



# State Engineer's Office

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STATE ENGINEER

October 20, 2008

## MEMORANDUM

TO: Members of the State Water Forum

FROM: Patrick Tyrrell, Chairman

SUBJECT: Attached for your review and information is a copy of the September 2, 2008 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 October 7th in the State Engineer's Conference Room at 10:00 a.m.

### WATER FORUM SCHEDULE 2008-2009 1<sup>st</sup> TUESDAY OF EACH MONTH

DATE	INVITED GUEST	DISCUSSION ITEM
October 7 <sup>th</sup>	Clint Kyhl – U.S. Forest Service – Bark Beetle Incident Commander	The Bark Beetle Epidemic
November 4 <sup>h</sup>	Glenn Pauley – Coordinator, CWCS	Update on Wyoming's Comprehensive Wildlife Conservation Strategy (CWCS)
December 2 <sup>nd</sup>	Nelli Williams, Scott Yates – Trout Unlimited	Activities of Trout Unlimited
January 6 <sup>th</sup>	Larry Bentley – Department of Agriculture	The Coordinated Resource Management (CRM) Process
February 3 <sup>rd</sup>	Bob Budd – Executive Director – Wyoming Wildlife and Natural Resource Trust	Activities of the Wyoming Wildlife and Natural Resource Trust
March 3 <sup>rd</sup>		
April 7 <sup>th</sup>	John Lawson, Bureau of Reclamation	Water Supply Forecast
May 5 <sup>th</sup>		

### SPECIAL REPORT

The next meeting of the Water Forum will be November 4, 2008 at 10:00 a.m. in the State Engineer's Office conference room. We will be hearing from Glenn Pauley. Mr. Pauley is the Coordinator for the Comprehensive Wildlife Conservation Strategy and will be giving us an

## WYOMING STATE WATER FORUM MEETING MINUTES

October 7, 2008

Sue Lowry called the two hundred and seventy-seventh 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	COE	matthew.a.bilodeau@usace.army.mil
Kevin Boyce	WWDO	kboyce@state.wy.us
Bruce Brinkman	WWDO	bbrink@state.wy.us
Jon Cecil	SEO	jcecil@seo.wyo.gov
Jeff Cowley	SEO	jcowle@seo.wyo.gov
Steve Gray	WRDS/State Climatologist	sgray8@uwyo.edu
Lee Hackleman	NRCS	lee.hackleman@wy.usda.gov
Debbie Hallberg	SEO	daha11@seo.wyo.gov
Mike Hand	SEO	mhand@seo.wyo.gov
Beth Hoobler	SEO	bhoobl@seo.wyo.gov
Matt Hoobler	SEO	mhoobl@seo.wyo.gov
Sue Lowry	SEO	slowry@seo.wyo.gov
Kirk Miller	USGS	kmiller@usgs.gov
Kathy Muller Ogle	DEQ-LQD	kmogle@state.wy.us
Chace Tavelli	WWDO	ctavel@state.wy.us
David Willms	AG	dwillm@state.wy.us

### 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.

#### STATE ENGINEER'S OFFICE (SEO)

Sue Lowry reported the following:

The Missouri River Association of States and Tribes (MoRAST) Board met in Cheyenne on August 27-28. There was increased Tribal representation at this meeting, but much discussion about the voting status in the by-laws for the Tribes. By-law revisions will take up a majority of the December 1-2 meeting in Rapid City which will be held jointly with the Great Plains Tribal Chairs. The first meeting of the Missouri River Recovery Implementation Committee (MRRIC) will be held in St. Louis Sept. 29-Oct. 1. The Stakeholder representatives will be named by September 15<sup>th</sup>.

The next Yellowstone River Compact Commission meeting will be held December 4 at Chico Hot Springs. The Supreme Court may act in mid-September on the Motion to Dismiss.

The fall meeting of the Snake River agency will be held September 18 at the conclusion of an aquatic nuisance species workshop being sponsored by Grand Teton National Park. The meeting will be held at the AMK Ranch in the Park. Wyoming's Palisades space filled this spring.

The Interstate Council on Water Policy (ICWP) hosted with the USGS a Regional Cooperators Roundtable in Cheyenne. It was well attended by USGS personnel and cooperators from throughout the Upper Missouri River basin.

Jodee Pring reported the following:

The next meeting of the Green River Basin Advisory Group (GRBAG) will be held Oct. 23<sup>rd</sup> in Rock Springs. At this meeting, the United States Geological Survey (USGS) and the Wyoming State Geological Survey (WSGS) will present their work on the Groundwater Level I study that they are completing in conjunction with the Green River Basin Water Plan update.

Short Elliott Hendrickson Inc. (SEH) has received notice to proceed on the Wind/Bighorn River Basin Plan. Basin Advisory Group (BAG) meetings should begin soon.

John Barnes reported the following:

The Surface Water division of the SEO has worked the backlog down to just a few remaining applications.

The outlet on the Wyoming Hereford Ranch No. 2 Reservoir failed. The owner of the reservoir dug a bypass channel to evacuate the water from the reservoir to prevent flooding. The SEO has issued a cease storage order for this reservoir.

#### WATER RESOURCES DATA SYSTEMS (WRDS)

Chris Nicholson reported the following:

WRDS has some new products out that include a new State Climate Office webpage. This webpage now has some climate monitoring products on the page such as Wyoming Precipitation Update maps, Wyoming Precipitation Charts and Data and Crop Weather reports.

There are also some new GIS web mapping products that include a Wyoming Water and Climate map server, an Irrigated Land IMS Web mapping site and a Powder River Basin IMS Web mapping site.

The Wyoming State Water Plan webpage has also been updated to make it easier to access BAG info, and now includes GIS web mapping and a new search function.

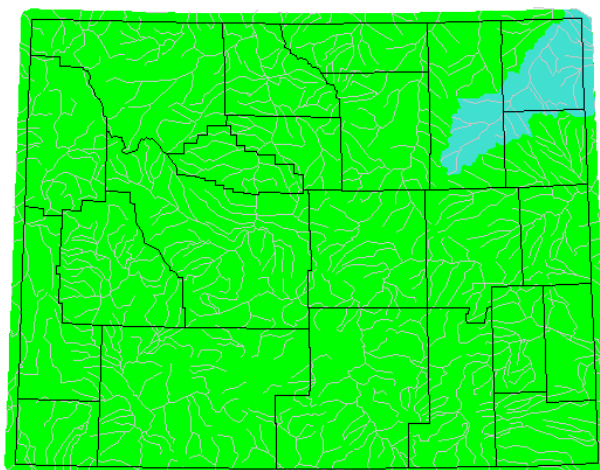
#### U.S. GEOLOGICAL SURVEY (USGS)

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

Kirk Miller reported the following:

#### Current Streamflow Conditions

Monday, September 01, 2008



Streamflow conditions for August were normal for most of the State to above normal for the Belle Fourche River basin. Following May where streamflow conditions were below normal in the northern half of the State, streamflows were generally normal to much above normal for the summer.

Streamflow conditions are based on USGS gaging stations with 30 or more years of record. More information on streamflow conditions in Wyoming is online at:

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

Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

### Wyoming Water Science Center Director

Myron Brooks has taken a new job as Chief of the USGS Hydrologic Instrumentation Facility (HIF). The vacancy announcement for the Wyoming WSC Director closed Friday, August 29. Linda Leake, Deputy Regional Executive for the Central Region North Central Area, currently is the Acting WSC Director. Linda can be reached at 307-775-9162 ( [lleake@usgs.gov](mailto:lleake@usgs.gov) ).

### New USGS Associate Director for Water

Matt Larsen was named the new Associate Director for Water. Matt's brings a broad range of experience to the job including working in a USGS Water Science Center. Matt replaces Bob Hirsch who has returned to the USGS National Research Program to pursue advancing science on climate change and long-term trends.

### 2009 Budget

The process of "marking up" the FY09 budget by the House and Senate has been delayed. Planning for FY09 is proceeding as if we will be operating under a continuing resolution (FY08 enacted). The USGS also is preparing FY10 budget information for the Administration's transition team. More information about the USGS budget is online at: <http://www.usgs.gov/budget/>

### Publications

No new Wyoming USGS publications to report. USGS publications related to water resources of Wyoming can be searched online at: <http://wy.water.usgs.gov/pubs/statebiblio/index.htm>

### NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

Lee Hackleman reported the following:

The NRCS has added a new employee to their ranks. Chris Carlsen has joined the Wyoming State Office Engineering Staff in Casper.

### WYOMING DEPARTMENT OF TRANSPORTATION (WYDOT)

Bill Bailey reported the following:

A flood occurred recently on Horseshoe Creek. The waters reached the 50-100 year flood stage mark.

UNITED STATES FOREST SERVICE (USFS)

Sharon Kyhl reported the following:

The Medicine Bow National Forest is looking at some road decommissioning.

The Bighorn National Forest is working to get permits filed with the State Engineer's Office.

WYOMING GAME AND FISH DEPARTMENT (WY G&F)

Rich Huber reported the following:

A Fish Passage section will be created in the fisheries division.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

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

August 31, 2008 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Seminole	6328.85	560,699	55	84
Pathfinder	5805.75	346,631	34	67
Alcova	5498.49	180,649	98	100
Glendo	4584.63	118,486	23	87
Guernsey	4411.91	27,985	61	101

August 31, 2007 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminole	6295.62	245,452	665,500
Pathfinder	5873.87	185,474	520,200
Alcova	5498.19	179,961	180,000
Glendo	4576.59	85,664	138,800
Guernsey	4403.55	13,962	28,100

August 2008 Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% Of Average</u>
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Seminole	41.9	118
Pathfinder (Sweetwater)	-2.6	N/A
Alcova to Glendo Gains	-0.6	N/A
Glendo to Guernsey Gains	0.4	21

Kendrick ownership was 512,895 acre-feet (AF) on August 31, 2008 and approximately 57% of average (900,000 AF), which compares to the ownership of 368,800 AF last year at this date. The August 31, 2008, North Platte ownership was 634,144 AF, which was approximately 130% of average (489,600 AF), which compares to 286,800 AF of North Platte ownership on this date last year. The Glendo ownership was 88,822 AF on August 31, 2008, which was approximately 65% of average (135,700 AF), which compares to the 57,700 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortess Dam are approximately 1,100 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 800 cfs. The level of Alcove Reservoir is at the normal summer operating range of 5498± one foot.

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

### August 31, 2008 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	5790.59	109,511	72	108
Boysen	4719.02	631,241	85	102
Buffalo Bill	5382.36	559,173	86	114
Pilot Butte	5444.32	20,936	62	97

### August 31, 2007 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5771.61	61,226	102,600
Boysen	4703.38	407,538	622,000
Buffalo Bill	5372.02	482,474	494,400*
Pilot Butte	5439.94	17,882	21,800

\* The average used for Buffalo Bill Reservoir reflects data from 1993 through 2007. 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.

## August 2008 Inflows

<u>Reservoir</u>	<u>Inflows (KAF)</u>	<u>% Average</u>
Bull Lake	16.2	76
Boysen	37.6	63
Buffalo Bill	58.8	130

The total release from Buffalo Bill Reservoir to the river and the springs is approximately 1,200 cfs as measured at the Cody river gage. The release from Boysen Dam is approximately 900 cfs.

### SPECIAL REPORT

Bob Jarrett, who is with the National Research Program of the United States Geological Survey, was our special presenter today. Mr. Jarrett's bio can be found **here**.

Mr. Jarrett gave a very interesting presentation on "Insights in Flood Science Using Paleoflood Hydrology". A copy of the PowerPoint presentation can be found **here**.

After the presentation, questions arose on debris flow vs. water floods. Mr. Jarrett provided the following link to a USGS publication that discusses this topic:

<http://vulcan.wr.usgs.gov/Projects/FS2004-3142/FS2004-3142.pdf>

The meeting adjourned at 12:00 pm.