
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
 303-866-3581; www.water.state.co.us

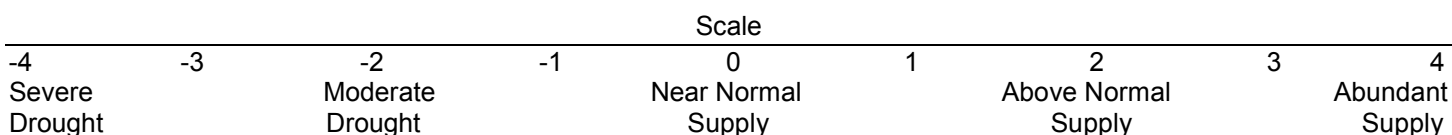
October 2008

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.

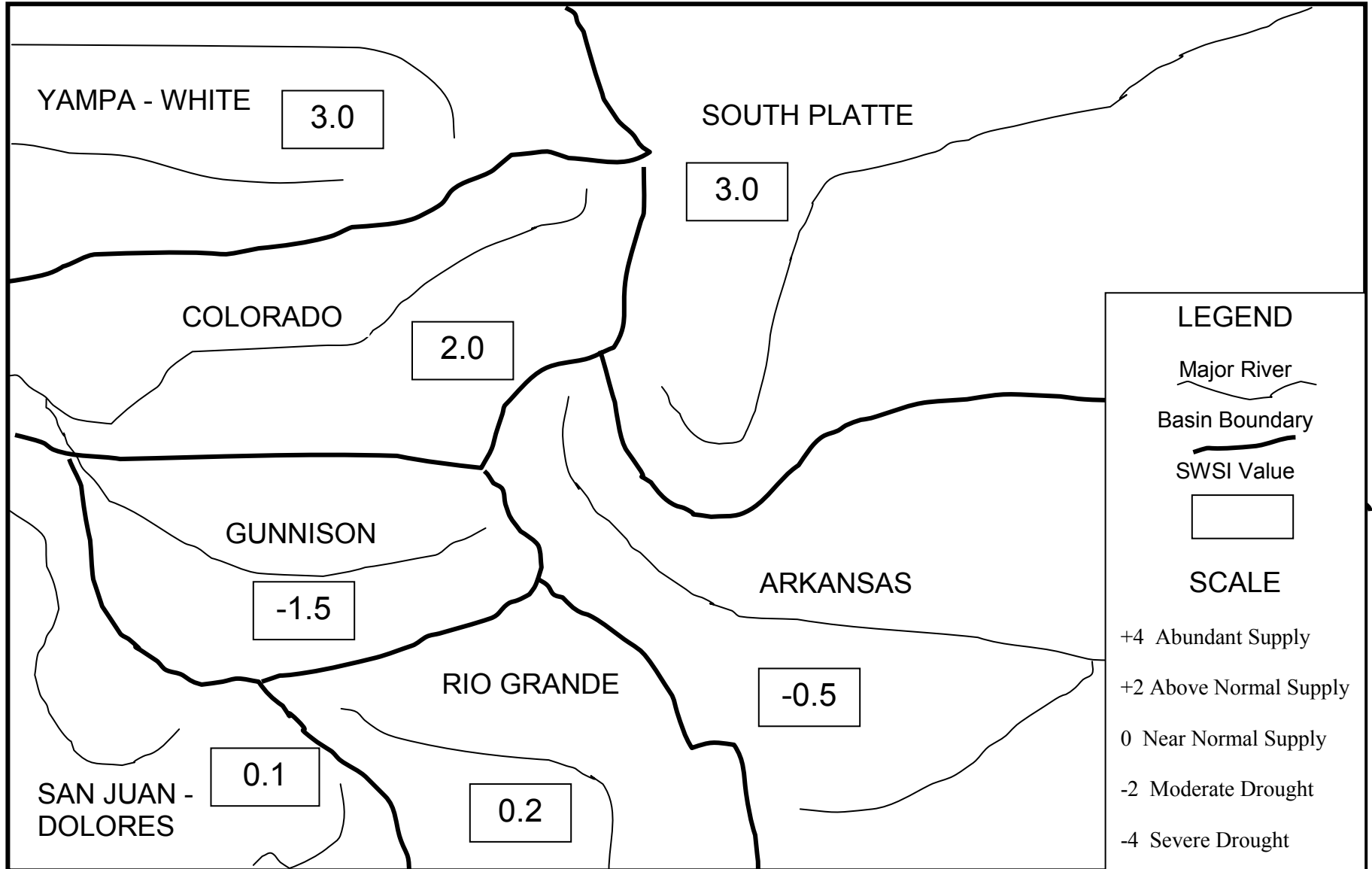
The statewide SWSI values for the month range from a high value of 3.0 in the South Platte and Yampa/White Basins to a low value of -1.5 in the Gunnison Basin. Four of the basins (Rio Grande, Colorado, Yampa/White, and San Juan/Dolores) experienced a gain from the previous month's values. Three of the basins (South Platte, Arkansas, and Gunnison) experienced a loss from the previous month's values.

The following SWSI values were computed for each of the seven major basins for October 1, 2008, and reflect the conditions during the month of September 2008.

<u>Basin</u>	<u>October 1, 2008 SWSI Value</u>	<u>Change From Previous Month</u>	<u>Change From Previous Year</u>
South Platte	+3.0	-0.1	+1.0
Arkansas	-0.5	-0.9	-1.2
Rio Grande	+0.2	+0.2	-1.6
Gunnison	-1.5	-3.1	-0.8
Colorado	+2.0	+0.1	-0.2
Yampa/White	+3.0	+2.7	+4.2
San Juan/Dolores	+0.1	+0.1	-2.4



SURFACE WATER SUPPLY INDEX FOR COLORADO



October 1, 2008

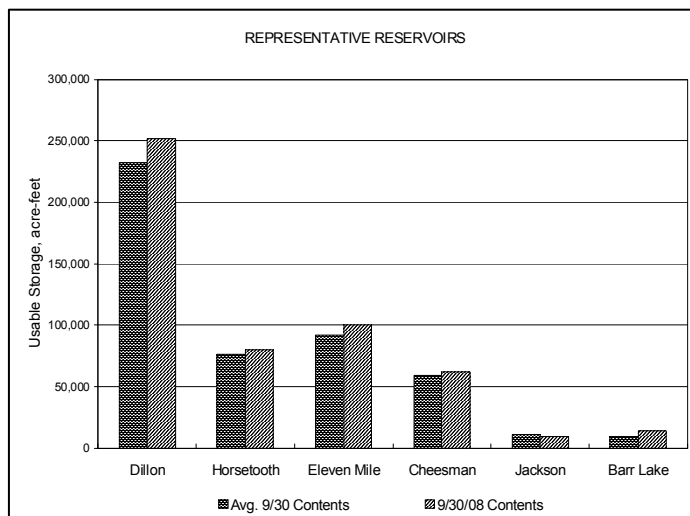
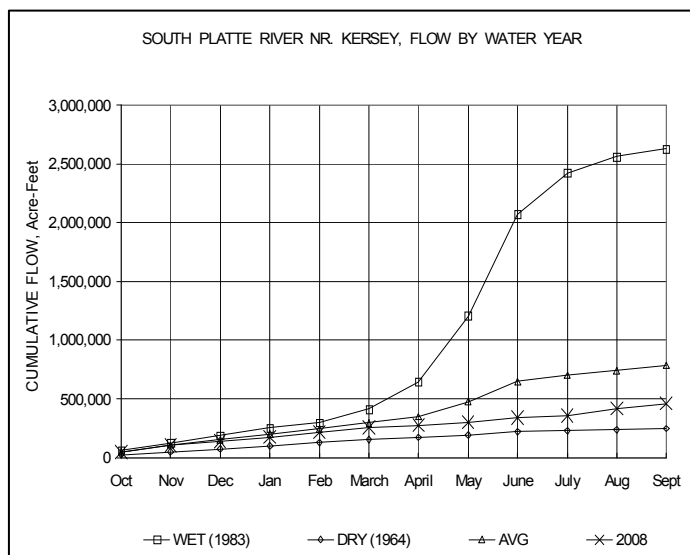
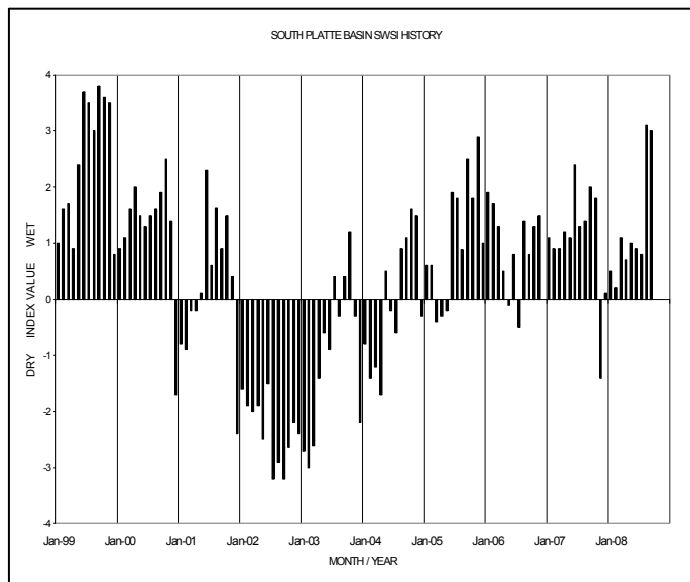
Basinwide Conditions Assessment

The SWSI value for the month was +3.0. Reservoir storage in Dillon, Horsetooth, Eleven Mile, Cheesman, Jackson, and Barr Lake, the major component in this basin in computing the SWSI value, was 108% of normal as of the end of September. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 29.5% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 89.9% of capacity. Flow at the gaging station South Platte River near Kersey was 679 cfs, as compared to the long-term average of 514 cfs. Flow at the Colorado/Nebraska state line averaged 90 cfs.

Outlook

Better than average precipitation continued in the South Platte basin in September. With this additional precipitation, the calls on the South Platte become more junior for the whole month with irrigation users generally having adequate supply for their crops. Because of the junior call conditions, a limited amount of refilling of irrigation storage occurred during a part of the month. While overall reservoir storage declined due to usage, the decline was not as significant as would have occurred if the conditions had been drier. This is significant as it helps assure irrigation users have an adequate supply to finish out this irrigation year and provides that at least a limited supply will already be in storage when users begin to fill reservoirs for next year.

Municipal suppliers continued to be in good water supply shape for this time of year. These suppliers benefited from the wetter conditions reducing their demand on reservoir water which will have the affect of increasing available supply for future years.



Basinwide Conditions Assessment

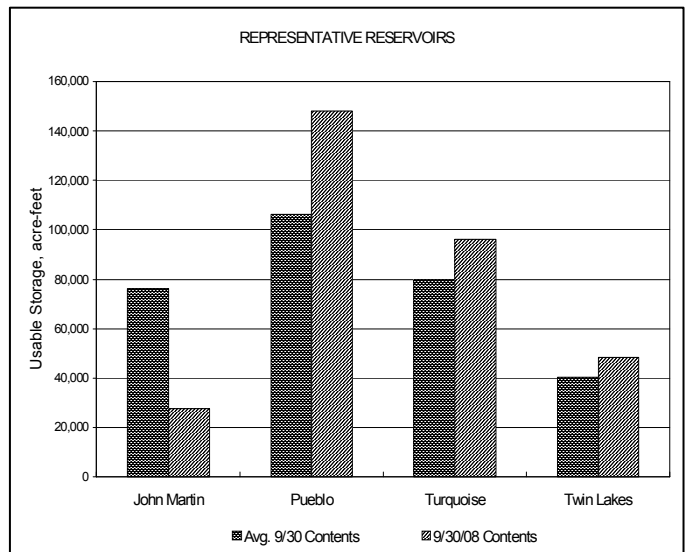
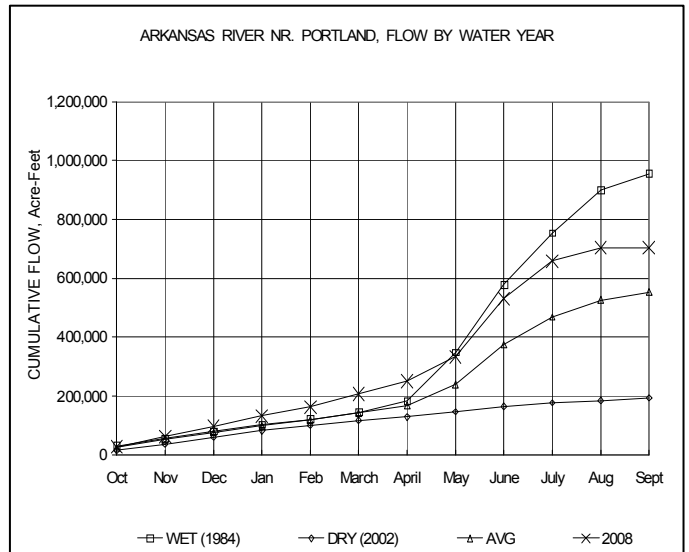
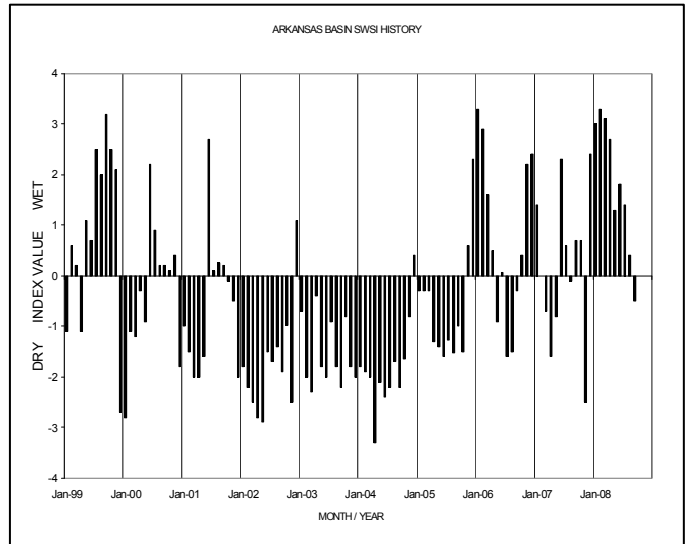
The SWSI value for the month was -0.5. Flow at the gaging station Arkansas River near Portland was 323 cfs, as compared to the long-term average of 452 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 106% of normal as of the end of September.

Outlook

The river call for September was set on the Amity Canal senior right (2/21/1887) for most of the month with a two day period from September 13th through 14th where a split call (Colorado Canal 6/09/1890 upstream of John Martin Reservoir) occurred due to a large rain event on Fountain Creek and the last week of the month when stream flows fell off and the call shifted to a split call (Catlin 12/3/1884 upstream of JMR and Lamar 11/4/1886 downstream of JMR). The late summer rains were extremely beneficial to many farmers finishing corn crops.

Administrative/Management Concerns

The Bureau of Reclamation and Southeastern Colorado Water Conservancy District were unable to achieve the estimated amount of Fryingpan-Arkansas transmountain imports for 2008, but SECWCD was able to underwrite the allocations of Project water by working with municipalities to cover the shortfall. The transmountain imports were still in excess of 90,000 acre-feet which is an exceptional yield for the Fry-Ark Project and attests to the strong snow pack in the central mountains during the 2007-08 winter months.



Basinwide Conditions Assessment

The SWSI value for the month was +0.2. Flow at the gaging station Rio Grande near Del Norte averaged 390 cfs (75% of normal). The Conejos River near Mogote had a mean flow of 191 cfs (150% of normal). Streamflow in the upper Rio Grande basin was generally below average during September as rainfall on the mountains and plains was well below normal. The Conejos River was above average due only to storage releases from Platoro Reservoir for irrigation demand. And a medium-sized drainage, Ute Creek, near Fort Garland remained above normal due to very localized snowfall in March and April. Storage in Rio Grande, Platoro, and Santa Maria reservoirs totaled 87% of normal as of the end of September.

Outlook

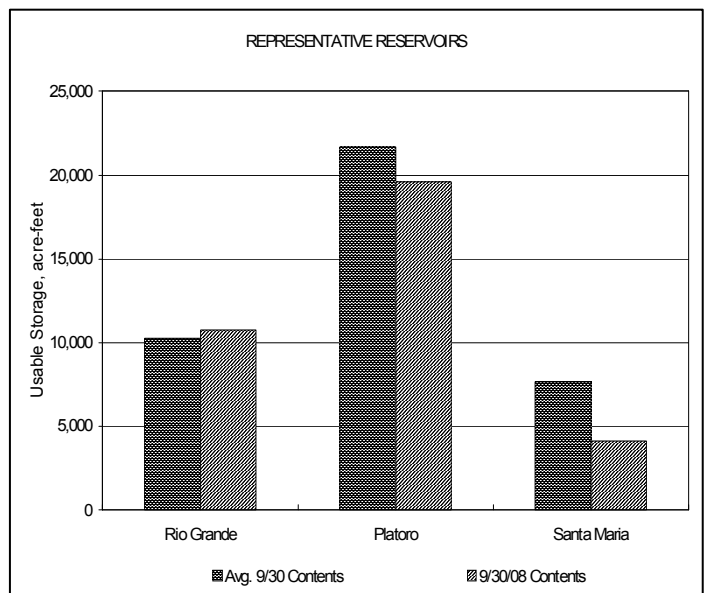
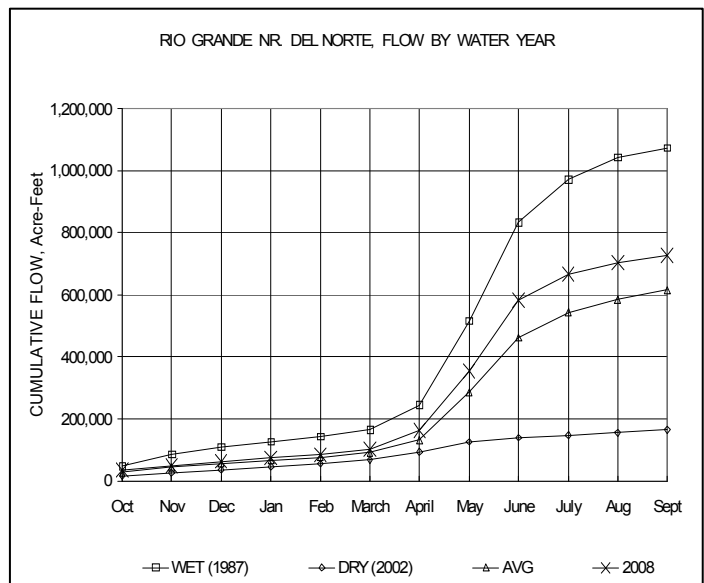
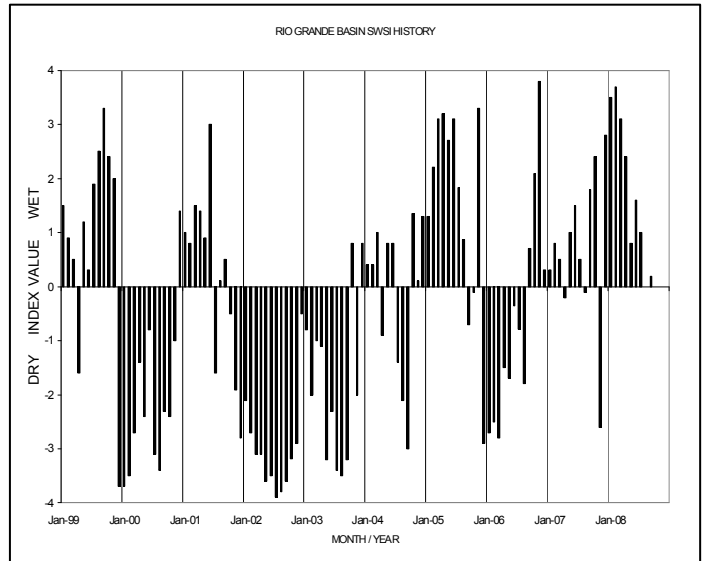
The month of September had generally warmer and drier conditions. Year to date precipitation is well below normal for the San Luis Valley.

Administrative / Management Concerns

The Division 3 staff of the Division of Water Resources regrets the loss of Division Engineer, Mike Sullivan, as he was recently appointed Deputy State Engineer. Mike had served the water users of the Rio Grande as Division Engineer for three years after beginning his tour as Assistant Division Engineer in 1998.

Public Use Impact

Although the early runoff season was better than normal, many irrigators felt the pinch of dry conditions and ditches going out of priority. Reservoir releases, if available, and well pumping helped meet the heavy demand for irrigation supplies during the latter part of the irrigation season. As October approaches, this demand eases as farmers continue their harvest. Crop prices are very good at this time.



Basinwide Conditions Assessment

The SWSI value for the month was -1.5. Flow at the gaging station Uncompahgre River near Ridgway was 96.7 cfs, as compared to the long-term average of 110 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 96% of normal as of the end of September.

Outlook

The anticipated monsoonal moisture that normally occurs during the later half of each summer which helps to replenish reservoir levels and relieve the demand for irrigation never really showed itself this year in the Gunnison Basin. With the exception of high mountain showers in September, the valleys were extremely dry. In fact, for many weather stations in the Gunnison Basin, the June through September period was one of the driest on record. Grand Junction received on 1.22 inches of precipitation during this period. For the previous 100 years, only 1956 was drier in Grand Junction.

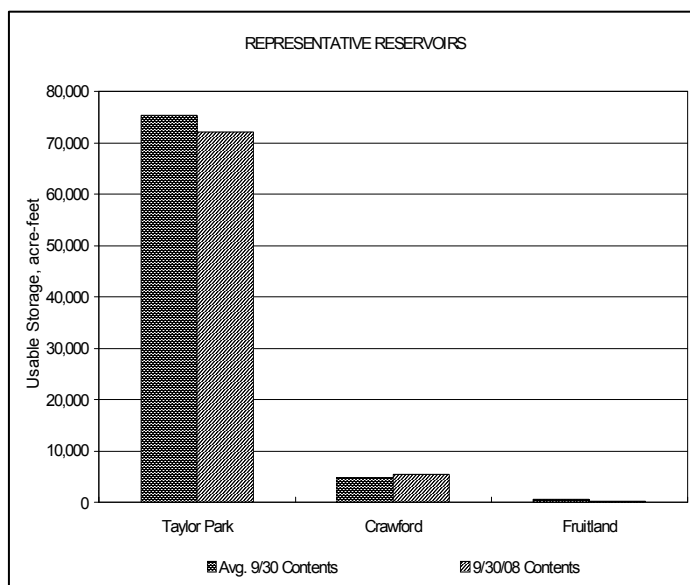
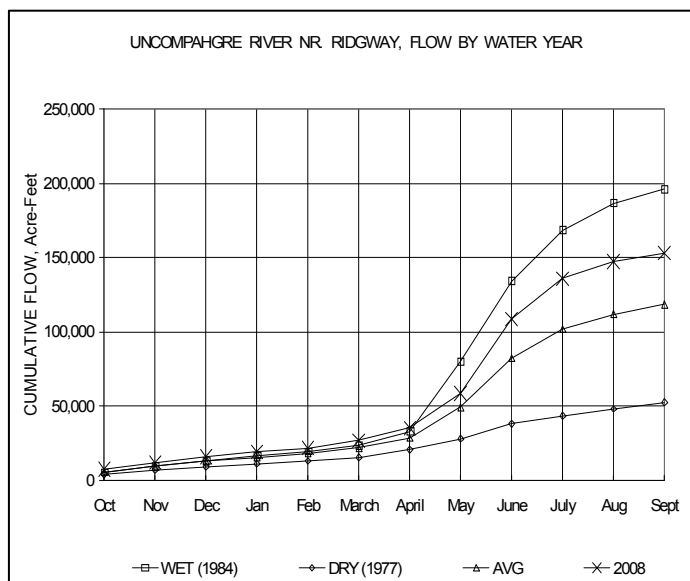
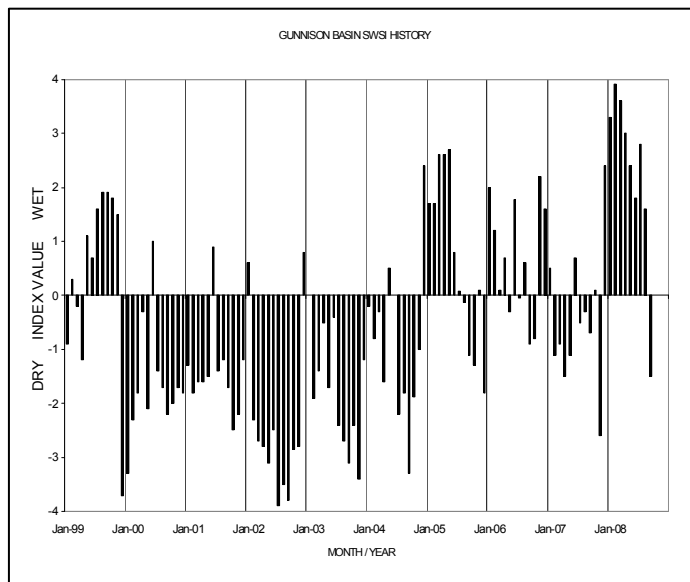
Now that fall has arrived and crops are being harvested, the demand for irrigation will be greatly reduced. This will help keep flows in the rivers up to levels meeting in-stream flow rights.

Administrative/Management Concerns

One of the major supply ditches in the North Fork of the Gunnison River, the Fire Mountain Canal, which carries 180 cfs for the irrigation of land below Paonia Reservoir, was shut down twice for emergency repairs. Significant administrative efforts by the local water commissioner and deputy water commissioners were necessary to provide the water users with irrigation water during completion of the repair work.

Public Use Impacts

Overall, this was a very good irrigation season due to a high spring runoff that went late into the spring and kept reservoirs full. Most irrigators had an above average supply. However, because this summer was also exceptionally dry, we are hoping for another good snowpack this winter to replenish our reservoirs and put the basin in good shape for next irrigation season.



Basinwide Conditions Assessment

The SWSI value for the month was +2.0. Flow at the gaging station Colorado River near Dotsero was 1839 cfs, as compared to the long-term average of 1419 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 101% of normal as of the end of September.

Outlook

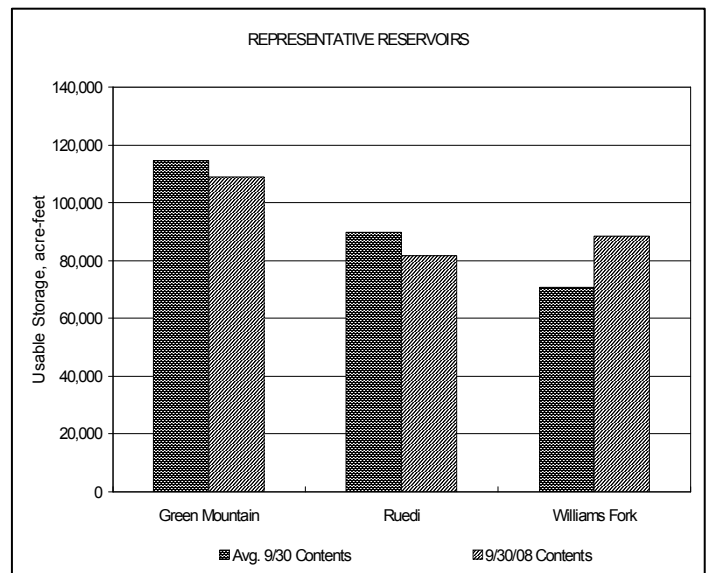
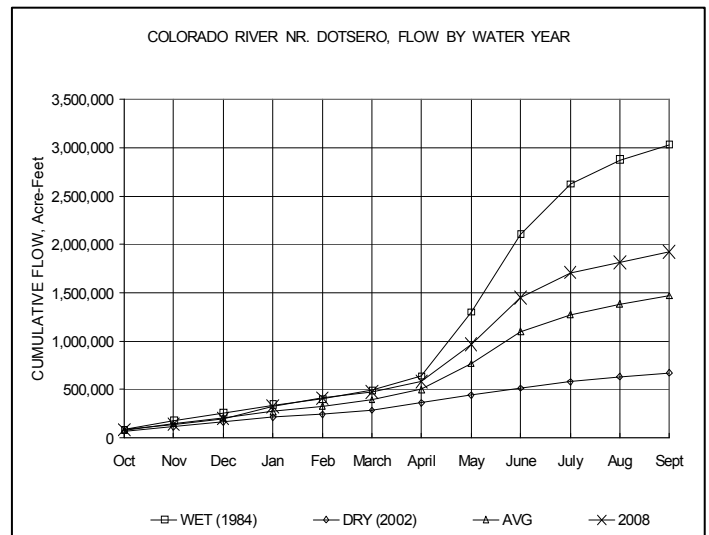
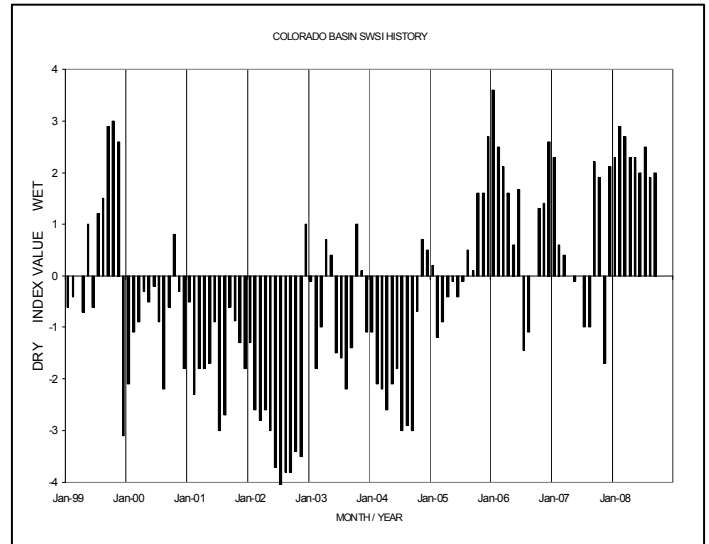
Upper Fryingpan River flow continued to be well below average. Crystal River flows dropped from considerably above average to well below average this month lowering the lower Roaring Fork River flows to near average. Likewise, Blue River flows also dropped considerably to slightly above average.

Administrative/Management Concerns

Decreasing flows in the 15-mile reach of the Colorado led to a 270 cfs release increase from the declared Historic Users Pool (HUP) surplus and 50 cfs hydropower release. Green Mountain reservoir releases were increased in early September to assist with maintaining the U.S. Fish and Wildlife target flow on the Colorado. The reservoir's 1935 power call on the Blue River was temporarily off in mid-September as the generators were bypassed for transformer maintenance (call re-imposed September 12th.) The Colorado River continues to have no calls from Grand Valley Irrigators.

Public Use Impacts

Ruedi Reservoir releases were decreased from 305 to 245 cfs on September 26th to extend U.S. Fish and Wildlife contracted water later into the fall to benefit the Endangered Fish Recovery Program. This will prolong reservoir boating, but negatively impact fishing on the lower Fryingpan. Success of the Glenwood Whitewater Park continued, by attracting enough attention to host the 2009 U.S. Kayak Freestyle Trials on September 21st. The park is benefiting from continued above average flows on the Colorado.



Basinwide Conditions Assessment

The SWSI value for the month was +3.0. Flow at the gaging station Yampa River at Steamboat was 129 cfs, as compared to the long-term average of 119 cfs. September precipitation was slightly above average for the Yampa, White, and North Platte River basins. Precipitation for the month, as measured at the SNOTEL sites operated by the NRCS, was reported at approximately 105% of average for the combined Yampa/White River and North Platte River basins. Year-to-date precipitation remains above average, and is reported at 103% of average for the combined basins. Warm weather continued throughout September and streamflows, in general, remained at approximately average conditions for the month.

Outlook

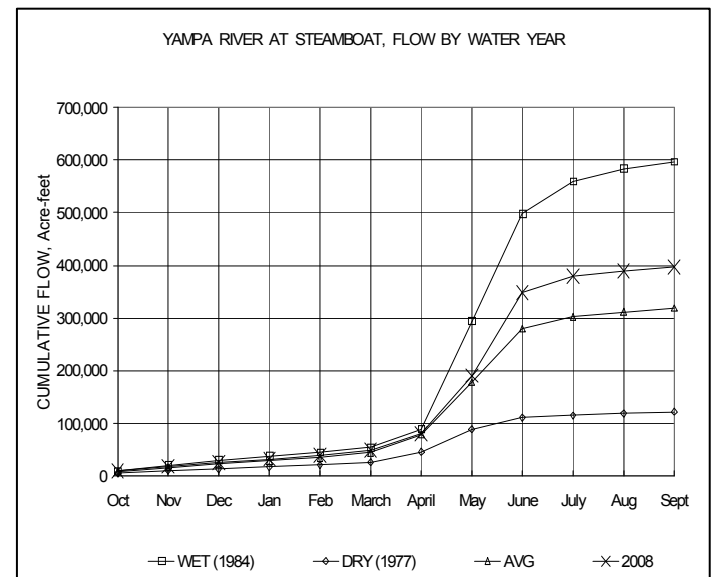
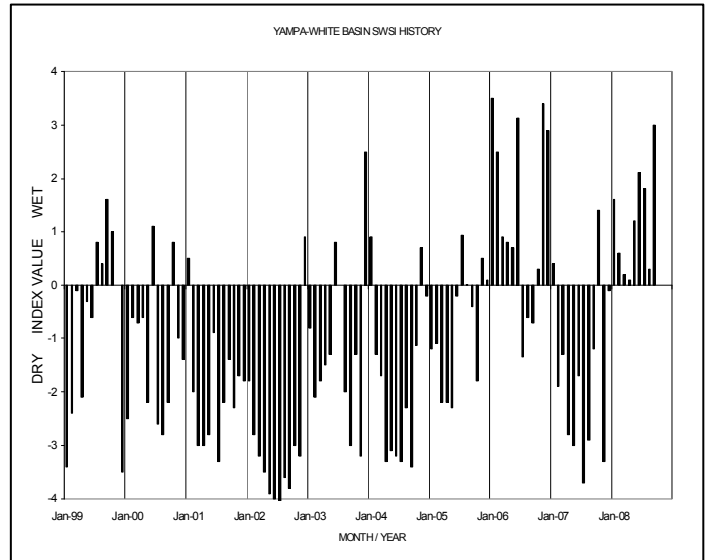
Yamcolo Reservoir, Elkhead Reservoir, and Fish Creek Reservoir were reported at approximately 62%, 76%, and 79% of capacity, respectively, at the end of September. Water stored in Fish Creek Reservoir is used primarily for municipal purposes, Yamcolo Reservoir for irrigation purposes, and Elkhead Reservoir for municipal, industrial, and recreation purposes, as well as fish recovery releases.

Administrative/Management Concerns

Calls were placed on the following streams, which remained under administration at the end of the month: Bear River (June 6), Talamantes Creek (June 13), and West Fish Creek (June 20). Little Bear Creek was released from call on September 16. The Colorado River District, on behalf of the Fish Recovery Program, requested that releases be made from Elkhead Reservoir starting on August 22 and continuing through the month of September. Releases are being made to augment flows and enhance habitat for the endangered fish species in the critical habitat reach of the Yampa River (from Craig to the confluence with the Green River at Echo Park). Target flows of 300 to 400 cfs at the Maybell gage were set through September this year to facilitate a special small mouth bass research project being conducted by Colorado State University on this stretch of the river. It is anticipated that target flows will return to their normal levels after completion of the study. District 44 water commissioners are responsible for protecting the water released from Elkhead Reservoir through the Yampa River critical habitat reach.

Public Use Impacts

Area reservoirs remain open for the season, with good fishing reported.



Basinwide Conditions Assessment

The SWSI value for the month was +0.1. Flows at the Animas River at Durango averaged 369 cfs (79% of normal) with a maximum average daily flow of 955 cfs on September 1st. The Dolores River at Dolores averaged 152 cfs (84% of normal) with a maximum average daily flow of 379 cfs on September 1st. The La Plata River at Hesperus averaged 13.8 cfs (68% of normal) with a maximum average daily flow of 45.5 cfs on September 1st.

Precipitation in Durango was 0.74 inches for September which is well below the 30-year average of 2.32 inches. Precipitation to date in Durango, for the water year, is 21.52 inches which is above the average of 19.52 inches. Temperatures were slightly above normal for the month. Durango was 2.0° above its 30-year average high and 1.8° above the 30-year average low.

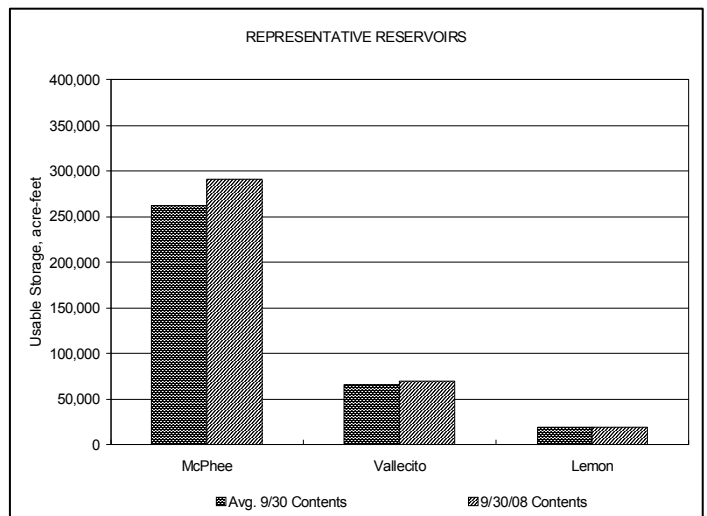
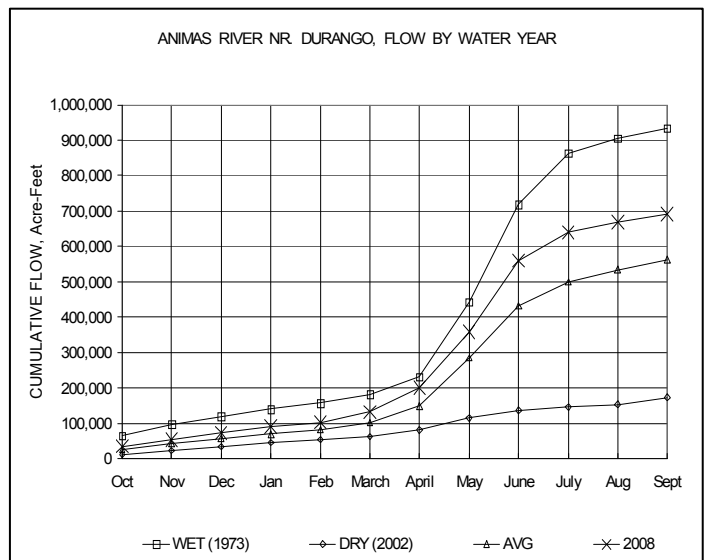
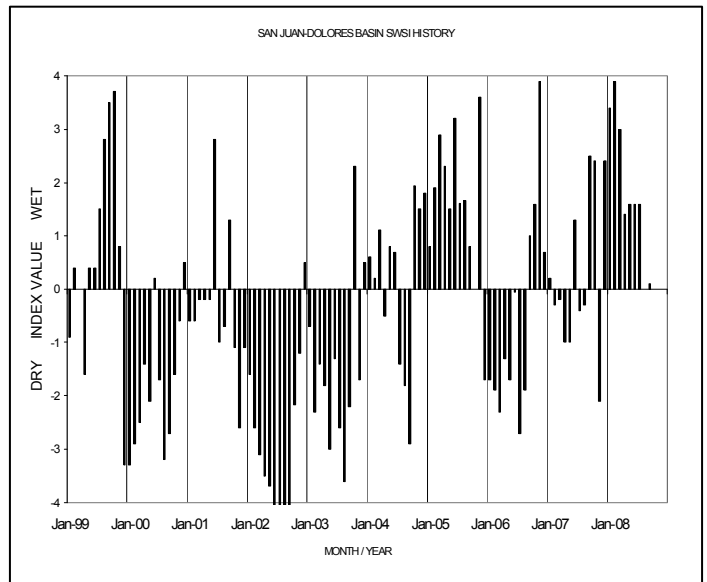
At the end of the month Vallecito Reservoir contained 70,110 acre-feet compared to its normal contents of 57,358 acre-feet (122% of normal). McPhee Reservoir was up to 290,794 acre-feet compared to its normal contents of 261,613 acre-feet (111% of normal), while Lemon Reservoir was up to 18,860 acre-feet as compared to its normal content of 19,677 acre-feet (96% of normal).

Outlook

Major rivers within the basin continue to flow well below average. With the irrigation season winding down we shift our focus to snow pack and hope we maintain 2008 levels or better

Administrative/Management Concerns

The La Plata compact continued to be on call the entire month of September. Rain within the La Plata River basin was still sparse. Unlike last month where there were 11 days when all the Colorado ditches on the La Plata were shut off, but this month there were a couple ditches that were able to divert a portion of their senior water rights for the entire month.



OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 SHERMAN STREET ROOM 818
DENVER CO 80203