COLORADO
WATER SUPPLY CONDITIONS UPDATE

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

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 March). 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 April 1, 2006, and reflect the conditions during the month of March.

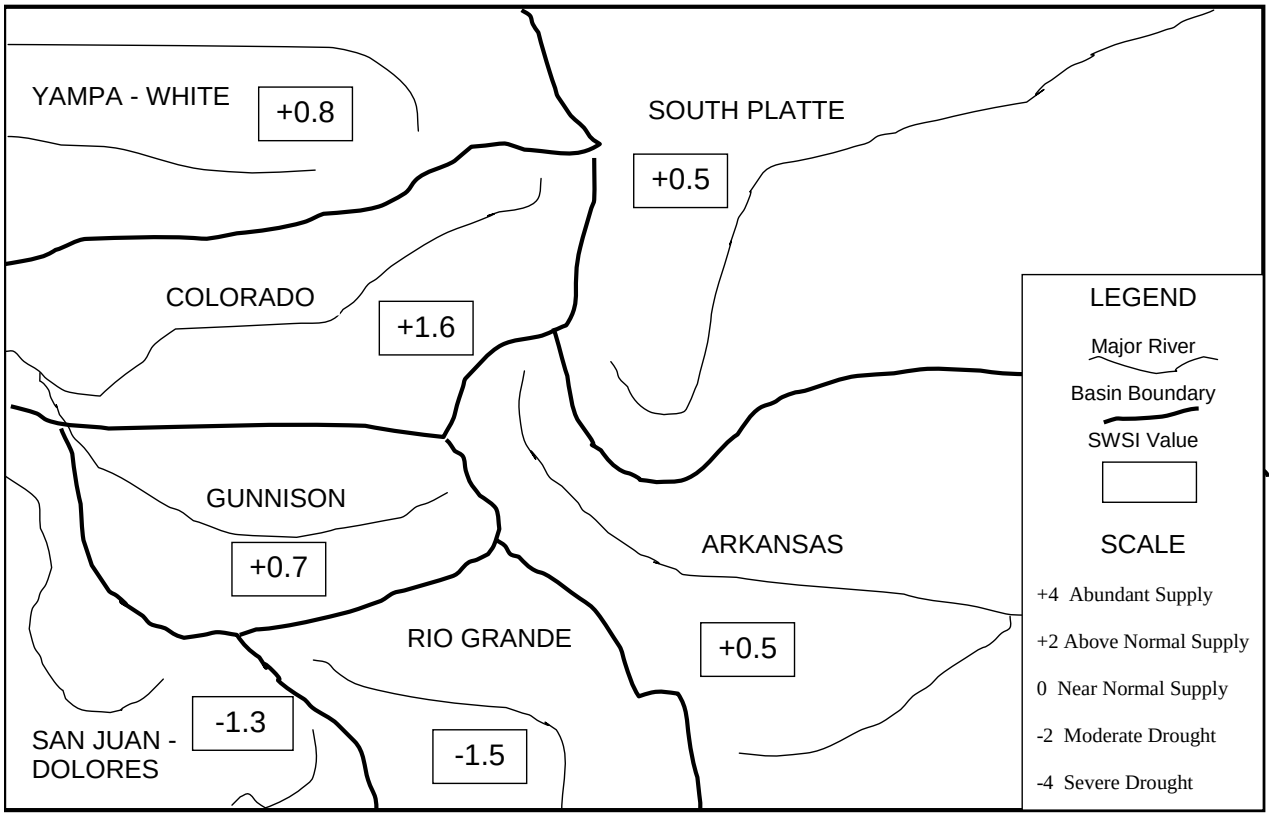
The SWSI values for this month show a near normal or higher value for all of Colorado, except the San Juan/Dolores and Rio Grande Basins in the southwest. The southwest basins did, however, show improvement in the past month, which was caused by March storms that dropped significant amounts of snow to the part of the state that needed it most. The current SWSI values range from a high of +1.6 in the Colorado Basin to a low of -1.5 in the Rio Grande Basin The statewide snowpack averages range from highs of 111% of normal in the Yampa/White Basin and 110% in the Colorado Basin to lows of 64% in the Rio Grande Basin and 68% in the San Juan/Dolores Basin.

Basin	April 1, 2006 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	+0.5	- 0.8	+0.8
Arkansas	+0.5	- 1.1	+1.8
Rio Grande	- 1.5	+1.3	- 4.7
Gunnison	+0.7	+0.6	- 1.9
Colorado	+1.6	- 0.5	+2.0
Yampa/White	+0.8	- 0.1	+3.0
San Juan/Dolores	- 1.3	+1.0	- 3.6

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



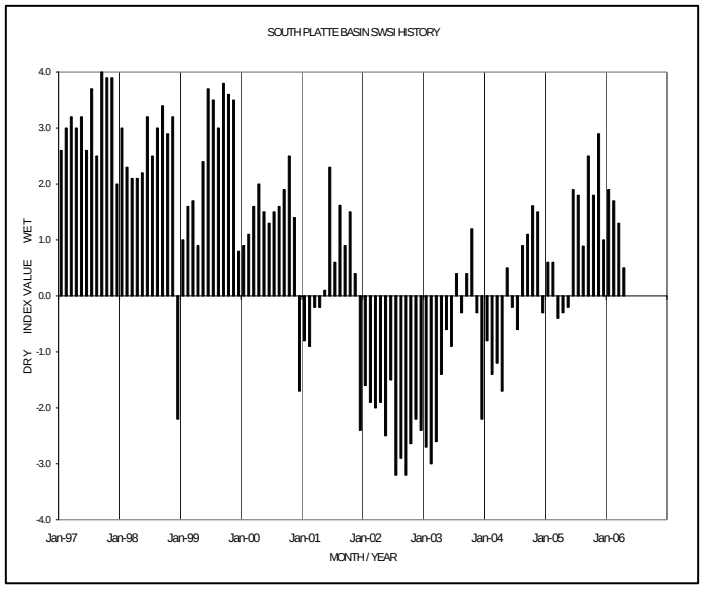
April 1, 2006

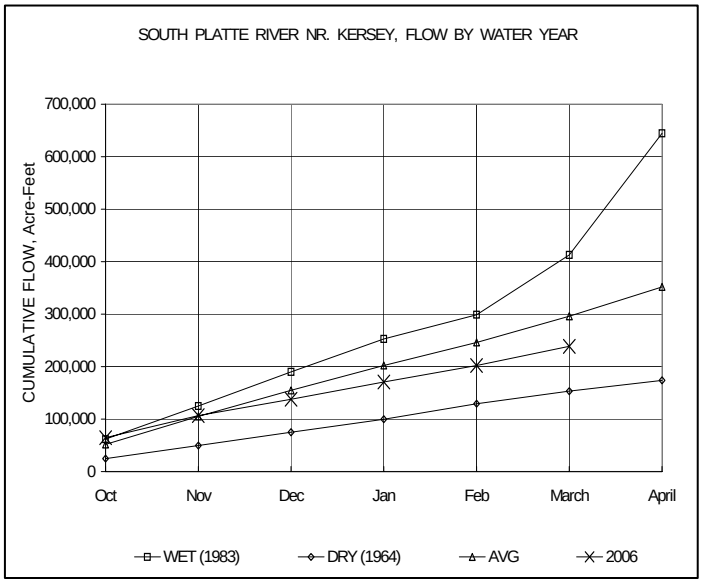
Basinwide Conditions Assessment

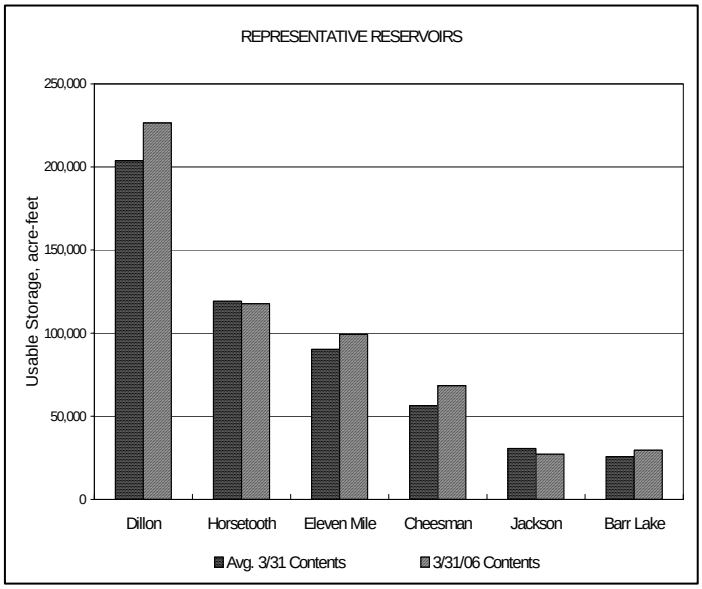
The SWSI value of +0.5 indicates that for March the basin water supplies were above normal. Cumulative storage for the six reservoirs graphed on this page was 108% of normal as of the end of March. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 99% of 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 April 1 snowpack is 103% of normal. Flow at the gaging station South Platte River near Kersey was 592 cfs, as compared to the long-term average of 686 cfs. Flow at the Colorado/Nebraska state line averaged 100 cfs.

Outlook

March returned to near normal levels for snow fall leaving the end of the month snowpack slightly above average with Clear Creek and Boulder Creek drainage basins in the best conditions. Based on present snowpack, we anticipate at least an average runoff. With all the main irrigation and most of the municipal reservoirs full on the mainstem and good storage levels on all the tributaries, this should provide for a good start to the irrigation season. This start was helped significantly by one storm on the plains in March that provided much needed water to the winter wheat crop and alfalfa without users diverting water from the river. As usually is the case, a few good spring precipitation events after corn is planted will help dramatically so users don't have to use reservoir supplies to irrigate up crops.

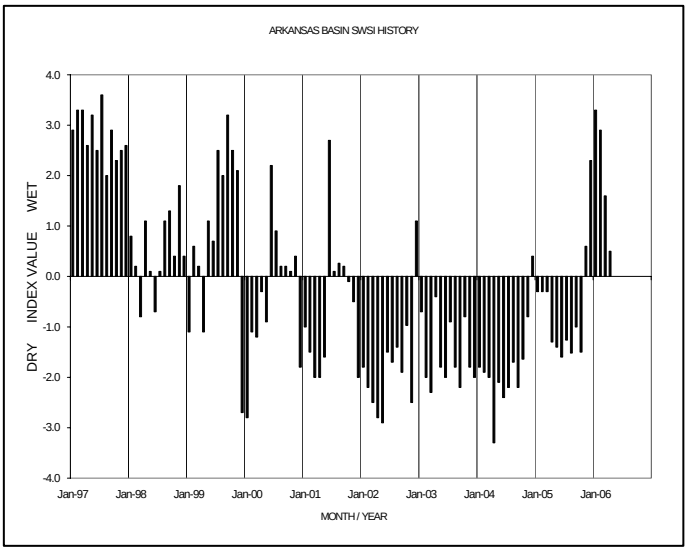






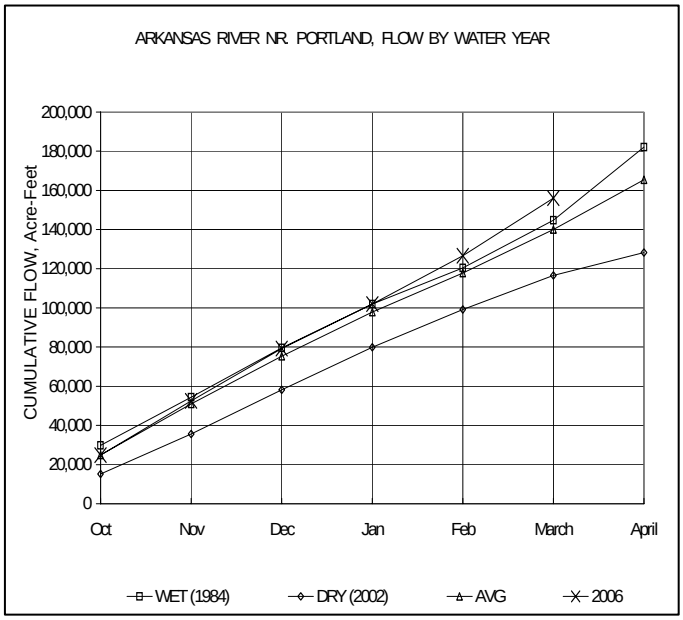
Basinwide Conditions Assessment

The SWSI value of +0.5 indicates that for March the basin water supplies were above normal. The Natural Resources Conservation Service reports that April 1 snowpack is 86% of normal. Flow at the gaging station Arkansas River near Portland was 480 cfs, as compared to the long-term average of 361 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 70% of normal as of the end of March.



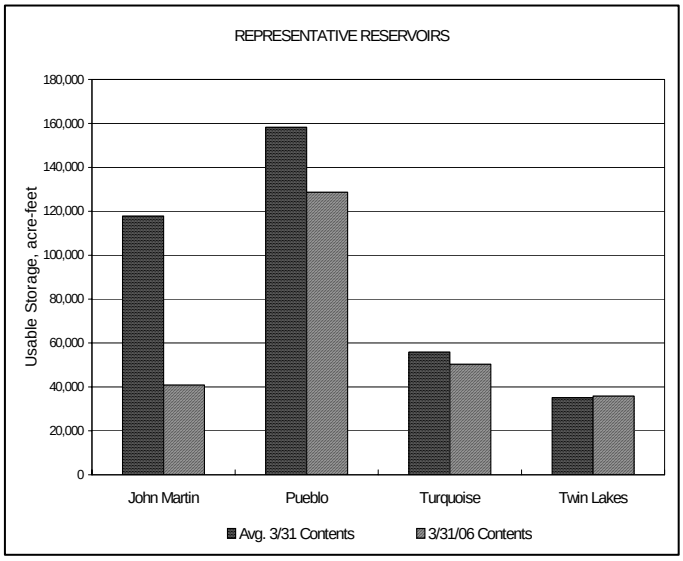
Outlook

Total distributed reservoir storage following the Pueblo Winter Water Program was 110,991 acre-feet, including 39,542 acre-feet in Pueblo Reservoir, 55,820 acre-feet in off-channel reservoirs, and 15,629 acre-feet in John Martin Reservoir (after distribution to accounts). Total Winter Compact Storage in John Martin Reservoir was 14,637 acre-feet for the period from November 1, 2005 through March 31, 2006. Distribution of Winter Compact Storage into accounts began at 08:00 hours on April 7, 2006.



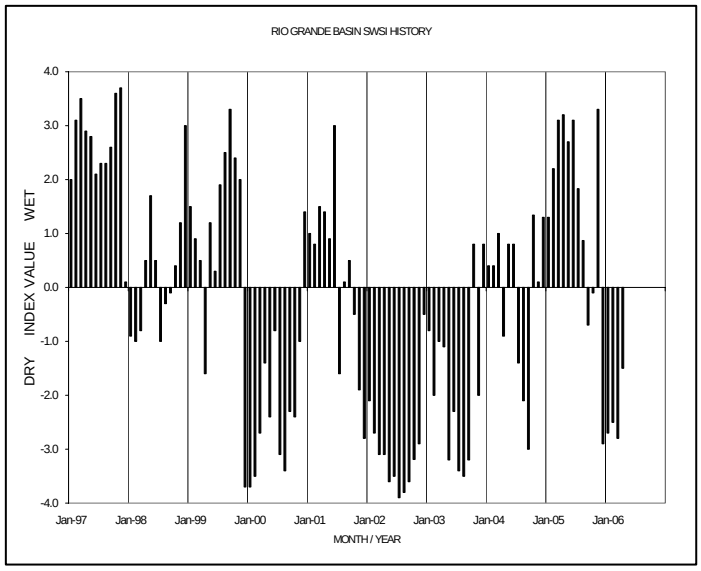
Administrative/Management Concerns

Major well associations had augmentation plans approved only on a temporary basis until June 1, 2006 to attempt to ensure that adequate replacement supplies could be expected to be finalized to facilitate planned pumping as well as deliver water to replace stateline depletions computed by the computer model used to verify compact compliance over a ten year period. It appears that Pueblo Board of Water Works will once again make available some water to offset computed stateline depletions.



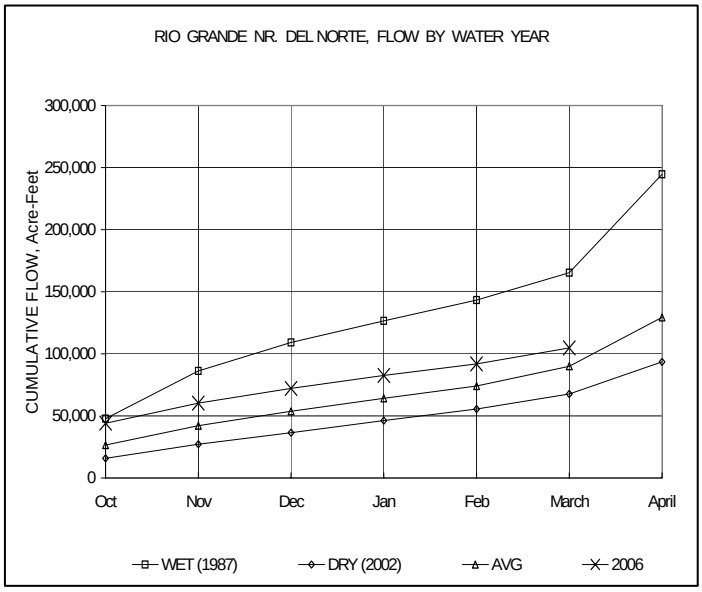
Basinwide Conditions Assessment

The SWSI value of –1.5 indicates that for March the basin water supplies were below normal. The Natural Resources Conservation Service reports that April 1 snowpack is 64% of normal. Flow at the gaging station Rio Grande near Del Norte averaged 210 cfs (78% of normal). The Conejos River near Mogote had a mean flow of 62 cfs (79% of normal). Flow at the state line was 70% of normal. Weather conditions in the San Luis Valley were once again warmer and drier than normal until substantial snowstorms hit the basin beginning on March 10th. Alamosa received a near-average 0.57 inches of precipitation during the month. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 87% of normal as of the end of March.



Outlook

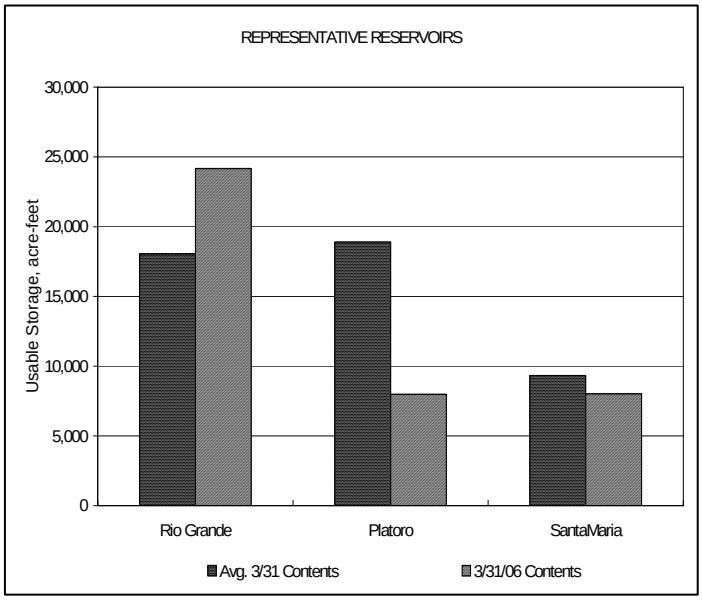
Significant snowstorms finally occurred in the basin during March. These events slowed the quick melt the basin was about to experience, added valuable snow pack, and pushed snowpack levels above the dangerously low 2002 levels. The chart of snowpack accumulation in the Rio Grande basin had tracked eerily close to that of the 2001-02 winter. The March snowstorms finally upgraded runoff conditions to a level similar to those in 1996, 2000 and 2003. Poor years, but significantly better than 2002. Current NRCS forecasts still predict runoff to be only 67% of average on the Rio Grande near Del Norte and 68% of average for the Conejos near Mogote.



Administrative/Management Concerns

Rio Grande Compact accounting for the calendar year 2005 was approved at the Compact meeting held in El Paso, Texas in late March. Colorado over-delivered only 2,700 acre-feet to the state line last year on an obligation of approximately 450,000 acre-feet. As of January 1, 2006 Colorado has an accrued credit of 4,700 acre-feet in Elephant Butte Reservoir. This credit will help reduce the need to bypass water past needy diverters this year.

Based on the current forecast, there will likely be only slight curtailment of water rights on the Rio Grande and the Conejos River this irrigation season.



Public Use Impacts

Due to the dry soil conditions and anticipated low runoff, diversions from area streams for irrigation began very early this year.

Basinwide Conditions Assessment

The SWSI value of +0.7 indicates that for March the basin water supplies were above normal. The Natural Resources Conservation Service reports that April 1 snowpack is 94% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 52 cfs, as compared to the long-term average of 61 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 101% of normal as of the end of March.

Outlook

March has been a much better month for the Gunnison Basin, as several storms dumped a significant amount of snowfall in the mountain areas. As a result, the snowpack percentages have increased noticeably. The lower area of the valleys also received some useful rainfall.

Administrative/Management Concerns

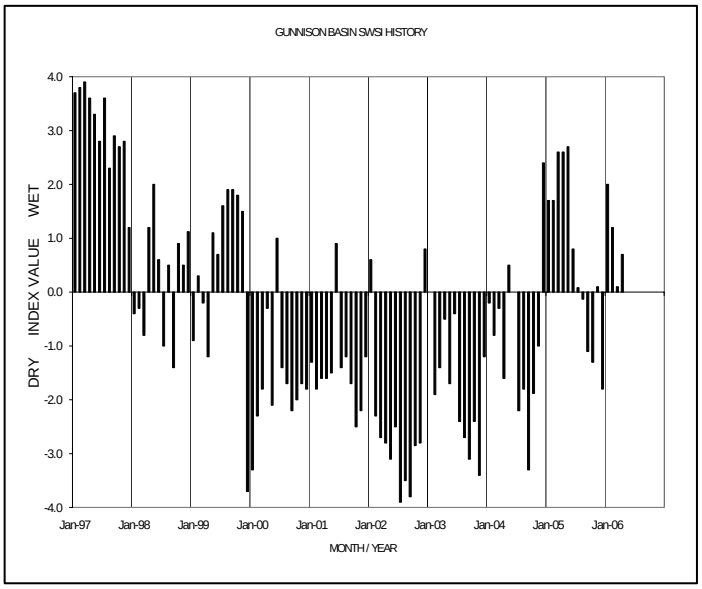
Division 4 seems to be in the middle between the above-average north part of the state and the dry south. However, the storms in March evened out the distribution across the basin, and as of April 10, the basin wide average was 100% of normal. The Upper Gunnison drainage looks great with 106%, the Tomichi close behind at 97%. The Lake Fork of the Gunnison River is doing much better at 110% The Grand Mesa is averaging 95%, far better than last month's 70%. The Uncompahgre basin is near normal. The San Miguel is the lowest drainage with an average of 84% of average.

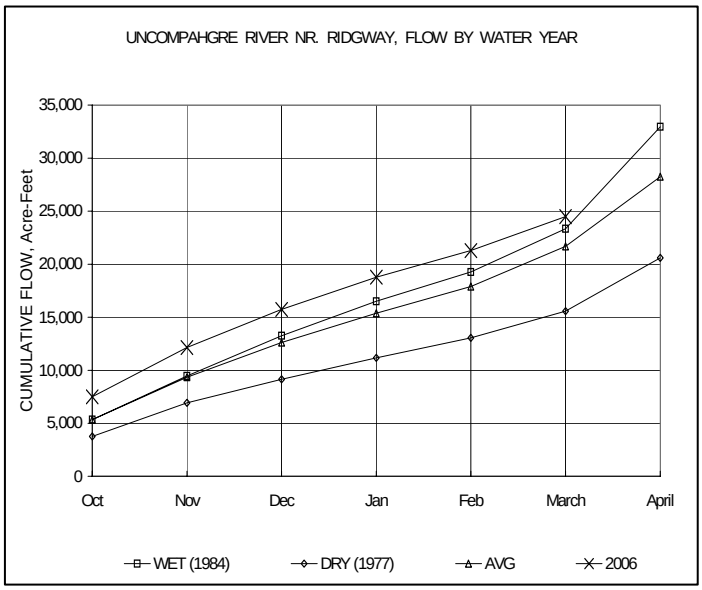
The April first forecast is in, which is the first truly meaningful forecast of the spring and summer runoff amounts. The USBR is still predicting Blue Mesa Reservoir will fill. The reservoirs on Grand Mesa should mostly fill, especially after the large carryover from last season. Even Taylor Park Reservoir should come close to filling, and all other reservoirs in the Gunnison Basin should also fill.

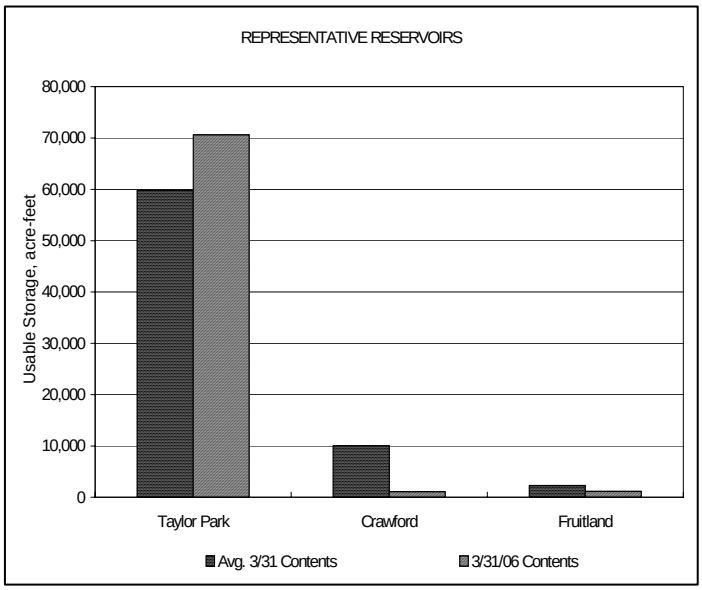
For those that have been watching Lake Powell and the compact issues raised by the recent drought, the inflow is forecasted for 97% of normal. The Lake should gain significant storage and rise 30 to 35 feet this year, especially from the inflows from the Colorado the Green Rivers that have above-normal snowpack numbers.

Public Use

The water using public should be relieved to see near-normal snowpack amounts in the basin. The higher flows will also benefit the many recreational users of stream and lakes in this area.





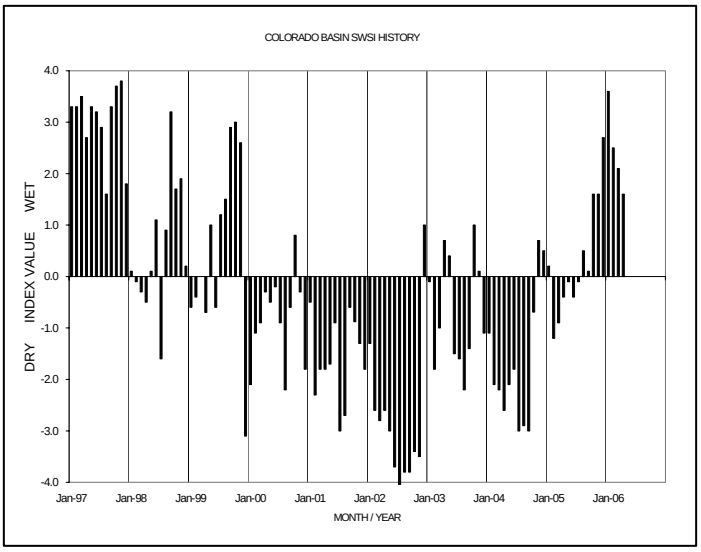


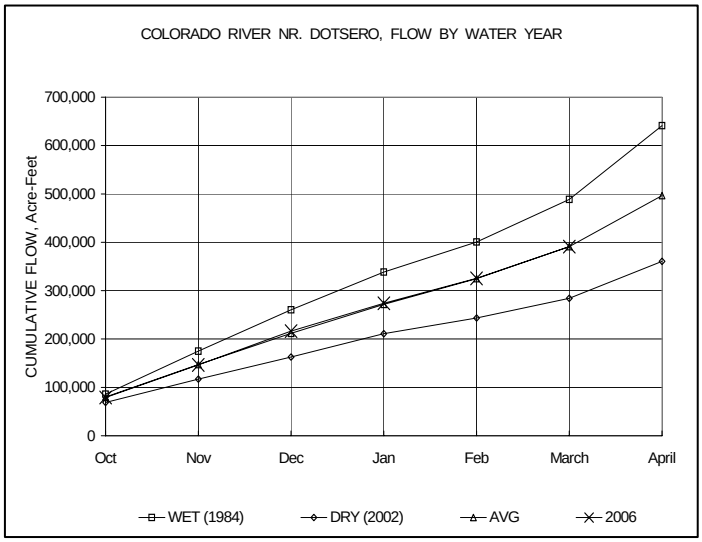
Basinwide Conditions Assessment

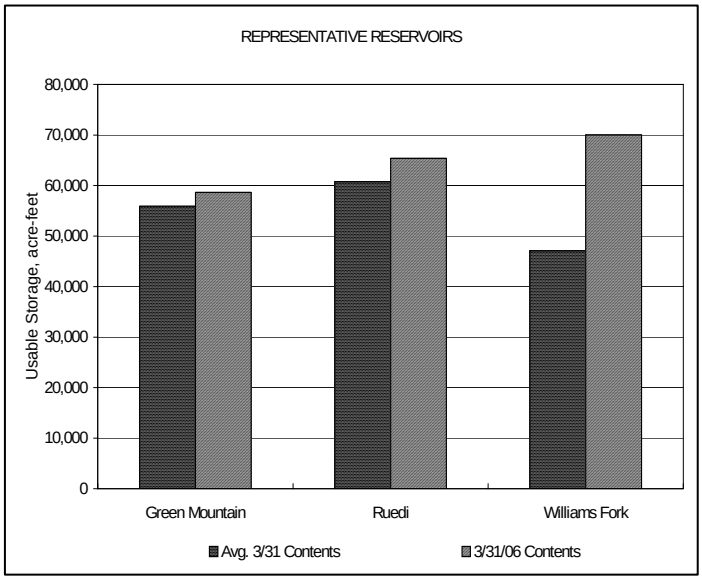
The SWSI value of +1.6 indicates that for March the basin water supplies were above normal. The Natural Resources Conservation Service reports that April 1 snowpack is 110% of normal. Flow at the gaging station Colorado River near Dotsero was 1065 cfs, as compared to the long-term average of 1079 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 119% of normal as of the end of March.

March precipitation was near average for the entire Colorado River basin, but this year's regional variation was reversed: the Eagle River and Blue River drainages received less than average snowfall while the western part of the basin, including Grand Mesa, received above average precipitation. The best snowpack remains in the upper, eastern basins.

The Colorado Basin River Forecast Center (NWS) April 1 volume forecast shows 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, and Willow Creek (near Granby), which has a forecast of 94 percent. Highest forecasts are for Muddy Creek above Wolford Mtn. Reservoir (130% of average), Eagle River (134%), and Blue River (125%). The new forecast at the Dotsero station, which measures flow available to the Shoshone Power Plant, did not change from the previous month: 122 percent of average.







Basinwide Conditions Assessment

The SWSI value of +0.8 indicates that for March the basin water supplies were above normal. Flow at the gaging station Yampa River at Steamboat was 150 cfs, as compared to the long-term average of 153 cfs. The overall snowpack for the Division was 111% of average.

Outlook

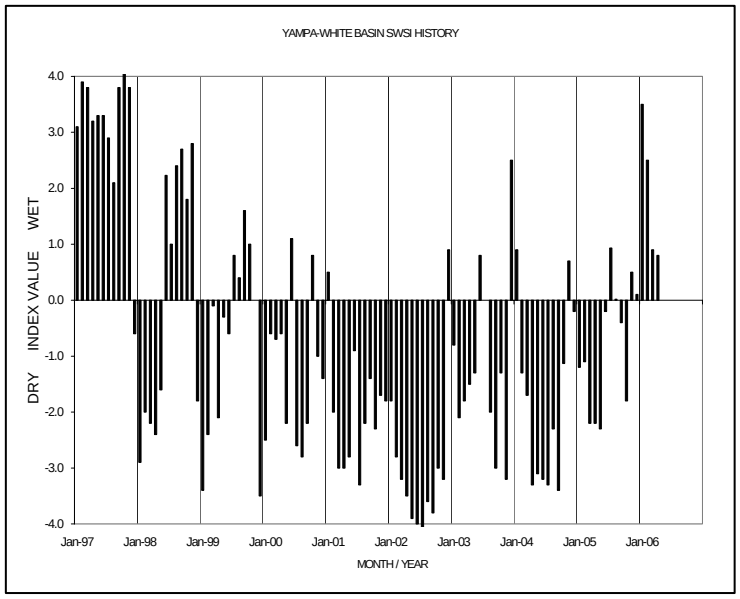
The snowpack in the basins declined slightly in March as precipitation was only about 96% of average. Total precipitation for the current water year is 114% of average, down slightly from the previous month. The overall snowpack for the Division was 111% of average, down from 113%. This continues to be the best snowpack that has been seen in the combined basins since 1997. For the individual basins, the snowpack at the end of the month were: 109% of average for the North Platte River Basin, 117% of average for the Yampa River Basin, and 108% of average for the White River Basin. 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 runoff forecasts are the same as for the previous month.

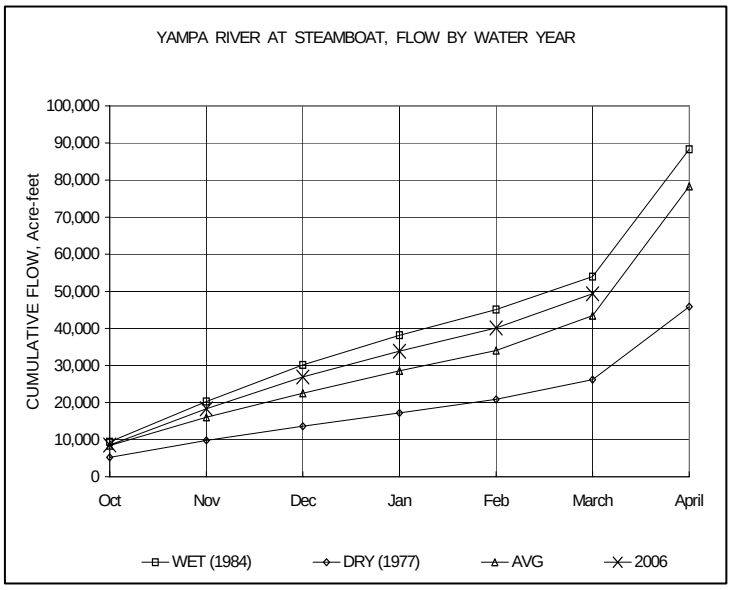
Administrative/Management Concerns

Given the above-average snowpack, the potential exists for localized flooding on the rivers and streams in the Division this year. The extent of any flooding will depend greatly on how the snowmelt progresses in May and early June.

Public Use Impacts

With warm temperatures at the end of the month, most rivers are ice free at the lower elevations and flowing at or above seasonal averages. Spring melting can cause flows to increase quickly. Caution should be exercised when recreating on or near the rivers and streams.





Basinwide Conditions Assessment

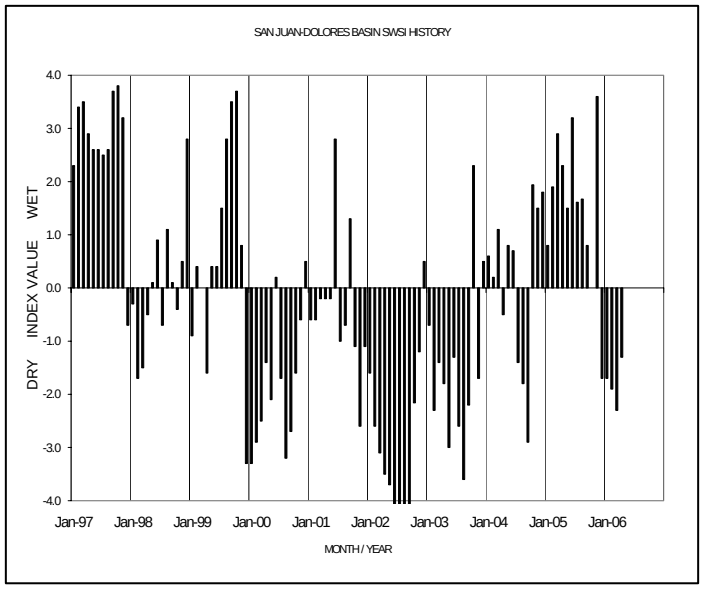
The SWSI value of –1.3 indicates that for March the basin water supplies were below normal. Flow at the gaging station Animas River near Durango was 230 cfs, as compared to the long-term average of 314 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 114% of normal as of the end of March.

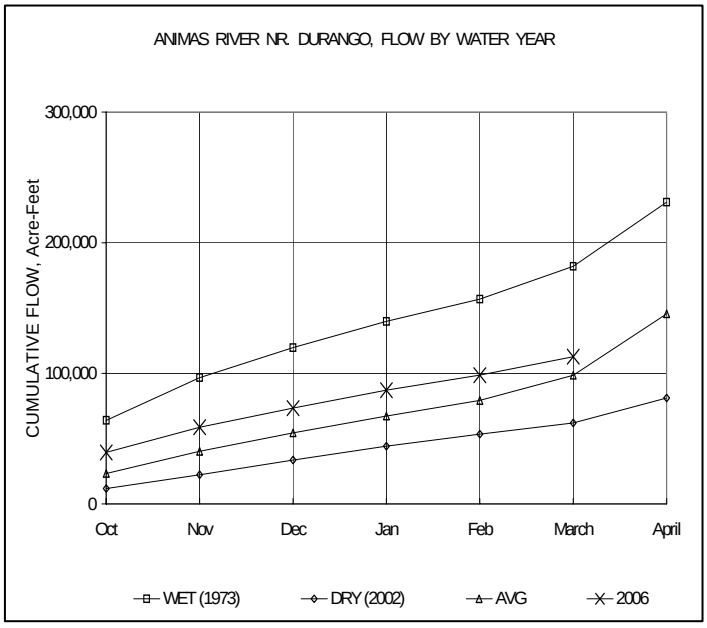
March weather finally broke the drier than normal pattern of the previous four months. In Durango, 2.38 inches of precipitation were recorded, 139% of average. So far this water year Durango is at 76% of normal precipitation. As of March 1st the snowpack for the San Juan River Basin was only at 46% of normal; as of April 1st the snowpack had increased to 68% of normal.

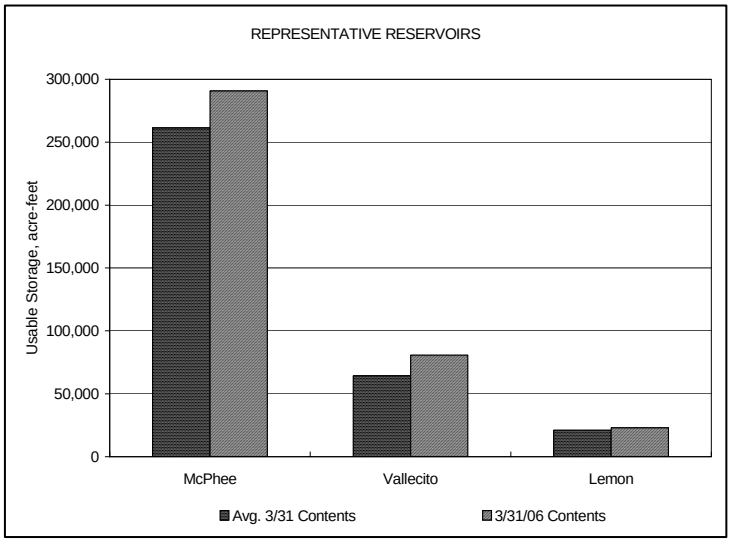
Stream flows dropped to below normal for the month due to the lack of low level snowpack and snowmelt. The Animas River peaked at 276 cfs on March 29th and averaged just 230 cfs for the month, which is 73% of normal. The Dolores River averaged 71 cfs for the month, well below the 129 cfs normal, and the La Plata River at Hesperus averaged only 7.1 cfs for the month compared with it's normal flow of 15.6 cfs.

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 cloudy weather kept the high temperatures below normal and the low temperatures above normal. Overall Durango was 2.2° below its 30-year average high and 2.0° above its 30-year average low.







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