



# State Engineer's Office

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STATE ENGINEER

November 30, 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 November 2, 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 December 7<sup>th</sup> in the State Engineer's Office Conference Room at 10:00 a.m.

### WATER FORUM SCHEDULE 2010-2011 1<sup>st</sup> TUESDAY OF EACH MONTH

DATE	INVITED GUEST	DISCUSSION ITEM
December 7 <sup>th</sup>	Dr. Ginger Paige – UW – Assoc. Professor – Water Resources	Overview of the various watershed instrumentation efforts and soil monitoring sites
January 4 <sup>th</sup>	Kim Johnson – WY Office of Homeland Security	WY Flood Map Modernization Program
February 1 <sup>st</sup>	Dr. Ron Surdam – UW – Director – Carbon Management Research Center – School of Energy Resources	Carbon Sequestration
March 1 <sup>st</sup>	Tim Bartos – USGS	High Plains Aquifer
April 5 <sup>th</sup>	Bureau of Reclamation	Water Supply Forecast
May 3 <sup>rd</sup>		

## SPECIAL REPORT

The next meeting of the Water Forum will be December 7, 2010 at 10:00 a.m. in the State Engineer's Office conference room. We will be hearing from Ginger Paige, Associate Professor at the University of Wyoming in Water Resources. Dr. Paige's presentation will be an overview of the various watershed instrumentation efforts and soil monitoring sites around the state of Wyoming.

## WYOMING STATE WATER FORUM MEETING MINUTES

November 2, 2010

Jodee Pring called the two hundred and ninety-sixth 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>
Brian Anderson	USBR	bjanderson@usbr.gov (phone)
Matt Bilodeau	COE	matthew.a.bilodeau@usace.army.mil
Liberty Blain	LCCD	liberty@lccdnet.org
Melanie Clark	USGS	mclark@usgs.gov (phone)
Brent Ewers	UW	beewers@uwyo.edu
Jeff Fassett	HDR Engineering, Inc.	jeff.fassett@hdrinc.com (phone)
Dave Gloss	USFS – Hydrologist	dgloss@fs.fed.us (phone)
Eric Gordon	Western Water Assessment	eric.gordon@noaa.gov
Matt Hoobler	SEO	mhoobl@seo.wyo.gov
Greg Kerr	UW – Office of Water Programs	rrek@uwyo.edu
Barry Lawrence	WWDO	blawre@state.wy.us
David Mott	USGS	dmott@usgs.gov
Don Newton	DEQ – Lander	dnewto@wyo.gov (phone)
Chris Nicholson	WRDS	cnichol5@uwyo.edu
Phil Ogle	WWDO	pogle@state.wy.us
George Parks	WAM	gparks@wyomuni.org
Jodee Pring	SEO	jpring@seo.wyo.gov
Evan Pugh	Univ. of Colorado	evan.pugh@colorado.edu
Cathy Rosenthal	WACD	ccooper@tribcsp.com (phone)
Justin Williams	AG	jwilli7@state.wy.us
Jennifer Zygmunt	WDEQ – WQD	jzygmum@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)

Jodee Pring reported the following:

The Water Planning team continues to work on the update of the Bear River Basin Plan. The team is working on updating tech memos and certain aspects of the report. The United States Geological Survey (USGS) and Wyoming State Geological Survey (WSGS) are ready to begin the groundwater portion of this plan.

The Water Development Office is requesting \$250,000 to begin a groundwater study in the Snake/Salt Basin. This request will be part of the upcoming omnibus water bill.

Matt Hoobler reported the following:

The reporting season is under way for WY2010 under the Platte River Recovery Implementation Program (PRRIP). Reports are being collected and solicited.

### UNITED STATES GEOLOGICAL SURVEY (USGS)

David Mott reported the following:

Kirk Miller gave a presentation on the status of the USGS monitoring network at the Wyoming Water Association meeting held October 27<sup>th</sup> – 29<sup>th</sup> in Laramie.

John Elliott, a research hydrologist with the USGS, will be giving a presentation Wednesday, November 17<sup>th</sup> at 10:00 am at the Cottonwood Room in the Laramie County Library. Mr. Elliott's presentation is titled: "River Restoration in Colorado – How Well Is It Working and How Can We Tell?"

### LARAMIE COUNTY CONSERVATION DISTRICT (LCCD)

Liberty Blain reported the following:

The Conservation District will be holding a public meeting on Oil and Gas Development in Laramie County on December 9<sup>th</sup>. The meeting will be held at the Burns Town Hall. Speakers include Tom Doll of the Wyoming Oil and Gas Conservation Commission, John Barnes of the State Engineer's Office and John Corra, of the Wyoming Department of Environmental Quality.

### DEPARTMENT OF ENVIRONMENTAL QUALITY – WATER QUALITY DIVISION (WDEQ – WQD)

Don Newton reported the following:

Fifteen Total Maximum Daily Loads (TMDLS) have been completed in the state. Some of the TMDLs include: Goose Creek, City of Gillette Fishing Lake, Belle Fourche, Lower Crow Creek, Big Horn River and Greybull River.

### WATER RESOURCES DATA SYSTEM (WRDS)

Chris Nicholson reported the following:

A copy of the October 26, 2010 Drought Monitor and the Wyoming Precipitation – Departures from normal for the month can be found on the WRDS website at: <http://www.wrds.uwyo.edu/>

### WYOMING WATER DEVELOPMENT OFFICE (WWDO)

Barry Lawrence reported the following:

A Water Development Commission meeting will be held Wednesday through Friday of this week. Fifty-four projects have been brought forward with \$64 million being requested but \$29 million being appropriated.

The Wyoming Weather Modification Program is in year 6. Additional funding for two years has been granted. Eighty-four cases were run this past year and they like to have 200 cases for a good confidence interval.

The Salt/Wyoming Range Feasibility Study is now into Phase II. A meteorological tower is being installed with funding coming from the Lower Colorado Basin.

The annual Wyoming Water Association meeting was held October 27<sup>th</sup> – 29<sup>th</sup> in Laramie with over 100 participants.

### OFFICE OF WATER PROGRAMS – UW (OWP)

Greg Kerr reported the following:

The Water Research Program has 11 ongoing projects and 4 projects that will be wrapping up in February 2011. There are 8 new proposals that are currently in review. On December 2<sup>nd</sup>, the selection committee will hold a meeting at WWDO.

All of the projects can be found online at: [uwyo.edu/owp](http://uwyo.edu/owp)

### WYOMING ASSOCIATION OF CONSERVATION DISTRICTS (WACD)

Cathy Rosenthal reported the following:

The WACD has been working on a web-based watershed tool with WYGISC. The project name is Suitewater and Phase I is almost complete.

The WACD annual convention will be held November 15-18 in Worland.

### Western Watershed Assessment (WWA)

Eric Gordon reported the following:

The Cooperative Institute for Research in Environmental Sciences (CIRES) Western Water Assessment (WWA) (<http://wwa.colorado.edu>) is seeking a full-time Professional Research Assistant to serve as Wyoming Liaison. Using multidisciplinary teams of experts in climate, water, law, and economics, WWA provides information about natural climate variability and human-caused climate change. This information – usually in the form of climate forecasts and regional vulnerability assessments – is designed to assist water-resource and other decision makers.

For a copy of the job description, click [\*\*here\*\*](#).

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

The following is a listing of reservoir conditions on October 31, 2010:

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

August 31, 2009 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Seminoe	6347.76	842,798	83	140
Pathfinder	5837.61	766,068	75	151
Alcova	5488.07	156,200	85	100
Glendo	4611.00	281,588	54	165
Guernsey	4395.55	5,745	13	106

October 31, 2009 Reservoir Conditions:

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminoe	6338.17	688,131	602,800
Pathfinder	5835.10	721,869	506,800
Alcova	5489.78	160,079	155,700
Glendo	4594.25	167,172	170,800
Guernsey	4398.72	8,399	5,400

October Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% Of Average</u>
Seminoe	28.3	94
Pathfinder (Sweetwater)	2.2	39
Alcova to Glendo Gains	13.2	106
Glendo to Guernsey Gains	2.6	113

The inflows were below average for all reservoirs in the North Platte Basin except for Pathfinder Reservoir for October 2010.

Kendrick ownership was 1,109,132 acre-feet (AF) on October 31, 2010 and approximately 127% of average (871,000 AF), which compares to the ownership of 1,011,711 AF last year at this date. The October 31, 2010, North Platte ownership was 719,565 AF, which was approximately 166% of average (433,700 AF), which compares to 598,633 AF of North Platte ownership on this date last year. The Glendo ownership was 174,622 AF on October 31, 2010, which was approximately 143% of average (121,800 AF), which compares to the 120,840 AF of Glendo ownership on this date last year.

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

## 2. Water Supply Conditions of the Big Horn Basin

### October 31, 2010 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full</u> <u>Conservation Storage</u>	<u>% Avg.</u>
Bull Lake	5774.77	68,577	45	92
Boysen	4718.78	627,113	85	105
Buffalo Bill	5368.51	457,581	71	109
Pilot Butte	5453.47	28,068	83	106

### October 31, 2009 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5779.56	80,259	74,800
Boysen	4720.85	663,535	595,700
Buffalo Bill	5368.92	460,463	419,200*
Pilot Butte	5455.09	29,427	26,600

\* 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.

### October Inflows

<u>Reservoir</u>	<u>Inflows (KAF)</u>	<u>% Average</u>
Bull Lake	4.0	71
Boysen	36.8	62
Buffalo Bill	16.6	64

Inflows to Bull Lake, Boysen, and Buffalo Bill Reservoirs were above average for October. The release from Boysen Dam is approximately 800 cfs. The release from Buffalo Bill Reservoir to the river is 350 cfs and with the addition of the springs results in approximately 410 cfs as measured at the Cody river gage.

### SPECIAL REPORT

Dr. Brent Ewers, Associate Professor at the University of Wyoming in Botany, gave a very interesting presentation on “How the Bark Beetle Epidemic is influencing Forest Hydrology.”

A copy of Dr. Ewers’ PowerPoint presentation can be found [here](#).

The meeting adjourned at 12:00 pm.