COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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January 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 December range from a high value of 2.3 in the Colorado Basin to a low value of 0.2 in the San Juan/Dolores Basin. Five of the basins (Arkansas, 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. One of the basins (Rio Grande) remained unchanged from the previous month's values.

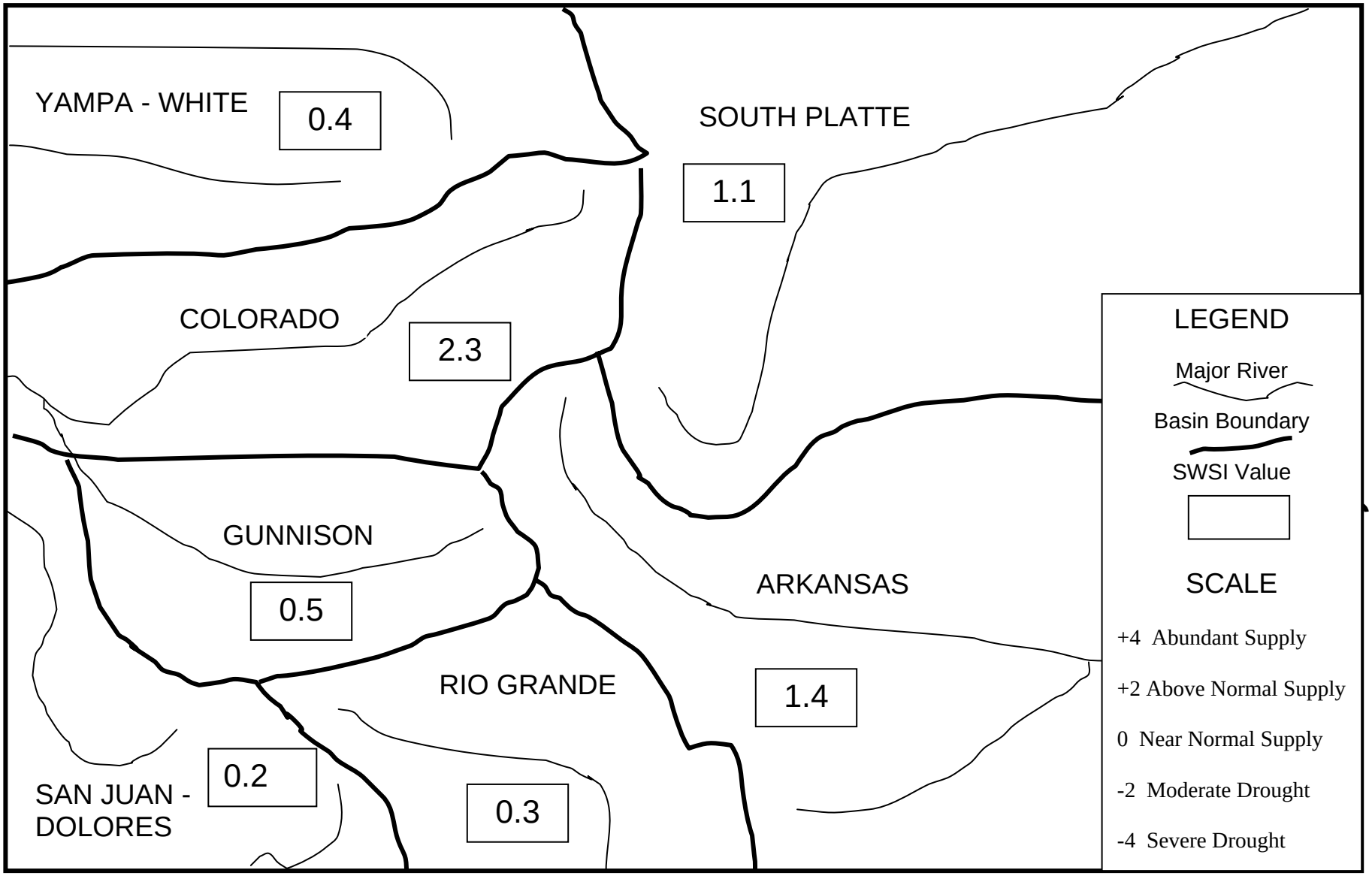
The following SWSI values were computed for each of the seven major basins for January 1, 2007, and reflect the conditions during the month of December.

Basin	January 1, 2007 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	+1.1	+1.1	- 0.8
Arkansas	+1.4	- 1.0	- 1.9
Rio Grande	+0.3	+0.0	+3.0
Gunnison	+0.5	- 1.1	- 1.5
Colorado	+2.3	- 0.3	- 1.3
Yampa/White	+0.4	- 2.5	- 3.1
San Juan/Dolores	+0.2	- 0.5	+1.9

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



January 1, 2006

Basinwide Conditions Assessment

The SWSI value for the month of December was 1.1. Cumulative storage for the six reservoirs graphed on this page was 109% of normal as of the end of December. The Natural Resources Conservation Service reports that the January 1 snowpack is 130% of normal. Flow at the gaging station South Platte River near Kersey was 704 cfs, as compared to the long-term average of 684 cfs. Flow at the Colorado/Nebraska state line averaged 165 cfs.

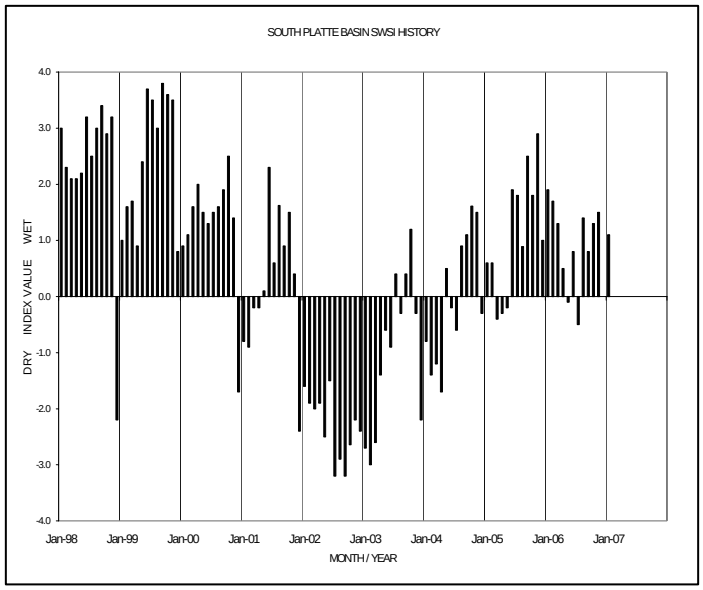
Outlook

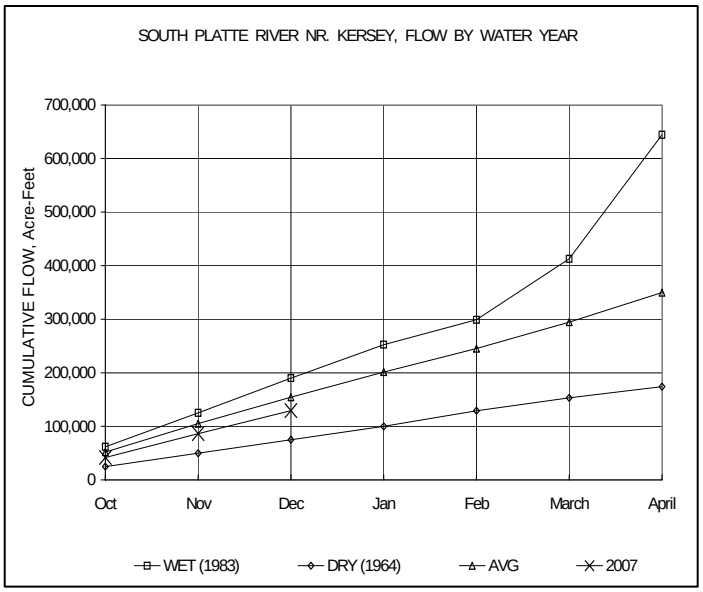
Two widespread extremely heavy storm systems hit the South Platte basin during December. These storms will provide significant relief in to the dry conditions during 2006. Specifically, these storms should help with the winter wheat crop along with increasing base flow in the river and anticipated runoff in the spring. Though the storms will obviously help, it is difficult to determine how much influence this will have on overall supply next spring. Wet conditions in March and April are still necessary to assure that all plains irrigation reservoirs are able to fill as these reservoirs were completely empty at the end of last irrigation season.

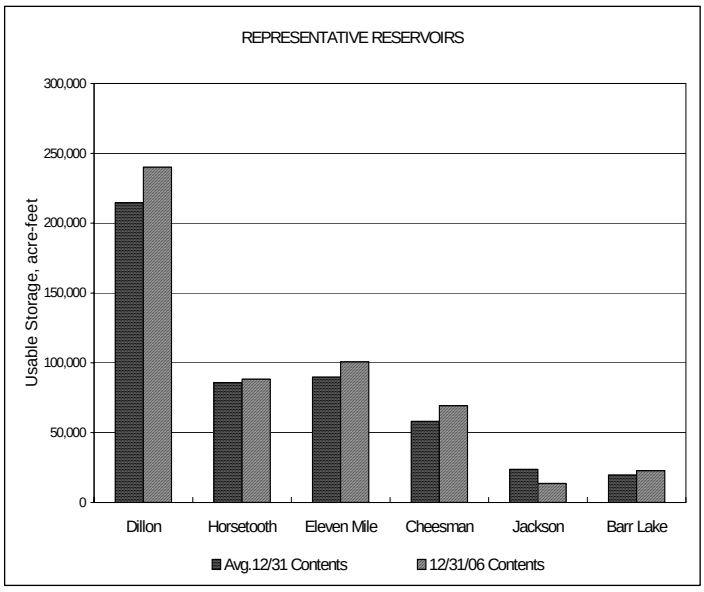
For now, the storms have not produced significantly more flow in the South Platte due to the cold conditions. The cold weather and snow actually slowed down the filling of reservoirs due to ice conditions and filling of inlet ditches with snow. The snow also created an immediate negative impact on agriculture in areas where cattle were stranded without food.

Administrative/Management Concerns

Supplies for all the major municipal suppliers continue to be in good to excellent shape especially with the snow conditions in December.

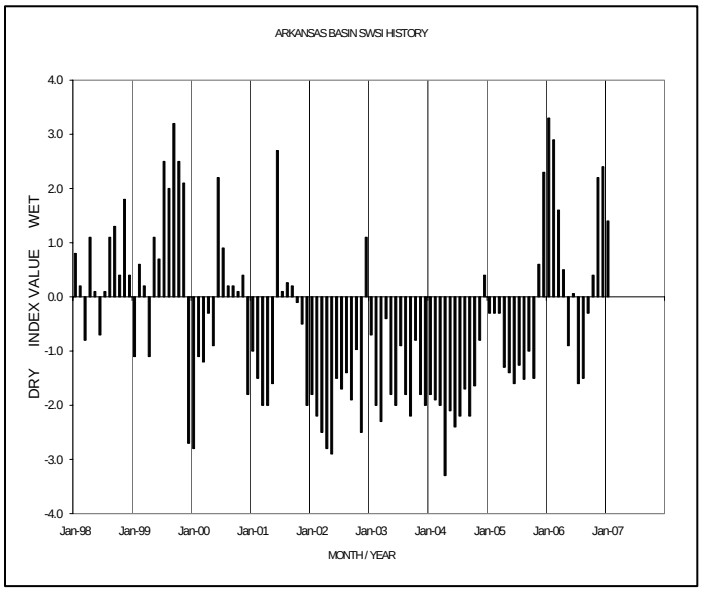






Basinwide Conditions Assessment

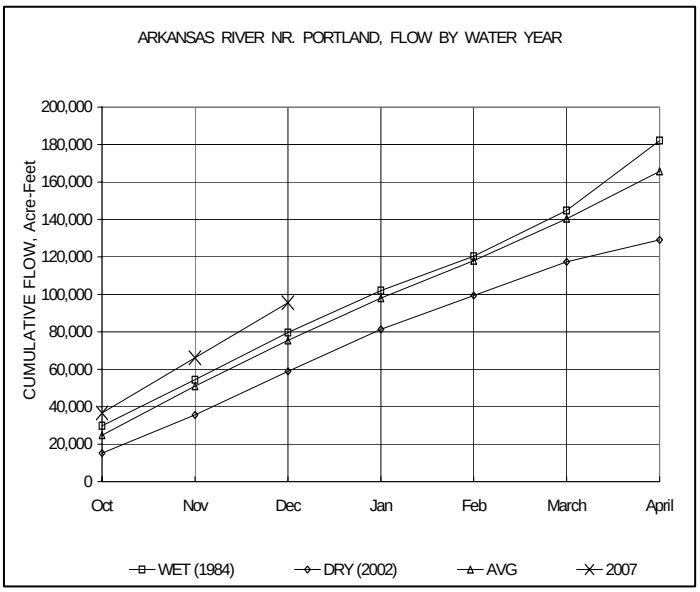
The SWSI value for the month of December was 1.4. The Natural Resources Conservation Service reports that the January 1 snowpack is 118% of normal. Flow at the gaging station Arkansas River near Portland was 479 cfs, as compared to the long-term average of 397 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 82% of normal as of the end of December.



Outlook

The Pueblo Winter Water system grand total was 59,121 acre-feet at the end of December representing an increase from last year's storage to date, which was 50,464 acre-feet. The previous five-year average for this period is 43,168 acre-feet and the average since 1990 for this period has been 62,608 acre-feet.

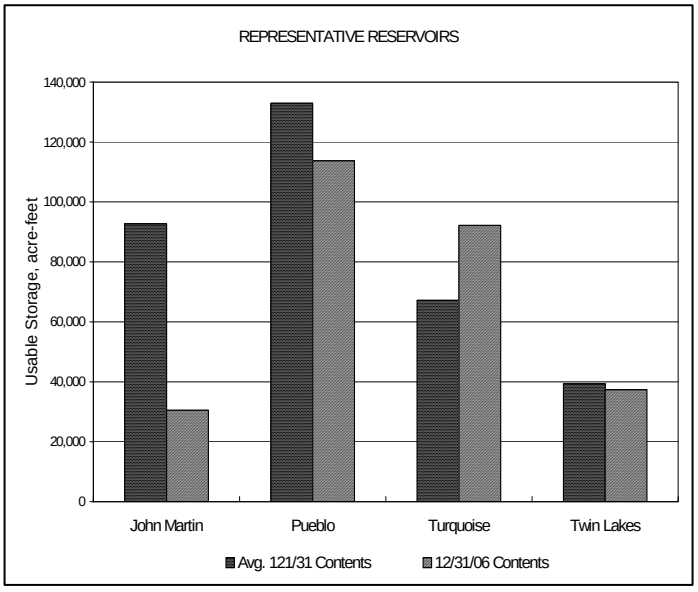
Conservation storage in John Martin Reservoir has been considerably better than last year. Storage since November 1st has been 16,022 acre-feet while storage a year ago for the same time period was 7,283 acre-feet.



Administrative/Management Concerns

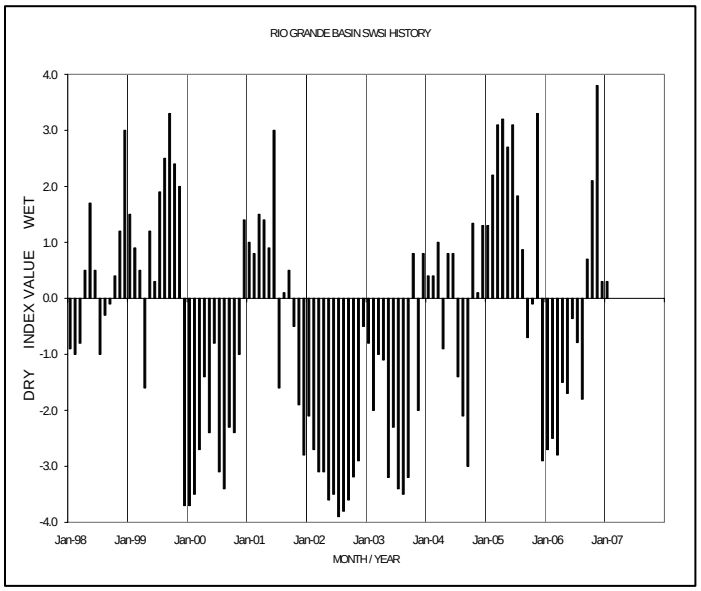
The Arkansas River Compact Administration meeting was held in Lamar on December 11th and 12th. A number of reservoir accounting issues for John Martin Reservoir were resolved due to the efforts of a Special Engineering Committee appointed by ARCA in 2005. The Special Engineering Committee will continue work in 2007 to try to resolve the remaining disputed issues on reservoir accounting.

Large snows in December in the Arkansas Basin and specifically across the eastern plains caused some short-term problems for ranchers and farmers as well as some administration challenges for entities diverting water to storage in off-channel reservoirs. The eastern plains counties in the Arkansas Basin had not experienced snowstorms of this magnitude since 1997. The additional soil moisture benefits will likely be felt at the start of the 2007 growing season.



Basinwide Conditions Assessment

The SWSI value for the month of December was 0.3. The Natural Resources Conservation Service reports that the January 1 snowpack is 94% of normal. Flow at the gaging station Rio Grande near Del Norte averaged 219 cfs (106% of normal) during December. The Conejos River near Mogote had a mean flow of 50 cfs (97% of normal) during the month. Alamosa received 0.62 inches of precipitation during December, 0.29 inches above normal. Alamosa's total precipitation of 8.43 inches during 2006 was 1.18 inches above the annual average. For the ninth consecutive year, the average annual temperature was well above normal. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 84% of normal as of the end of December.



Outlook

As 2006 came to a close, snowpack at index sites in the San Juan and Sangre de Cristo mountains was in the range of 75% to 120% of normal.

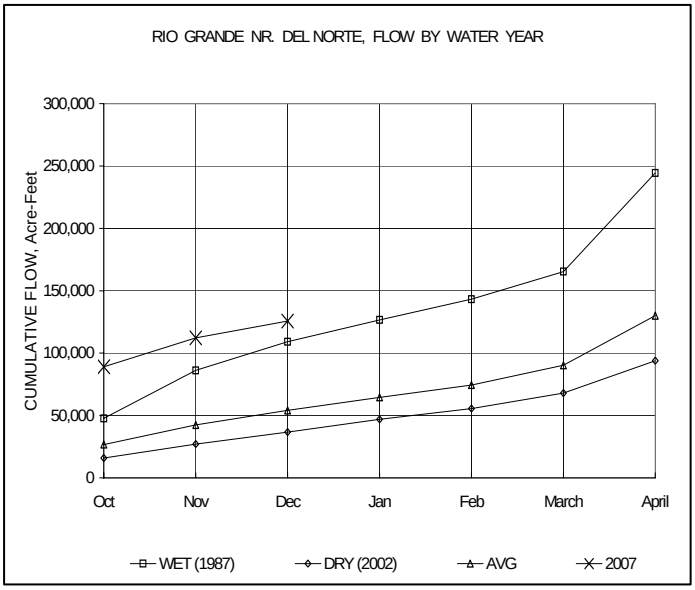
Administrative/Management Concerns

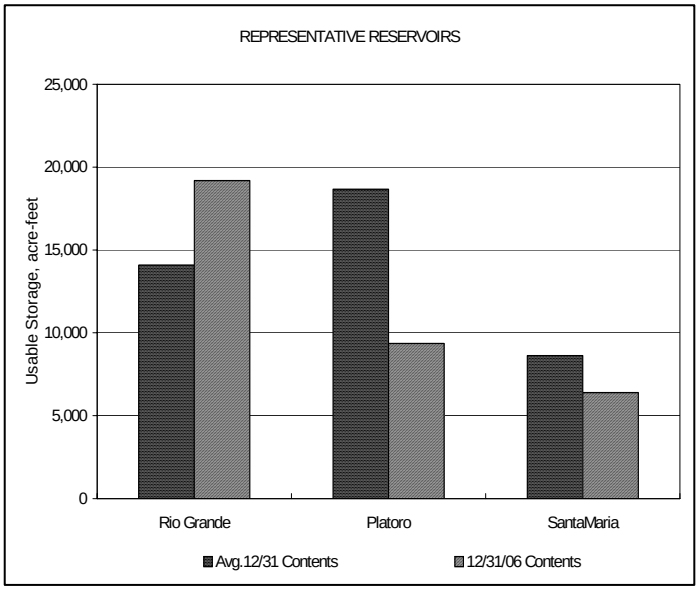
Pursuant to the provisions of the Rio Grande Compact, Colorado delivered approximately 227,000 acre-feet to New Mexico and Texas during 2006. A small delivery credit will be available for 2007. Closed Basin Project delivery to the Rio Grande totaled about 14,200 acre-feet.

2006 saw near average runoff during April and May in the upper Rio Grande basin as the snowpack melted out early. June and most of July had extremely poor runoff, around 45% of normal. Abundant rains came to the basin in July and didn't seem to let up until November. As a result, streamflow was well above normal levels. In fact, runoff in the Rio Grande near Del Norte during October exceeded the runoff during June! Very unusual. In the end, the Rio Grande near Del Norte had annual flows of approximately 90% of normal, a far cry more than forecasted. The Conejos near Mogote annual volume was 80% of normal.

After a 6-week trial in early 2006, a decision was handed down near the end of the year in Case No. 04CW24, Rules for the Confined Aquifer. The decision upheld the position of the State Engineer that the confined aquifer of the San Luis Valley is over-appropriated. An appeal is expected.

The passage of Case No. 05CW12, "Rules Governing the Measurement of Ground Water Diversions Located in Water Division No. 3" during 2006 requires all non-exempt wells to be have meters in place by March 1, 2007. Owners of such wells can request a variance or declare the structure inactive.





Public Use Impacts

In summary, 2006 started out with pitiful snowfall in January, February and the early part of March. Excellent snowfall during the rest of March brightened the runoff forecast. But poor snowfall during April set forecasted flows down to 25% to 75% of normal. Hardest hit were the Sangre de Cristo drainages. Abundant rainfall from July through October radically increased area streamflow but damaged crops and harvests throughout the San Luis Valley.

Basinwide Conditions Assessment

The SWSI value for the month of December was 0.5. The Natural Resources Conservation Service reports that the January 1 snowpack is 93% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 59.4 cfs, as compared to the long-term average of 53.2 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 124% of normal as of the end of December.

Outlook

The precipitation for the month of December, which was mostly snow for the entire basin, was about the normal amount.

Administrative/Management Concerns

The storms that have pounded the Front Range have not hit this basin to the same extent. Certainly the mountains have been getting snow, but not as much as the southern mountains.

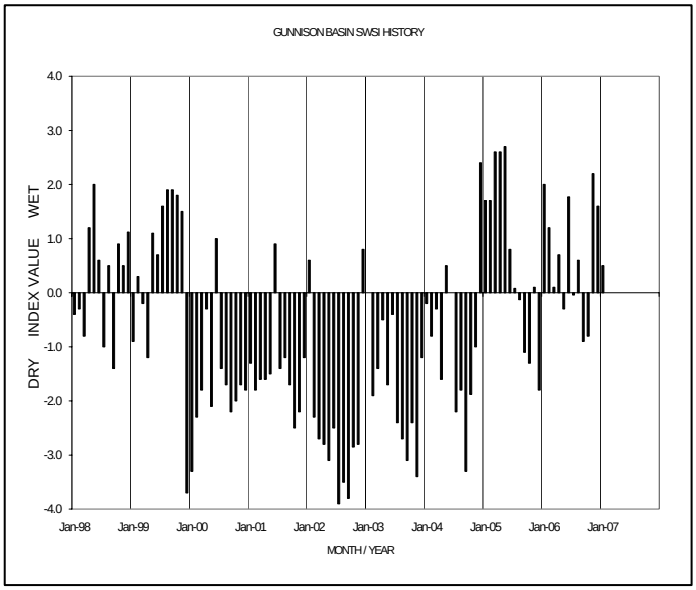
Usually the January numbers at the SNOTEL sites are the first indication of the spring runoff potential. Over the entire basin, the snowpack in the Gunnison basin is 92 percent of average. The amounts at the sites are rather sporadic, with no clear indication that any drainage is better than the other.

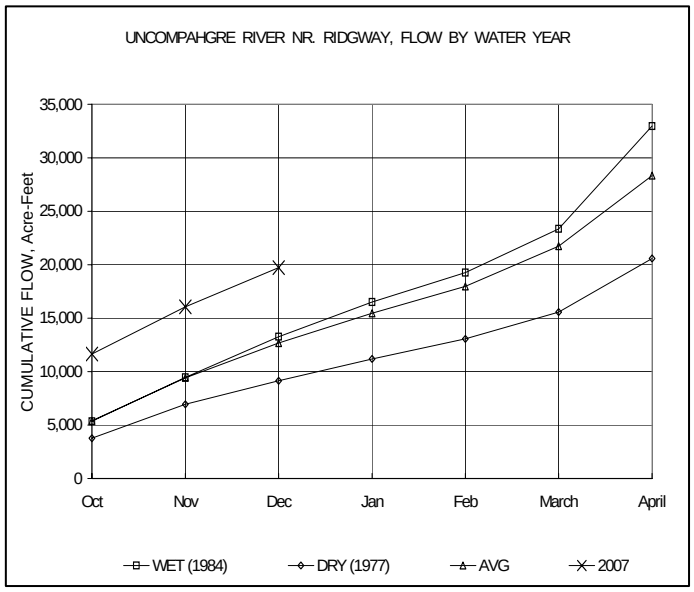
The abundant rain in the fall created high soil moisture profiles that will increase the spring runoff next spring. The springs and rivers are still running stronger that normal

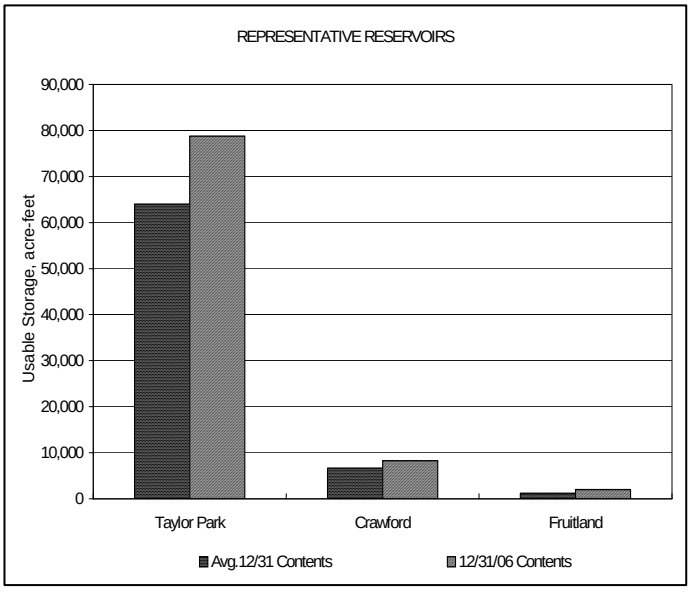
Ridgway reservoir is still within 3 feet of spilling and the winter releases are double the normal amount. The releases from the Aspinall Unit are still above 1600 cfs to meet the reduced storage target at Blue Mesa Reservoir. This January 1 target was established to avoid river icing conditions on the Gunnison River just above the reservoir and up into the town of Gunnison.

Public Use Impacts

The winter time public recreation, such as skiing and snowmobiling has been good, and should get better as snow accumulates.

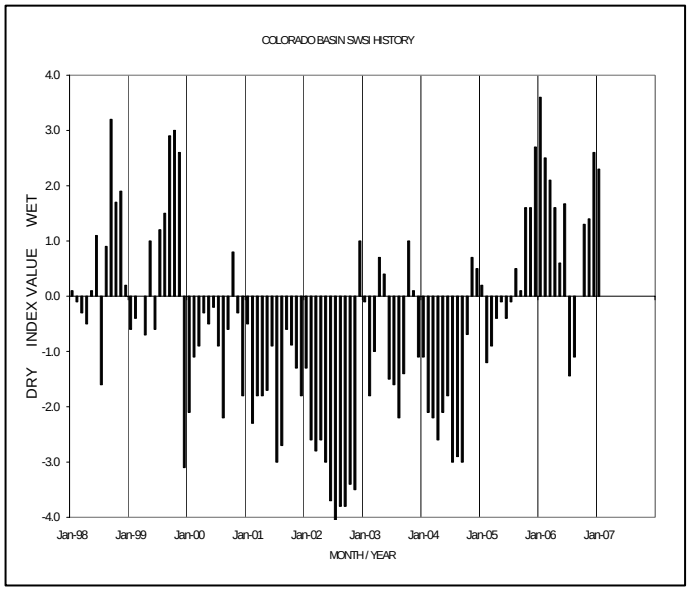






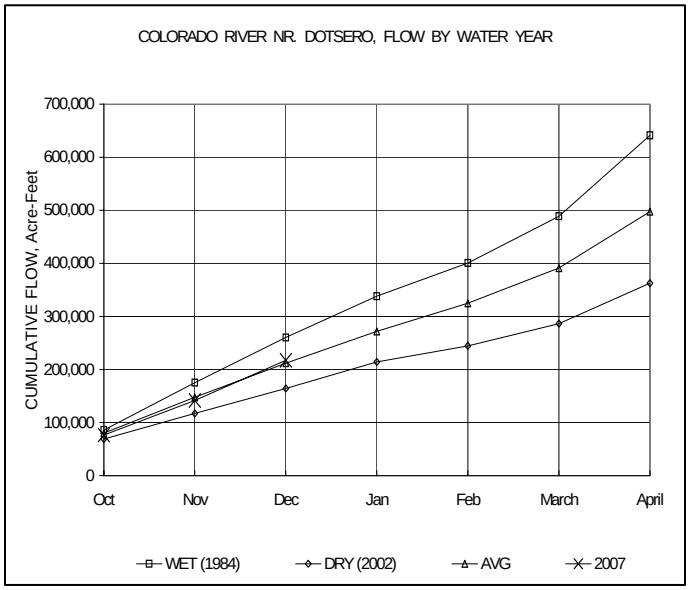
Basinwide Conditions Assessment

The SWSI value for the month of December was 2.3. The Natural Resources Conservation Service reports that the January 1 snowpack is 103% of normal. Flow at the gaging station Colorado River near Dotsero was 1233 cfs, as compared to the long-term average of 1048 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 113% of normal as of the end of December.



Outlook

Although the storms from last month made a lesser impact on the West slope, Green Mountain Reservoir continues to bypass more than depletions in order to try to satisfy end of month storage targets. Since the Shoshone Power Plant is on their winter maintenance schedule (and running only one of the two turbines) and the plant has an adequate legal supply of water, the reservoirs are in a position to maximize all winter storage opportunities. The down side is that changes in downstream flows may have negative effects on the increase/decrease of icing in the channels.

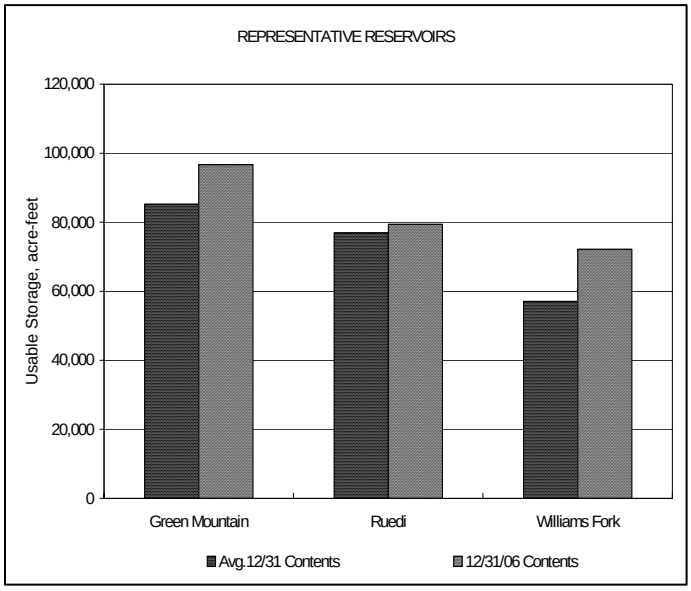


Administrative/Management Concerns

Effective January 1, 2007, a new 25 year agreement between Xcel Energy and the Denver Water Board (DWB) went into effect regarding Xcel's Shoshone water right. The agreement outlines parameters when the senior Shoshone water right can be relaxed: when DWB's reservoir storage is below 80% in its system on July 1; the stream flow forecast is expected to be less than 85% of average; limiting the window from mid-March to late May; and to not cause a Grand Valley call from the Grand Junction area irrigators. Denver Water would make available to west slope entities an amount of water equal to 10% of the net water resulting form the relaxation.

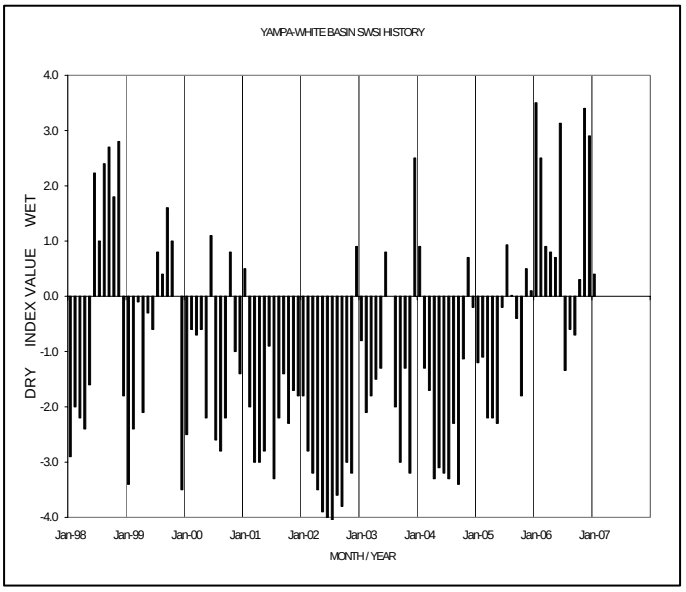
Public Use Impacts

The Hot Springs Lodge and Pool in Glenwood Springs has allocated $20,000 for the development of a whitewater course on the Colorado River downstream of the confluence with the Roaring Fork. The Ruedi Water and Power Authority is sponsoring a study for a comprehensive water shed plan for the Roaring Fork valley which will help prioritize water management needs in the valley.



Basinwide Conditions Assessment

The SWSI value for the month of December was 0.4. Flow at the gaging station Yampa River at Steamboat was 143 cfs, as compared to the long-term average of 106 cfs. December precipitation was well below average for the basin. Precipitation for the month as measured at the SNOTEL sites operated by the NRCS averaged 65% of normal for the Yampa, White, and North Platte River basins combined. For the Yampa and White River Basins the precipitation totaled 57% of average and the North Platte River basin it totaled 77% of average. The snow water equivalent as of December 31, 2006 for the Yampa and White River Basins was 81% of average and for the Laramie and North Platte River Basins it was 95% of average.

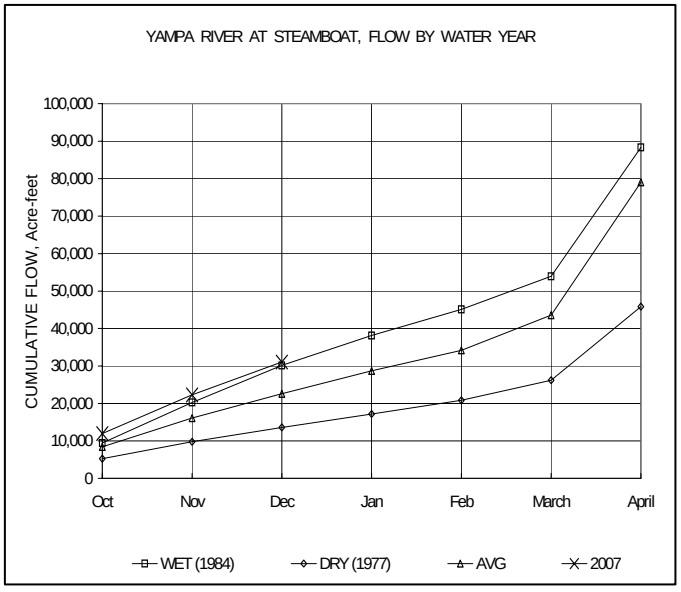


Outlook

Fish Creek Reservoir storage levels continued to drop throughout the month of December ending the month at approximately 83% of capacity. Yamcolo Reservoir storage levels at the end of December were approximately 82% of capacity. Officials are taking the opportunity at Elkhead Reservoir to store as much inflow as possible releasing just a minimal amount. Water stored in Fish Creek Reservoir is used primarily for municipal purposes, Yamcolo Reservoir for irrigation purposes, and Elkhead Reservoir for municipal, recreation, and potential fish recovery releases.

Public Use Impacts

Area reservoirs are frozen, with good ice fishing reported. Construction activities are nearly complete at Elkhead Reservoir; however, the reservoir still remains closed to all recreational activities



Basinwide Conditions Assessment

The SWSI value for the month of December was 0.2. The Natural Resources Conservation Service reports that the January 1 snowpack is 77% of normal. Flows at the Animas River at Durango averaged 316 cfs (142% of normal) with a maximum average daily peak flow of 344 cfs on Dec. 9th. The Dolores River at Dolores was estimated to average 87 cfs (149% of normal). The La Plata River at Hesperus averaged 11.8 cfs (144% of normal) with a maximum average daily peak flow of 14 cfs on Dec. 5th. Precipitation in Durango was 1.37 inches for December which is below the average of 1.68 inches. Precipitation to date in Durango, for the water year, is 6.28 inches which is above the average of 5.04 inches.

At the end of the month Vallecito Reservoir contained 76,140 acre-feet compared to its normal contents of 52,152 acre-feet. McPhee Reservoir was up to 272,284 acre-feet compared to its normal contents of 254,407 acre-feet. Lemon Reservoir was up to 32,732 acre-feet as compared to its normal content of 19,298 acre-feet. The storage in Lemon Reservoir is the highest amount stored for an end of December period based on 43 years of record. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 112% of normal as of the end of December.

Outlook

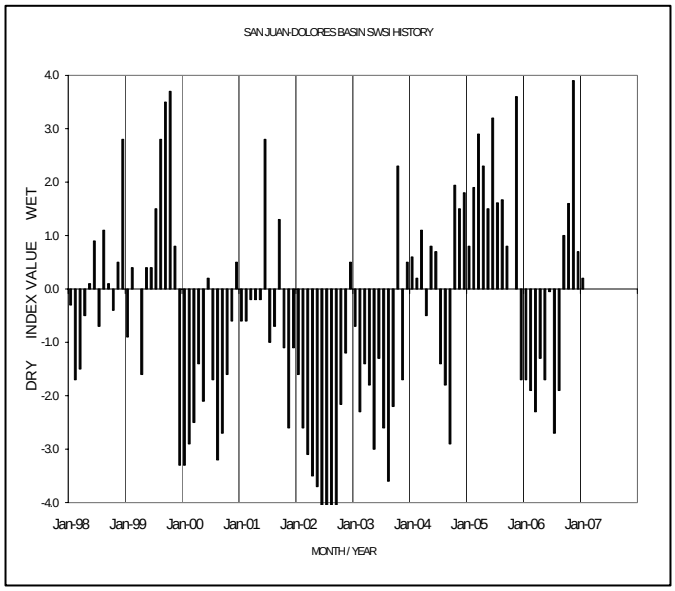
Current snowpack for the basin remains below average. Above average precipitation in the fall allowed reservoirs to store water. Reservoir storage remains above average, but the basin will need more precipitation in the following months to maintain reservoir levels and river flows for next year irrigation season.

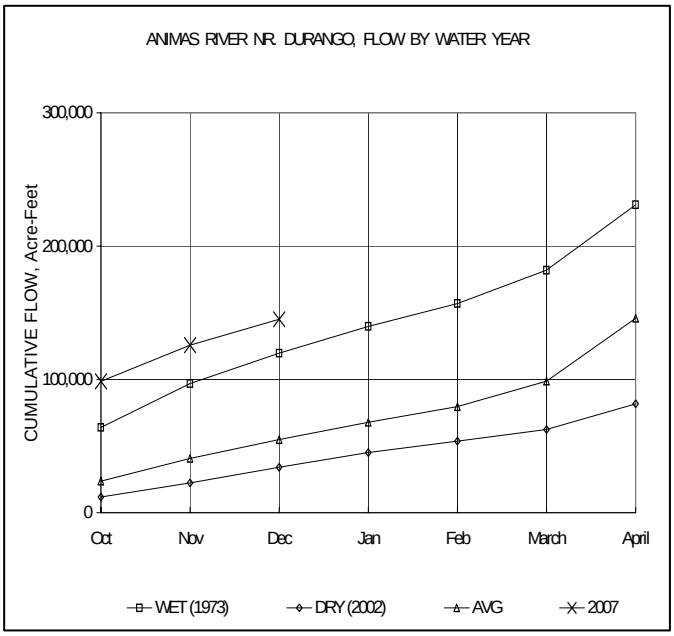
Administrative/Management Concerns

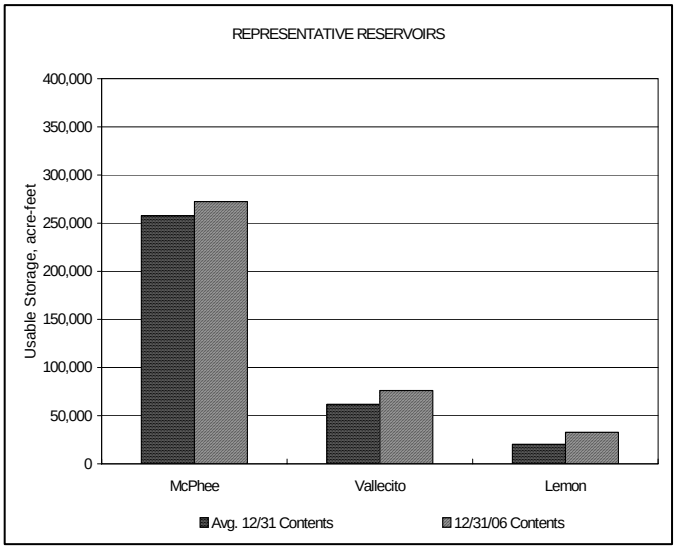
A large number of Water Court cases were filed in November and December due to the City of Durango RICD filing earlier in 2006.

Public Use Impacts

DWR staff did not observe kayaking on the Animas River in the month of December.







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