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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November 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 2.2 in the South Platte Basin to a low value of -2.2 in the Gunnison Basin. One of the basins (Arkansas) experienced a gain from the previous month's values. Six of the basins (South Platte, Rio Grande, Gunnison, Colorado, Yampa/White, San Juan/Dolores) experienced a loss from the previous month's values.

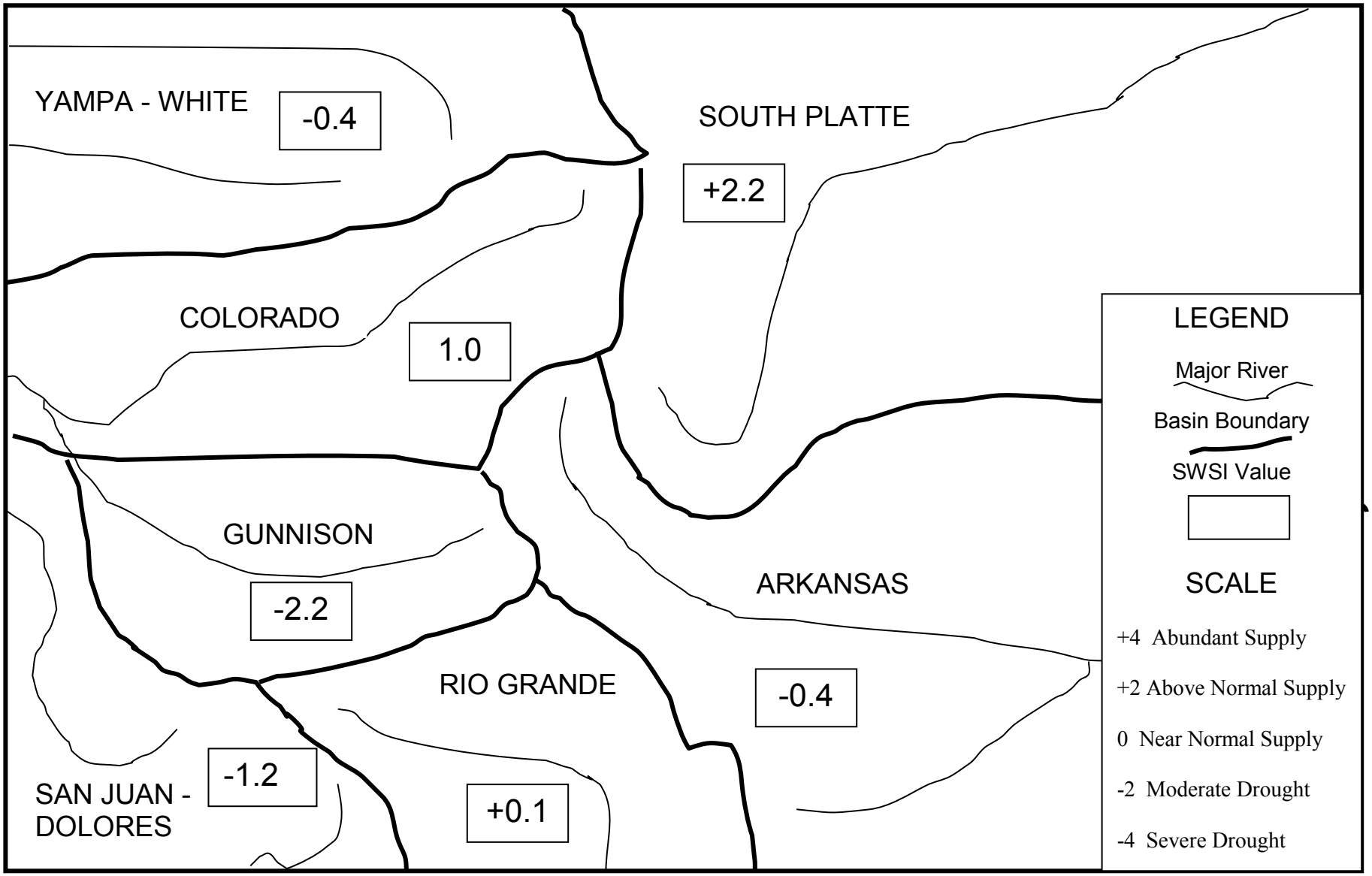
The following SWSI values were computed for each of the seven major basins for November 1, 2008, and reflect the conditions during the month of October 2008.

Basin	November 1, 2008 SWSI Value	Change From Previous Month	Change From Previous Year
South Platte	+2.2	- 0.8	+0.4
Arkansas	- 0.4	+0.1	- 1.1
Rio Grande	+0.1	- 0.1	- 2.3
Gunnison	- 2.2	- 0.7	- 2.3
Colorado	+1.0	- 1.0	- 0.9
Yampa/White	- 0.4	- 3.4	- 1.8
San Juan/Dolores	- 1.2	- 1.3	- 3.6

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



NOVEMBER 1, 2008

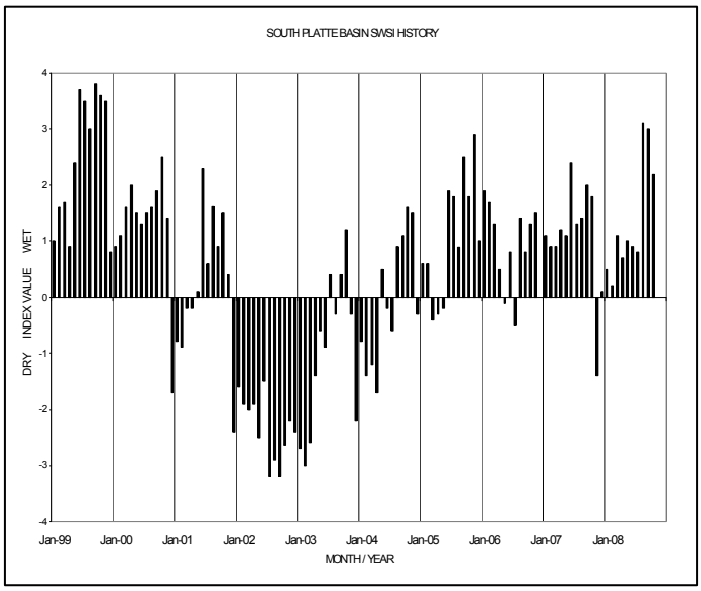
Basinwide Conditions Assessment

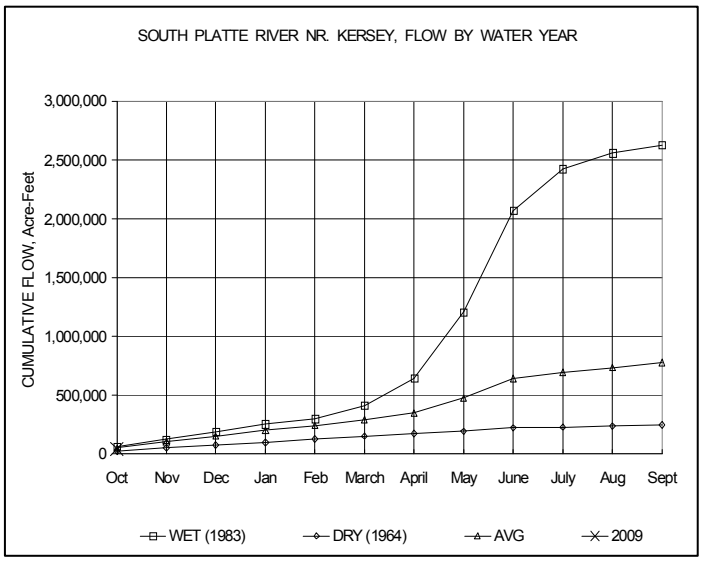
The SWSI value for the month was +2.2. Reservoir storage in Dillon, Horsetooth, Eleven Mile, Cheesman, Jackson, and Barr Lake, the major component in this basin in computing the SWSI value, was 107% of normal as of the end of October. Cumulative storage in the major plains reservoirs: Julesberg, North Sterling, and Prewitt, is at 38% of capacity. Cumulative storage in the major upper-basin reservoirs: Cheesman, Eleven Mile, Spinney, and Antero is at 91% of capacity. Flow at the gaging station South Platte River near Kersey was 694 cfs, as compared to the long-term average of 841 cfs. Flow at the Colorado/Nebraska state line averaged 149 cfs.

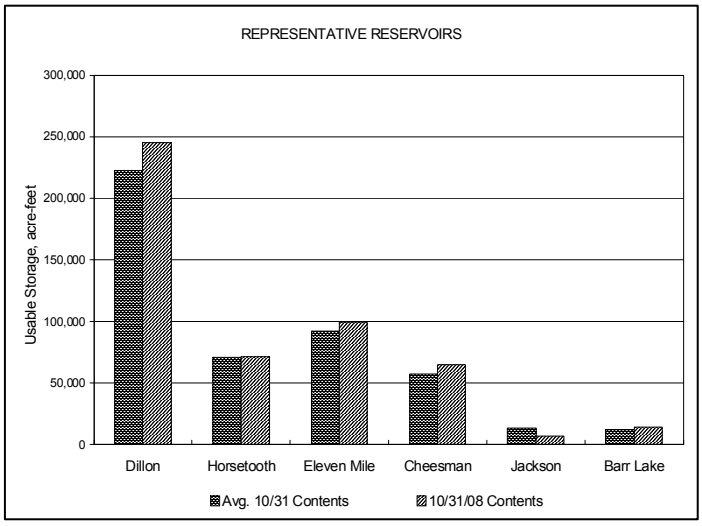
Outlook

As the irrigation season wound down once again, attention was directed to next year's supply. By the beginning of October, the supply of water exceeded the reduced irrigation demand and users began to store water for next year's supply. The overall storage situation along the South Platte is above average when compared to the last several years of drier conditions. With the present storage situation, we are optimistic that all the major irrigation reservoirs along the South Platte will once again be able to fill prior to next year's irrigation season. In addition, irrigation users began to recharge water to provide replacement supplies for future depletions associated with well pumping.

Municipal suppliers continued to be in a good water supply situation throughout the basin with average or above average storage for this time of year.







Basinwide Conditions Assessment

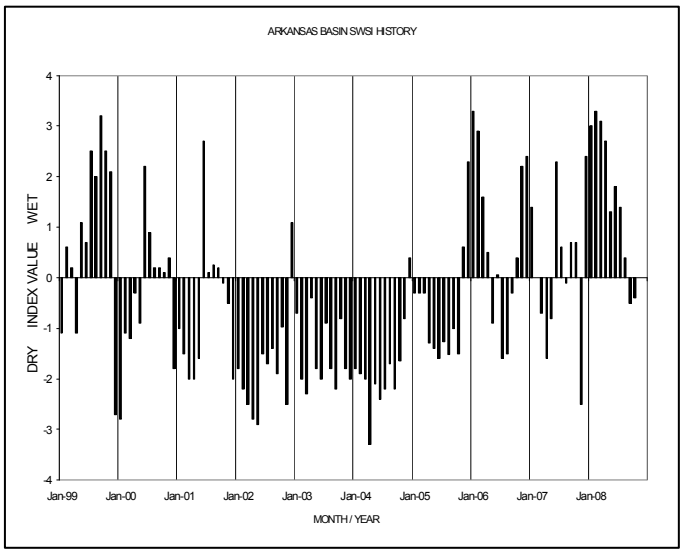
The SWSI value for the month was -0.4. Flow at the gaging station Arkansas River near Portland was 374 cfs, as compared to the long-term average of 409 cfs. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 62% of normal as of the end of October.

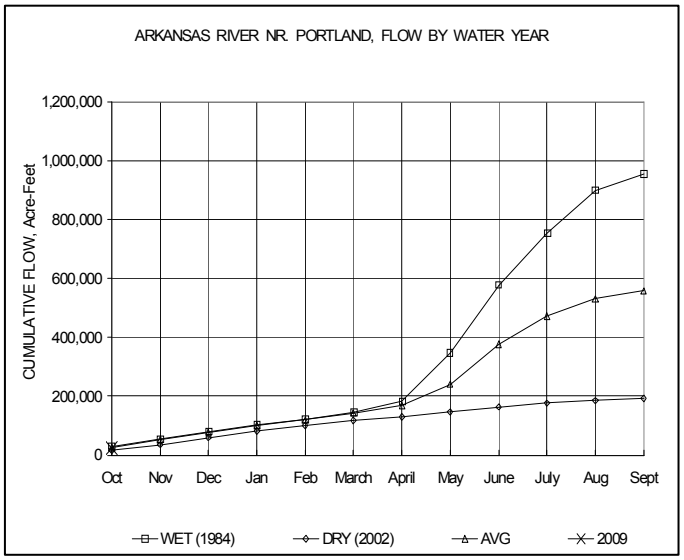
Outlook

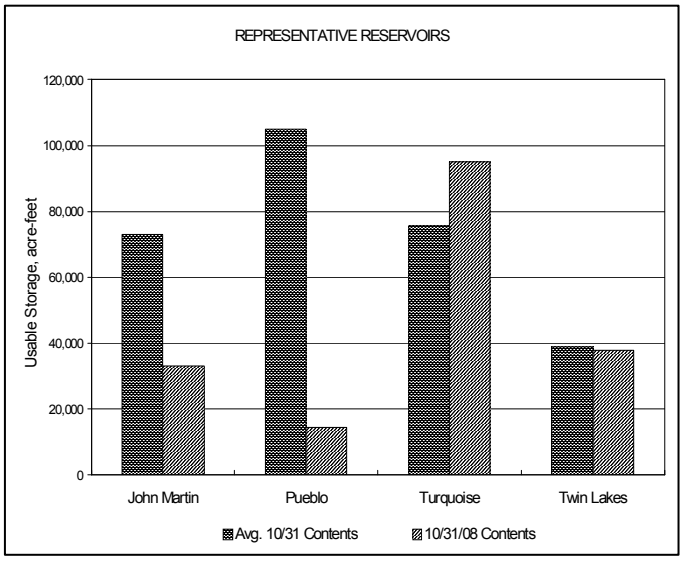
The river call for October began as a split call with Catlin Canal's 12/3/1884 right calling upstream of John Martin Reservoir and Lamar Canal's 11/4/1886 call below John Martin Reservoir and held at that call up through the first third of October when heavy rains on the Purgatoire River triggered a rare late summer conservation storage event in John Martin Reservoir. The storage event caused approximately 5,785 acre-feet to be stored in John Martin Reservoir and shifted the call to the Fort Lyon Canal second water right of 3/1/1887 upstream of John Martin Reservoir for the rest of the month.

A meeting of the Winter Water Board of Directors was held on October 17, 2008. Planning for the upcoming storage season which runs from November 15, 2008 through March 14, 2009 was the topic at this meeting.

Winter Compact storage in John Martin Reservoir began at midnight on October 31, 2008. Storage in Trinidad Reservoir began on October 14, 2008.







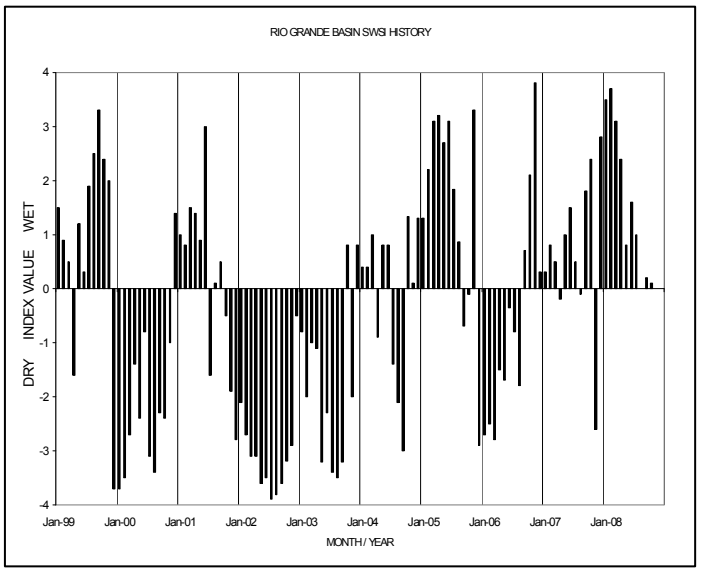
Basinwide Conditions Assessment

The SWSI value for the month was +0.1. Flow at the gaging station Rio Grande near Del Norte averaged only 360 cfs (74% of normal). The Conejos River near Mogote had a mean flow of 140 cfs (119% of normal). Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 82% of normal as of the end of October.

Precipitation during October in Alamosa was 0.85 inches, 0.18 inches above normal. A substantial rain event on October 12 in the mountains bolstered streamflow.

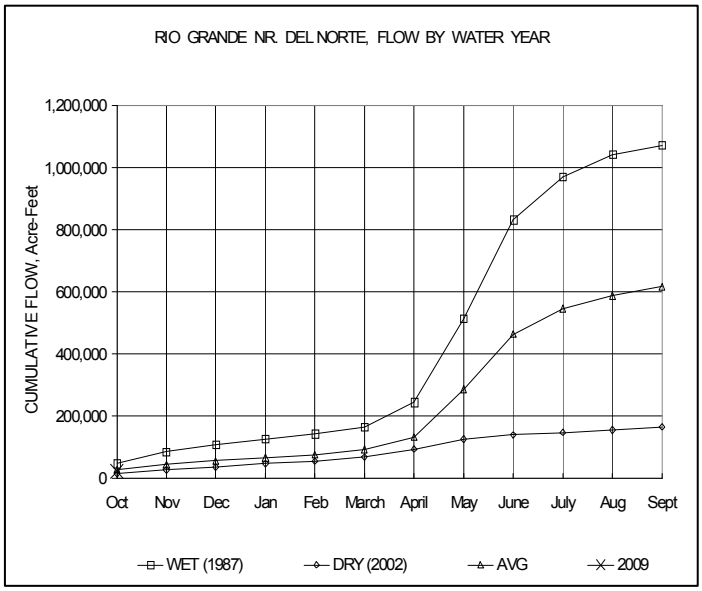
The above average stream flow in the Conejos River was due mostly to the release of pre-Compact irrigation rights stored in Platoro Reservoir. Once the storage water was evacuated, Conejos River flow dropped to below normal levels.

Streamflow levels in other parts of the upper Rio Grande basin continued to be below normal. This has been the general trend since July. The exceptions to this were Culebra Creek near San Luis, Ute Creek near Fort Garland, Rito Alto Creek near Crestone, and Pinos Creek near Del Norte drainages. Oddly, these creeks seemed to have benefited more from spring snowstorms than the others.



Outlook

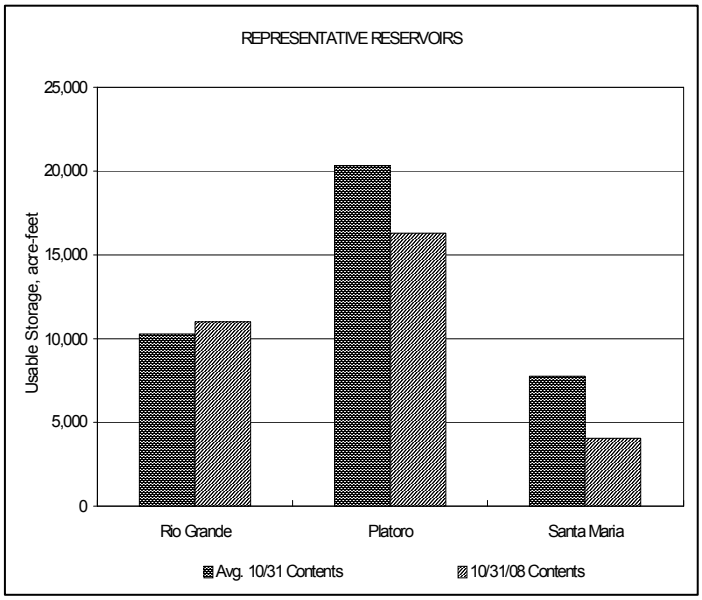
Autumn in the San Luis Valley can be very beautiful, as is the case this year. Weather conditions have been generally very pleasant with sunny days and mild temperatures. However, a glance at the snowpack conditions during the first week of November indicates most of the upper Rio Grande basin is lagging well behind average. Weather forecasts are calling for above normal temperatures the next several months, but are inconclusive on the expected precipitation.



Administrative/Management Concerns

Reservoirs in the basin reduced outflows and began storing inflow as October came to a close. The summer irrigation demand significantly decreased the storage in most of the basin's reservoirs.

Colorado will over-deliver on the amount required to meet the Rio Grande Compact delivery requirement to New Mexico and Texas during 2008. The final, precise credit status won't be determined until February.

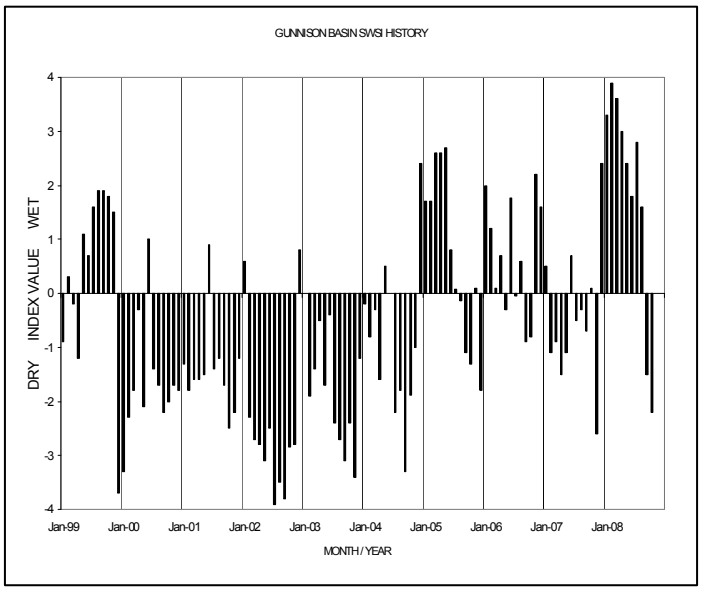


Public Use Impacts

Mild weather conditions allowed those water users in priority to continue irrigation through the end of October.

Basinwide Conditions Assessment

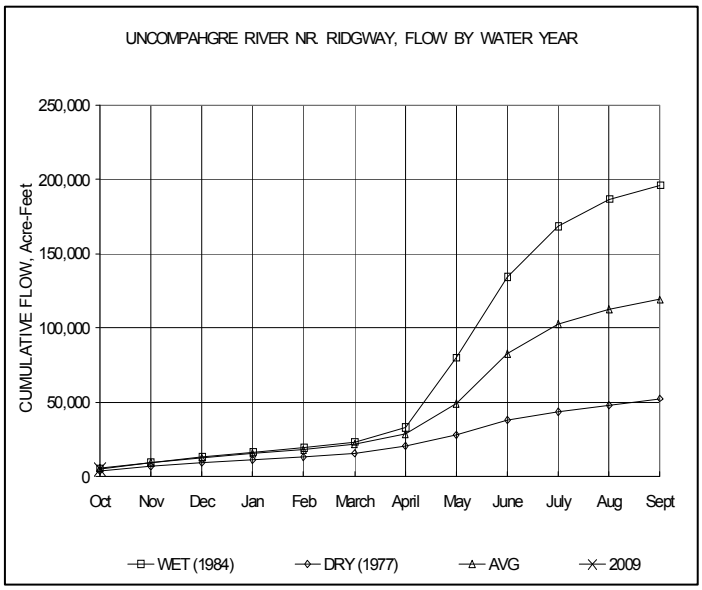
The SWSI value for the month was -2.2. Flow at the gaging station Uncompahgre River near Ridgway was 79.8 cfs, as compared to the long-term average of 90.6 cfs. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 104% of normal as of the end of October.



Outlook

Conditions throughout the basin for the month of October have been drier than normal. Temperatures remained normal to lower than normal, but the entire irrigation year has seen much lower precipitation than usual.

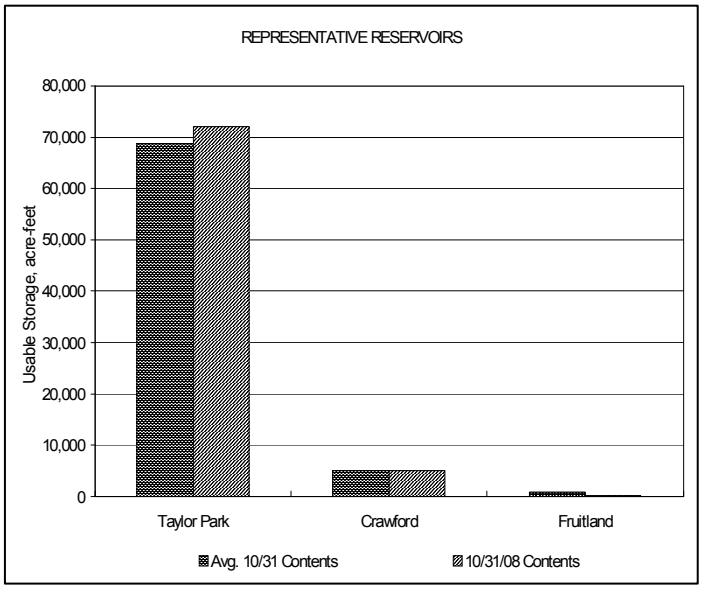
The main stem of the Uncompahgre, San Miguel, and Gunnison Rivers are running lower than normal for this time of the year, even with much of the irrigation demand shutoff by the end of October. Hopefully, precipitation will increase the rest of the winter and build up some soil moisture and give us a good snowpack for next spring's runoff season.



Administrative/Management Concerns

With the lower than normal streamflow levels, especially in the upper basin areas, irrigation demand in much of those areas has been shutoff by the end of October to meet instream flow rights. In the upper Gunnison River basin, the Slate River at Crested Butte was at full administration in October, with all irrigation demands shutoff at the end of month, and the CWCB instream flow right was still not met.

On a good note, reservoir levels are still looking good despite the lack of precipitation the previous five months. The Grand Mesa reservoirs will be going into the winter with about 50 percent carryover storage, normal being about 15 percent. Blue Mesa Reservoir will continue to release approximately 665 cfs going into winter to meet a target elevation to prevent icing problems upstream, resulting in a storage volume of 580,000 acre-feet. The median flow out of the Aspinall Unit for this time of the year is approximately 565 cfs.



Public Use Impacts

Hunting season is in full swing by October in the Gunnison River Basin and the local economy is boosted by the large number of hunters that come to this area each year. Of course some years are better than others. This season has been dry and warm, with no snow to bring the game down from the high country. Just like the Broncos, there is always next year.

Basinwide Conditions Assessment

The SWSI value for the month was +1.0. Flow at the gaging station Colorado River near Dotsero was 1563 cfs, as compared to the long-term average of 1301 cfs. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 93% of normal as of the end of October.

Outlook

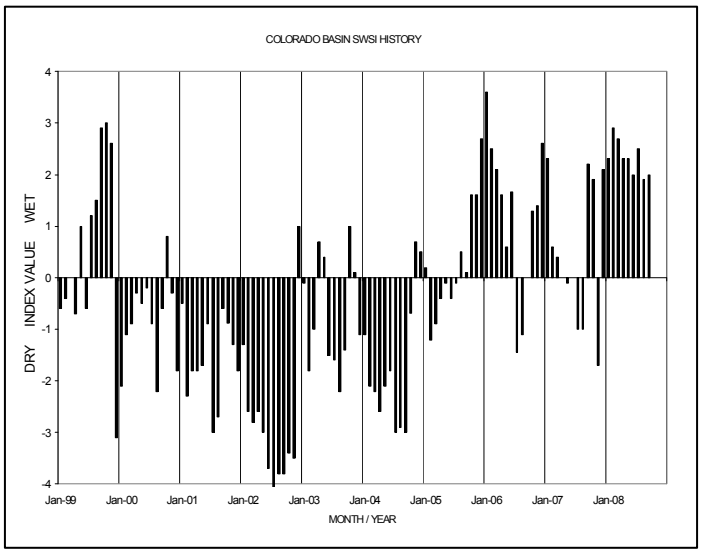
Continued decreasing Green Mountain Reservoir releases from CBT Project depletions, along with a drop in Roaring Fork River flows from below average Crystal and Fryingpan River flows, will likely result in continued below-average Colorado River flows.

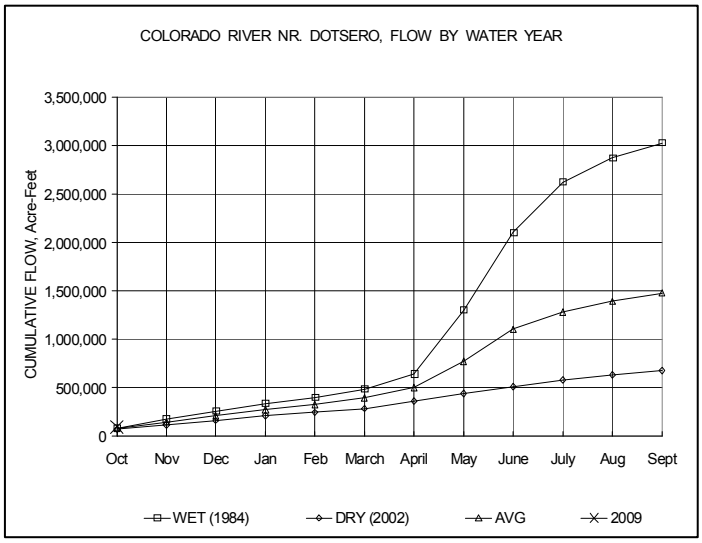
Administrative/Management Concerns

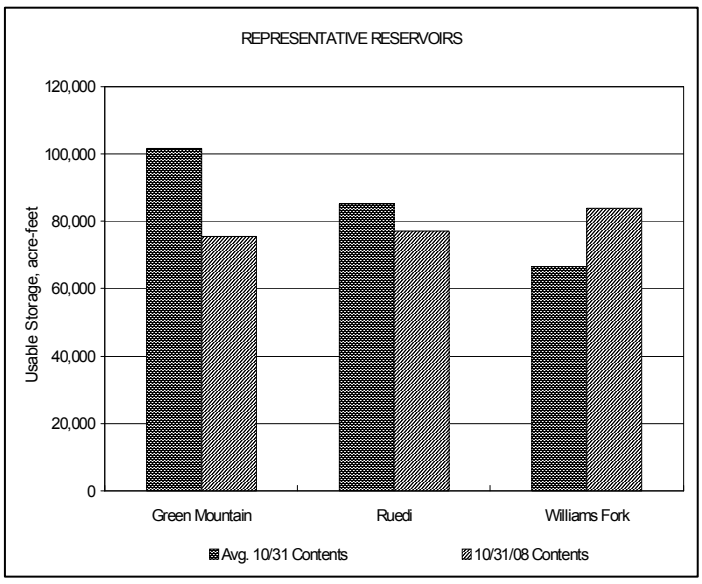
Flows above the target range in the 15-mile reach of the Colorado led to a 100 cfs release increase from the declared Historic Users Pool (HUP) surplus on October 22nd. HUP surplus water was terminated on October 28th - 29th resulting in a 500 cfs decrease in Green Mountain reservoir release. This resulted in a drop to below average of the Colorado River below Glenwood Springs. The close of the 2008 irrigation year atypically saw no calls from the Grand Valley water users. Shoshone Power Plant placed only two calls of short duration in October as they continue to experience difficulties with equipment following last year's penstock rupture.

Public Use Impacts

Ruedi Reservoir releases were decreased substantially from 245 to 80 cfs on October 15th. This will negatively impact fishing on the lower Fryingpan.







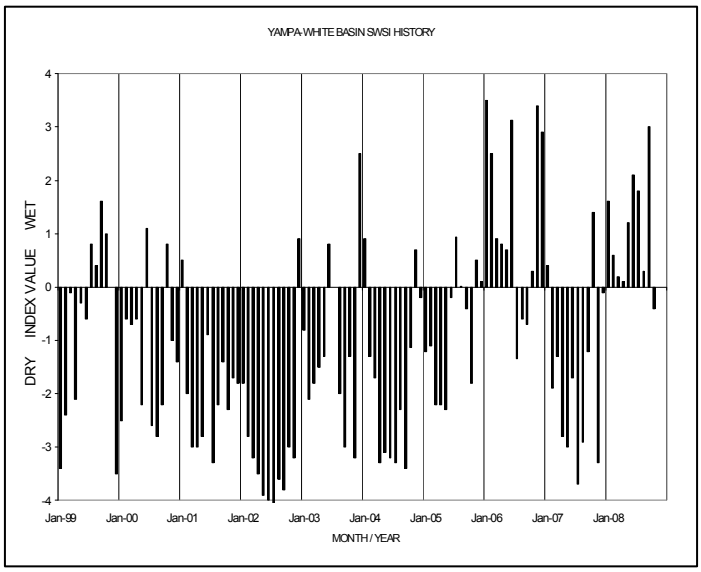
Basinwide Conditions Assessment

The SWSI value for the month was -0.4. Flow at the gaging station Yampa River at Steamboat was 113 cfs, as compared to the long-term average of 138 cfs.

October precipitation was well below 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 55% of average for the Yampa/White River basin and 67% of average for the North Platte River basin. Precipitation for the combined Yampa, White, and North Platte River basins was reported at approximately 59% of average.

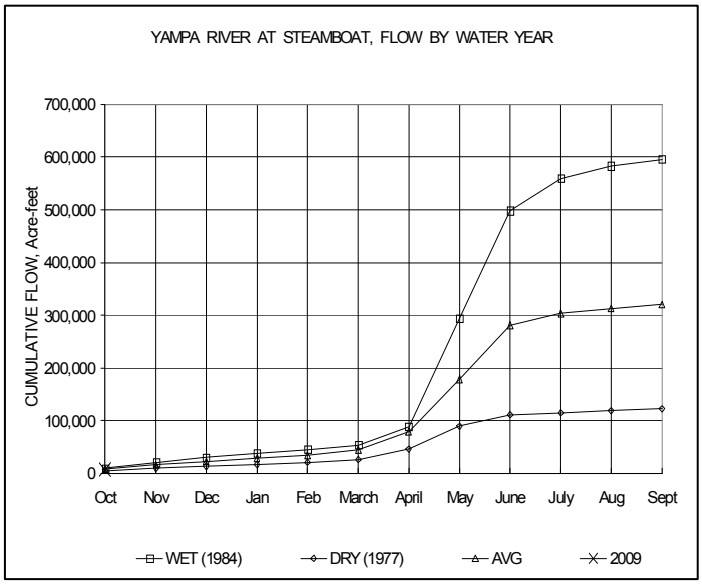
The snow water equivalent (SWE) as of October 31, 2008 was 41% of average for the North Platte River basin, 15% of average for the Yampa River basin, and 16% of average for the White River basin.

Streamflows throughout the basins were generally at average to slightly below average levels at the end of the month.



Outlook

The Fish Creek Reservoir storage level decreased slightly in October and was reported at approximately 68.5% of capacity at the end of the month. The Elkhead Creek Reservoir level also declined during the month and the reservoir was at approximately 74% of its' enlarged capacity. The Yamcolo Reservoir storage level increased slightly in October and the reservoir was at approximately 66% of capacity at the end of the month. 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 fish recovery releases.



Administrative/Management Concerns

All remaining calls were released in October and no Division 6 streams remained under administration at the end of the month.

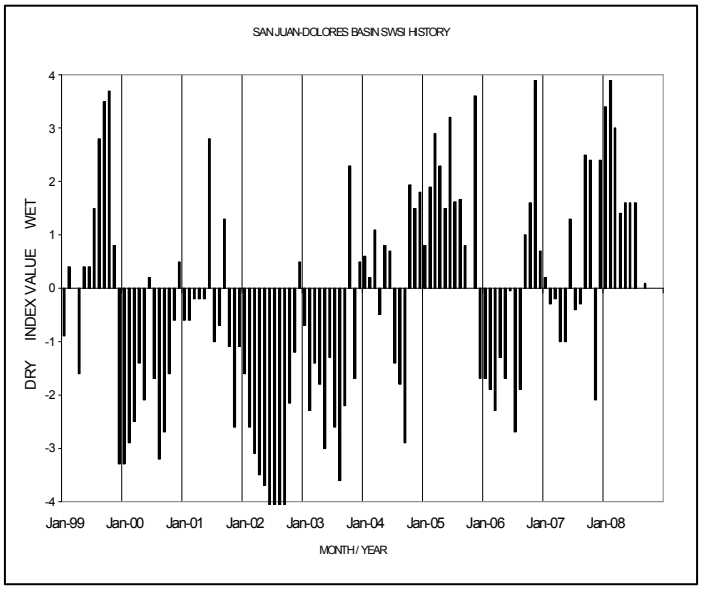
The second year of the fish recovery release from Elkhead Creek Reservoir was completed successfully and data collected during the release are being compiled and reviewed by participating agencies. The program was directed by the Colorado River District, on behalf of the Recovery Program and Division 6 is responsible for protecting this water through the Yampa River critical habitat reach (from Craig to the confluence with the Green River at Echo Park).

Public Use Impacts

Area reservoirs remain open, with good fishing reported.

Basinwide Conditions Assessment

The SWSI value for the month was -1.2. Flows at the Animas River at Durango averaged 278 cfs (68% of normal) with a maximum average daily flow of 334 cfs on October 12th. The Dolores River at Dolores averaged 95 cfs (70% of normal) with a maximum average daily flow of 169 cfs on October 5th. The La Plata River at Hesperus averaged 8.8 cfs (56% of normal) with a maximum average daily flow of 10.6 cfs on October 13th.



Precipitation in Durango was 1.07 inches for October which is below the 30-year average of 1.97 inches. Precipitation to date in Durango, for the water year, is 1.07 inches which is below the average of 1.95 inches. Temperatures were near normal for the month. Durango was 2.2° above its 30-year average high and at the 30-year average low.

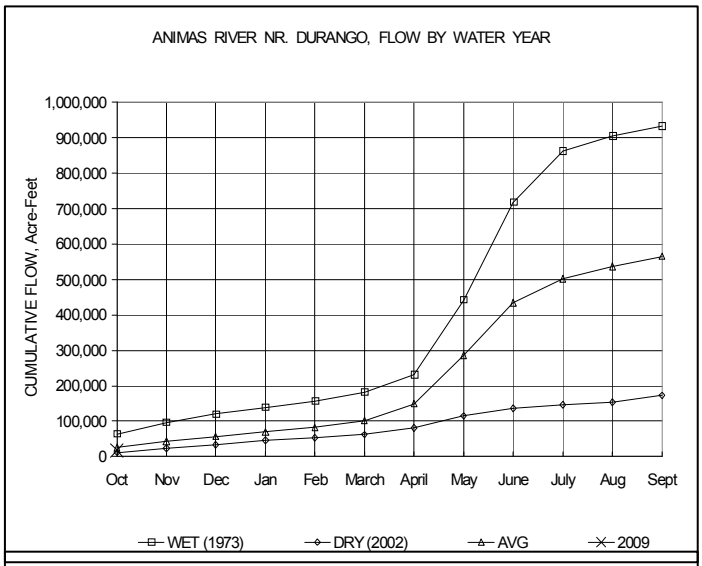
At the end of the month Vallecito Reservoir contained 64,780 acre-feet compared to its normal contents of 51,516 acre-feet (126% of normal). McPhee Reservoir was up to 284,728 acre-feet compared to its normal contents of 258,779 acre-feet (110% of normal), while Lemon Reservoir was up to 18,240 acre-feet as compared to its normal content of 19,690 acre-feet (93% of normal).

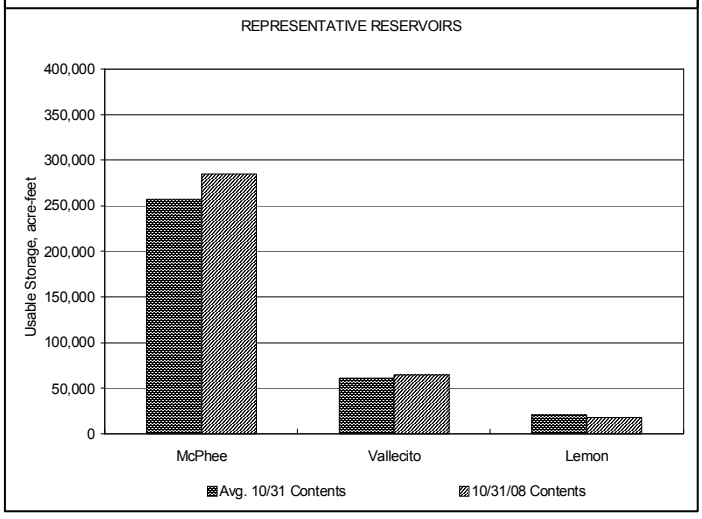
Outlook

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 October. The flows at the upper index gage are low enough that return flows from Long Hollow Creek is sufficient to supply water to meet our compact obligations to New Mexico.





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