



# State Engineer's Office

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GOVERNOR

PATRICK T. TYRRELL  
STATE ENGINEER

November 18, 2005

## 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 1, 2005 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 6th in the State Engineer's Conference Room at 10:00 a.m.

### WATER FORUM SCHEDULE 2005-2006 1<sup>ST</sup> TUESDAY OF EACH MONTH

DATE	INVITED GUEST	DISCUSSION ITEM
December 6 <sup>th</sup>	Mike Jennings and Pepper Herman	WARWS Happenings
January 3 <sup>rd</sup>	Phil Ogle	Kirby Area Water Supply Project
February 7 <sup>th</sup>	Laurie Goodman and Jeff Fassett	Instream Flow
March 7 <sup>th</sup>	Paul Caffrey	NHD and FEMA Map Mod projects
April 4 <sup>th</sup>	John Lawson	Water Forecast
May 2 <sup>nd</sup>		

### SPECIAL REPORT

The next meeting of the Water Forum will be December 6th, 2005 at 10:00 a.m. in the State Engineer's Office conference room. Mike Jennings and Pepper Herman, who are with the Wyoming Association of Rural Water Systems, will be giving us a presentation on all of the different activities in which their organization is involved.

## WYOMING STATE WATER FORUM MEETING MINUTES

November 1, 2005

Jodee Pring called the two hundred and fifty-first 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>
Matt Bilodeau	Army Corps of Engineers	matthew.a.bilodeau@usace.army.mil
Paul Caffrey	WYGISC	caffrey@uwyo.edu
Mark Conrad	WDEQ-WQD	mconra@state.wy.us
Jan Curtis	WRDS/State Climatologist	jcurtis@uwyo.edu
Tom Dietrich	WRDS	tdietric@uwyo.edu
Terry Gonzales	NRCS	terry.gonzales@wy.usda.gov
Lee Hackleman	NRCS	lee.hackleman@wy.usda.gov
Ed Kouma	USBR	ekouma@gp.usbr.gov
Jessica Lowrey	Western Water Assessment	jessica.lowrey@noaa.gov
Hugh McFadden	AG	hmcfad@state.wy.us
Kirk Miller	USGS	kmiller@usgs.gov
Erika Olson	AG	eolson@state.wy.us
Todd Parfitt	WDEQ-WQD	tparfi@state.wy.us
Jodee Pring	SEO	jpring@seo.wyo.gov
Phil Stump	SEO	pstump@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](mailto:jpring@seo.wyo.gov). For more information on the following reports, please contact the agency representative listed above.

### WATER RESOURCES DATA SYSTEMS

Jan Curtis submitted the following:

Drought: Conditions continue to improve. As of 1 November, the worst drought intensity is only at the moderate drought level. The forecast for the next six months is calling for normal precipitation with slightly above normal temperatures. During this neutral El Nino period, Wyoming's drought should see continued improvement. The only vulnerable part of the state is over the North Platte River Drainage. The history of precipitation of the North Platte can be viewed in this interesting website:

<http://www.crh.noaa.gov/lbf/pastevents/drought/drought.htm>

Personal: The State Climatologist and WRDS Director will be leaving his position effective 2 December for a staff position at the NRCS-NWCC in Portland, OR.

The WRDS Project Coordinator position that was last held by Justin Mulbay is still vacant. Changing requirements and workload at the WWDC has caused a reevaluation of this position.

It is hoped that these positions will be announced and filled in the coming months.

The Society for Range Management (SRM) and Soil & Water Conservation Society (SWCS) will hold a joint Annual Meeting Program (Nov 30 - Dec 1, 2005) about a Wyoming Vegetation Perspective: A 360 Degree View. On the 30th, Jan Curtis will be giving a presentation on Climate Change over the past 10,000 years followed by Dr. Stephen Jackson, UW presentation on the Vegetation Change over the past 10,000 years in Wyoming. The meeting will take place at the Parkway Plaza in Casper during the afternoon.

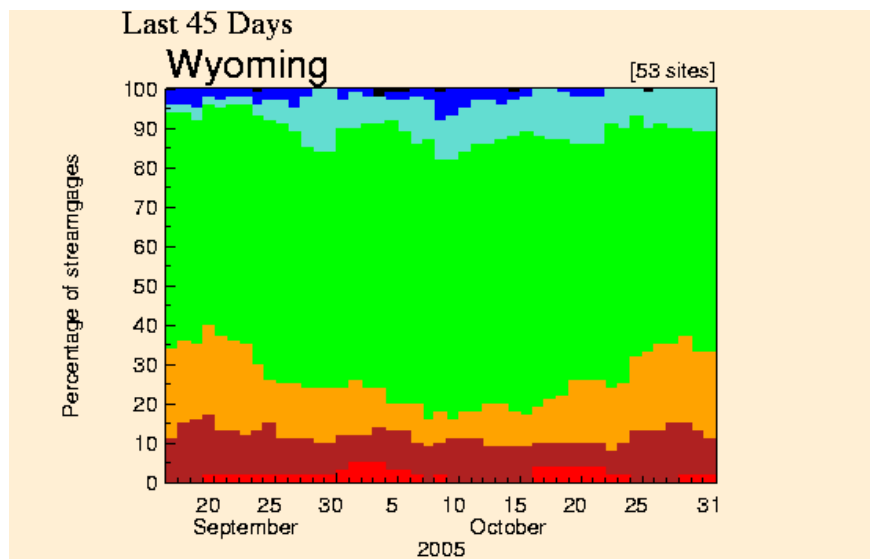
**The Occurrence and Characteristics of Ground Water in Wyoming** has been scanned. These discs will be available for sale on the publications page of the Library website. The seven-volume set contains over 1200 pages and 54 oversize plates.

U.S. GEOLOGICAL SURVEY <http://wy.water.usgs.gov/>

Kirk Miller reported the following:

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

Preliminary 7-day average streamflow data over the last 45 days at about 55 to 65 percent of reporting gaging stations in Wyoming with 30 or more years of record indicated near normal (25<sup>th</sup> to 74<sup>th</sup> percentile) conditions. As of October 31, streamflow conditions at about 35 percent of these stations are below normal (24<sup>th</sup> percentile or less).

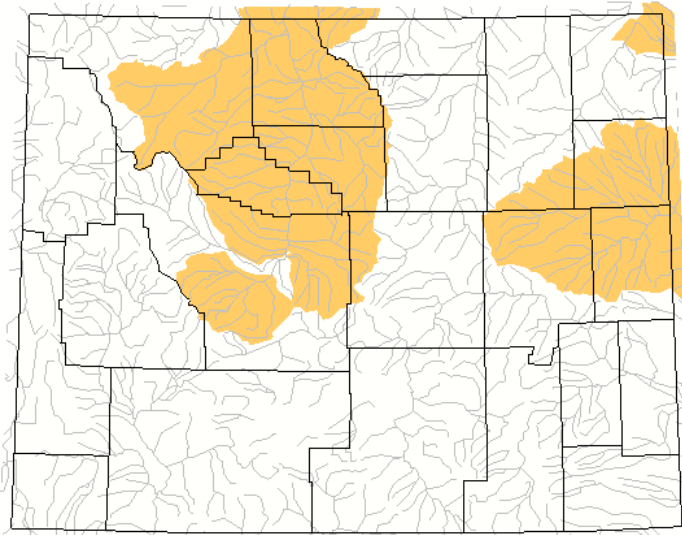


Explanation - Percentile classes						
New low	< 10	10-24	25-74	75 - 89	≥ 90	New high

Hydrologic Drought <http://wy.water.usgs.gov/projects/drought/>

Streamflow conditions over the last 7 days in the Little Wind, Bighorn, Little Bighorn, and Cheyenne River basins were below normal. Conditions are based on provisional data from streamflow-gaging stations with at least 30 years of record.

Monday, October 31, 2005



Explanation - Percentile classes				
New low	≤ 5	6 - 9	10 - 24	Insufficient data for a hydrologic region
Extreme Hydrologic Drought	Severe Hydrologic Drought	Moderate Hydrologic Drought	Below Normal	

Budget Update

A 2.5 percent rescission of FY2006 appropriations will result in USGS Cooperative Water Program and National Streamflow Information Program (NSIP) funding levels less than FY2005 enacted levels. The rescission is essentially an across the board cut to offset costs associated with Hurricane Katrina.

New Publications

Eddy-Miller, C.A., and Remley, K.J., 2005, Pesticides in ground water, Albany County, Wyoming, 2003-04: U.S. Geological Survey Fact Sheet 2005-3087, 4 p., available online at <http://pubs.water.usgs.gov/fs2005-3087>, prepared in cooperation with Wyoming Department of Agriculture and Wyoming Department of Environmental Quality.

Eddy-Miller, C.A., and Remley, K.J., 2005, Pesticides in ground water, Hot Springs County, Wyoming, 2003-04: U.S. Geological Survey Fact Sheet 2005-3088, 4 p., available online at <http://pubs.water.usgs.gov/fs2005-3088>, prepared in cooperation with

Wyoming Department of Agriculture and Wyoming Department of Environmental Quality.

Eddy-Miller, C.A., and Remley, K.J., 2005, Pesticides in ground water, Converse County, Wyoming, 2003-04: U.S. Geological Survey Fact Sheet 2005-3089, 4 p., available online at <http://pubs.water.usgs.gov/fs2005-3089>, prepared in cooperation with Wyoming Department of Agriculture and Wyoming Department of Environmental Quality.

Miller, K.A., Elliott, J.R., and Friday, N., 2005, Soils infiltration data for selected Wyoming watersheds, 1998-99: U.S. Geological Survey Open-File Report 2005-1322, 74 p., available **only** online at <http://pubs.water.usgs.gov/ofr2005-1322/>, prepared in cooperation with Wyoming Department of Transportation.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

The following is a listing of reservoir conditions on October 31, 2005:

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	6317.22	428,600	42	66
Pathfinder	5795.66	263,600	26	49
Alcova	5489.52	159,400	86	102
Glendo	4595.38	173,700	34	103
Guernsey	4397.14	7,000	15	143

October 31, 2004 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminole	6300.00	277,035	652,200
Pathfinder	5789.51	220,593	535,300
Alcova	5489.00	158,303	155,600
Glendo	4593.44	162,604	169,100
Guernsey	4401.77	11,686	4,900

October Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% Of Average</u>
Seminole	23.5	84
Pathfinder (Includes Sweetwater)	4.5	74
Alcova to Glendo Gains	4.7	34
Glendo to Guernsey Gains	1.4	58

The October inflows were below average for all reservoirs in the North Platte Basin.

Kendrick ownership was 540,900 acre-feet (AF) on October 31, 2005 and approximately 57% of average (942,900 AF), which compares to the 642,000 AF of Kendrick ownership on this date last year. The Kendrick ownership was the third lowest October ownership in the last 30 years. The October 31, 2005, North Platte ownership was 429,700 AF, which was approximately 101% of average (425,500 AF), which compares to the 120,700 AF of North Platte ownership on this date last year. The Glendo ownership was 53,600 AF on October 31, 2005, which was approximately 40% of average (134,000 AF), which compares to the 63,700 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortes Dam are approximately 520 cubic feet per second (cfs) on October 1, 2005. Releases from Gray Reef Reservoir are approximately 500 cfs. Due to current water supply conditions, the Bureau of Reclamation will not be conducting flushing flows below Gray Reef this fall.

The annual drawdown of Alcova Reservoir began on October 3, 2005. The reservoir was lowered approximately 2.5 feet per week until the reservoir reached the normal winter operating range of 5488± one foot on October 31, 2005.

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

### October 31, 2005 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	5775.32	69,900	46	92
Boysen	4718.80	627,500	85	112
Buffalo Bill	5367.63	451,300	70	110
Pilot Butte	5453.90	28,800	85	125

### October 31, 2005 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5786.20	97,489	76,100
Boysen	4714.48	557,732	560,800
Buffalo Bill	5366.04	440,183	408,900*
Pilot Butte	5453.14	27,795	23,000

\* 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.

### October Inflows

<u>Reservoir</u>	<u>Inflows (KAF)</u>	<u>% Average</u>
Bull Lake	5.9	113
Boysen	47.4	77
Buffalo Bill	32.3	133

The total release from Buffalo Bill Reservoir to the river is currently 200 cfs. With inflow from the springs a flow of 250 cfs is measured at the Cody river gage. The release from Boysen Dam is currently 600 cfs and is being held at 600 cfs to assist the town of Thermopolis in their construction of a pipeline across the river, as agreed upon with Wyoming Game and Fish. The release from Boysen Dam will be increased to approximately 1000 cfs upon construction completion. (Note: Construction of the pipeline was completed November 4, 2005 and the release from Boysen Dam was increased to 1000 cfs on November 5, 2005).

## WESTERN WATER ASSESSMENT

Jessica Lowrey reported the following:

Western Water Assessment will be hosting a Wyoming Climate Workshop for Water Resource Decision Makers to be held at the Wyoming Water Development Commission office. The information for the workshop is outlined below:

When: 9am – 4pm Monday, December 12, 2005

Where: Wyoming Water Development Commission offices in Cheyenne, WY.  
(Map on website, see below)

Target audience: Municipal, state, and federal water managers, extension specialists, and other policy makers interested in climate and water resources management.

Registration forms and agenda at:

[http://wwa.colorado.edu/links/climate\\_workshop.html](http://wwa.colorado.edu/links/climate_workshop.html)

Details: This free workshop will be a great opportunity to learn more about climate products and how water managers use them in their annual operations and long-term planning decisions. The workshop will provide an in depth introduction to climate products like the U.S Drought Monitor, the NOAA Seasonal Precipitation and Temperature Forecasts, and Experimental Climate Forecasts. The goals of the workshops are: to give workshop attendees a better understanding of the strengths and limitations of these climate products in order to support more informed use in planning and decision-making; and to collect feedback on the products to improve usability. There will be opportunities for water managers to both learn and participate at the workshops, and we hope you will consider attending.

The Wyoming workshop is one of a series of Western Water Assessment-sponsored regional climate workshops for water resource decision makers in the Intermountain West. A workshop focusing on Colorado is planned for Thursday, December 1st in Golden, CO.

Details and registration forms for both workshops will be available at:

[http://wwa.colorado.edu/links/climate\\_workshop.html](http://wwa.colorado.edu/links/climate_workshop.html).

The Western Water Assessment is a joint research project of NOAA, the University of Colorado, and Colorado State University. Its mission is to identify and characterize regional vulnerabilities to climate variability and change, and to develop information, products, and

processes to assist water-resource decision-makers throughout the Intermountain West (Colorado, Wyoming, and Utah). Western Water Assessment is one of several programs funded by NOAA to provide input into NOAA's emerging 'Climate Services', an analog to the National Weather Service.

Questions: Contact Jessica Lowrey at [jessica.lowrey@noaa.gov](mailto:jessica.lowrey@noaa.gov) or (303) 497-4722 if you have questions or if you are willing to participate in a panel discussion about your interests in climate information and products.

## STATE ENGINEER'S OFFICE

Jodee Pring reported the following:

Ms. Pring thanked Jan Curtis, State Climatologist and WRDS Director, for his contributions and dedicated attendance to the Water Forum. Mr. Curtis contributed invaluable information to our group on a variety of topics and he will be greatly missed. Out of the 36 Water Forum meetings that were held during Mr. Curtis' tenure, he only missed three. We wish him well in his new endeavors in Portland, OR.

The next round of Basin Advisory Group (BAG) meetings will be held in Nov. and Dec. The dates and locations are as follows:

Nov. 7 – 6:00p – 9:00p - Bear River BAG – Evanston – Uinta Co. Library  
Nov. 8 – 10:00 a – 4:00p - Green River BAG – Kemmerer – City Hall  
Nov. 9 – 6:00p – 9:00p – Snake/Salt BAG – Jackson – WY Game and Fish Office  
Dec. 6 – 6:00p – 9:00p – Wind/Bighorn BAG – Cody – Big Horn Federal  
Dec. 7 – 3:00p – 6:00p – Powder/Tongue BAG – Dayton – Town Hall  
Dec. 8 – 1:00p – 4:00p – Northeast WY BAG – Sundance – Crook Co. Courthouse  
Dec. 13 – 10:00a – 1:00p – Platte BAG – Torrington – Pinnacle Bank

Among other interesting topics to be presented at these meetings, the State Framework Water Plan will be discussed. Jodie Pavlica, Project Manager for the Framework plan, will be presenting a review of what has gone on with River Basin planning thus far and what the Framework plan means for the basins. Each BAG will also be asked to choose a representative and an alternate to be their contact with the Framework water plan consultant, the planning team and the Water Development Commission. The issues that each BAG brought forward at the time their basin plan was being completed will also be reviewed.

The agendas and minutes for the meetings can be found on the WWDO website at <http://waterplan.state.wy.us/>.

Select Water Committee and the Water Development Commission will be holding a joint workshop and meeting Nov. 16 – 18 in Casper at the Casper Events Center. Wednesday, November 16 will be a workshop to discuss the North Platte Cooperative Agreement and Thursday, Nov. 17 and Friday, Nov. 18 will be the meeting.

The Yellowstone River Compact Commission will be holding their 54<sup>th</sup> annual meeting Nov. 30 in Billings, MT at the Sheraton Billings Hotel.



A meeting on the Belle Fourche River Compact will be held Dec. 8 at 8:30 am in Belle Fourche, SD.

Ms. Pring reminded the group that all Water Forum minutes and presentations can be found on the State Engineer's Office website at <http://seo.state.wy.us/> under State Water Forum meetings.

### SPECIAL REPORT

Todd Parfitt, Wyoming Department of Environmental Quality, Water Quality Division, gave a presentation entitled "WYDES Watershed Based Permitting". This very interesting and informative powerpoint presentation can be found here.

The meeting adjourned at 11:45 am.