COLORADO
WATER SUPPLY CONDITIONS UPDATE

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

While statewide the January 1 snowpack is at 104% of average, the amounts vary significantly from basin to basin, which is not uncommon. Snowpack in northern mountains is abundant, with the Yampa-White, Colorado, and South Platte basins having 134%, 133%, and 132% of average respectively. The southern mountains, however, have very low snowpack, with the Rio Grande and San Juan-Dolores basins having 34% and 47% of average respectively. Time remains for the southern mountains to add to the snowpack, but it is unlikely that an average snowpack will be reached, and these values do not bode well for spring runoff and the summer's water supply.

Cumulative storage for the reservoirs graphed in this report is 101% of average. Stream flows are at low winter base flow levels, with some indexed stream flows above average, and some below.

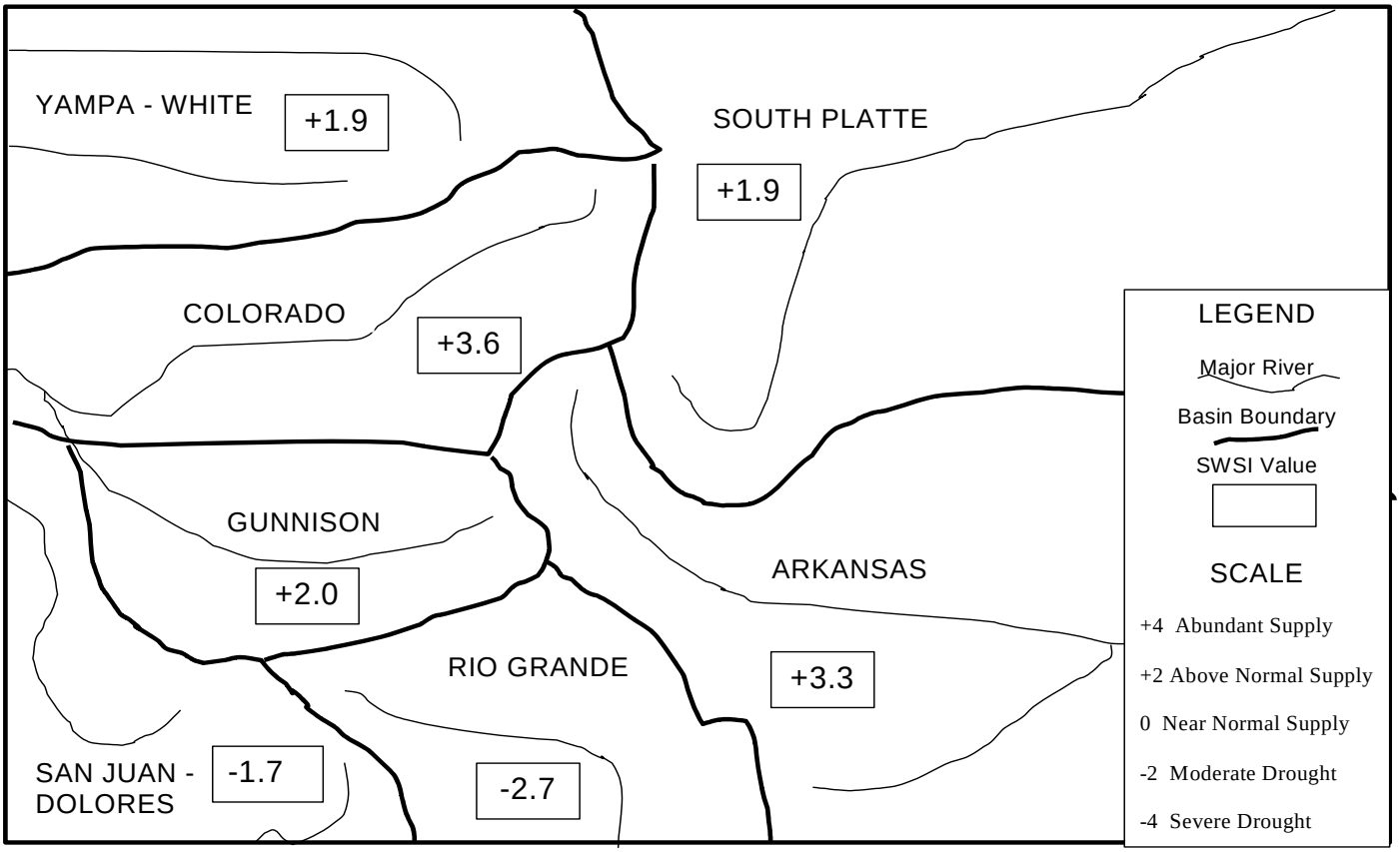
The Surface Water Supply Index (SWSI) developed by this office and the U.S.D.A. Natural Resources Conservation Service is used as an indicator of mountain-based water supply conditions in the major river basins of the state. It is based on snowpack, reservoir storage, and precipitation for the winter 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 January 1, 2006, and reflect the conditions during the month of December 2005.

Basin	January 1, 2006 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	1.9	+0.9	+1.3
Arkansas	3.3	+1.0	+3.6
Rio Grande	-2.7	+0.2	-4.0
Gunnison	2.0	+3.8	+0.3
Colorado	3.6	+0.9	+3.4
Yampa/White	1.9	+1.8	+3.1
San Juan/Dolores	-1.7	+0.0	-2.5

Scale

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

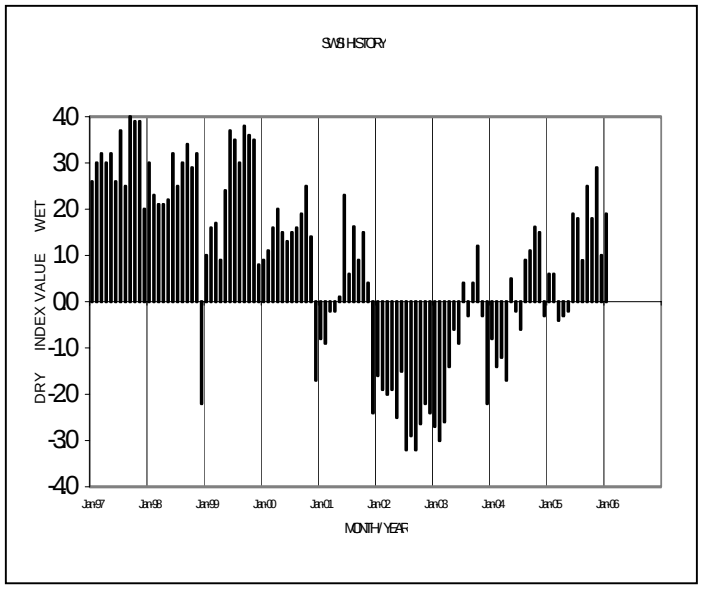
SURFACE WATER SUPPLY INDEX FOR COLORADO



JANUARY 1, 2006

Basinwide Conditions Assessment

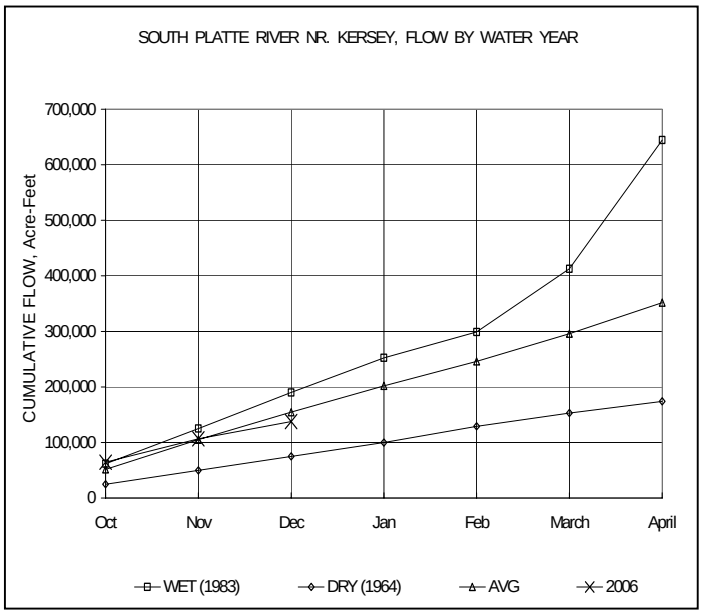
The SWSI value of 1.9 indicates that for December the basin water supplies were above normal. Reservoir storage, the major component in this basin in computing the SWSI value, was 108% of normal as of the end of December. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 66% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 88% of capacity. The Natural Resources Conservation Service reports that January 1 snowpack is 132% of normal. Flow at the gaging station South Platte River near Kersey was 502 cfs, as compared to the long-term average of 684 cfs. Flow at the Colorado/Nebraska state line averaged 165 cfs.

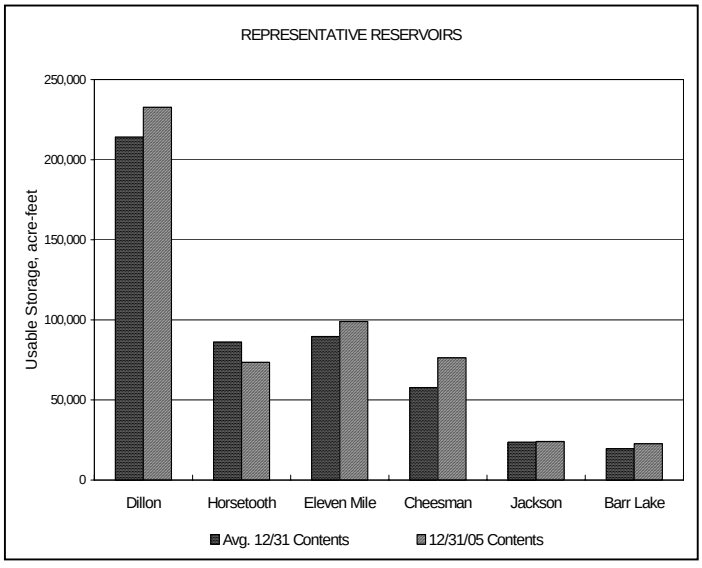


Outlook

Reservoir storage continued as the main diversion in December. Warmer conditions toward the end of the month allowed for increased storage. Administrators anticipate all reservoirs will reach their winter safe storage level on the South Platte some time in January. Once reservoirs have reached their winter safe storage level, we anticipate the call will become junior for recharge. Reservoirs will again pick up in March to finish their fill for the year.

The recharge call will mark a strong contrast with the last few years where senior reservoir calls controlled the mainstem of the South Platte all winter. This bodes well for the overall supply for 2006 especially with snowpack continuing to exceed average through out the basin.

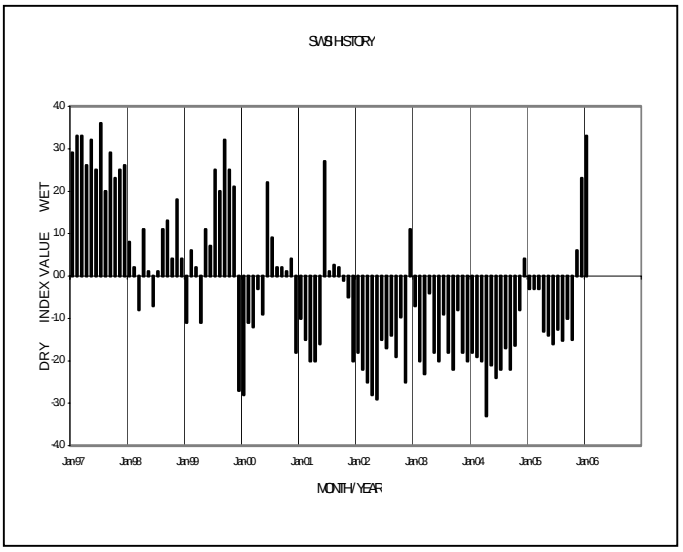




Basinwide Conditions Assessment

The SWSI value of 3.3 indicates that for December the basin water supplies were well above normal. The Natural Resources Conservation Service reports that January 1 snowpack was 98% of normal. Flow at the gaging station Arkansas River near Portland was 434 cfs, as compared to the long-term average of 396 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 68% of normal as of the end of December.

Snowpack in the Arkansas basin mirrors the rest of the state in that snowpack in the northern mountains is above average and in the southern mountain is below average.

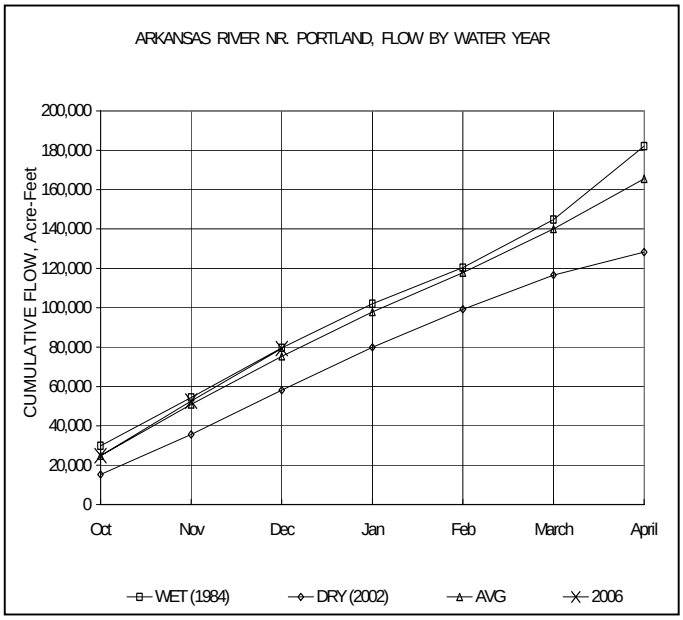


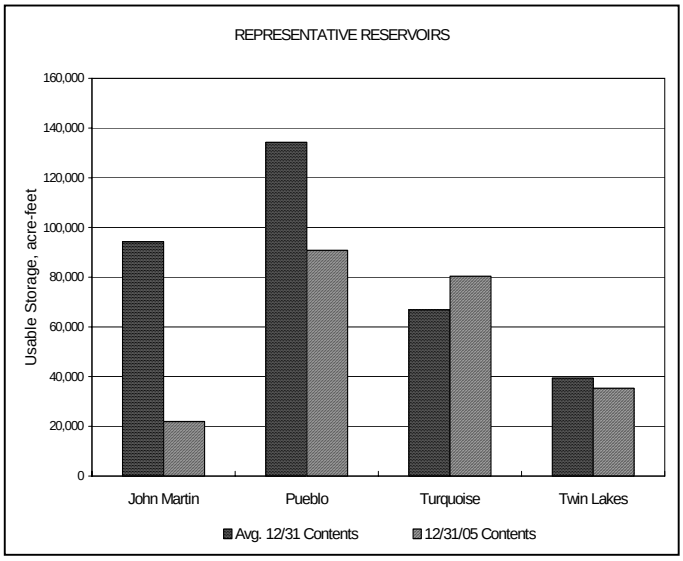
Administrative/Management Concerns

The Pueblo Winter Water system grand total was 50,464 acre-feet at the end of December, which represents an improvement from last year's storage at this time of 45,903 acre-feet. The previous five-year average for this period is 46,958 acre-feet and the average since 1990 for this period has been 63,367 acre-feet.

Conservation storage in John Martin Reservoir is slightly less than last year. Storage since November 1st has been 7,283 acre-feet while storage a year ago for the same time period was 8,801 acre-feet. Inflow contributions from the Purgatoire River have been weaker in 2005 due to poorer early snowpack in the southern mountains.

The Arkansas River Compact Administration meeting was held in Lamar on December 12th and 13th. A Special Engineering Committee was approved by ARCA to include the Colorado State Engineer, Kansas Chief Engineer, one ARCA representative from each state and staff as needed to attempt to resolve a number of remaining issues related to accounting and operation of John Martin Reservoir. This committee will meet in 2006 and attempt resolution by the next ARCA meeting in December 2006.





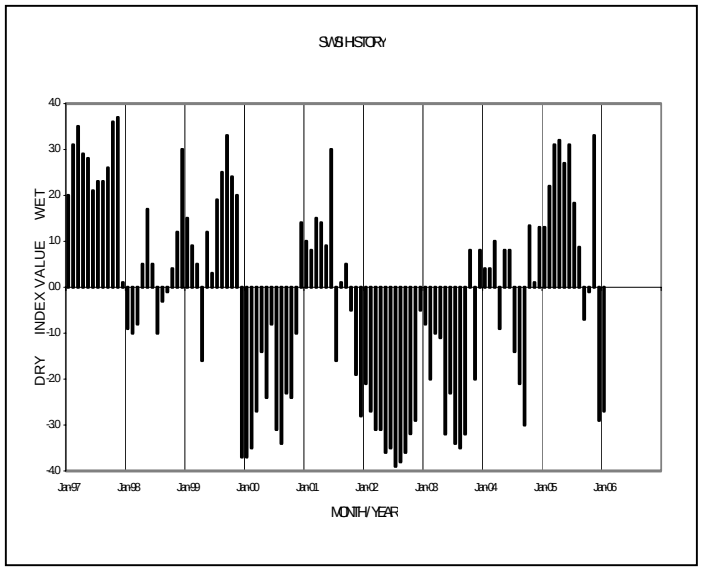
Basinwide Conditions Assessment

The SWSI value of –2.7 indicates that for December the basin water supplies were below normal. The Natural Resources Conservation Service reports that January 1 snowpack is 34% of normal. Flow at the gaging station Rio Grande near Del Norte was 193 cfs (93% of normal) The Conejos River near Mogote had a mean flow of 45 cfs (86% of normal). Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 91% of normal as of the end of December.

Alamosa received only 0.04 inches of precipitation during December, 0.29 inches below normal. Alamosa's total precipitation of 7.96 inches during 2005 was 0.7 inches above the annual average.

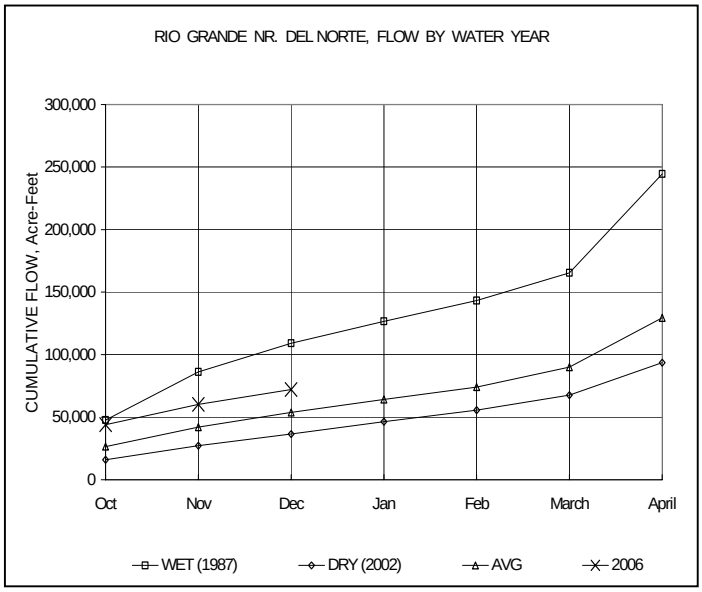
This has been the eighth consecutive December the average annual temperature was well above normal.

2005 stared out with a bang of snowfall in January resulting in an unusually high runoff from April through early July. However, as soon as the stream flow became more dependent on rainfall and less on snow melt, poor precipitation during the summer months cut off the abundant runoff and stream flow in area creeks and rivers dropped to levels reminiscent of 2000 and 2002.



Outlook

Stream flow in the basin should be slightly below average for the next few months due to the recent dry spell. If the present trend continues, the stream flow forecast could be very bleak. Due to the extremely poor snowpack, current NRCS forecasts for the 2006 runoff are generally 60 to 80 percent of normal for key streams in the Upper Rio Grande Basin. The exception to this is Saguache Creek, where the forecast is for normal runoff in 2006.



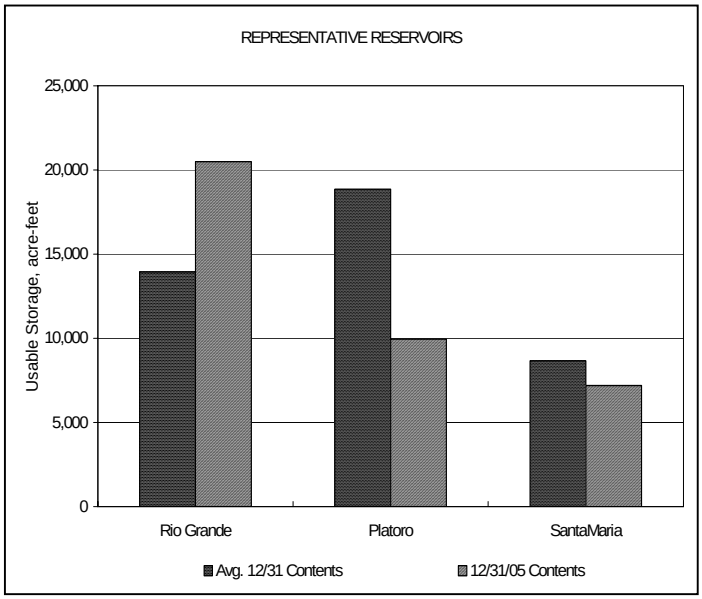
Administrative/Management Concerns

Pursuant to the Rio Grande Compact Colorado delivered approximately 448,000 acre-feet to New Mexico and Texas during 2005. The delivery obligation was approximately 445,000 acre-feet resulting in a small delivery credit for 2006.

Bolstered by a generous early runoff, the Rio Grande and its tributaries generated about 795,000 acre-feet through the gage near Del Norte during 2005. The long-term average is 650,000 acre-feet. Although the total was above normal, it fell short of NRCS forecasts and resulted in difficulty administering water rights for Compact delivery requirements.

The Conejos River and its tributaries also experienced a plentiful runoff. Indexed flow on the Conejos River near Mogote totaled 294,000 acre-feet in 2005, compared to an average of 240,000 acre-feet.

Closed Basin Project delivery to the Rio Grande totaled about 10,700 acre-feet. Approximately 100 acre-feet of Project canal deliveries did not meet water quality standards.



Basinwide Conditions Assessment

The SWSI value of 2.0 indicates that for January the basin water supplies were above normal. The Natural Resources Conservation Service reports that January 1 snowpack was 98% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 61 cfs, as compared to the long-term average of 53 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 111% of normal as of the end of December.

December started cold and stormy, but soon turned to above normal temperature and below-normal snowfall. The snowpack numbers vary greatly across the Gunnison Basin. In the Crested Butte, Taylor River, and Tomichi Creek areas the snowpack averages 130% of normal. The Grand Mesa is averaging 91%, while the upper Uncompahgre River is 89% of normal. The worst area is the Uncompahgre Plateau, which has only 64% of normal snowpack.

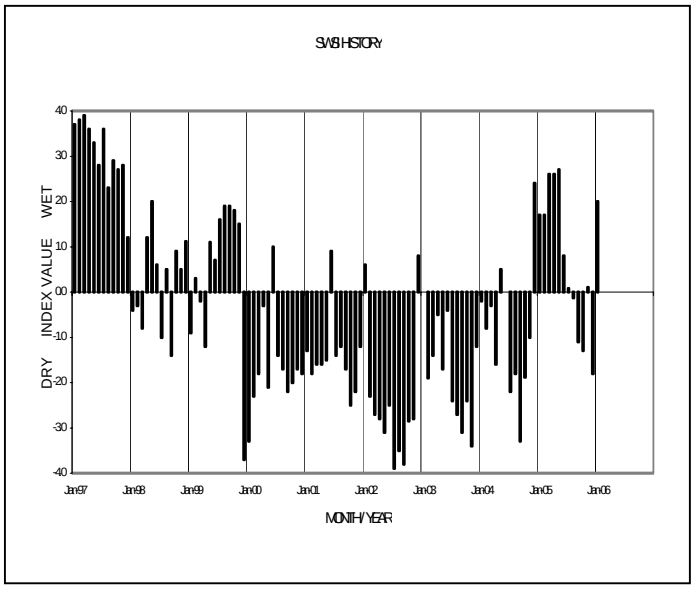
Administrative/Management Concerns

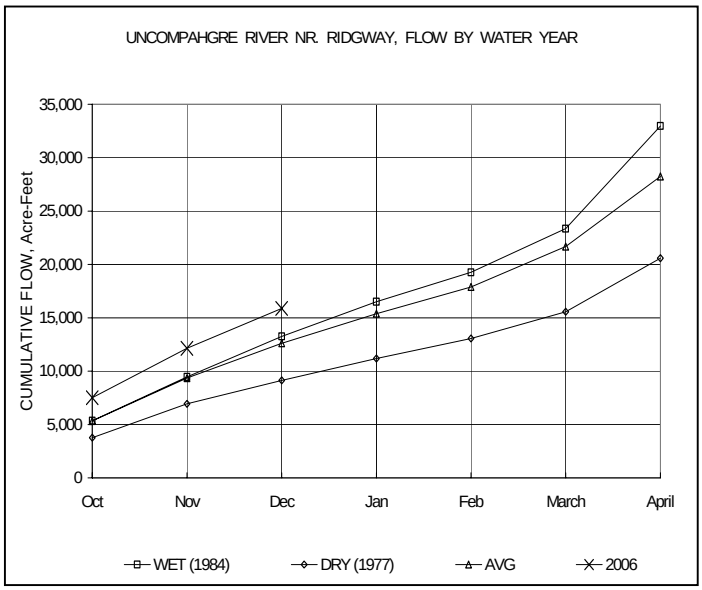
The largest reservoirs in the Gunnison Basin, Blue Mesa and Taylor Park are holding their own right now, levels are not dropping like they normally do during the winter season. Both have small releases now, Taylor Park being 75 cfs and Blue Mesa being 500 cfs. Ridgway Reservoir is gaining slightly, but should level off as winter flows decrease. Overall, reservoir storage is looking good right now, and should be ahead of normal going into the runoff and storage season.

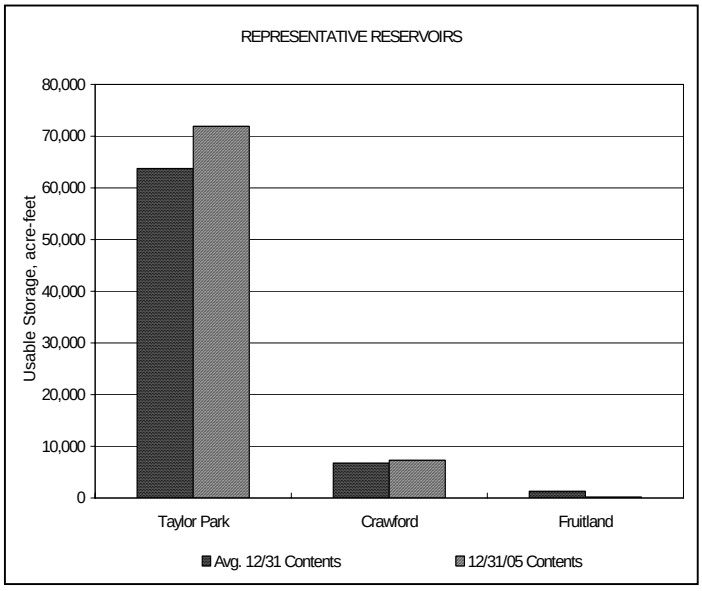
The USBR will use the January 1 NRCS runoff forecast to adjust power operations at the Aspinall Unit. If it is above normal, they could increase releases for power production during the critical winter months when the electricity is most needed.

Public Use Impacts

After years of drought, 2005 finally brought relief to water users across the Gunnison valley. The Grand Junction area received 131% of average precipitation and above normal temperatures. Water users are keenly interested in getting another above-average year, not desiring to slip back into the drought cycle.







Basinwide Conditions Assessment

The SWSI value of 3.6 indicates that for December the basin water supplies were well above normal. The Natural Resources Conservation Service reports that January 1 snowpack is 133% of normal. Flow at the gaging station Colorado River near Dotsero was 1,140 cfs, as compared to the long-term average of 1,046 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 113% of normal as of the end of December.

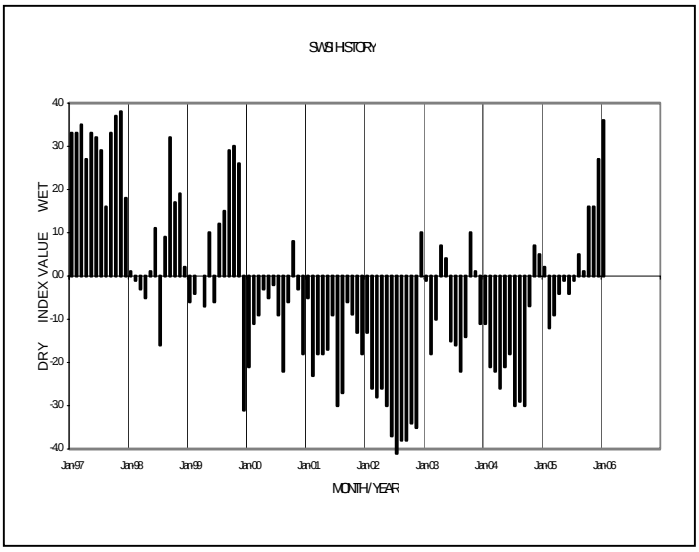
December precipitation was near or above average for the entire Colorado River basin, with the best snowfall occurring in the upper tributaries. As a result, the best snowpack is in the upper basin.

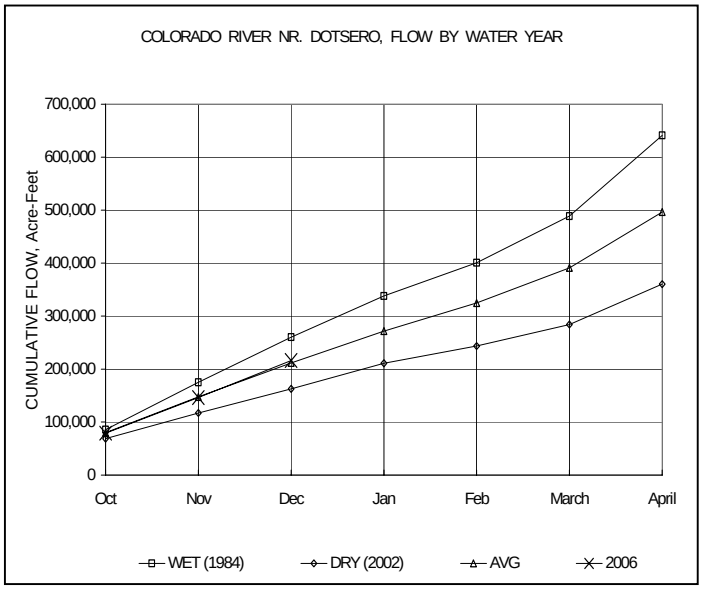
Outlook

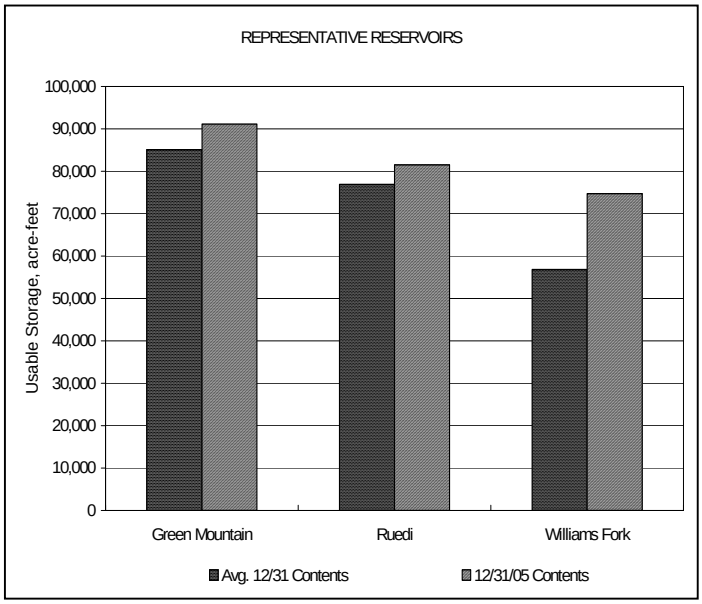
The Colorado Basin River Forecast Center (NWS) January 1 volume forecasts show above average volume runoff (April - July) for all tributaries of the Colorado River except Plateau Creek, which is forecast at only 87 percent of average. The Blue and Eagle Rivers are highest, with forecasts of over 130 percent of average.

Administrative/Management Concerns

Beginning on January 4, 2006, the Shoshone Power Plant will start their winter turbine maintenance, so that the Shoshone senior call will be administered at 700 cfs for about eight weeks, or approximately half of this senior water right. This will essentially remove the call from the upper basin, allowing some users such as Denver Water and Northern Colorado Water Conservancy District to maximize their winter diversions.



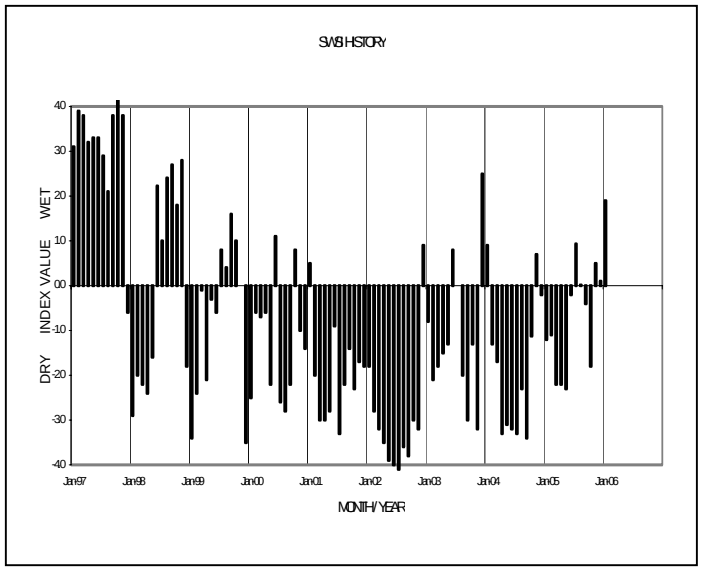




Basinwide Conditions Assessment

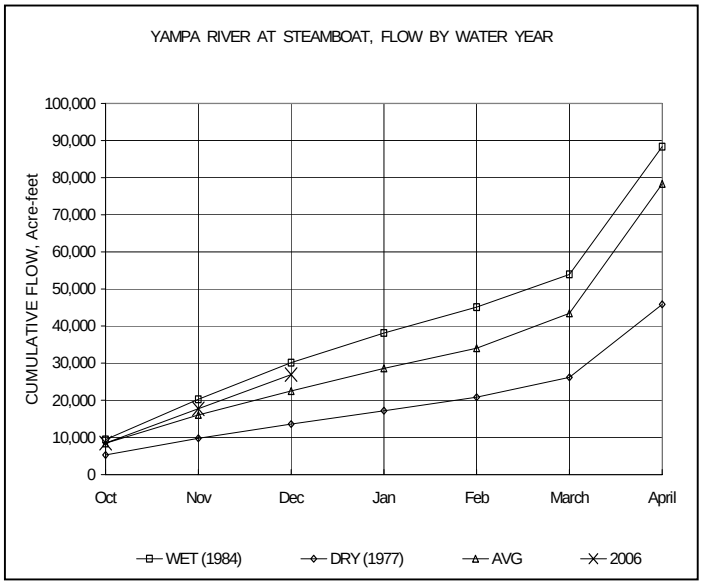
The SWSI value of 1.9 indicates that for December the basin water supplies were above normal. The Natural Resources Conservation Service reports that January 1 snowpack is 134% of normal. Flow at the gaging station Yampa River at Steamboat was estimated at 150 cfs, as compared to the long-term average of 105 cfs.

December precipitation was much above average for the basin. Pacific storms moved across the basin on a regular basis throughout the month. Precipitation for the month averaged 151% of normal as measured at the SNOTEL sites operated by the NRCS. At the end of the month, snow pack totals for individual drainages were 137% of average for the North Platte River Basin, 141% of average for the Yampa River Basin, and 134% of average for the White River Basin. The ski area in Steamboat Springs reported that December was the fifth snowiest December since records have been kept at the area.



Outlook

Early runoff predictions from the NRCS for the April through July period are 131% of average for the North Platte River at Northgate, 135% of average for the Yampa River near Maybell, 122% of average for the Little Snake River near Dixon, and 121% of average for the White River near Meeker.



Public Use Impacts

There is abundant snow in the mountains for skiing, snowshoeing and snowmobile activities. Area reservoirs are frozen, with good ice fishing reported. Construction activities at Elkhead Reservoir have ceased for the winter, but the reservoir remains closed to all recreational activities.

Basinwide Conditions Assessment

The SWSI value of –1.7 indicates that for December the basin water supplies were below normal. The Natural Resources Conservation Service reports that January 1 snowpack is 47% of normal. Flow at the gaging station Animas River near Durango was 240 cfs, as compared to the long-term average of 230 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 116% of normal as of the end of December.

December weather continued the drier than normal pattern of the previous month. In Durango, only 0.32 inches of precipitation were recorded, 22% of average. So far this Water Year Durango is at 71% of normal precipitation. As of January 1st the snowpack for the San Juan River Basin was only at 47% of normal. The snow courses above Vallecito and Lemon Reservoirs are particularly short of water at 17% and 36% of normal respectively.

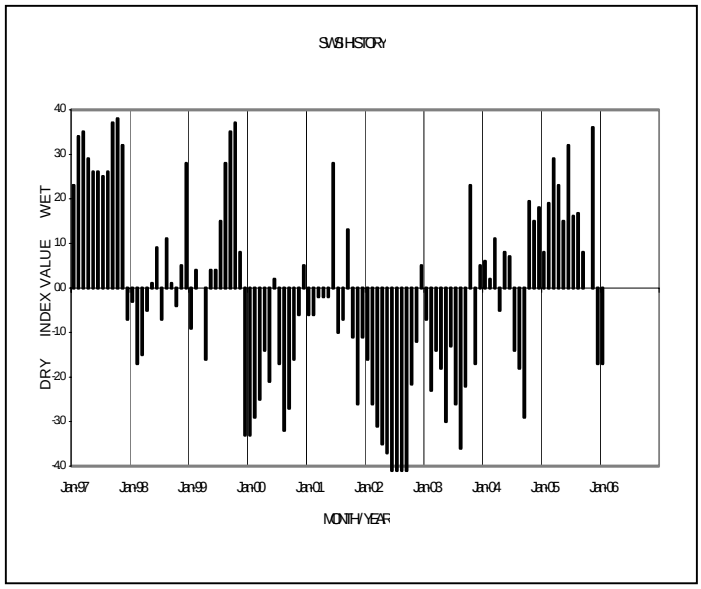
Stream flows remained near to slightly below normal for the month due to the warm temperatures melting of the meager snowpack. The Animas River had a December peak of 285 cfs on the 3rd and averaged 240 cfs for the month, which is 108% of normal.

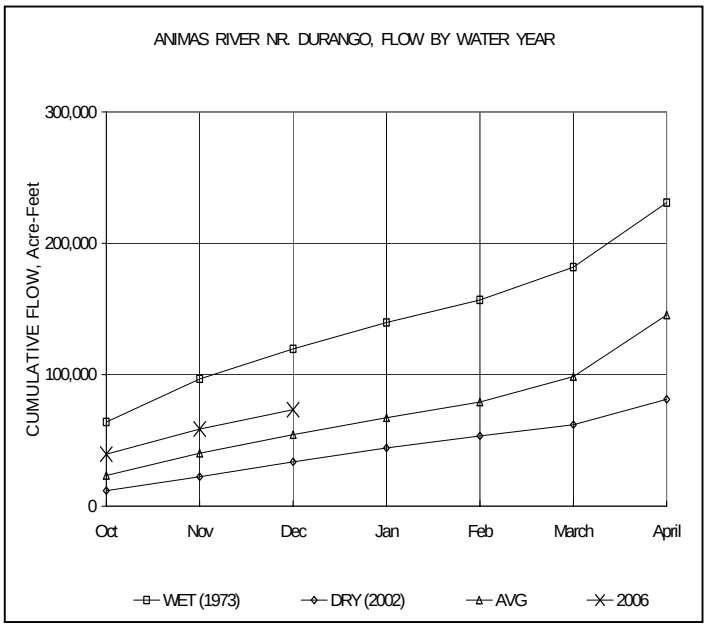
Reservoirs continued to be the bright spot in the water supply outlook. The three major reservoirs still maintained above average storage at the end of the month.

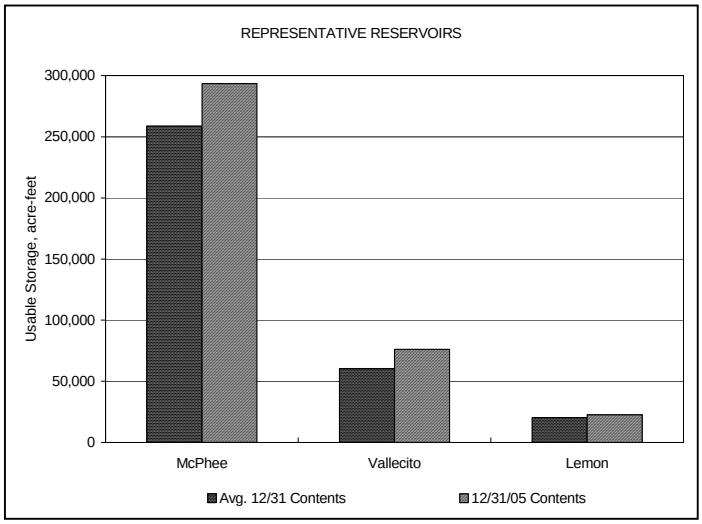
The temperatures remained above normal. Overall Durango was 3.0° above its 30-year average high and 0.6° above its 30-year average low.

Outlook

The current weather pattern has the storm track to the north of Division 7, but basin administrators are optimistic that users will get a fair share of snow in the coming winter months.







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