



State Engineer's Office

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STATE ENGINEER

March 13, 2006

MEMORANDUM

TO: Members of the State Water Forum

FROM: Patrick Tyrrell, Chairman

SUBJECT: Attached for your review and information is a copy of the March 7, 2006 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 April 4th in the State Engineer's Conference Room at 10:00 a.m.

WATER FORUM SCHEDULE 2005-2006 1ST TUESDAY OF EACH MONTH

DATE	INVITED GUEST	DISCUSSION ITEM
April 4 th	John Lawson	Water Forecast
May 2 nd		

SPECIAL REPORT

The next meeting of the Water Forum will be April 4, 2006 at 10:00 a.m. in the State Engineer's Office conference room. John Lawson, Area Manager for the Wyoming Area Office of the Bureau of Reclamation will be giving us a presentation on the Water Forecast for the upcoming season.

WYOMING STATE WATER FORUM MEETING MINUTES

March 7, 2006

Jodee Pring called the two hundred and fifty-fifth 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>
Bill Bailey	WYDOT	william.bailey@dot.state.wy.us
Matt Bilodeau	COE	matthew.a.bilodeau@usace.army.mil
Bruce Brinkman	WWDO	bbrink@state.wy.us
Paul Caffrey	WYGISC	caffrey@uwyo.edu
Lee Hackleman	NRCS	lee.hackleman@wy.usda.gov
Pepper Herman	WARWS	pepperh@wyoming.com
Beth Hoobler	SEO	bhoobl@seo.wyo.gov
Scott Horgen	SEO	shorge@seo.wyo.gov
Rick Huber	G&F	rick.huber@wgf.state.wy.us
Jeremy Lyon	WDEQ-WQD	jlyon@state.wy.us
Kirk Miller	USGS	kmiller@usgs.gov
Kathy Muller-Ogle	WDEQ-LQD	kmogle@state.wy.us
Jodee Pring	SEO	jpring@seo.wyo.gov
Beth Tebben	SEO	btebbe@seo.wyo.gov
Steve Vossler	SEO	svossl@seo.wyo.gov
Mahonri Williams	USBR	mlwilliams@gp.usbr.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.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

1. Water Supply Conditions of the North Platte River Basin

February 28, 2006 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Seminoe	6314.51	401,517	39	80
Pathfinder	5799.10	290,043	29	46
Alcova	5488.30	156,718	85	101
Glendo	4613.00	297,688	58	80
Guernsey	4404.56	15,372	34	109

February 28, 2005 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminoe	6298.69	267,311	499,600
Pathfinder	5793.60	248,690	634,600
Alcova	5487.92	155,863	155,600
Glendo	4613.11	298,590	371,800
Guernsey	4607.20	19,441	14,100

February 2006 Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% Of Average</u>
Seminoe	22.8	84
Pathfinder (Includes Sweetwater)	6.3	103
Alcova to Glendo Gains	4.5	32
Glendo to Guernsey Gains	0.2	15

The Pathfinder Reservoir storage was the fifth lowest January storage in the last 30 years. The Alcova to Glendo gains was the lowest of record since Glendo was completed in 1958.

Kendrick ownership was 536,883 acre-feet (AF) on February 28, 2006 and approximately 57% of average (936,700 AF), which compares to the 638,255 AF of Kendrick ownership on this date last year. The Kendrick ownership was the third lowest February ownership in the last 30 years. The February 28, 2006, North Platte ownership was 557,515 AF, which was approximately 97% of average (575,100 AF), which compares to the 276,449 AF of North Platte ownership on this date last year. The Glendo ownership was 52,509 AF on February 28, 2006, which was approximately 38% of average (138,300 AF), which compares to the 62,859 AF of Glendo ownership on this date last year. The Glendo ownership was the second lowest February ownership in the last 30 years.

Flows in the Miracle Mile below Kortez Dam are approximately 521 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 500 cfs.

During the week of March 20, 2006, flushing flows will be conducted on the North Platte River from the Gray Reef Dam consisting of 5 daily pulses of 4000 cfs.

a. North Platte River Basin Forecast

The March 1, 2006 water supply forecast indicates above average April – July runoff for Seminoe Reservoir and for the Sweetwater River above Pathfinder Reservoir. The forecast for the North Platte River between Alcova Reservoir and Glendo Reservoir was below average.

North Platte Water Supply Forecast

Forecast Points	March 1, 2006 Forecast of April-July Runoff			30 Yr. April-July Runoff Avg. ²	Most Probable % of Avg.	Comparative Actual April – July Runoff			
	Reasonable Maximum ¹	Most Probable	Reasonable Minimum ¹			W. Yr. 2005	W. Yr. 2004	W. Yr. 2003	W. Yr. 2002
Seminoe Reservoir	1125	875	625	702	125	733	277	530	118
Sweetwater River above Pathfinder Res.	105	65	30	63	103	66	34	17	15
Alcova to Glendo	180	100	40	123	81	39	34	93	18

¹ The probability is estimated to be 8 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

² Average is based on the 1976-2005 period.

2. The allocation letter was sent to Nebraska and Wyoming according to paragraph B.1.b. of Appendix E of the Final Settlement Stipulation of the North Platte Decree. Reclamation advised that there is no need for allocation of storage water this season.

3. Water Supply Conditions of the Big Horn Basin

February 28, 2006 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full</u> <u>Conservation Storage</u>	<u>% Avg.</u>
Bull Lake	5776.61	72,989	48	95
Boysen	4715.30	570,317	77	112
Buffalo Bill	5370.72	472,985	73	117
Pilot Butte	5453.40	28,010	83	118

February 28, 2005 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5788.87	104,741	77,000
Boysen	4719.46	638,870	507,700
Buffalo Bill	5370.42	470,594	403,700*
Pilot Butte	5452.34	27,137	23,700

* The average used for Buffalo Bill Reservoir reflects data from 1993 through 2005. 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.

February 2006 Inflows

Reservoir	Inflows	% Of Average
Bull Lake	2.4	150
Boysen	31.1	82
Buffalo Bill	11.8	89

The total release from Buffalo Bill Reservoir to the river is currently 200 cfs, pursuant to the new Winter Release Agreement signed in December 2004. With the inflow from the springs, the flow measured at the Cody river gage is 276 cfs. The release from Boysen Dam is currently 800 cfs.

a. Bighorn River Basin Forecast

The March 1, 2006 water supply forecast indicates below average April – July runoff can be expected at all forecast points in the Bighorn Basin except the Buffalo Bill watershed where average runoff is expected. The water supply forecasts are based on the snowpack at the Snotel stations, along with precipitation and soil moisture data.

Bighorn Water Supply Forecast

Forecast Points	February 1, 2006 Forecast of April-July Runoff			30 Yr. April-July Runoff Avg. ²	Most Probable % of Avg.	Comparative Actual April – July Runoff			
	Reasonable Maximum ¹	Most Probable	Reasonable Minimum ¹			W. Yr. 2005	W. Yr. 2004	W. Yr. 2003	W. Yr. 2002
Bull Lake Reservoir	150	130	110	140	93	155	117	110	99
Wind River above Bull Lake Creek	460	360	260	411	88	388	294	302	277
Boysen Reservoir	800	500	300	565	89	589	321	262	159
Buffalo Bill Reservoir	800	650	500	653	100	513	387	668	553

¹ The probability is estimated to be 8 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

² Average is based on the 1976-2005 period.

2. Snow Conditions (from NRCS March 6, 2006 report)

The following table shows the current and preceding weeks' percentage of average snow water equivalent amounts for Wyoming basins. Average is based on all reporting Snotel sites in the basin. The reference period for average comparison is 1971-2000. The table does not include manually read snow courses.

Snow Pack

Drainage Basin	3/06/06	2/27/06	2/21/06	2/13/06	3/06/05
Wind River	86	86	87	85	91
Bighorn Basin	84	87	86	85	63
Shoshone	81	83	82	84	56
Upper North Platte	111	114	118	119	93
Lower North Platte	101	105	108	107	84

U.S. ARMY CORPS OF ENGINEERS - WYOMING REGULATORY OFFICE

Matt Bilodeau reported the following:

In a ruling issued on February 21, 2006, the United States Court of Appeals for the Tenth Circuit upheld the conviction of Mr. John Hubenka.

Mr. Hubenka was originally found guilty of violations of the Clean Water Act after a jury trial held in Federal Court in Cheyenne, Wyoming, in September 2004. The conviction stemmed from Mr. Hubenka's unauthorized construction of three earthen dikes in the Wind River near Riverton, Wyoming. The U.S. Environmental Protection Agency (EPA) investigated and litigated the case with the assistance of the U.S. Attorney's Office in Cheyenne. Tom Johnson from the Corps of Engineers Wyoming Regulatory Office testified as an expert witness on behalf of the federal government.

Upon conviction in the U.S. District Court for the District of Wyoming, Mr. Hubenka was sentenced to 12 months probation and ordered to comply with an EPA administrative order directing him to restore the river channel by removing the dikes. However, the District Court judge had stayed that sentence pending appeal.

Mr. Hubenka had appealed his conviction partially on the basis that his activities on the Wind River were beyond the reach of the Clean Water Act. The Appeals Court ruling affirmed the government's position that the Wind River is a "water of the United States" for the purposes of the Clean Water Act.

The jurisdiction of the federal government over the nation's waterways under the Clean Water Act was also the subject of a hearing before the U.S. Supreme Court held on February 21, 2006. A ruling on that matter is expected early this summer. It is likely to have a significant impact on clarifying the extent of federal jurisdiction over the nation's waterways and the meaning of the term "waters of the United States."

A pdf of the Court decision can be found [here](#).

DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

Jeremy Lyon reported the following:

Todd Parfitt, formerly the WYPDES Program Manager, has accepted the position of Deputy Director in the DEQ. LeRoy Feusner, formerly the Storage Tank Program Engineering Supervisor, has accepted the position of Solid and Hazardous Waste Division Administrator. The two Water Quality Division positions have not been filled at this time.

UNITED STATES GEOLOGICAL SURVEY

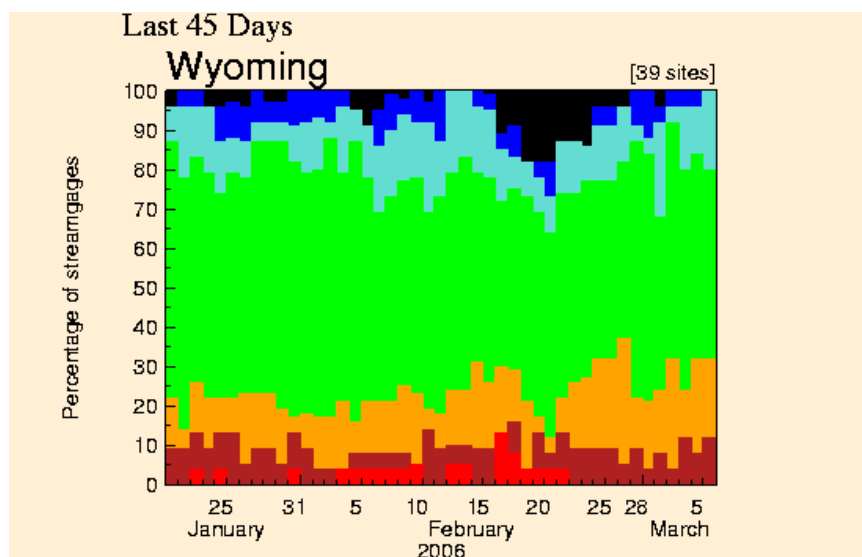
<http://wy.water.usgs.gov/>

Kirk Miller reported the following:

Current Streamflows

<http://waterdata.usgs.gov/wy/nwis/rt>

Preliminary real-time streamflow data over the last 45 days at about 25 to 80 percent of reporting gaging stations in Wyoming with 30 or more years of record indicated near normal (25th to 74th percentile) conditions. As of March 6, streamflow conditions at about 30 percent of these stations are below normal (24th percentile or less). Note: Streamflow data are not included for those stations where the stage-discharge relation is affected by ice.



Explanation - Percentile classes						
New low	< 10	10-24	25-74	75 - 89	≥ 90	New high

2005 Streamflow Data

Final daily mean values of discharge for water year 2005 are available from NWISWeb for all USGS and cooperative program streamflow-gaging stations. The data and related statistics are available online from links on the Wyoming Water Science Center home page <http://wy.water.usgs.gov> or at <http://nwis.waterdata.usgs.gov/wy/nwis/discharge>

New National Publications

Anderson, M.T., and Woosley, L.H., Jr., 2006, Water availability for the western United States—Key scientific challenges: U.S. Geological Survey Circular 1261, 85 p., online at <http://pubs.water.usgs.gov/circ1261/>

Gilliom, R.J., Barbash, J.E., Crawford, C.G., Hamilton, P.A., Martin, J.D., Nakagaki, N., Nowell, L.H., Scott, J.C., Stackelberg, P.E., Thelin, G.P., and Wolock, D.M., 2006, The quality of our Nation's water—Pesticides in the Nation's streams and ground water, 1992-2001: U.S. Geological Survey Circular 1291, 172 p., online at <http://pubs.usgs.gov/circ/2005/1291/>

NATURAL RESOURCES CONSERVATION SERVICE

Lee Hackleman reported the following:

If anyone is interested in receiving the Monday morning snow report via email, please email Lee your address.

Monday Morning Snow Report - Mar. 6, 2006 - REPORT #15

Not good this week folks, we dropped 4% to 105% of average for the state. All basins showed a drop in average except the Wind River Basin and it remained the same. The Shoshone Basin is still the lowest drainage basin in the state at 81% of average. The Belle Fourche Basin dropped the most, down 12% to 83% of average. The Upper Bear River is still the highest drainage basin at 117% of average. Current percentages for the state of Wyoming range from 81 to 117% of average. This week in 2005 the state was at 82% of average with a range in percentages from 46 to 105% of average. Last year there was only 1 basin above average at this time. This year 8 of the 13 basins are still above normal. See the table below for more information.

For those of you with INTERNET capability, this report as well as a map showing SWE percentages for the state can be found at "<http://www.wrds.uwyo.edu/wrds/nrcs/nrcs.html>" Figure 1 -- SNOW WATER EQUIVALENT AS PERCENT OF AVERAGE. The following table shows the current and preceding weeks' percentage of average snow water equivalent (SWE) amounts for Wyoming basins. Average is based on all reporting SNOTEL sites in the basin. The reference period for average comparison is 1971-2000. The table does not include manually read snow courses.

DRAINAGE BASIN	3/6/2006	2/27/2006	2/21/2006	2/13/2006	3/6/2005
SNAKE RIVER	114	115	117	122	72
UPPER YELLOWSTONE	106	107	107	112	67
WIND RIVER	86	86	87	85	91
BIGHORN BASIN	84	87	86	85	63
SHOSHONE	81	83	82	84	56
POWDER - TONGUE	89	95	95	92	71
BELLE FOURCHE	83	95	91	96	46
UPPER NORTH PLATTE	111	114	118	119	93
LOWER N PLATTE,SWT	101	105	108	107	84
LITTLE SNAKE RIVER	113	116	119	122	99
UPPER GREEN RIVER	108	110	111	115	77
LOWER GREEN RIVER	110	111	113	119	96
UPPER BEAR RIVER	117	118	122	128	105
Weighted State Average	105	109	110	111	82

* red = down * blue = up * green = even

WYOMING WATER DEVELOPMENT COMMISSION

Bruce Brinkman reported the following:

The Water Development Commission will be holding a workshop this Thursday, March 9th and a commission meeting on Friday, March 10th.

Two people have been interviewed for the Water Resources Data Systems (WRDS) position. The committee is hoping to make an offer in the next few weeks to one of the candidates.

WYOMING ASSOCIATION OF RURAL WATER SYSTEMS

Pepper Herman reported the following:

WARWS will be holding their 15th annual Spring Training Conference April 3-6 in Casper. There will be 50-60 exhibitors present. Please visit www.warws.com for more information.

STATE ENGINEER'S OFFICE

Jodee Pring reported the following:

On the Bear River, the Game and Fish have approached the Bear River Technical Advisory Committee about drawing down Sulphur Creek Reservoir to get rid of the walleye in that reservoir. The committee has been discussing the possibility of transferring the water that would be drawn down to Woodruff Narrows reservoir. Robert Keith, with the Game and Fish

out of Green River along with Sue Lowry, Jade Henderson, Superintendent of Water Division IV and John Barnes of the SEO have been working on this issue.

The Yellowstone River Compact Commission will be holding their technical committee meeting April 12th from 1pm to 3pm and their Commission meeting on April 13th from 8am to 12pm. Both meetings will be held in Thermopolis.

Sue Lowry is attending the Idaho Water District 01 Annual meeting until Wednesday of this week.

The State Engineer's Office will be holding their annual Water Commissioner School March 21-23 at the Hitching Post in Cheyenne. Please contact Jodee Pring if you would like a copy of the agenda.

The 5% progress review meeting for the State Framework Water Plan was held in Riverton on March 1st. Of the approximately 40 in attendance, all seven of the Framework representatives were present along with members of the Water Development Commission and interested members of the public. The consultant, Murray Schroeder, of WWC Engineering, gave a powerpoint presentation on the work that has been done so far and received good feedback from those present on additional items that they would like to see in the Framework. The next meeting of this group will be held July 11th in Casper.

The following is the schedule of the Spring round of Basin Advisory Group (BAG) meetings:

March 27 - Bear River BAG - Cokeville - Senior Center - 6-9pm

March 28 - Green River BAG - Green River - Upper Green River Joint Powers Board room - 10a-4pm

March 29 - Snake/Salt BAG - Afton - Lower Valley Energy Board room - 6-9pm

April 11 - Wind/Bighorn BAG - Dubois - Headwaters Arts and Conference Center - 3-6pm

April 12 - Powder/Tongue BAG - Buffalo - Colonel Bozeman's - 3-6pm

April 13 - Northeast BAG - USDA Service Center - 1-4pm

April 18 - Platte BAG - Douglas - Law Enforcement Academy - 10am-1pm

The SEO will be testing some use case modules this week as part of the IT Initiative. This week is the first of many weeks where this type of testing will take place.

SPECIAL REPORT

Paul Caffrey, who is with the Wyoming Geographic Information Science Center, gave a great presentation on the National Hydrography Dataset and the FEMA Map Modernization program. Carrie Martin also attended the meeting and is the research associate working with Paul on Wyoming's FEMA map program. For information regarding these two programs, please contact Paul at (307) 766-2770 or by email at caffrey@uwyo.edu. A copy of Mr. Caffrey's powerpoint presentation can be found [here](#).

The meeting adjourned at 12:00 p.m.