
COLORADO

WATER SUPPLY CONDITIONS UPDATE

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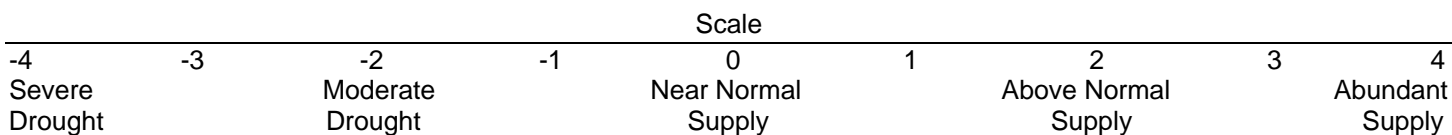
August 2007

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 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.

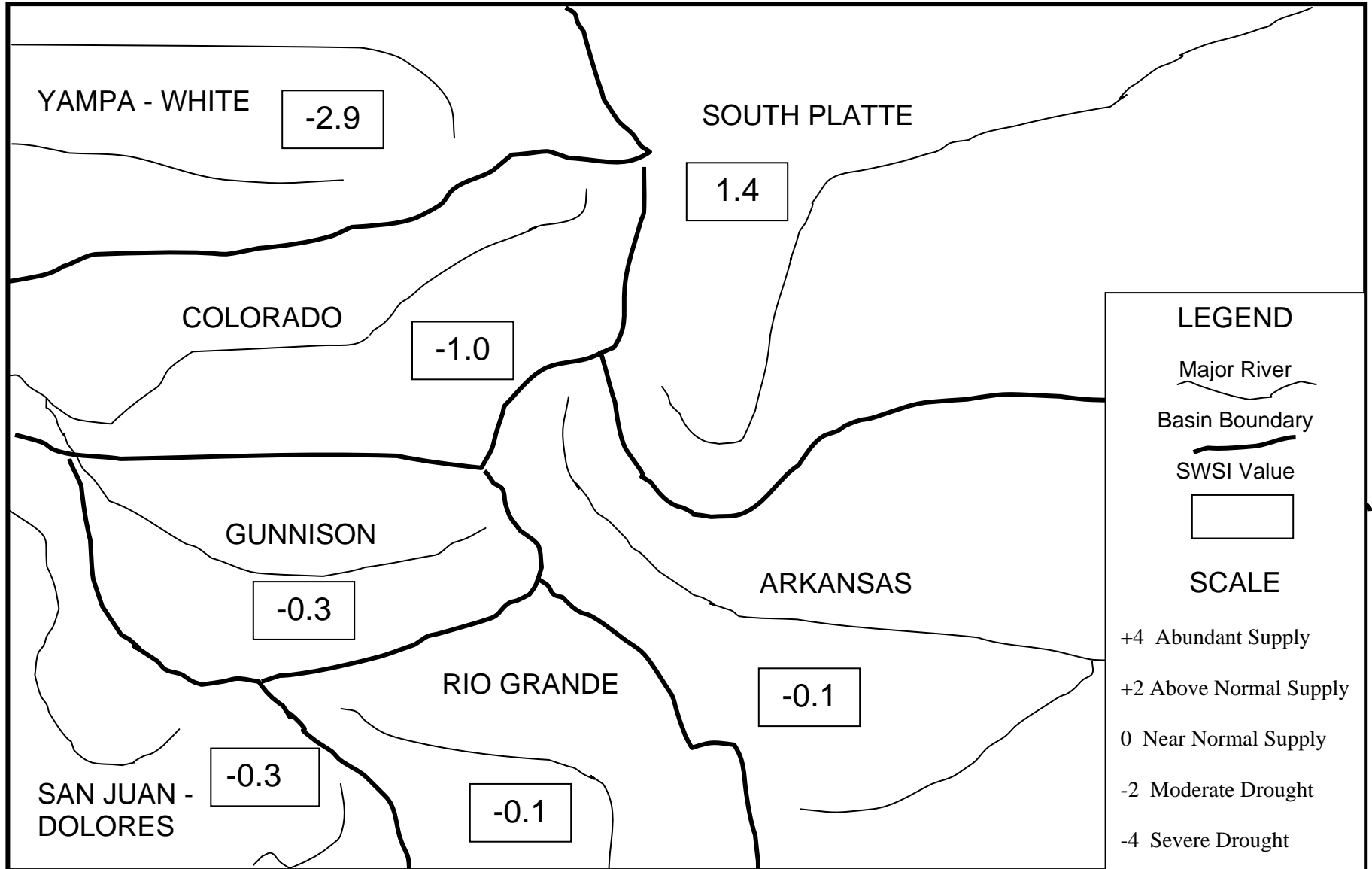
The statewide SWSI values for the month range from a high value of 1.4 in the South Platte Basin to a low value of -2.9 in the Yampa/White Basin. Four of the basins (South Platte, Gunnison, Yampa/White, and San Juan/Dolores) experienced a gain from the previous month's values. Two of the basins (Arkansas and Rio Grande) experienced a loss from the previous month's values. One of the basins (Colorado) was unchanged from the previous month's values.

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

<u>Basin</u>	<u>August 1, 2007 SWSI Value</u>	<u>Change From Previous Month</u>	<u>Change From Previous Year</u>
South Platte	+1.4	+0.1	+0.0
Arkansas	- 0.1	- 0.7	+1.4
Rio Grande	- 0.1	- 0.6	+1.7
Gunnison	- 0.3	+0.2	- 0.9
Colorado	- 1.0	+0.0	+0.1
Yampa/White	- 2.9	+0.8	- 2.3
San Juan/Dolores	- 0.3	+0.1	+1.6



SURFACE WATER SUPPLY INDEX FOR COLORADO



August 1, 2007

Basinwide Conditions Assessment

The SWSI value for the month was 1.4. Reservoir storage in Dillon, Horsetooth, Eleven Mile, Cheesman, Jackson, and Barr Lake, the major component in this basin in computing the SWSI value, was 101% of normal as of the end of July. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 61% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 101% of capacity. Flow at the gaging station South Platte River near Kersey was 381 cfs, as compared to the long-term average of 666 cfs. Flow at the Colorado/Nebraska state line averaged 54 cfs.

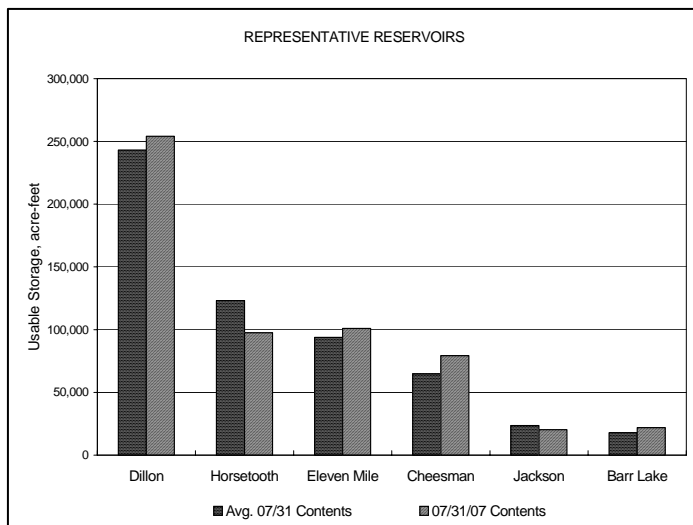
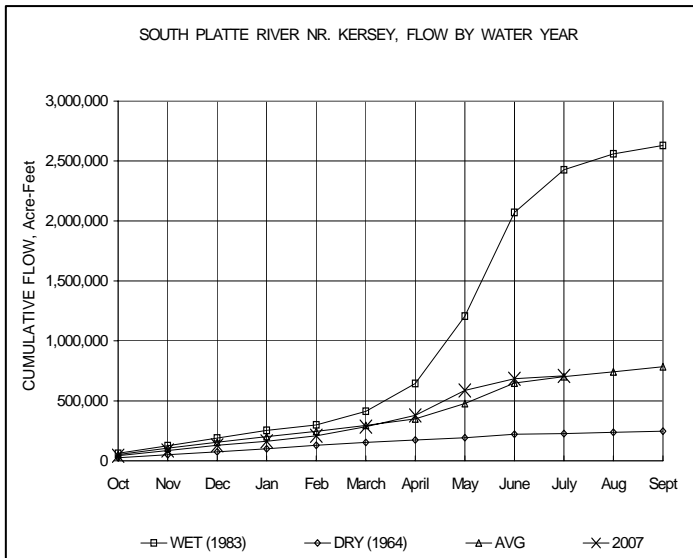
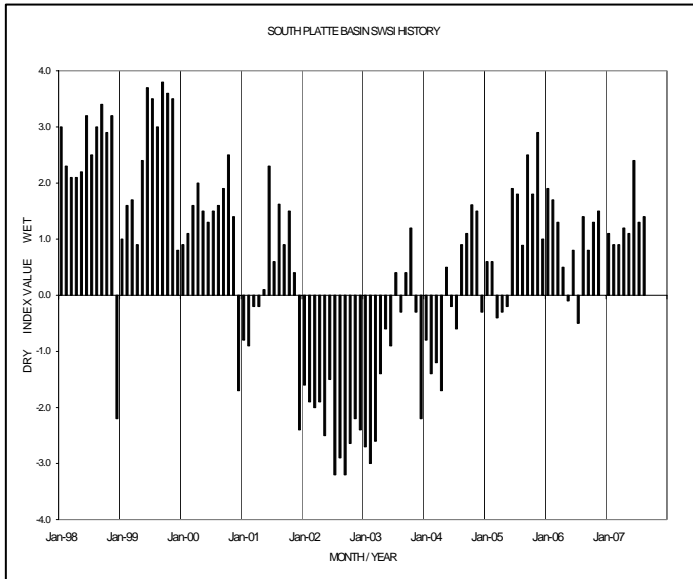
Outlook

The flow in the South Platte and tributaries continued to decline in July as always is the case. These declines in flow lead to more senior calls for water along the South Platte and its tributaries. Nevertheless, the call on the South Platte was more junior than most years during July due to the overall wet conditions this year. This is especially true in the area above Kersey. By the end of the month, rains had increased the flow enough to allow some brief refilling of storage rights on the main stem and tributaries.

Administrative/Management Concerns

Because of the spring and summer conditions, we do not anticipate any shortages of supply to irrigation water users who normally get adequate water supplies. Further, it appears that the carry over storage for next year will be much better than it was last year.

Major municipalities are also in an excellent water supply situation with full or nearly full reservoirs.



Basinwide Conditions Assessment

The SWSI value for the month was -0.1. Flow at the gaging station Arkansas River near Portland was 989 cfs, as compared to the long-term average of 1546 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 104% of normal as of the end of July.

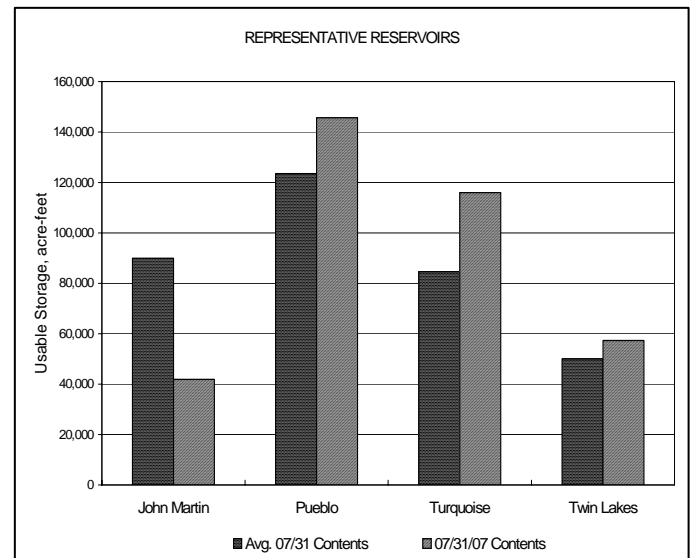
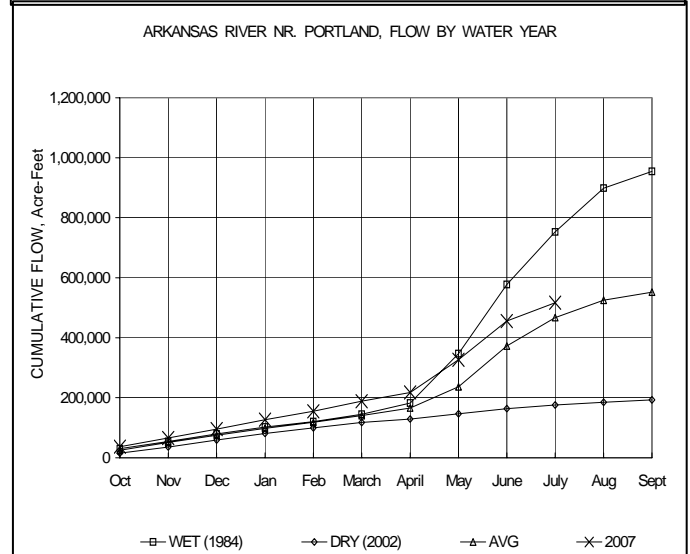
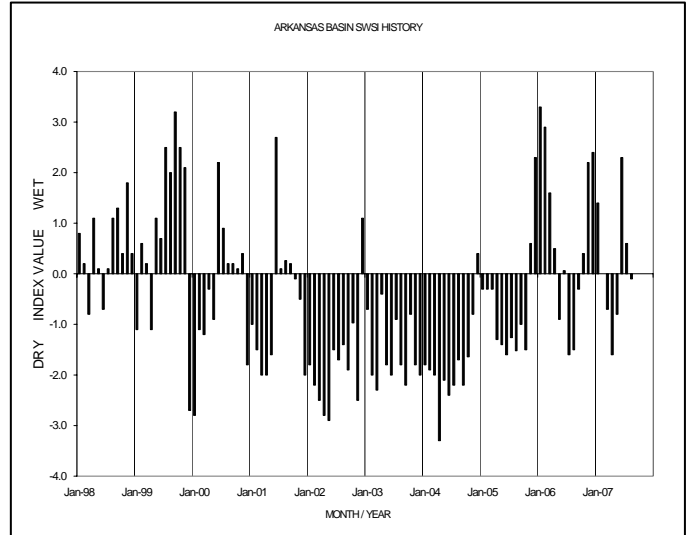
Outlook

The Arkansas River call began the month and ended the month set at the Fort Lyon #2 call (3/1/1887). There were about 12 days of Amity #1 call (2/21/1887) and a short period of higher flows with more junior calls. Overall irrigation supplies have been quite good in 2007 and that trend continued in July.

Kansas called for a release of their stored water in John Martin Reservoir in late June and continued that delivery to ditches in western Kansas through July 28, 2007. The delivery included a release of 26,464 acre-feet of Section II water along with 559 acre-feet of transit loss water. The transit loss release was limited under an agreement between the two States signed in the fall of 2006, but the delivery experienced no additional transit loss to be made up from future inflows to storage in John Martin Reservoir. The release also included 9,208 acre-feet of Offset Account water that resulted in a net stateline delivery credit of 6,650 acre-feet for the benefit of Colorado well owners in the Lower Arkansas Water Management Association (LAWMA) plan.

Administrative/Management Concerns

Colorado is still waiting for Kansas to agree on the final computer modeling results that appear to indicate Colorado is in compliance with the Arkansas River Compact for the first full ten-year period of operations (1997-2006) under the Arkansas Basin Well Rules. Attorneys and engineers for the two states also continue to forge the final decree documents that are designed to facilitate the end of the long-standing litigation and address operations on into the future and expect to be complete sometime this fall.



Basinwide Conditions Assessment

The SWSI value for the month was -0.1. Flow at the gaging station Rio Grande near Del Norte averaged 1,099 cfs (79% of normal) for the month of July. The Conejos River near Mogote had a mean flow of 352 cfs (75% of normal). Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 92% of normal as of the end of July. July precipitation in Alamosa was 2.62 inches, a generous 1.68 inches above normal. The mean temperature was 66.3 degrees, 2.2 degrees above normal.

Outlook

Stream flow levels in the basin's streams fell off drastically during the first part of July. The high runoff in May and June ran out the majority of the snowpack. However, July's streamflows were higher than what was forecasted earlier in the year. The monsoonal pattern of late afternoon rainstorms arrived late in July.

Junior water right owners in Division 3 should expect senior calls to keep them out of priority for most of the rest of the irrigation season, except for the short duration increases in flow due to the rain.

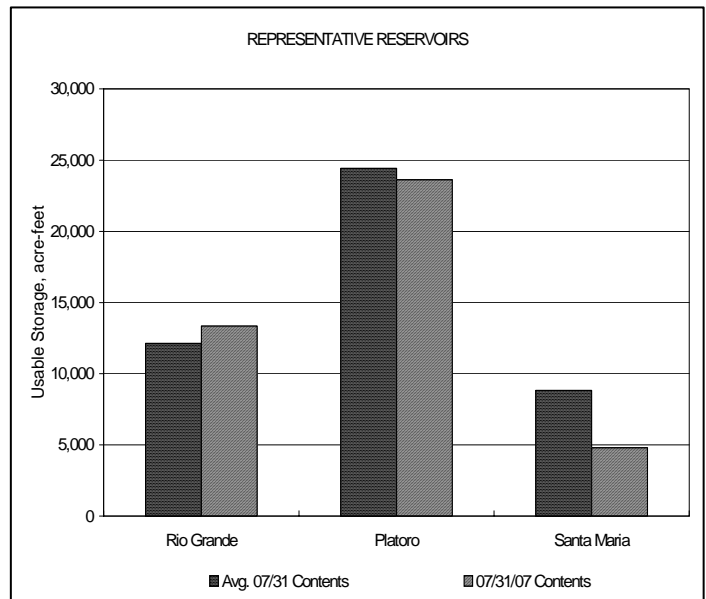
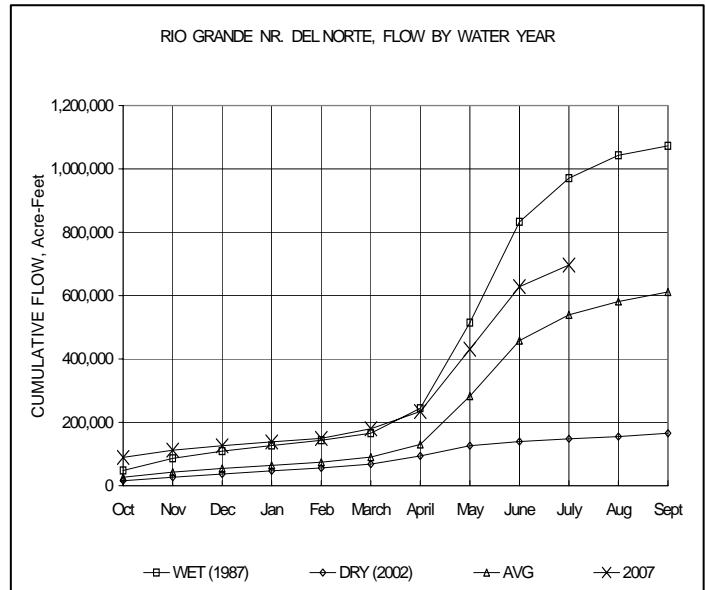
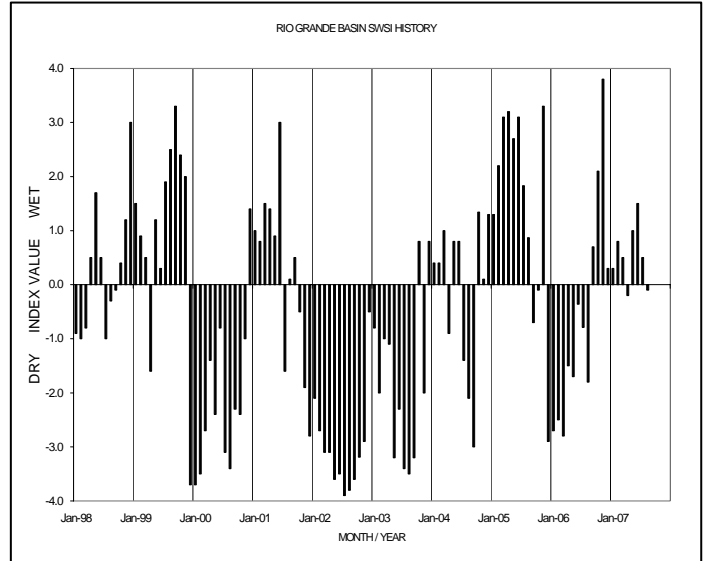
Administrative/Management Concerns

Reservoir releases in the upper Rio Grande basin ceased in early-July. Other basins may have a block of water left to release, but most mid and junior priority farmers and ranchers in Division 3 are looking for help from the monsoons to get another irrigation run.

Curtailment on the Rio Grande was increased to 25% on July 6, and then to 30% on July 24, to keep up with the Rio Grande Compact delivery schedule. The curtailment on the Conejos River system remained at 16% throughout the month.

Public Use Impacts

The abundant rainfall and warm weather have assisted in the growing of the valley's crops. However, that same rainfall has hampered efforts to put up the second cutting of hay and alfalfa.



Basinwide Conditions Assessment

The SWSI value for the month was -0.3. Flow at the gaging station Uncompahgre River near Ridgway was 267 cfs, as compared to the long-term average of 319 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 97% of normal as of the end of July.

Outlook

Users in the basin are hoping the Monsoon conditions will continue in August.

Administrative/Management Concerns

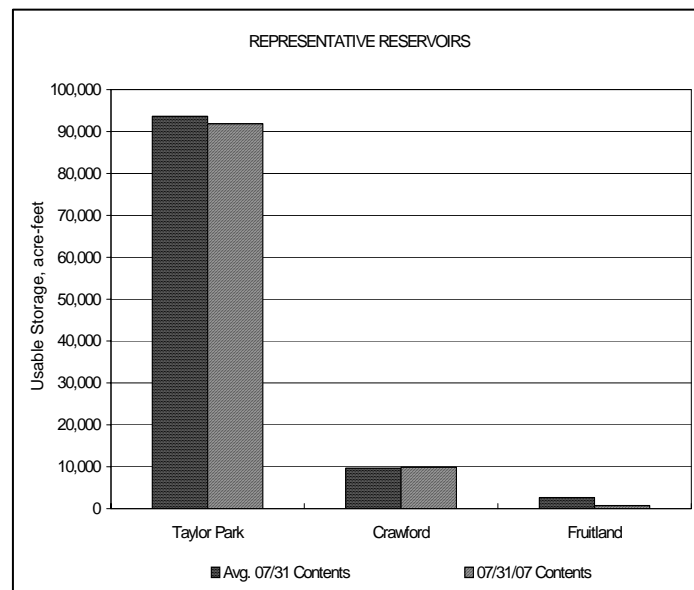
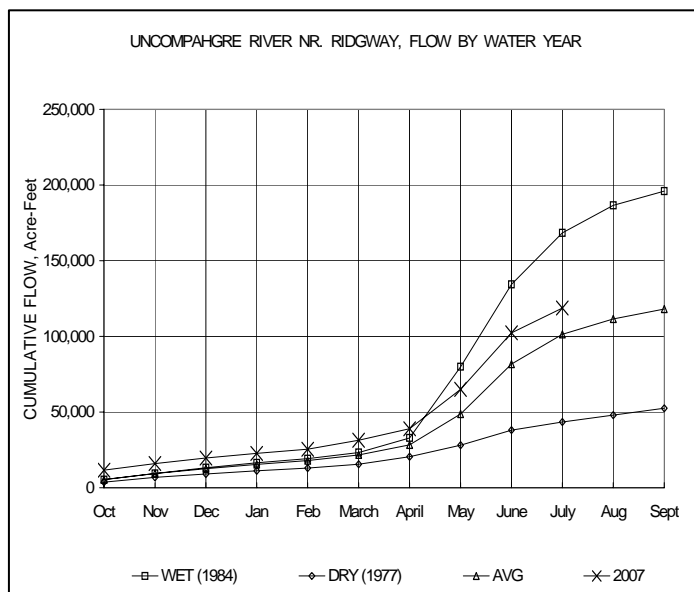
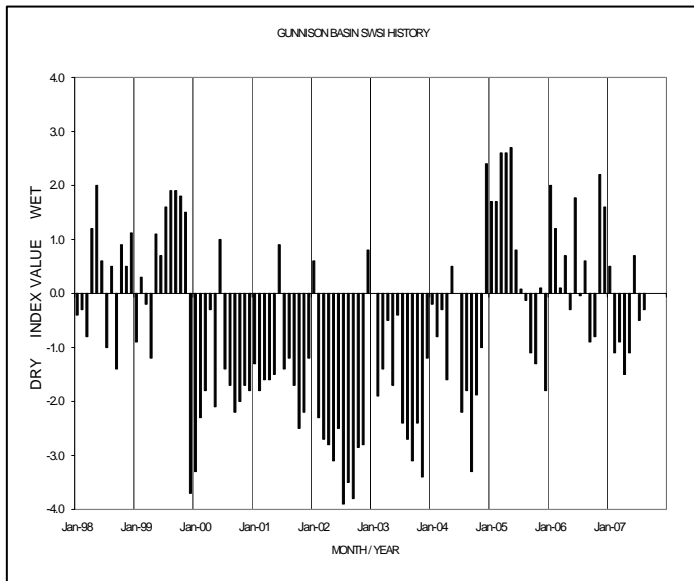
June was a record hot month with very little precipitation. July stayed very hot and dry during the first half of the month, but Monsoon conditions came and the basin started to receive much needed rains. The rains have boosted flows and relieved many of the dry conditions in the mountains, where grass was drying up and creating a high fire hazard. They have also helped to reduce the amount of stored water needed, which will extend the supplies later into the season.

Reservoir storage has been more than expected in the basin this summer, largely due to increased flows from the wet groundwater conditions last fall and this spring's precipitation. Taylor Park filled and Blue Mesa filled to 3.5 feet from spilling this year. Flows in the Gunnison River through the Black Canyon have been increased to meet the January 1 target elevation at Blue Mesa.

The monsoon rains will help users avoid a call from the Uncompahgre Valley Water Users Association at the M & D canal on the Uncompahgre River and the Gunnison Tunnel on the Gunnison River. There should also be enough flow in the lower Gunnison River to avoid a call from The Redlands Power Canal.

Public Use Impacts

Blue Mesa and Taylor Park reservoirs have an extremely high recreational use in the summer, and the higher levels increase the value of that experience. The recreational users of lakes on the Grand Mesa have also enjoyed full lakes, which will still have significant carryover storage at the end of the irrigation season.



Basinwide Conditions Assessment

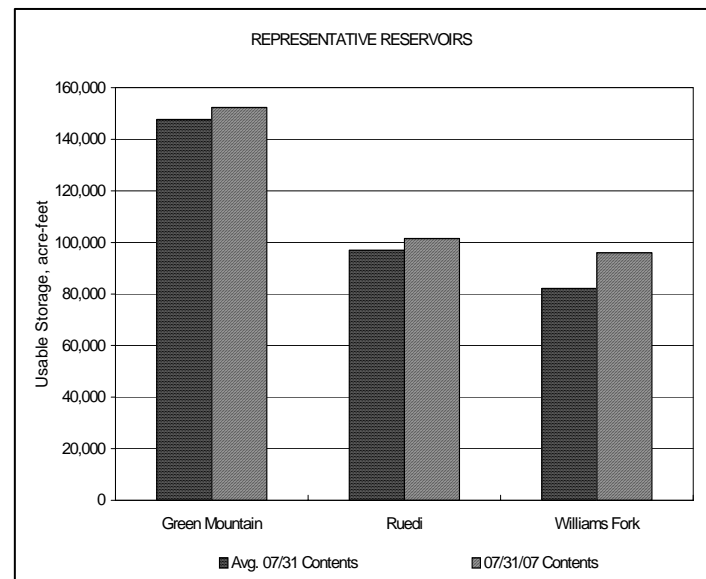
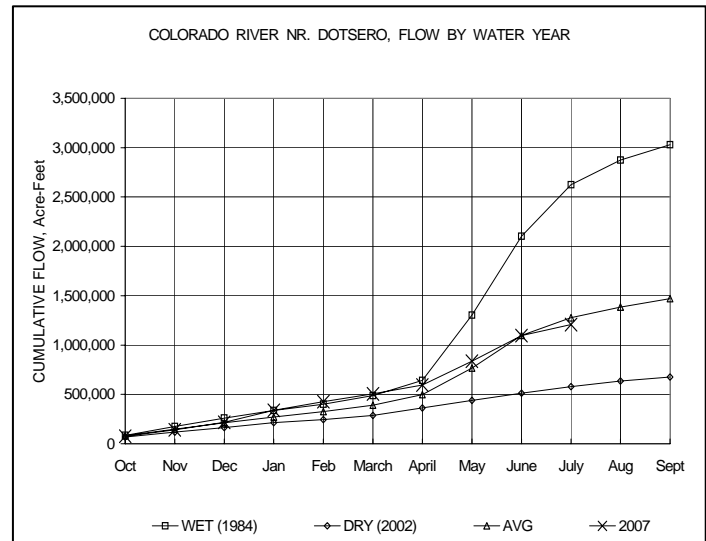
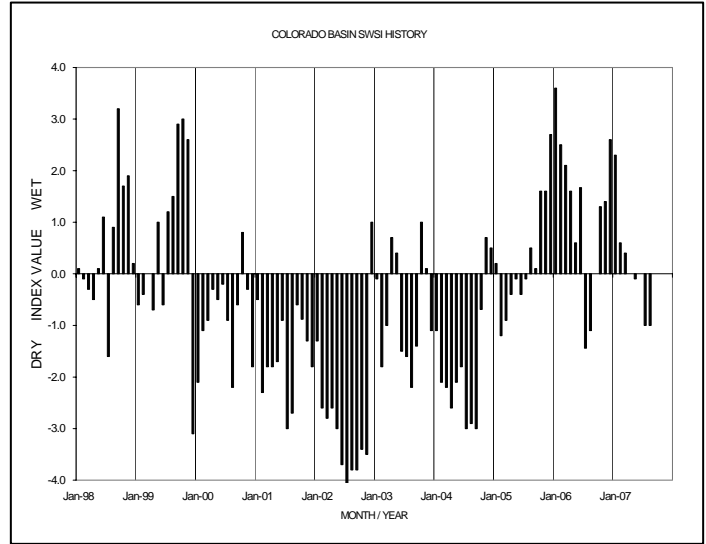
The SWSI value for the month was -1.0. Flow at the gaging station Colorado River near Dotsero was 1815 cfs, as compared to the long-term average of 2926 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 107% of normal as of the end of July.

Administrative/Management Concerns

The timeframe regarding repair of the Shoshone Power Plant on June 20, 2007 penstock rupture remains unknown at this point. The generator room has been cleaned out to begin disassembly of the turbines and generators. Rock clearing behind the building continues to evaluate the extent of the penstock damage. Water users continue cooperative efforts to prevent a probable call on the main stem of the Colorado River, as related to the absence of the Shoshone Power Plant diversion.

Public Use Impacts

Reservoir operators and water users agreed to maintain river flow levels to accommodate endangered fish protection in the Grand Valley, as well as the Grand, Eagle and Garfield County Rafting industries. Target flow rates of 1200 cfs in Glenwood Canyon through Labor Day, and 810 cfs in the Endangered Fish Critical Reach of the Grand Valley through October will be provided by Green Mountain, Granby, Wolford Mountain and Williams Fork Reservoirs.



Basinwide Conditions Assessment

The SWSI value for the month was -2.9. Flow at the gaging station Yampa River at Steamboat was 116 cfs, as compared to the long-term average of 378 cfs.

July precipitation was below average for the Yampa and White River basins and slightly above average for the North Platte River basin. Precipitation for the month, as measured at the SNOTEL sites operated by the NRCS, was reported at approximately 76% of average for the Yampa and White River basins and 103% of average for the North Platte River basin.

Stream flows throughout the basins, as monitored by both USGS and DWR, were generally below average throughout July. With the increase in afternoon thunderstorms in late July, however, many streams were beginning to return to normal levels by the end of the month.

August temperature and precipitation forecasts for the area, based on NOAA data, are for above normal temperatures and below normal to normal precipitation for the month.

Outlook

Area reservoir levels continued to drop in July. Fish Creek Reservoir storage level at the end of July was reported at approximately 92% of capacity. Yamcolo Reservoir storage level continued to decline throughout July and the reservoir was at approximately 41% of capacity at the end of the month. Elkhead Creek Reservoir level also declined and the reservoir was at approximately 22,900 acre-feet or 92% of its' enlarged capacity (approximately 24,900 acre-feet) at the end of July. 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.

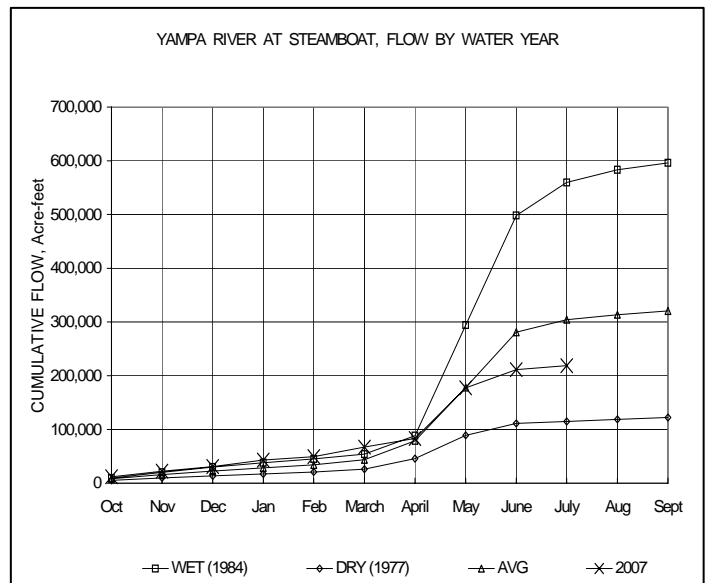
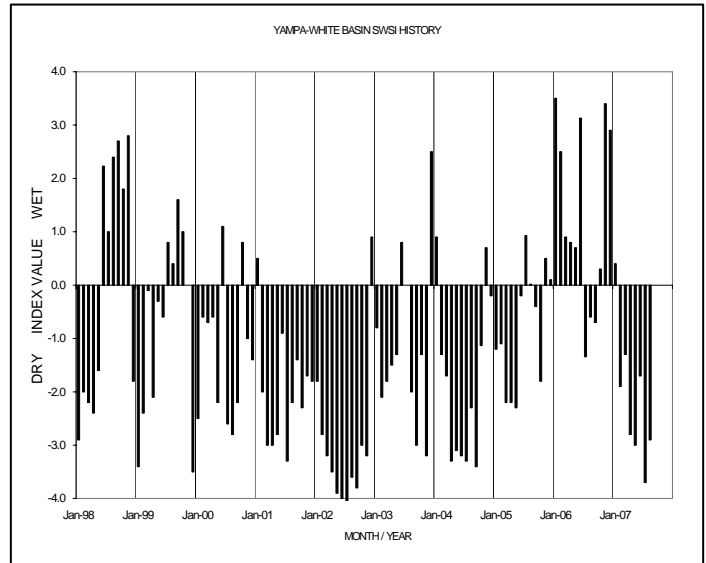
Administrative/Management Concerns

Middle Hunt Creek, Bear River, Little Bear Creek, South Hunt Creek, Piceance Creek, Morapos Creek, Deer Creek, Newcomb Creek, Illinois River, Spring Creek, and Willow Creek remained under administration throughout the month of July.

The Colorado River District is intending to release water from Elkhead Creek Reservoir this summer, which Division 6 is responsible for protecting through the Yampa River critical habitat reach. The River District is planning a test release in early August to determine potential transit losses in Elkhead Creek and the Yampa River downstream of Elkhead Creek.

Public Use Impacts

Elkhead Creek Reservoir opened on May 5 for day-use fishing and recreational activities after being closed for almost two years. A celebration of the completion of the reservoir enlargement was held on July 11, at which the Colorado River District recognized the collaborative efforts of local, state, and federal agencies on the completion of the project.



Basinwide Conditions Assessment

The SWSI value for the month was -0.3. Flows at the Animas River at Durango averaged 831 cfs (70% of normal) with a maximum average daily peak flow of 1240 cfs on July 1st. The Dolores River at Dolores averaged 262 cfs (66% of normal) with a maximum average daily peak flow of 618 cfs on July 29th. The La Plata River at Hesperus averaged 26.7 cfs (72% of normal) with a maximum average daily peak flow of 76.3 cfs on July 30th. The monsoon season typically begins in July although did not get into full swing until the end of the month this year. There were 20 out of 31 days this month where measurable precipitation was recorded with the last 12 days recording precipitation. This year, Durango recorded 1.71 inches for the month which is below the 30-year average of 1.91 inches. Precipitation to date in Durango, for the water year, is 14.47 inches which is slightly below the average of 15.20 inches. Temperatures in July were above normal for the month. Durango was 2.6° above its 30-year average high and 4.9° above its 30-year average low.

At the end of the month Vallecito Reservoir contained 105,900 acre-feet compared to its normal contents of 87,226 acre-feet (121% of normal). McPhee Reservoir has 334,655 acre-feet compared to its normal contents of 295,282 acre-feet (113% of normal). Lemon Reservoir has 29,640 acre-feet as compared to its normal content of 27,418 acre-feet (108% of normal).

Outlook

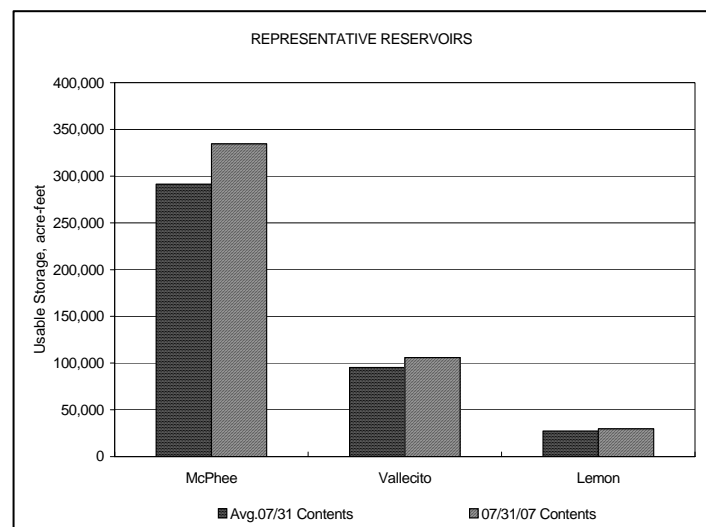
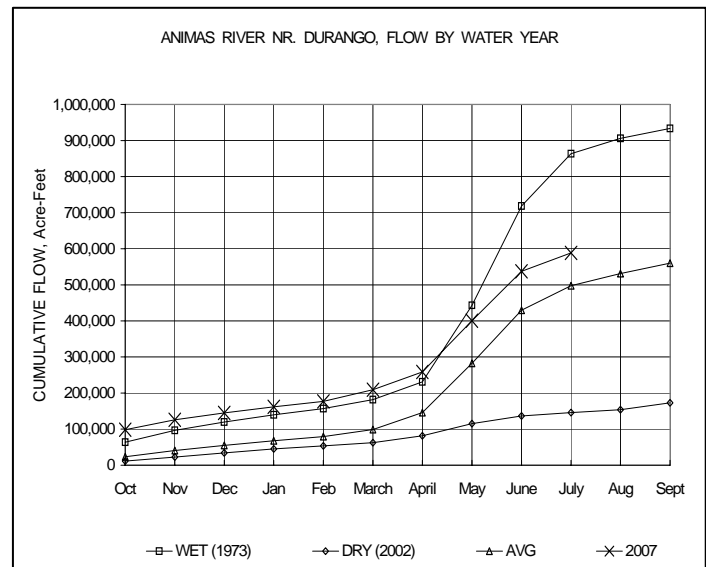
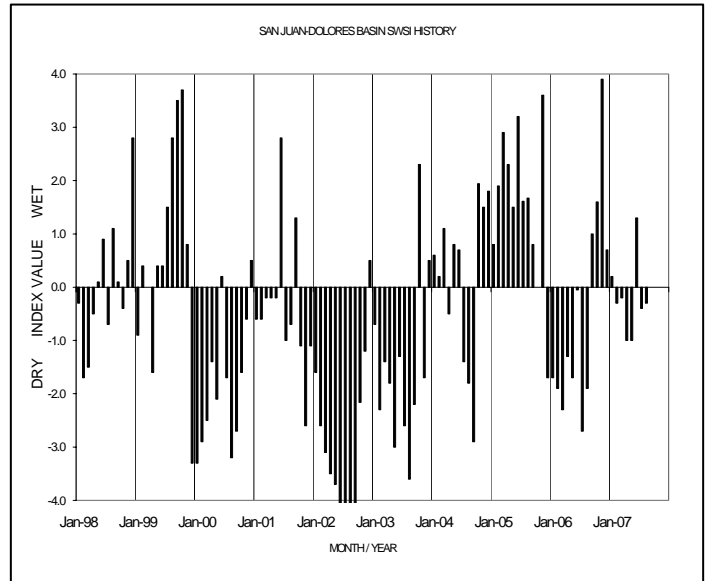
The monsoon rains of July have begun and have continued into the first part of August. August is the wettest month of the year in Durango and appears to be on track for another wet month.

Administrative/Management Concerns

The La Plata compact continued to be on call the entire month of July. New Mexico placed a call for 80 cfs on May 22nd that continued for the entire month of July. All Colorado ditches were turned off on July 13th in order to stay in compliance with the La Plata compact. Monsoon rains kicked in on July 20th and a few Colorado ditches were able to turn water back into their ditch.

Public Use Impacts

With summer in full bloom, kayaking has continued to be observed by DWR staff on the Animas River.



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