



# Water News

## The Framework Water Plan Wrap-up

The Statewide Framework Water Plan has been completed. We want to thank everyone who participated in the planning process through the Basin Advisory Groups. For anyone less familiar with the River Basin Planning Program, this article will give some background about the proc-

water use within the state is estimated to be 3,313,000 acre-feet. Figure 1 shows the percent of total current surface water use for each of the seven basins. The greatest percent of current water use is in the Wind/Bighorn Basin due to irrigated agricultural use.

After calculating current water use, the basin plans projected future water use 30 years into the future. Water use projections were broken down into low, medium, and high growth scenarios. The Framework Water Plan summarized these projections for the state. Figure 2 below shows the projected percentage of surface water uses for the high growth rate scenario. This scenario indicates the state's water use will increase to 5,460,000 acre-feet in the next 30 years. The largest projected increase in water use is in the Wind/Bighorn Basin. Water use in this basin is projected to increase largely as a result of additional lands being placed under irrigation. Also included in this increase is additional water use for two natural gas fired power plants and two coal fired power plants. Under the high growth scenario additional water demands are projected in

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### Special points of interest:

- As always, look for activities in your area in the Calendar of Water Events
- Don't forget to send any address changes to the WY Water Development Office  
Attn: River Basin Planning  
6920 Yellowtail Road  
Cheyenne, WY 82002  
307-777-7626

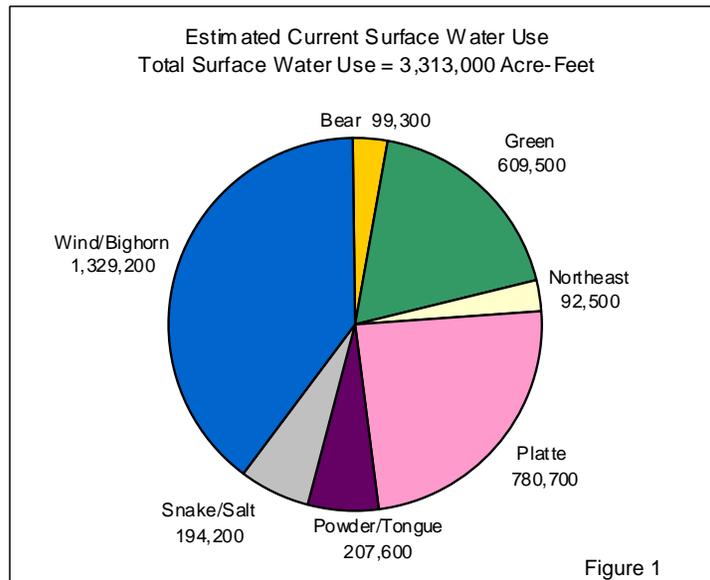


Figure 1

ess and some information from the plan.

The Statewide Framework Water Plan is available as a two volume set. Volume I summarizes the seven individual river basin plans, which were completed between 2001 and 2006. It includes current water use and projected water needs 30 years into the future. Volume II provides planning recommendations for the future and the next round of river basin plan updates.

The basin planning process begins by evaluating water uses within the river basin. Total

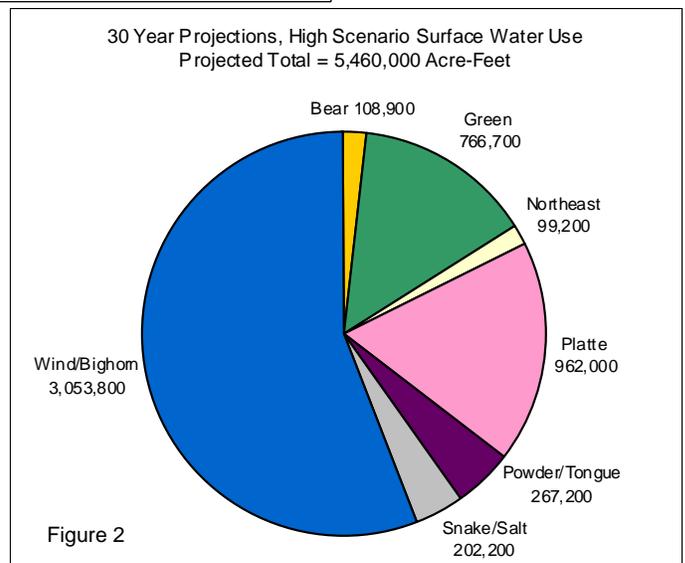


Figure 2

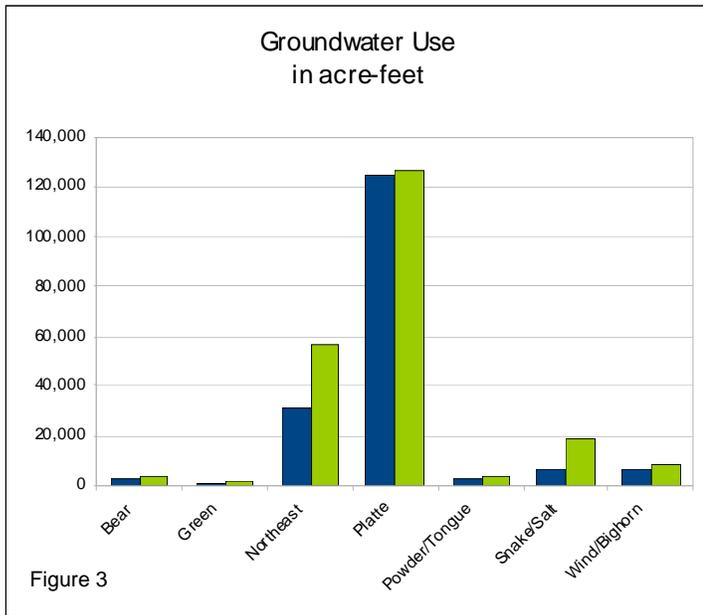


Figure 3

the Platte River Basin as a result of municipal growth, industrial demands from a new power plant, and a coal conversion plant that would produce nine million barrels of diesel fuel per day.

Figure 3 compares current and projected high growth groundwater uses by basin. The dark gray bars represent the current groundwater use in acre-feet, and the light gray bars represent the anticipated groundwater use 30 years into the future. As shown, the Platte River Basin uses the most groundwater and the greatest increase in groundwater use occurs in the Northeast River Basin due to the basin's dependence on groundwater resources. More information on projected water use can be found in Volume I of the Framework Water Plan.

Using the spreadsheet models developed as a part of the individual basin plans, the Framework Report presents available surface water flows calculated for dry, normal, and wet hydrologic cycles. Figure 4 shows the average annual stream flow for each of the seven basins. This figure is small but provides a graphical representation for the

scale of stream flows within the state. It is evident that the Northeast and Powder/Tongue River Basins have significantly less surface flows than the other basins. More information on available flows and the spreadsheet models can be found in Chapter 7 of the

Framework Volume I Report.

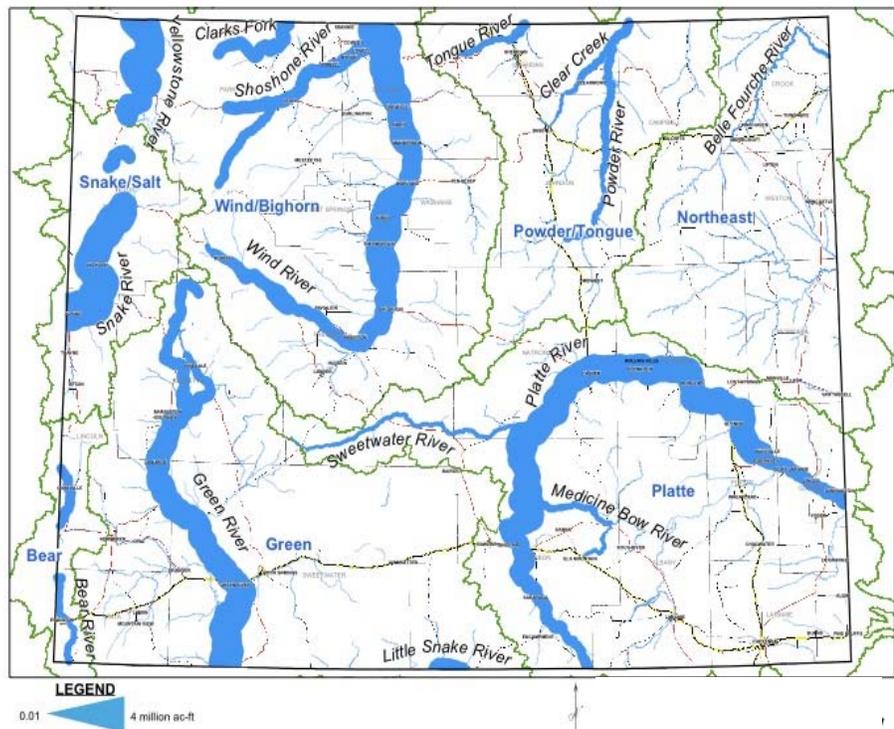
Volume II of the Framework Water Plan includes many recommendations for future river basin planning. One such recommendation is to improve on the hydrologic modeling by developing a state-wide model similar to Colorado's StateMod program. Groundwater data acquisition, to facilitate management of this valuable resource, is also recommended.

The final reports and Presentation Tool are now available online. All of the information referenced above can be found in the Presentation Tool, which is available at: <http://waterplan.state.wy.us/frameworkplan.html>

### Wind/Bighorn Plan Update

The Green River Basin Plan Update is underway (see page 4) and the next basin plan to be updated will be the Wind/Bighorn. As with the Green River Basin Plan Update, the Wind/Bighorn Update will be split into two parts. One part will focus on the groundwater needs of the basin. This portion of the plan will be completed by the Wyoming Geological Survey and the U.S. Geological Survey. The second part will focus on updating the surface water modeling, the water use projections, and updating the technical data developed in the first plan. A selection process is currently underway for the surface water portion of the update with interviews being held in May. Both parts of the Wind/Bighorn Plan update should be starting this summer.

Figure 4





# News from the WWDO

## Planning and Construction Project Update

The legislature has approved the Omnibus Water Bill-Planning and the Omnibus Water Bill-Construction for 2008. The Omnibus Water Bill-Construction includes 13 new projects. Funding for the six New Development Program construction projects was \$12,506,600. Appropriations for the seven Rehabilitation Program projects equal \$5,670,565. There was an additional \$500,000 added to the Rehabilitation Program as supplemental funding for the sponsors inflation fund. These funds allow increases in construction costs due to inflation to be covered without delay.

There are 28 new projects approved in the planning bill. Twelve were Level I New Development studies included in the bill with a total appropriation of \$1,805,000. The Level I New Development Program also includes an appropriation of \$300,000 for the Statewide Water Research Program; bringing the total funding for the Level I New Development Program to \$2,105,000.

Nine Level II New Development studies were approved with funding of \$2,395,000. There were two Level I reconnaissance storage studies approved with an appropriation of \$600,000. Two Level II storage feasibility studies were included in the bill with funding of \$500,000. Five hundred thousand dollars (\$500,000) was appropriated for three Level II Rehabilitation feasibility studies.

Additionally, the planning bill appropriation included \$500,000, for the Groundwater Grant Program and \$165,000 for the University of Wyoming, Office of Water Programs.

<u>Green River Basin</u>	<u>Northeast River Basins</u>	<u>Wind/Bighorn River Basin</u>
<b>Level I New Development Projects</b>	<b>Level I New Development Projects</b>	<b>Level I New Development Projects</b>
Kemmerer-Diamondville Master Plan	Gillette Regional Master Plan	Cody Master Plan
<b>Level II New Development Projects</b>	Pine Haven Master Plan	Lander Master Plan
Jamestown/Rio Vista Water Supply	Wright Master Plan	South Circle Master Plan
Wamsutter Groundwater	<b>Level I Storage Studies</b>	Wind/Big Horn River Basin Plan Update
<b>Level II Storage Studies</b>	Thunder Basin Watershed Study	<b>Level II New Development Projects</b>
Little Snake River Supplemental Storage		Farview water Supply
		Northern Arapaho Groundwater
		Owl Creek Water Supply
<b>Snake/Salt River Basin</b>	<b>Platte River Basin</b>	South Thermopolis Water Supply
<b>Level II New Development Projects</b>	<b>Level I New Development Projects</b>	<b>Level I Storage Studies</b>
Alpine Master Plan Phase II	Evansville Master Plan	
	Laramie County Aquifer Study	Nowood River Watershed Study
	Pine Bluffs Master Plan	<b>Level II Storage Studies</b>
	Rawlins Master Plan	Cottonwood/Grass Creek CRM
	<b>Level II New Development Projects</b>	<b>Level II Rehabilitation Studies</b>
	Glendo Water Supply	Cody Canal Rehab. Study and GIS
	Mile-Hi Water Supply	Greybull Valley Rehab. Study and GIS
		Willwood Rehab. Study and GIS

New construction projects are listed in Table 1 and new planning projects are presented in Table 2. Both tables show the projects by river basin. There are new planning projects scheduled for five of the seven planning basins.

<u>Wind/Bighorn River Basin</u>
<b>Level III New Development Projects</b>
Cowley Transmission Pipeline Greybull Pipeline and Well Improvements Lovell Transmission Pipeline
<b>Level III Rehabilitation Projects</b>
Big Horn Canal Lining Gooseberry Rehabilitation Heart Mountain Rehabilitation Sidon Rehabilitation Taylor Ditch Siphon Replacement
<b>Platte River Basin</b>
<b>Level III New Development Projects</b>
Glenrock Well Laramie Transmission Pipeline
<b>Level III Rehabilitation Projects</b>
Casper's Rock Creek Dam Rehabilitation Cheyenne's Granite Dam Spillway Rehabilitation
<b>Northeast River Basins</b>
<b>Level III New Development Projects</b>
Gillette Fort Union Wells

## Green River Basin Plan II

The Green River Basin Plan II has been in full swing for the last seven months. To refresh memories, the plan was split into two parts. One focusing on the plan update and the other focusing on groundwater. The update/surface water contract was

awarded to WWC Engineering, which has offices in Sheridan and Laramie. Murray Schroeder, of the WWC Laramie office, is the project manager. Mr. Schroeder was the project manager for the State Framework Water Plan also. WWC has well qualified sub-contractors for modeling efforts, meeting facilitation, and environmental/recreational analyses working with them on the project. Boyle Engineering, a Colorado engineering firm, will handle most of the duties for

updating the existing hydro-logic model, which will aid in determining water availability. Earl DeGroot, Western Management Services, LLC, Cheyenne, provides the much needed service of meeting facilitation. It is a goal of the

planning process to make sure everyone feels comfortable speaking at our bi-monthly Basin Advisory Group (BAG) meetings and a professional facilitator is one of

the best ways to make this possible. ERO Resources, from Denver, Colorado, is a natural resources firm and will be handling much of the environmental/recreational evaluations and planning duties. The groundwater portion of the plan is being headed by the



Wyoming State Geological Service (WSGS). Working with the WSGS is the United States Geological Survey and Water Resources Data System, University of Wyoming.

At this point in the study, all of the work is focused on data gathering. Both WWC and the WSGS are moving steadily through this process and anticipate continuing with data acquisition for the next few months. The first BAG meeting was held in Green River, November 28, 2007. Unfortunately the meeting scheduled for January in Kemmerer was rescheduled due to Wyoming winter highways. Hence, there will be a several month gap between the first meeting and the meeting sched-



uled for March 26, in Pinedale. The Pinedale BAG will have presentations from both the Pinedale Town

Engineer and a representative from Wyoming Trout Unlimited. Both presentations will be followed by question and answer periods, and we intend to have a 30 minute block set aside during the meeting to discuss strategies for approaching the many water related issues the Basin faces. The strategy sessions are designed to emphasize listening to the people and special interests in the basin. So if you would like to attend and participate, we look forward to seeing you in Pinedale.

## News from Water Resources Data System



The Wyoming Water Resources Data System (WRDS) is pleased to announce

that the Statewide Framework Water Plan is now available on the State Water Plan Website (<http://waterplan.state.wy.us/>). This extensive website allows users to view the Framework Plan Report online, as well as download it in a PDF format. In addition, users can view and/or download the original planning recommendations and GIS data used in the compilation of the maps featured in the report.

The Framework web pages feature several important advances in the archiving and delivery of information related to the State Water Plan. In particular, the Irrigated Lands IMS Web Mapping Tool (<http://ims2.wrds.uwyo.edu/Website/>

[Irrigated Lands/](#)) allows users to search the state for irrigated lands, permits, boundaries, districts, and points of diversion using a navigable map of the state. Users can zoom into a section of irrigated lands, click on a parcel of irrigated land and view associated permit data. The site uses color aerial imagery as well as other base data (roads, cities, topographic maps) to help users pinpoint specific locations that may be of interest. This IMS web mapping site will serve as a template for future IMS sites for the seven planning basins, as well as other water related projects. Numerous "behind the scenes" changes also pave the way for more frequent updates to critical water plan data and easier access to the latest information on the water planning process.

In addition to the Statewide Framework Water

Plan, the 2007 Public Water System Survey is also available online from the WWDC web pages <http://wwdc.state.wy.us/surveys.html>. This was the first year that the public water system surveys were offered online, and we received an excellent response. This survey provides important information for the agency's funding criteria and aids in prioritizing the funds available for feasibility studies and project construction. These surveys also allow public water systems to compare operational issues, water rates, conservation measures, and general information with others around the state.

Within the next few weeks, the 2008 Irrigation Survey will be distributed, both online survey and as hard

copy. We hope to have the results of the Irrigation Survey compiled and online by mid-year. Ultimately, WRDS plans to integrate the water system survey data with an online web



mapping tool, much like the Irrigated Lands IMS. In the meantime WRDS is developing a suite of new

online products to accompany the updated Green River and Wind/Bighorn River Basin Plans, and we are working with WWDO Staff on a major update to their web pages.

For more information, please contact Steve Gray, WRDS Director ([sgray8@uwyo.edu](mailto:sgray8@uwyo.edu)) or Chris Nicholson, WRDS Outreach and Technology Coordinator ([cnichol5@uwyo.edu](mailto:cnichol5@uwyo.edu)).



# What's Up in the State Engineer's Office...

## The Missouri River Recovery Implementation Committee

Now, I know quite a few of you will read the title and say "WHAT??" But bear with me. By writing this, I hope to share with you details of a new program important to Wyoming.

As I go to various meetings that deal with the Missouri River Basin (MRB), I often times get the question, "Why does Wyoming care about what happens in the Missouri River Basin?" What I have to remind those people is two-thirds of our state drains into the Missouri River. And for a state that ranks tenth among the fifty states in area, that's a big deal!

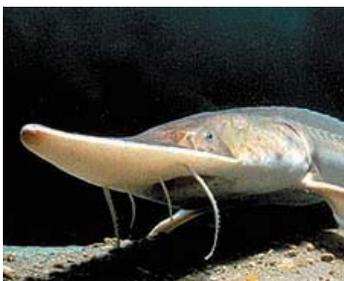
An important event now occurring in the MRB is the creation of the Missouri River Recovery Implementation Committee or the MRRIC. Formation of this committee was recommended by the National Research Council because there are three endangered species in the Missouri River Basin; the interior least tern, the piping plover and the pallid sturgeon. The U.S. Fish and Wildlife Service also recommended in their biological opinion that MRRIC be convened. These entities recognized stakeholder participation is vital if progress towards improved ecological conditions in the basin are to be made. The MRRIC will give stake-

holders the opportunity to collaboratively craft solutions and provide recommendations to the federal, state, local, and private entities in the basin on activities affecting the threatened and endangered species and the ecosystem.

The committee is being convened under the authority of Section 5018 of the Water Resources Development Act (WRDA) of 2007. Before the committee could be convened, a charter on how the committee would operate needed to be developed. A planning group was created and consisted of two sub-groups, the drafting team and the review panel. The drafting team met every month from March 2007 to January 2008 to develop the charter. The review panel



Piping Plover



Pallid Sturgeon



Interior Least Tern

view panel joined meetings with the drafting team three times between April 2007 and January 2008. These meetings were conducted to give the review panel the first look at the draft charter. The public was given an opportunity to review the draft charter through public workshops and public comment.

The first item for the planning group to hammer out was a purpose and scope of the

MRRIC. The purpose and scope of the MRRIC is to provide recommendations and guidance on mitigation, recovery and restoration of the Missouri River to the federal agencies involved with these activities.

Once the purpose and scope was decided, the next question was who will be committee members. The planning group decided that federal agencies with programs affecting the Missouri River should be members. In addition, eight states and 28 tribes were directed to appoint one representative and one alternate committee member. Further, there will be a maximum of 28 stakeholder members appointed, broken down into 15 different interest categories.

The charter also describes appointment of stakeholder seats, attendance, election of leadership, member responsibility and how meetings should be conducted including frequency and location.

So, what are the next steps? Since the Army Corps of Engineers is the lead federal agency on the Missouri River, the charter has been forwarded to the Assistant Secretary of the Army for approval. Upon approval, the states and tribes will be directed to appoint a representative and an alternate and applications will be accepted for the 28 stakeholder posi-

tions. According to direction included in WRDA 2007, the MRRIC is to convene by May of 2008.

As a headwaters state, Wyoming must continually be cognizant of activities and issues downstream. Therefore, the SEO's Interstate Streams Division (ISD) must participate in programs, such as the MRRIC to protect Wyoming's water interests and the ability to develop our allocated water.

Any questions or requests regarding this program should be directed to Jodee Pring, Water Planning Coordinator, Wyoming State Engineer's Office, Herschler Bldg., 4E; Cheyenne, WY 82002; [jpring@seo.wyo.gov](mailto:jpring@seo.wyo.gov) (307) 777-7803.



**WYOMING WATER  
DEVELOPMENT OFFICE**

6920 Yellowtail Road  
Cheyenne, WY 82002

PRE-SORTED  
STANDARD  
US POSTAGE PAID  
CHEYENNE WY  
PERMIT # 7

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## Calendar of Water Events



April 1, 2008 - Water Forum,  
State Engineer's Office, Chey-  
enne, WY

April 2, 2008 - Platte River  
Basin i-BAG, Douglas, WY

April 3, 2008 - Powder-  
Tongue & NE WY River Ba-  
sins Joint i-BAG, Gillette, WY

April 7, 2008 - Wind-Bighorn  
River Basin i-BAG, Riverton,  
WY

April 8, 2008 - Snake-Salt  
Basin i-BAG, Jackson, WY

April 9, 2008 - Bear River  
Basin i-BAG, Evanston, WY

April 16-17, 2008 - Yellowstone  
River Compact Commission  
Meeting, Cody, WY

April 22, 2008 - Bear River  
Commission Meeting, Salt Lake  
City, UT

May 6, 2008 - Water Forum,  
State Engineer's Office, Chey-  
enne, WY

May 9, 2008 -- WWDC Meet-  
ing, Cheyenne, WY

May 21-22, 2008 - Missouri  
River Association of States and  
Tribes Meeting (MoRAST),  
Great Falls, MT

May 22, 2008 - Green River  
Basin Advisory Group Meet-  
ing, Lyman, WY

May 29-30, 2008 - Colorado  
River Basin Salinity Control  
Forum, Montrose, CO

June 5, 2008 - WWDC/Select  
Water Committee Joint Meet-  
ing, Cheyenne, WY

June 25, 2008 - Green River  
Basin Advisory Group Meet-  
ing, Kemmerer, WY

June 26-27, 2008 - Upper  
Colorado River Commission  
Meeting, Glenwood Springs,  
CO

August 22, 2008 -  
WWDC/Select Water Com-  
mittee Joint Meeting, Al-  
pine, WY

August 26-27, 2008 - USGS  
Cooperators Meeting, Chey-  
enne, WY

August 27-28, 2008 - Mis-  
souri River Association of  
States and Tribes Meeting  
(MoRAST), Cheyenne, WY