



# State Engineer's Office

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GOVERNOR

PATRICK T. TYRRELL  
STATE ENGINEER

January 14, 2010

## MEMORANDUM

TO: Members of the State Water Forum

FROM: Patrick Tyrrell, Chairman

SUBJECT: Attached for your review and information is a copy of the January 5, 2010 Water Forum meeting minutes. Please take a few moments and pencil into your calendar the Water Forum dates for this year. The next meeting will be February 2<sup>nd</sup> in the State Engineer's Conference Room at 10:00 a.m.

### WATER FORUM SCHEDULE 2009-2010 1<sup>st</sup> TUESDAY OF EACH MONTH

| DATE                     | INVITED GUEST             | DISCUSSION ITEM   |
|--------------------------|---------------------------|---|
| January 5 <sup>th</sup>  | Bern Hinckley             | Lusk Area Groundwater Level I Study                                     |
| February 2 <sup>nd</sup> | John Henz and Bill Badini | Extreme Precipitation Analysis tool and Climate Change and Water Supply |
| March 2 <sup>nd</sup>    | Blaine Christopherson     | Allison Draw Project  |
| April 6 <sup>th</sup>    | Bureau of Reclamation     | Water Supply Forecast   |
| May 4 <sup>th</sup>      | Tim Bartos                | High Plains Aquifer Study   |

### SPECIAL REPORT

The next meeting of the Water Forum will be February 2, 2010 at 10:00 a.m. in the State Engineer's Office conference room. We will be hearing from John Henz and Bill Badini, who are with HDR in Denver, CO. Mr. Henz and Mr. Badini will be giving us a presentation on their Extreme Precipitation tool and Climate Change and Water Supply.

# WYOMING STATE WATER FORUM MEETING MINUTES

January 5, 2010

Sue Lowry called the two hundred and eighty-ninth meeting of the State Water Forum to order at 10:00 a.m. The following were in attendance:

| <u>Name</u>     | <u>Agency</u>       | <u>E-mail</u>              |
|-----------------|---------------------|----------------------------|
| Tom Annear      | WY Game and Fish    | tom.annear@wgf.state.wy.us |
| Kevin Boyce     | WWDO                | kboyce@state.wy.us         |
| Lee Hackleman   | NRCS                | lee.hackleman@wy.usda.gov  |
| John Harju      | SEO                 | jharju@seo.wyo.gov         |
| Bern Hinckley   | Hinckley Consulting | bhinckley@aol.com          |
| Matt Hoobler    | SEO                 | mhoobl@seo.wyo.gov         |
| Rick Huber      | WY Game and Fish    | rick.huber@wgf.state.wy.us |
| Sue Lowry       | SEO                 | slowry@seo.wyo.gov         |
| Jeremy Manley   | SEO                 | jmanle@seo.wyo.gov         |
| Pete Michael    | AG                  | pmicha@state.wy.us         |
| George Moser    | SEO                 | gmoser@seo.wyo.gov         |
| David Mott      | USGS                | dmott@usgs.gov             |
| Teresa Nealon   | Trihydro            | tnealon@trihydro.com       |
| Chris Nicholson | WRDS                | cnichol5@uwyo.edu          |
| Jodee Pring     | SEO                 | jpring@seo.wyo.gov         |
| John Shields    | SEO                 | jshiel@seo.wyo.gov         |
| Steve Wolff     | SEO                 | swolff@seo.wyo.gov         |

## AGENCY REPORTS

In order to assure accurate reporting in the minutes, forms are passed out to be completed by the representative of each agency at the meeting. These minutes consist of a compilation of the written reports received. Please complete a form either at the Forum meeting or return within a couple of days to Jodee Pring, State Engineer's Office. This will increase the efficiency and accuracy of completing the minutes for the Water Forum. Reports can also be sent via e-mail to: jpring@seo.wyo.gov. For more information on the following reports, please contact the agency representative listed above.

### STATE ENGINEER'S OFFICE (SEO)

Sue Lowry reported the following:

On December 15<sup>th</sup>, a Belle Fourche River Compact meeting was held in Belle Fourche, SD. Some of the items the meeting attendees discussed included a review of summer 2009 irrigation season operations and the status of Keyhole Reservoir. The 2010 meeting will be held in Wyoming.

During the week of March 22, many meetings will be held in Washington, DC. On Mar. 22, the National Water Resources Association will be meeting. March 23-26, the Interstate Council on Water Policy and Western States Water Council will meet jointly. This joint meeting will include the Washington Roundtable and the Cooperative Water Program Stakeholders' Conference.

John Shields reported the following:

On December 10, 2009, Secretary of the Interior Ken Salazar announced that the Department of the Interior (Department) would initiate development of a High-Flow Experimental Protocol (Protocol) for releases from Glen Canyon Dam as part of the ongoing implementation of the Glen Canyon Dam Adaptive Management Program (AMP). High-flow experimental releases have been undertaken in the past and will be further analyzed and implemented pursuant to the direction of the Secretary to assess the ability of such releases to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established. Previous high-flow experiments from Glen Canyon Dam were conducted in 1996, 2004, and 2008. Experimental high flows mobilize sand stored in the main channel of the Colorado River to rebuild sandbars, beaches, and associated backwater habitats along shorelines. Sandbars provide key wildlife habitat, protect archeological sites and vegetation structure, and provide camping opportunities in Grand Canyon. Development and implementation of the Protocol builds on information developed in the previous three high-flow experiments, and will be designed to further evaluate the hypothesis that repeated high-flow releases conducted under conditions of sand enrichment in Grand Canyon may result in cumulative increases in sandbar area and volume. The Department intends to develop the High-Flow Experimental Protocol through a public process pursuant to NEPA, through the development of an Environmental Assessment (EA). The Protocol is anticipated to be a multi-year, multi-experiment approach and will be based on the best available scientific information developed through the AMP as well as other sources of relevant information. The Protocol constitutes the next logical step in adaptive management with respect to high flow testing.

A Colorado River Basin Water Supply and Demand Study will be getting underway at the end of January. The Study will be conducted as one of the three river basin studies selected for conduct as part of the Department of Interior's Water Conservation Initiative. The Bureau of Reclamation is the lead agency and paying 50%. The states and the major water users within the states are covering the remaining 50%. The scope of work for the study is very broad. It includes an analysis of system demands and water supply availability under climate change conditions, system reliability, environmental issues and augmentation strategies.

The study will:

- analyze water supply and demand imbalances throughout the study area through 2060;
- assess options for resolving such imbalances; and
- develop recommendations to address current and projected imbalances.

Non-Federal cost-share partners include each of the seven Basin States, water management authorities, and irrigation and water districts. Broad support for the study exists among stakeholders throughout the Basin and their input and participation will be sought throughout the study. The total cost of the study is \$2 million (50/50 cost share) and the study will be completed within a period of two years. The "augmentation" portion of the study is going to be very interesting. It will be an expansion of a prior study conducted several years ago that was funded by the Southern Nevada Water Authority and participated in by the seven Colorado River Basin States which looked at a number of augmentation strategies on an appraisal level. A number of the Lower Basin entities want the study to look at importation strategies from adjacent basins. The problem is that except for the Mississippi River, adjacent river systems all have similar water supply problems.

Non-federal participants to the Upper Colorado River Endangered Fish Recovery Program and the San Juan River Basin Recovery Implementation Program have continued working to get amendments to the recovery programs' federal statutory authorization enacted during the first session of Congress, which will soon be over. He reported that the House Resources Committee and the Senate Energy and Natural Resources Committee both marked out recovery program-related legislation to extend the entire existing annual program funding authority through 2023 on December 16<sup>th</sup>. The re-authorization was necessitated by a clause in P.L. 106-392 that states the utilization of power revenues for annual base funding shall cease after the fiscal year 2011, unless re-authorized by Congress; except that power revenue may continue to be utilized to fund the operation and maintenance of capital projects and monitoring. Hearings on the bills occurred in July (Senate) and September (House). The Commissioner of Reclamation and others testified in support of the bills.

This bill is subject to the "pay-as-you-go" (pay-go) rule. The House Water and Power Subcommittee has determined that the only way to have this bill pass is to remove the authorization for continued use of power revenues for that portion of annual funding that is being reauthorized and substitute language that, through fiscal years 2023, authorizes Congress to appropriate the funds that heretofore having been coming from power revenues. About 39% of the power revenue funds will be lost in order to comply with pay-go. Recovery program actions ineligible for continued funding would include stocking, non-native fish removal, information and education, and program management. The House Committee amended the bill to make the extended authority funding subject to appropriations (e.g., removed the direct spending authority and hence the source of the funding would not be from the Upper Colorado Basin Fund) whereas the Senate Committee reported the bill without amendment – it will be interesting to see what the resolution of this legislative matter will be during the Second Session of the Congress that will convene early in 2010.

Pete Michael of the Attorney General's Office offered that the Forum's attendees might find it of interest to know about litigation challenging the constitutionality of the California Quantification Settlement Agreement (QSA) that was implemented when the Secretary of the Interior signed a Colorado River deal in October 2003. For decades, California took more than its basic apportionment of 4.4 million acre-feet of water from the Colorado River, spurring complaints from the other states and a requirement by the Department of the Interior that California develop a 4.4 Plan. The QSA set in motion a program for California to reduce its draw on the River and maintain its uses at 4.4 MAF during normal water supply years. A Sacramento Superior Court judge made a tentative ruling recently calling into question whether the State of California and in particular the Legislature had legal authority to fund remediation actions at the Salton Sea in the manner done. The judge's tentative ruling was that it was unconstitutional for the Legislature to approve a "blank check" to help pay for revitalizing the Sea. This ruling has raised some initial concerns about whether the QSA and overall Colorado River deal might need to be amended or aspects of it redone.

Matt Hoobler reported the following:

Work continues on the municipal and industrial water use reports that are required under the North Platte Decree. The deadline for the information from the entities is due December 31<sup>st</sup>. Mr. Hoobler will then submit his report to the North Platte Decree Committee on March 31<sup>st</sup>.

George Moser reported the following:

The deadline for public comment on the revised minimum water well standards is January 22<sup>nd</sup>. These revisions can be found on the State Engineer's Office website.

John Harju reported the following:

To comply with the Governor's Executive Order 2008-2 regarding sage grouse conservation, the State Engineer's Office has added a step to its water right permit application review procedure. Effective January 4, 2010, the State Engineer's Office will begin screening all new water right permit applications to determine if they are located within a defined Core Population Area. For more details on this procedure, please visit the SEO website at:  
<http://seo.state.wy.us/PDF/Sage%20Grouse%20Conservation.pdf>

Jodee Pring reported the following:

This week, the SEO will be conducting e-permit training for the field staff in Riverton. This is in anticipation of e-permit going live to the public sometime before the end of January.

There will be a Green River Basin Advisory Group meeting in Rock Springs at 6:00 p.m. on January 28<sup>th</sup> at the White Mountain Library. This meeting will include a presentation from WWC Engineering on the final draft of the update of the Green River Basin Plan and an update from the Water Development Office on the feasibility study that will be conducted on the Green River Basin Decision Support System (DSS).

On December 1<sup>st</sup>, there will be a meeting in Powell, WY of the Yellowstone River Compact Commission.

#### Attorney General's Office (AG)

Pete Michael reported the following:

An Interim report from the Special Master in the MT v. WY case is expected today. The two parties may appear before the Supreme Court in October.

The following website, hosted through Stanford University, is where all of the documents pertaining to the MT v. WY case can be found:

<http://www.stanford.edu/dept/law/mvn/>

Marion Yoder reported the following:

The AG's office is helping the SEO with some Big Horn adjudication clean-up. There are some return flow issues left to be settled. A Pro Se claimant is stating that he is entitled to return flows that were historically coming off of irrigated lands that are now to be eliminated.

#### UNITED STATES GEOLOGICAL SURVEY (USGS)

David Mott reported the following:

Under the National Water Quality Assessment Program or NAWQA, Montana is conducting a study in the Yellowstone River Basin. The study is to monitor water quality in shallow aquifers that are under irrigated lands. The study is focusing on land that is growing wheat and corn.

WATER RESOURCES DATA SYSTEM

Chris Nicholson reported the following:

Chris passed three handouts: one on Wyoming Precipitation: Departures from Normal, one showing the January temperature average max, record max, average min and record min in Casper from 1948 – 2009 and the December temperature average max, record max, average min and record min in Cheyenne from 1915 – 2009. A copy of these handouts can be found [here](#).

WRDS has an article in the Winter 2009/2010 issue of ARC News. Please visit: [http://www.esri.com/news/arcnews/winter0910articles/files/arcnews31\\_4/arcnews-winter09.pdf](http://www.esri.com/news/arcnews/winter0910articles/files/arcnews31_4/arcnews-winter09.pdf) to read this interesting article.

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

Lee Hackleman reported the following:

Lee provided a copy of the Monday morning snow report. A copy of that report can be found [here](#).

WYOMING GAME AND FISH (WY G&F)

Tom Annear reported the following:

WY G&F has been monitoring and on the lookout for aquatic invasive species. So far, no invasive species have been found in Wyoming waters.

Rick Huber reported the following:

WY G&F has provided recommendations to the Bureau of Land Management on construction of wind farms and their potential impact to aquatic and terrestrial life.

WYOMING WATER DEVELOPMENT OFFICE (WWDO)

Kevin Boyce reported the following:

During this legislative session, House Bill 46, omnibus water bill – planning <http://legisweb.state.wy.us/2010/Enroll/HB0046.pdf> and Senate File 37, omnibus water bill - construction <http://legisweb.state.wy.us/2010/Enroll/SF0037.pdf> will be reviewed.

Consultant selection for the 2010 projects will begin after the Select Water Committee meets this week.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

1. Water Supply Conditions of the North Platte River Basin.

December 31, 2009 Reservoir Conditions

| <u>Reservoir</u> | <u>Elev. (Ft)</u> | <u>Content (AF)</u> | <u>% Full Conservation Storage</u> | <u>% Avg.</u> |
|------------------|-------------------|---------------------|------------------------------------|---------------|
| Seminole         | 6337.97           | 685,173             | 67                                 | 124           |
| Pathfinder       | 5835.48           | 728,425             | 72                                 | 137           |

| <u>Reservoir</u> | <u>Elev. (Ft)</u> | <u>Content (AF)</u> | <u>% Full Conservation Storage</u> | <u>% Avg.</u> |
|------------------|-------------------|---------------------|------------------------------------|---------------|
| Alcova           | 5487.94           | 155,908             | 85                                 | 101           |
| Glendo           | 4605.54           | 240,337             | 46                                 | 90            |
| Guernsey         | 4403.89           | 14,427              | 32                                 | 162           |

December 31, 2008 Reservoir Conditions

| <u>Reservoir</u> | <u>Elev. (Ft)</u> | <u>Content (AF)</u> | <u>30 Year Average (AF)</u> |
|------------------|-------------------|---------------------|-----------------------------|
| Seminoe          | 6324.82           | 511,754             | 552,200                     |
| Pathfinder       | 5810.18           | 388,843             | 532,600                     |
| Alcova           | 5488.33           | 156,786             | 154,900                     |
| Glendo           | 4603.23           | 224,010             | 267,700                     |
| Guernsey         | 4403.11           | 13,375              | 8,900                       |

December 2009 Inflows

| <u>Reservoir</u>         | <u>Inflows</u> | <u>% Of Average</u> |
|--------------------------|----------------|---------------------|
| Seminoe                  | 25.8           | 98                  |
| Pathfinder (Sweetwater)  | 0.6            | 14                  |
| Alcova to Glendo Gains   | 6.0            | 83                  |
| Glendo to Guernsey Gains | 1.3            | 87                  |

Kendrick ownership was 1,007,380 acre-feet (AF) on December 31, 2009 and approximately 116% of average (866,400 AF), which compares to the ownership of 524,170 AF last year at this date. The December 31, 2009, North Platte ownership was 669,087 AF, which was approximately 133% of average (502,400 AF), which compares to 678,196 AF of North Platte ownership on this date last year. The Glendo ownership was 120,308 AF on December 31, 2009, which was approximately 99% of average (121,100 AF), which compares to the 83,926 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortes Dam are approximately 530 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 500 cfs. The level of Alcova Reservoir is approaching the winter operating range of 5488± one foot.

2. Water Supply Conditions of the Big Horn Basin

December 31, 2009 Reservoir Conditions

| <u>Reservoir</u> | <u>Elev. (Ft)</u> | <u>Content (AF)</u> | <u>% Full Conservation Storage</u> | <u>% Avg.</u> |
|------------------|-------------------|---------------------|------------------------------------|---------------|
| Bull Lake        | 5780.07           | 81,538              | 53                                 | 108           |
| Boysen           | 4719.18           | 634,008             | 85                                 | 111           |
| Buffalo Bill     | 5367.20           | 448,252             | 69                                 | 107           |
| Pilot Butte      | 5454.72           | 29,115              | 86                                 | 107           |

December 31, 2009 Reservoir Conditions

| <u>Reservoir</u> | <u>Elev. (Ft)</u> | <u>Content (AF)</u> | <u>30 Year Average (AF)</u> |
|------------------|-------------------|---------------------|-----------------------------|
| Bull Lake        | 5783.34           | 89,924              | 75,700                      |
| Boysen           | 4717.94           | 612,893             | 571,400                     |
| Buffalo Bill     | 5367.87           | 452,816             | 419,800*                    |
| Pilot Butte      | 5453.64           | 28,210              | 27,200                      |

\* The average used for Buffalo Bill Reservoir reflects data from 1993 through 2009. In 1992, the capacity of the reservoir was increased to approximately 646,565 AF as a result of raising the dam. A long term average cannot be calculated until several years of operation occur under the increased storage.

December 2009 Inflows

| <u>Reservoir</u> | <u>Inflows (KAF)</u> | <u>% Average</u> |
|------------------|----------------------|------------------|
| Bull Lake        | 1.9                  | 76               |
| Boysen           | 30.7                 | 81               |
| Buffalo Bill     | 13.5                 | 86               |

The release from Buffalo Bill Reservoir to the river and the springs is approximately 410 cfs as measured at the Cody river gage. The release from Boysen Dam is approximately 900 cfs.

SPECIAL REPORT

Bern Hinckley of Hinckley Consulting gave a presentation on the Lusk Area Level I Groundwater Study. This study was completed for the Water Development Commission at the request of groundwater users in the area asking for a Control Area. A copy of this report can be found at: [http://library.wrds.uwyo.edu/wwdcrept/Lusk/Lusk\\_Area-Groundwater\\_Level\\_I\\_Study-Final\\_Report-2009.html](http://library.wrds.uwyo.edu/wwdcrept/Lusk/Lusk_Area-Groundwater_Level_I_Study-Final_Report-2009.html)

The meeting adjourned at 12:00 pm.