

# Utah Climate and Water Report

March, 2013



**Green River SCAN, Utah**

Photo by Kent Sutcliffe

# 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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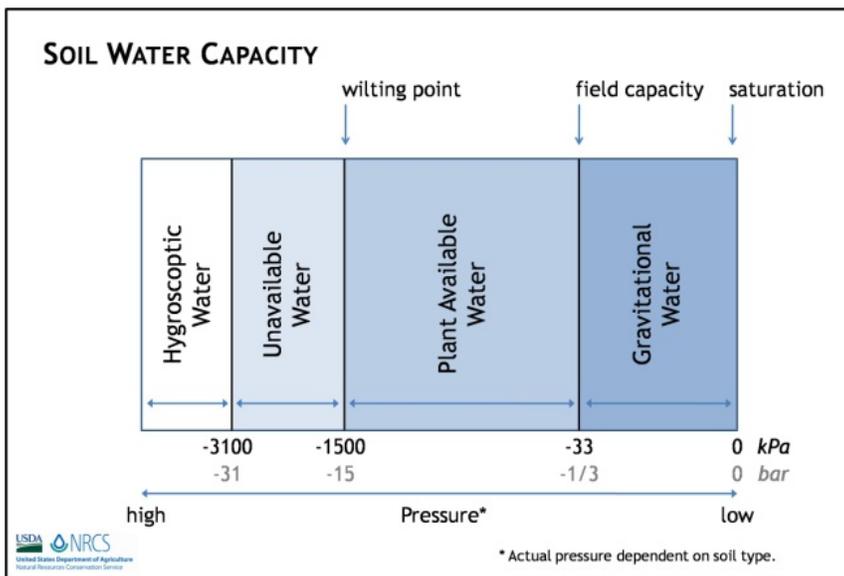
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# Climate and Water Information

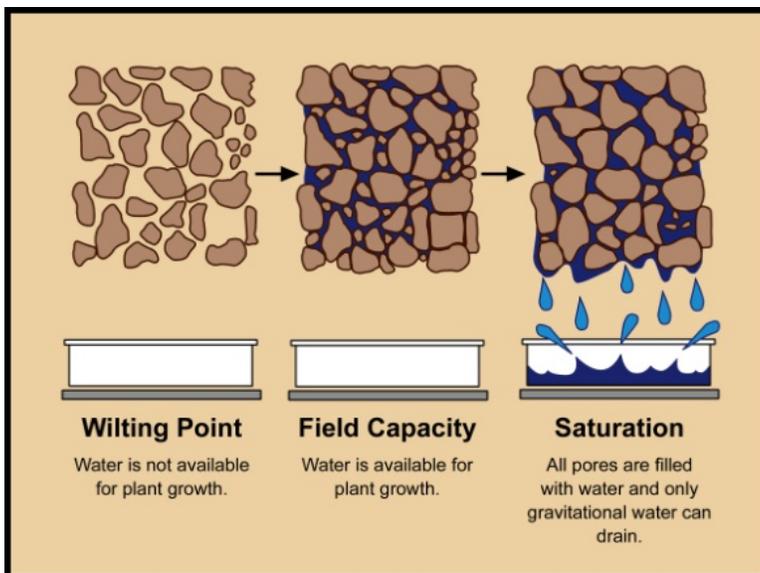
## Soil Climate Analysis Network

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.**

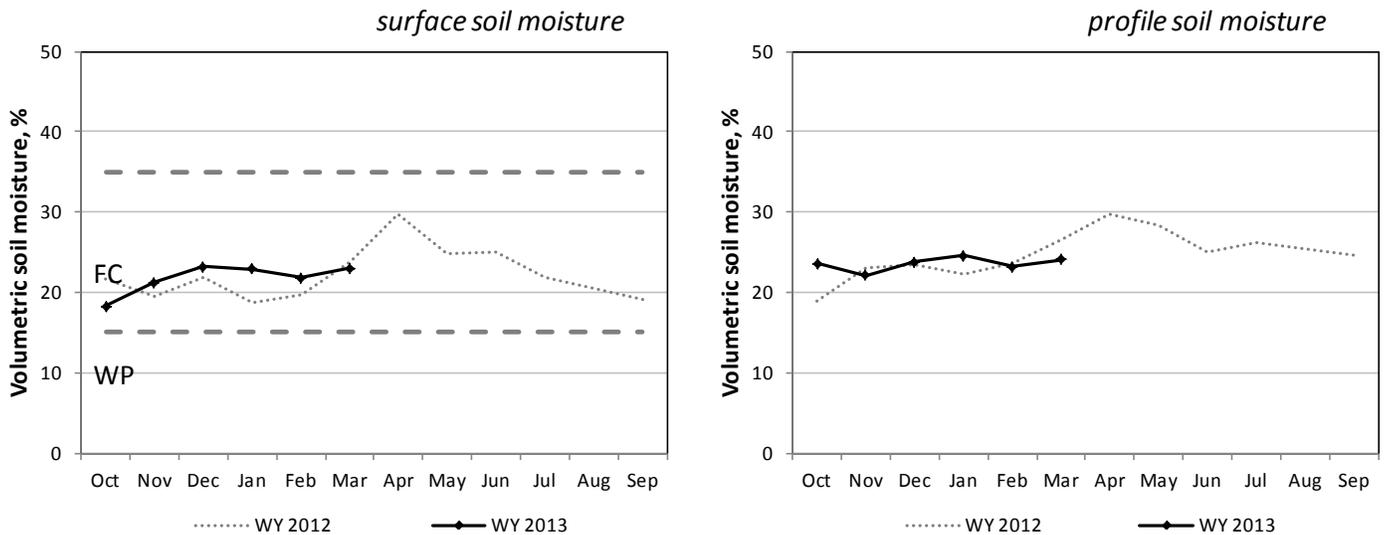
# North Central

## 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	3.7	0.3	26	26	26	20	16	32	33	34	36	39
Cache Junction	6.8	0.5	15	16	26	31	28	28	30	30	33	37
Grantsville	3.7	0.3	16	21	25	26	26	33	34	36	40	

\* 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.**

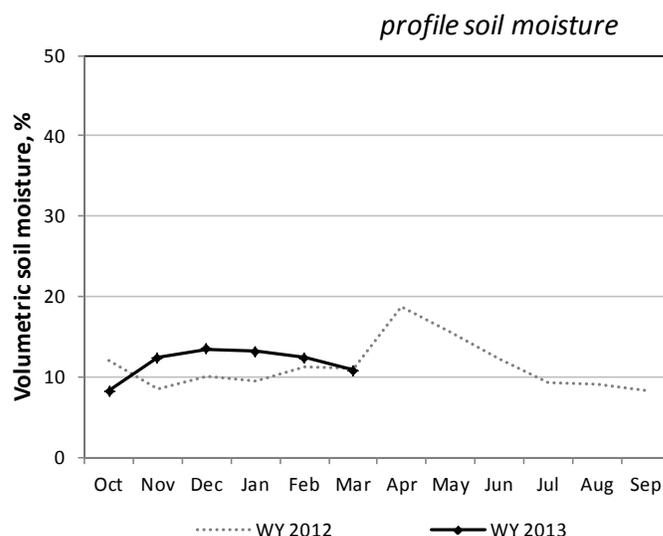
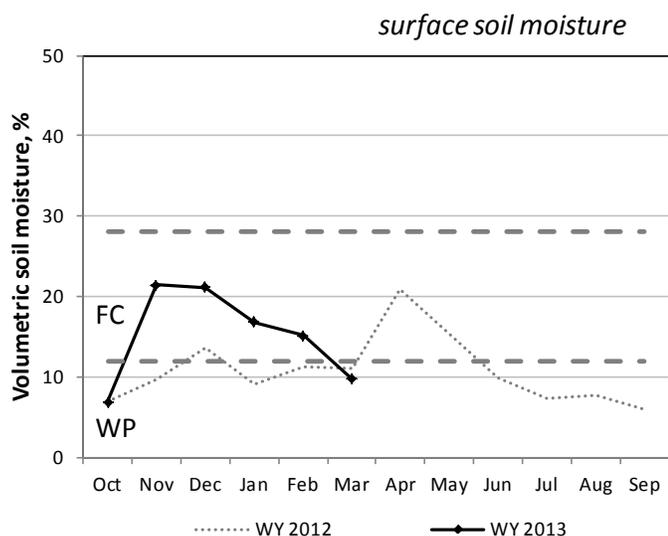
# Northern Mountains

## 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	4.8	0.2	7	10	9	17	11	29	30	30	32	35
Buffalo Jump	4.3	0.3	6	8	8	8	-	26	26	26	30	-
Morgan	7.7	0.2	11	14	14	13	9	32	31	32	32	32

\* 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.**

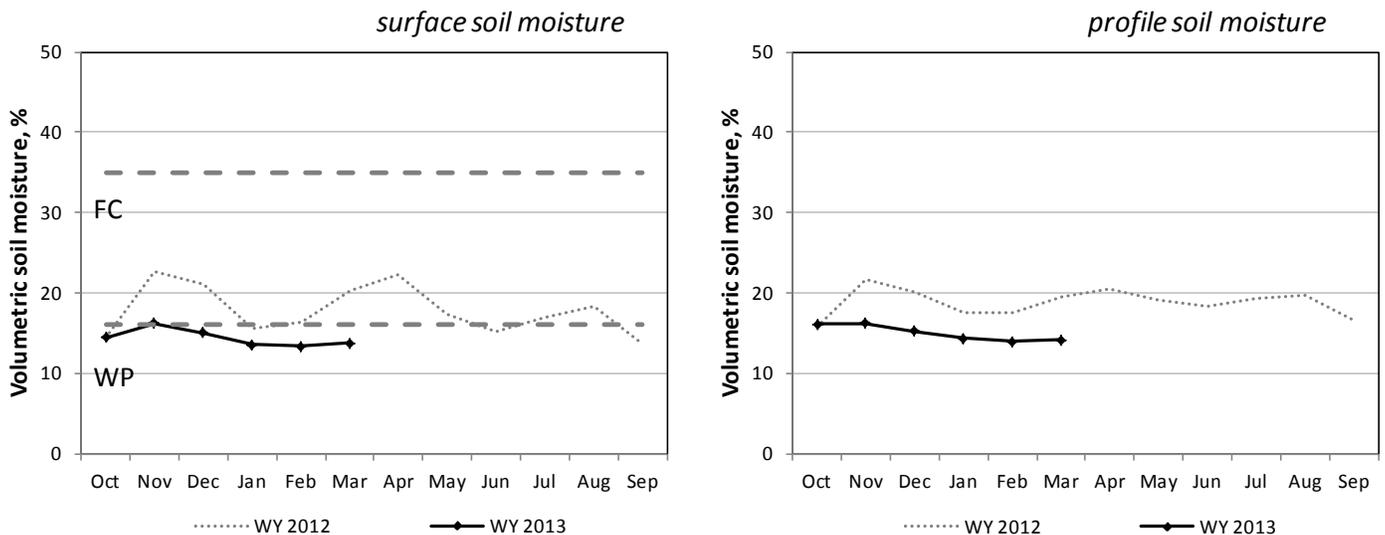
# Uintah Basin

## 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	2.2	0.2	12	17	20	17	9	28	28	30	33	36
Little Red Fox	1.3	0.1	9	11	15	19	20	24	30	31	33	35
Split Mountain	2.4	0.2	7	17	12	11	10	28	29	29	33	36

\* 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.**

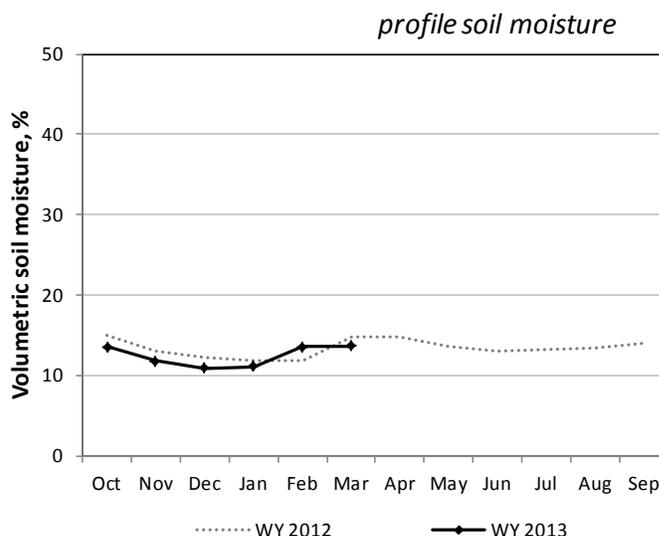
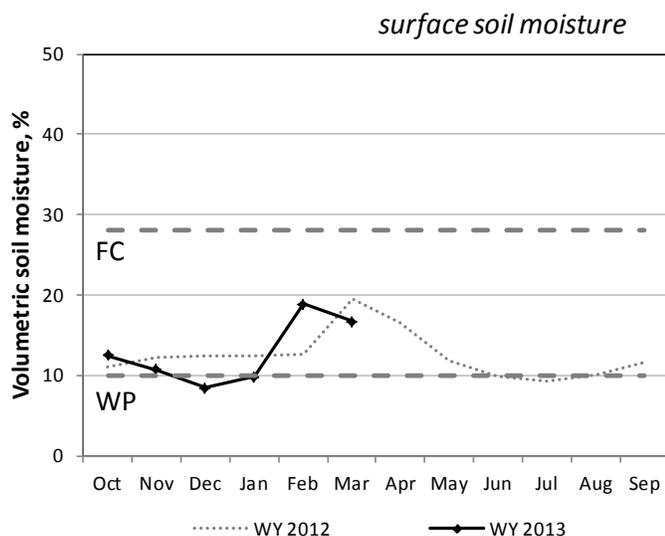
# Southeast

## 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"
			volume %					°F				
<b>SOUTHEAST</b>												
Price	2.2	0.0	4	18	20	13	15	32	34	33	35	37
Green River	1.3	0.1	13	17	14	4	7	32	33	35	36	39
Harm's Way	2.4	0.2	17	1	25	15	6	32	32	32	34	38
West Summit	2.2	0.3	14	15	13	13	16	30	30	31	32	36
Eastland	2.7	0.2	22	21	22	30	18	32	32	33	35	38
Alkali Mesa	3.4	0.3	13	14	18	16	11	31	31	31	34	36
McCracken Mesa	3.7	0.4	20	26	25	21	11	35	38	37	37	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.

## 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.**

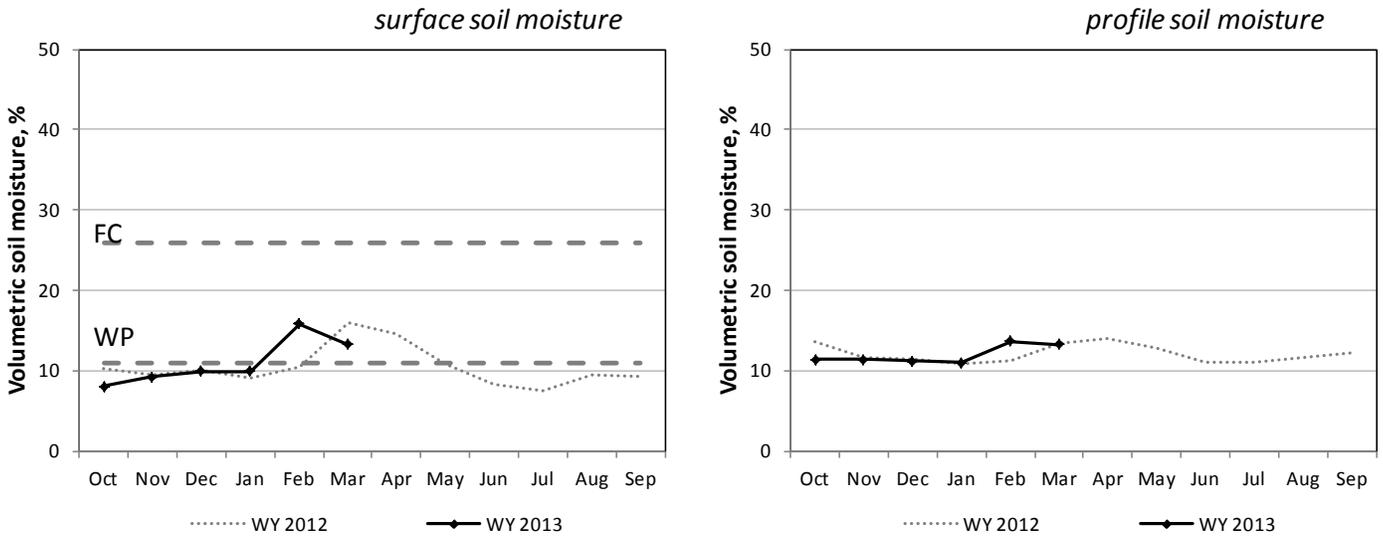
# South Central

## 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	3.9	0.4	26	29	26	7	0	32	32	32	35	39
Ephraim	3.4	0.3	13	12	25	25	32	30	31	32	33	37
Holden	3.6	0.2	12	9	10	19	12	32	32	32	34	39
Milford	3.0	0.3	29	30	29	24	15	32	33	34	37	41
Manderfield	4.2	0.1	13	16	24	23	9	31	32	32	34	37
Circleville	1.3	0.2	15	5	5	7	7	32	31	31	35	
Panguitch	1.8	0.0	11	16	10	18	29	24	26	26	31	38
Cave Valley	7.3	0.5	1	11	1	5	6	32	32	32	33	36
Vermillion	3.7	0.3	0	1	2	9	6	30	30	31	32	36
Spooky	2.1	0.1	6	7	4	10	0	35	34	36	38	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.

## 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.**

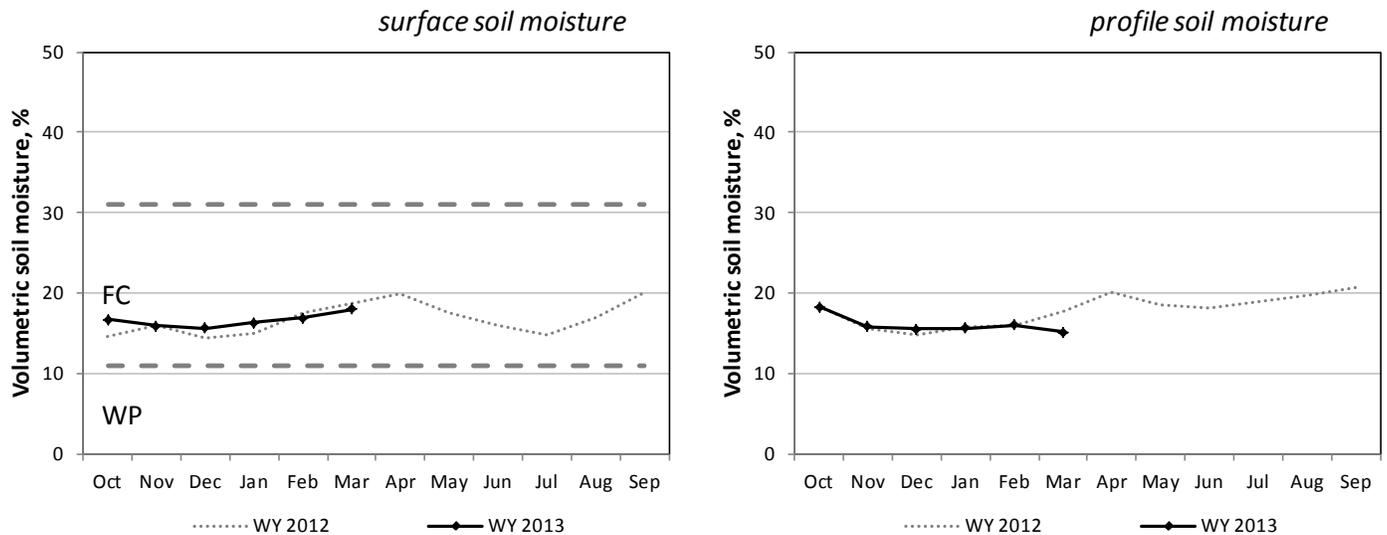
# Western and Dixie

## 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	3.7	0.2	13	20	17	15	15	33	33	35	36	39
Park Valley	4.4	1.9	2	6	13	25	22	31	30	31	34	39
Goshute	3.0	0.3	13	24	43	17	25	31	31	31	32	37
Dugway	2.5	0.3	26	33	34		11	31	32	32	36	37
Tule Valley	2.6	0.4	13	11	17	19	8	30	30	31	32	36
Hal's Canyon	1.2	0.2	5	12	14	9	8	33	35	33	36	39
Enterprise	3.0	0.3	12	35	31	15	15	32	34	33	35	39
<b>DIXIE</b>												
Sand Hollow	3.0	0.3	1	5	5	6	0	39	43	46	45	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

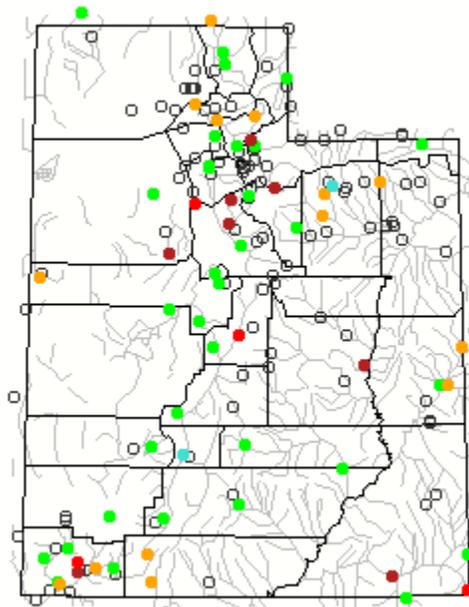
March 1, 2013

## Current Conditions

Soil moisture values are dry in the southern and eastern portions of the state and near to above in the north. Precipitation across the state was much below average for February (46%) which brings seasonal precipitation (Oct-Feb) to 81%. Snowpack across the state is below normal at 80% of median. Reservoir storage is much lower than last year at 69% of capacity compared to 87%. Overall, water supply conditions are below normal in northern, eastern and southeastern Utah and near normal.

## Current Utah Streamflow - Courtesy US Geological Survey

Monday, March 04, 2013 12:30ET



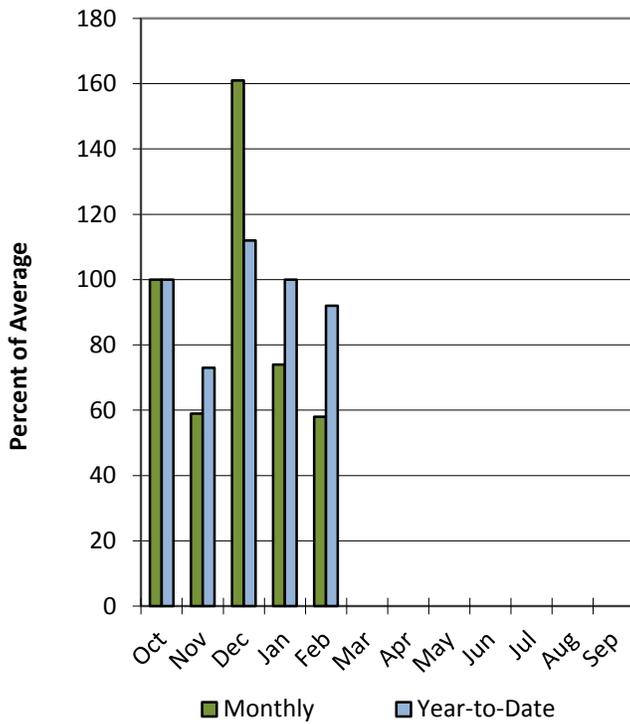
Explanation - Percentile classes						
<10	10-24	25-75	76-90	>90	High	Not ranked
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	

# Raft River Basin

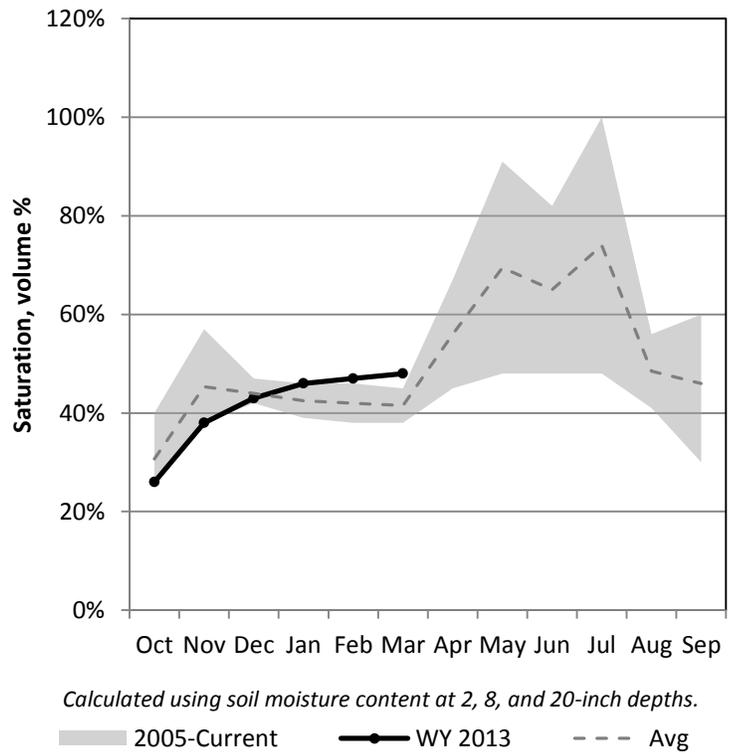
3/1/2013

Precipitation in February was much below average at 58%, which brings the seasonal accumulation (Oct-Feb) to 92% of average. Soil moisture is at 48% compared to 38% last year.

## Precipitation



## Soil Moisture

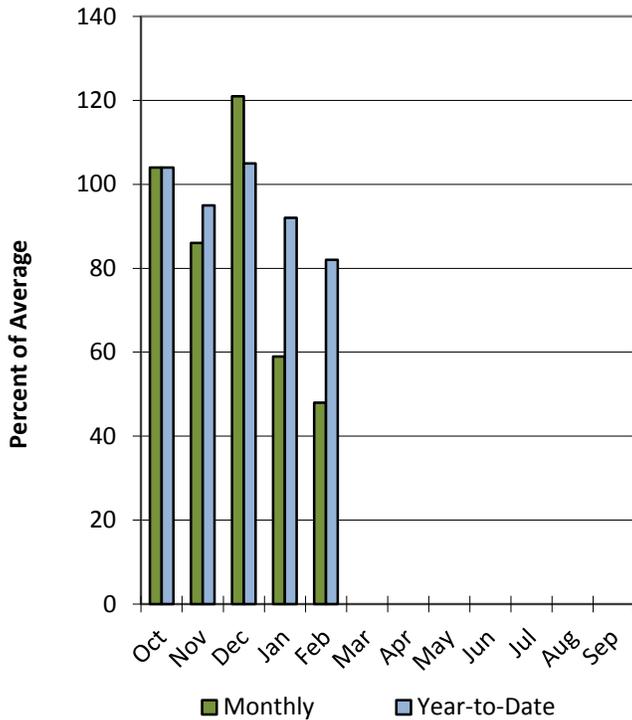


# Bear River Basin

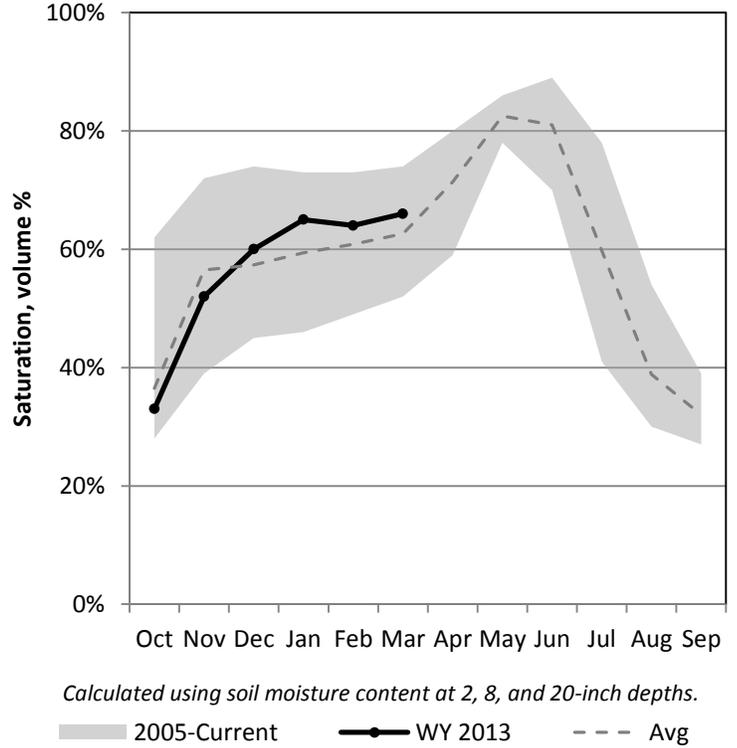
3/1/2013

Precipitation in February was much below average at 48%, which brings the seasonal accumulation (Oct-Feb) to 82% of average. Soil moisture is at 66% compared to 54% last year. Reservoir storage is at 67% of capacity, compared to 86% last year. The water availability index for the Bear River is 50%.

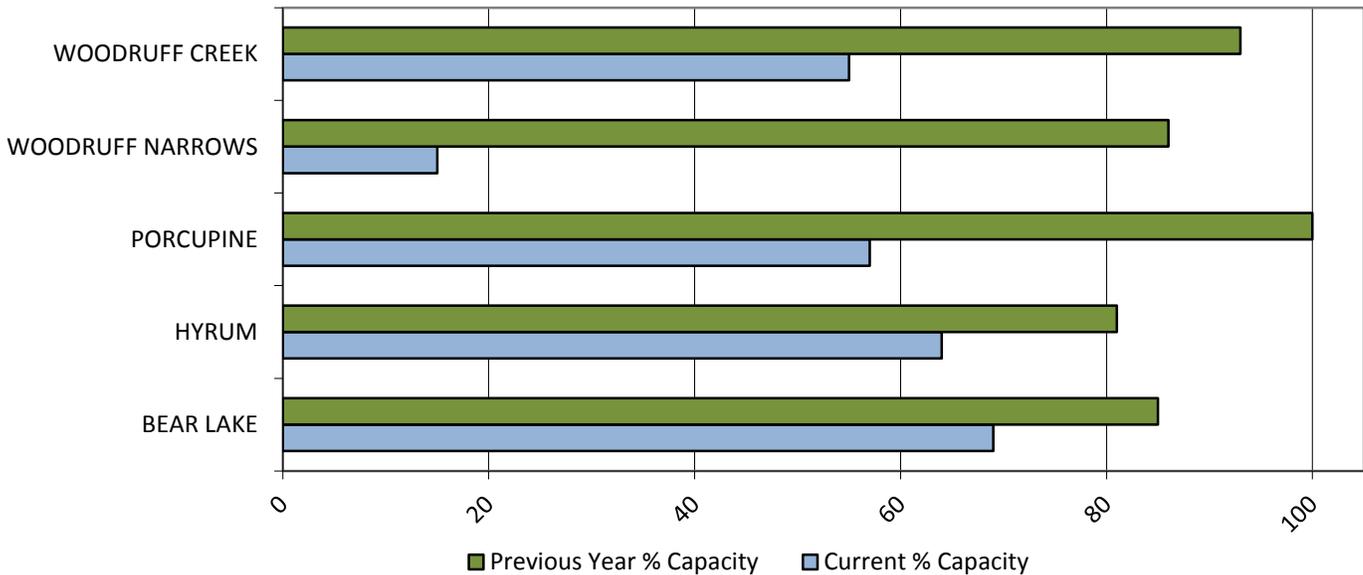
## Precipitation



## Soil Moisture



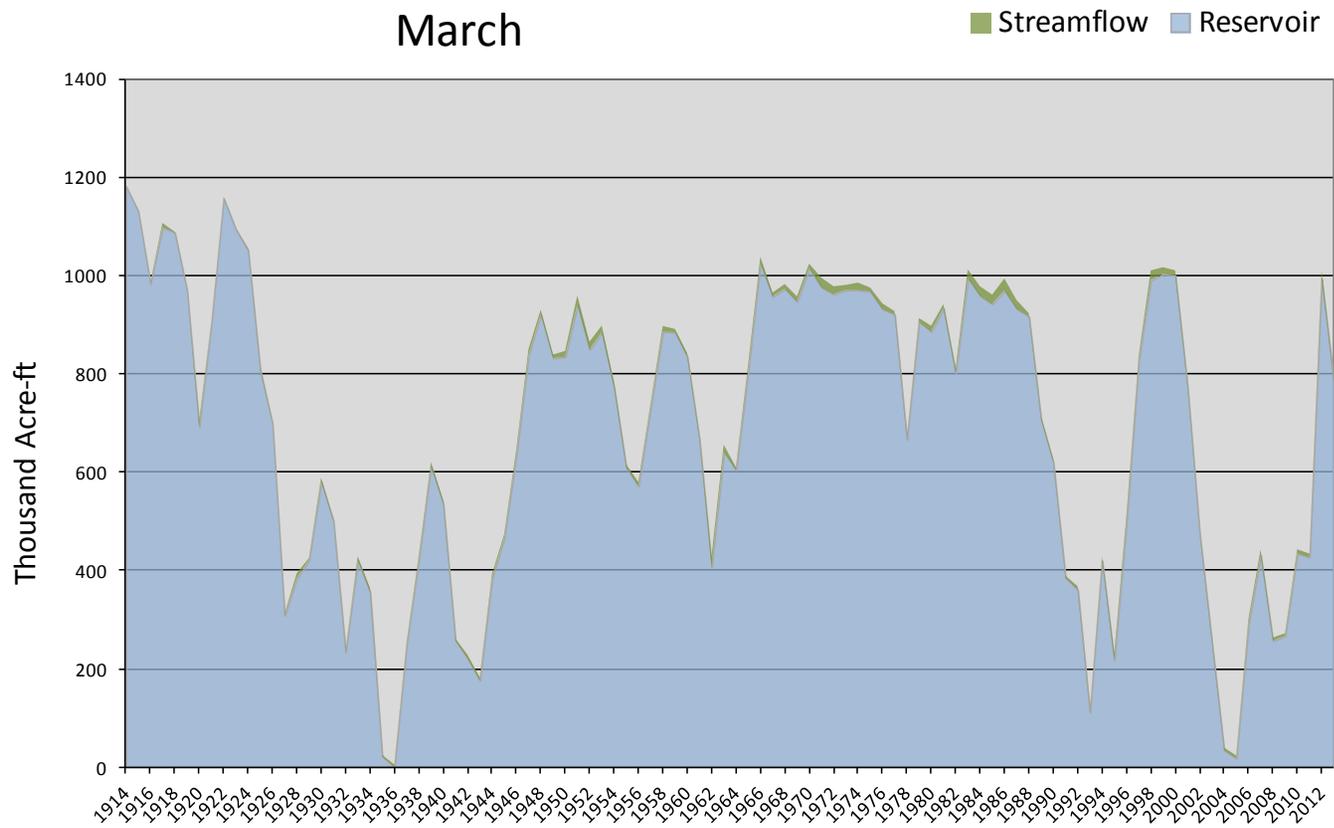
## Reservoir Storage



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Bear Lake	February accumulated inflow to Bear Lake ( <i>observed</i> )	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Bear River</b>	<b>783</b>	<b>7</b>	<b>790</b>	<b>0.04</b>	<b>50</b>	<b>01, 54, 82, 25</b>

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

Bear Lake - Water Availability Index  
March

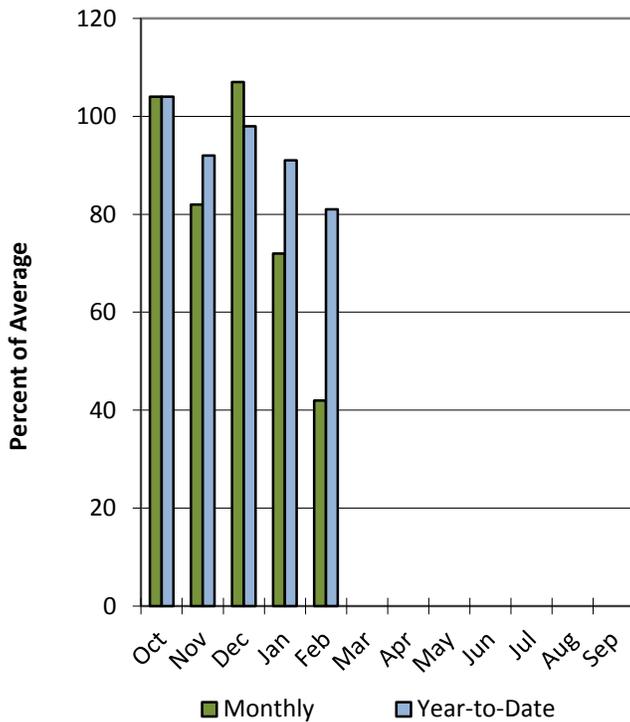


# Weber & Ogden River Basins

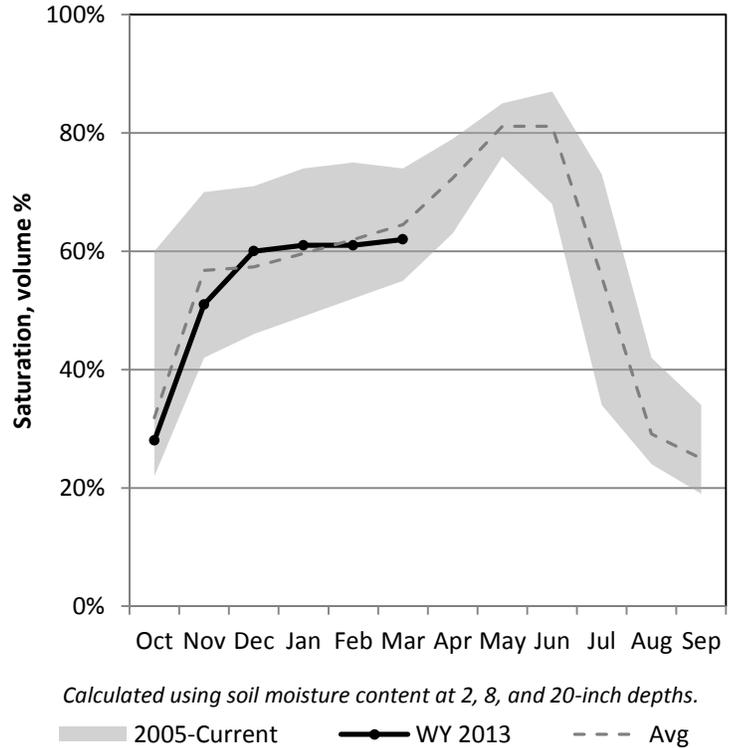
3/1/2013

Precipitation in February was much below average at 42%, which brings the seasonal accumulation (Oct-Feb) to 81% of average. Soil moisture is at 62% compared to 56% last year. Reservoir storage is at 54% of capacity, compared to 83% last year. The water availability index for the Ogden River is 38% and 22% for the Weber River.

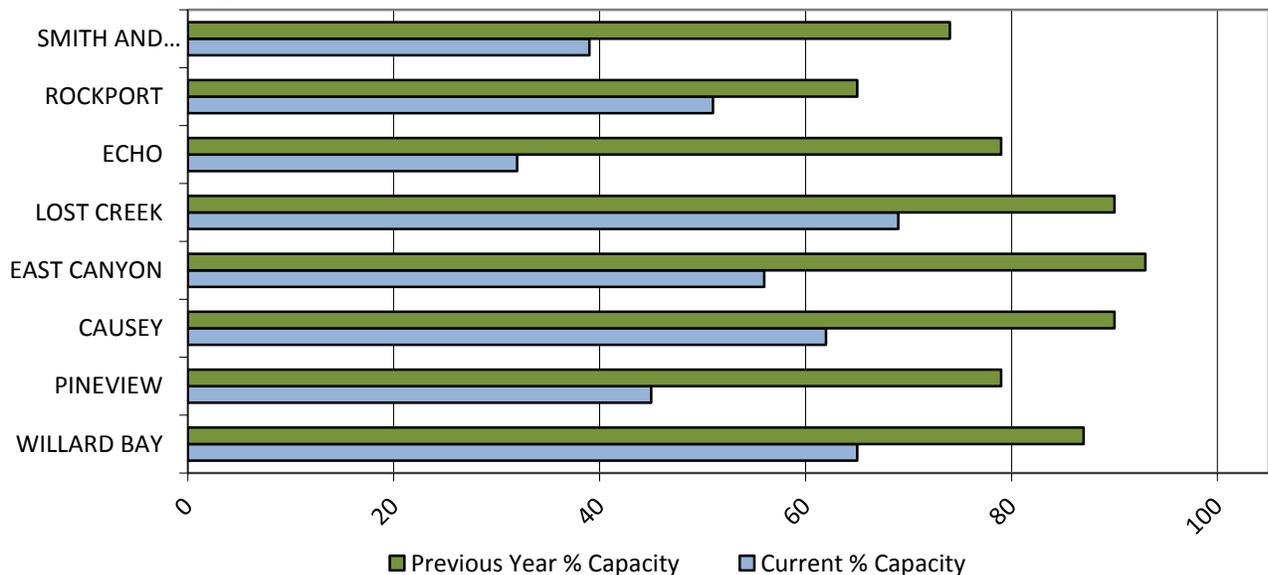
## Precipitation



## Soil Moisture



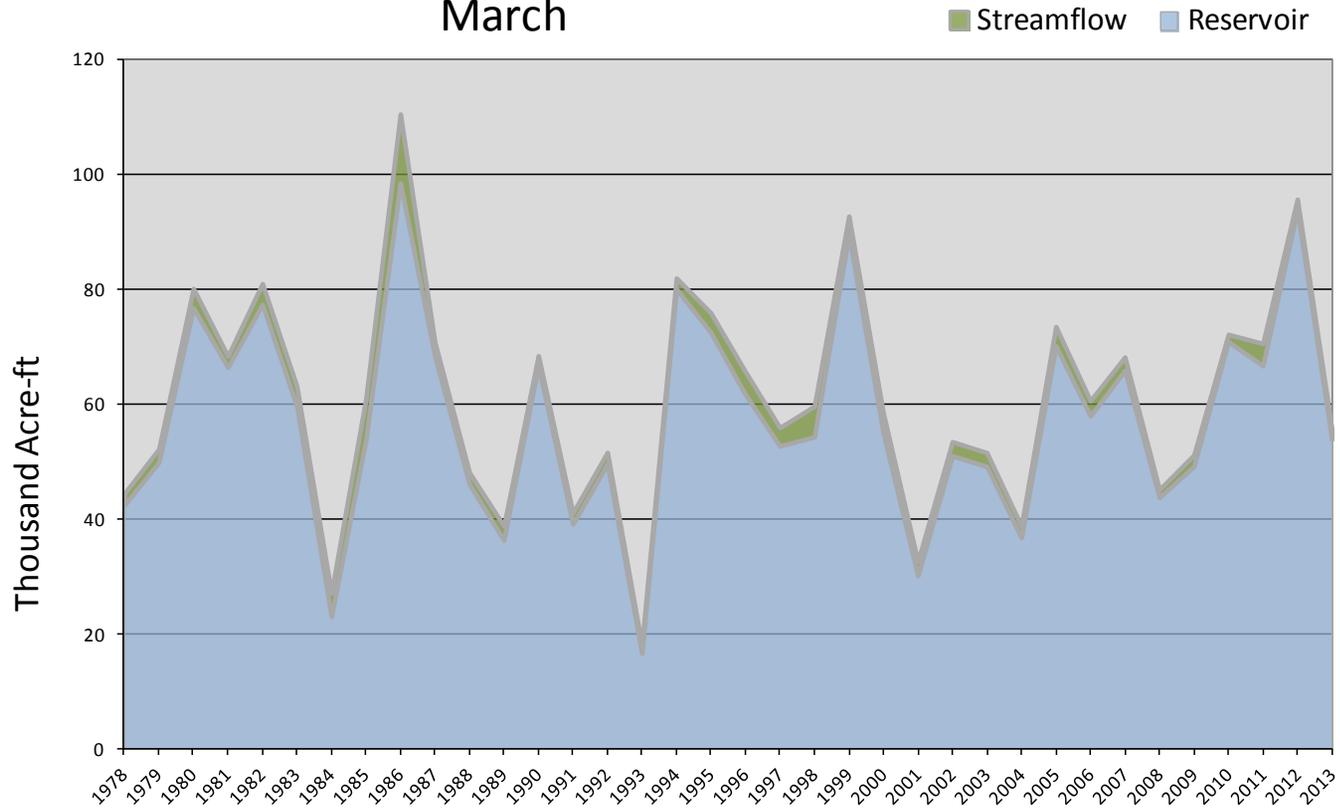
## Reservoir Storage



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Pine View & Causey	February 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>53.8</b>	<b>1.8</b>	<b>55.6</b>	<b>-0.79</b>	<b>41</b>	<b>79, 02, 97, 00</b>

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

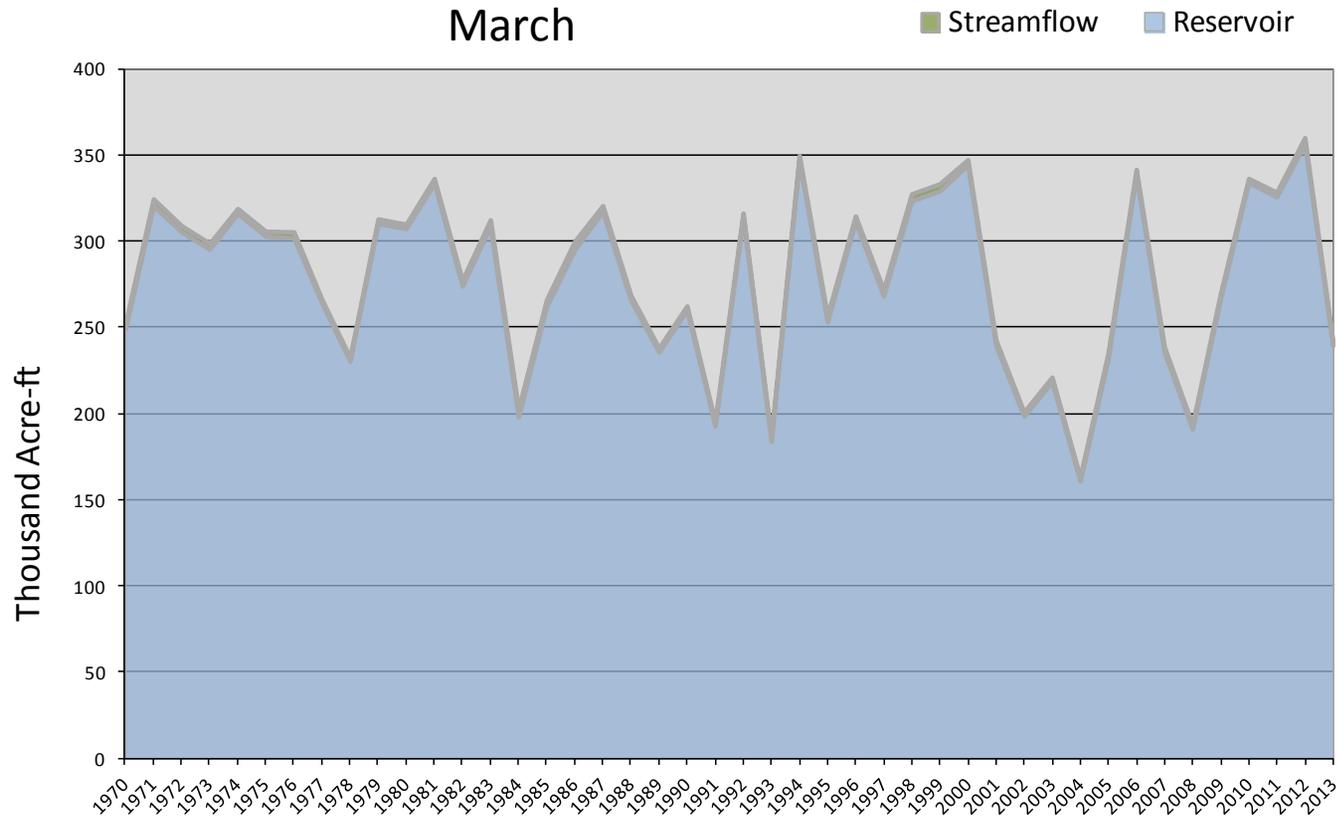
Ogden River - Water Availability Index  
March



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Reservoirs	February accumulated flow at Weber near Oakley ( <i>observed</i> )	Reservoirs + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Weber River</b>	<b>240</b>	<b>3</b>	<b>242</b>	<b>-1.94</b>	<b>27</b>	<b>89, 07, 01, 70</b>

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

Weber River - Water Availability Index  
March

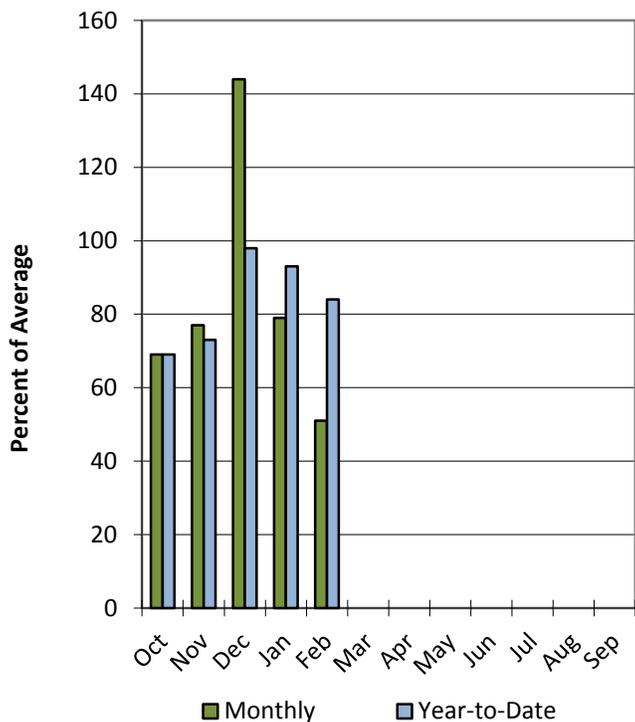


# Tooele & Vernon Creek Basins

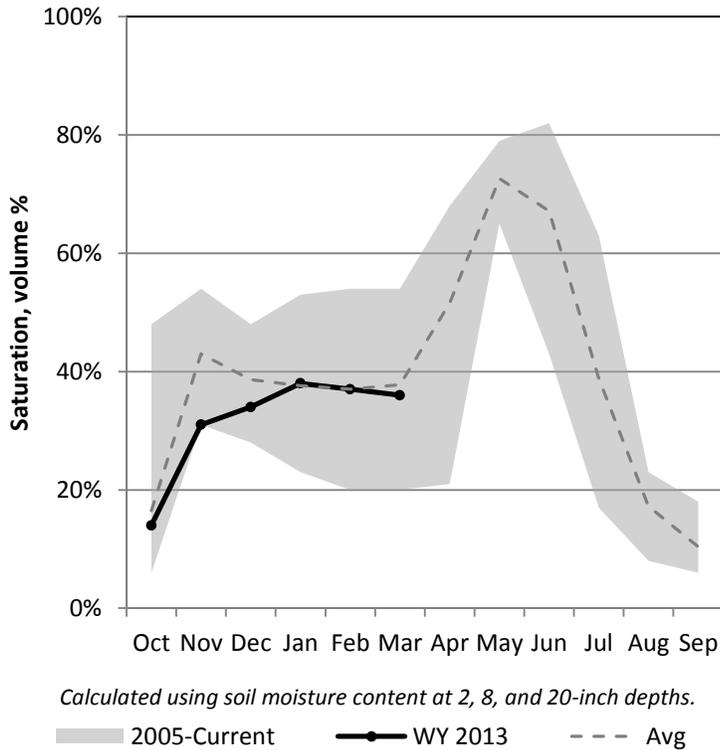
3/1/2013

Precipitation in February was much below average at 51%, which brings the seasonal accumulation (Oct-Feb) to 84% of average. Soil moisture is at 36% compared to 24% last year. Reservoir storage is at 37% of capacity, compared to 96% last year.

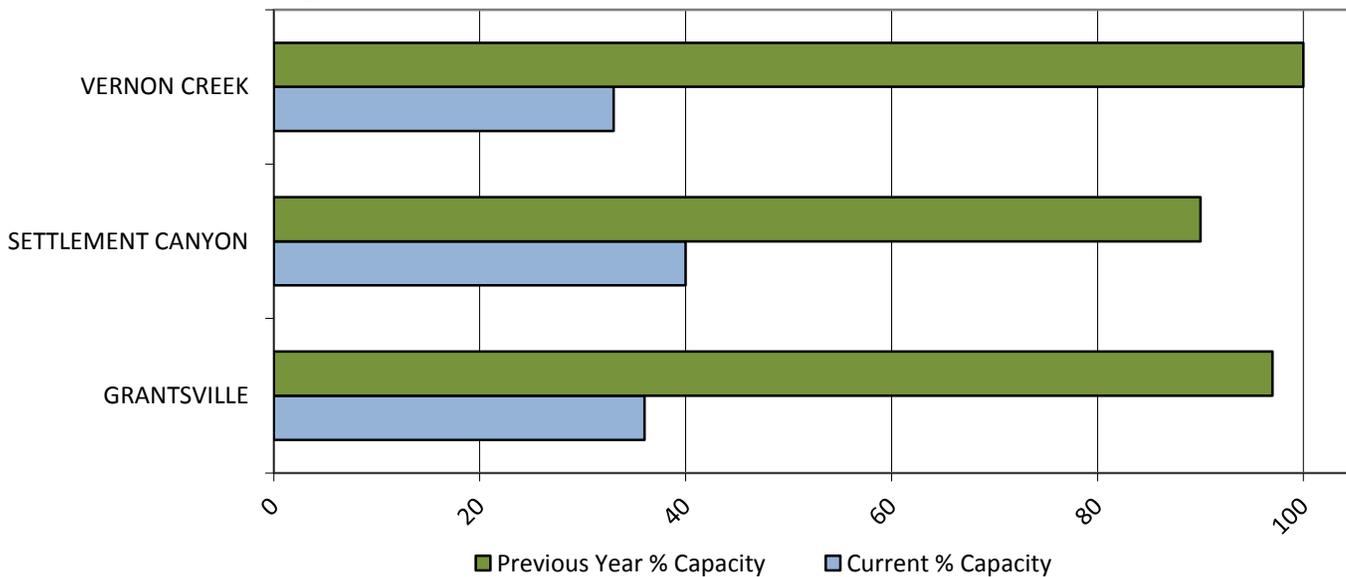
## Precipitation



## Soil Moisture



## Reservoir Storage

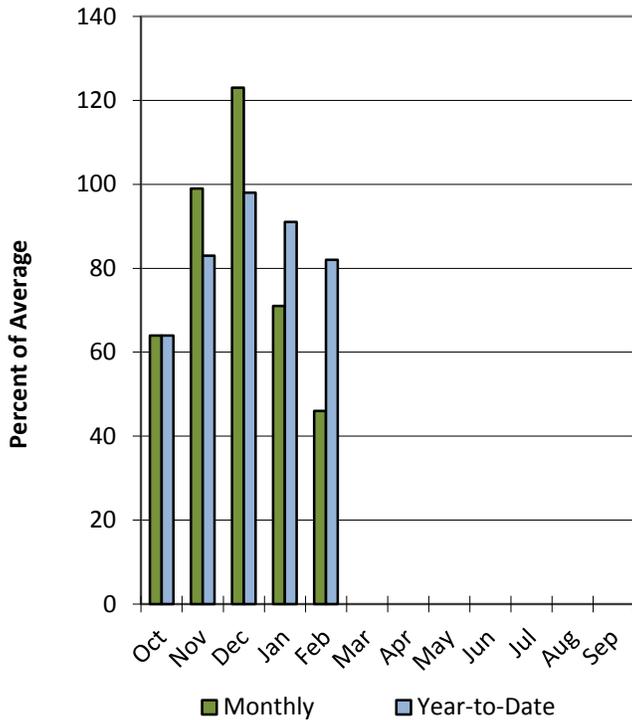


# Provo & Jordan River Basins

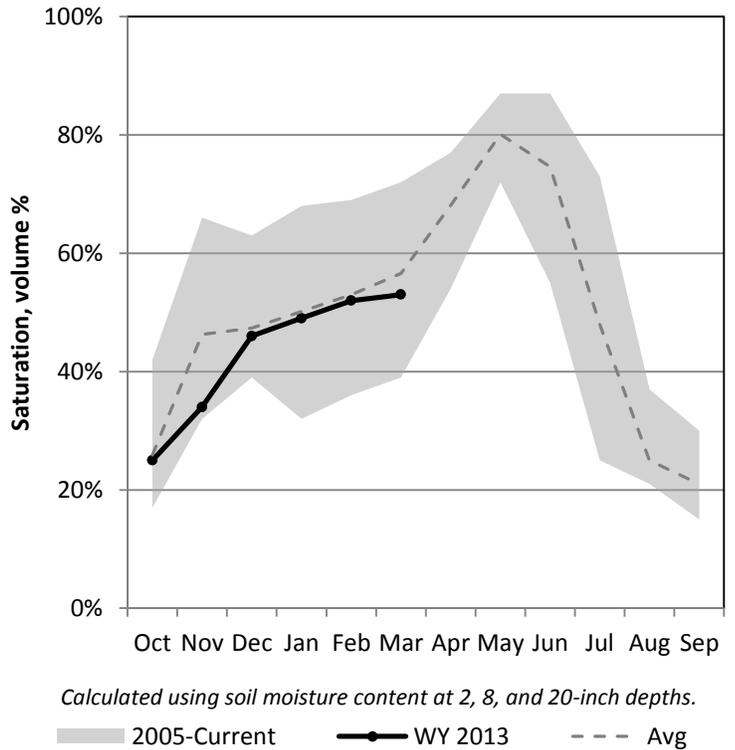
3/1/2013

Precipitation in February was much below average at 46%, which brings the seasonal accumulation (Oct-Feb) to 82% of average. Soil moisture is at 53% compared to 42% last year. Reservoir storage is at 79% of capacity, compared to 92% last year. The water availability index for the Provo River is 21%.

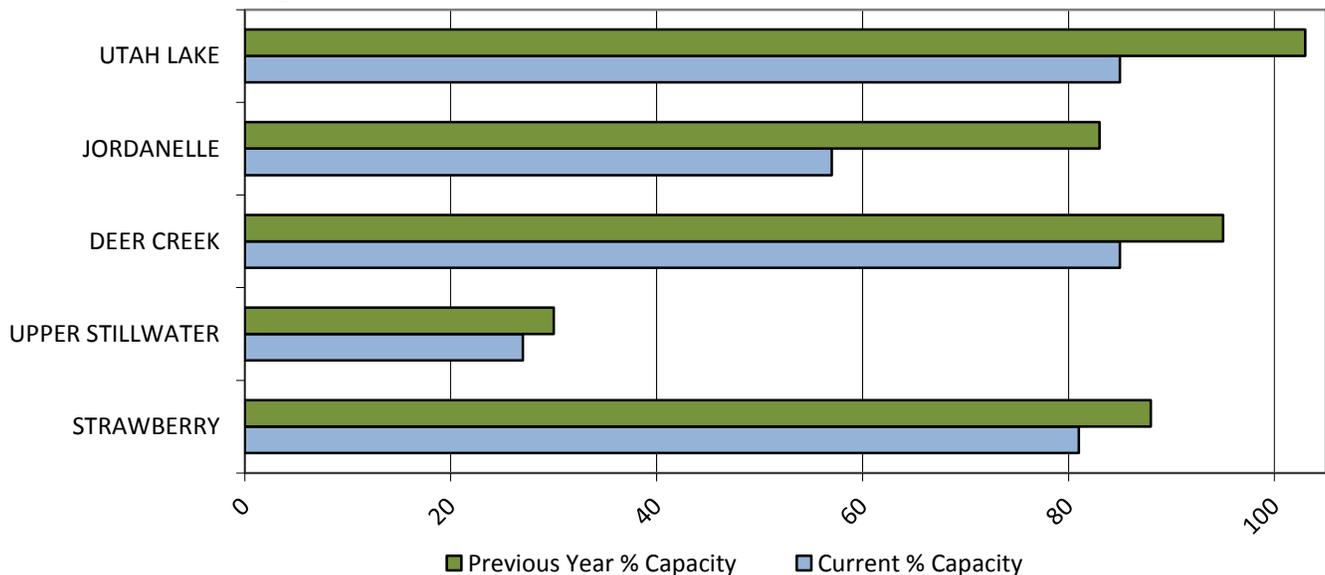
## Precipitation



## Soil Moisture

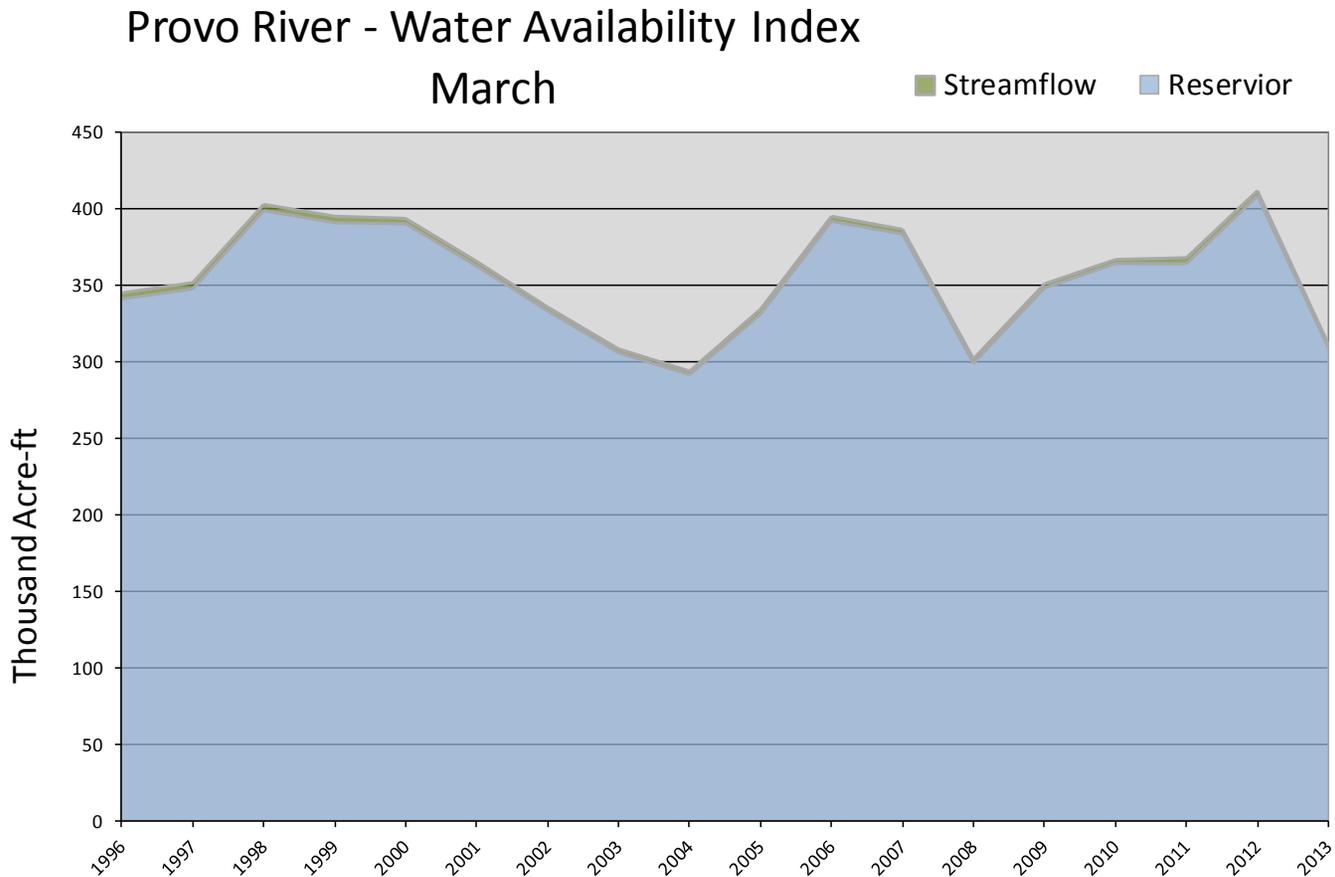


## Reservoir Storage



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Deer Creek, Jordanelle	February accumulated flow Provo River at Woodland ( <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>Provo</b>	<b>309</b>	<b>2.3</b>	<b>311</b>	<b>-2.41</b>	<b>21%</b>	<b>02,05,03,08</b>

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

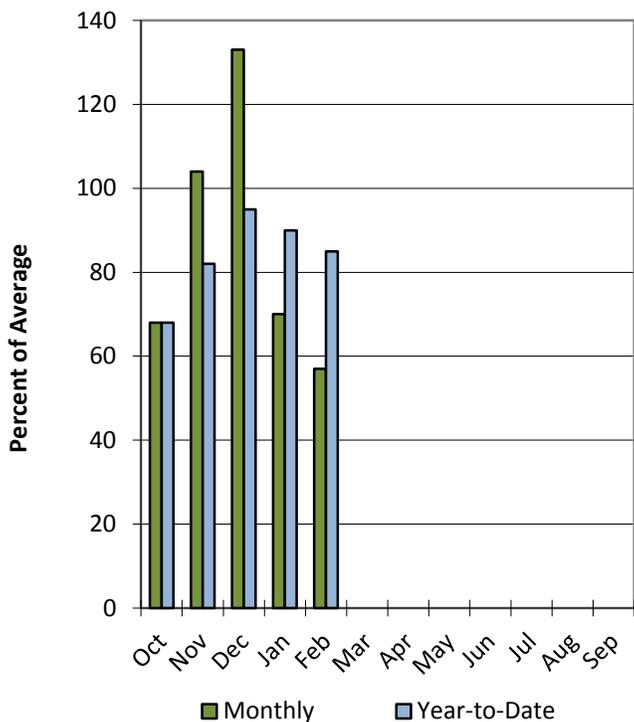


# Northeastern Uintah Basin

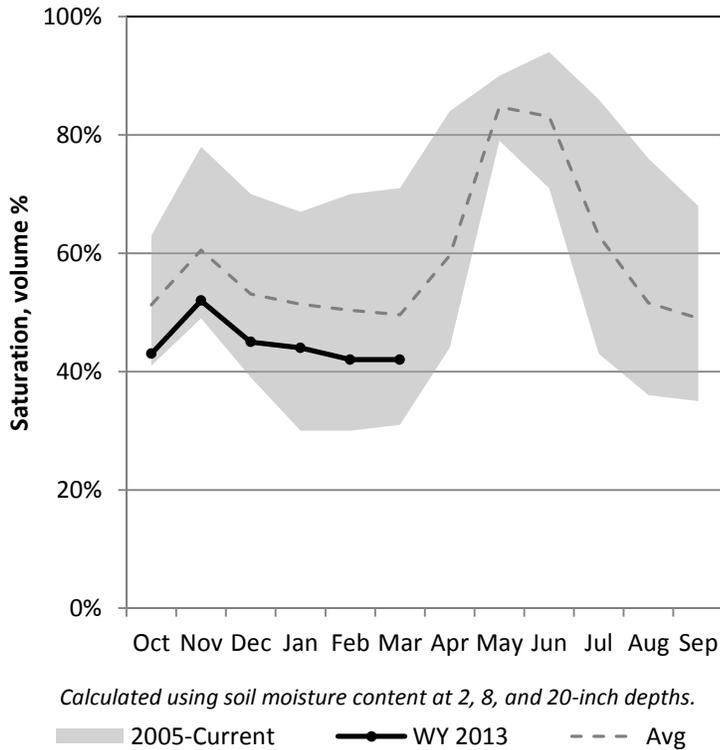
3/1/2013

Precipitation in February was much below average at 57%, which brings the seasonal accumulation (Oct-Feb) to 85% of average. Soil moisture is at 42% compared to 61% last year. Reservoir storage is at 79% of capacity, compared to 87% last year.

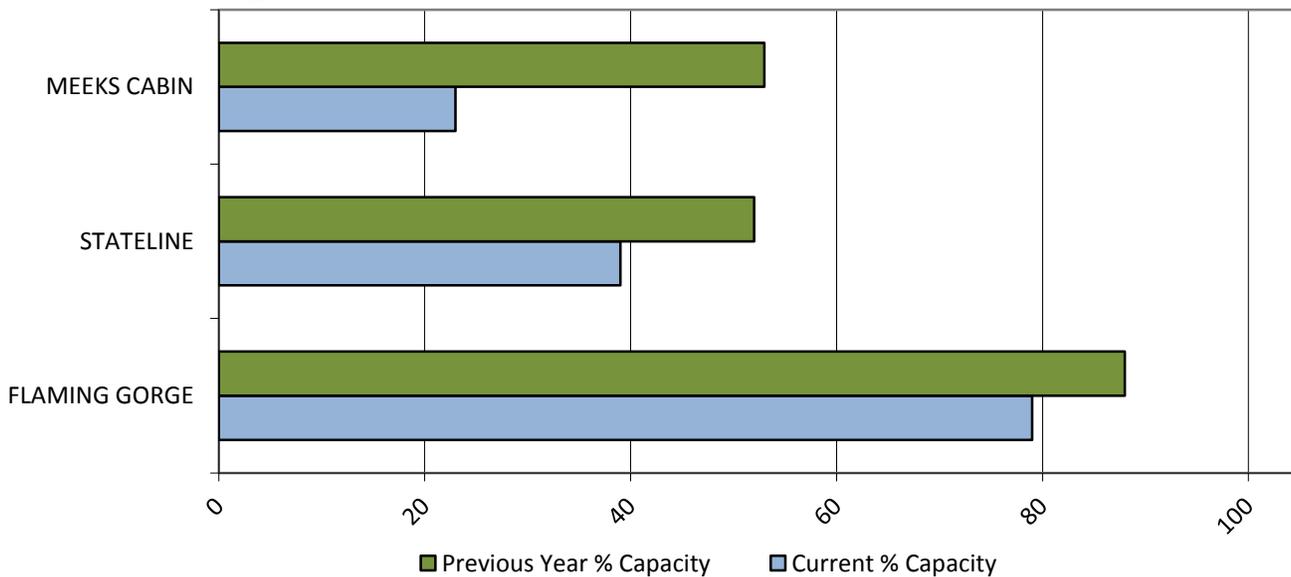
## Precipitation



## Soil Moisture



## Reservoir Storage

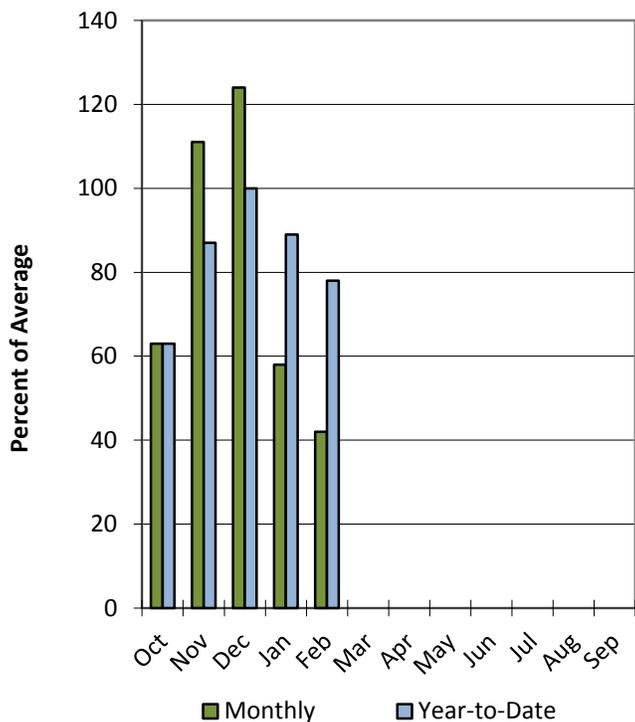


# Duchesne River Basin

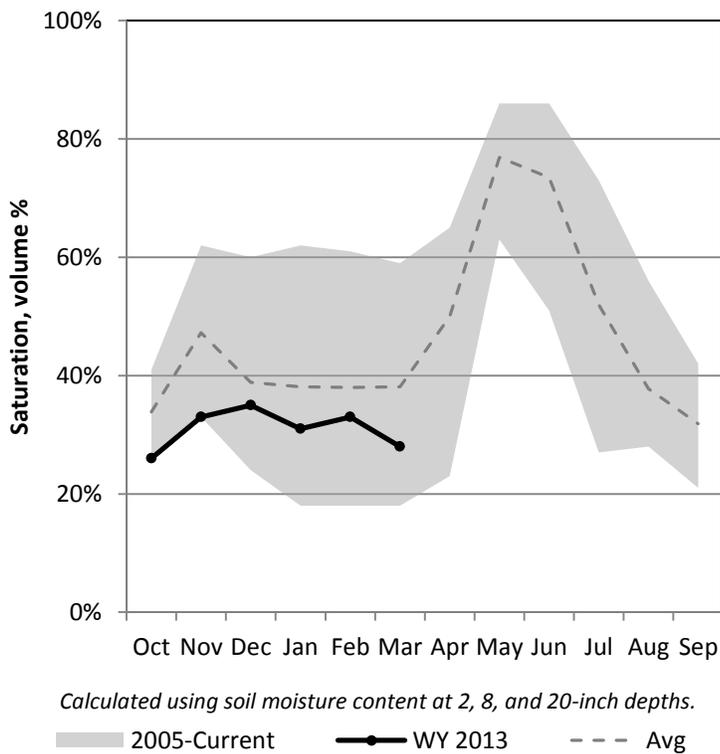
3/1/2013

Precipitation in February was much below average at 42%, which brings the seasonal accumulation (Oct-Feb) to 78% of average. Soil moisture is at 28% compared to 31% last year. Reservoir storage is at 78% of capacity, compared to 88% last year. The water availability index for the Western Uintahs is 18% and 14% for the Eastern Uintahs.

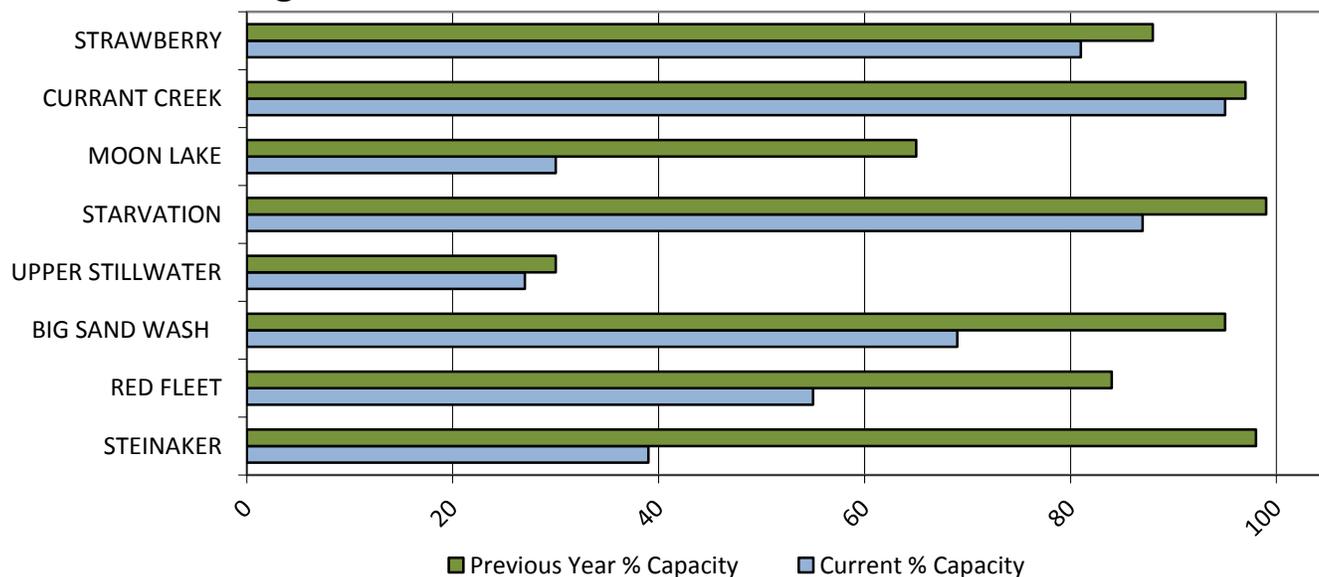
## Precipitation



## Soil Moisture



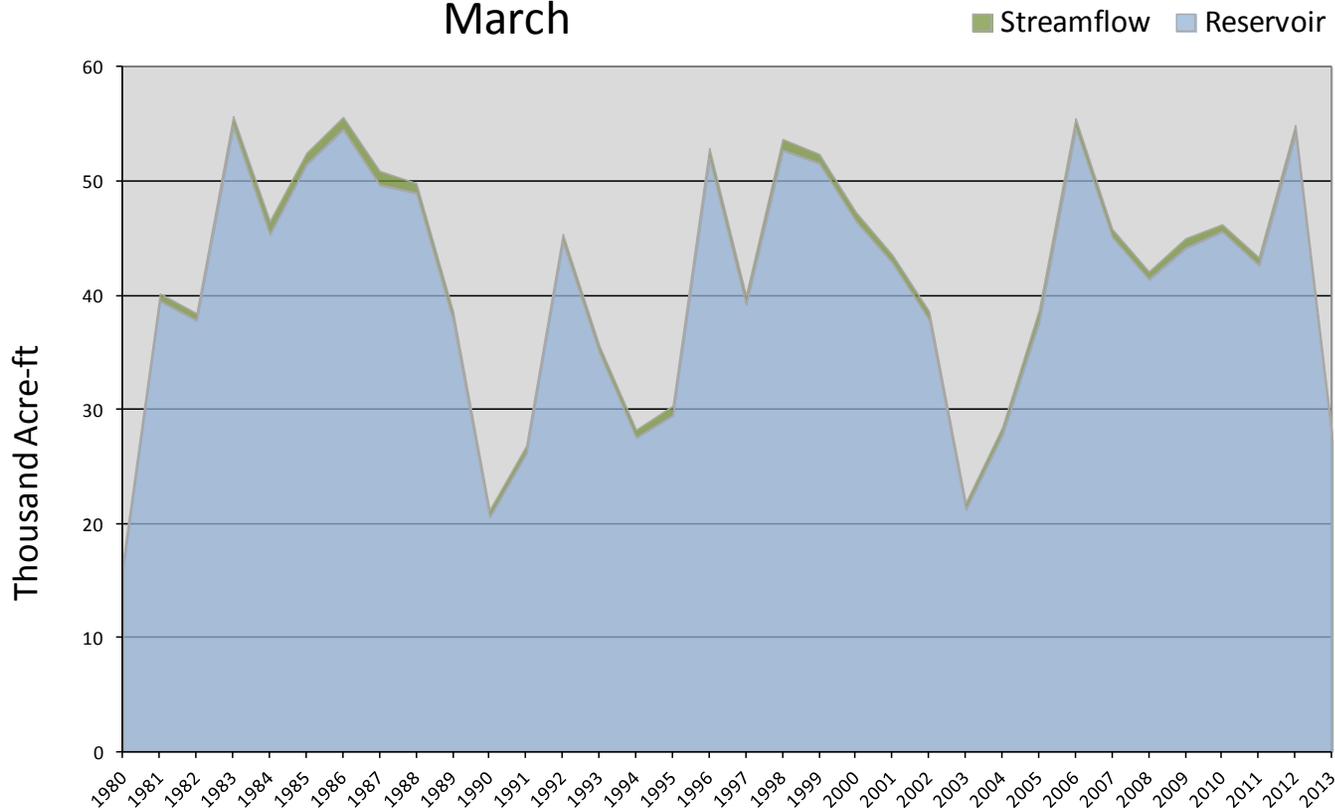
## Reservoir Storage



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Red Fleet and Steinaker	February accumulated flow Big Brush Creek ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Eastern Uintah</b>	<b>27.3</b>	<b>0.7</b>	<b>28.0</b>	<b>-2.98</b>	<b>14</b>	<b>03, 91, 94, 04</b>

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

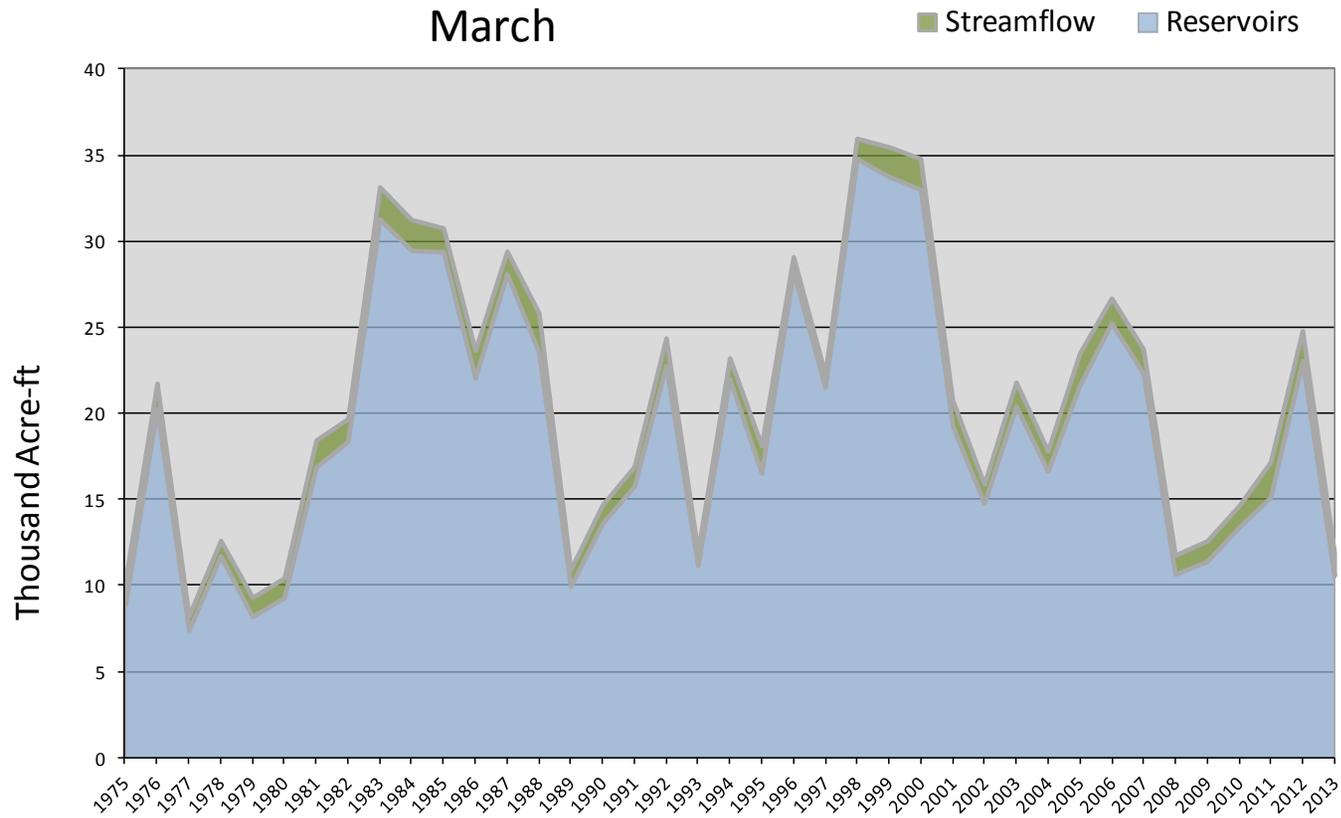
Eastern Uintah - Water Availability Index  
March



March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Moon Lake	February accumulated flow Lake Fork Creek above Moon Lake ( <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>Moon Lake</b>	<b>10.6</b>	<b>1.4</b>	<b>12.0</b>	<b>-2.71</b>	<b>18</b>	<b>89, 08, 93, 09</b>

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

Moon Lake - Water Availability Index  
March

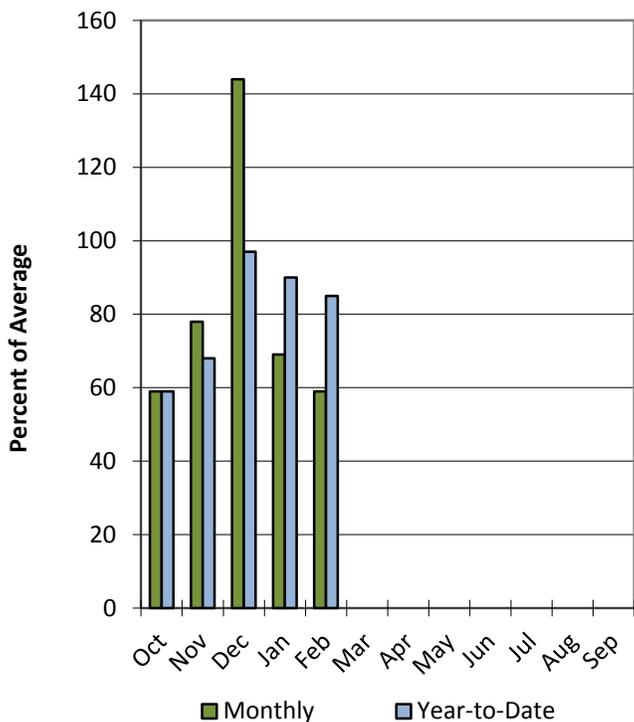


# Price & San Rafael Basins

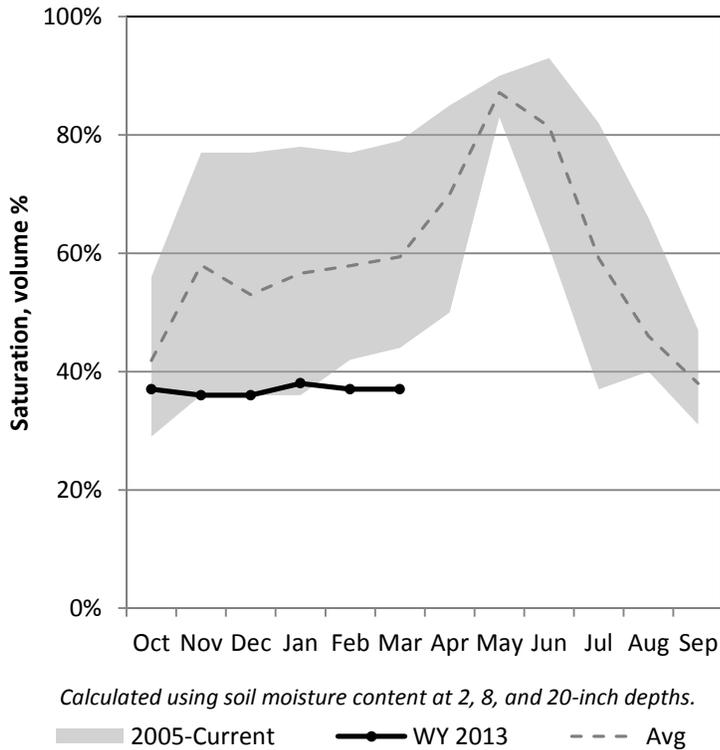
3/1/2013

Precipitation in February was much below average at 59%, which brings the seasonal accumulation (Oct-Feb) to 85% of average. Soil moisture is at 37% compared to 56% last year. Reservoir storage is at 50% of capacity, compared to 78% last year. The water availability index for the Price River is 48%, and 23% for Joe's Valley.

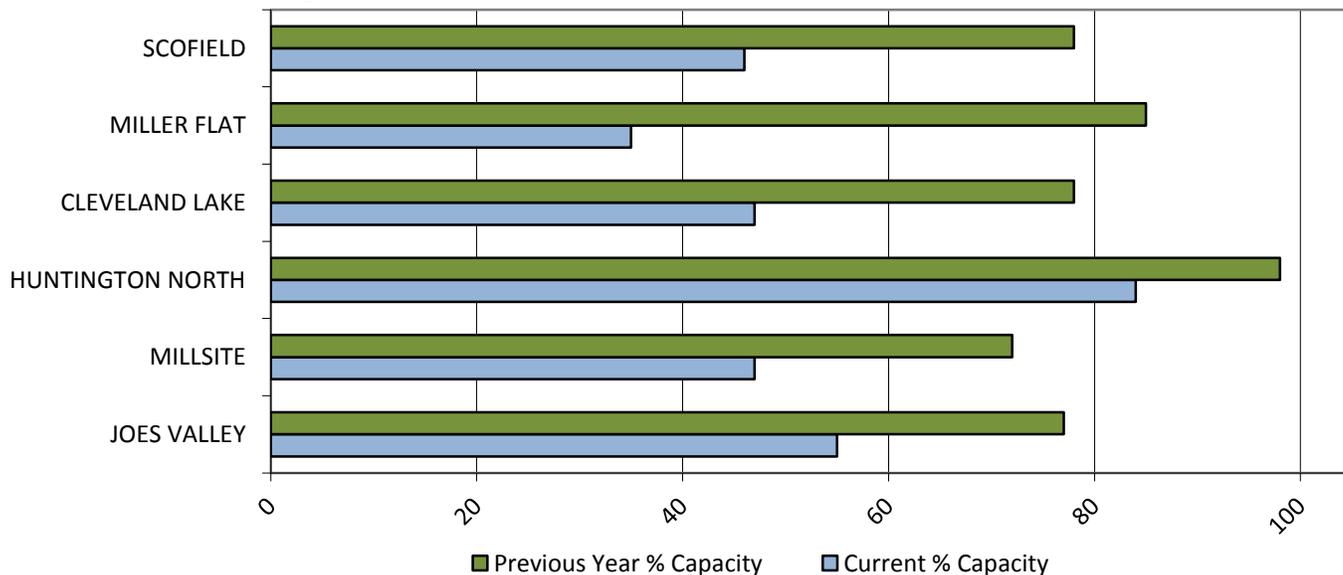
## Precipitation



## Soil Moisture



## Reservoir Storage

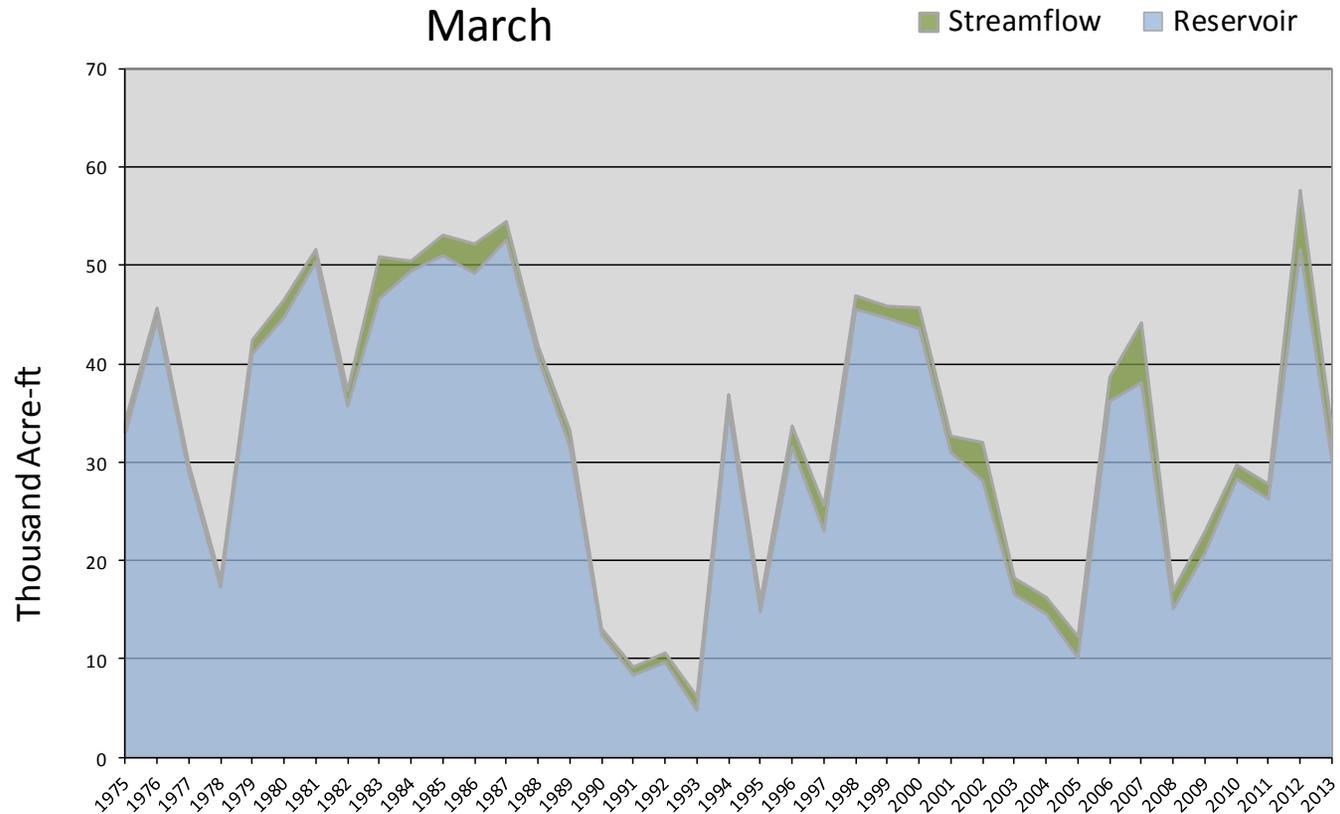


March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Scofield	February accumulated inflow to Scofield (calculated)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Price River</b>	<b>30.1</b>	<b>3.2</b>	<b>33.3</b>	<b>-0.21</b>	<b>48</b>	<b>01, 89, 96, 75</b>

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

### Price River - Water Availability Index

March

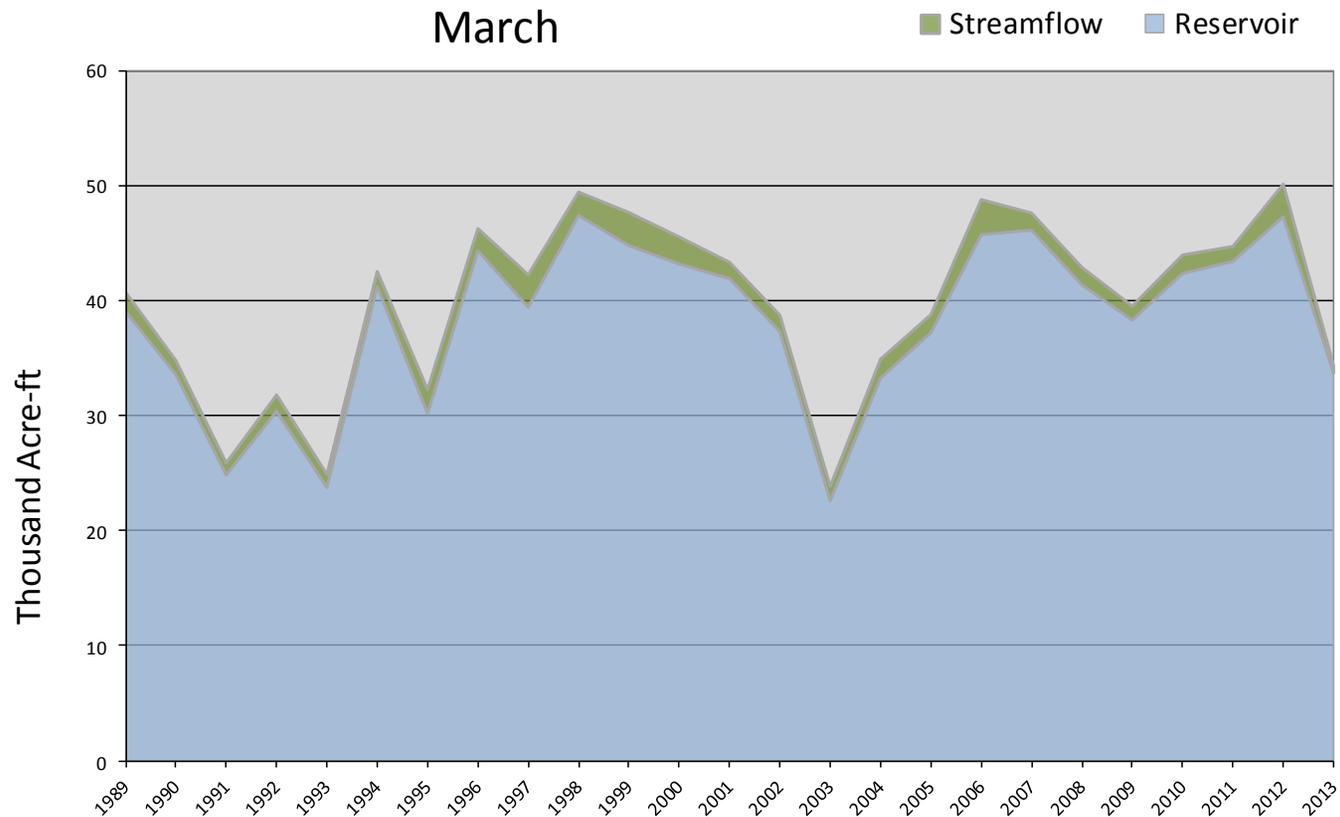


March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Joe's Valley	February accumulated inflow to Joe's Valley (calculated)	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Joe's Valley</b>	<b>33.7</b>	<b>0.7</b>	<b>34.4</b>	<b>-2.24</b>	<b>23</b>	<b>92, 95, 90, 04</b>

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

## Joe's Valley - Water Availability Index

March

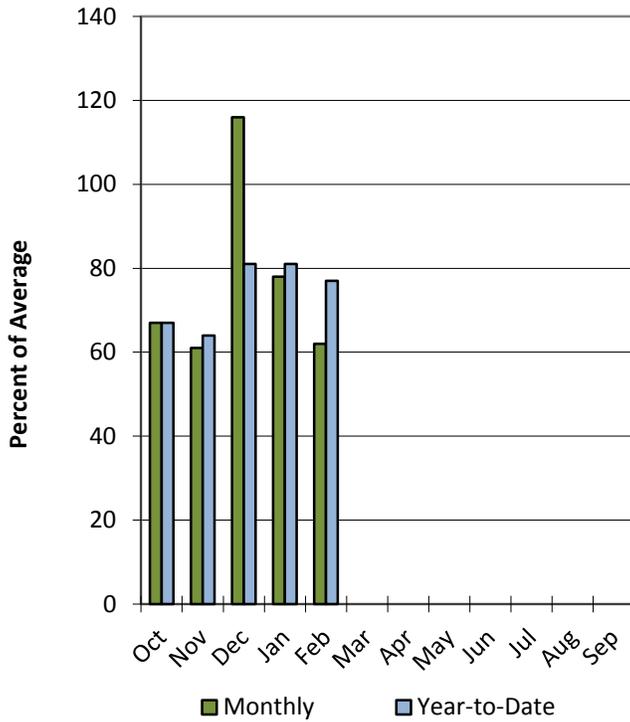


# Dirty Devil Basin

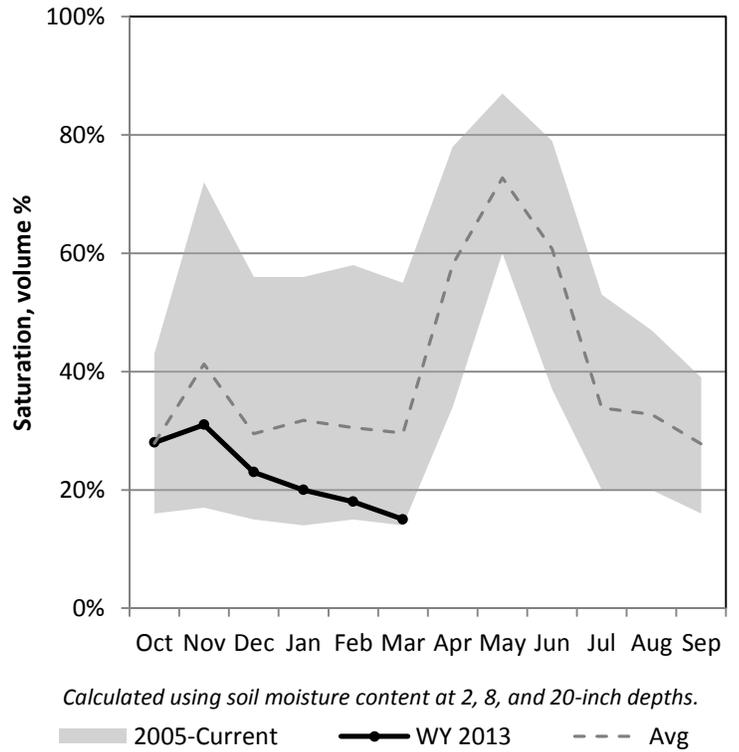
3/1/2013

Precipitation in February was much below average at 62%, which brings the seasonal accumulation (Oct-Feb) to 77% of average. Soil moisture is at 15% compared to 21% last year.

## Precipitation



## Soil Moisture

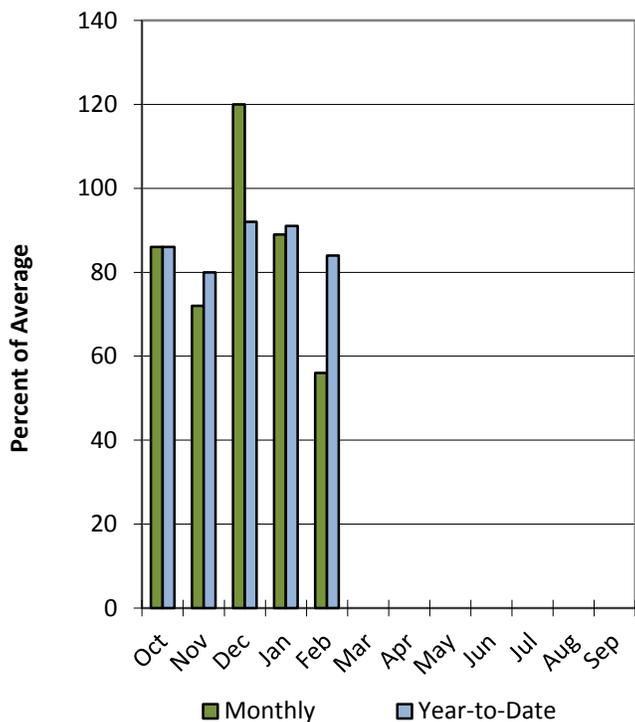


# Escalante River Basin

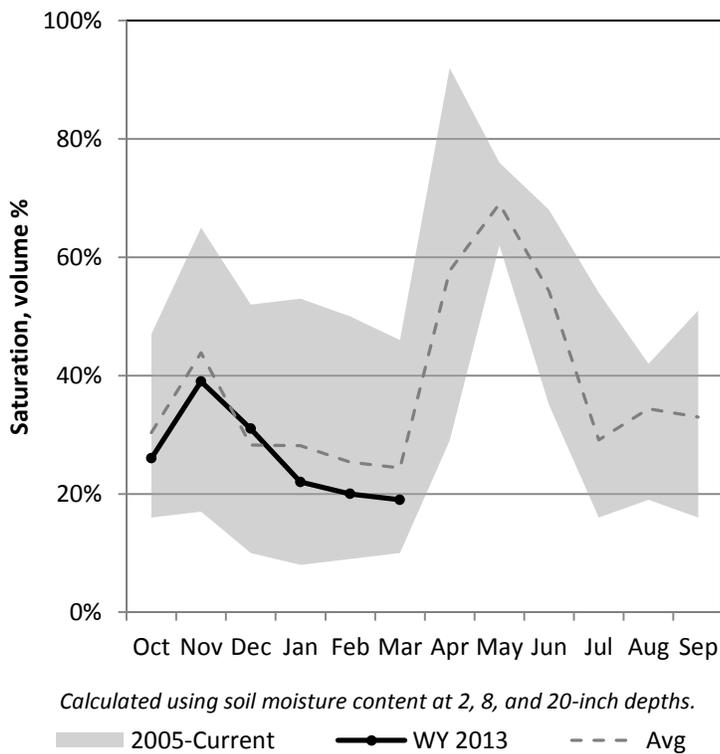
3/1/2013

Precipitation in February was much below average at 56%, which brings the seasonal accumulation (Oct-Feb) to 84% of average. Soil moisture is at 19% compared to 32% last year.

## Precipitation



## Soil Moisture

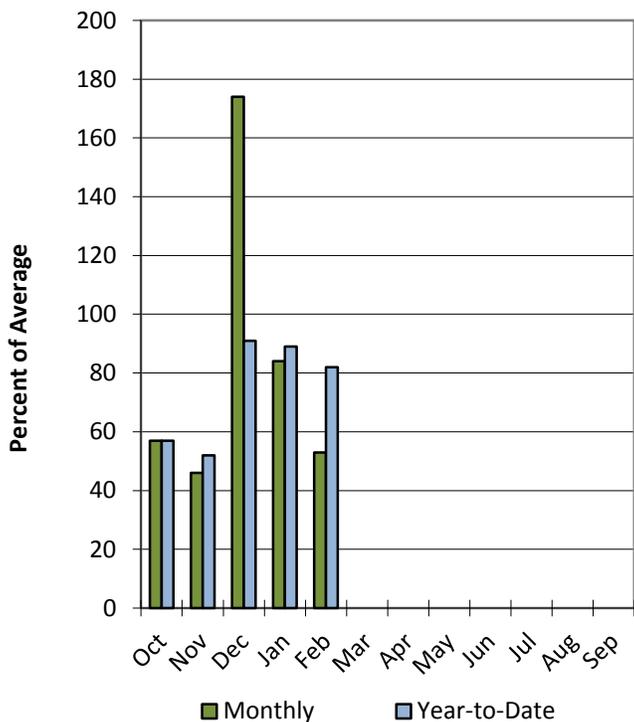


# Southeastern Utah Basin

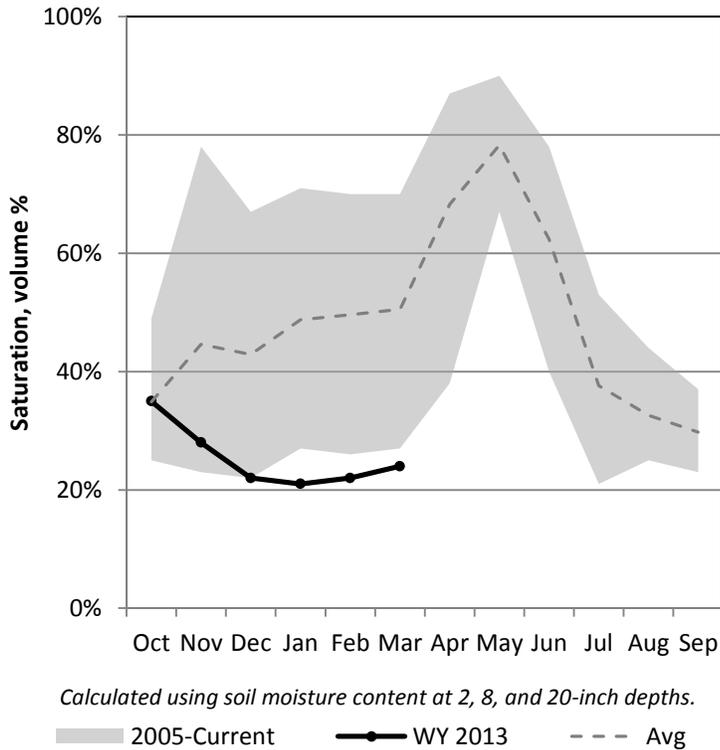
3/1/2013

Precipitation in February was much below average at 53%, which brings the seasonal accumulation (Oct-Feb) to 82% of average. Soil moisture is at 24% compared to 51% last year. Reservoir storage is at 15% of capacity, compared to 83% last year. The water availability index for Moab is 4%.

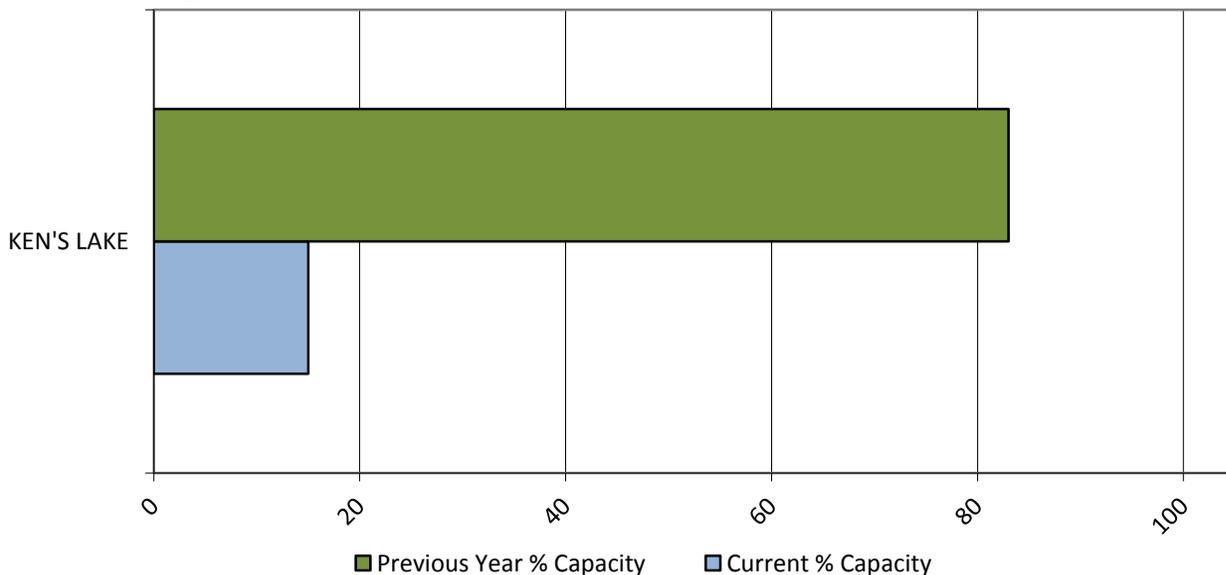
## Precipitation



## Soil Moisture



## Reservoir Storage

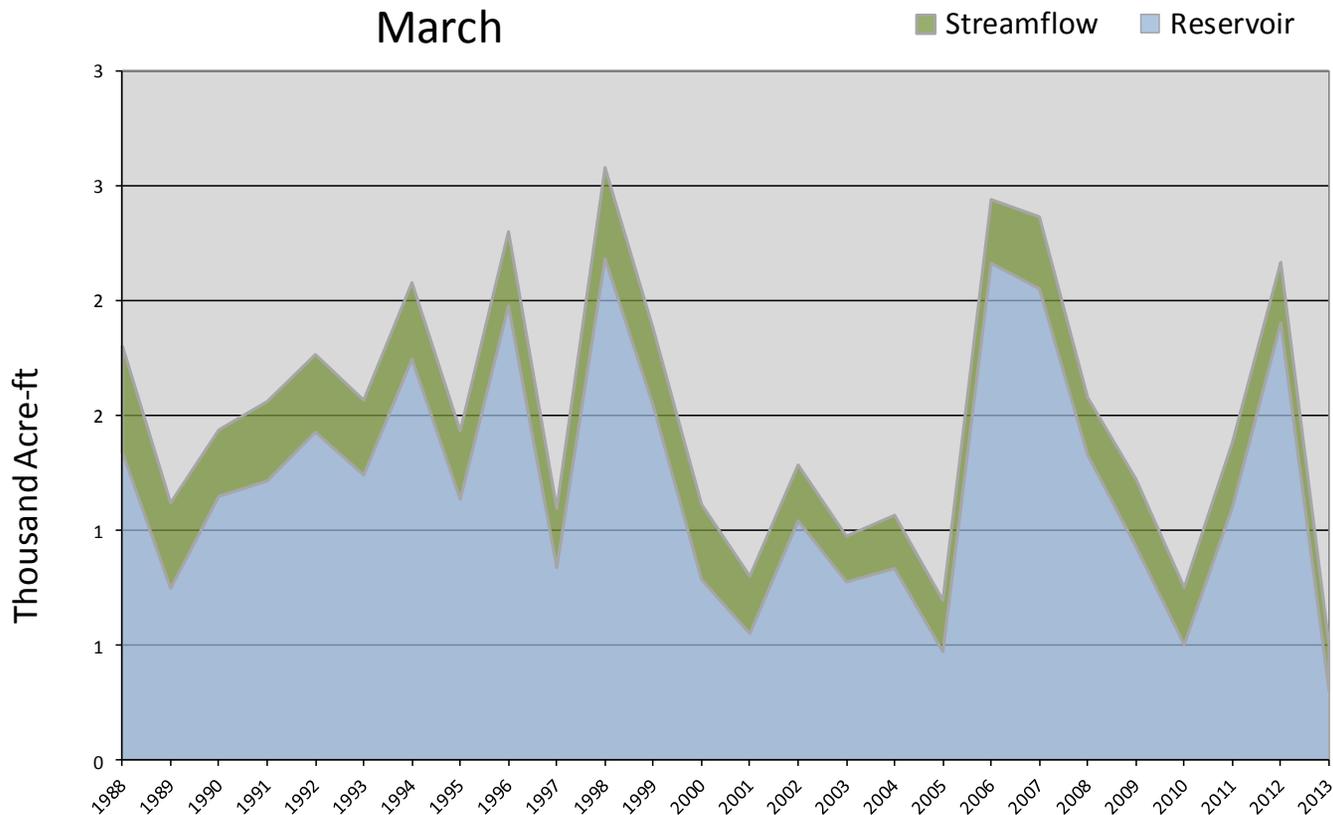


March 1, 2013		Water Availability Index				
Basin or Region	February EOM* Ken's Lake Reservoir	February accumulated flow Mill Creek at Sheley ( <i>observed</i> )	Reservoir + Streamflow	WAI <sup>#</sup>	Percentile	Years with similar WAI
	KAF <sup>^</sup>	KAF	KAF		%	
<b>Moab</b>	<b>0.3</b>	<b>0.2</b>	<b>0.5</b>	<b>-3.86</b>	<b>4</b>	<b>05, 10</b>

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

### Moab - Water Availability Index

March

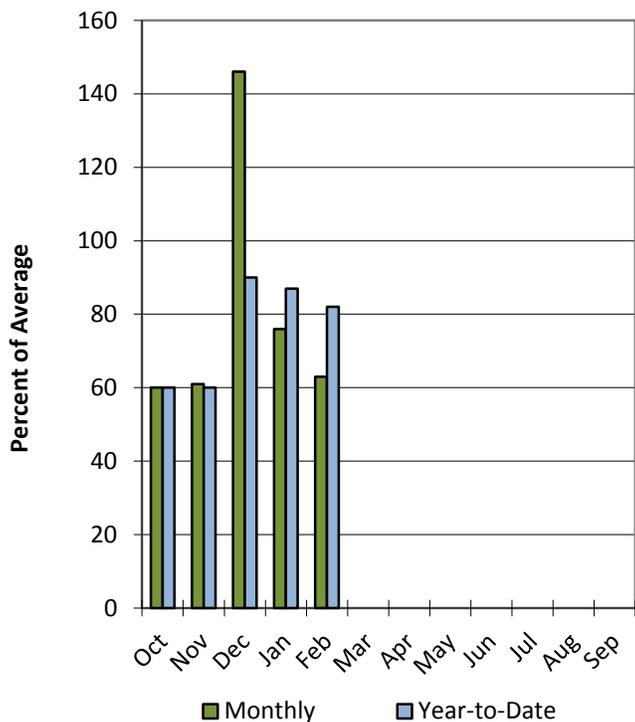


# San Pitch River Basin

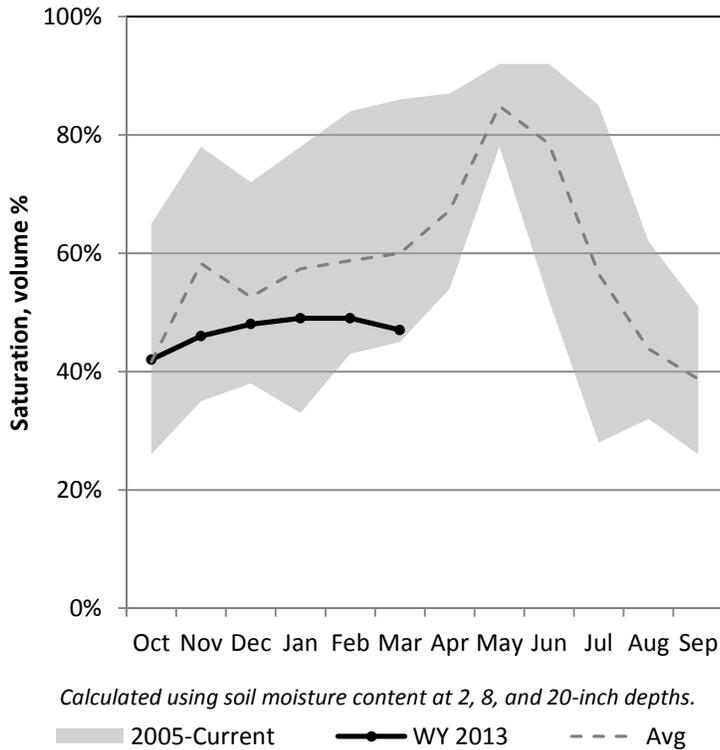
3/1/2013

Precipitation in February was much below average at 63%, which brings the seasonal accumulation (Oct-Feb) to 82% of average. Soil Moisture is at 47% compared to 56% last year. Reservoir storage is at 30% of capacity, compared to 100% last year.

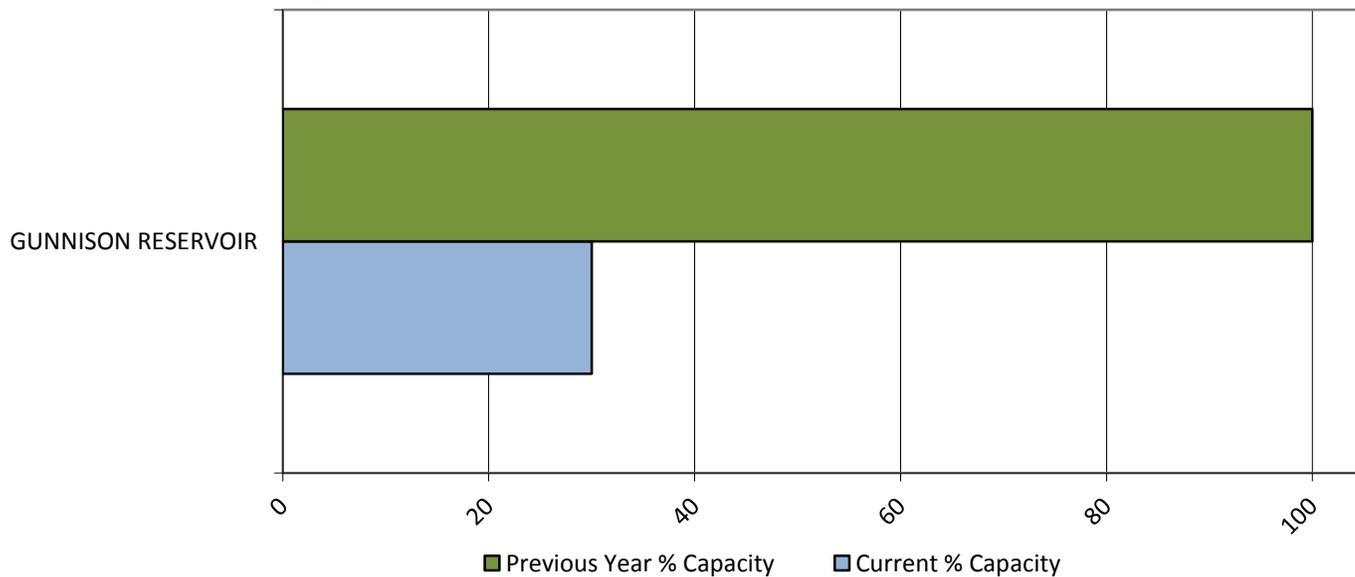
## Precipitation



## Soil Moisture



## Reservoir Storage

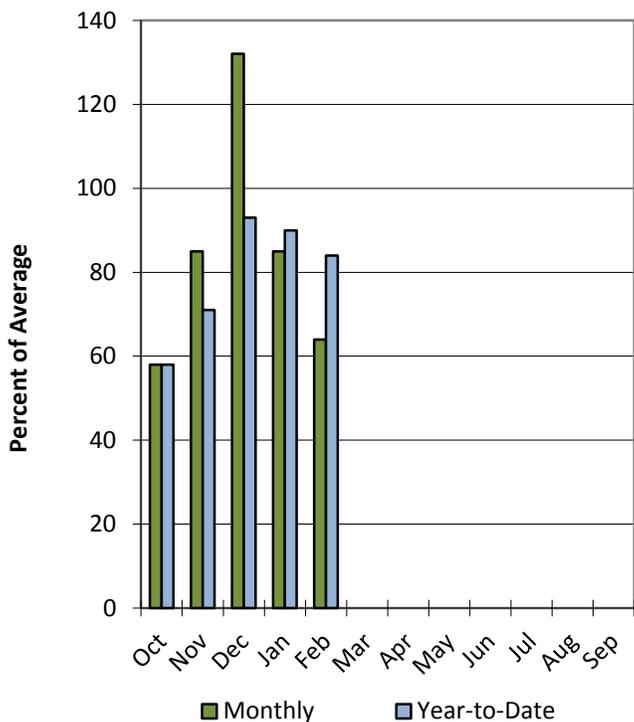


# Upper Sevier River Basin

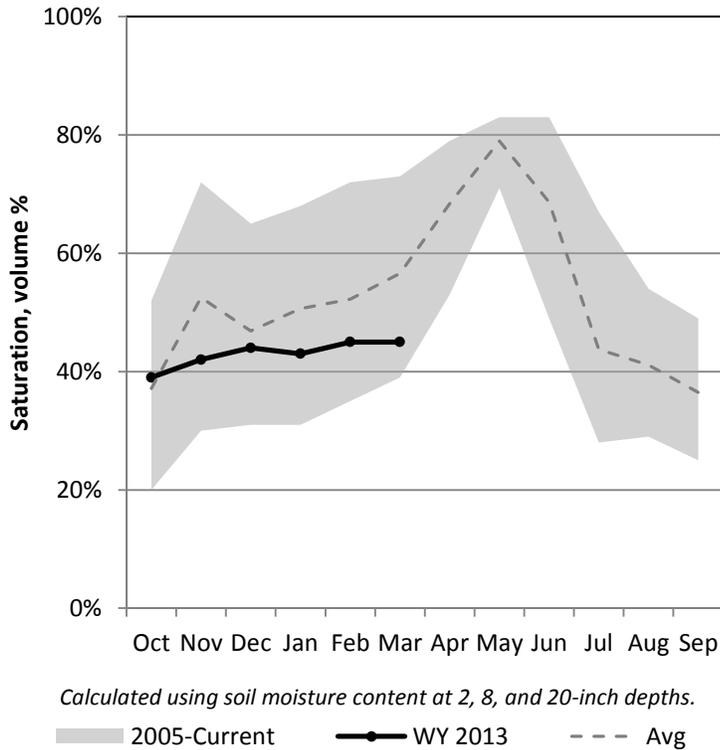
3/1/2013

Precipitation in February was much below average at 64%, which brings the seasonal accumulation (Oct-Feb) to 84% of average. Soil moisture is at 45% compared to 52% last year. Reservoir storage is at 63% of capacity, compared to 83% last year. The water availability index for the Upper Sevier is 51%.

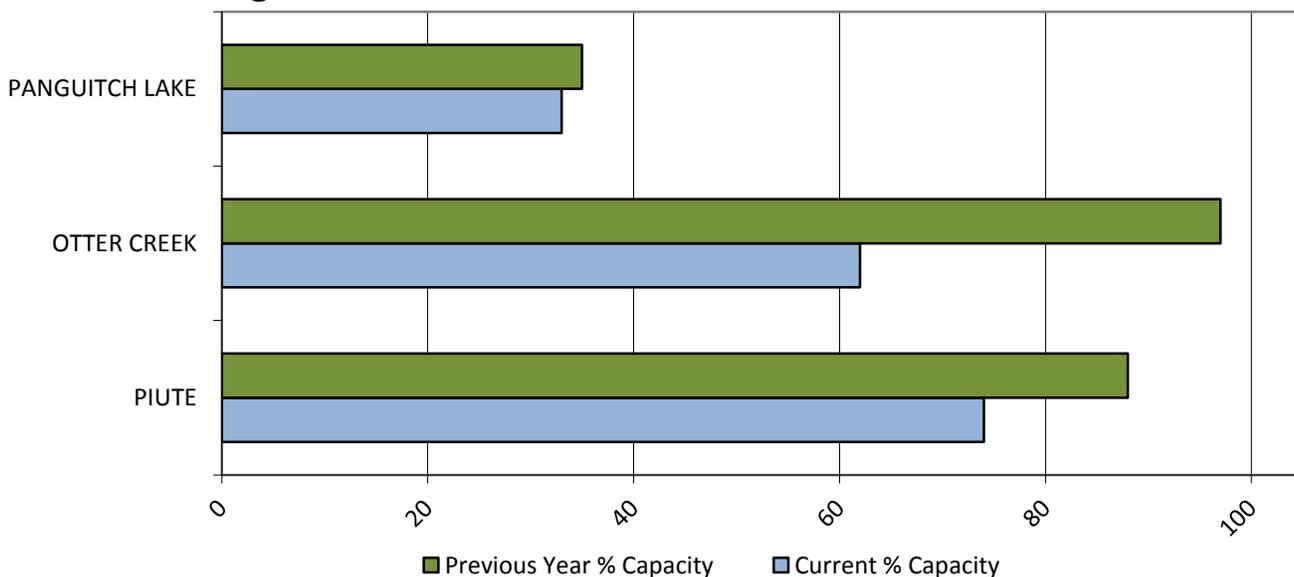
## Precipitation



## Soil Moisture



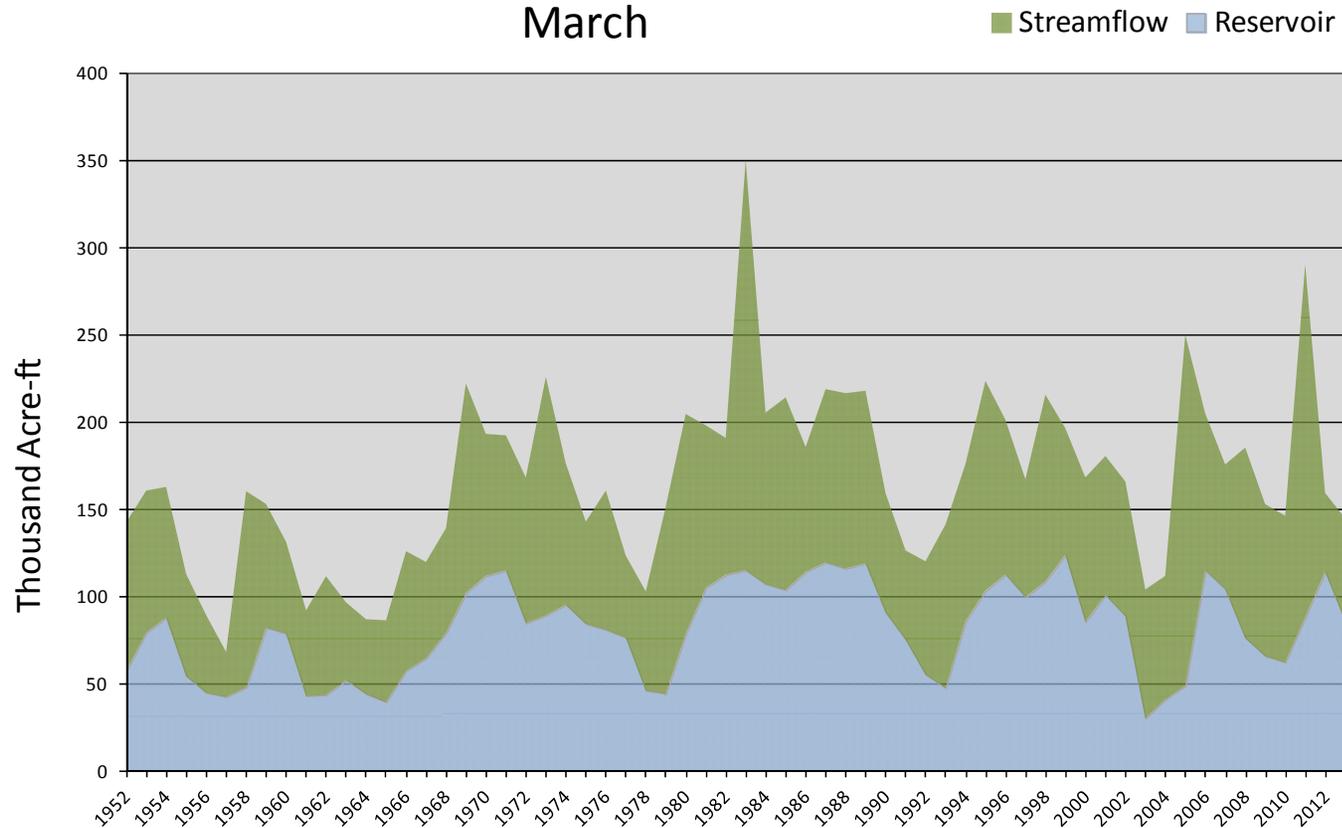
## Reservoir Storage



March 1, 2013		Surface Water Supply Index				
Basin or Region	February EOM* Piute & Otter Creek Reservoir	April-July Forecast Inflow to Piute Reservoir	Reservoir + Streamflow	SWSI <sup>#</sup>	Percentile	Years with similar SWSI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Upper Sevier</b>	<b>85.7</b>	<b>59</b>	<b>145</b>	<b>-1.26</b>	<b>35</b>	<b>52,75,10,79</b>

*\*EOM, end of month; <sup>#</sup>SWSI, Surface Water Supply Index; <sup>^</sup>KAF, thousand acre-feet.*

Upper Sevier River - Surface Water Supply Index  
March

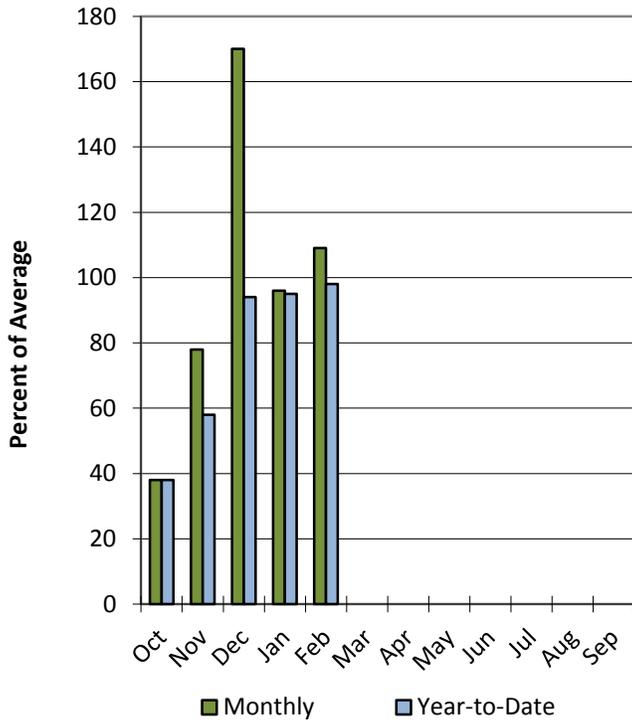


# Lower Sevier River Basin

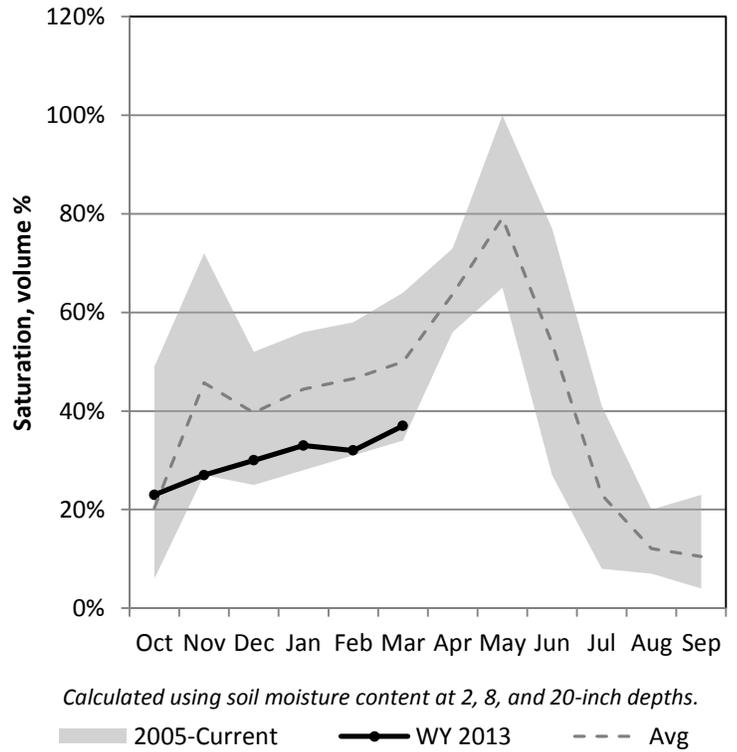
3/1/2013

Precipitation in February was near average at 109%, which brings the seasonal accumulation (Oct-Feb) to 98% of average. Soil moisture is at 37% compared to 41% last year. Reservoir storage is at 67% of capacity, compared to 98% last year. The water availability index for the Lower Sevier is 49%.

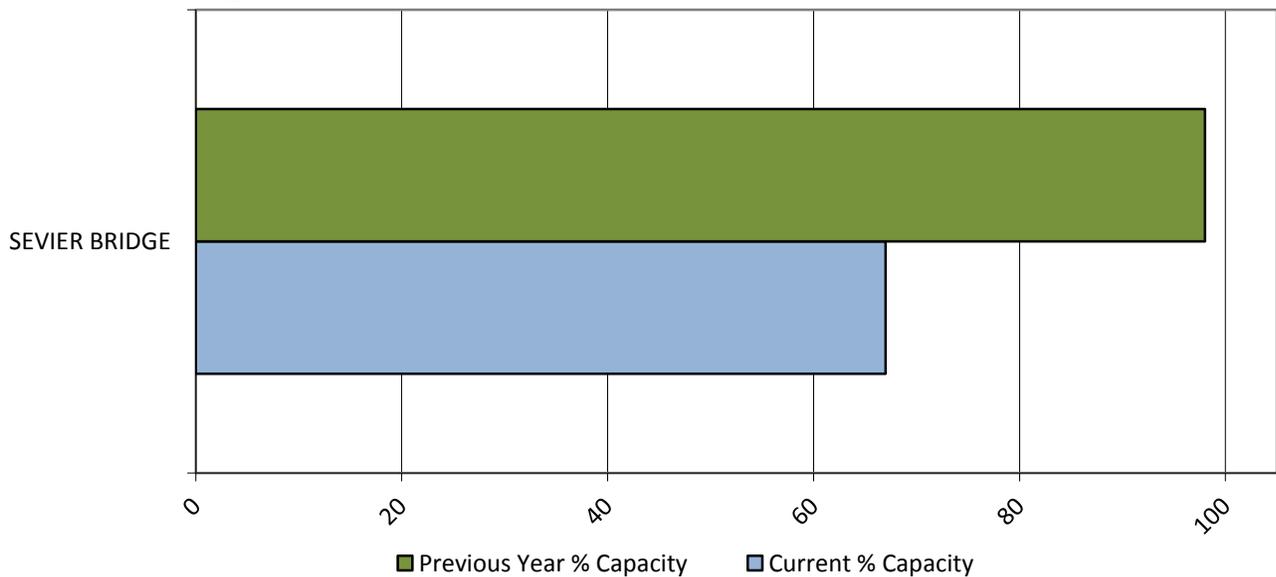
## Precipitation



## Soil Moisture



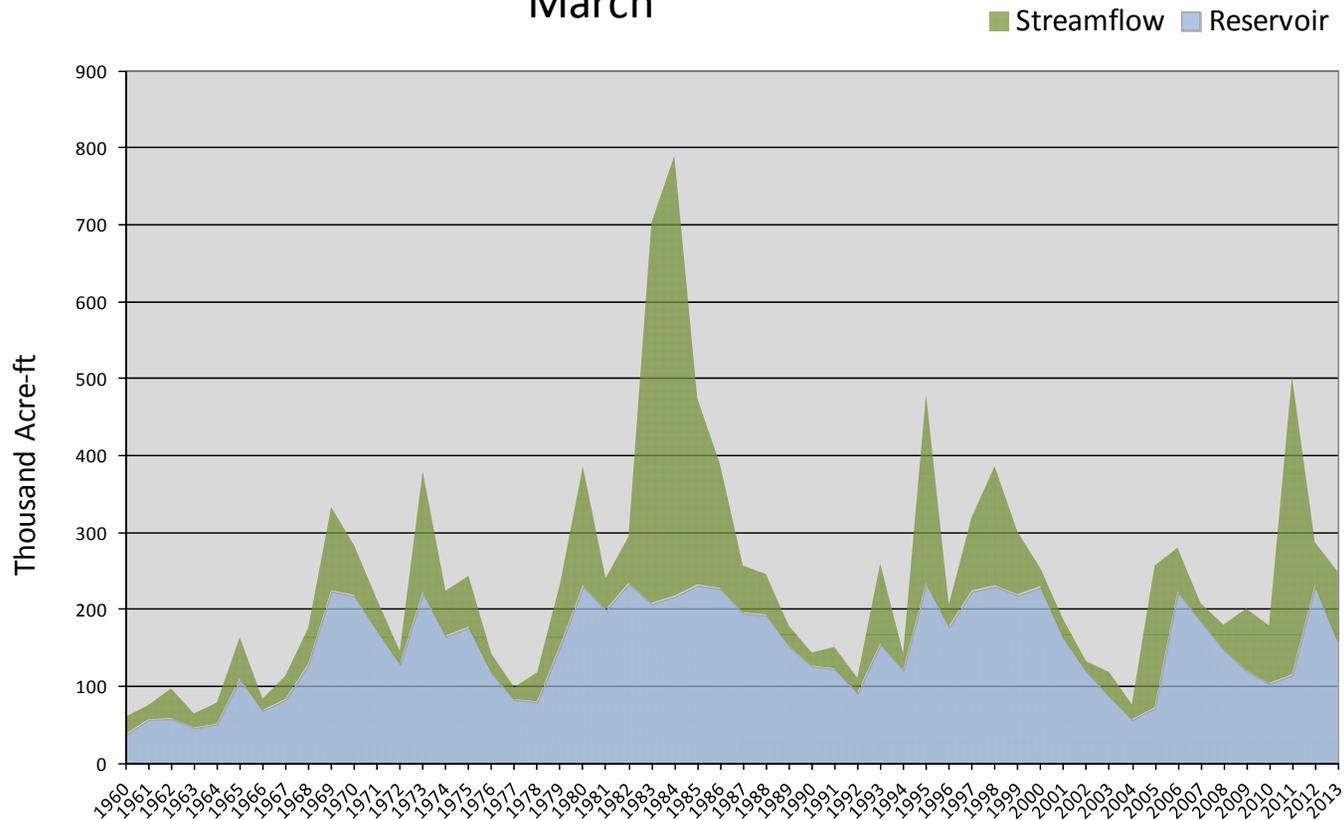
## Reservoir Storage



March 1, 2013	Lower Sevier Surface Water Supply Index					
Basin or Region	February EOM* Sevier Bridge Reservoir	April-July Forecast Inflow to Sevier Bridge Reservoir	Reservoir + Streamflow	SWSI#	Percentile	Years with similar SWSI
	KAF^	KAF	KAF		%	
<b>Lower Sevier</b>	<b>157.8</b>	<b>91</b>	<b>249</b>	<b>0.98</b>	<b>62</b>	<b>75,88,00,05</b>

*\*EOM, end of month; # SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.*

Lower Sevier River - Surface Water Supply Index  
March

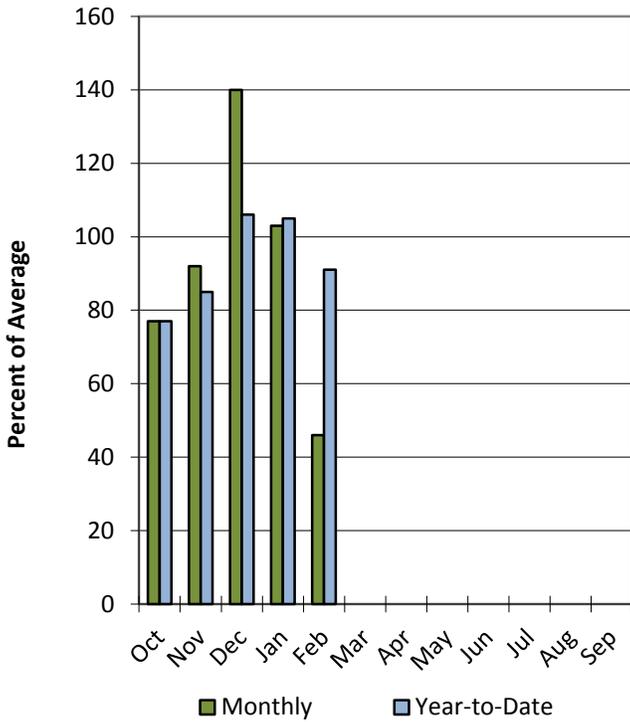


# Beaver River Basin

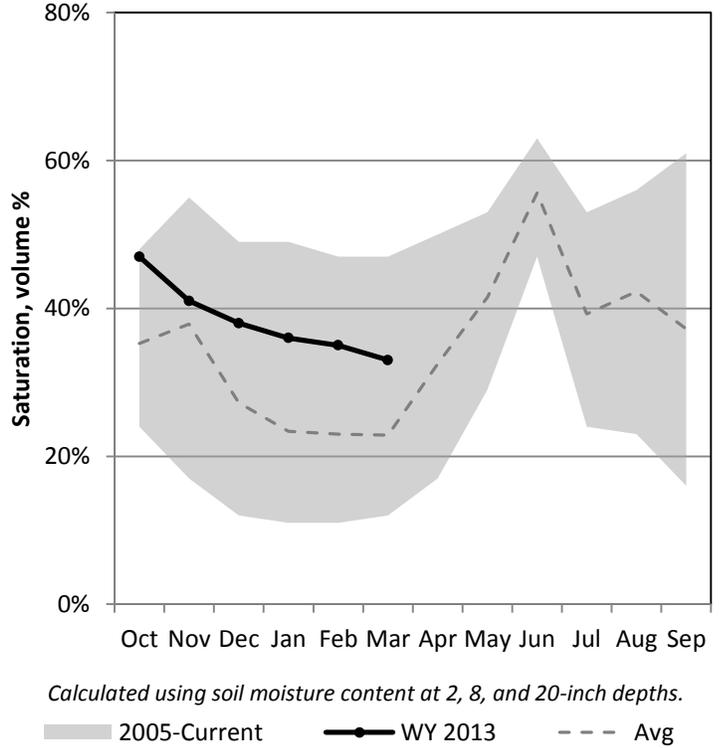
3/1/2013

Precipitation in February was much below average at 46%, which brings the seasonal accumulation (Oct-Feb) to 91% of average. Soil moisture is at 33% compared to 24% last year. Reservoir storage is at 54% of capacity, compared to 107% last year. The water availability index for the Beaver River is 47%.

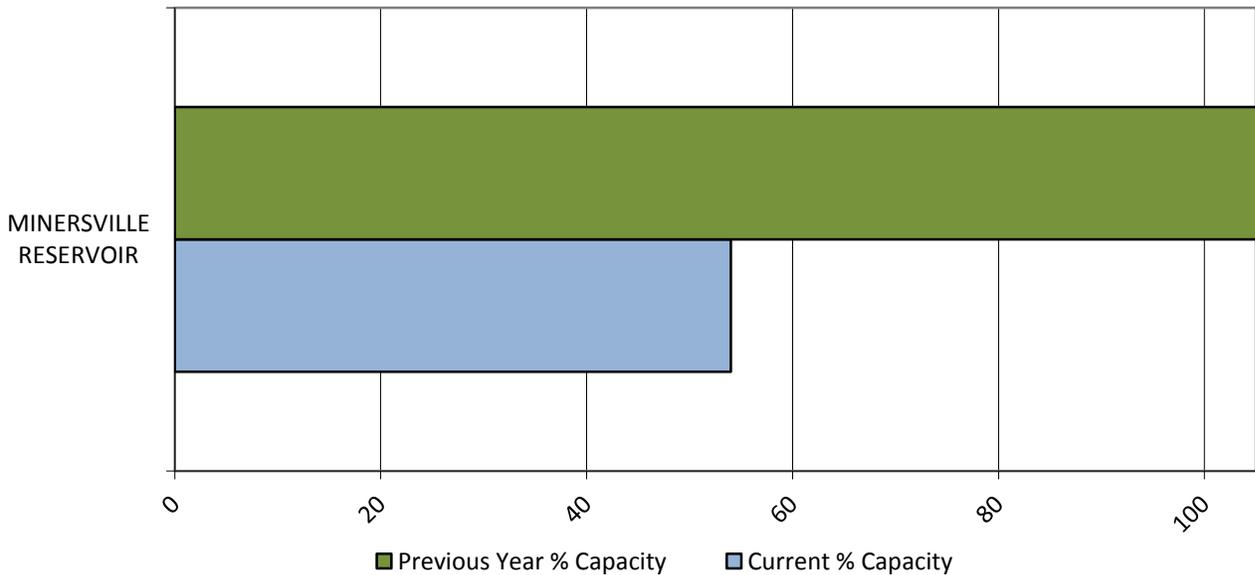
## Precipitation



## Soil Moisture



## Reservoir Storage



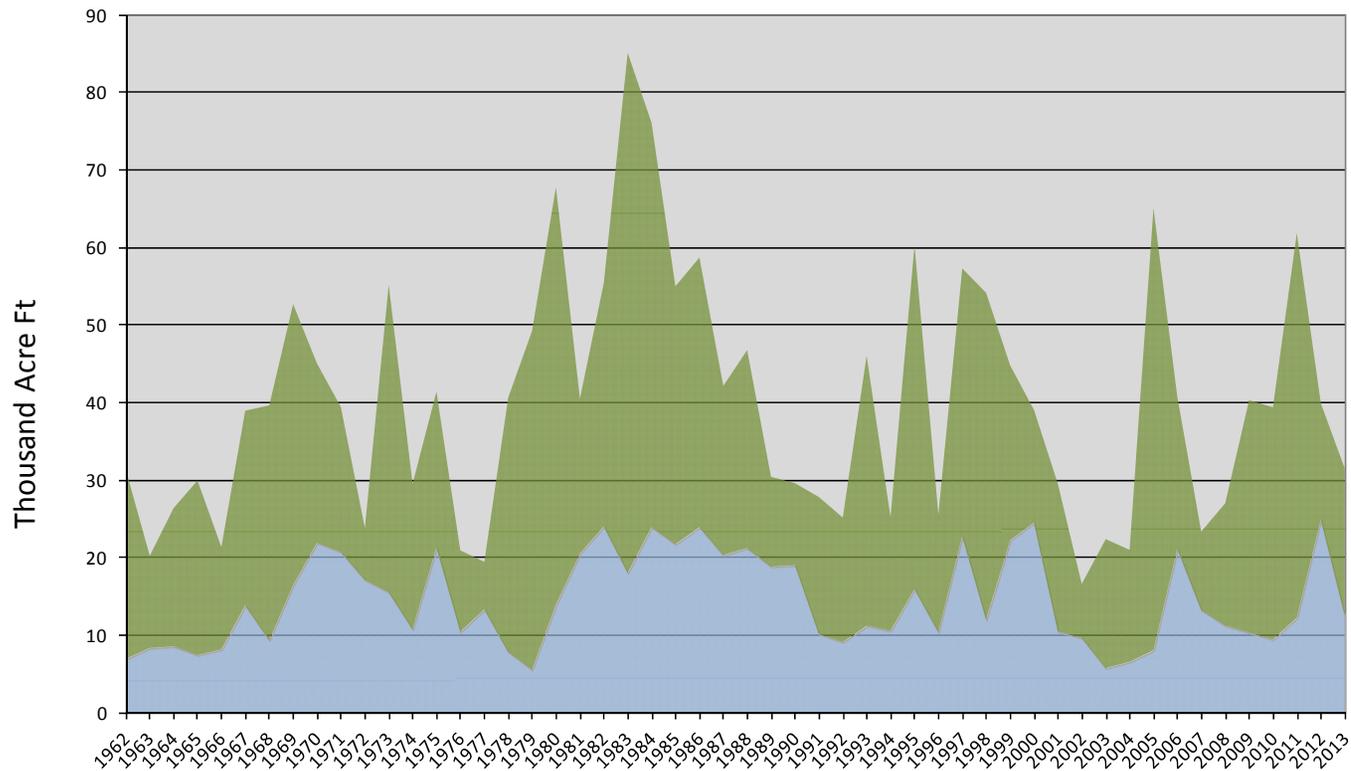
March 1, 2013		Beaver Surface Water Supply Index				
Basin or Region	February EOM* Minersville Reservoir	April-July forecast Beaver River at Beaver	Reservoir + Streamflow	SWSI#	Percentile	Years with similar SWSI
	<i>KAF</i> <sup>^</sup>	<i>KAF</i>	<i>KAF</i>		%	
<b>Beaver</b>	<b>12.5</b>	<b>19.0</b>	<b>39.9</b>	<b>-0.71</b>	<b>42</b>	<b>89,62,67,00</b>

*\*EOM, end of month; # SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.*

### Beaver River - Surface Water Supply Index

March

■ Streamflow ■ Reservoir

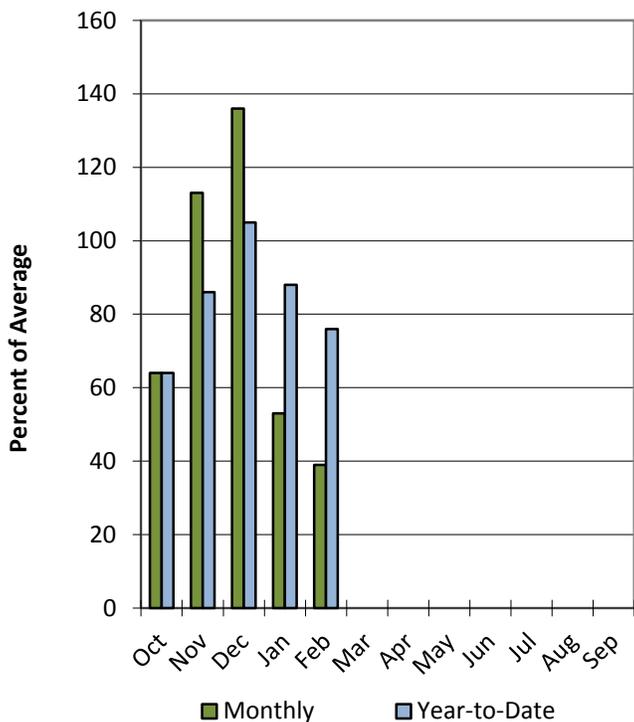


# Southwestern Utah Basin

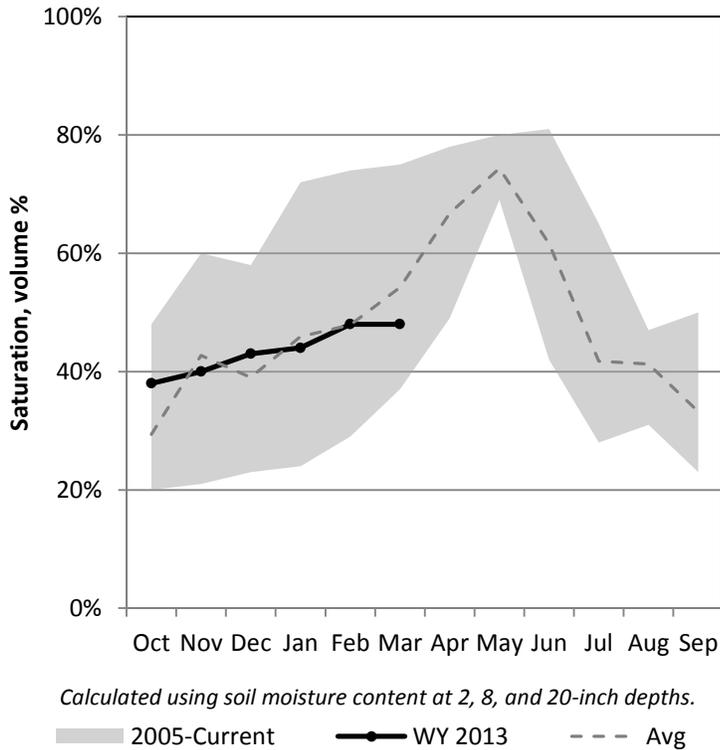
3/1/2013

Precipitation in February was much below average at 39%, which brings the seasonal accumulation (Oct-Feb) to 76% of average. Soil moisture is at 48% compared to 44% last year. Reservoir storage is at 49% of capacity, compared to 64% last year. The water availability index for the Virgin River is 19%.

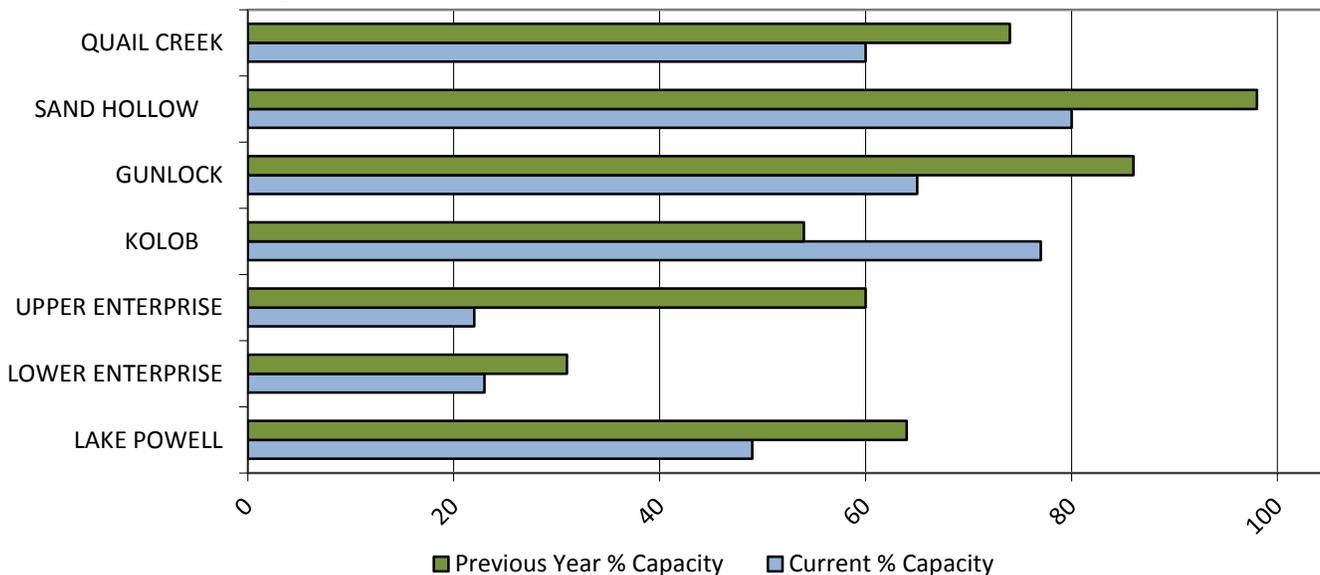
## Precipitation



## Soil Moisture



## Reservoir Storage



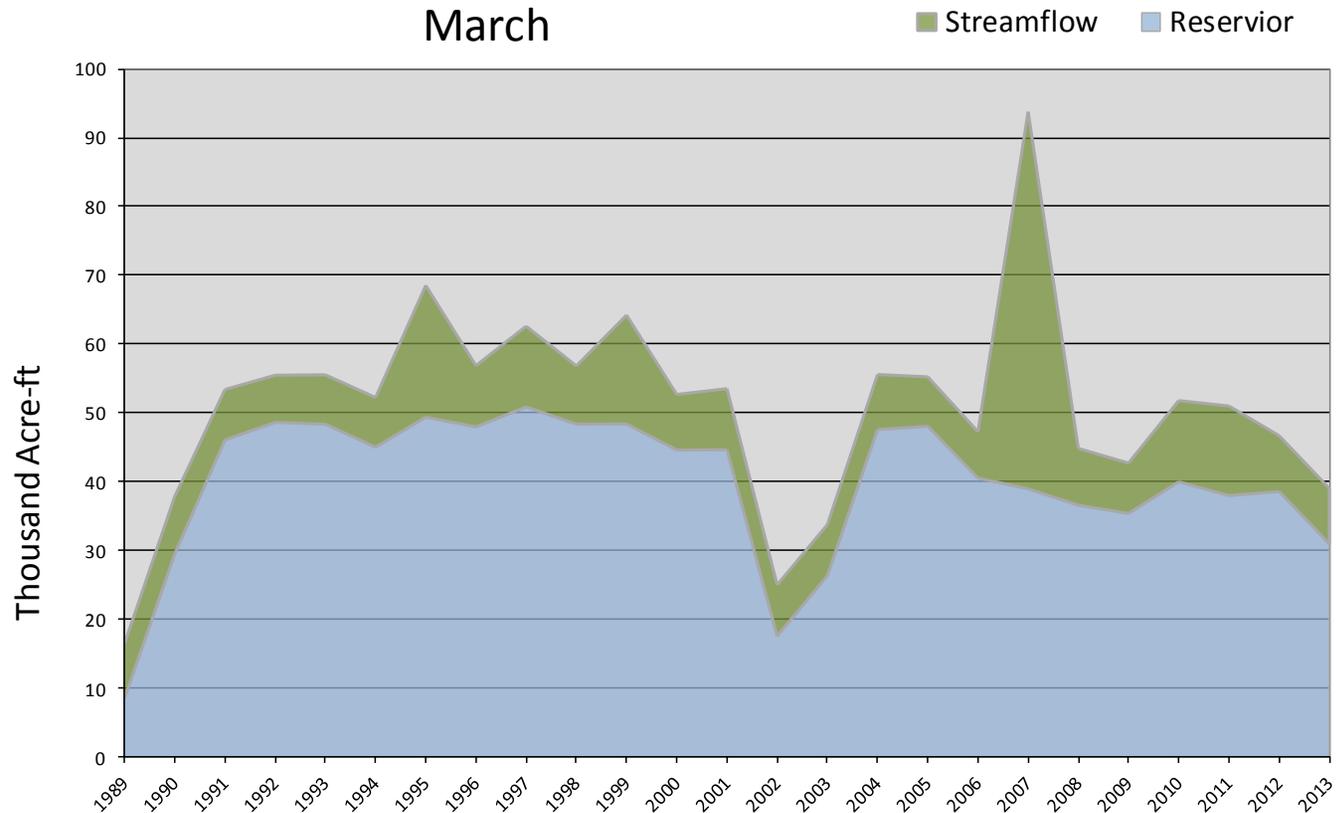
March 1, 2013

## Water Availability Index

Basin or Region	February EOM* Reservoir	February accumulated flow Virgin and Santa Clara Rivers (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
<b>Southwest</b>	<b>31.0</b>	<b>8.1</b>	<b>39.1</b>	<b>-2.56</b>	<b>19</b>	<b>08,09,90,03</b>

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

### Southwest - Water Availability Index March



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**Utah Climate and  
Water Report**  
Natural Resources Conservation Service  
Salt Lake City, UT

