



Wyoming Drought Information



**Rangeland Precipitation---Water Supply---Mountain Snowpack
3 Key Ingredients Defining Drought in Wyoming**

Updated April 30, 2009

...Moderate hydrologic drought persists across a small portion of southwest Wyoming--Upper Bear and Lower Green Basins...

...Normal to above normal precipitation totals for rangelands/basins across most of Wyoming for current water year 2009 (October - April 2009)...

...Near normal to above normal mountain snowpack averages across Wyoming...

...Reservoir storages across Wyoming continue to well above water year 2008 storages...

.Synopsis...

3 key ingredients define the overall drought picture for Wyoming: **Rangeland Precipitation---Water Supply--Mountain Snowpack**

Rangeland Precipitation---

Precipitation across Wyoming's pasturelands/rangelands during the current water year 2009 (October 2008 - April 2009) was near normal to above normal for almost all of Wyoming. Precipitation across the major river basins across Wyoming was also near normal to above normal across almost all of Wyoming. 35 to 50 percent of the water year's total precipitation across the majority of Wyoming's rangeland/pastureland areas occurs in the spring (April - June).

Water Supply---

Reservoir storages across Wyoming were averaging 102 percent of average as of April 1st. Storages at a majority of major reservoirs continue to be above water year 2008 averages. Overall, reservoir storage continues to be 124 percent of last water year's reservoir storage.

The current water supply forecast calls for near normal snowmelt runoff volumes across the majority of basins across Wyoming. Snowmelt runoff volumes are expected to be below normal over the major basins across the southwest part of the state.

Mountain Snowpack---

Snow water equivalents (SWEs) by the end of the April 2009 were near normal to above normal across the majority of the basins across the state.

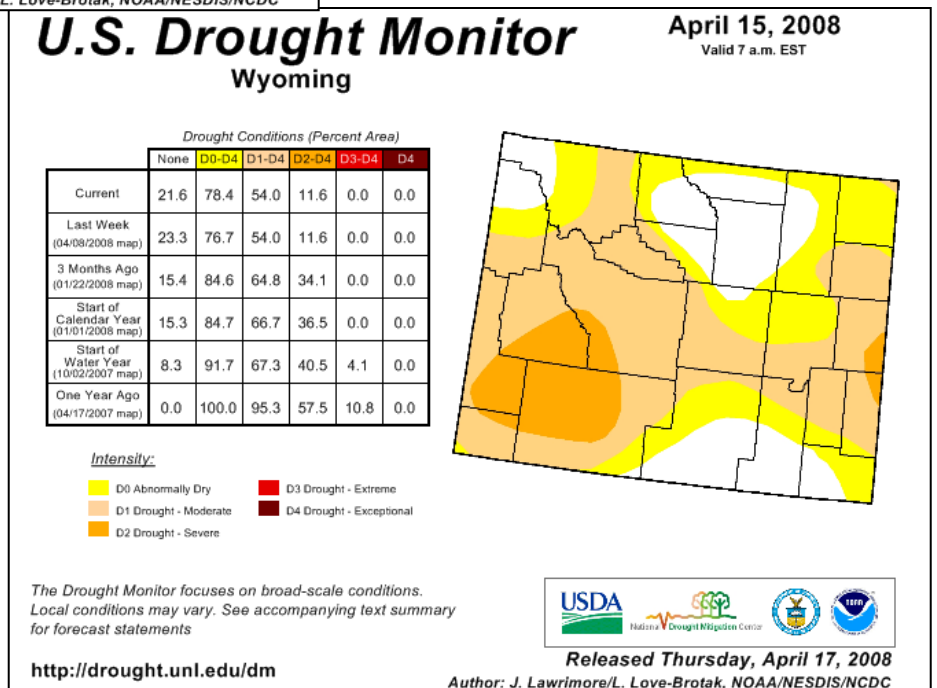
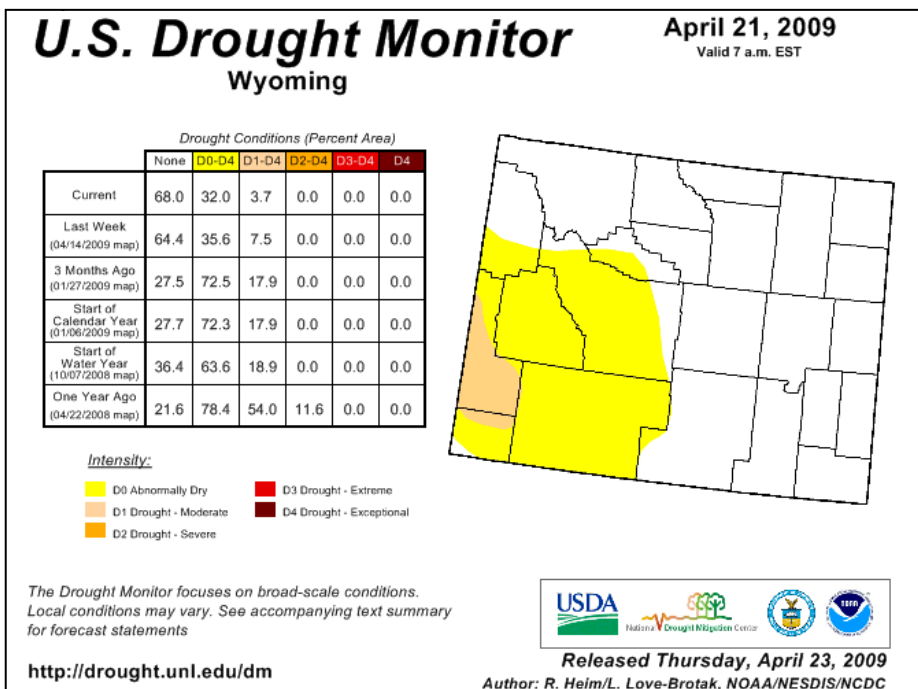
Overall Drought Picture---

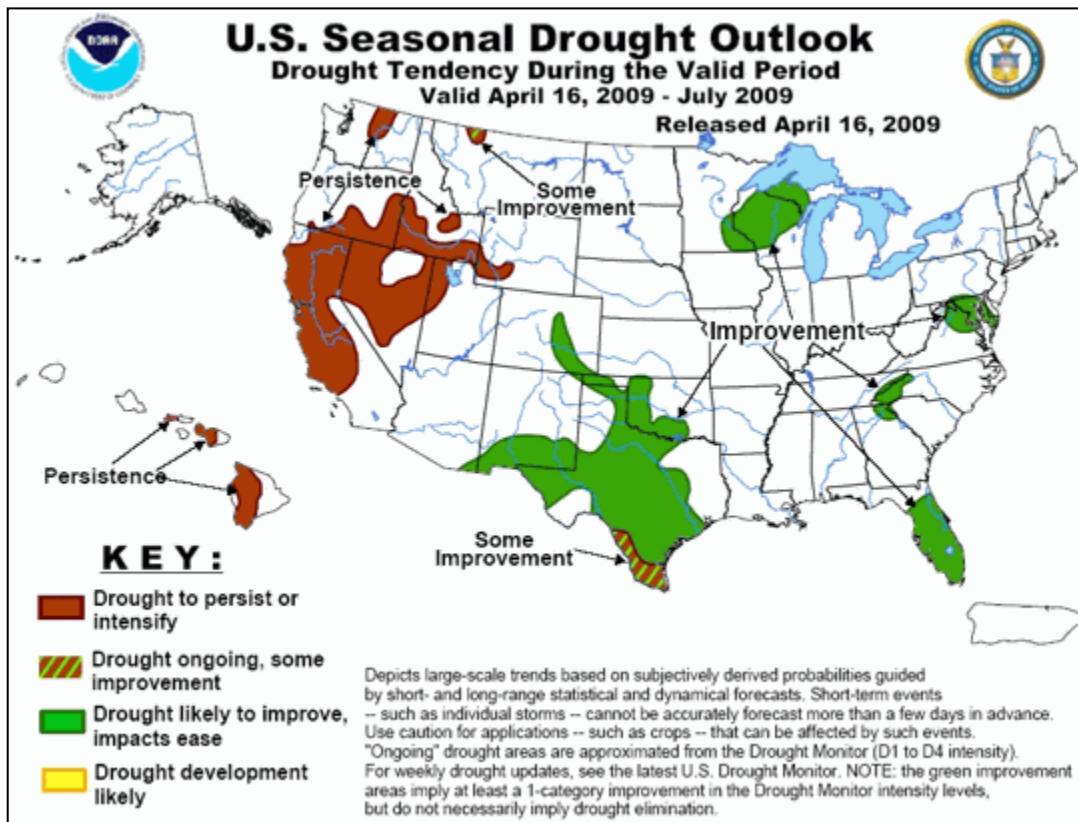
Wyoming is doing very well with respect to water supply and mountain snowpack averages. Rangeland/pastureland precipitation totals through April have increased to near normal (for water year 2009) in many areas due to a wet late March and April. The Lower Green and Upper Bear River Basins continue to be the driest basins in Wyoming---as these basins continue to be under the moderate hydrologic drought category. The next 2 months (May and June) are critical for precipitation across the rangelands/pasturelands. As stated

before---many rangeland locations (especially across areas east of the continental divide) receive 35 to 50 percent of their water year/annual precipitation during April through June.

Bottom line is that current precipitation, water supply, and precipitation conditions are keeping the momentum going with respect to totally breaking the long-term drought that has been plaguing Wyoming for the past 10 years.

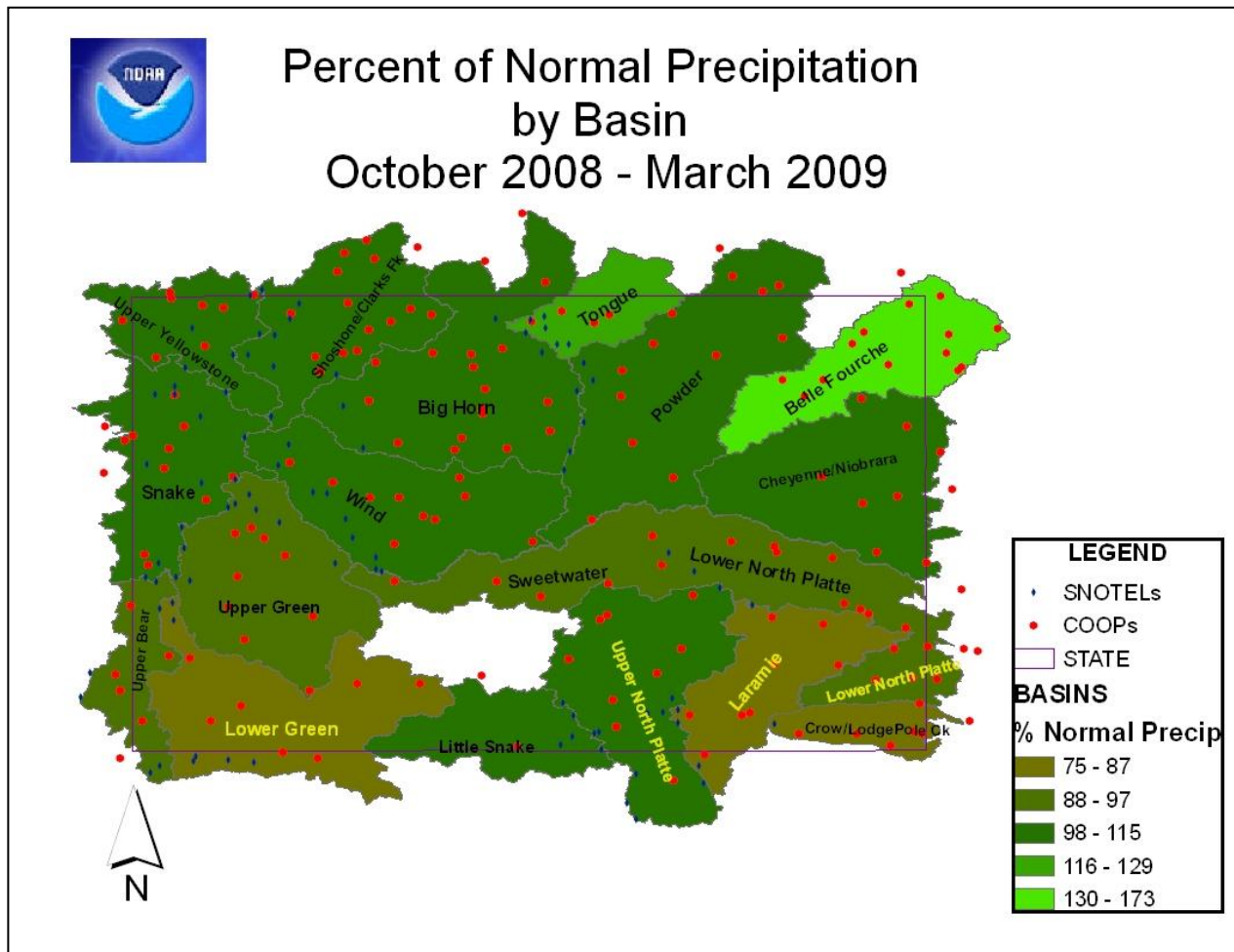
**Wyoming Drought Monitor (Current and 1 year ago)
Drought Outlook**





.Rangeland/Basin Precipitation...

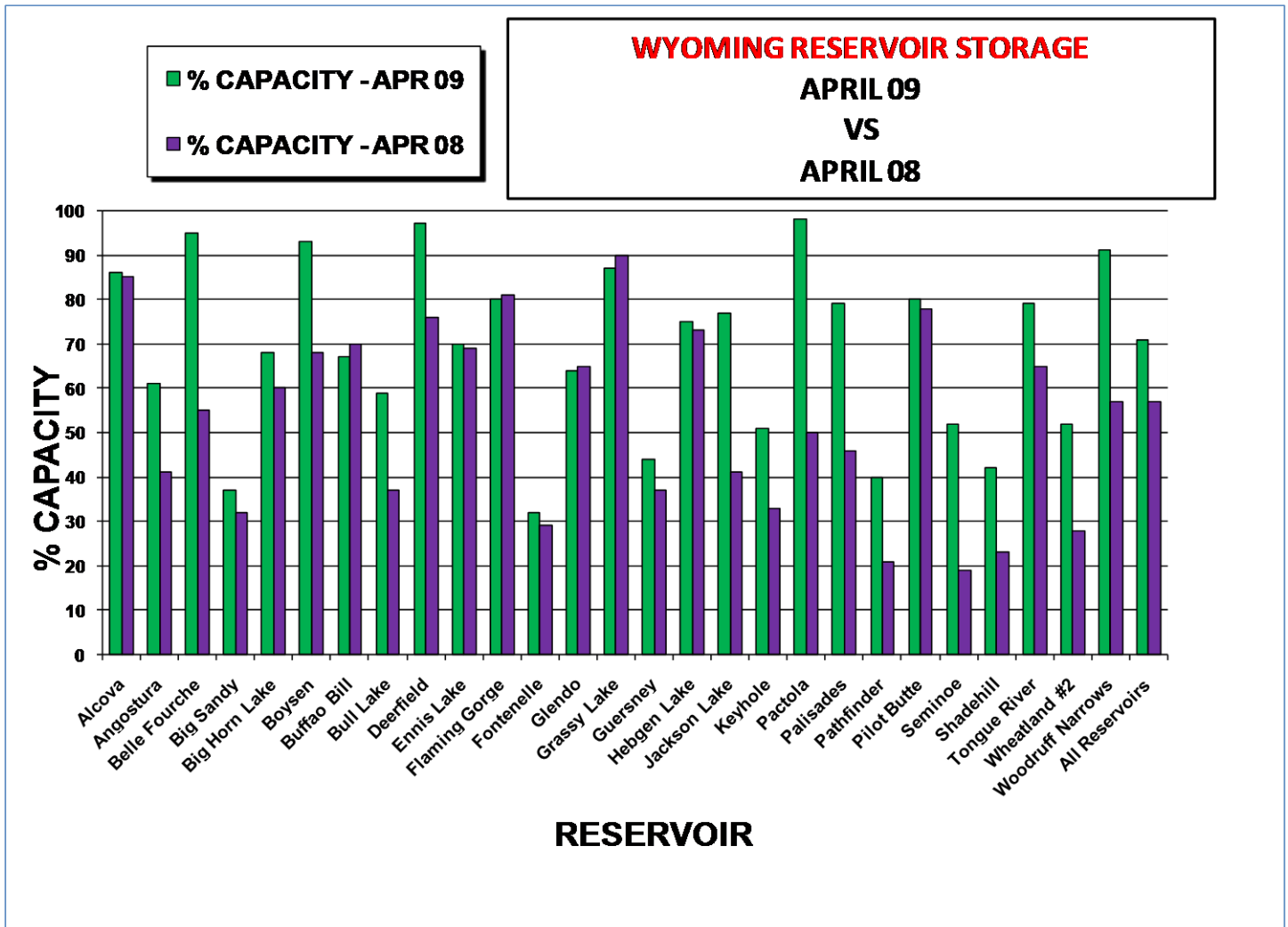
>> Basins--Current Water Year 2009 (October 2008 - March 2009)



>>Select Rangeland Locations during Water Year 2009

	OCT 08 - APR 09 PRECIP	OCT - APR AVERAGE	% AVERAGE
SHERIDAN	6.75	6.93	97
CHEYENNE	6.66	5.34	125
DOUGLAS	8.31	9.07	92
LARAMIE	3.11	4.59	68
RAWLINS	7.93	4.79	127
CASPER	6.73	6.22	108
LANDER	8.84	7.34	120
RIVERTON	5.02	3.66	137
ROCK SPRINGS	3.64	5.04	72
WORLAND	3.80	3.14	121
BUFFALO	4.50	5.18	87
PINEDALE	6.29	5.03	125
GILLETTE	9.72	7.01	139
EVANSTON	4.55	5.98	76

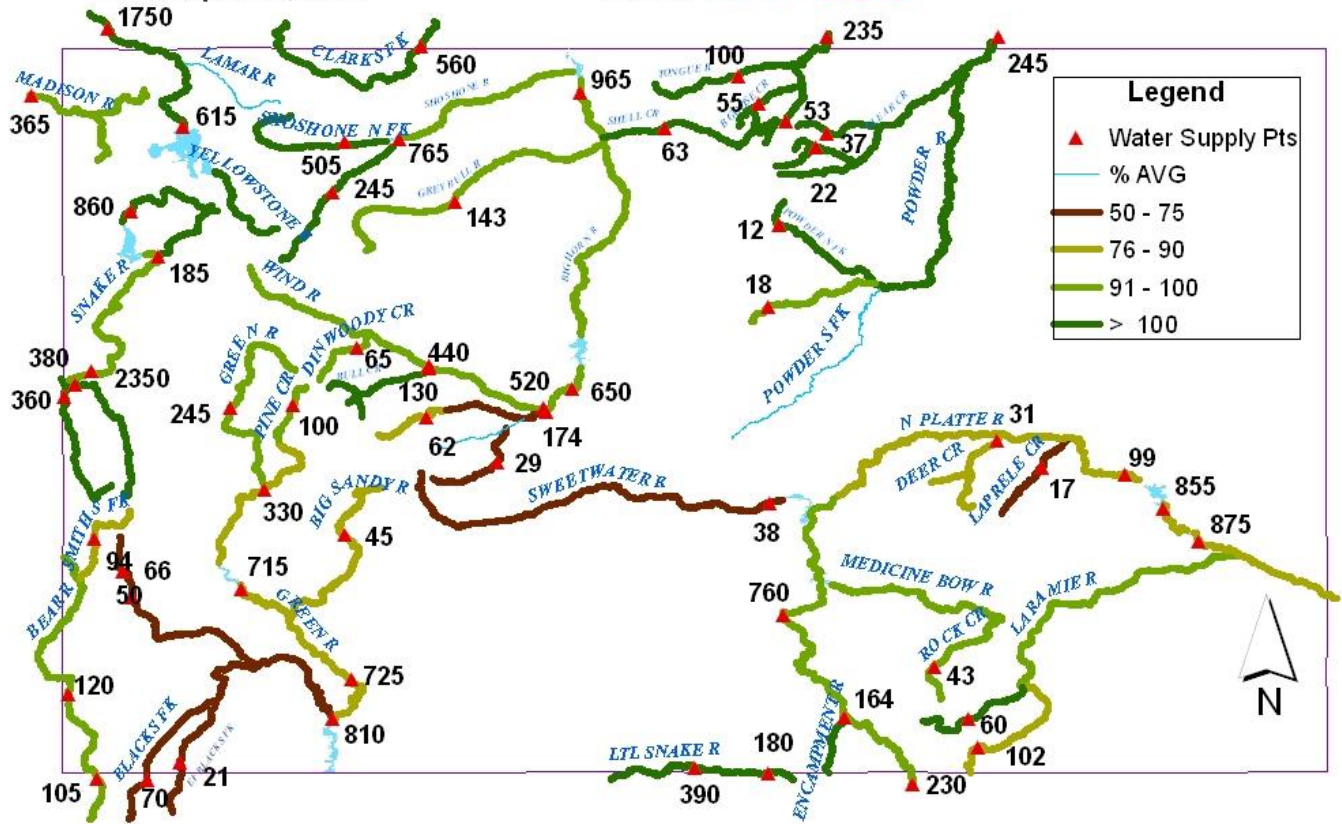
.Wyoming Water Supply...



Wyoming Water Supply Outlook

As of: April 21, 2009

VALID: APR - JUL 09



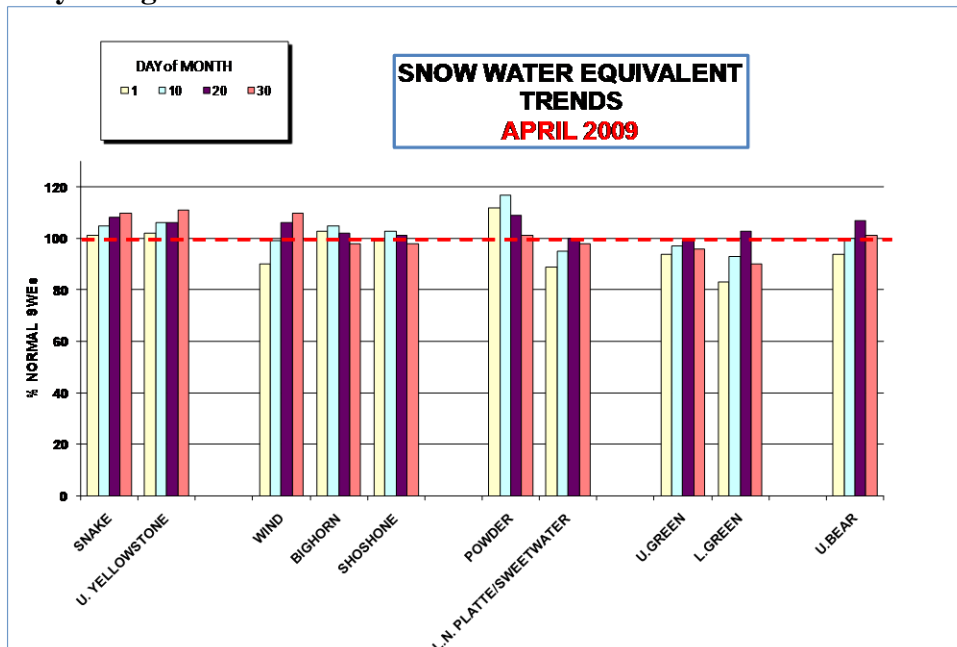
Note: Numbers in Bold next to Water Supply Points Refer to Volume Forecast in Thousands of Acre-feet (K-ACFT). 1 acre-foot of water covers 1 acre of land to a depth of 1 foot.

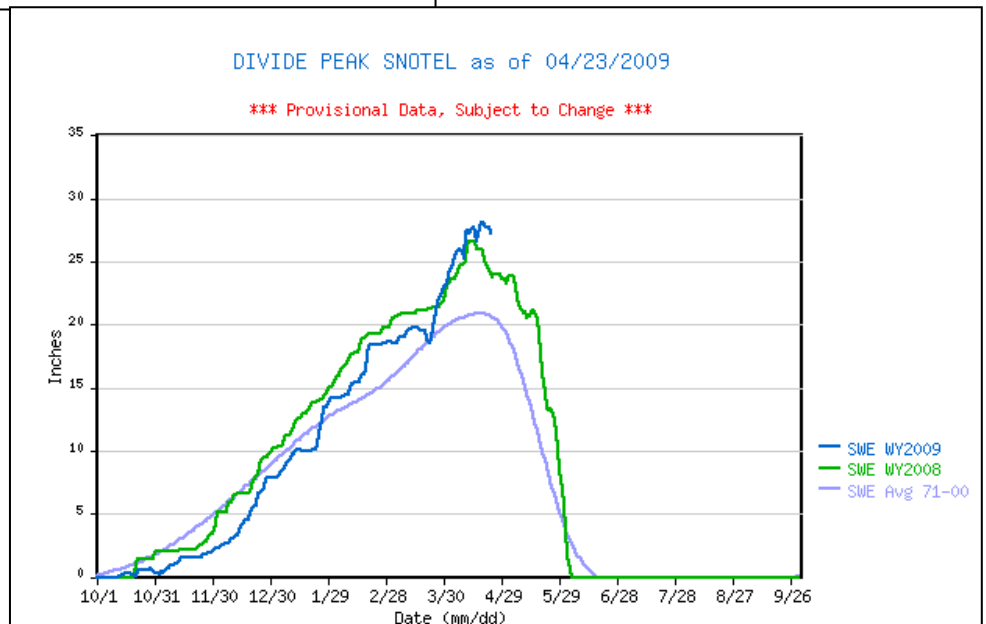
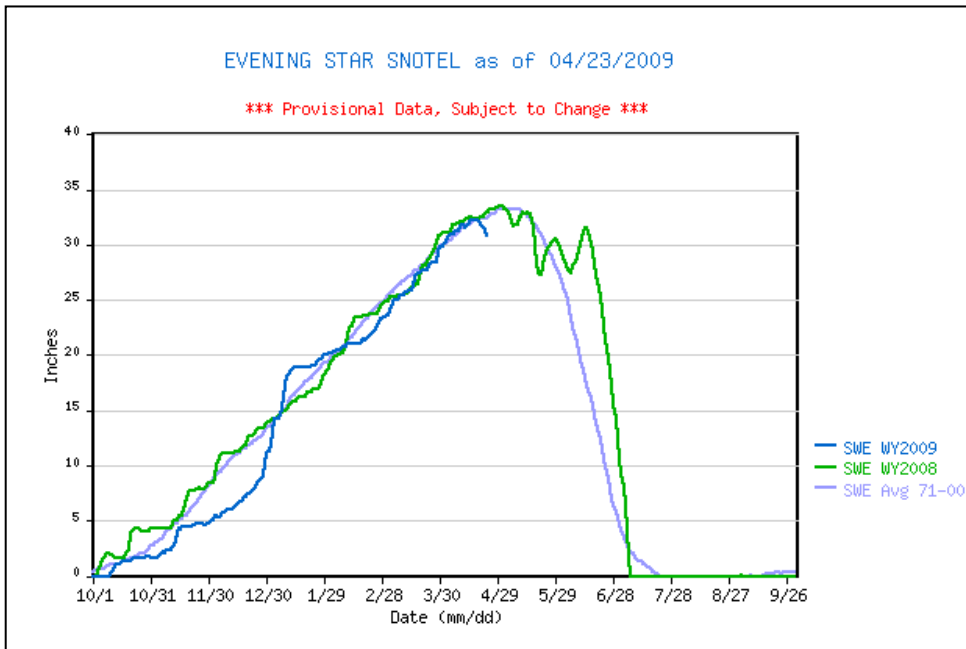
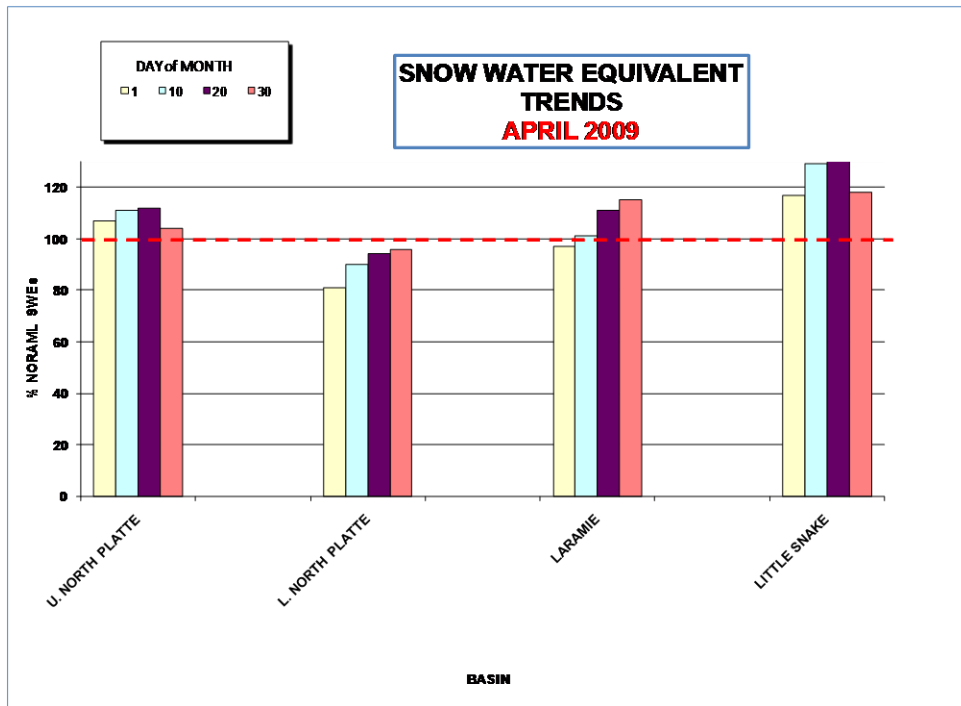
NOTE: ALL FORECAST VOLUMES REFLECT FULL NATURAL FLOW. ACTUAL OBSERVED FLOWS MAY BE AFFECTED BY UPSTREAM WATER MANAGEMENT.

Note: The next graphical water supply outlook will be around May 20th.

.Wyoming Mountain Snowpack...

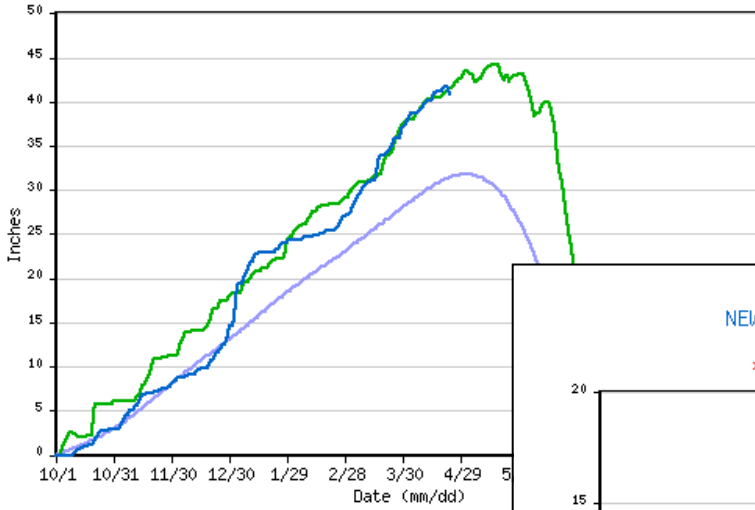
>>Wyoming SWE Trends...





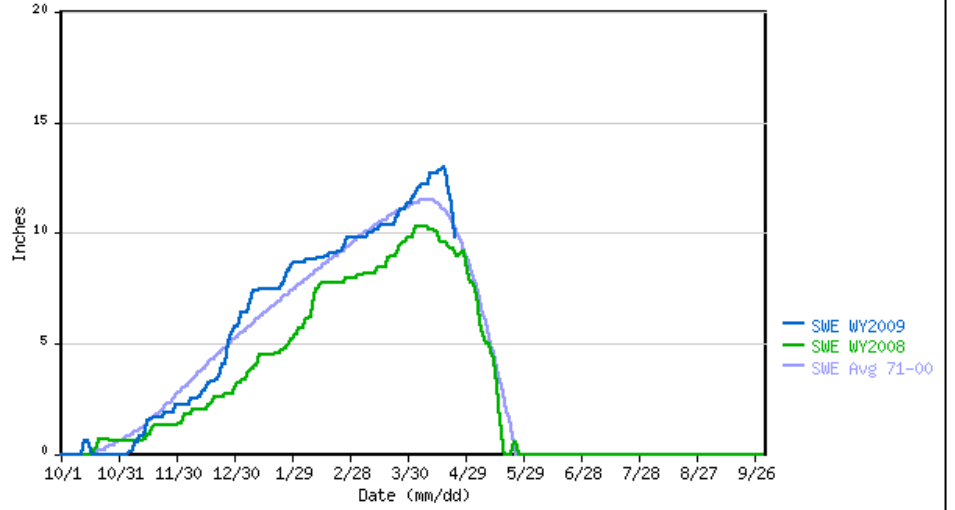
TWO OCEAN PLATEAU SNOTEL as of 04/23/2009

*** Provisional Data, Subject to Change ***



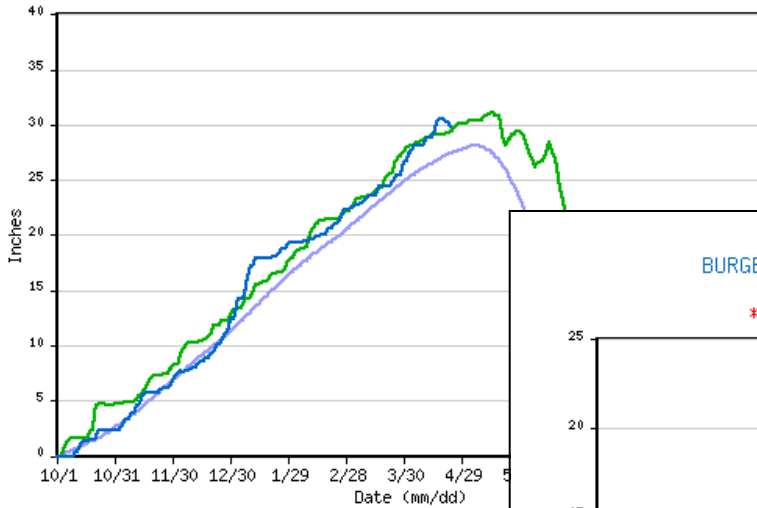
NEW FORK LAKE SNOTEL as of 04/23/2009

*** Provisional Data, Subject to Change ***



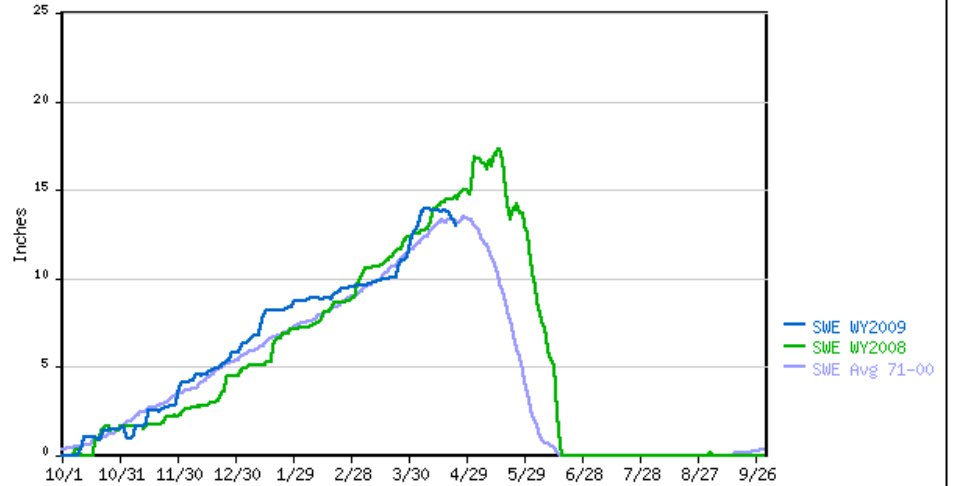
TOGMOTEE PASS SNOTEL as of 04/23/2009

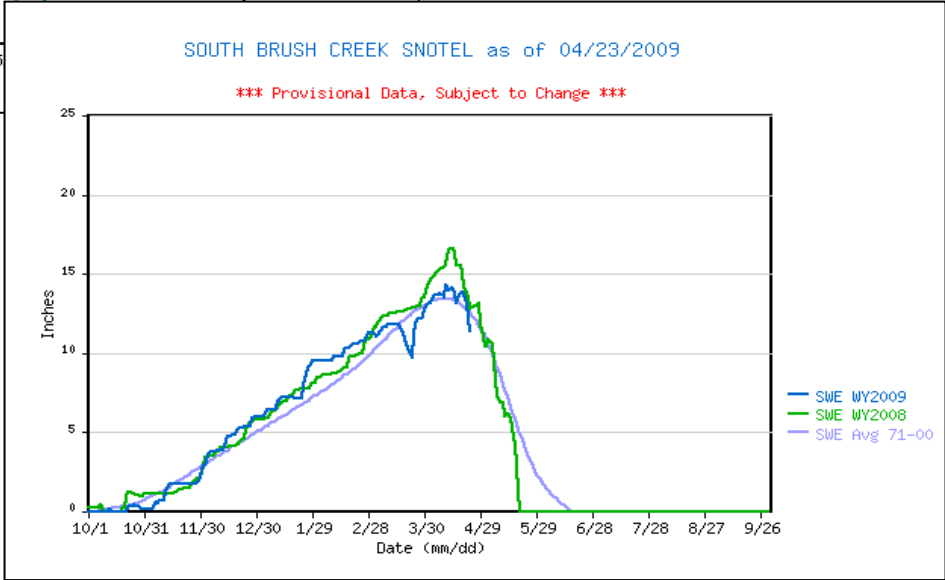
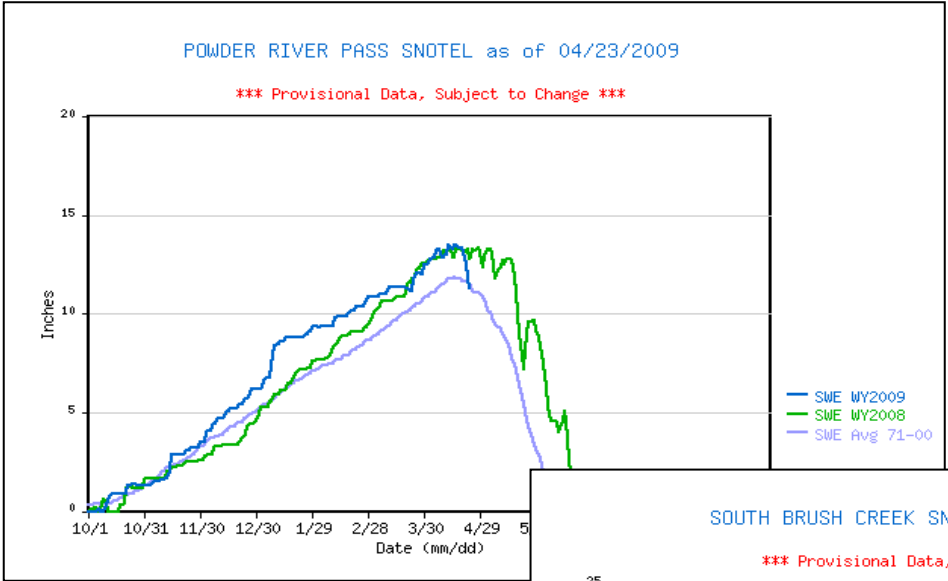
*** Provisional Data, Subject to Change ***



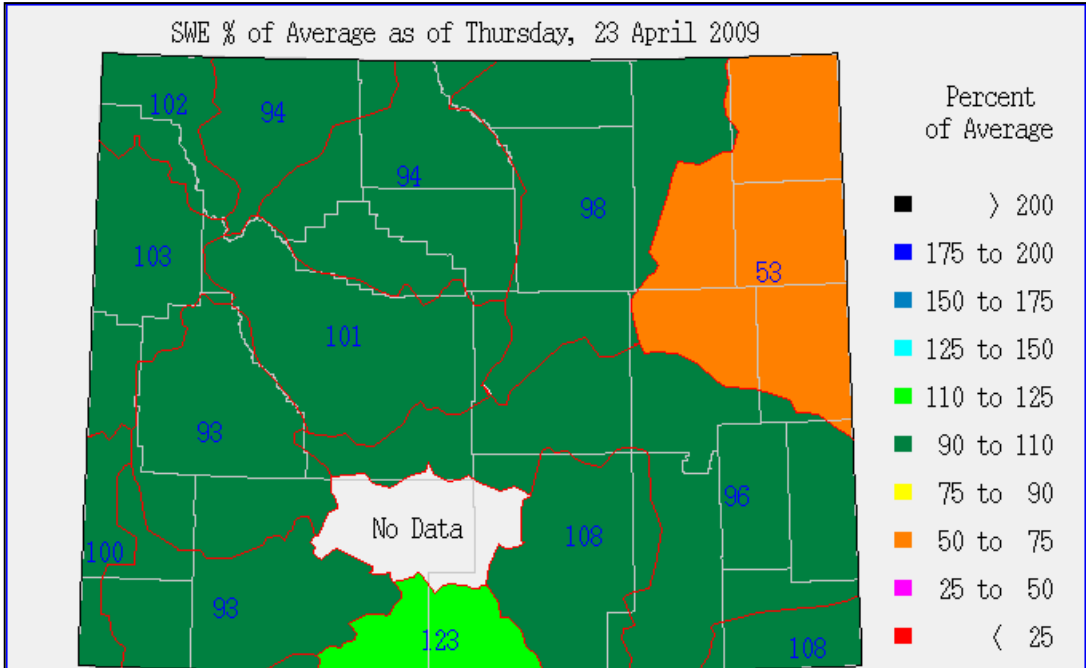
BURGESS JUNCTION SNOTEL as of 04/23/2009

*** Provisional Data, Subject to Change ***





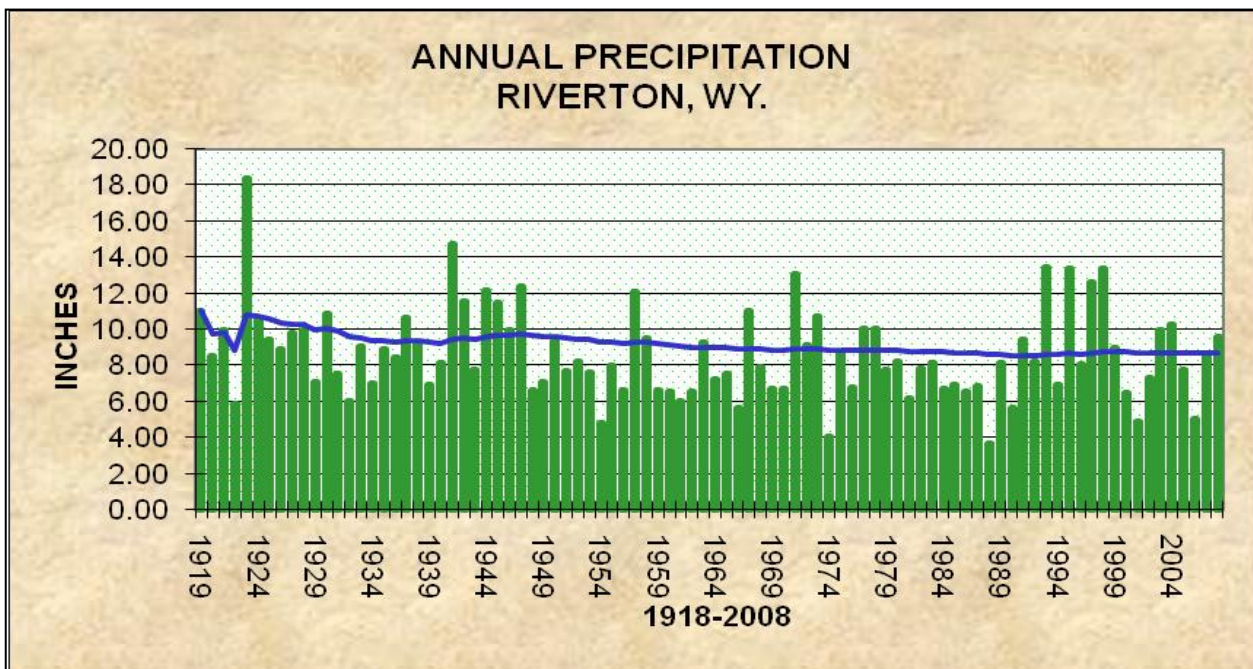
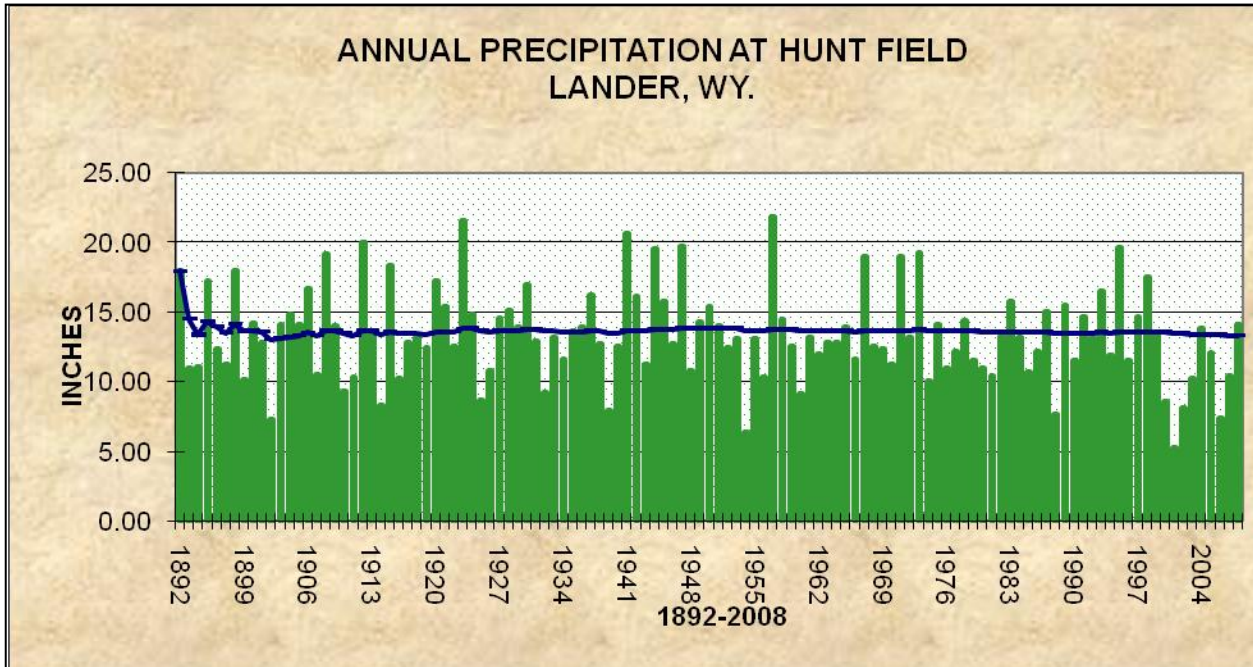
>>Wyoming SWE as Percent of Average...

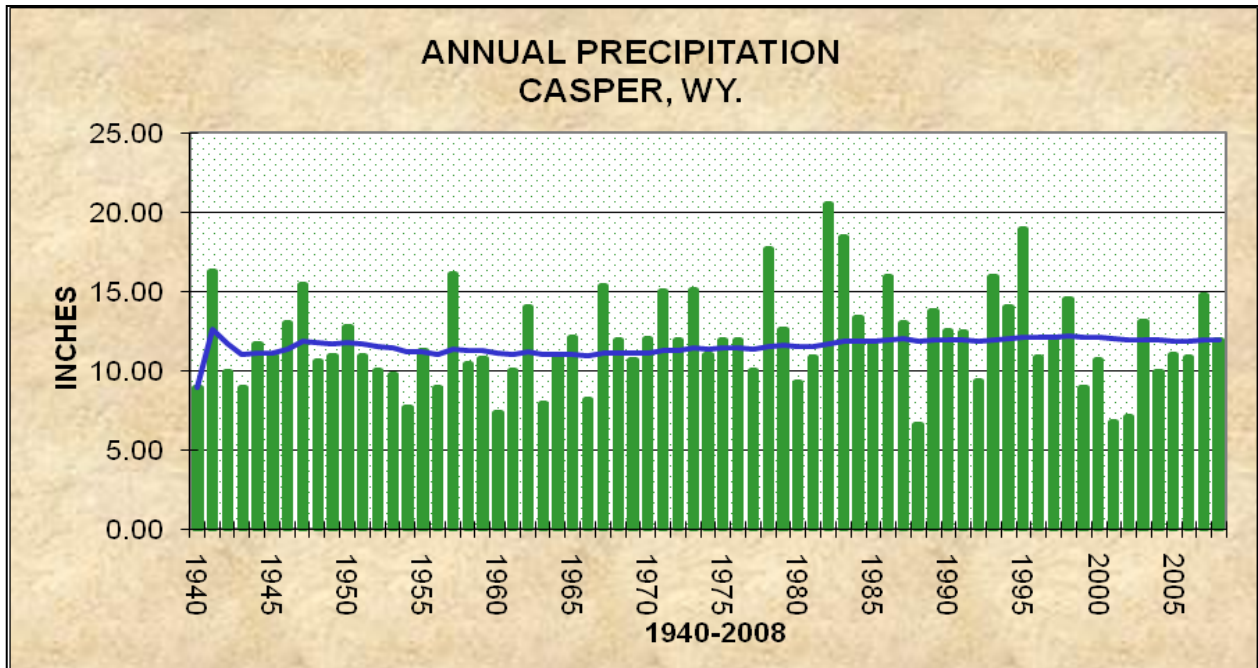


Miscellaneous Drought Graphics...

>>Long Range Precipitation Trends...

Lander's precipitation records go back to 1892—Riverton's precipitation records go back to 1919—and Casper's precipitation records go back to 1940.

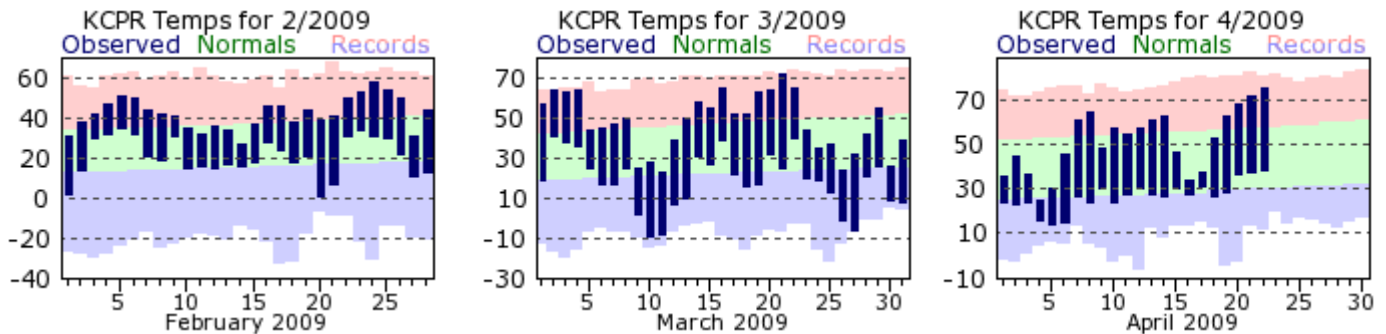




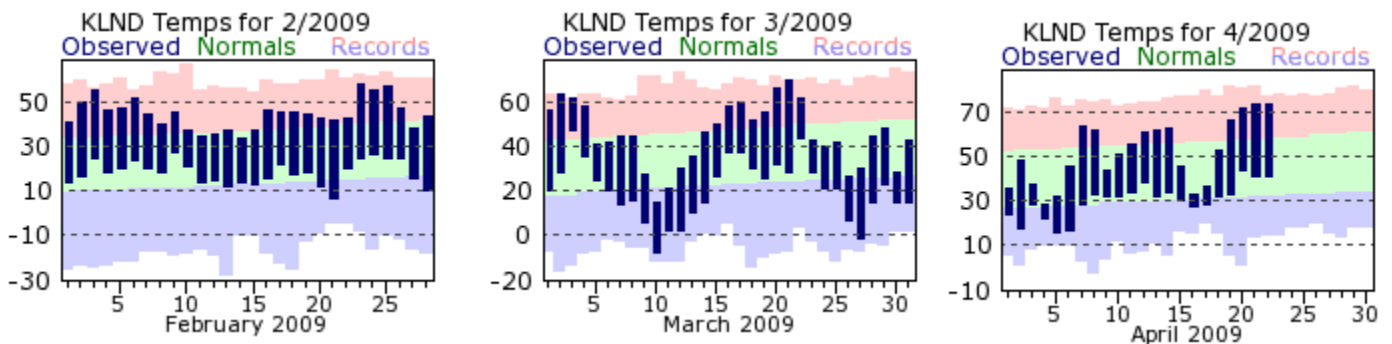
>> Short-term Temperature Trends...

Above normal temperatures from February to the middle of March. Near normal to normal temperatures from the middle of March to late April.

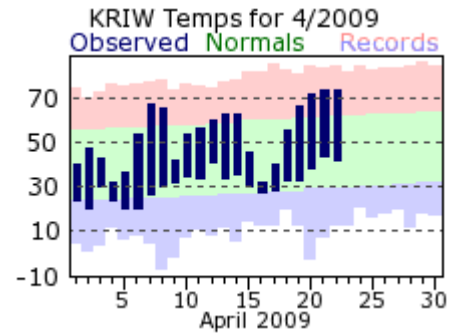
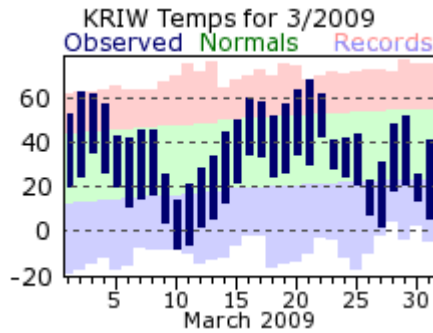
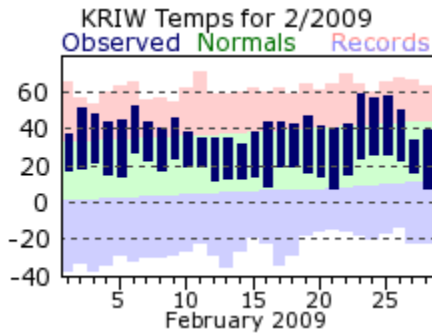
Casper



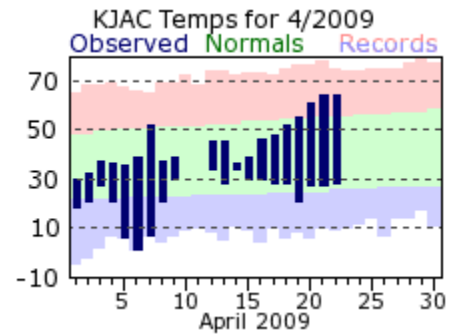
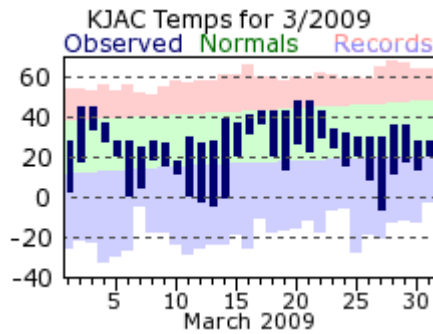
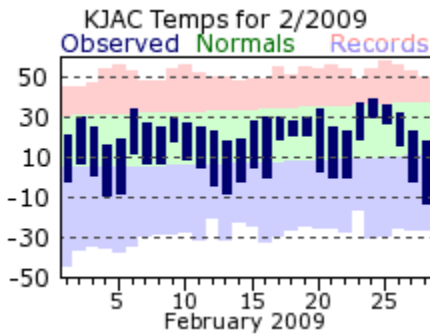
Lander



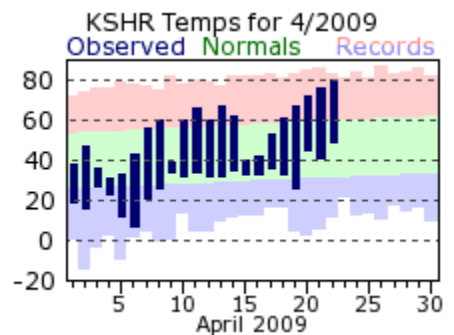
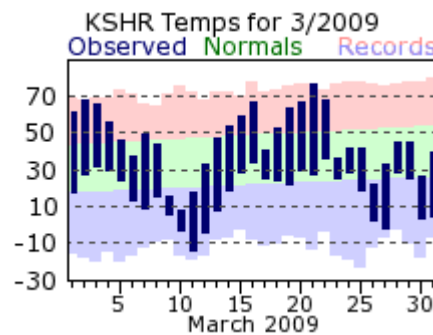
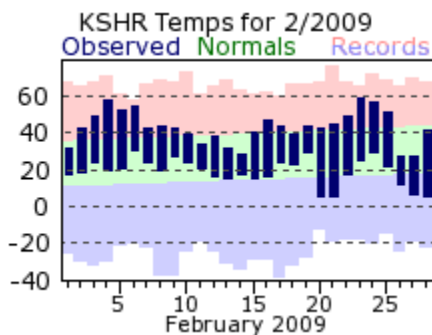
Riverton



Jackson



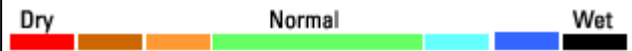
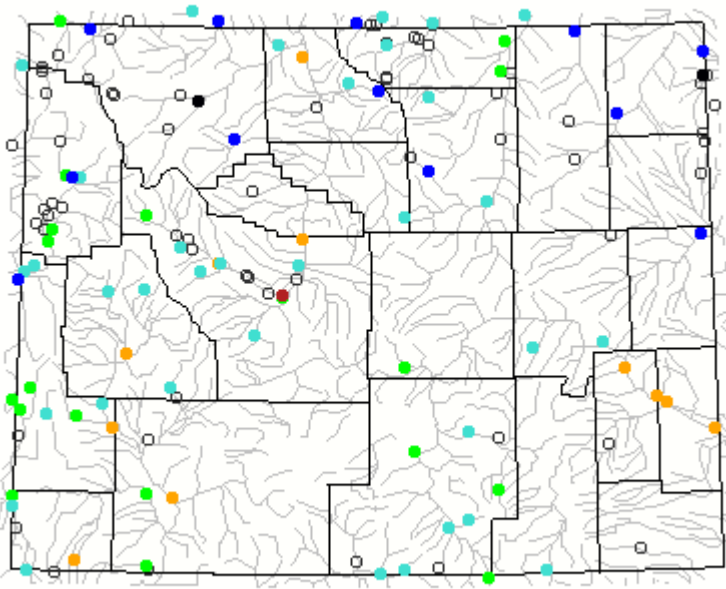
Sheridan



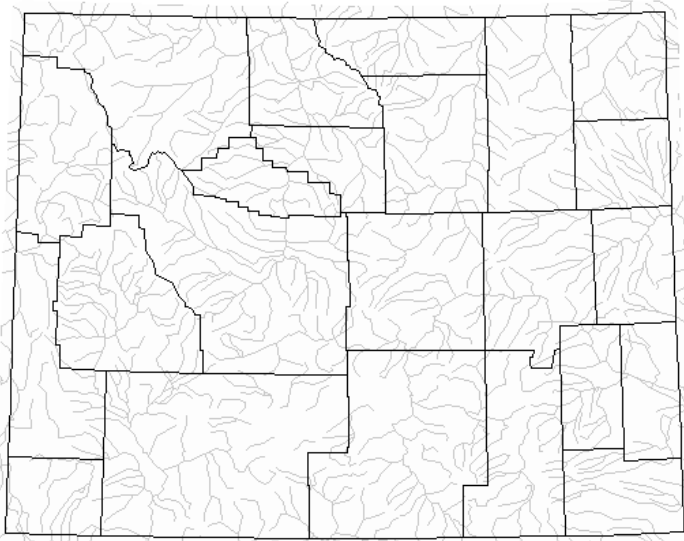
>>River and Streamflow Conditions...

Above normal streamflows in Wyoming--

Thursday, April 23, 2009 14:30ET



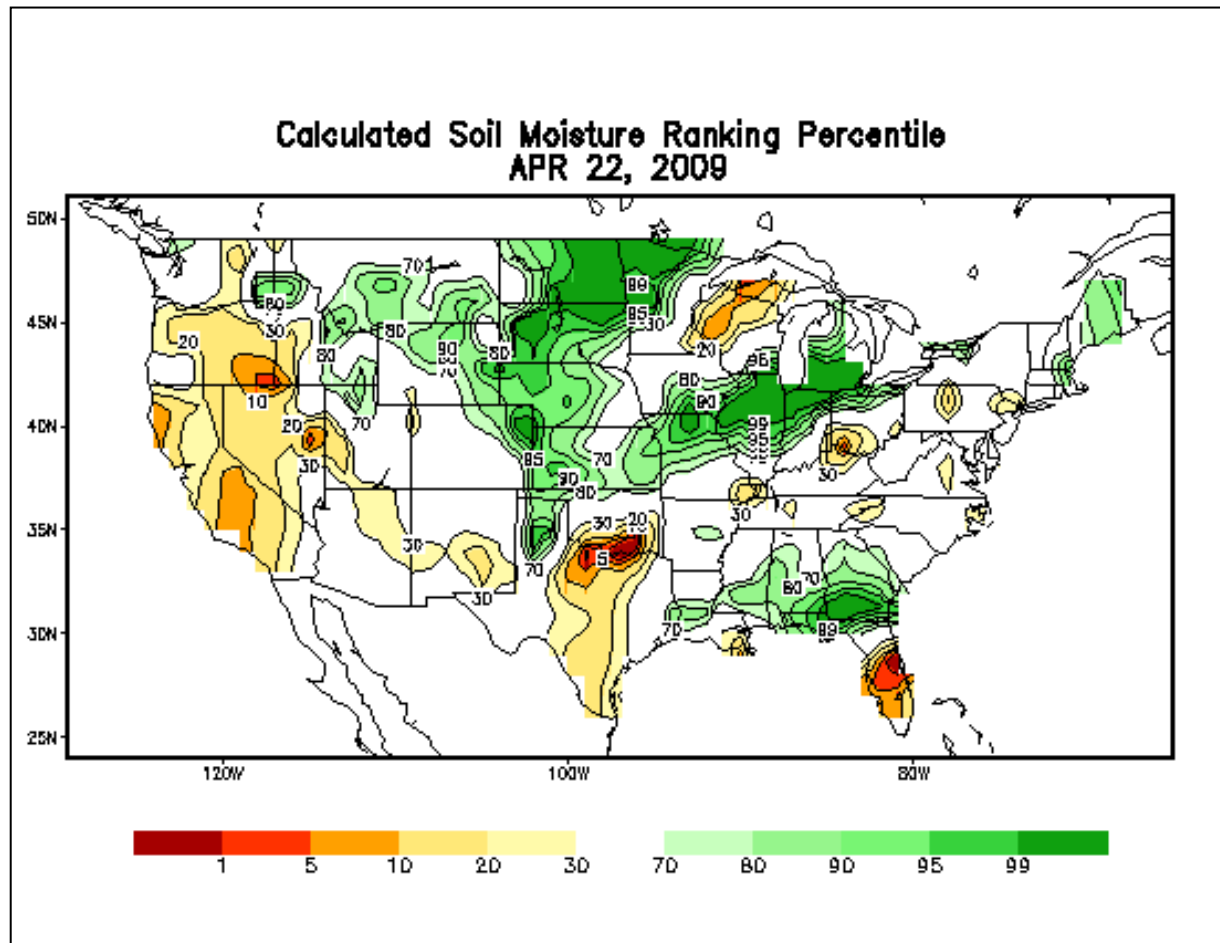
Wednesday, April 22, 2009



Explanation - Percentile classes				
Low	≤5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

Map of below-normal streamflow conditions for Wyoming.

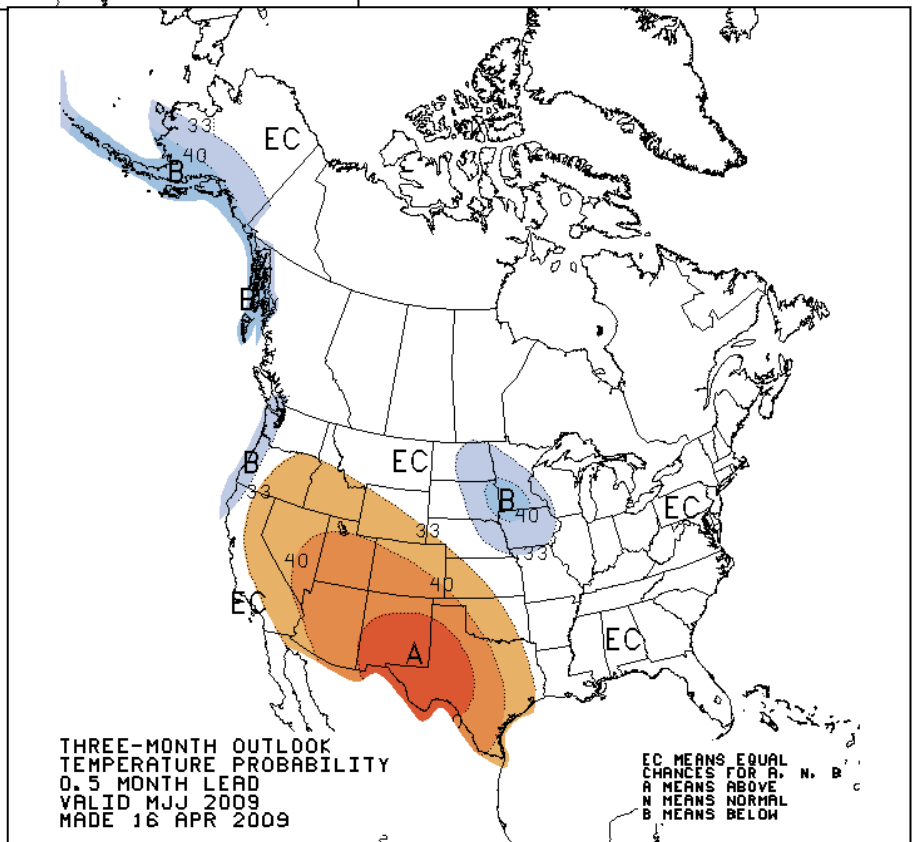
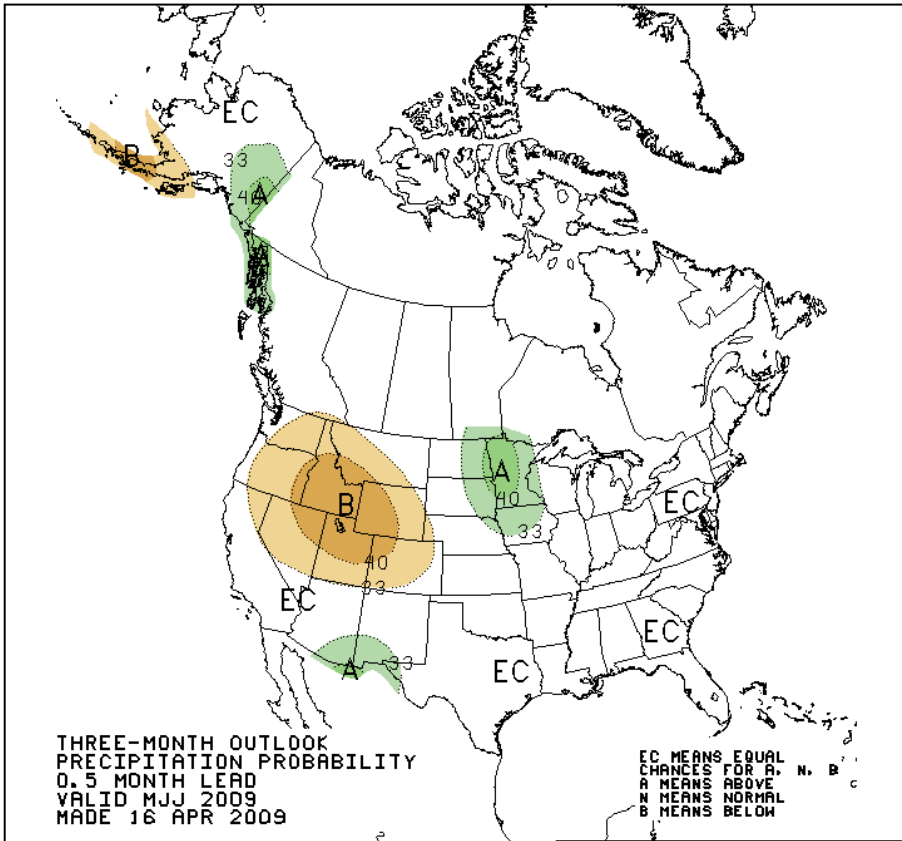
>>Soil Moisture Conditions...



>>Precipitation/Temperature Outlooks...

The 90-day outlook (May-July 2009) indicates that there is a 30-40 percent chance of a warmer than average late spring-early summer for Wyoming.

During May-July, Wyoming is expected to experience below normal precipitation during late spring through early summer.



.Questions or comments...

If you have any questions or comments about this drought information, please contact:

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James.Fahey@noaa.gov

.Related web sites...

Wyoming Drought Site...

www.wrds.uwyo.edu/wrds/wsc/df

USGS Wyoming Drought Watch...

www.wy.water.usgs.gov/projects/drought

U.S. Drought Monitor...

www.drought.unl.edu/dm/monitor.html

NOAA Drought Page...

www.drought.noaa.gov

Western Regional Climate Center...

www.wrcc.dri.edu

NOAA/NWS Climate Page...

www.weather.gov/climate/index/php?wfo=riw

Wyoming River Information...

NWS - www.crh.noaa.gov/ahps2/index.php?wfo=riw/(or cys/unr)
<http://ahps2.wrh.noaa.gov/ahps2/index.php?wfo=slc>/(or byz)

USGS - www.waterdata.usgs.gov/wy/nwis/rt

NRCS Snow Survey/Snowpack Information...

www.wrds.uwyo.edu/wrds/nrcs

Climate Prediction Center...

www.cpc.ncep.noaa.gov

.Acknowledgements...

This Wyoming Graphical Drought Informational Statement is a multi-agency effort involving NOAA's National Weather Service and the National Climatic Center, the NRCS, Wyoming State Climatologist's Office, regional center climatologists, and the National Drought Mitigation Center. Information for this statement has been gathered from the NWS and FAA observation sites...state cooperative services...the NRCS...and the USGS.

.Next issuance...

This product will be updated by the **20-25 of October 2009**--to correspond with the end of the irrigation season and the beginning of the new water year.