

# Utah Climate and Water Report

January, 2013



**Harms Way SCAN site, La Sal, UT**

**Photo by Karen Vaughan**

# 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

### 1) Climate and Water Information – Soil Climate Analysis Network

- a) North Central
- b) Northern Mountains
- c) Uintah Basin
- d) Southeast
- e) South Central
- f) Western and Dixie

### 2) General Hydrological Conditions

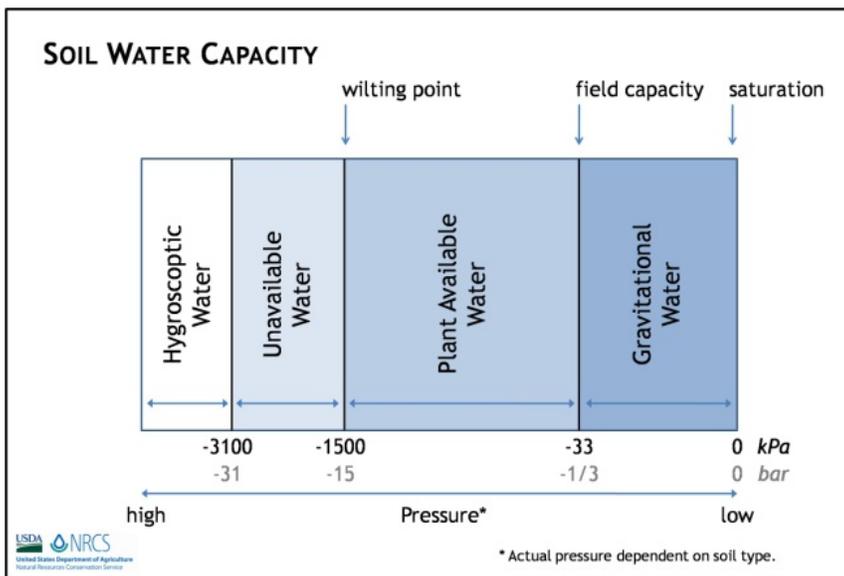
- a) SNOTEL Current Snow Water Equivalent (SWE) % of Normal
- b) SNOTEL Water Year to Date Precipitation
- c) Bear River Basin
  - Water Availability Index
- d) Weber and Ogden River Basins
  - Water Availability Index
- e) Utah Lake, Jordan River, and Tooele Valley Basins
  - Water Availability Index
- f) Uintah Basin
  - Water Availability Index
- g) Southeast River Basins
  - Water Availability Index
- h) Sevier and Beaver River Basins
  - Water Availability Index
- i) E. Garfield, Kane, Washington, and Iron Co.
  - Water Availability Index

# Climate and Water Information

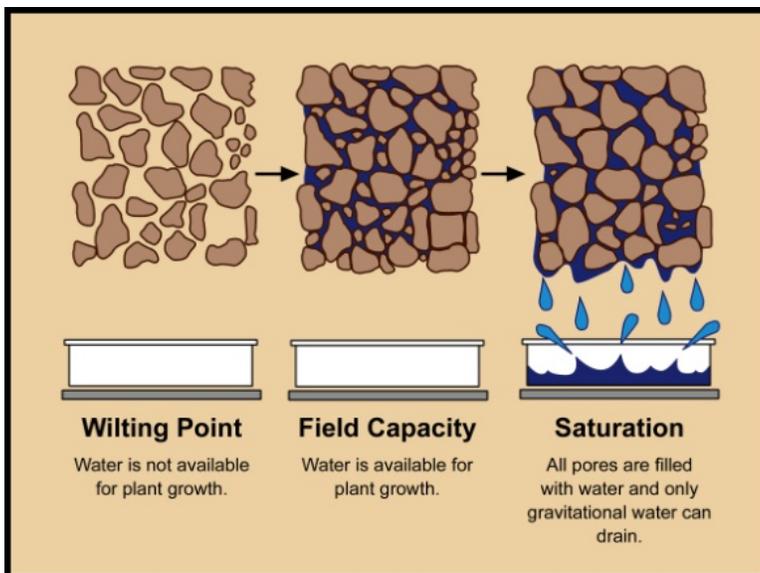
## Soil Climate Analysis Network

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.**

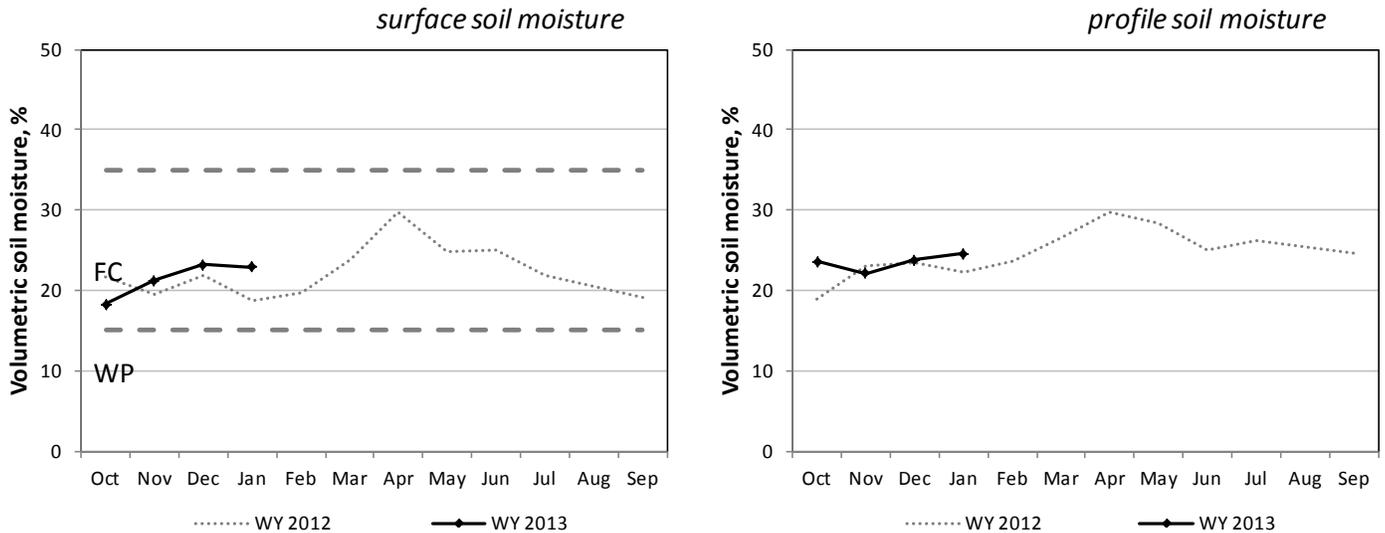
# North Central

## 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"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>°F</i>				
<b>NORTH CENTRAL</b>												
Blue Creek	2.9	0.0	27	26	19	21	16	33	34	35	38	43
Cache Junction	5.2	0.0	15	16	35	35	29	24	26	31	38	43
Grantsville	2.8	0.0	14	21	24	25	26	33	35	38	44	

\* 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.**

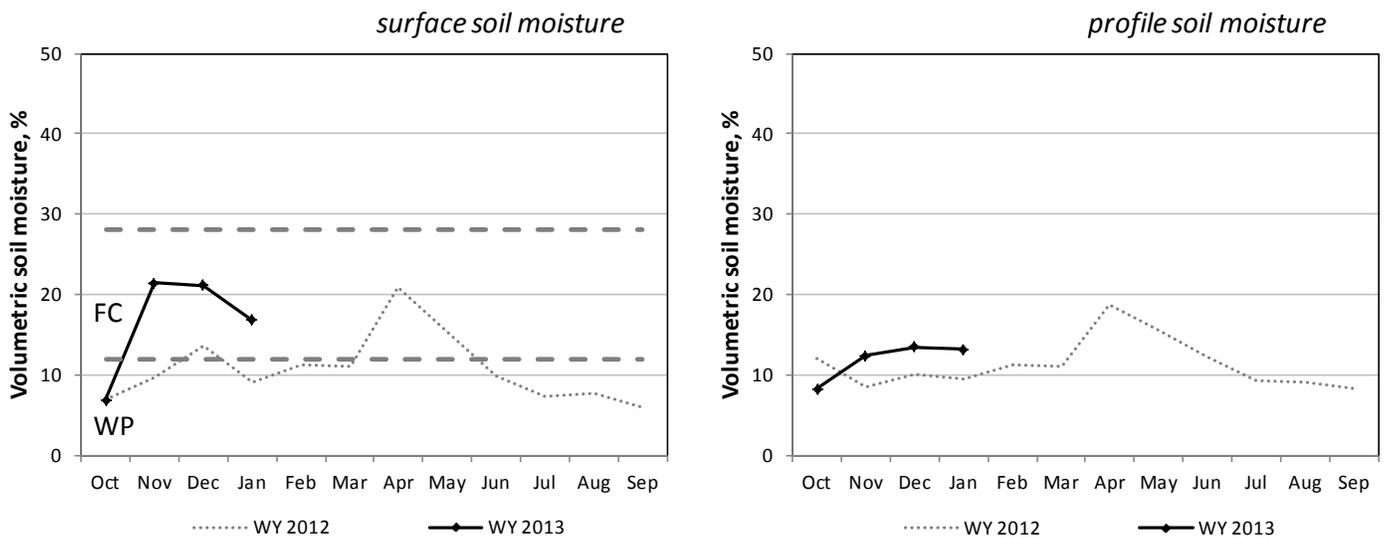
# Northern Mountains

## 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"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>°F</i>				
<b>NORTHERN MOUNTAINS</b>												
Chicken Ridge	4.5	0.0	10	17	20	18	11	32	32	33	35	38
Buffalo Jump	3.8	0.0	7	10	12	8	-	28	29	31	35	-
Morgan	6.6	0.0	20	24	25	14	9	33	33	34	35	37

\* 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* 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.**

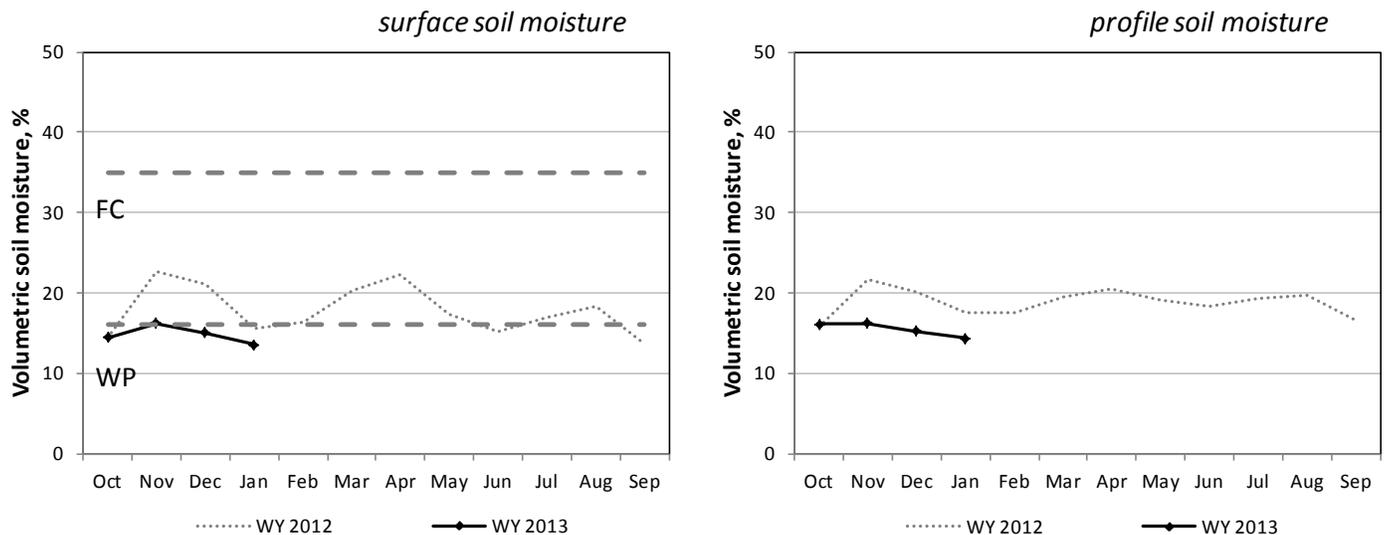
# Uintah Basin

## 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"
		<i>in.</i>	<i>volume %</i>					<i>°F</i>				
<b>UINTAH BASIN</b>												
Mountain Home	1.8	0.0	14	17	20	17	9	30	32	33	36	40
Little Red Fox	1.0	0.0	2	10	15	20	21	16	31	32	35	40
Split Mountain	1.7	0.0	8	17	13	11	10	28	29	31	35	41

\* 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.**

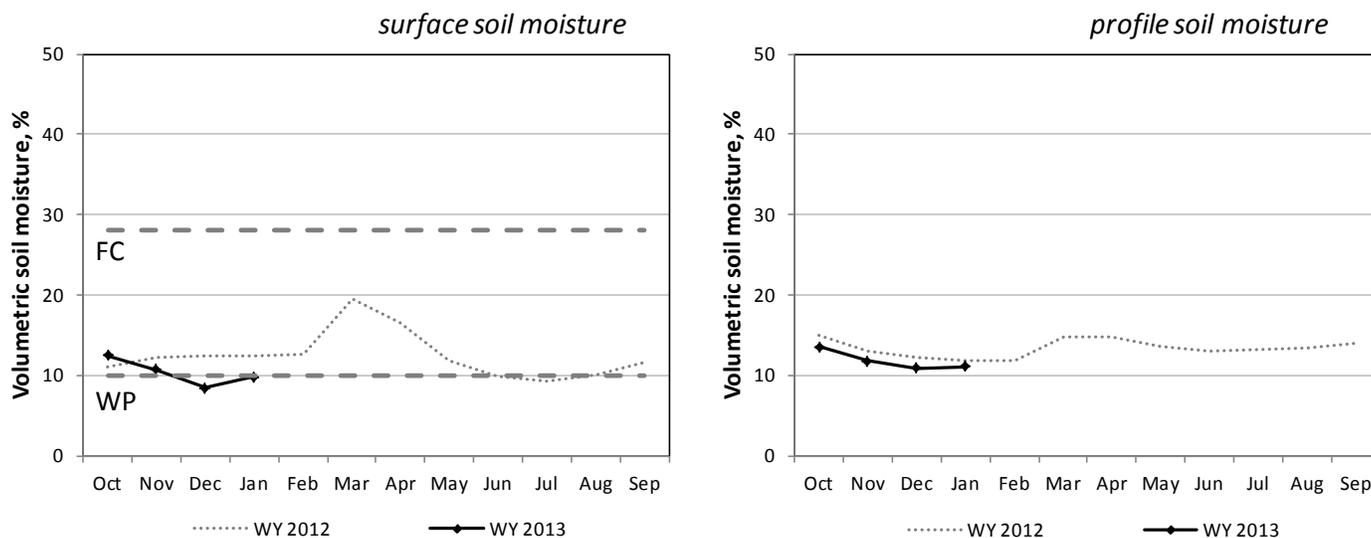
# Southeast

## 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"
		<i>in.</i>	<i>volume %</i>					<i>°F</i>				
<b>SOUTHEAST</b>												
Price	1.6	0.0	3	6	10	13	18	27	28	30	36	41
Green River	0.7	0.0	5	6	5	3	7	24	25	27	32	41
Harm's Way	1.0	0.0	4	1	11	12	5	34	33	36	38	43
West Summit	0.8	0.0	8	12	11	13	16	30	31	33	34	39
Eastland	1.1	0.0	7	8	7	20	19	34	34	35	38	42
Alkali Mesa	1.2	0.0	7	16	13	16	12	32	32	33	38	42
McCracken Mesa	1.4	0.0	14	16	20	14	11	30	31	32	39	46

\* 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* 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.

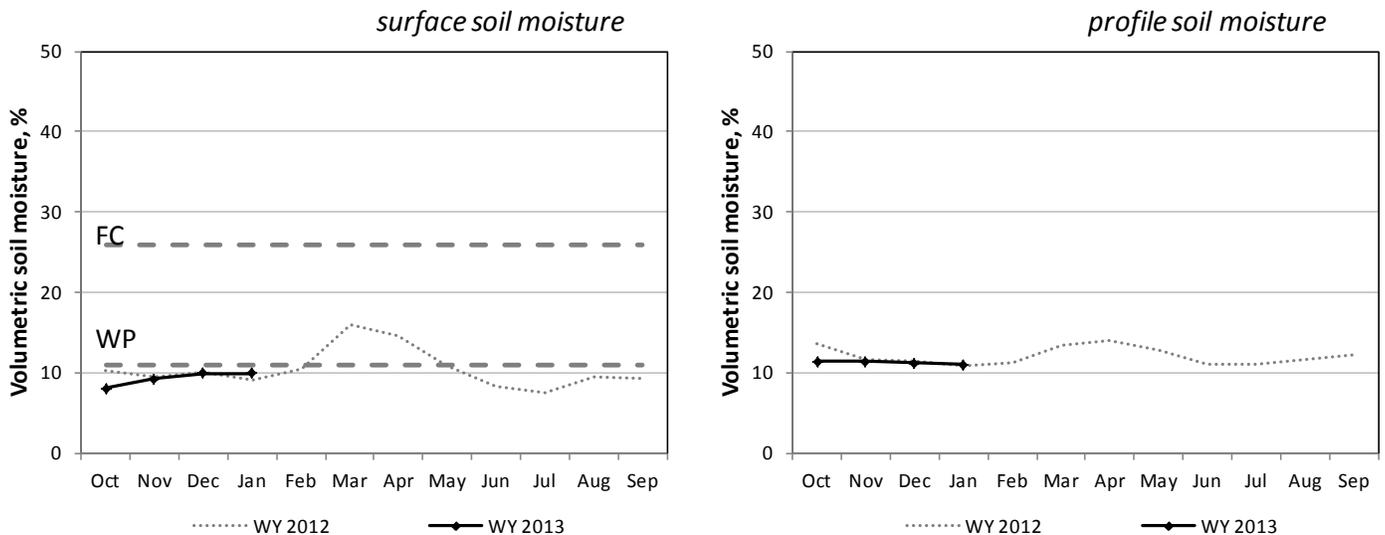
# South Central

## Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>° F</i>				
<b>SOUTH CENTRAL</b>												
Nephi	2.9	0.0	24	26	21	7	0	34	34	35	39	44
Ephraim	2.3	0.0	15	17	20	17	33	34	35	36	39	43
Holden	2.8	0.0	7	9	6	12	12	32	33	34	37	44
Milford	2.1	0.0	17	21	16	25	16	32	33	36	41	47
Manderfield	3.1	0.0	7	15	11	10	4	32	33	34	38	42
Circleville	0.7	0.0	5	3	4	7	8	24	24	28	37	
Panguitch	1.2	0.0	3	14	11	18	29	26	27	29	35	42
Cave Valley	5.5	0.0	0	8	7	6	7	33	33	34	36	39
Vermillion	2.2	0.0	1	5	2	2	7	30	33	35	37	41
Spooky	1.4	0.0	0	1	1	10	0	26	26	28	36	42

\* 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.

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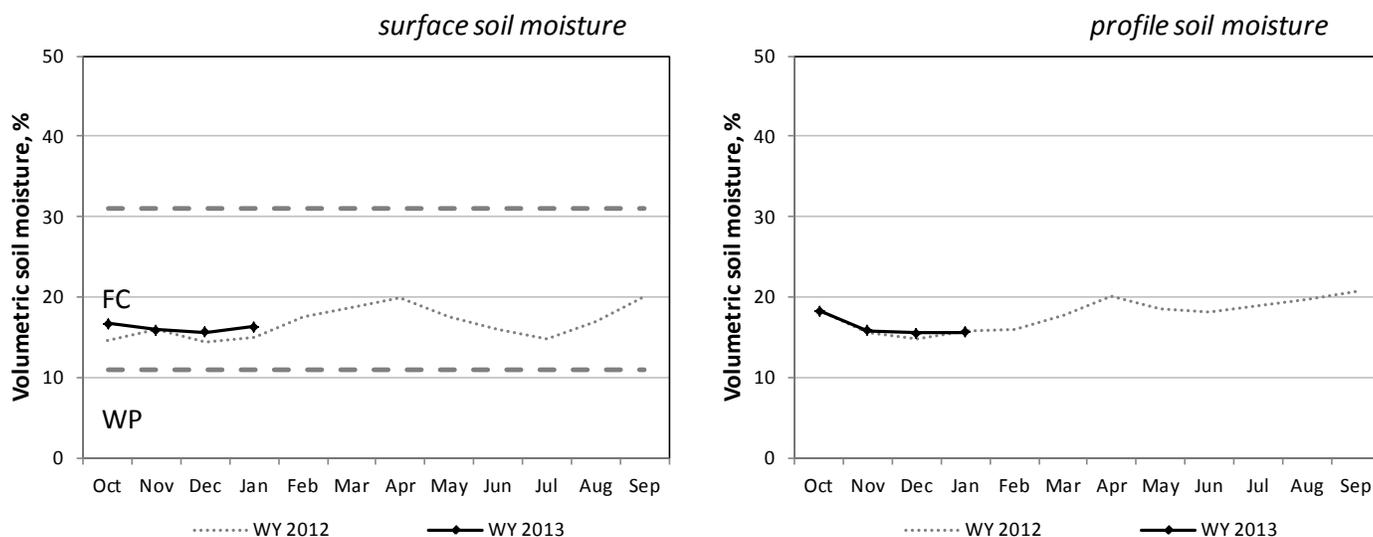
## Western and Dixie

### 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"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>°F</i>				
<b>WESTERN</b>												
Grouse Creek	2.9	0.0	5	17	11	14	15	32	32	35	37	41
Park Valley	1.9	0.0	1	5	13	23	24	28	27	31	37	43
Goshute	2.1	0.0	14	24	20	26	23	31	31	33	35	42
Dugway	2.0	0.0	25	35	33		11	31	32	34	39	41
Tule Valley	1.9	0.0	20	21	20	24	8	32	33	35	37	42
Hal's Canyon	0.7	0.0					8	23	27	32	39	45
Enterprise	2.2	0.0	6	29	21	13	14	28	31	32	37	45
<b>DIXIE</b>												
Sand Hollow	2.2	0.0	3	5	6	7	0	30	33	35	38	47

\* 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.

# Utah Hydrologic Summary

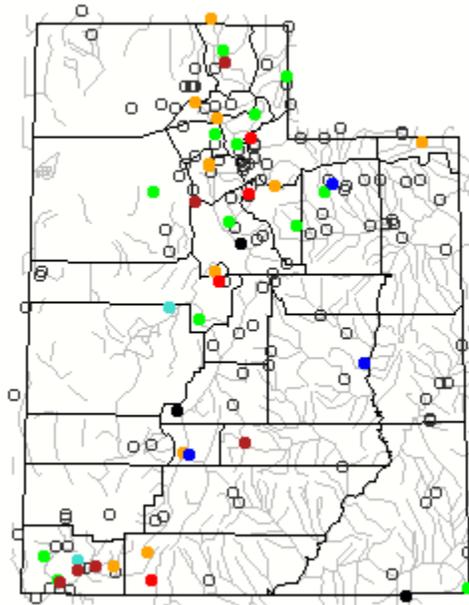
January 1, 2013

## Current Conditions

Soil moisture values across the state are near normal except for the southeast where they are very low. Precipitation across the state was above average for December (123%) which brings seasonal precipitation (Oct-Dec) to 96%. Snowpack across the state is near normal in the 90% to 120% of median range. Reservoir storage is much lower than last year at 64% of capacity compared to 84%. Overall, water supply conditions are near normal.

## Current Utah Streamflow - Courtesy US Geological Survey

Thursday, January 03, 2013 14:30ET



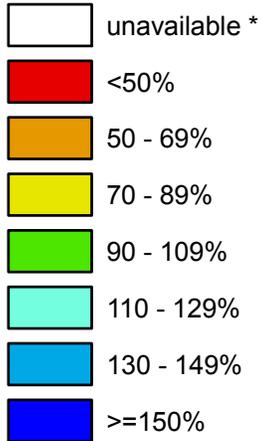
Explanation - Percentile classes						
						
<10	10-24	25-75	76-90	>90	High	Not ranked
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	

# Utah

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

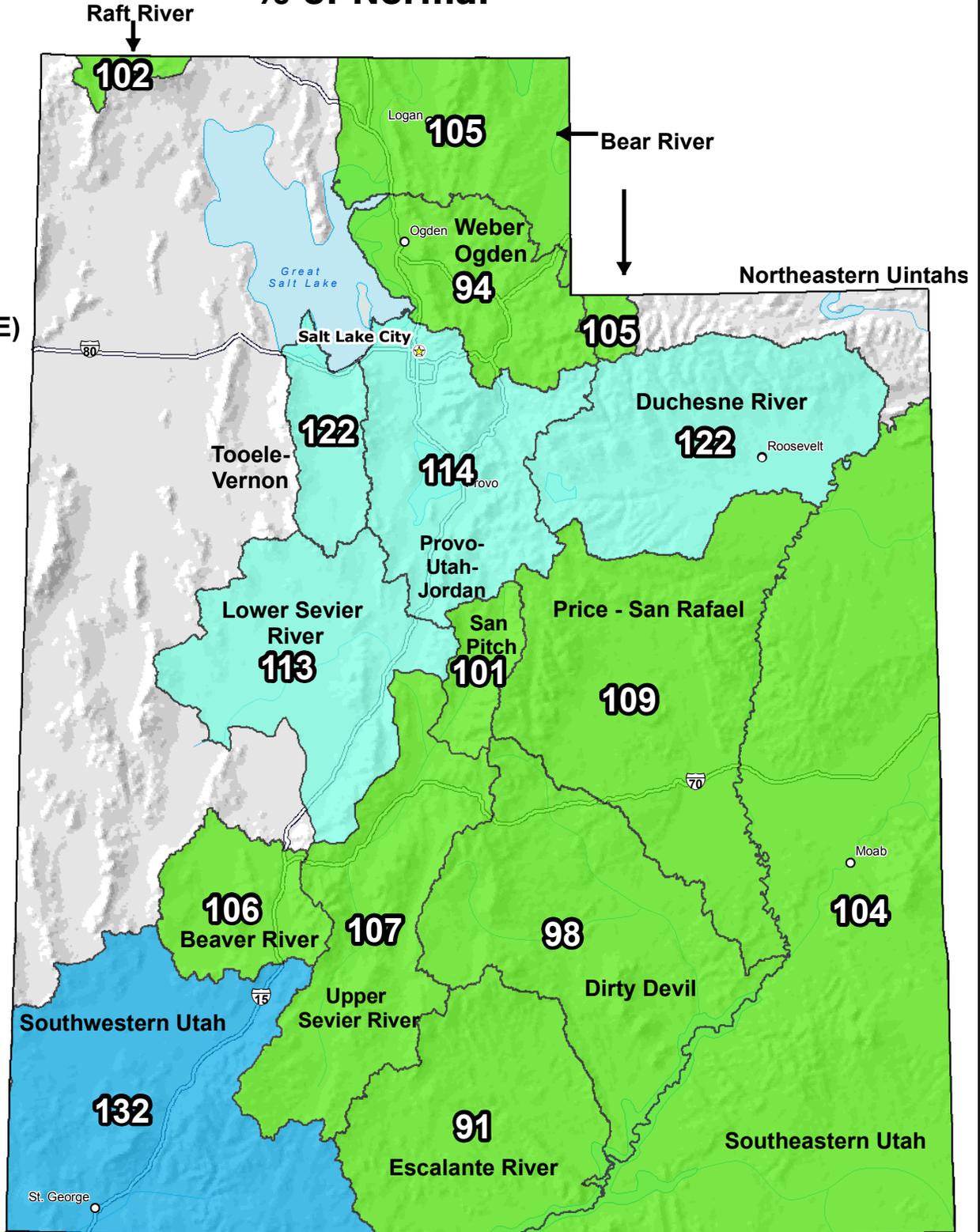
Jan 01, 2013

**Snow Water Equivalent (SWE)  
Basin-wide  
Percent of  
1981-2010  
Median**



\* 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).

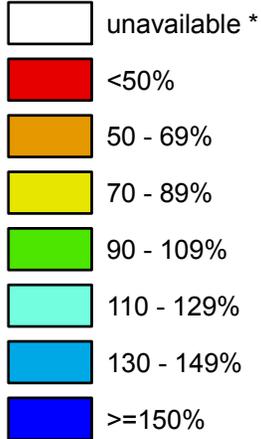
Prepared by the USDA/NRCS National Water and Climate Center  
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>  
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>  
Science contact: [Jim.Marron@por.usda.gov](mailto:Jim.Marron@por.usda.gov) 503 414 3047

# Utah

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

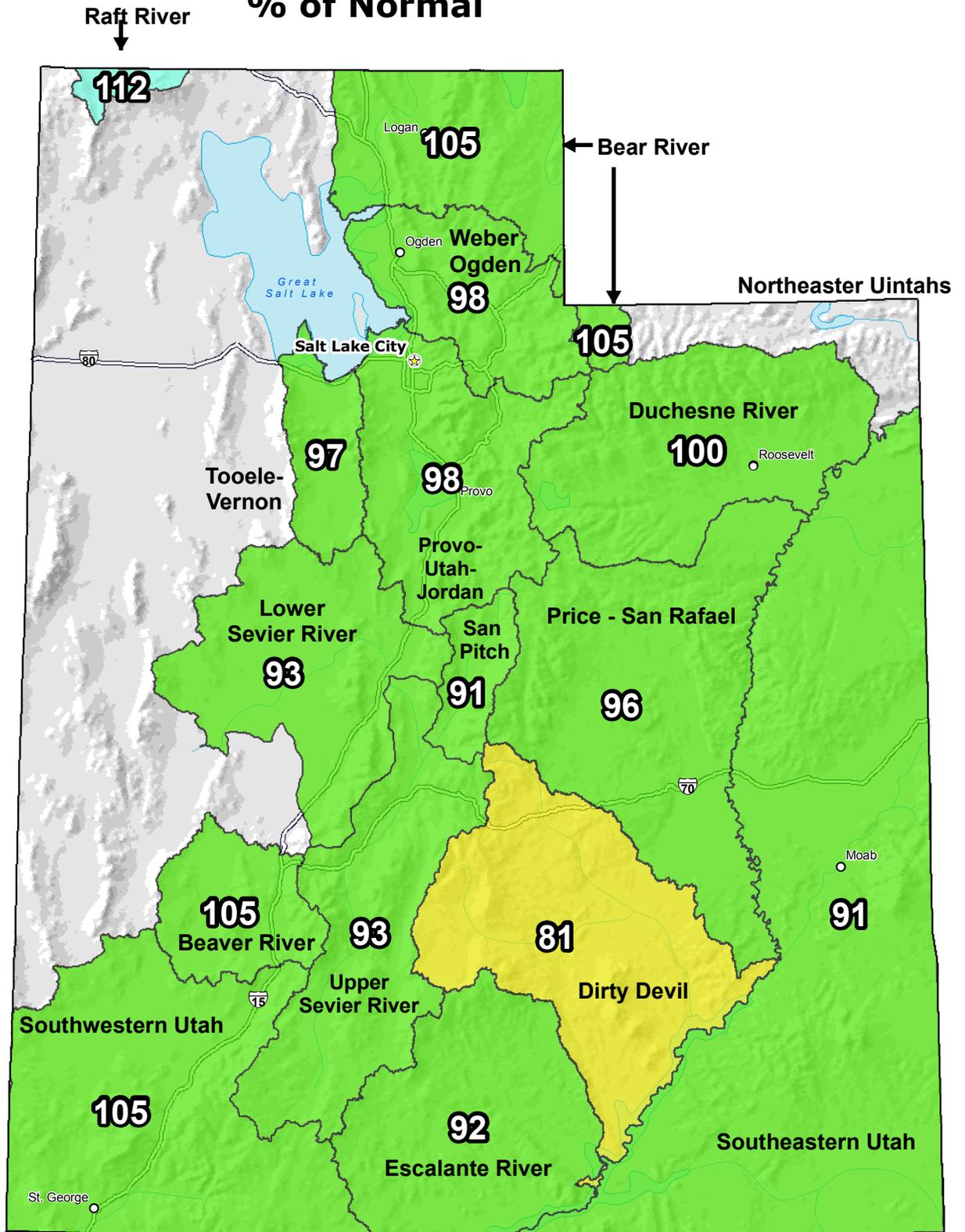
Jan 01, 2013

**Water Year  
(Oct 1) to Date  
Precipitation  
Basin-wide  
Percent of  
1981-2010  
Average**



\* 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).

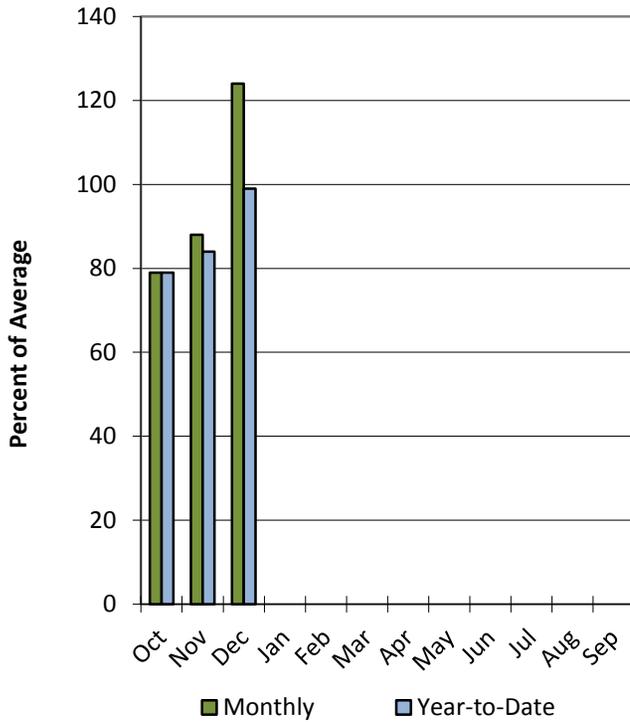
Prepared by the USDA/NRCS National Water and Climate Center  
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>  
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>  
Science contact: [Jim.Marron@por.usda.gov](mailto:Jim.Marron@por.usda.gov) 503 414 3047

# Statewide Utah

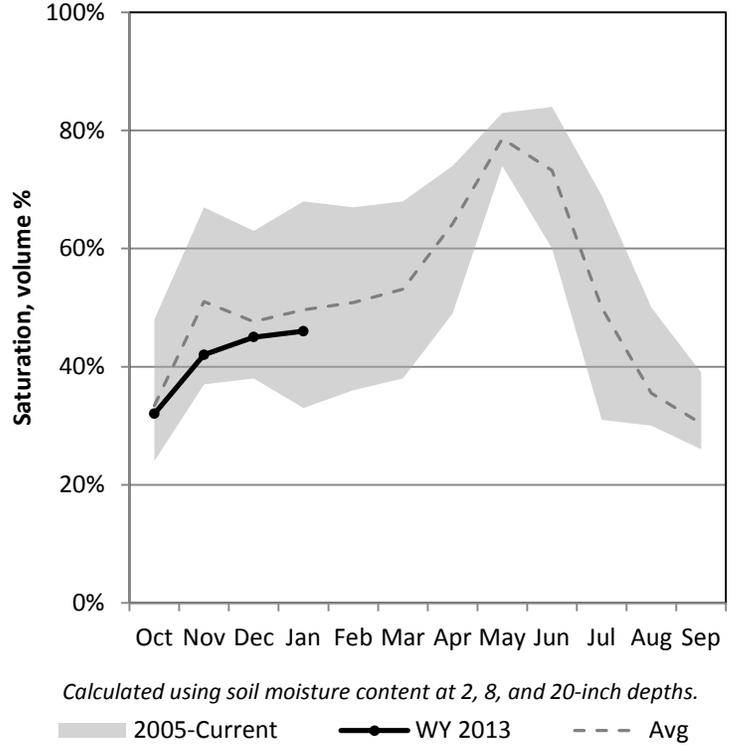
1/1/2013

Precipitation in December was above average at 124%, which brings the seasonal accumulation (Oct-Dec) to 99% of average. Soil Moisture is at 46% compared to 48% last year. Reservoir storage is at 64% of average, compared to 84% last year.

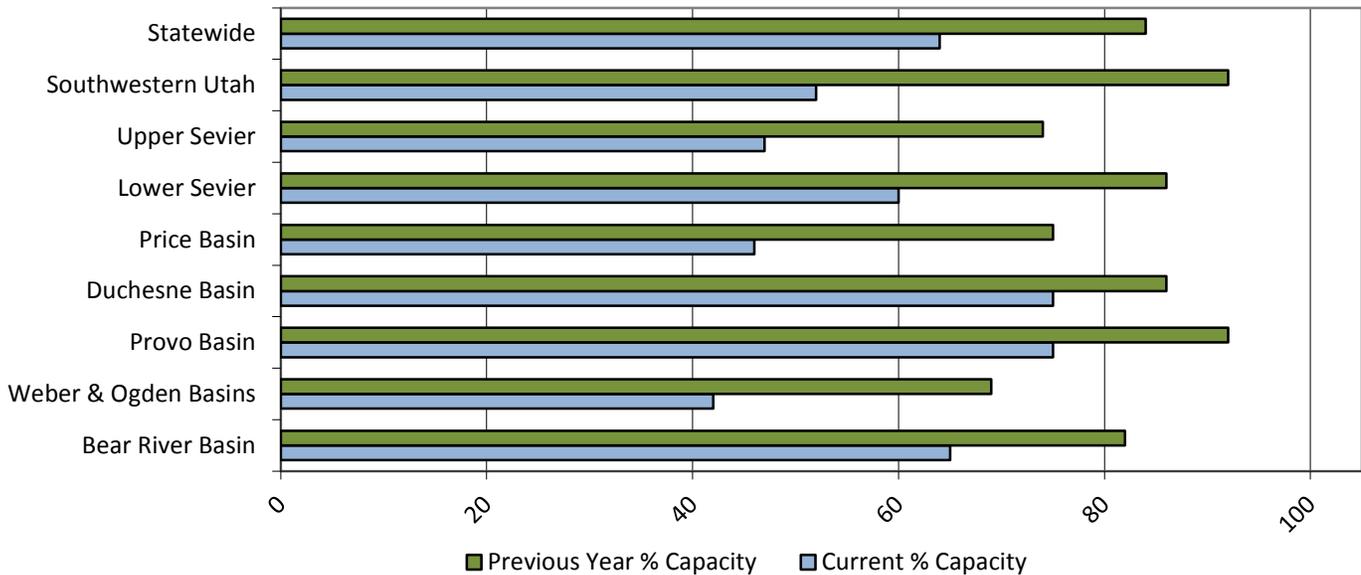
## Precipitation



## Soil Moisture



## Reservoir Storage

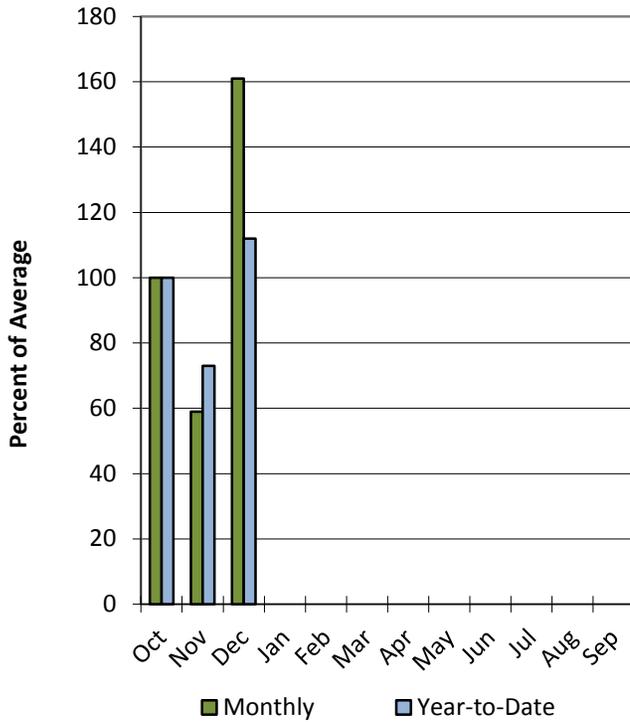


# Raft River Basin

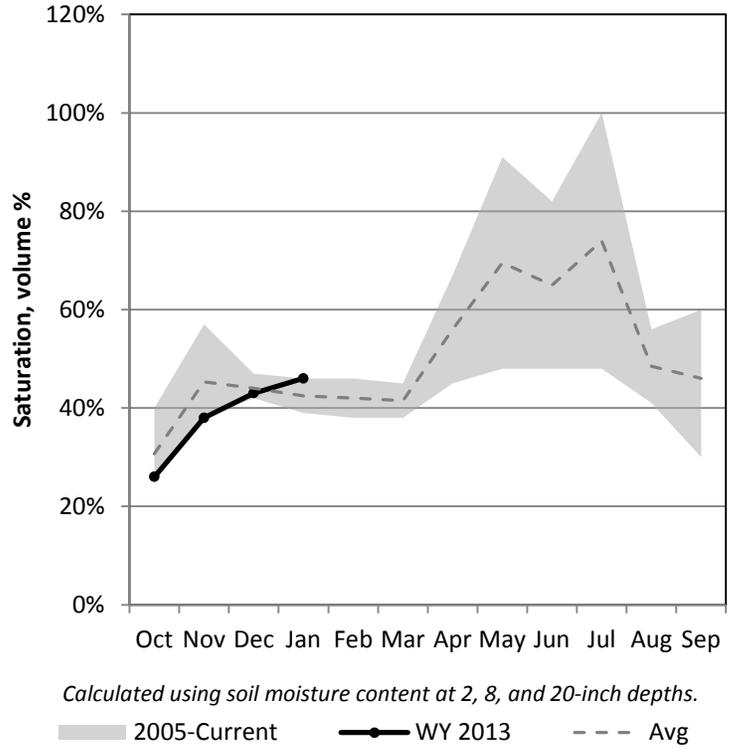
1/1/2013

Precipitation in December was much above average at 161%, which brings the seasonal accumulation (Oct-Dec) to 112% of average. Soil Moisture is at 46% compared to 39% last year.

## Precipitation



## Soil Moisture

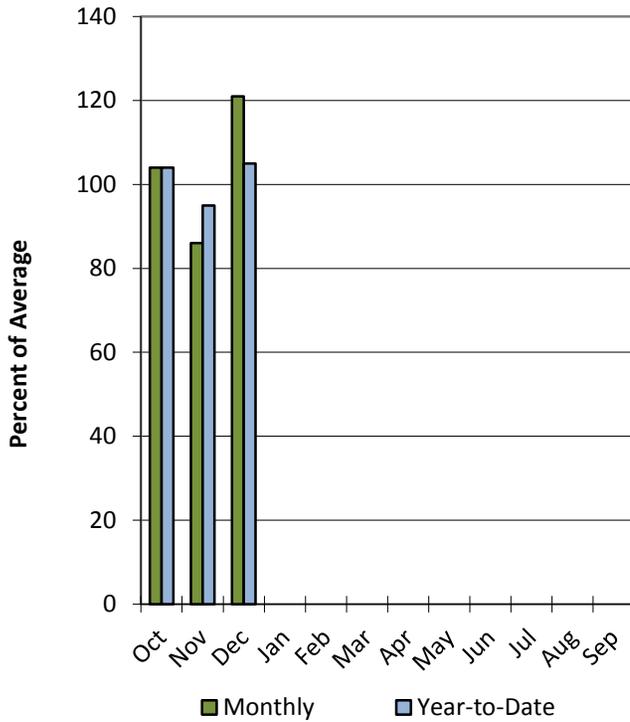


# Bear River Basin

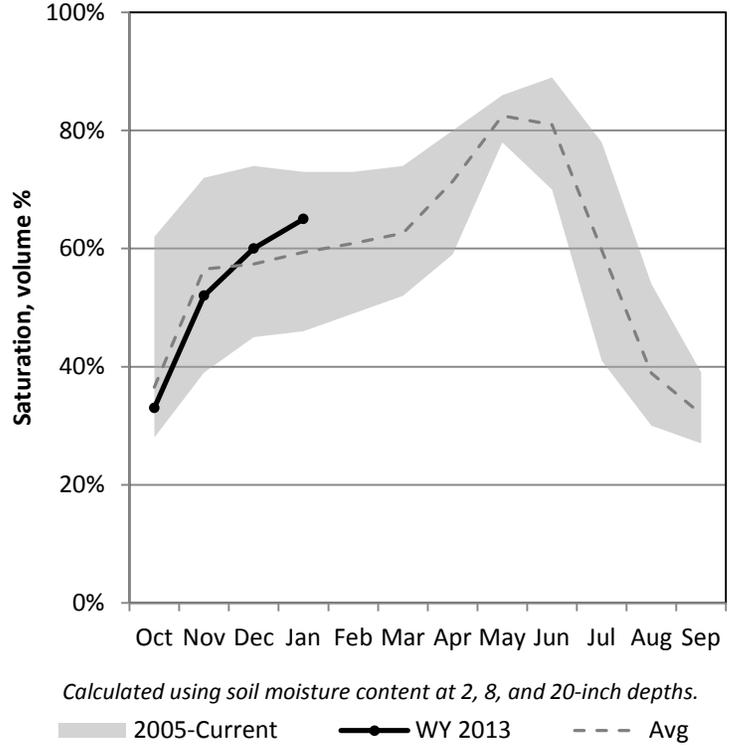
1/1/2013

Precipitation in December was above average at 121%, which brings the seasonal accumulation (Oct-Dec) to 105% of average. Soil Moisture is at 65% compared to 52% last year. Reservoir storage is at 65% of average, compared to 82% last year.

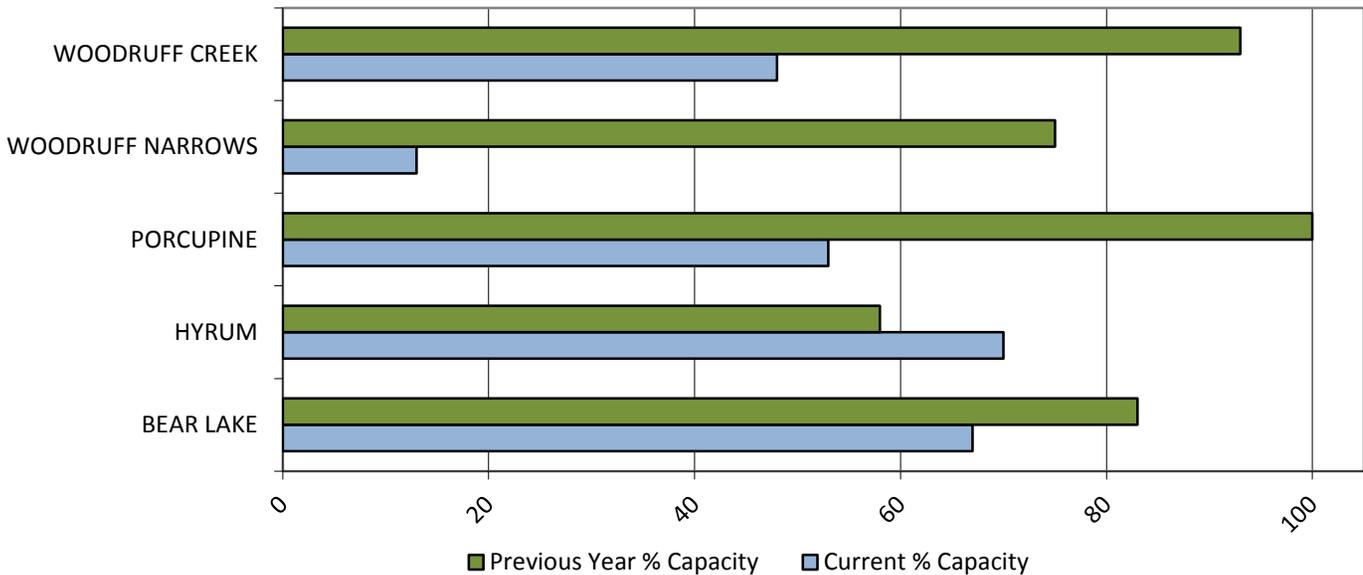
## Precipitation



## Soil Moisture



## Reservoir Storage

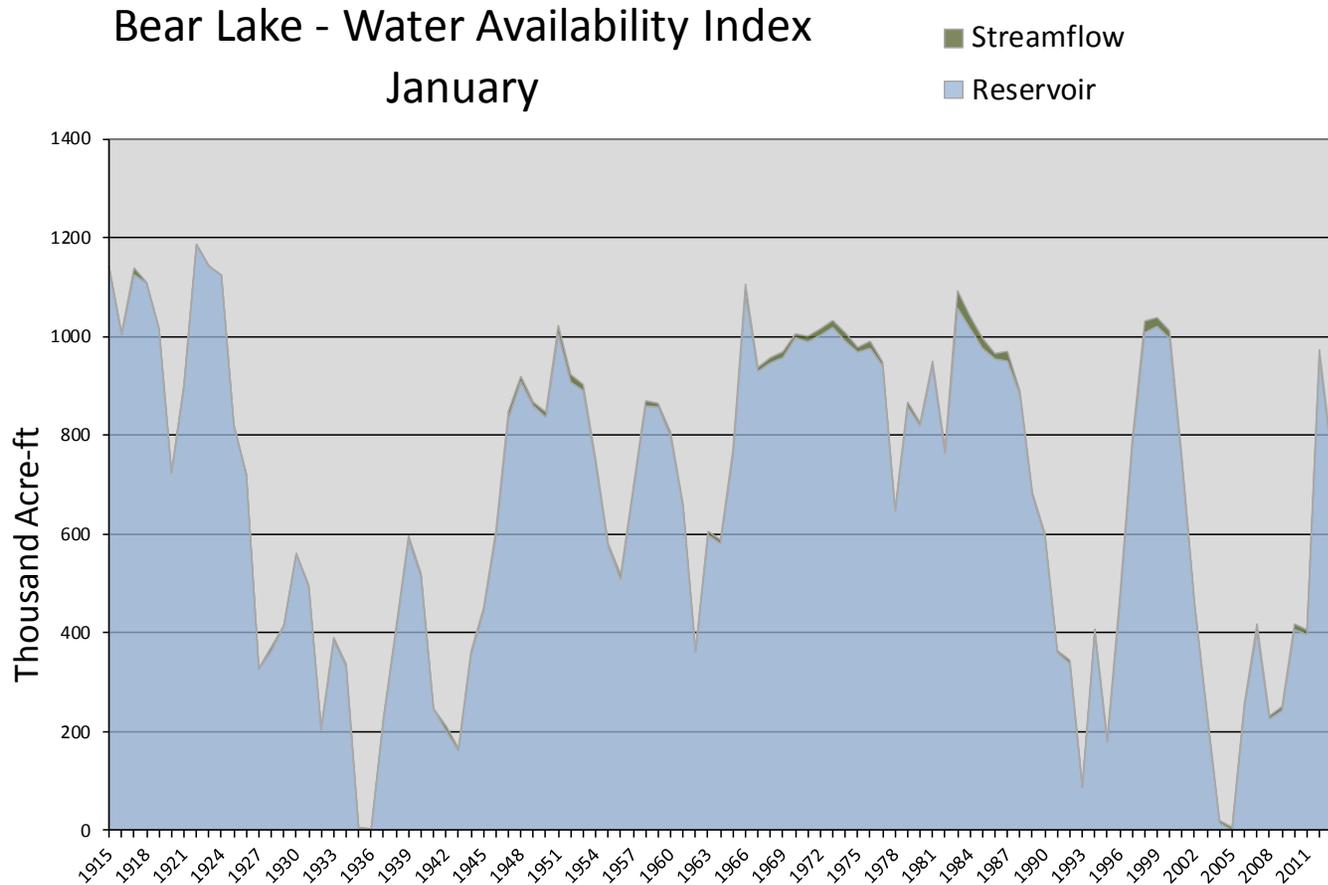


January 1, 2013

## Water Availability Index

Basin or Region	December EOM* Bear Lake	December accumulated inflow to Bear Lake ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Bear River</b>	<b>756</b>	<b>10</b>	<b>766</b>	<b>0.08</b>	<b>51</b>	<b>01, 54, 65, 82</b>

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

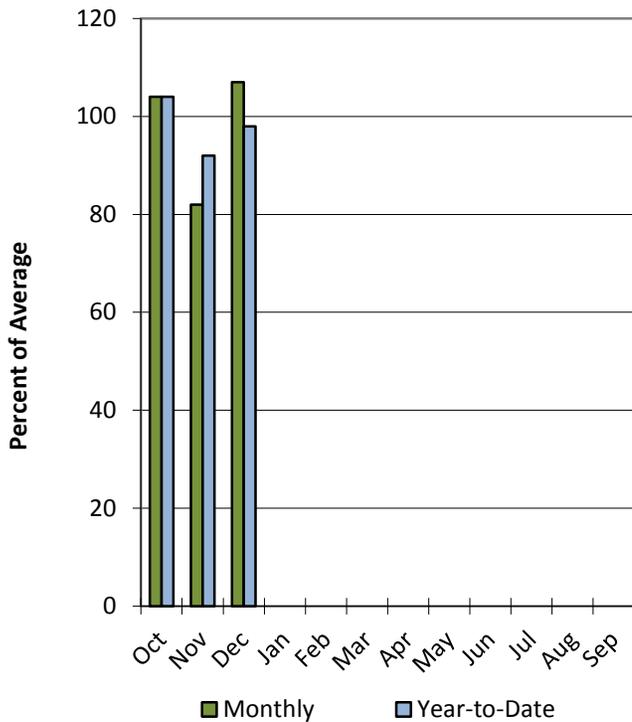


# Weber & Ogden River Basins

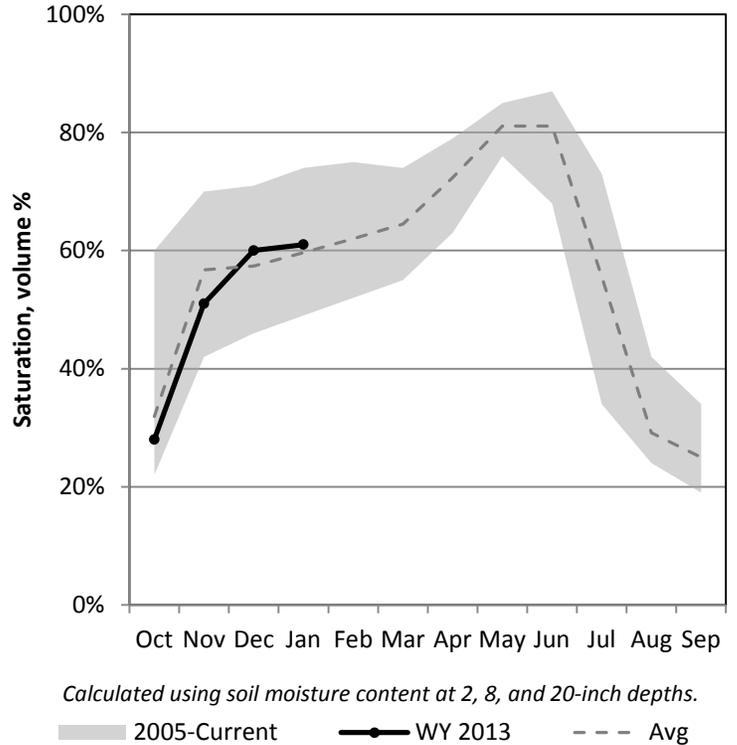
1/1/2013

Precipitation in December was near average at 107%, which brings the seasonal accumulation (Oct-Dec) to 98% of average. Soil Moisture is at 61% compared to 53% last year. Reservoir storage is at 42% of average, compared to 69% last year.

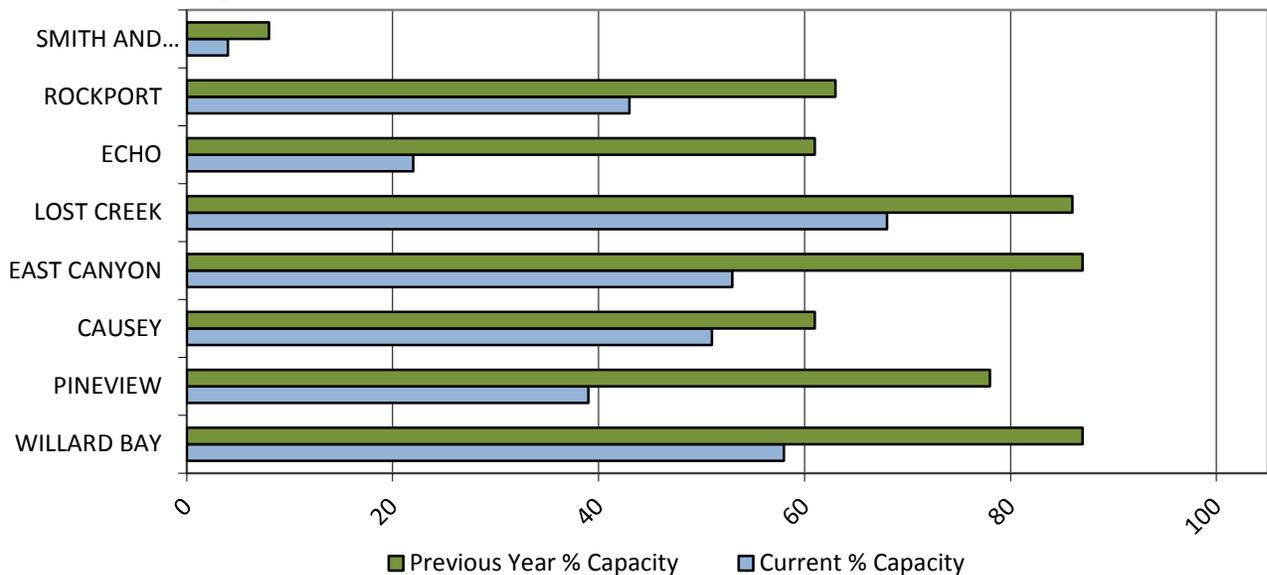
## Precipitation



## Soil Moisture



## Reservoir Storage



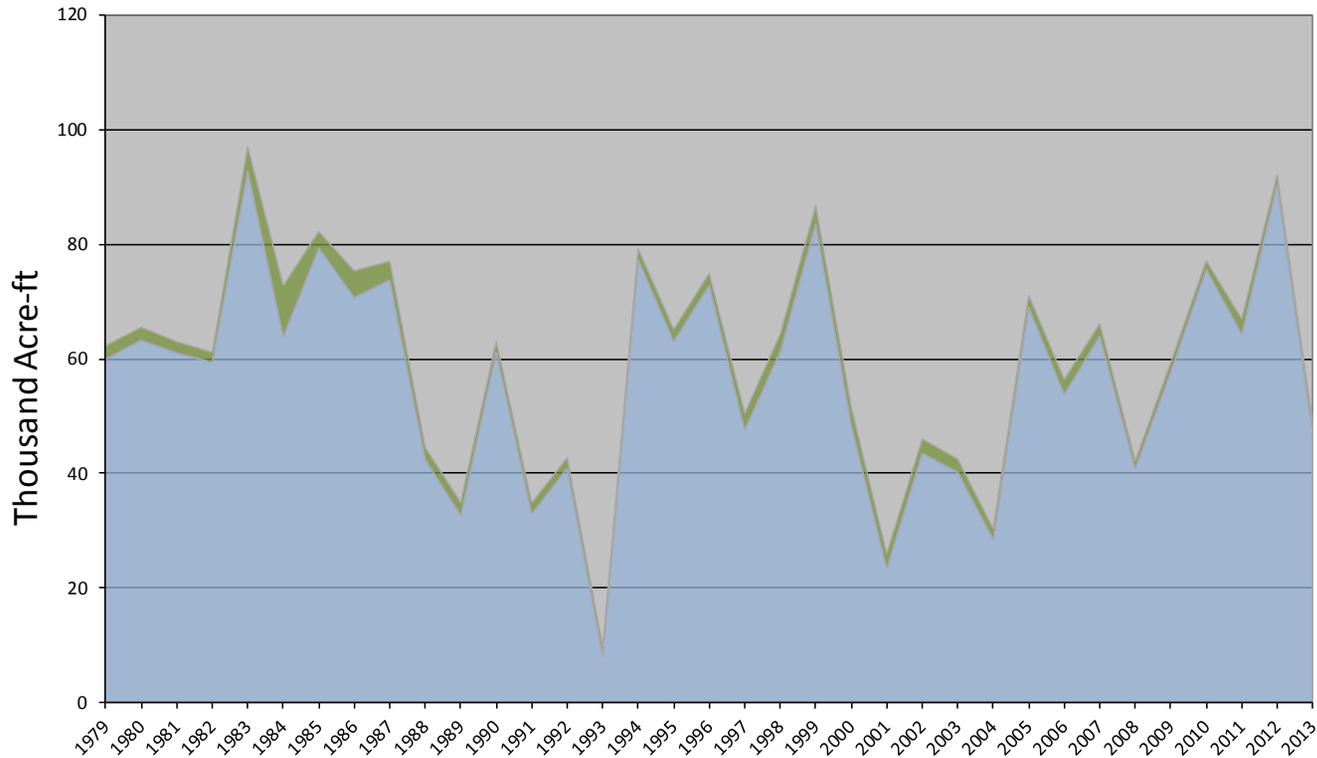
January 1, 2013

## Water Availability Index

Basin or Region	December EOM* Pine View & Causey	December accumulated flow at South Fork Ogden ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Ogden River</b>	<b>47</b>	<b>2</b>	<b>49</b>	<b>-1.62</b>	<b>31</b>	<b>88, 02, 97, 00</b>

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

Ogden River - Water Availability Index  
January

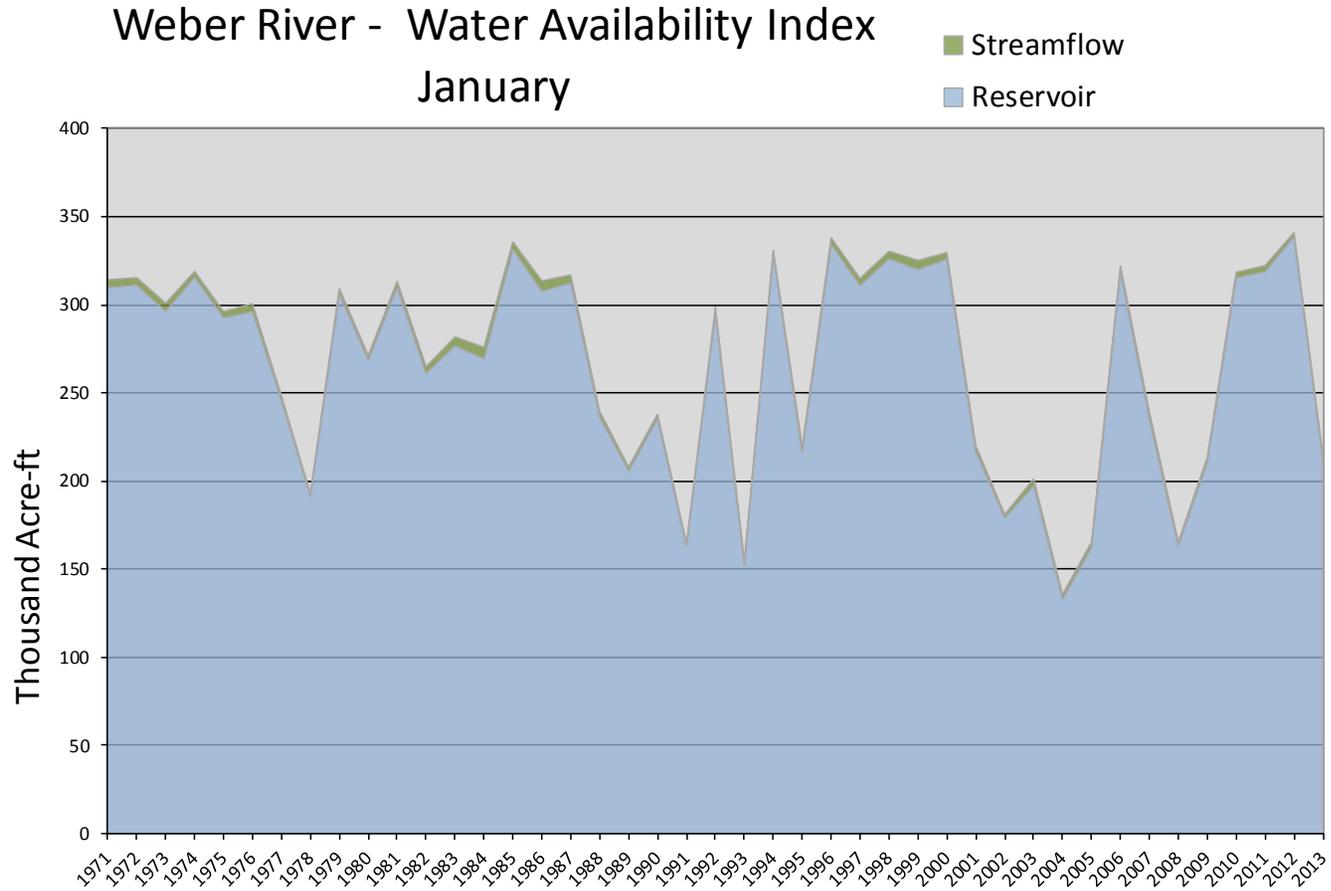


January 1, 2013

## Water Availability Index

Basin or Region	December EOM* Reservoirs	December accumulated flow at Weber near Oakley (observed)	Reservoirs + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Weber River</b>	<b>211</b>	<b>3</b>	<b>214</b>	<b>-2.08</b>	<b>25</b>	<b>89, 09, 95, 01</b>

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

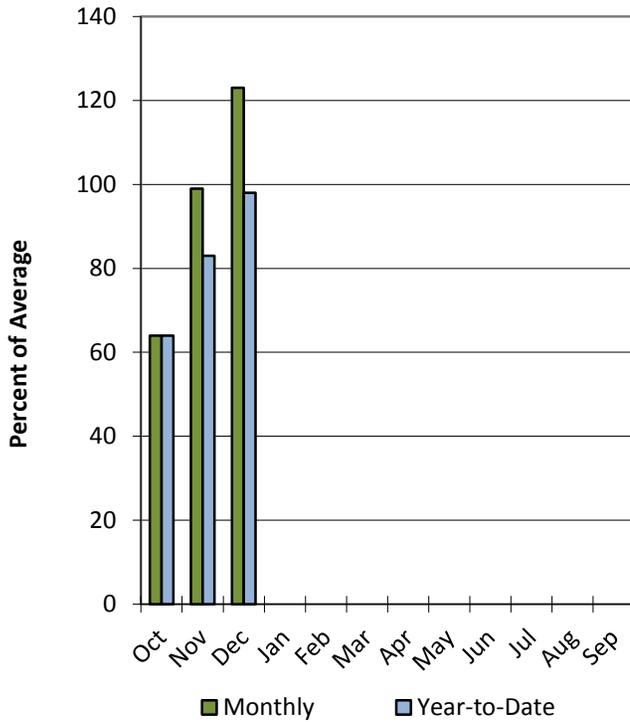


# Provo & Jordan River Basins

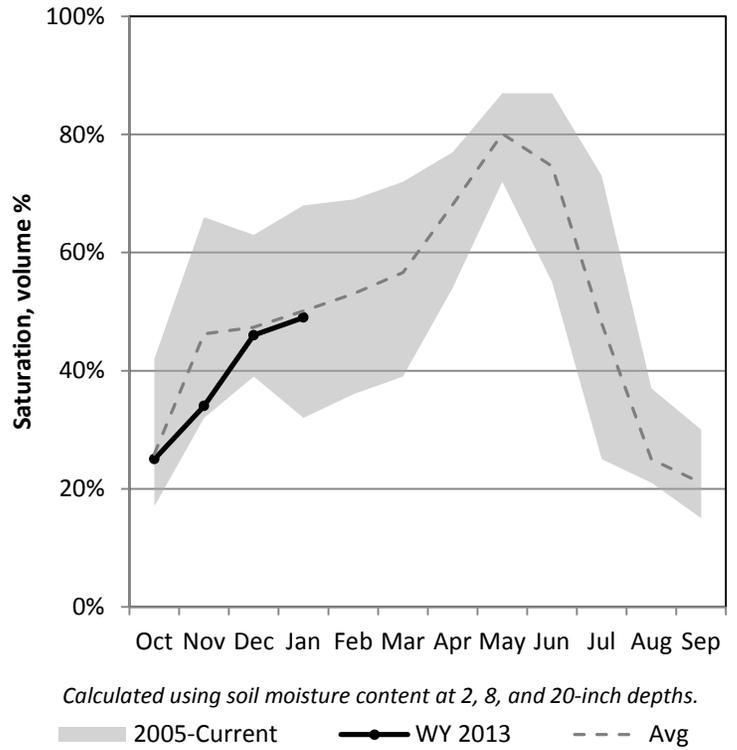
1/1/2013

Precipitation in December was above average at 123%, which brings the seasonal accumulation (Oct-Dec) to 98% of average. Soil Moisture is at 49% compared to 39% last year. Reservoir storage is at 75% of average, compared to 92% last year.

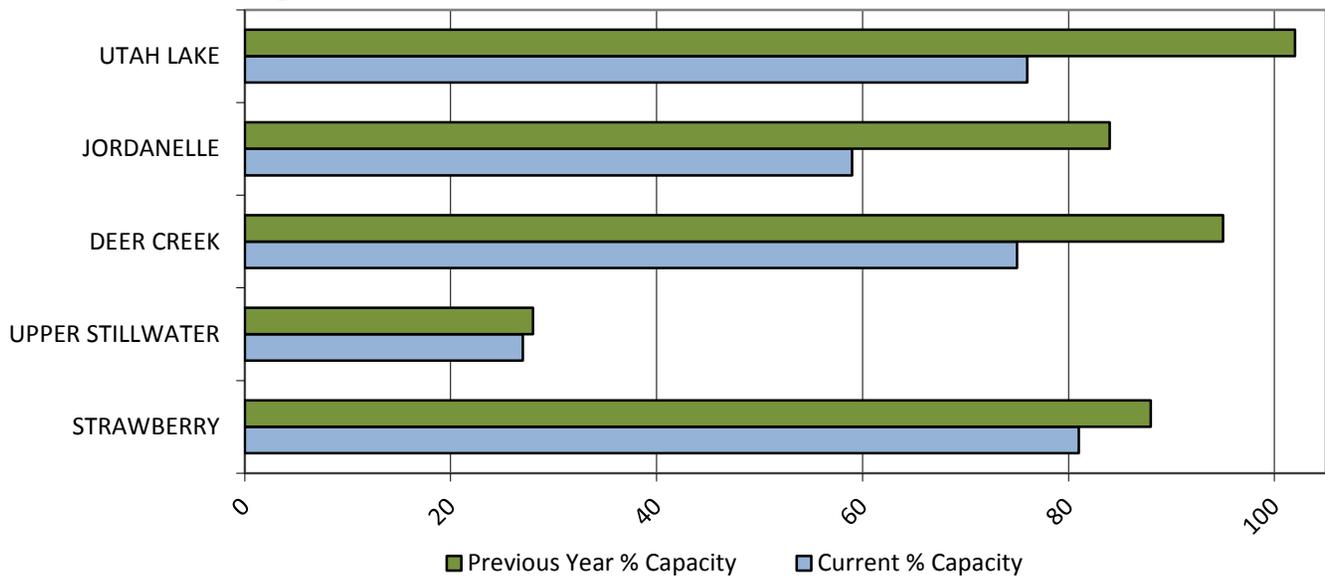
## Precipitation



## Soil Moisture

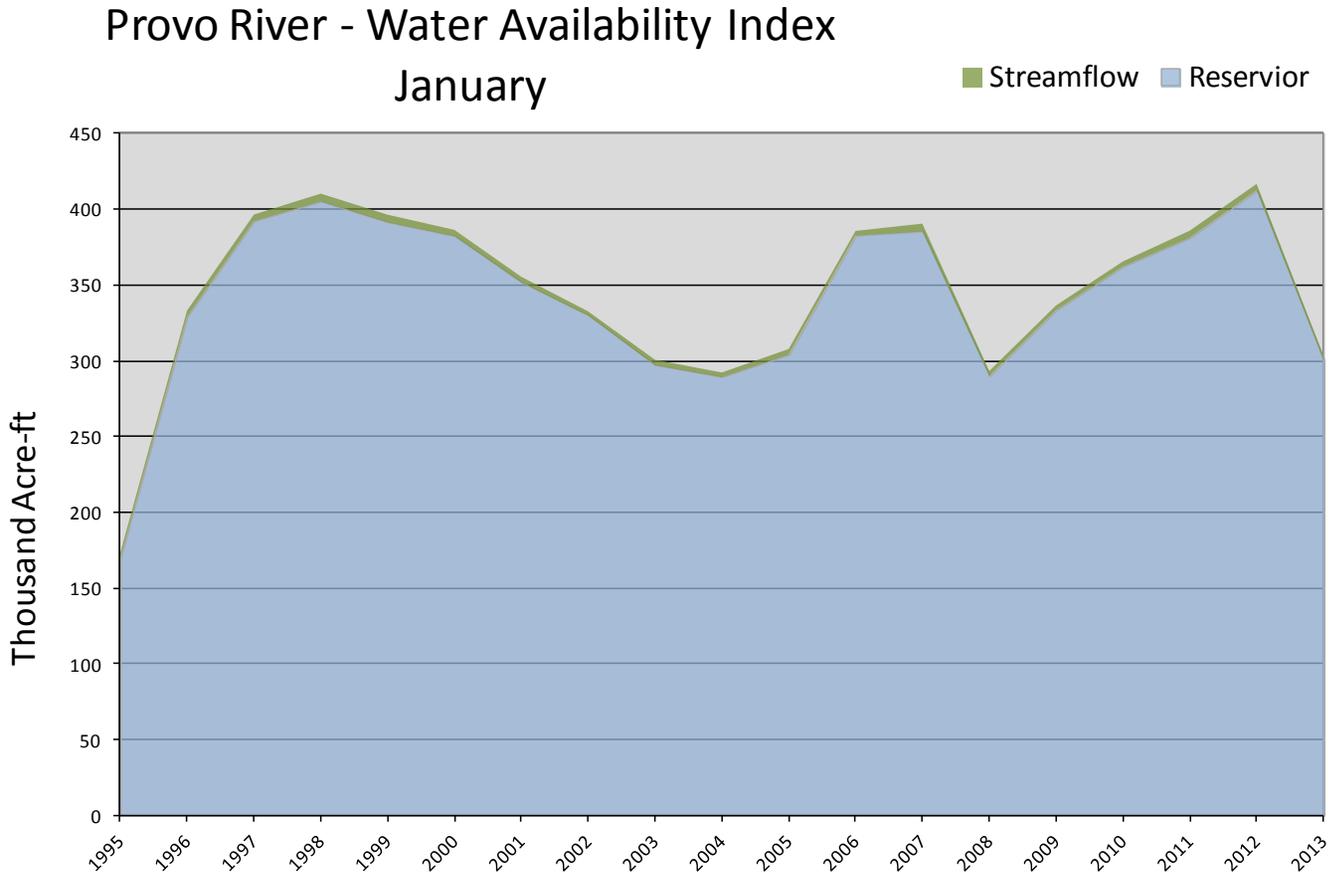


## Reservoir Storage



January 1, 2013	Water Availability Index					
Basin or Region	December EOM* Deer Creek, Jordanelle	December 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>301</b>	<b>2.9</b>	<b>304</b>	<b>-2.50</b>	<b>20%</b>	<b>02,05,03,08</b>

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

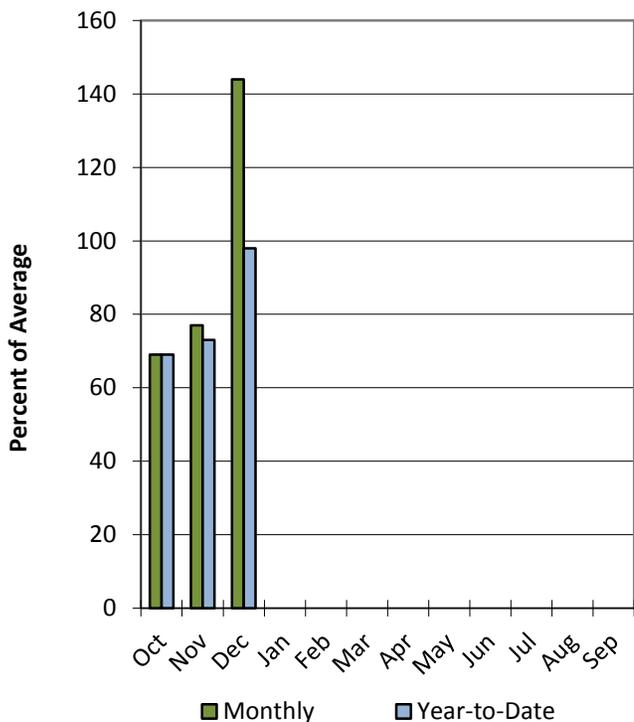


# Tooele Valley and Vernon Creek Basins

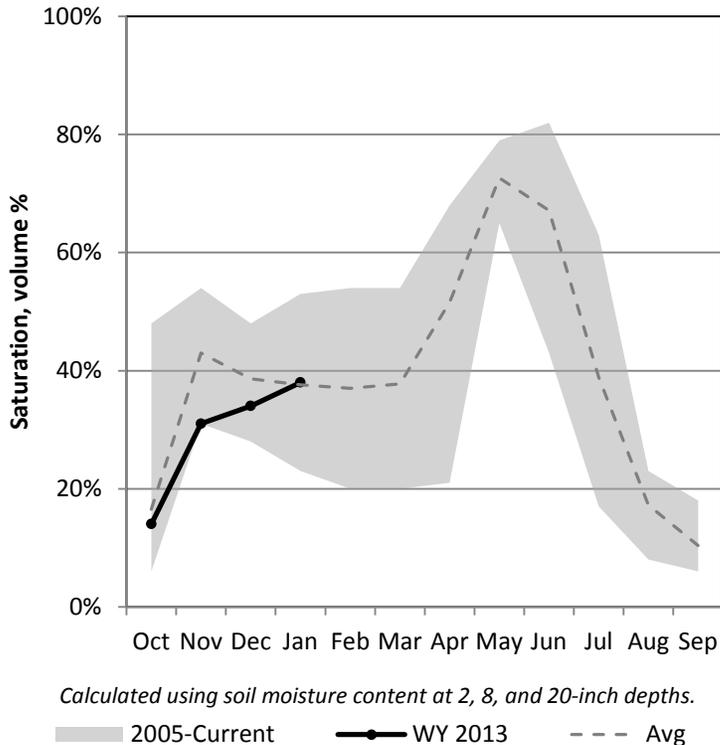
1/1/2013

Precipitation in December was much above average at 144%, which brings the seasonal accumulation (Oct-Dec) to 98% of average. Soil Moisture is at 38% compared to 32% last year. Reservoir storage is at 27% of average, compared to 80% last year.

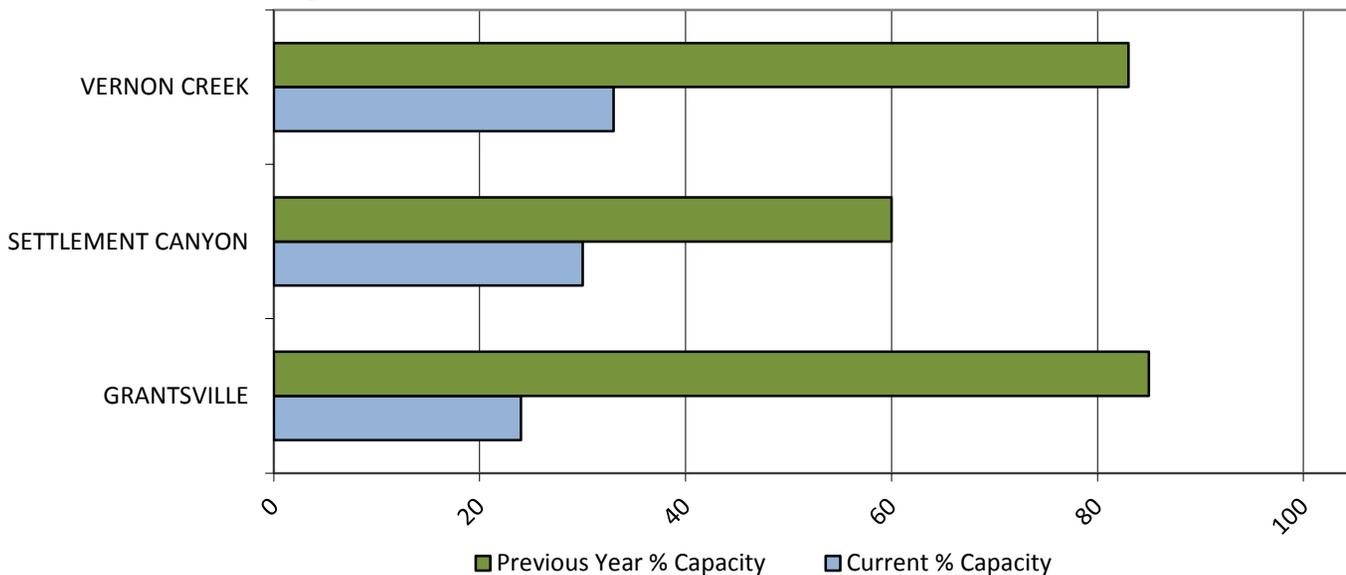
## Precipitation



## Soil Moisture



## Reservoir Storage

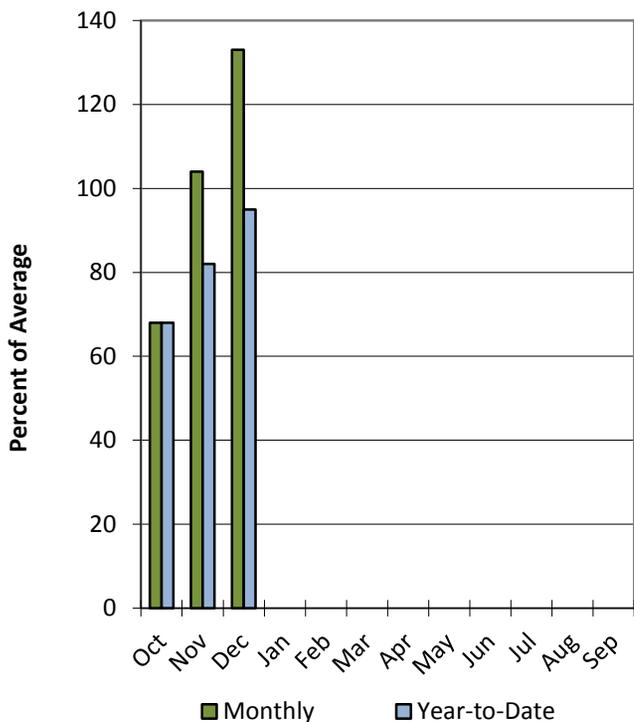


# Northeastern Uintah Basin

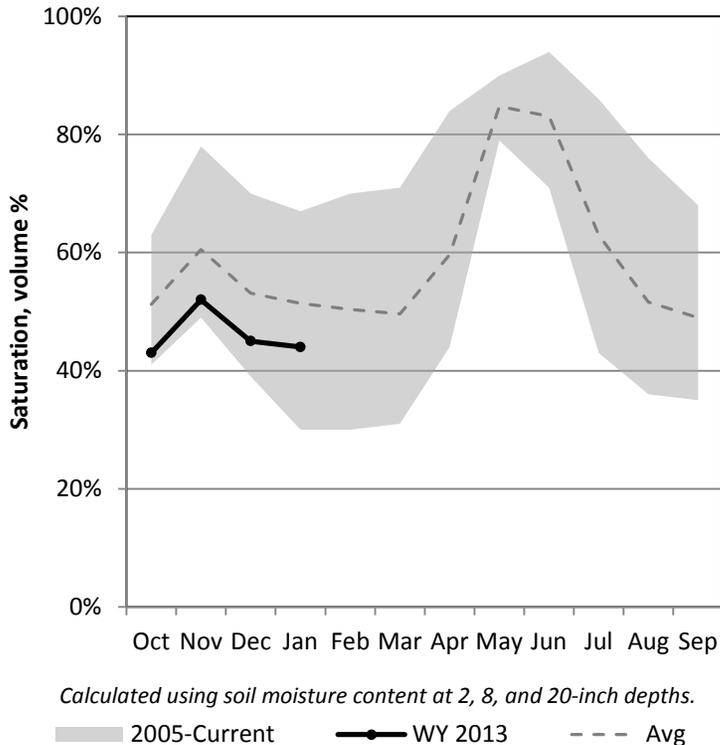
1/1/2013

Precipitation in December was much above average at 133%, which brings the seasonal accumulation (Oct-Dec) to 95% of average. Soil Moisture is at 44% compared to 64% last year. Reservoir storage is at 79% of average, compared to 90% last year.

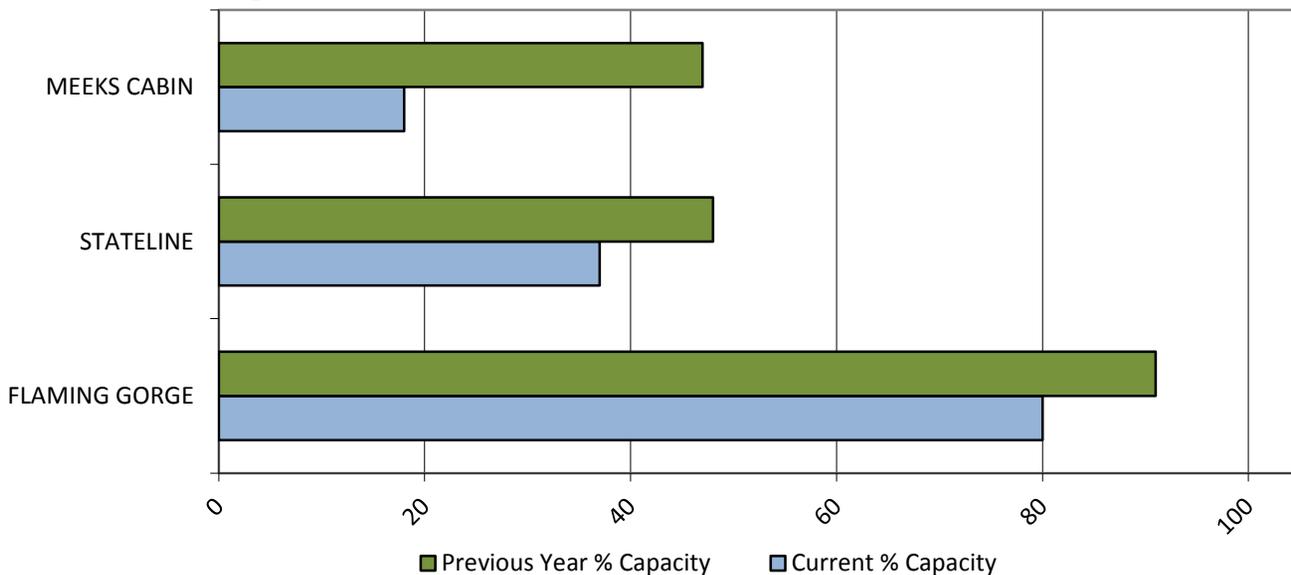
## Precipitation



## Soil Moisture



## Reservoir Storage

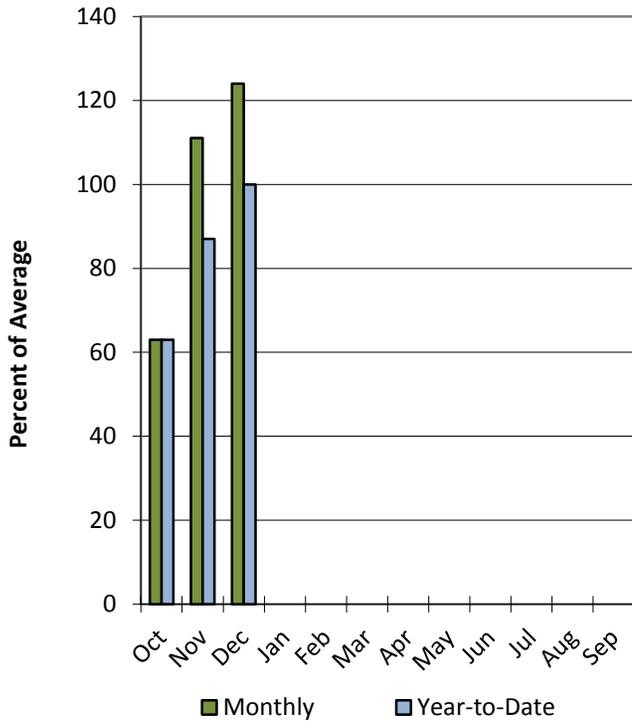


# Duchesne River Basin

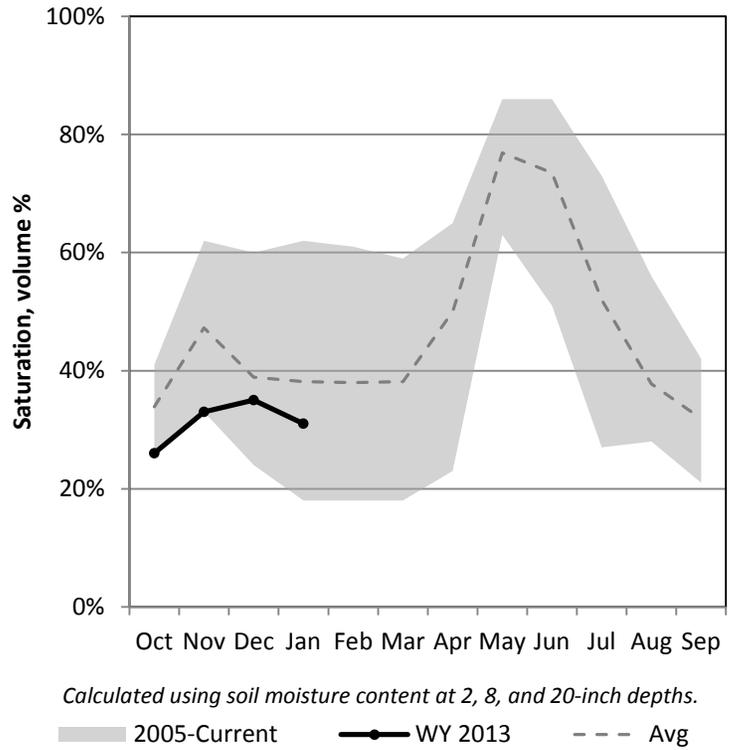
1/1/2013

Precipitation in December was above average at 124%, which brings the seasonal accumulation (Oct-Dec) to 100% of average. Soil Moisture is at 31% compared to 34% last year. Reservoir storage is at 75% of average, compared to 86% last year.

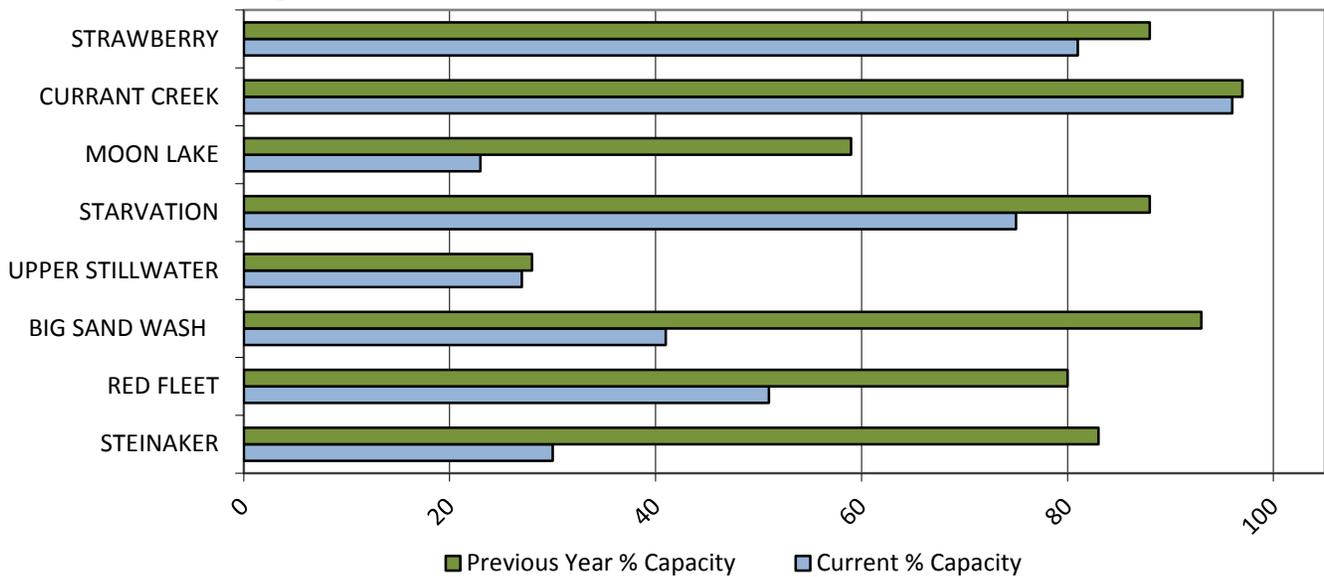
## Precipitation



## Soil Moisture



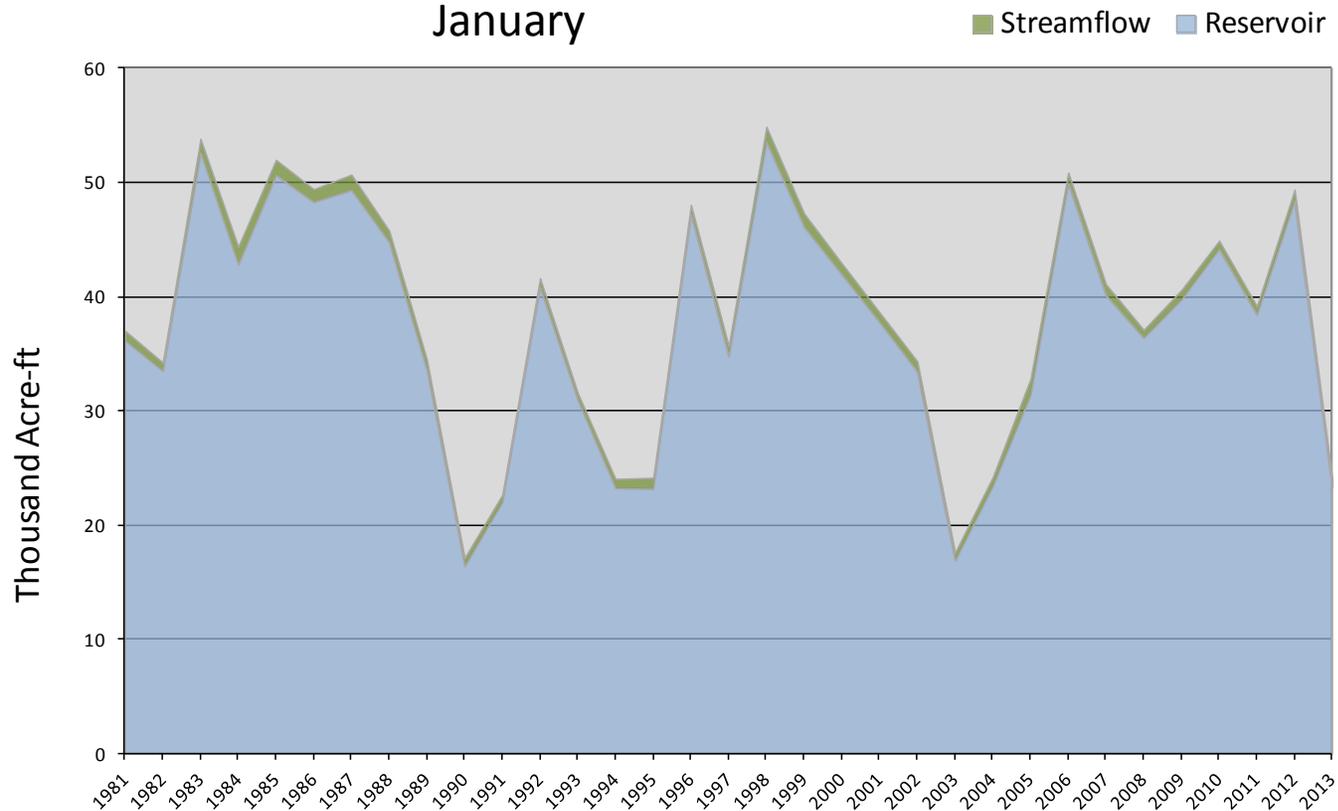
## Reservoir Storage



January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Red Fleet and Steinaker	December accumulated flow Big Brush Creek ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Eastern Uintah</b>	<b>23.3</b>	<b>0.7</b>	<b>24.0</b>	<b>-3.19</b>	<b>12</b>	<b>03, 91, 94, 95</b>

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

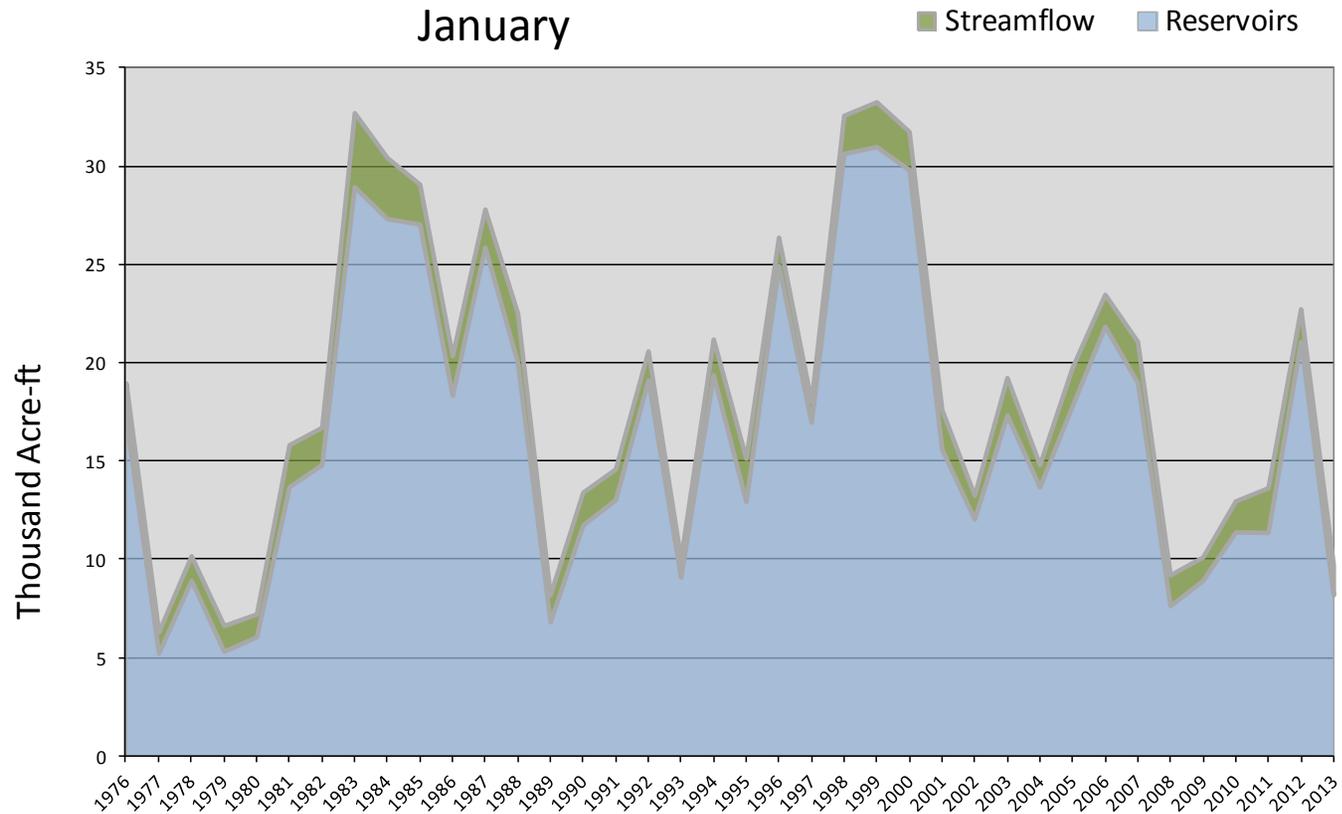
Eastern Uintah - Water Availability Index  
January



January 1, 2013						
Water Availability Index						
Basin or Region	December EOM* Moon Lake	December accumulated flow Lake Fork Creek above Moon Lake ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Moon Lake</b>	<b>8.2</b>	<b>1.5</b>	<b>9.7</b>	<b>-2.88</b>	<b>15</b>	<b>89, 08, 93, 09</b>

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

### Moon Lake - Water Availability Index

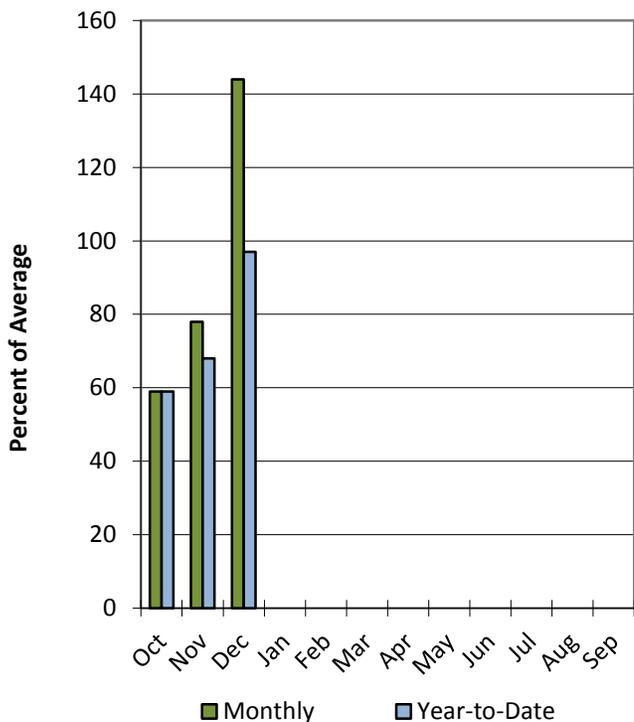


# Price & San Rafael Basins

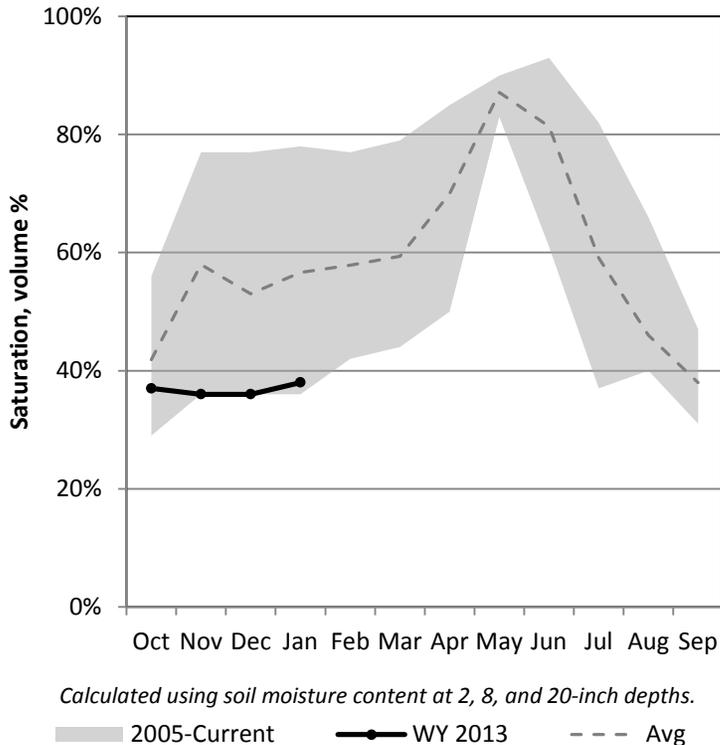
1/1/2013

Precipitation in December was much above average at 144%, which brings the seasonal accumulation (Oct-Dec) to 97% of average. Soil Moisture is at 38% compared to 55% last year. Reservoir storage is at 46% of average, compared to 75% last year.

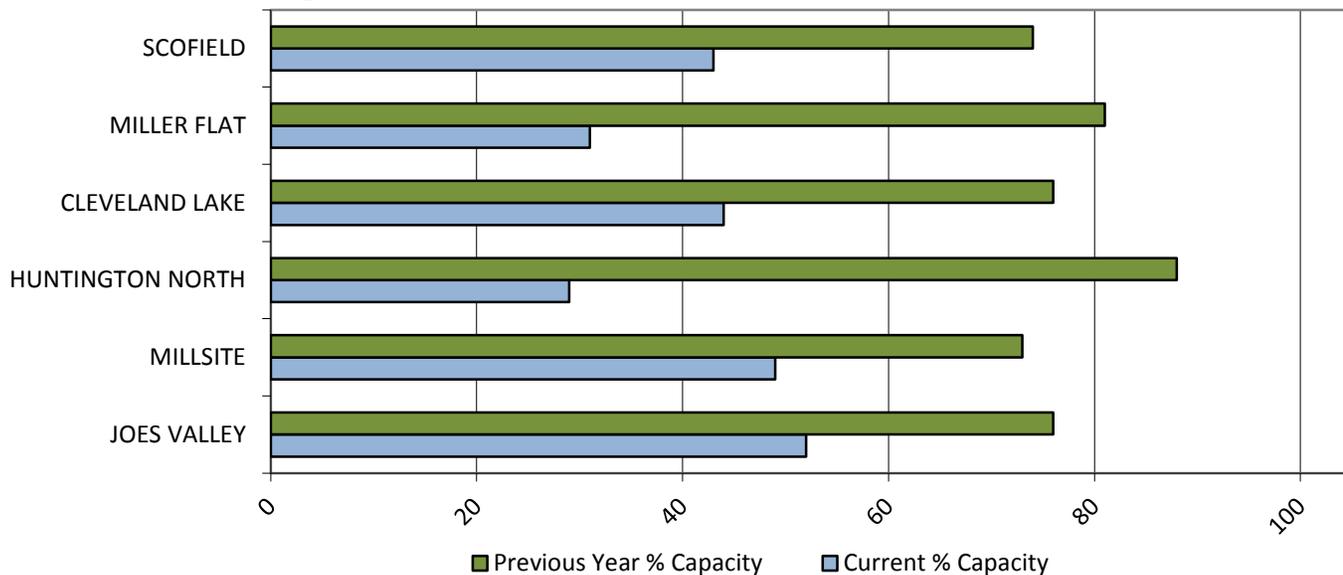
## Precipitation



## Soil Moisture



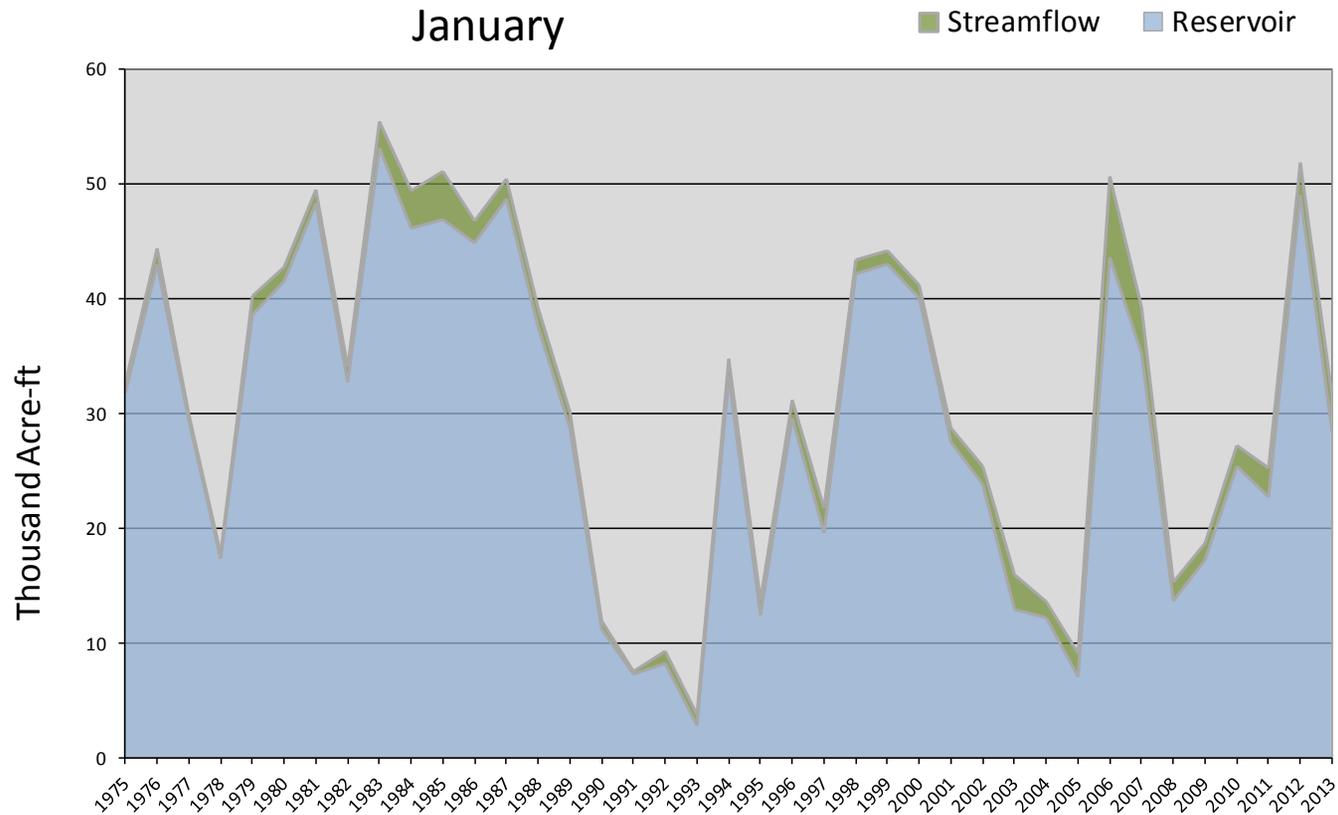
## Reservoir Storage



January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Scofield	December accumulated inflow to Scofield (calculated)	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Price River</b>	<b>28.4</b>	<b>3.1</b>	<b>31.5</b>	<b>0.00</b>	<b>50</b>	<b>89, 96, 75, 82</b>

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

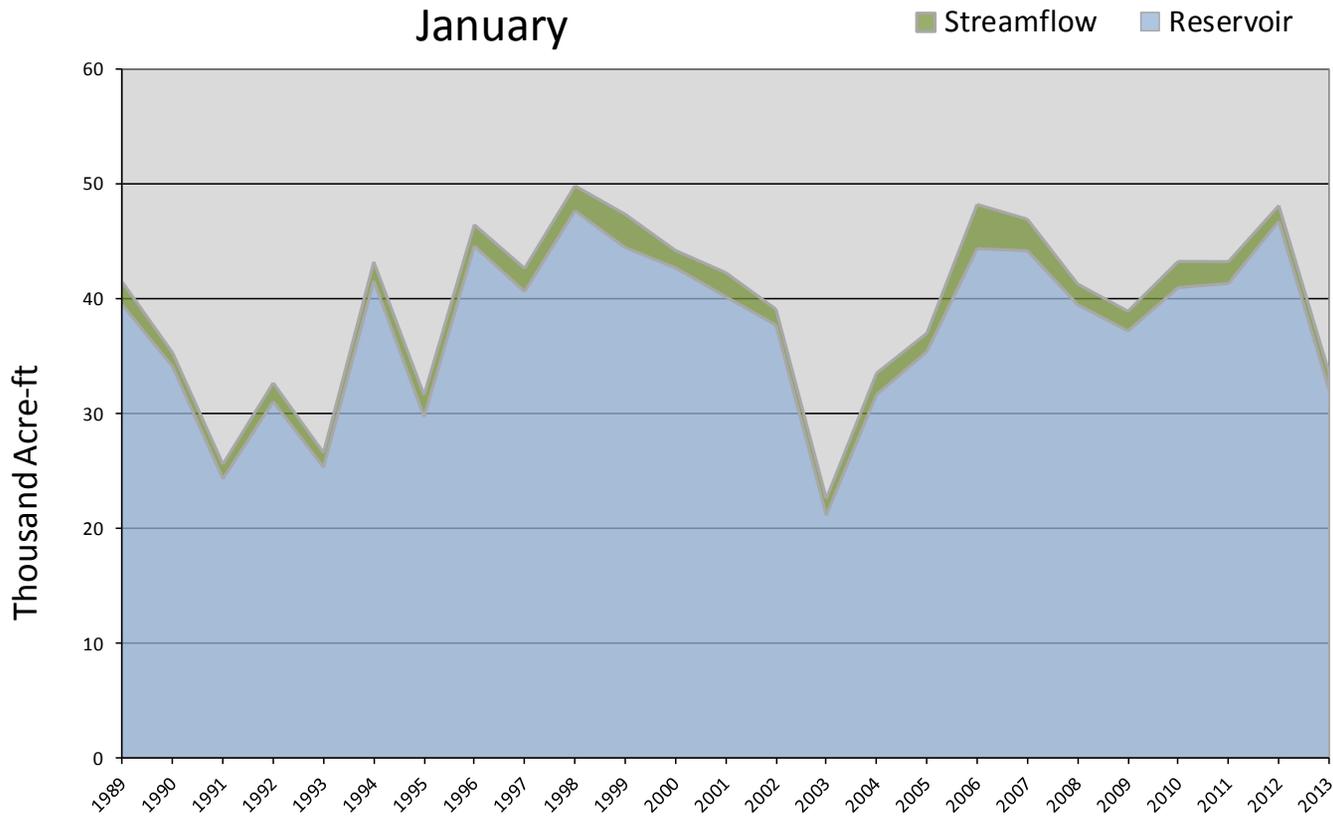
Price River - Water Availability Index  
January



January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Joe's Valley	December accumulated inflow to Joe's Valley (calculated)	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Joe's Valley</b>	<b>46.7</b>	<b>1.4</b>	<b>48.1</b>	<b>-1.92</b>	<b>27</b>	<b>92, 04, 90, 05</b>

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

## Joe's Valley - Water Availability Index

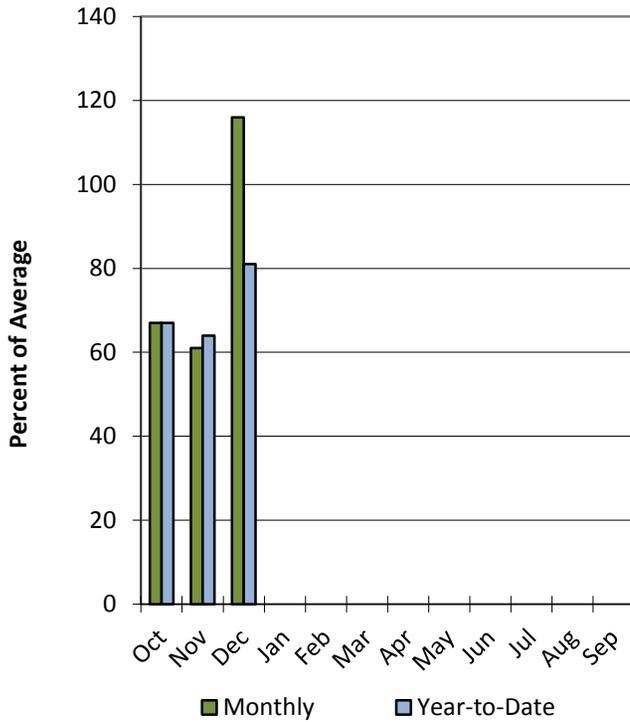


# Dirty Devil Basin

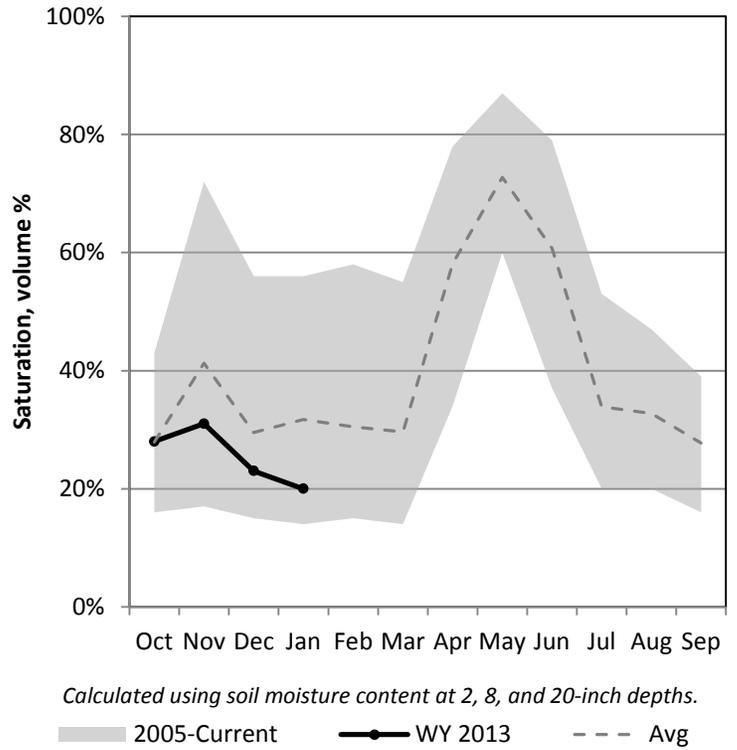
1/1/2013

Precipitation in December was above average at 116%, which brings the seasonal accumulation (Oct-Dec) to 81% of average. Soil Moisture is at 20% compared to 26% last year.

## Precipitation



## Soil Moisture

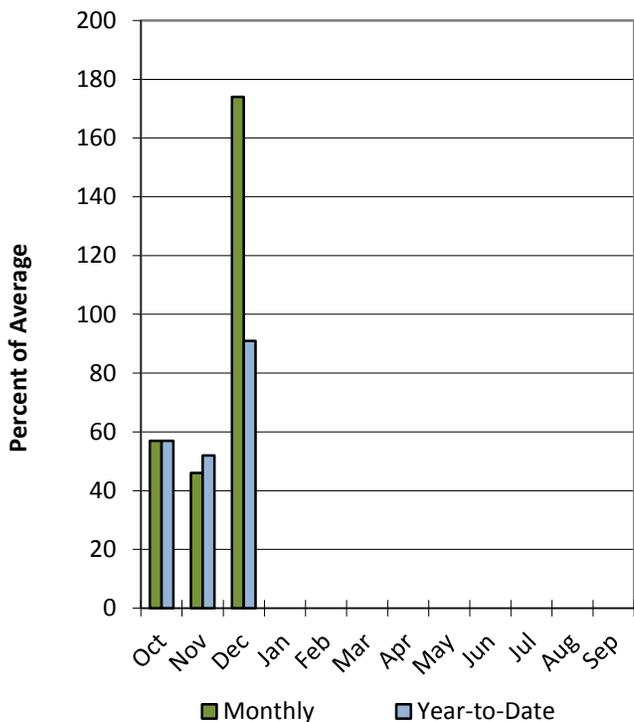


# Southeastern Utah Basin

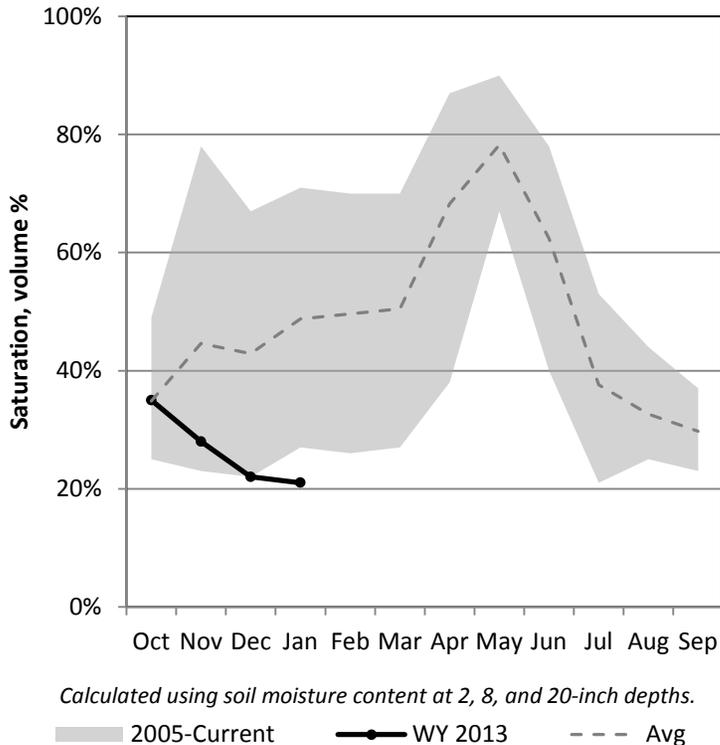
1/1/2013

Precipitation in December was much above average at 174%, which brings the seasonal accumulation (Oct-Dec) to 91% of average. Soil Moisture is at 21% compared to 56% last year. Reservoir storage is at 9% of average, compared to 70% last year.

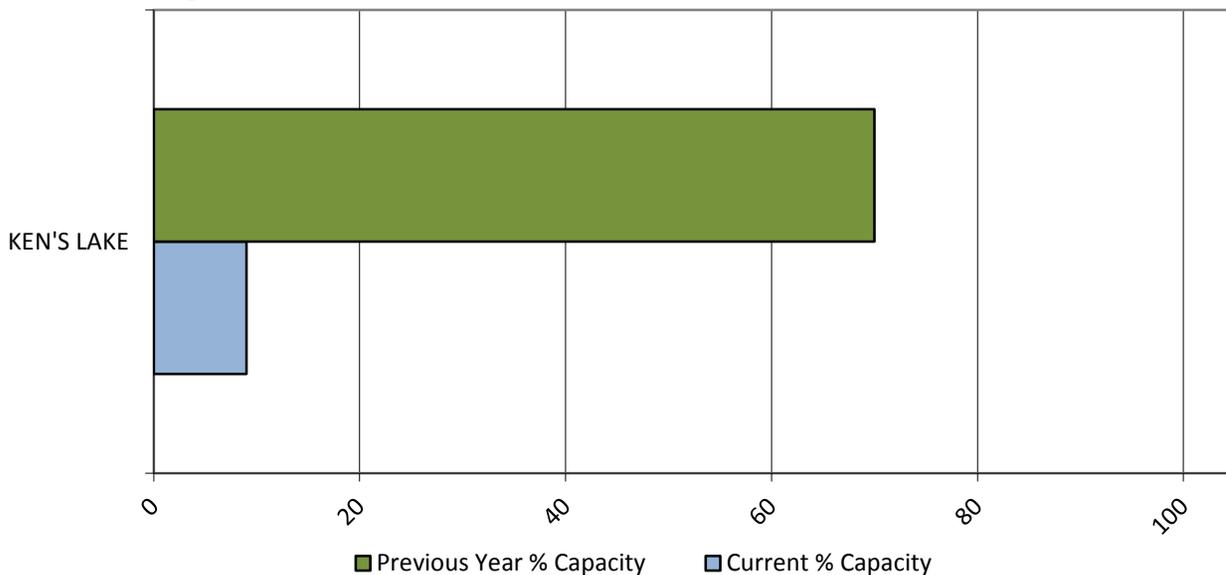
## Precipitation



## Soil Moisture



## Reservoir Storage

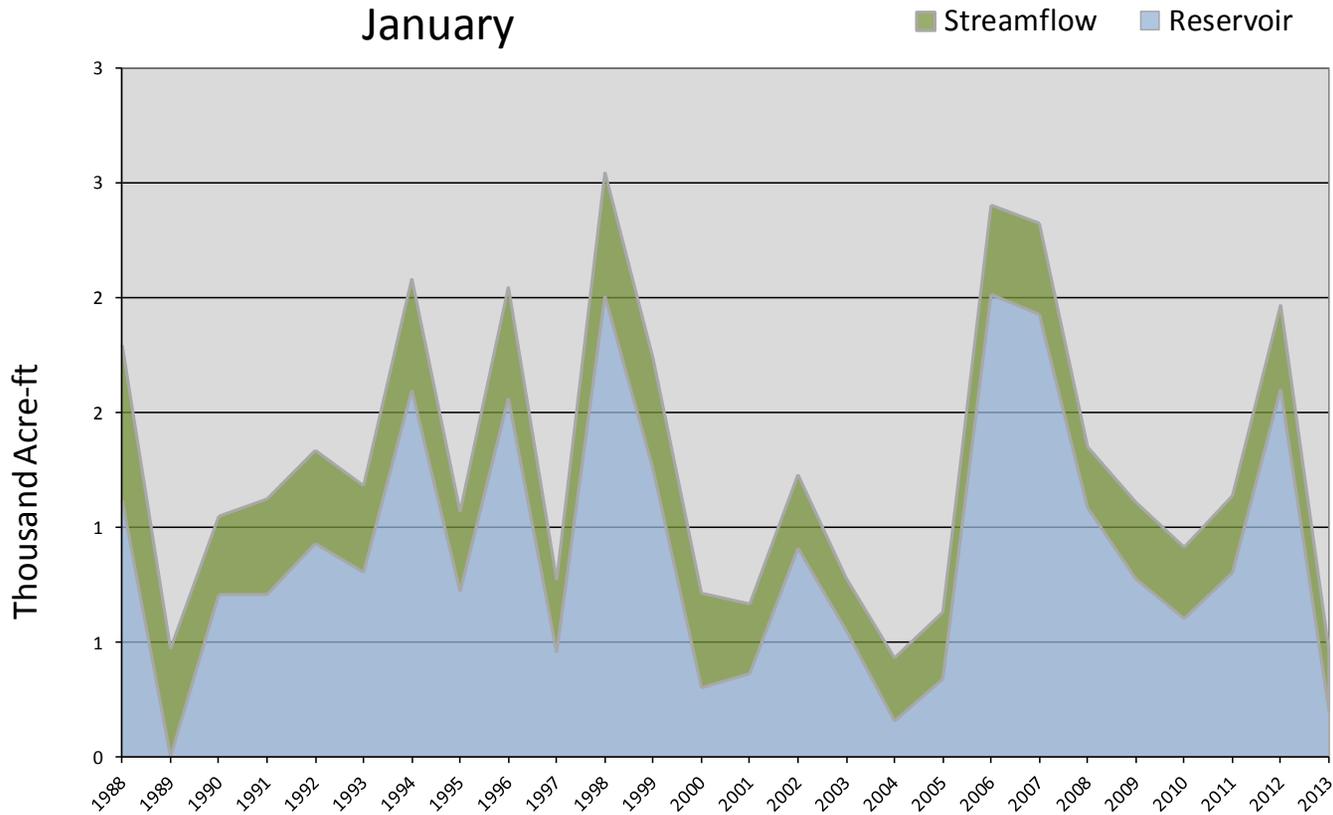


January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Ken's Lake Reservoir	December accumulated flow Mill Creek at Sheley ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Moab</b>	<b>0.2</b>	<b>0.3</b>	<b>0.5</b>	<b>-3.55</b>	<b>7</b>	<b>04, 89, 05</b>

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

### Moab - Water Availability Index

January

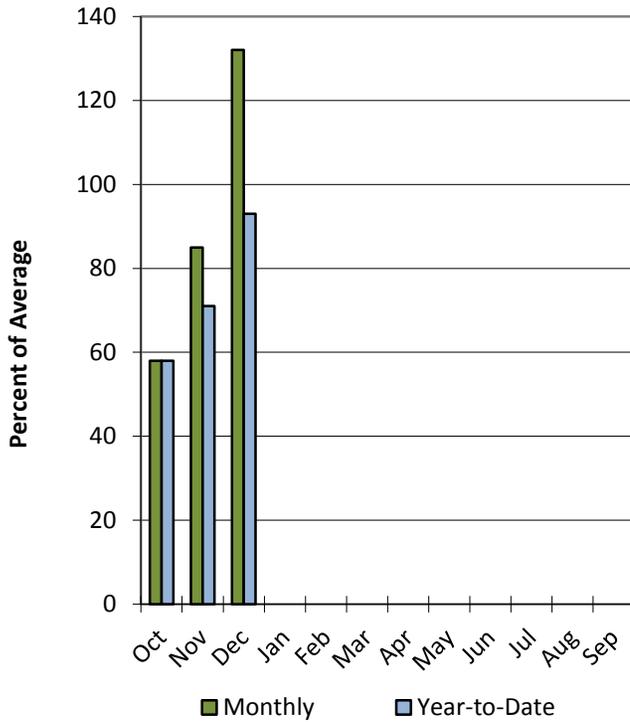


# Upper Sevier River Basin

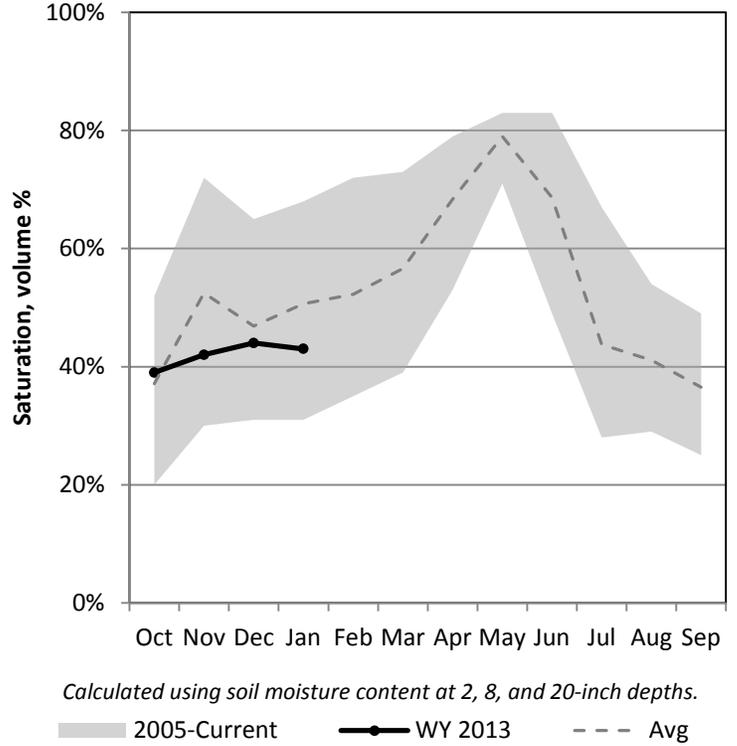
1/1/2013

Precipitation in December was much above average at 132%, which brings the seasonal accumulation (Oct-Dec) to 93% of average. Soil Moisture is at 43% compared to 54% last year. Reservoir storage is at 47% of average, compared to 74% last year.

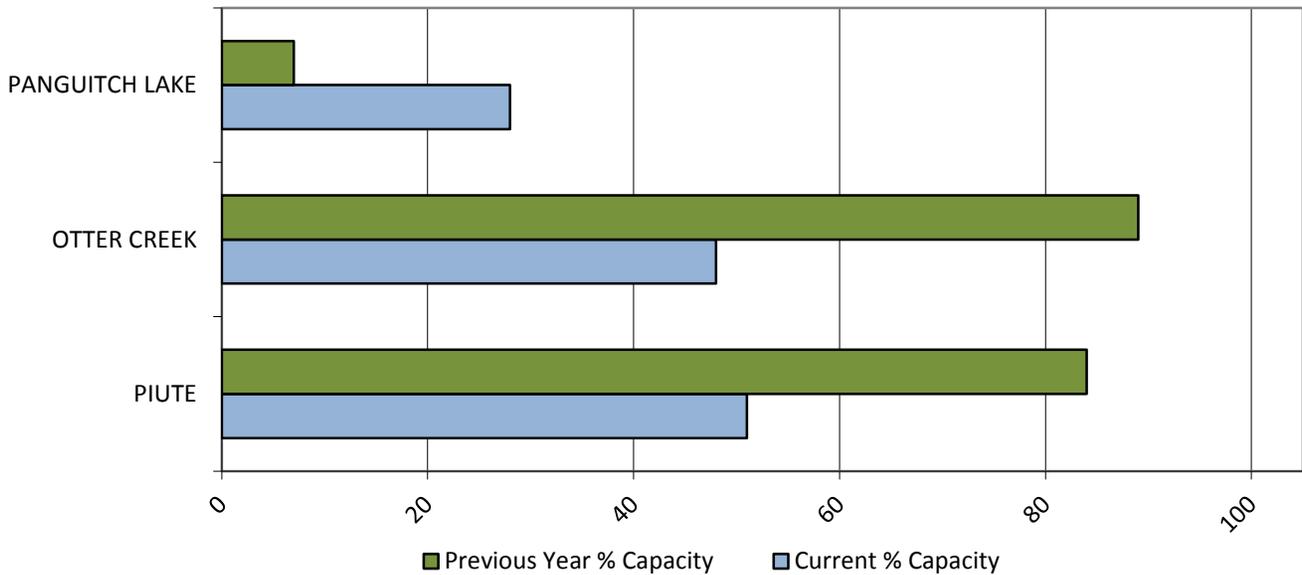
## Precipitation



## Soil Moisture



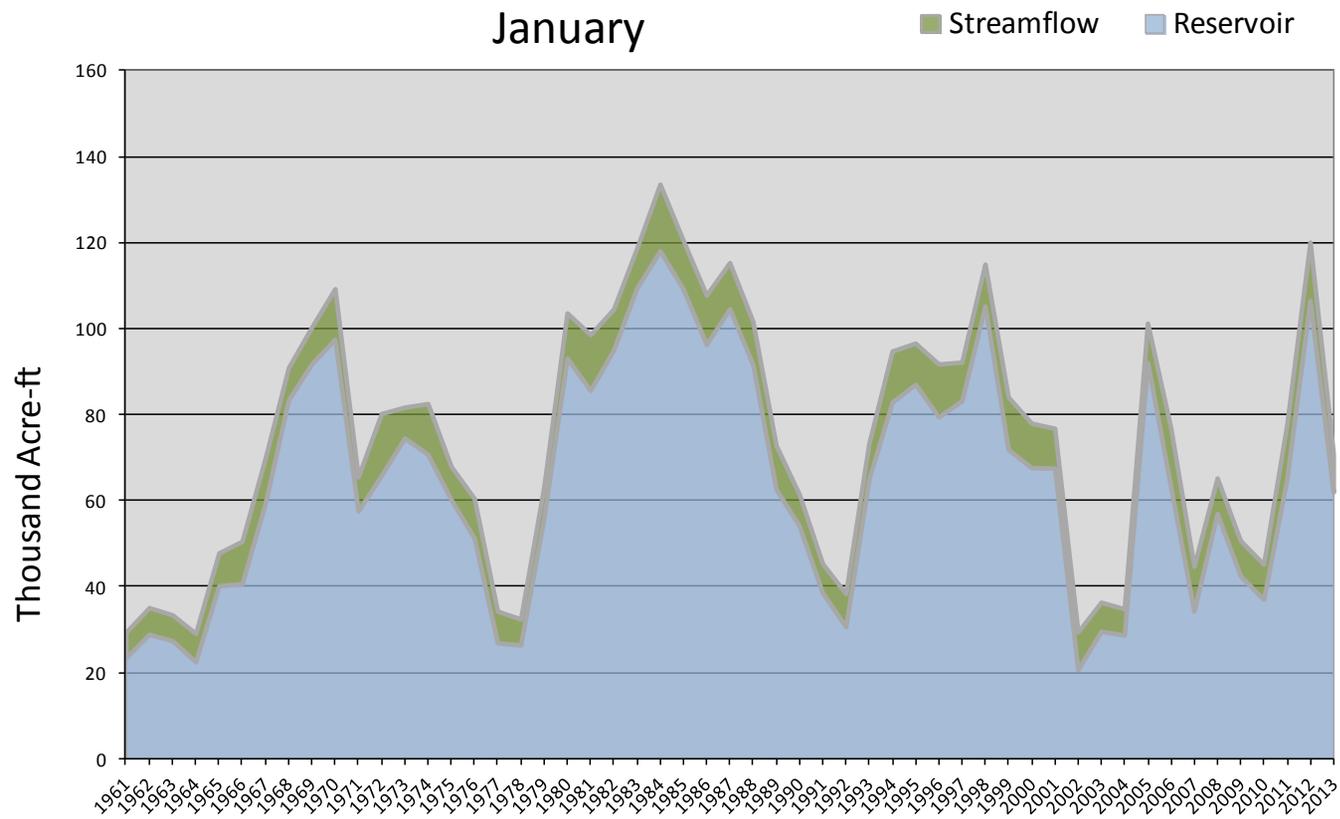
## Reservoir Storage



January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Otter Creek and Piute	December accumulated flow at Kingston ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Upper Sevier River</b>	<b>62</b>	<b>9.0</b>	<b>71</b>	<b>0.20</b>	<b>52</b>	<b>53,67,89,93</b>

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

## Upper Sevier River - Water Availability Index

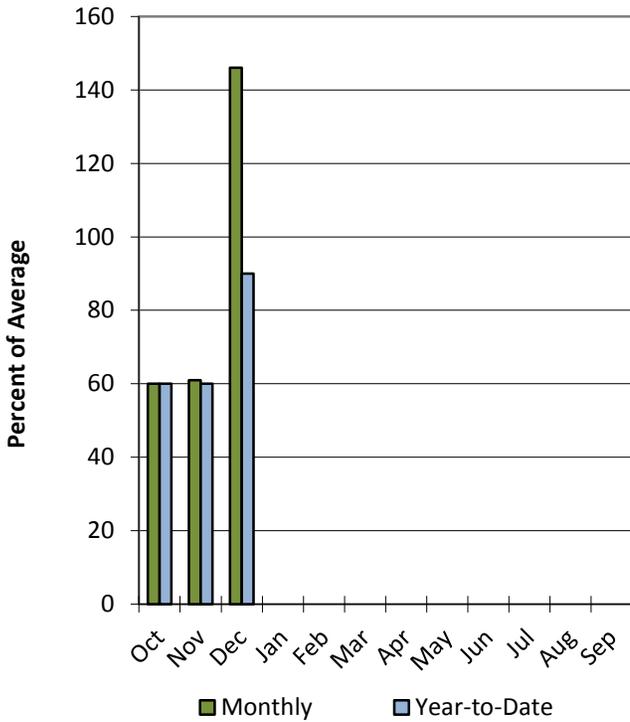


# San Pitch River Basin

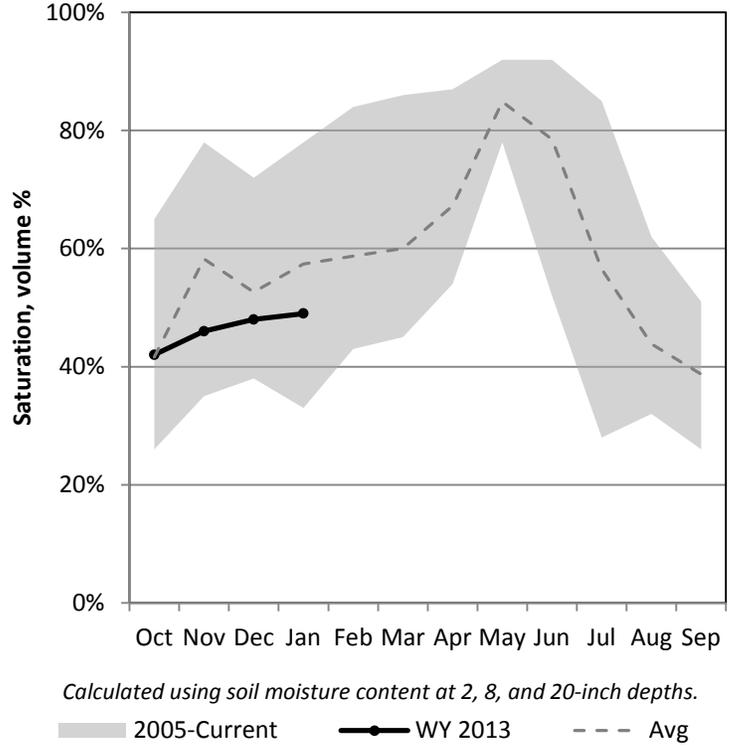
1/1/2013

Precipitation in December was much above average at 146%, which brings the seasonal accumulation (Oct-Dec) to 90% of average. Soil Moisture is at 49% compared to 57% last year. Reservoir storage is at 2% of average, compared to 90% last year.

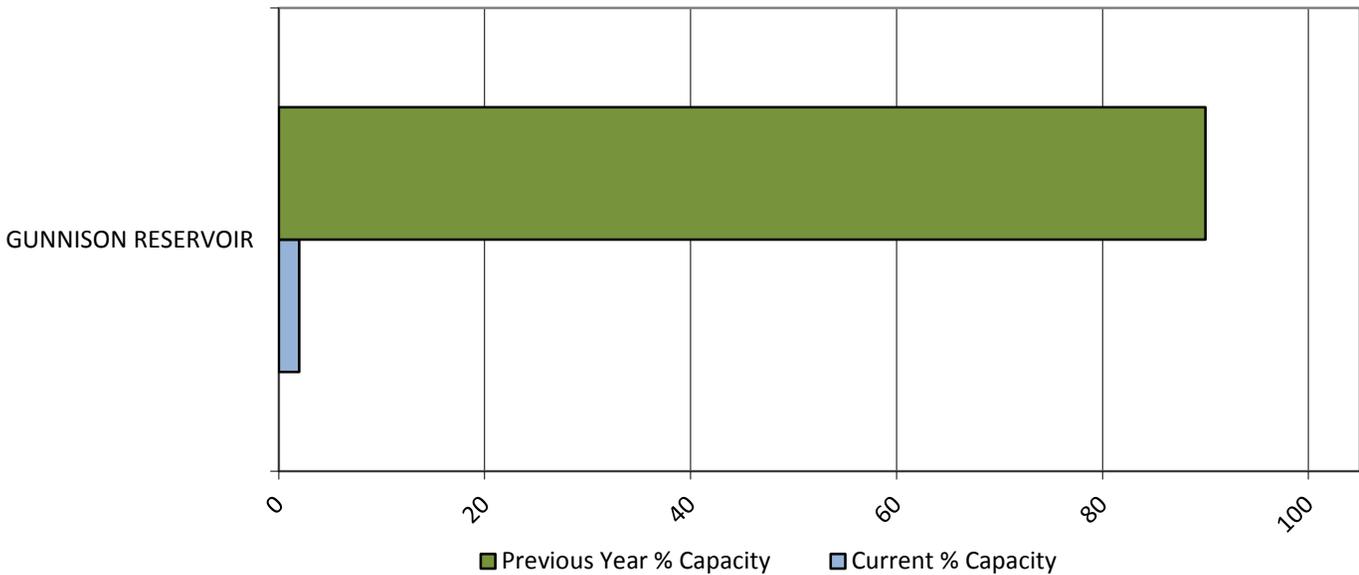
## Precipitation



## Soil Moisture



## Reservoir Storage

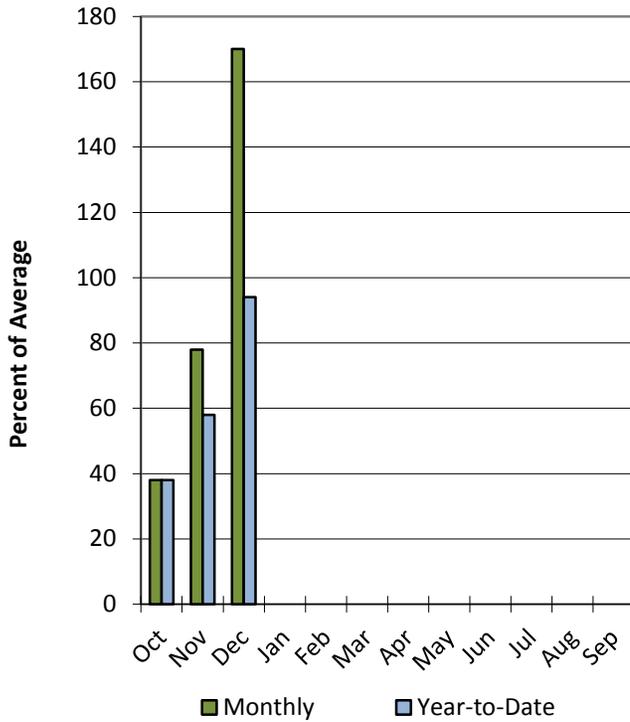


# Lower Sevier River Basin

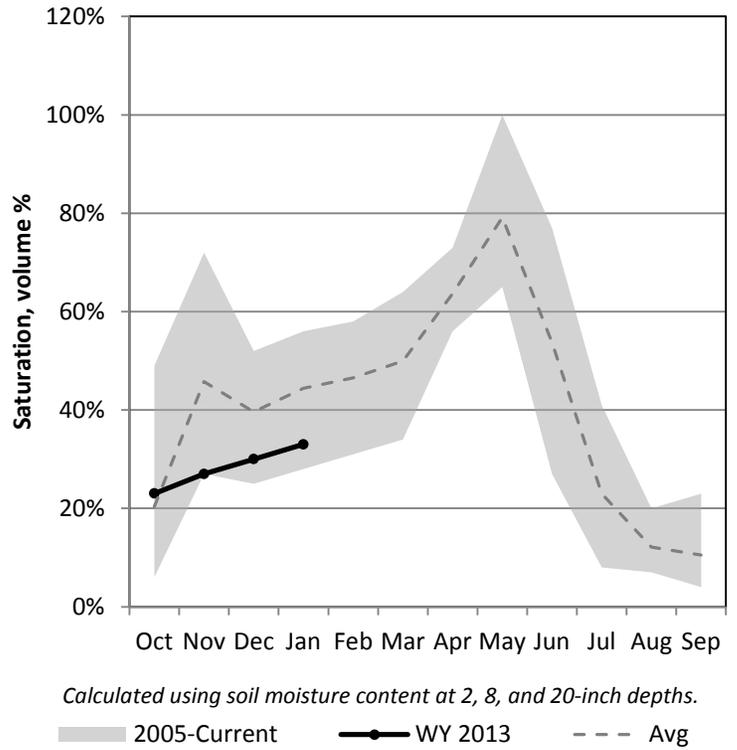
1/1/2013

Precipitation in December was much above average at 170%, which brings the seasonal accumulation (Oct-Dec) to 94% of average. Soil Moisture is at 33% compared to 43% last year. Reservoir storage is at 60% of average, compared to 88% last year.

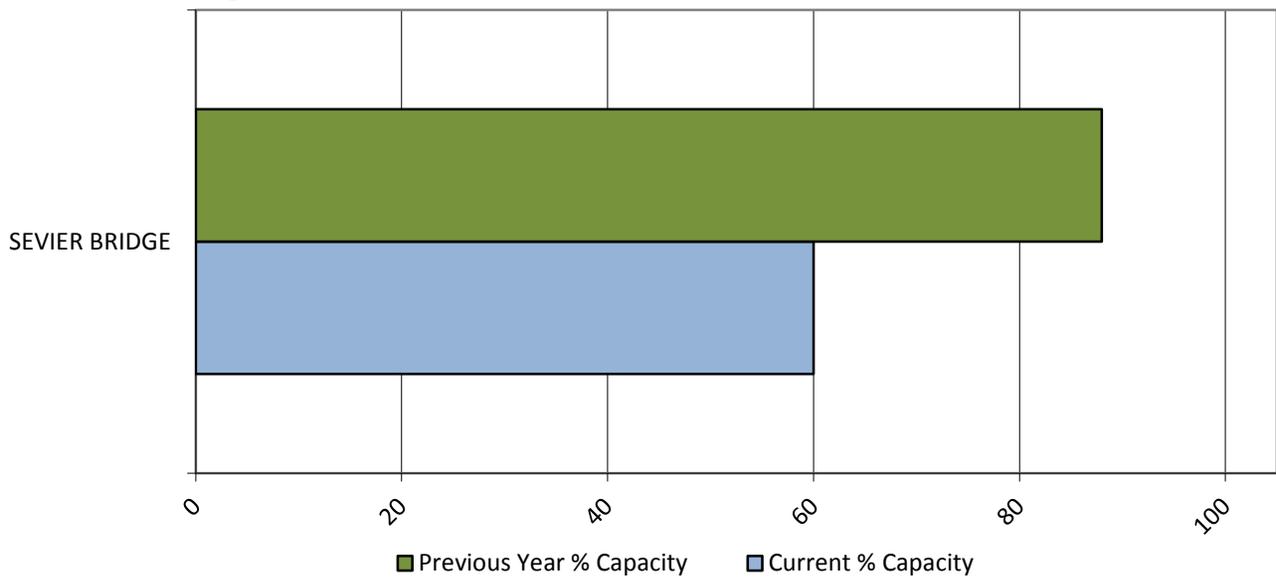
## Precipitation



## Soil Moisture



## Reservoir Storage



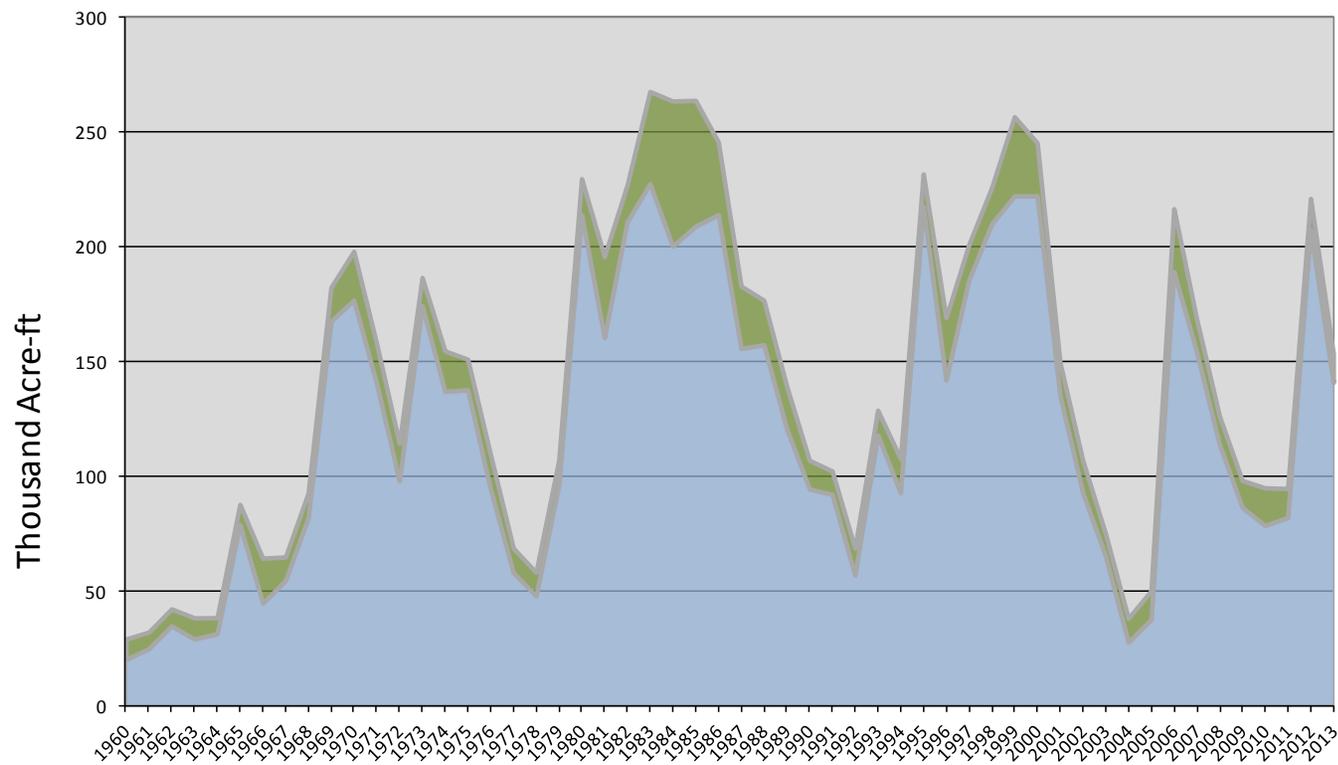
January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Sevier Bridge	December accumulated flow Sevier at Gunnison ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Lower Sevier River</b>	<b>141</b>	<b>12.5</b>	<b>154</b>	<b>0.53</b>	<b>56</b>	<b>01,75,74,71</b>

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

### Lower Sevier River - Water Availability Index

January

■ Streamflow ■ Reservoir

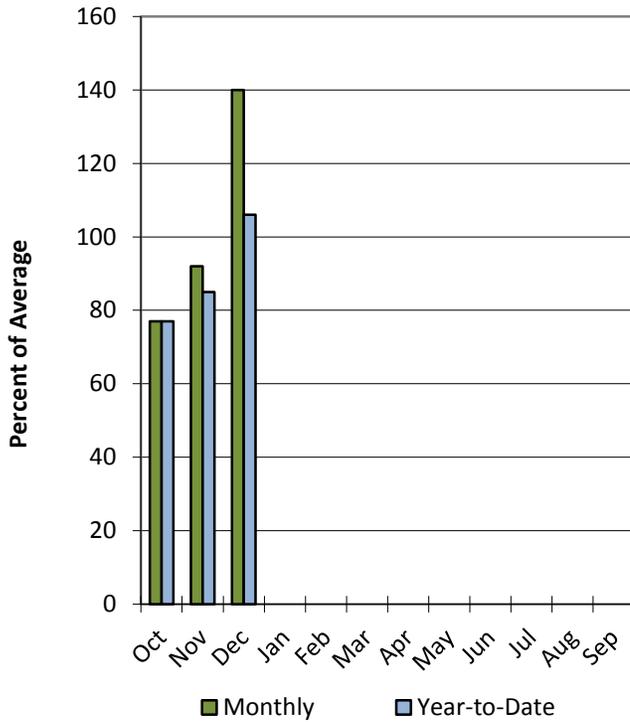


# Beaver River Basin

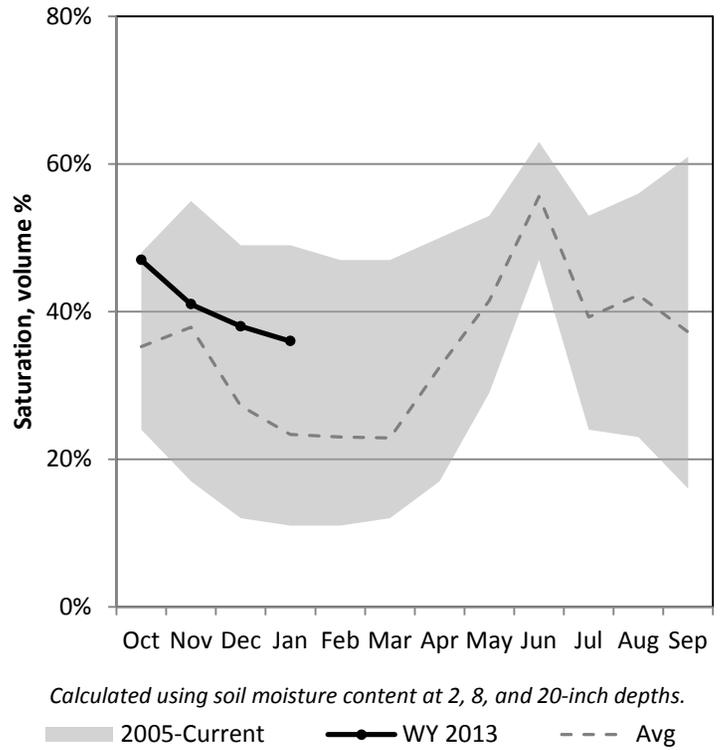
1/1/2013

Precipitation in December was much above average at 140%, which brings the seasonal accumulation (Oct-Dec) to 106% of average. Soil Moisture is at 36% compared to 27% last year. Reservoir storage is at 36% of average, compared to 97% last year.

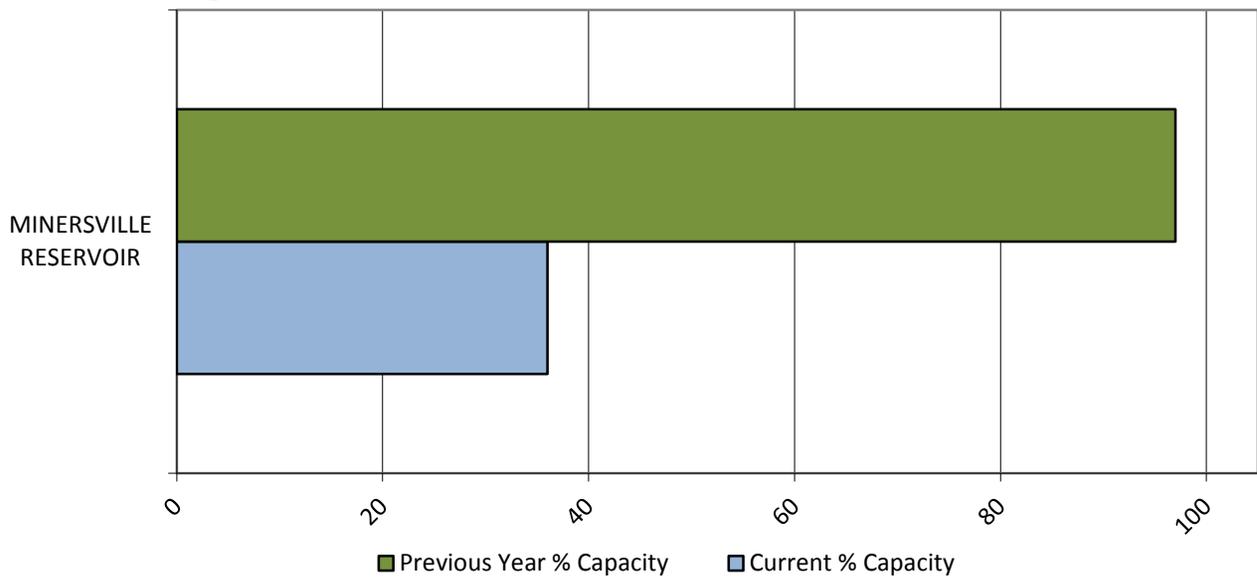
## Precipitation



## Soil Moisture



## Reservoir Storage

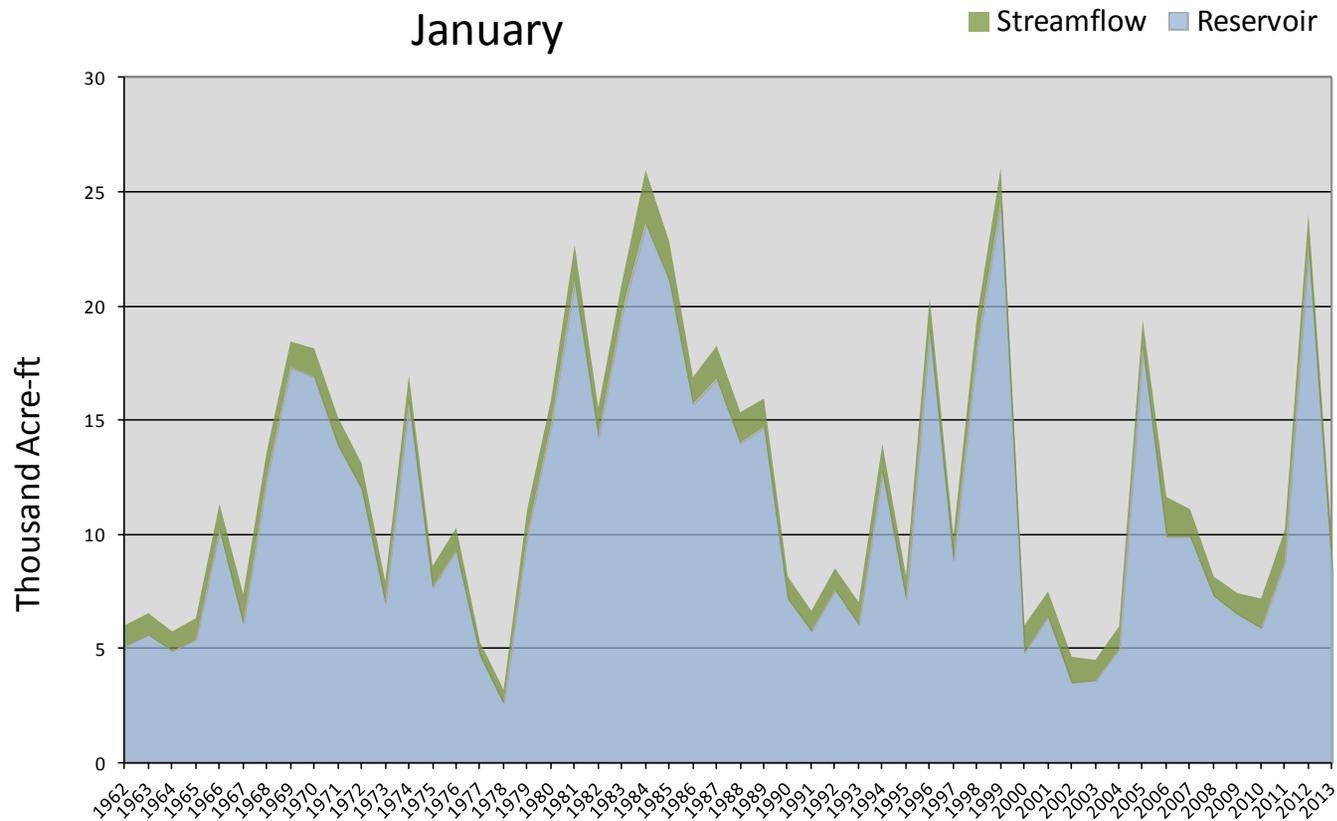


January 1, 2013		Water Availability Index				
Basin or Region	December EOM* Minersville Reservoir	December accumulated flow Beaver River at Beaver ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Beaver</b>	<b>8.4</b>	<b>1.2</b>	<b>9.6</b>	<b>-0.55</b>	<b>43</b>	<b>92,75,97,11</b>

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

## Beaver River - Water Availability Index

January

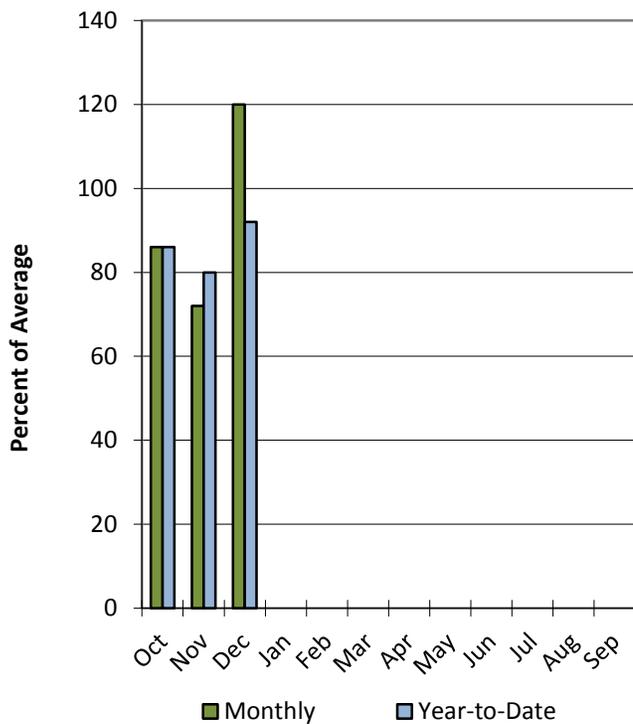


# Escalante River Basin

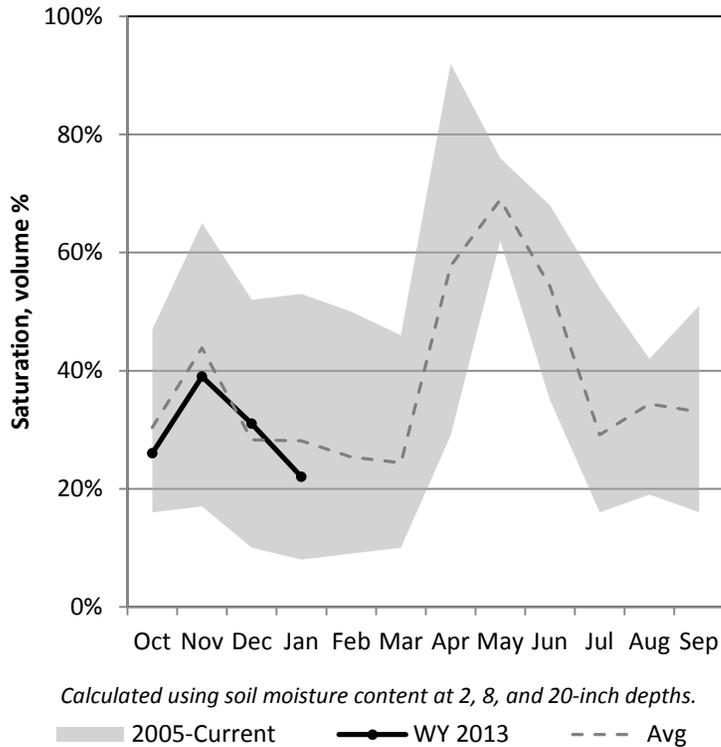
1/1/2013

Precipitation in December was above average at 120%, which brings the seasonal accumulation (Oct-Dec) to 92% of average. Soil Moisture is at 22% compared to 37% last year.

## Precipitation



## Soil Moisture

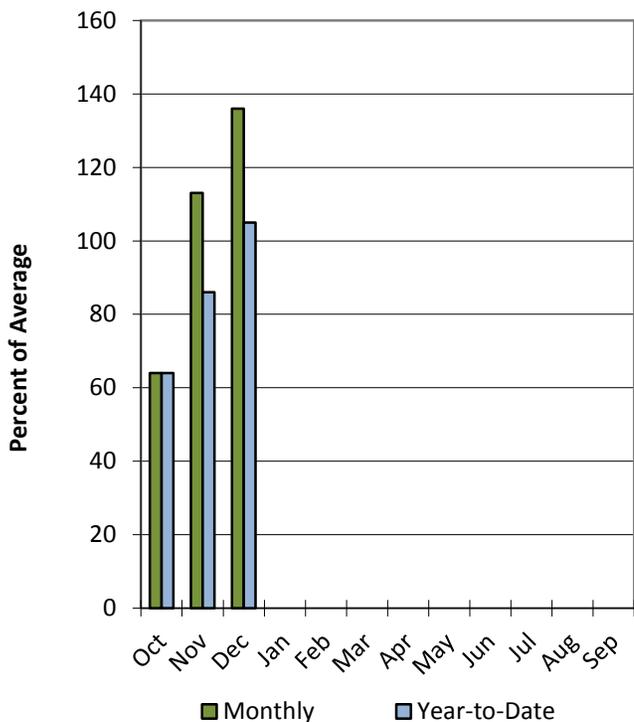


# Southwestern Utah Basin

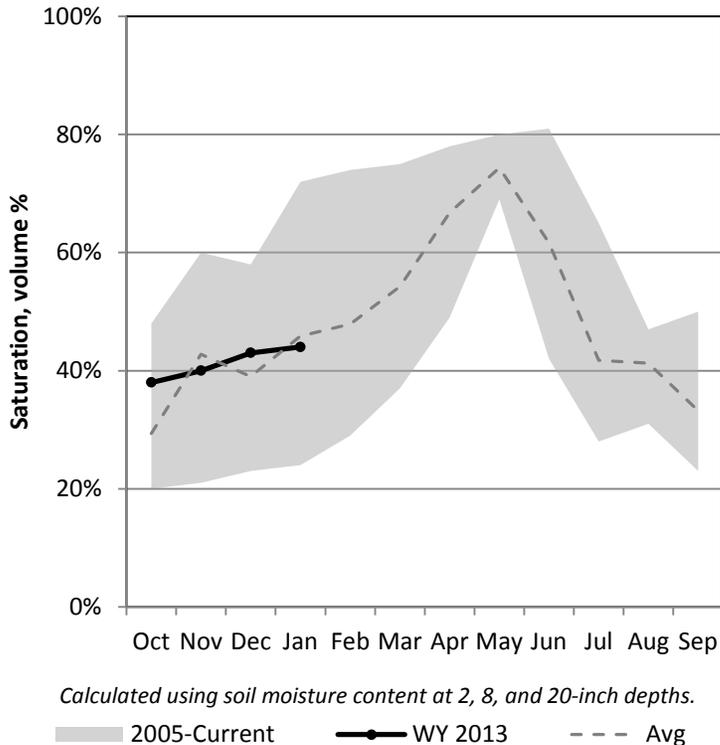
1/1/2013

Precipitation in December was much above average at 136%, which brings the seasonal accumulation (Oct-Dec) to 105% of average. Soil Moisture is at 44% compared to 46% last year. Reservoir storage is at 52% of average, compared to 92% last year.

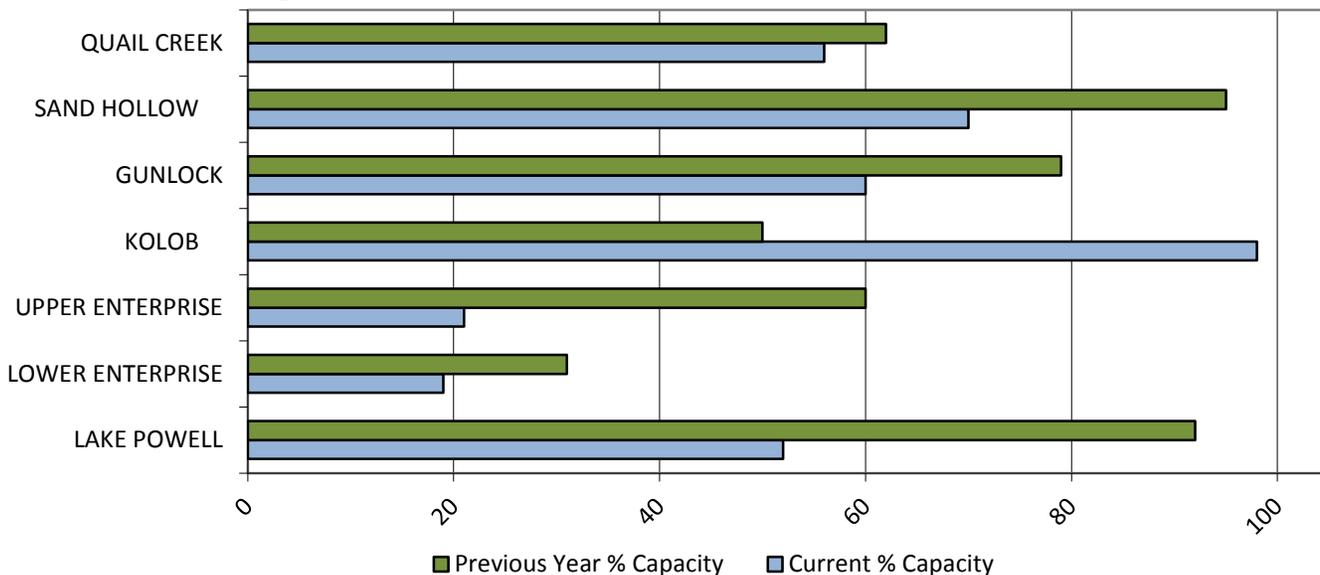
## Precipitation



## Soil Moisture

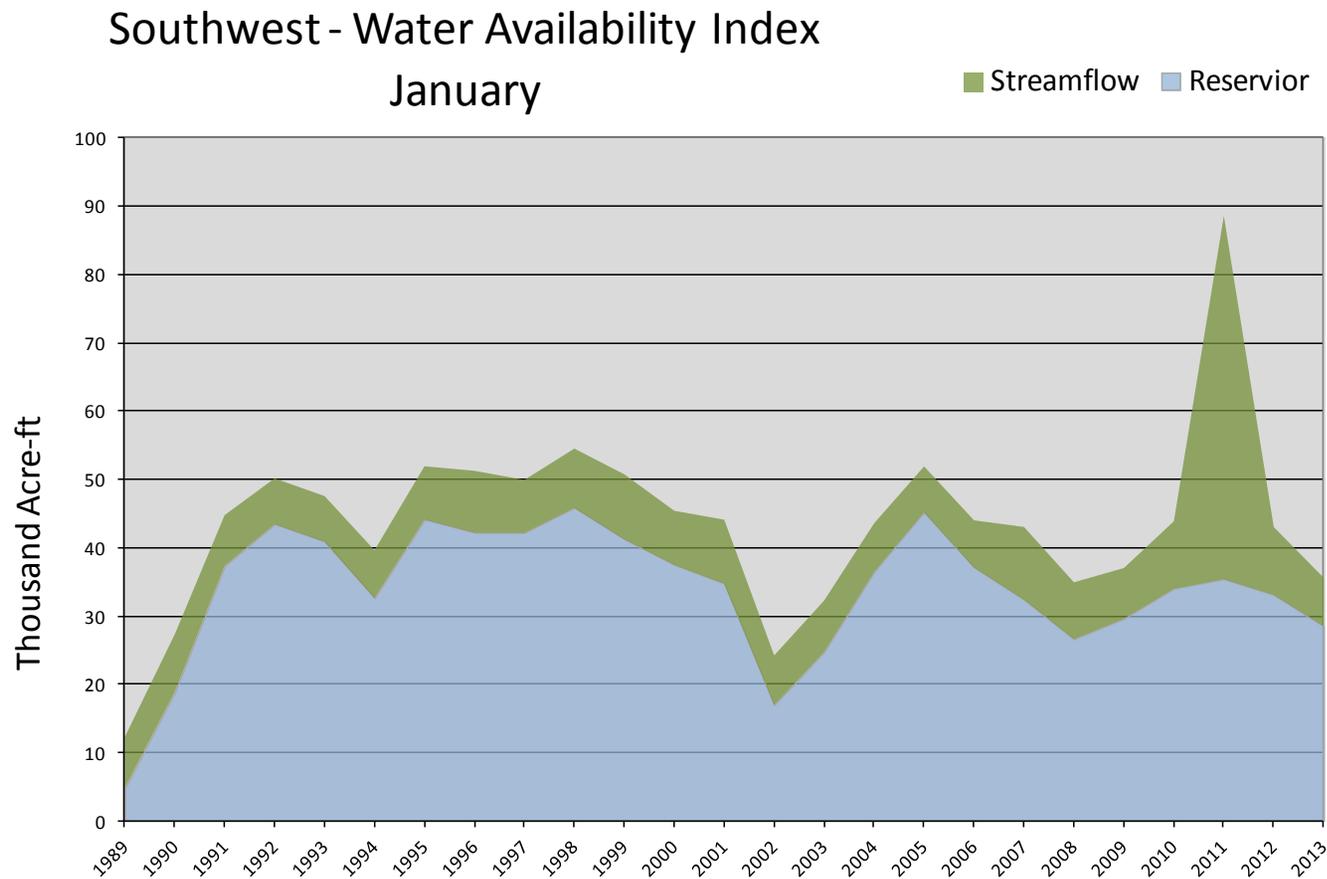


## Reservoir Storage



January 1, 2013						
Water Availability Index						
Basin or Region	December EOM* Reservoir	December accumulated flow Virgin and Santa Clara Rivers ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Southwest</b>	<b>28.5</b>	<b>7.1</b>	<b>35.6</b>	<b>-2.24</b>	<b>23</b>	<b>94,09,08,03</b>

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



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# Utah Climate and Water Report

Natural Resources Conservation Service  
Salt Lake City, UT

