

Colorado Division of Water Resources

2012 Annual Report

Water Division 5



April 27, 2011
Fryingpan River
near Nast.
Below, same
location on
April 10, 2012

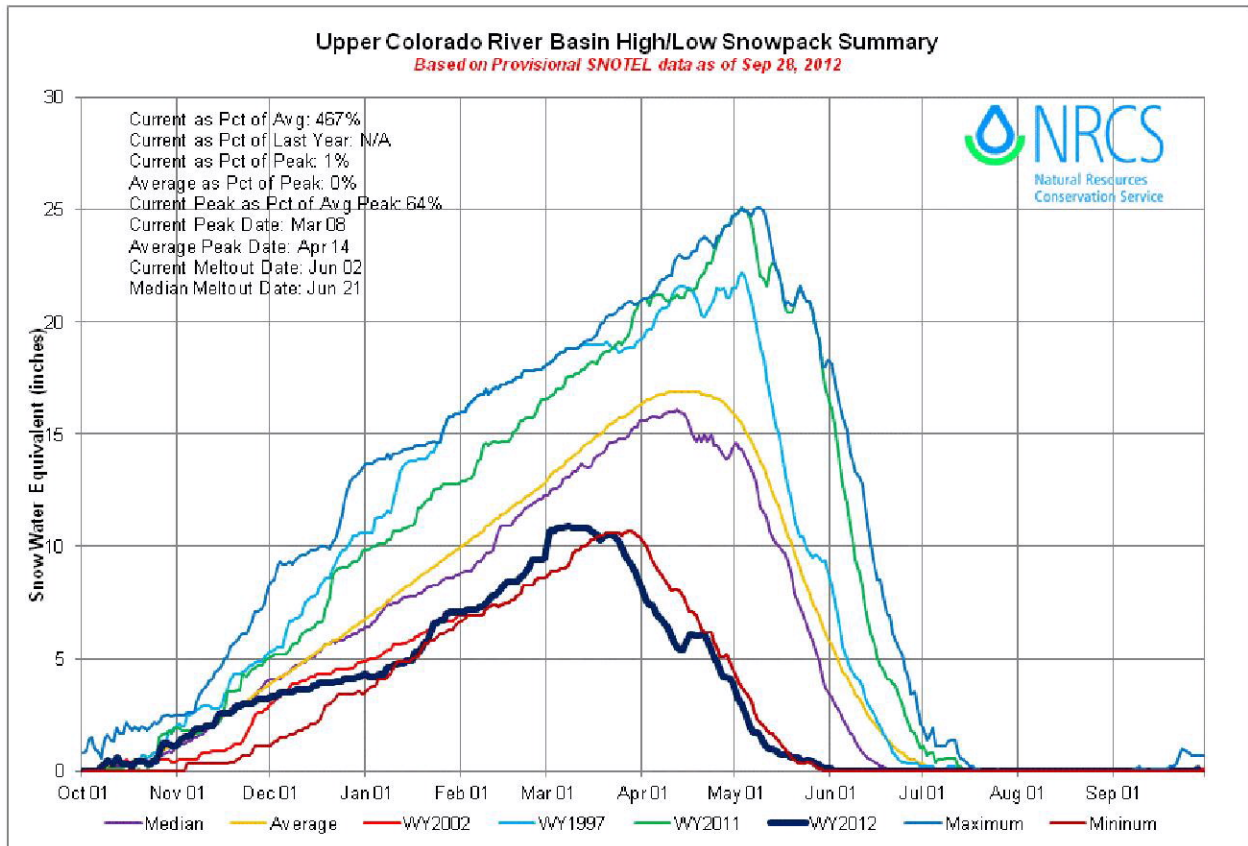


Alan C Martellaro
Division Engineer

Water Division 5 –The Colorado River Basin

Surface Water Supply

The Colorado River Basin water supply for the 2012 irrigation year and the 2011 irrigation year are years of extremes, and polar opposites. The 2011 year had one of the greatest snow packs on record, while 2012 had one of the lowest. Basin wide precipitation for the 2012 irrigation year was 74.0% of average and 59.0% of 2011. The April 1, 2012 snow water equivalent was 49% of average and it had already peaked, while the April 1, 2011 snow water equivalent was 130% of average and it continued to gain into May. The graph below depicts the contrast. By early March the 2012 snowpack was declining and redefined the historic minimum curve from the third week in March through the of snowmelt runoff, excluding a minor variation the end of May. The opposite is depicted in the snow water equivalent graph for 2011, where the curve for the maximum of record was redefined by 2011, extending the curve during late April-early May and also in late May. When the 2011 curve did not create new peaks, it did track very close to the maximum of record on the descending limb of the snow water curve. Generally, the snowpack in Division 5 for the 2012 season peaked 6 weeks earlier than average, and SNOTEL sites below 10,000 ft were completely devoid of snow 5 weeks ahead of average. By June 1st only two SNOTEL sites had not completely melted out.



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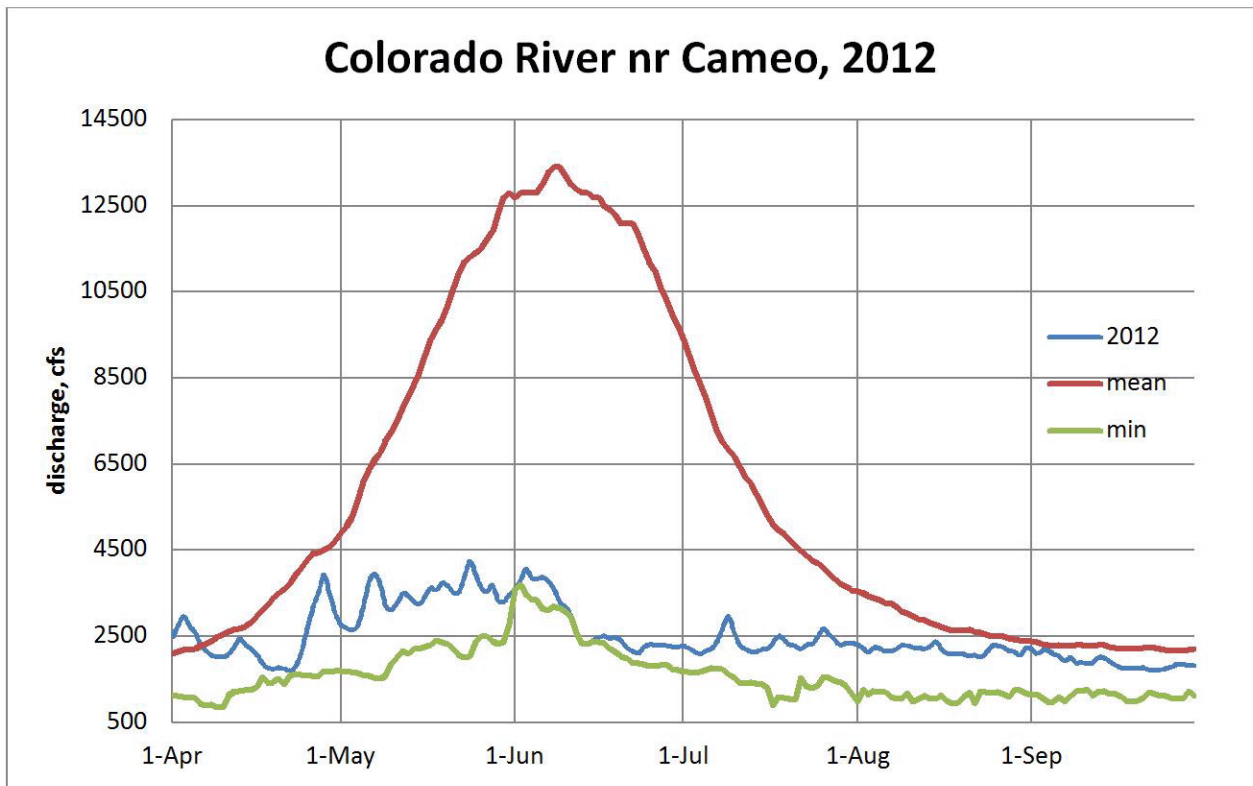
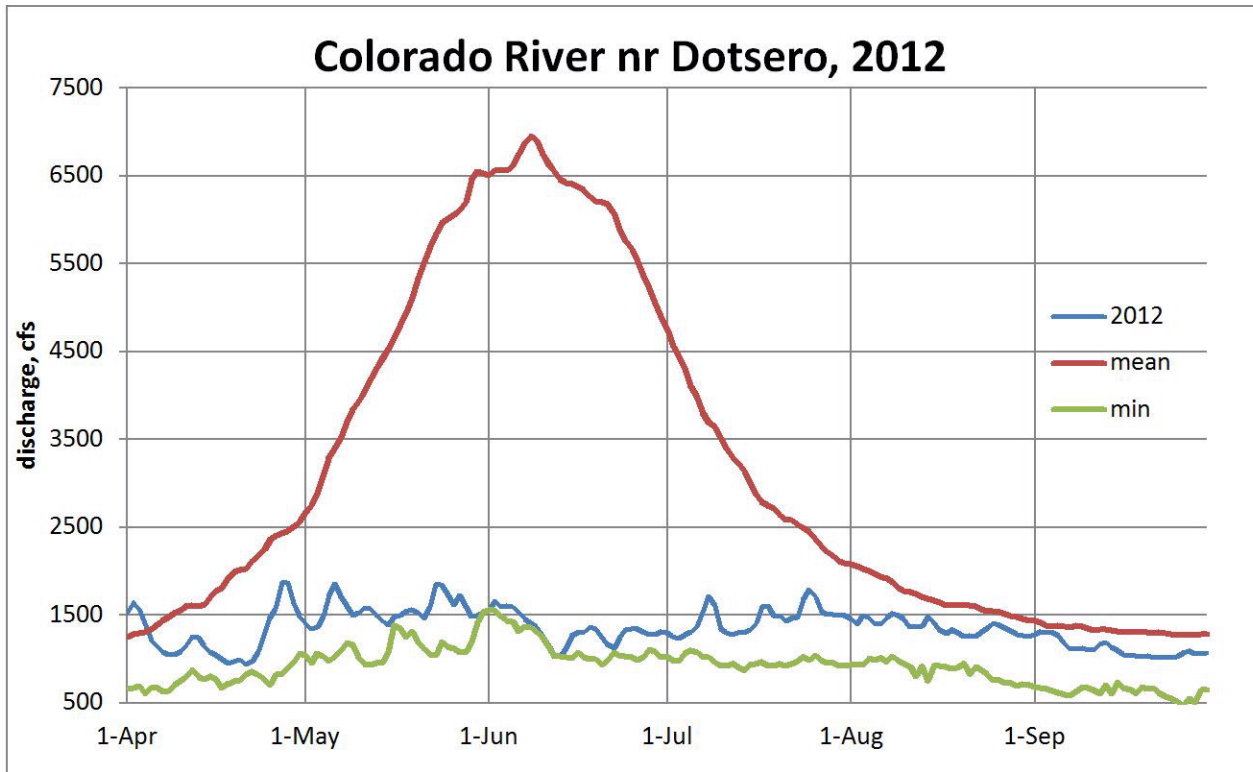
After four consecutive months of below average precipitation through the end of February, the March 1, 2012 forecasts indicated runoff would be well below average. However, each of the months of March through June continued the trend of monthly below average precipitation. The result was a continued degradation in forecasts. The table below depicts this downward trend in forecasted undepleted flows for the two key mainstem stream gages on the Colorado River near Dotsero and Cameo.

Colorado River nr Dotsero, and nr Cameo
2012 forecast 50% exceedence (most probable), April-July in KAF

	1-Mar		1-Apr		1-May		1-Jun		average
	flow	%ave	flow	%ave	flow	%ave	flow	%ave	
Dotsero	1090	76	770	54	625	43	555	39	1440
Cameo	1760	73	1280	53	1030	43	930	38	2420

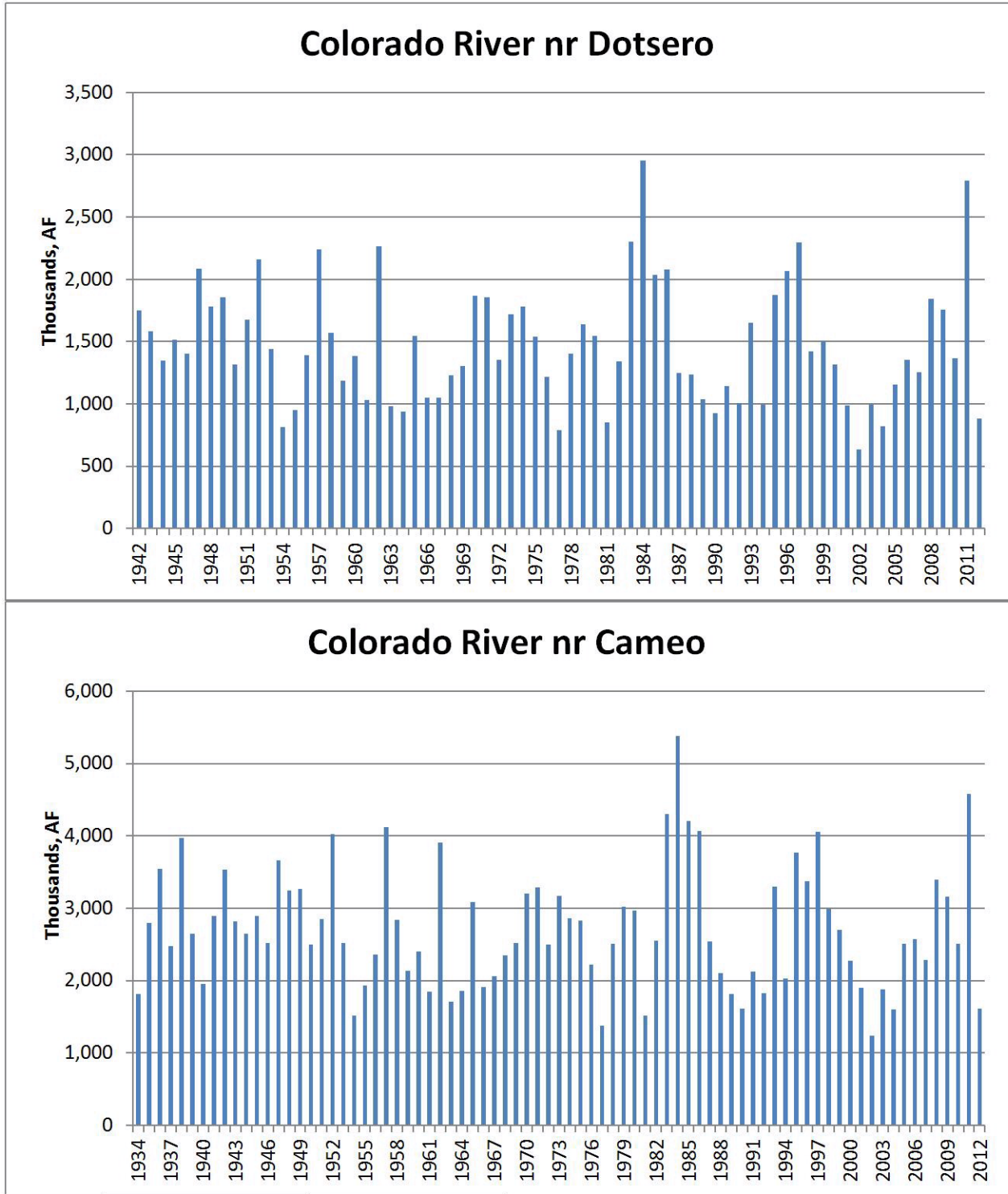
Incredibly the Colorado River near Dotsero peak daily average occurred on April 28, 2012 with flows on May 6th and May 24th approaching the April 28th peak. The April 28th peak is the earliest on record. The average peak day for the Dotsero gage is on June 8th. The Colorado River at Cameo peak daily average was on May 24, 2011, over two weeks ahead of the norm, which occurs on June 9th. In comparing the forecasts for undepleted flow with actual gaged flow, the gaged stream flow for the April-July period fared much worse. The Colorado River near Dotsero gaged stream flows were 17% of average and the Colorado River near Cameo stream flows were 22% of average. The differences are attributed to the continued below average precipitation after the June 1 forecast and that the major reservoirs and diversions upstream of the gages take a much larger share of the undepleted flow in low flow years.

Green Mountain Reservoir did paper fill in 2012, however it only attained a physical fill of 111,944 acre-feet with 39,777 acre-feet owed to it by Denver and Colorado Springs. Ruedi Reservoir did not fill this year with a maximum content of 90,249 acre-feet, which is 12KAF short of full. Wolford Mountain Reservoir generally fills early with its lower elevation drainage. In 2012 it filled its 66,891 acre-foot capacity on April 19th and spilled through June 8th. Williams Fork Reservoir was just shy of full, reaching maximum content on June 10th at 94,123 acre-feet. Maximum storage for 2012 in Granby reached 432,359 acre-feet on June 14th, while full capacity is 539,800 acre-feet. Homestake Reservoir was drained for major repairs.



Ultimately the dire snowpack was mitigated by reservoir storage beginning the year 20% above average, and near average mid to late summer precipitation. The Water Year did end with the seventh lowest year in 79 years of record for the Colorado River near Cameo gage

flow and the sixth lowest year in 71 years of record for the Colorado River near Dotsero. The gaged flows for the entire Water Year were 59% of historic average at both the Colorado River near Cameo and near Dotsero gages (see histograms of annual gaged flow).



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With water supplies at historically low levels and an unusually warm March and April administration of many of our tributaries began in late March. Streams that normally provide supply to most water rights into July were reduced to only the most senior rights by mid May. Several higher elevation streams that historically only have shortages in much below average years were curtailed by August. One stream, Cataract Creek in District 36, was administered for only the second time in history.

For the 2012 irrigation year the Shoshone Power Plant was offline, operating with only one of two units, or operating with a reduced head at the dam and could not use all the water available. The lowered pond elevation at the diversion dam was the result of excessive seepage and concerns for the integrity of the dam. Repair was completed in late November 2012 and the power plant was at full operation by mid December. By early summer the Cameo Call provided sufficient water at Shoshone for the reduced head operations.

The Cameo Call was placed on June 20, 2012. It is the second earliest call on record, exceeded only by the June 16th call in 2002. To preserve upstream storage, the Grand Valley water users attempted to operate well below their demand of 1950cfs.

**SUMMARY OF COLORADO RIVER MAIN STEM CALLS
2012 IRRIGATION YEAR**

STATUS OF CALL AT THE SHOSHONE POWER PLANT

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING RIGHT	DECREE D AMT.	SWING PRIORITY*	SWING PRIORITY ADMIN. NO.	COMMENTS
11.01.11	06.20.12	233	Free River	---	---	---	Free River
06.21.12	10.31.12	133	No Call from Shoshone				Grand Valley Call Controlled

STATUS OF CALL IN THE GRAND VALLEY (CAMEO DEMAND)

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING RIGHT	DECREE D AMT.	SWING PRIORITY*	SWING PRIORITY ADMIN. NO.	COMMENTS
11.01.11	06.20.12	233	Free River	---	---	---	
06.21.12	06.21.12	1	GVIC	119 cfs	Blue River Diversion Project	35238.00000	Roberts Tunnel/Dillon Reservoir
06.22.12	07.15.12	24	GVIC	119 cfs	C-BT Project	31258.00000	
07.16.12	07.20.12	5	GVIC	119 cfs	---	30895.23491	No swing right
07.21.12	07.21.12	1	GVIC	119 cfs	IPTDS	30941.29454	Twin Lakes Tunnel
07.22.12	07.30.12	9	GVIC	119 cfs	C-BT Project	31258.00000	
07.31.12	07.31.12	1	GVIC	119 cfs	Blue River Diversion Project	35927.00000	Roberts Tunnel/Dillon Reservoir (5/13/48 appropriation date)
08.01.12	08.05.12	5	GVIC	119 cfs	---	30895.23491	No swing right
08.06.12	10.16.12	72	GVWUA	730 cfs	---	22729.21241	No swing right
10.17.12	10.22.12	6	GVIC	119 cfs	---	30895.23491	No swing right
10.23.12	10.31.12	9	Free River	---	---	---	

*SWING PRIORITY = most junior water right, diverting U/S of calling structure

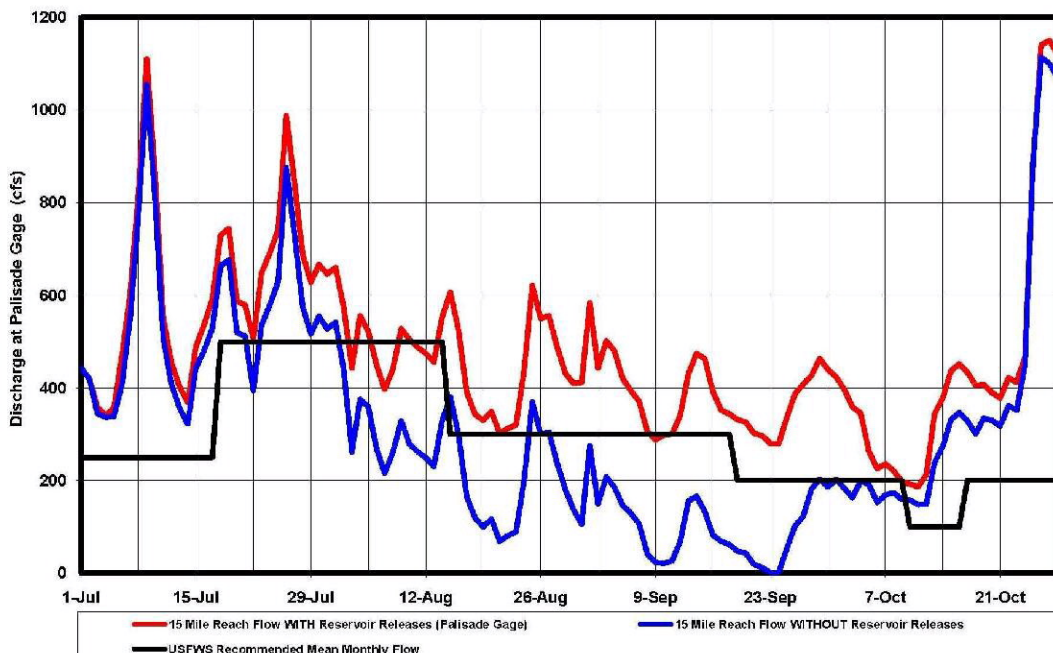
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On April 12, 2012, the Interim Policy for the 2012 Green Mountain Reservoir fill season was issued with no substantive changes from 2011. The policy did anticipate a paper fill of Green Mountain Reservoir. The Secretary of Interior declared start of fill on April 1, 2012. Due to the extremely low runoff no water was allocated to power at Green Mountain Reservoir during the fill season and therefore the Interim Fill Policy had no practical impact on the manner of filling the reservoir or any rights upstream and subject to a call by Green Mountain.

Coordinated Reservoir Reoperations for the Endangered Fish Recovery Program (CROS) were not conducted in 2012. Confidence in storage for participating reservoirs and forecasted peak flows at Cameo well below the 12,000cfs trigger for the program led to an early decision to call off CROS this year. On May 24th the river peaked at 4,250cfs, confirming that decision. The CROS program is an element of the Recovery Program for the Endangered Fish in the 15-mile reach. When operated the participating reservoirs modify the timing of their fill, without impacting yield to enhance the peak at Cameo for a 7-10 day period, so long as the peak is sufficient (12,000cfs) to provide benefit to the habitat and yet will not cause damage (25,000cfs).

The Recovery Program did not fare well after the snowmelt runoff. The extremely dry conditions left a total of 32,649 acre-feet available for the endangered fish from Ruedi, Wolford Mountain and Williams Fork Reservoirs. The 5,000 acre-feet in Ruedi's 4 out of 5 pool was not available and no Green Mountain Reservoir HUP surplus water was available. Of the 32,649 acre-feet available for the program, 31,652 acre-feet was released. 4,772 acre-feet of Wolford's 5412 was released from Ruedi by contract and 997 acre-feet remained in Wolford. Assessed transit losses reduced the releases at the 15-mile reach to 29,001 acre-feet. Additional flow for the 15 mile reach is provided by returns from the Highline Canal through the Palisade Pipeline, which totaled 9,119 acre-feet in 2012. The target flows for the habitat were set within the very low range of 100cfs to 500cfs.

EFFECT OF LATE IRRIGATION SEASON RESERVOIR RELEASES ON FLOW IN THE 15-MILE REACH
(As Measured at the Colorado River at Palisade Gage)
2012 LATE SUMMER/FALL



In addition to the annual increase in decreed augmentation plans, Division 5 personnel administered by formal approval 6 administrative exchanges pursuant to §CRS 37-80-120 or §CRS 37-83-104 , 26 Substitute Supply plans issued pursuant to §CRS 37-92-308 (excluding SWSP's issued for gravel pits), and for the first time ever 2 Temporary Loans to the CWCB approved pursuant to §CRS 37-83-105. Note, Water Commissioners operate countless historic exchanges without formal approval under §CRS 37-83-104.

Groundwater

Well permitting activity increased in 2012 over 2011 with a total of 424 well permit applications received for both exempt and non exempt new and replacement wells. This compares to 359 applications in 2011. It is the first year over year increase in applications for Division No. 5 since the start of the 2008 recession. However, is a considerable distance from the 1200 annual applications of the late 1990's. Total permits issued for both exempt and non exempt new and replacement wells in 2012 was 397 compared to a total of 387 permits in 2011. The slight 2012 increase over 2011 of permits issued compared to applications is the result of a backlog from 2010. Geothermal Permits continue to have a minor workload. 2012 saw only 1 permit issued compared to 7 in 2011. Drilling activity did increase in 2012 with 275 drillers logs received versus 228 in 2011.

2010 Abandonment List

The 2010 Abandonment List was submitted to the court in July of 2010 with 169 water rights. It was the smallest Abandonment List ever offered by Division 5. As prescribed by law the Revised 2010 Abandonment List was published with the December 2011 Water Court Resume. It was assigned case number 11CW173 and had the 74 water rights that remained on the list. The six protests to the Revised 2010 Abandonment List were assigned individual water court case numbers, and involved nine water rights. During the 2012 calendar year site visits and settlement meetings were held with the water right owners. As of this writing only one case remains unresolved. That case is awaiting a site visit after snowmelt. We expect to close that case by early summer, and close the mother case, 11CW173, soon after. Closing the 1990 Abandonment list within 3 years of the original filing is a vast improvement over the 7-11 years previous list have taken.

Augmentation Plan and Municipal Water Rights Administration

Future administration of the Colorado River will trend toward exchanges, substitutions, and augmentation plans. The greatest volume of diversions will continue to be to storage power transmountain and irrigation. However, the work volume will shift from field personnel turning headgates to data collection by remote sensors, submittal from water users, and accounting spreadsheets with field verification of operations. The Division 5 Augmentation/Municipal Administration Team is positioned for the task. The focus is to support Water Commissioners through the negotiation of good decrees, tabulation and interpretation of decrees, development of accounting specific to each, and development of processes for data collection. The team meets on a regular basis to flesh out issues and processes. In addition to the tabulation of the water rights, complex decrees are outlined in documents that will be attached to the accounting as the administrative plan for the water system. In 2012, all newly decreed augmentation plans were tabulated with the exclusion

of new plans tied to the previously untabulated decrees in Water District 36. Also in 2012, all old spreadsheets were modified to accommodate the new HydroBase standards, and a handful of new spreadsheets were developed. Previously unconnected water users continue to be contacted to provide data and to collect information for verification that plans are operating in accordance with decrees.

Division 5 Paperless Project

Our goal is to have all Water Division 5 non-confidential documents electronically available to the public on Laserfiche. This includes all water court case files, water administration files, data not in HydroBase, and other administrative documents. Through 2012, all of the water court files and 60% of our Water Administration files have been imaged, named with a user friendly naming convention, and uploaded to Laserfiche. The documents for the imaged files have been recycled and are only available electronically. We plan to complete the water administration files in 2013.

Colorado River Cooperative Agreement

Negotiation of the Colorado River Cooperative Agreement (CRCA) continued in 2012 with the Division and State Engineer in the thick of it. A draft agreement was signed in 2011 by several parties, including Denver Water, Grand County, Summit County, a consortium of interests in Eagle County, and various water providers in Garfield County. The remaining parties are awaiting a final agreement, which has been held up by the most critical piece of the agreement—the Green Mountain Reservoir Fill Protocol. The Colorado River Cooperative Agreement is the over-arching agreement that provides for the Moffat FIRMing Project, and includes the Green Mountain Reservoir Fill Protocol, and the Shoshone Outage Protocol, new sources for Summit and Grand County water supplies and Grand County environmental flows, and considerations for several water suppliers on the Colorado River. The water court applications by Grand County for RCID's on the Colorado River (10CW298), by Denver Water for a right of substitution using Fraser River diversions and Gross Reservoir in Water Division 1 (11CW121) are pieces to resolution of Grand Counties water supply and environmental concerns. Case Number 10CW298 continues to progress through settlement negotiations. However, 11CW121 is currently on a trial track, and may not be settled for several years. The Shoshone Outage Protocol was completed in 2012. As of this writing the Green Mountain Reservoir Fill Protocol and the Green Mountain Protocol Agreement are completed. The final signed documents are being circulated. The Green Mountain Protocol Agreement requires that a State Water Court Application and a Federal Court Petition be filed to incorporate the Green Mountain Reservoir Fill Protocol into the Blue River Decrees. These documents have yet to be filed. The parties to the Blue River Decrees (The United States, Denver Water, Colorado Springs Utilities, Colorado River Water Conservation District, and the Grand Valley Entities) are currently drafting the Water Court application and Federal Court petition.

Windy Gap FIRMing

DWR continued to work with the parties (Municipal Subdistrict of Northern Colorado WCD, Middle Park WCD, Grand County, CRWCD, and NWCOG) to the Windy Gap FIRMing IGA. We are not a party to the agreement, but were brought in to ensure the agreement can be administered within Colorado Water Law. The Attorney General's Office provided

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excellent legal guidance and alternatives for resolution of key issues. The agreement includes a provision to modify the Windy Gap Decrees by incorporating the IGA into them. Windy Gap Firming is the construction of storage on the East Slope, 90,000AF Chimney Hollow Reservoir. The reservoir will store West Slope diversions that otherwise would be bypassed at Windy Gap or spilled at Granby Reservoir. To maximize yield CBT project water in Granby Reservoir will be “pre-positioned” in a non-project reservoir (Chimney Hollow) freeing space in Granby Reservoir for Windy Gap water. Without pre-positioning the CBT water would sit in Granby until it could be delivered, likely after snowmelt runoff, to a project reservoir, such as Carter or Horsetooth. The IGA has provisions to firm up 2300AF of the 3000AF previously granted the MPWCD in the 1983 Windy Gap Agreement. Additionally, MPWCD and Grand County can divert and store in Granby Reservoir up to 1,500AF each at a rate of 3.8% each of any water diverted after the Municipal Subdistrict diverts 15, 000AF. The most important point of discussion has been the use of the Windy Gap water rights for use on the West Slope without a change of those water rights. We believe we have worked through the issues. However, the agreement is awaiting resolution of concerns of Grand County water users below Windy Gap that are not a party to the IGA.



Alan C Martellaro, Division Engineer

Colorado Division of Water Resources

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Alan C Martellaro, Division Engineer

APPENDIX of Figures and Tables referenced in 2012 report.

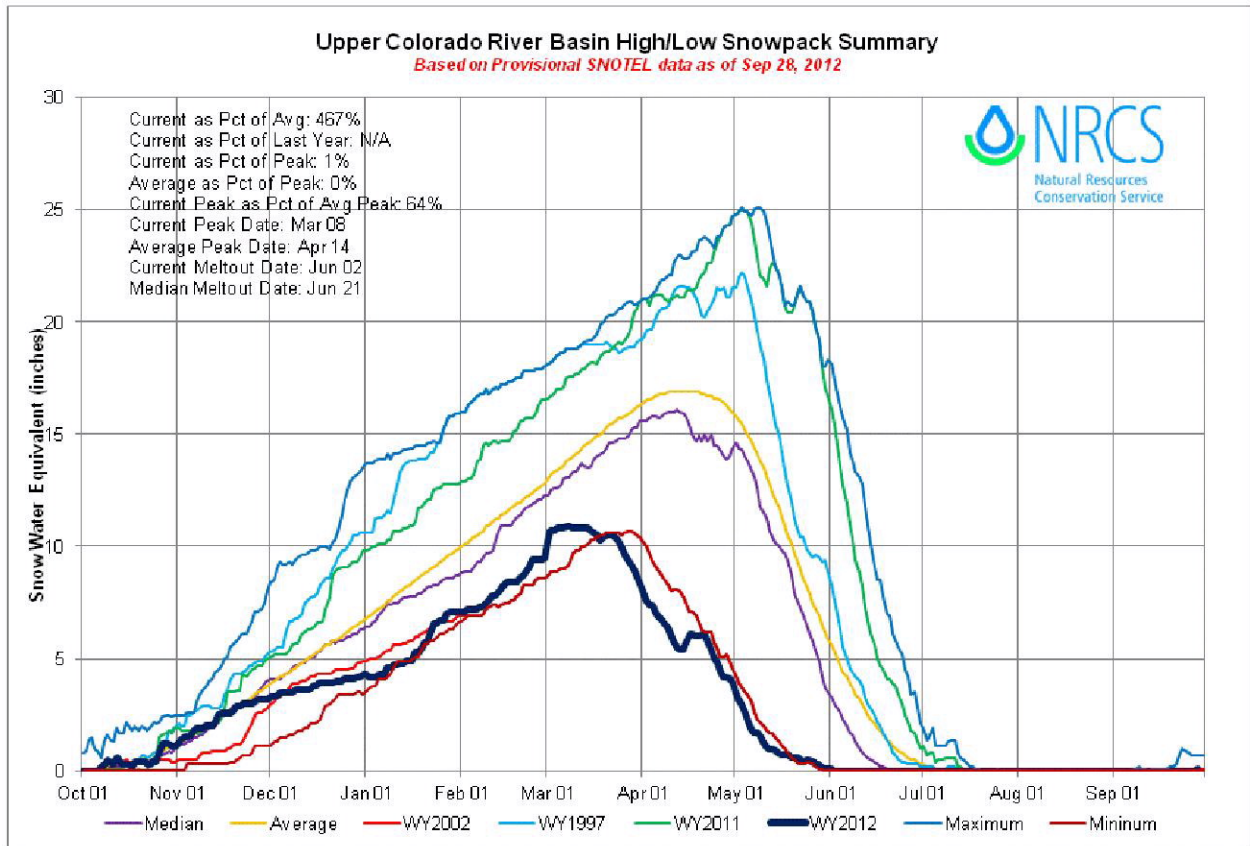


FIGURE 1, SWE for Colorado River Basin

Colorado River nr Dotsero, and nr Cameo

2012 forecast 50% exceedence (most probable), April-July in KAF

	1-Mar		1-Apr		1-May		1-Jun		average
	flow	%ave	flow	%ave	flow	%ave	flow	%ave	
Dotsero	1090	76	770	54	625	43	555	39	1440
Cameo	1760	73	1280	53	1030	43	930	38	2420

TABLE 1, diminishing runoff forecasts

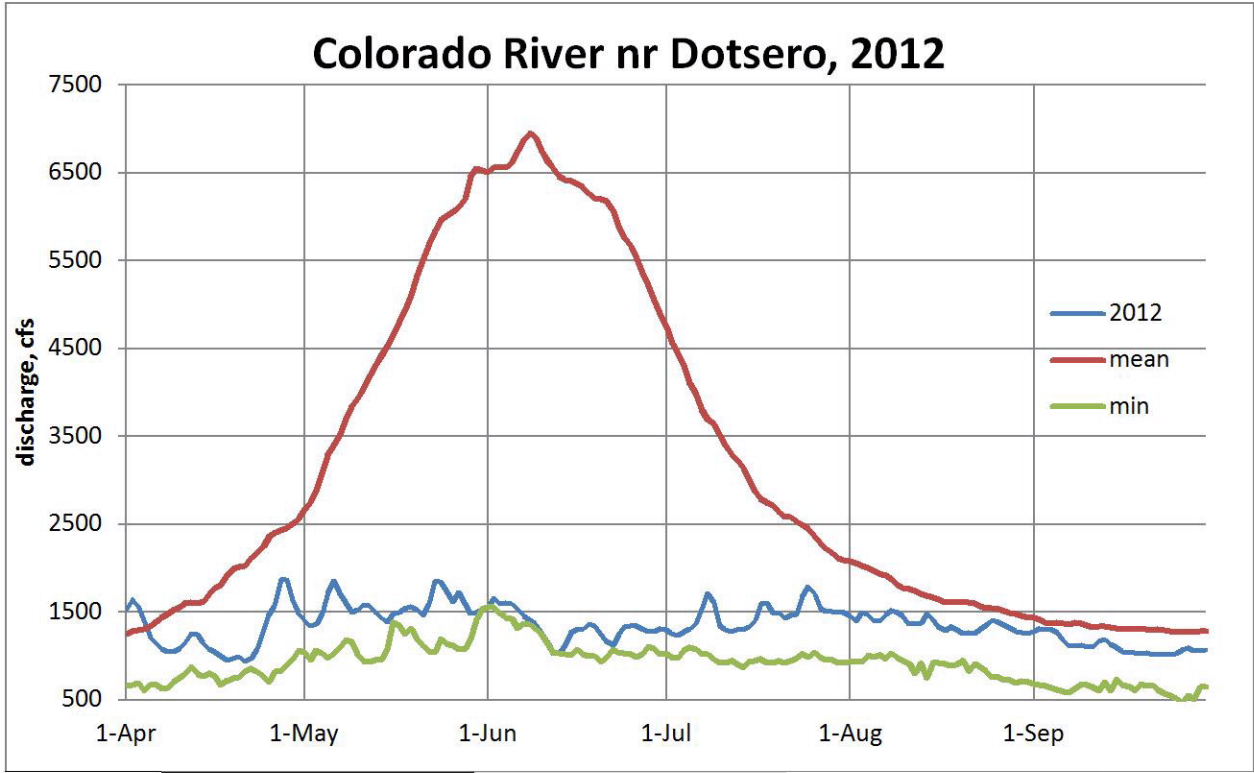


FIGURE 2, 2012 stream flow comparison

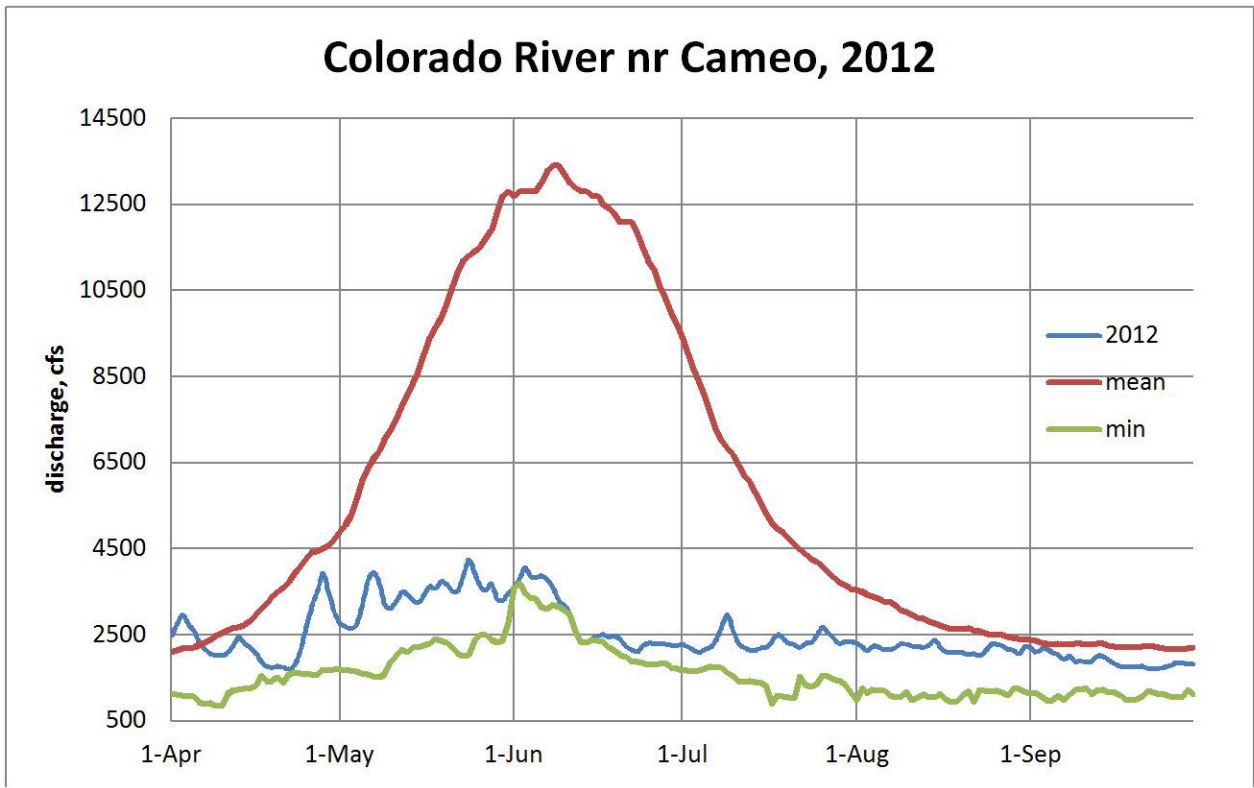


FIGURE 3, 2012 stream flow comparison

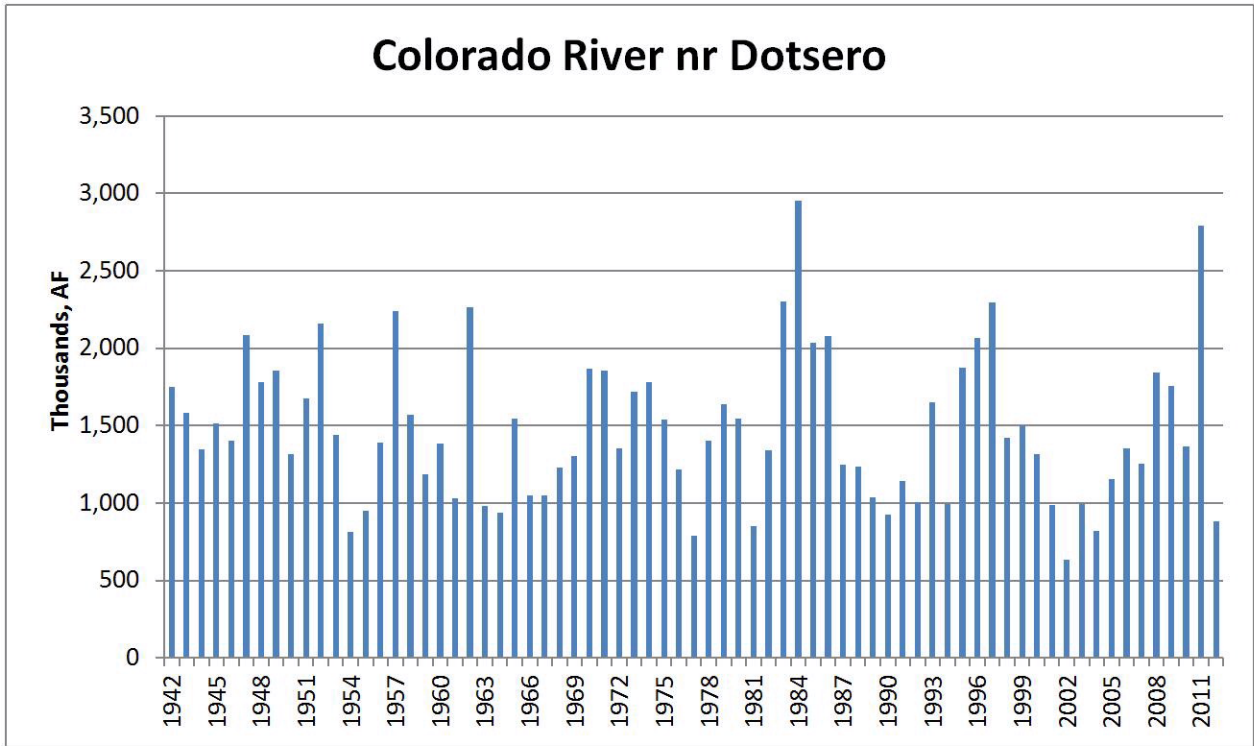


FIGURE 4, Colorado River nr Dotsero histogram

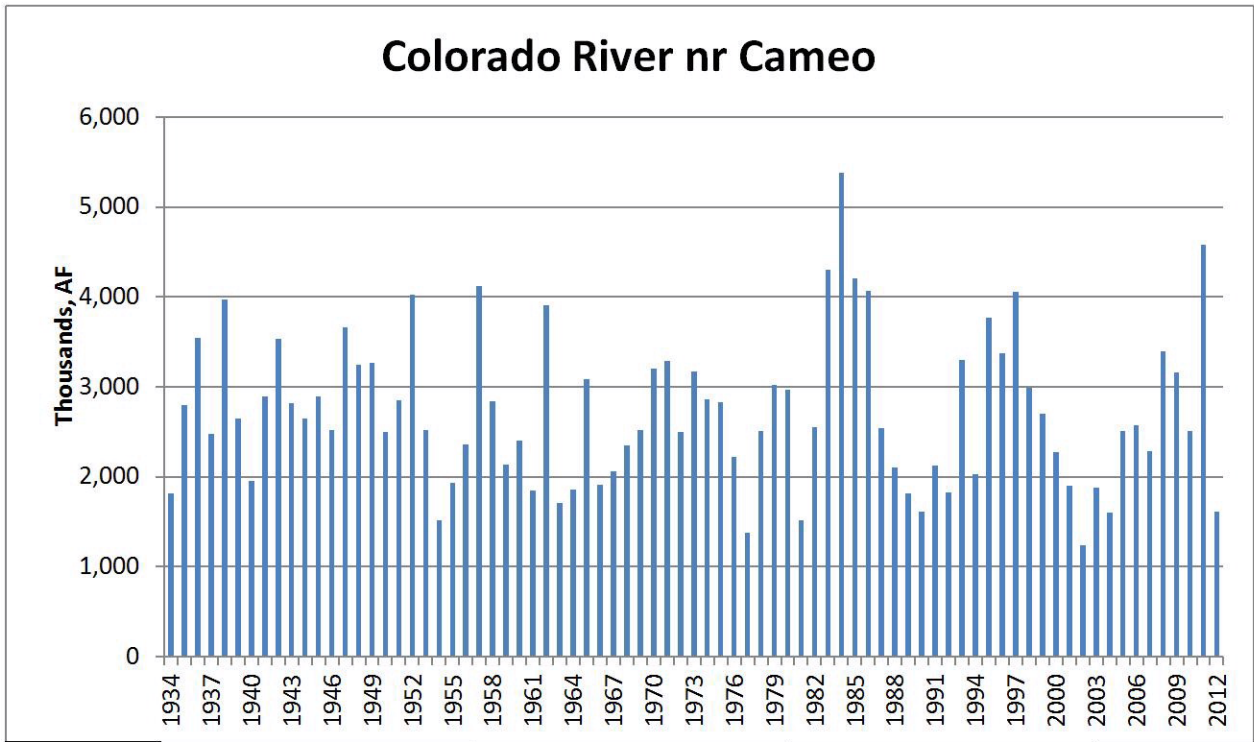


FIGURE 5, Colorado River nr Cameo histogram

2012 Division 5 Annual Report

**SUMMARY OF COLORADO RIVER MAIN STEM CALLS
2012 IRRIGATION YEAR**

STATUS OF CALL AT THE SHOSHONE POWER PLANT

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING RIGHT	DECREED AMT.	SWING PRIORITY*	SWING PRIORITY ADMIN. NO.	COMMENTS
11.01.11	06.20.12	233	Free River	---	---	---	Free River
06.21.12	10.31.12	133	No Call from Shoshone				Grand Valley Call Controlled

STATUS OF CALL IN THE GRAND VALLEY (CAMEO DEMAND)

DATE ON	THRU	NO. DAYS CALL ON/OFF	CALLING RIGHT	DECREED AMT.	SWING PRIORITY*	SWING PRIORITY ADMIN. NO.	COMMENTS
11.01.11	06.20.12	233	Free River	---	---	---	
06.21.12	06.21.12	1	GVIC	119 cfs	Blue River Diversion Project	35238.00000	Roberts Tunnel/Dillon Reservoir
06.22.12	07.15.12	24	GVIC	119 cfs	C-BT Project	31258.00000	
07.16.12	07.20.12	5	GVIC	119 cfs	---	30895.23491	No swing right
07.21.12	07.21.12	1	GVIC	119 cfs	IPTDS	30941.29454	Twin Lakes Tunnel
07.22.12	07.30.12	9	GVIC	119 cfs	C-BT Project	31258.00000	
07.31.12	07.31.12	1	GVIC	119 cfs	Blue River Diversion Project	35927.00000	Roberts Tunnel/Dillon Reservoir (5/13/48 appropriation date)
08.01.12	08.05.12	5	GVIC	119 cfs	---	30895.23491	No swing right
08.06.12	10.16.12	72	GVWUA	730 cfs	---	22729.21241	No swing right
10.17.12	10.22.12	6	GVIC	119 cfs	---	30895.23491	No swing right
10.23.12	10.31.12	9	Free River	---	---	---	

*SWING PRIORITY = most junior water right, diverting U/S of calling structure

TABLE 2 and 3, 2012 Shoshone and Cameo call data

EFFECT OF LATE IRRIGATION SEASON RESERVOIR RELEASES ON FLOW IN THE 15-MILE REACH
(As Measured at the Colorado River at Palisade Gage)
2012 LATE SUMMER/FALL

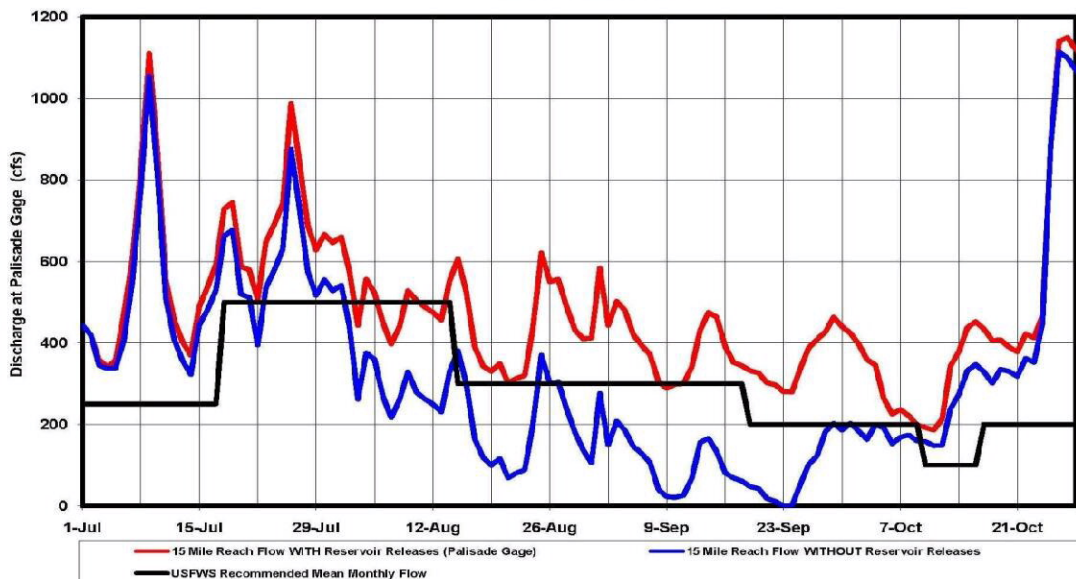


FIGURE 6, Recovery Program

Water Division 5 (Colorado River Basin)

Surface Water Supply

The Colorado River Basin water supply for the 2012 irrigation year and the 2011 irrigation year are years of extremes, and polar opposites. The 2011 year had one of the greatest snow packs on record, while 2012 had one of the lowest. Basin wide precipitation for the 2012 irrigation year was 74.0% of average and 59.0% of 2011. The April 1, 2012 snow water equivalent was 49% of average and it had already peaked, while the April 1, 2011 snow water equivalent was 130% of average and it continued to gain into May. By early March the 2012 snowpack was declining and redefined the historic minimum curve from the third week in March through the of snowmelt runoff, excluding a minor variation the end of May. The opposite is depicted in the snow water equivalent graph for 2011, where the curve for the maximum of record was redefined by 2011, extending the curve during late April-early May and also in late May. When the 2011 curve did not create new peaks, it did track very close to the maximum of record on the descending limb of the snow water curve. Generally, the snowpack in Division 5 for the 2012 season peaked 6 weeks earlier than average, and SNOTEL sites below 10,000 ft were completely devoid of snow 5 weeks ahead of average. By June 1st only two SNOTEL sites had not completely melted out.

After four consecutive months of below average precipitation through the end of February, the March 1, 2012 forecasts indicated runoff would be well below average. However, each of the months of March through June continued the trend of monthly below average precipitation. The result was a continued degradation in forecasts. The downward trend in forecasted undepleted flows for the two key mainstem stream gages on the Colorado River near Dotsero and Cameo resulted in a June 1 forecast of 38% and 39% of average undepleted flow respectively.

Incredibly the Colorado River near Dotsero peak daily average occurred on April 28, 2012 with flows on May 6th and May 24th approaching the April 28th peak. The April 28th peak is the earliest on record. The average peak day for the Dotsero gage is on June 8th. The Colorado River at Cameo peak daily average was on May 24, 2011, over two weeks ahead of the norm, which occurs on June 9th. In comparing the forecasts for undepleted flow with actual gaged flow, the gaged stream flow for the April-July period fared much worse. The Colorado River near Dotsero gaged stream flows were 17% of average and the Colorado River near Cameo stream flows were 22% of average. The differences are attributed to the continued below average precipitation after the June 1 forecast and that the major reservoirs and diversions upstream of the gages take a much larger share of the undepleted flow in low flow years.

Green Mountain Reservoir did paper fill in 2012, however it only attained a physical fill of 111,944 acre-feet with 39,777 acre-feet owed to it by Denver and Colorado Springs. Ruedi Reservoir did not fill this year with a maximum content of 90,249 acre-feet, which is 12KAF short of full. Wolford Mountain Reservoir generally fills early with its lower elevation drainage. In 2012 it filled its 66,891 acre-foot capacity on April 19th and spilled through

June 8th. Williams Fork Reservoir was just shy of full, reaching maximum content on June 10th at 94,123 acre-feet. Maximum storage for 2012 in Granby reached 432,359 acre-feet on June 14th, while full capacity is 539,800 acre-feet. Homestake Reservoir was drained for major repairs.

Ultimately the dire snowpack was mitigated by reservoir storage beginning the year 20% above average, and near average mid to late summer precipitation. The Water Year did end with the seventh lowest year in 79 years of record for the Colorado River near Cameo gage flow and the sixth lowest year in 71 years of record for the Colorado River near Dotsero. The gaged flows for the entire Water Year were 59% of historic average at both the Colorado River near Cameo and near Dotsero gages.

Surface Water Administration

With water supplies at historically low levels and an unusually warm March and April administration of many of our tributaries began in late March. Streams that normally provide supply to most water rights into July were reduced to only the most senior rights by mid May. Several higher elevation streams that historically only have shortages in much below average years were curtailed by August. One stream, Cataract Creek in District 36, was administered for only the second time in history.

For the 2012 irrigation year the Shoshone Power Plant was offline, operating with only one of two units, or operating with a reduced head at the dam and could not use all the water available. The lowered pond elevation at the diversion dam was the result of excessive seepage and concerns for the integrity of the dam. Repair was completed in late November 2012 and the power plant was at full operation by mid December. By early summer the Cameo Call provided sufficient water at Shoshone for the reduced head operations.

The Cameo Call was placed on June 20, 2012. It is the second earliest call on record, exceeded only by the June 16th call in 2002. To preserve upstream storage, the Grand Valley water users attempted to operate well below their demand of 1950cfs.

On April 12, 2012, the Interim Policy for the 2012 Green Mountain Reservoir fill season was issued with no substantive changes from 2011. The policy did anticipate a paper fill of Green Mountain Reservoir. The Secretary of Interior declared start of fill on April 1, 2012. Due to the extremely low runoff no water was allocated to power at Green Mountain Reservoir during the fill season and therefore the Interim Fill Policy had no practical impact on the manner of filling the reservoir or any rights upstream and subject to a call by Green Mountain.

Coordinated Reservoir Reoperations for the Endangered Fish Recovery Program (CROS) were not conducted in 2012. Confidence in storage for participating reservoirs and forecasted peak flows at Cameo well below the 12,000cfs trigger for the program led to an early decision to call off CROS this year. On May 24th the river peaked at 4,250cfs, confirming that decision. The CROS program is an element of the Recovery Program for the Endangered Fish in the 15-mile reach. When operated the participating reservoirs modify the timing of their fill, without impacting yield to enhance the peak at Cameo for a 7-10 day

period, so long as the peak is sufficient (12,000cfs) to provide benefit to the habitat and yet will not cause damage (25,000cfs).

The Recovery Program did not fare well after the snowmelt runoff. The extremely dry conditions left a total of 32,649 acre-feet available for the endangered fish from Ruedi, Wolford Mountain and Williams Fork Reservoirs. The 5,000 acre-feet in Ruedi's 4 out of 5 pool was not available and no Green Mountain Reservoir HUP surplus water was available. Of the 32,649 acre-feet available for the program, 31,652 acre-feet was released. 4,772 acre-feet of Wolford's 5412 was released from Ruedi by contract and 997 acre-feet remained in Wolford. Assessed transit losses reduced the releases at the 15-mile reach to 29,001 acre-feet. Additional flow for the 15 mile reach is provided by returns from the Highline Canal through the Palisade Pipeline, which totaled 9,119 acre-feet in 2012. The target flows for the habitat were set within the very low range of 100cfs to 500cfs.

In addition to the annual increase in decreed augmentation plans, Division 5 personnel administered by formal approval 6 administrative exchanges pursuant to §CRS 37-80-120 or §CRS 37-83-104 , 26 Substitute Supply plans issued pursuant to §CRS 37-92-308 (excluding SWSP's issued for gravel pits), and for the first time ever 2 Temporary Loans to the CWCB approved pursuant to §CRS 37-83-105. Note, Water Commissioners operate countless historic exchanges without formal approval under §CRS 37-83-104.

Groundwater

Well permitting activity increased in 2012 over 2011 with a total of 424 well permit applications received for both exempt and non exempt new and replacement wells. This compares to 359 applications in 2011. It is the first year over year increase in applications for Division No. 5 since the start of the 2008 recession. However, is a considerable distance from the 1200 annual applications of the late 1990's. Total permits issued for both exempt and non exempt new and replacement wells in 2012 was 397 compared to a total of 387 permits in 2011. The slight 2012 increase over 2011 of permits issued compared to applications is the result of a backlog from 2010. Geothermal Permits continue to have a minor workload. 2012 saw only 1 permit issued compared to 7 in 2011. Drilling activity did increase in 2012 with 275 drillers logs received versus 228 in 2011.

2010 Abandonment List

The 2010 Abandonment List was submitted to the court in July of 2010 with 169 water rights. It was the smallest Abandonment List ever offered by Division 5. As prescribed by law the Revised 2010 Abandonment List was published with the December 2011 Water Court Resume. It was assigned case number 11CW173 and had the 74 water rights that remained on the list. The six protests to the Revised 2010 Abandonment List were assigned individual water court case numbers, and involved nine water rights. During the 2012 calendar year site visits and settlement meetings were held with the water right owners. As of this writing only one case remains unresolved. That case is awaiting a site visit after snowmelt. We expect to close that case by early summer, and close the mother case, 11CW173, soon after. Closing the 1990 Abandonment list within 3 years of the original filing is a vast improvement over the 7-11 years previous list have taken.

Augmentation Plan and Municipal Water Rights Administration

Future administration of the Colorado River will trend toward exchanges, substitutions, and augmentation plans. The greatest volume of diversions will continue to be to storage power transmountain and irrigation. However, the work volume will shift from field personnel turning headgates to data collection by remote sensors, submittal from water users, and accounting spreadsheets with field verification of operations. The Division 5 Augmentation/Municipal Administration Team is positioned for the task. The focus is to support Water Commissioners through the negotiation of good decrees, tabulation and interpretation of decrees, development of accounting specific to each, and development of processes for data collection. The team meets on a regular basis to flesh out issues and processes. In addition to the tabulation of the water rights, complex decrees are outlined in documents that will be attached to the accounting as the administrative plan for the water system. In 2012, all newly decreed augmentation plans were tabulated with the exclusion of new plans tied to the previously untabulated decrees in Water District 36. Also in 2012, all old spreadsheets were modified to accommodate the new HydroBase standards, and a handful of new spreadsheets were developed. Previously unconnected water users continue to be contacted to provide data and to collect information for verification that plans are operating in accordance with decrees.

Division 5 Paperless Project

Our goal is to have all Water Division 5 non-confidential documents electronically available to the public on Laserfiche. This includes all water court case files, water administration files, data not in HydroBase, and other administrative documents. Through 2012, all of the water court files and 60% of our Water Administration files have been imaged, named with a user friendly naming convention, and uploaded to Laserfiche. The documents for the imaged files have been recycled and are only available electronically. We plan to complete the water administration files in 2013.

Colorado River Cooperative Agreement

Negotiation of the Colorado River Cooperative Agreement (CRCA) continued in 2012 with the Division and State Engineer in the thick of it. A draft agreement was signed in 2011 by several parties, including Denver Water, Grand County, Summit County, a consortium of interests in Eagle County, and various water providers in Garfield County. The remaining parties are awaiting a final agreement, which has been held up by the most critical piece of the agreement—the Green Mountain Reservoir Fill Protocol. The Colorado River Cooperative Agreement is the over-arching agreement that provides for the Moffat Firming Project, and includes the Green Mountain Reservoir Fill Protocol, and the Shoshone Outage Protocol, new sources for Summit and Grand County water supplies and Grand County environmental flows, and considerations for several water suppliers on the Colorado River. The water court applications by Grand County for RCID's on the Colorado River (10CW298), by Denver Water for a right of substitution using Fraser River diversions and Gross Reservoir in Water Division 1 (11CW121) are pieces to resolution of Grand Counties water supply and environmental concerns. Case Number 10CW298 continues to progress through settlement negotiations. However, 11CW121 is currently on a trial track, and may not be settled for several years. The Shoshone Outage Protocol was completed in 2012. As of this writing the Green Mountain Reservoir Fill Protocol and the Green Mountain Protocol

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