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
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July 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 stream flow, reservoir storage, and precipitation for the summer period (May through October). During the summer period, stream flow 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 June range from a high of 0.0 in the Gunnison Basin to a low of -2.7 in the San Juan/Dolores Basin. All of the basins experienced a reduction from the previous month values, with the greatest reduction being in the Yampa/White Basin. Streamflow values, for those rivers and streams computed in the index, were poor in all parts of the state, especially in the South Platte and San Juan/Dolores Basins. Reservoir storage for June was about average to above average. The Gunnison and Colorado Basins, in particular, show good storage values for June. However, the expectation is that reservoirs across the state will be tapped for increased demand due to lower than normal natural streamflows for the remainder of the summer.

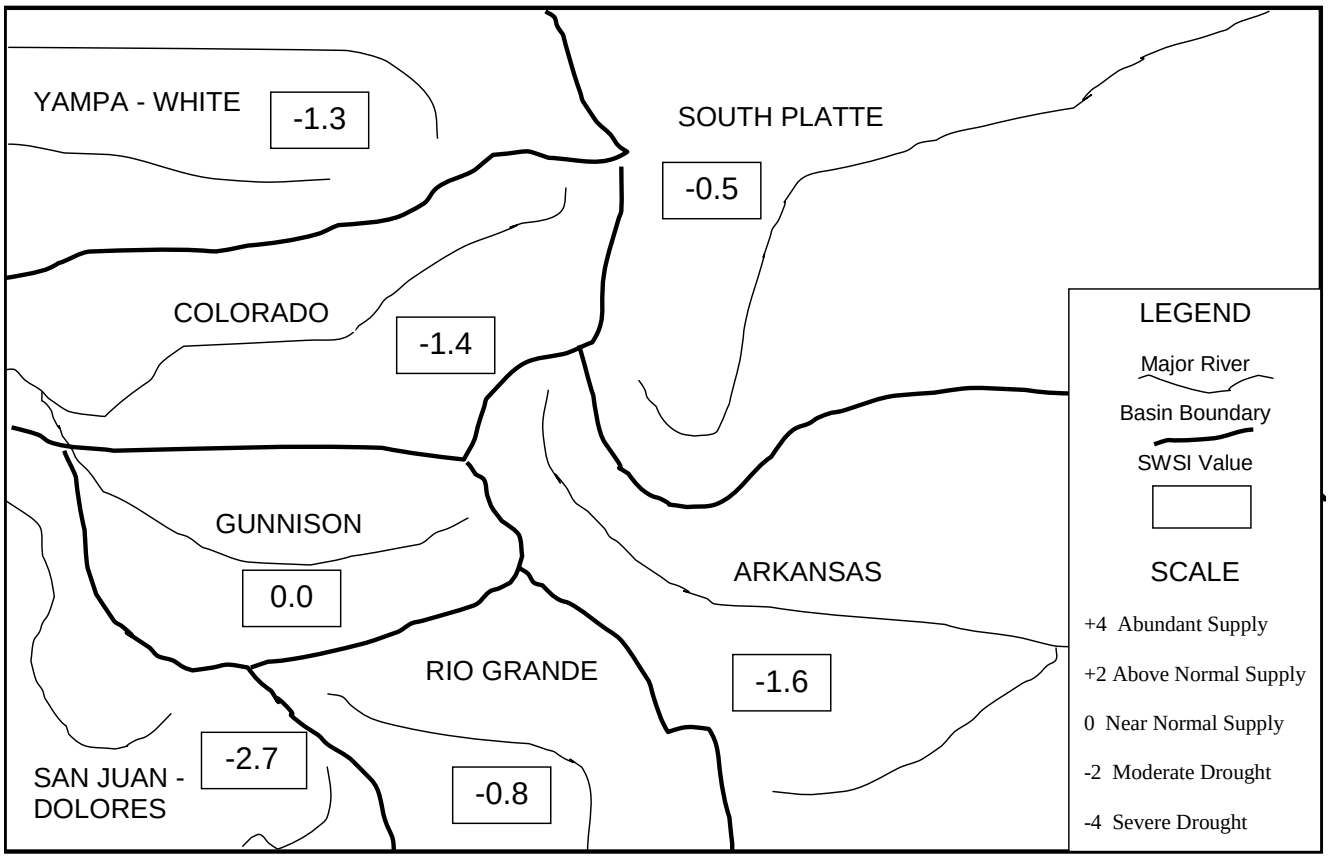
The following SWSI values were computed for each of the seven major basins for July 1, 2006, and reflect the conditions during the month of June.

Basin	July 1, 2006 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	-0.5	-1.3	-2.3
Arkansas	-1.6	-1.7	-0.3
Rio Grande	-0.8	-0.4	-2.6
Gunnison	0.0	-1.8	-0.1
Colorado	-1.4	-3.1	-1.3
Yampa/White	-1.3	-4.5	-2.3
San Juan/Dolores	-2.7	-2.7	-4.3

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



July 1, 2006

Basinwide Conditions Assessment

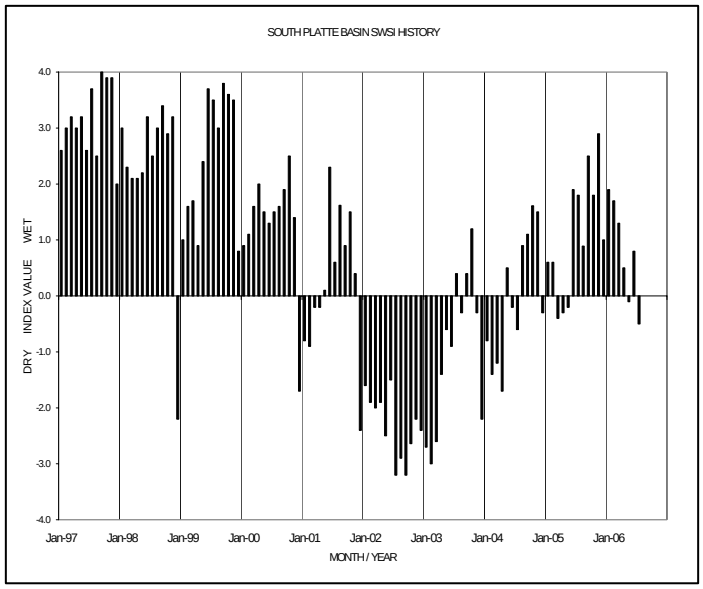
The SWSI value was -0.5 for the South Platte Basin. Reservoir storage is the major component in this basin in computing the SWSI value. The value for those reservoirs graphed on this page is 99% of normal as of the end of June. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 53% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 95% of capacity. Flow at the Colorado/Nebraska state line averaged 34 cfs.

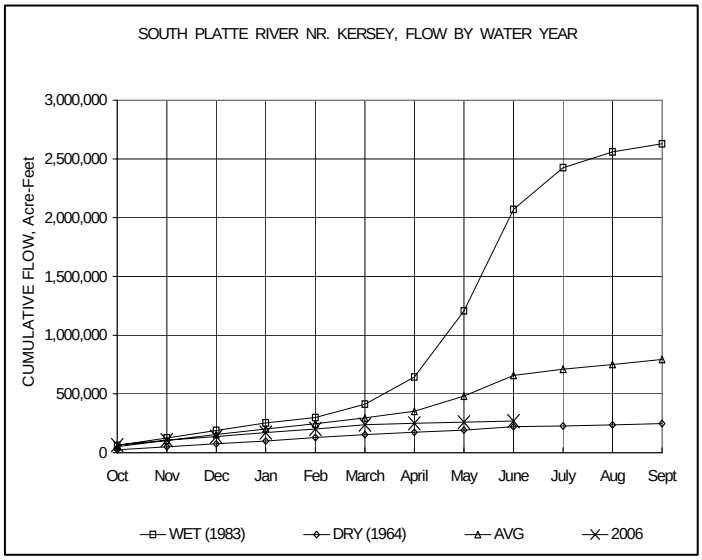
June continued to be extremely dry and warm through out the South Platte basin. Stream flow was far below average for the month with stream flow at the key Kersey gage on the South Platte continuing to mimic the extremely severe drought year of 2002. Average flow in 2002 at Kersey during June was 141 cfs while this years flow was 165 cfs. This compares to a historical average flow in June at Kersey of approximately 2300 cfs.

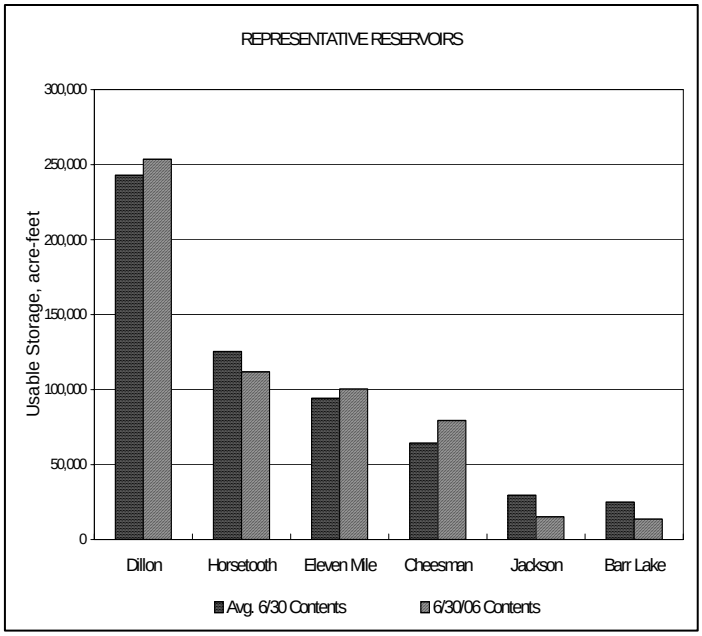
As a result of this, the calls on the South Platte stayed extremely senior not allowing for any recharge or refilling of reservoirs. In fact, senior reservoirs were relied upon heavily for releases for irrigation and municipal purposes. The end of the month storage for June also paralleled 2002 with storage below Kersey of 121706 ac-ft this year compared to 137692 ac-ft in 2002. For comparison, the storage below Kersey at the end of June last year was 242989 ac-ft.

Outlook

Without significant rains during the remainder of the irrigation season, this year will turn out to be a disaster for many farmers. Many crops have already been severely damaged or destroyed by the dry conditions to date. While municipal users are in better shape due to planning since 2002 and their financial ability to have a greater safety factor, continued dry conditions will also start to impact these users if we do not have at least seasonal precipitation in the next several months.







Basinwide Conditions Assessment

The SWSI value for the basin was -1.6. Flow at the gaging station Arkansas River near Portland was 1554 cfs, as compared to the long-term average of 2303 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 74% of normal as of the end of June.

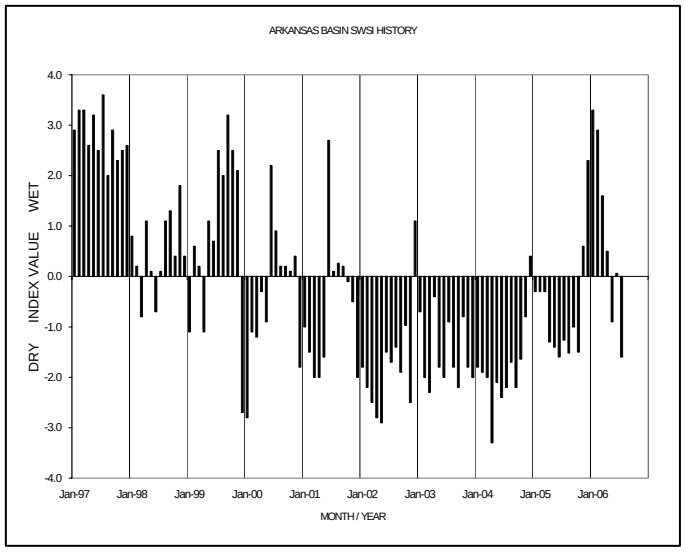
Outlook

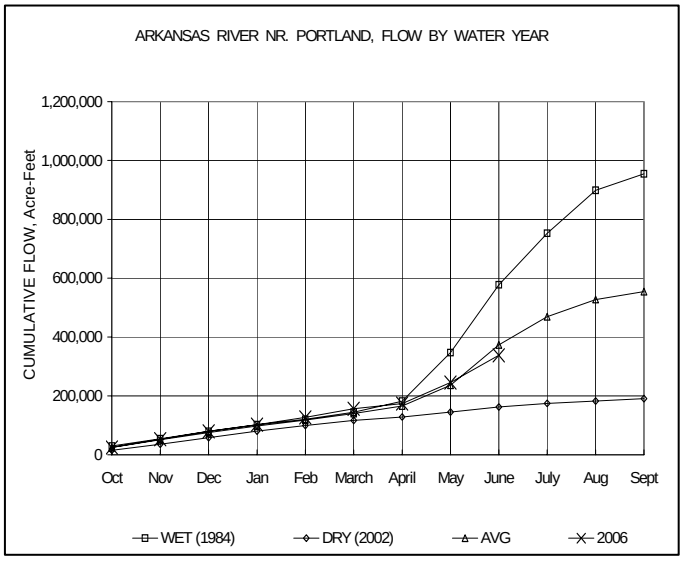
Stream flows in early June continued fairly strong with a peak the week of June 10th at most mainstem gages. The Arkansas River call began the month set at the Las Animas Consolidated 3/13/1888 priority. The river call at the end of June was the Amity #1 call (2/21/1887).

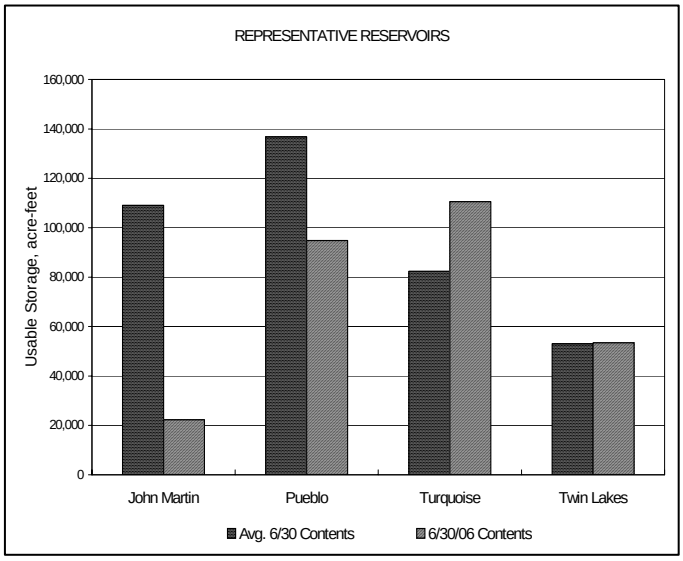
Administrative/Management Concerns

The Southeastern Colorado Water Conservancy District allocated approximately 47,000 acre-feet of Fryingpan Arkansas Project water. Import deliveries have been fairly strong due to good runoff conditions on the western slope.

Well augmentation groups again worked with Pueblo Board of Water Works and the Lower Arkansas Valley Water Conservancy District to make a delivery of consumable water to the Offset Account in John Martin Reservoir as a hedge against stateline depletions as the final year (2006) of the first ten year accounting period proceeded to the final half of the year.





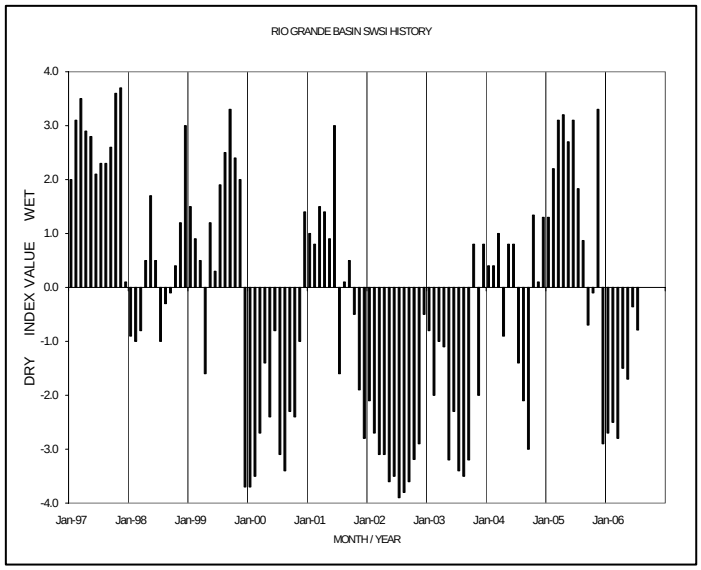


Basinwide Conditions Assessment

The SWSI value for the basin was -0.8. Flow at the gaging station Rio Grande near Del Norte was 1427 cfs, as compared to the long-term average of 2982 cfs. The Conejos River near Mogote had a mean flow of 537 cfs (41% of normal). Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 43% of normal as of the end of June. Precipitation in Alamosa was only 0.15 inches, which is 0.44 inches below normal. Temperatures ranged from 32 degrees to 91 degrees in Alamosa where the average monthly temperature was 61.8 degrees, 2.4 degrees above normal.

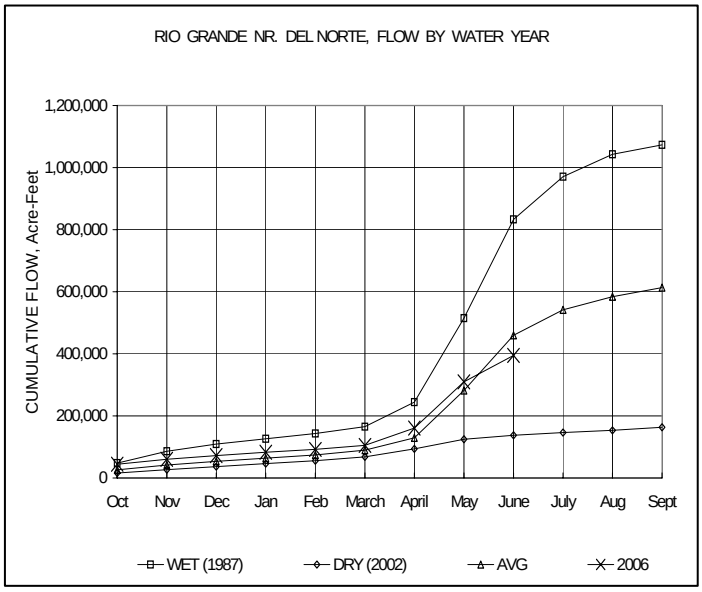
June continued the trend of drier and warmer than normal conditions. After a surprisingly decent runoff during April and May, area streams dropped quickly as the month progressed.

Note: The San Luis Valley received extraordinary precipitation the first nine days of July. Streamflow and soil moisture conditions improved significantly during that period.



Outlook

If the monsoonal activity of early July continues, conditions within the forest and rangeland of the upper Rio Grande basin should improve greatly. Large groundwater withdrawals are anticipated and the overall aquifer storage should decrease this year as pumping most likely will exceed recharge. Some reservoir releases for this irrigation season are still expected, particularly from Platoro, Sanchez, and the Trinchera Creek reservoirs.



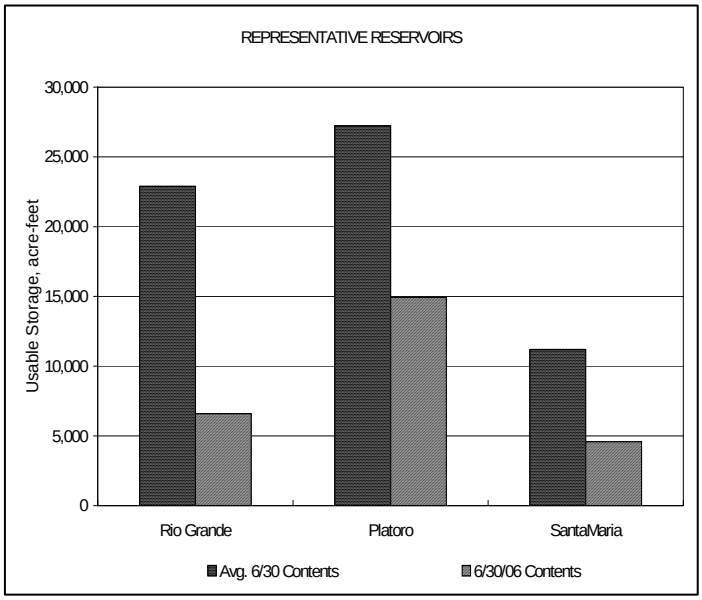
Administrative/Management Concerns

Administrators have placed curtailments on indexed stream flows in order to meet water delivery requirements to the state line pursuant to the Rio Grande Compact. The current delivery targets are set at 10% for the Rio Grande and 12% for the Conejos River system. These percentages of available native flow are routed downstream past the ditches to the state line. If the rains continue, these curtailments will need to be increased.

Public Use Impacts

June was a disastrous month on native rangeland and forested areas in the upper Rio Grande basin. Fires erupted near Fort Garland (13,000 acres burned) and La Garita (500 acres burned) during the third week of June. Grazing was also limited by the dry conditions.

The warm, dry weather during June benefited those farmers and ranchers with cropland that had an available irrigation supply. Well pumping geared up as the creeks and rivers dropped. Fortunately, the early July rainstorms reversed the trend. As the summer progresses, recreational opportunities will be hampered by low water levels in both reservoirs and streams in the basin.



Basinwide Conditions Assessment

The SWSI value for the basin was 0.0. Flow at the gaging station Uncompahgre River near Ridgway was 389 cfs, as compared to the long-term average of 558 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 100% of normal as of the end of June.

Outlook

After the Grand Junction weather station recorded the 7th driest May on record, the month of June tied as the 10th warmest on record. The precipitation in the basin was far below the normal for June. These conditions led to very hot and dry June.

Administrative/Management Concerns

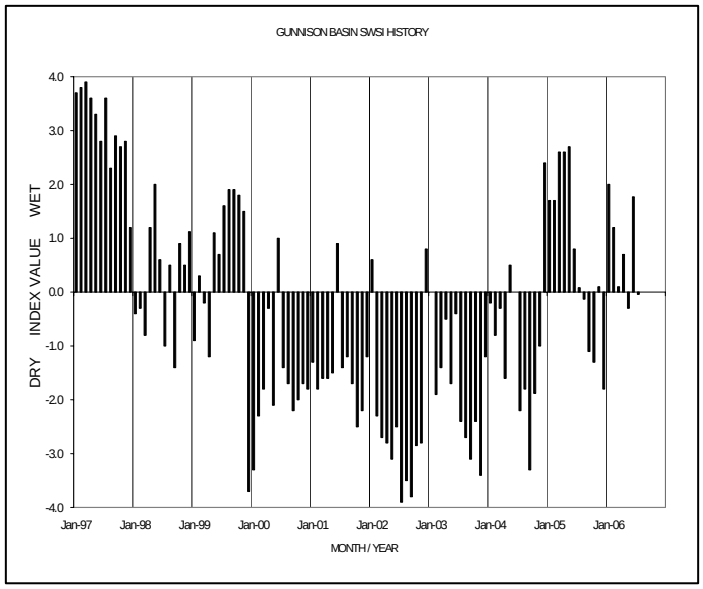
Since the runoff peaked early, the flows in June have continued to drop. However, the hot conditions have kept the flows higher than expected, melting the remaining snow at an advanced rate.

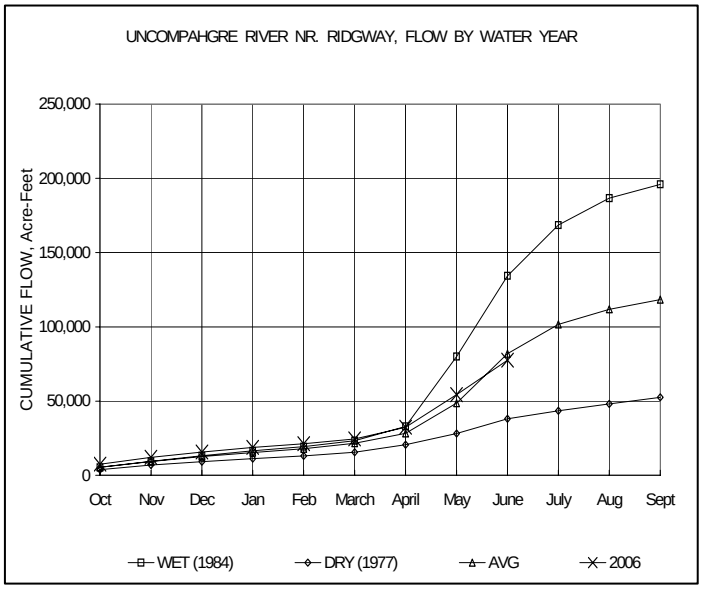
At the last report, Blue Mesa Reservoir was not expected to fill. But by June 17, the level of the reservoir was only 1.7 feet from spilling and the USBR decided to increase releases to keep from filling any more. They like to keep about a 1.5 feet buffer for summer flood events. Blue Mesa Reservoir hasn't filled since July of 1999, when drought conditions started in the Gunnison Basin. Filling the largest reservoir in the state, which holds over 930,000 acre-feet, is a great accomplishment given the recent drought conditions.

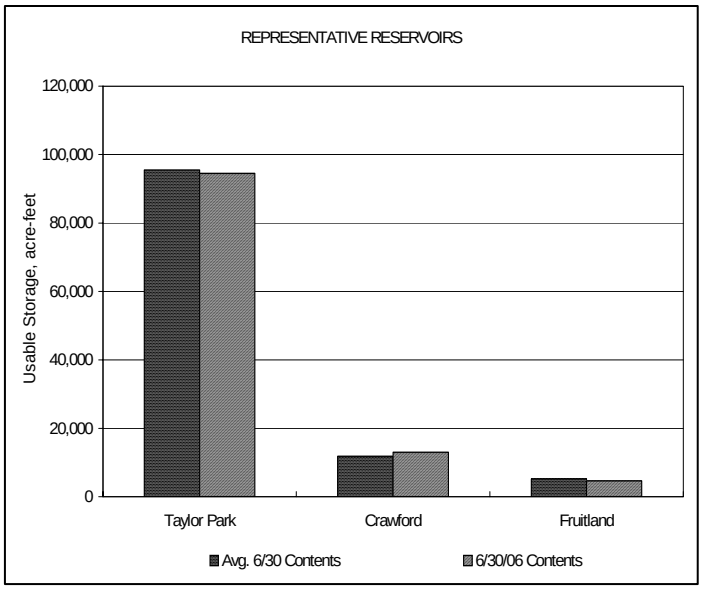
Taylor Park Reservoir also filled more than expected, reaching a point just 4.5 feet from spilling. Ridgway spilled for 15 days from June 6 to 20. As desired, much of the accumulated debris was washed over the morning glory spillway. The reservoirs on the Grand Mesa are mostly full, although the use of summer storage has begun.

Public Use Impacts

The increased reservoir supply has made conditions look better. The streamflows will likely drop drastically in July and August, but will hopefully be boosted by summer rains. The first week and a half of July have need very wet, and overall basin-wide conditions have really improved. Irrigators and recreationists should have a good summer season, with sufficient water for most needs.







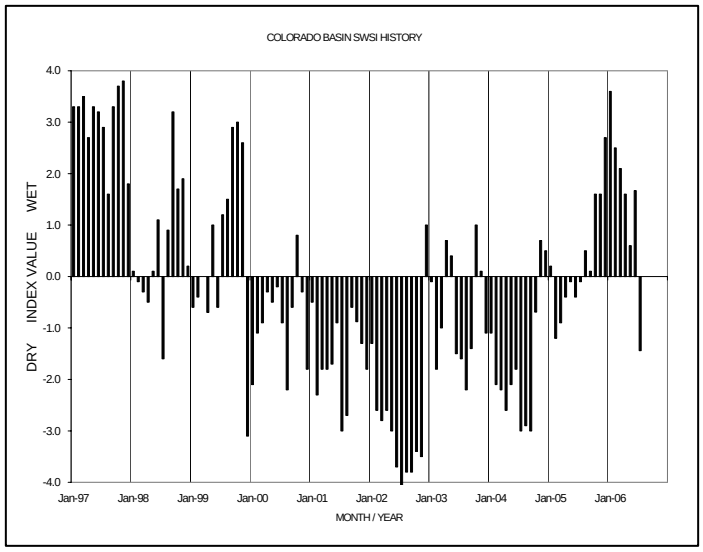
Basinwide Conditions Assessment

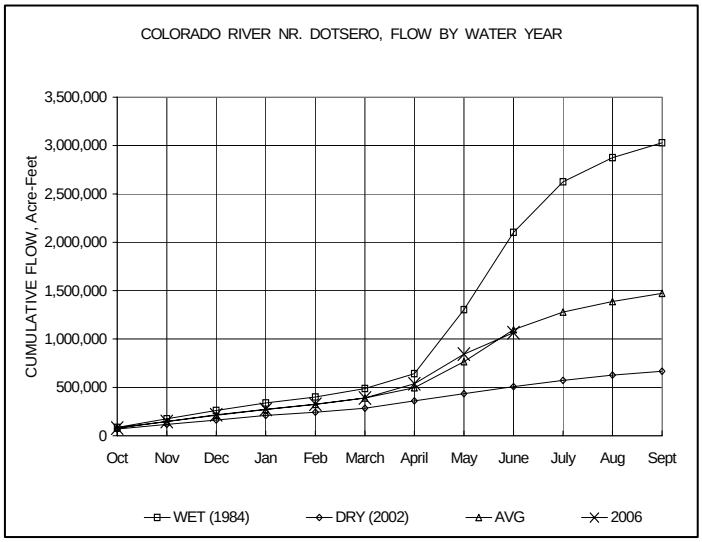
The SWSI value for the basin was -1.4. Flow at the gaging station Colorado River near Dotsero was 3719 cfs, as compared to the long-term average of 5583 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 113% of normal as of the end of June.

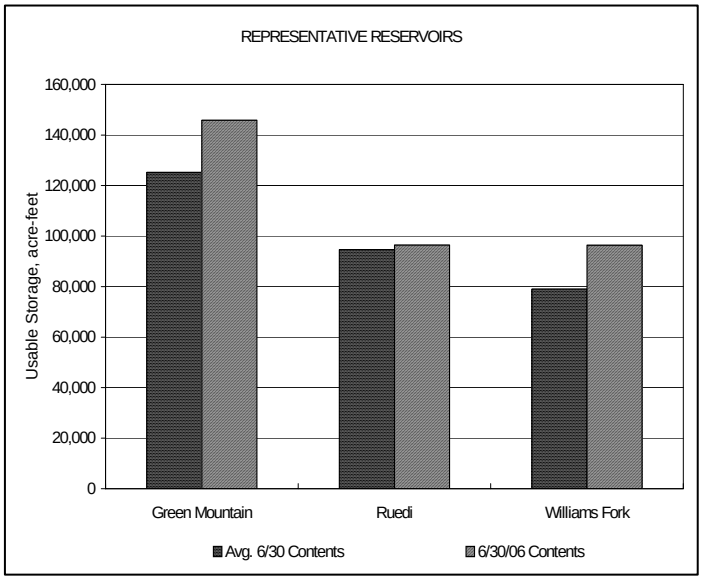
Outlook

The summer monsoon season finally arrived in the Colorado River basin at the end of June, bringing much needed rainfall to most of the basin. The rains leveled off the river hydrographs, which had been dropping steadily, and this has kept the River Call from coming on from either Shoshone or Grand Valley.

Green Mountain Reservoir is spilling and is not making power because of the final phase of a ring seal construction project. In addition, Dillon Reservoir is spilling for a second time this year. This situation has created Free River conditions for the entire Blue River basin (exclusive of local tributary calls) which is a rare occurrence.



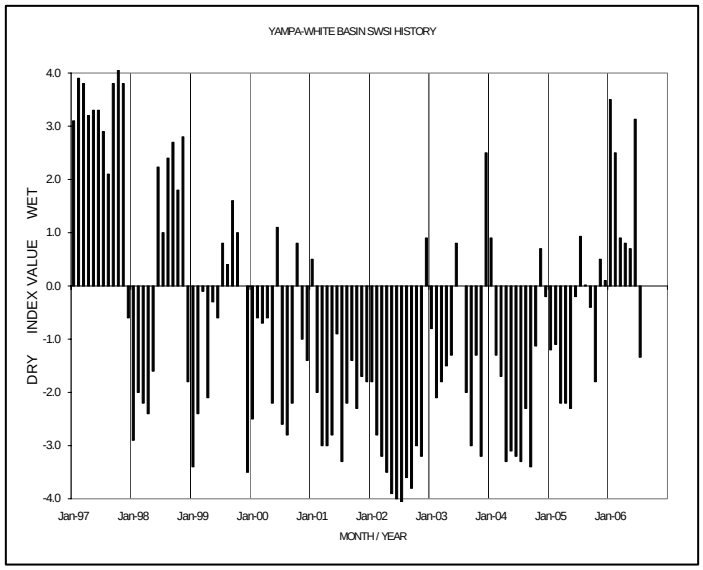




Basinwide Conditions Assessment

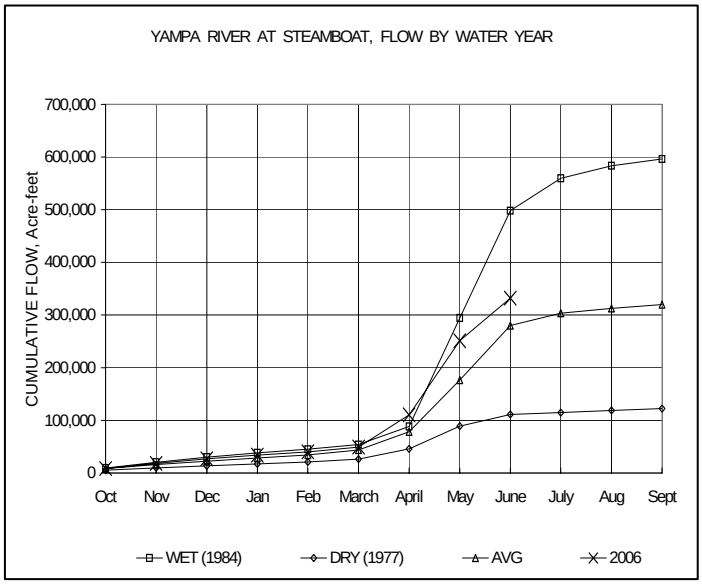
The SWSI value for the basin was -1.3. Flow at the gaging station Yampa River at Steamboat was 1360 cfs, as compared to the long-term average of 1737 cfs.

June was an exceptionally dry month for the basins. Precipitation, as recorded at the SNOTEL sites operated by the NRCS, totaled only 29% and 31% of average for the Yampa and White River Basins and North Platte River Basin, respectively, for the month. There is very little snowpack left at the higher elevations, and the stream flows have dropped below average for this time of year throughout the basins. Due to good winter snowpack, the reservoirs in the area were able to fill. The reservoir levels have now begun to drop though not significantly.



Administrative/Management Concerns

Many of the lower elevation tributaries have already gone under administration and many of the smaller tributaries have already gone dry for the season. These situations will most likely increase as river flows drop. Having full reservoirs going into the summer has provided some relief for irrigators that have access to storage supplies.



Public Use Impacts

Area streams and rivers have dropped significantly and are now below normal levels. Recreation on the Yampa River through Steamboat Springs, in particular, has gone from rafting and kayaking to tubing and fishing. Elkhead Reservoir continues to remain closed for all recreational activities for the summer of 2006.

Basinwide Conditions Assessment

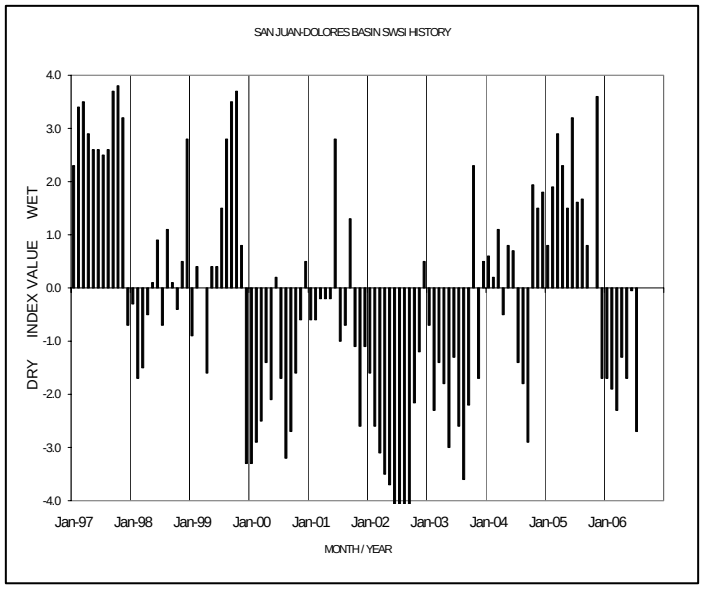
The SWSI value for the basin was -2.7. Flow at the gaging station Animas River near Durango was 1295 cfs, as compared to the long-term average of 2502 cfs. Storage in McPhee, Vallecito, and Lemon reservoirs totaled 99% of normal as of the end of June.

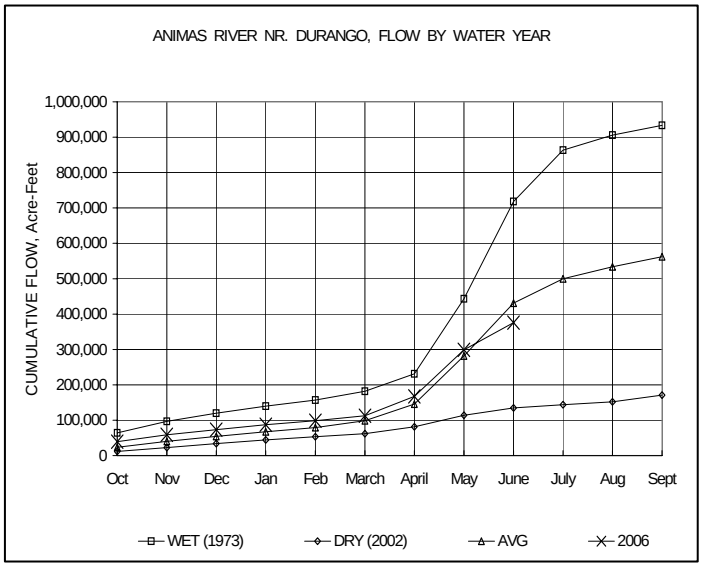
June weather stayed in the weather pattern that occurred from November 2005 to March 2006 and April to May 2006, drier and warmer than normal. The only slightly bright spot was that Durango had near normal precipitation, 0.63 inches of precipitation, 98% of average. So far this Water Year Durango is at 71% of normal precipitation.

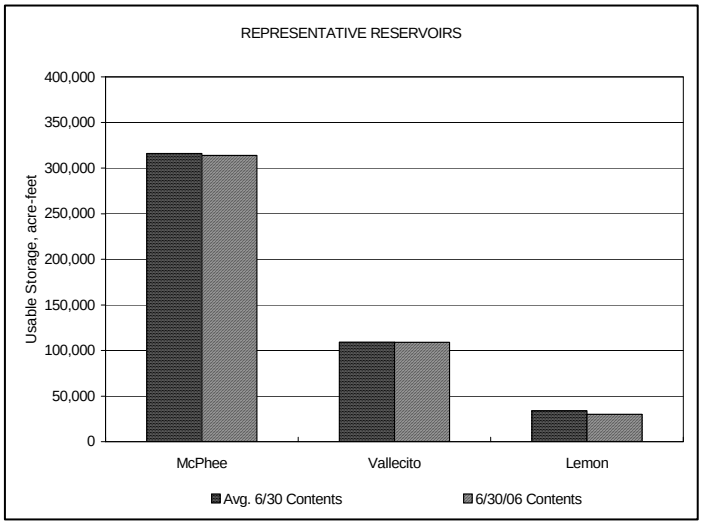
Stream flows were far below normal for the month due to the lack of snowmelt and widespread precipitation. The Animas River peaked at 2160 cfs on June 9th and averaged 1290 cfs for the month, which is 44% of normal. The Dolores River averaged just 314 cfs for the month, well below the 1389 cfs normal, and the La Plata River at Hesperus averaged only 31 cfs for the month compared with it's normal flow of 135 cfs.

Reservoirs continued to be a slightly dimmer bright spot in the water supply outlook. Only one of the three major reservoirs still maintained above average storage at the end of the month. Vallecito reservoir was at 108,942 acre feet (af) of storage, 107% of normal. Lemon Reservoir was down to 30,164 af, 91% of normal. McPhee Reservoir was at 313,950 af, 99% of normal.

The clear and dry weather kept the high and low temperatures above normal. Overall Durango was 3.5° above its 30-year average high and 7.8° above its 30-year average low.







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