COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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FEB 2004

The SWSI values for this month range from a high of +0.4 in the Rio Grande Basin to a low of –2.1 in the Colorado Basin. The snowpack is average to slightly above average in the southwestern basins (Gunnison, San Juan/Dolores, Rio Grande). However, the South Platte Basin, which encompasses the most populous urban areas in Colorado, is well below average at only 65% of normal. The Natural Resources Conservation Service reports that this is the fourth consecutive year with February 1 snowpack readings at or below this level in the South Platte Basin and that for the state, 2004 marks the seventh consecutive year of below average snowpack accumulations on February 1. The statewide snowpack is 88% of average for February 1, 2004.

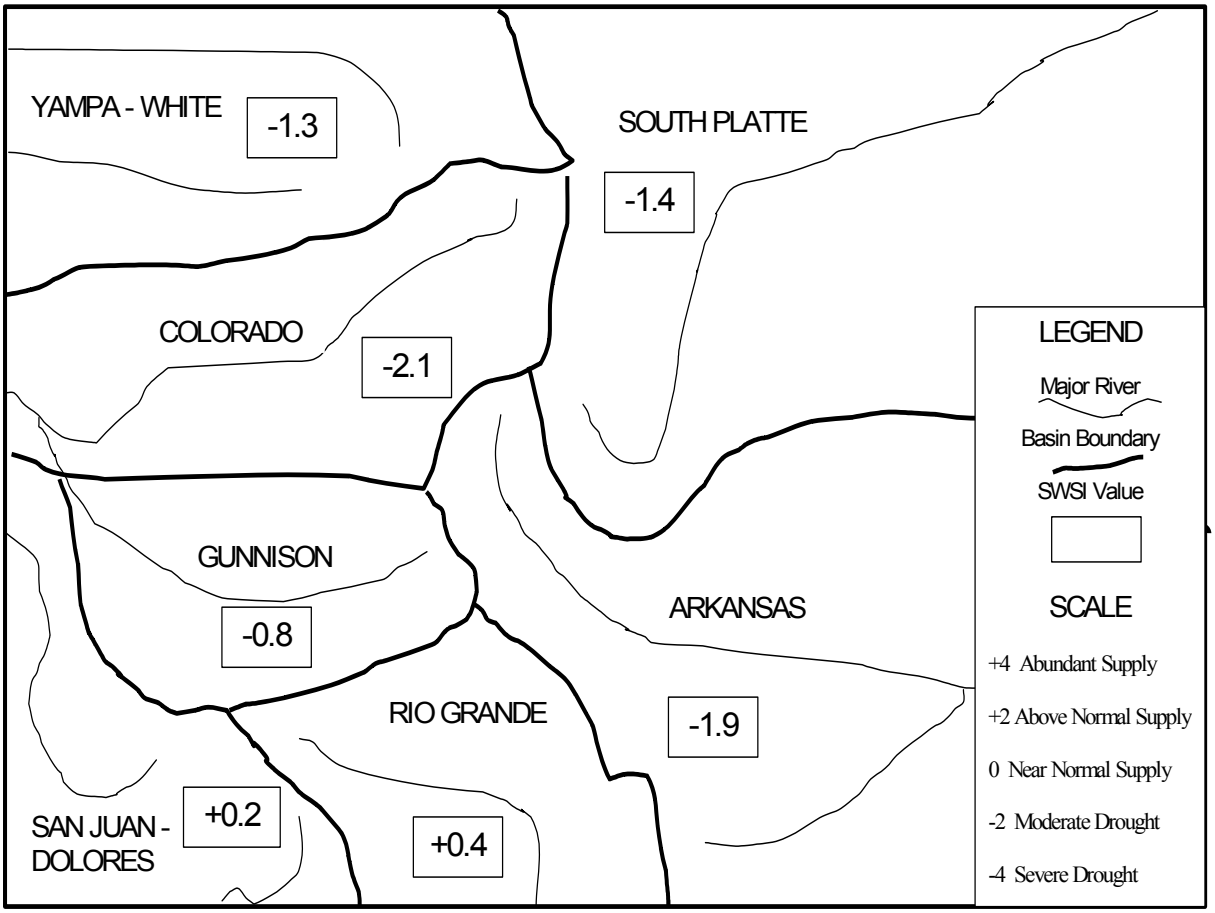
The Surface Water Supply Index (SWSI) developed by this office and the U.S.D.A. Natural Resources Conservation Service is used as an indicator of mountain-based water supply conditions in the major river basins of the state. It is based on snowpack, reservoir storage, and precipitation for the winter 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 February 1, 2004, and reflect the conditions during the month of January.

Basin	Feb 1, 2004 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	- 1.4	- 0.6	+1.6
Arkansas	- 1.9	- 0.1	+0.1
Rio Grande	+0.4	0.0	+2.4
Gunnison	- 0.8	- 0.6	+1.1
Colorado	- 2.1	- 1.0	- 0.3
Yampa/White	- 1.3	- 2.2	+0.8
San Juan/Dolores	+0.2	- 0.4	+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

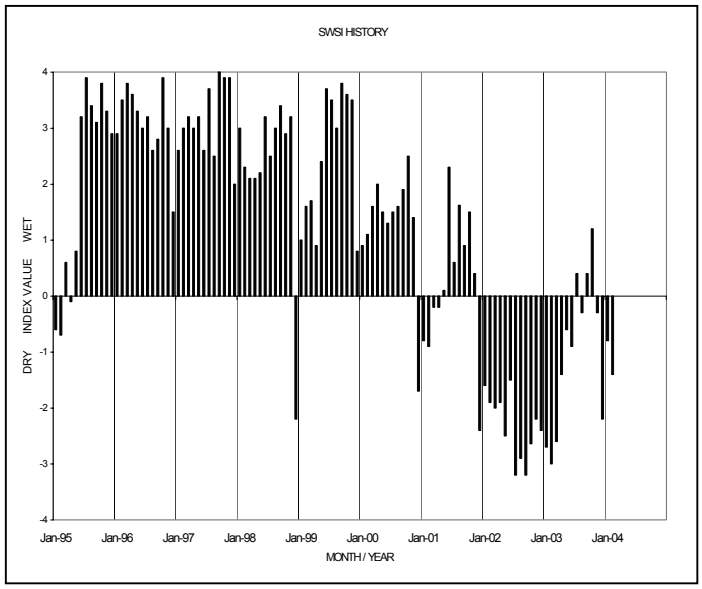


February 1, 2004

Basinwide Conditions Assessment

The SWSI value of –1.4 indicates that for January the basin water supplies were slightly below normal. Cumulative storage for the six reservoirs graphed on this page was 103% of normal as of the end of January. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 53% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 64% of capacity. The Natural Resources Conservation Service reports that February 1 snowpack is 65% of normal. Flow at the gaging station South Platte River near Kersey was 485 cfs, as compared to the long-term average of 792 cfs. Flow at the Colorado/Nebraska state line averaged 63 cfs.

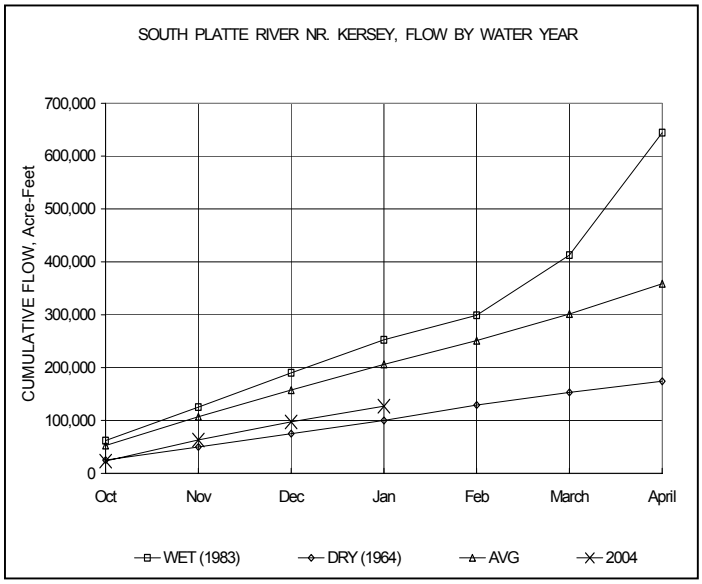
Reservoir storage continued in January for reservoirs along the mainstem and tributaries. Calls for storage continued through out the basin except below the Prewitt inlet. Calls for storage also existed on tributaries in January, the normal situation for this time of year.

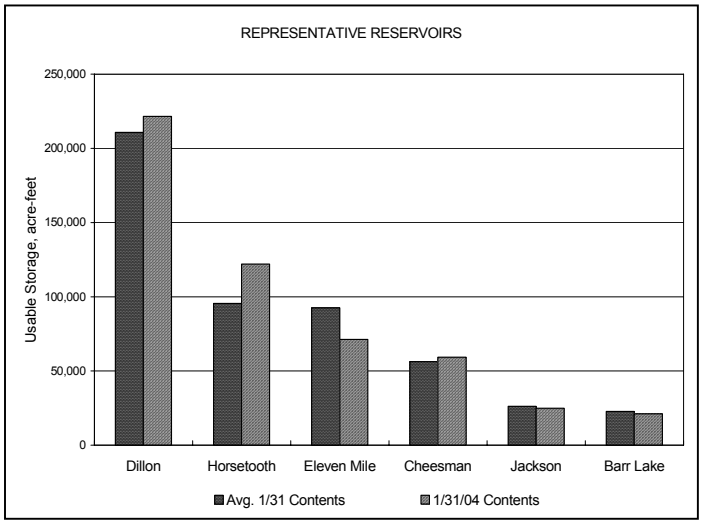


Outlook

With stream flow remaining near the historic low for the last 30 years at the Kersey gage, filling reservoirs below this location proceeds slower than would be hoped. This along with the low snowpack increases the concern that all the reservoirs below Kersey may not fill this year. In order to completely fill these reservoirs, it will be important that we have at least near average runoff conditions this spring.

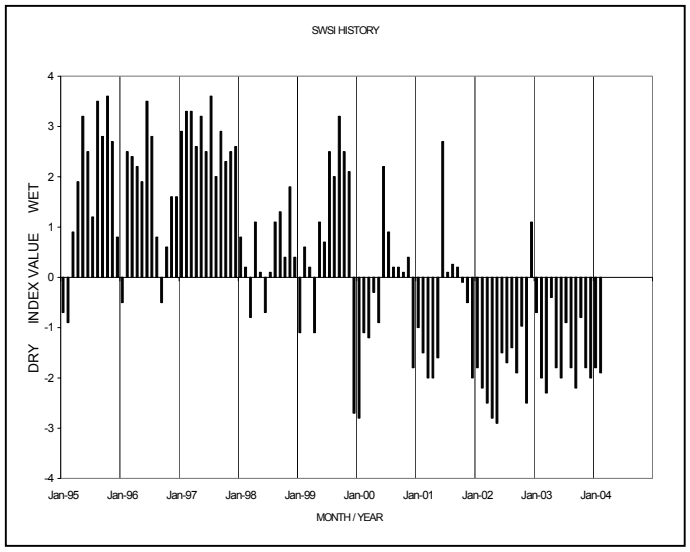
Present activities and anticipated activities by Denver Water, other metro municipalities, and private organization to recapture reusable water that historically flowed downstream will increasingly effect the amount of winter base flow that will be available for storage downstream in upcoming years. Likewise, these activities will increase the safe yield of those suppliers.





Basinwide Conditions Assessment

The SWSI value of –1.9 indicates that for January the basin water supplies were below normal. The Natural Resources Conservation Service reports that February 1 snowpack is 76% of normal. Flow at the gaging station Arkansas River near Portland was 344 cfs, as compared to the long-term average of 361 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 55% of normal as of the end of January.

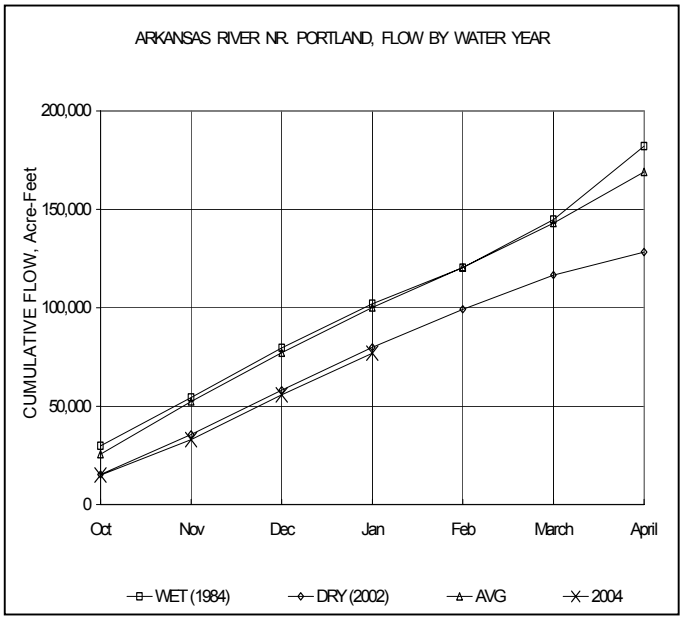


Administrative/Management Concerns

Reservoir storage in the Pueblo Winter Water Program totaled only about 51,100 acre-feet as of the end of January. This storage amount is up slightly from last year's storage to date but only about 52% of the past five-year average. Conservation storage in John Martin Reservoir has accumulated only about 3,960 acre-feet as of the end of January, down from last year's 5,600 acre-feet at this point in the season.

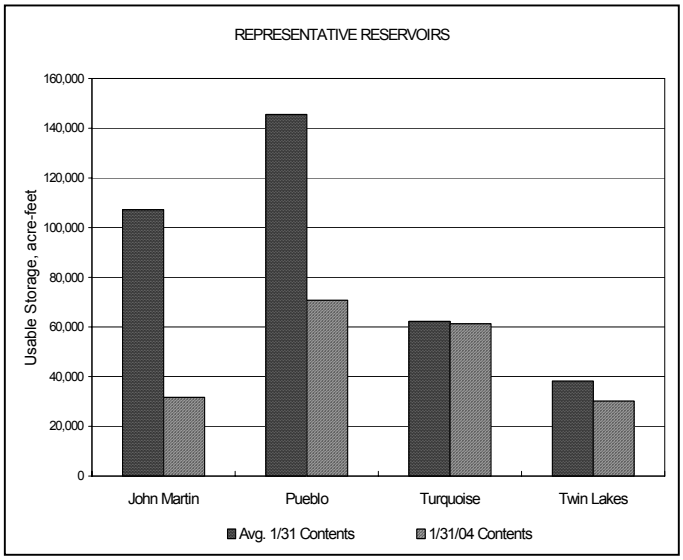
Aurora received approval for a substitute water supply plan to gain consumptive use credits from dry up of approximately 37% of the Rocky Ford Highline Ditch at the end of January. Aurora has still not made a final decision on operation of the plan pending receipt of a storage water contract in Pueblo Reservoir from the Bureau of Reclamation that would facilitate exchange of the consumable credits. This plan, if operated, would be one of the largest interruptible supply agreements entered into by a municipal entity to date in Colorado.

Pueblo and Colorado Springs continue to have ongoing discussions on issues between the two cities such as Colorado Springs' plans for a new Southern Delivery system pipeline that would allow a larger amount of Colorado Springs' transmountain and consumable water to be pumped from Pueblo Reservoir than can currently be delivered through the Fountain Valley pipeline.



Public Use Impacts

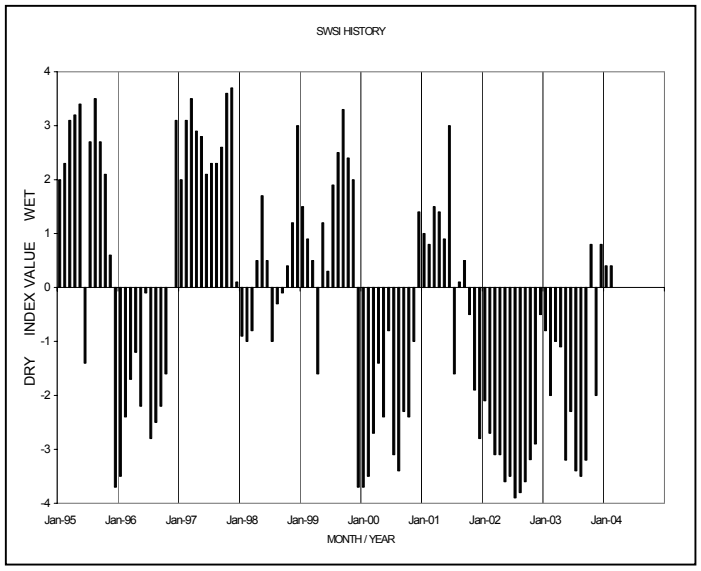
The issue of water quality, primarily associated with the Aurora water court case involving exchanges, has dominated recent newspaper coverage. Water quality continues to rise in prominence in water right change considerations.



Basinwide Conditions Assessment

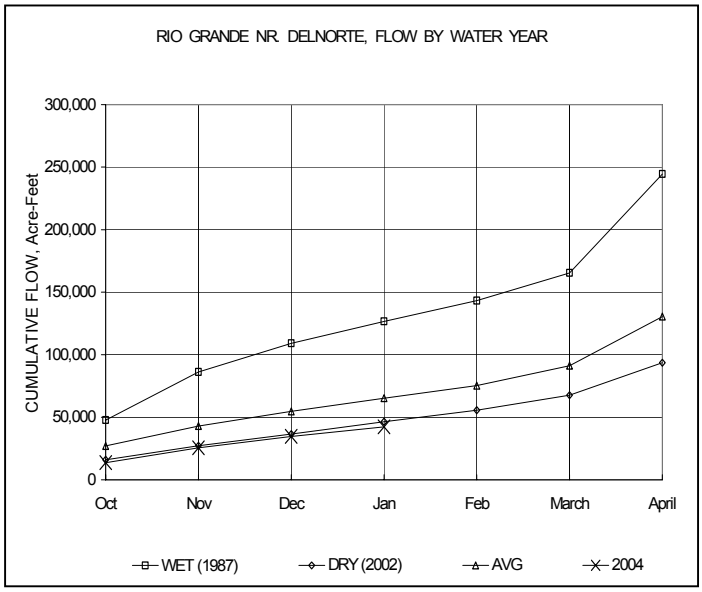
The SWSI value of +0.4 indicates that for January the basin water supplies were normal. The Natural Resources Conservation Service reports that February 1 snowpack is 106% of normal. Flow at the gaging station Rio Grande near Del Norte averaged 126 cfs (66% of normal). The Conejos River near Mogote had a mean flow of 38 cfs (80% of normal). Precipitation in Alamosa was 0.14 inches, 0.11 inches above normal. Temperatures ranged from -15 degrees to 45 degrees in Alamosa where the average monthly temperature was 19.2 degrees, 4.5 degrees above normal. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 52% of normal as of the end of January.

Residents of the San Luis Valley are experiencing more "normal" conditions this winter. As January came to a close, snowpack in the mountains was near average and cold temperatures followed those days with substantial snowfall on the valley floor.



Outlook

With the highest basin snowpack in the state, local water administrators ought to be optimistic about the upcoming runoff. With the exception of streams in the Sangre de Cristo Range, the Natural Resources Conservation Service stream flow forecasts are predicting runoff in area streams to be in the range of 88 to 114% of average during the 2004 irrigation season.

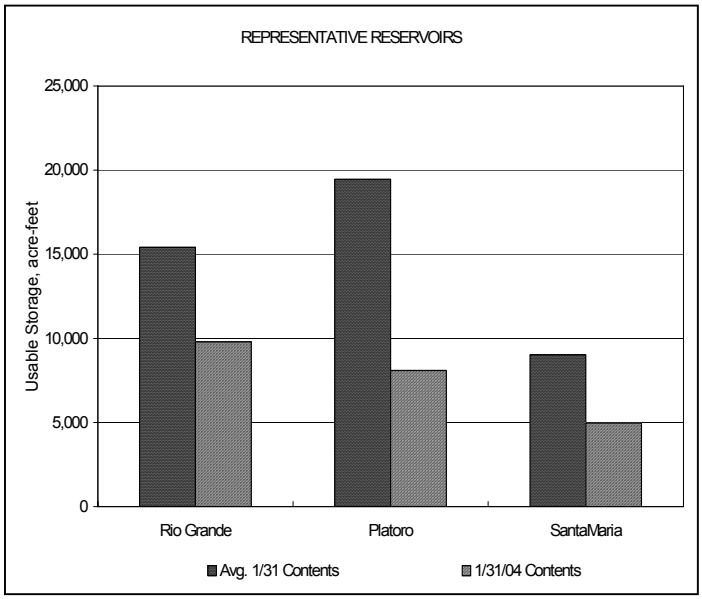


Administrative/Management Concerns

Much effort was spent during January finalizing streamflow and diversion records. The annual meetings of local districts and ditch boards are held this time of year to reflect back on the 2003 season and plan for the upcoming irrigation season.

Public Use Impacts

Other than increased icing problems due to the cold temperatures, area water users and winter sports enthusiasts are enjoying the wintery conditions.



Basinwide Conditions Assessment

The SWSI value of –0.8 indicates that for January the basin water supplies were slightly below normal. The Natural Resources Conservation Service reports that February 1 snowpack is 100% of normal. Flow at the gaging station Uncompahgre River near Ridgway was 45 cfs, which equals the long-term average. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 104% of normal as of the end of January.

Outlook

The outlook for a good spring and summer runoff is the best it's been in years. The extremely cold weather had postponed any snowmelt and runoff until a time this spring when it can be better utilized.

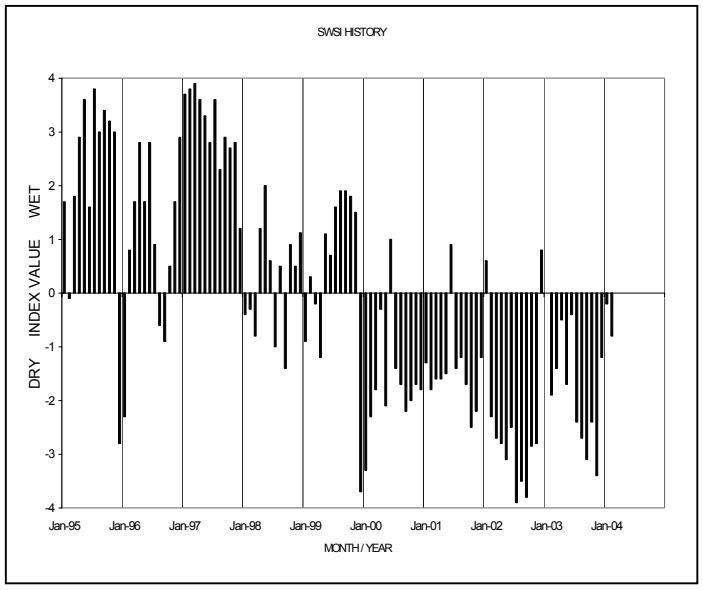
Administrative/Management Concerns

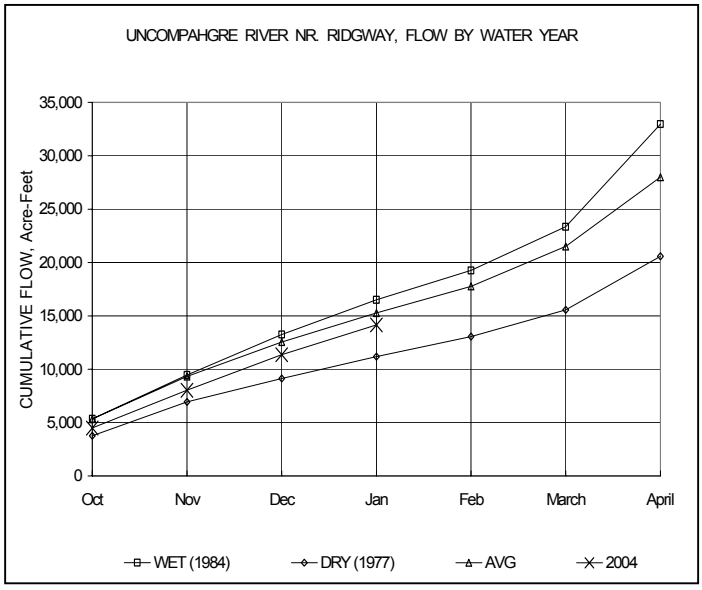
The flow at the Redlands Canal Near Grand Junction is still well below the 750 cfs water rights that could be called for, but it appears that the ice at the diversion dam will prevent them from being able to seal up the leakage and place a call. There will be increased flows when the weather warms up to melt the ice around the diversion structure. Based on the amount of low elevations snow, and the early melt it will produce, it is anticipated that the flows will be high enough this spring (March and April) to satisfy the Redlands Canal and prevent a spring-time call.

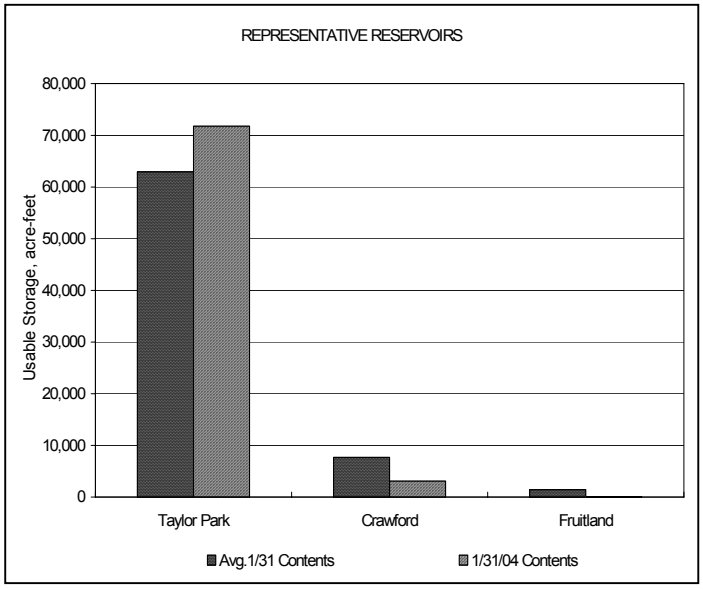
On the Gunnison River, the USBR has forecasted that Blue Mesa could come close to filling this summer, if reasonable flows are maintained in the Black Canyon. Taylor Park Reservoir could see a considerable increase in volume as well.

Public Use Impacts

After years of drought conditions, people are very encouraged to see a normal snow pack. The snow has provided excellent recreational opportunities, such as skiing, ice fishing, snowmobiling, and ice climbing. The snow cover will also create high soil-moisture conditions that will give the new vegetation this spring a real boost. The farmers and ranchers are especially appreciative

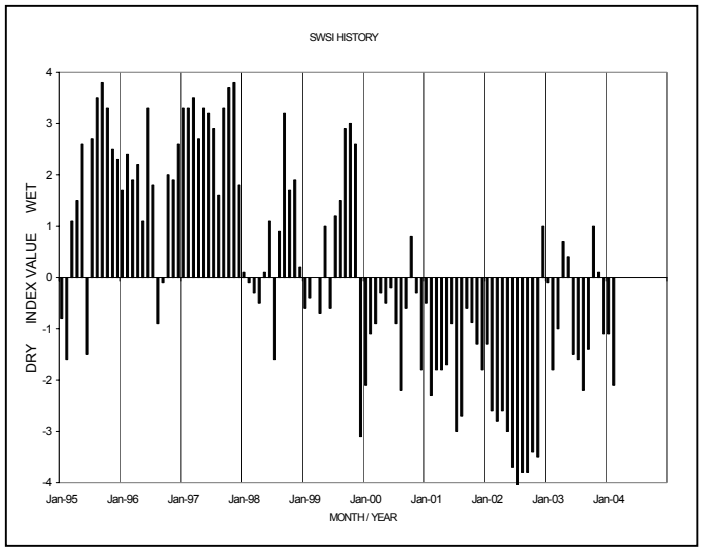






Basinwide Conditions Assessment

The SWSI value of –2.1 indicates that for January the basin water supplies were below normal. The Natural Resources Conservation Service reports that February 1 snowpack is 84% of normal. Flow at the gaging station Colorado River near Dotsero was 1109 cfs, as compared to the long-term average of 983 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 94% of normal as of the end of January.

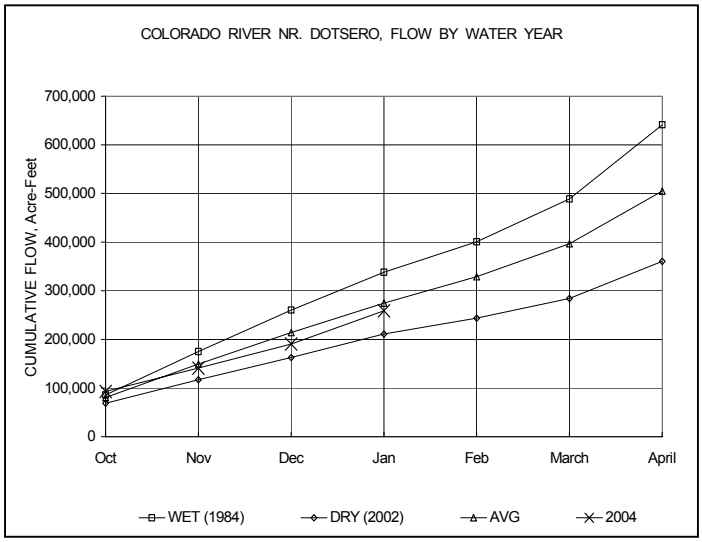


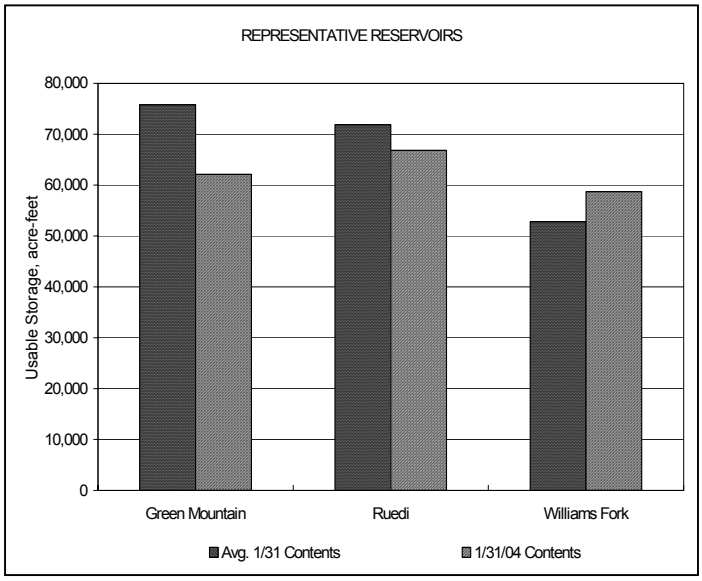
Outlook

Snowpack is below average for the entire Colorado River basin, but better than the last three years at the start of February. Some drainages are significantly below average, such as the Blue River at below 80%, and some are having good years, such as Plateau Creek. Winter river flows range from average down to 75% of average, but are improved over the last several winters.

Administrative/Management Concerns

The Shoshone power plant will continue to place the senior river call through mid-March when it is anticipated that the power plant will be shut down for six weeks for special maintenance (i.e., retrofit of the control system.) This will remove the river call and allow upstream reservoirs such as Dillon, Green Mountain, Granby, and Wolford to store in priority. However, this will also reduce river flows to possibly historic lows, which may cause some water quality or diversion problems for several downstream municipal diverters. It is unclear what impact these low flows will have upon sport or endangered fish species and the overall aquatic habitat of the Colorado River.

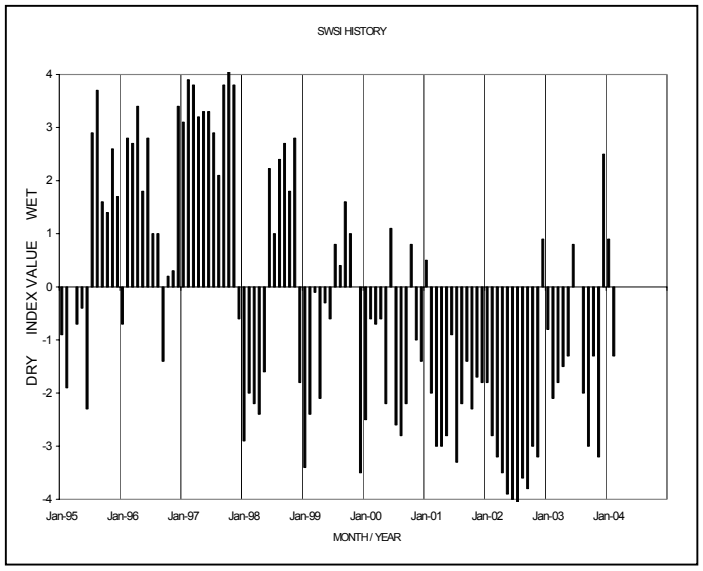




Basinwide Conditions Assessment

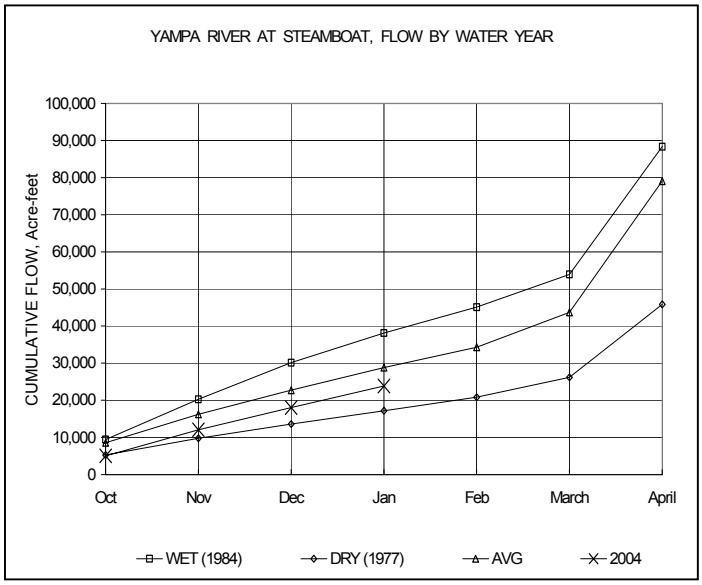
The SWSI value of –1.3 indicates that for January the basin water supplies were below normal. The Natural Resources Conservation Service reports that February 1 snowpack is 86% of normal. Flow at the gaging station Yampa River at Steamboat was 95 cfs, as compared to the long-term average of 100 cfs.

January brought little in the way of precipitation to the basin. Most of the snowfall occurred in the very early and late parts of the month, with little to no activity in between. The basin went from having the highest snow pack in the state at 108% on January 1, to 86% of average on February 1. Precipitation totals during January were only 56% of average, bringing the water year total down to 87% of average.



Outlook

The February 1st runoff forecast prepared by the Natural Resources Conservation Service is predicting below-normal spring runoff for much of the drainage. The percent of average runoff under the most probable forecast is 85% for the North Platte River near Northgate, 81% for the Yampa River near Maybell, and 83% for the White River near Meeker. These forecasts are all down from the January 1st numbers. Only the Little Snake River is near average, with a forecast of 99%.



Basinwide Conditions Assessment

The SWSI value of +0.2 indicates that for January the basin water supplies were normal. The Natural Resources Conservation Service reports that February 1 snowpack is 103% of normal. Flow at the gaging station Animas River near Durango was 168 cfs, as compared to the long-term average of 210 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 67% of normal as of the end of January.

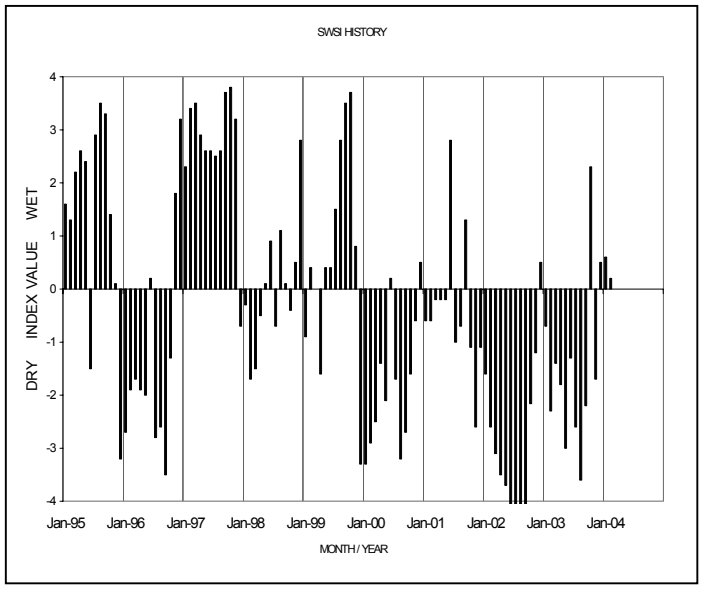
Outlook

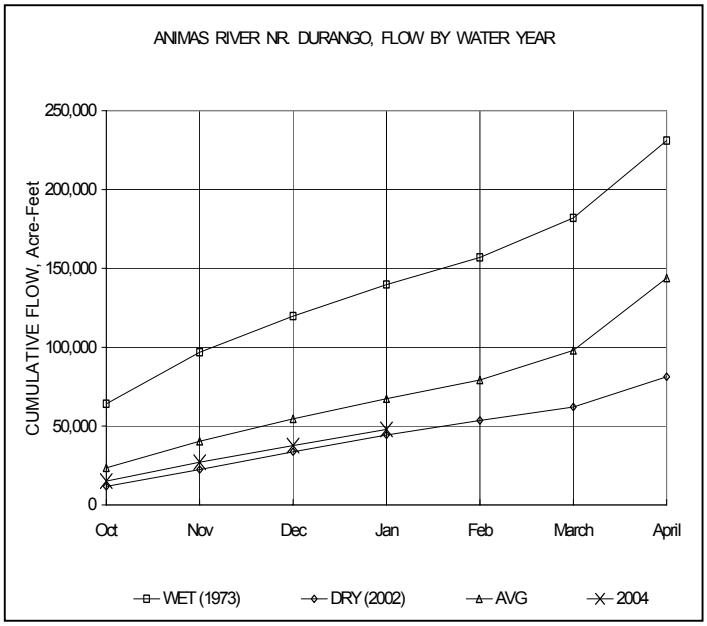
The water supply situation in Division Seven remained positive this month as the snow accumulation kept pace with average increases. The end of month snow water content showed 107% of normal, the highest basin in the state. The snow courses operated by Division Seven in the La Plata mountains had accumulated well over 50% of the total water needed for an average year.

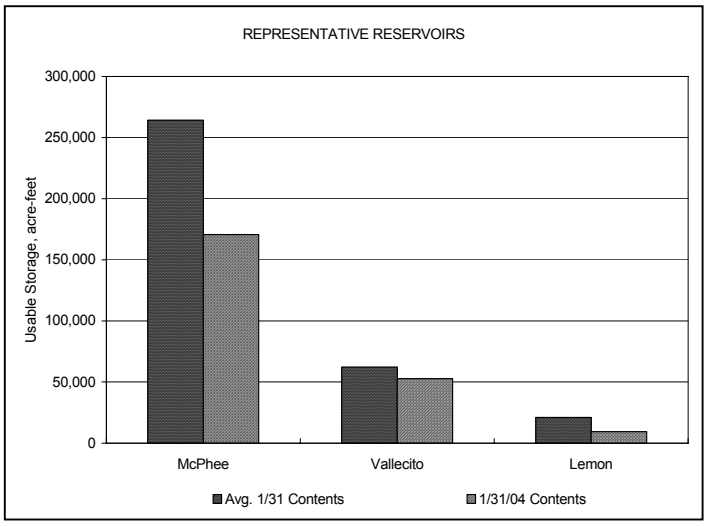
Although stream flows remained well below normal and reservoir storage carry over in general was poor, prospects of a good start on the runoff were improved because of the general low elevation snow accumulation not otherwise measured.

Vallecito reservoir and Narragiunnep reservoirs were at normal levels or better. Other reservoirs had significant vacancies and needed a good runoff for a normal supply.

The distribution of snow across the area provided excellent winter recreation and hopefully will remain until spring so that further use of the resource can be made this irrigation season.







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