

March 2, 2004

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 2, 2004 Water Forum meeting minutes. Please take a few moments and pencil into your calendar the Water Forum dates for this year. **The schedule has changed, so please take note. The next meeting will be April 6th in the State Engineer's Conference Room at 10:00 a.m.**

WATER FORUM SCHEDULE
2003-2004
1st TUESDAY OF EACH MONTH

DATE	INVITED GUEST	DISCUSSION ITEM
April 6 th	John Lawson - Bureau of Reclamation	Water Forecast
May 4 th	Marge Bedessem - UW	Field evaluation of the fate of wastewater components from septic systems

SPECIAL REPORT

The next meeting of the Water Forum will be April 6, 2004 at 10:00 a.m. in the State Engineer's Office conference room. Our special guest will be John Lawson from the Bureau of Reclamation who will speak to us about water conditions in the Big Horn and North Platte basins. Mike Beus from the Snake River Area Office in Burley, ID will also be attending and telling us about conditions in the Snake River basin. Please plan to join us for this informative session.

WYOMING STATE WATER FORUM MEETING MINUTES

March 2, 2004

Pat Tyrrell called the two hundred and thirty-eighth 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	wbaile@state.wy.us
John Barnes	SEO	jbarnel@state.wy.us
Matt Bilodeau	COE	matthew.a.bilodeau@nwo02.usace.army.mil
Dawn Colarusso	WOHS/EMA	dcolar@state.wy.us
Debra Cook	WRDS	decCook@uwyo.edu
Jan Curtis	State Climatologist	jcurtis@uwyo.edu
Pepper Herman	WY Assoc. Rural Water	wyogw@yahoo.com
Rick Huber	G&F	rick.huber@wgf.state.wy.us
Steve Jackson	UW	jackson@uwyo.edu
Ed Kouma	USBR	ekouma@gp.usbr.gov
Harry LaBonde	SEO	hlabon@state.wy.us
Jeremy Lyon	WDEQ	jlyon@state.wy.us
Erika Olson	AG	eolson@state.wy.us
Jodee Pring	SEO	jpring@state.wy.us
Mike Sweat	USGS	mjsweat@usgs.gov
Pat Tyrrell	SEO	ptyrre@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@state.wy.us. For more information on the following reports, please contact the agency representative listed above.

STATE ENGINEER'S OFFICE

Pat Tyrrell reported the following:

On February 13th, priority administration of water rights diverting from the North Platte River and its tributaries upstream of Guernsey Reservoir went into effect. The administration effects those water rights that are upstream and junior to Pathfinder (priority of December 6, 1904) and Guernsey (priority of April 20, 1923) Reservoirs. This is the third year in a row that similar basin-wide priority administration has been necessary to protect the senior priority users, as provided by state law. Pat directed everyone to our website (<http://seo.state.wy.us>) for the press release concerning this priority administration.

The state legislature is meeting concerning the budget and the SEO has asked for funding for an IT initiative. This initiative allows for the SEO to become more electronic and in the future, allow such activities as e-permitting. So far, the legislature has been very receptive to the initiative.

The State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors met for the third time on Jan. 20, 2004. The next meeting is tentatively scheduled for Mar. 16, 2004 in Casper. The board is going to discuss their rules and regulations. The goal of this examining board is to have the certification program up and running in 2005.

Coalbed methane is still dominating the number of applications received in the SEO. Two-thirds of both the ground water and surface water applications received are related to coalbed methane.

A map that was produced in conjunction with the Department of Environmental Quality – Water Quality Division is now on the SEO website. The map is entitled SEO/DEQ CBM Water Planning Map (Northeast Wyoming). This map shows areas of concern and should help CBM operators determine the best placing of their wells and any reservoirs used to contain CBM water.

Jodee Pring reported the following:

The Wyoming Water Association will hold their summer tour July 9th. The plan is to take a tour of Tie Hack Dam and Lake DeSmet. For more information concerning this tour, contact John Shields at wwa@wyoming.com or 631-0898.

The 2nd Annual Wyoming Water Law conference will be held March 25-26, 2004 at Little America Hotel in Cheyenne. For more information concerning this conference, visit www.cle.com or call 1-800-873-7130.

The next round of basin advisory group (BAG) meetings are as follows:

March 22 – Bear River BAG – Cokeville – 6-9pm – Senior Center, Town Hall
 March 23 – Green River BAG – Rock Springs – 10am-4pm – White Mountain Library
 March 24 – Snake/Salt BAG – Alpine – 6-9pm – Alpen Haus conference room
 April 6 – Wind/Big Horn BAG – Lander – 3-6pm – Pronghorn Lodge, Monarch Hall
 April 7 – Powder/Tongue BAG – Buffalo – 6-9pm – Buffalo Federal Bank
 April 8 – NE BAG – Sundance – 1-4p – Ranch A

WATER RESOURCES DATA SYSTEMS (WRDS)

Jan Curtis reported the following:

Climate atlas

Wyoming Climate Atlas will be available in April and 1,500 copies will be distributed, for free, to most Wyoming state activities (Junior, High Schools), State Offices, Conservation Districts, Libraries, etc., and Federal agencies within Wyoming.

The on-line version has received very good feedback thus far and we are looking forward to updating and expanding this document over time.

http://www.wrds.uwyo.edu/wrds/wsc/climateatlas/title_page.html

CoCoRaHS

CoCoRaHS is now operational in Wyoming and volunteers may sign up at <http://www.cocorahs.org>. Work is continuing on the IMS with most of the framework in place. Jan expects to hand out some rain gauges while touring the state during the BAG meetings in March and April. The Colorado Climate Office is sponsoring a retreat on 26 March, hosting key local coordinates of this program. NWS is one of the key participants.

Drought

Next drought email updates: 8 and 26 March. In April and May, updates will be weekly. Despite a good past week of moisture, the forecast through mid-March is not indicating much moisture.

Western Governor's Association meeting in Tempe, AZ (11-12 March) to address the Drought Initiative Plan (National Integrated Drought Information System) will be attended by Jan Curtis.

Jan Curtis will accompany WWDC-BAG 22-24 March to discuss latest drought status.

Next Governor's Drought Task Force meeting will be Friday, 26 March at 10AM in the Hathaway Bldg. Basement Conference Room.

Powder River Basin Water Quality

Northern Basin (T49N to T58N) – Current Project

Cross Section routines and access to the water quality database have been added to the IMS.

The prototype has been well-received at advance presentations already, and we expect a release to the public very shortly. This will be presented to the Water Development Commission during their March 5th meeting.

Southern Basin (T38N to T48N) – Proposed Project

There will be a presentation to the BLM in Casper on March 4th to demonstrate the capabilities of the current project.

Water Plan

Platte – Next Platte Meeting is April 13th in Torrington. Agenda for the meeting is online.

<http://waterplan.state.wy.us/BAG/platte/BAG-platte.html#mr>

Snake/Salt – Executive Summary and Final Report (Chapters 1-3) are online, both in PDF and HTML format. <http://waterplan.state.wy.us/plan/snake/techmemos/techmemos.html>

Wind/Bighorn – 75% of the Technical memos are now online in PDF and HTML format. The remainder are available in PDF only.

<http://waterplan.state.wy.us/plan/bighorn/bighorn-plan.html>

March 2004 Water Development Commission Notebook and the 2004 Consultant Selection Notebook are both online.

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

Matt Bilodeau reported the following:

Mr. Michael Burgan has been added to the staff of the Corps of Engineers, Wyoming Regulatory Office (WRO). He started work in October of 2003. Mr. Burgan was a wetland specialist with the Missouri Department of Transportation before coming to work for the Corps.

Chandler Peter of the WRO has accepted an assignment as a senior project manager for the Omaha District of the Corps of Engineers. He will remain in the Cheyenne Office but will work on EIS level projects throughout the Omaha District. He is currently working on two water development projects proposed for northeastern Colorado where the Corps is or will be the lead agency for preparation of the EIS. He is also the Corps representative in a cooperating agency status on a third water development project proposed in Colorado and the Dakota, Minnesota & Eastern (DM&E) railroad construction and rehabilitation project.

The Corps is awaiting a decision by the 10th District Court of Appeals in Denver, CO on a permit issued by the Corps to Canyon Club, Inc. for the development of a golf course in Teton County, WY. Issuance of the Corps permit was upheld by the 10th District Court in a decision issued April 2003 by Judge William Downes. The Greater Yellowstone Coalition, et.al., appealed that decision to the 10th Circuit Court of Appeals. A hearing was held in front of that court of that court on the merits of the case on January 15th.

As reported in the February 2002 Water Forum Minutes, the Wyoming Outdoor Council, Powder River Basin Resource Council, and Biodiversity Associates brought a lawsuit against the Corps over the issuance of General Permit 98-08 for oil and gas development and exploration in Wyoming. A hearing was held before Judge William Downes in the 10th District Federal Court in Casper, WY on February 3, 2004 over a request by the petitioners for a preliminary injunction against the use of the General Permit. The Corps was notified by the Department of Justice on February 13, 2004, that the preliminary injunction request had been denied.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

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

February 29, 2004 Reservoir Conditions

	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Seminole	6298.22	263,880	26	51
Pathfinder	5804.18	332,606	33	49
Alcova	5488.38	156,899	85	101
Glendo	4614.39	309,207	60	81
Guernsey	4406.46	18,247	40	107

February 28, 2003 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminoe	6289.44	205,389	519,300
Pathfinde	5807.26	360,575	677,600
Alcova	5488.00	156,043	155,700
Glendo	4609.36	268,801	381,600
Guernsey	4403.40	13,760	17,000 1/

1/ Eleven year average (1993-2003)

October through February Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% of Average</u>
Seminoe	96.3	71
Pathfinder (Sweetwater)	36.8	139
Alcova to Glendo Gains	23.2	38
Glendo to Guernsey	6.7	71

March 1, 2004 Snowpack

Snow in the basin above Seminoe is at 80% of average, in the Sweetwater Basin above Pathfinder Reservoir it is at 92% of average and in the lower basin (Pathfinder to Glendo) it is at 85% of average.

March 1, 2004 Snowmelt Runoff Forecast

March forecasts of April-July runoff were prepared for the following forecast points in the North Platte Basin:

<u>Forecast Point</u>	<u>Most Probable Inflow</u>	<u>Percent of Average</u>
North Platte River above Seminoe Reservoir	450,000 AF	61
Sweetwater River above Pathfinder Reservoir	60,000 AF	91
Alcova to Glendo Reach	75,000 AF	58

Ownership of North Platte River Storage Water

Kendrick ownership was 744,317 acre-feet (AF) on February 29, 2004, and approximately 77% of average (966,000 AF), which compares to the ownership of 767,980 AF last year at this date. The February 29, 2004, North Platte (Pathfinder and Guernsey) ownership totaled 217,015 AF, which was approximately 35% of average (615,300 AF). This compares to the 133,262 AF of North Platte ownership on this date last year. The Glendo ownership was 102,108 AF on February 29, 2004, which was approximately 72% of average (141,600 AF). This compares to the 86,521 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 at 500 cfs. The level of Alcova Reservoir is at the normal winter operating range of 5488 ± one foot.

Other Events

At the request of Wyoming Game and Fish Department, Reclamation has scheduled a series of flushing flows in the North Platte River below Gray Reef Dam. From March 8 through March 12 the flows of the river will be increased from 500 cfs to 4,000 cfs for 5 hours each morning. The increased flows are intended to clean sediments from the trout spawning gravels in the river to improve the success rate of trout reproduction.

On March 12, a meeting will be held at the Hampton Inn on the West Side of Scottsbluff Nebraska to continue discussions of individual storage water accounts for 13 irrigation districts which contract for North Platte Project storage water. The individual accounts are being considered as a water conservation measure.

2. Water Supply Conditions of the Big Horn Basin

February 29, 2004 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>
Bull Lake	5770.23	58,105	38	74
Boysen	4703.87	413,444 *	56	81
Buffalo Bill	5370.14	468,610	72	117
Pilot Butte	5453.05	27,720	82	121

* Except for last year storage in Boysen Reservoir for the end of February has not been lower since 1961.

February 28, 2003 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5763.71	44,128	81,500
Boysen	4694.45	308,593	515,800
Buffalo Bill	5355.95	373,258	391,700**
Pilot Butte	5453.57	28,151	22,500

** The average used for Buffalo Bill Reservoir reflects data from 1993 through 2003. 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 through February Inflows

<u>Reservoir</u>	<u>Inflows</u>	<u>% of Average</u>
Bull Lake	8.4	59
Boysen	169.5	74
Buffalo Bill	65.6	73

March 1, 2004 Snowpack

Snowpack in the basin above Bull Lake is at 87% of average, above Boysen Reservoir it is at 76% of average and above Buffalo Bill Reservoir it is at 75% of average.

March 1, 2004 Snowmelt Runoff Forecast

March forecasts of April-July runoff were prepared for the following forecast points in the Bighorn Basin:

<u>Forecast Point</u>	<u>Most Probable Inflow</u>	<u>Percent of Average</u>
Buffalo Bill Reservoir	530,000 AF	77
Boysen Reservoir	400,000 AF	68
Bull Lake Reservoir	110,000 AF	78
Wind River above Bull Lake Creek	340,000 AF	80

The release from Buffalo Bill Dam is approximately 100 cfs, which with addition of flow from the springs results in a flow of approximately 180 cfs at the Cody river gage. The release from Boysen Dam is approximately 350 cfs and will be maintained at this release for the winter.

UNITED STATES GEOLOGICAL SURVEY

Mike Sweat reported the following:

Bob Swanson and others from USGS offices in the state, along with Mark Smith, the USGS Central Region surface water specialist, are providing surface-water and ground-water records computation training 3/2-4. Attendees include a mix of USGS and WSEO personnel.

The USGS Annual Data Report (ADR) records processing is complete, with anticipated report availability about March 26. Paper copies will not be printed this year, except for the State Engineers Office. All data will be available on CD and at USGS web sites. Previous years data are available at <http://wy.water.usgs.gov/pubs/adr/index.htm>, and this years data will be added when available.

The Wyoming District has recently agreed to conduct a study of interactions between surface water and ground water in the Fish Creek watershed at the request of the Teton Conservation District.

The Wyoming District is sponsoring a guest lecture later this year from the USGS National Research Program. Johnkarl (JK) Böhlke, Reston, VA will present "Approaches for Quantifying Movement and Reaction of Nitrate in Ground Water and Surface Water." Date, location, and time will be announced as soon as we have it. USGS is also investigating presenting a lecture by Julio Betancourt by cyberseminar or video. The topic of Julio's presentation is "The Historical, Climatic and Socioeconomic Context for U.S. Megadrought."

The Wyoming District will be releasing three factsheets about pesticides in ground water in Natrona, Sweetwater, and Teton counties. When released, these factsheets will be available for distribution, and can be viewed or downloaded from <http://water.usgs.gov/pubs/FS/>. These are part of a series of factsheets on pesticides in ground water completed in cooperation with the Wyoming Department of Agriculture and the Wyoming Department of Environmental Quality, Water Quality Division. A

factsheet on pesticides in ground water in Uinta County should be released later this year. Previously released factsheets on pesticides in ground water can be found at <http://wy.water.usgs.gov/pubs/html/factsheets.htm>.

The USGS has recently released two flood related reports. USGS Circular 1245, "Large Floods in the United States: Where They Happen and Why" can be viewed at <http://water.usgs.gov/pubs/circ/2003/circ1245/.USGS> . Fact Sheet 076-03, "Effects of Urban Development on Floods" can be viewed at <http://water.usgs.gov/pubs/fs/fs07603/>. Copies of either report can be ordered from the USGS Publications Warehouse at http://infotrek.er.usgs.gov/servlet/page?_pageid=2126&_dad=portal30&_schema=PORTAL30

WYOMING DEPARTMENT OF TRANSPORTATION

Bill Bailey reported the following:

WYDOT will be looking at Dead Horse Creek in April as this tributary of the Powder has been overtopping the highway. Mapping and data collection will begin in April.

The final report on the Murphy Creek Flood (Kaycee, WY) is almost complete.

WYOMING ASSOCIATION OF RURAL WATER SYSTEMS

Pepper Herman reported the following:

The 13th annual WARWS Technical Conference will be held March 23-25 in Casper at the Casper Events Center and Parkway Plaza Hotel. Please visit their website at www.warws.com for registration and conference information.

SPECIAL REPORT

Steve Jackson, who is with the Dept. of Botany at the University of Wyoming, was today's special presenter. Mr. Jackson gave a very interesting and informative presentation entitled "Droughts, megadroughts, and gigadroughts: a long view of drought risk from paleoclimatology." A copy of his powerpoint presentation can be found on the State Engineer's Office website under State Water Forum meetings.

The meeting adjourned at 12:00 p.m.