller, Linda	Administrative Specialist 2
Culver, Sheri	Administrative Specialist 1
Ebsen, Mike	Cooperative Programs Coordinator
Fishback, Tonia	Administrative Specialist 2
Verplancke, Cheryl	Water Management Specialist 1
Lett, Sheryl	Water Management Specialist 1
Horgen, Scott	Water Management Specialist 1
Harju, John	Water Manager 3
Manley, Jeremy	Water Management Specialist 1
Rockweiler, Jed	Water Management Specialist 1
Pierce, Dixie	Administrative Specialist 2
Langstaff, George	Water Management Specialist 1
Arnold, Cindy	Administrative Specialist 4
Tebben, Beth	Water Management Specialist 2
McDonald, Doug	Administrative Specialist 2
Trujillo, Roxanne	Administrative Specialist 3
Wilber, P.J	Water Management Specialist 2

STATE BOARD OF CONTROL

NAME	TITLE
Cunningham, Allan D	**Administrator, Board of Control**
O'Dell, Michael	Water Manager 4
Rando, Cynthia	Water Management Specialist 2
Westbrook, Carol	Administrative Specialist 1
Engbretson, Arlene	Water Management Specialist 3
Casey, Jennifer	Administrative Specialist 2
Lane, Monica	Administrative Specialist 4
Dudrey, Linda	Administrative Specialist 3
Jessup, Anna	Administrative Specialist 4
Sayers, Mike	Administrative Specialist 2
Tullis, Randy	**Superintendent**
Water Division No. I	Torrington
Whitaker, Michael B	**Superintendent**
Water Division No. II	Sheridan
Smith, Loren	**Superintendent**
Water Division No. III	Riverton
Henderson, Jade	**Superintendent**
Water Division No. IV	Cokeville

STATE BOARD OF CONTROL-BIG HORN ADJUDICATION

NAME	TITLE
McCann, Nancy	**Water Manager 3**
Hallberg, Debbie	Water Management Specialist 1
Wilson, Katina	Water Management Specialist 2
Fetter, David	Water Management Specialist 2
Skoetsch, Connie	Administrative Specialist 3
Mumper, Karen	Water Management Specialist 2

INTERSTATE STREAMS

NAME	TITLE
Lowry, Sue	**Administrator, Interstate Streams**
Shields, John W	Interstate Streams Engineer
Pring, Jodee	Water Planning Coordinator
Stump, Phil	North Platte Coordinator
Wolff, Steve	Colorado River Coordinator

WATER ADMINISTRATION PERSONNEL
(As of September 30, 2006)

Key to Title Abbreviations:

AS = Assistant Superintendent
HC = Hydrographer-Commissioner
AI = Acreage Inspector
WI = Well Inspector
PI = Pump Inspector
AHC = Assistant Hydrographer-Commissioner
NPAC = North Platte Accounting Coordinator

DIVISION I: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Randy Tullis, h2odivone@netcomnfiander.com	510 West 27th Torrington, Wyoming 82240
Assistant Superintendent	Al Prado, aprado@state.wv.us	PO Box 1368 Douglas, Wyoming 82633
Field Investigator	Rob Foreman, rforem@lstate.wv.us	510 West 27th Torrington, Wyoming 82240
Administrative Spec. 2	Sharon L. Hackett, shacke@state.wv.us	510 West 27th Torrington, Wyoming 82240

DIVISION I: WATER ADMINISTRATION PERSONNEL

DISTRICT	TITLE	NAME	ADDRESS
1	**HC**	Scott Ross, sross@seo.wvo.gov	P.O. Box 218 Meridan, WY 82081
2	**HC**	Gary Mehling, amehli@state.wy.us	510 West 27th Torrington, Wyoming 82240
3.4C	**HC**	Doug Oliver, doliver@state.wy.us	1560 B Johnston St. Wheatland, Wyoming 82201
4A	**HC**	Darren Parkin, dparki@state.wy.us	Laramie Civic Center 710 Garfield, Room 114 Laramie, Wyoming 82070
4B	**HC**	Trevor Hiegel, thiege@seo.wvo.gov	Laramie Civic Center 710 Garfield, Room 114 Laramie, Wyoming 82070
6,7,8,16, 17,18	**HC**	Kevin Pantle	PO Box 710 Saratoga, Wyoming 82331
6,7,8,16, 17,18,	**HC**	Vacant	P.O. Box 710 Saratoga, Wyoming 82331

DIVISION I: WATER ADMINISTRATION PERSONNEL (cont'd)

DISTRICT	TITLE	NAME	ADDRESS
9	HC	Rod Oliver, rolive@state.wy.us	277 Dutton Creek Road Laramie, Wyoming 82070
13, 15-5,20	HC	Nate Weinand	117 S. 2nd St., Rm. 3 Douglas, Wyoming 82633
10,11, 12,Asst14	HC	Jack Gibson, igibso@state.wy.us	2020 Fairgrounds Rd., Ste. 104 Casper, Wyoming 82604
14	HC	Kent Becker, kbecke@state.wv.us	510 West 27in Torrington, Wyoming 82240
6,7,8,16, 17, 18	AHC	Robin Blake	P.O. Box 244 Encampment, Wyoming 82325
19	AS	Al Prado, aprado@state.wv us	PO Box 1368 Douglas, Wyoming 82633
North Platte River	Triangle PI	Tracy Brown	510 West 27m Torrington, Wyoming 82240
North Platte River	AI	J. Scott Haskamp, shaska@state.wy.us	2020 Fairground Rd. Ste. 104 Casper, WY 82604
North Platte River	AI	Chad Pickett, cDicke@state.wy.us	PO Box 710 Saratoga, Wyoming 82331
North Platte River	Triangle WI	Kelly Mehling, kmehli@state.wv.us	510 West 27En Torrington, Wyoming 82240
North Platte River	AI	Jamie Rasnake, jrasna@state.wv.us	1560 B Johnston Street Wheatland, Wyoming 82201
North Platte River	PI	Wray Lovitt	117 S. 2na Street, Ste. 2B Douglas, Wyoming 82633
North Platte River	NPAC	Brian Pugsley, bpugsl@state.wv.us nprwyact@communicomm.com	510 West 27in Torrington, Wyoming 82240

DIVISION II: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Mike Whitaker, mwhita@seo.wyo.gov	PO Box 6103 Sheridan, Wyoming 82801
Assistant Superintendent	Carmine LoGuidice, clogui@seo.wyo.gov	PO Box 6103 Sheridan, Wyoming 82801
Administrative Spec. 2	Deborah Reed, dreed@2seo.wyo.gov	PO Box 6103 Sheridan, Wyoming 82801
CBNG Res. Inspector	David Schroeder, dschro@seo.wvo.gov	PO Box 6103 Sheridan, Wyoming 82801

DIVISION II: WATER ADMINISTRATION PERSONNEL

DISTRICT	TITLE	NAME	ADDRESS
1,7,10	HC	Kody Steinbrecher, kstein@RangeWeb.net	113 S. 21sl St. Sundance, Wyominq 82729
2,3,8, 9,11	AS	Carmine LoGuidice, clogui@seo.wyo.gov	PO Box 6103 Sheridan, Wyoming 82801
2,3	HC	David Pelloux, dpello@seo.wyo.gov	P.O. Box 6103 Sheridan, Wyoming 82801
4,5,6	HC	William Knapp, bknapp@seo.wvo.gov	PO Box 6103 Sheridan, Wyoming 82801
8	HC	Sandy Dixon	PO Box 133 Kaycee, Wyoming 82639
5,6	HC	Pat Boyd, pboyd@seo.wyo.gov	P.O. Box 6103 Sheridan, Wyominq 82801
1,8	HC	Roger Ralph, rralph@seo.wyo.gov	2020 Fairgrounds Road Ste 103 Casper, Wyoming 82601

DIVISION III: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Loren Smith, lsmith@seo.wyo.gov	715 East Roosevelt Riverton, Wyoming 82501
Assistant Superintendent	David Deutz, ddeutz@seo.wyo.gov	2009 Big Horn Avenue, Ste 1 Worland, WY 82401
Administrative Spec. 2	Janet Wempen, jwempe@seo.wyo.gov	715 East Roosevelt Riverton, Wyoming 82501

DIVISION III: WATER ADMINISTRATION PERSONNEL

DISTRICT	TITLE	NAME	ADDRESS
At Large	AS	David Deutz, ddeutz@seo.wyo.gov	2009 Big Horn Ave, Ste. 1 Worland, WY 82401
1,11	**HC**	Myron Smalley, msmall@seo.wyo.gov	715 East Roosevelt Riverton, Wyoming 82501
3	**HC**	Aaron Marshall, amarsh@seo.wyo.gov	715 East Roosevelt Riverton, Wyoming 82501
5, 14	**HC**	Mike Kimsey, mkimse@seo.wyo.gov	2009 Big Horn Ave., Ste 1 Worland, WY 82401
6,12	**HC**	Rod Delker, rdelke@seo.wyo.gov	2009 Big Horn Ave., Ste 1 Worland, WY 82401
7	**HC**	Gary Anders, gander@seo.wyo.gov	P. O. Box 263 Greybull, Wyoming 82426
8,16	**HC**	Heber Jensen, hjense@seo.wyo.gov	1201 E. 7^{tn} Powell, WY 82435
9,10,15	**HC**	Landis Webber, lwebbe@seo.wyo.gov	1201 E. 7^{in} Powell, WY 82435
13,6	**HC**	Mike Riley, mriley@seo.wyo.gov	1201 E. 7^{tn} Powell, WY 82435

WATER DIVIS ON III - BIG HORN GENERAL ADJUDICATION

DISTRICT	TITLE	NAME	ADDRESS
Big Horn	AI	Ryan Mikesell, rmikes@seo.wyo.gov	715 East Roosevelt Riverton, Wyoming 82501

DIVISION IV: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Jade Henderson, jhende@allwest.net jhende@seo.wyo.gov	PO Box 277 Cokeville, Wyoming 83114
Assistant Superintendent	Chris Carisen, ccarl@centurytel.net ccarls@seo.wyo.gov	Box 1080 Big Piney, Wyoming 83113
Administrative Spec. 3	Carol Reed, water4sec@allwest.net creed@seo.wyo.gov	PO Box 277 Cokeville, Wyoming 83114

DIVISION IV: WATER ADMINISTRATION PERSONNEL

DISTRICT	**TITLE**	**NAME**	ADDRESS
1,5,6,7,10, 11,13,16	AS	Chris Carlsen, ccarl@centurytel.net ccarls@seo.wyo.gov	PO Box 1080 Big Piney, Wyoming 83113
3,9,14,15	LHC	John Yarbrough, jyarbro@seo.wyo.gov	PO Box 1208 Lyman, Wyoming 82937
2,4, 8,12	LHC	Kevin Wilde, kwilde@allwest.net, kwilde@seo.wyo.gov	Box 277 Cokeville, Wyoming 83114
2	HC	Kevin Payne, water4dist2@allwest.net kpayne@seo.wyo.gov	P.O. Box 277 Cokeville, WY 83114
3	WC	Dennis Barker, dbarke@seo.wyo.gov	PO Box 122 Mtn View, WY 82939
4	WC	Don Shoemaker, shoemakerdnb@aol.com. dshoem@seo.wyo.gov	343 Ninth Street Evanston, Wyoming 82930
7,10, 11	HC	Jeff Davis, pinedaleh2o@vcn.com jdavis@seo.wyo.gov	PO Box 689 Pinedale, Wyoming 82941
5,6,10	HC	Ed Boe, eboe@centurytel.net eboe@seo.wyo.gov	PO Box 1080 Big Piney, Wyoming 83113
7, 10, 11	WC	David Orzel, dorzel@centurytel.net dorzeliffiseo.wyo.gov	PO Box 1080 Big Piney, Wyoming 83113
8,12	WC	Ed Bruce	142 Allred Road Afton, Wyoming 83110
9	WC	Bill Marchione, williamm@hamsfork.net. wmarch@seo.wyo.gov	PO Box 605 Kemmerer, Wyoming 83101
13	WC	Jim Wilson, jim.wilson@sirsidynix.com	275 Yellow Rose Drive Alta, Wyoming 83422
14	WC	Todd Covolo, tscovolo@union-tel.com. tcovol@seo.wyo.gov	PO Box 1165 Lyman, WY 82937

DISTRICT	TITLE	NAME	ADDRESS
15	WC	Allen Jaggi, jaggia@union-tel.com. ajaggia@seo.wyo.gov	PO Box 326 Lyman, Wyoming 82937
16	WC	Don Barney, dbarney@tetonwyo.org	PO Box 9575 Jackson, Wyoming 83002-9575
16	AWC	Conan Beesley, cbeesley@tetonwyo.org	PO Box 9575 Jackson, Wyoming 83002-9575

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS

NAME	POSITION
Hutchinson, Peter J.	President
Abell, Stanton J., Jr.	Vice President
Tyrrell, Patrick T.	Secretary-Treasurer
Ballard, John (Mike) M.	Member/Public
Jacobson, Roger	Member
Pedersen, Martin A.	Member
Whitman, David L.	Member

NAME	POSITION
Troy A. Niesen	Licensing Officer
Krista M. Wilson	Licensing Specialist
Christine Turk	Executive Director

STATE BOARD OF EXAMINING WATER WELL DRILLING CONTRACTORS AND WATER WELL PUMP INSTALLATION CONTRACTORS

NAME	ADDRESS	PHONE NO.	E-MAIL	TERM EXPIRES *
Lisa Lindemarm, State Engineer's Office	Herschler Bldg. 4E Cheyenne, WY 82002	307-777-5063	llinde@seo.wvo.eov	2009
Kevin Frederick, WDEQ-WQD	Herschler Bldg. 4W Cheyenne, WY 82202	307-777-5985	kfrede@.state.wy.us	2007
Jack Weber Weber Drilling	1305 Gregory Lane Jackson, WY 83001	307-733-3343 307-413-1596 (cell)	jacwebe@wyoming.com	2007
Chuck Wilson Bronco Drilling	P.O. Box 836 Torrington, WY 82240	307-532-4882	NA	2009
Edward Finch Bamhart Drilling Co. Inc.	P.O.Box 1638 Riverton, WY 82501	307-856-6481 307-856-6753 (FAX)	bdci@trib.com	2007
Steve Barbour Aqua Pumps	9406 NHwy 14-16 Gillette, WY 82716	307-686-2573 307-660-2573 (cell)	sgb@wyoming.com	2009
Richard G. Stockdale	1704 Cheshire Drive Cheyenne, WY 82001	307-635-3602 307-630-5860 (cell)	NA	2009

* All terms expire March 31st of the year indicated.

Attorney General's Contact: 307-777-3435 (Fax)

Ken Nelson	2424 Pioneer Street 3rd Floor North. Cheyenne, WY 82002	307-777-7890	Knels03@state.wy.us

GROUND WATER ADVISORY COMMITTEES				
WATER DIVISION	NAME	ADDRESS	TERM EXPIRES	PHONE NO.
DIV. I	Ben Jordan	1050 North 3ra Street, Suite E Laramie, WY 82072	9/30/10	745-6118
	K. James Fornstrom	PO Box 2032 Pine Bluffs, WY 82082	9/30/06	245-9320
	Colby Drechsel colbydrechsel@yahoo.com	1233 South Jackson Casper, WY 82601	9/30/08	259-8459
	Harvey Crowe	587 South Buffalo, WY 82834	9/30/10	684-7477
DIV. II	Timothy G. Barritt	P. O. Box 664 Upton, WY 82730	9/30/06	686-1125 Cell 680-3549
	Thomas Pilch pilch@wavecom.net	41 East Burkitt Sheridan, WY 82801	9/30/08	672-8750 Cell 899-4712
DIV. III	Dick Steedley, Jr.	2236 Greever St. Cody, WY 82414	9/30/06	527-6712
	Ken Schreuder ees@wvoming. com	40 Meandering Way Lander, WY 82050	9/30/10	332-1528
	Doyle Ward tward@wyoming. com	P.O. Box 1841 Riverton, WY 82501	9/30/08	856-9014
DIV. IV	David A. Stephenson dstephenson@lbgwyoming.com	970 West Broadway (MBE)-No. 512 Jackson, WY 83001	9/30/10	734-4432
	Eugene B. Martin	P.O. Box 399 Evanston, WY 82930	9/30/08	789-3506
	Robert E. Johnson	JFC Engineering & Surveyors 1941 Edgar Street, Ste. 2 Rock Springs, WY 82901	9/30/06	362-6113 1-800-434-7519

GROUND WATER CONTROL AREA ADVISORY BOARD MEMBERS				
CONTROL AREA	NAME	ADDRESS	TERM EXPIRE	DISTRICT NO.
LARAMIE COUNTY ESTAB. 9/2/81	Mike Romsa	5260 Hwy 216 Albin, WY 82050	2007	DIST.5
	Pat Gross	1394 County Rd. 215	2008	DIST.1
	Dale Martin	P.O. Box 391 Carpenter, WY 82054	2008	DIST.2
	Don Berry	2436 Torrington Rd. Cheyenne, WY 82009	2007	DIST. 4
	Mark Child	11106 Child Road Cheyenne, WY 82009	2008	DIST.3
PLATTE COUNTY ESTAB. 10/7/81	Josh Graves	14 S. Antelope Creek Rd. Wheatland, WY 82201	2007	DIST.5
	Doug DeRouchey	P.O. Box 457 Wheatland, WY 82201	2008	DIST.1
	Clara Lou Johnson	29 West Johnson Road Wheatland, WY 82201	2008	DIST.2
	Bernard McGuire, Jr.	4398 Palmer Canyon Road Wheatland, WY 82201	2008	DIST.3
	David Hinman	62 Ferguson Rd. Wheatland, WY 82201	2007	DIST.4
PRAIRIE CENTER ESTAB. 12/2/77	Blake Ochsner	HC74, Torrington, WY 82240	2006	
	Greg DesEnfants	5557 Road 118 Torrington, WY 82240	2007	
	Elden Baldwin	North Star Route Torrington, WY 82240	2006	
	Angie Babcock	13008 Rd. 43 Torrington, WY 82240	2006	
	Chuck Berry	HC74 Torrington, WY 82240	2007	

WYOMING MEMBERS OF INTERSTATE COMPACT COMMISSIONS AND REGIONAL AND INTERSTATE COMMITTEES RELATING TO WATER RESOURCES

(As of September 30, 2006)

BEAR RIVER COMMISSION

(Idaho, Utah and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Commissioner
Gordon Thornock	Commissioner
Sam Lowham	Commissioner
Erick Esterholdt	Alternate Commissioner
John Wagner, DEQ - Water Quality Division Admin.	Water Quality Committee Member
Jade Henderson, Superintendent Water Division IV	Alternate Commissioner, Technical Advisory Committee Member
Sue Lowry, Administrator Interstate Streams	Alternate Commissioner, Technical Advisory Committee Member

UPPER COLORADO RIVER COMMISSION

(Colorado, New Mexico, Utah and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Commissioner
Dan S. Budd, Interstate Stream Commissioner	Alternate Commissioner
Benjamin C. Bracken	Alternate Commissioner
John W. Shields, State Engineer's Office	Engineering Committee, Chairman

COLORADO RIVER MANAGEMENT V IfORK GROUP

NAME, TITLE	POSITION
John W. Shields, State Engineer's Office	Member

COLORADO RIVER COMMITTEE OF FOURTEEN

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
John W. Shields, State Engineer's Office	Member

COLORADO RIVER BASIN SALINITY CONTROL ADVISORY COUNCIL

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Dan S. Budd, Interstate Stream Commissioner	Member
John Wagner, Administrator, Water Quality Division, Department of Environmental Quality	Member

COLORADO RIVER BASIN SALINITY CONTROL FORUM

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Dan S. Budd, Interstate Stream Commissioner	Member
John Wagner, Administrator, Water Quality Division, Department of Environmental Quality	Member
John W. Shields, State Engineer's Office	Work Group Member
Bill DiRienzo, Water Quality Div., Department of Environmental Quality	Work Group Member

GLEN CANYON ADAPTIVE MANAGEM ENT PROGRAM

NAME, TITLE	POSITION
John W. Shields, State Engineer's Office	Adaptive Management Work Group Member and Technical Work Group Member

RECOVERY IMPLEMENTATION PROGRAM FOR ENDANGERED FISH SPECIES IN THE UPPER COLORADO RIVER BASIN

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Recovery Implementation Committee Member
John W. Shields, State Engineer's Office	Management Committee Member and Chairman
Kevin Gelwicks, Wyoming Game and Fish Department	Biology Committee Member

COLORADO RIVER WATER USERS ASSOCIATION

NAME, TITLE	POSITION
John A. Zebre, Citizen	Member, Board of Trustees; Exhibits Committee Member and Housing and Arrangements Committee Member
Alan W. Harris, Citizen	Member, Board of Trustees; Audit Committee Member and Nominations Committee Member
Benjamin C. Bracken, Citizen	Member, Board of Trustees; and Public Affairs Committee Member
John W. Shields, State Engineer's Office	Resolutions Committee Chairman

MISSOURI RIVER BASIN ASSOCIATION

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Director
Jodee Pring, State Engineer's Office	Technical Committee Member

MISSOURI RIVER ASSOCIATION OF STATES & TRIBES (MoRAST)

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Director
Jodee Pring, State Engineer's Office	Alternate

YELLOWSTONE RIVER COMPACT COMMISSION
(Montana, North Dakota and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Sue Lowry, Administrator Interstate Streams	Advisor

YELLOWSTONE RIVER COMPACT COMMISSION
(Technical Committee)

NAME, TITLE	POSITION
Sue Lowry, Administrator	Member
Michael Whitaker, Division II Superintendent	Member

BELLE FOURCHE RIVER COMPACT
(South Dakota and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Sue Lowry, Administrator Interstate Streams	Advisor

UPPER NIOBRARA RIVER COMPACT
(Nebraska and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Sue Lowry, Administrator Interstate Streams	Advisor
John W. Shields, State Engineer's Office	Advisor

PLATTE RIVER COOPERATIVE AGREEMENT

NAME, TITLE	POSITION
Lawrence M. Besson, Administrator, Water Development Commission	Governance Committee Member
Patrick T. Tyrrell, State Engineer	Governance Committee Alternate
Norm DeMott, Goshen Irrigation District	Governance Committee Member
Phil Stump, State Engineer's Office	Water Management Committee Member
Phil Ogle, Water Development Commission	Technical Committee Member

NORTH PLATTE DECREE COMMITTEE

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Chair, Wyoming Representative
Randy Tullis	Wyoming's Alternate Representative
Phillip Stump	Official Files Subcommittee
Randy Tullis	Crest Control Subcommittee
Lisa Lindeman, Chair	Ground Water Wells Subcommittee
Sue Lowry	By-Laws Subcommittee
Phillip Stump, Chair	Finance Subcommittee
Randy Tullis Phillip Stump	Consumptive Use Subcommittee
Phillip Stump	Replacement Water Subcommittee

COLUMBIA RIVER WATER MANAGEMENT GROUP

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member

SNAKE RIVER COMPACT
(Idaho and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
Sue Lowry, Administrator Interstate Streams	Advisor

SNAKE RIVER COMMITTEE OF NINE

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Advisory Member

OGALLALA AQUIFER INSTITUTE
(Wyoming, South Dakota, Colorado, Nebraska, Kansas, Oklahoma, Texas, New Mexico)

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Member and Treasurer

WESTERN STATES WATER COUNCIL

NAME, TITLE	POSITION
Dave Freudenthal, Governor	Governor Member
Patrick T. Tyrrell, State Engineer	Member
Peter K. Michael, Senior Asst. Attorney General, Attorney General's Office	Member
John Corra, Administrator, Department of Environmental Quality	Member
Lawrence M. Besson, Water Development Commission	Alternate
Sue Lowry, State Engineer's Office	Alternate
John Wagner, Administrator, Water Quality Division, DEQ	Alternate

ASSOCIATION OF STATE DAM SAFETY OFFICIALS

NAME, TITLE	POSITION
Vacant, Safety of Dams Engineer	State Representative

INTERSTATE COUNCIL ON WATER POLICY

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Chair