Climate Issues Report
Committee Meeting Information
November 22, 2010
Webinar and in the WDA Conference Room
Cheyenne, WY

COMMITTEE MEMBERS PRESENT
State Forester Bill Crapser, Co-chairman
Marty Griffith, BLM
Bob Means, BLM
Leanne Stevenson, WDA
John Keck, National Park Service
John Barnes, State Engineer's Office
VIA WEBINAR
Steve Ferrell, Game and Fish
Glenn Pauley, Game and Fish
Steve Gray, State Climatologist
John Lawson, Bureau of Reclamation
Milward Simpson, State Parks
Todd Ballard, USDA NASS
Ken Von Buettner, NRCS
Steve Furtney, Governor's Office

CALL TO ORDER
Co-Chairman Bill Crapser called the meeting to order. The following summarizes the committee proceedings by agency. Please refer to the materials index for meeting sign-in and complete agency reports.

Bureau of Reclamation
John Lawson reported on reservoirs along the North Platte River. Inflow for Federal FY10 was 2,224,000 acre foot (AF). Outflow was 1,524,000 AF.

Buffalo Bill reservoir- Inflow averaged 845,000 AF. Outflow was almost identical to that in FY 09 at 486,000AF. Over the winter the reservoir came down somewhat, averaging 630,000 AF. The snow water equivalent was below average.

Boysen Reservoir—Inflow was 1,000,000 AF. Outflow averaged 639,000AF.

Water was released through Pathfinder dam's emergency spillway on June 24th, which was the first occurrence since 1984. High inflow at Pathfinder resulted in significant releases in Casper.

The Seminoe Reservoir had a record high inflow during the FY10 water year, almost 20,000 CFS.

Releases at Glendo averaged 4,000 CFS in May. This was cut to 1,000 CFS mid-June when inflows were reduced.

STATE CLIMATE OFFICE

Steve Gray gave a recap of Federal fiscal year 10 water conditions by month. The overall pattern was complex and kept changing. While October '09 had very wet conditions compared to the national average, November was much drier and December conditions were mixed. January through March 2010- conditions kept changing between very dry and very wet patterns. April saw a spike of precipitation, which was needed as the surface water index in mid April showed extremely dry conditions. Precipitation increased in May in the Wind River and Big Horn areas, and the overall temperature for May was 5-7 degrees cooler, which helped to fend off drought. Most of the spring was marked by cooler than average temperatures. June was the wettest on record for Rawlins since the 1940s. Despite the dry winter, cooler temperatures combined with moisture in June had a positive impact on drought conditions. July through September, saw a return to dryer conditions.

WATER RESOURCES DATA SYSTEM

Steve Gray updated the committee on the status of the soil moisture sensors project. 22 operational sites are scattered around the state. Sensors at each site are calibrated for soil and moisture readings, coupled with incoming precipitation. The project has moved beyond the data collection phase. New project staff will be coming up with applications for the data, starting statistics work and modeling. Data will be used over time to understand drought and drought impact progressions, and make predictions about drought recovery. There is a desire to develop on-line tools to view the data and analyses.

WYOMING DEPARTMENT OF AGRICULTURE

Leanne Stevenson reported a high degree of variability has directly impacted Ag producers, affecting their productivity and sustainability. The late arrival of spring water impacted irrigation and crops. Irrigation delivery systems are still being repaired due to summer flooding.

The WDA managed the grasshopper program in 2010 where treatment focused on rangeland. Some criticism was received about excluding cropland from the program. The WDA is looking into including cropland in the 2011 grasshopper treatment program if funding is appropriated in the Department's supplemental budget. Grasshoppers had a late hatch and survived into late fall, which has the potential for the laying of more egg sacs than normal (3-4 sacs per producing grasshopper as compared to a usual 1-2). Overall, grasshoppers progressed westward.

The forage life-cycle was not able to fully utilize all the late spring moisture due to the late, cool temperatures quickly changing into hot, dry conditions. The continuation of bark beetle tree die off has secondary effects on livestock through impacts on fences, limited movement of livestock through downed timber, and water quality/quantity issues.

Cap and Trade legislation has the potential to impact Agriculture. Currently, carbon has decreased in value at the Chicago Climate Exchange; a metric ton of carbon which previously topped out at $7.40 a metric ton has lately been selling for .05 cents.

When looking at the National Drought Monitor, a D4 category is the worst for drought conditions. None of the State has been in the D4 category since May 3, 2005. The WDA again cautions federal agencies in decisions to reduce AUMs based on data including these extreme drought years. Flexibility should be built into grazing decisions to allow for variability in forage production and timing of production to

account for the high variability in our current weather patterns. Turnout dates and other grazing adjustments should relate to the timing of the vegetation life-cycle and timing of temperature warm-up, not a given calendar day.

BLM

Marty Griffith stated there is a need for flexibility in grazing systems with permittees. Data from the last 10 years shows flexibility is needed and field offices are moving in this direction. Bob Means reported that the BLM is in flux, redefining and developing climate change policies. The BLM is involved with the grasshopper spray program. The Mountain Pine Beetle is moving into the lower elevation pine stands and into the woodlands, showing it is here to stay. The BLM is working with UW to plan another Climate Change Workshop, tentatively scheduled to be held in Cody in the spring. The workshop will be open to all interested from private sectors to the public. A major topic will be Eco-Region assessments- defining change agents and finding biological hot spots. They are looking at Ponderosa Pine genotypes and defining priorities for conserving the different types presently on the landscape.

STATE FORESTRY

Bill Crapser reported the 4 million acres of forestry in the state are affected by three beetle types. Currently there is an 80-90% mortality rate of mature lodge pole pines. Fires are also contributed to this rate. A slow green-up occurred this summer. More red flag days occurred than have been recorded in the past 10 years. Dry lightning strikes were almost non-existent this year which translated to 70% of 2010 fires being caused by humans instead of Mother Nature.

GAME AND FISH DEPARTMENT

Steve Ferrell said the Wyoming State Wildlife Plan is being completed, with one whole chapter devoted to climate change. Glenn Pauley stated he is the climate change contact for Game and Fish. The National Association for State Game and Fish Departments views climate change as a big issue and has pushed to include climate change in state action plans.

GOVERNOR'S OFFICE

Steve Furtney listened in on the meeting and had nothing to report.

NRCS

Ken Von Buettner listened in on the meeting and had nothing to report.

State Engineer's Office

Jon Barnes reported that 4 cloud seeding permits have been issued by the state. Of those 4, 2 are state funded. One covers the Sierra Madre and Medicine Bow Mountains, and the other covers the Wind River Mountains. Cloud seeding is set up to go from 11-15-10 through 4-15-11. Oil and gas drilling in SE Wyoming will factor into shortage of water in the area. As of 11-19-10, 40 temporary water use agreements have been issued. 4600 AF water available from Ag use will be transferred to oil and gas drilling. This translates to 3000 acres of idle irrigated lands next year.

State Parks
Milward Simpson said the beetle issue is a priority agenda item for all State Park meetings. A supplemental budget request of $185,000.00 will be submitted to the Governor for spraying affected parks. Sustainability depends on how state parks are managed.

U. S. Park Service
John Keck informed the committee of the National Climate Change Office located in Fort Collins, CO. The U.S. Park Service is running an Inventory Monitoring Program, under which each Park Unit defines major categories to monitor. John can help the committee get access to the database. The U.S. Park Service is also looking at new species (invasive species) versus species progression and adaptation. They are discussing if new species are truly new, or rather an adaptation of a current species that is affected by climate change e.g., the Joshua trees in California are naturally moving. This affects the parameters of how the U.S. Park Service operates. He offered to provide more information on this topic to the committee if interested.

NASS
Todd Ballard reported crop planting was off to a good start this spring, though some sugar beets and dry beans had to be replanted. Currently there is a record yield for sugar beets. Some hay losses occurred due to flooding and grasshopper numbers. The summer flooding also led to some disaster declarations in Carbon and Albany counties. Current conditions: winter wheat has struggled so far, but the recent moisture should improve conditions; 67 percent of corn is harvested; stock water supply is above average; for cattle and sheep, pasture conditions are good, although moisture is needed as the ground is quite dry; and 20 out of 33 stations are reporting below normal ground moisture.

Discussion and Actions needed as a result of the reports:
None

This committee will be discussed with Governor-elect Mead's transition team and then staff as we move forward. At this time, the next meeting is scheduled for April or early May. Any changes to this schedule will be emailed to those on the committee and the "interested parties" email list in addition to being posted on the WDA website.

The meeting was adjourned.