



# State Engineer's Office

HERSCHLER BUILDING, 4-E CHEYENNE, WYOMING 82002  
(307) 777-7354 FAX (307) 777-5451  
[seoleg@state.wy.us](mailto:seoleg@state.wy.us)

**MATTHEW H. MEAD**  
GOVERNOR

**PATRICK T. TYRRELL**  
STATE ENGINEER

April 13, 2011

## MEMORANDUM

**TO:** Members of the State Water Forum

**FROM:** Patrick Tyrrell, Chairman

**SUBJECT:** Attached for your review and information is a copy of the April 5, 2011 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 May 3<sup>rd</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

<b>DATE</b>	<b>INVITED GUEST</b>	<b>DISCUSSION ITEM</b>
May 3 <sup>rd</sup>	Cheryl Miller – USGS	Evaluation of the Use of Coupled Streambank Piezometers and Active Gaging Stations to Aid in Streamflow Interpretation and Water Exchanges

## SPECIAL REPORT

The next meeting of the Water Forum will be May 3, 2011 at 10:00 a.m. in the State Engineer's Office conference room. We will be hearing from Cheryl Miller with the U.S. Geological Survey. Ms. Miller's presentation is titled, "Evaluation of the Use of Coupled Streambank Piezometers and Active Stream Gaging Stations to Aid in Streamflow Interpretation and Water Exchanges."

## WYOMING STATE WATER FORUM MEETING MINUTES

April 5, 2011

Pat Tyrrell called the three-hundredth 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>
John Barnes	SEO	jbarne@seo.wyo.gov
Mike Beus	BOR	mbeus@pn.usbr.gov
Matt Bilodeau	COE	matt.a.bilodeau@usace.army.mil
Joel Farber	Trihydro	jfarber@trihydro.com
Jeff Fassett	HDR Engineering, Inc.	jeff.fassett@hdrinc.com
Lee Hackleman	NRCS	lee.hackleman@wy.usda.gov
Kristi Hansen	UW – Ag Econ Dept.	khanse18@uwyo.edu
Rick Huber	WY G&F	rick.huber@wgf.state.wy.us
Kim Johnson	WOHS	kjohns6@wyo.gov
Gregg Kerr	UW – Office of Water Programs	rrek@uwyo.edu
Harry LaBonde	SEO	hlabon@seo.wyo.gov
Barry Lawrence	WWDO	blawre@state.wy.us
John Lawson	BOR	jlawson@usbr.gov
Nancy McCann	SEO	nmccan@seo.wyo.gov
David Mott	USGS	dmott@usgs.gov
Suzy Noecker	WY Farm Bureau	snoecker@wyfb.org
George Parks	WAM	gparks@wyomuni.org
Jodee Pring	SEO	jpring@seo.wyo.gov
Chuck Schmitt	NRCS	chuck.schmitt@wy.usda.gov
Pat Tyrrell	SEO	ptyrre@seo.wyo.gov
Steve Wolff	SEO	swolff@seo.wyo.gov
Jennifer Zygmunt	WDEQ-WQD	jzygmu@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.

This Water Forum meeting was dedicated to learning more about the Water Supply Forecast for the upcoming season. John Lawson, from the Bureau of Reclamation's Wyoming Area Office and Mike Beus with the Snake River Area Office were our special guests.

A copy of John Lawson's PowerPoint presentation can be found [here](#).

A copy of Mike Beus' PowerPoint presentation can be found [here](#).

A copy of the April 4<sup>th</sup> Monday Morning Snow Report can be found [here](#).

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

The following is a listing of reservoir conditions on March 31, 2011:

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

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Seminole	6339.74	711,694	70	148
Pathfinder	5841.96	847,652	83	140
Alcova	5488.63	157,464	85	99
Glendo	4623.66	393,216	76	98
Guernsey	4408.25	21,208	46	106

March 31, 2010 Reservoir Conditions:

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminole	6338.28	689,763	481,200
Pathfinder	5835.94	736,425	604,600
Alcova	5488.76	157,758	158,500
Glendo	4621.63	373,634	400,400
Guernsey	4408.69	21,973	20,000

March 2011 Inflows

<u>Reservoir</u>	<u>Inflows (KAF)</u>	<u>% Of Average</u>
Seminole	68.5	119
Pathfinder (Sweetwater)	-2.2	N/A
Alcova to Glendo Gains	27.3	160
Glendo to Guernsey Gains	-0.2	N/A

Kendrick ownership was 792,316 acre-feet (AF) on March 31, 2011 and approximately 92% of average (858,800 AF), which compares to the ownership of 1,004,075 AF last year at this date. The March 31, 2011, North Platte ownership was 959,180 AF, which was approximately 148% of average (646,600 AF), which compares to 824,740 AF of North Platte ownership on this date last year. The Glendo ownership was 180,059 AF on March 31, 2011, which was approximately 141% of average (127,500 AF), which compares to the 121,692 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortez Dam are approximately 5,000 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 4,250 cfs and will be increased to 4,500 cfs for April 6. The level of Alcova Reservoir is being raised 10 feet during the month of April and will be at its summer operating range of 5498± one foot by May 1. The Wyoming Game and Fish Department did not request a flushing flow on the North Platte River this spring due to high flows already planned by the Bureau of Reclamation.

### North Platte Water Supply Forecast

The April 1, 2010, water supply forecast indicates below average April - July runoff for Seminoe Reservoir, Sweetwater River and Alcova to Glendo gain. The forecast for the North Platte River system is shown in the two tables below.

(1000 acre-feet)

Forecast Points	April 1, 2011 Forecast of April-July Runoff			30 Yr. April-July Runoff Avg. <sup>2</sup>	Expected % of Avg.	Comparative Actual April - July Runoff			
	Reasonable Maximum <sup>1</sup>	Expected	Reasonable Minimum <sup>1</sup>			W. Yr. 2010	W. Yr. 2009	W. Yr. 2008	W. Yr. 2007
Seminoe Reservoir	1600	1,450	1200	714	203	1242	964	956	425
Sweetwater River Above Pathfinder Reservoir	95	65	45	59	110	91	48	52	24
Alcova to Glendo	280	180	100	131	137	304	161	209	102

<sup>1</sup> The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

<sup>2</sup> Average is based on the 1981-2010 period.

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

### March 31, 2011 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Bull Lake	5775.75	70,915	46	93
Boysen	4716.88	595,410	80	110
Buffalo Bill	5365.05	433,323	67	105
Pilot Butte	5452.67	27,408	81	93

### March 31, 2010 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5779.95	81,236	76,100
Boysen	4716.84	594,760	539,600
Buffalo Bill	5363.96	425,925	410,900*
Pilot Butte	5454.55	28,971	29,500

\* The average used for Buffalo Bill Reservoir reflects data from 1993 through 2010. 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.

March 2011 Inflows

<u>Reservoir</u>	<u>Inflows (KAF)</u>	<u>% Average</u>
Bull Lake	1.4	78
Boysen	46.7	90
Buffalo Bill	17.7	93

The release from Buffalo Bill Reservoir to the river with the springs is approximately 1,000 cfs as measured at the Cody river gage. The release from Boysen Dam has been increased to 5,000 cfs for the flushing flow, which began April 5<sup>th</sup> and will be returned to a release of 1,200 cfs on April 6<sup>th</sup> after completion of the flushing flow.

Bighorn Water Supply Forecast

(1000 acre-feet)									
Forecast Points	April 1, 2011 Forecast of April-July Runoff			30 Yr. April-July Runoff	Expected % of Avg.	Comparative Actual April - July Runoff			
	Reasonable Minimum <sup>1</sup>	Expected	Reasonable Maximum <sup>1</sup>	Avg. <sup>2</sup>		W. Yr. 2010	W. Yr. 2009	W. Yr. 2008	W. Yr. 2007
	Bull Lake Reservoir	120	150	180	139.5	108	151	159	135
Wind River above Bull Lake Creek	370	470	570	401.6	117	408	546	412	199
Boysen Reservoir	470	670	870	555.9	121	861	803	522	211
Buffalo Bill Reservoir	690	840	990	660.9	127	674	954	955	427

<sup>1</sup> The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

<sup>2</sup> Average is based on the 1981-2010 period.

The meeting adjourned at 12:00 p.m.