COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
ROOM 818, 1313 SHERMAN ST., DENVER, CO 80203
303-866-3581; www.water.state.co.us

May 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 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.

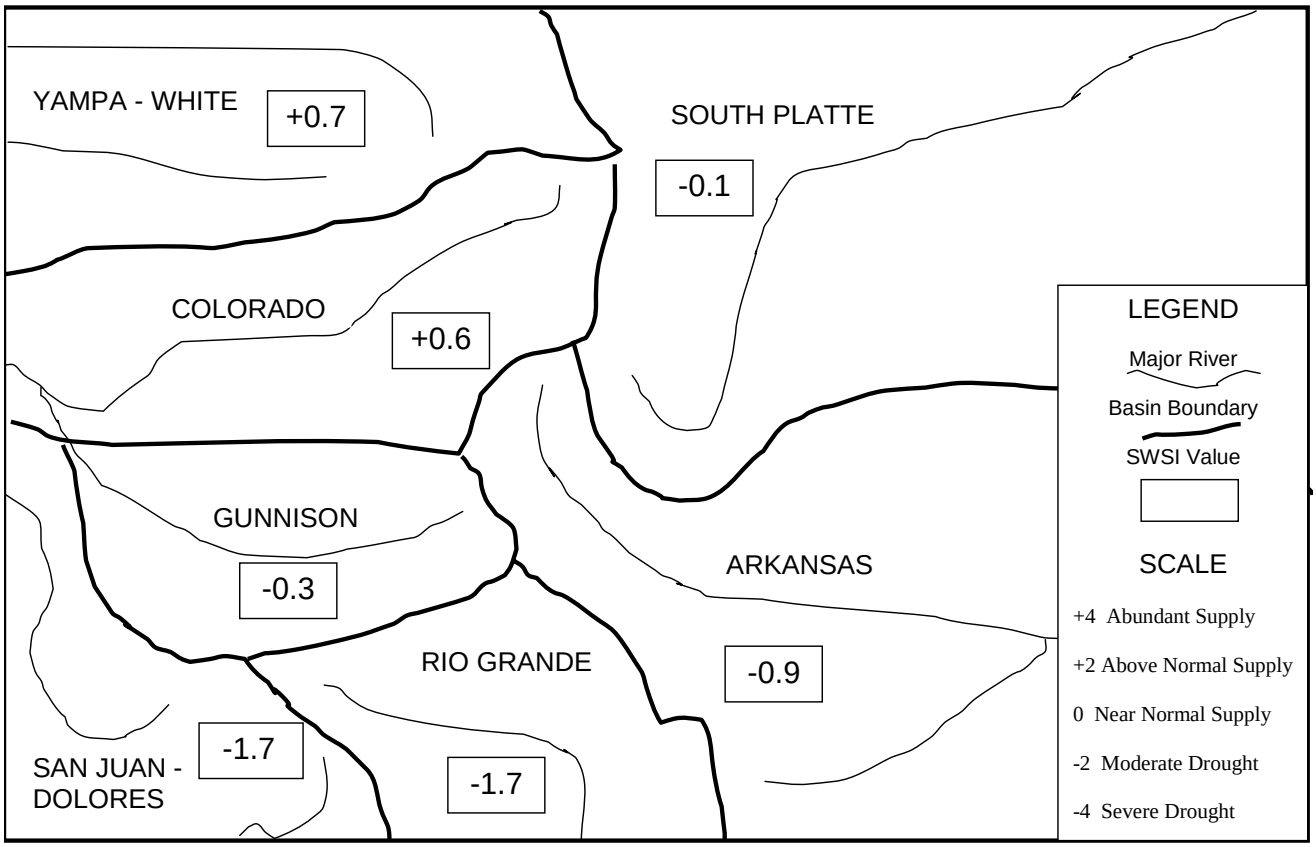
All of the basins show a decline in the SWSI value as compared to last month. A higher than normal rate of snowpack melt during April contributed to the decline in SWSI values. The high value this month is in the Yampa/White, with a value of +0.7. The low values were in the San Juan/Dolores and Rio Grande Basins, with SWSI values of -1.7. These SWSI values correspond with a statewide high snowpack in the Yampa/White (84% of normal) and statewide low snowpacks in the Rio Grande Basin (41%) and San Juan/Dolores Basin (44%). The SWSI values shown below were computed for each of the seven major basins for May 1, 2006, and reflect the conditions during the month of April.

Basin	May 1, 2006 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	- 0.1	- 0.6	+ 0.1
Arkansas	- 0.9	- 1.4	+ 0.5
Rio Grande	- 1.7	- 0.2	- 4.4
Gunnison	- 0.3	- 1.0	- 3.0
Colorado	+ 0.6	- 1.0	+ 0.7
Yampa/White	+ 0.7	- 0.1	+ 3.0
San Juan/Dolores	- 1.7	- 0.4	- 3.2

Scale

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

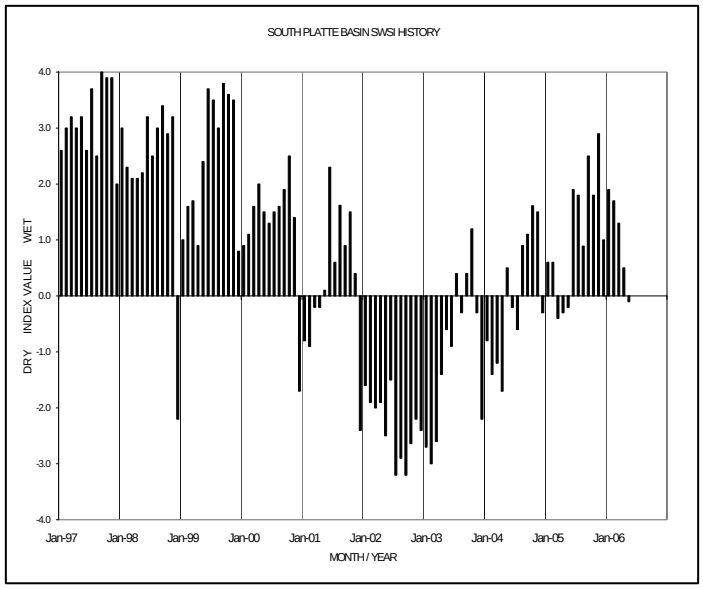
SURFACE WATER SUPPLY INDEX FOR COLORADO



May 1, 2006

Basinwide Conditions Assessment

The SWSI value of -0.1 indicates that for April the basin water supplies were normal. Cumulative storage for the six reservoirs graphed on this page was 107% of normal as of the end of April. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 93% 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 May 1 snowpack is 74% of normal. Flow at the gaging station South Platte River near Kersey was 204 cfs, as compared to the long-term average of 849 cfs. Flow at the Colorado/Nebraska state line averaged 144 cfs.

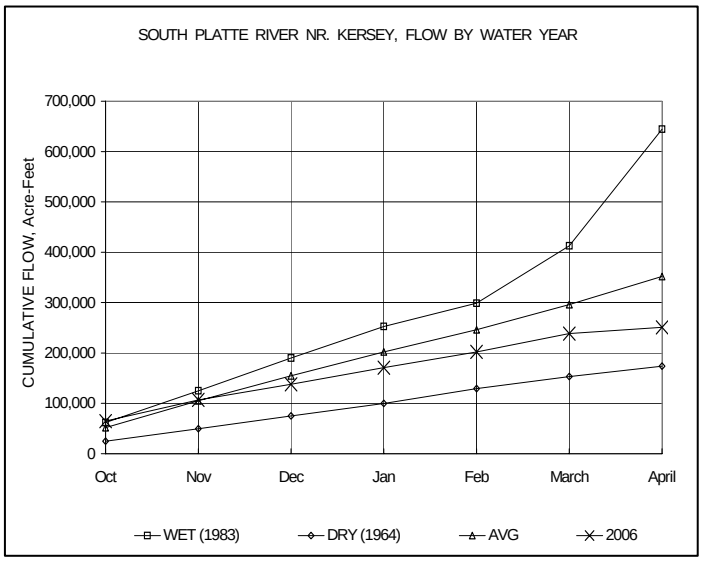


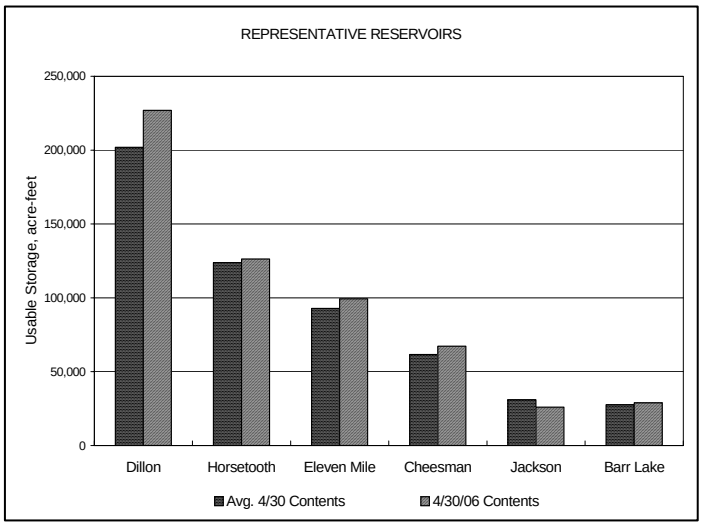
Outlook

April continued as a very dry, warm month. In addition to the snowpack declining from above average to below average, flows at key index gages dropped significantly. For example, the Kersey gage, a key measure of flow conditions averaged just 204 cfs, less than one quarter of the average flow of 849 cfs during May. This reduced flow was due in part to irrigation demands upstream of the gage because of the dry conditions and the lack of any significant precipitation events along the front range. During many years, precipitation in April will meet much of the initial irrigation demand, but not this year. The call on the South Platte above Kersey was 1871 for most of the latter half of the month. This is an extremely senior irrigation call for this time of year. The calls on the tributaries mirrored the senior call on the mainstem of the South Platte only they were even more senior.

Although all the mainstem irrigation reservoirs were able to fill, these reservoirs are already dropping due to seepage that wasn't refilled and due to initial use of the reservoirs. On tributaries, overall reservoir storage levels are not as good as last year due to the low flow conditions.

The dry conditions and declining snowpack are a reason for concern for users on the mainstem of the South Platte. During dry years, the runoff is below average and is sometimes taken up completely within the tributaries of the South Platte as their direct flow rights are generally senior to direct flow rights on the mainstem of the South Platte. Without runoff or precipitation, the call on the mainstem will remain senior stopping users from recharging the aquifer and refilling their reservoirs instead requiring significant use of water from the reservoirs. There are sometimes irrigation supply shortages at the end of the summer when reservoirs are used extensively early in the year. With that said, wet spring time conditions that occur during many years could more than alleviate any present supply concerns.





Basinwide Conditions Assessment

The SWSI value of -0.9 indicates that for April the basin water supplies were slightly below normal. The Natural Resources Conservation Service reports that May 1 snowpack is 66% of normal. Flow at the gaging station Arkansas River near Portland was 301 cfs, as compared to the long-term average of 428 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 72% of normal at the end of April.

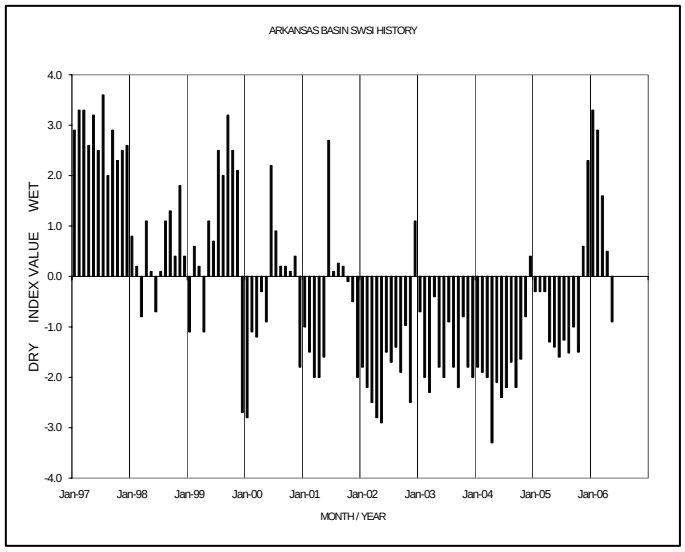
Outlook

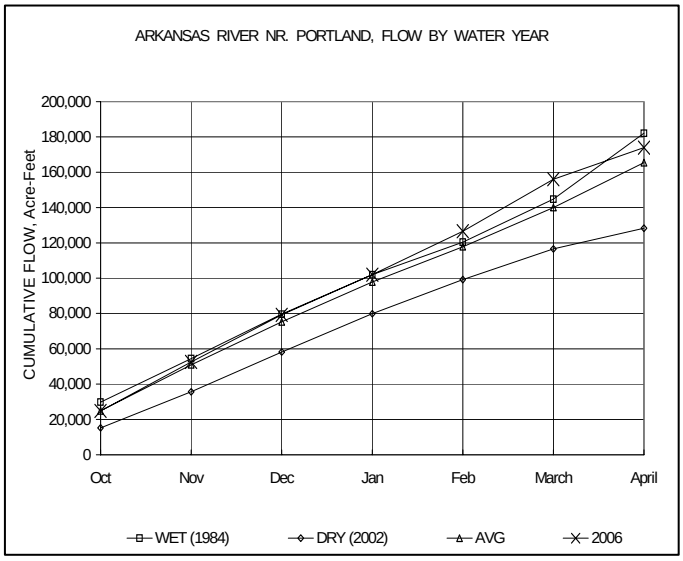
Ditches below John Martin Reservoir did not call for water from the reservoir prior to May 7, 2006 at 08:00 hours, consequently the distribution of conservation storage into accounts per the 1980 Operating Agreement for John Martin Reservoir began on the above date and time. Total storage from November 1, 2005 through April 17, 2006 in John Martin Reservoir was approximately a net of 19,559 acre-feet. This storage volume was substantially below the storage amount in last year.

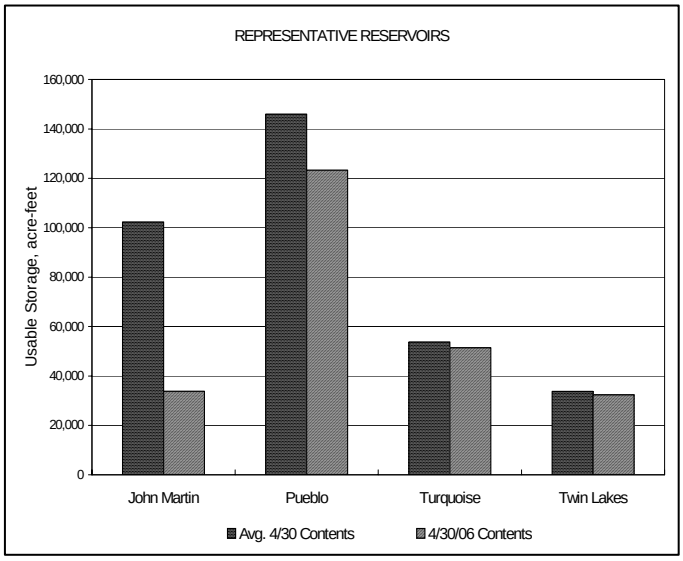
The Arkansas River call started at Catlin Canal's senior water right (12/3/1884) but ended on Fort Lyon Canal's senior water right (4/15/1884). In a sharp contrast from 2005, flows from southern tributaries were very weak in April. Well pumping throughout the Arkansas River Basin from Pueblo to the stateline was above average for the first part of 2006 to compensate for poorer streamflow conditions.

Administrative/Management Concerns

Well associations operating in the Arkansas River Basin are faced with a second year of attempting to deliver additional water to the Offset Account in John Martin Reservoir as a hedge against possible depletions to usable stateline flow at the end of the first ten year accounting period under the Arkansas River Compact (1997-2006). Pueblo Board of Water Works and the Lower Arkansas River Water Conservancy District have again stepped up to help the associations provide water at reasonable cost for this purpose.

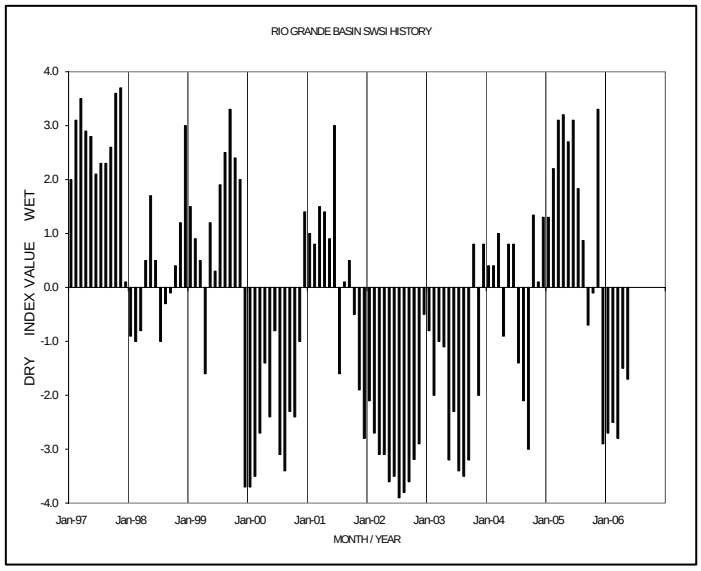






Basinwide Conditions Assessment

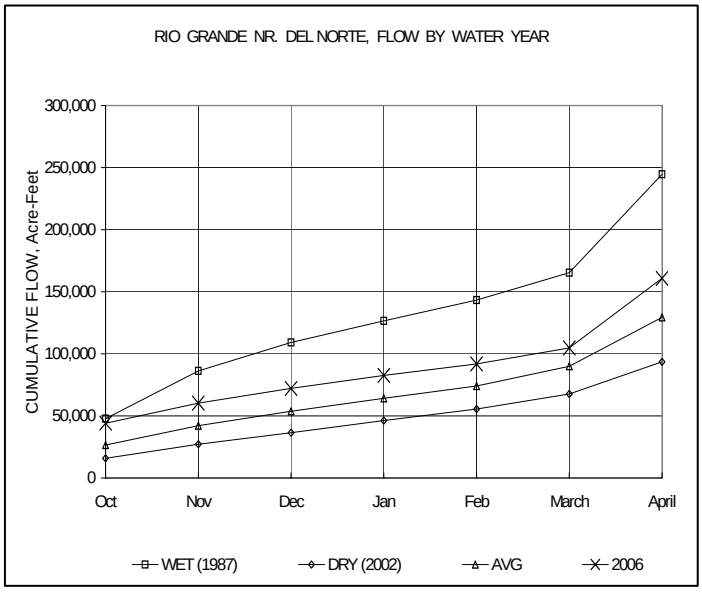
The SWSI value of –1.7 indicates that for April the basin water supplies were below normal. The Natural Resources Conservation Service reports that May 1 snowpack is 41% of normal. Flow at the gaging station Rio Grande near Del Norte averaged 940 cfs (121% of normal). The Conejos River near Mogote had a mean flow of 318 cfs (99% of normal). Flow to the state line was only 35% of normal as upstream diversions for irrigation needs continued. Alamosa received precipitation totaling 0.36 inches during April, 0.18 inches below normal. Most of that precipitation came during a late April snowstorm that brought much needed relief to the parched valley floor and foothills. Temperatures in the San Luis Valley were above normal for the tenth month in a row. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 88% of normal as of the end of April.



Outlook

NRCS forecasts are now predicting runoff to be only 67% of average on the Rio Grande near Del Norte and 68% for the Conejos near Mogote. Other drainages of particular concern are the Alamosa River (66%), Saguache Creek (76%), and the eastern side of the basin where runoff from Sangre de Cristo Range Creeks will be extremely poor at less than 40% of normal.

Based on these forecasts, water users in the basin who are reliant on stream flow for irrigation and stock watering needs should expect extremely limited availability.



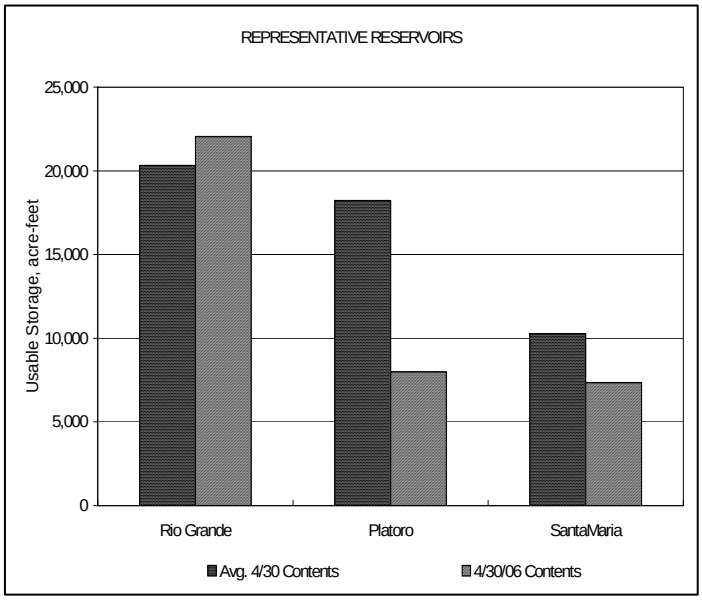
Administrative/Management Concerns

Water rights were curtailed slightly during April on the Rio Grande and the Conejos. It appears that only very low curtailment will be necessary on these drainages to make water available for Rio Grande Compact deliveries in 2006.

With only the most senior water rights able to divert throughout the summer, massive pumping from the valley's aquifers will be necessary to meet demand.

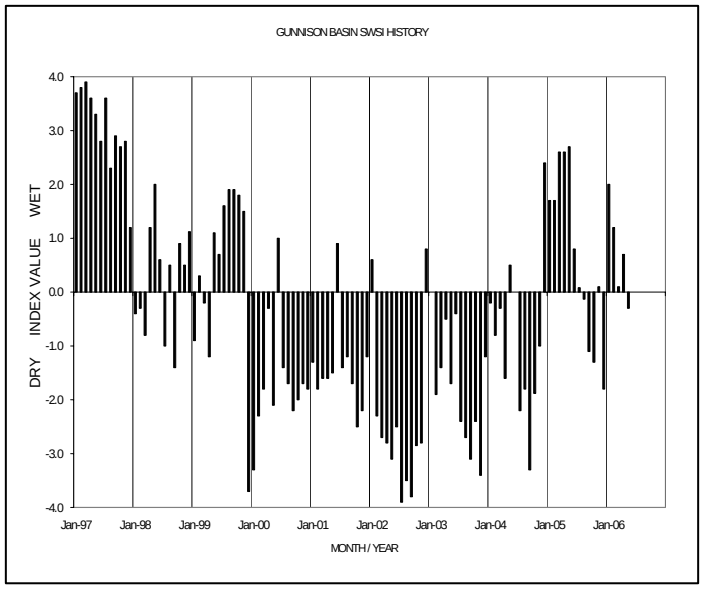
Public Use Impacts

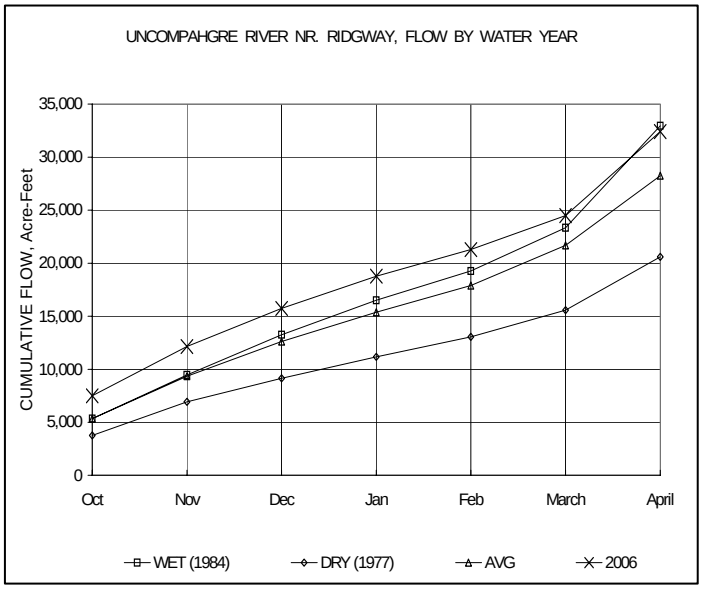
There is a great deal of concern about the existing alfalfa fields in the San Luis Valley. A majority of the existing alfalfa stands were damaged during the dry winter. Thousands of acres must be replanted during May and June. The expected poor stream flow will adversely affect the farming, ranching, and recreational industries in the basin.

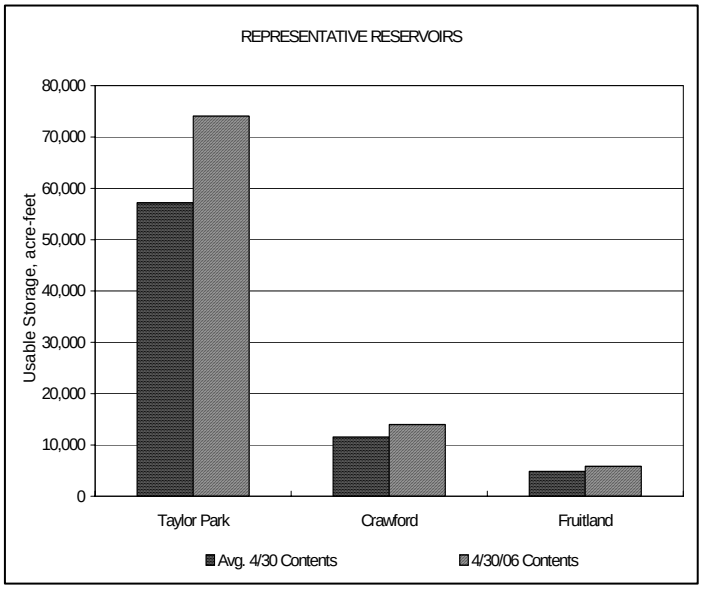


Basinwide Conditions Assessment

The SWSI value of -0.3 indicates that for April the basin water supplies were about normal. The Natural Resources Conservation Service reports that May 1 snowpack is 56% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 133 cfs, as compared to the long-term average of 111 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 111% of normal as of the end of April.

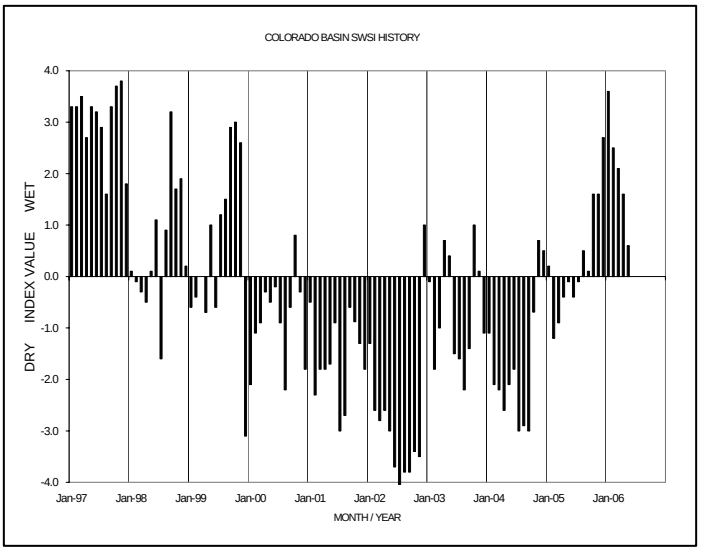






Basinwide Conditions Assessment

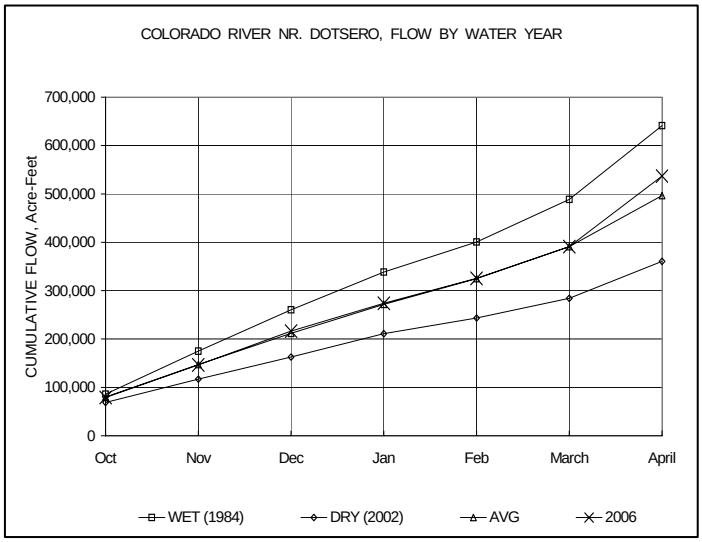
The SWSI value of +0.6 indicates that for April the basin water supplies were slightly above normal. The Natural Resources Conservation Service reports that May 1 snowpack is 78% of normal. Flow at the gaging station Colorado River near Dotsero was 2453 cfs, as compared to the long-term average of 1770 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 128% of normal as of the end of April.

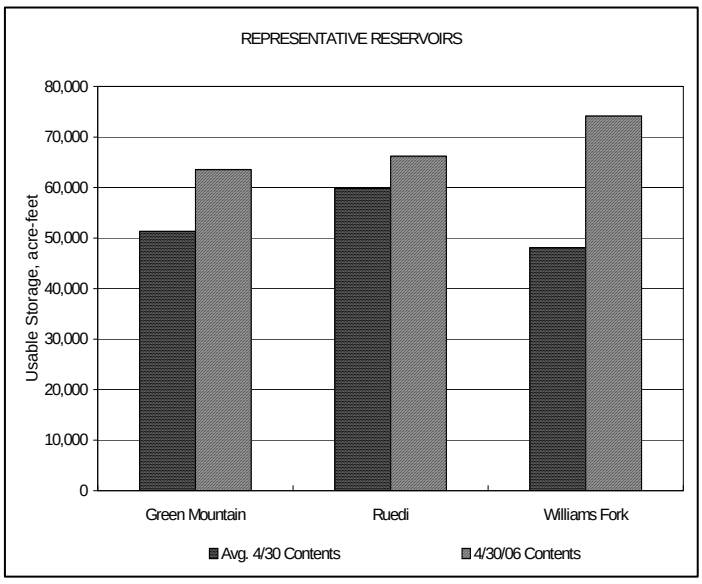


Outlook

April precipitation was below average for the entire Colorado River basin, with some parts of the basin, including the Blue, Fraser and Upper Colorado River basins, receiving only 50-69% of average precipitation. Snow water equivalent for the entire basin declined to 75% of average in early May. In addition, above normal temperatures in April produced streamflows that were above average. As a result, flooding concerns in the basin have been tempered.

The Colorado Basin River Forecast Center (NWS) May 1 volume runoff forecast (April – July) for the entire basin has dropped to about 105% of average, down from 115-125% forecasts in previous months.

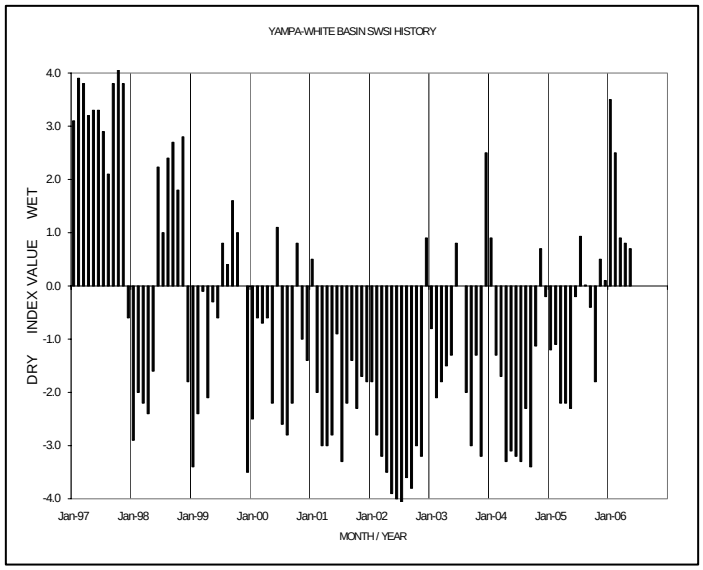


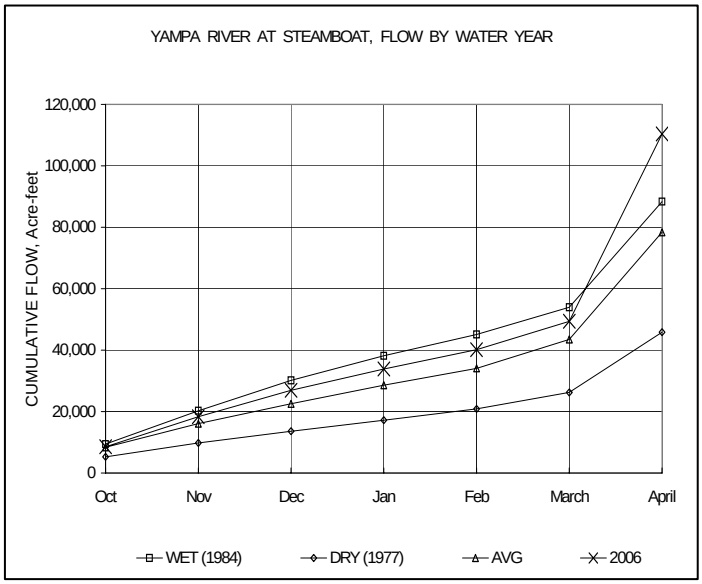


Basinwide Conditions Assessment

The SWSI value of +0.7 indicates that for April the basin water supplies were slightly above normal. Flow at the gaging station Yampa River at Steamboat was 1025 cfs, as compared to the long-term average of 586 cfs. The overall snowpack for the Division was 84% of average.

The snowpack in the basins declined significantly in May as precipitation was only about 70% of average and temperatures were well above normal. Total precipitation for the current water year is 104% of average, down from 114% from the previous month. The overall snowpack for the Division was 84% of average, down from 111% at the end of March. For the individual basins, the snowpack at the end of the month were: 89% of average for the North Platte River Basin, 86% of average for the Yampa River Basin, and 82% of average for the White River Basin. These values are all down significantly from the previous month. The May 1 runoff forecast from the NRCS for the May through July period are 81% of average for the North Platte River at Northgate, 111% of average for the Yampa River near Maybell, 94% of average for the Little Snake River near Dixon, and 103% of average for the White River near Meeker. Except for the White River, these runoff forecasts are lower than for the previous month. River flows continue to run above average on most of the streams and rivers in the basin.





Administrative/Management Concerns

Most of the mid-elevation snow pack has melted and the high elevation snow is beginning to melt earlier than normal. Early runoff would limit the availability of flows for irrigation use later in the summer unless precipitation events occurred on a regular basis. Some tributaries may be subject to administration earlier than normal.

Public Use Impacts

Area streams and rivers are flowing at above normal levels. Caution should be exercised when recreating on or near the water. Elkhead Reservoir continues to remain closed for all recreational activities for the summer of 2006.

Basinwide Conditions Assessment

The SWSI value of –1.7 indicates that for April the basin water supplies were below normal. Flow at the gaging station Animas River near Durango was 918 cfs, as compared to the long-term average of 790 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 116% of normal as of the end of April.

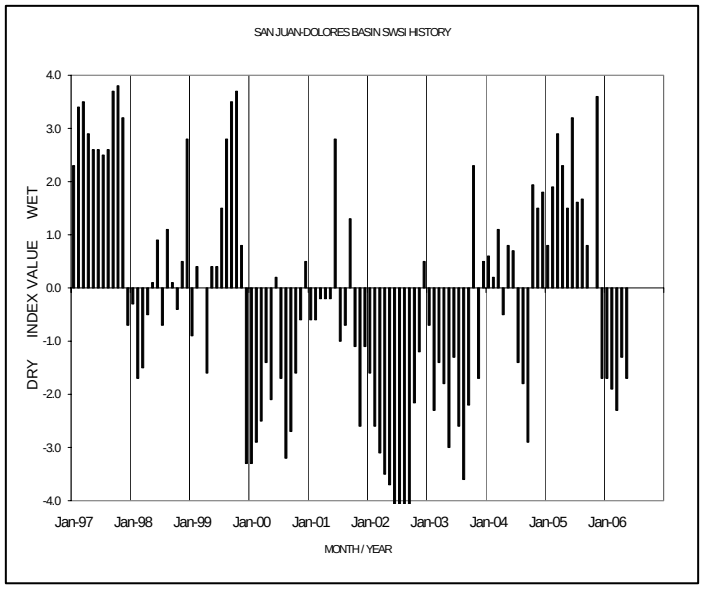
Outlook

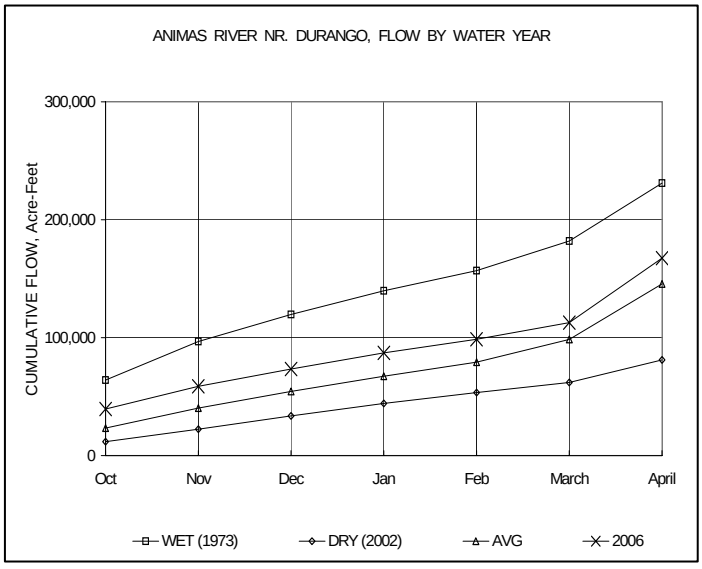
April weather fell back into the weather pattern that occurred from November 2005 to March 2006, drier and warmer than normal. In Durango, 1.20 inches of precipitation were recorded, 81% of average. Of the 1.20" of moisture, 1.13" (94%) fell in the first 7 days of the month. So far this Water Year Durango is at 77% of normal precipitation. As of April 1st the snowpack for the San Juan River Basin was at 70% of normal, as of May 1st the snowpack had decreased to 48% of normal.

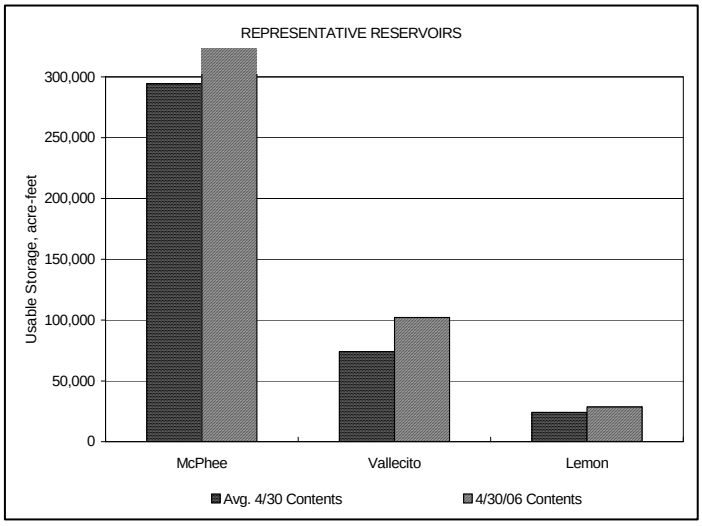
Stream flows in the La Plata and Dolores River basins dropped to below normal for the month due to the lack of low level snowpack and snowmelt. The Animas River was above normal. It peaked at 1620 cfs on April 28th and averaged 918 cfs for the month, which is 109% of normal. The Dolores River averaged just 603 cfs for the month, well below the 752 cfs normal, and the La Plata River at Hesperus averaged only 63.3 cfs for the month compared with it's normal flow of 82.8 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 clear weather kept the high and low temperatures above normal. Overall Durango was 3.8° above its 30-year average high and 3.2° above its 30-year average low.







OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 SHERMAN STREET ROOM 818
DENVER CO 80203