

January 13, 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 January 6, 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 February 3rd 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
February 3rd	Jerry Pierce – BLM - Kemmerer	Cumberland Allotment and other BLM activities
March 2nd	Steve Jackson - UW	Tree Ring Study
April 6th	John Lawson - Bureau of Reclamation	Water Forecast
May 4th	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 Feb. 3, 2004 at 10:00 a.m. in the State Engineer's Office conference room. Our special guest will be Jerry Pierce with the Bureau of Land Management in Kemmerer. He will be speaking to us about the Cumberland Allotment and other BLM activities.

WYOMING STATE WATER FORUM MEETING MINUTES

January 6, 2004

Sue Lowry called the two hundred and thirty-sixth 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>
Liberty Blain	Laramie Co. Conservation Dist.	liberty@lccdnet.org
Ed Burton	NRCS	ed.burton@wy.usda.gov
Mark Conrad	DEQ	mconra@state.wy.us
Debra Cook	WRDS	decook@uwyo.edu
Chuck Harnish	DEQ	charni@state.wy.us
Rick Huber	G&F	rick.huber@wgf.state.wy.us
Harry LaBonde	SEO	hlabon@state.wy.us
Barry Lawrence	WWDC	blawre@state.wy.us
Lisa Lindemann	SEO	llinde@state.wy.us
Sue Lowry	SEO	slowry@state.wy.us
Jeremy Lyon	DEQ	jlyon@state.wy.us
Mark Opitz	NRCS	mark.opitz@wy.usda.gov
Jodee Pring	SEO	jpring@state.wy.us
Bob Swanson	USGS	rswanson@usgs.gov
Ron Vore	WWDC	rvore@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

Sue Lowry reported the following:

The 52nd annual meeting of the Yellowstone River Compact Commission was held Dec. 16, 2003 in Billings, MT. The commission mentioned that they were pleased with the work the technical committee has done and would like for them to continue to work together on issues in the basin. The commission decided to move the time of year that they meet from the winter to the spring. By the spring, reservoir conditions and the forecast for summer should be available for review. The next meeting of the technical committee will be April 14th and the commission will meet the next day, April 15th. The meeting will be held in Sheridan.

Progress on the review of the Master Water Control Manual for the Missouri River continues. The biological opinion from the Fish and Wildlife Service was out before Christmas and the Corps of Engineers has until March 5th to have the annual operating plan completed for 2004.

The Four States Irrigation Council will be holding a technical workshop beginning at 1pm on Jan. 13 through 11:30 a.m. Jan. 14, in conjunction with their annual meeting at the University Park Holiday Inn in Ft. Collins. The workshop is entitled “Modernizing Agricultural Water Systems”. Staff from the Bureau of Reclamation’s Technical Service Center will conduct the workshop. The registration is \$25 and the deadline is Jan. 7. Please call Michelle Patrick (Four States) at 970-622-2247 or Allen Powers (Reclamation) at 208-334-1904 for more information.

The Western States Water Council, along with others, held a conference on ground water management in the West Dec. 3-5 in Amarillo, Texas. Some of the topics of the meeting included western ground water law and resource management challenges, information concerning the Ogallala Aquifer Institute, and a presentation by T. Boone Pickens entitled “Water: An Economic Opportunity”. The 144th Council Meeting will be held March 31-April 2 in Las Vegas, NV at the Golden Nugget.

Jodee Pring reported the following:

There will be no special presentation today since our speaker had a conflict. We are going to change the schedule and have Jerry Pierce speak to us on Feb. 3, Steve Jackson on Mar. 2, John Lawson on April 6 and Marge Bedessem on May 4. We will move the round table to Oct. 2003.

We are checking into getting the past water forum minutes posted on the State Engineer’s website. The thought is to make a heading under the Water Forum tab that states “Archived Water Forum minutes”. The SEO is in possession of the minutes from 1995 to the present.

Due to a change in executive assistants, please email all of you agency reports to Jodee at jpring@state.wy.us.

Lisa Lindemann reported the following:

The State Board of Examining Water Well Drilling Contractors and Water Well Pump Installation Contractors will be meeting Jan. 20th in Casper at the Wyoming Oil and Gas Conservation Commission office from 10 a.m. to 2 p.m.

From Jan. 2003 to Dec. 2003, the ground water division of the State Engineer’s office processed 3700 coalbed methane applications.

Harry LaBonde reported the following:

Anna Hutchinson has been hired to replace Laura Watson who retired Jan. 2nd after 28 years of service to the State of Wyoming.

The annual report for the State Engineer’s Office will be out next month. The report will actually contain 15 months of information as we are moving to reporting based on the water year instead of the fiscal year.

The State Engineer’s Office will be appearing before the JAC Jan. 9th to discuss the SEO budget.

WYOMING WATER DEVELOPMENT COMMISSION (WWDC)

Barry Lawrence reported the following:

The Commission will hold its next meeting on Tuesday, January 13th at 8:30 a.m. at the Water Development Commission offices located at 6920 Yellowtail Road in Cheyenne. The primary purpose of the meeting will be consideration of the omnibus planning and construction bills going before the 2004 Wyoming State Legislature. A workshop will also be held the previous day at 1:30 p.m. at the same location.

The next meeting of the Legislative Select Water Committee is set for January 28th at 8:30 a.m. in the Capitol, Room 302. Again, the primary focus will be consideration of the omnibus planning and construction bills to be sponsored by the committee.

The Platte Basin Advisory Group will be holding its next meeting on Tuesday, February 10th in Saratoga at 10a.m. The meeting will focus on the issues identification process for the basin. At the last meeting in Casper in December, the group heard a consultant update, discussed the educational tools to be developed as part of the basin planning process, and listened to a presentation from Ed Harvey of Harvey Economics, Denver, Colorado entitled: "Introduction and Discussion of Platte River Basin Water Demand Forecasts".

The following additional BAG meetings have been set:

- Mon., Mar. 22, 6 pm – Bear River BAG, Cokeville, WY
- Tues., Mar. 23, 10am – Green River BAG, Rock Springs, WY
- Wed., Mar. 24, 6 pm – Snake/Salt BAG, Alpine, WY
- Tues., Apr. 6, 3 pm – Wind/Bighorn BAG, Lander, WY
- Wed., Apr. 7, 6 pm – Powder/Tongue BAG, Buffalo, WY
- Thurs., Apr. 8, 1 pm – Northeast BAG, Sundance, WY

Finally, Bruce Brinkman, WWDC, wished to announce the availability of final reports (in CD format) for the project: "Testing of Hydrologic Models for Estimating Low Flows in Mountainous Areas of Wyoming". Persons desiring copies of the report should contact Bruce at 777-7626.

Ron Vore reported the following:

Wyoming Water Development Commission Small Water Project Program Update:

During 2003, there were 31 small water projects approved for construction by the WWDC. Of these, 20 were New Development and 11 were Rehabilitation. Further breakdown shows 17 well projects, 10 pipeline projects and 4 stock pond projects. Currently, 4 Rehabilitation projects and 1 New Development project have been completed. Therefore, until there is an additional appropriation to this program, there is funding available for 9 additional Rehabilitation projects.

Currently the WWDC has the Kirby Creek Watershed Plan in process. It is scheduled for completion in June of 2004. An extensive amount of upland and riparian assessment was conducted in the 2003 summer season and information resulting from that effort is forthcoming.

UNITED STATES GEOLOGICAL SURVEY (USGS)

Bob Swanson reported the following:

125th Anniversary Celebration: The United States Geological Survey will celebrate its 125th anniversary on March 3, 2004. The USGS will showcase the partnerships developed during 125 years of science for America. This celebration coincides with the continuing presentations and open houses that are conducted for the Lewis and Clark Expedition Bicentennial.

Reports: Fact Sheet 075-03 “Desalination of Ground Water: Earth Science Perspectives” was released to address one of the issues identified in the Department of the Interior’s Water 2025 Initiative. Saline water may become a significant source of potable water in the future. We know a lot about freshwater ground water resources because we use it a lot. We do not know a great deal about the hydrogeology of saline ground water resources in the country. The fact sheet can be found here:

<http://water.usgs.gov/pubs/fs/fs075-03/>

USGS Circular 1260 “Heat as a Tool for Studying the Movement of Ground Water near Streams” by D. A. Stonestrom and Jim Constantz has been released. We are using these techniques with Jim Constantz on Burger Draw in the Powder River Basin to help develop understanding of surface water/ground water relationship in the area. You can find this circular here:

<http://water.usgs.gov/pubs/circ/2003/circ1260/>

High Plains Reports: USGS Circular 1243 “Water in Storage and Approaches to Ground-Water Management, High Plains Aquifer, 2000” is a good primer for understanding the High Plains aquifer system and the approaches the states that overlay the aquifer deal with management issues. You can obtain free copies by calling 1(888) ASK USGS (275-8747) and this report should be available online later in January. USGS Fact Sheet “Water-Level Changes in the High Plains Aquifer, Predevelopment to 2001, 1999 to 2000, and 2000 to 2001” is also available for free distribution. In January, this report can be found here: <http://water.usgs.gov/pubs/fs/FS078-03/>

New releases from the High Plains Regional NAWQA study include: USGS Open-File Report 03-345 “Ground Water Quality of the Southern High Plains Aquifer, Texas and New Mexico, 2001:

http://co.water.usgs.gov/nawqa/hpgw/reports/ofr03_345.pdf

USGS Water-Resources Investigations Report 03-4171 “Water Movement Through Thick Unsaturated Zones Overlying the Central High Plains Aquifer, Southwestern Kansas, 2000-2001:

http://co.water.usgs.gov/nawqa/hpgw/reports/wrir02_4112.pdf

USGS Water-Resources Investigations Report 03-4219 “Ground-Water Quality Beneath Irrigated Agriculture in the Central High Plains Aquifer, 1999-2000: <http://water.usgs.gov/pubs/wri/wri034219/>

DEPARTMENT OF ENVIRONMENTAL QUALITY – WATER QUALITY DIVISION

Mark Conrad reported the following:

As of January 1, 2004, the Water Quality Division (WQD) of the Wyoming Department of Environmental Quality will require “Permits to Construct” for coal bed methane (CBM) produced water treatment plants. For the purpose of this directive, a “CBM produced water treatment plant” shall

be defined as any treatment plant or works (including its associated piping and storage etc.) which is designed to alter the physical or chemical quality of the produced water. Such plants include ion exchange units, reverse osmosis units, facilities which inject liquid or gas into the water, and similar types of operations. If the treated water from the plant is land applied, the land application portion of the operation will be permitted along with the plant. (This directive does not apply to well fracturing, acidization, or other treatments associated with downhole operations.) At this time, this agency is not requiring permits to construct for stand alone land application operations, irrigation systems, “misterters”, pits, ponds, or similar facilities. As long as there are no treatment facilities which would alter the physical or chemical quality of the water before it is land applied or otherwise discharged, no construction permit is now being required.

Current operators of CBM produced water treatment plants are not now considered to be in violation of Wyoming law. However, owners and operators of existing treatment facilities must submit “as built” plans and specifications to the agency no later than April 1, 2004. No new CBM produced water treatment plants may be constructed after January 1, 2004 without first obtaining a permit to construct. It is our expectation that plants, which are of a standardized design and which may vary only in size and location, will eventually be permitted through a “statewide” permit, or other expedited process.

If you currently own or operate a CBM produced water treatment plant, or if you have plans to install one, you should immediately contact the appropriate District Engineer. Information on contacting our District Engineers can be obtained at <http://deq.state.wy.us/> and clicking on the “Water Quality” link followed by the “Water and Wastewater” link, followed by the “District Engineers” link.

Wyoming’s Draft 2004 305(b) State Water Quality Assessment Report and Wyoming’s Draft 2004 303(d) List (included in the Draft 305(b) Report), are available for review and comment until February 16, 2004. This document is available on the DEQ-WQD website under current events <http://deq.state.wy.us/wqd/events.asp>.

The Above and Underground Storage Tank Program, after being under DEQ Solid and Hazardous Waste Division, is again back under the Water Quality Division.

LARAMIE COUNTY CONSERVATION DISTRICT (LCCD)

Liberty Blain reported the following:

LCCD finished the public comment period last month on the Crow Creek Watershed Plan. The watershed steering committee will meet at the end of the month to review public comments and make any necessary changes to the plan. We are hoping to have the final plan completed by February or March.

WATER RESOURCES DATA SYSTEMS (WRDS)

Debra Cook reported the following:

CLIMATE ATLAS:

The entire Wyoming Climate Atlas is expected to be on-line around 15 January. The paper version with data CD should be available by mid-April.

DROUGHT:

The next Governor's Drought Task Force meeting will be held on Friday, 9 January at 10AM in the Hathaway Bldg. basement conference room in Cheyenne.

Current drought status shows all but the extreme SE portion of Wyoming in D2 - severe drought. Over the North Platte River, southeast of Douglas, conditions are worse, D3 - extreme drought. Mountain snowpack is just above normal based on a statewide average but is still below normal over NE and SE Wyoming. Forecast still calls for a normal winter and spring weather pattern. This should help improve but not end drought conditions in 2004.

Jan Curtis will be giving a drought presentation to BLM in Lander on 15 January.

WEATHER OBSERVATION PROGRAM:

Jan Curtis and Tony Bergantino will be attending a CoCo RaHS meeting in Ft Collins on 21 January to discuss plans to introduce this weather observing program to Wyoming.

WATER PLANNING:

2003 Irrigation Survey is now online at:

<http://wwdc.state.wy.us/surveys.html>

Bridging the Headgate:

This project keeps track of all current water projects in the State. Forty responses have been received. An Access Data Base will be developed and a listing will be sent to each Agency for review. If you have current water projects and haven't filled out the form, please email Debra Cook at decook@uwyo.edu .

Snake/Salt:

Executive Summary, Final Report, and Technical Memos are all available online in PDF format. Html is approximately 50% complete. Hydrologic spreadsheet models are also online.

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

Wind/Bighorn:

Technical Memos are available online in PDF format. GIS coverages of irrigated lands, water rights database, and points of diversion are also available.

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

Powder/Tongue and NE Wyoming:

Hydrologic Spreadsheet Models are now online. These sites are now finished.

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

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

WRDS LIBRARY:

The WRDS Library has joined the Wyoming Libraries Database, so you can search in any Public Library and see documents at WRDS.

BUREAU OF RECLAMATION / WYOMING AREA OFFICE

John Lawson submitted the following:

The following is a listing of reservoir conditions on December 31, 2003:

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>
Seminoe	6301.60	298,240	28	47
Pathfinder	5801.96	313,484	31	51
Alcova	5488.22	156,538	85	101
Glendo	4606.27	245,635	47	87
Guernsey	4403.14	13,414	29	174

December 31, 2002 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Seminoe	6293.98	234,307	612,000
Pathfinder	5804.48	335,252	611,700
Alcova	5488.43	157,012	154,500
Glendo	4601.21	210,279	280,800
Guernsey	4399.69	9,364	7,700

October through November Inflows

<u>Reservoir</u>	<u>Inflow (KAF)</u>	<u>% of Average</u>
Seminoe	56.9	67
Pathfinder (Sweetwater R.)	18.4	123
Alcova to Glendo Gains	13.2	38
Glendo to Guernsey	4.2	66

Kendrick ownership was 747,960 acre-feet (AF) on December 31, 2003, and approximately 77% of average (967,400 AF), which compares to the ownership of 769,507 AF last year at this date. The Kendrick ownership was the fifth lowest December ownership in the last 30 years. The December 31, 2003, North Platte ownership was 151,723 AF, which was approximately 28% of average (538,600 AF). This compares to the ownership of 72,709 AF of North Platte ownership on this date last year. The North Platte ownership was the sixth lowest December ownership in the last 30 years. The Glendo ownership was 102,481 AF on December 31, 2003, which was approximately 75% of average (135,900 AF). This compares to 87,727 AF of Glendo ownership on this date last year. The Glendo ownership was the fifth lowest December ownership in the last 30 years.

Flows in the Miracle Mile below Kortes Dam are approximately 540 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 500 cfs. The level of Alcova Reservoir was lowered to the normal winter operating range of 5488 \pm one foot.

2. Water Supply Conditions of the Big Horn Basin

December 31, 2003 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>%/Avg</u>
Bull Lake	5770.03	57,655	38	73
Boysen	4701.95	390,620**	53	72
Buffalo Bill	5368.63	457,989	71	114
Pilot Butte	5453.02	27,696	82	120

December 31, 2002 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (ft)</u>	<u>Content (AF)</u>	<u>30 Year Average (AF)</u>
Bull Lake	5763.66	44,026	79,100
Boysen	4691.46	278,683*	544,900
Buffalo Bill	5354.11	361,871	400,300***
Pilot Butte	5453.63	28,201	23,100

*Storage in Boysen Reservoir was the lowest of record (1953-2003) for the end of December.

**Storage in Boysen Reservoir was the fourth lowest of record (1953-2003) for the end of December.

***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 December Inflows

<u>Reservoir</u>	<u>Inflow (KAF)</u>	<u>% of Average</u>
Bull Lake	5.8	55
Boysen	103.7	68
Buffalo Bill	42.5	70

The total release from Buffalo Bill Reservoir to the river is approximately 100 cfs and with addition from the springs is 200 cfs as measured at the Cody river gage. The release from Boysen Dam is approximately 350 cfs and will be maintained at this release for the winter.

SPECIAL REPORT

There was no special report today.

The meeting adjourned at 11:30 a.m.