COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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MARCH 2006

While the statewide March 1 snowpack is 88% of normal, the sharp difference between above normal snowpack in the north of the state and well below normal snowpack in the south continues a winter long trend. The extremely low snowpack in the southern mountains (40% of average in the Rio Grande Basin and 46% of average in the San Juan/Dolores Basin) is causing significant concerns about the upcoming runoff and summer stream flows, with the possibility that conditions will rival the extraordinary drought year of 2002.

Below average precipitation across the state during February caused snowpack to decline as a percent of average in all basins, which is reflected in the drop in SWSI values in all basins. Stream flows are currently near seasonal winter norms. Cumulative storage of the reservoirs graphed in this report is 101% of average.

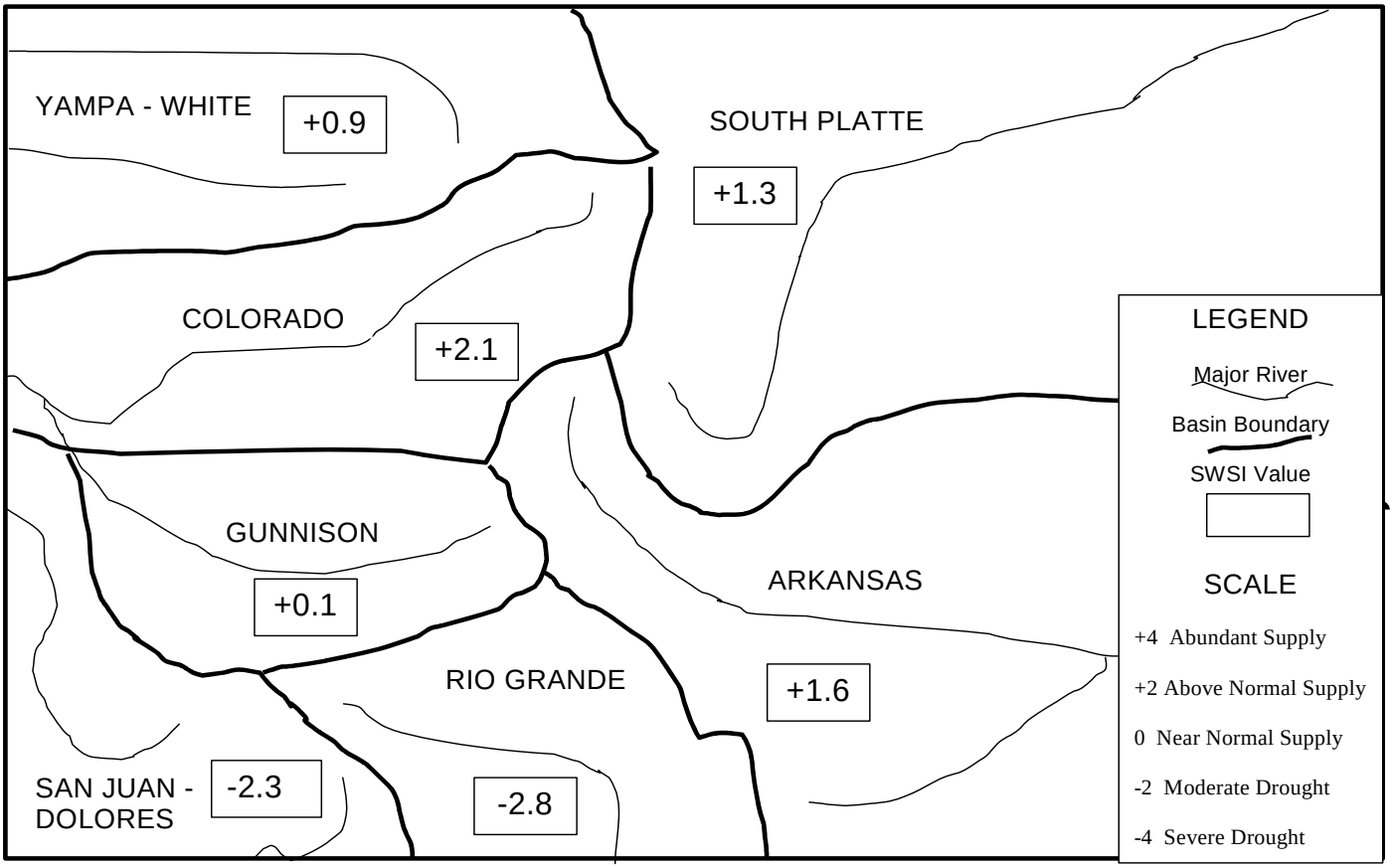
The Surface Water Supply Index (SWSI) developed by this office and the U.S.D.A. Natural Resources Conservation Service is used as an indicator of mountain-based water supply conditions in the major river basins of the state. It is based on snowpack, reservoir storage, and precipitation for the winter period (November through April). During the winter period, snowpack is the primary component in all basins except the South Platte basin where reservoir storage is given the most weight. The following SWSI values were computed for each of the seven major basins for March 1, 2006, and reflect the conditions during the month of February.

Basin	March 1, 2006 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	1.3	-0.4	+1.7
Arkansas	1.6	-1.3	+1.9
Rio Grande	-2.8	-0.3	-5.9
Gunnison	0.1	-1.1	-2.5
Colorado	2.1	-0.4	+3.0
Yampa/White	0.9	-1.6	+3.1
San Juan/Dolores	-2.3	-0.4	-5.2

Scale

-4	-3	-2	-1	0	1	2	3	4
Severe Drought		Moderate Drought		Near Normal Supply		Above Normal Supply		Abundant Supply

SURFACE WATER SUPPLY INDEX FOR COLORADO

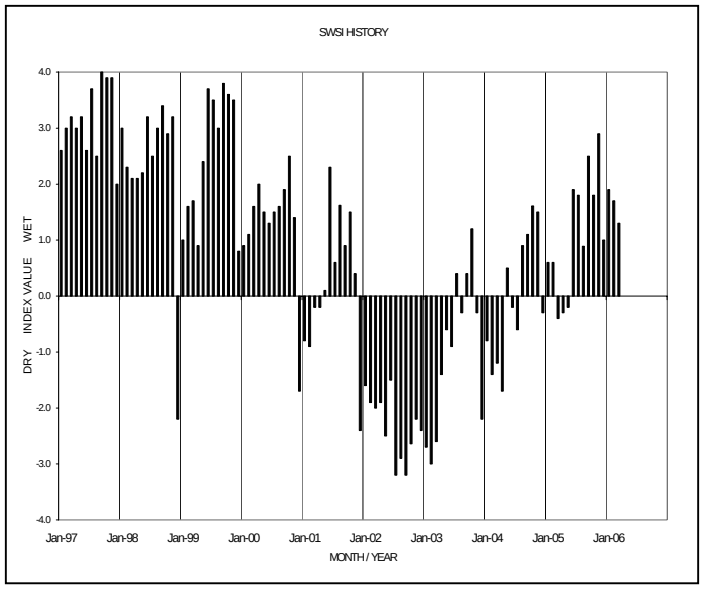


MARCH 1, 2006

Basinwide Conditions Assessment

The SWSI value of 1.3 indicates that for February the basin water supplies were slightly above normal. Reservoir storage, the major component in this basin in computing the SWSI value, was 108% of normal as of the end of February. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 89% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 86% of capacity. The Natural Resources Conservation Service reports that March 1 snowpack is 103% of normal. Flow at the gaging station South Platte River near Kersey was 569 cfs, as compared to the long-term average of 674 cfs.

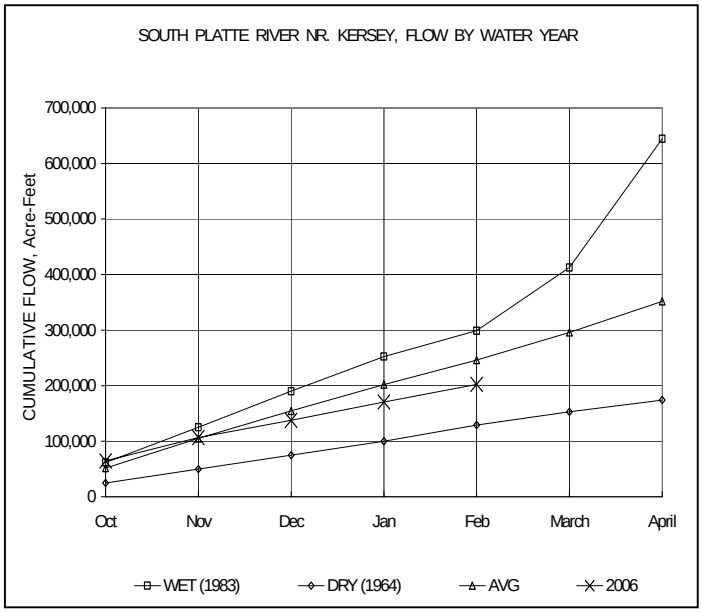
Snowpack is slightly above average through the basin. The snowpack percent of average has declined the end of February because we haven't had significant precipitation. It is also very dry on the plains, perhaps requiring early irrigation for some crops and hay unless we get precipitation in March.



Outlook

While snowpack is good, late season snow and rain in the spring are probably the most important factors in determining how good the water year will be.

Many reservoirs on the mainstem have reached their winter fill and will not pick up again until late February or March. Unless there is a very early call this spring for direct flow uses because of the dry warm conditions, we would anticipate that all the reservoirs on the plains and generally on the mainstem should fill.

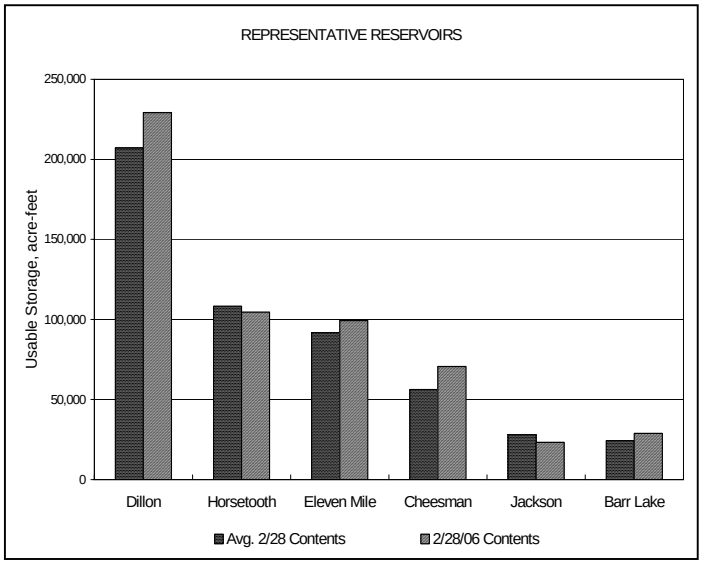


Administrative/Management Concerns

Reservoir storage continued as the main diversion in February. The weather continued to be unseasonably warm and there were no restrictions in storage due to weather conditions.

Public Use Impacts

The flow at key gages are at normal levels for this time of year. At this point, we are not expecting flooding unless we have significant rainstorm events this spring.

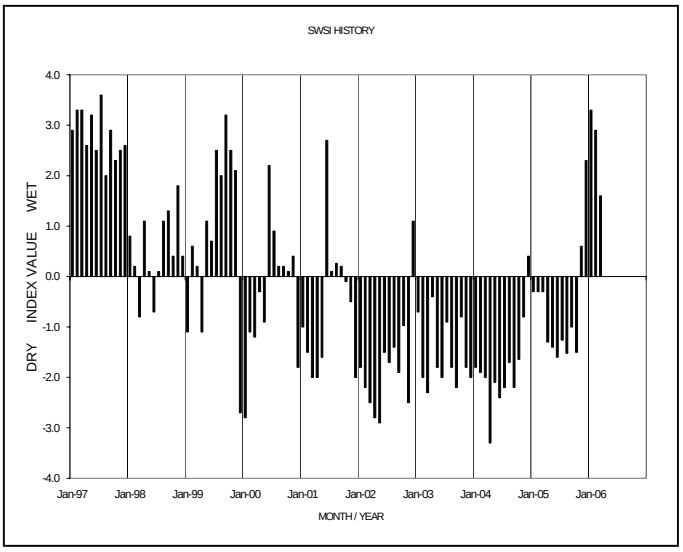


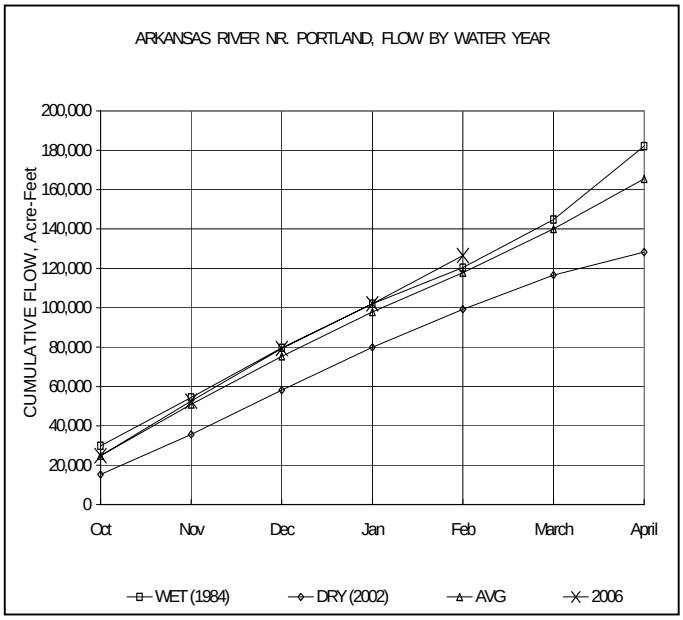
Basinwide Conditions Assessment

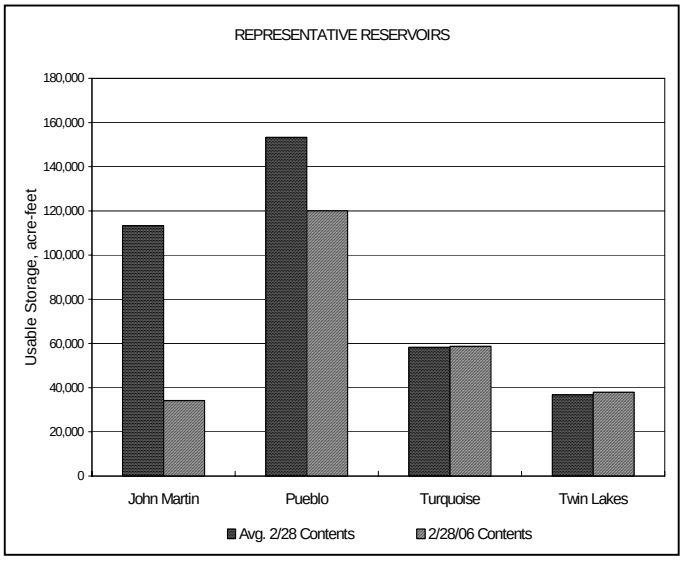
The SWSI value of 1.6 indicates that for February the basin water supplies were slightly above normal. The Natural Resources Conservation Service reports that March 1 snowpack was 88% of normal. Flow at the gaging station Arkansas River near Portland was 442 cfs, as compared to the long-term average of 356 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 69% of normal as of the end of February.

Administrative/Management Concerns

Reservoir storage in the Pueblo Winter Water Program totaled 100,109 acre-feet as of the end of February. This storage amount is slightly less than last year's storage to date and represents 99% of the past five-year average. Conservation storage in John Martin Reservoir has accumulated 13,171 acre-feet versus 18,917 acre-feet as of the end of February last year.





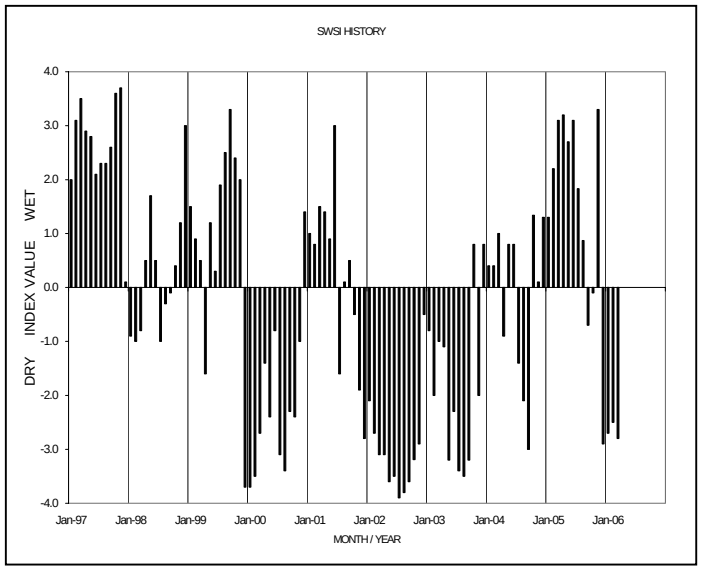


Basinwide Conditions Assessment

The SWSI value of –2.8 indicates that for February the basin water supplies were well below normal. The Natural Resources Conservation Service reports that March 1 snowpack is 40% of normal. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 88% of normal as of the end of February.

Flow at the gaging station Rio Grande near Del Norte averaged 167 cfs (84% of normal). The Conejos River near Mogote had a mean flow of 49 cfs (94% of normal). Flow to the state line was 91% of normal.

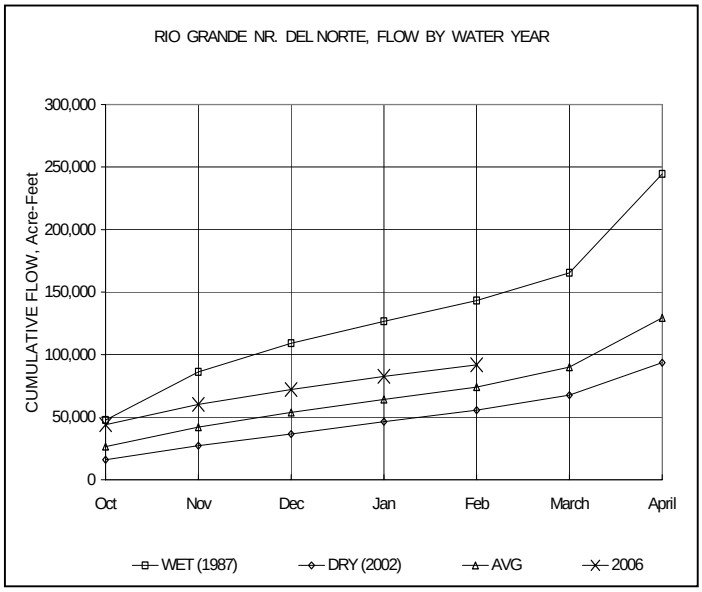
Temperatures were nearly 3 degrees above normal in the San Luis Valley during February, the eighth month in a row with above average temperatures. Alamosa received just 0.02 inches of precipitation during the month, 0.19 inches below normal and the fourth consecutive month with paltry precipitation.



Outlook

When compared to long-term averages, snowpack conditions dropped significantly during February and lag even the extraordinary drought year of 2002.

Recent NRCS stream flow forecasts are calling for well below average conditions in the entire upper Rio Grande basin this year. The expected April through September runoff is just 53 percent of normal for the Rio Grande near Del Norte and the Conejos near Mogote. Carryover storage in the basin reservoirs cannot counteract the effects of low runoff for most water users and activities dependent on higher flows.



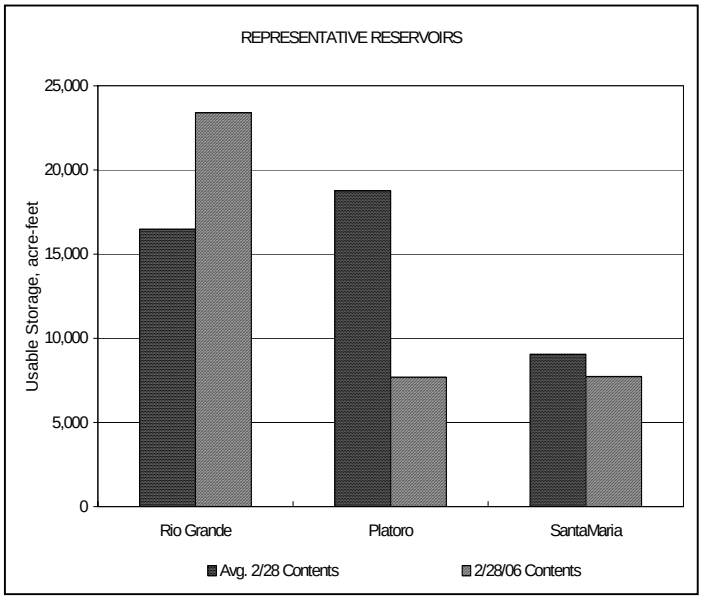
Administrative/Management Concerns

The annual meeting of the Rio Grande Compact Commission will be held in El Paso, Texas at the Hilton Inn – El Paso Airport on Thursday, March 23, 2006. The public is invited to attend. The meeting is scheduled to start at 9:00 a.m.

The Division Engineer expects early calls for irrigation water this year. Diversions from the Rio Grande and Conejos will begin mid to late March.

Public Use Impacts

Farmers and ranchers are preparing for a drought year similar to 2002. Ditch diversions will be limited to those with only the most senior priorities and extensive well use will further strain the depleted aquifers.



Basinwide Conditions Assessment

The SWSI value of 0.1 indicates that for February the basin water supplies were near normal. The Natural Resources Conservation Service reports that March 1 snowpack was 84% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 45.3 cfs, equaling the long-term average of 45.3 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 111% of normal as of the end of February.

The Gunnison Basin seems to be in the middle between the above-average north part of the state and the dry south. The Upper Gunnison drainage still looks the best with 97% of normal snowpack, the Taylor and Tomichi basins close behind at 96% and 92% respectively, the Lake Fork of the Gunnison River is doing OK at 91%, the Grand Mesa is averaging 70%, the Uncompahgre 75%, the San Miguel 56%, and the Uncompahgre Plateau 47%.

The Gunnison Basin received very little precipitation in February. As a result the snowpack figures dropped drastically. On February 1, the basin wide snowpack percentage was at 96. By March 1, it had dropped to 84%.

The month of February produced several significant wind storms in additional to the warm temperatures. Several of the storms brought in a lot of dust and dirt from Utah, giving the snow a darkened, dirty look. Many feel this has caused the snow to melt faster, making matters even worse. A good solid covering of fresh white snow would sure help.

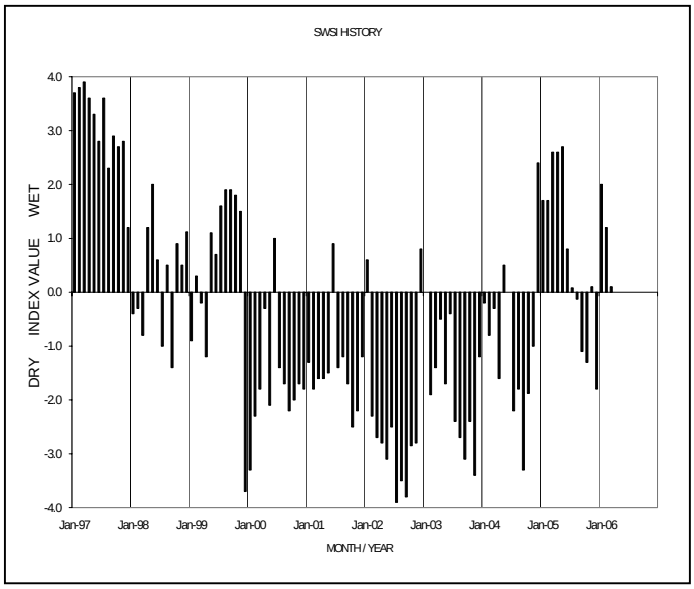
Outlook

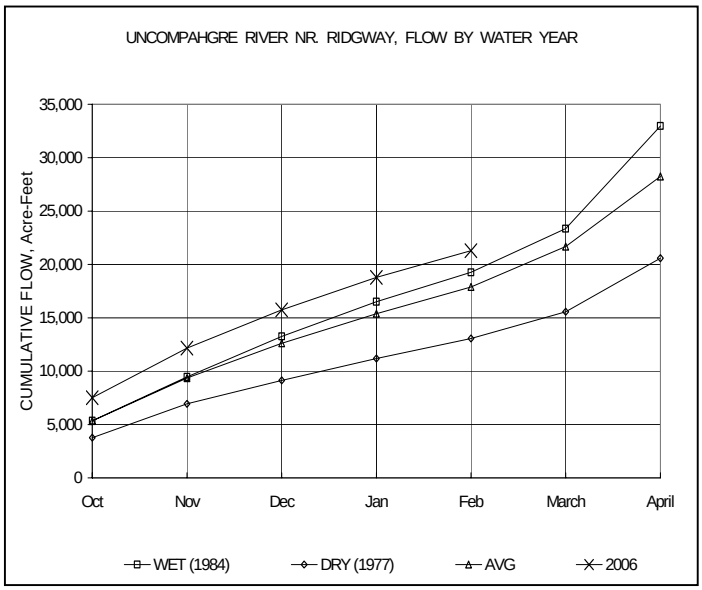
If the precipitation patterns don't change and start coming this way, it will be a drought year.

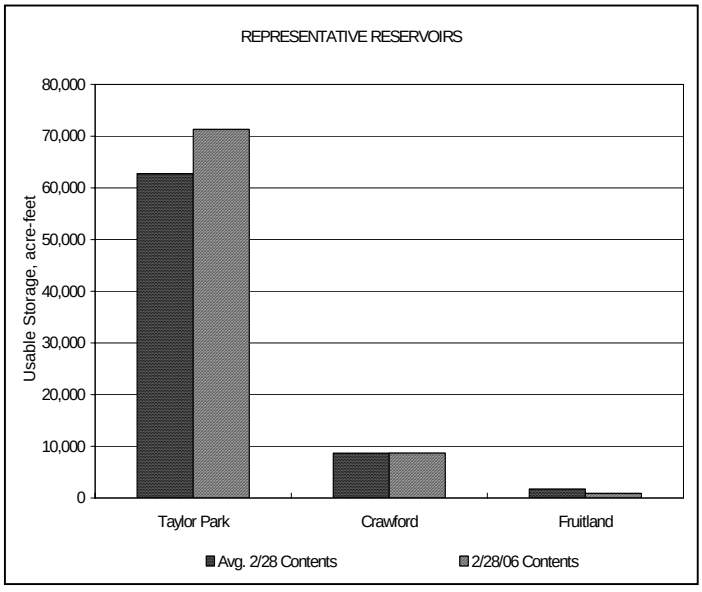
The water using public is now starting to get nervous, wondering if these good precipitation months of March and April will produce enough moisture. Also, the remaining snow below 8,000 feet is almost non-existent. There is likely to be very little runoff in April and early May, before the high snow kicks in and starts to melt.

Administrative/Management Concerns

At the last Aspinall Unit operations meeting, the USBR forecasted that they could fill Blue Mesa Reservoir this year. Blue Mesa Reservoir is at a significantly higher level than last year. The USBR also increased the releases out of the Aspinall from 500 cfs to 700 cfs, forecasting they would have enough inflow to sustain the higher releases. The months of December, January, and February are critical to power generation at the Unit. The releases have stayed at 700 cfs through February.



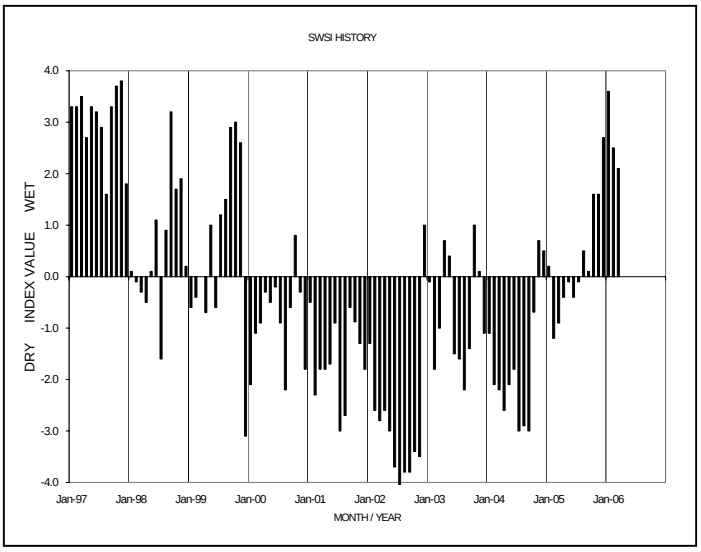




Basinwide Conditions Assessment

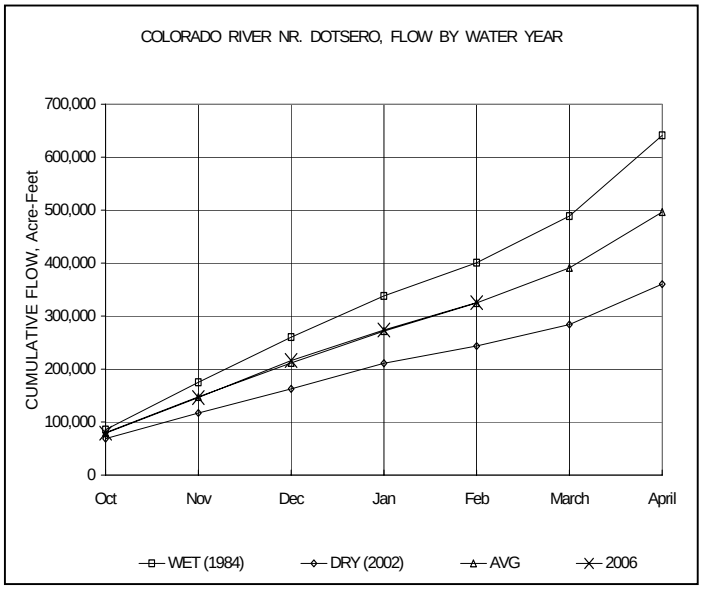
The SWSI value of 2.1 indicates that for February the basin water supplies were above normal. The Natural Resources Conservation Service reports that March 1 snowpack is 115% of normal. Flow at the gaging station Colorado River near Dotsero was 930 cfs, as compared to the long-term average of 945 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 116% of normal as of the end of February.

February precipitation was significantly below average for the entire Colorado River basin. As a result, snowpack for the entire basin dropped to as low as 110 percent of average in early February. The best snowpack remains in the upper, eastern sub-basins.



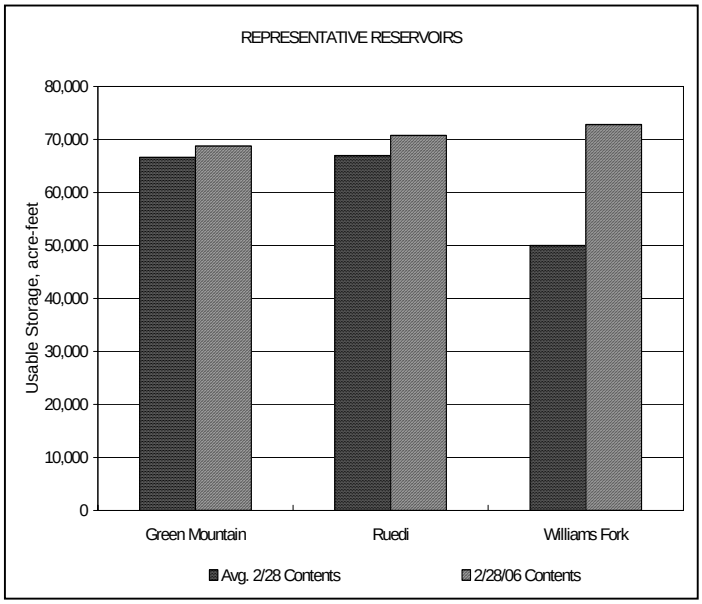
Outlook

The Colorado Basin River Forecast Center (NWS) March 1 volume forecasts still show above average volume runoff (April - July) for all tributaries of the Colorado River except Plateau Creek, which has a forecast of only 70 percent of average. The Blue and Eagle Rivers remain highest, with forecasts of about 130 percent of average. The new forecast at the Dotsero station, which measures flow available to the Shoshone Power Plant, is 122 percent of average.



Administrative/Management Concerns

The mainstem administrative senior call from Shoshone Power Plant will remain at only 700 cfs until approximately April 10, when turbine maintenance should be completed. After this date, the river call will return to the full Shoshone call of about 1400 cfs.

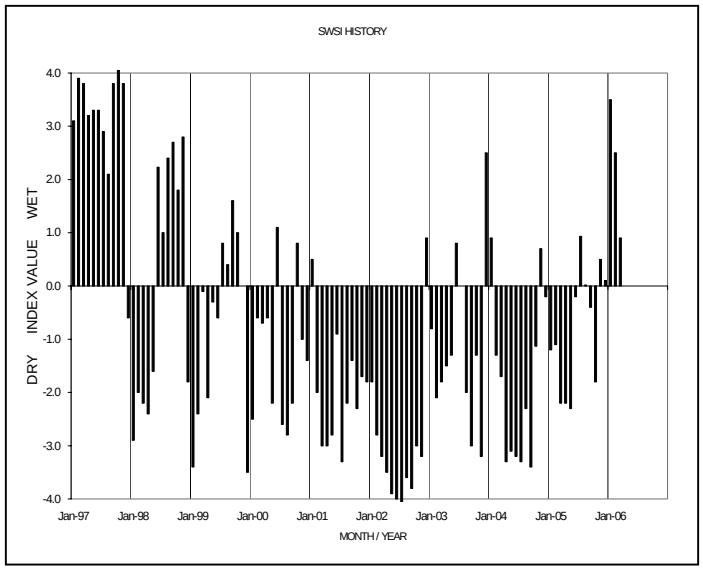


Basinwide Conditions Assessment

The SWSI value of 0.9 indicates that for February the basin water supplies were slightly above normal. The Natural Resources Conservation Service reports that March 1 snowpack is 113% of normal. Flow at the gaging station Yampa River at Steamboat was estimated at 113 cfs, as compared to the long-term average of 98 cfs.

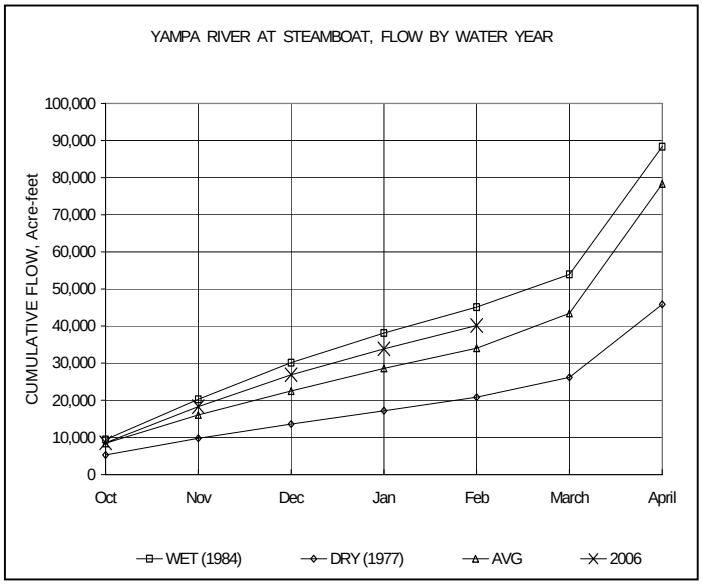
The snowpack in the basins declined in February as precipitation was only about 77% of average. The overall snowpack for the basin continues to be the best that has been seen in since 1997. For the individual basins the snowpack at the end of the month were: 112% of average for the North Platte River Basin, 120% of average for the Yampa River Basin, and 108% of average for the White River Basin.

Total precipitation for the current water year is 118% of average, down from 131% the previous month.



Outlook

The March 1 runoff forecast from the NRCS for the April through July period are 114% of average for the North Platte River at Northgate, 123% of average for the Yampa River near Maybell, 112% of average for the Little Snake River near Dixon, and 103% of average for the White River near Meeker. These forecasts are all down from the previous month.



Basinwide Conditions Assessment

The SWSI value of –2.3 indicates that for February the basin water supplies were well below normal. The Natural Resources Conservation Service reports that March 1 snowpack is 46% of normal. Flow at the gaging station Animas River near Durango was 207 cfs, as compared to the long-term average of 212 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 114% of normal as of the end of February.

As of March 1st the snowpack for the San Juan River Basin was only at 48% of normal with a slight increase in the snow-water equivalent values for most sites. The snow-water equivalent on the La Plata and Mancos Rivers dropped in the last month.

February weather continued the drier than normal pattern of the previous three months. In Durango, only 0.45 inches of precipitation were recorded, 25% of average. So far this Water Year Durango is at 62% of normal precipitation.

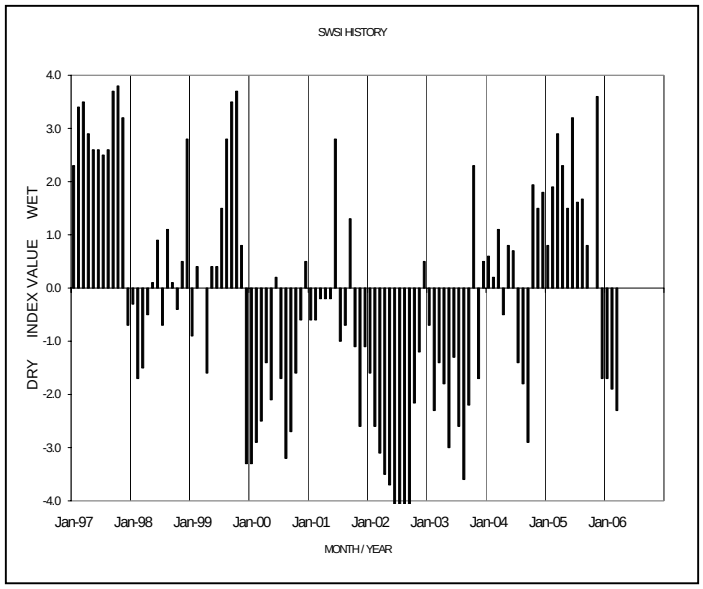
Stream flows remained near normal to slightly below normal for the month due to the warm temperatures melting the meager snowpack. For March the Animas River peaked at 223 cfs on the 1st, and averaged 207 cfs for the month, which is 100% of normal.

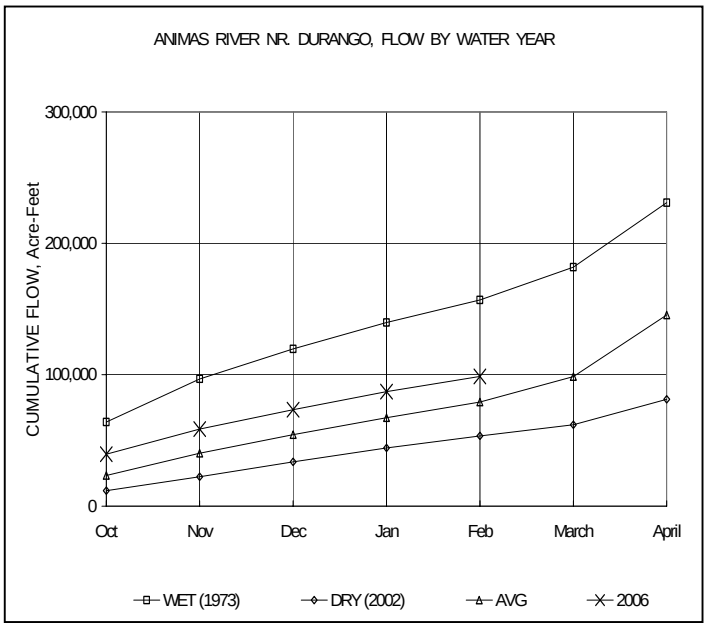
Reservoirs continued to be the bright spot in the water supply outlook. The three major reservoirs still maintained above average storage at the end of the month.

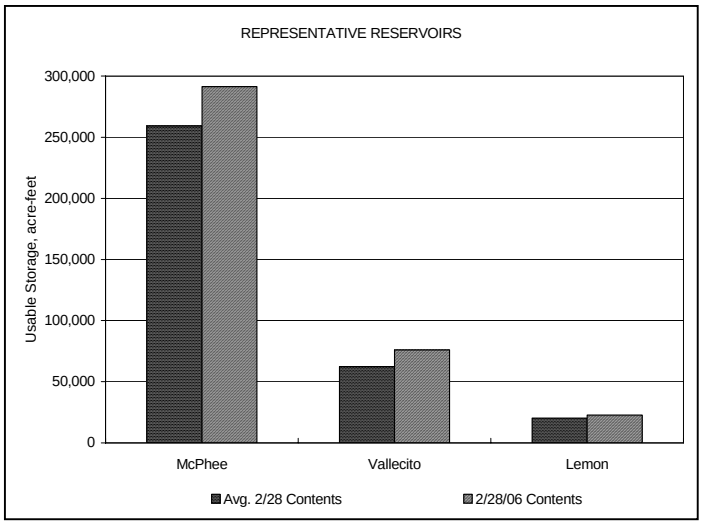
The temperatures remained well above normal. Overall Durango was 4.1° above its 30-year average high and 1.8° above its 30-year average low.

Outlook

The current weather pattern still has the storm track to the north, but basin administrators are hopeful that they will get their fair share of snow in the coming winter and spring months. The latest National Weather Service 90 day outlook is forecasting a dryer and warmer than normal period.







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