

STATE OF WYOMING

2005

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, 2004 through September 30, 2005

TABLE OF CONTENTS

REPORT OF THE STATE ENGINEER BY PATRICK T. TYRRELL.....i

ORGANIZATIONAL CHARTS

- STATE ENGINEER.....v
- STATE BOARD OF CONTROL.....vi
- STATE BOARD OF REGISTRATION.....vii
- STATE BOARD OF EXAMINING WATER WELL DRILLING viii
CONTRACTORS AND WATER WELL PUMP INSTALLATION
CONTRACTORS

MAJOR ACCOMPLISHMENTS BY SECTION OR PROGRAM

- ADMINISTRATION DIVISION..... 1
- INTERSTATE STREAMS DIVISION
 - INTERSTATE STREAMS ACTIVITIES3
 - WATER ORGANIZATION AND POLICY ISSUES.....15
 - WATER PLANNING.....16
 - FRAMEWORK WATER PLAN18
 - WATER CONSERVATION19
- SUPPORT SERVICES DIVISION
 - INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS20
 - MICROFILM AND IMAGING..... 20
 - LIBRARY 21
- SURFACE WATER AND ENGINEERING DIVISION
 - SURFACE WATER RIGHTS SECTION23
 - WEATHER MODIFICATION PERMITTING ACTIVITIES 28
 - SAFETY OF DAMS SECTION 29
- GROUND WATER DIVISION
 - GROUND WATER SECTION..... 33
 - COOPERATIVE PROGRAMS SECTION 53
 - SURFACE AND GROUND WATER DATA PROGRAM..... 53
 - SNOW SURVEY AND STREAMFLOW FORECAST PROGRAM ...56
 - SUBDIVISION WATER RIGHT PROGRAM 58
- BOARD OF CONTROL DIVISION
 - BOARD OF CONTROL SECTION..... 61
 - BIG HORN GENERAL ADJUDICATION..... 64
- LEGAL ACTIVITIES 68

TABLE OF CONTENTS

FIELD REPORTS OF WATER DIVISION SUPERINTENDENTS

- MAP OF WYOMING WATER DIVISIONS.....70
- WATER DIVISION NO. I71
- WATER DIVISION NO. II 76
- WATER DIVISION NO. III78
- WATER DIVISION NO. IV84

BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS.....86

STATE BOARD OF EXAMINING WATER WELL DRILLING CONTRACTORS AND WATER WELL PUMP INSTALLATION CONTRACTORS.....89

PERSONNEL, COMMITTEE AND BOARD MEMBERS LISTS

- STATE ENGINEER'S OFFICE91
- WATER ADMINISTRATIVE PERSONNEL
 - DIVISION I94
 - DIVISION II96
 - DIVISION III97
 - DIVISION IV98
- STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS
AND PROFESSIONAL LAND SURVEYORS99
- STATE BOARD OF EXAMINING WATER WELL DRILLING CONTRACTORS
AND WATER WELL PUMP INSTALLATION CONTRACTORS 100
- GROUND WATER ADVISORY COMMITTEES 101
- GROUND WATER CONTROL AREA ADVISORY BOARD MEMBERS..... 102
- WYOMING MEMBERS OF INTERSTATE COMPACT COMMISSIONS AND
REGIONAL AND INTERSTATE COMMITTEES
RELATING TO WATER RESOURCES 103

REPORT OF THE STATE ENGINEER

Patrick T. Tyrrell, P. E.

Water year 2005 can be contrasted against the previous four of my tenure in that the state of Wyoming saw a reprieve from the previous five years of below normal runoff conditions. Although not all areas of the state benefited from normal or above normal water availability, the overall assessment is that 2005 was a far better year than any of the previous years since 1999. In other areas, the agency saw successes in the legislative arena, continued its progress in growing our IT capabilities, saw changes in important positions due to the retirement of valued long-term employees, and continued to work hard on issues related to Coal Bed Natural Gas production. Interstate debates continue, especially related to our apportionments under the Colorado and Yellowstone River Compacts, and compliance under the Modified North Platte Decree and Settlement entered its fourth year.

The agency continues its work to improve our information technology (IT) capabilities, and Phase II of that worked commenced. We will be seeking additional money in the 2006 budget session to continue work into Phase III, which should bring much of our effort to fruition (see the report of the Deputy State Engineer).

2005 General Legislative Session

In April 2004 the State Engineer brought to interim Joint Agriculture, Public Lands and Water Resources Committee proposed legislation for repealing our water library statutes and for removing language inhibiting our ability to function electronically in the future. Primarily, the water library had seen little use, was unfunded, and was more properly managed in today's online environment through the state and the University of Wyoming's Water Resources Data System (WRDS) library systems. The electronic permitting bill, as it has come to be called, primarily is aimed at removing antiquated language that requires linen or hard-copy maps, paper permits, and physical books for recording permits. This legislation provides more flexible words that, while not precluding hard-copy submittals for those who wish, open up the process so that the State Engineer's Office can accept electronic permits, maps, and other documents in the future. The Committee agreed with our approach in both areas, and sponsored both in committee bills in the 2005 General Session. Both bills passed.

At the fall 2004 joint committee meeting, Superintendent Jade Henderson (Division IV) made a strong presentation regarding the need for increased penalties for water theft. The penalties existing in our water statutes are as antiquated as the requirements for linen maps, and rarely match the seriousness of the crime or the value of the water which can be taken. Mr. Henderson recounted how, in the cases he has had to try, the judge has commented that our penalties are too low. Following the presentation, legislator offers were received to sponsor a bill for increasing our penalty levels in the 2005 session. The bill was prepared by staff, introduced, and passed into law. This

legislation provides a significant advantage for this office, additional tools for courts that have to address water law violations, and should serve as a strong deterrent to violations in the future.

In short, the bill compiles all penalty provisions under one statute, establishes provisions for daily fines up to \$1,250 for willing non-compliance (where earlier language provided in most cases for one-time fines of \$100 or \$500) and brings small dams under overt penalty provisions where previously none existed. Also, the possession and use of legally denied water is now a violation in and of itself, where previously such action was only prima facie evidence of some other violation (such as headgate tampering). In all, the penalties are significantly strengthened, and some indication of their value may be the anecdotal observation that no violations occurred after July 1, 2005 (the bill's effective date) of such a grievous nature that this new statute needed to be invoked. The deterrent factor alone could be the reason we were not required to force the penalty issue in this, its first year.

The agency saw support from the legislature in the 2005 supplemental budget process by providing personnel and contracting resources for our efforts regarding coal bed natural gas (CBNG) development. In 2004, the agency had begun an intensified effort at inspecting reservoirs in the Powder River CBNG play, based upon reports and observations that numerous reservoirs were being used without proper permits or out of compliance with whatever permit they might have had. Consultants began inspections in the Rawhide Creek basin north of Gillette, and in January 2005 their initial report was that 153 of 223 total reservoirs inspected either had no permit issued, or had not even been filed upon. This initial information raised quite a stir in the press, and no doubt had an impact not only on the success of our penalty bill, but also resulted in a rare supplemental budget request for this agency. This request included a full-time dam inspector for the CBNG area, and continued funding for contract dam inspections as well. By the fall of 2005, the unpermitted number had fallen to just eight, and all these at least had application in process. Twelve dams were breached. A total of 43 structures out of the original 223 were determined not to need permits because they were not true reservoirs but rather road crossings, depressions, or some other structure that we would not normally have permitted anyway. These results are quite positive, but did not come easily in that at least twice the agency was within days of filing official court complaints directed at non-responding parties when their applications finally arrived.

Field Notes

Water Year 2005 saw a reprieve, if not total recovery, from the drought conditions of the past five years. Snowpack and runoff in the Bear River drainage were significantly higher than seen the four previous years, and Bear Lake recovered to within a couple of feet of elevation 5,911 where storage restrictions would cease. In the Wind/Big Horn drainage, Boysen and Yellowtail Reservoirs filled for the first time in several years. In the Tongue and Powder River drainages, snow augmented by significant early summer rains provided much-needed runoff. Flooding in the Sheridan area in June in response

to over 5 inches of rain helped fill Tongue River Reservoir for the first time in several years. The Green River basin also saw more water than in the period 2000-2004, but not quite as much as those basins along the northern tier. Only the North Platte River Basin, while receiving improved runoff amounts, did not see filling of its mainstem reservoirs and 2005 was the fourth "allocation year" in a row in that basin. The Laramie River in particular is still under drought conditions and operation of Grayrocks Reservoir continues to be threatened. Basin Electric Corporation for two years now has augmented its cooling water supply by entering temporary use agreements with local irrigators, transferring the use of several irrigation wells to help meet their industrial needs. Entering 2006, the Laramie River Basin is probably the most critical in the state in terms of needing moisture to avoid dire consequences.

Interstate Streams issues

In 2004, Montana placed what could be termed a "compact call" requesting Wyoming to release stored water in the Tongue and Powder River basins. The Yellowstone River Compact makes no provision for a "call." Because there exists dispute resolution procedures under this compact, and because Wyoming believed we had stored and used water in compliance with the compact, the storage release request was not honored. Wyoming and Montana representatives met over the summer of 2004 to discuss what could be done. Montana was invited twice to inspect Wyoming uses of water in these basins, and declined both times. While Montana alluded to court action to address their issues, Wyoming consistently put numbers on the table that showed our use of water was not excessive and that in fact more water was made available to Montana's pre-compact acres than to our own, and that Montana had more ability to manage storage in the basin than did Wyoming. The result of these 2004 intramurals was that Montana backed off its position. In 2005, significant runoff in the Tongue and Powder River Basins meant that Montana did not repeat its unsuccessful attempt to get Wyoming to respond to a "call," although in April (before the runoff proved to be so plentiful) we were advised to expect another such letter.

In our preparations for the 2006 budget session, we have included a request for \$200,000 to assist in technical work to more fully understand operations on both sides of the border on the Tongue and Powder Rivers. Montana has been invited to participate, dollar for dollar, in using half this amount (i.e. \$100,000 from each state) to develop the technical underpinnings of future compact administration if and when any might occur. Wyoming's other \$100,000 is intended for its sole use to begin to develop specific information to backstop any compact contest Montana may initiate, with the full \$200,000 available to Wyoming if Montana does not participate.

In 2004, on the Colorado River, storage in Lakes Powell and Mead continued to decline. Lake Powell was at levels not seen since its initial filling, and power generation ability at Glen Canyon Dam was threatened as early as 2006 if the drought continued. The upper basin states demanded the insertion of language in the 2005 AOP for an April (mid-year) 2005 review of releases from Powell. While the lower basin states fight any reduction in releases from Powell below the 8.23 MAF "minimum objective release,"¹ this language was added by the Secretary nonetheless.

Beginning in December 2004, significant rains in the lower basin, and prodigious snow in central and southern Utah and Colorado, and northern New Mexico, brightened the outlook for reservoir operations in 2005. The April mid-year review therefore resulted in no decision to decrease in flows from Lake Powell. However, because the basin states could not agree on specifics for operating the reservoirs at low levels, the Secretary in April also noticed the states that in June the Department of Interior would begin a scoping process to begin to develop low reservoir operating criteria as well as Lower Basin Shortage Guidelines. These issues continue to be debated by the basin states, and Wyoming representatives find themselves traveling regularly to represent our interests. The scoping process is ongoing, and the hope is the basin states can continue to cooperate and stave off what may be long-term litigation if current efforts fail.

Personnel Topics

During the period of this annual report several personnel changes are of note. First, our long-term fiscal officer Janice Rath took a medical retirement. We wish Janice the best, and her replacement, Beth Bartholomew, now manages that work. Next, long-term personnel officer Danna Williams also retired, and her replacement, Ms. Melanie Doolin, has assumed those duties. We will miss both Janice and Danna, and wish them much success in their future endeavors. With equal fervor, we wish Beth and Melanie success in their new positions. Our Support Services Administrator, Traci Lindsten, also left the agency in August for a similar position. Her replacement, Mr. Martin Zimmerman, came on board in November, 2005- We wish Traci success in her new position and welcome Martin aboard as he takes the reins of our very important support work, which includes the management of our crucial computer, networking, and records retention tasks.

The daily efforts of all our loyal employees can not go unnoticed, although I do not have room to recount all their contributions here. I am constantly in debt to them for their creativity, work ethic, and positive representation of this office.

As a final note, in March of 2005 I was reappointed by Governor Dave Freudenthal, and confirmed, for another 6-year term (until 2011). This is a humbling achievement, and I hope to continue to serve in a manner fulfilling the expectations of this great state.

Summary

Water year 2005 was, in general, better for our users and regulators than the five previous. The agency saw success in the legislative arena, with bills being passed that help our work stay current with the times. Personnel changes brought new faces to old positions, and we will miss those who retired. In all, it was a good year for the agency, and I look forward to the challenges of 2006. The State Engineer's Office still represents the finest in state government.

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 headed by Janice Rath until July 30, 2005. Ms. Rath was a long-time employee, and her extensive knowledge and experience will be missed by the agency. Ms. Beth Bartholomew was hired on August 8, 2005 as the agency's new fiscal specialist, and assisted in final preparation of the agency's 2007-08 biennium budget request. Ms. Bartholomew will be responsible for all fiscal operations regarding agency financial matters which total in excess of \$21,000,000.00 for the 2005-06 biennium.

Human Resources/Personnel Management

As with Fiscal Operations, the Human Resources section experienced the retirement of a long-term and valued employee. Ms. Danna Williams had worked for this agency for 16 years, and retired on July 30, 2005. Her dedicated service and comprehensive knowledge of the State's personnel system will be missed. Ms. Melanie Doolin was hired on July 25, 2006 to replace Ms. Williams.

Health and Safety Program

Work on the agency's Health and Safety Program continued this year with the development of an agency plan. This plan was presented to agency personnel in a series of five meetings conducted by Pat Tyrrell and Harry LaBonde. It is hoped that employees will become more safety conscious and make safety part of the culture within the agency.

IT Initiative

The IT Initiative proceeded into Phase II - Design of project in 2005. Weston Solutions was selected as the design consultant in March 2005. Their negotiated contract value was 31,359,013.00 and the contract scope of services includes the following four project components:

- Development of an e-permitting/petition system including workflow management capabilities
- Design of a new water rights database
- Development of specifications for a 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 November 2006.

In formulating the 2007-08 biennium budget request, the agency requested an additional \$3,310,288.00 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. 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

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 water allocations under our interstate compacts and court decrees. Wyoming is party to seven interstate river compacts, and three interstate court decrees, which allocate interstate waters. 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

With the completion of the Master Manual update in March, 2004, the Missouri River Basin Association (MRBA) turned its focus to the implementation of the Biological Opinion (BiOp), for the revised Master Manual. The BiOp delayed mandating flow release changes until 2006 as long as substantial increases in habitat were in place by July 1, 2004, which was reached by developing 1,200 acres of shallow habitat for pallid sturgeon. The Corps of Engineers (CoE) retained the US Institute for Environmental Conflict Resolution and CDR Associates to make the development of the Spring Rise criteria as open and collaborative process as possible. Four plenary and several technical meetings were held during the summer of 2005, but the parties held disparate, irreconcilable views in many areas, particularly the storage triggers and the flood constraints. As the stakeholder group was unable to reach consensus, the CoE and US Fish and Wildlife Service continued their consultations under the Endangered Species Act for the 2006 Annual Operating Plan (AOP). The AOP dictates a bi-model spring rise for 2006 if the total system storage on March 1 is 36.5 Million Acre Feet (MAF) or greater. Total system storage at the end of the 2005 water year was 36.2 MAF.

The MRBA is continuing with its plan to evolve into a new organization that will include the state Game and Fish Directors as Board members as well as the state Water Resources official for each of the 8 basin states. The Wyoming Game and Fish Department has chosen to not participate at this time as they are comfortable with the Wyoming State Engineer's Office being Wyoming's representative. The By-laws have been constructed to allow the Wyoming Game and Fish Department to participate in the future if they would so desire.

The MRBA had success this past year in working with the Appropriations Committees in Congress to support the CoE's budget in the President's request. President Bush had recommended \$83 million for the endangered species recovery work in the basin. Although this amount was decreased by Congress, the funds available for 2006 (\$53 million) will be a huge start to addressing the needed habitat improvements for the least tern, piping plover and pallid sturgeon.

The MRBA has been operating with interim staff for this reporting period following Richard Opper's resignation in January, 2005. Richard had been the MRBA's Executive Director since 1989. He was selected by incoming Montana Governor Schweitzer to head their Department of Environmental Quality. Richard's leadership in the Missouri River basin will be missed.

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 settlement achieves the goal of protecting Wyoming's 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. State Engineer Patrick T. Tyrrell is currently serving as Chair for the NPDC. Ms. Ann Bleed, Acting Director of Nebraska Department of Natural Resources, will take over the Chair position on 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 2005 Wyoming's compliance with the North Platte Settlement Agreement included carrying out the following tasks:

- 1.) Wyoming is finalizing the adjudication of all groundwater wells used for irrigation purposes in the area from the Whalen Diversion Dam to the Nebraska State Line known as the "Triangle". Wyoming is also adjudicating all irrigation wells hydrologically connected to surface water in the Lower Laramie Basin and in the basin above Guernsey Reservoir.
- 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, Subject to NPDC financing and final approval, the subcommittee expects to complete a consumptive use appropriated survey above Guernsey Reservoir through the mailing of irrigation questionnaires in January, 2006, and plans to install two weather stations and establish two field study sites for directly measuring evapotranspiration over the next few years.
- 3.) Wyoming continues to track and report daily accounting for the Whalen Diversion Dam to the State Line reach. A new telemetry system has been installed at the mainstem diversions below Whalen to improve data collection and accuracy.
- 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". Wyoming had to replace 24.4 acre feet of water for each of the 275 wells reported as active in 2004. In 2005, for the second year Wyoming had to measure and provide replacement water for out-of-priority diversions on tributaries within the "Triangle". These diversions 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. In 2006, Wyoming plans to add six tributary diversion locations to the existing mainstem radio telemetry system.
- 5.) For the 2004 irrigation season, Wyoming reported in a February 28, 2005 letter to the NPDC, that the intentionally irrigated acreage for the North Platte River basin above Guernsey Reservoir, exclusive of the Kendrick Project, was 162,735 acres and in the Lower Laramie River basin, exclusive of the Wheatland Irrigation District, was 15,852 acres. According to the Settlement Agreement, the intentionally irrigated acreage caps for these basin areas are 226,000 acres and 39,000 acres, respectively.
- 6.) During 2005 Wyoming began installing measuring devices to track annual accruals of the eight largest irrigation reservoirs storing water upstream of Pathfinder Reservoir. The remaining measuring devices and electronic monitoring equipment will be installed over the next few years.
- 7) Since 2005 was an allocation year for the North Platte Project contractors, Wyoming was required to collect and report the cumulative amount of surface water diversions from the mainstem of the North Platte River for irrigation purposes for each two-week

reporting period. The maximum reported diversion amount was 4,952 acre feet for the two-week period ending July 21, 2005. According to the Settlement Agreement, Wyoming is limited to cumulative diversions of 6.600 acre feet per two-week period.

Seven (7) new full-time staff positions and three (3) new part-time positions within the State Engineer's office carry out the new 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 precious water resource.

Platte River Cooperative Agreement

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

Mr. Purcell developed Wyoming's Water Depletion Plan that addresses Wyoming's responsibilities for new water depletions in the Platte River Basin occurring since July 1, 1997. 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.

The U.S. Fish and Wildlife Service still needs to release a Biological Opinion (BiOp) that assesses whether the Governance Committee's proposed Program will meet the requirements of the ESA. The anticipated schedule is the release of a final EIS in March 2006, and the final BiOp followed by the release of the Record of Decision in spring, 2006. The expected date of the official start of the Program is October 1, 2006. The Program needs to be approved by the Governors and the Legislatures of each state and by the Secretary of Department of Interior prior to commencement of the program. More information regarding the status of the Platter River Cooperative Agreement is available at the following website: www.platterriver.org

Yellowstone River Basin

The Yellowstone River Compact Commission met for its annual meeting on December 6, 2004 in Billings, MT. A Technical Committee, which consists of representatives from

the two states, the US Geological Survey, the Natural Resources Conservation Service and the National Weather Service from both states met April 25, 2005 in Sheridan and reviewed the various long-term streamflow gages and SNOTEL sites in the basin. Wyoming also presented the reservoir operations and descriptions information from the Wyoming Water Plan for the Tongue and Powder River basins. The full Commission met on April 26, 2005 in Sheridan. This was Jim Kircher's last meeting as the Federal Chair as he was leaving his position as Assistant Regional Hydrologist to take the District Chief position in Colorado. Bill Horak will be serving as the Federal Chair. Bill was previously the Chair of the Commission for several years while he was the North Dakota District Chief.

The Commission again discussed the issues 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. The drought that had gripped the Tongue River basin particularly hard eased a bit during the late spring and early summer of 2005. Tongue River Reservoir filled in May, 2005 and there was localized flooding the Tongue and Goose Creek drainages. Yellowtail Reservoir on the Bighorn River also filled. While Montana continues to raise its differing interpretation of compact administration, the increase in precipitation certainly helped the situation for the 2005 irrigation season.

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 November 18, 2004 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 overview of the work they plan to accomplish for 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.

Cheyenne River Basin

While there is no compact or decree covering the allocation of the flow of the Cheyenne River basin, some of the same coalbed methane issues arise in this basin as in the Belle Fourche river basin. These issues include, but are not limited to:

- Salinity impact to lands
- Impact of discharging perennial flows to ephemeral drainages

- Impacts to flowing springs

Niobrara River Basin

The Upper Niobrara Compact does provide 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 improved in water year 2005 (October 2004 through September 2005) in the Upper Colorado River Basin. The elevation of Lake Powell increased by 31 feet during water year 2005 and water storage in Lake Powell increased by 2.77 million acre-feet. Unregulated inflow to Lake Powell in water year 2005 was 105 percent of average.

During 2005, Lake Powell reached a low elevation on April 8, 2005, of 3,555 feet (145 feet from full pool). Reservoir storage had declined to 33 percent of live capacity. The last time Lake Powell had been this low was in May 1969. The water surface elevation increased through the spring and early summer of 2005, reaching a peak elevation of 3,608.4 feet on July 14, 2005 (91.6 feet from full pool). In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. Inflow volumes for the previous five consecutive water years prior to 2005 were significantly below average. Total unregulated inflow in water years 2000, 2001, 2002, 2003, and 2004 was 62, 59, 25, 51, and 49 percent of average, respectively, inflow in water year 2002 was the lowest ever observed since the completion of Glen Canyon Dam in 1963.

Following the inclusion of language in the 2005 Colorado River Annual Operating (AOP) Plan that provided for a mid-year review of the water delivery volume from Lake Powell¹, the Upper Division States of Colorado, New Mexico, Utah and Wyoming proposed the inclusion of similar language in the 2006 AOP. This suggestion was opposed by Arizona, California and Nevada representatives, who further asserted that the Secretary lacked the authority to make the mid-year adjustment. Letters with conflicting requests were submitted by the two basins' states. On May 2nd, Secretary of the Interior Norton

1 The 2005 AOP included the following: "Due to the severe drought and the reduction in available reservoir storage in the Colorado River Basin, pursuant to Article I (2) of the Operating Criteria, the Secretary will review the 2005 annual release amount from Lake Powell in April 2005 to determine if the runoff forecast warrants an adjustment to the release amount for water year 2005. Any revision to the AOP may occur only through the AOP consultation process as required by applicable Federal law."

announced her decision to maintain Colorado River water releases from Lake Powell at their scheduled level for the remainder of the water year (and thus make an annual release of 8,230,000 acre-feet from Lake Powell) as drought conditions in the Colorado River Basin had eased during the 2005 water year. The Secretary reaffirmed her ability to adjust releases from Lake Powell as part of annual operations.

The Governors' representatives for the Colorado River Basin States and their staff members met numerous times during the past year. The underlying focus of these meetings has continued to be on reaching agreement on shortage guidelines. The basis for needing such criteria can be understood by considering that the Secretary of the Interior (pursuant to the 1968 Colorado River Basin Project Act and the 1970 Coordinated Long Range Operating Criteria for Colorado River Reservoirs) is required to annually determine whether the Colorado River water supply is normal, surplus or shortage. The Secretary has adopted Flood Control Regulations, Interim Surplus Guides, 602(a) storage determinations and other hydrologic determinations for surplus; however, a shortage has never been declared and no shortage criteria have yet been developed. As noted in last year's report, the States' representatives formed a technical work group in July 2004 to assist with the technical analysis of coordinated reservoir operations at Lake Mead and Lake Powell (e.g., adjusting releases from Lake Powell on the basis of specific reservoir levels in Lake Powell and in Lake Mead). The technical group has met on an approximately monthly frequency since its formation.

In May 2005, the Secretary of the Interior directed the Bureau of 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. To this end, Reclamation has initiated a public process to develop and adopt water supply guidelines that can be used when water shortage conditions exist. The proposed action is the development and adoption of these strategies and guidelines. In December, 2004, Norton urged the Basin States to develop a consensus plan by April of 2005 on managing the river during drought, including reservoir levels and releases from Lake Powell. However, the states were unable to reach agreement (in part because Arizona had initiated an in-state water users process to establish acceptable tiered shortage levels in the event of a shortage declaration and in part on account of the dispute over the AOP language). In her May 2nd letter to each of the Basin states' Governors resolving the AOP language dispute, Norton announced Interior was moving ahead with their process to develop guidelines for Lower Basin shortages and conjunctive management of Lake Powell and Lake Mead. This letter established that the Interior process would be conducted within a timeframe allowing a decision to be made by December 2007.

The seven Basin states were able to come to agreement on a letter commenting to Reclamation concerning the scoping of Reclamation's process. In their letter of August 25th, the Basin states informed the Secretary of their ongoing work to develop a consensus recommendation for shortage guidelines and coordinated reservoir management during low-reservoir conditions. The States' letter indicated the discussions include the following:

- The effective period of and means of making the agreement binding
- Coordinated reservoir management
- Shortage strategies
- System efficiency and reservoir management strategies
- Augmentation of supply, including proposals to implement precipitation management, weather modification, desalination water supply projects, non-tributary groundwater, consumptive uses retirement, temporary additional Lake Mead consumption, use of wastewater which flows into the Colorado River System and ownership of enhanced supply
- Finally, the states indicated the discussions include provisions that would involve all of the States agreeing to not raise Law of the River issues or to seek enforcement or compliance with the Colorado River Compact Article's III (a), (b), (d), or (e) during the period of the agreement. It is anticipated that compliance with all of the Compact's provisions would resume upon the expiration of the agreement.

During this past year, 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 to respond if Wyoming is ever required to limit water use (curtail use) as required by the provisions of the Colorado River Compacts (and specifically by Article IV of the Upper Colorado River Basin Compact) and to provide recommendations as to how the necessary information might be generated. The Interstate Streams Engineer worked closely with the consultant retained by the State Engineer on the development of the consultant's report. This was followed by public meetings held in May 2005 in Pinedale, Green River and Baggs concerning the genesis of the project and the report's recommendations. In initiating this project, the State Engineer made clear there has never been and there may never be a need to limit water use to meet obligations under the Colorado River Basin Compacts - however, the severity of the prolonged drought experienced during the 2000 through 2004 period and the corresponding extreme decline in Lake Powell water storage had caused water administrators in the Upper Division States to evaluate the appropriate response to a valid call for curtailment of use under the Upper Colorado River Basin Compact. The report recommended the development of an annual comprehensive water use monitoring program addressing all categories of water use so that the State Engineer would have the necessary data to determine prior year consumptive use. At the end of this reporting period, the State Engineer had included in his budget submittal to the Governor a request for one additional staff position who would undertake the development of an annual consumptive use monitoring program in accordance with the report's recommendations.

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 the ongoing seven Basin States' meetings dialogue.

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 the ongoing and continuing implementation at the Big Sandy Unit of the Colorado River Salinity Control Project, physically situated within the boundaries of the Eden Valley Irrigation and Drainage District. This reporting year was the seventh 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, which amended the Colorado River Basin Salinity Control Act to allow up-front cost-sharing in addition to reimbursement 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 and has greatly accelerated the rate of salinity control efforts being implemented across the Upper Colorado River Basin.

During this year 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 was considered and approved by the seven state Colorado River Basin Salinity Control Forum. The District submitted an application to the Water Development Commission for assistance with this water management/salinity control project and during the 2005 session the Wyoming Legislature appropriated a bit more than \$1.5 million for this project; the remaining 50% of the funding will come from the "parallel" salinity control program. The State Engineer's Office will act as the financial agent transferring the "parallel" program funds to the District as contractor bills are submitted. The SEO will be working closely with the Water Development Commission on implementing this project.

Upper Colorado River Endangered Fish Recovery Program

Legislation to increase the appropriations authorization ceiling to provide sufficient funding to complete the capital construction projects for the endangered fish recovery implementation programs for the Upper Colorado River and San Juan River basins 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. These projects include fish passages, fish screens, acquisition of riverine habitat, and construction of hatcheries. H.R. 3153 and S. 1578, titled "The Upper Colorado and San Juan Basin Endangered Fish Recovery Implementation Programs Reauthorization Act of 2005" was the product of much effort expended by the non-federal participants to the Upper Colorado River Endangered Fish Recovery Program. This measure would amend existing legislation (P.L. 106-392 as amended by P.L. 107-395) authorizing 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 extend the time allowed for completion of capital construction projects for both programs from FY 2008 through FY 2010. The time extension is being sought in order to avoid "bumping" upward the annual appropriations requests in Reclamation's budget made of the Congress, which on average have been about \$5.0 million per year for capital expenditures for these two programs.

The bill garnered 13 of the possible 14 members of the Colorado, Utah, and New Mexico House of Representative delegations as sponsors, showing strong bipartisan support for the amendments necessary to complete the capital construction projects associated with these important and highly successful ongoing programs. The Senate bill had 5 of 8 of the affected States' Senators on it as sponsors and the support of the Committee Chairman when it was reported favorably out of the Senate Energy and Natural Resources Committee on November 16, 2005.

Under the increased authorization, the federal government would expend \$61,0 million and the non-federal parties would provide \$65.0 million in cost sharing. At the time of the drafting of this report, both bills had been heard in the House and Senate subcommittees, marked directly out of the full committees and were on the unanimous consent calendars of the Congress, awaiting enactment. The support and leadership of Governor Freudenthal in submitting letters and testimony supporting this needed legislation, and especially of Representative Cubin, Vice-Chair of the House Resources Committee, in being the lead sponsor of the House version of the bill, is most gratefully acknowledged and appreciated.

During this reporting period, considerable time was spent in obtaining the requisite federal funding to allow the U.S. Fish and Wildlife Service to continue to participate as a funding partner in the Recovery Program during fiscal year 2006. This effort was necessitated when the President's Budget released February 2005 was, again, lacking the anticipated \$691,000 in "recovery" funding for the Fish and Wildlife Service annual program funding participation. The Office of Management and Budget had, again, "zeroed out" this funding when the Department of Interior's budget was transmitted to the Executive Office of the President. Without this funding, the ability of the Fish and Wildlife Service to fund the Program Director and his staff and keep the Recovery Program's administrative functions ongoing would have been problematic for fiscal year 2006. Were the Program's nonfederal partners unable to convince the Congress to "restore" into the Interior and Related Agencies Appropriations Act these needed funds, USFWS personnel involved with the Program might have been separated from service and the viability of the Recovery Program being able to continue in the 2006 fiscal year could have been compromised.

As was done and reported on in last year's report, the non-federal Recovery Program participants again worked with the involved States' Congressional Delegations and Congressional Committee staff during their February and March briefing and funding support trips in Washington, D.C. to get the funding restored. The House and Senate Appropriations Committees did restore the funding as requested in circulated joint Congressional Delegation letters and the enacted Interior and Related Agencies

Appropriations Act included the requisite funding. In addition, efforts were made to fix the problem by getting the Administration to put this funding in the FWS "base" "recovery" funds - in the President's recommended fiscal year 2007 budget. These efforts included additional joint delegation letters to the Secretary of the Interior and a personal meeting with the Assistant Secretary of the Interior for Policy, Management and Budget. We will have to see if we were successful come February 2006.

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.

Other Colorado River basin issues

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.

Bear River Basin

The last few years of drought resulted in Bear Lake beginning this water year at a level as low as it was at the end of the 1930's drought. Bear Lake reached a low of 5903.09' on October 27, 2004. Spring and summer rains greatly improved the water supply in the Bear River basin and Bear Lake reached a high of 5909.69' on July 10, 2005 and inflows in the Rainbow Canal were as high as 1,800 cfs. As Bear Lake remained below 5911', storage in Woodruff Narrows Reservoir was restricted. High inflows surpassed the reservoir's ability to pass an equal amount of water, but the unauthorized storage was later released and was tracked to the Rainbow Canal. Bear Lake ended the water year at 5907.78'. The Bear River Commission meetings were held November 16, 2004 (Boise, Idaho) and April 19, 2005.

The Technical Advisory Committee to the Commission met in June, 2005 to review PacifiCorp's flood control and evacuation criteria at Bear Lake. Some residents in the Bear Lake area were requesting the Corps of Engineers complete a flood control study of the entire basin upstream of Bear Lake. The U.S. Senate had supported such a study in the Corps' budget request, but the House version did not include the Bear River study. The automation and telemetry of measuring devices for diversions in the Central Division continued- The Bear River Commission applied for and was successful in obtaining an \$800,000 water quality grant through the EPA's watershed program. The Commission is subcontracting with Utah State University for water quality model development, the outreach website and the pollution credits trading component.

The Town of Bear River requested an allocation of 1958 Compact storage to provide raw water 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 on a joint powers board before additional funding for the regional system is applied for with the Water Development Commission.

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. Jackson Lake storage was at 5% of capacity to start this water year. The Snake River valley in Idaho received above average precipitation in the late spring and early summer which greatly reduced the storage demand on Jackson Lake. Jackson Lake ended the irrigation season with 200,000 AF more storage than the previous year. The 2005 Spring Agency meeting was held May 19 to discuss planned summer operations. Representatives from Grand Teton National Park have been attending the agency meetings for the past couple of years, expanding the issues that are discussed. The Bureau committed to a winter release of 325 cfs for 2005-06 at the Fall Agency meeting on September 15, 2005. A representative from the Wild and Scenic Campaign came to this meeting to describe their plans for gaining support for obtaining Wild and Scenic designation for portions of the Snake River in Wyoming.

The dam safety repairs at Grassy Lake Reservoir Dam continued this year and there will be one more construction season needed to complete the project.

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 during the September through May "school year" period 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. The Forum continues to provide 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 Office include, but are not limited to, 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, 51 notices were received from the Governor's Planning Office and 2 were received from the Army Corps of Engineers. The Water Planning Coordinator position is also responsible for attending the State and Federal Coordinating Committee {SFCC} meetings held the third Tuesday of every month. These meetings have been opportunities for both State and Federal representatives to talk about issues pertinent to their agency.

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 is shifting its focus to interstate activities and has received a grant from the USGS and EPA to review various interstate river basin organization types and to compare and contrast the beneficial attributes of different ways of organizing. Michael Donahue with the Great Lakes Commission and Jeff Fassett, Fassett Consulting and former Wyoming State Engineer will complete the study. This was a rebuilding year for the ICWP. Peter Evans was retained in May, 2005 to conduct an analysis of the strengths and weaknesses of the organization. The Carmen Group contract was allowed to expire in March, 2005. Peter Evans is the current Executive Director for ICWP and the group is rebuilding its membership base.

The ICWP has been spearheading 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). A letter with 20 different organizations was sent to Congress in August requesting a \$10 million dollar increase to the USGS's budget for these programs each year for the next 10 years. While federal budgets remain very tight, the effort has raised the awareness for the problem. Following the 20 organization letter, Sen. Dominici and several members of the Energy and Natural Resources Committee sent a similar letter, but they requested twice the amount of increases.

Sue Lowry is ICWP's representative to the Advisory Committee on Water Information (ACVVI) 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 is reviewing the USGS's Cooperative Water Program and will be completing a list of recommendations for the program in December, 2005

Western States Water Council (WSWC): In addition to its role in coordinating information exchange among the states, the WSWC focused upon improving the communications between federal water management agencies and the states. The WSWC sponsored a Water Conservation Workshop at its meeting in Boise in April, 2005. Similarly, a workshop in water data needs and gaps was held in Seattle in July, 2005.

Under the auspices of the WSWC, the states which share the Ogallala aquifer have formed the Ogallala Task Force. This group made up of the 8 states that share the Ogallala (High Plains aquifer) has continued to meet to discuss various pieces of legislation that have been introduced to both study map the aquifer and to provide funds for the acquisition of water rights in the most heavily drawn-down areas of the aquifer.

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 Water 2025 Initiative, served on the NRCS's State Technical Committee, as well as the State Total Maximum Daily Load (TMDL) Work Group. The ISS Division also helped draft legislative changes to Title 41 to allow for electronic permitting to occur, which passed the 2005 Wyoming Legislature.

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 have or will be placed on the Water Planning website (<http://A/vaterpian.state.wv.us/V>) 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. All the individual basin plans are completed with the exception of the Platte, which will be completed by March of 2006. Each of the plans will be updated approximately every five years in perpetuity. 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 summarizes what has occurred or is occurring in the water planning process in each basin:

Bear River Basin Plan

In September of 2001, the Bear River Basin Plan was completed. The executive summary, final report, technical memoranda, GIS products, and hydrologic models are available on the water planning website. The lead consultant for this basin was Forsgren and Associates. The Bear River BAG is operating in the iBAG role, meeting every three months.

Green River Basin Plan

The Green River Plan was finished in February 2001. The final report and executive summary are online, as well as the technical memoranda, GIS products, and the

spreadsheet models. The lead consultant for this basin plan was States West Water Resources. The Green River BAG is also operating in the iBAG role.

Northeast and Powder/Tongue River Basin Plans

River basin plans for the Powder/Tongue and the Northeast Basins (Little Missouri, Belle Fourche, Cheyenne, and Niobrara) were completed in February 2002. The final report, executive summary, technical memoranda, GIS products and spreadsheet models are all available online. HKM Engineering in Sheridan, WY and Billings, MT were the principal consultants for this planning effort. The Powder/Tongue and Northeast BAGs are now operating as iBAGs.

Wind/Bighorn River Basin Plan

The Wind/Bighorn River Basin plan was completed in October of 2003. The final report, executive summary, technical memoranda, GIS products and spreadsheet models are all available online. The Wind/Bighorn BAG is now operating as an iBAG and has been meeting every three months. The lead consultant for this basin plan was BRS Engineering out of Riverton.

Snake/Salt River Basin Plan

The Snake/Salt Basin Plan was finished in June of 2003. The final report, executive summary, technical memoranda, GIS products and spreadsheet models are available online. The Snake/Salt BAG is operating as an iBAG. The lead consultant for this basin plan was Sunrise Engineering out of Afton.

Platte River Basin Plan

The Platte River Basin Plan was commenced in June of 2003. TriHydro Engineering out of Laramie was chosen to complete this basin plan. The BAG met during this last water year every other month with the first meeting being held September 4, 2003. For this plan, a spreadsheet model was not developed. Instead, an educational tool was created in the form of a website. The website will be called the Platte Water Atlas and will give users a broad summary concerning issues in the basin. On June 14, 2004, the BAG was presented with the final conclusions of the plan. TriHydro plans to have the final copies of the technical memoranda, the report and the Water Atlas completed by March of 2006. The Platte BAG is now operating as an iBAG.

Framework Water Plan

After the completion of the Platte River Basin Plan, the next task in the statewide water planning process will be the preparation of the State Framework Water Plan. This document 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 ground water, 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.

The Wyoming Water Development Commission (WWDC) was appropriated \$500,000 to complete the State Framework Water Plan. On September 29, 2005, proposals for the Framework Water Plan were received by the Water Development Commission. Three firms submitted proposals for this project: WWC Engineering out of Laramie, WY, Sunrise Engineering out of Afton, WY, and Trihydro Corporation, also out of Laramie, WY. The consultant and their team will be hired to compile all of the information and provide the final document and related products.

Water Conservation

Sue Lowry continues to serve as the Western States Water Councils representative to the Bridging the Headgate 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 was a field services staff member of the Bureau in Grand Junction, Colorado and was recently promoted to the Denver Office of the Bureau to coordinate the Field Services Program. Providing support to the Bridging the Headgate partnership was to be one of her duties. Although the upper management of the Bureau appears to still be supportive of the BTH goals, there seems to be a disconnect with mid-management in the Denver office who are Kathy's direct supervisors. The BTH partners will be working over the next few months to try and solidify the Bureau's support of the partnership.

SUPPORT SERVICES DIVISION

By

Support Services Staff

General

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

- Information Technology and Telecommunications
 - Web - Website, web Development, Web Content
 - Network-Telecommunications, Routers, switches, Infrastructure
 - Help Desk & Support - All user issues and problems, all desktop equipment
 - Database - SQL & Microsoft Access programming, reports and queries
 - GIS - ArcGIS, ArcIMS and ArcSDE application support and development
- Microfilm & Imaging
 - Maintaining film and appropriate archive procedures
 - Upgrade project for older film
 - 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
- Library & Records Management
 - Maintain the SEO Library
 - 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 I of the project is complete with Phase II underway and Support Services has an instrumental role in preparing and supporting this initiative. ST has made several infrastructure modification and upgrades over the past year including implementation of an IP SAN (Storage Area Network) for centralized file storage, an FTP server for large file transfers, WAN connections to division offices, and upgraded portable HVAC system and increased Uninterruptible Power System to provide a reliable network infrastructure.

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.

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 also rolled out a mapping toolbar, with the help of the University of Wyoming, so that adding data layers and finding information statewide would be easier. This past year, we made strides on getting ArcIMS running so that we can 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. Additionally, the GIS department worked with Weston to provide data and information relevant to help them understand and complete the Rock Creek Pilot area project in Phase II of the IT Initiative. We are also still working in a cooperative with the University of Wyoming in providing our data through their map server to serve to the public. 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 administering water rights. They continue to monitor and upgrade poor film, correct film that is misfiled or filmed with the wrong permit number, and they are preparing jackets for conversion to electronic format. Imaging or scanning of documents continues and more than 145,000 documents have been scanned to date.

Library

It is our goal to eventually get the publications in the SEO Library scanned and into electronic format to be able to offer these on the website. Records management is and will be incorporated into an automated system with the ability to tie in imaging, technician scans, and overall storage management into one system.

Summary

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

SURFACE WATER AND ENGINEERING

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, 2004 through September 30, 2005, which is referred to as Water Year (WY) 2005.

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 2004-2005 winter continued the drought with a below normal snow pack over the State with the exception of the Upper Bear River drainage. The reservoirs on the North Platte River were almost empty at the end of the 2005 irrigation season. Due to below normal runoff, the Drought Task Force has continued to meet and deal with the situation. 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 - 1650; b) petitions - 23; c) Temporary Water Agreements - 140; d) water rights information searches - 120. 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 1650 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 1999 and continuing through WY 2005. The end-of-period backlog is 1768 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
99	522	460	1341	11	8	59
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

*Represents a 15-month period: July 1, 2003 to September 30, 2004.

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. Five instream flow applications were received during the period and no hearings were held.

COMPARISONS OF TYPES OF APPLICATIONS RECEIVED				
Category	FY 2002	FY 2003*	WY2004	WY2005
Ditches/Pipe-lines	112	115	146	133
Enlargements	30	30	17	19
Reservoirs	268	305	235	366
Stock Reservoirs	706	672	970	975
Temporary Use	86	147	68	152
Instream Flow	3	235	136**	5
Totals	1205	1205	1610	1650

* Represents a 15-month period: July 1, 2003 to September 30, 2004.

**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 108 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 this reporting period, a total of 140 Water Agreements were received and approved. A comparison with previous years follows:

<u>FY/WY</u>	<u>Water Agreements</u>
2000	105
2001	130
2002	179
2003	207* (166)
2004	129
2005	140

* 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 2005, a total of 120 requests were answered requiring records searches. The following table shows the history in the numbers of requests received.

<u>FY/WY</u>	<u>SEARCH REQUESTS</u>
1998	530
1999	568
2000	647
2001	778
2002	666
2003	416* (333)
2004	86
2005	120

* Represents a 15-month period: July 1, 2003 to September 30, 2004.
(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

Two permits were issued for weather modification purposes during this reporting period. Permit Number 86 was issued to Eden Valley Irrigation and Drainage District in Parson, Wyoming, with the objective of their continuing 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-third year of cloud seeding activities in cooperation with the University of Wyoming, Department of Atmospheric Sciences.

Permit No. 87 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.

Other Activities

Due to the drought, many inquiries regarding the weather modifications process are

occurring. The Wyoming Water Development Commission funded project is now going through an environmental impact review to study the effects of weather modification in the Sierra Madres, the Snow Range, and the Wind River Range. Partial implementation of the project is expected to occur during the 2005-2006 winter season.

SAFETY OF DAMS SECTION

By

Safety of Dams Staff

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 si2e 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

During the past year, 154 new jurisdictional size permits and repair projects were received and 96 projects were carried over from previous years. Eight applications were rejected. A breakout describing the year's activities including construction progress follows:

Dam Safety Review Status	New Projects	Carry Over Projects
Previously approved and under construction	N/A	33
Reviewed, approved and under construction	71	9
Under Review	9	22
Dam safety review complete and awaiting surface water right permitting	35	6
Awaiting review	39	26
	154	96

The rehabilitation work or construction of twenty-four reservoirs previously approved has not started. Permits for fifty-three other dams were issued, but construction has not yet started. There were no dam removals this year. Two permits were cancelled.

Several projects are in the planning, permitting and design stages. Studies are underway to determine the feasibility of design and new construction, rehabilitation, and/or enlargement of other facilities in the state. We have been actively involved with many of these projects through meetings with the owners, sponsors, and engineers and by review and comments on reports outlining the proposed work.

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, 1,410 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). To date, 253 dams were inspected in Water Year 2005-05 and 289 are due for inspection in water year 2005-6. The number of dams due for inspection in any given year varies between 253 and 299.

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.

Existing BLM reservoirs in Division III have been permitted under the Division-wide adjudication. Because of time constraints, the only information required to permit these facilities was structure location and reservoir capacity. Eighteen (18 of these facilities have been added to the SOD inventory as they are subject to jurisdiction based on structure height and reservoir capacity, which has been verified. The heights of thirty-six (36) structures have yet to be verified. Once the height of each structure has been verified, those which do meet SOD criteria will be fully inspected and added to the SOD inventory.

The final problem area concerns the lack of an adequate support staff for the Safety of Dams Program A significant amount of both of the Safety of Dams Engineer's time is spent performing technician or clerical level duties for the section. The addition of an engineering technician position to the Safety of Dams staff would significantly improve the efficiency and effectiveness of the professional staff and the Program. Such a person would conduct office work including: archiving, and compliance tracking, which Surface Water personnel are no longer performing, and data entry (including digital

photos from our grant project discussed below).

Other Activities

Work is continuing on the National Inventory of Dams (NID) Project. We have been compiling information for each of the 1,410 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. We have completed the second year of a three-year work plan to improve the dam safety program. The project to acquire digital photos of all jurisdictional reservoirs statewide, continued this summer. Approximately 65% of jurisdictional dams have now been photographed.

Some of these FEMA grant funds were also used for training. One dam safety engineer attended the 2005 Association of State Dam Safety Officials annual conference and another attended the 2005 Western Regional Conference. One field person attended NDSP Technical Workshop #12 - "Potential Failure Mode Analysis and Monitoring."

In our grant application we have funding for an inspector to monitor, verify and enforce construction requirements.

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 two years ago, but have not been notified as to the decision at this time.

GROUND WATER DIVISION

The Ground Water Division's (GW) report comprises two sections: 1) Ground Water, and 2) Cooperative Programs, The Ground Water section provides an update on the day to day activities of the Ground Water Division; the Cooperative Programs section reports on three programs, 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, etc.
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 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

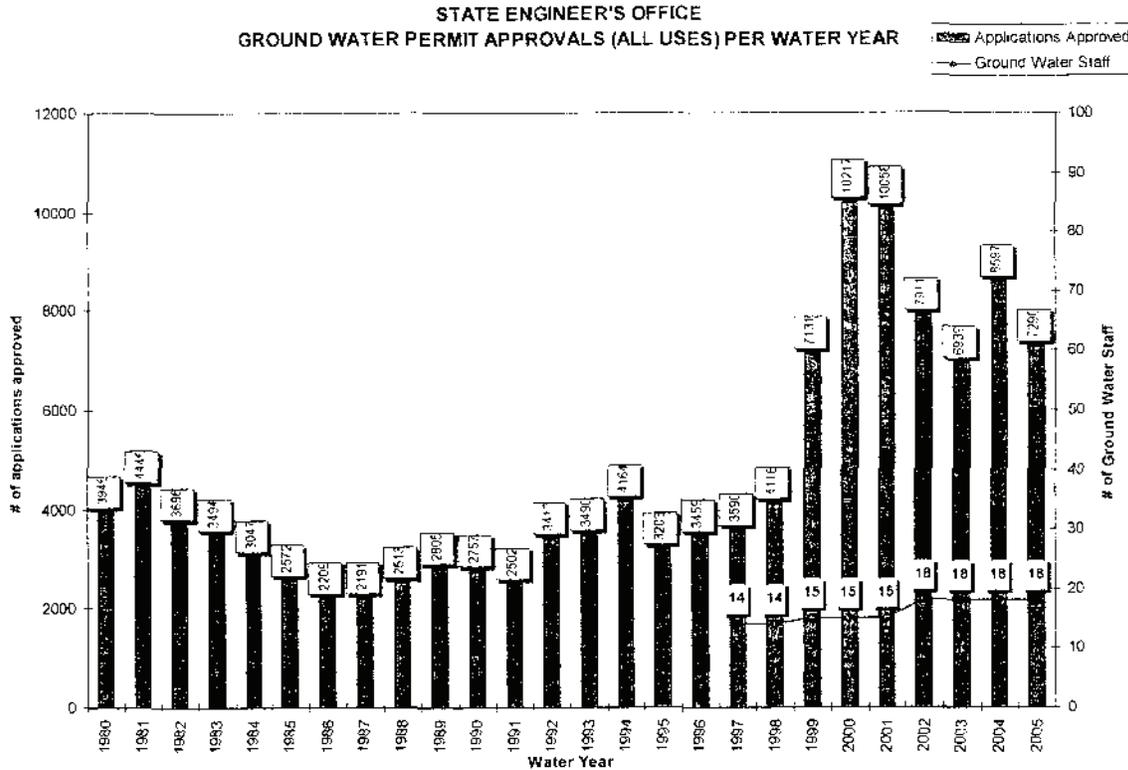
Application Processing and Recording

During Water Year (WY)-05, GW received 7,999 applications for Permit(s) to Appropriate Ground Water. Although this is a decrease of 427 applications from WY-04, GW is still receiving and processing more applications than it has since the mid-1980's (Figure 1). During WY-05, 7,291 applications were approved to permit status (1,306 less than WY-04). and 57 applications were rejected (24 more than WY-04), Additionally, 128 requests for relocations of existing wells were received and processed (36 less than WY-04).

Permit Cancellations

During WY-05, 2,296 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 time limits, or the permittee requested cancellation of the permit (1,249 more than WY-04). The attendant water rights to 365 abandoned wells were cancelled (175 more than WY-04). Note: the number of abandoned/cancelled permits is counted separately from permits that were cancelled because the required notices were not filed; these wells were in use and were subsequently abandoned, generally for physical failure.

Seven thousand, nine-hundred forty-one (7,941) certified expiration letters were prepared and mailed, notifying the 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 submitted to the SEO (550 more than WY-04).



Permit Maintenance

The ownership of 2,739 permits to appropriate ground water was assigned to different owners during WY-05 (1,628 more than WY-04). Requests for

assignments have increased considerably since GW began permitting coal bed natural gas (CBNG) wells. Requests from CBNG producers range from a few permits to thousands of permits, creating a considerable back log of assignments.

Requests for 1,733 extensions of time to complete construction or put ground water to beneficial use were received, processed and approved. Twelve (12) requests for additional points of use were received, processed and approved (9 more than WY-04). Four thousand six hundred seventy-one (4,671) permits were updated with statements of completion or beneficial use forms. GW received and processed 320 miscellaneous updates.

Water Rights Search Requests

One hundred-twelve (112) "major" ground water rights searches were conducted for realtors, water resource consultants and other interested parties during WY-05. Public access to the SEO's water rights database through Internet access has greatly decreased the search requests GW receives. GW received approximately 5,500 "smaller" (i.e., phone and counter requests) water rights search requests.

Two-year Review Letters

During WY-05, no "Two-year Review Letters" were sent to permit holders. These letters are the result 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 completed.

Adjudications

During WY-05, 74 North Platte water rights and 4 regular (i.e., non-North Platte related) water rights (78 total) were inspected by GW staff and adjudicated by the Board of Control; 36 North Platte and no regular water rights at the May 2005 meeting; 38 North Platte and 4 regular water rights at the November 2005 meeting. Additionally, 27 North Platte proofs and 49 regular (i.e., non-North Platte related) proofs were carried over at the May 2005 meeting; and 22 North Platte proofs and 57 regular (i.e., non-North Platte related) proofs were carried over at the November 2005 meeting.

GW received 167 Maps to Accompany Proof of Appropriation and Beneficial Use of Ground Water in WY-05 (some maps depict more than one well, or enlargements of permits). The maps represent a total of 232 water rights to be inspected by GW staff.

Problem Areas

Adjudication inspections not related to the Final Settlement Stipulation and Modified North Platte Decree have been largely ignored while GW staff attend to the more urgent adjudication inspections associated with the Final Settlement Stipulation and Modified North Platte Decree. Approximately 600-700 water rights across the state need to be inspected so the water rights can then be adjudicated. GW staff is attempting to conduct inspections that are in the vicinity of "North Platte" inspections or other projects. The remaining inspections however, will be conducted as staff resources allow.

Control Areas

Laramie County Control Area

No candidates participated in the District 3 Advisory Board elections conducted in July 2004. Mark Child volunteered for the position and was appointed to the Board in December 2004.

- Four Advisory Board meetings were held in WY-05:
- January 27, 2005
- April 18, 2005
- June 3, 2005
- September 8, 2005

The State Engineer received a request for regulation from an appropriator in the Carpenter area in WY-04. The appropriator felt a nearby well was negatively impacting his ability to exercise his water right. As both wells are located within the Laramie County Control Area boundaries, certain measures must be undertaken before any ground water right regulation can occur within the control area. The appropriator submitted two additional letters to the SEO on May 20, 2005. The first letter reiterated his original request for regulation of the Crow Creek Watershed. The State Engineer recommended that the Advisory Board be consulted prior to any action taken by the State Engineer to determine if regulation should be carried out immediately. During the June 3, 2005 meeting the topic of regulation was discussed in length; however, the advisory board tabled the topic until their next meeting. The second letter was a request to revisit the conditions and limitations placed on Permit No. U.W. 124102, the Martin No. 1 Well. The conditions and limitations addressed adjudicated amounts of seven irrigation wells belonging to the owner of the Martin No. 1 well. The complainant believed pumping of the Martin No. 1 well affected his ability to produce water from his irrigation well, the Glassburn No. 1 well. The Advisory Board revisited the conditions and limitations attached to Permit No. U.W. 124102 on June 3, 2005 and decided that no further conditions and limitations should be imposed on the Martin No. 1 Well, and that the adjudicated amounts of the other seven wells were not being exceeded.

During the September 8, 2005 Advisory Board meeting, regulation of water wells in the Laramie County Control Area was discussed again. Some Advisory Board

members were amenable to regulation other than priority regulation; other members were opposed to the any regulation. The Advisory Board requested additional information prior to making a decision of this magnitude - regulation should not be considered an option unless the potential impacts of each regulation scenario were known. The Advisory Board recommended the State Engineer "do nothing' as the current system seems to be 'self-regulating".

Fourteen [14] applications were received and advertised in the Laramie County Control Area. Nine (9) applications were received and approved during WY-05:

- Permit No. U.W. 164910, Enl. J.J. Exploratory #1 Well, Don Berry;
- Permit No. U.W. 165191, Albin 04-01 Noelle, Town of Albin and Wyoming Water Development Commission;
- Permit No. U.W. 165192, Albin 04-02 Mary, Town of Albin and Wyoming Water Development Commission;
- Permit No. U.W. 168100, Burnett Dairy No. 1 Well, Jerry L. and Margaret E. Burnett;
- Permit No. U.W. 168101, Burnett Dairy No. 2 Well (NE), Jerry L. and Margaret E. Burnett;
- Permit No. U.W. 168102, Burnett Dairy No. 3 Well (SE), Jerry L. and Margaret E. Burnett;
- Permit No. U.W. 168103, Burnett Dairy No. 4 Well (SW), Jerry L. and Margaret E. Burnett;
- Permit No. U.W. 168441, Loyd #2, Loyd Farms; and
- Permit No. U.W. 168442, Anderson Irr #1, Anderson Livestock.

Several of the applications were protested, however, the protests were either resolved because the protestants withdrew their protests or the protest was annulled due to a lack of response to the SEO.

The following applications were received and advertised during WY-05. These applications remain in a pending status for the reason noted (irrigation use unless otherwise noted):

- T.F. No. U.W. 37-1-294, 2nd Enl. P.T.I. Site No. 2, Well No. 2, Ronald W. Lerwick (applicant has not provided clarifying information);
- T.F. No. U.W. 37-2-294, 2nd Enl. P.T.I. Site No. 2, Well No. 1, Ronald W. Lerwick (applicant has not provided clarifying information);
- T.F. No. U.W. 37-5-479, Radke 15 Additional. Konig Farms {Advisory Board recommended the application be denied};
- T.F. No. U.W. 37-6-479, Werner No. 8 Additional, Konig Investments, LLC (Advisory Board recommended the application be denied); and
- T.F. No. U.W. 38-1-103, Enl. Ragland No. 1, Loyd Farms (need recommendation from Advisory Board).

The following application was received and advertised during WY-04 and granted during WY-05 (irrigation use unless otherwise noted):

- Permit No. U.W. 165190: Enl. Lundberg No. 1; Roger Leonard.

The following Board of Control Petitions were granted:

- BOC Petition Docket I-U-2005-1-1, Don Bern,': Petition for change in location of the J.J. Exploratory Well. This petition was granted by the Board of Control at the February 2005 meeting.
- BOC Petition Docket I-U-2005-2-6, Gross-Wilkinson Ranch, Co.: Petition for change in location of the Kaser No. 2 Well and its enlargements. This petition was granted conditionally by the Board of Control at the May 2005 meeting and Continued to Grant Conditionally at the August 2005 meeting. The condition of granting is the submittal of a certificate of surveyor.

Platte County Control Area

Two Platte County Control Area Advisory Board meetings were held during WY-05:

- March 2, 2005
- June 24, 2005

Seven (7) applications were received and advertised in the Platte County Control Area in WY-05. The low number of applications was attributed to the drought lessening in the vicinity of the Wheatland Irrigation District, thus decreasing the need for new irrigation wells.

Six (6) permits were received and approved during WY-05 [irrigation use unless otherwise noted]:

- Permit No. U.W. 165602, Jack #1, John Willard Baker Trust and Willard V. Baker Trust;
- Permit No. U.W. 165601, 2nd Enl. Ed Preuit#2, Thomas M. Preuit;
- Permit No. U.W. 168607, Lazy J 2, Larry W. and Joan D. McKee;
- Permit No. U.W. 168606, Hall 1, Joseph Hall;
- Permit No. U.W. 169252, Fairview #5, Lee and Janet Shoop; and
- Permit No. U.W. 169878, Muriel #1, Jim Kumelos (Miscellaneous Use).

The following application was received and advertised during WY-05, and remains in pending status for the reason noted [irrigation use unless otherwise noted]:

- T.F. No. U.W. 38-4-33, Forell-Baumgardner No. 2, Basin Electric Power Company (Industrial, Miscellaneous Use) (need recommendation from Advisory Board).

Four (4) permits were received in WY-04 and approved during WY-05 [irrigation use unless otherwise noted]:

- Permit No. U.W. 166365, Baker #1, John W. Baker;
- Permit No. U.W. 166857, Forell-Baumgardner No. 1, Basin Electric Power Company (Industrial/Miscellaneous Use);
- Permit No. U.W. 165544, Dwyer Jet RA #5, Wyoming Department of Transportation (Miscellaneous Use); and
- Permit No. U.W. 165692, Enl. Edward #2, Mary Ann Wilhelm.

Eight (8) applications were received during WY-04 and rejected in WY-05 [irrigation use unless otherwise noted]:

- T.F. Nos. U.W. 36-7-572/4-573, Basin Electric Power Company (Industrial Use).

The following applications were received and advertised prior to WY-05 and remain in a pending status for the reasons noted [irrigation use unless otherwise noted]:

- T.F. No. U.W. 36-8-315, Platte County School District (Miscellaneous Use) (application was protested; hearing was scheduled for March 2, 2005; received notice from both parties stating they wished to postpone the hearing as they were in negotiations to resolve the conflict);
- T.F- Nos. U.W. 36-6/7-473, Robert Shepard, (application was protested; hearing was conducted February 17, 2005; advisory board recommended approval at the June 24, 2005 meeting; Order of the State Engineer should be issued and mailed to the applicant and protestants during WY-06 stating the State Engineer's decision); and
- T.F. No. U.W. 36-8-440, Marty Shepard (Advisory Board recommended denial of the application).

The application, T.F. No. U.W. 34-5-105, 2nd Enl. Graves #1, Robert Sinnard, was received during WY-02. A protest was filed following advertisement and went unresolved for a number of years. To resolve the protest, the applicant requested that the agency reject the enlargement application. The application was rejected during WY-05.

The following Board of Control Petition was granted in WY-05:

- BOC Petition Docket I-U-2005-2-5, David T. and Alyana Kidd (Petition for change in location of the Spur Farm No. 2 Well. This petition was granted conditionally by the Board of Control at the May 2005 meeting. Conditions were met on July 26, 2005).

The following Board of Control Petitions were carried over at the August 2005 meeting to await recommendations from the Advisory Board in WY-06:

- 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); and
- 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. 1Well).

Prairie Center Control Area

One (1) Prairie Center Control Area Advisory Board meeting was held in WY-05 on June 14, 2005. Two applications were received in WY-03 and were subsequently protested by a number of individuals. An Order of the State Engineer was issued in WY-05, resulting in the approval of Permit No U.W 167546; Sturman Irrigation #3 Well; Mike, Janice and Heidi Sturman. Application T.F. No. U.W. 34-4-401; Sturman Irrigation Additional; Mike, Janice and Heidi Sturman remains held in pending status.

Two (2) applications for a proposed dairy were received in WY-04 and protested in WY-05. A hearing was conducted on February 9, 2005, an Order of the State Engineer was issued, and the applications approved in WY-05:

- T.F. No. U.W. 36-6-491, Big Prairie #1, Blair Merriam (Miscellaneous Use);
and
- T.F. No. U.W. 36-2-511, Big Prairie #2, Blair Merriam (Miscellaneous Use).

GW has a pending application received July 7, 1981, which attaches to the same lands as the proposed dairy. As part of the granting of the two permits listed above, application T.F. No. U.W. 15-1-390, Reizenstein No. 3 was rejected.

The following Board of Control Petition was granted during WY-05:

- BOC Petition Docket I-U-2004-4-; William Francis (Petition for change in location of the Schneider No. 5 Well This petition was carried over at the November 2004 Board of Control meeting; granted conditionally at the February 2005 meeting; and granted at the May 2005 meeting).

Problem Areas

During the summer irrigation season, when members of the Control Area Advisory Boards are busiest and time is of the essence, GW has traditionally obtained recommendations from the Advisory Boards via ballots-by-mail (i.e., written votes from the Advisory Boards). During a Laramie County Control Area meeting, an Advisory Board member asked whether the Board could discuss the applications and then make recommendations after the applicants leave the meeting. The Board was advised that "voting needs to be held within a public meeting." Thus, the question arose as to the legality of ballots-by-mail. To be in compliance with the law, particularly Title 41 and the Public Meetings Act (Wyo. Stat. Ann. §§16-4-401-408], a meeting must be convened and it must be public; therefore, ballots-by-mail are no longer an acceptable method of obtaining recommendations. Not being able to use ballots-by mail has hindered GWs ability to obtain recommendations for applications and petitions in a timely manner. Scheduling meetings for all items needing consideration from the appropriate Advisory Board, especially during the

busy summer irrigation season, is, at times, futile. This means that timely consideration of an application can be problematic.

The number of applications protested each year is increasing. Each and every protest has to be addressed and a hearing scheduled. This places the burden of contacting appropriators and protestants, scheduling and conducting hearings, scheduling Advisory Board meetings for recommendations, interpreting and reviewing data gathered at the hearing and preparing the Order of the State Engineer on GW. This is a time sensitive process. To that end, a pre-hearing conference process was developed, and it includes a generic memorandum. A pre-hearing conference is scheduled to address pending motions and challenges to admissibility of exhibits or testimony or any other matter raised by the parties. The "Pre-hearing Memorandum" requires that applicants and contestants submit to the State Engineer, not less than twenty (20) days before the pre-hearing conference, the following information:

- A complete list of witnesses who may or will testify, as well as their contact information;
- A statement of the specific claims, defenses and issues of each party;
- A complete list and a copy of all documents, statements, etc. which each party may introduce as evidence; and
- A list of all facts to which the each party is will to stipulate or which are not in dispute.

If a party fails to file a proper pre-hearing memorandum on time, or fails to attend the pre-hearing conference, the protest can be dismissed or the evidence the party is allowed to submit may be restricted.

Special Projects

IT Initiative

The State Engineer's Office embarked on a journey called the "IT initiative". GW's participation in the Business Process Evaluation was a great learning experience for everyone. It also allowed staff to see exactly what other staff members' job duties were. As GW participated in the process, it became readily apparent that there were small changes we could make now to improve our work flow.

Administrative Improvements

The following is a list of the major changes, improvements, etc. made during WY-05:

- No longer manually updating the Township cards, resulting in a huge time savings for Ground Water);
- Using the SEO Intranet Site for Batch Management and Search Request Management. This allows GW to view these records from their desktop.

As time allows during WY-Q5, additional information will be automated into this format (e.g., Assignment Requests, Additional Points of Use requests, Relocations and/or Deepening requests, etc.);

- A new assignment endorsement for Coal Bed Natural Gas (CBNG) wells, resulting in time savings from a shorter endorsement;
- No longer filing assignment and extension requests for CBNG wells in Miscellaneous Notices, resulting in both time savings as well as saving room in filing cabinets).

GW hopes to automate our Log Books as we move through the Business Re-Engineering Process. These Log Books are an essential tool in the Ground Water record tracking process and having them automated will be a great benefit to GW.

Groundwater Fairs, Outreach Programs, and Conferences

During WY-05, GW staff attended fairs and participated in outreach programs, providing assistance and education to the public on ground water and agency policy, filing procedures, and legislative updates. GW staff also participated as science fair judges for the Pioneer Park Elementary School Science Fair in Cheyenne on February 18, 2005.

State Engineer's Office staff have traditionally attended the Wyoming State Children's Water Festival held each year in Casper. The 2005 festival was cancelled due to lack of funding. The festival allows fourth and fifth graders a chance to learn about lakes, streams, ground water, soils and how they all interact with them in their environment

GW staff presented information at the following events:

- Wyoming Water Well Association - March 2-4, 2005, Gillette;
- Wyoming Association of Rural Water Systems - March 29-30, 2005, Casper;
- 2005 Western South Dakota Hydrology Conference - April 11-12, 2005, Rapid City, South Dakota;
- Wyoming Society of Professional Engineers - Cheyenne Chapter - April 11, 2005, Cheyenne; and
- Wyoming Game & Fish Expo - September 9-11, 2005, Casper.

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 GW staff.

Adjudication

During WY-05, GW staff continued to expend considerable amounts of time to complete the adjudication requirement of the Decree, by conducting water rights research, assisting the consultants and engineers involved in this project, conducting field inspections of the 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. The required field inspections of the remaining ground water facilities involved was completed in WY-05. It is anticipated that the remaining adjudication activities will be completed by mid WY-06.

New Permits

The Groundwater Wells Subcommittee of the North Platte Decree Committee agreed in June 2004 with SEO's determination that the Lloyd No. 2 well (Permit No. U.W. 163769) could be constructed so as to ensure lack of hydrological connection with waters tributary to the North Platte River even though the well was to be located in the flood plain of Horseshoe Creek near Glendo. The 147 acres to be irrigated by this well would consequently not be included in North Platte acreage accounting. This was the first well to be approved through this process

GW staff observed construction of the Lloyd No. 2 well in April and May 2005 in order to document compliance with the permit conditions and forestall any doubts about hydrological connection by the Groundwater Wells Subcommittee. The well targeted the informally named Converse sand of the Hartville Formation. It was constructed with 30-inch diameter corrugated metal pipe from one foot above surface to 20 feet, 20-inch diameter steel pipe cemented from surface to 29 feet, 13 3/8-inch diameter steel pipe cemented from surface to 317 feet, and with an open borehole from 317 to 440 feet. A cement bond log was run before drilling below 317 feet. The bottom of the alluvium was encountered at about 20 feet and the top of the Converse sand at about 335 feet. The well flowed about 150 gpm and airlifting produced up to 780 gpm.

Reporting

During WY-05, GW continued to report to the 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 is subject to these provisions including five applications for new irrigation use permits within the Wheatland Irrigation District, two applications for municipal use permits, and one application for an industrial use permit. Five irrigation use permits within the Wheatland Irrigation District, two permits for municipal use, and one permit for industrial use were

subsequently reported as approved permits, tight applications for industrial use permits were reported as being rejected.

The GW division also reported annual ground water pumpage of 1825.4 acre feet from 22 post 2000 irrigation use well permits within the Wheatland Irrigation District to the NPDC during WY-05. A total of 41 post 2000 irrigation use well permits are recorded with the agency.

Coal Bed Natural Gas Projects

Interest in coal bed natural gas (CBNG) exploration and production remained strong during WY-05, The SEO received 4,784 CBNG applications during WY-05 from 52 companies. The following table provides a comparison of approved ground water permits and the number of companies submitting applications per fiscal year.

Annual Report Year	Total Applications	Number of Companies
2005	4784	52
2004	4758	39
2003	3938	48
2002	5663	58
2001	6093	55
2000	5811	86
1999	2532	51

The rapid and continued expansion of CBNG development consumes countless hours of GW staff time. Although the number of applications received for CBNG uses has declined from a 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. GW staff time and resources are also spent attending public meetings, making presentations, coordinating with other regulatory agencies, reviewing and providing comments on EIS and EA documents, reviewing water management and usage proposals, investigating ground water supply problems, installing and maintaining monitoring wells, and fulfilling information requests related to this development.

The Powder River Basin continues to be the largest area being developed for CBNG and represents the largest proportion of permit applications received. Management of produced CBNG water continues to be a concern of residents in CBNG development areas.

During WY-05, it was discovered that there were several hundred reservoirs in the Powder River Basin which were receiving CBNG produced water which had no permits. Based on this discovery, the State Engineer required that the reservoirs be properly permitted prior to the issuance of any permit for a CBNG well that would produce water to be stored in the reservoirs. This action resulted in holding

hundreds of CBNG ground water well applications in a pending status for months, while awaiting the approval of the reservoir applications.

Concerns related to the management of the produced CBNG water are outlined in previous annual reports and are mainly centered on the chemical nature of the produced waters and the construction of CBNG produced water holding reservoirs which may hamper the ability of downstream senior water right holders to exercise their appropriations. Concerns about water rights and water quality continue to initiate changes in the process of SEO permitting and changes in the water management plans formulated by the CBNG industry. Various water treatment and water use scenarios continue to be explored: including but not limited to surface discharge, treatment and surface discharge, stock, domestic, reservoir supply, industrial water use, dust abatement, drilling of additional wells, fisheries, irrigation, and re-injection.

The release of the Record of Decision for the Atlantic Rim Natural Gas Project in WY-06 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 CBNG development.

Current industry trends and natural gas prices at record highs indicate that the CBNG-related activities of the SEO will continue to intensify for the foreseeable future.

Problem Areas

Coal bed natural gas permit applications received by GW remained steady in WY-05 - approximately 5,000 CBM applications were processed. Although environmental groups and the media focus on interference from CBM production and development, no formal complaints of interference were received by the SEO in WY-05

Observation Wells

GW maintains a network of approximately 275 observation wells throughout the state and works on continually improving both the network and data collection efforts. WY-05 improvements include 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.

The observation well network has several wells that are in need of rehabilitation. These wells have been temporarily taken out of service until funding is available for rehabilitation or abandonment.

The aforementioned changes continue to be aimed at better serving the needs of the agency and providing support to permitting and management of the ground water resource of the State of Wyoming.

One digital recording devices was acquired through funding provided by Wyoming Department of Transportation (WYDOT). The device was to be installed in a well historically used for oil field and road construction projects to allow data collection efforts during times of active well production.

Proper installation of the device involves lifting the pump assembly out of the well. Once removed the device is attached to the drop pipe. And the pump assembly is then re-installed into the well. Due to limited funds, installation was attempted by hand feeding the recording device to a depth of 1,100'. At approximately 200' below ground surface the recording device encountered an obstruction. Several attempts were made to raise and lower the device past the obstruction. When this failed the device was to be retrieved, check its condition and re-attempt installation. Upon retrieval the device wrapped around the drop pipe of the pump assembly and became stuck. An outside consultant was hired to lift the pump assembly and retrieve the recording device. On August 23, 2005, the consultant was successful in retrieving the recording device.

Problem Areas

GW's practice of measuring water levels in private wells cost the Division another \$5,000 in WY-05 to have a pump installation contractor remove a transducer from a privately owned, deep Madison well that wrapped around the pump column and could not be retrieved by field staff. Monitoring water levels should be restricted to state-owned wells to minimize potential liability and cost.

Interference Investigations

Borie Area

Pumping tests of four of Dyno Nobel's eleven water supply wells and of one of Cheyenne's three water supply wells in the Borie area were completed by early December 2004. Before the end of the tests, two of Dyno Nobel's unused wells were converted to monitor wells with continuous water level recorders. Data from the "Borie" monitor well maintained by the U.S. Geological Survey provided additional data for analysis. Preliminary estimates of transmissivity and storage coefficient have been calculated but analysis of the pumping test data was not completed before the end of WY-05. Collection of data from the six monitor wells (including four Cheyenne Board of Public Utilities wells, which were converted to monitor wells in WY-04) continues in order to better document seasonal variations in water levels.

U.S. Fish and Wildlife Service - Saratoga Fish Hatchery

Compilation of collected data and reference materials associated with the U.S. Fish and Wildlife Service - Saratoga Fish Hatchery investigation commenced in WY-05. Collected data include surface water discharge records, ground water observation well water levels, water use and production records, history of USFWS and irrigation operations, bibliographic search, climatic records, and assimilation of geologic and hydrogeologic information for the Saratoga Valley and associated area. The Wyoming Water Development Commission's ground water exploration and testing project in the vicinity of the hatchery is currently being finalized and should provide additional information and data to this investigation.

Inspections for Proof of Appropriation and Beneficial Use of Ground Water have been conducted for water rights on irrigation wells and wells serving the hatchery as part of the North Platte River Settlement. The summary report is expected to be released in WY-06.

East Wheatland Area

The "Interference Investigation Report: Protestants to the Granting of Permits for the Hardy #1 and Hardy #2 Water Wells vs. Wyoming Premium Farms, LLC and Hardy Von Forell" was completed in WY-05 and distributed to involved parties. The report, required by law (W.S. 41-3-911 (b)) for formal interference complaints, addresses a complaint filed by Verna Crusch, Belva J. Rothleutner, Max J. Rothleutner, Virginia A. Ervin, M.M. Ervin, Evelyn Johnson, Lee Johnson, Mildred Johnson, Pete W. Johnson, and Arland Childers, who identified themselves as "Protestants to the granting of permits for Hardy #1 and Hardy #2 water wells." This complaint implied that reduced water production and sand pumping would be exacerbated by use of the Hardy #1 and Hardy #2 wells (Permit Nos. U.W. 103288, 103289, and 108296), The water rights holders of these wells are Wyoming Premium Farms and Hardy Von Forrell.

Upon receipt of the written complaint (dated May 17, 1996), GW formulated a plan for investigation of the alleged interference. This involved 1) determining the Area of Investigation, 2) researching groundwater rights in the Area of Investigation, 3) measuring water levels in wells located in the Area of Investigation, 4) collecting data on water usage and water levels in the Hardy #1 and Hardy #2 wells; 5) conducting drawdown models, and 6) preparing a summary report of the findings of the investigation. Measuring of groundwater levels for this investigation began in June 1996, and ceased in July 2001.

Conclusions of the report and those findings enumerated by the State Engineer, based on the report, led to the decision that no apparent unreasonable interference or damage will be, or has been, caused to the Protestants' wells by the exercise of the water rights appurtenant to the Hardy #1 and Hardy #2 wells.

Problem Areas

Poorly defined statutory definitions (e.g., "adequate" well and "unreasonable" interference) continue to be problematic in providing remedy to appropriators who claim interference from another appropriator, GW will develop working definitions when the existing (1974) rules and regulations are updated.

Hydrogeologic Studies

West Bank Snake River Hydrology Project

The West Bank Snake River Hydrology Project was completed and released in mid WY-05. This study was an ongoing effort with various Federal, State, and local entities to examine the hydrology of the study area and the relationships between the surface water systems and their associated ground water responses.

It is unknown whether Teton County will continue to use their monitoring well network, Telog 2100e data loggers or their software to continue to monitor the relationships of surface water and ground water in the West Bank of the Snake River area. This monitoring well network could continue to provide valuable information for the Jackson Hole Environmental Restoration Study. One facet of the Restoration Study is to determine the impact that man-made changes to the river channel within the Snake River levee system have on ground water levels outside of the levee system.

Lysite Mountain

In December 2004, GW made a presentation to the legislature's Select Water Committee summarizing its review of the Lysite Mountain test well. The Lysite Mountain test well had been proposed as part of the search for ground water supplies for a regional Bighorn Basin water system, which was funded by the Wyoming Water Development Commission (WWDC). Matt and Teresa Brown, of Thermopolis, opposed the test well due to fears that a production well would reduce stream and spring flows. Phoenix Production Company, current operator of the Black Mountain oil field, alleged that a production well would reduce reservoir pressures in the oil field, lower production by \$150 million, and decrease the state and local tax take by up to \$82 million. Lidstone and Associates, Inc. of Fort Collins, Colorado, consultant to WWDC for the Bighorn Basin study, addressed these concerns in a November 2003 memorandum and concluded that a production well would have "minimal impact" on the Black Mountain oil field but did not present detailed evidence. At the January 2004 meeting of the Select Water Committee, Richard Stockdale and Todd Jarvis, hired by WWDC as "third party" consultants, proposed a partnering approach to

resolve the conflict but did not evaluate the technical merits of the complaints. The Select Water Committee decided not to fund drilling the Lysite Mountain test well in 2004 and instead asked SEO for another review,

The target for the proposed Lysite Mountain test well is the Madison Formation at depths below 4,000 feet. The great thickness of relatively impermeable rocks overlying the Madison Formation (Cretaceous Cody Shale is exposed at the surface over most of the area) makes the Browns' fears implausible though not impossible. Phoenix Production Company's prediction of a 1,300+ feet maximum water level decline in the non-producing Madison reservoir of the Black Mountain oil field used an unreasonably large pumping rate and an implausibly low transmissivity and would have resulted in a water level decline of over 10,000 feet in the production well. Phoenix Production also ignored evidence that the Madison Formation is severed by a fault between the oil field and the proposed test well site and that the Madison reservoir is compartmentalized even within the oil field. More realistic but still worst-case parameters would produce head declines of less than 400 feet at a distance of 8,000 feet from the proposed test well site, assuming the Madison aquifer is continuous from the production well to the oil field and is isotropic. Head declines could be less than 10 feet. An additional factor which was not considered in these scenarios is Phoenix Production's disposal of water produced with oil from the Tensleep Formation reservoir into the Madison reservoir.

Industrial Siting Permits - Water Supply and Water Yield Analyses

Basin Electric's Dry Fork Power Plant

In accordance with the Industrial Development and Siting act, Basin Electric Power Cooperative submitted a water supply and water yield analysis to SEO in May 2005 for a proposed coal-fired power generation plant at the Dry Fork coal mine, northeast of Gillette. Basin Electric plans to drill three wells capable of producing 450 gpm from the lower Lance - Fox Hills aquifer at depths below about 1,800 feet. Water supply needs for the power plant were estimated to be 1,300 gpm, or 2,100 acre-feet/year, or less. Over the 60-year life of the plant, the maximum total water use would be about 126,000 acre-feet (41 billion gallons).

GW released a preliminary opinion of the water supply and water analysis in July 2005. The preliminary opinion was advertised in the Gillette News-Record on August 9, 16, 23, and 30. Basin Electric submitted additional information and comments on the preliminary opinion. GW received one comment from the public. A ground water user who lives about 4 1/2 miles southeast of the nearest proposed Basin Electric well was worried that his well would be impacted by Basin Electric's wells. This possibility was considered unlikely by GW because the user's well is completed in the Tongue River -Wasatch aquifer and is separated from the lower Lance - Fox Hills aquifer by the Lebo confining unit, the

Tulloch aquifer, and the upper Lance confining unit over a thickness of at least 1,000 feet.

Due to the low public response, no public hearing was held. After considering the comments received, GW completed the final opinion of Basin Electric's water supply and water yield analysis in September 2005. GW concluded that an adequate water supply exists in the lower Lance - Fox Hills aquifer but that it might require more than three wells to produce 1,300 gpm continuously. Due to the low storage coefficients of confined aquifers, Basin Electric will have to lower the potentiometric surface of the lower Lance - Fox Hills aquifer enough to start draining the aquifer under unconfined conditions in order to obtain sufficient water. Water level declines of hundreds of feet would be expected in other lower Lance - Fox Hills wells in the Gillette area.

Ground Water Advisory Committees

The SEO's four Ground Water Advisory Committees, revived in WY-04, remained active in WY-05. 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.

WY-05 Ground Water Advisory Committee members include:

<u>Water Division:</u>	<u>Committee Member:</u>	<u>Term Expires:</u>
I	K. James Fornstrom	9/30/06
	Colby Dreschel	9/30/08
	Ben Jordan	9/30/10
II	Harvey Crowe	9/30/10
	Timothy G. Barritt	9/30/06
	Thomas Pilch	9/30/08
III	Dick Steedley, Jr.	9/30/06
	Ken Schreuder	9/30/10
	Doyle Ward	9/30/08
IV	David A, Stephenson	9/30/10
	Robert E. Johnson	9/30/06
	Eugene Martin	9/30/08

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.

The Ground Water Advisory Committees chose to continue meeting as a group in WY-05, facilitating the dissemination of "background" information to all committee members. The group met twice on January 18th and July 12th, 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. Conversely, Division 1 Ground Water Advisory Committee members participated in the Control Area meetings, enhancing ground water discussions relative to each members' area of expertise.

Ground Water Staff

Beth Tebben joined the GW technical staff in December 2004 as a Ground Water Management Specialist 2. Tonia Fishback and Myrna Johnson joined the technical support staff in January 2004 as AD-04s. Tonia was later promoted to an AD-02 position while Myrna left the SEO in July 2005 to pursue employment with another State agency. Jenna Thorburn, a six-year SEO employee left in August 2005 to pursue a career in education. The contributions of both employees will be missed.

In addition to the daily processing of permit applications and maintenance of approved permits, GW continues to work on addressing a backlog of interference investigations, hydrogeologic investigations, field adjudications and expiration notices. In WY-05, GW also provided the Industrial Siting Council with water supply and water yield analysis plan for a proposed coal-fired power plant, and conducted an independent review of a hydrogeologic study for the Select Water Committee. Staff also oversaw the activities of three Control Areas, four Ground Water Advisory Committees and the State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors.

The enthusiasm each GW staff member brings to his/her job each day, the proffering of suggestions and ideas to improve the work place, continued rapport with the public, and the willingness to meld individual personalities and talents into one cohesive team to "get the job done" all make GW a Division to be proud of.

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 original objective of the Subdivision Review Program was and is to insure that existing water rights appurtenant to lands proposed for subdivision are addressed in compliance with statutory provisions prior to land development. Due to subsequent legislation review objectives now include commitments associated with the adequacy of proposed water supplies for these subdivisions.

Surface and Ground Water Data Program

Historically, a significant portion of the funding for the Program has 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 Streamgaging 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 streamgaging 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 streamflow data collection on the Laramie River, near Grayrocks Reservoir.

It has again been a busy year for the field staff and their efforts are appreciated. Their activities in general include regular measurements at the various sites, and communicating essential information to the appropriate parties as the season progresses. Detailed records of stream flows and reservoir stages 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. Maintenance around the state ranges from repairs resulting from the acts of vandals; to the acts of mother nature and father time. Shelters are painted and patched, walkways and cabieways are tested and repaired, and riprap is placed around gage houses, stream banks and damaged artificial controls.

Statewide Streamgaging Upgrade Activities

The State Engineer's Office and USBR are winding down activities associated with the replacement, repair or rehabilitation of select stream gaging stations throughout the state. These activities have included the installation of new instrument shelters, the construction of new or the rehabilitation of existing cabieways, 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. A historic perspective of these activities can be found in previous reports.

By cooperating with the USBR at sites of mutual interest, the State Engineer has effectively doubled the resources available to upgrading these sites. This in turn allowed for more extensive upgrades, and/or more sites to be considered at other locations. 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.

Yellowstone River Compact 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 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.

Bear River Compact 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.

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 are underway.

The first, "Water Resources of Carbon County", has been reviewed and is being published. The second, "Hydrologic Assessment of the High Plains Aquifer in Southwestern Laramie County", has been initiated. This newly initiated effort reflects a shift in extent, content and focus from the earlier resource evaluations by county perspective. More detailed information on this activity can be located in the Ground Water Section of this report.

Problem Areas

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

The net result is that State Engineer 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.

Perennial damages associated with vandalism continue to be a concern. Exterior, unprotected components including solar panels, antenna, and cables are particularly vulnerable, but damage tends to occur only at certain problem sites, and appears a component cost of doing this kind of work.

In conclusion, repair costs, as well as timely product repair and support, from instrumentation vendors continues to be of concern, but the solution may lie in selecting new instrumentation vendors when the opportunity to replace these gage components arises.

Snow Survey and Streamflow Forecast Program

The Natural Resources Conservation Service (NRCS), State Engineer personnel, and others participate in the Snow Survey Program. Snow surveys are conducted four (4) times each year, beginning February 1st and continuing until

May 1st, at the 66 manually measured snow courses, and daily at the 83 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 snowpack 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; radiotelemetered, snowpack data collection sites and are generally located in remote, yet hydrologically significant areas throughout Wyoming. These sites provide equivalent water depth of the snowpack (SWE), as well as precipitation, air temperature, and in some cases soil moisture and temperature. The number of sites that measure snow depth directly from electronic depth sensors 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 State Engineer's Office 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 will be reduced.

Streamflow forecasts are an end result of these snow data collection efforts and provide a valuable tool for those involved in water management and planning. Streamflow 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 streamflow prediction sites have been selected as the direct result of input from local water users. The sites require the presence of an active streamgauge 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, instream 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 SEO contributed \$2,000 to this program and provides approximately 80 workdays of effort in the collection of snow survey data per year.

This year Pat Boyd (Dayton) and Aaron Marshal (for Dubois/Lander run) completed the formal West Wide Snow Survey and Survival Training, acquired the necessary certifications and physical examinations, and began participating

in the program during the 2004/05 snow season (WY-05). Additionally, a special Wyoming snow survey refresher course for the 'old hands' was held in early January and was attended by Darren Parken, Rod Oliver, and Chad Pickett from Division I; Bill Knapp and Dave Pelloux from Division If; Aaron Marshall from Division III; and Kevin Wilde, Kevin Payne, Ed Boe, Jeff Davis, and John Yarbrough from Division IV.

Problem Areas

State Engineer personnel and others, should recognize and focus on how changes in funding, personnel, and activities within other water data programs (i.e. streamgauge discountenances} have and may continue to adversely impact related activities (such as streamflow 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.

Due to innate fluctuations in snowpack measurements; and the effects of weather patterns prior to and during the measurement and runoff periods, snow surveying and streamflow 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.

Subdivision Review Program

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 zoning officials. Or, if there are no subject water rights appurtenant to the subdivision lands, the developer should obtain a statement confirming this fact from the office of the State Engineer for submission to the county zoning officials.

During the 2005 Water Year (WY-05), water right review requests on 126 parcels of land proposed to be subdivided were received. After searching State Engineer records; appropriate recommendations, follow-ups, and approvals are provided. Of these requests, 30 required no water right action, 19 required further action and have since been approved, and 77 are pending further action.

Since the enactment of this legislation in 1980, an average of 22 reviews per year were provided during the decade of the 80's, and an average of 42 reviews per year were provided during the decade of the 90's. Comparing this with an

average 65 reviews per year during the 2000-2004 time frame and the 126 reviews provided during this water year; confirms a continued upward trend in the number of reported subdivision developments taking place throughout the state.

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).

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 county subdivision developments; as they relate to system adequacy and dependability. This directive requires a necessary 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 requested 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 planning process is the filing of necessary water right applications, which will recognize the proposed subdivision water supply as a legitimate and beneficial use of the waters of the State once perfected,

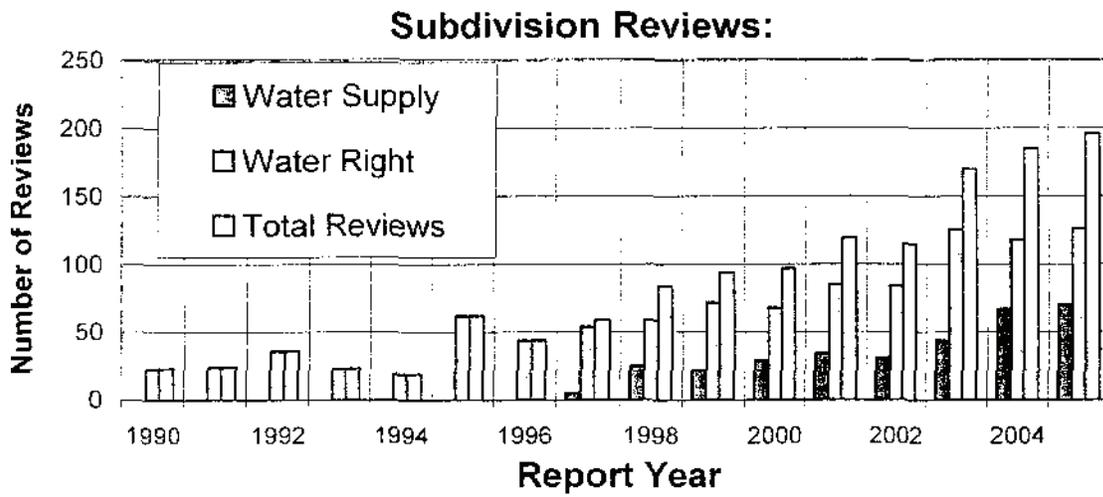
Since the original enactment of this legislation in 1997, the State Engineer has provided the Department of Environmental Quality with review comments and follow-up reviews as requested. The Department requested assistance on 5 subdivisions during calendar year 1997 (CY97), 25 during CY98, 22 during CY99, 29 during CY2000, 34 during CY01, 31 during CY02, 44 during CY03, 67 during WY-04 and 70 during WY-05. These reviews were in addition to the water right reviews required under W. S. 18-5-306 (a) (xi), and also require staff time to be committed to participating in meetings, teleconferences, and associated activities.

Also worth repeating is the decision on the part of the Department or Environmental Quality (during WY-04) to shift Department review responsibilities from the Main Office in Cheyenne to the District Offices throughout the State.

Problem Areas

The mission and objective of this Agency and Program include the directive to advance the constitutional and statutory provision that, a water right is in fact a property right and as such warrants recognition and protection under Wyoming's Constitution as well as under State Statute.

This program has historically addressed only issues associated with existing water rights, and the number of this type of subdivision review request continues to rise. This, coupled with the increasing workload associated with more recent subdivision water supply adequacy responsibilities, as well as time commitments in other programs contributes to the review backlog, and lengthens State Engineer response time.



NOTE: All years through 2003 are reported as reviews per Calendar Year, 2004 and 2005 are reported as reviews per Water Year.

Records indicate program compliance has been and remains poor. With the advent of the newer subdivision water supply legislation, compliance may ultimately improve, however subdivisions continue to be approved by County Planners and Commissioners before the water right issues have been reviewed and resolved by the State Engineer's Office. At the time of this report additional staff time has been committed to these activities, and a plan to divide these existing water right and proposed water supply tasks between the Board of Control and Ground Water Divisions respectively, is being implemented. It is anticipated that this formal division of review responsibilities will be complete effective January 1, 2006.

BOARD OF CONTROL DIVISION

The Board of Control is comprised of two (2) sections: the Board of Control Section and the Water Division No, III - 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, 2004 to September 30, 2005) the Board received 267 petitions from throughout the State in addition to the 150 petitions already on the agenda. These new petitions are listed by division as follows:

	SURFACE	GROUND	TOTAL
DIVISION NO. 1	91	41	132
DIVISION NO. 2	22	1	23
DIVISION NO. 3	52	19	71
DIVISION NO. 4	<u>41</u>	<u>0</u>	<u>41</u>
TOTAL	206	61	267

Final action was taken on a total of 276 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. During this reporting period the number of petitions pending before the Division reached an all time high of 192 for the 12-year period of record.

A total of 223 proofs of appropriation were considered by the Board of Control during this reporting period. Eighty one (81) of these proofs were for ground water rights (wells), and 142 were for surface water rights. In addition to these 223 proofs, 44 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, a preliminary draft of the Tabulation of Adjudicated Water Rights for Water Division No. IV was finalized and was being checked for accuracy.

During the reporting period, the State Engineer's Office assisted by its consultant, Weston Solutions, began development of the SEO IT Initiative. The State Board of Control Division also participated in a business process review identifying its business process, workflow, and data handling points.

In anticipation of the completion of the Big Horn General Adjudication, a schedule for its completion has been devised. The completion of BOC recommendations to the court for general adjudication has been set for June 30, 2006. Transition of the Big Horn General Adjudication staff into other Board of Control review processes began during this reporting period through cross-training for processing petitions filed with the Board.

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 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 staff's 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.

Recommendations

The Division's business process review has revealed a need for additional technical positions within the Division. The Big Horn General Adjudication is nearing completion and 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.

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 staff's 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 in the Division 3 tabulation book of adjudicated rights, one of the final documents concluding the adjudication. 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.

In keeping with the goal of the district court, the staff continues to work under a comprehensive plan for the Big Horn General Adjudication program with the main goal of wrapping up Phase III of the program by the close of 2006. The staff uses the plan to keep the project and all phases of the case moving concurrently forward at a steady pace. Since April 2004, at the direction of the District Court Judge, the staff assisted the court and the parties' ad hoc committee in the coordination of Final Decree meetings which were held through mid 2005. These meeting discussions explored potential decree content and a process to bring the Big Horn Case to conclusion both legally and technically. All work products were discussed openly, with the parties desire to avoid increased litigation and cost. The results of the ad hoc committees' work were summarized in the "Report of the Ad Hoc Committee" also referred to as the "Thorson" report. There will be work activities that the staff will be responsible for carrying out resultant from the committee's report.

What lies before us

Each phase of the adjudication is in a different stage of completion, but must continue to move forward concurrently. The Big Horn action plan has been used to assist in securing necessary budget and personnel and tracking work activity and progress. There are numerous tasks already underway that need finalization, and new tasks identified in the Thorson report that the staff will begin in the upcoming year. 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. With the continuance of the final decree discussions by the parties

ad hoc committee into mid 2005, we anticipate resolving what can be worked out between the parties and to let actual substantive issues drive the unresolved issues 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 2006. We anticipate that training the agency in the understanding of all rights awarded within Phase I will begin in mid 2006,

Phase II Decree

- Federal (non-Indian) Reserved Water Rights

A parties and the Court made a determination to submit a complete revision of the existing Phase II Interlocutory Decree. The staff worked diligently to revise and update the draft final decree which contains legal language and a potpourri of tables listing innumerable claims for stock ponds, instream flows, seeps, springs, wells and domestic uses that were never verified before entering the interlocutory decree. The State and all other parties to the case participated in the review of a draft final decree. During this reporting period, the draft decree was finalized, placed in public view and the due process notification initiated. No objections to the decree were filed and it is anticipated that the final decree will be approved by the District Court in late 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 87 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 this reporting period. It contains over 100,000 acres and covers lands within three large irrigation districts. 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 7 permits including 3 reinspections. Less than 7 permits remain to be investigated in the

field. We anticipate a few reinspections may become needed to resolve issues or further clarify questions on previous inspections.

During this period the staff also created materials which were provided to two irrigation districts and the Riverton field office (i.e., spreadsheets, color Infrared photography and map overlays). These materials are used to provide the irrigation districts with a foundation and understanding of the staff's recommendations for adjudication of the district's water rights. These tasks consumed approximately 6 weeks during the reporting period.

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 35 surface water permits were reported to the District Court. Certificates of Appropriation issued from Court Orders totaled 65.

From February 28, 2005 until September 30, 2005, one Big Horn General Adjudication technician was assigned to perform Surface Water tasks to assist with the backlog within the Surface Water Division. Generally the work involved platting of applications in the paper record (884 total), analysis of applications in order to proceed to assignment of a permit number (111 coal bed methane applications, 119 other types, primarily temporary water hauls), and processing of letters of petition (3 total).

At the close of this reporting period, the Big Horn staff and the Board of Control staff were cross-trained to handle the increase of petitions filed within the Board of Control and the deadline set for the completion of the Big Horn Adjudication.

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 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 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 consent cannot

be obtained, then requiring a hearing in order to finalize the petition. There is also a petition increase within the Board of Control. The remaining permits left on Phase III of the Big Horn Case are very complex and require detailed analysis. In addition, several parties are involved in the review of the staff's 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. 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 were 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 1945 the United States Supreme Court equitably apportioned the waters of the North Platte River between Wyoming, Nebraska and Colorado, ending eleven years of litigation between the three states and the federal government. Under its North Platte Decree, the Supreme Court retained jurisdiction over the dispute.

Nebraska reopened the litigation in 1986, alleging that Wyoming was violating or threatening to violate the North Platte Decree by depleting the flows of the North Platte River. Wyoming denied those allegations and filed counterclaims. As parties to the original litigation, Colorado and the United States remained parties to this action. In 2000, after extensive negotiation, the parties agreed to settle the case. The United States Supreme Court approved the final Settlement Stipulation on November 13, 2001. The lengthy settlement agreement includes changes made to the 1945 North Platte Decree. The 2001 decision is referred to as the Modified North Platte Decree. It places new limitations on Wyoming and makes record-keeping and reporting requirements. The Modified Decree expands the limitation on irrigated acreage, puts new limits on consumptive use of irrigation water, and requires accounting for ground water use within the North Platte River basin.

The settlement agreement created the North Platte Decree Committee (NPDC) to assist in monitoring, administering, and implementing the Final Settlement Stipulation and Modified North Platte Decree. The NPDC is comprised of representatives from Nebraska, Colorado, Wyoming, and the United States Bureau of Reclamation. The NPDC must hold two meetings per year, one in the spring and one in the fall. Special meetings may be called at any other time at the request of any of the members. The NPDC has formed subcommittees to help conduct NPDC business related to groundwater wells, consumptive use, NPDC official files, and NPDC finances.

The NPDC met on April 14, 2005 in Scottsbluff, Nebraska and on October 11, 2005 in Torrington, Wyoming.

The Attorney General's office continues to provide legal advice to the State Engineer's Office concerning Wyoming's rights and responsibilities under the North Platte settlement agreement. [ARCHIVING]
The Attorney General's office expects to complete archiving documents from the North Platte litigation in 2005.

Berman v. Yarbrough

Dan Berman is a Utah lawyer who owns a ranchette in Uinta County. Mr. Berman claims Wyoming direct flow rights out of the East Fork of Smith's Fork, tributary of the Black's Fork. Mr. Berman claims storage rights out of China Lake Reservoir, which is located in Utah. Mr. Berman sued Lead Hydrographer-Commtssioner John Yarbrough in 2003, alleging that Mr. Yarbrough has failed to honor Mr. Berman's Utah water rights in Wyoming.

Wyoming sought to have the case dismissed. The Utah court denied the motion. Discovery is complete—both sides have taken depositions and answered interrogatories. Both sides asked for summary judgment. The court denied the requests. Mr. Berman says that he will amend his complaint to join the Utah state engineer and other China Lake Reservoir owners. As of early December, 2005, it appears that the case will go to trial in Utah.

Wyoming does not propose to allow the courts of other states to interfere with the internal administration of Wyoming's water.

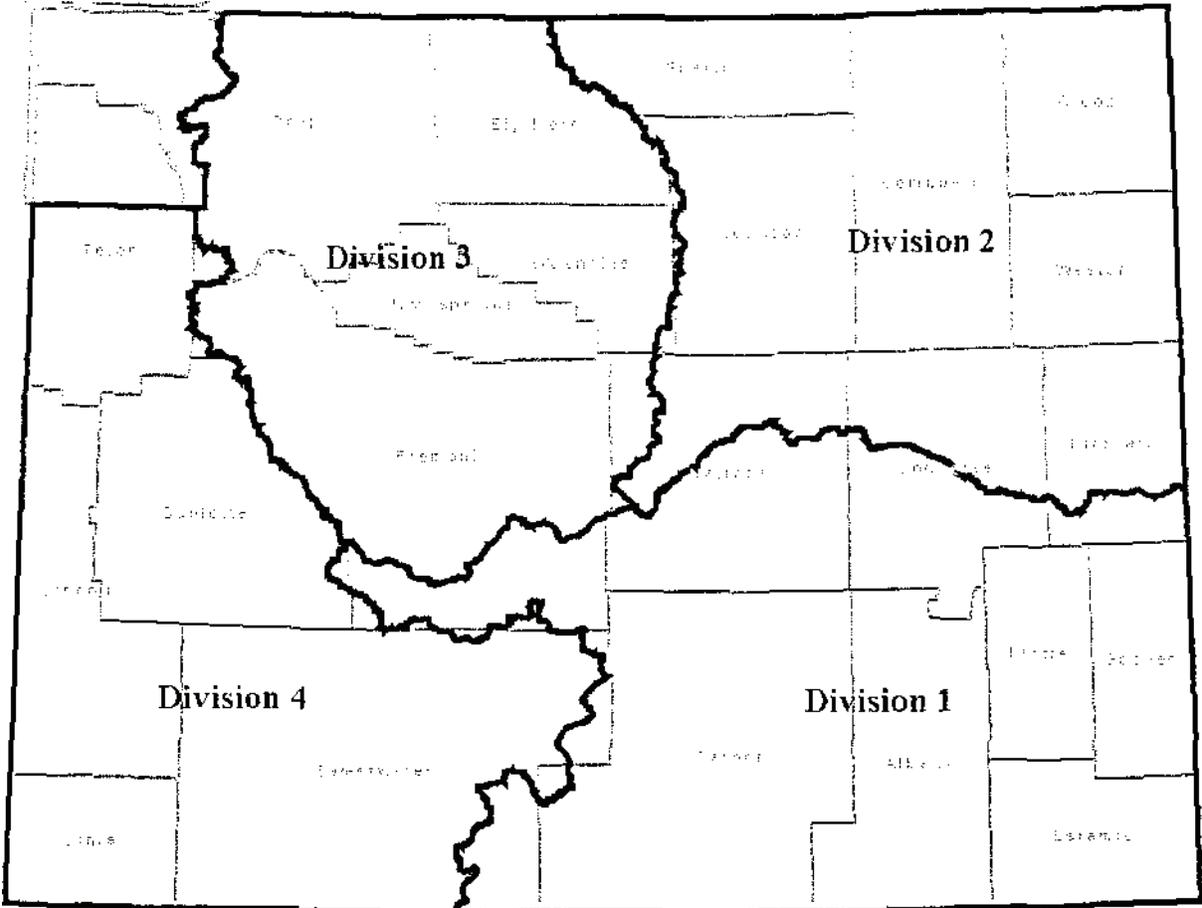
Colorado River

It is too early to declare that the drought which began in 1999 is over. Lake Powell was below half of its capacity and Lake Mead was only a little above half capacity. The seven Colorado River Basin states are cooperating with the U. S. Bureau of Reclamation to work out guidelines to handle shortages in the Lower Basin, to coordinate the operation of Glen Canyon Dam and Hoover Dam in times of low water, and to pass on a share of the shortage to Mexico under the Treaty of 1944. Nevada's plans to acquire water from the Virgin River and to import non-tributary ground water, and population growth in Arizona and Nevada have brought the questions posed by the drought to the top of the list. The Attorney General's office is working with the State Engineer's Office to determine how best to preserve Wyoming's water for use in Wyoming, while honoring Wyoming's legal obligations under the Colorado River Compact. We are cooperating with the legal advisers of the other Upper Basin States and the Upper Colorado River Compact Commission to develop solutions to questions of common interest.

FIELD REPORTS
OF
WATER DIVISION SUPERINTENDENTS 2005
WATER YEAR

October 1, 2004 through September 30, 2005

Wyoming Water Divisions



REPORT OF THE SUPERINTENDENT

WATER DIVISION I

By

Randy Tullis, Torrington

This report is a summary of water related activities and trends within Water Division No. 1 for the period October 1, 2004, to September 30, 2005. Water Division I is comprised of the North Platte, South Platte, Niobrara, and Little Snake River drainages of south and eastern Wyoming.

General and Climatic Conditions

I am pleased to report that the direct flow drought conditions experienced for the previous five (5) consecutive years somewhat relaxed in Water Year 2005, although the cumulative effects of drought continue to be apparent in both reservoir carryover and groundwater supplies. Carryover ownership into Water Year 2005 in the North Platte River mainstem reservoir system continued to be well below normal with the North Platte Project at 77.4 kaf (18% of average), Kendrick Project at 643.8 kaf (67% of average), and Glendo ownership at 64.3 kaf (46% of average). Kendrick has not accrued water to ownership since Water Year 2000 and continues to steadily deplete their junior priority storage. Similarly, production from springs and groundwater developments within many areas of the basin continue to experience pockets of reduced and often absent production or availability. These less than favorable conditions continue to impact historic water users and new development plans alike.

The 2004 Water Year began with continued below normal soil moisture profiles and limited to non-existent carryover storage. Snowpack accumulations tracked below normal throughout the winter season and again resulted in less than favorable expected runoff predictions by mid-April. But Mother Nature has a weird sense of humor, and in reality the climatic conditions experienced from the end of April through June were optimal for direct flow and storage users alike. Several strong late season snowstorms combined with cooler than normal temperatures resulted in an increased snowpack, delayed runoff, and greatly improved soil moisture. As temperatures finally rose in late May and early June many drainages experience record or near-record peak flows, conditions advantageous to direct flow diversions and storage accruals.

High streamflows do not come without damaging consequences and as water administrators we assisted when possible. My compliments to Darren Parkin on the Laramie River in fostering the cooperation between Wheatland Irrigation District and the Pioneer Canal Company, In this instance, it was decided cooperatively to employ a temporary (2 day) relaxation of priority administration on the Big Laramie River to ease the rising public concern of possible flooding damage in and near the City of Laramie. This cooperation allowed for several hundred acre feet of water to be diverted to Lake

Hattie and slightly reduce the flows correlated with the peak stage through Laramie. Water managers will agree that the true hydrologic effect of these actions were minimal but it was great public relations and encouraging to again see the cooperation between Wheatland Irrigation District and water users in the upper basin

Following procedures as detailed in the Modified North Platte Decree, the United States Bureau of Reclamation (Reclamation) forecasted North Platte Project supplies of 1,022 kaf in February, 907 kaf in March, and 943 kaf in April. Although below the comparison mark of 1,100 kaf, these forecasted supplies were the best since the recent drought began. In each of these three months the State Engineer assessed available snowpack and runoff predictions and honored the "automatic call for regulation." Priority administration by Division I staff was enforced for Pathfinder (12/6/1904) and Guernsey (4/20/1923) Reservoirs in February and March, and for Pathfinder and Inland Lakes (1993 United States Supreme Court opinion priority of 12/6/1904) in April.

During the water year North Platte Project storage ownership accrued approximately 858 kaf comprised of about 791 kaf in Pathfinder ownership, 45 kaf in Guernsey ownership, and 21 kaf in Inland Lakes ownership. Those accruals were about twice the amount of Water Year 2004! Glendo ownership accrued about 13 kaf and Kendrick again went "accrue-less." The last time Kendrick accrued water (and filled their ownership) was in Water Year 2000.

As was encouraged, most water users below Whalen Diversion Dam (Wyoming privates and Federal contractors) again delayed their demand for deliveries until well into the month of June, thus allowing as much accrual to storage ownerships as possible. This delayed demand benefits many of the row crop or hay producers that have additional supplies from irrigation wells by delaying allocation deliveries and ensuring adequate mid to late season supplies. Delivery of storage water below Whalen was initiated June 29th and started the initial allocation (estimated at 913 kaf) and following weekly allocation accounting of increased supply of North Platte Project supplies. It is important to note that I was disappointed in the actions of the Pathfinder Irrigation District (majority user in the Interstate Canal) during May and June. The Pathfinder Irrigation District Board decided to divert and re-store the available natural flows in May and June, to the detriment of accruals to Glendo ownership. Granted, Pathfinder's diversion were accounted appropriately against their 2005 allocation, yet Wyoming's Glendo ownership has been severely depleted in past years and it was hoped that account could gain some early accruals.

Wyoming's share of the initial allocation was distributed as follows; 136.0 kaf to Goshen Irrigation District, 27.5 kaf to Lingie Water Users, 10.5 kaf to Hill Irrigation District, and 2.8 kaf to Rock Ranch Ditch. The system increases re-allocated to the Wyoming districts through the irrigation season was about 29 kaf. Most major districts in Wyoming and Nebraska had ceased diversions by September 9 and resulted in Wyoming Districts carryover as follows; Goshen 63.4 kaf, Lingie 9.2 kaf, Hill 3.7 kaf, and Rock Ranch 1.6 kaf.

Even with the favorable runoff conditions in many areas of the Division, there was considerable priority regulation administration for diminished supplies through the mid to latter part of the irrigation season. Many were from drainages with standing calls for unfilled reservoir storage from the previous water year and many were from drainages that we have only recently begun to be asked to administer due to the compounding effects of the drought. Occasional precipitation events in the late season seemed to help ease the constant tension of the increased workload and it is my honor to again compliment the professionally diligent work and long hours invested by Division I staff to address the many calls that occurred.

Accomplishments

Reporting requirements for Modified North Platte Decree compliance has continued to be completed in a timely and accurate manner. Previous years experience is proving to be a great advantage to existing staff, both older and newer folks. They are better able to budget their time and resources when necessary at critical seasonal changes. Having staff dedicated to intentionally irrigated acreage inspections has allowed Hydrographers to concentrate on their statutory duties including priority administration, safety of dams inspections, client assistance, and other important duties often neglected in past seasons.

Replacement water for "triangle area" depletions from irrigation wells and tributary diversions has been accomplished accurately with available non-contracted Wyoming Glendo storage, City of Cheyenne ownership, and cooperation with the Torrington and New Grattan Ditch users with contracted Glendo carryover water. The replacement obligation from depletions of active irrigation wells during Water Year 2004 was 6710 af for 275 "active" irrigation wells. It was released as natural flow during storage demand. Additionally, this was the second year to include "triangle" tributary diversions in the daily natural flow accounting and "out-of-priority" depletions were replaced the following month as detailed in the Modified Decree.

High Savery Reservoir is the new highlight of Division I. Filling and spilling during the water year, test releases from High Savery were implemented by the Wyoming Water Development Commission during the latter part of the irrigation season to the benefit of numerous direct flow users. The test released also provided an opportunity for Division staff to trouble shoot, monitor, and collect the records on several new gages to provide indications of conveyance losses never previously determined. These conveyance loss indicators will assist in future administration of reservoir releases to appropriate users in the Little Snake River basin. Although a long time in coming, i and other water users in that basin would compliment the Wyoming Water Development Commission, and Director Mike Besson, for their perseverance in finally seeing this project to its successful completion.

As in previous years, statutory required duties were completed by the Division I Superintendent and staff. Of greatest importance this field season was the priority administration that occurred basin wide. As of this writing I am not aware of any official appeals of administration that were initiated to the State Engineer and particularly, I know of no appeals that overturned our field administrative actions. As I have stated before, priority administration is not often a welcomed enforcement action, yet I am proud of the capable staff that handled the calls for regulation in a timely, professional, and equitable manner-Field inspections for proof of appropriation, proof of reservoir construction, and petition verification and efficacy were completed for presentation at quarterly Board of Control meetings. Six (6) contested case hearings were advertised in September 2004 with hearing dates in late October. Five (5) of those petitions were eventually granted, several with conditions attached. After considerable discussion and debate the involuntary abandonment petition by McLoughlin was denied, and from this Board members perspective, mainly on the fact that the claim of injury to the petitioner's stock reservoir right was unsubstantiated. In late April three (3) hearings were held in Saratoga or Wheatland and two (2) other hearings were held in the Douglas area. All those petitions eventually were granted - the latter two being a change in point of diversion and place of use for Wagonhound Land and Livestock and a request for an amended certificate for White Land and Livestock. For the first time in my tenure as Superintendent, a proof of construction for a reservoir recommended for adjudication was contested. On the day of the scheduled hearing, and after consideration of the adjudication process, the objector decided to not proceed with the protest and will probably seek relief through field administration when the potential for priority administration is present.

Public Outreach was again important with presentations on Wyoming Water Law and rights given to numerous groups. Irrigation Districts generally hold their annual meetings in February and as best as could be scheduled I attended many of these meetings throughout the basin.

I am pleased to report that the majority of this field season was administered with a full crew of capable field staff. Unlike previous years, there were no resignations or retirements. Many of the newer staff have a year or two behind them (under the belt or thicker leather on the backside, you pick one.) As has been previously detailed in other Annual Reports, the selection, training, and retention of Hydrographers is a difficult task. I continue to be challenged to find people that are committed to this type of position for the compensation that I can offer,

Summary

Water Year 2005 will be remembered as a year of blessings. Those blessings included a fairly mild and open winter, timely precipitation and runoff in the spring and early summer, and one of the best agricultural production years in recent memory for many in the basin. Hopefully this is the first of several consecutive years that will break the

recent record drought and allow groundwater recharge and reservoir carryovers to improve.

I would like to thank members of the Board of Control for their counsel and advice on the many challenges that seem to occur statewide. The State Engineer's Office staff in Cheyenne should also be complimented on their able assistance with timely and accurate record searches and field delivery so that the rights of record can be equitably administered in a timely manner by my staff. Last but not least, I also thank the hard work and long hours invested by the Division I staff. It is their professionalism under often less than optimum hydrologic conditions and with numerous personalities involved with water use that our statutory water administration shows its strength.

REPORT OF THE SUPERINTENDENT

WATER DIVISION II

By

MICHAEL B. WHITAKER, SHERIDAN

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

General Conditions

The 2005 water year began with good carry-over storage in most of the reservoirs used for irrigation. The Tongue River drainage was at 42 percent carry-over, the Powder River drainage was at 74 percent carry-over and Keyhole Reservoir had 47 percent.

At the annual meeting with Montana water folks the end of April, we discussed the low snowpack conditions; Tongue River basin at 78 percent of normal, Powder River basin at 73 percent of normal and the Belie Fourche basin at 6 percent. Even though conditions were slightly better than the previous year, all indications were that the mountain reservoirs would be lucky to fill and that Tongue River Reservoir would probably not - even though Montana had reduced the release amount. It looked like another difficult year for water administrators and irrigators.

The irrigation season in this area generally begins in early May. This year we received almost eight inches of rain in May and early June. We had two different peak flows of approximately the same discharge; the first on May 11 from rain and then again mid-June from snow melt, which resulted in Tongue River Reservoir filling and spilling with ease. We experienced some flooding along Little Goose Creek with the county evacuating some folks in low lying areas. As expected crops and pastures were in excellent condition and with so much hay we saw a drop in the price. Temperatures were mild this summer as well. I don't recall running the air conditioner at my home more than a couple of times.

The eastern part of the division experienced much the same conditions, but with less rainfall in May. Water was ordered from Keyhole Reservoir by both irrigation districts. The need for measuring devices for diversions from the Belie Fourche River became apparent this season. To that end we have completed a review of the diversions and will be working with the irrigators to start collecting diversion data next season.

Reservoir usage in the Tongue River and Powder River basins was typical this year with most releasing water to get down to a desirable winter elevation. Carry-over storage for the 2006 water year for the Tongue River drainage was 48 percent, the Powder River drainage was 84 percent and Keyhole Reservoir was 38 percent.

Our CBNG reservoir inspection program continues to grow. Bruce Engineering of Gillette completed inspections in the Rawhide Creek drainage and has now moved into the Wild Horse Creek drainage. Inberg-Miller of Casper is conducting inspections in the Pumpkin Creek and Dry Fork Powder River area. In addition to these contract inspectors, we added one new employee to the Sheridan office to do these inspections. At this time the contractors are east of the Powder River and our employee is on the west side. The remainder of the division staff is also involved inspecting reservoirs and logging inspections on a spreadsheet as time allows.

This past year 44 Final Proof of Appropriations were taken and submitted to the Board of Control for adjudication of the water rights along with the finalization of 40 stock reservoir inspections not to be adjudicated, but included in the Tab Book. In addition, 29 petitions reflecting various changes of water rights were acted upon. Both petitions and proofs require on-site inspections, as well as additional research and documentation.

The Safety of Dams program involves inspections every five years for reservoirs that exceed 20' in fill height or 50 acre-feet in capacity. There are approximately 650 dams in Division II that fall into the program and 121 were scheduled for inspection this year.

This year on the stream gage rehab program, the design and cost estimates were completed by WWC for a new gage on the Belle Fourche River below Keyhole Reservoir. The low bid was approximately thirty percent higher than the projected cost. About the same time we received bids, gasoline prices increased significantly and concrete shortages were predicted for this area. The decision was made to shelve this project for the time being. On other sites, a new outside gage was established at the Belle Fourche nr. Alva gage by constructing a stilling well.

SUMMARY

At the start of the irrigation season, it appeared the drought would continue for another summer. Higher than normal precipitation in May changed everything around and even had some folks start predicting that the drought was over. This is a good example of how fragile the system that we live in is when just a few inches of moisture at the right time can change an entire growing season for one year. Instead of selling off more livestock because of lack of feed, there is an opportunity to start rebuilding herds. Hopefully, this truly is the beginning of the end for this drought cycle and the long range predictions are not true.

REPORT OF THE SUPERINTENDENT

WATER DIVISION III

By Loren Smith,

Riverton

Water Division III encompasses the Wind River / Big Horn River system as well as that of the Clark's Fork Drainage in North Central Wyoming. The division 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. Water year 2005 was a vast improvement over the previous 5 years and is a testament to the hard work of the staff employed in this division as well as this entire agency.

As was the case of the previous year, the carry-over in the division's primary reservoirs ranged from non-existent in the Greybult River system to a near normal level of 450,000 acre-feet in Buffalo Bill Reservoir. Once again minimal winter releases from most reservoirs in the basin improved storage availability by spring. Of the district 1 reservoirs in the southern Wind River Mountains, only Worthen Meadows Reservoir had any carry over storage to bring forward into WY 2005. Capacity statistics for the major reservoirs in Division III are summarized in the table below.

District	Reservoir	Capacity9/30/2004 AF/% Full	Capacity9/30/2005 AF/%Full	Change (AF)
3	Bull Lake Reservoir	88,940 / 59%	66,100/44%	-22,840
3	Pilot Butte Reservoir	15,630/45%	12,300/35%	-3,330
3	Boysen Reservoir	475,100/63%	591.900/78%	116.800
5	Anchor Reservoir	429 / 4.6%	300/3.2%	-129
7	Adelaide Reservoir	800/13%	2000/42%	1200
8	Roach Gulch Reservoir	1,100/3%	8000 / 24%	6900
9	Buffalo Bill Reservoir	438,800/68%	450,300/70%	11,200
16	Upper Sunshine Reservoir	6,600/12%	24,000/45%	17,400
16	Lower Sunshine Reservoir	1,007/1.2%	21.000/36%	20.000

Mid-season snowpack figures were not very promising. Most drainages were hanging in the 60% of normal range as spring temperatures began to warm up. The apprehension of most irrigators and their districts led to a strong feeling of uneasiness in the division as we approached what appeared to be another extremely dry year. Those feelings led to some major canals turning water in nearly a month earlier than their historic practice. Lower Hanover Canal led this early procession turning on March 17 followed closely by the Upper Hanover system four days later.

Oh, what a difference a storm or two can make. Heavy spring precipitation during May and early June created a runoff scenario any hydrographer would love. High stream flows were evidenced across the division with the Big Horn River at Basin being a good example with an estimated high flow of over 10,000 cfs being reported on May 12. All of that wonderful spring moisture led to much improved grazing on the non-irrigated rangeland as well as the grass hay and pasture land throughout the division. Stock reservoirs were full and the irrigation reservoirs were well poised to capture the high flows and store them for later use.

In some instances farmers were detoured from planting early because of the lack of available water in the forecasts. Once the rains began and it looked like water supplies were improving the fields were too wet to plant. About the time things would begin to dry enough to get into the fields more rain would occur. Those who planted early were in good shape, but often was the case that beans weren't planted early enough to allow a long enough season for them to properly mature. In the Greybull and Shoshone drainages some fields were never planted this year because there would not have been enough time to finish a crop.

Once the rains subsided in late June the temperatures began to soar. A hot dry July was to follow. Thermopolis recorded five days straight over 105° during July. Crop production throughout the division reflects the availability of water as well as the temperature extremes seen this year. Alfalfa, corn, beans and the grains were considered to be of normal production, where planting was actually completed. Some beans never did mature fully and were relegated to the silage bins. Sugar beets are said to be of average quality and average sugar content making for decent yields this year. Early harvest of sugar beets was once again hampered by rains and early snows. This is a situation not favored by the producers as entire crops can easily rot in the fields given the wrong conditions.

Because the moisture was received so late in the season, it never had the opportunity to develop into a solid snowpack. Once the runoff began to recede in early July, the season quickly began to look much like the previous years. The saving grace was all the water held in storage at the end of runoff, as those with available storage were able to extend their irrigation season. The table below represents the stream systems of Division III that were regulated for direct flow supplies. The dates of call were amazingly close to the same dates that these streams went into regulation during the previous water year. On the Big Wind River system we became concerned as the natural flow available actually dropped well below that which had been available in the previous year during August and September.

District	Stream System	Date of Call	Calling Party
1	Beaver Creek	7/1/2005	Yellowstone Ranches Inc.
1	Middle Fork Popo Agie River	8/9/2005	Cemetery Ditch
5	Owl Creek	4/14/2005	Chessington-Wilson Ditch
6	Nowood River	9/12/2005	Redland Ranch
7	Shell Creek	7/26/2005	Shell Canal Board
8	Greybull River	4/17/2005	Fairview Canal
9	Canyon Creek	7/15/2005	Canyon Creek Ditch
9	Jim Creek	5/5/2005	Nuchol's Ditch
10	Bennett/Little Rocky Creeks	4/13/2005	Berry Ditch
13	Gooseberry Creek	3/15/2005	Holand Ditch
14	Cottonwood Creek	4/15/2005	Brassington Ditch

There was only one official appeal of a hydrographer based administrative decision this season. This appeal dealt with the capture, storage and re-use of wastewater. Since the water was clearly being applied to lands from which it didn't originate, the hydrographer's decision to not allow this un-permitted use was upheld. The lack of appealed decisions relates to a lot of factors; the hydrographers are becoming much more familiar and confident in the processes and reasoning behind proper administrative regulation, the appropriators are becoming much more confident and comfortable with these same processes. There were no appeals of any superintendent decisions elevated to the State Engineer this year. The same appeal of the State Engineer's ruling regarding the longstanding disagreement over the administration of the Tripartite agreement in District 3 is still sitting in district court and no movement has been made this year.

Taking care of the personnel side of the water division management once again has taken time from not only this superintendent but also my lead staff as they have had to complete more training and assist in covering the areas under the newly hired hydrographer. A bit of juggling of positions has resulted in better coverage for the appropriators, equalized work loads for the hydrographers and ultimately better field administration as a whole. Districts 5, 13, 14 and 16 had historically been covered by three seasonal hydrographers. One of these positions had been upgraded by the legislature to a year round position. After considerable scrutiny I decided to appoint Mr. Mike Kimsey to cover his original district 5 duties as well as now being assigned district 14. It was then decided to combine the two vacant seasonal positions to create a year round position to cover both districts 14 and 16. In early May Mr. Mike Riley was hired to fill this slot bringing the division three staff up to full status. Early signs are that this division will be experiencing further turnover due to retirements during the upcoming water year.

Area Highlights:

This was the first season where my assistant superintendent was able to function more as an assistant rather than another hydrographer. By being up to full staff before things got too interesting in the division, Mr. Dave Deutz was able to begin concentrating on many of the broader issues that have been neglected the last couple seasons. Dave has worked hard to get up to speed on completing proof of appropriation field inspections over the last year. Dave keeps the oversight for our division on compliance with the safety of dams inspections as well as working extensively on our division's overall personnel safety program.

Hydrographer Mr. Myron Smalley continues to battle the Little Wind No. 5 Ditch. The results of a 2002 Federal Court decision placed the administration of this small irrigation ditch in the hands of Mr. Smalley. Two parties operate under this facility and this season saw tempers and violations escalate. Measuring flumes, headgate parts, regulation tags as well as State padlocks and chains were tampered with and or removed at various stages during the year. All parties found themselves back in front of Judge Clarence Brimmer during the month of August. Ruling from the bench, Judge Brimmer explained that "self help" was not a remedy and he laid out a concise set of actions to be taken by both parties, while maintaining that the administration of this ditch would remain solely in the hands of Water Division III. The Judge did relax somewhat the application of a drought declaration under tribal water code that must be applied to our administration on this facility. This hopefully will alleviate some of Mr. Smalley's tremendous time commitment involved in this administration activity.

District 3 Hydrographer Mr. Aaron Marshall, now having a full year under his belt, experienced a much smoother year of administration. Mr. Marshall reports that due to the high volume of stored water in Boysen Reservoir and the positive streamflow forecasts the Bureau of Reclamation declared that 2005 would be a non-accounting year and no storage would be charged out. The last gaging stations needing relocated were taken care of prior to startup in the spring, allowing a more equitable measurement of diversion rates across the system. During August, Riverton Valley Irrigation District and Midvale Irrigation District entered into a rotation agreement where, due to, decreased demand during harvest Riverton Valley lowered their diversion rate by 15 C.F.S. and Midvale was allowed to increase by 15 C.F.S. for a period of 15 days. At the end of this period Riverton Valley was allowed to come up to 15 C.F.S. over their appropriation while Midvale cut back. Because of diminished demand, Riverton Valley had no use for the full volume available for pay back but the rotation as a whole was a success and it was good to see this cooperation between the districts.

Mr. Mike Kimsey had his duties expanded with the upgrading of his position to a full-time year-round hydrographer during the early spring. This was an excellent year for Mike to expand his area with the new assignment to cover district 14 as well as his previously assigned district 5 duties. Mike also helped out by covering district 13 while the new hydrographer got his feet wet and learned the ropes on the Greybull River areas first. Mr. Kimsey reports that all the drainages under his control experienced

something they hadn't seen for a few years, runoff. Timely late season snows and spring rains provided a much improved and extended runoff. When this was over though, the water dropped off quite measurably. Continued problems with internal ditch squabbles, apprehension amongst appropriators dealing with a new hydrographer kept Mike quite busy this season. As reported last year, there was once again continued struggles to coordinate the regulation of tribal ditches in a timely manner. Typically the administration of these ditches is completed by the Tribal Water Engineer's Office, again this year, this effort seems to have been lacking. This lack of, or untimely response, can come about to the detriment of downstream State water rights appropriators and needs to be rectified.

Mr. Rod Delker, Hydrographer for districts 6 and 12, reports a fairly quiet year in his area. This slower season allowed for the resolution of two very longstanding problems in Mr. Delker's areas. Finally, after five years of persistent encouragement, the users under the Farmers Ditch system on the Nowood River filed the proper petitions to reflect their 2000 change from a single delivery ditch to eight individual pump points. Also, during the spring, negotiations were held between Charles Lewton and Bruce Weeter with the Division III staff. Through these negotiations a resolution was finally reached that was amicable to all parties involved. This nine year battle had been in hearing before the State Engineer as well as under orders of the previous division superintendent without a resolution or compliance prior to this settlement.

Mr. Gary Anders, Hydrographer in the Shell Creek drainage, reports very few problems this year attributed to the increased runoff and higher flows experienced this past season, Mr. Anders did work diligently with Landis Webber and the users of Leavitt Reservoir to develop a delivery plan and accounting of this small reservoir on the Beaver Creek drainage. This effort appears to have been successful as no further complaints were filed this year.

Mr. Heber Jensen, district 8 Hydrographer, reports further progress, fine tuning and acceptance of the leveling program on the Lower Greybull River. Water was plentiful at times during runoff and short late season but one factor that made things work well in district 8 was that about 15,000 acre-feet of water was relocated from Lower Sunshine Reservoir to Greybull Valley Reservoir (Roach Gulch) during July. This extra water enabled the first complete physical filling of Greybuli Valley Reservoir since it's completion. Proof of Construction was completed on the reservoir during this full condition and will be submitted to the Board of Control for adjudication in early 2005.

Mr. Mike Riley was hired in early May to fill the vacant district 16 Hydrographer position. Mr. Riley reports that amongst his major accomplishments this season was his education. Mr. Riley stepped into one of Division III's most regulated districts as well as another district which almost never experiences surplus conditions. Learning the laws, processes as well as the physical locations, nuances and personalities of his area is always a fun time and to do so under the cloud of regulation makes it even that much more interesting. By doing so though, it is believed that the hydrographer does a better job of learning and retaining what he has seen.

Lead Hydrographer Mr. Landis Webber had his normal regulation duties to take care of on the streams around Cody. In addition, Mr. Webber was charged with the responsibility of training the newly appointed hydrographer in district 16. Also, continuing to fill Mr. Webber's plate is subdivision problems. In areas of high development, such as Cody and Jackson, it is so important from a field administrators standpoint that all requirements of title 18 of the State statutes must be enforced. It is the field administrators who take the heat when there are errors or mis-representations.

What a difference a couple storms can make. First of May had us scrambling to prepare for another dry year. By the end of May we, as well as the appropriators, were breathing much easier. Water was going into storage and the rains were coming frequently. Frugal use of the water supply still continued this year as people have become accustomed to that mode of operation. All these factors have led to most reservoirs in the division being in as good of shape as a year ago or much better as is the case on the Greybull River system. We, as a division, have made good strides in all aspects of our jobs, from the daily accounting being done on the major river systems; to the quality of our gaging and diversion data, and to the settling of some of those longstanding complaints that have been around for a lot longer than they deserved. These strides are only possible because of the quality of people in this division and our agency as a whole. With everyone doing their part and consistency in the approaches, answers and rulings we can not go wrong.

REPORT OF THE SUPERINTENDENT

WATER DIVISION NO. IV

By

Jade Henderson, Cokeville

The following annual report is a summary of Water Year 2005 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 Division I.)

General Conditions

Substantial snowpack and runoff improvements suggested an end to the past five-year severe drought. Resultant streamflows were higher and sustained. Hard summer frosts were surprisingly non-existent, reducing crop demands for water and producing bumper yields. Reservoir storage continued recovery from the low carryover of the drought years. We continue to wrestle with challengers at different state lines who seek to be exempt from regulation by either state. But we did have a seasoned field staff with no new trainees, some long-overdue pay adjustments, and several successful reclassifications (even though several more have been requested; and one Water Commissioner is now leaving after the season ends to take a job in the trona industry). The Division has a new and effective office "secretary" or Administrative Specialist.

Green River

We rejected the request by Hanks Family Ranch to have Wyoming enforce Utah's irrigation cap of 3 acre-feet per acre in the Henry's Fork drainage, despite their approach to our Governor's office. Instead, both State Engineers met to be briefed and consider existing priority schedules together with the water rights overlap mapping.

The Berman lawsuit in Utah stubbornly continues despite Wyoming's willingness to accept settlement that asked us to officially administer exactly what we were sued for doing by consensus. Although plaintiff lost a significant preliminary ruling ("that the [Utah] Court lacks subject matter jurisdiction to determine Berman's rights in the water at issue once it passes into Wyoming"), he would not accept our terms that China Lake water rights along the state line must remain defined as historically honored by both states. Expansion would be injurious to all Wyoming rights on Smith's Fork accustomed to honoring only the full fill. and set a harmful precedent all along the Uinta's state line.

Black's Fork and Smith's Fork Creek are always regulated for summertime storage delivery from Meeks Cabin and Stateline reservoirs. This year we again denied a District

request to lift shrink before all junior rights were met. Ham's Fork irrigators did not need their PacifiCorp storage pool in Viva Naughton Reservoir until fall. The streams near Big Piney narrowly escaped regulation this year. Pine Creek accounting below Fremont Lake Reservoir needed new streamgage ratings from relocated Instream Flow gaging sites. Formal analysis was started for the administrative tools that would be required to regulate inside Wyoming due to a Colorado River compact call for curtailment should the drought return to force that precedent.

Snake River

Revision and renegotiation of our Water Commissioner contract with Teton County was successful. Un- or mis-permitted aesthetic ponds continue to demand attention for proper water right filings throughout this subdividing drainage. Successful passage of legislation to stiffen penalties and criminalization of water law violations was presented in several situations throughout the Division as an incentive for compliance. The ongoing complaint on Birch Creek near Etna (against changes or expansion by non-native appropriators) resulted in extensive open correspondence, a neighborhood "open house" by newer users, and violation letters to speed water right filing.

Bear River

Unusually, interstate regulation of this compact's Central Division was not imposed at all this year. And voluntary compact allocation between Wyoming and Utah in the Upper Division guaranteed belated storage in the high Whitney Reservoir again this year; but the idea of regulating Wyoming irrigators in order to fill others' storage accounts is beginning to be resisted (even though it is questionable whether formal calls for regulation would turn them back on). Perhaps Bear Lake's storage recovery will finish next year in time for high flow to have everyone on and full. The interstate Commission's advocacy of Internet telemetry on major diversions has shifted Wyoming's funding from upgrading recorders to purchasing recorders with radio telemetry; and waning federal participation from the Bureau of Reclamation may shift ongoing maintenance to our budget as well.

Conclusion

The Division bid fond farewell to our retiring Secretary, Linda Ferguson, who preceded the current Superintendent's 12 years. We have been very fortunate to have extra funding for progress in some parts of Streamgage Rehabilitation, but continue to hold new equipment in storage awaiting funds for replacements and installation. Although Information Technology's new diversion-re cords database has not yet finished the year-old 2004 data for publication, they did accomplish the 2003 report, and with both years' lengthy experience are now reversing their recommendation against using MS-Access which Division IV used prior to 2003. We have some internal struggles in realizing expectations from restructuring with the new Assistant Superintendent. An ambitious team is critical and appreciated as we continue to face both old and new challenges.

**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. The Board takes appropriate action against registrants who are found guilty of practice or ethical violations.

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 resolution of complaints. 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, 2005				
		RESIDENT	NON-RESIDENT	TOTAL
PROFESSIONAL ENGINEER	INDIVIDUAL	962	3,478	4,440
	CORPORATION	91	350	441
	TOTAL	1,053	3,828	4,881
PROFESSIONAL LAND SURVEYOR	INDIVIDUAL	125	180	305
	CORPORATION	12	10	22
	TOTAL	137	190	327
PROFESSIONAL ENGINEER & LAND SURVEYOR	INDIVIDUAL	82	48	130
	CORPORATION	44	28	72
	TOTAL	126	76	202
ENGINEER-IN-TRAINING		1,133	501	1,634
LAND SURVEYOR-IN-TRAINING		43	9	52
GRAND TOTAL		2,492	4,604	7,096

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 functioning since June 2003.

Current Board members include:

<u>Board Member:</u>	<u>Representing:</u>	<u>Term Expires:</u>
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 driller contractor operator's license must be at least 18 years old, provide written documentation of financial responsibility, pass an examination prescribed by the board (or provide evidence he is currently certified 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 anticipates being able to offer their first certification exams by February 2005.

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 on December 29, 2004.

The Board is currently in the process of revising those rules and regulations to reflect changes in the National Ground Water Association's (NGWA) testing procedure,

effective January 1, 2005. The Board also recommended deleting the listing of NGWA's specialty exams for both the drilling and pump installation categories, which would allow the rules and regulations to still be valid even if NGWA's exam categories change in the future. When the rules and regulations are filed as emergency rules, they will be in effect for 120 days - during which time the Board can begin accepting applications and send the revised rules and regulations out for public review and comment

The Board met four times in WY-05; January 20 in Casper, March 16 in Casper, June 9 in Casper, and September 17 in Jackson.

Outreach efforts for WY-05 included the Ground Water Division staff presenting information on certification to the:

- Wyoming Water Well Drillers Association (March 3, 2005); and
- Wyoming - Cheyenne Chapter of Professional Engineers (April 11, 2005).

To date, the Division has received three requests for applications for certification from water well drilling and/or pump installation contractors in Idaho, Nebraska and Colorado

PERSONNEL LISTS
STATE ENGINEER'S OFFICE
(As of September 30, 2005 Administrative Specialist 2)

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

ADMINISTRATION

NAME	TITLE
Hutchinson, Anna.....	Executive Assistant
Doolin, Melanie	Human Resources Officer
Bartholomew, Beth.....	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
Benner David.....	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 Management Specialist 2
Cowley, Jeff	Water Management Specialist 3
Wright, Cheryl	Water Management Specialist 3
Vacant.....	Water Management 3

SUPPORT SERVICES

NAME	TITLE
Lindsten, Traci	Administrator, Support Services
Castle, Daniela	Administrative Specialist 5
Cavaliere, Libby.....	Administrative Specialist 5
Collins, Andrea	Info. Technology Specialist 2
Irwin, Kay.....	Administrative Specialist 4
Hoobler, Beth	Water Management Specialist 1
Lopez Joe	Info Technology Specialist 3
Nathan Rayburn	Info. Technology Specialist 3
Sylvester, Tandy.....	Info. Technology Specialist 2
Vossler, Steve	Water Management Specialist 3
Haldeman, Jason	Info. 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 2
Pierce, Dixie	Administrative Specialist 2
Langstaff, George.....	Water Management Specialist 1
Vacant	Administrative Specialist 2
Tebben, Beth.....	Water Management Specialist 2
McDonald, Doug.....	Administrative Specialist 2
Vacant	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
West Susan.....	Administrative Specialist 2
Lane, Monica.....	Administrative Specialist 4
Vacant.....	Administrative Specialist 3
Montgomery, Priscella.....	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 2
Hallberg, Debbie	Water Management Specialist 1
Wilson, Katina	Water Management Specialist 3
Fetter, David.....	Water Management Specialist 3
Skoetsch, Connie.....	Administrative Specialist 3
Mumper, Karen.....	Water Management Specialist 3

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

WATER ADMINISTRATION PERSONNEL

As of September 30, 2005

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	510 West 27th Torrington, Wyoming 82240
Assistant Superintendent	Al Prado	PO Box 1368 Douglas, Wyoming 82633
Field Investigator	Robert Foreman	510 West 27th Torrington, Wyoming 82240
Administrative Spec. 2	Sharon L. Hackett	510 West 27th Torrington, Wyoming 82240

DISTRICT	TITLE	NAME	ADDRESS
1	HC	Gene Stillahn	State Engineer's Office Herschler Bldg. 4-E Cheyenne, WY 82002
2	HC	Gary Mehling	510 West 27th Torrington, Wyoming 82240
3,4C	HC	Douglas Oliver	302 B 16th Street Wheatland, Wyoming 82201
4A	HC	Darren Parkin	Laramie Civic Center Room 240 710 Garfield Laramie, Wyoming 82070
4B	HC	Daniel Sprangers	Laramie Civic Center Room 240 710 Garfield Laramie, Wyoming 82070
6,7,8,16, 17,18	HC	Vacant	PO Box 710 Saratoga, Wyoming 82331
6,7,8,16, 17,18,	HC	Ted Vyvey	P.O. Box 710 Saratoga, Wyoming 82331

DIVISION I: WATER ADMINISTRATION PERSONNEL (cont'd)

DISTRICT	TITLE	NAME	ADDRESS
9	HC	Rod Oliver	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, Asst 14	HC	Jack Gibson	2020 Fairgrounds Rd., Ste. 103 Casper, Wyoming 82604
14	HC	Kent Becker	510 West 27 th Torrington, Wyoming 82240
6, 7,8,16. 17, 18	AHC	Robin Blake	P.O. Box 244 Encampment, Wyoming 82325
19	AS	Al Prado	PO Box 1368 Douglas, Wyoming 82633
North Platte River	Triangle PI	Tracy Brown	510 West 27 th Torrington, Wyoming 82240
North Platte River	AI	J. Scott Haskamp	2020 Fairground Rd. Ste. 103 Casper, WY 82604
North Platte River	Ai	Chad Pickett	PO Box 710 Saratoga, Wyoming 82331
North Platte River	Triangle WI	Kelly Mehling	510 West 27 th Torrington, Wyoming 82240
North Platte River	AI	Jamie Rasnake	302 B 16 th Street Wheatland, Wyoming 82201
North Platte River	PI	Wray Lovitt	PO Box 1368 Douglas, Wyoming 82633
North Platte River	NPAC	Brian Pugsley	510 West 27 th Torrington, Wyoming 82240

DIVISION II: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Mike Whitaker	PO Box 6103 Sheridan, Wyoming 82801
Assistant Superintendent	Carmine LoGuidice	PO Box 6103 Sheridan, Wyoming 82801
Administrative Spec. 2	Deborah Reed	PO Box 6103 Sheridan, Wyoming 82801
Reservoir Inspector	David Schroeder	PO Box 6103 Sheridan, Wyoming 82801

DIVISION II: WATER ADMINISTRATION PERSONNEL

DISTRICT	TITLE	NAME	ADDRESS
1,7,10	HC	Kody Steinbrecher	113 S. 21 st St. Sundance, Wyoming 82729
2,3,8, 9,11	AS	Carmine LoGuidice	PO Box 6103 Sheridan, Wyoming 82801
2,3	HC	David Pelloux	P.O. Box 6103 Sheridan, Wyoming 82801
4,5,6	HC	William Knapp	PO Box 6103 Sheridan, Wyoming 82801
8	HC	Sandy Dixon	PO Box 133 Kaycee, Wyoming 82639
5,6	HC	Pat Boyd	P.O. Box 6103 Sheridan, Wyoming 82801
1,8	HC	Roger Ralph	2020 Fairgrounds Road Ste 103 Casper, Wyoming 82601

DIVISION III: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Loren Smith	715 East Roosevelt Riverton, Wyoming 82501
Assistant Superintendent	David Deutz	2009 Big Horn Avenue, Ste 1 Worland, WY 82401
Administrative Spec. 2	Marie Johnson	715 East Roosevelt Riverton, Wyoming 82501

DIVISION III: WATER ADMINISTRATION PERSONNEL

DISTRICT	TITLE	NAME	ADDRESS
At Large	AS	David Deutz	2009 Big Horn Ave, Ste. 1 Worland, WY 82401
1, 11	HC	Myron Smailey	715 East Roosevelt Riverton, Wyoming 82501
1,3	HC	Aaron Marshall	715 East Roosevelt Riverton, Wyoming 82501
5, 14	HC	Mike Kimsey	1450 Owl Creek Rd. Thermopolis, Wyoming 82443
6,12	HC	Rod Delker	2009 Big Horn Ave., Ste 1 Worland, WY 82401
7	HC	Gary Anders	P. O. Box 263 Greybull, Wyoming 82426
8,16	HC	Heber Jensen	1201 E. 7 th Powell. WY 82435
9,10,15	HC	Landis Webber	1201 E. 7 th Powell, WY 82435
13,6	HC	Mike Riley	1201 E. 7 th Powell, WY 82435

WATER DIVISION III - BIG HORN GENERAL ADJUDICATION

DISTRICT	TITLE	NAME	ADDRESS
Big Horn	AI	Randy Maxwell	715 East Roosevelt Riverton, Wyoming 82501

DIVISION IV: PERSONNEL AT LARGE

TITLE	NAME	ADDRESS
Superintendent	Jade Henderson	PO Box 277 Cokeville, Wyoming 83114
Assistant Superintendent	Chris Carlsen	Box 1080 Big Piney, Wyoming 83113
Administrative Spec. 4	Linda Ferguson	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	PO Box 1080 Big Piney, Wyoming 83113
3,9,14,15	LHC	John Yarbrough	PO Box 1208 Lyman, Wyoming 82937
2,4, 8,12	LHC	Kevin Wilde	Box 277 Cokeville, Wyoming 83114
2	WC	Kevin Payne	P.O. Box 277 Cokeville, WY 83114
3	WC	Todd Rollins	1653 County Road 234 Lyman, WY 82937
4	WC	Don Shoemaker	343 Ninth Street Evanston, Wyoming 82930
7,10, 11	HC	Jeff Davis	PO Box 1080 Big Piney, Wyoming 83113
5,6,10	HC	Ed Boe	PO Box 1080 Big Piney, Wyoming 83113
7,11	WC	Kursty Day	PO Box 689 Pinedale, Wyoming 82941
8,12	WC	Ed Bruce	142 Allred Road Afton, Wyoming 83110
9	WC	Bill Marchione	PO Box 605 Kemmerer, Wyoming 83101
13	WC	Jim Wilson	275 Yellow Rose Drive Alta, Wyoming 83422
14	WC	Todd Covolo	PO Box 1165 Lyman, WY 82937
15	WC	Allen Jaggi	PO Box 326 Lyman, Wyoming 82937
16	WC	Don Barney	PO Box 9575 Jackson, Wyoming 83002-9575
16	AWC	Conan Beesley	PO Box 9575 Jackson, Wyoming 83002-9575

STATE BOARD OF REGISTRATION FOR PROFESIONAL 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/Pubiic
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 Lindemann, State Engineer's Office	Herschler Bldg. 4E Cheyenne, WY 82002	307-777-5063	llinde@state.wy.us	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)	jacweber@wyoming.com	2007
Chuck Wilson Bronco Drilling	P.O. Box 836 Torrington, WY 82240	307-532-4882	NA	2009
Edward Finch Barnhart Drilling Co. Inc.	P.O. Box 1638 Riverton, WY 82501	307-856-6481 307-856-6753 (FAX)	bdc@trib.com	2007
Steve Barbour Aqua Pumps	9406 N Hwy 14-16 Gillette, WY 82716	307-686-2573 307-660-2573 (cell)	seb@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 3 rd Floor North. Cheyenne, WY 82002	307-777-7890	Knels03@state.wy.us
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GROUND WATER ADVISORY COMMITTEES

WATER DIVISION	NAME	ADDRESS	TERM EXPIRES	PHONE NO.
DIV. I	Ben Jordan	1050 North 3 rd 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
DIV. II	Harvey Crowe	587 South Buffalo, WY 82834	9/30/10	684-7477
	Timothy G. Barritt	P. O. Box 664 Upton, WY 82730	9/30/06	686-1125 Cell 680-3549
	Thomas Pilch plich@wavecom.net	41 East Burkitt Sheridan, WY 82801	9/30/08	672-8750 Cell 899-4712
DIV. III	Dick Steediey, Jr.	2236 Greever St. Cody, WY 82414	9/30/06	527-6712
	Ken Schreuder ees@wyoming.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@lbgwvoming.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**

**BEAR RIVER COMMISSION
(Idaho, Utah and Wyoming)**

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Commissioner
Gordon Thornock, Citizen	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, Interstate Stream Engineer	Engineering Committee, Member and Chairman

COLORADO RIVER MANAGEMENT WORK GROUP

NAME, TITLE	POSITION
John W. Shields, Interstate Streams Engineer	Member

COLORADO RIVER COMMITTEE OF FOURTEEN

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Member
John W. Shields, Interstate Streams Engineer	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, Interstate Streams Engineer	Work Group Member
Bill DiRienzo, Water Quality Div., Department of Environmental Quality	Work Group Member

GLEN CANYON ADAPTIVE MANAGEMENT PROGRAM

NAME, TITLE	POSITION
John W. Shields, Interstate Streams Engineer	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, Interstate Streams Engineer	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, Interstate Streams Engineer	Resolutions Committee Chairman and Membership Committee Member

MISSOURI RIVER BASIN ASSOCIATION

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Director
Jodee Pring, Water Planning Coordinator	Technical Committee Member

YELLOWSTONE RIVER COMPACT COMMISSION

(Montana, North Dakota and Wyoming)

NAME, TITLE	POSITION
Patrick T. Tyrrell, State Engineer	Commissioner
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, Interstate Streams Engineer	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, North Platte Coordinator	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
Phillip Stump, Chair Lisa Lindeman	Ground Water Wells Subcommittee
Sue Lowry	By-Laws Subcommittee
Phillip Stump	Finance Subcommittee
Randy Tullis Phillip Stump	Consumptive Use 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 INSTITUTES

(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
Hugh McFadden, 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, Administrator Interstate Streams	Alternate
John Wagner, Administrator, Water Quality Division, DEQ	Alternate

ASSOCIATION OF STATE DAM SAFETY OFFICIALS

NAME, TITLE	POSITION
David S. Benner Safety of Dams Engineer	State Representative

INTERSTATE COUNCIL ON WATER POLICY

NAME, TITLE	POSITION
Sue Lowry, Administrator Interstate Streams	Chair