COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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April 2007

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 statewide SWSI values for March range from a high value of 1.2 in the South Platte Basin to a low value of -2.8 in the Yampa/White Basin. Six of the basins (Arkansas, Rio Grande, Gunnison, Colorado, Yampa/White, and San Juan/Dolores) experienced a loss from the previous month's values. One of the basins (South Platte) experienced a gain from the previous month's values.

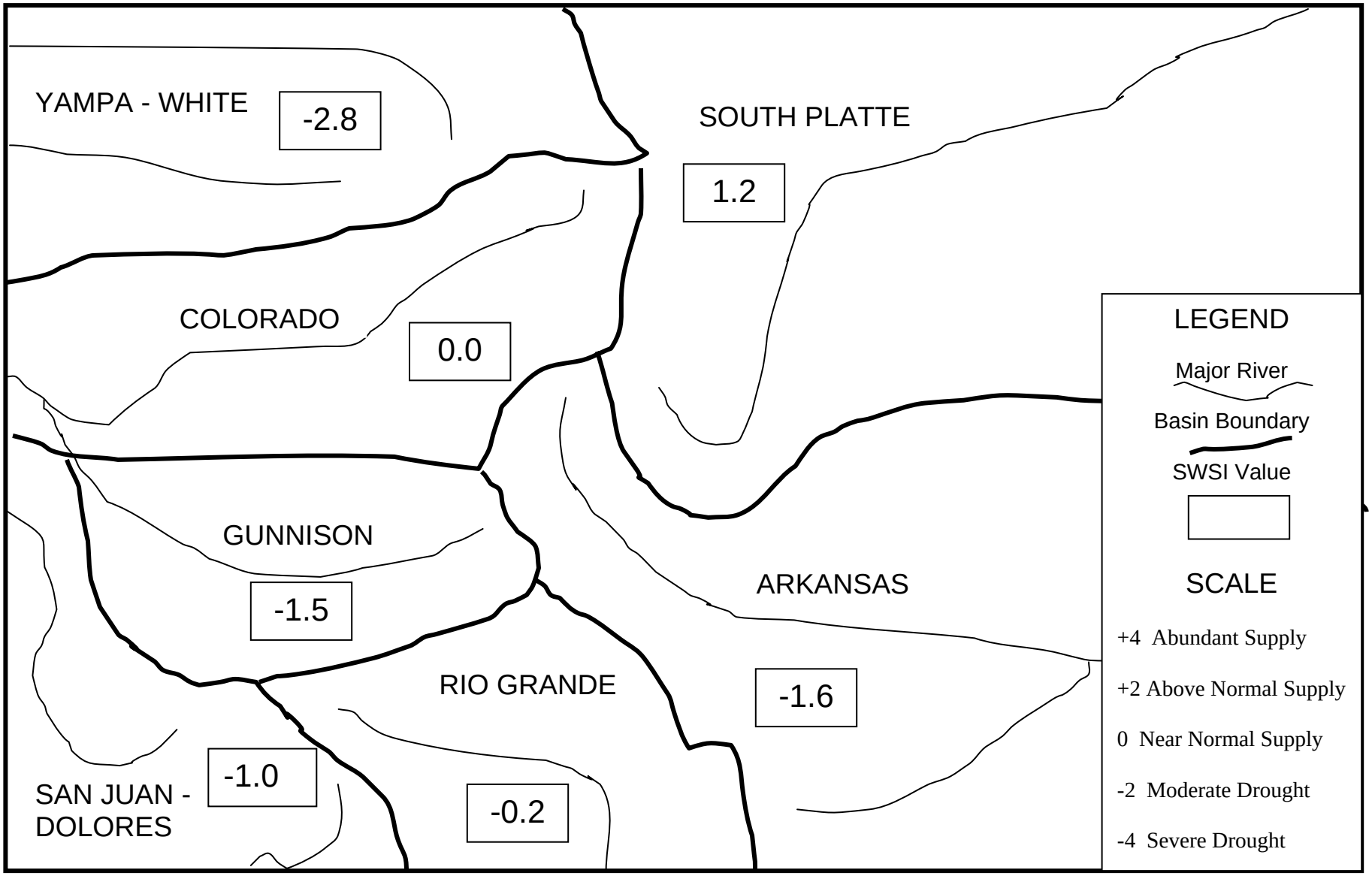
The following SWSI values were computed for each of the seven major basins for April 1, 2007, and reflect the conditions during the month of March.

Basin	April 1, 2007 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	+1.2	+0.3	+0.7
Arkansas	- 1.6	- 0.9	- 2.1
Rio Grande	- 0.2	- 0.7	+1.3
Gunnison	- 1.5	- 0.6	- 2.2
Colorado	0.0	- 0.4	- 1.6
Yampa/White	- 2.8	- 1.5	- 3.6
San Juan/Dolores	- 1.0	- 0.8	+0.3

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



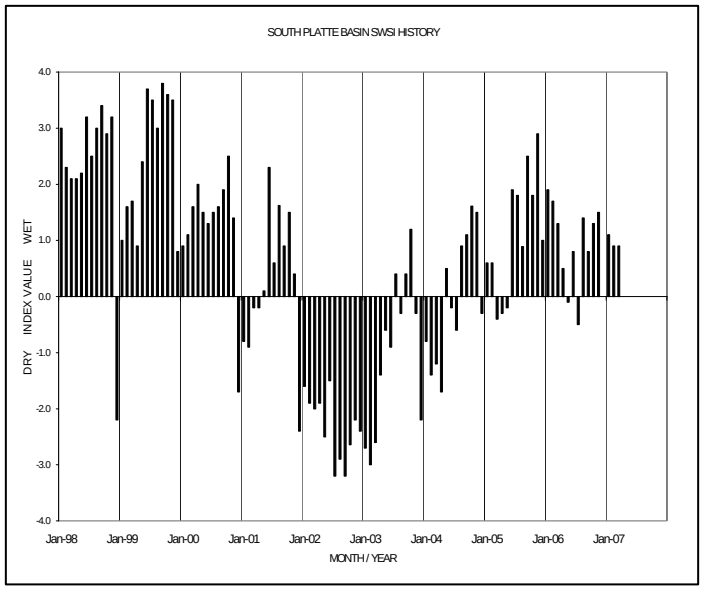
April 1, 2007

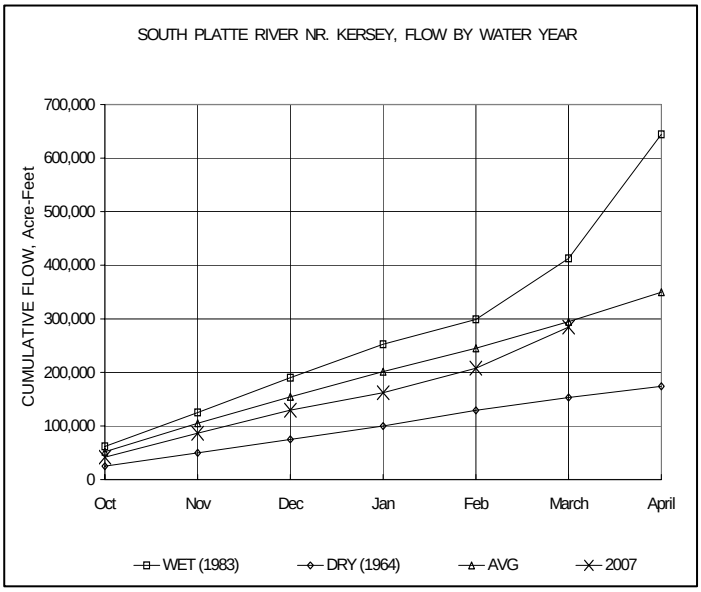
Basinwide Conditions Assessment

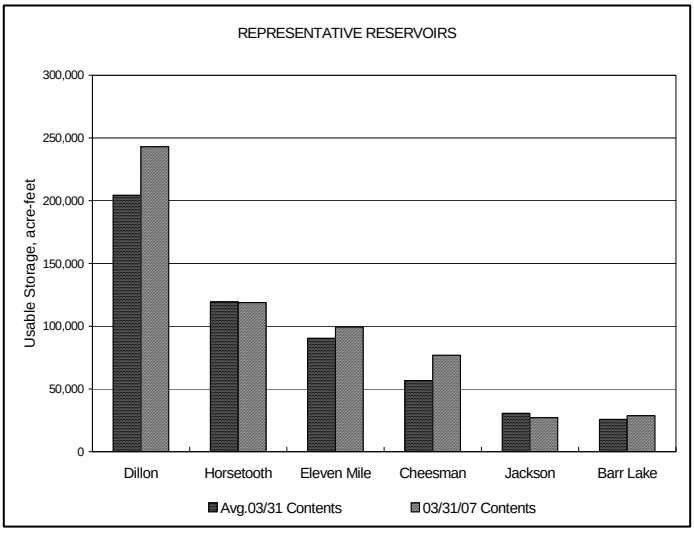
The SWSI value for the month of March was 1.2. Cumulative storage for the six reservoirs graphed on this page was 113% of normal as of the end of March. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 86% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 93% of capacity. The Natural Resources Conservation Service reports that the April 1 snowpack is 100% of normal. Flow at the gaging station South Platte River near Kersey was 1250 cfs, as compared to the long-term average of 685 cfs. Flow at the Colorado/Nebraska state line averaged 60 cfs.

Outlook

Spring rain at lower elevations and runoff from low mountain snow created excellent flow conditions for the South Platte. This allowed significant storage and later recharge during the month of March, especially toward the end of month. The higher flow allowed users far behind in attempting to fill their reservoirs to complete their fill or make excellent headway to achieve that goal. At the end of March, it appeared all plains reservoirs on the South Platte would certainly fill, except perhaps North Sterling. This is surprising considering how low reservoir storage was going into this water year on November 1, 2006. If conditions remain favorable the first week or two into April, then even North Sterling will fill and significant additional recharge may be available. The recharge is needed to provide augmentation supplies to wells. Likewise, significant storage was made on tributaries to the South Platte. Storage sources to the Denver area remain full.







Basinwide Conditions Assessment

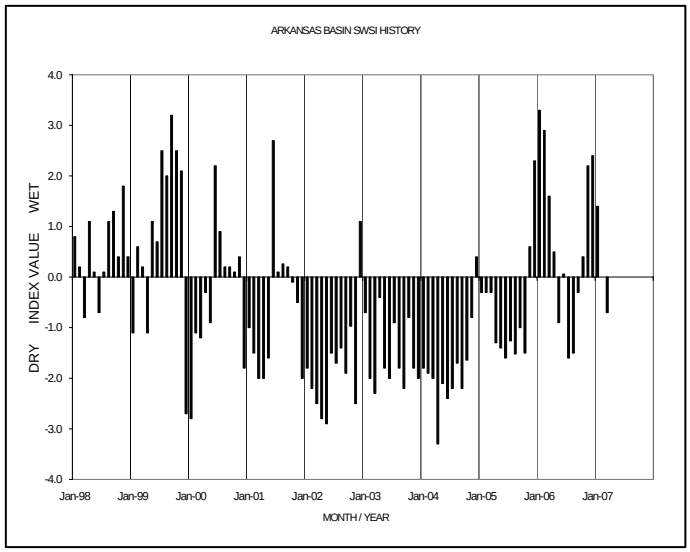
The SWSI value for the month of March was -1.6. The Natural Resources Conservation Service reports that the April 1 snowpack is 94% of normal. Flow at the gaging station Arkansas River near Portland was 547 cfs, as compared to the long-term average of 364 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 92% of normal as of the end of March.

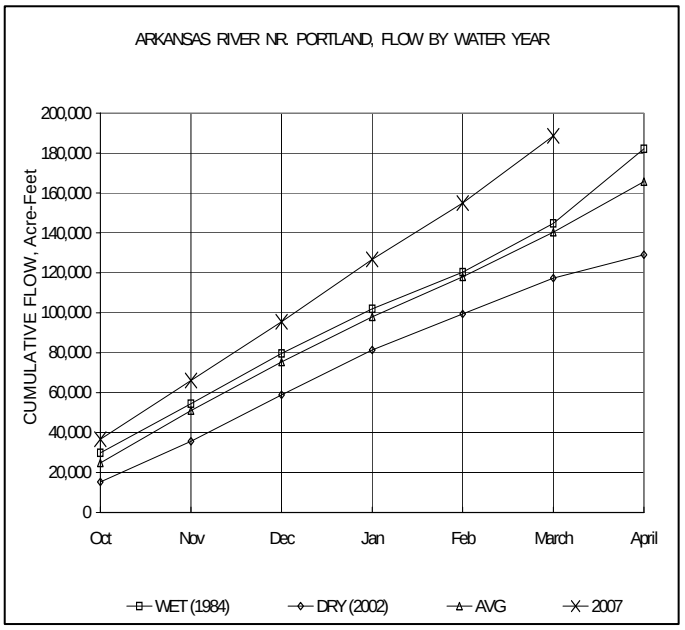
Outlook

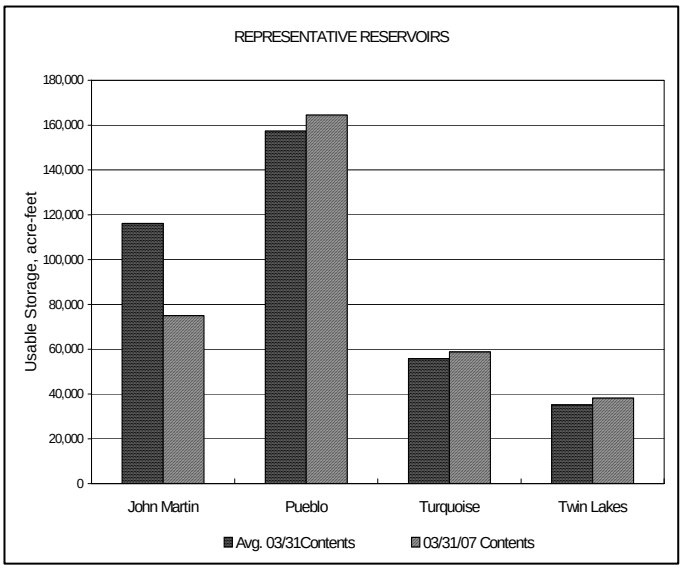
Total distributed reservoir storage following the Pueblo Winter Water Program was 149,577 acre-feet, including 52,939 acre-feet in Pueblo Reservoir, 72,296 acre-feet in off-channel reservoirs, and 21,461 acre-feet in John Martin Reservoir (after distribution to accounts). Storage in John Martin Reservoir through March 31, 2007 in conservation storage totaled 42,629 acre-feet, which was considerably better than the 17,925 acre-feet stored at the end of March in 2006.

Administrative/Management Concerns

Low elevation snowpack from earlier in the winter delayed field preparation and caused the river call to trend fairly junior just after the end of the Pueblo Winter Water Storage Program on March 15th.







Basinwide Conditions Assessment

The SWSI value for the month of March was -0.2. The Natural Resources Conservation Service reports that the April 1 snowpack is 76% of normal.

Flow at the gaging station Rio Grande near Del Norte averaged 498 cfs (184% of normal). The Conejos River near Mogote had a mean flow of 163 cfs (207% of normal). Flow at the state line was 200% of normal. Throughout the upper Rio Grande basin, streamflow during March was well above normal due to the abnormally high temperatures.

Weather conditions in the San Luis Valley were much warmer than normal during March. For several days, the maximum daytime temperatures reached the 70-degree mark. Precipitation at Alamosa totaled 1.05 inches for the month, which was 0.59 inch above normal. This above average monthly precipitation was caused largely by a rain/snow event on March 24 that brought 0.88 inch of moisture to Alamosa.

A recent study of SNOTEL sites in the upper Rio Grande basin showed the existing snowpack began to decline about March 10, a month before the normal peak of the snowpack. Fortunately, a snowstorm and colder temperatures towards the end of March slowed the melt-out and returned streamflows back down towards more normal levels.

Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 102% of normal as of the end of March.

Outlook

Current NRCS streamflow forecasts predict the April through September runoff to be 78% of average on the Rio Grande near Del Norte and 75% of average for the Conejos near Mogote. Other streams in the basin are forecast as low as 48% of normal for the San Antonio River at Ortiz, but most fall in the low-70 to low-90 percent of normal range.

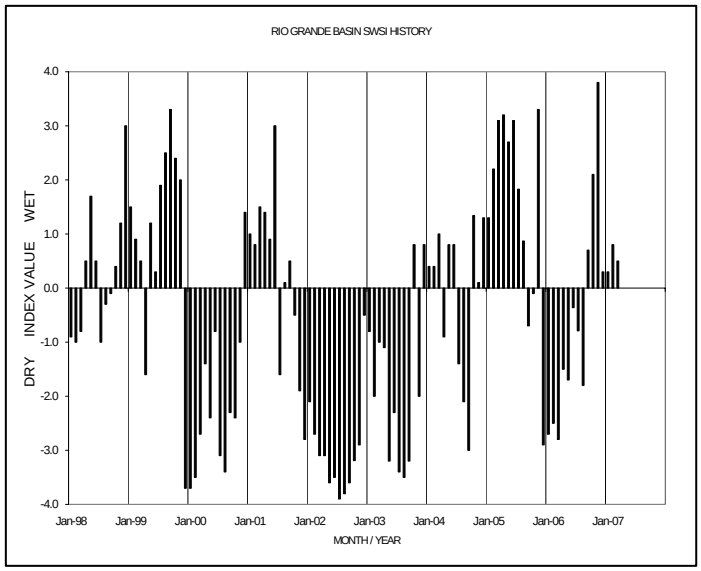
Soil moisture conditions are good in most locations around the basin due to the late March precipitation.

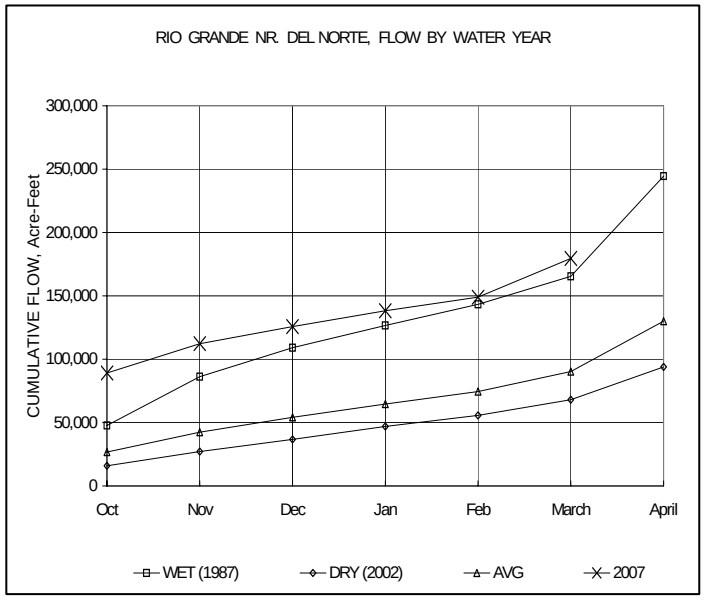
Administrative/Management Concerns

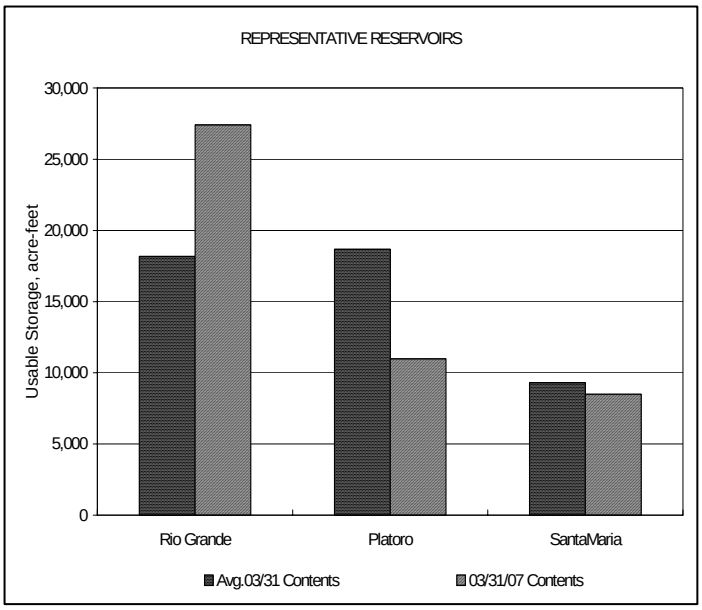
Based on the current forecast, there will be curtailments of water rights on the Rio Grande of approximately 5% and for the Conejos River system approximately 7% this irrigation season.

Public Use Impacts

Diversions from the Rio Grande and Conejos River systems for irrigation purposes began on April 4.



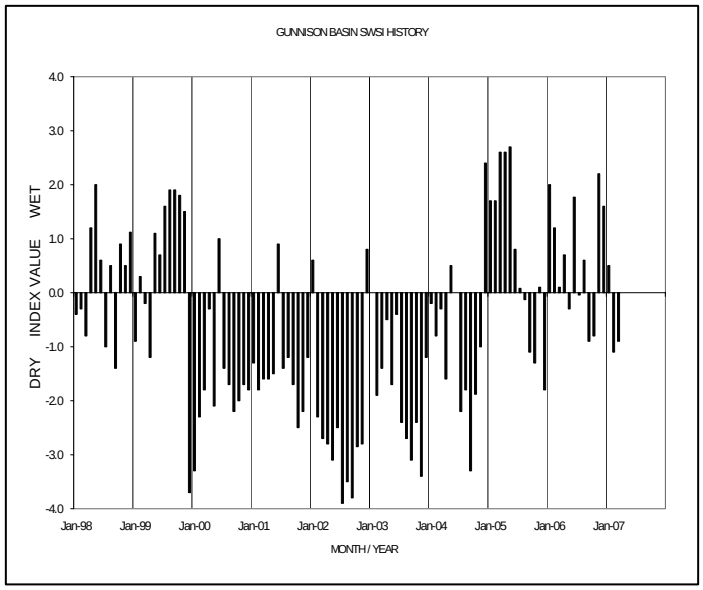




Basinwide Conditions Assessment

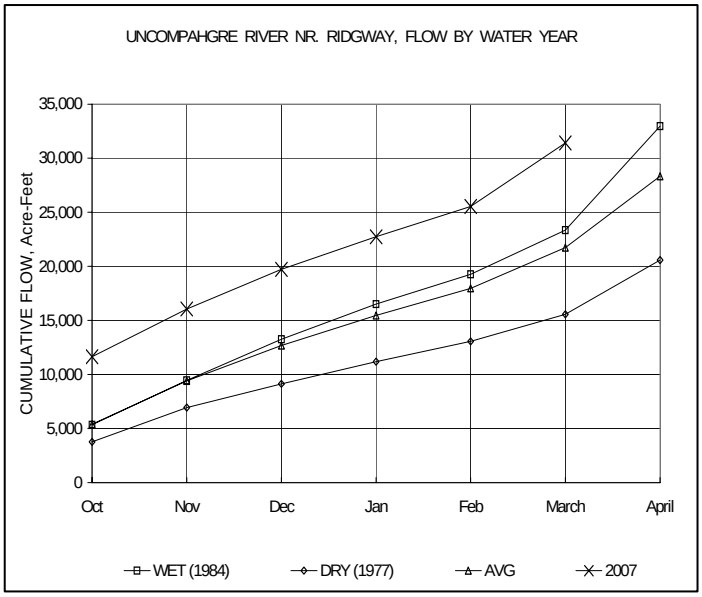
The SWSI value for the month of March was -1.5. The Natural Resources Conservation Service reports that the April 1 snowpack is 73% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 96 cfs, as compared to the long-term average of 61 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 138% of normal as of the end of March.

Current reservoir storage levels in the basin are slightly above average. Current streamflow levels are well above normal throughout the Gunnison basin due to well above normal temperatures. The April 1, 2007 streamflow forecasts issued by the Natural Resources Conservation Service (NRCS) for runoff in the Gunnison River basin look grim. Lack of snowfall during the middle two weeks of March resulted in further reduction of forecasted runoff for the April 1 through July 31 period. At this time, no sub-basins of the Gunnison are forecasted to experience an average runoff this year. The highest is the Lake Fork of the Gunnison at 79%, down from 95% a month ago. The lowest is the Tomichi Creek basin at only 50% of normal. Most of the major rivers in the Gunnison basin are expected to produce 60 to 70% of normal runoff.



Outlook

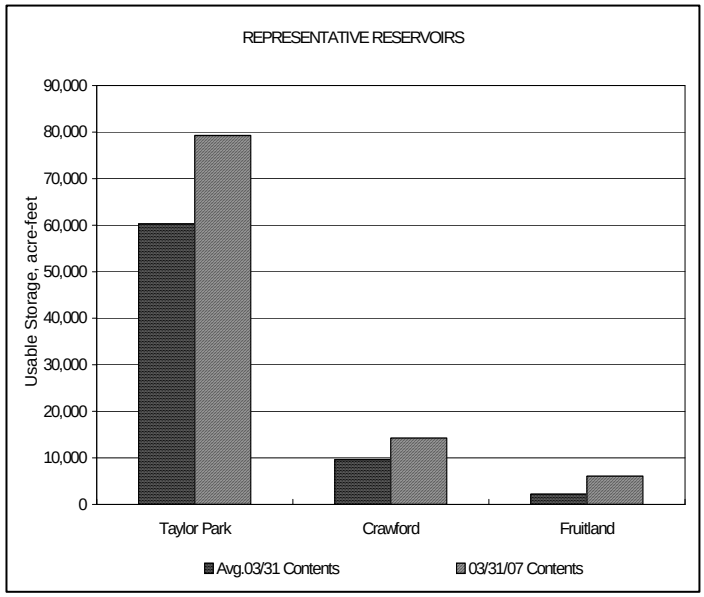
The runoff is expected to peak early and be of much shorter duration this year. Reservoir storage releases will be necessary to meet irrigation demands. Many creeks will go "on call" earlier than normal.



Administrative/Management Concerns

The lack of precipitation during March has resulted in further administrative changes. The Gunnison tunnel began taking water on April 2 at about 200 cfs. This diversion was increased to 400 cfs on April 5. The releases from Crystal Reservoir were not increased correspondingly. In an effort to prepare for the low runoff, streamflow below the Gunnison Tunnel diversion getting into the Black Canyon will be temporarily reduced. The release from Ridgway Reservoir was increased from 125 cfs to 200 cfs on April 2.

Some moisture and cooler temperatures during April would benefit the basin by slowing the snowmelt. The early runoff of the low and intermediate elevation snowpack went largely unused. There aren't any reservoirs to collect this runoff on the mainstem of the Gunnison River below Crystal Dam and the North Fork's high runoff in March went to the state line.



Public Use Impacts

Lack of snowfall during March was very detrimental to winter sports activities. Warm and dry weather has lead to early diversions and calls for irrigation water as users anticipate a lower than normal water supply.

Basinwide Conditions Assessment

The SWSI value for the month of March was 0.0. The Natural Resources Conservation Service reports that the April 1 snowpack is 85% of normal. Flow at the gaging station Colorado River near Dotsero was 1275 cfs, as compared to the long-term average of 1079 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 131% of normal as of the end of March.

Outlook

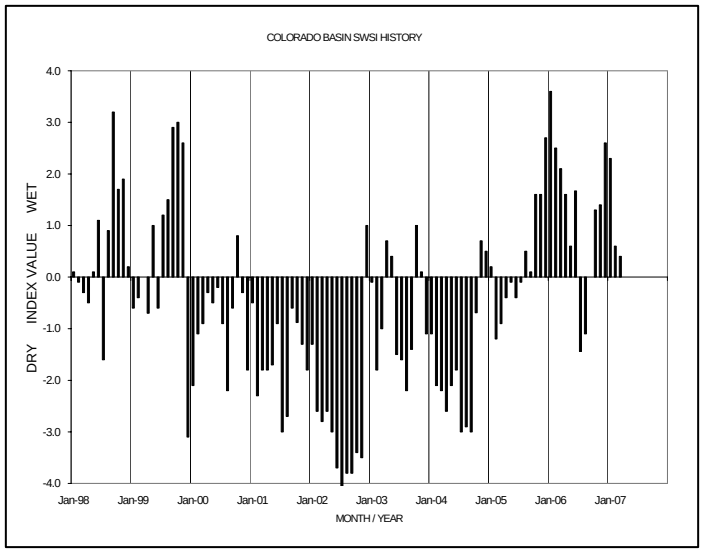
Runoff started early this spring with many streams experiencing above average flows. Hunter and Plateau Creeks had record daily maximum flows in early April to warrant concerns from residents. Most flows are higher than usual for this time of year. Concern has been voiced that with the early runoff, recreation users in late May might be disappointed with river flows.

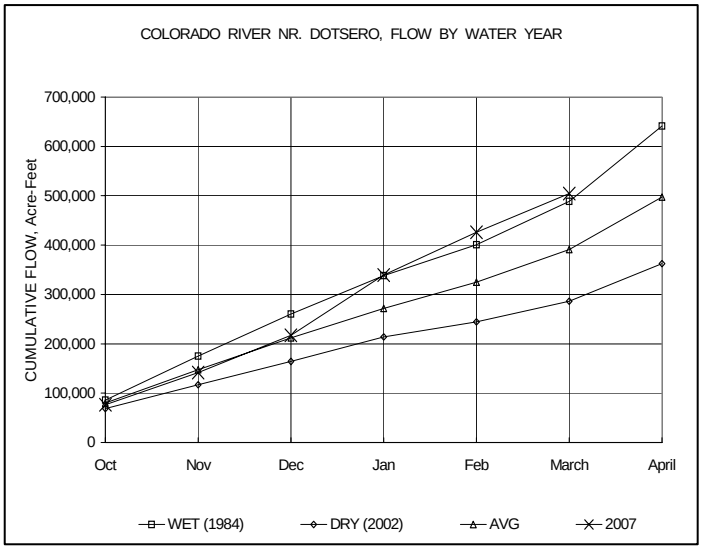
Administrative/Management Concerns

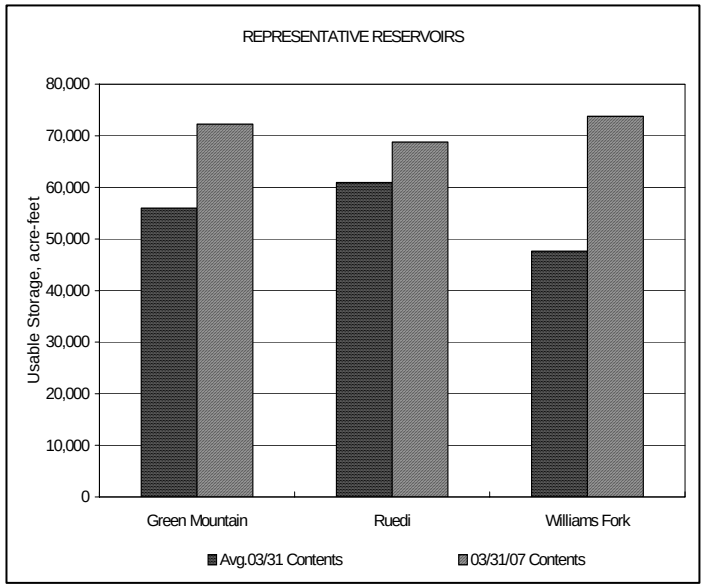
Colorado Springs Utilities, owner of Upper Blue Reservoir located in the head waters of the Blue River in Summit County, plans to install a CARPI liner on the face of the dam this summer. The asphalt lining on the dam is about 10-years old and has been slipping and the seep from the dam has been increasing. Although they will not be able to store any water in Upper Blue this year, diversions through the tunnel will still occur.

Public Use Impacts

The 50 percentile peak flow forecast for the Cameo gage is expected to be 12,500 cfs.



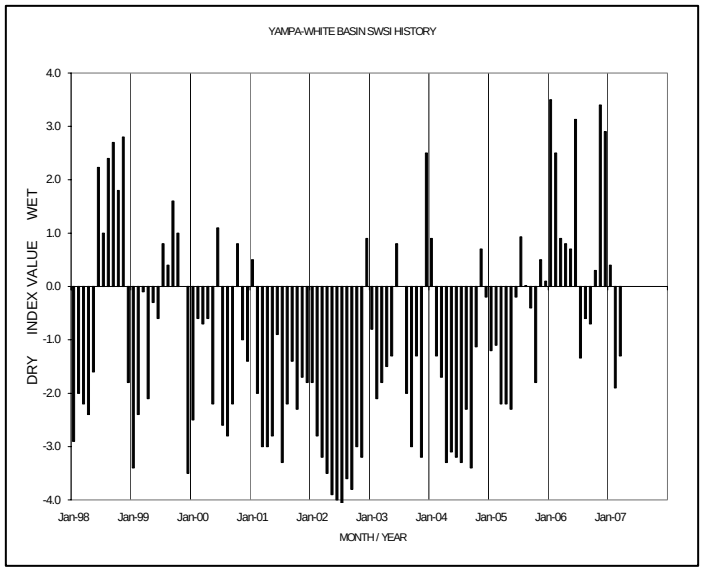




Basinwide Conditions Assessment

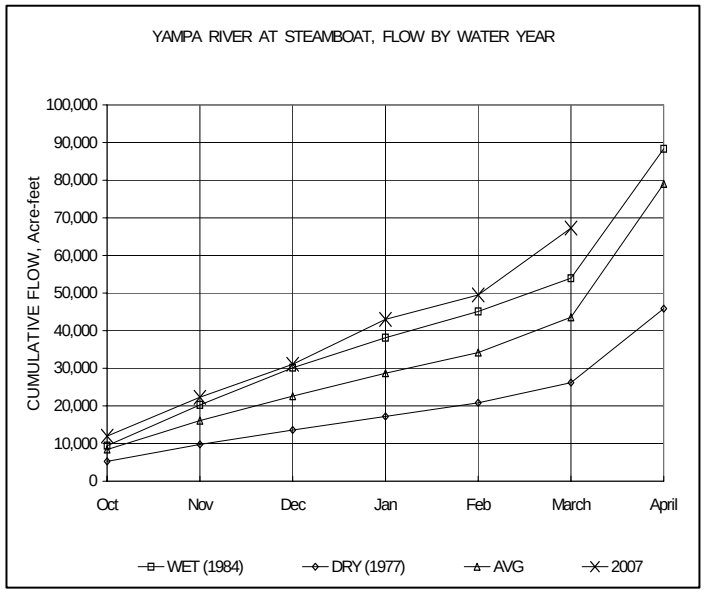
The SWSI value for the month of March was -2.8. Flow at the gaging station Yampa River at Steamboat was 289 cfs, as compared to the long-term average of 153 cfs.

March precipitation was below average for the basin. The snow water equivalent as of March 31, 2007 for the Yampa and White River Basins was 70% of average and for the Laramie and North Platte River Basins it was 81% of average. For the individual basins the snowpacks at the end of the month were: 80% of average for the North Platte River Basin, 69% of average for the Yampa River Basin and 69% of average for the White River Basin. The latest runoff forecasts from the NRCS for the April through July period are 74% of average for the North Platte River at Northgate, 58% of average for the Yampa River near Maybell, 51% of average for the Little Snake River near Lily and 60% of average for the White River near Meeker.



Outlook

Fish Creek Reservoir storage level at the end of March was reported at approximately 80% of capacity. Yamcolo Reservoir storage level at the end of March was approximately 99% of capacity. Officials continued to store as much inflow as possible at Elkhead Creek Reservoir, which was storing approximately 13,500 acre-feet (the original reservoir capacity) at the end of March. The enlarged capacity of the reservoir is approximately 24,900 acre-feet. Water stored in Fish Creek Reservoir is used primarily for municipal purposes, Yamcolo Reservoir for irrigation purposes, and Elkhead Creek Reservoir for municipal, industrial, recreation, and in the future, fish recovery releases.



Public Use Impacts

Area reservoirs are beginning to thaw. Elkhead Reservoir remains closed to all recreational activities.

Basinwide Conditions Assessment

The SWSI value for the month of March was -1.0. The Natural Resources Conservation Service reports that the April 1 snowpack is 61% of normal. Flows at the Animas River at Durango averaged 525 cfs (175% of normal) with a maximum average daily peak flow of 895 cfs on Mar. 19th. The Dolores River at Dolores averaged 368 cfs (276% of normal) with a maximum average daily peak flow of 784 cfs on Mar. 19th. The La Plata River at Hesperus averaged 34 cfs (215% of normal) with a maximum average daily peak flow of 84 cfs on Mar. 18th.

Precipitation in Durango was 0.90 inches for March which is below the 30-year average of 1.77 inches. Precipitation to date in Durango, for the water year, is 8.92 inches which is below the average of 9.96 inches. Temperatures were well above normal for the month which was the reason for the above normal flows in the rivers. Durango was 6.4° above its 30-year average high and 3.9° above its 30-year average low.

At the end of the month Vallecito Reservoir contained 85,990 acre-feet compared to its normal contents of 55,055 acre-feet (156% of normal). The storage in Vallecito Reservoir is the highest amount stored for an end of March period based on 66 years of record. McPhee Reservoir was up to 309,788 acre-feet compared to its normal contents of 268,921 acre-feet (115% of normal), while Lemon Reservoir was up to 36,290 acre-feet as compared to its normal content of 20,021 acre-feet (181% of normal). The storage in Lemon Reservoir is the highest amount stored for an end of March period based on 44 years of record.

Outlook

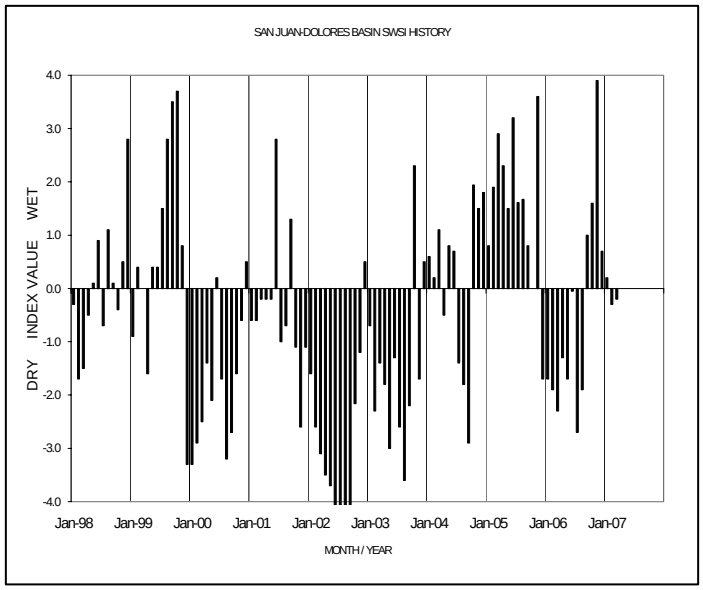
Higher than normal temperatures has taken its toll on snow pack but has increased river flows to higher than normal flows. Average flows on the Dolores River were almost three times normal flow. Current snow pack for the basin is now well below average. Snow-water-equivalent at the end of March for the entire basin is at 61% with the Cascade sub-basin reporting zero percent snow-water-equivalent. Reservoir storage remains the bright spot in the basin with above average storage. With the heaviest snow month behind us and a larger snow melt than accumulation in March, we shift our hope to spring and summer rains to sustain river flows.

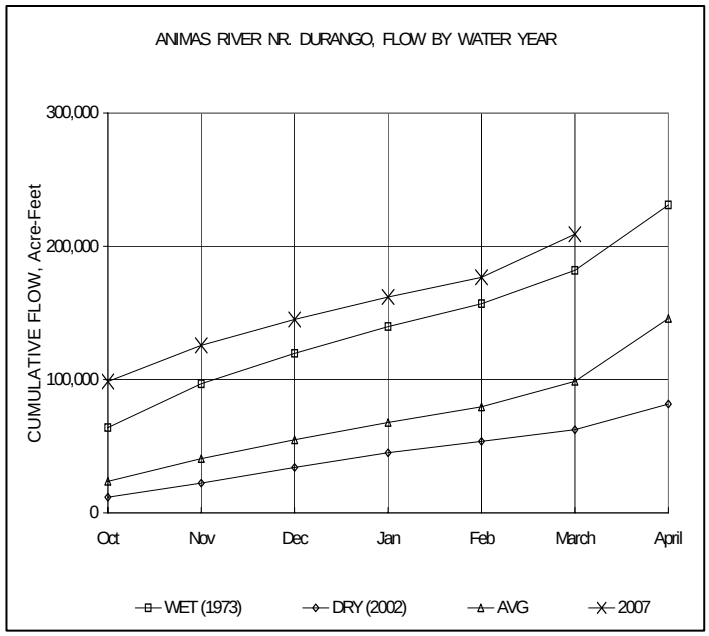
Administrative/Management Concerns

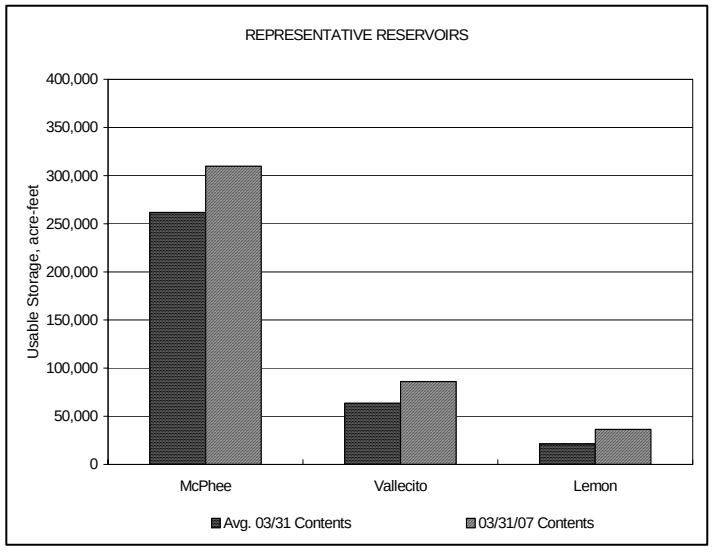
The compact period on the La Plata between Colorado and New Mexico began on February 15th. The La Plata remained off compact call until March 28th.

Public Use Impacts

Warm spring like weather most of March brought some kayaking to the Animas River as DWR staff did observe some kayaking beginning mid-March.







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