

# Utah Climate and Water Report

July 2011



East Fork of the Sevier (*photo by Beau Uriona, NRCS*)

# 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.

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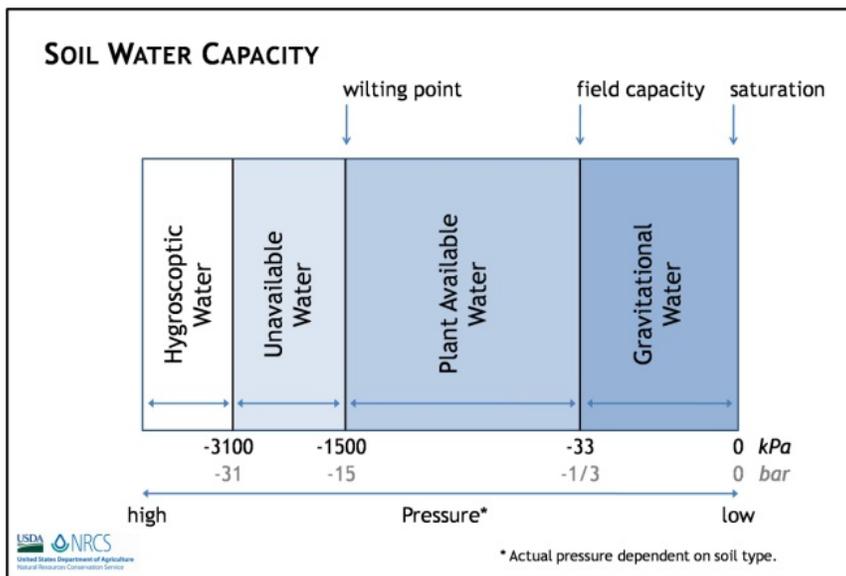
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# Climate and Water Information

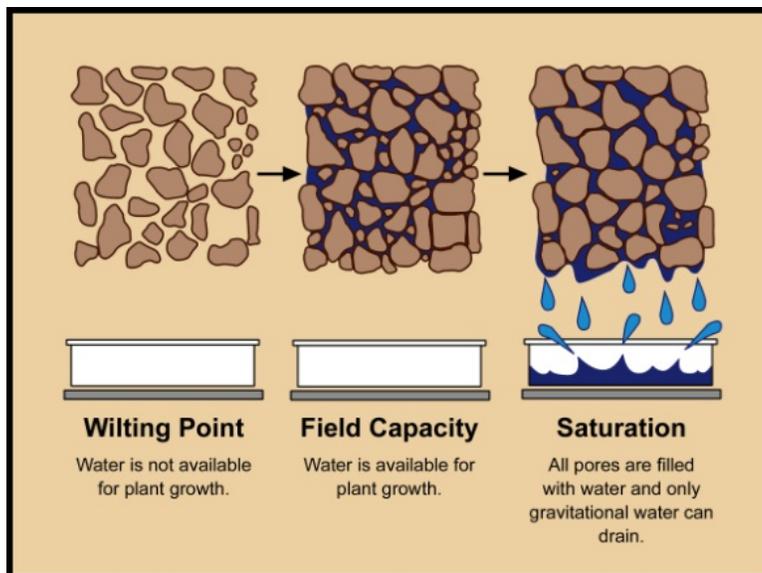
## Soil Climate Analysis Network

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).



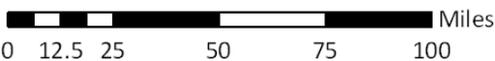
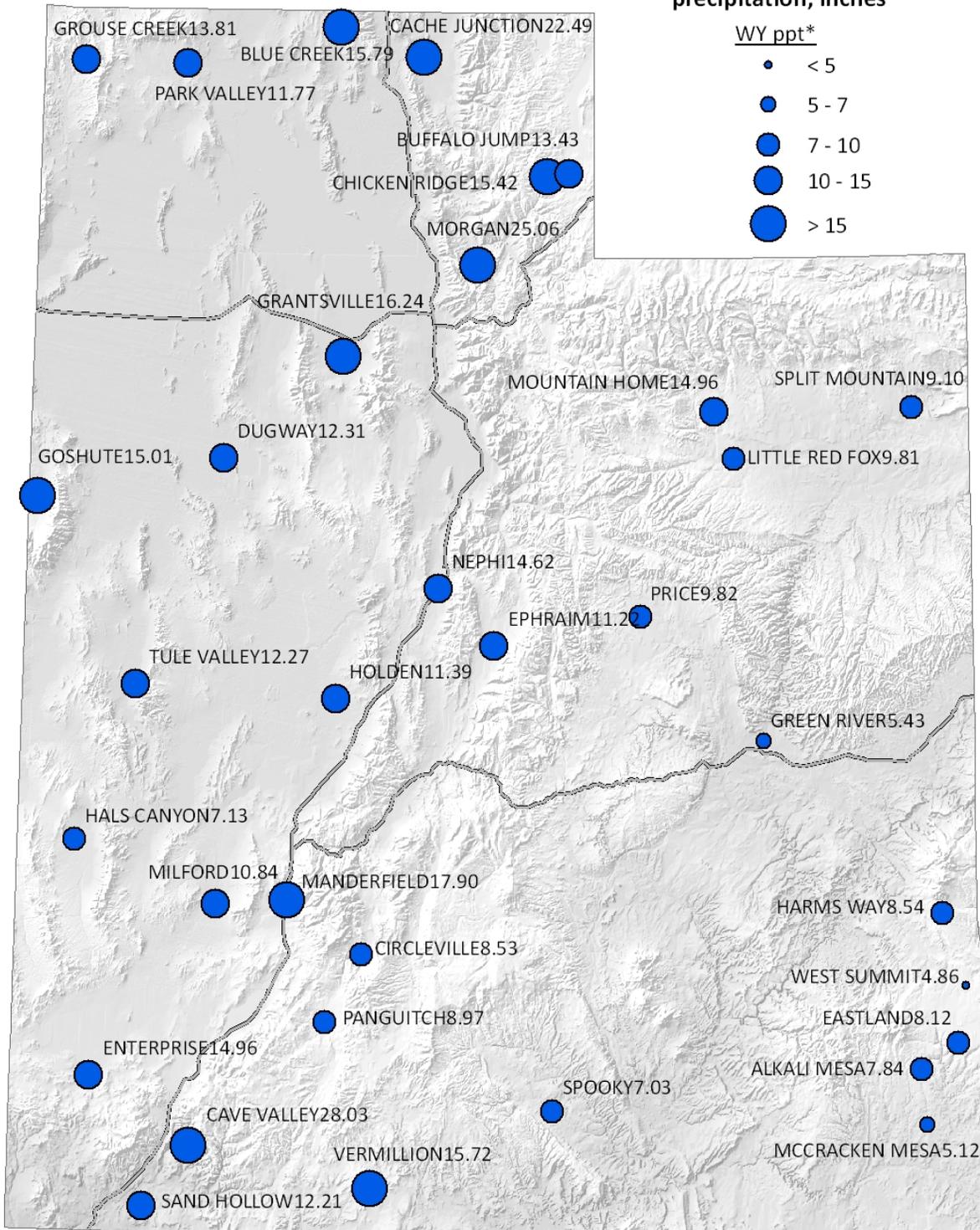
**Explanation of soil water capacity definitions.** Field capacity (FC) and wilting point (WP) are calculated in the laboratory for each soil horizon. The amount of water held between field capacity and wilting point is plant available.



**Visual explanation of soil water capacity definitions.**

# Utah SCAN Water Year Precipitation \*

updated July 1, 2011



\*since October 1, 2010. Data based on the first reading of the day.  
 \*\*since May 1, 2011

**Provisional Data Subject to Revision**

Prepared by the USDA/NRCS Utah DCO  
 Salt Lake City, Utah  
<http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html>  
 Science contact: Karen Vaughan  
 (karen.vaughan@ut.usda.gov)

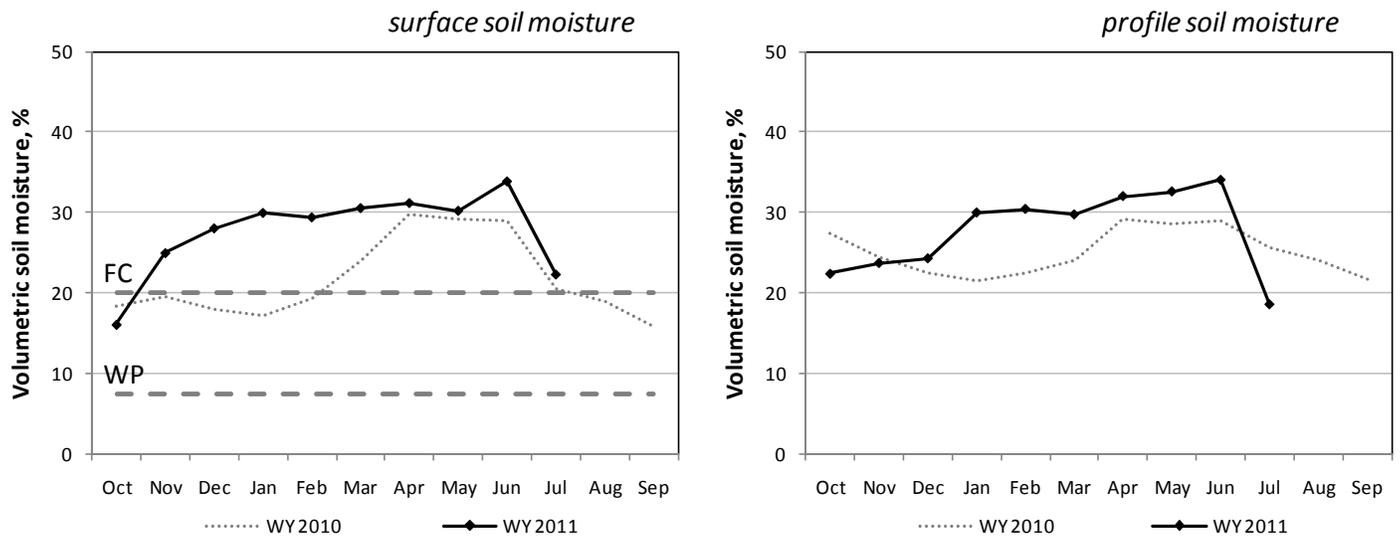
# North Central

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>NORTH CENTRAL</b>														
Blue Creek	<i>Box Elder</i>	15.8	1.3	76	13	19	25	31	25	76	77	75	68	59
Cache Junction	<i>Cache</i>	22.5	1.3	71	20	24	31	29	39	64	64	61	58	53
Grantsville	<i>Tooele</i>	16.2	1.1	83	2	2	25	34	29	79	78	77	69	63

\*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. 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.**

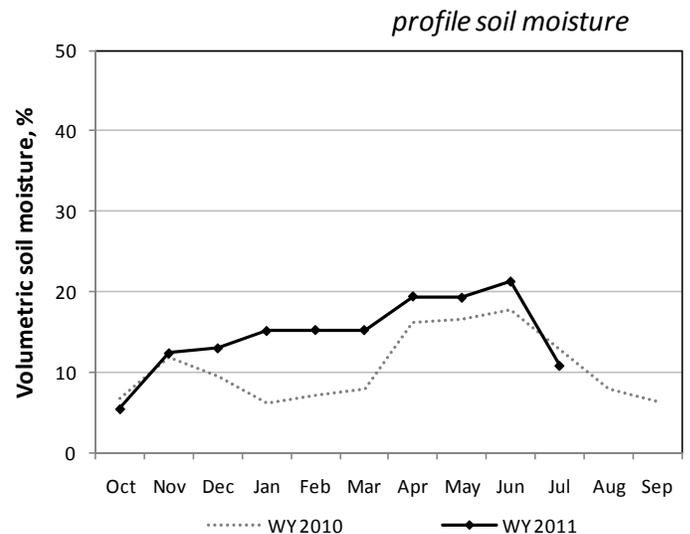
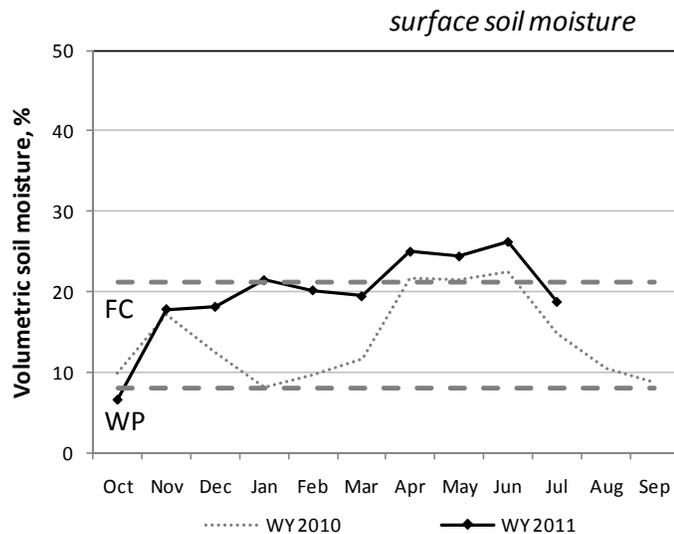
# Northern Mountains

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>NORTHERN MOUNTAINS</b>														
Chicken Ridge	<i>Morgan</i>	15.4	1.0	65	3	21	13	27	16	59	60	60	65	51
Buffalo Jump	<i>Rich</i>	13.4	0.5	67	0	8	12	14	-	67	67	32	66	-
Morgan	<i>Morgan</i>	25.1	0.4	68	3	8	12	8	8	71	71	70	66	63

\*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

## Northern Mountains



*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.

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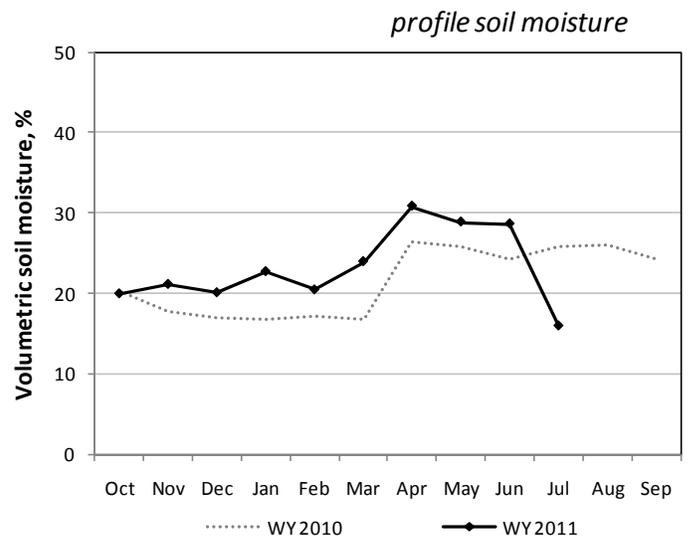
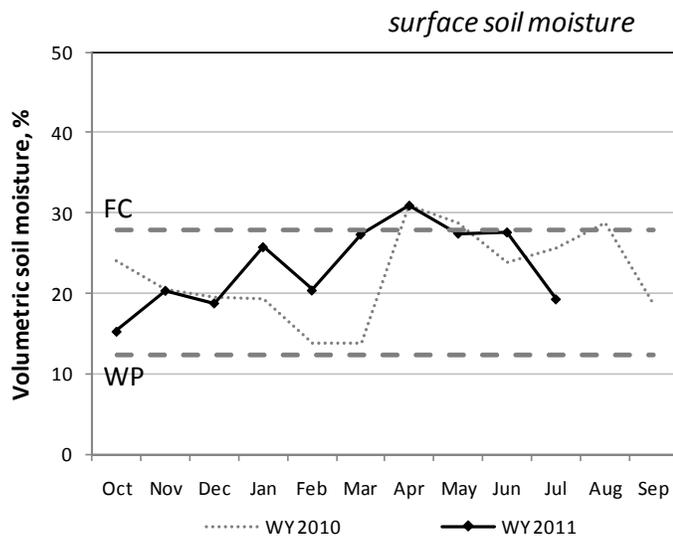
# Uintah Basin

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>UINTAH BASIN</b>														
Mountain Home	<i>Duchesne</i>	15.0	2.8	67	16	24	26	24	15	61	61	60	58	55
Little Red Fox	<i>Duchesne</i>	9.8	1.2	72	14	25	27	27	36	69	73	73	68	62
Split Mountain	<i>Uintah</i>	9.1	1.2	77	6	20	15	15	12	77	81	80	73	65

\*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. 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.

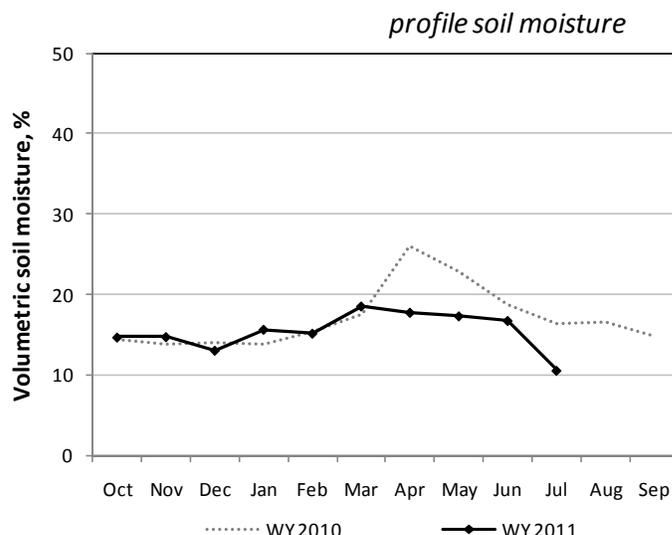
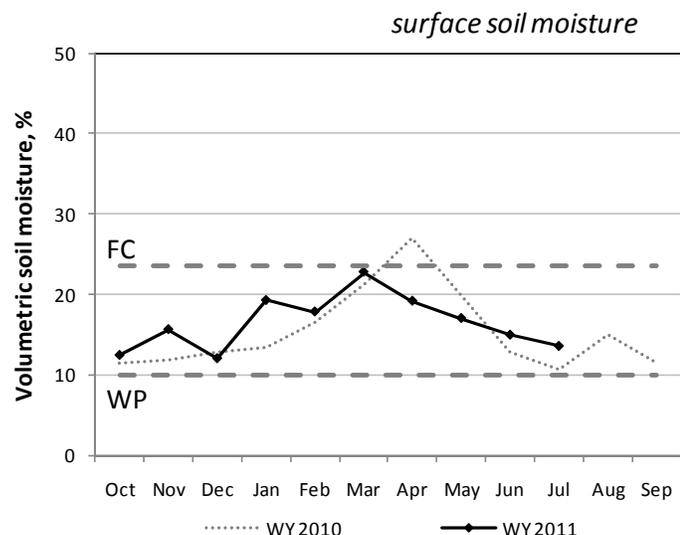
# Southeast

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>SOUTHEAST</b>														
Price	<i>Carbon</i>	9.8	0.6	78	2	12	18	18	21	77	80	81	75	68
Green River	<i>Emery</i>	5.4	0.5	86	5	8	10	7	10	89	91	90	82	74
Harm's Way	<i>San Juan</i>	8.5	0.6	75	7	2	15	16	7	79	76	76	69	62
West Summit	<i>San Juan</i>	4.9	0.3	75	6	11	15	16	19	78	80	79	69	63
Eastland	<i>San Juan</i>	8.1	0.1	74	7	12	9	25	30	73	75	74	66	61
Alkali Mesa	<i>San Juan</i>	7.8	0.1	79	6	7	16	20	14	78	79	78	71	66
McCracken Mesa	<i>San Juan</i>	5.1	0.0	80	7	11	15	18	14	84	88	88	76	71

\*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

### Southeast



*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.

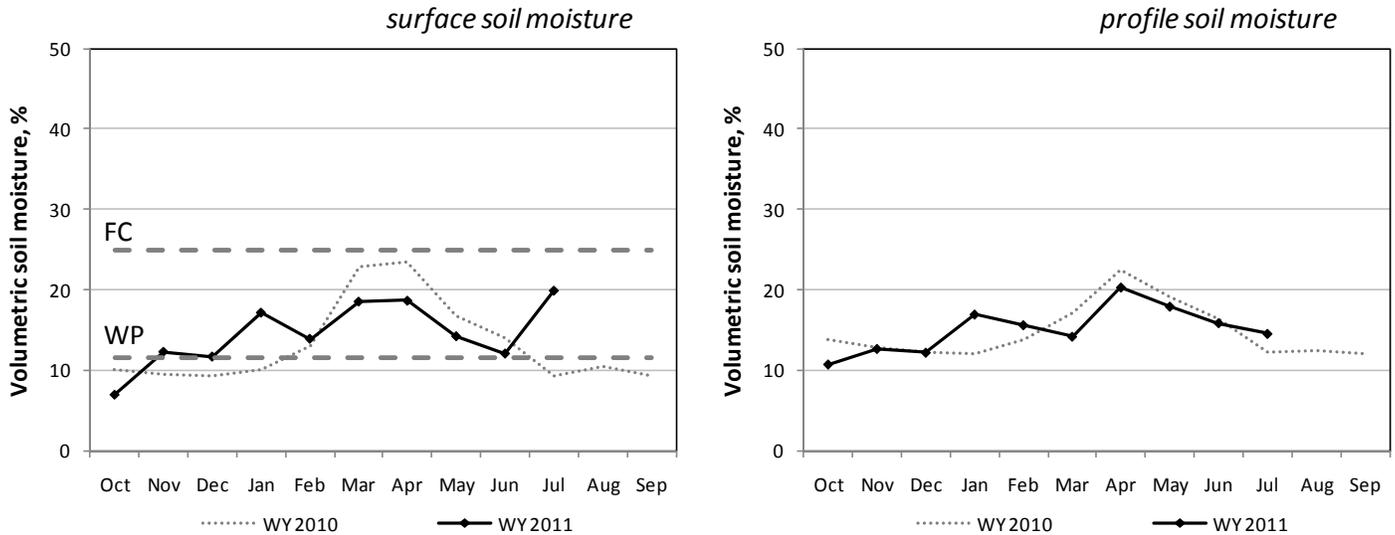
# South Central

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>SOUTH CENTRAL</b>														
Nephi	<i>Juab</i>	14.6	1.8	75	16	19	17	9	7	70	71	71	65	60
Ephraim	<i>Sanpete</i>	11.2	1.2	70	9	11	16	15	35	65	66	66	59	55
Holden	<i>Millard</i>	11.4	1.0	76	5	6	6	14	16	76	76	76	70	64
Milford	<i>Beaver</i>	10.8	0.4	76	6	18	19	30	17	82	80	76	69	62
Manderfield	<i>Beaver</i>	17.9	2.0	71	4	15	14	13	6	68	69	67	63	57
Circleville	<i>Piute</i>	8.5	0.5	70	9	5	8	10	9	73	73	73	65	59
Panguitch	<i>Garfield</i>	9.0	0.1	68	1	18	14	21	29	67	67	64	59	53
Cave Valley	<i>Washington</i>	28.0	0.0	70	6	1	0	0	1	76	78	78	69	64
Vermillion	<i>Kane</i>	15.7	0.1	74	0	1	3	4	9	76	78	73	65	59
Spooky	<i>Kane</i>	7.0	0.0	83	2	0	4	16	3	90	90	83	75	70

\*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. 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.

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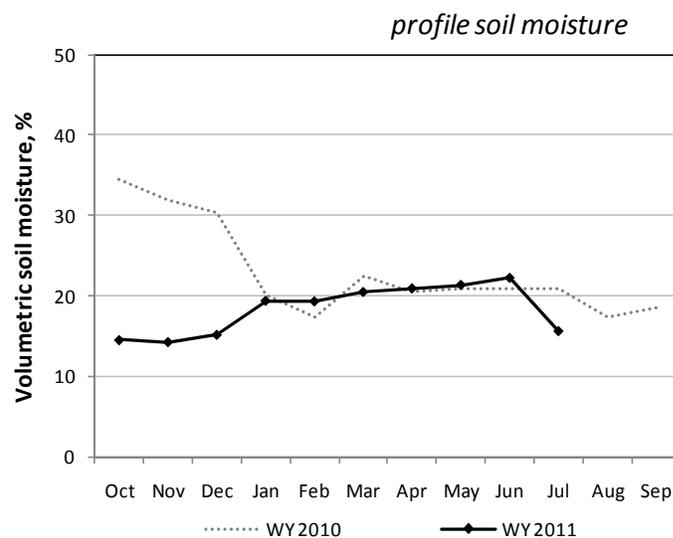
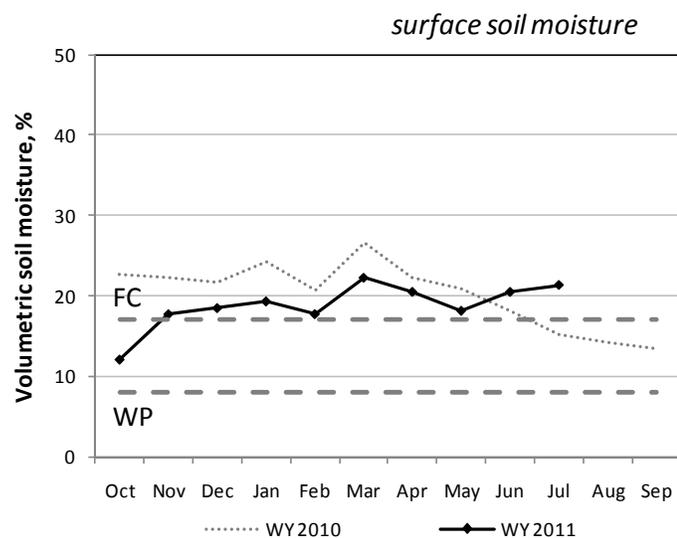
# Western and Dixie

## Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
<b>WESTERN</b>														
Grouse Creek	Box Elder	13.8	0.8	73	1	8	16	21	23	74	75	72	64	60
Park Valley	Box Elder	11.8	0.6	75	2	4	14	29	26	76	77	75	68	60
Goshute	Tooele	15.0	0.4	73	7	20	19	43	64	68	72	73	69	61
Dugway	Tooele	12.3	0.3	82	12	25	34	nd	11	78	79	77	70	67
Tule Valley	Millard	12.3	0.5	80	22	13	28	23	12	70	78	85	84	79
Hal's Canyon	Millard	7.1	0.4	75	4	0	9	11	10	76	81	83	74	67
Enterprise	Washington	15.0	0.0	73	5	27	26	17	23	74	76	76	70	64
<b>DIXIE</b>														
Sand Hollow	Washington	12.2	0.1	85	0	0	1	2	1	88	94	90	83	77

\*since October 1, 2010, (nd) no data. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. 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.**

## 2010 Minimum Soil Temperatures at Utah SCAN sites

Minimum soil temperatures and number of days less than or equal to 32°F.

Site Name	2-inch		4-inch		8-inch		20-inch		40-inch	
	min. temp	#								
	°F	days								
Alkali Mesa	23	34	22	45	29	5	34	0	36	0
Blue Creek	20	64	24	26	26	22	33	0	38	0
Buffalo Jump	19	125	24	121	26	113	31	68	R	
Cache Junction	22	83	24	54	27	50	34	0	38	0
Chicken Ridge	23	133	26	102	26	92	33	0	35	0
Circleville	19	82	21	96	21	127	29	29	37	0
Dugway	15	56	21	39	26	28	35	0	37	0
Eastland	28	38	31	23	32	0	34	0	36	0
Enterprise	23	52	29	32	30	27	34	0	40	0
Ephraim	18	105	26	56	30	6	35	0	38	0
Grantsville	22	65	27	42	32	7	38	0	46	0
Green River	15	99	16	94	21	89	27	44	35	0
Holden	26	27	27	29	29	21	33	0	41	0
Lightning Ridge	32	12	34	0	33	0	33	0	35	0
Little Red Fox	28	43	29	44	30	41	33	0	36	0
McCracken Mesa	26	55	31	8	33	0	36	0	40	0
Milford	22	43	27	26	29	11	36	0	42	0
Morgan	24	80	26	82	27	56	32	1	34	0
Mountain Home	25	27	28	19	30	11	34	0	38	0
Nephi	24	34	27	22	30	6	36	0	39	0
Panguitch	25	53	28	35	29	29	33	0	38	0
Price	15	79	21	71	25	50	32	0	37	0
Sand Hollow	33	0	36	0	40	0	43	0	46	0
Split Mountain	18	53	20	52	23	51	28	41	34	0
West Summit	20	53	22	55	28	6	33	0	36	0

min. temp, minimum temperature recorded; #, number of days less than or equal to 32°F; R, bedrock; site installation not complete in time to calculate 2010 frost depth at Harm's Way, Goshute, Hal's Canyon, Tule Valley, Vermillion, Cave Valley, Grouse Creek, Spooky, Manderfield, and Park Valley.

# Utah Hydrologic Summary

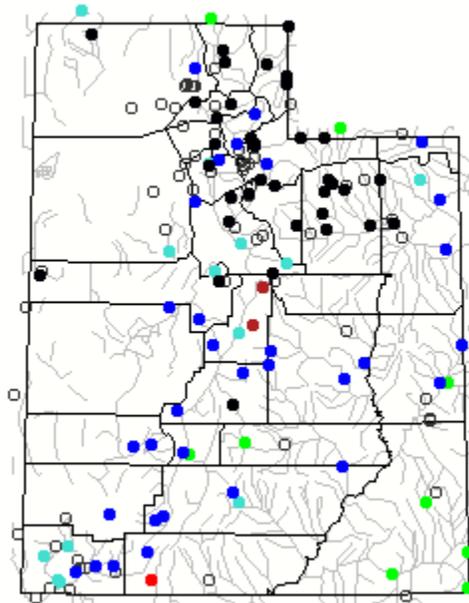
July 1, 2011

## Current Conditions

Snowpacks across the state are pretty much melted out at this point and streamflows are in recession – but it has been a most remarkable season. Huge snowpacks across the state melted in perhaps the most unusual of ways – slowly, steadily and mostly without huge spikes. Streamflow hydrographs came up to record levels and stayed there for weeks on end but in the end, did not reach levels that could have been had we experienced temperatures in the 90's or even 100's. Temperatures stayed in the zone (70's to low 80's) where snow could melt at a rate of 1.5 to 2 inches per day for May and June – sufficient to melt the snow but not high enough to cause melt rates of 2.5 to 4 inches per day where catastrophic flows could occur. Nearly all reservoirs across the state are full and spilling. Streamflows are still exceptionally high - in record or near record high territory. Irrigation season has been effectively shortened by the cool, wet spring reducing water demand which will allow high reservoir carryover for next year. Soil moisture levels across the state are extremely high. June precipitation across the state was nearly absent in the south to normal in the north (7%-107%). All things considered the water supply conditions across the state are very good.

### Current Utah Streamflow - Courtesy US Geological Survey

Tue., July 05, 2011 12:30ET



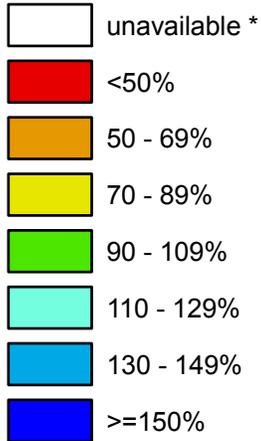
Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

# Utah

## SNOTEL Current Snow Water Equivalent (SWE) % of Normal

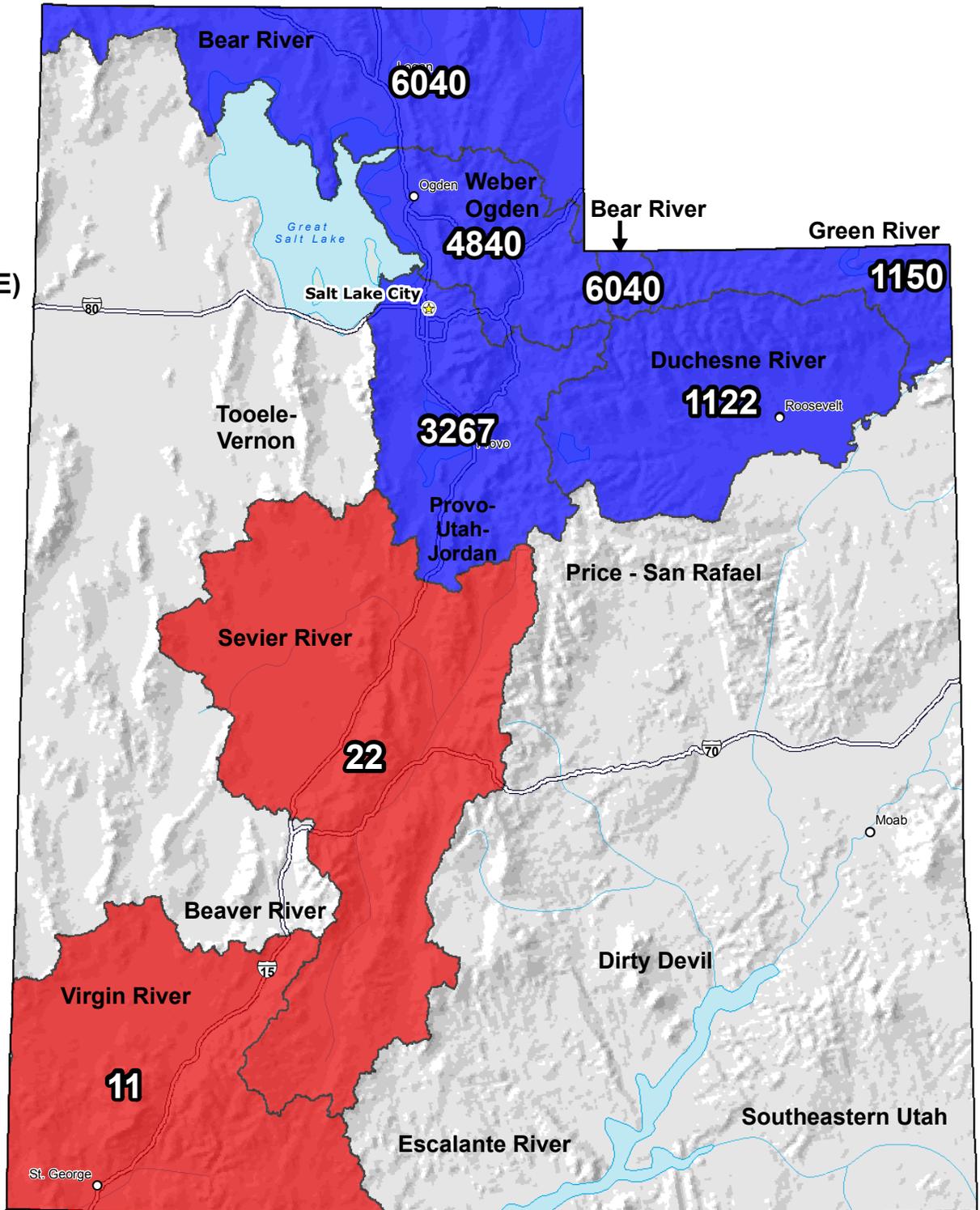
**Jul 01, 2011**

**Snow Water Equivalent (SWE)  
Basin-wide  
Percent of  
1971-2000  
Normal**



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

**Provisional Data  
Subject to Revision**



The snow water equivalent percent of normal represents the current snow water equivalent 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).

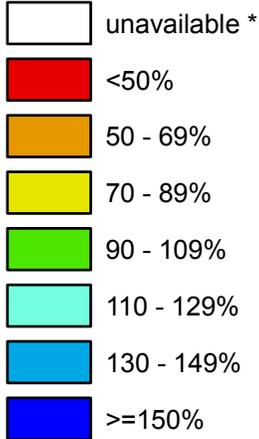
Prepared by the USDA/NRCS National Water and Climate Center  
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>  
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>  
Science contact: [Jim.Marron@por.usda.gov](mailto:Jim.Marron@por.usda.gov) 503 414 3047

# Utah

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

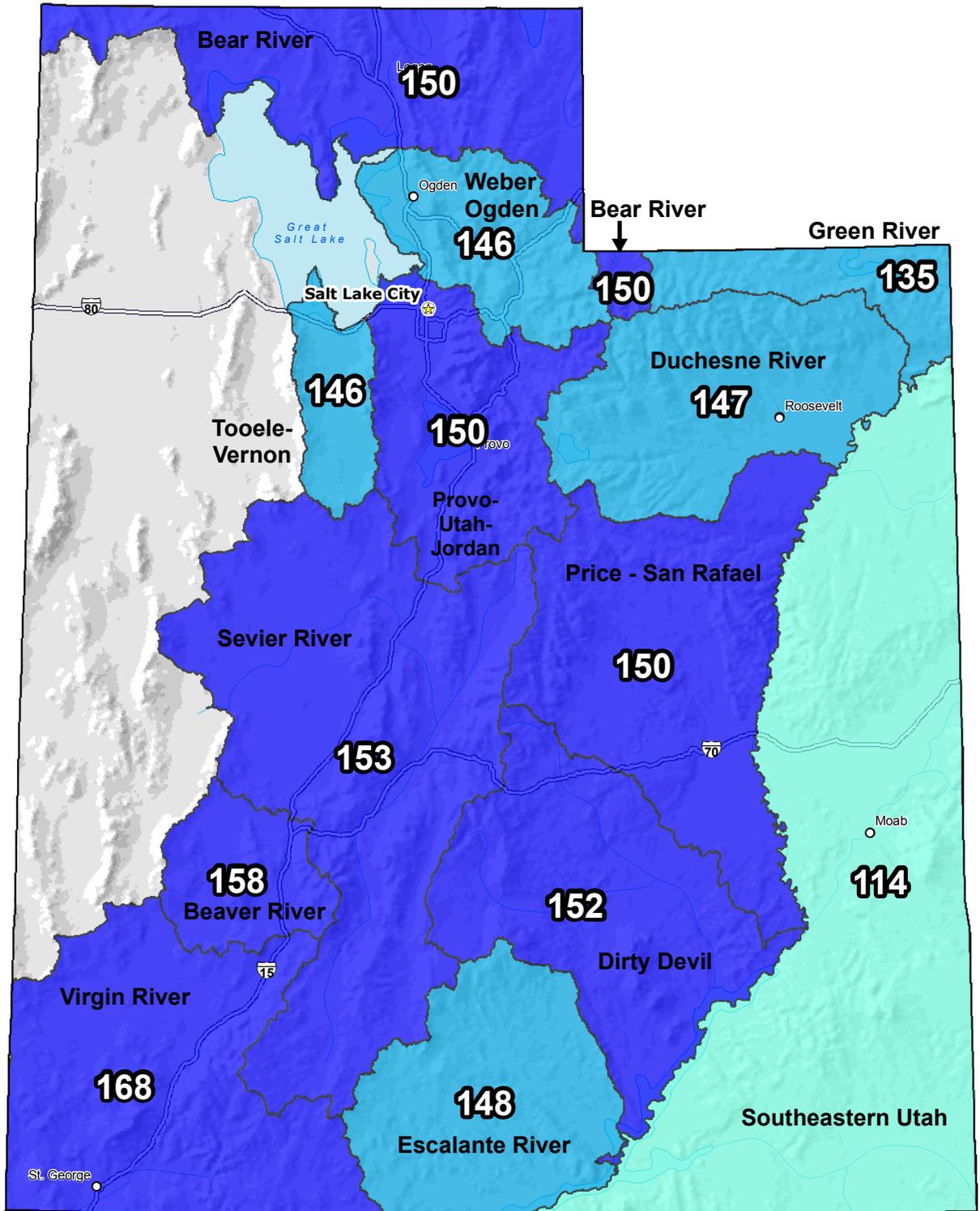
**Jul 01, 2011**

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



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

**Provisional Data  
Subject to Revision**



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).

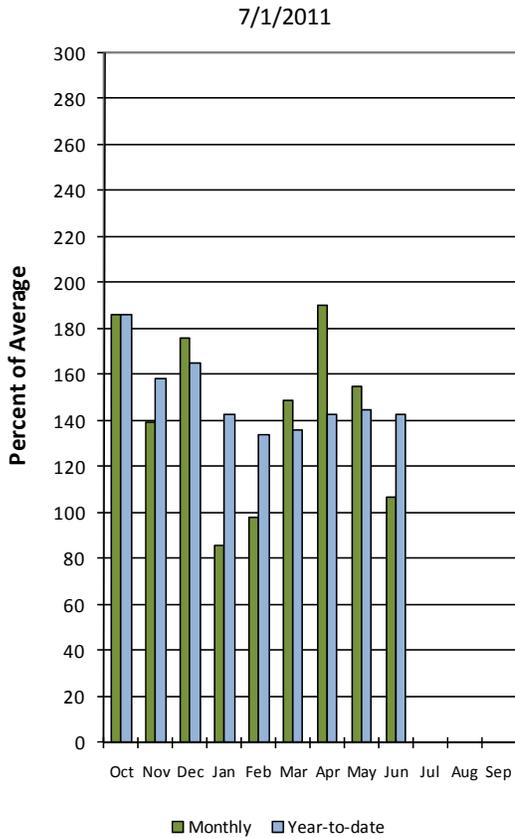
Prepared by the USDA/NRCS National Water and Climate Center  
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>  
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>  
Science contact: [Jim.Marron@por.usda.gov](mailto:Jim.Marron@por.usda.gov) 503 414 3047

# Bear River Basin

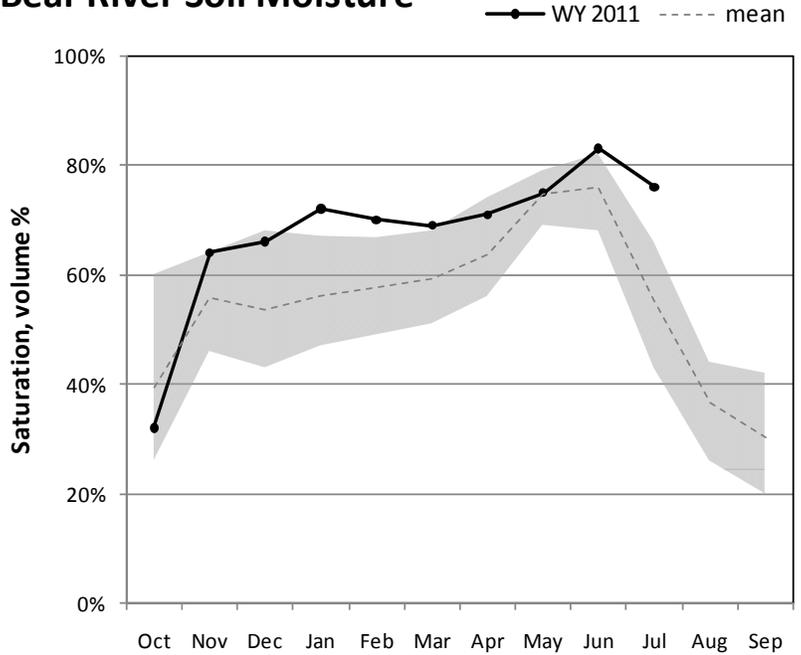
July 1, 2011

Precipitation in June was average at 107% which brings the water year accumulation to 143%. Reservoir storage is average at 77% of capacity, which is 30% higher than this time last year. Soil moisture is at 76% compared to 61% last year.

## Bear River Precipitation

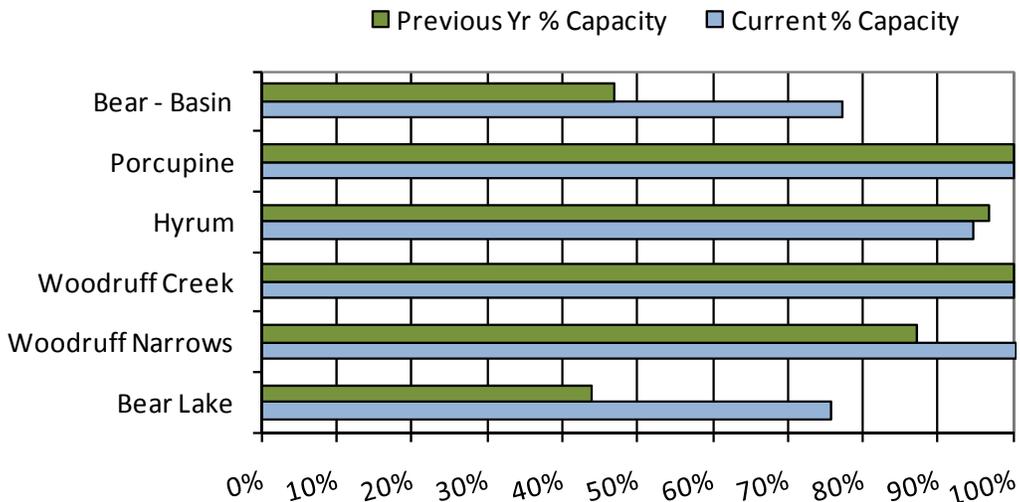


## Bear River Soil Moisture



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.

## July Bear River Reservoir Storage



July 1, 2011

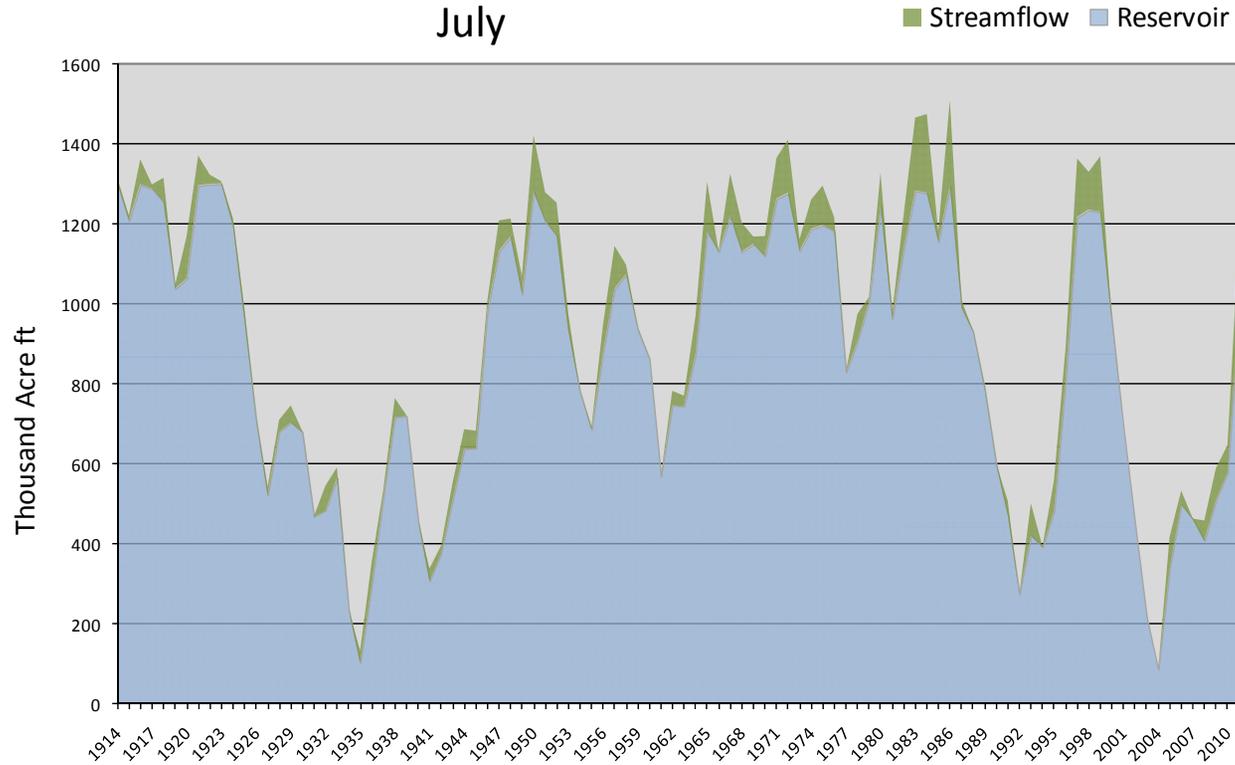
## Water Availability Index

Basin or Region	June EOM* Bear Lake	June accumulated inflow to Bear Lake ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Bear River</b>	<b>986</b>	<b>186</b>	<b>1172</b>	<b>1.47</b>	<b>68</b>	<b>68,69,70,85</b>

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

### Bear Lake Surface Water Supply Index

July



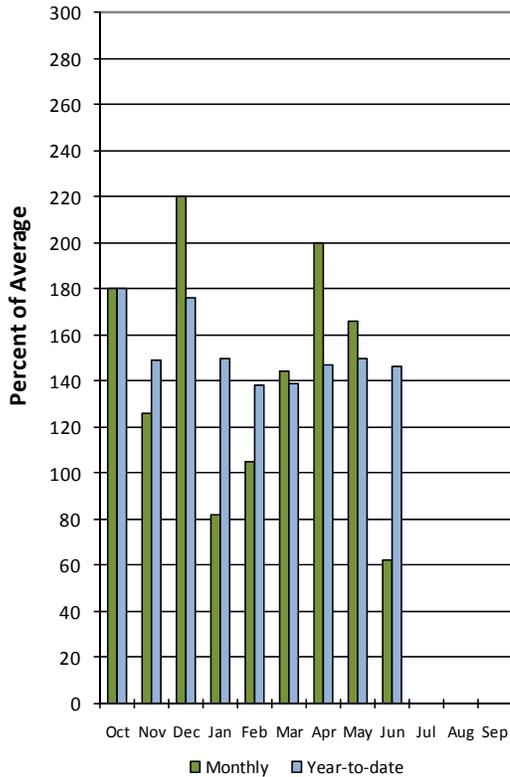
# Weber and Ogden River Basin

July 1, 2011

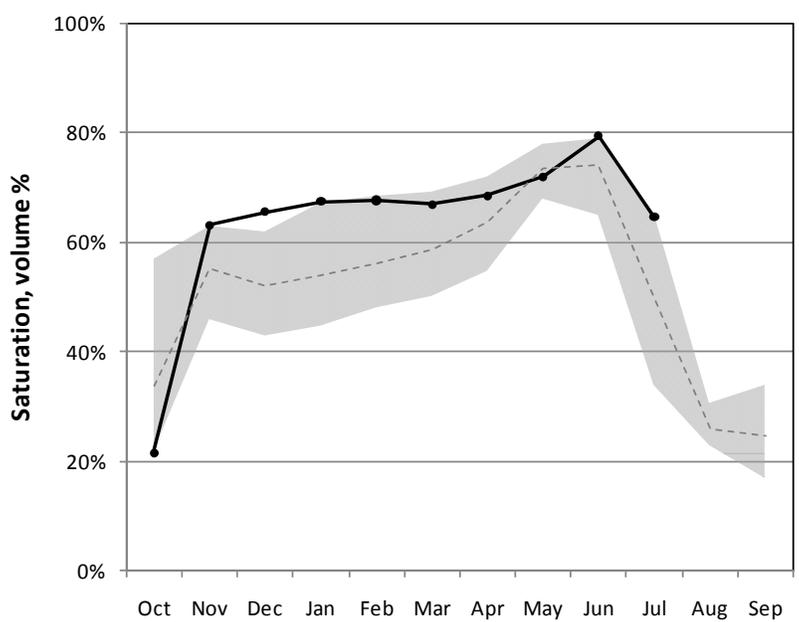
Precipitation in June was below average at 65% which brings the water year accumulation to 146%. Reservoir storage is at 94% of capacity, which is 3% lower than this time last year. Soil moisture is at 65% compared to 57% last year.

## Weber River Precipitation

7/1/2011

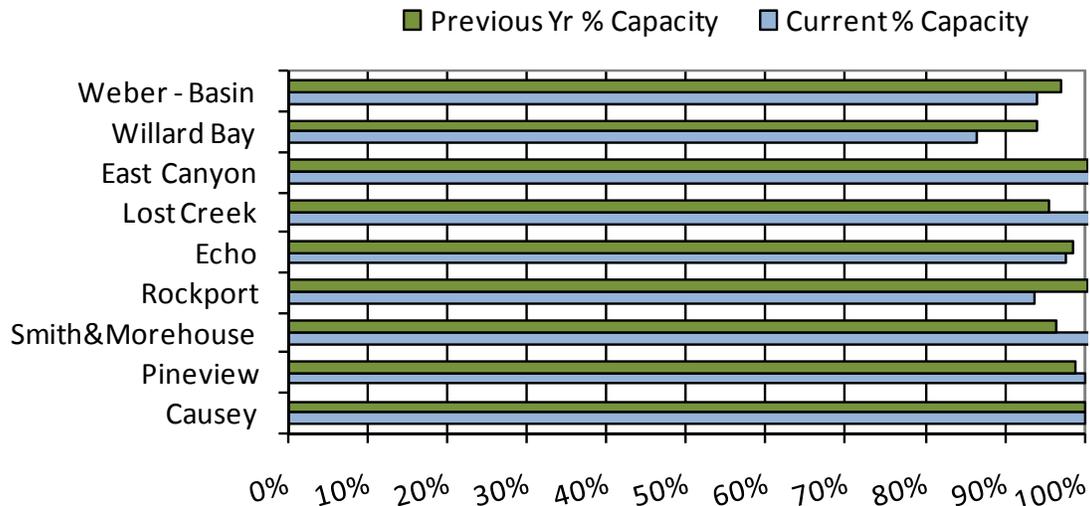


## Weber River Soil Moisture



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.

## July Weber Basin Reservoir Storage



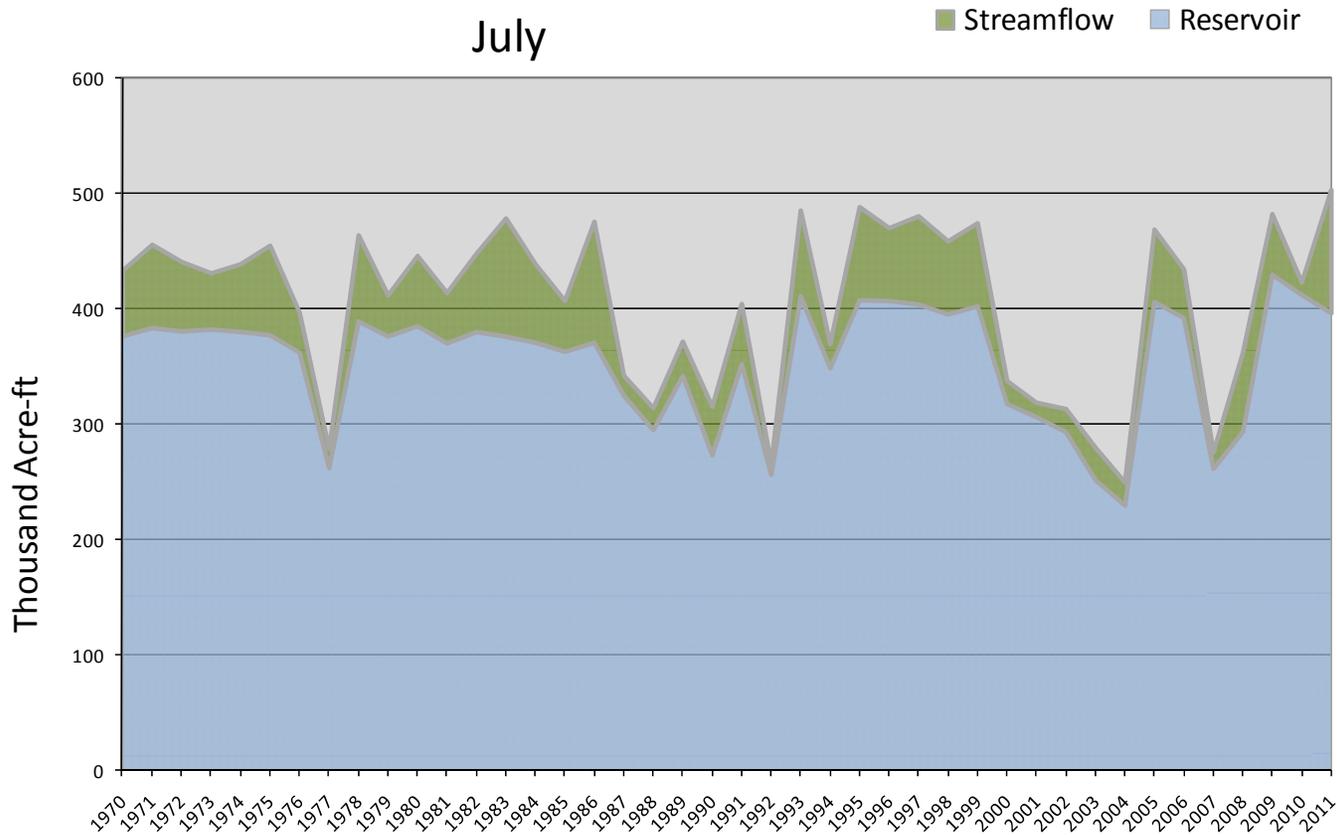
July 1, 2011

## Water Availability Index

Basin or Region	June EOM*	June accumulated	Reservoirs + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	Reservoirs	flow at Weber near Oakley (observed)				
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Weber River</b>	<b>397</b>	<b>107</b>	<b>503</b>	<b>3.97</b>	<b>98</b>	<b>93,95,97,09</b>

\*EOM, end of month; <sup>#</sup> WAI, water availability index; <sup>^</sup>KAF, thousand acre-feet.

### Weber River - Water Availability Index July



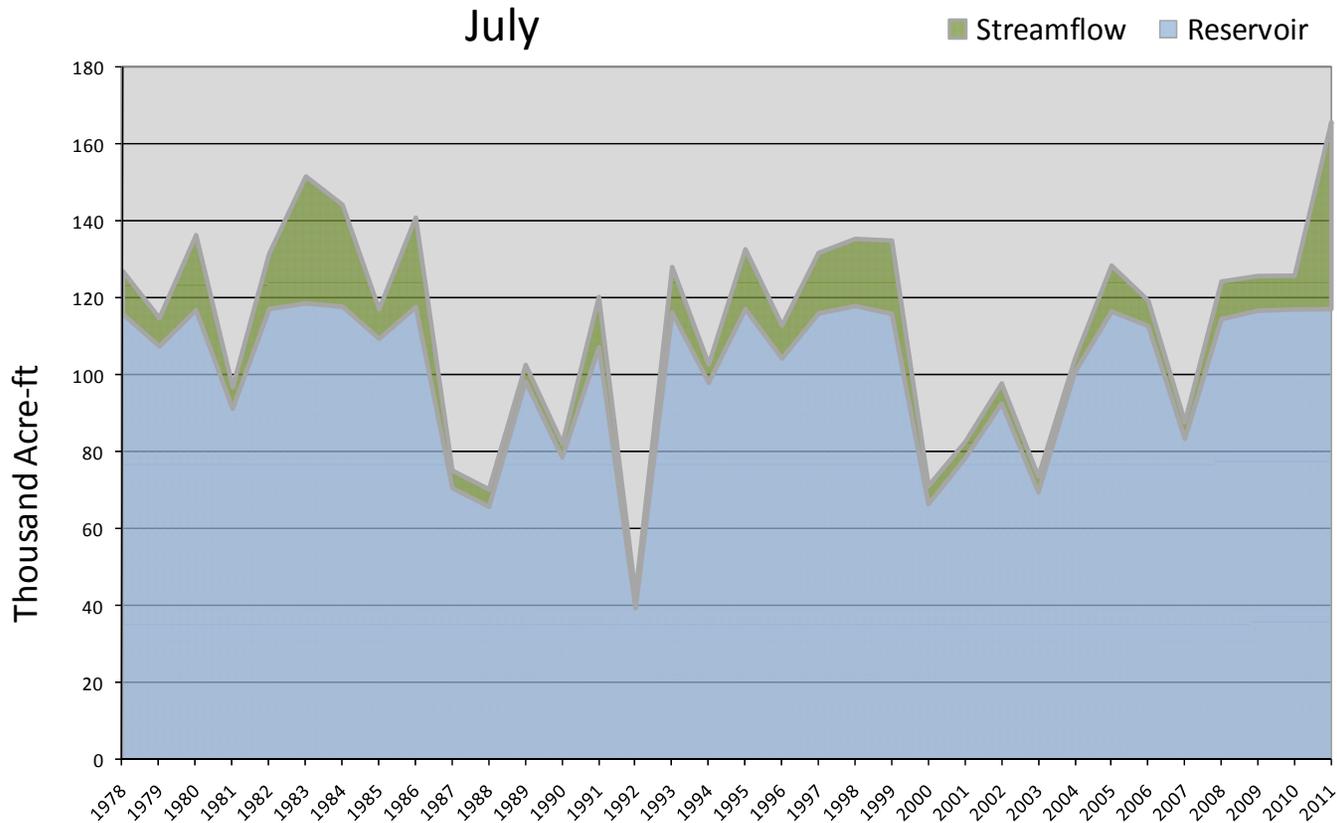
July 1, 2011

## Water Availability Index

Basin or Region	June accumulated			WAI <sup>#</sup>	Percentile	Years with similar WAI
	June EOM* Pine View & Causey	flow at South Fork Ogden ( <i>observed</i> )	Reservoir + Streamflow			
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Ogden River</b>	<b>117</b>	<b>49.0</b>	<b>166</b>	<b>3.93</b>	<b>97</b>	<b>80,83,84,86</b>

\*EOM, end of month; <sup>#</sup> WAI, water availability index; <sup>^</sup>KAF, thousand acre-feet.

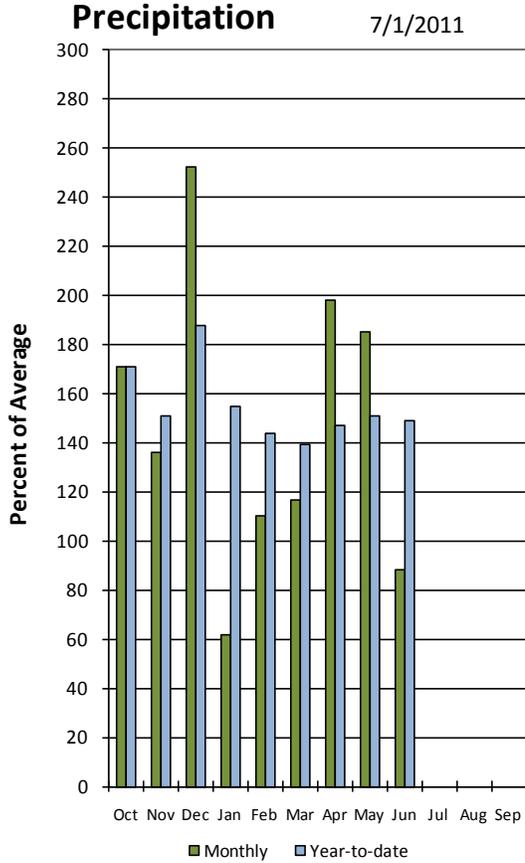
### Ogden River - Water Availability Index



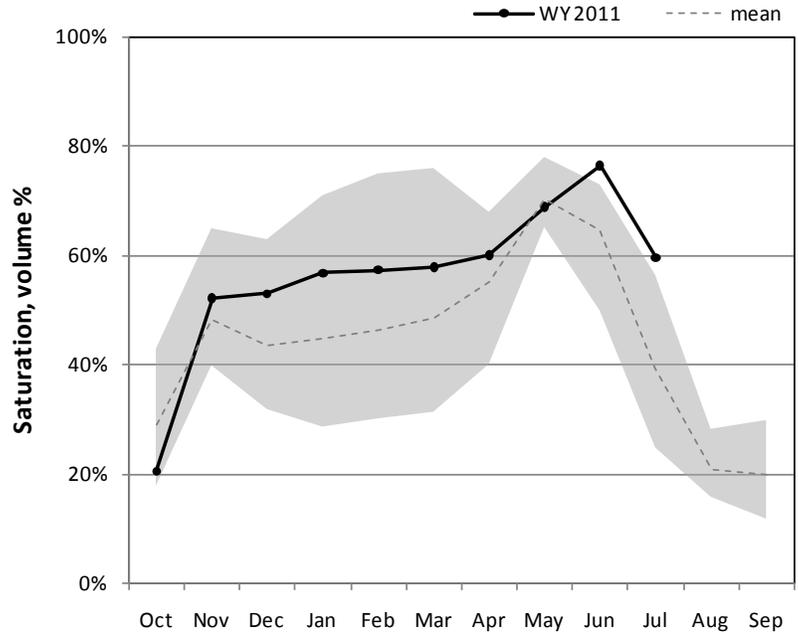
## Utah Lake, Jordan River, & Tooele Valley Basins July 1, 2011

Precipitation in June was below average at 88%, bringing water year accumulation to 149%. Reservoir storage is at 108% of capacity, which is 13% more than this time last year. Soil moisture is at 60% compared to 48% last year at this time.

### Jordan / Provo River

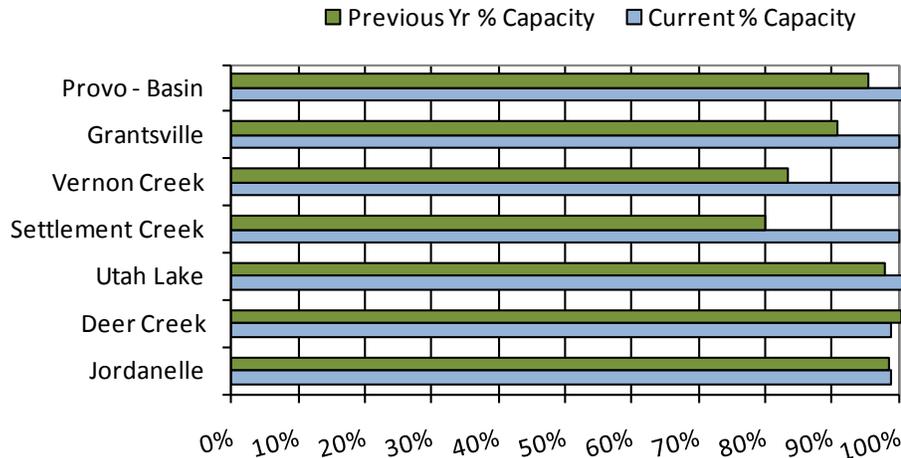


### Jordan / Provo River Soil Moisture



*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.*

### July Provo River Reservoir Storage



July 1, 2011

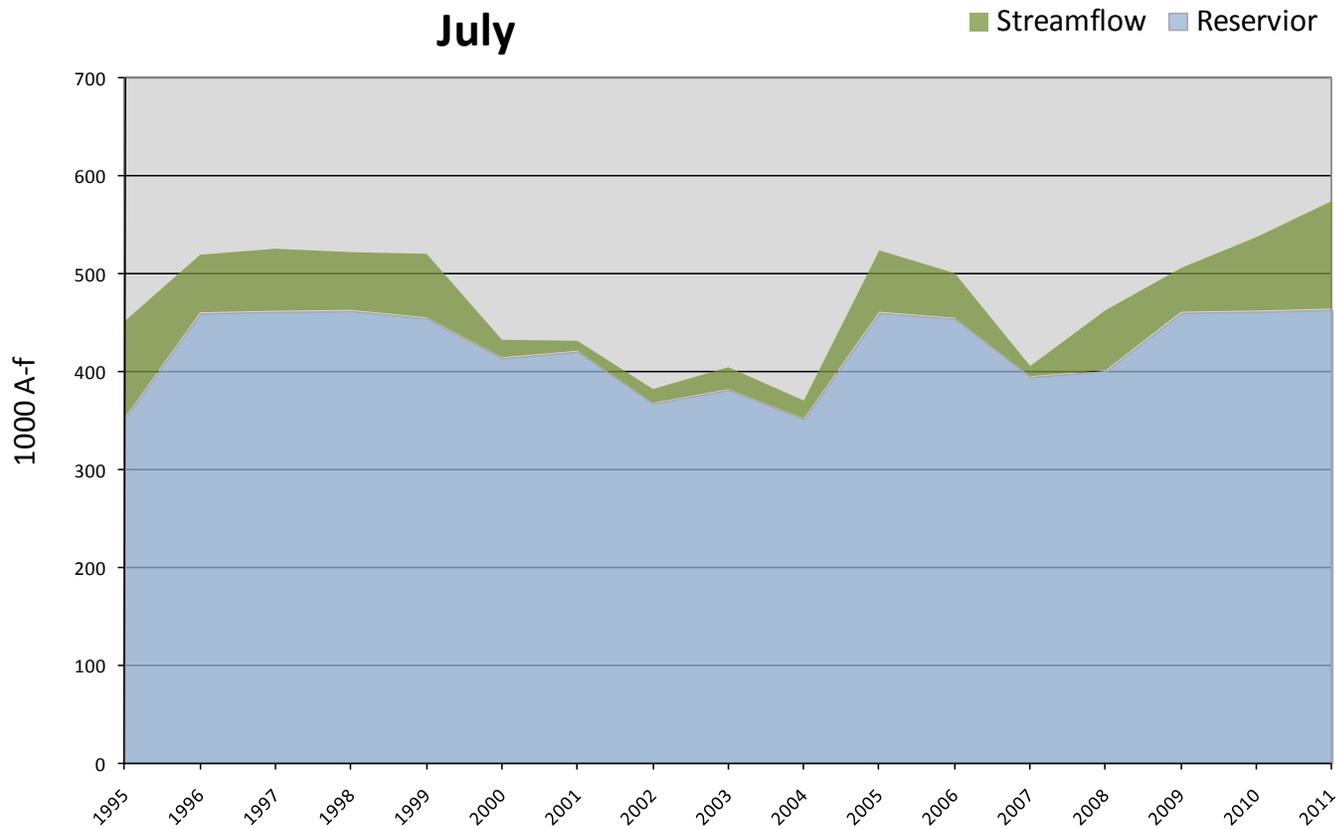
## Water Availability Index

Basin or Region	June EOM* Deer Creek, Jordanelle	June accumulated flow Provo River at Woodland <i>(observed)</i>	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF			
<b>Provo</b>	<b>464</b>	<b>110</b>	<b>574</b>	<b>3.70</b>	<b>94%</b>	<b>10,97,05,98</b>

\*EOM, end of month; <sup>#</sup> WAI, water availability index; <sup>^</sup>KAF, thousand acre-feet.

### Provo River - Water Availability Index

July



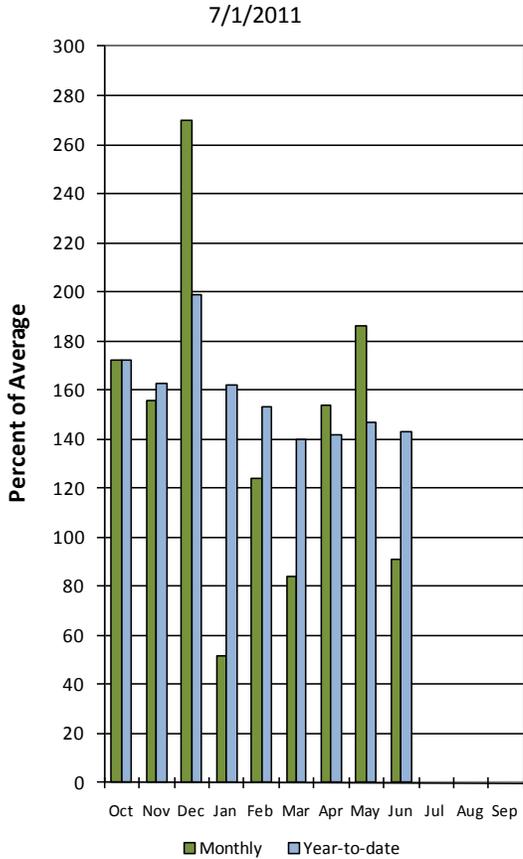
Utah Lake, Jordan River, and Tooele Valley Basins

# Uintah Basin and Dagget SCDs

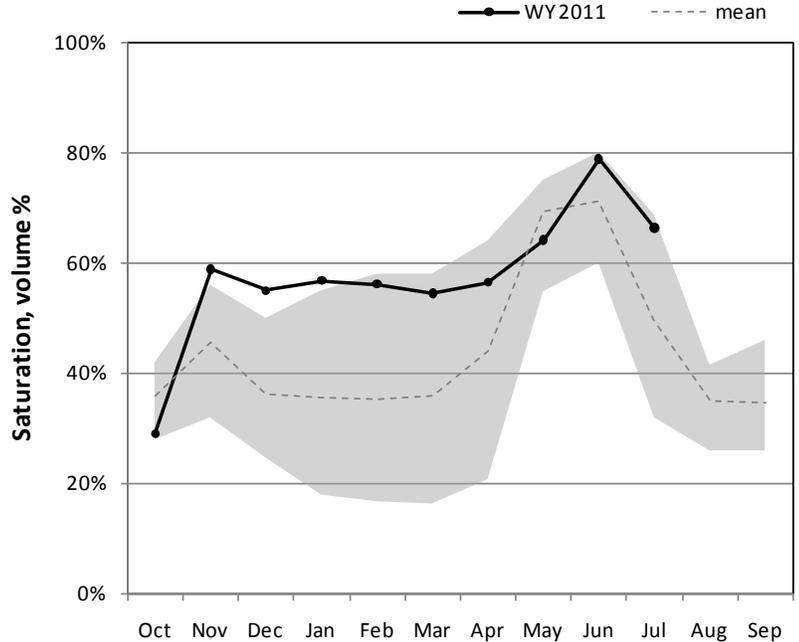
July 1, 2011

Precipitation in May was average at 91%, bringing the water year accumulation to 143%. Reservoir storage is at 100% of capacity, 6% higher as this time last year. Soil moisture is at 66% compared to 52% last year.

## Uintah Precipitation

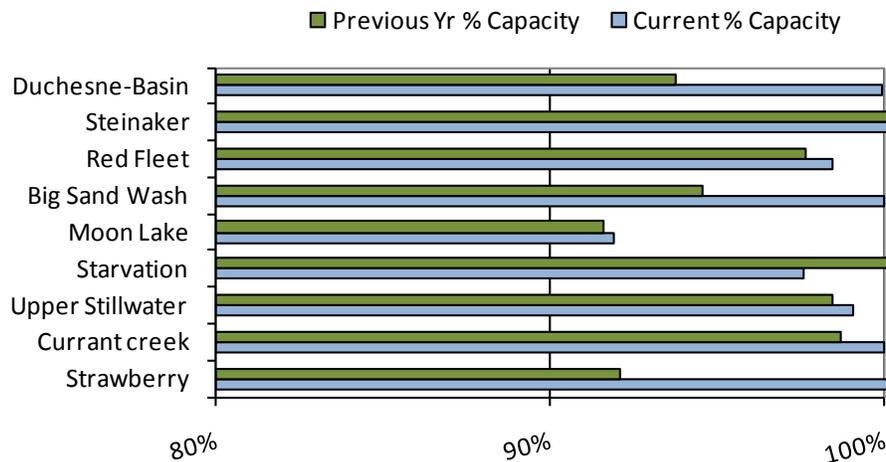


## Uintah Basin Soil Moisture



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.

## July Uintah Basin Reservoir Storage



July 1, 2011

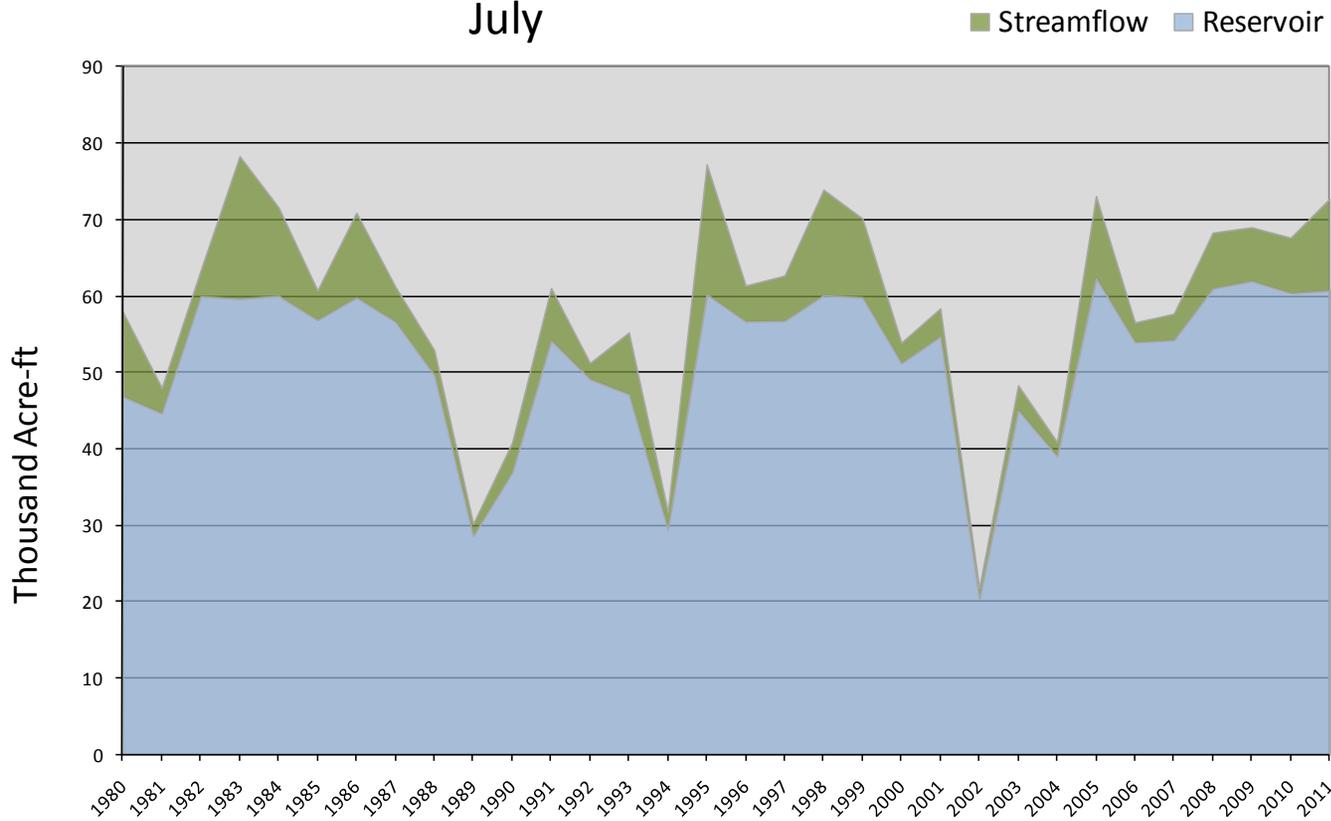
## Water Availability Index

Basin or Region	June EOM* Red Fleet and Steinaker	June accumulated flow Big Brush Creek ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Eastern Uintah</b>	<b>60.8</b>	<b>12.0</b>	<b>72.8</b>	<b>2.90</b>	<b>85</b>	<b>86, 84, 05, 98</b>

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

### Eastern Uintah - Water Availability Index

July



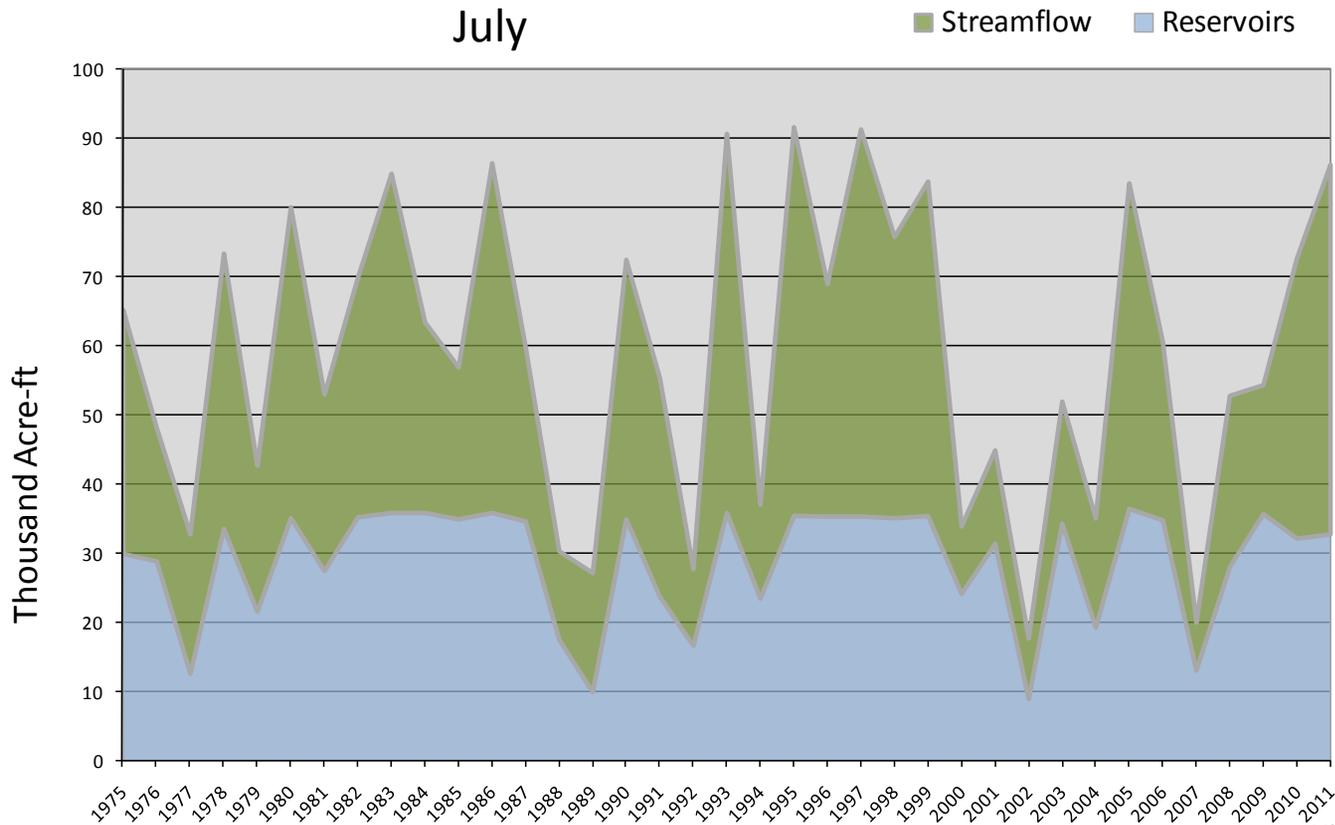
July 1, 2011

## Water Availability Index

Basin or Region	June EOM* Moon Lake	June accumulated flow Lake Fork Creek above Moon Lake ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Moon Lake</b>	<b>32.9</b>	<b>53.5</b>	<b>86.4</b>	<b>3.07</b>	<b>87</b>	<b>99, 83, 86, 93</b>

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

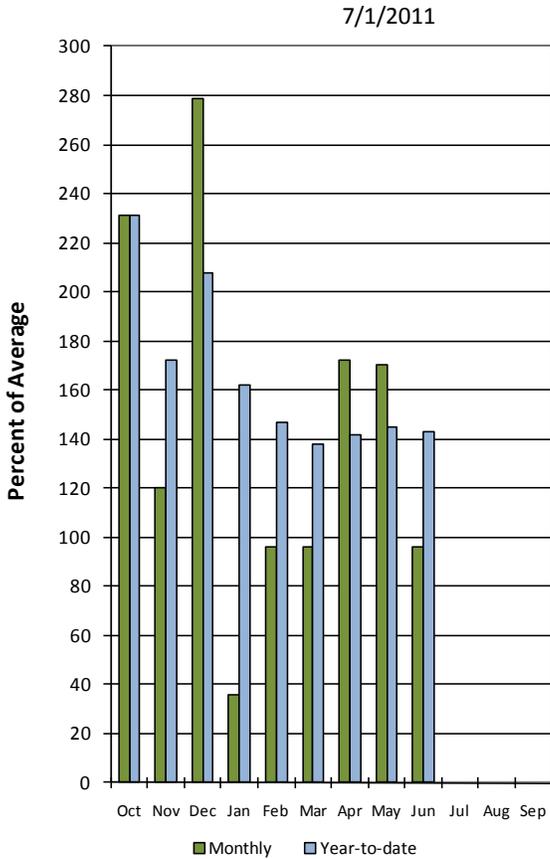
### Moon Lake - Water Availability Index



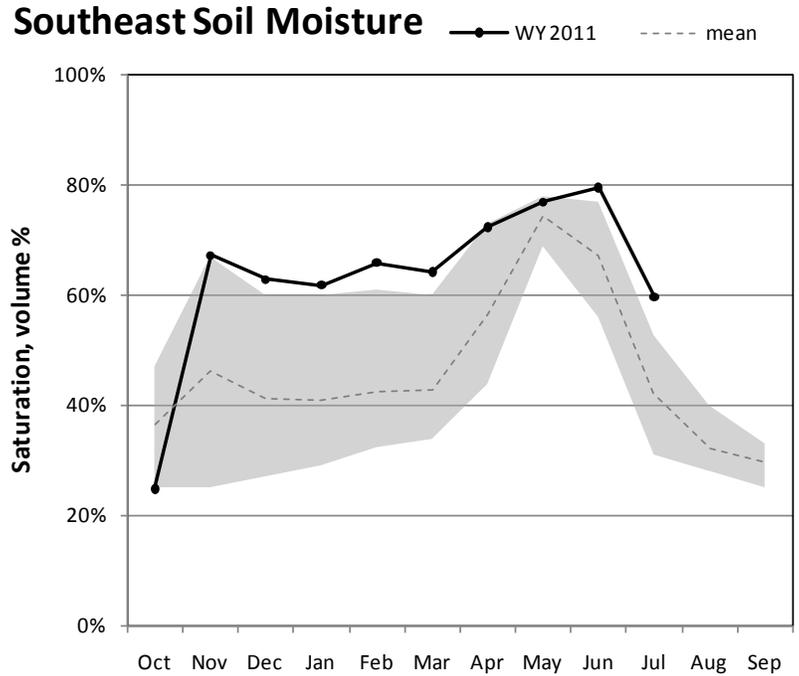
## Southeast – Carbon, Emery, Wayne, Grand, and San Juan Counties July 1, 2011

Precipitation in June was average at 96%, bringing the water year accumulation to 143%. Reservoir storage is at 104% of capacity, which is 22% higher at this time last year. Soil moisture is at 60% compared to 44% last year.

### Southeast Utah Precipitation

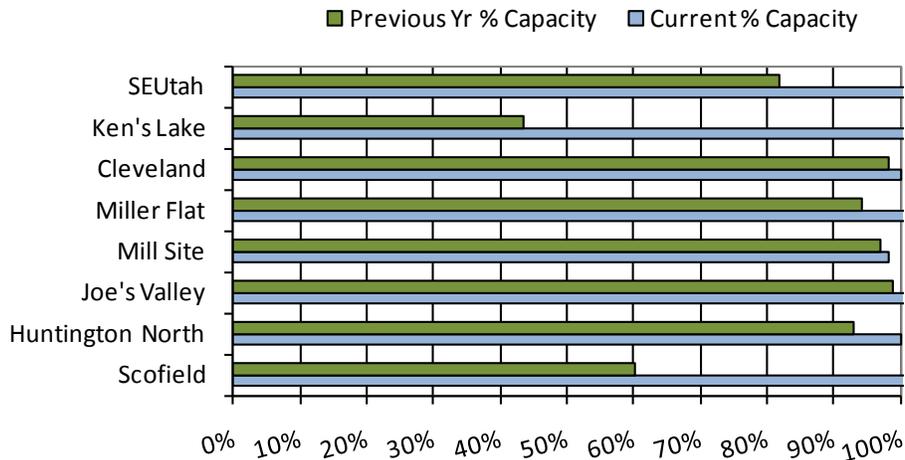


### Southeast Soil Moisture



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.

### July Southeast Utah Reservoir Storage



July 1, 2011

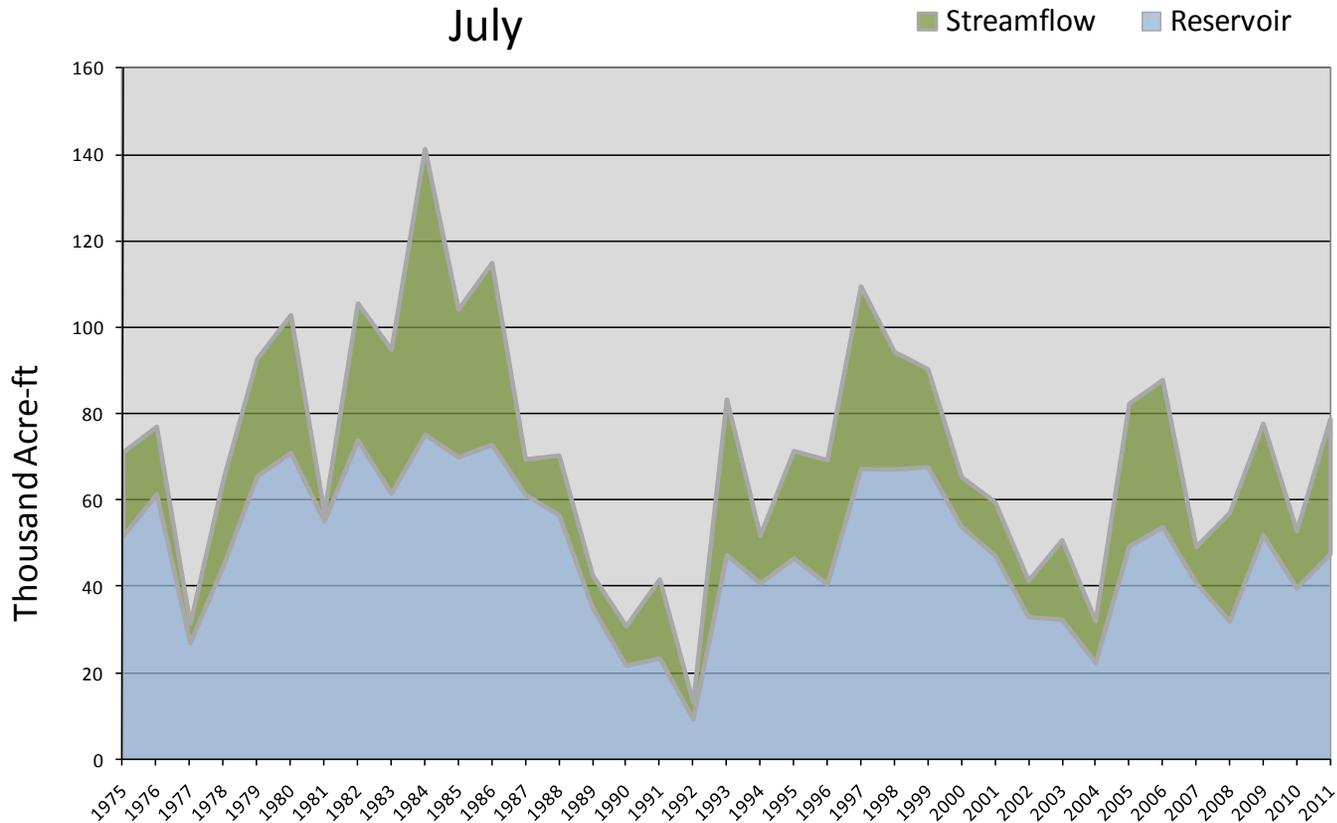
## Water Availability Index

Basin or Region	June EOM* Scofield	June accumulated inflow to Scofield ( <i>calculated</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Price River</b>	<b>69.6</b>	<b>37.2</b>	<b>106.8</b>	<b>3.73</b>	<b>95</b>	<b>95, 75, 84, 83</b>

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

### Price River - Water Availability Index

July



July 1, 2011

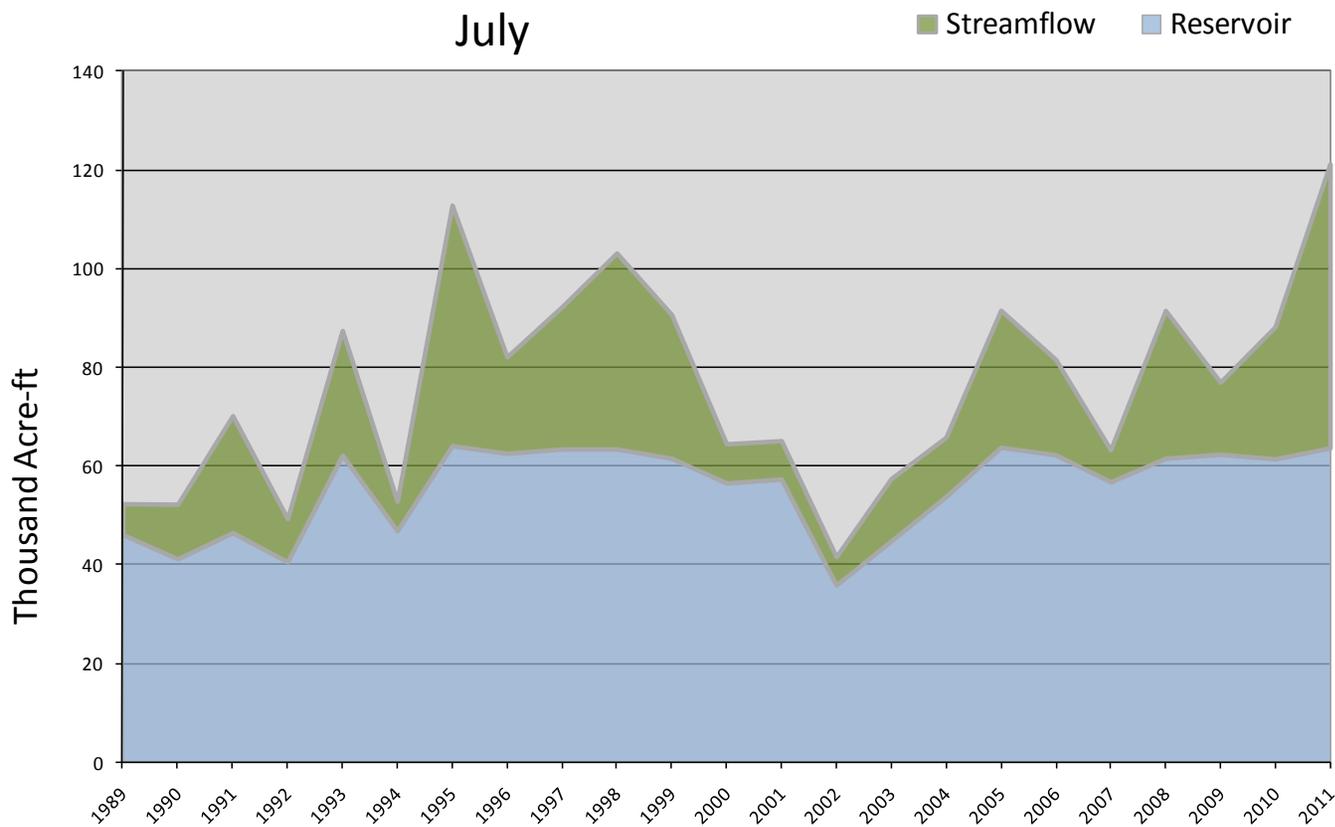
## Water Availability Index

Basin or Region	June accumulated			WAI <sup>#</sup>	Percentile	Years with similar WAI
	June EOM* Joe's Valley	inflow to Joe's Valley (calculated)	Reservoir + Streamflow			
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Joe's Valley</b>	<b>63.7</b>	<b>57.8</b>	<b>121.5</b>	<b>3.82</b>	<b>96</b>	<b>88, 92, 83, 79</b>

\*EOM, end of month; <sup>#</sup> WAI, water availability index; <sup>^</sup>KAF, thousand acre-feet.

### Joe's Valley - Water Availability Index

July



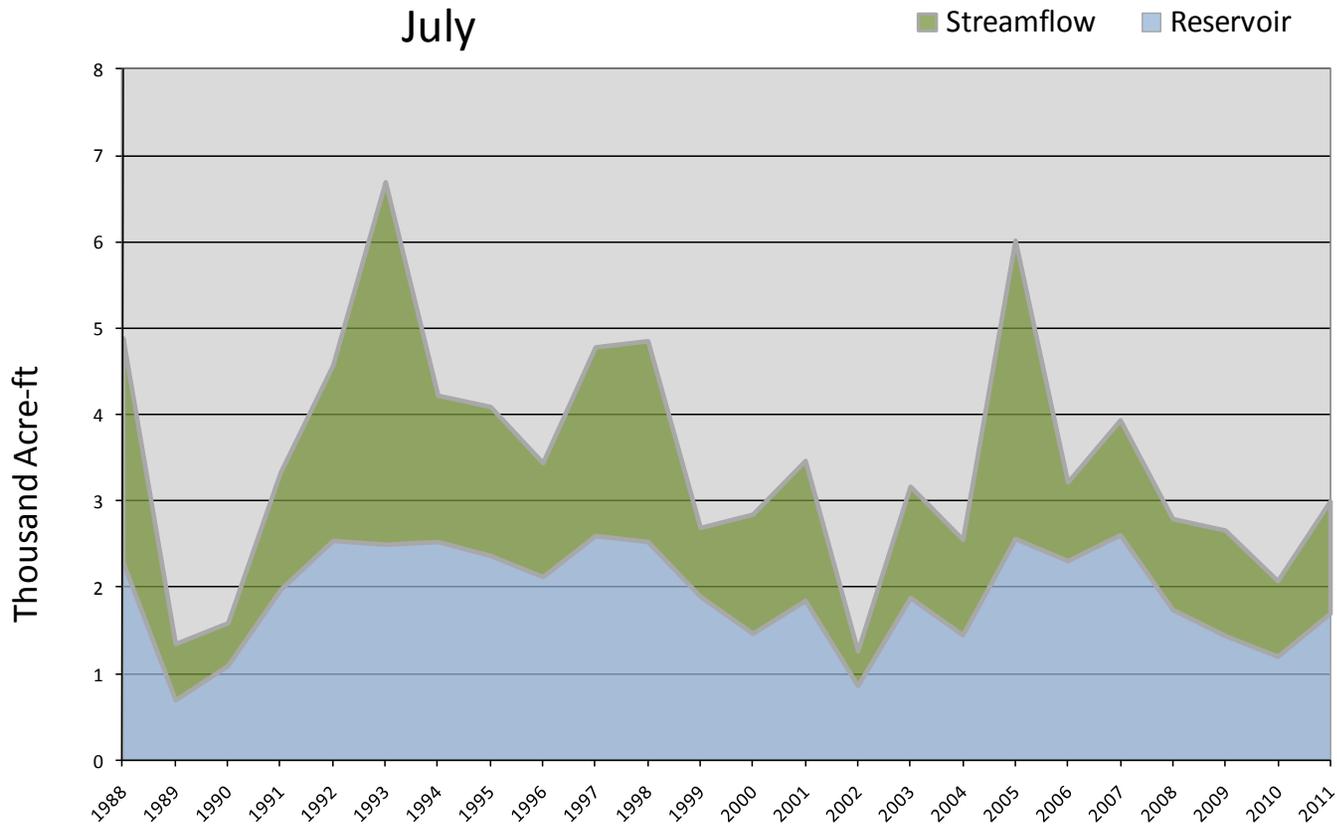
July 1, 2011

## Water Availability Index

Basin or Region	June EOM* Ken's Lake Reservoir	June accumulated flow Mill Creek at Sheley ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Moab</b>	<b>2.5</b>	<b>2.9</b>	<b>5.4</b>	<b>2.83</b>	<b>84</b>	<b>97, 98, 95, 85</b>

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

Moab - Water Availability Index  
July

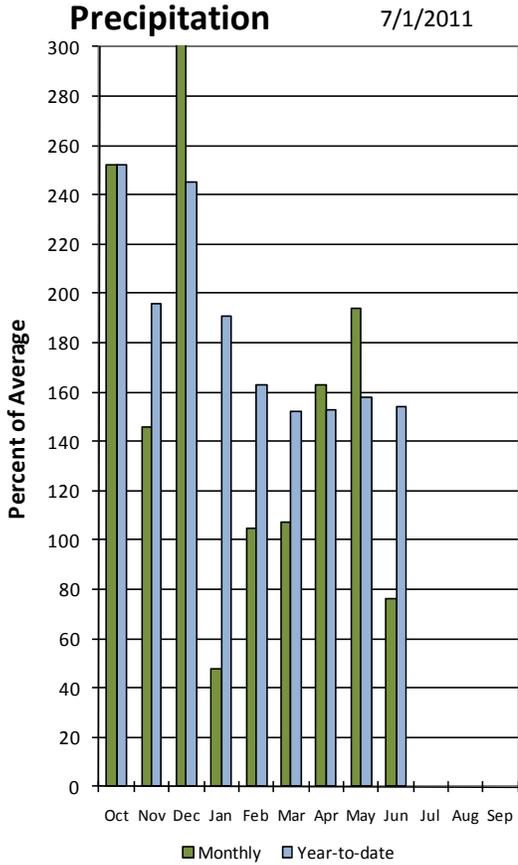


# Sevier and Beaver River Basins

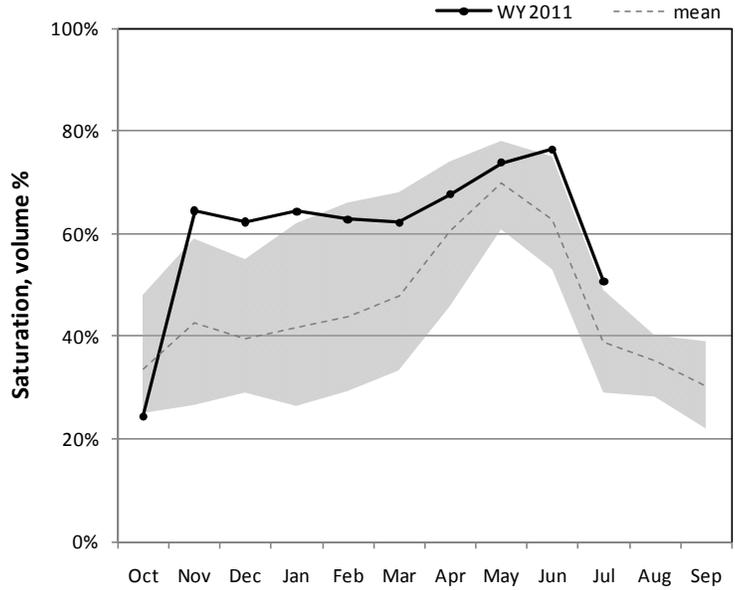
July 1, 2011

Precipitation in June was below average at 76%, which brings the seasonal accumulation (Oct-Jun) to 154% of average. Reservoir storage is at 93% of capacity, 39% more than last year. Soil moisture is decreasing compared to last month but higher than last year: current 51%, last month - 76% and last year - 43% of saturation.

## Sevier /Beaver River

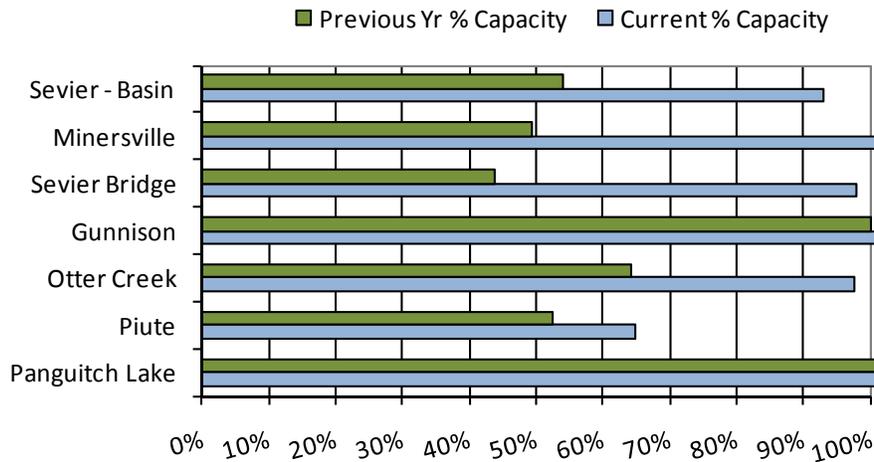


## Sevier / Beaver River Soil Moisture



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.

## July Sevier River Reservoir Storage

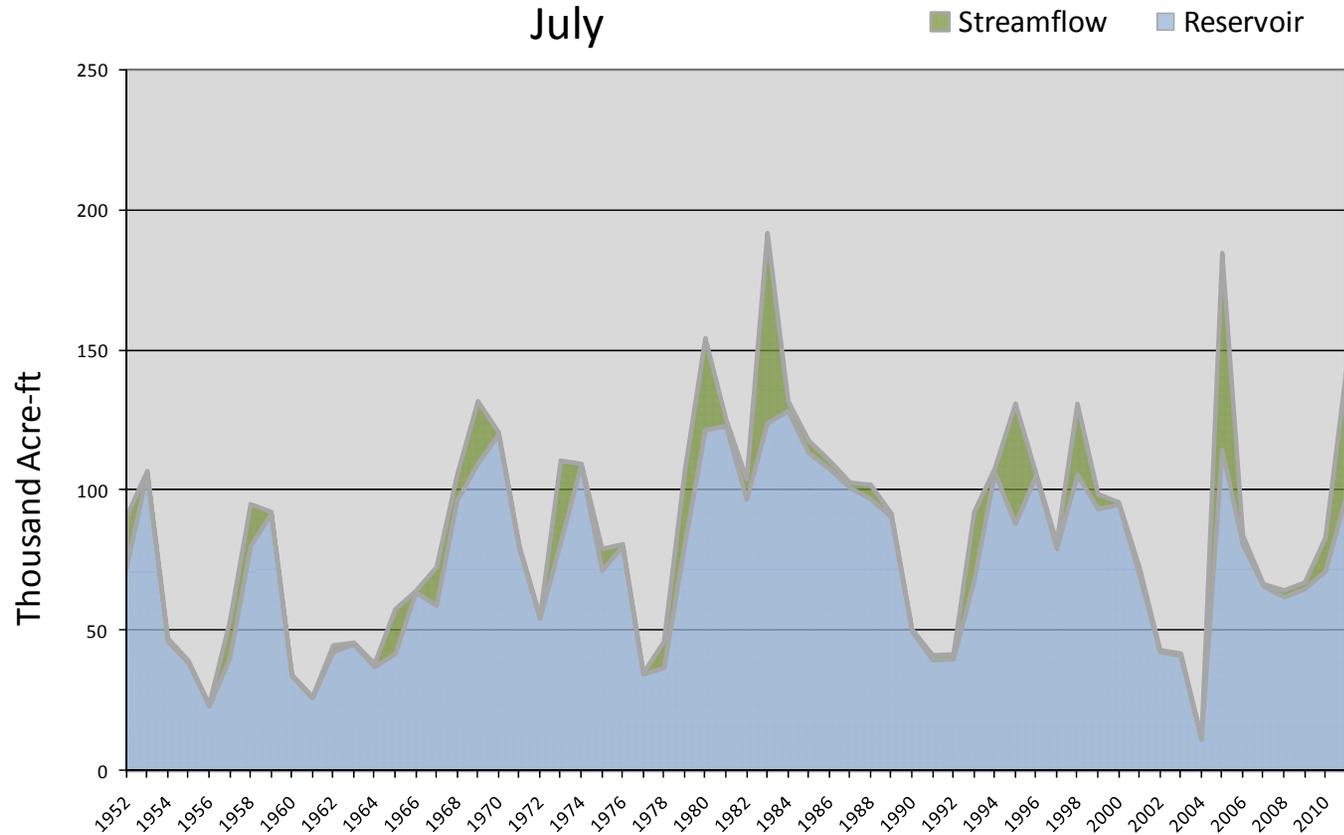


July 1, 2011		Water Availability Index				
Basin or Region	June EOM* Otter Creek and Piute	June accumulated flow at Kingston (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Upper Sevier River</b>	<b>97.9</b>	<b>44.5</b>	<b>142.4</b>	<b>3.62</b>	<b>93</b>	<b>69,84,80,05</b>

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

## Upper Sevier River - Water Availability Index

July



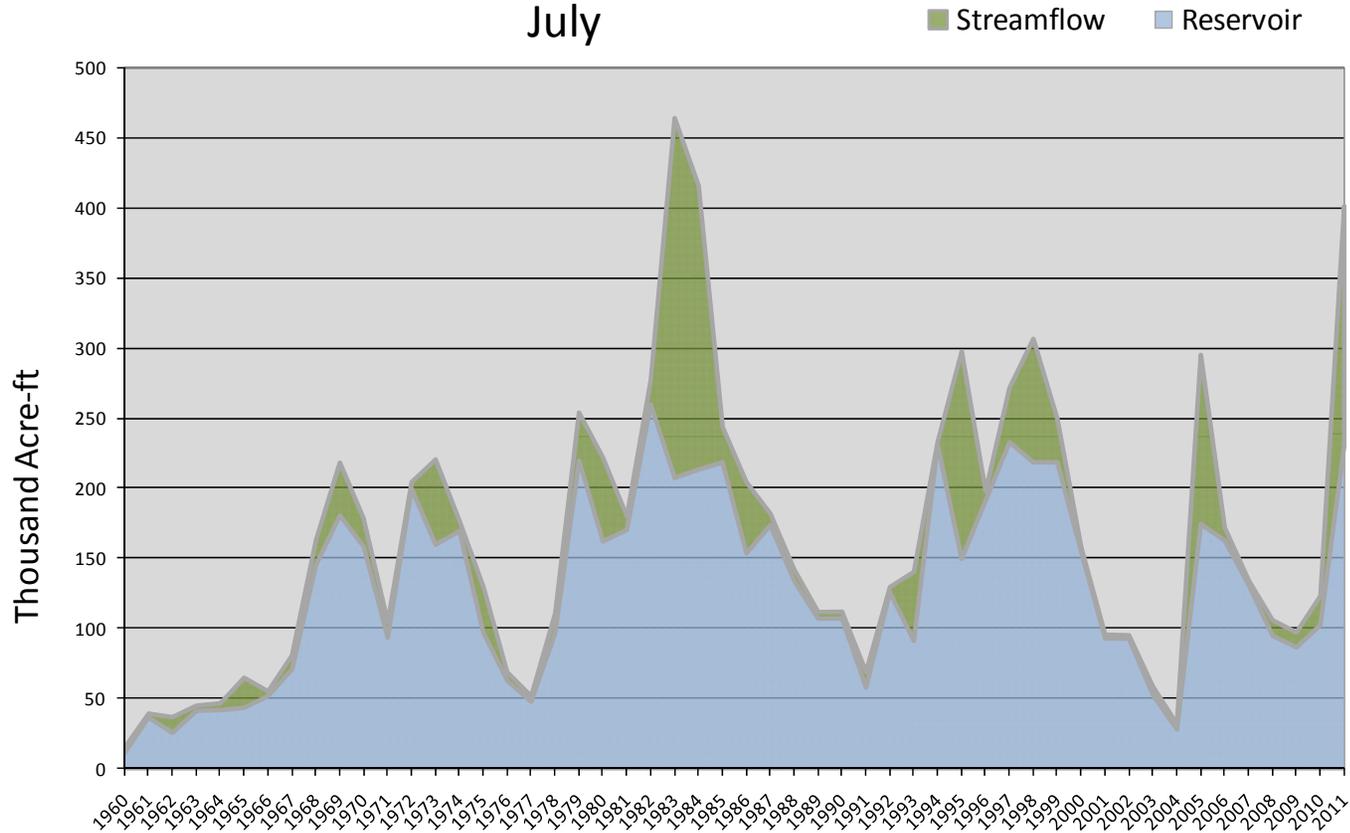
July 1, 2011

# Water Availability Index

Basin or Region	June EOM* Sevier Bridge	June accumulated flow Sevier at Gunnison ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Lower Sevier River</b>	<b>231.4</b>	<b>170.4</b>	<b>401.8</b>	<b>3.69</b>	<b>94</b>	<b>95,98,84,83</b>

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

## Lower Sevier River - Water Availability Index July

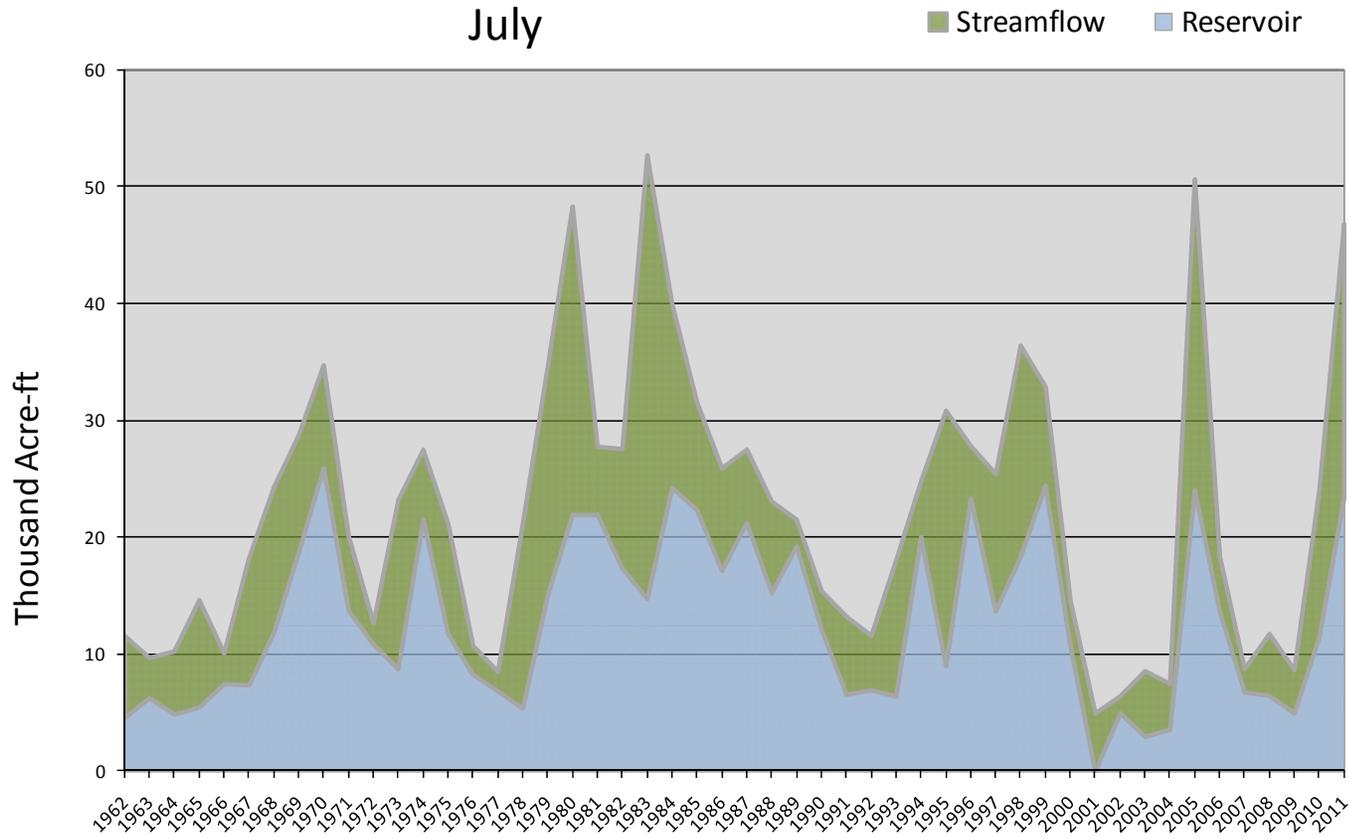


July 1, 2011		Water Availability Index				
Basin or Region	June EOM* Minersville Reservoir	June accumulated flow Beaver River at Beaver ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Beaver</b>	<b>23.5</b>	<b>23.4</b>	<b>46.9</b>	<b>3.51</b>	<b>92</b>	<b>98,84,80,05</b>

*\*EOM, end of month; <sup>#</sup> WAI, water availability index; <sup>^</sup>KAF, thousand acre-feet.*

### Beaver River - Water Availability Index

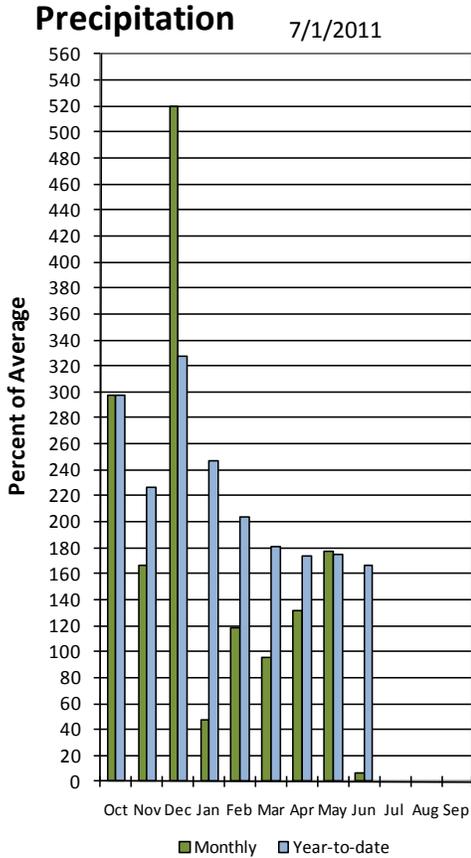
July



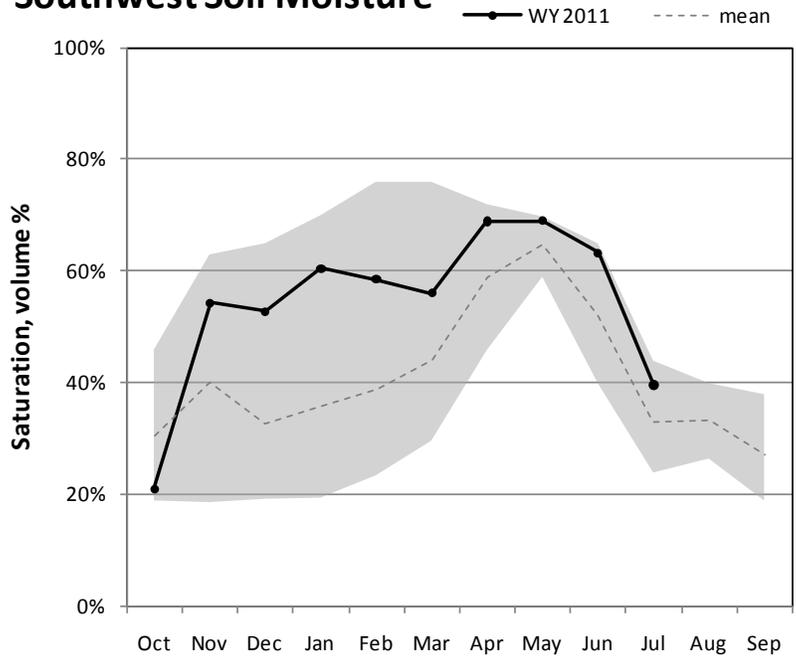
## Southwest – E. Garfield, Kane, Washington, & Iron Counties July 1, 2011

Precipitation in June was much below average at 7%, bringing water year accumulation to 167%. Reservoir storage is at 81% of capacity, 13% higher than last year at this time. Soil moisture is at 40% compared to 37% at this time last year.

### Southwest Utah

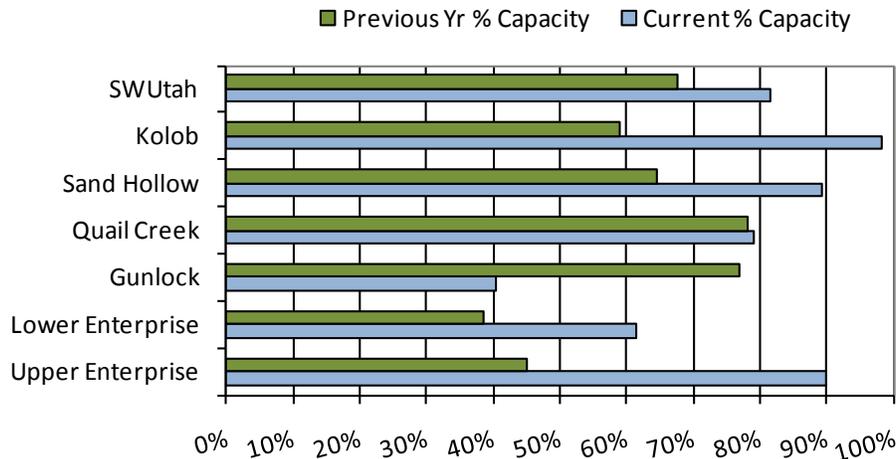


### Southwest Soil Moisture



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.

### July Southwest Utah Reservoir Storage



July 1, 2011

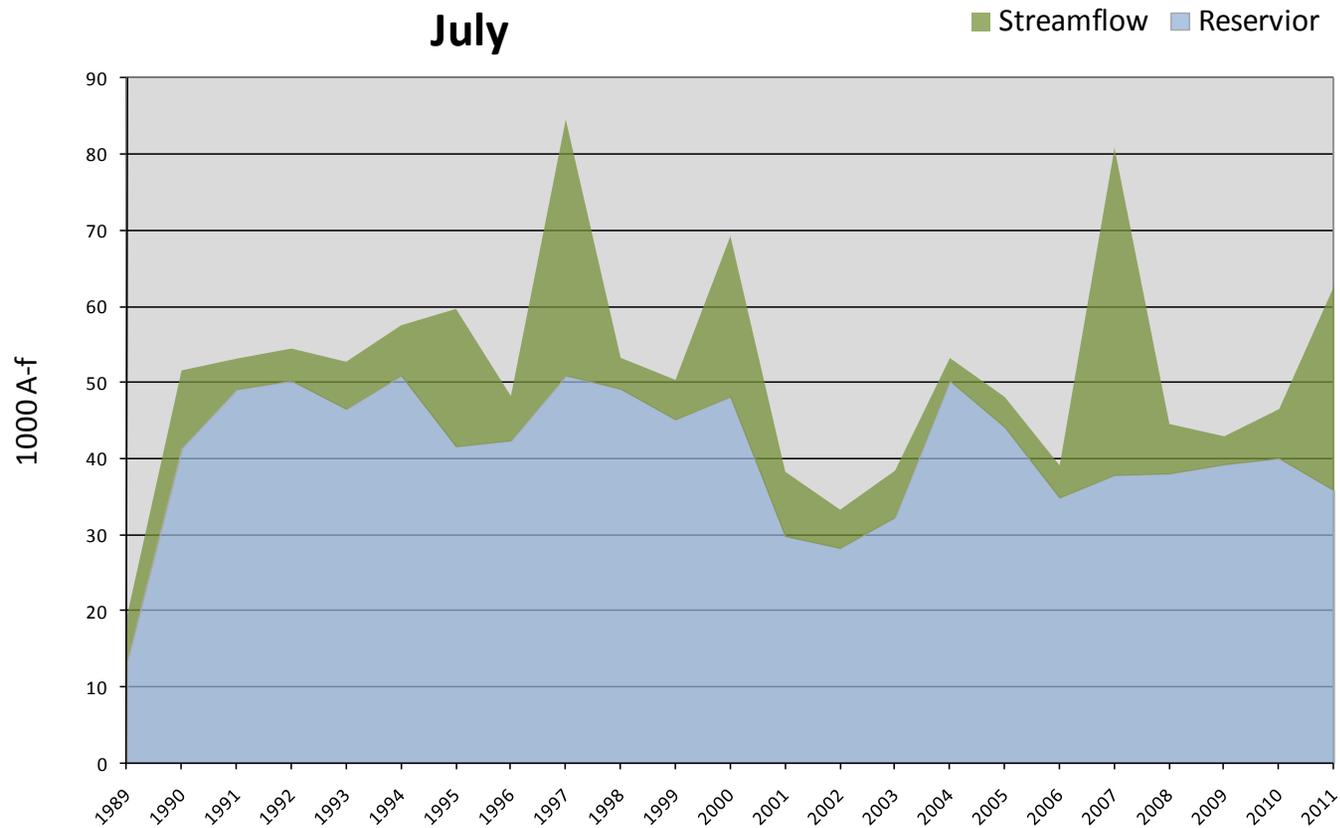
## Water Availability Index

Basin or Region	June EOM* Reservoir	June accumulated flow Virgin and Santa Clara Rivers (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Southwest</b>	<b>36</b>	<b>27</b>	<b>63</b>	<b>2.78</b>	<b>83%</b>	<b>07,00,95,94</b>

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

### Southwest - Water Availability Index

July



*Issued by*

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

*Released by*

**Sylvia Gillen**  
**State Conservationist**  
**Natural Resources Conservation Service**  
**Salt Lake City, Utah**

*Prepared by*

**Snow Survey Staff**  
**Randall Julander, Supervisor**  
**Troy Brosten, Hydrologist**  
**Timothy Bardsley, Hydrologist**  
**Mike Bricco, Hydrologist**  
**Beau Uriona, Hydrologist**  
**Karen Vaughan, Soil Scientist**  
**Bob Nault, Electronics Technician**



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Snow Survey, USDA, NRCS  
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

