NRCS
Natural Resources Conservation Service

Utah Climate and Water Report

August 2012

Oak Creek SNOTEL after the fire.

Photo by Beau Uriona

Utah Climate and Water Report

The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from the United States Geological Survey, reservoir data from the Bureau of Reclamation, and other sources), geography including high elevation United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Snowpack Telemetry (SNOTEL) data, and agriculturally important data from the USDA-NRCS Soil Climate Analysis Network (SCAN). Data on precipitation, soil moisture, soil temperature, reservoir storage, and streamflow are analyzed and presented. These data analyses can be used to increase irrigation efficiency and agricultural production. As with all data and analyses, there are limitations due to data quality, quantity, and spatial application.

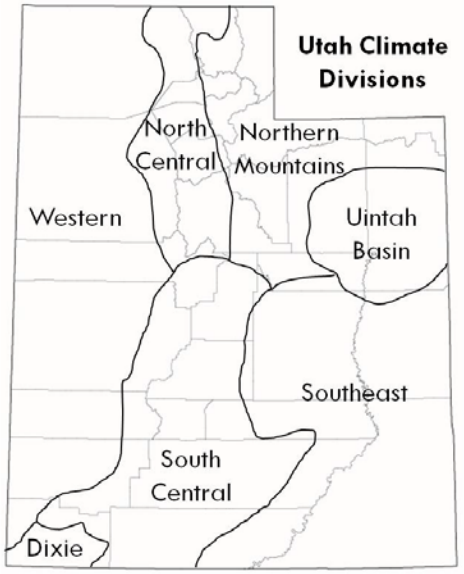
Report Content

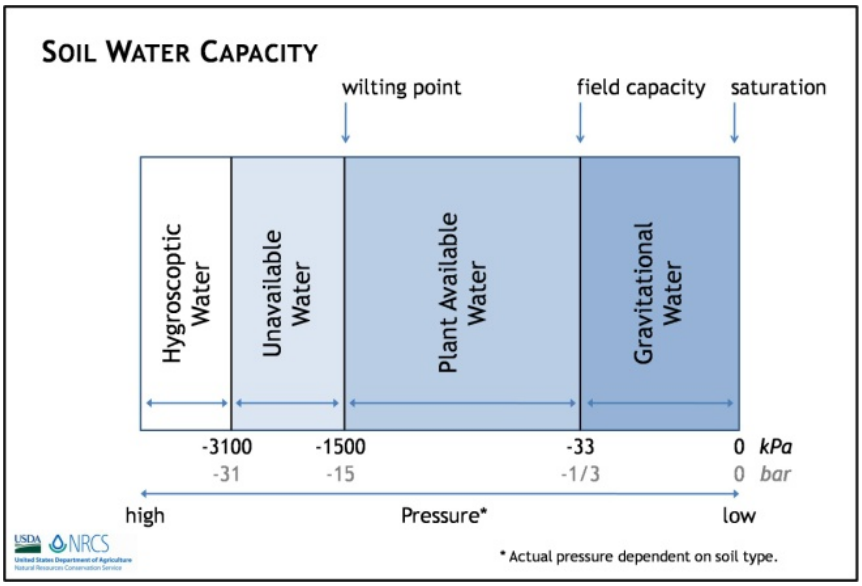
Climate and Water Information

Soil Climate Analysis Network

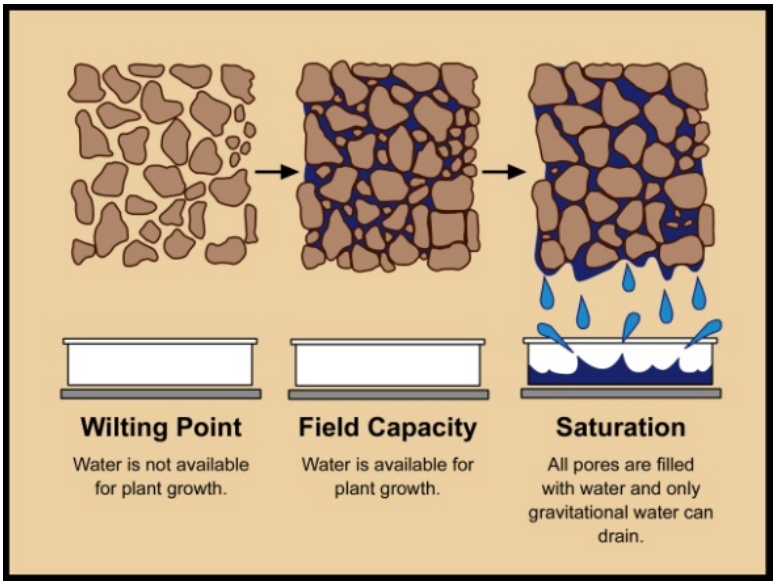
Soil Climate Analysis Network (SCAN) stations are primarily located on low- to mid-elevation, agriculturally important landscapes that maintain representative soils. Elevations range from 3,000 to 7,000 ft. The SCAN network provides real-time soil moisture and temperature data coupled with additional climate information for use in natural resource planning, drought assessment, water resource management, and resource inventory. Stations are situated on non-irrigated, native soils, are remotely located, and collect hourly atmospheric and soils data that are available to the public online.

In order to summarize SCAN data, the 35 sites in Utah are grouped by climate divisions (North Central, Northern Mountains, Uintah Basin, Southeast, South Central, Dixie, and Western).





Explanation of soil water capacity definitions. Field capacity (FC) and wilting point (WP) are calculated in the laboratory for each soil horizon. The amount of water held between field capacity and wilting point is plant available.



Visual explanation of soil water capacity definitions.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

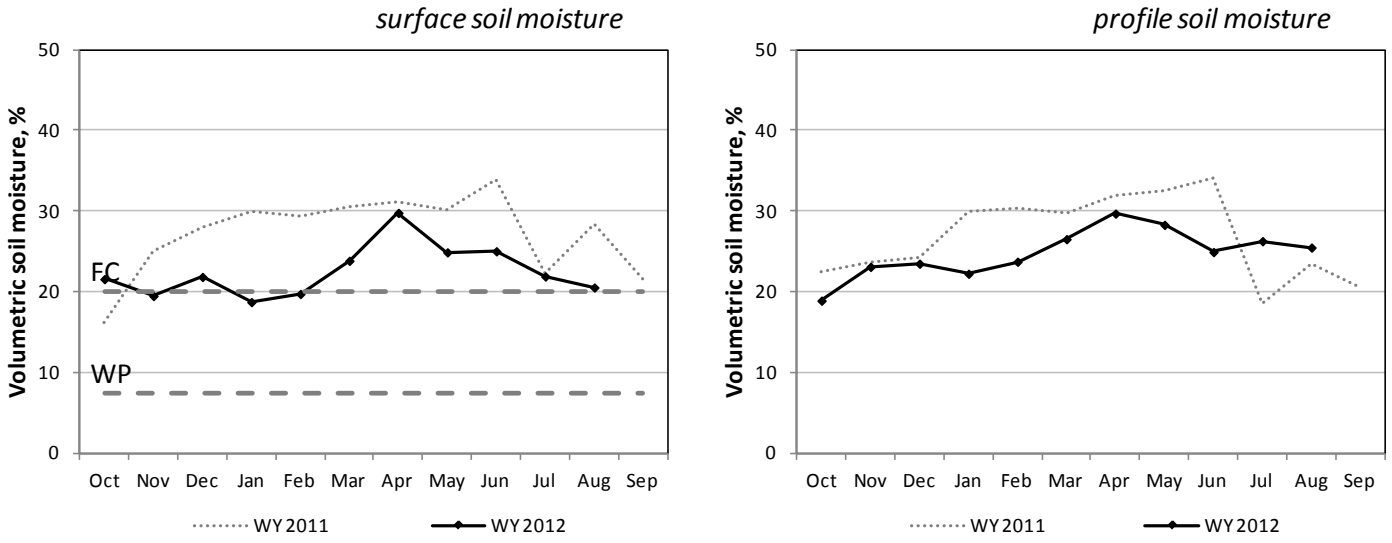
North Central

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o} F*				
NORTH CENTRAL												
Blue Creek	9.2	0.3	9	15	23	25	18	84	86	84	77	69
Cache Junction	11.7	0.4	18	18	34	33	36	73	73	71	66	61
Grantsville	6.4	0.7	1	18	27	28		85	85	82	74	

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

North Central



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

Northern Mountains

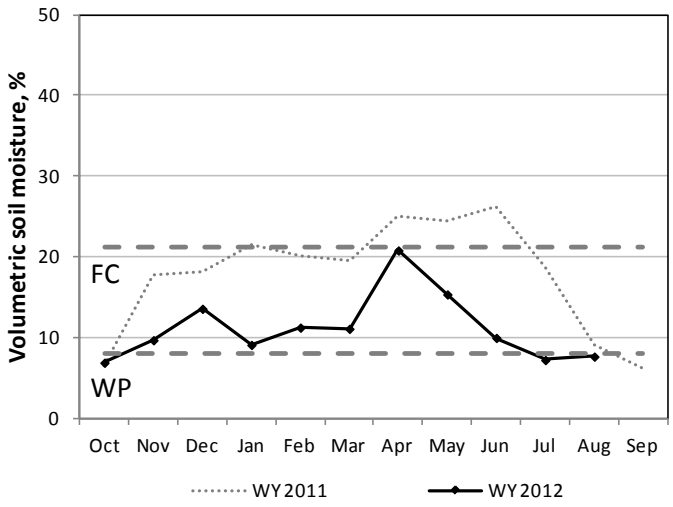
Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o}F*				
NORTHERN MOUNTAINS												
Chicken Ridge	6.0	0.8	0	6	8	12	11	65	67	67	63	58
Buffalo Jump	5.0	0.9	5	9	9	9	-	75	76	74	68	-
Morgan	10.9	0.9	8	8	11	7	9	71	72	71	68	66

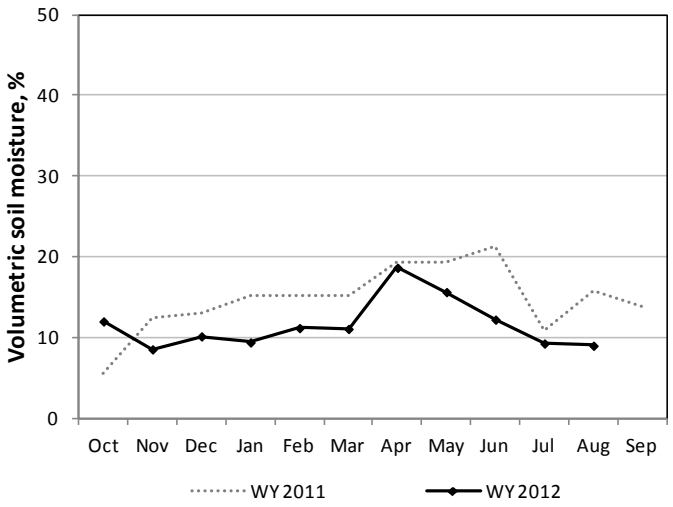
* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Northern Mountains

surface soil moisture



profile soil moisture



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

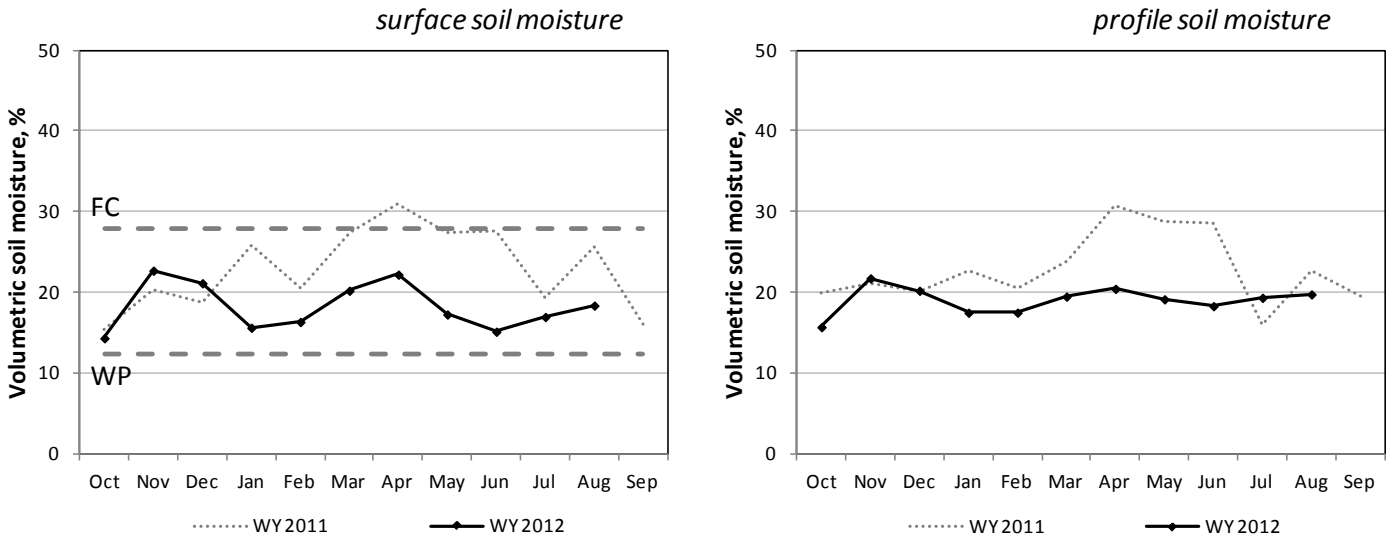
Uintah Basin

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o} F*				
UINTAH BASIN												
Mountain Home	6.9	1.8	14	21	24	19	12	66	66	65	62	60
Little Red Fox	4.2	1.3	5	19	20	24	26	73	77	77	70	67
Split Mountain	3.5	0.2						98	95	83	79	74

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Uintah Basin



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

Southeast

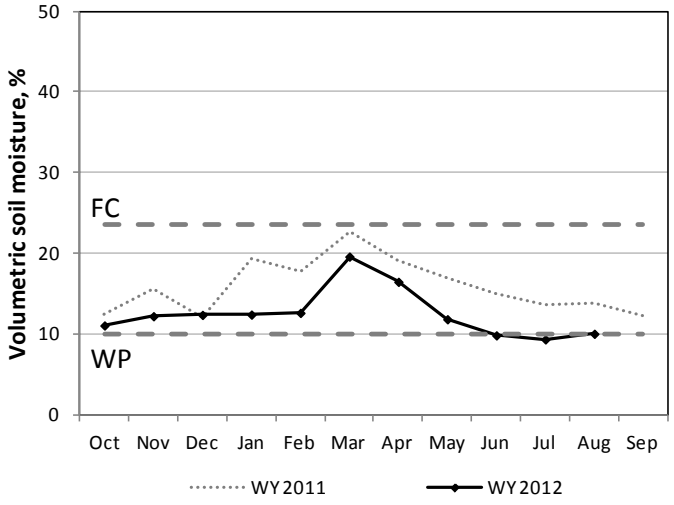
Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o} F*				
SOUTHEAST												
Price	5.0	1.8	1	14	16	19	22	74	78	79	76	73
Green River	2.7	0.4	5	7	7	6	11	83	85	86	83	80
Harm's Way	4.5	1.4	6	6	14	15	7	73	68	75	72	68
West Summit	3.6	0.5	6	10	12	16	19	72	75	78	72	68
Eastland	5.7	1.5	9	11	9	24	21	71	73	74	69	67
Alkali Mesa	6.5	0.9	6	9	15	19	14	77	78	78	75	72
McCracken Mesa	4.8	0.8	9	10	13	17	14	75	82	85	78	75

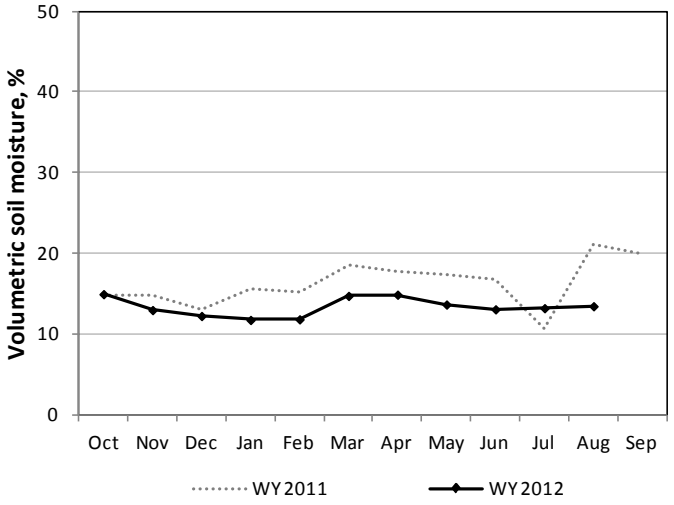
* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Southeast

surface soil moisture



profile soil moisture



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

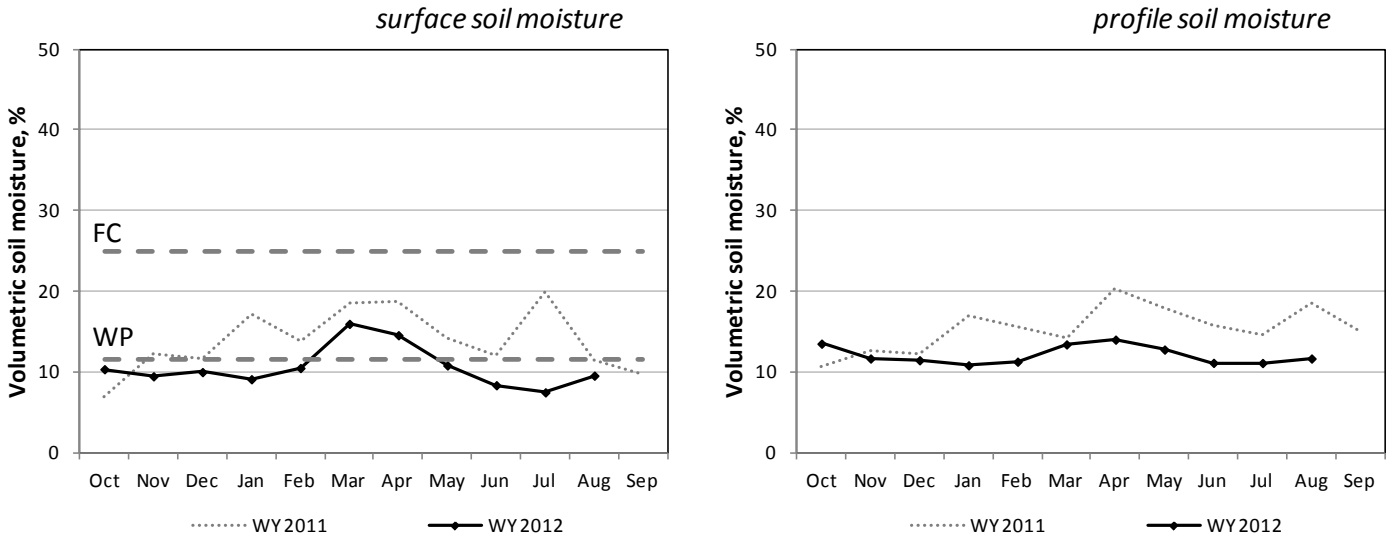
South Central

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o} F*				
SOUTH CENTRAL												
Nephi	9.2	0.7	11	16	15	9	6	78	79	78	73	68
Ephraim	6.7	2.1	11	10	16	18	35	63	66	68	64	62
Holden	5.1	0.7	3	5	4	13	15	78	79	78	75	71
Milford	5.8	1.8	27	15	21	30	17	71	76	76	73	69
Manderfield	6.9	2.2	15	12	15	11	5	65	70	70	68	65
Circleville	2.6	0.1	7	5	6	10	9	69	69	73	68	
Panguitch	4.8	1.7	6	18	13	21	25	67	68	66	63	59
Cave Valley	13.3	3.3	2	8	8	1	1	69	69	72	71	69
Vermillion	8.0	2.5	0	2	3	3	8	62	64	69	67	64
Spooky	3.9	0.4	2	1	4	12	2	83	82	81	77	75

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

South Central



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

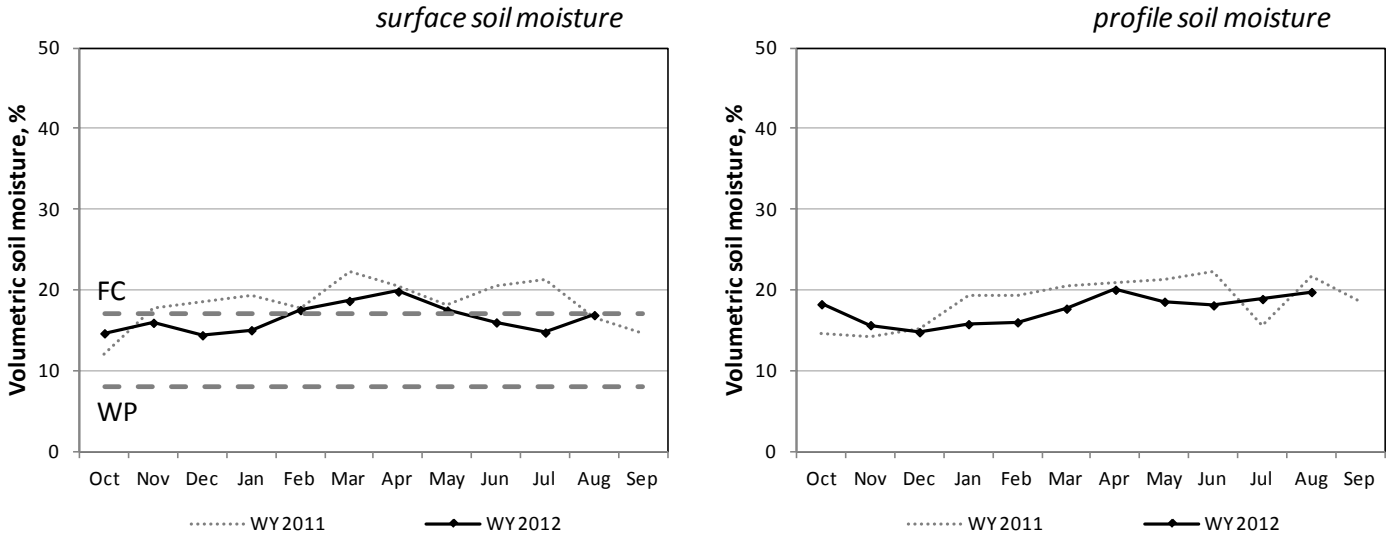
Western and Dixie

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*^{o}F*				
WESTERN												
Grouse Creek	8.7	2.0	0	10	14	17	17	79	80	80	71	67
Park Valley	5.7	1.1	1	7	13	37	27	77	79	79	74	69
Goshute	3.7	0.7	17	28	56	38	35	65	70	77	74	68
Dugway	4.6	0.7	15	29	39	75	12	85	85	82	76	73
Tule Valley	3.7	0.2	8	11	28	16	11	79	86	89	87	84
Hal's Canyon	2.9	0.1	1	0	8	11	10	75	80	84	78	71
Enterprise	7.0	2.2	15	23	22	14	16	68	77	77	73	69
DIXIE												
Sand Hollow	7.0	2.0	4	5	5	2	0	76	80	85	85	82

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Western & Dixie



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

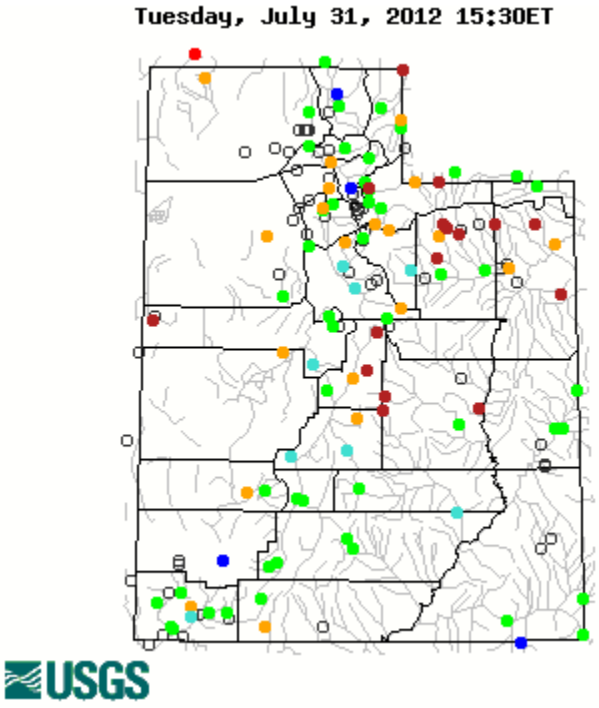
Utah Hydrologic Summary

August 1, 2012

Current Conditions

Stream flow has improved in southern Utah due to substantial precipitation in the past few days. This will likely be transient and short term. Natural stream flow in northern Utah remains extremely low with many stations in the less than 10% of normal category. Soil moisture values have rebounded significantly in southern Utah (39%-46% of saturation) while remaining very dry in the north (21%-40% of saturation). July Precipitation across the state ranged from 81% on the Weber to an amazing 418% on the Sevier bringing the Oct-July period to 78% statewide. Reservoir storage for the entire state is at 71% of capacity – a drop of 8% from last month. With about 6 weeks of irrigation season left statewide reservoir capacity will likely be near the 55%-60% of capacity as carryover for next year.

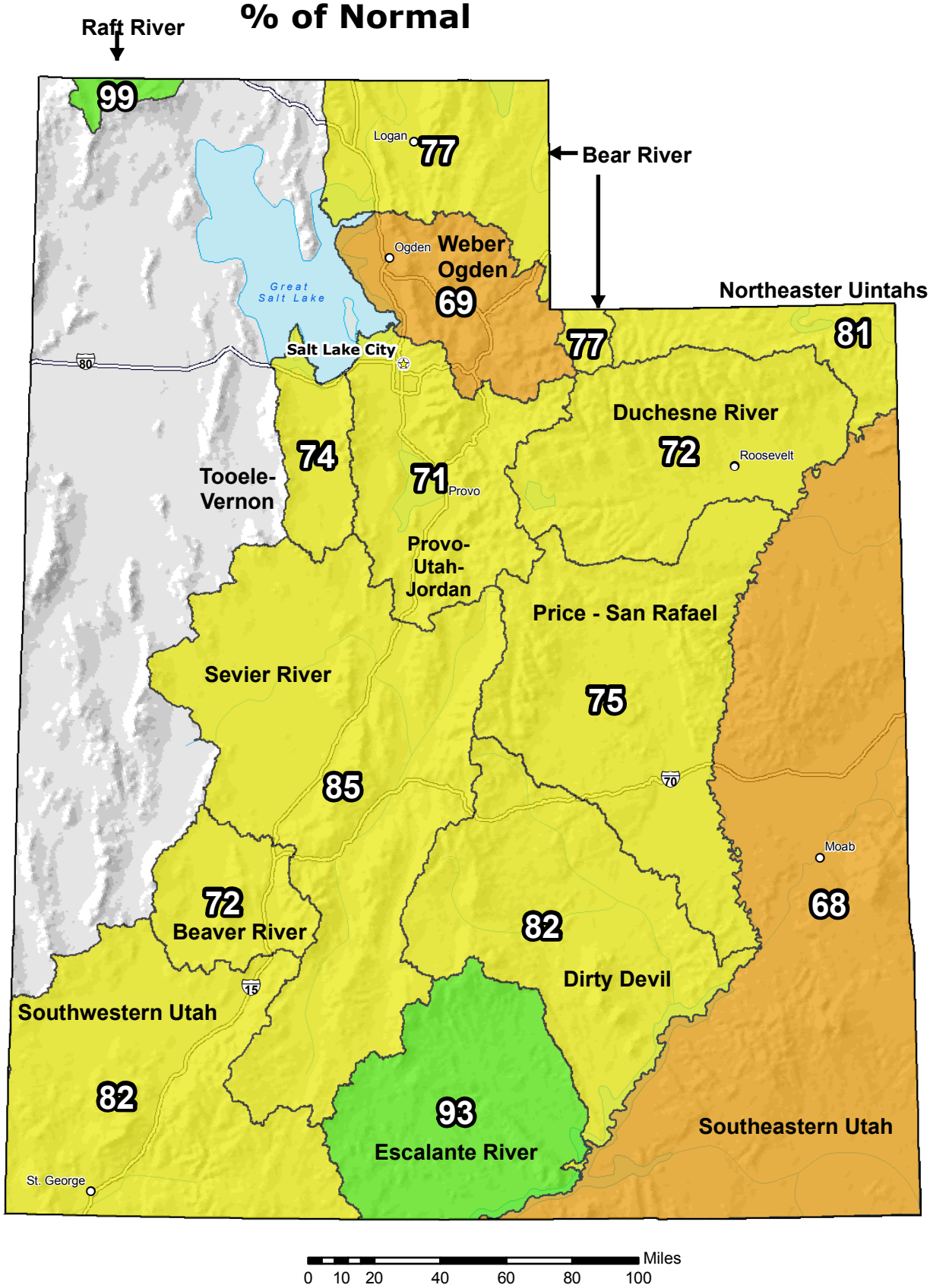
Current Utah Streamflow - Courtesy US Geological Survey



Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Utah
SNOTEL Water Year (Oct 1) to Date Precipitation
% of Normal

Aug 01, 2012



Water Year (Oct 1) to Date Precipitation Basin-wide Percent of 1971-2000 Normal

- unavailable *
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >=150%

* *Data unavailable at time of posting or measurement is not representative at this time of year*

Provisional Data Subject to Revision

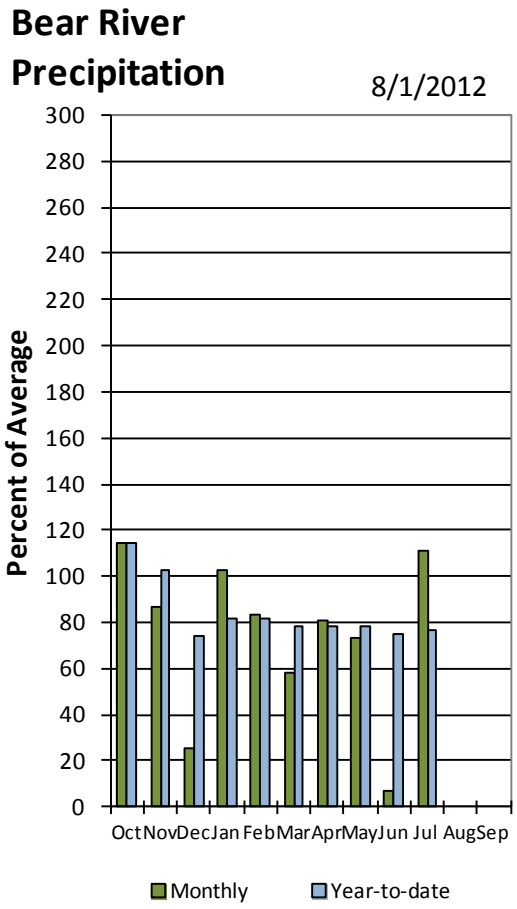
USDA NRCS

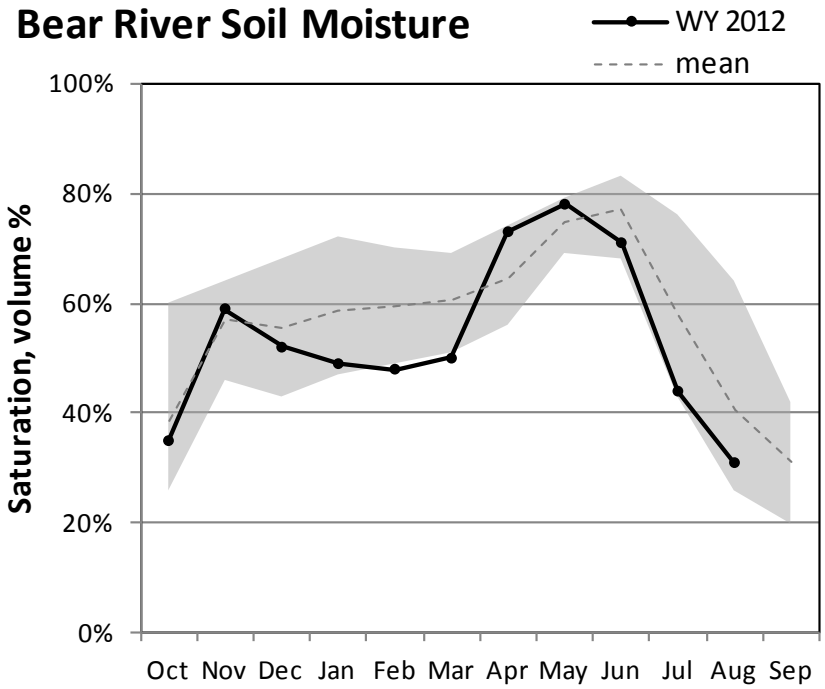
The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon http://www.wcc.nrcs.usda.gov/gis/
Based on data from http://www.wcc.nrcs.usda.gov/reports/
Science contact: Jim.Marron@por.usda.gov 503 414 3047

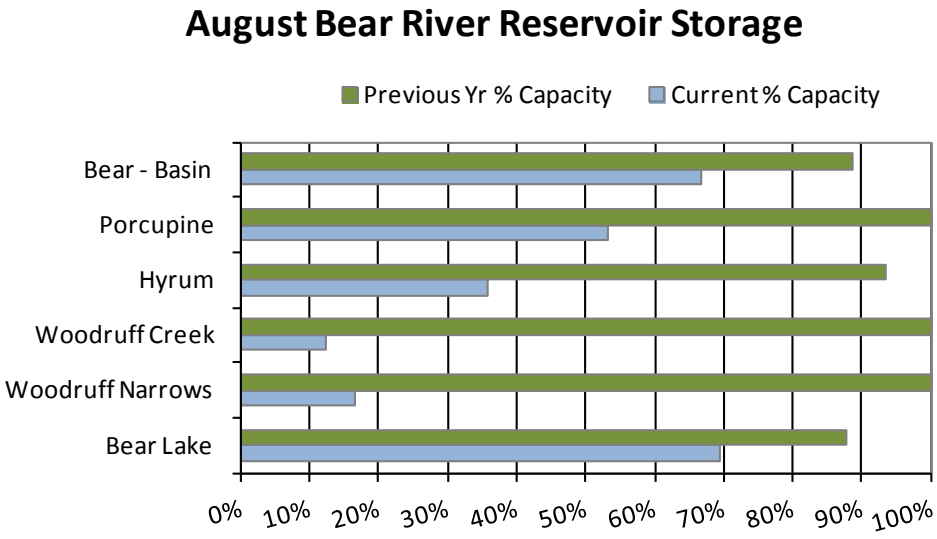
Bear River Basin
August 1, 2012

Precipitation in July was above average at 111% which brings the water year accumulation to 77%. Reservoir storage is at 67% of capacity, which is 22% lower than this time last year. Soil moisture is at 31% compared to 64% last year.





Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

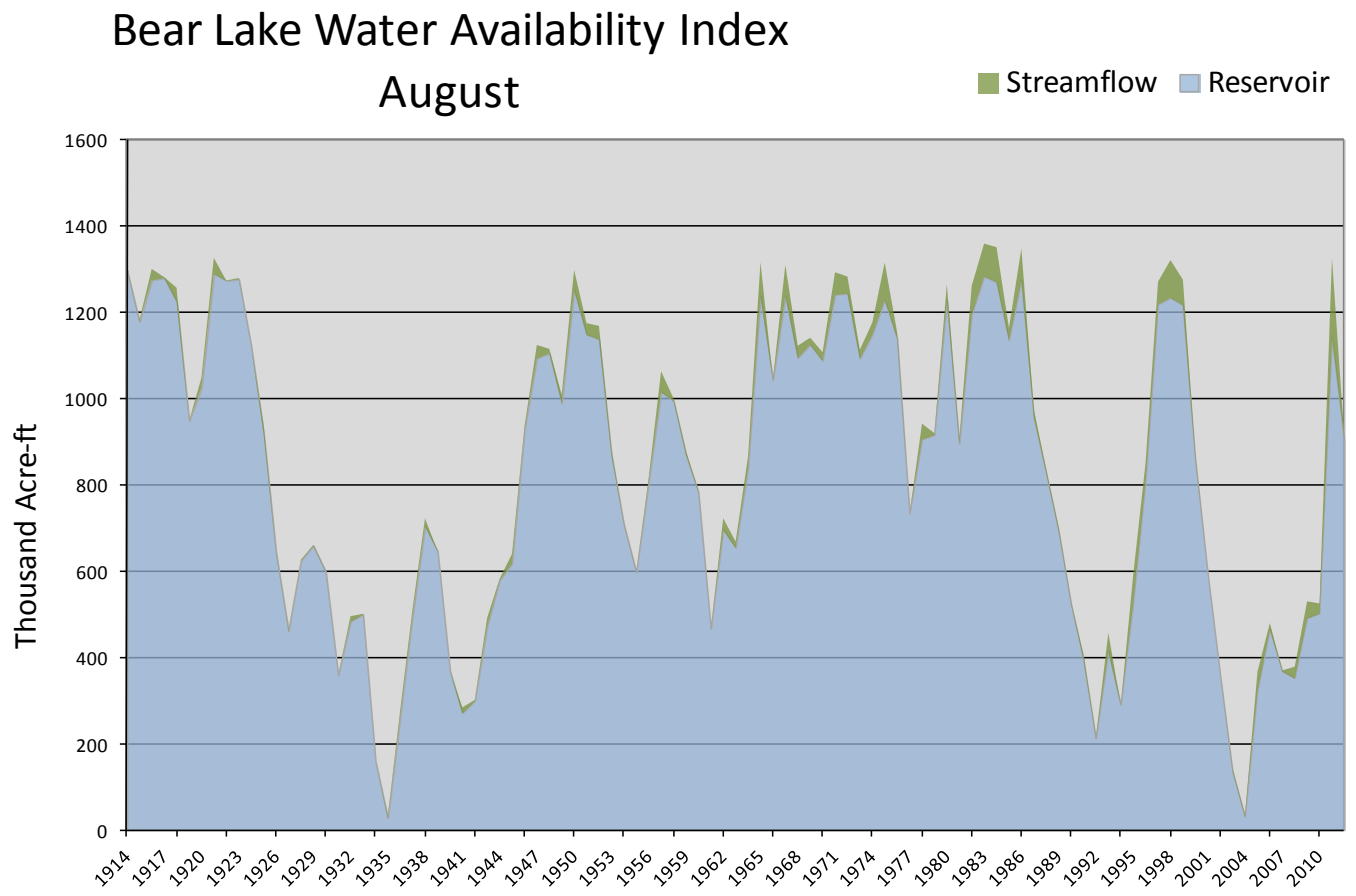


August 1, 2012

Water Availability Index

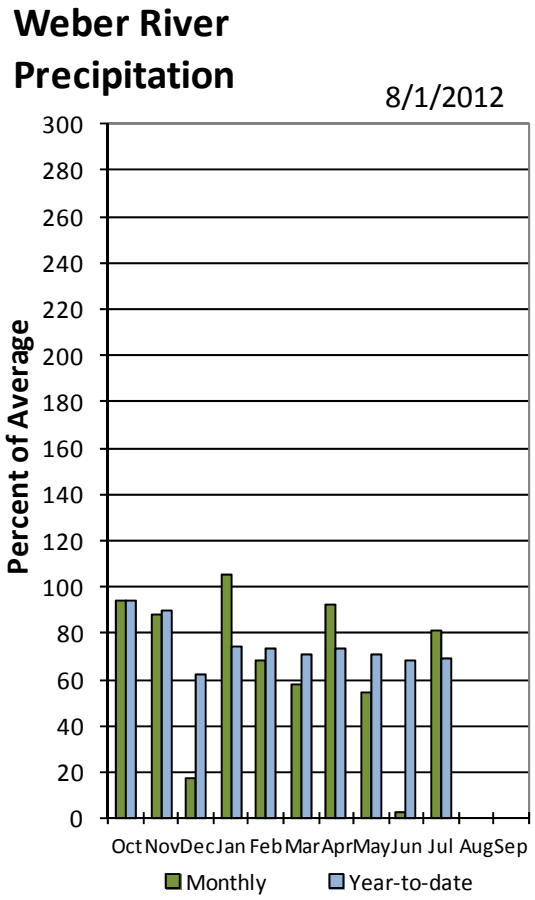
Basin or Region	July EOM* Bear Lake	July accumulated inflow to Bear Lake (*observed*)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Bear River	**904**	**5**	**909**	**0.25**	**53**	**53,81,79,46**

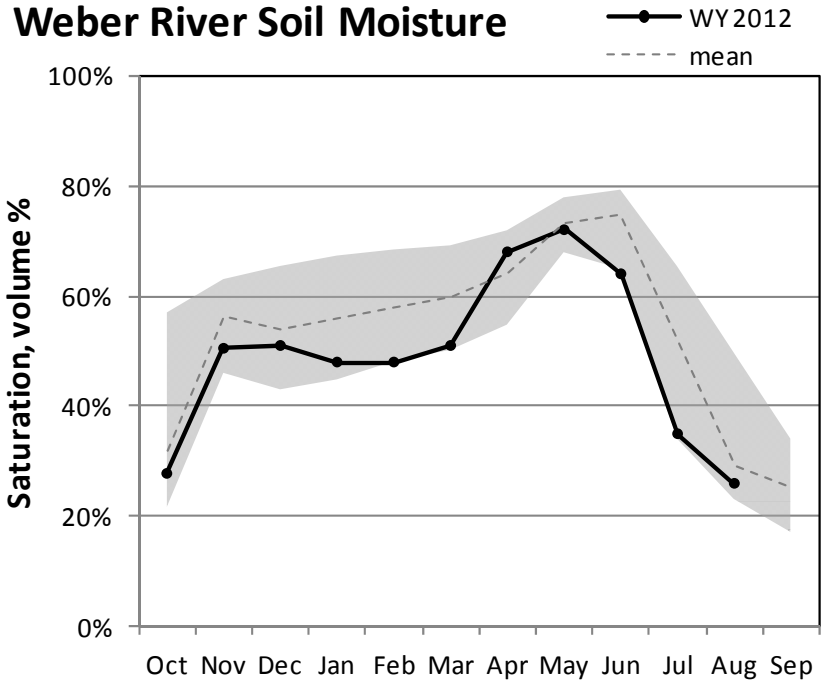
**EOM, end of month; #WAI, water availability index; ^KAF, thousand acre-feet.*



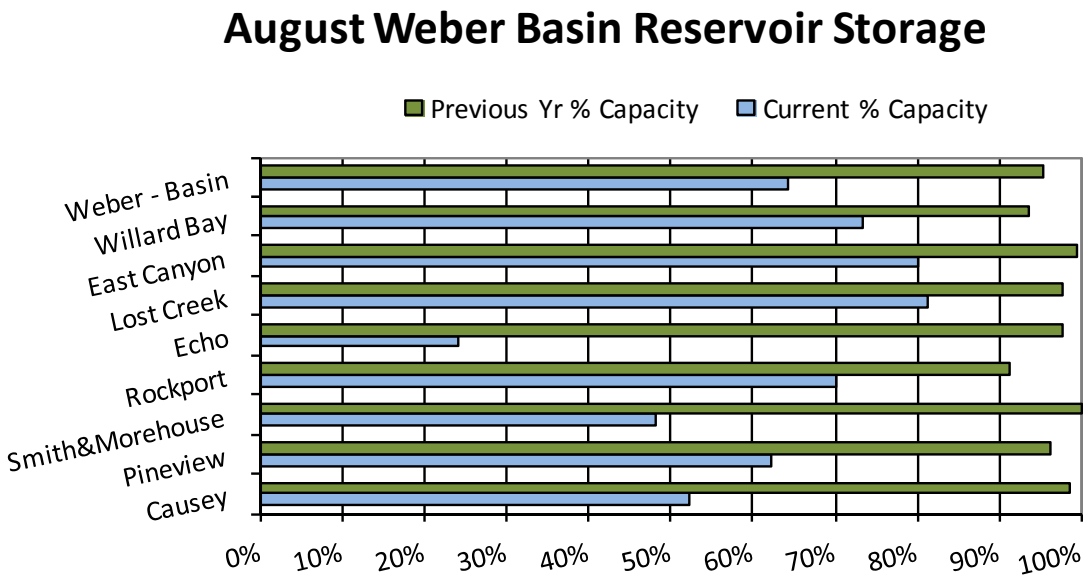
Weber and Ogden River Basin
August 1, 2012

Precipitation in July was below average at 81% which brings the water year accumulation to 69%. Reservoir storage is at 64% of capacity, which is 31% lower than this time last year. Soil moisture is at 26% compared to 50% last year.





Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

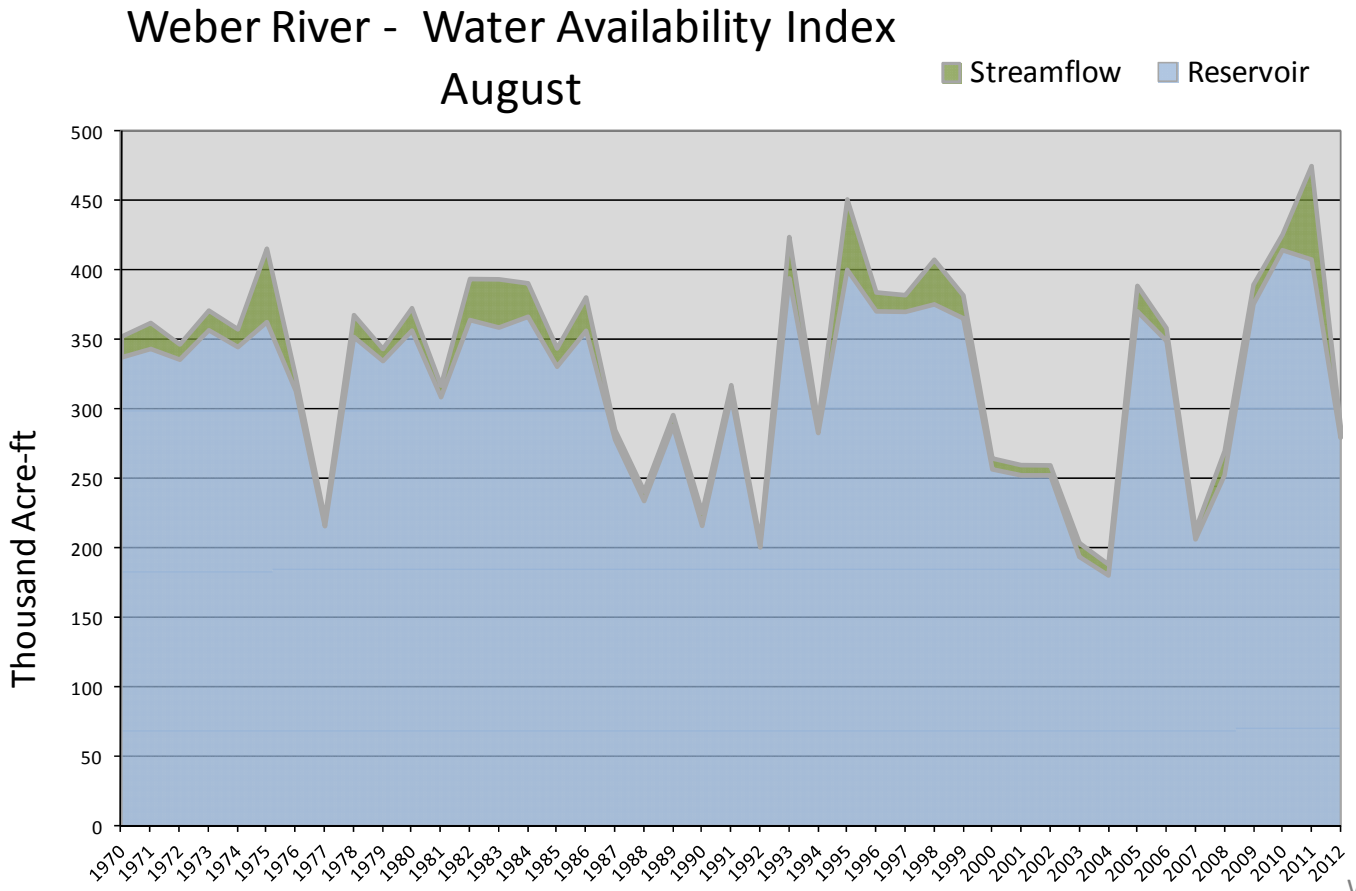


August 1, 2012

Water Availability Index

Basin or Region	July EOM* Reservoirs	July accumulated flow at Weber near Oakley (*observed*)	Reservoirs + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Weber River	**280**	**8**	**288**	**-1.70**	**30**	**08,87,94,89**

**EOM, end of month; [#]WAI, water availability index; ^KAF, thousand acre-feet.*

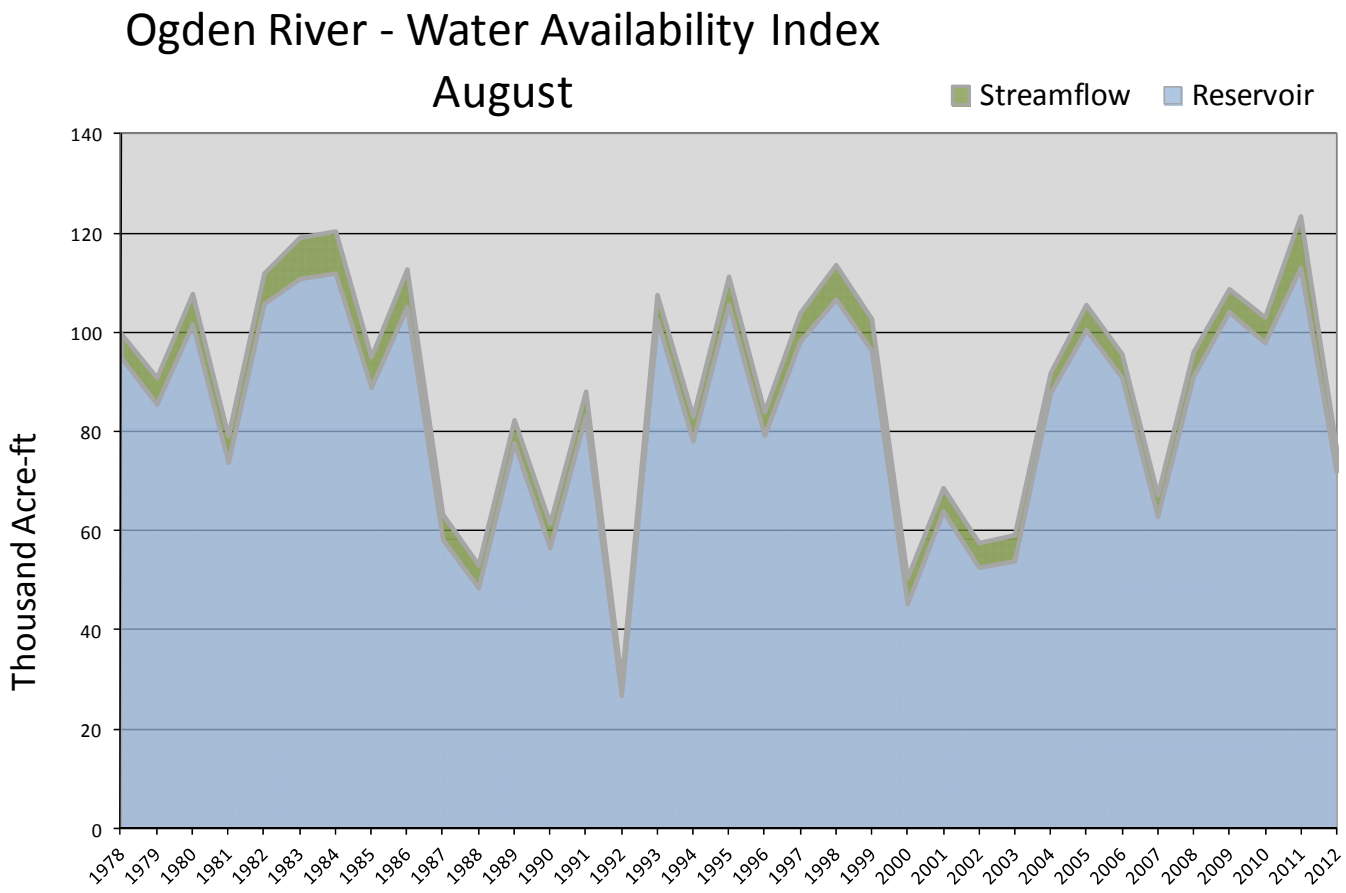


August 1, 2012

Water Availability Index

Basin or Region	July EOM* Pine View & Causey	July accumulated flow at South Fork Ogden (*observed*)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Ogden River	**72**	**5.0**	**77**	**-1.85**	**28**	**07,01,81,89**

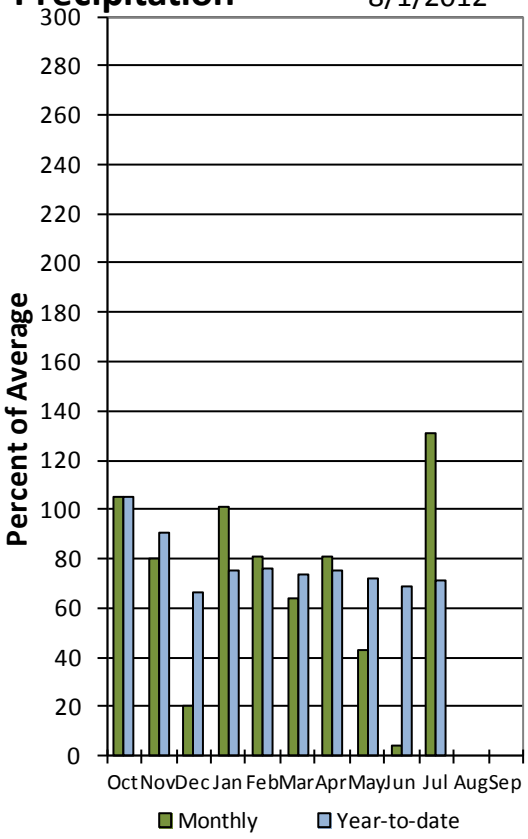
**EOM, end of month; #WAI, water availability index; ^KAF, thousand acre-feet.*



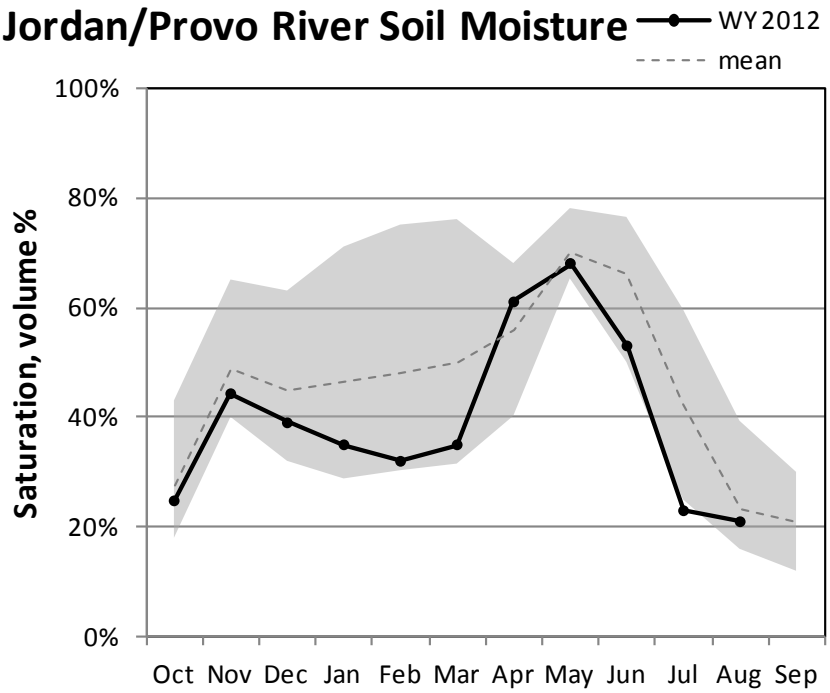
Utah Lake, Jordan River, & Tooele Valley Basins
August 1, 2012

Precipitation in July was above average at 131%, bringing water year accumulation to 71%. Reservoir storage is at 82% of capacity, which is 24% less than this time last year. Soil moisture is at 21% compared to 39% last year at this time.

Jordan / Provo River Precipitation

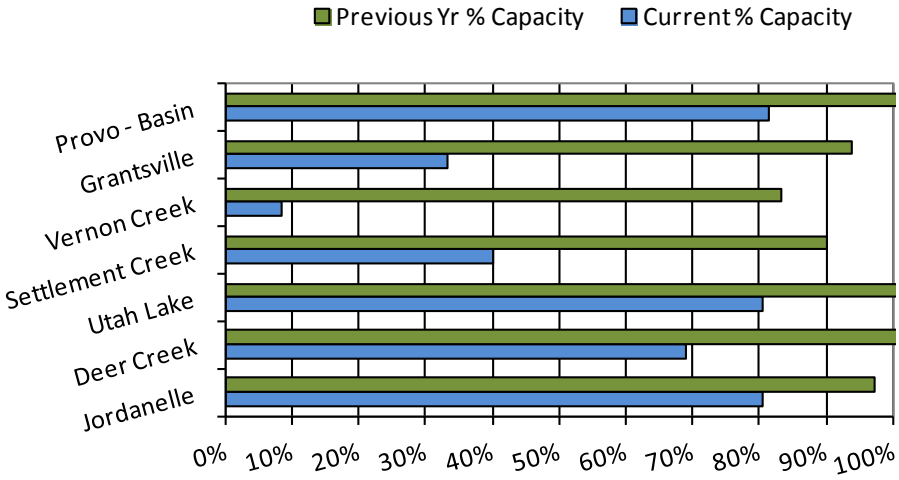


Jordan/Provo River Soil Moisture



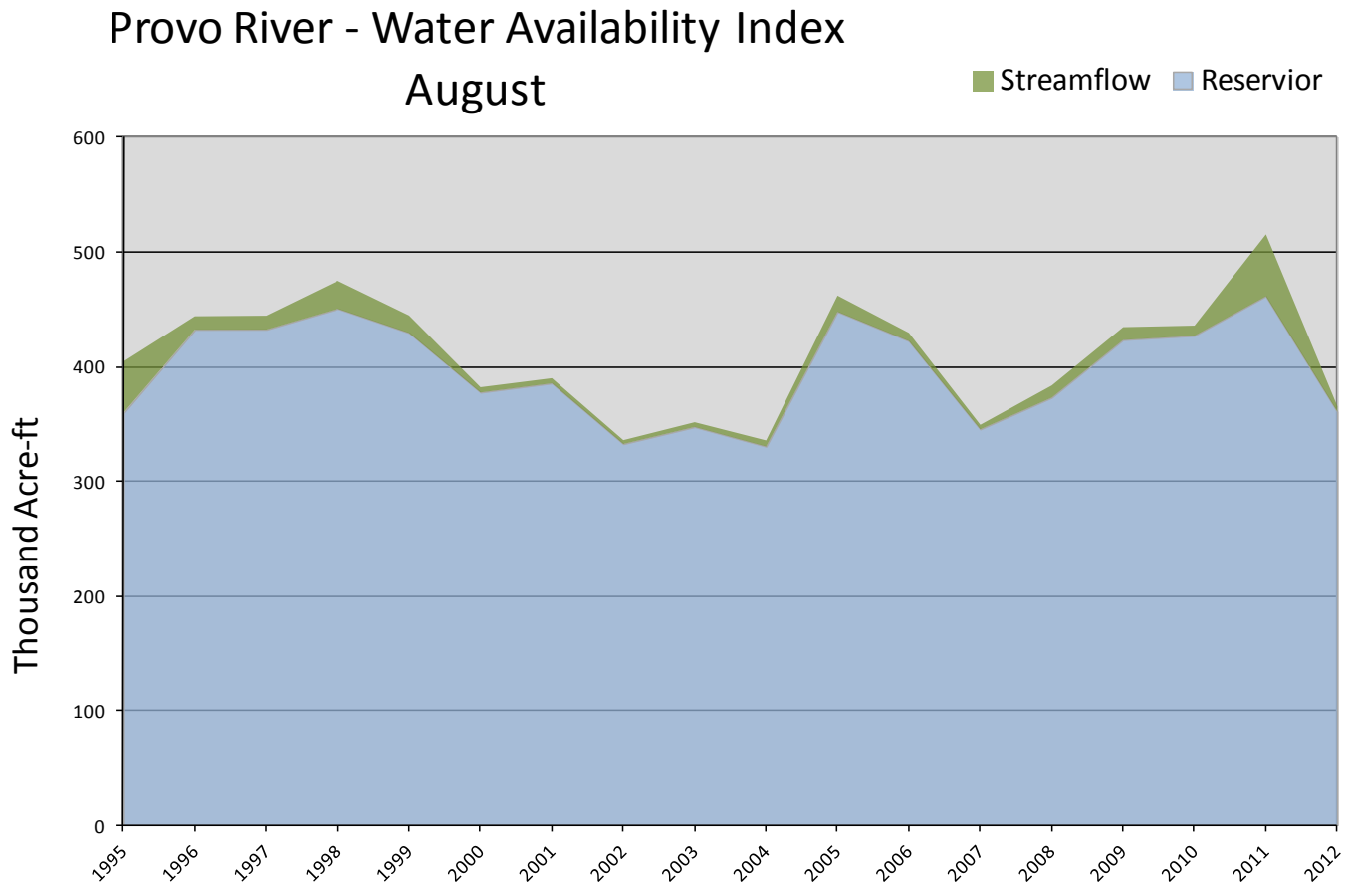
Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

August Provo River Reservoir Storage



August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Deer Creek, Jordanelle	July accumulated flow Provo River at Woodland (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Provo	**361**	**5**	**366**	**-1.97**	**26%**	**08,00,03,07**

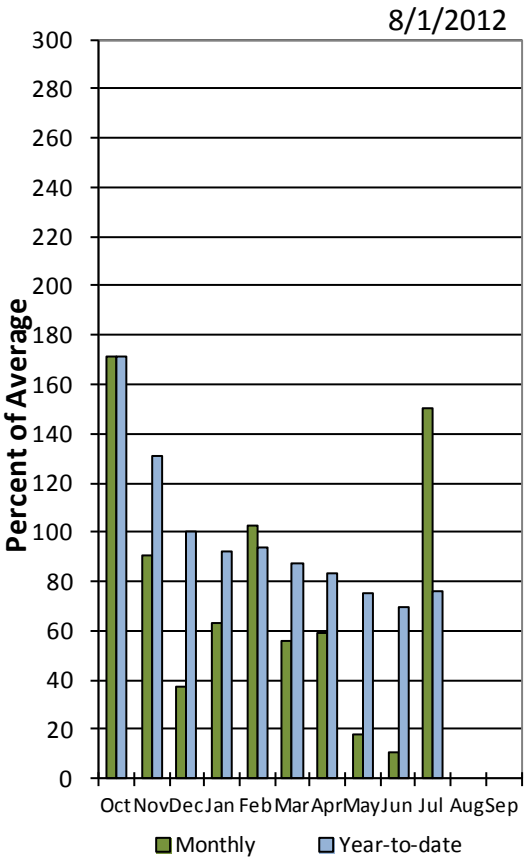
**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



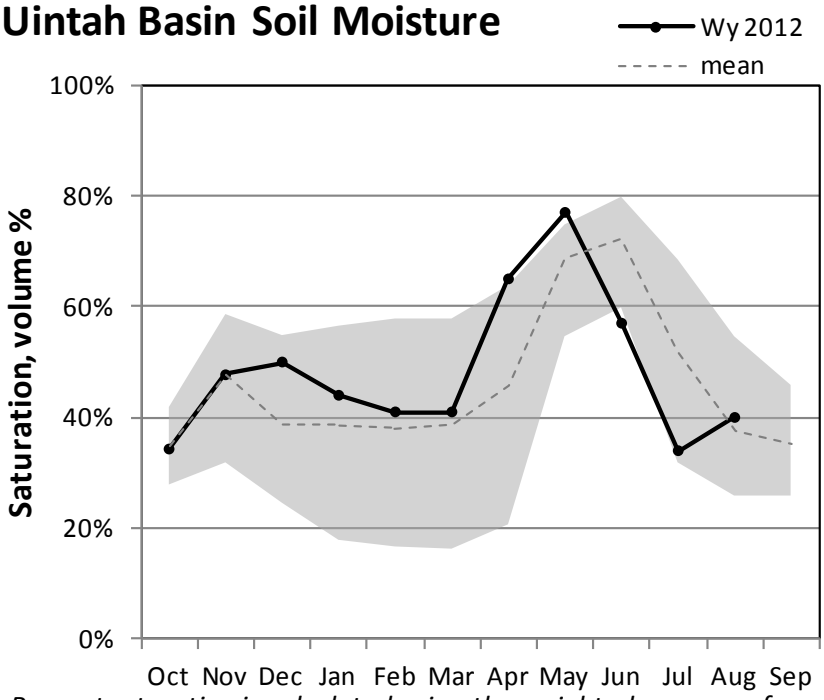
Uintah Basin and Dagget SCDs
August 1, 2012

Precipitation in July was much above average at 150%, bringing the water year accumulation to 76%. Reservoir storage is at 79% of capacity, 1% lower than this time last year. Soil moisture is at 38% compared to 55% last year.

Uintah Precipitation

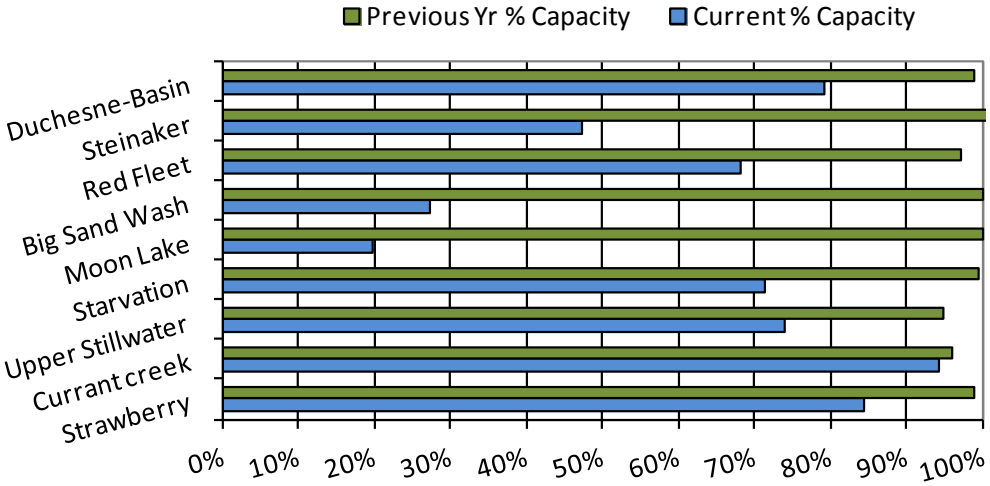


Uintah Basin Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

August Uintah Basin Reservoir Storage

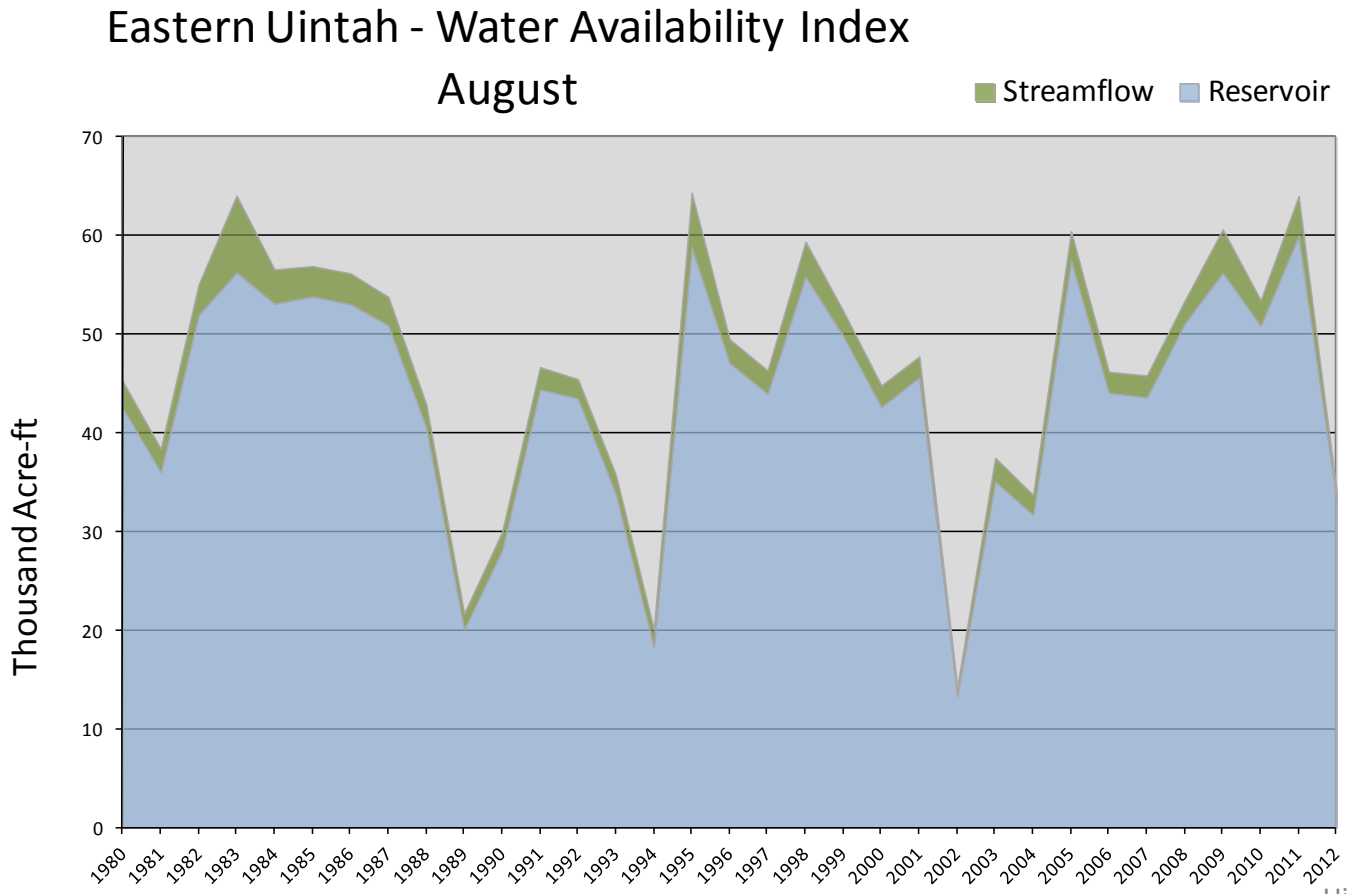


August 1, 2012

Water Availability Index

Basin or Region	July EOM* Red Fleet and Steinaker	July accumulated flow Big Brush Creek (*observed*)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Eastern Uintah	**33.3**	**0.8**	**34.1**	**-2.94**	**18**	**90,04,93,03**

**EOM, end of month; #WAI, water availability index; ^KAF, thousand acre-feet.*

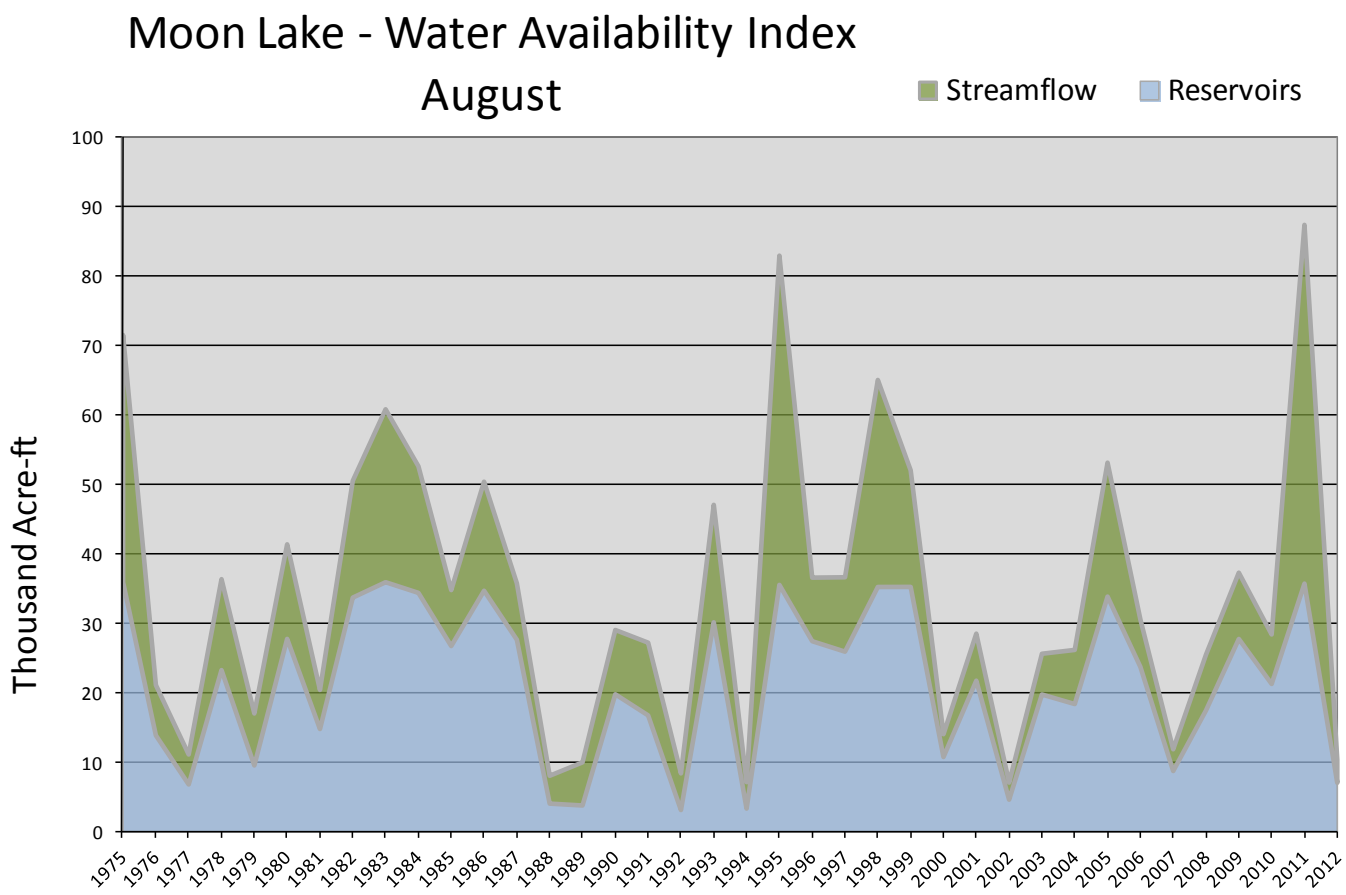


August 1, 2012

Water Availability Index

Basin or Region	July EOM* Moon Lake	July accumulated flow Lake Fork Creek above Moon Lake (*observed*)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Moon Lake	**7.1**	**3.3**	**10.4**	**-2.88**	**15**	**92,89,77,07**

**EOM, end of month; #WAI, water availability index; ^KAF, thousand acre-feet.*

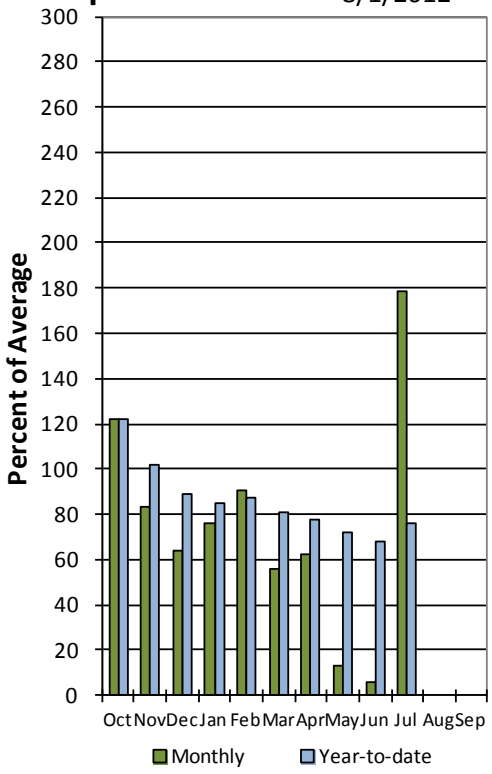


Uintah Basin and Dagget SCDs

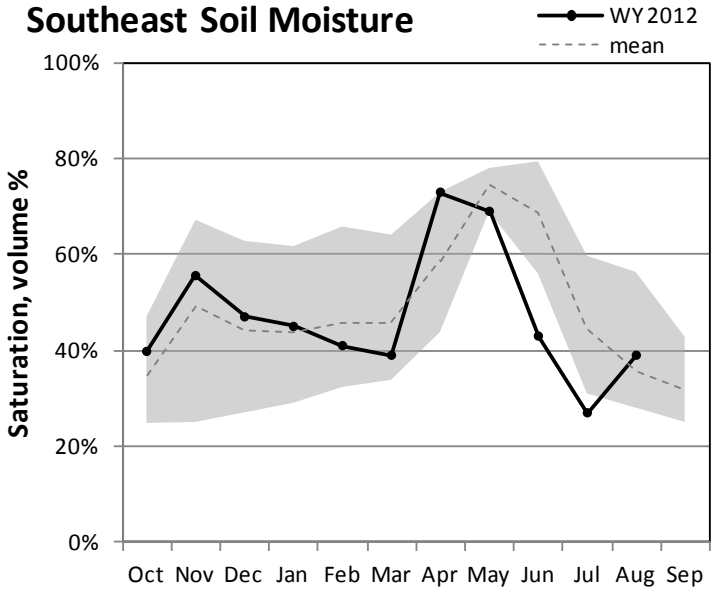
Southeast – Carbon, Emery, Wayne, Grand, and San Juan Counties
August 1, 2012

Precipitation in July was much above average at 179%, bringing the water year accumulation to 76%. Reservoir storage is at 62% of capacity, which is 37% lower than at this time last year. Soil moisture is at 27% compared to 60% last year.

Southeast Utah Precipitation

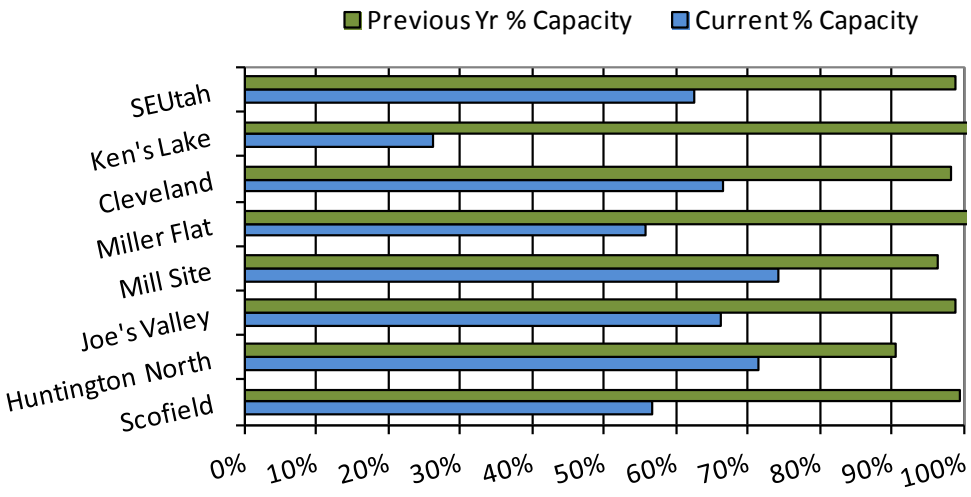


Southeast Soil Moisture



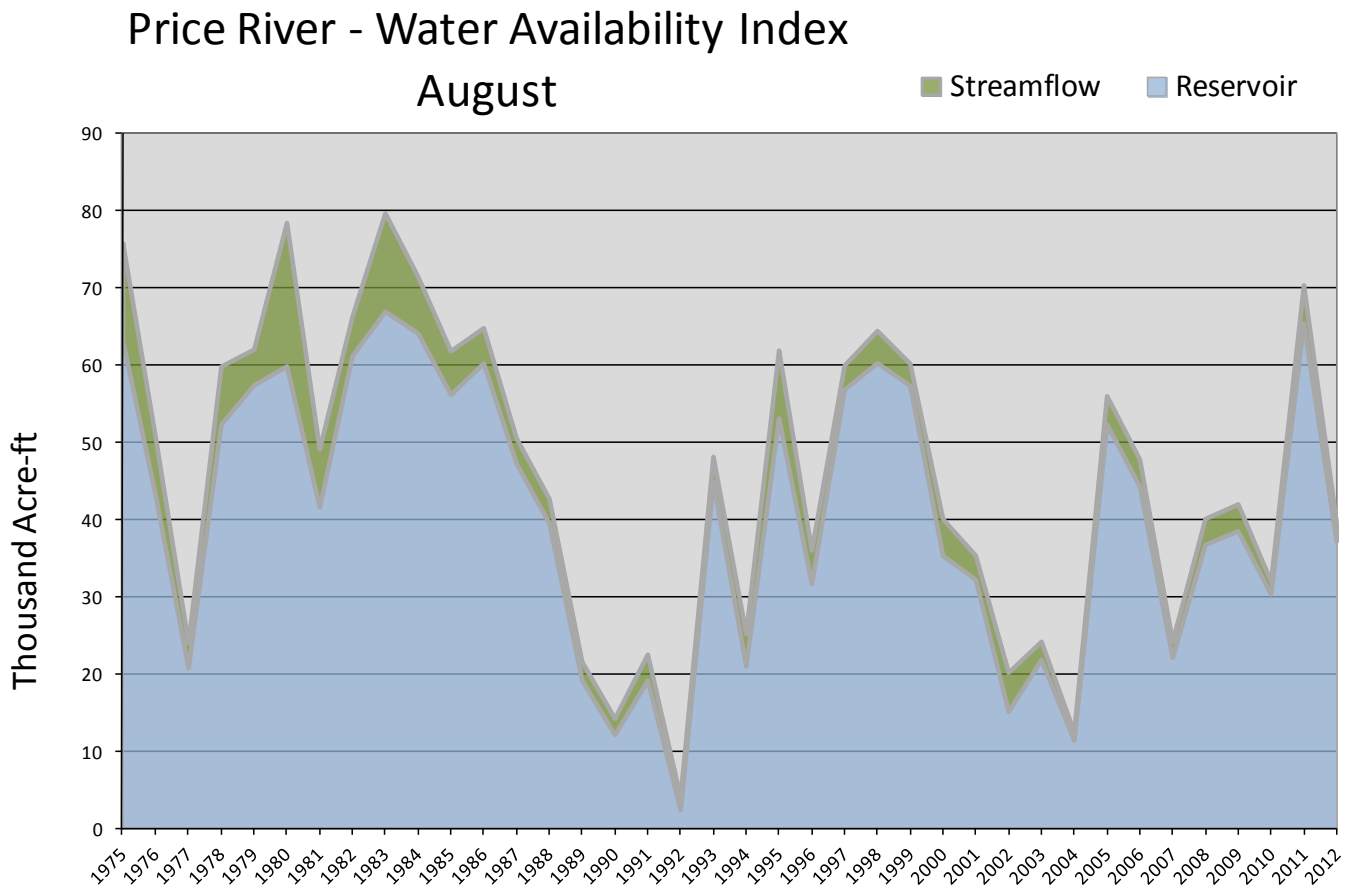
Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

August Southeast Utah Reservoir Storage



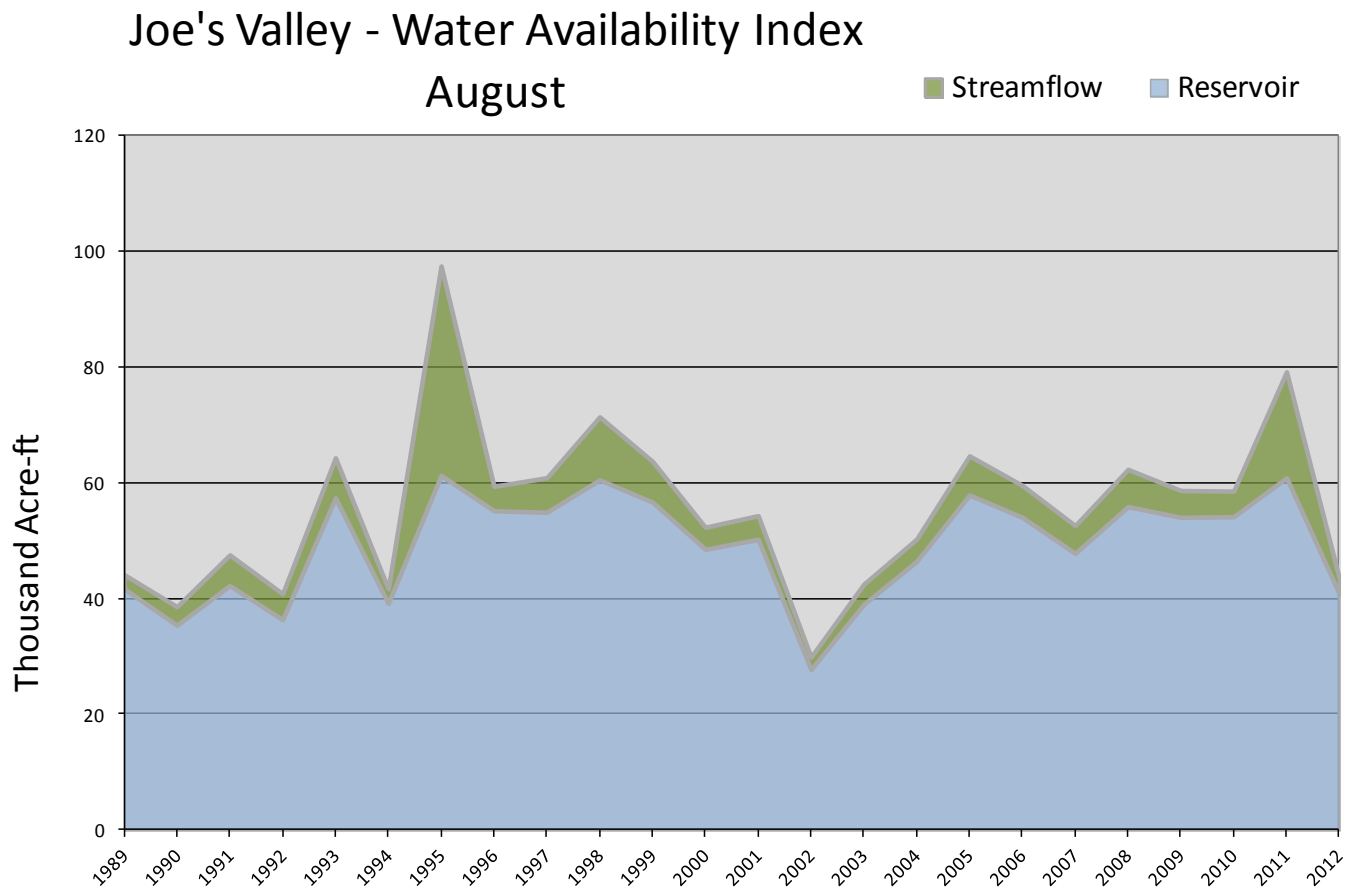
August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Scofield	July accumulated inflow to Scofield (*calculated*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Price River	**37.3**	**2.4**	**39.7**	**-1.18**	**36**	**01, 96, 00, 08**

**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



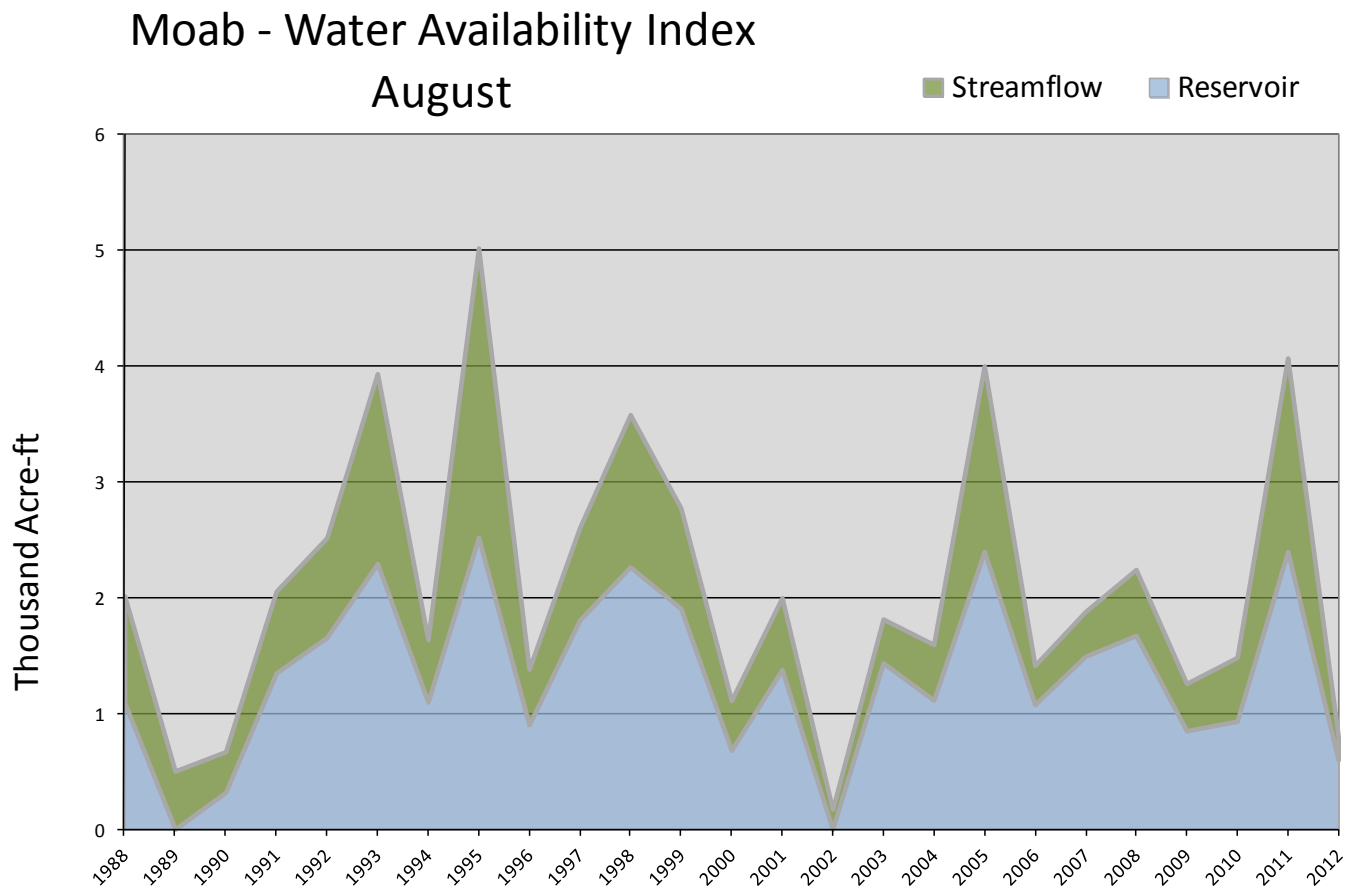
August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Joe's Valley	July accumulated inflow to Joe's Valley (*calculated*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Joe's Valley	**40.8**	**2.6**	**43.4**	**-2.17**	**24**	**94, 03, 89, 91**

**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Ken's Lake Reservoir	July accumulated flow Mill Creek at Sheley (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Moab	**0.6**	**0.2**	**0.8**	**-2.88**	**15**	**89, 90, 00, 09**

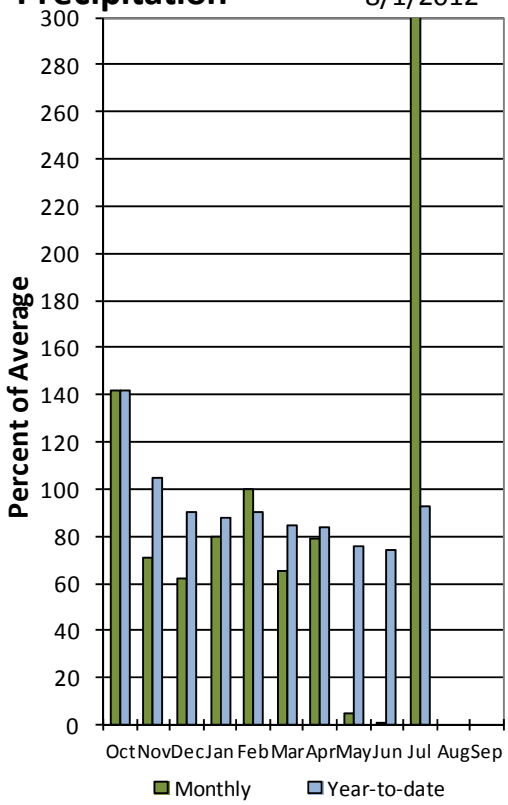
**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



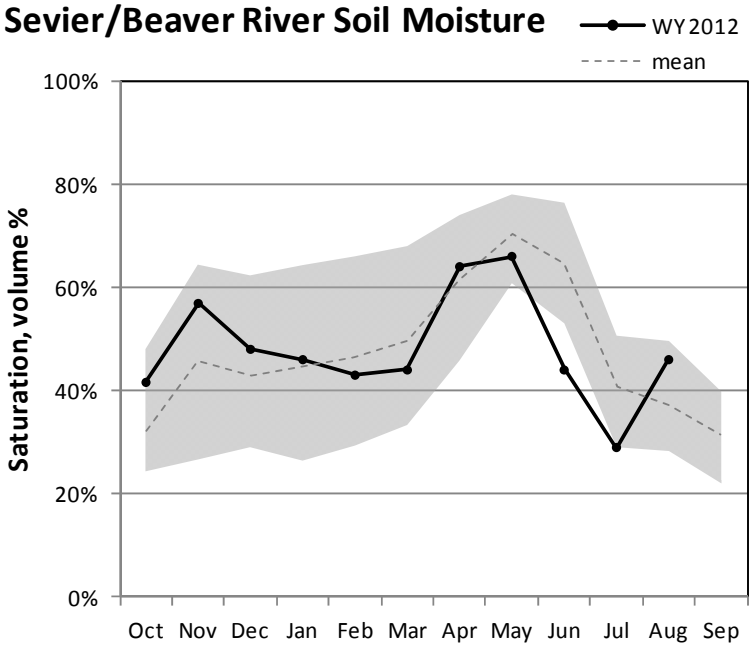
Sevier and Beaver River Basins
August 1, 2012

Precipitation in July was much above average at 418% - nearly 6 inches of precipitation, which brings the seasonal accumulation (Oct-Jul) to 93% of average. Reservoir storage is low at 45% of capacity compared to 93% last year. Soil moisture is above average for this time of year due to recent precipitation: current 46%, last month – 29% and last year - 50% of saturation. Water supply conditions are low to average as indicated by the Water Availability Index: Upper Sevier – 35%, Lower Sevier – 46% and Beaver 48%.

Sevier /Beaver River Precipitation 8/1/2012

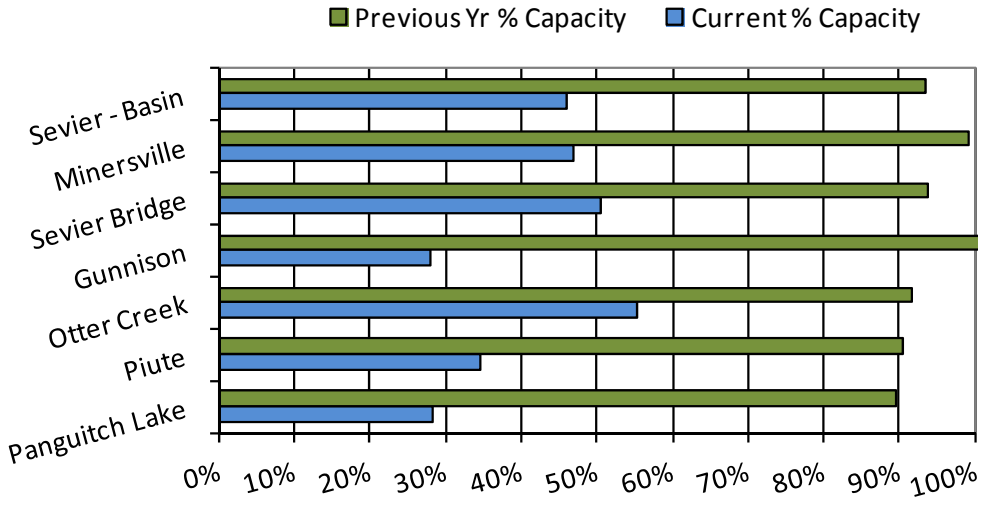


Sevier/Beaver River Soil Moisture



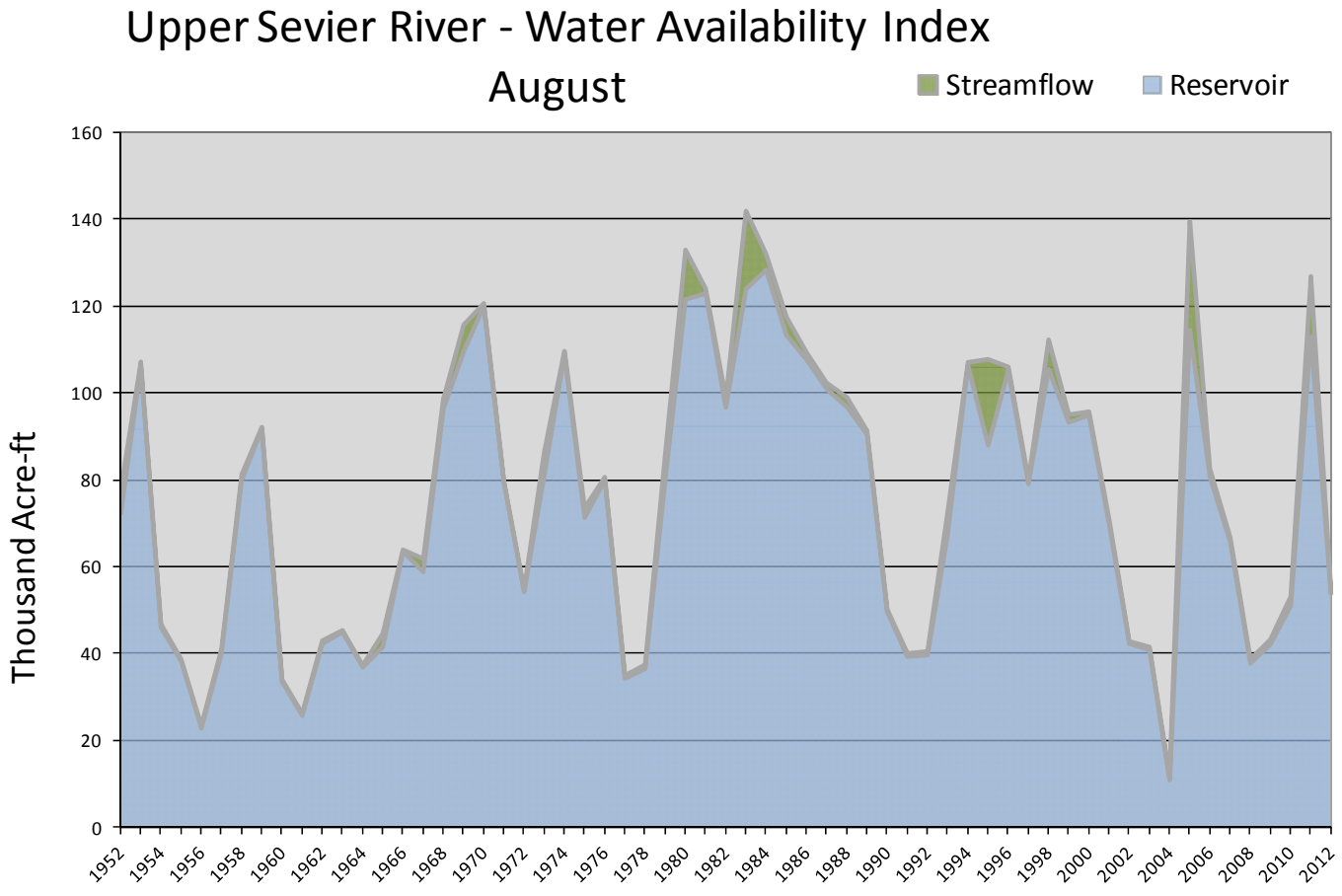
Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

August Sevier River Reservoir Storage



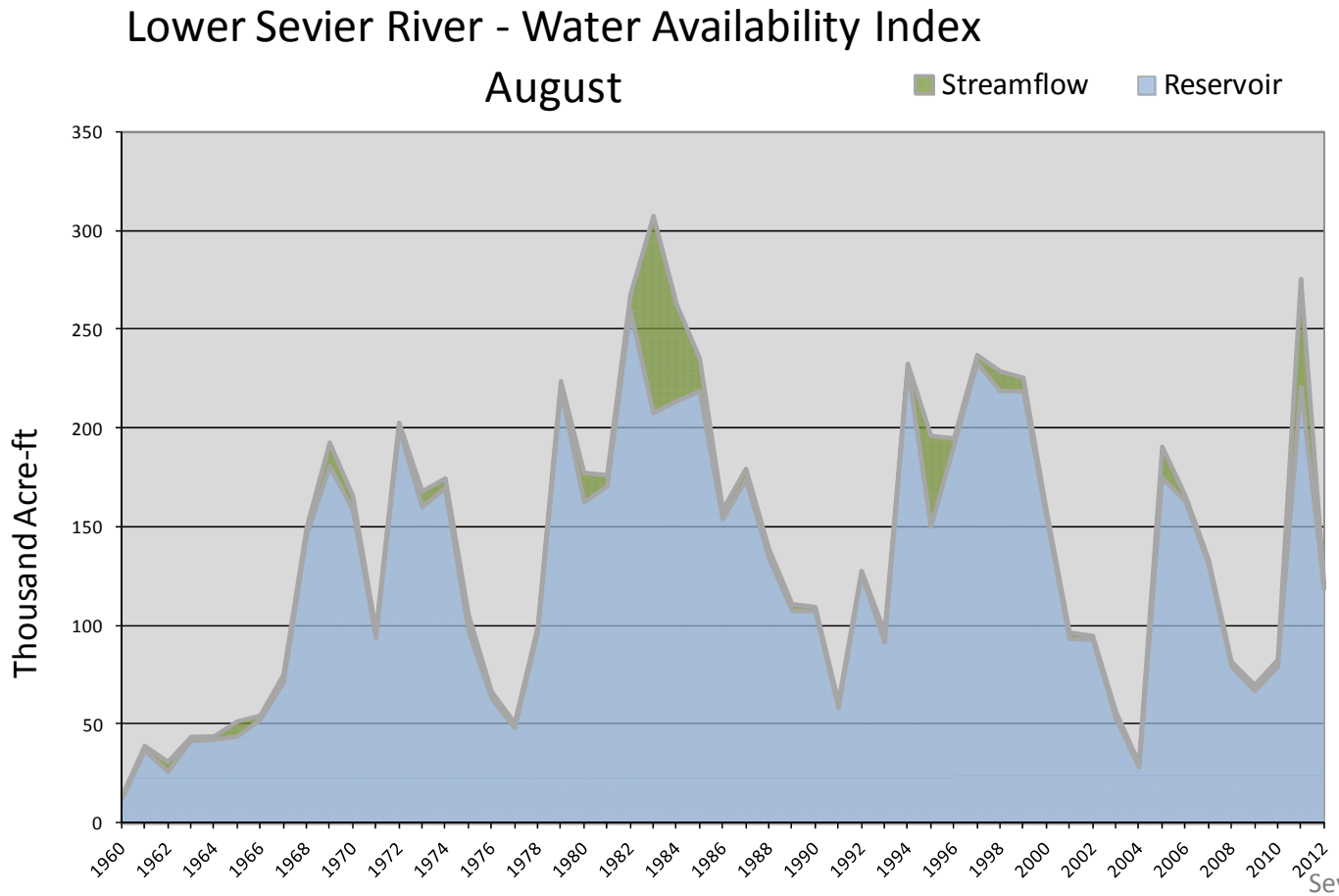
August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Otter Creek and Piute	July accumulated flow at Kingston (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Upper Sevier River	**54.0**	**0.7**	**54.7**	**-1.21**	**35**	**90,10,72,67**

**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



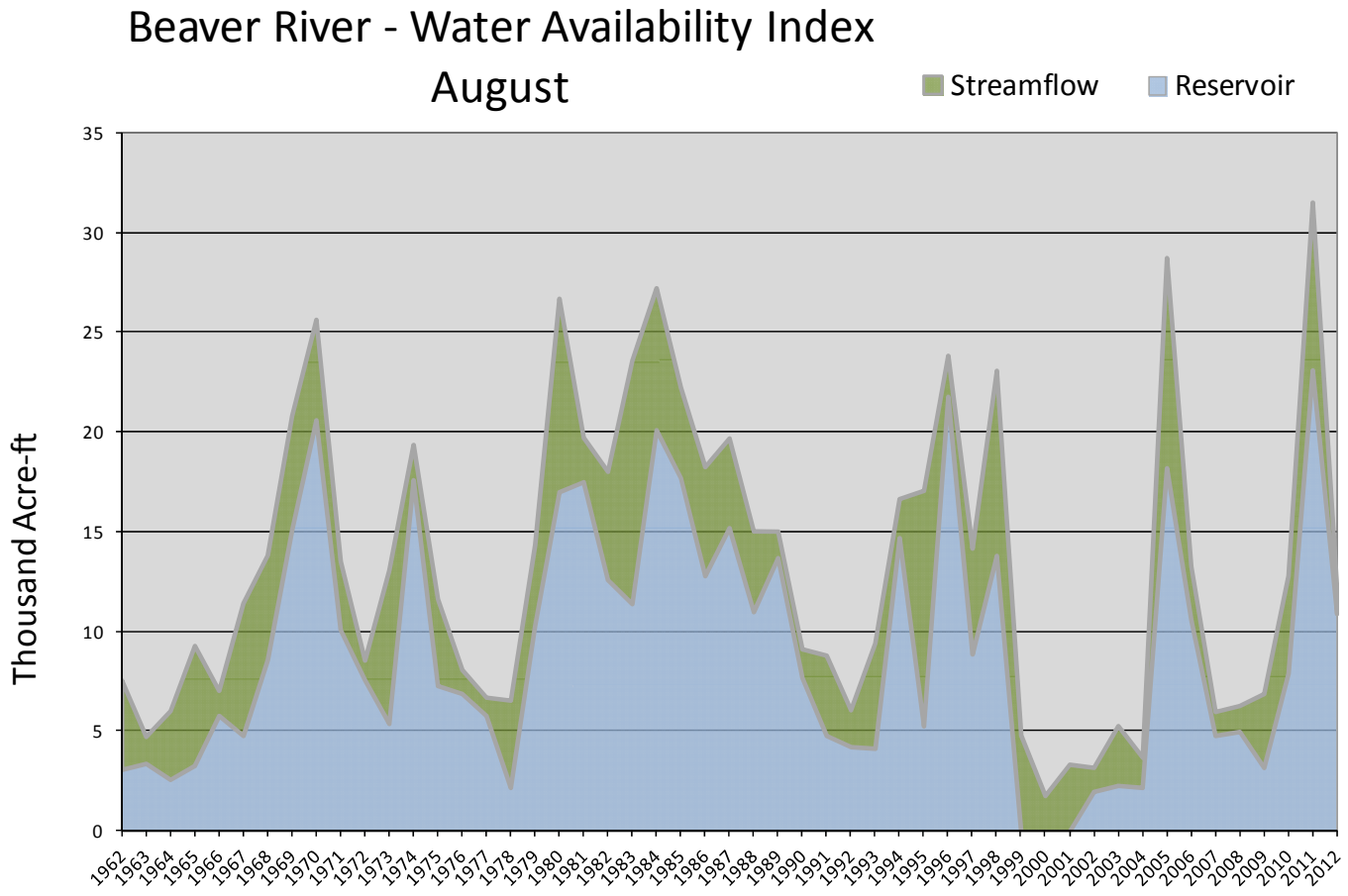
August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Sevier Bridge	July accumulated flow Sevier at Gunnsion (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Lower Sevier River	**119.1**	**3.4**	**122.5**	**-0.31**	**46**	**90,89,97,07**

**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



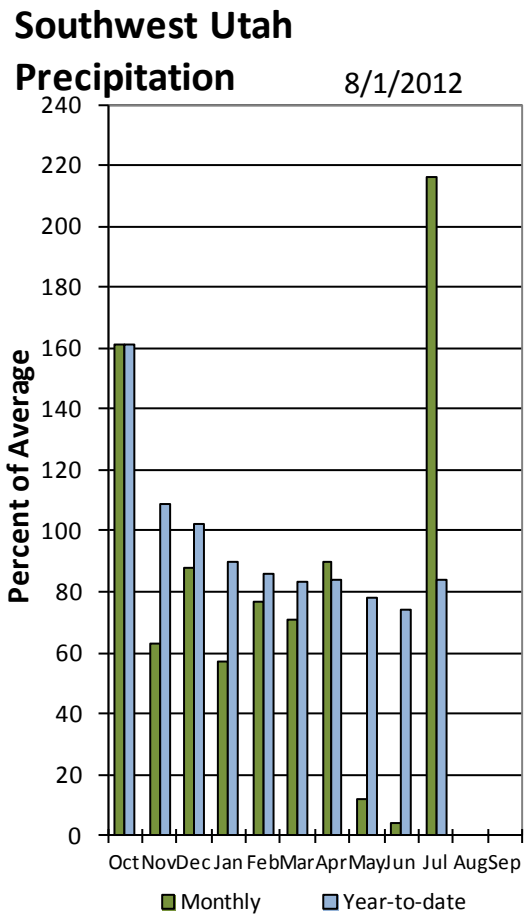
August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Minersville Reservoir	July accumulated flow Beaver River at Beaver (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Beaver	**10.9**	**1.3**	**12.2**	**-0.16**	**48**	**67,75,2010,73**

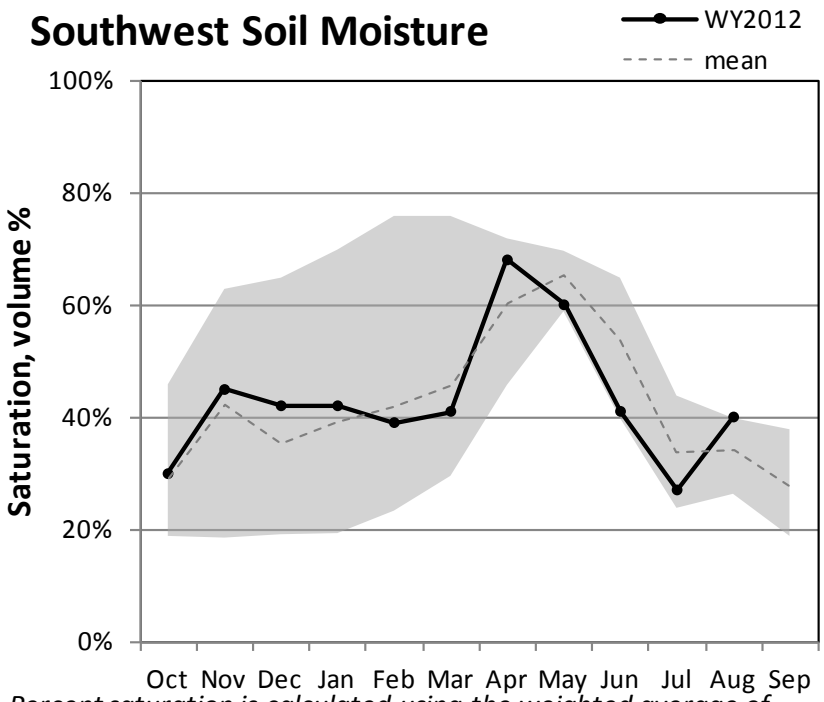
**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



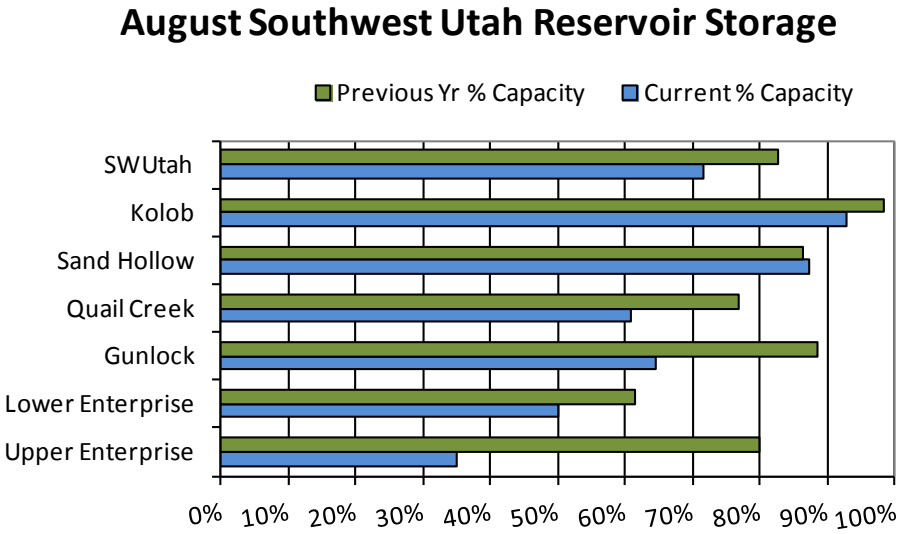
Southwest – E. Garfield, Kane, Washington, & Iron Counties
August 1, 2012

Precipitation in July was much above average at 216%, bringing water year accumulation to 84%. Reservoir storage is at 71% of capacity, 12% lower than last year at this time. Soil moisture is at 40%, the same as last year at this time.



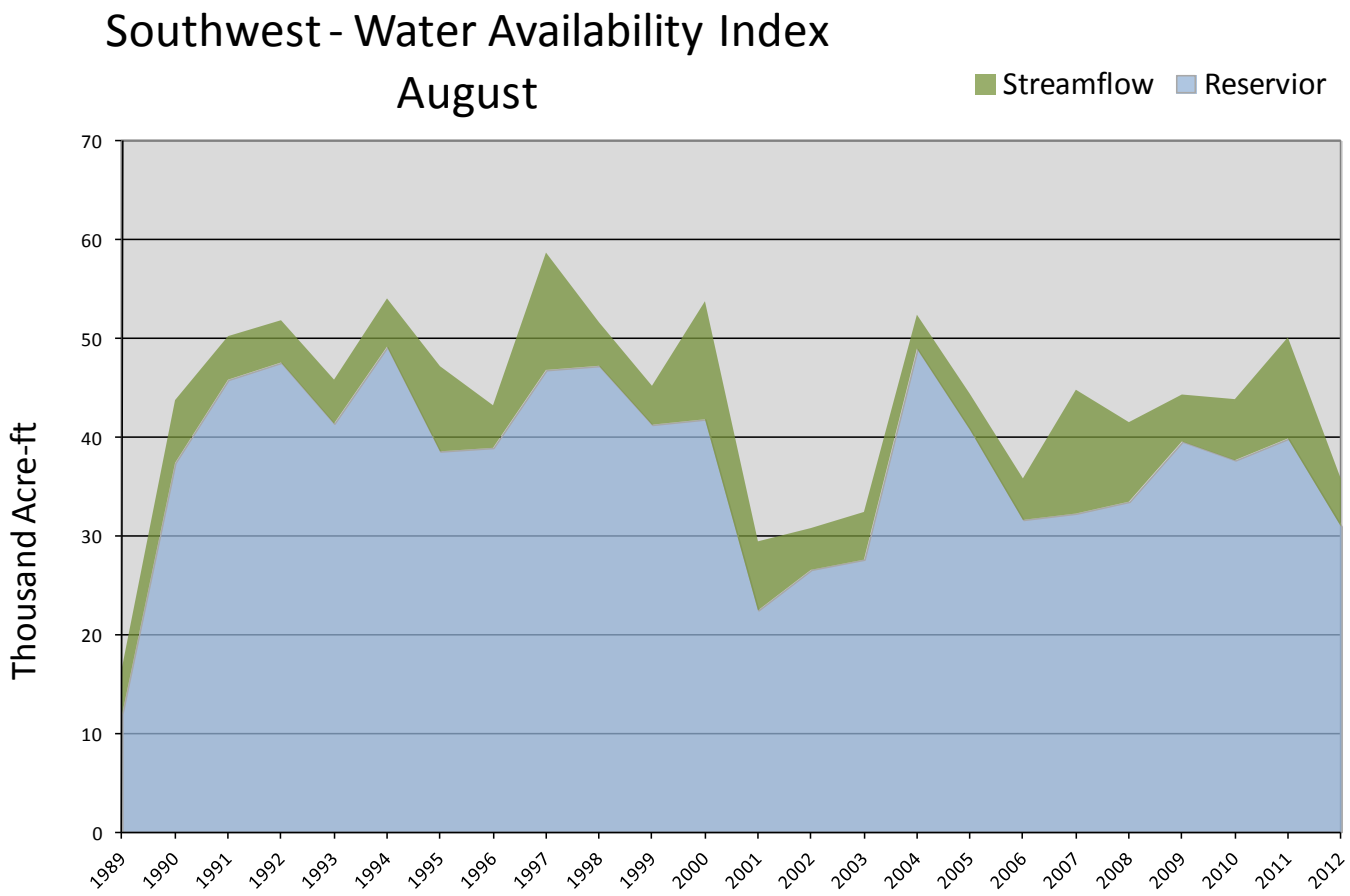


Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.



August 1, 2012	**Water Availability Index**					
Basin or Region	July EOM* Reservoir	July accumulated flow Virgin and Santa Clara Rivers (*observed*)	Reservoir + Streamflow	WAI[#]	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Southwest	**31**	**5**	**36**	**-2.50**	**20**	**08,06,03,02**

**EOM, end of month; [#] WAI, water availability index; ^KAF, thousand acre-feet.*



Issued by

David White
Chief
Natural Resources Conservation Service
U.S. Department of Agriculture

Released by

David Brown
State Conservationist
Natural Resources Conservation Service
Salt Lake City, Utah

Prepared by
Snow Survey Staff
Randall Julander, Supervisor
Troy Brosten, Assistant Supervisor
Beau Uriona, Hydrologist
Amy Burke, Hydrologist
Jordan Clayton, Hydrologist
Bob Nault, Electronics Technician

YOU MAY OBTAIN THIS PRODUCT AS WELL AS CURENT SNOW, PRECIPITATION, TEMPERATURE AND SOIL MOISTURE, RESERVOIR, SURFACE WATER SUPPLY INDEX, AND OTHER DATA BY VISITING OUR WEB SITE @: **http://www.ut.nrcs.usda.gov/snow/**

Snow Survey, NRCS, USDA
245 North Jimmy Doolittle Road
Salt Lake City, UT 84116
(801) 524-5213

Utah Climate and Water Report

Natural Resources Conservation Service
Salt Lake City, UT