

Utah Climate and Water Report

January, 2014



Aspen stand near Clear Creek #1 SNOTEL site

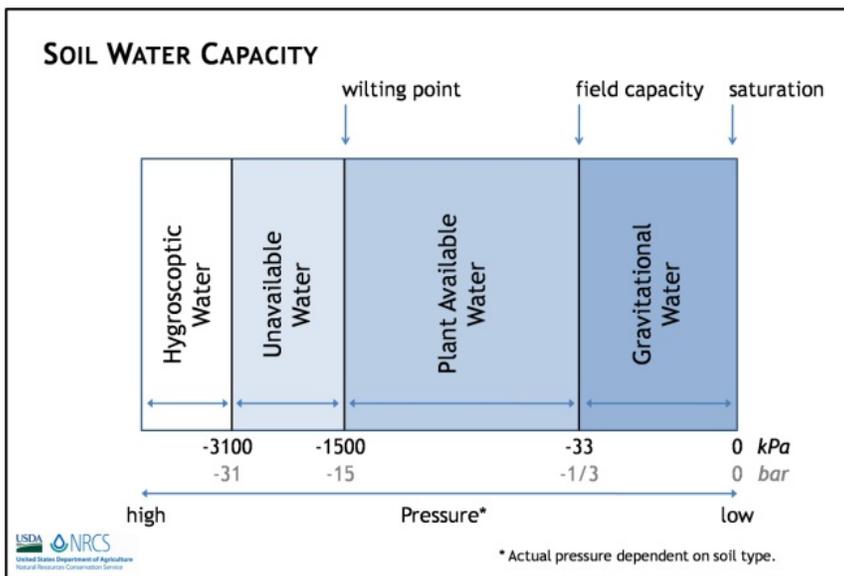
Photo by Randy Julander

Climate and Water Information

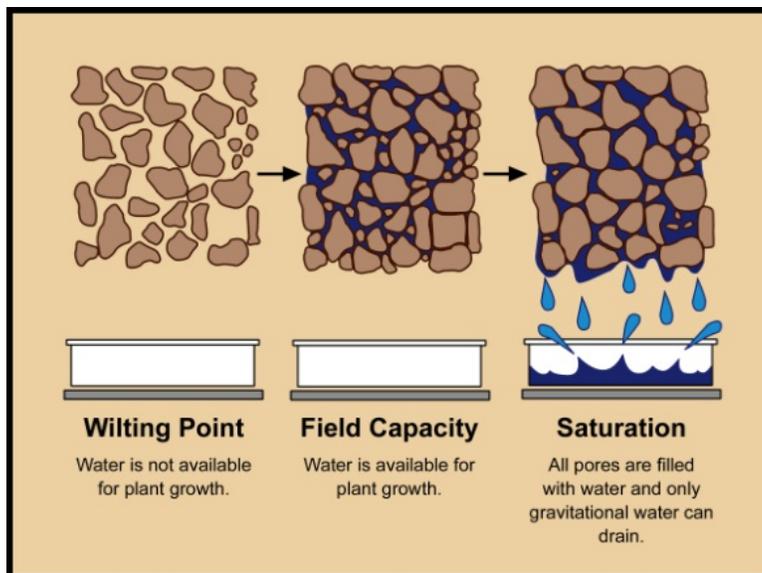
Soil Climate Analysis Network

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.

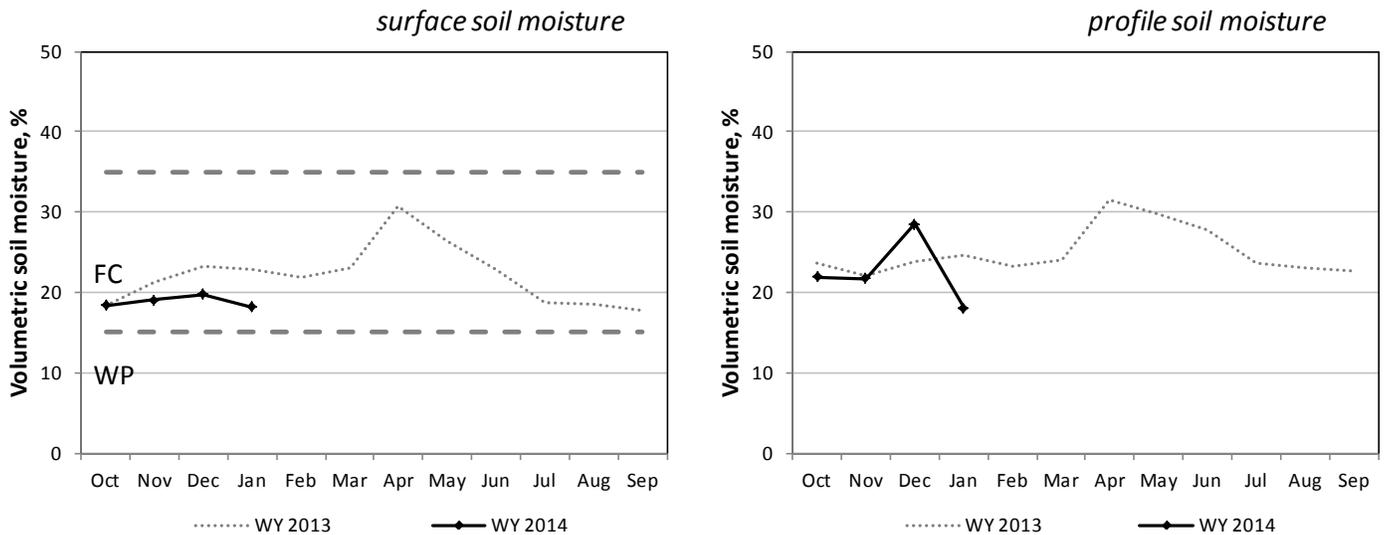
North Central

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>				
NORTH CENTRAL												
Blue Creek	1.8	0.7	13	11	17	20	16	30	31	32	35	41
Cache Junction	2.4	0.6	18	18	23	23	23	30	30	31	36	42
Grantsville	2.4	0.4	12	19	25	27	0	32	34	37	43	9

* 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.

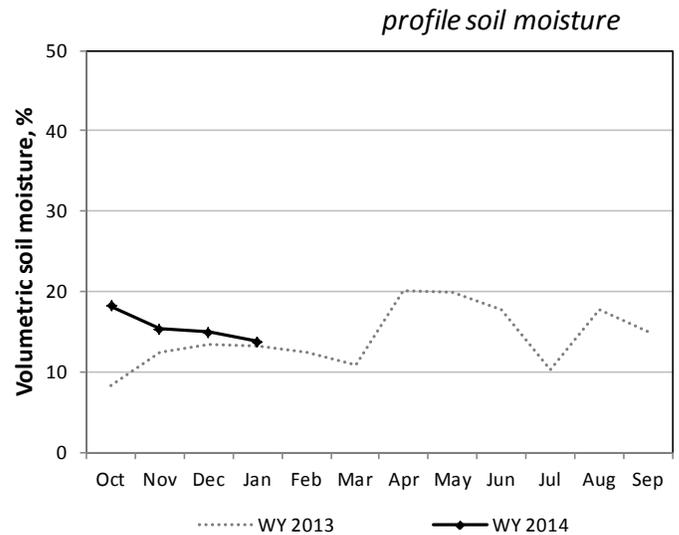
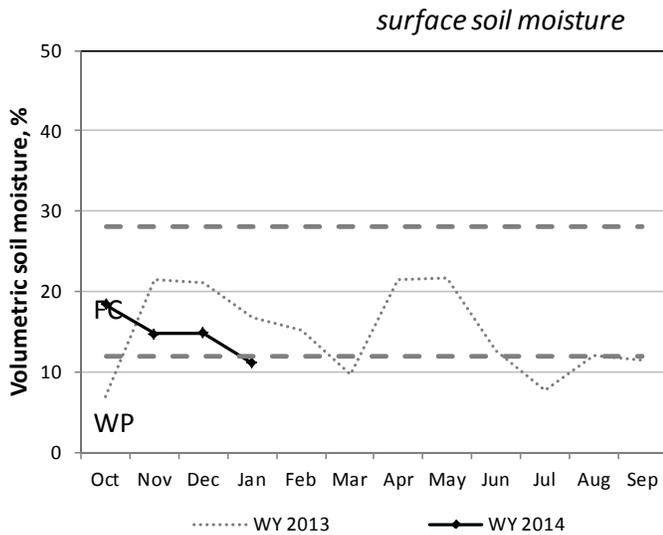
Northern Mountains

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>				
NORTHERN MOUNTAINS												
Chicken Ridge	1.1	0.3	4	8	9	10	11	31	31	31	34	38
Buffalo Jump	1.6	0.7	6	9	8	7	-	29	29	30	34	-
Morgan	3.2	1.7	16	16	20	31	17	31	31	31	32	35

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Northern Mountains



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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.

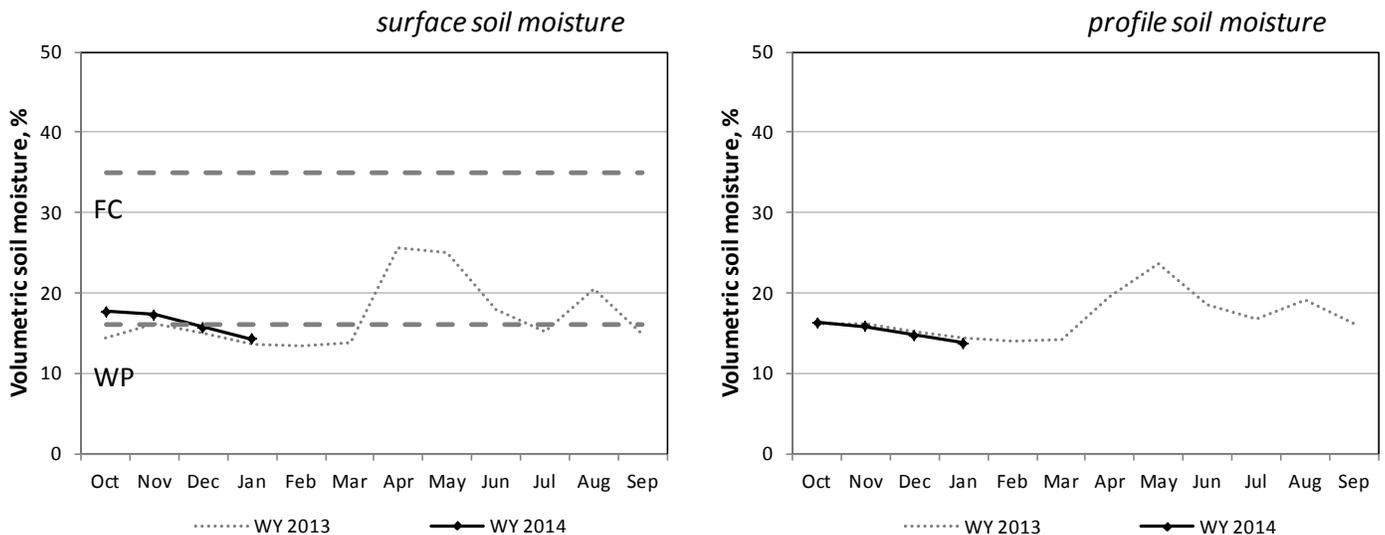
Uintah Basin

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>in.</i>	<i>volume %</i>					<i>°F</i>				
UINTAH BASIN												
Mountain Home	1.3	0.3	13	18	21	18	9	30	30	31	35	38
Little Red Fox	1.0	0.2	8	13	16	18	16	19	23	24	28	35
Split Mountain	2.2	0.4	8	16	11	11	10	26	27	28	33	39

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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.

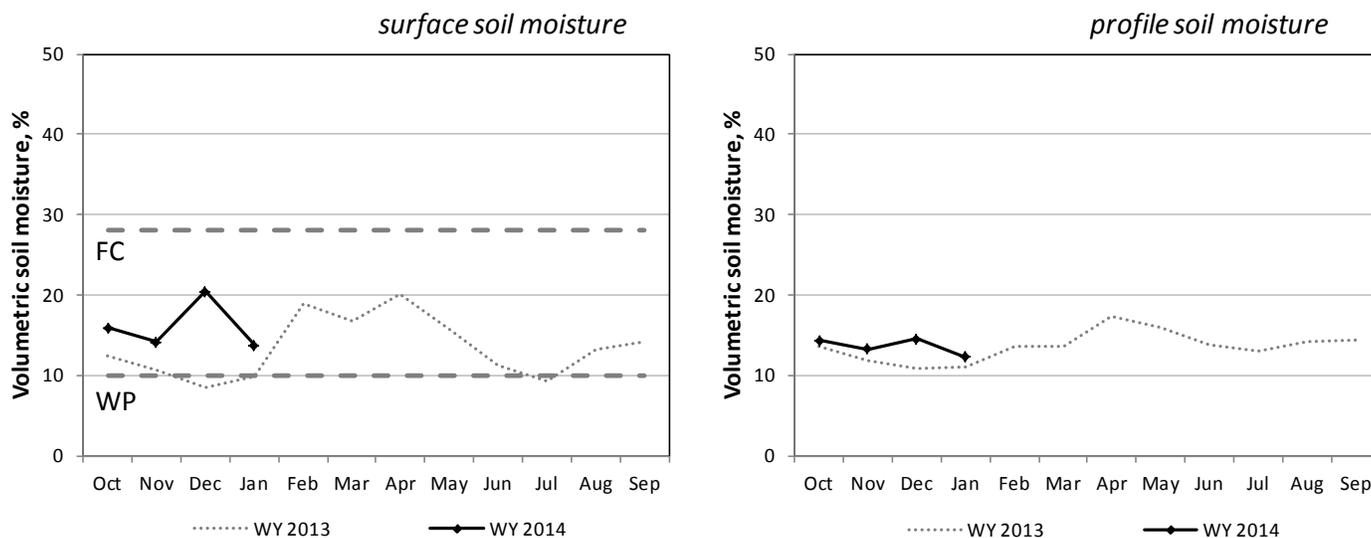
Southeast

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"
			in.					in.				
			volume %					°F				
SOUTHEAST												
Price	2.0	0.1	3	11	15	12	16	25	27	27	31	36
Green River	1.1	0.3	5	6	6	3	5	21	22	23	28	36
Harm's Way	3.1	0.0	11	3	15	15	5	31	31	31	34	39
West Summit	2.8	0.1	17	24	24	14	16	32	32	33	33	38
Eastland	3.2	0.1	24	21	24	26	20	33	33	34	37	40
Alkali Mesa	2.9	0.2	11	12	18	17	12	31	30	31	35	38
McCracken Mesa	2.9	0.2	20	19	16	14	12	31	32	32	36	43

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Southeast



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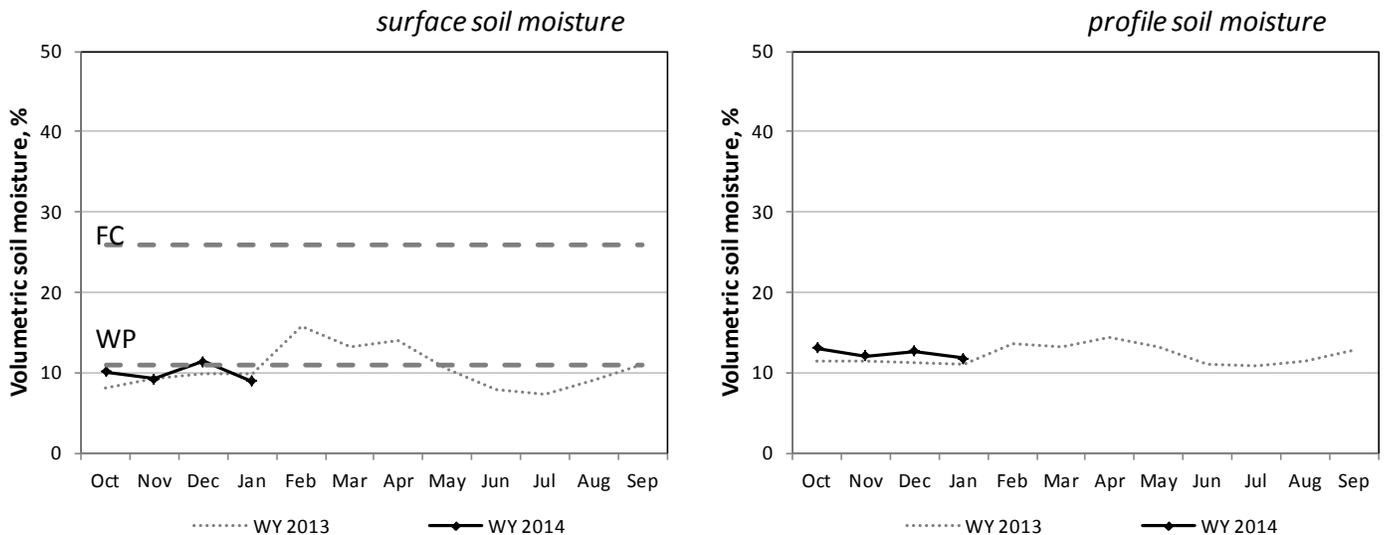
South Central

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>				
SOUTH CENTRAL												
Nephi	2.0	0.7	19	25	19	7	0	32	32	33	38	42
Ephraim	2.3	0.5	9	14	19	14	33	31	32	34	37	43
Holden	1.4	0.3	5	5	0	10	11	31	31	31	35	43
Milford	0.8	0.1	11	13	12	24	15	30	30	32	38	45
Manderfield	1.7	0.4	5	11	10	10	5	30	30	31	35	39
Circleville	0.9	0.2	13	11	6	7	17	24	25	25	34	42
Panguitch	1.3	0.2	4	15	11	19	30	26	27	28	34	41
Cave Valley	3.5	0.2	0	12	1	5	7	31	32	32	34	37
Vermillion	3.6	0.4	0	1	7	13	7	32	31	33	35	38
Spooky	2.1	0.1	3	4	3	24	1	32	31	31	35	39

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South Central



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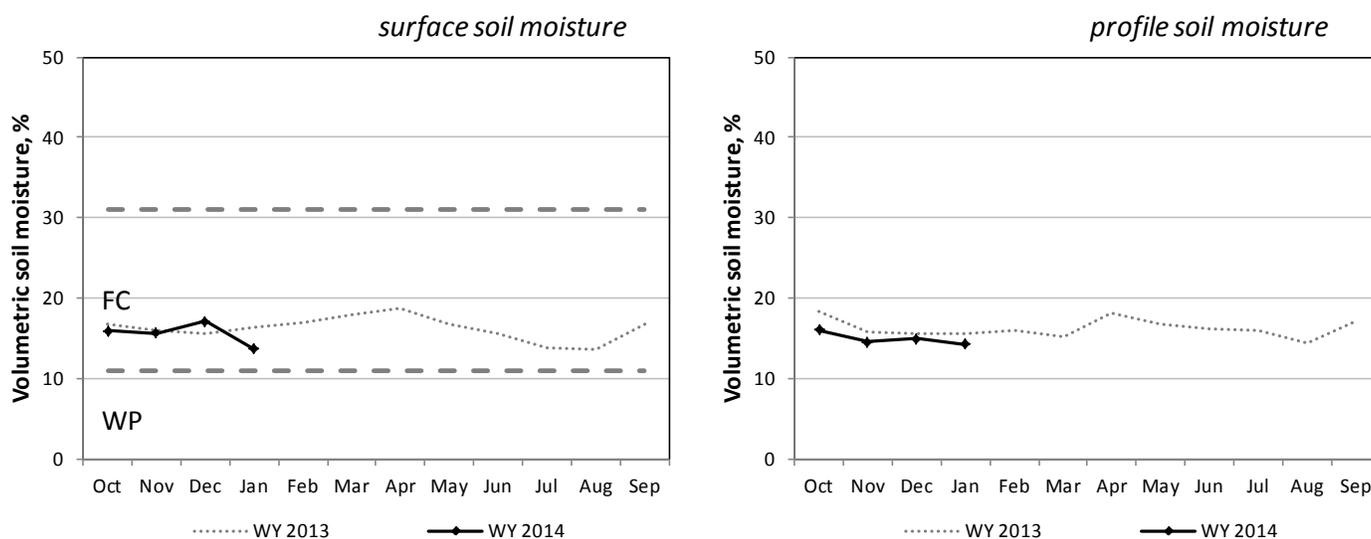
Western and Dixie

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>				
WESTERN												
Grouse Creek	1.3	0.4	4	7	10	14	15	30	31	32	35	39
Park Valley	1.8	0.3	1	4	10	23	23	28	28	29	33	40
Goshute	1.8	0.5	14	0	37	30	26	30	30	31	33	40
Dugway	1.6	0.4	25	31	35		11	30	30	32	37	39
Tule Valley	1.1	0.3	10	9	20	17	9	26	28	30	32	39
Hal's Canyon	1.4	0.2	3	6	8	9	8	26	27	28	34	41
Enterprise	0.9	0.0	7	22	19	12	14	29	29	29	34	42
DIXIE												
Sand Hollow	0.9	0.6	4	5	4	7	0	33	35	37	39	45

* 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

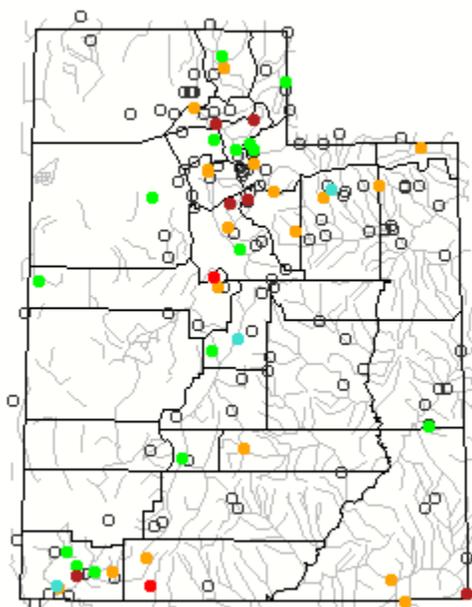
January 1, 2014

Current Conditions

Soil moisture values across the state are near to below normal in the north and much above normal in the south. Precipitation across most of the state was below average for December (60%-80%) which brings seasonal precipitation (Oct-Dec) to 70%-110% of average. Snowpack's across the state are below normal in the north (70%-90%) and near normal in the south 95%-105% of median. Reservoir storage is much lower than last year at 55% of capacity compared to 64%. Overall, water supply conditions are below normal in north and near normal in the south.

Current Utah Streamflow - Courtesy US Geological Survey

Friday, January 03, 2014 12:30ET



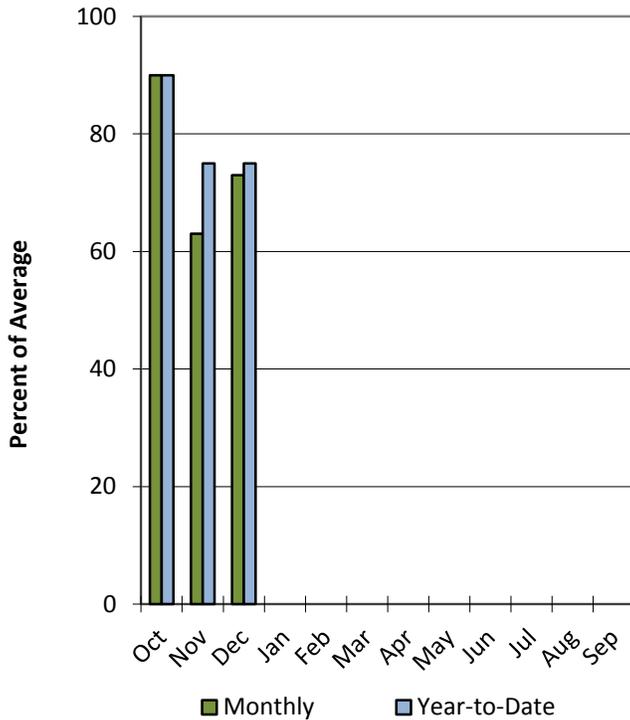
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Statewide Utah

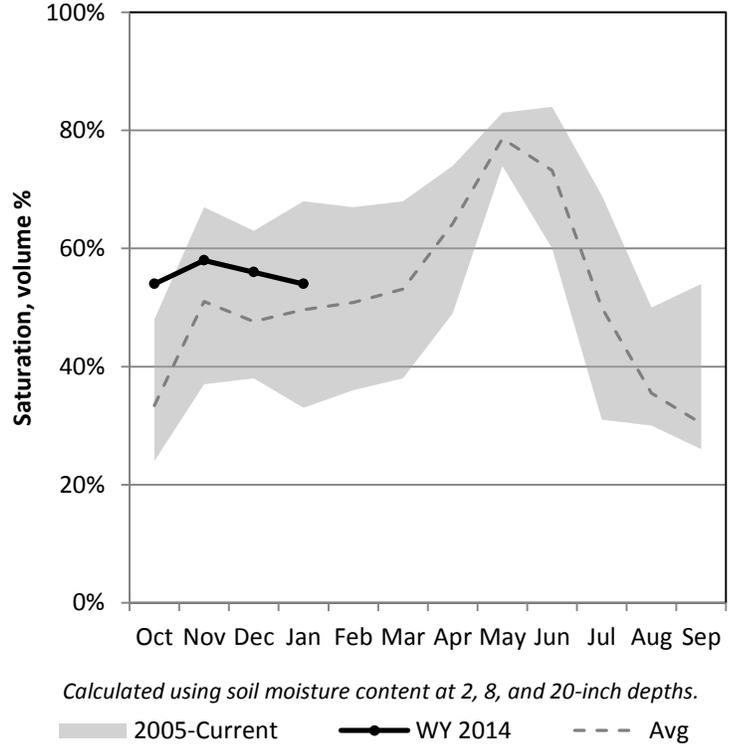
1/1/2014

Precipitation in December was below average at 73%, which brings the seasonal accumulation (Oct-Dec) to 75% of average. Soil moisture is at 54% compared to 46% last year. Reservoir storage is at 65% of capacity, compared to 86% last year.

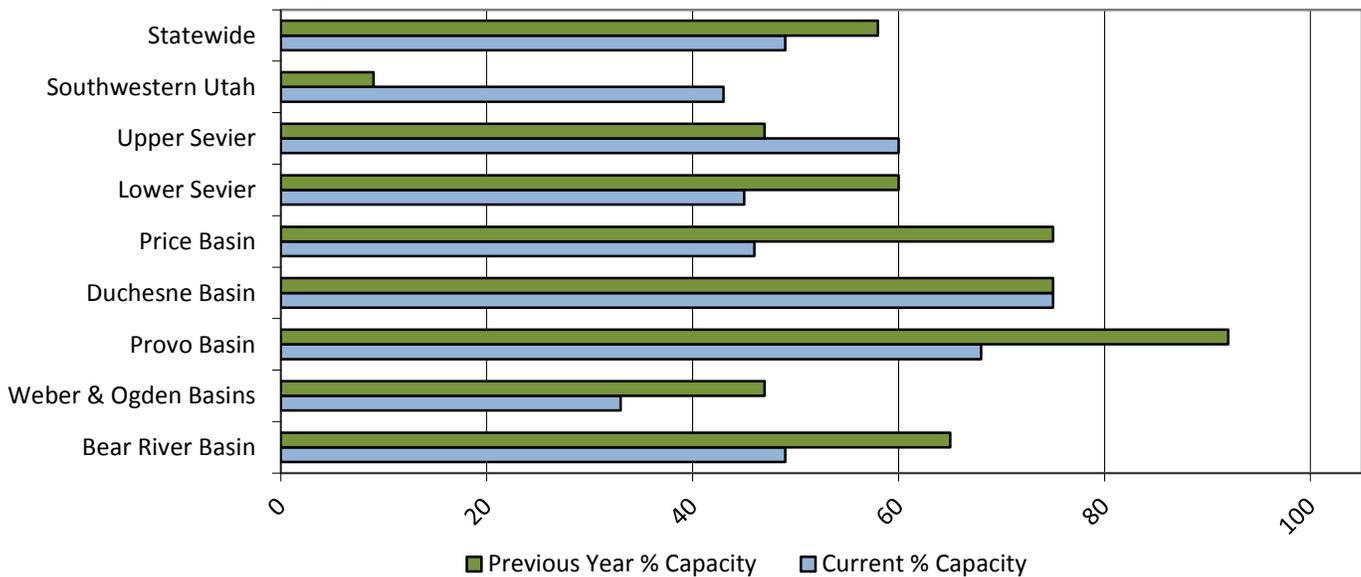
Precipitation



Soil Moisture



Reservoir Storage

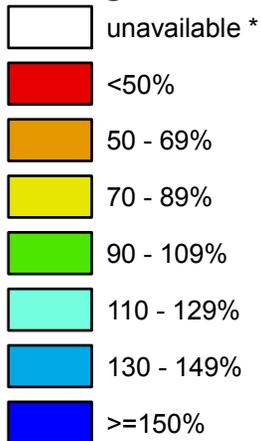


Utah

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

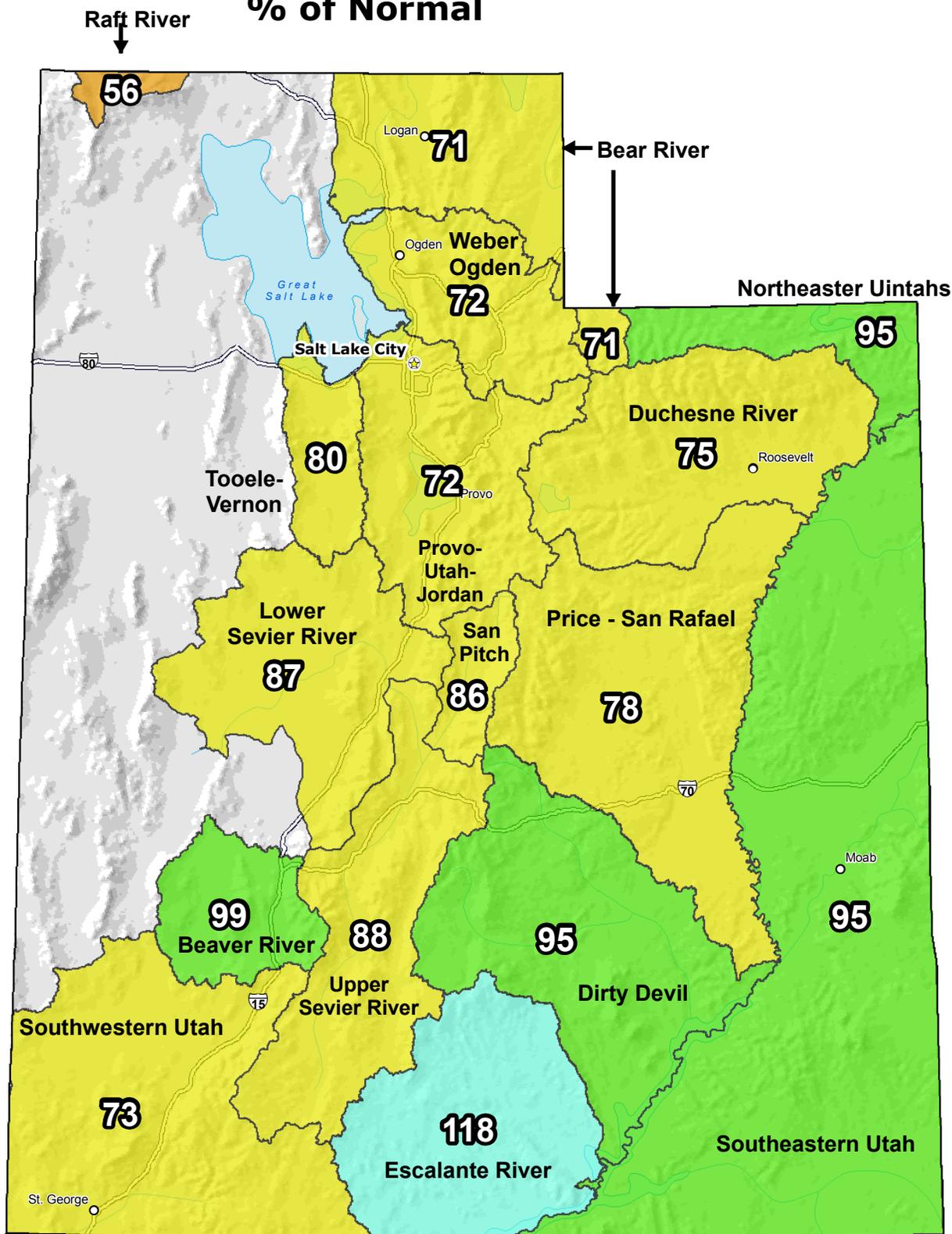
Jan 01, 2014

**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).

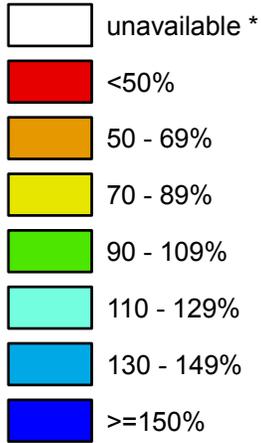
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Utah

SNOTEL Current Snow Water Equivalent (SWE) % of Normal

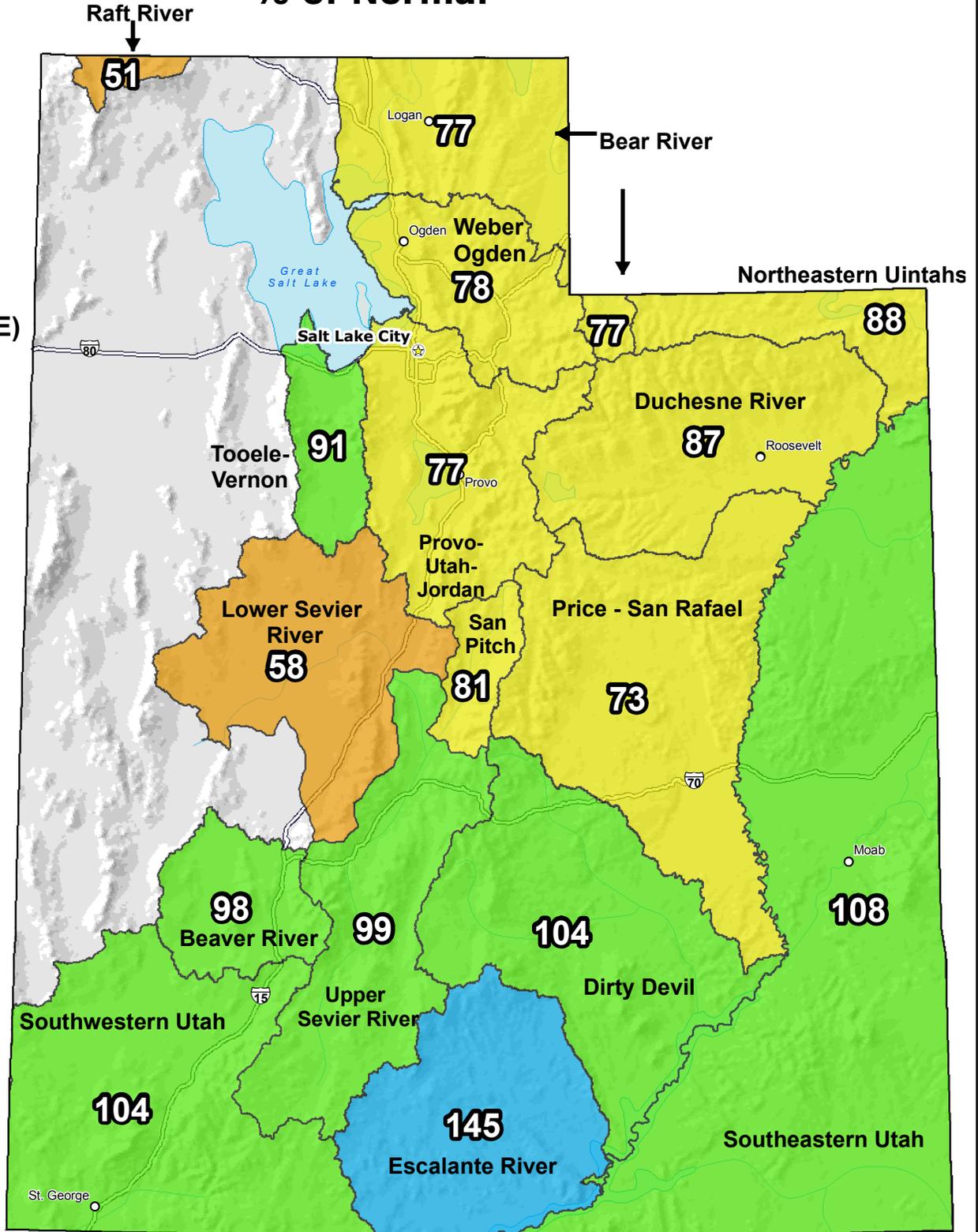
Jan 01, 2014

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).

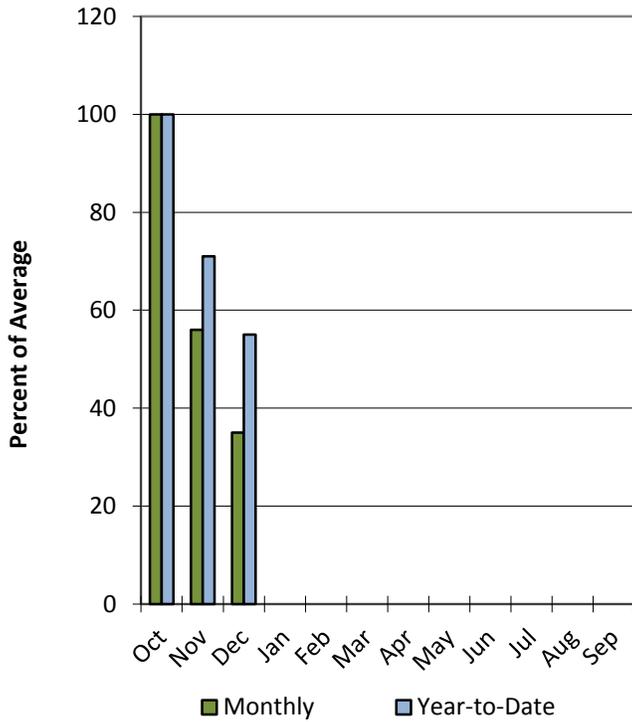
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Raft River Basin

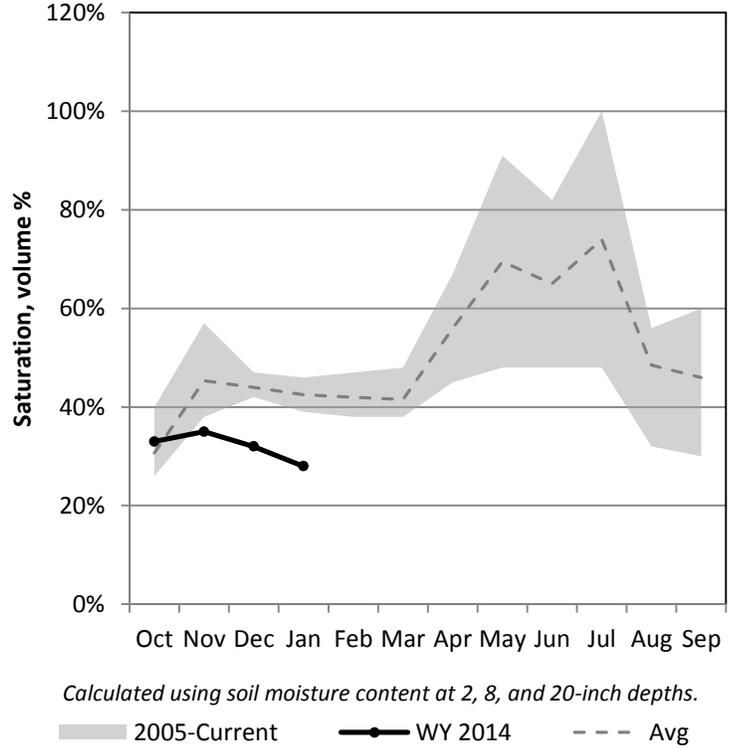
1/1/2014

Precipitation in December was much below average at 35%, which brings the seasonal accumulation (Oct-Dec) to 55% of average. Soil moisture is at 28% compared to 46% last year.

Precipitation



Soil Moisture

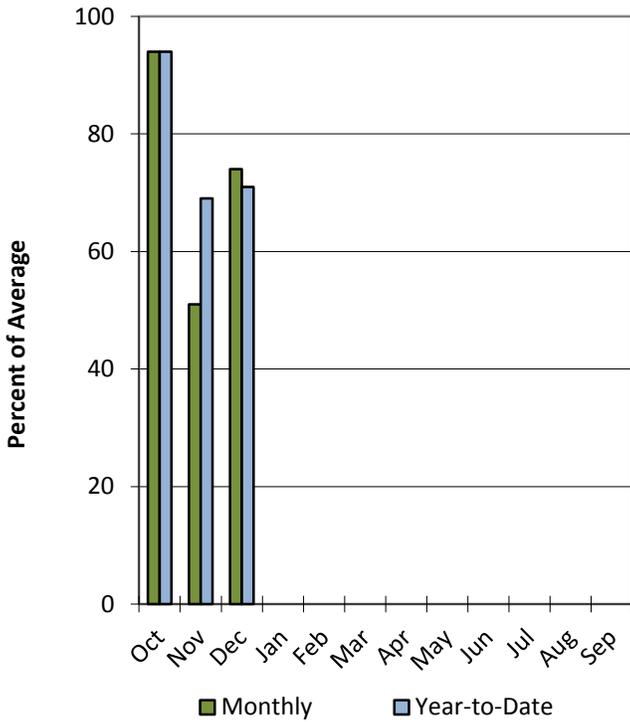


Bear River Basin

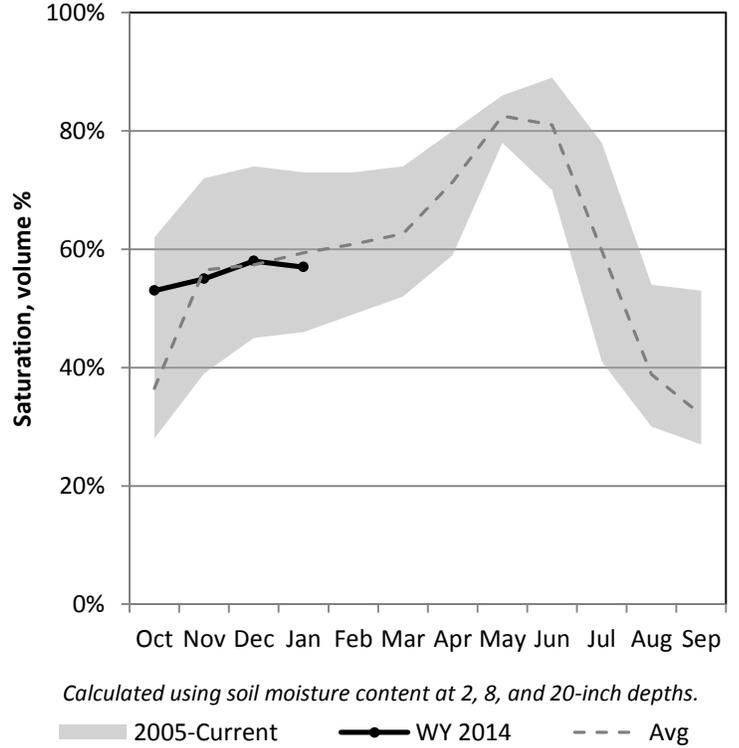
1/1/2014

Precipitation in December was below average at 74%, which brings the seasonal accumulation (Oct-Dec) to 71% of average. Soil moisture is at 57% compared to 65% last year. Reservoir storage is at 49% of capacity, compared to 65% last year. The water availability index for the Bear River is 36%.

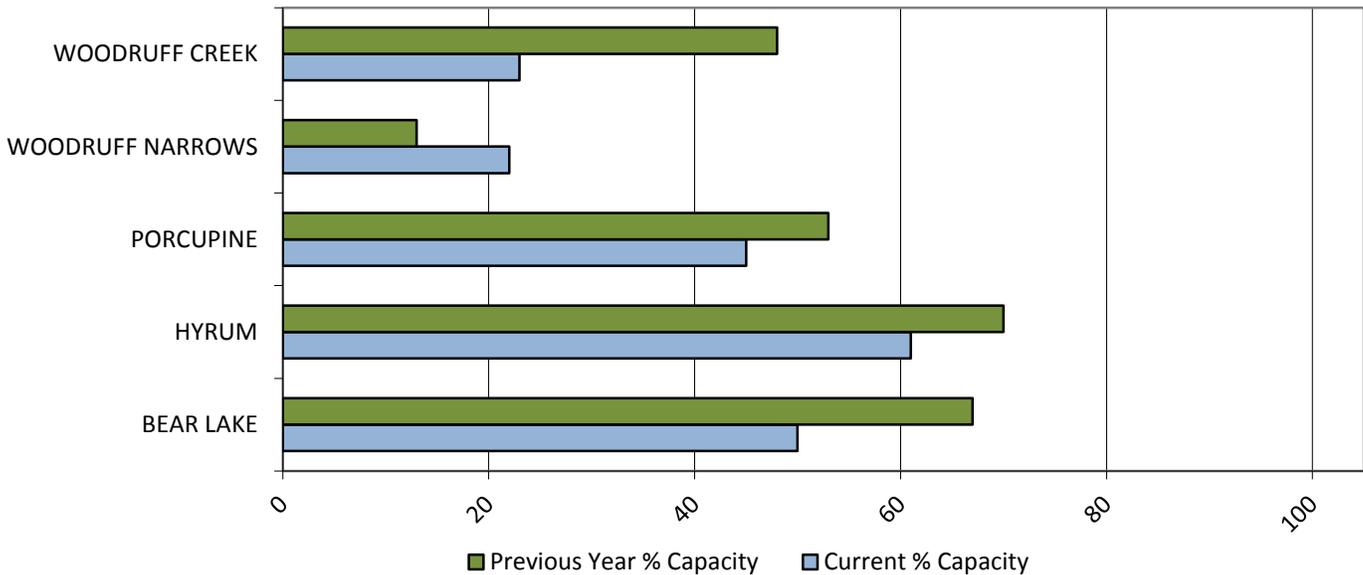
Precipitation



Soil Moisture



Reservoir Storage



January 1, 2014

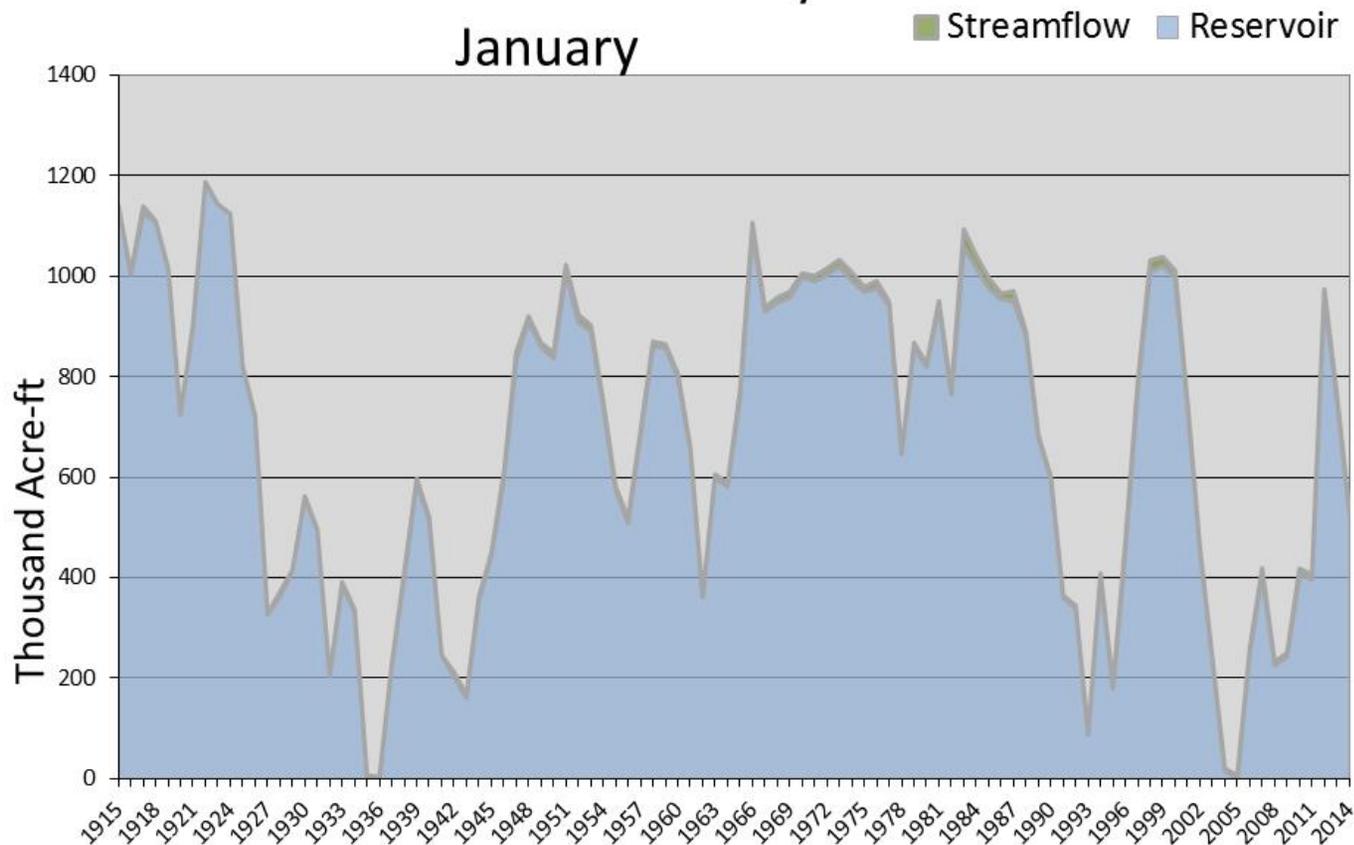
Water Availability Index

Basin or Region	December EOM* Bear Lake	December accumulated inflow to Bear Lake (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Bear River	532	5	537	-1.20	36	56, 40, 30, 55

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

Bear Lake - Water Availability Index

January



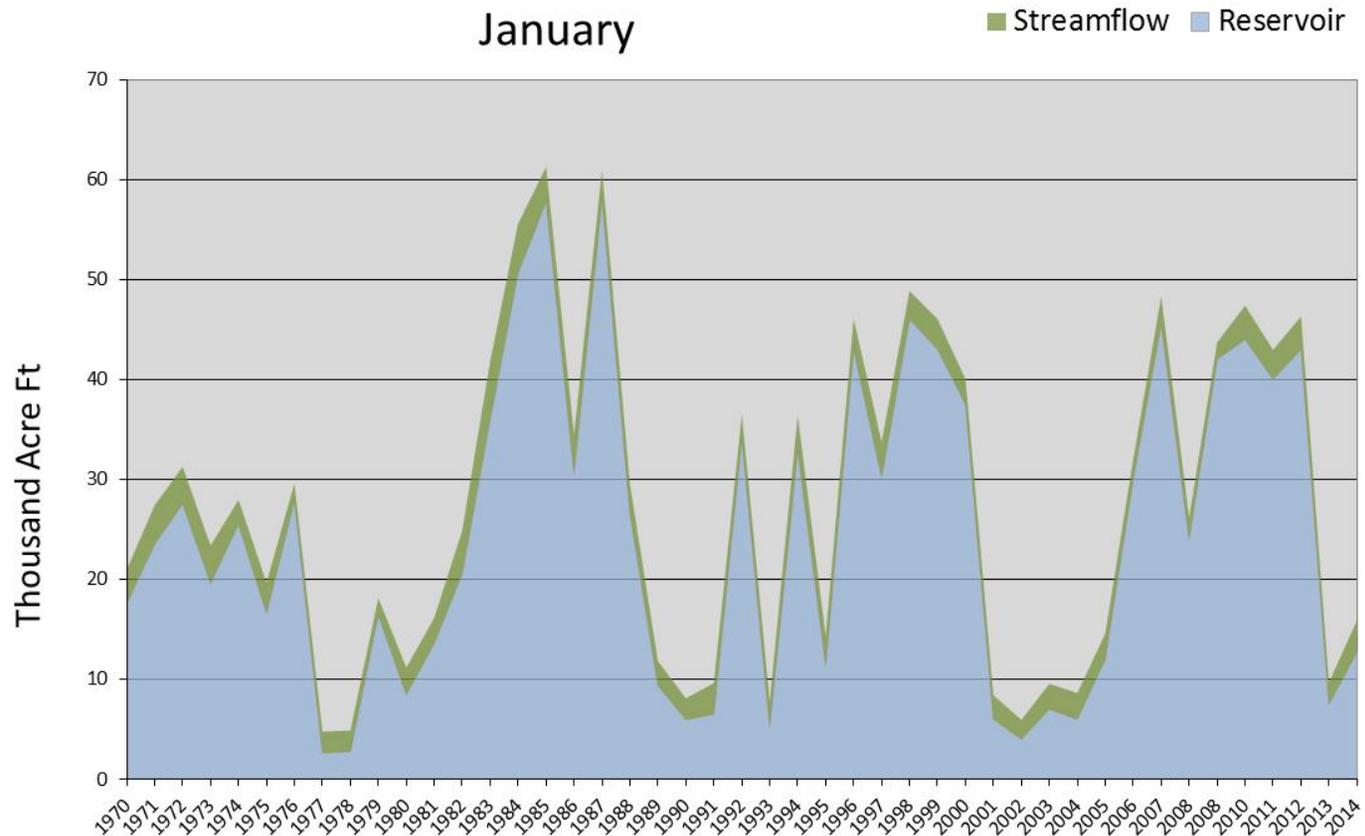
January 1, 2014

Woodruff Narrows Water Availability Index

Basin or Region	December EOM*	December	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	Woodruff Narrows Reservoir	Observed Streamflow Bear at Stateline				
	KAF [^]	KAF	KAF		%	
Woodruff Narrows	12.7	3.2	16.0	-1.45	33	95, 05, 81, 79

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

Woodruff Narrows - Water Availability Index January



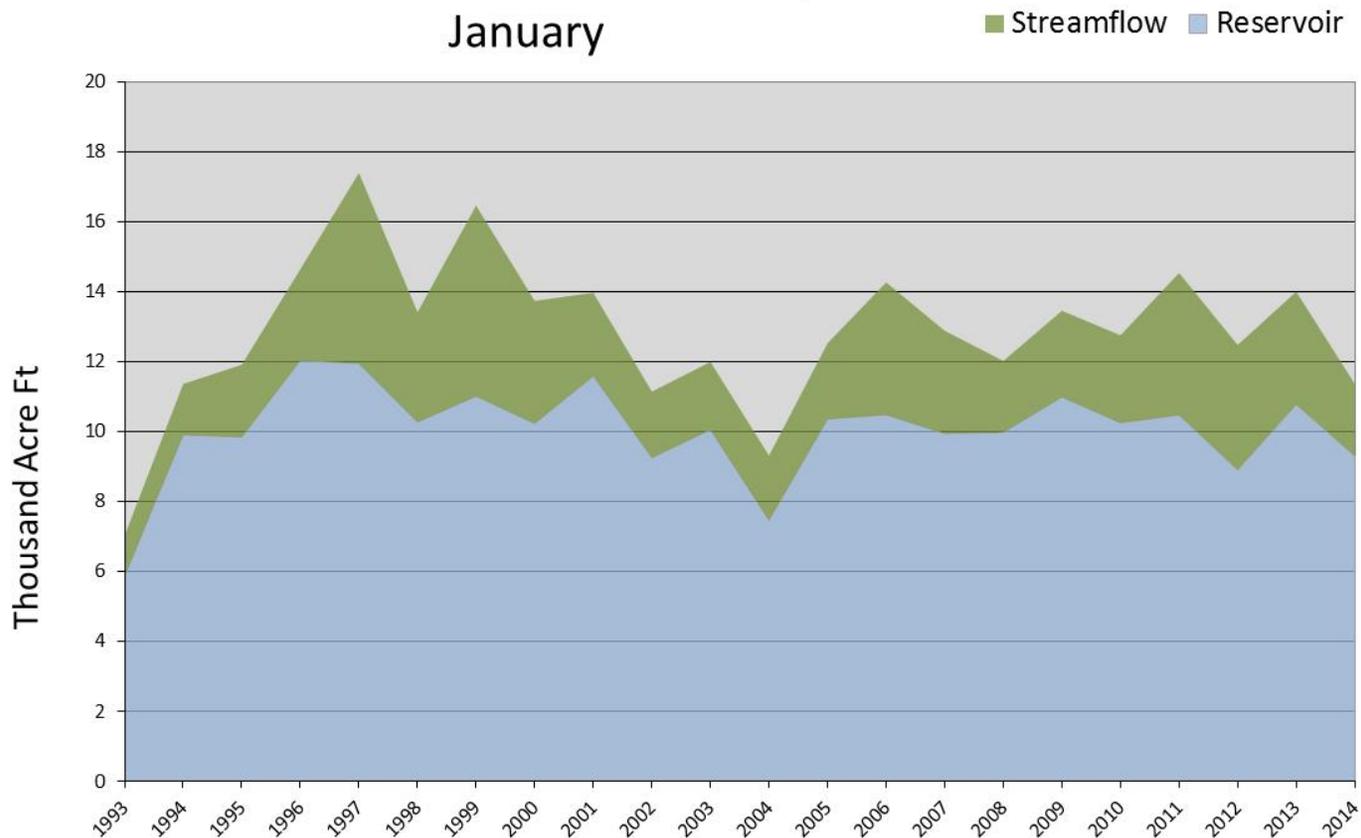
January 1, 2014

Little Bear Water Availability Index

Basin or Region	December EOM*	December Observed	Reservoir +	WAI [#]	Percentile	Years with similar WAI
	Hyrum Reservoir	Streamflow Little Bear nr Paradise	Streamflow			
	KAF [^]	KAF	KAF		%	
Little Bear	9.3	2.1	11.0	-2.36	22	02, 94, 95, 03

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

Little Bear River - Water Availability Index
January

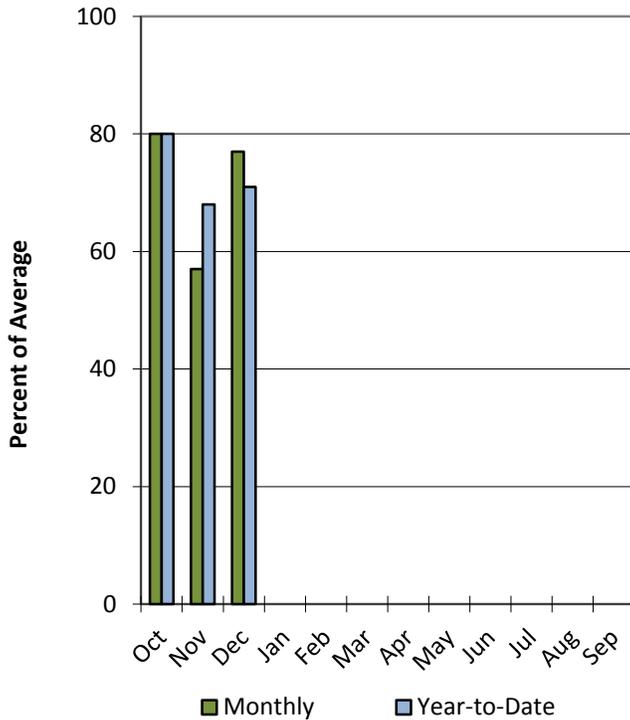


Weber & Ogden River Basins

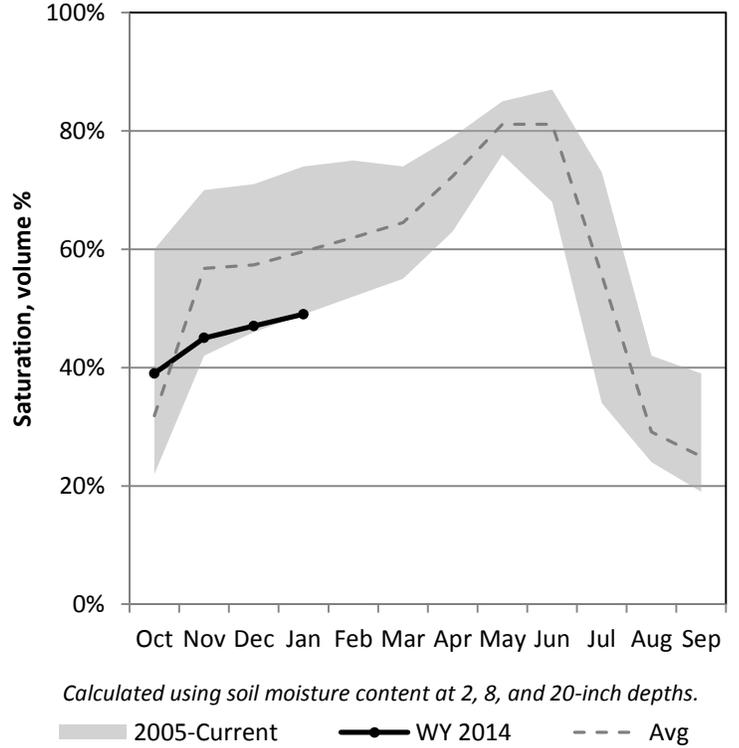
1/1/2014

Precipitation in December was below average at 77%, which brings the seasonal accumulation (Oct-Dec) to 71% of average. Soil moisture is at 49% compared to 61% last year. Reservoir storage is at 33% of capacity, compared to 47% last year. The water availability index for the Ogden River is 16% and 4% for the Weber River.

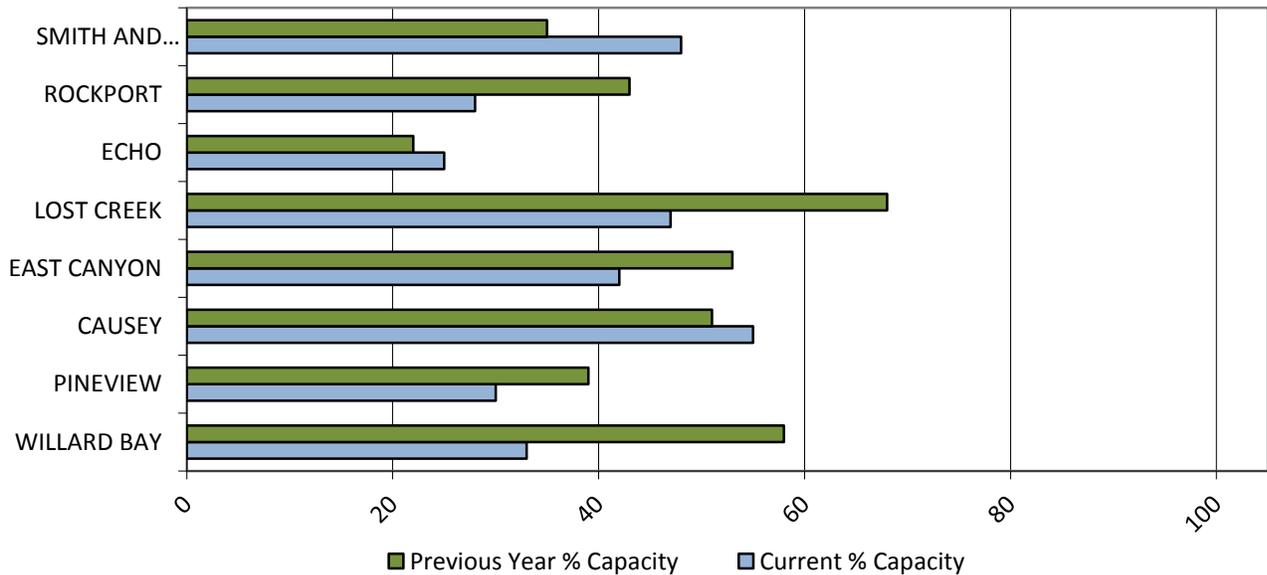
Precipitation



Soil Moisture



Reservoir Storage



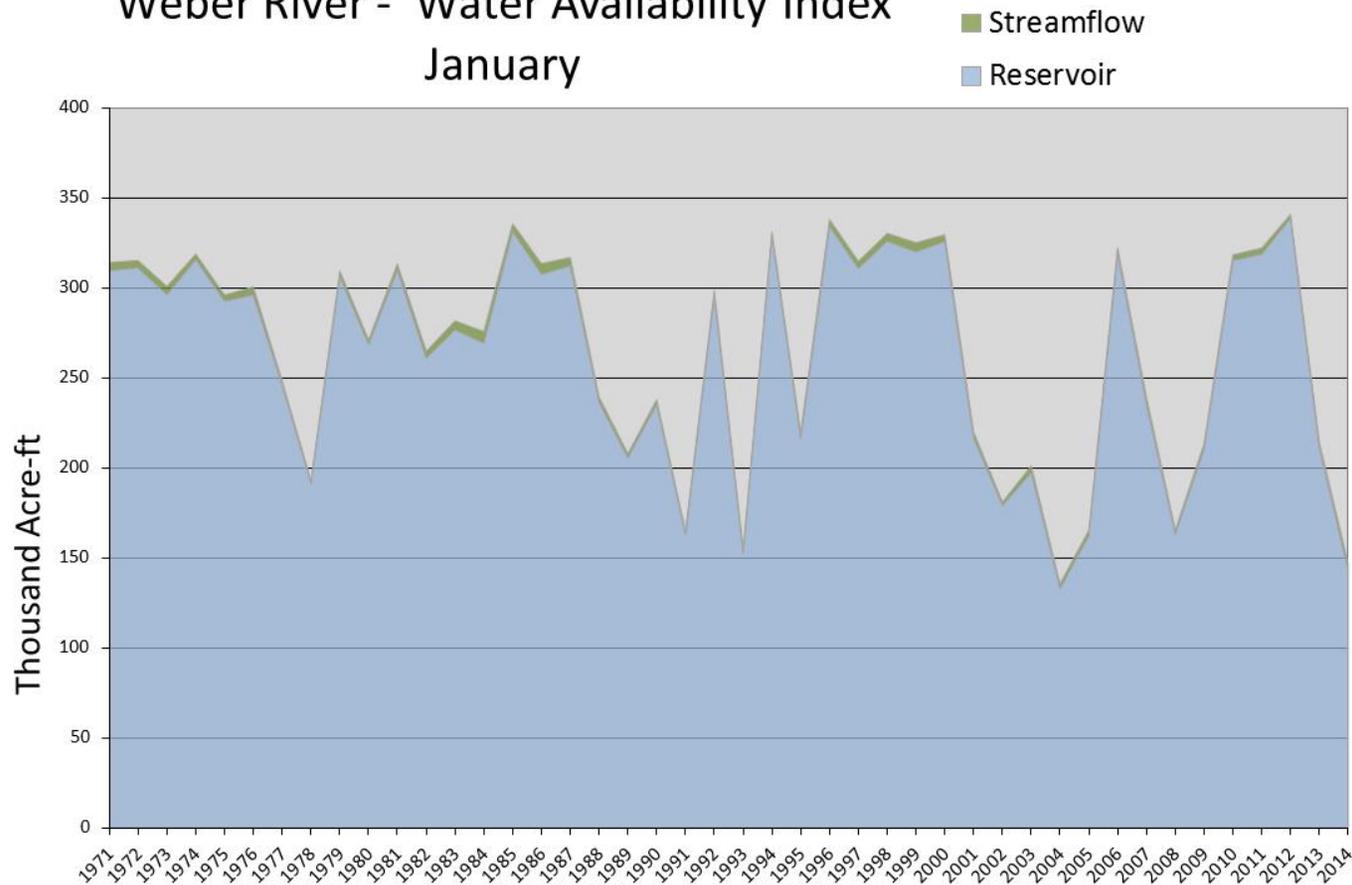
January 1, 2014

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		%	
Weber River	143	4	147	-3.80	4	04, 93, 91

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

Weber River - Water Availability Index
January



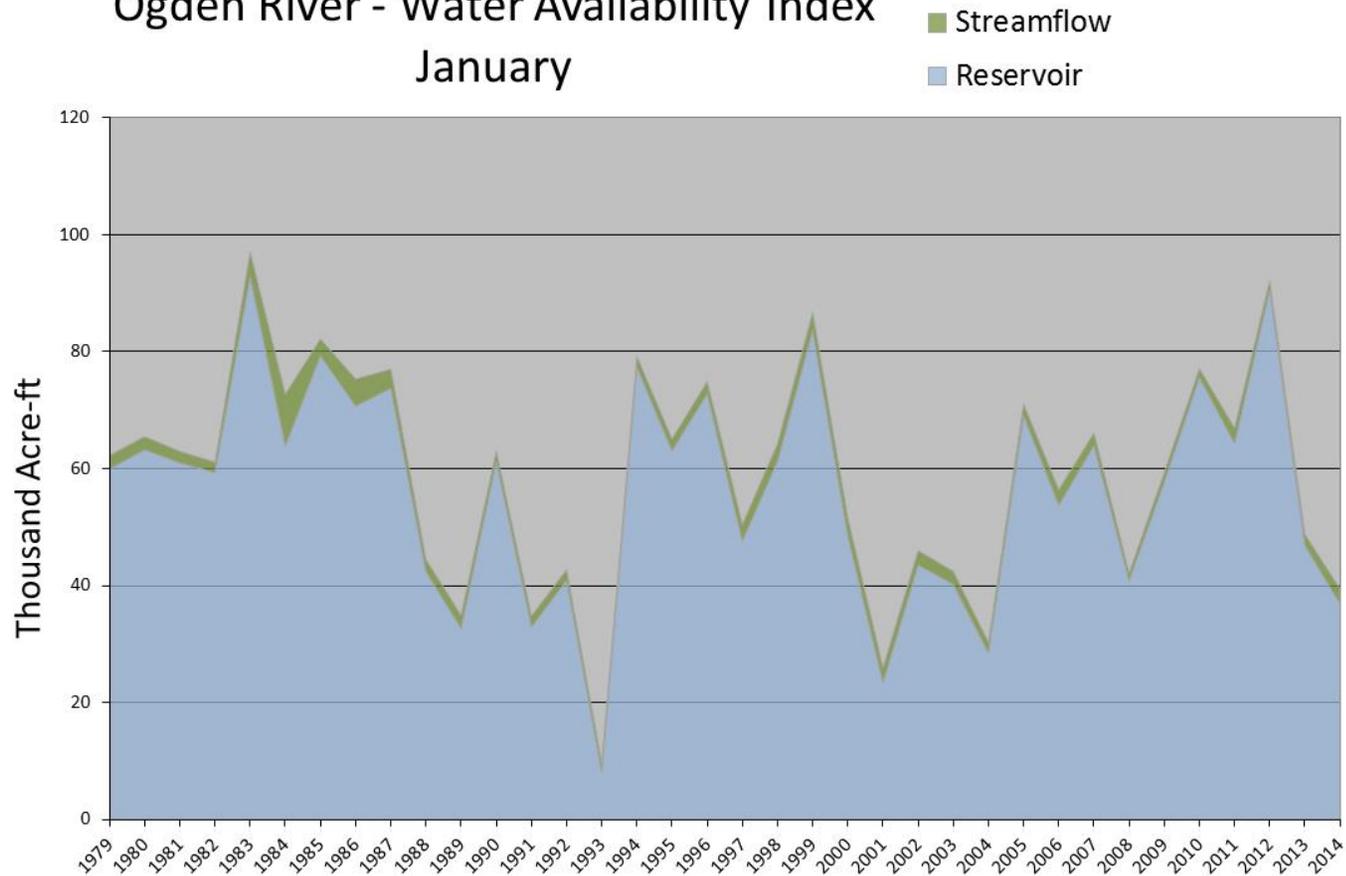
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Pine View & Causey	December accumulated flow at South Fork Ogden (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Ogden River	37	3	40	-2.82	16	91, 89, 08, 03

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

Ogden River - Water Availability Index
January

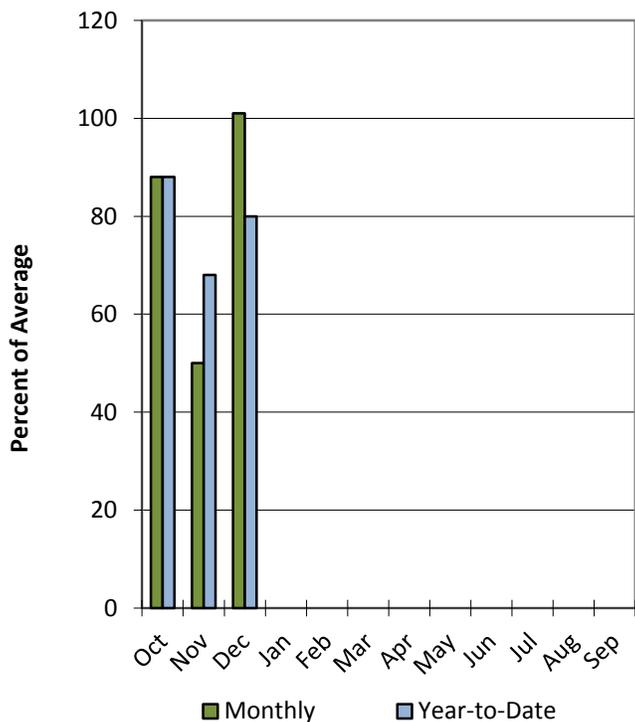


Tooele & Vernon Creek Basins

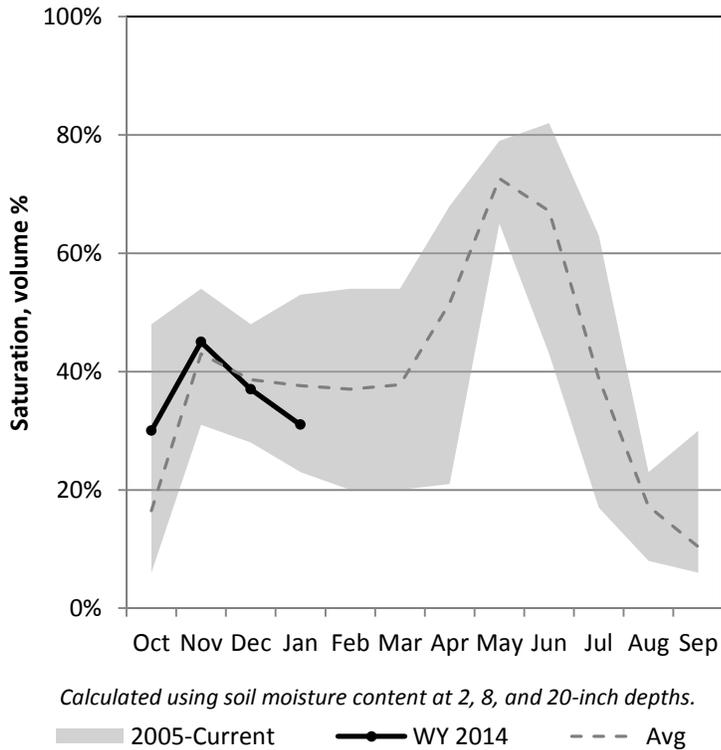
1/1/2014

Precipitation in December was near average at 101%, which brings the seasonal accumulation (Oct-Dec) to 80% of average. Soil moisture is at 31% compared to 38% last year. Reservoir storage is at 24% of capacity, compared to 27% last year.

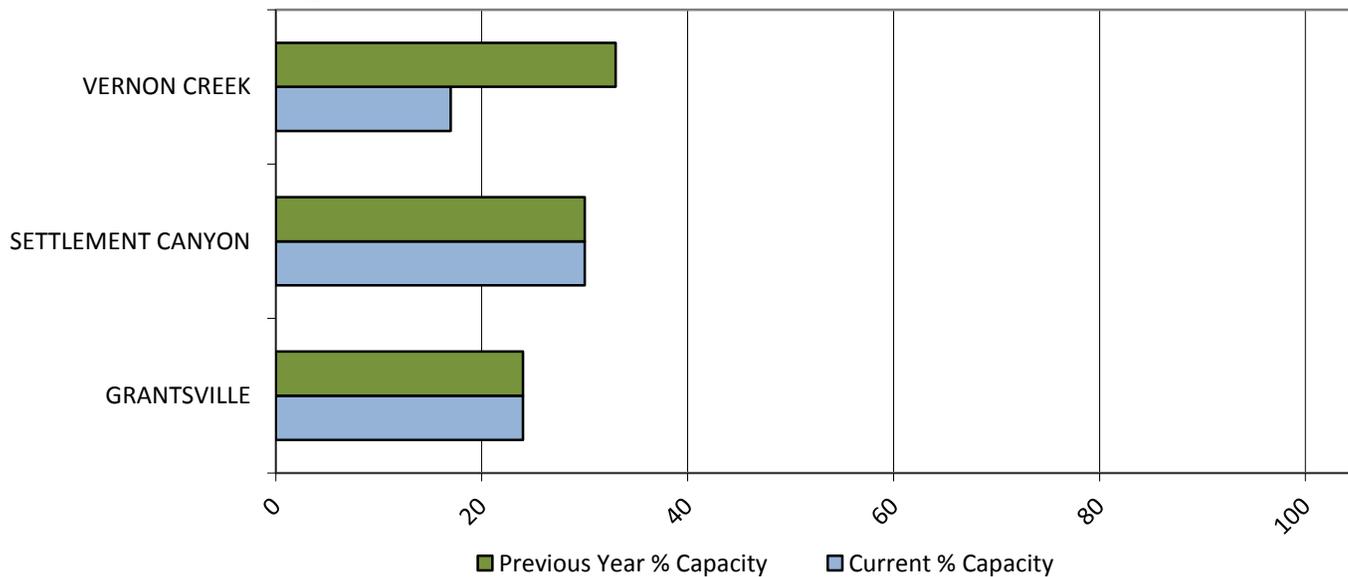
Precipitation



Soil Moisture



Reservoir Storage

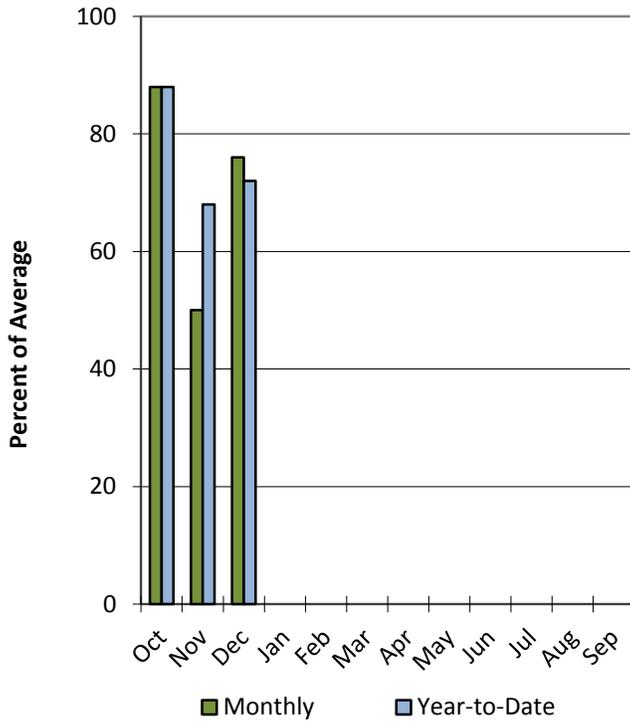


Provo & Jordan River Basins

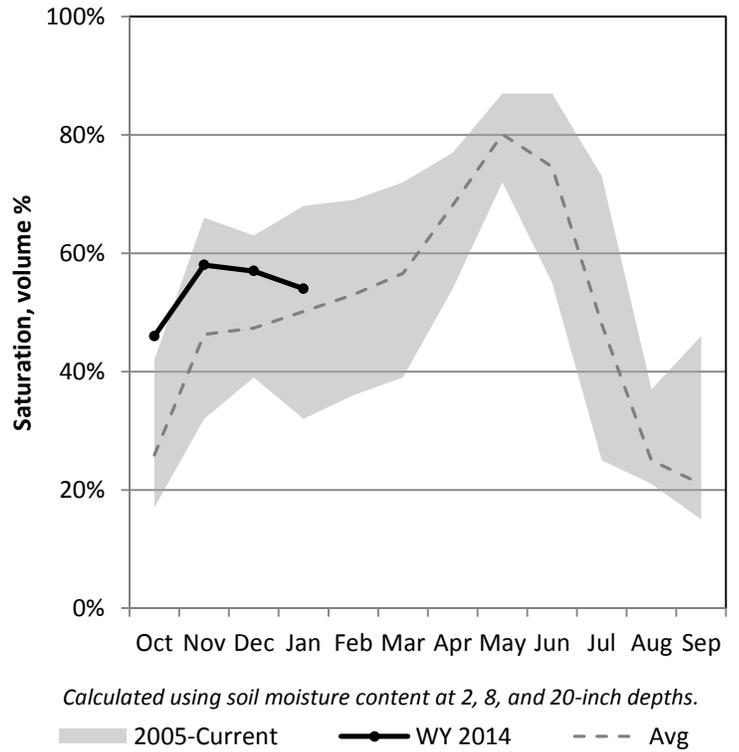
1/1/2014

Precipitation in December was below average at 76%, which brings the seasonal accumulation (Oct-Dec) to 72% of average. Soil moisture is at 54% compared to 49% last year. Reservoir storage is at 68% of capacity, compared to 75% last year. The water availability index for the Provo River is 10%.

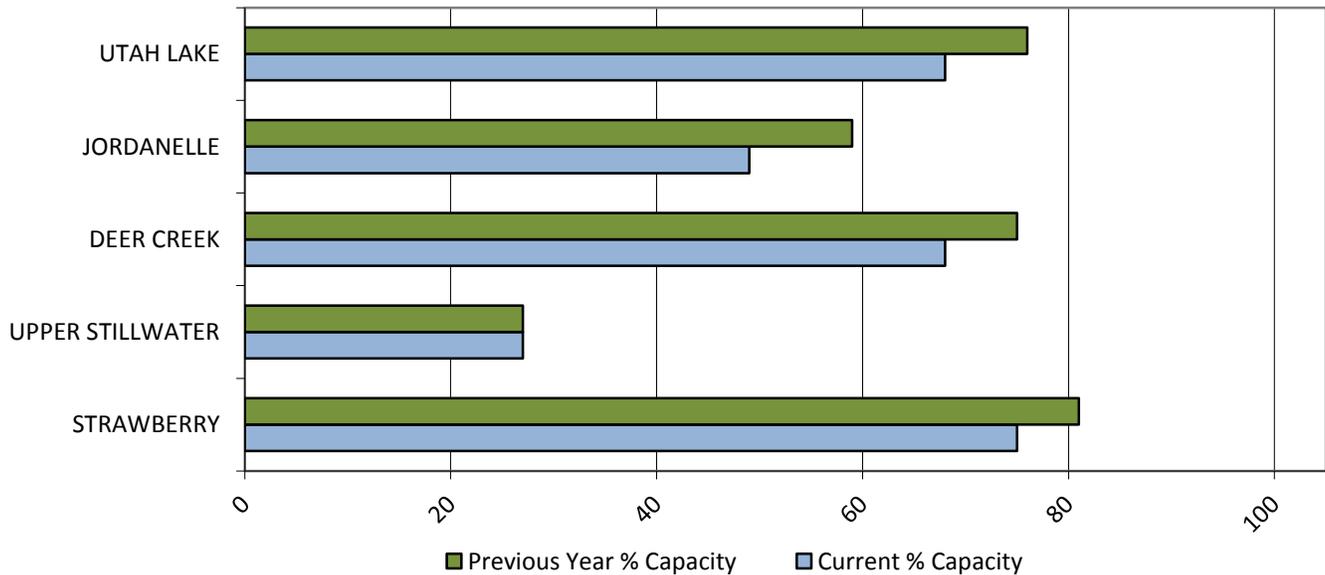
Precipitation



Soil Moisture



Reservoir Storage



January 1, 2014

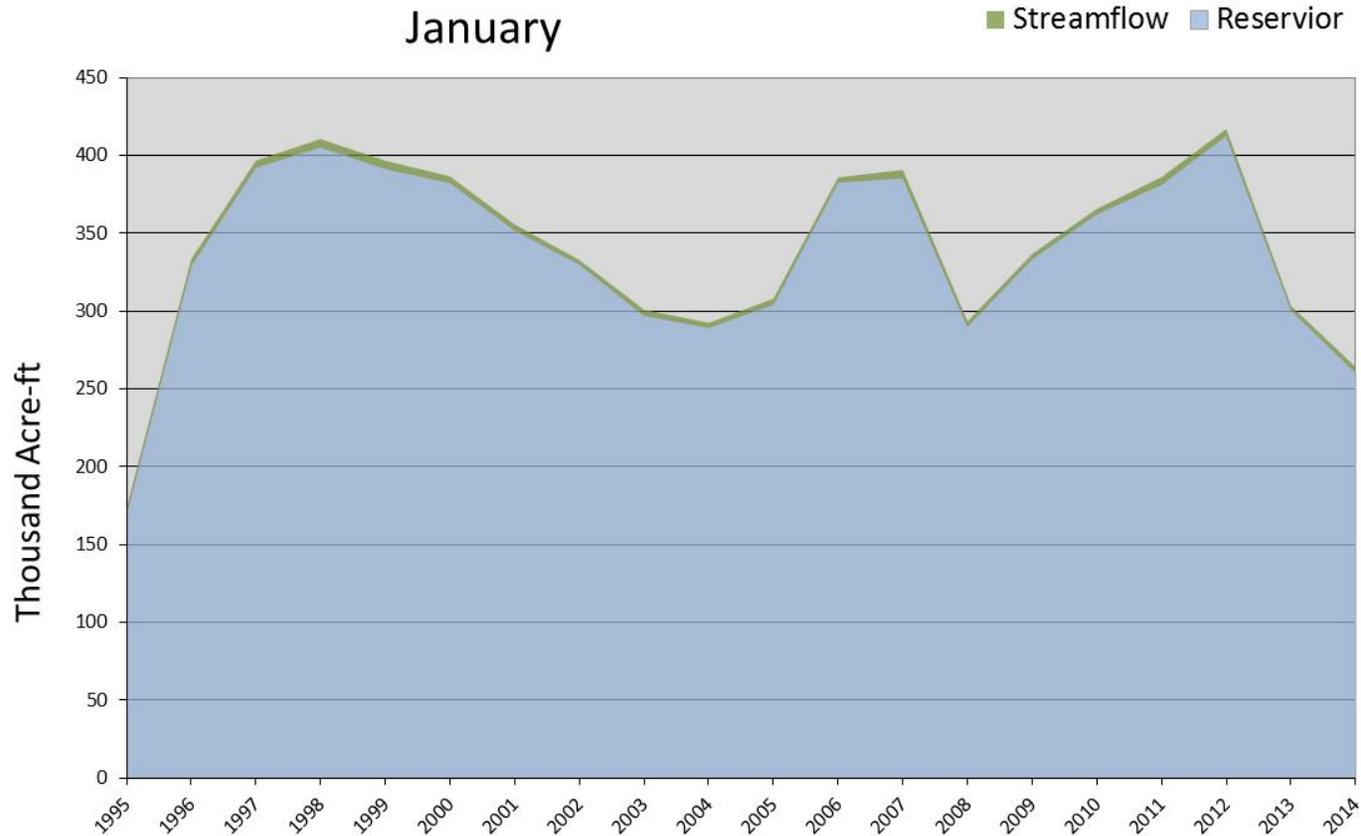
Water Availability Index

Basin or Region	December EOM*	December accumulated flow	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	Deer Creek, Jordanelle	Provo River at Woodland (<i>observed</i>)				
	KAF [^]	KAF	KAF		%	
Provo	261	3.6	264	-3.37	10	95, 04, 08

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

Provo River - Water Availability Index

January

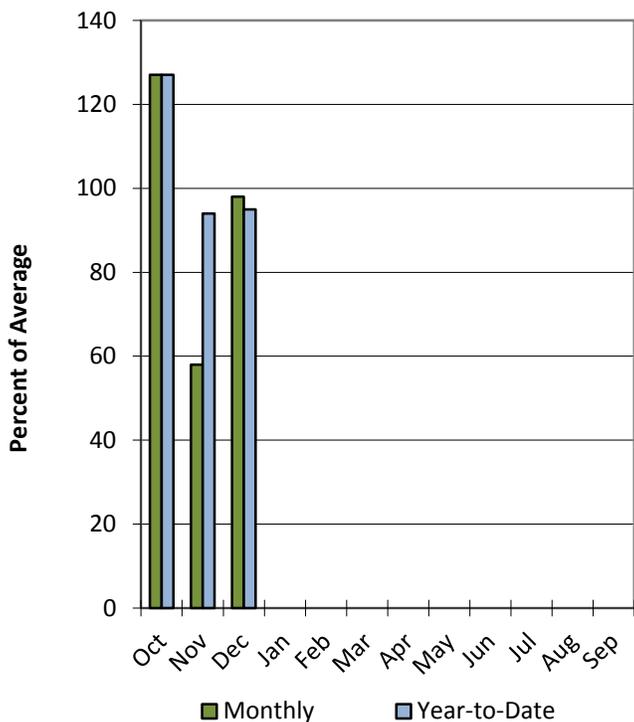


Northeastern Uintah Basin

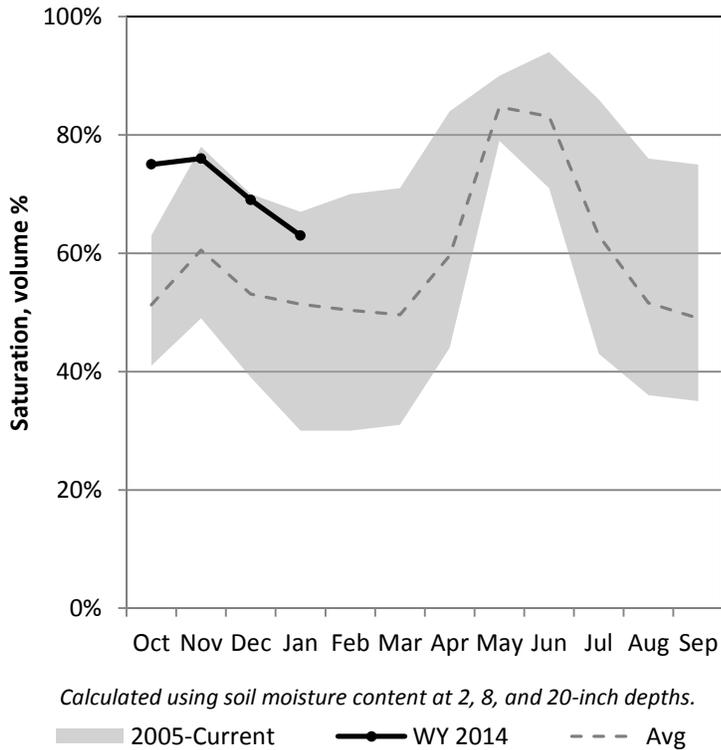
1/1/2014

Precipitation in December was near average at 98%, which brings the seasonal accumulation (Oct-Dec) to 95% of average. Soil moisture is at 63% compared to 44% last year. Reservoir storage is at 75% of capacity, compared to 79% last year.

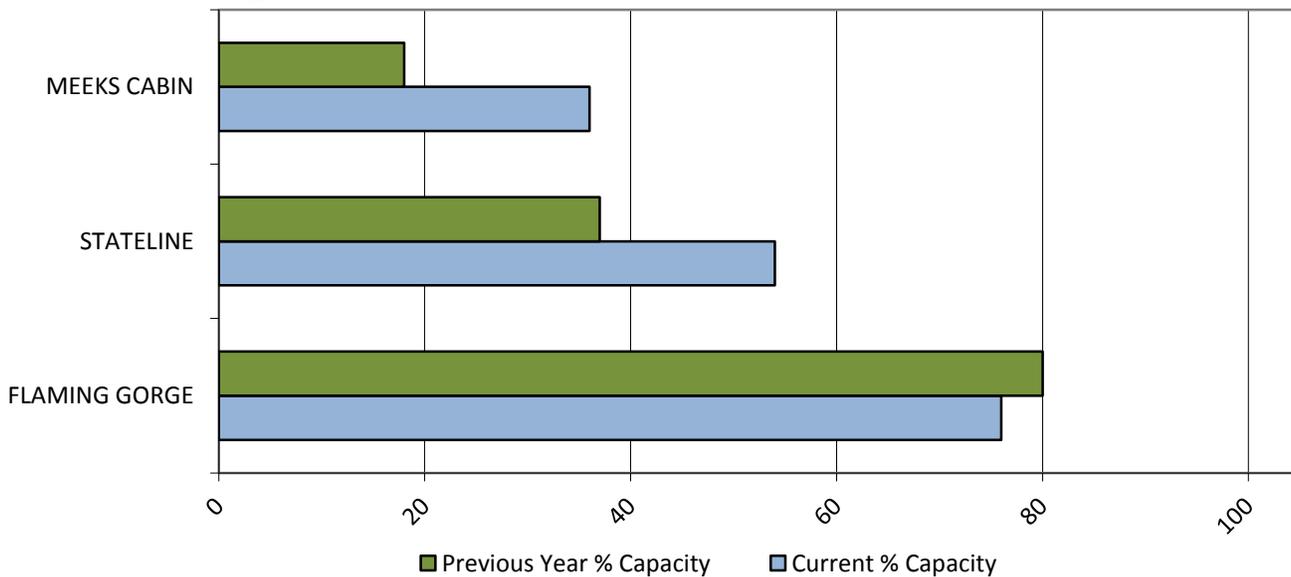
Precipitation



Soil Moisture



Reservoir Storage



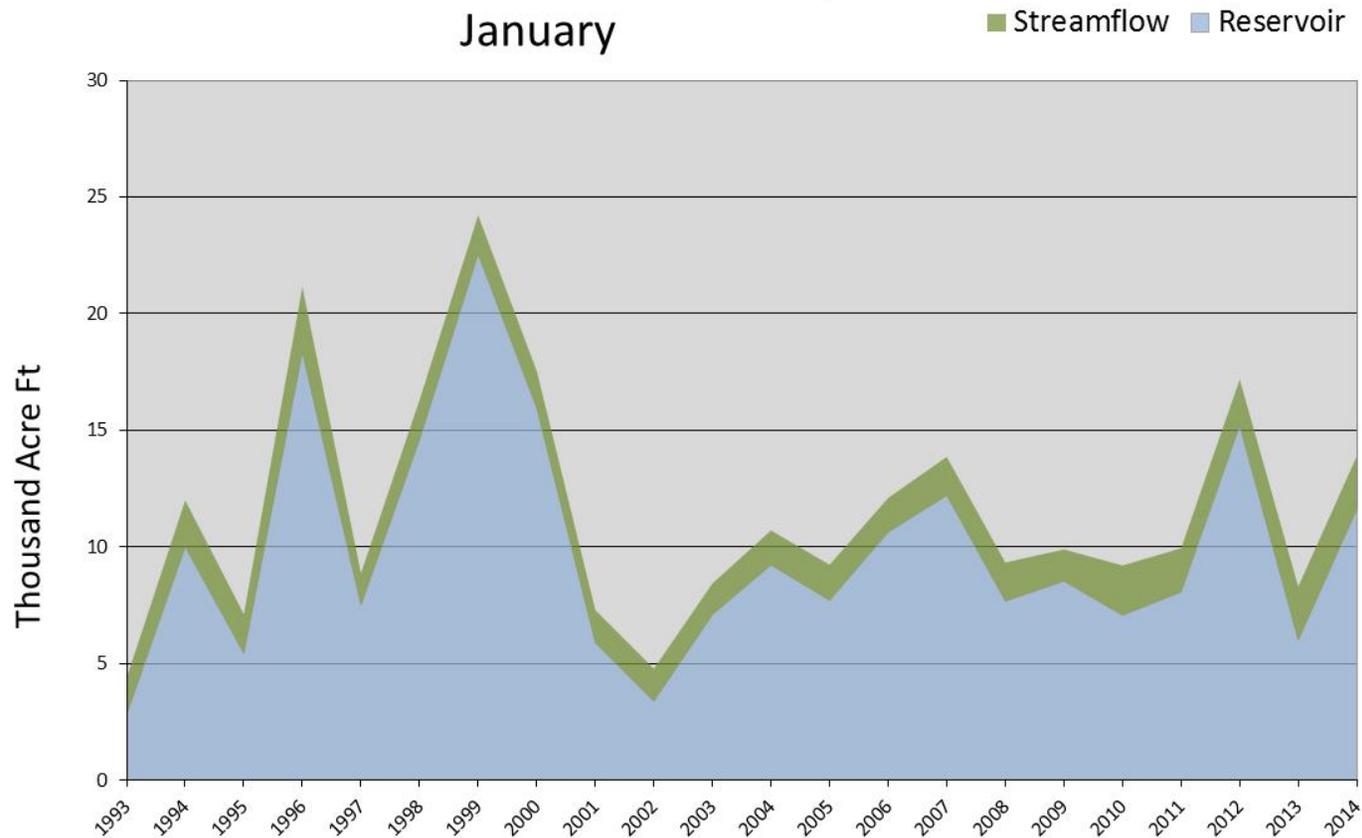
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Meeks Cabin Reservoir	December Observed Streamflow Blacks Fork nr Robertson	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Blacks Fork	11.6	2.3	13.9	1.99	74	06, 07, 98, 12

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

Blacks Fork River - Water Availability Index January



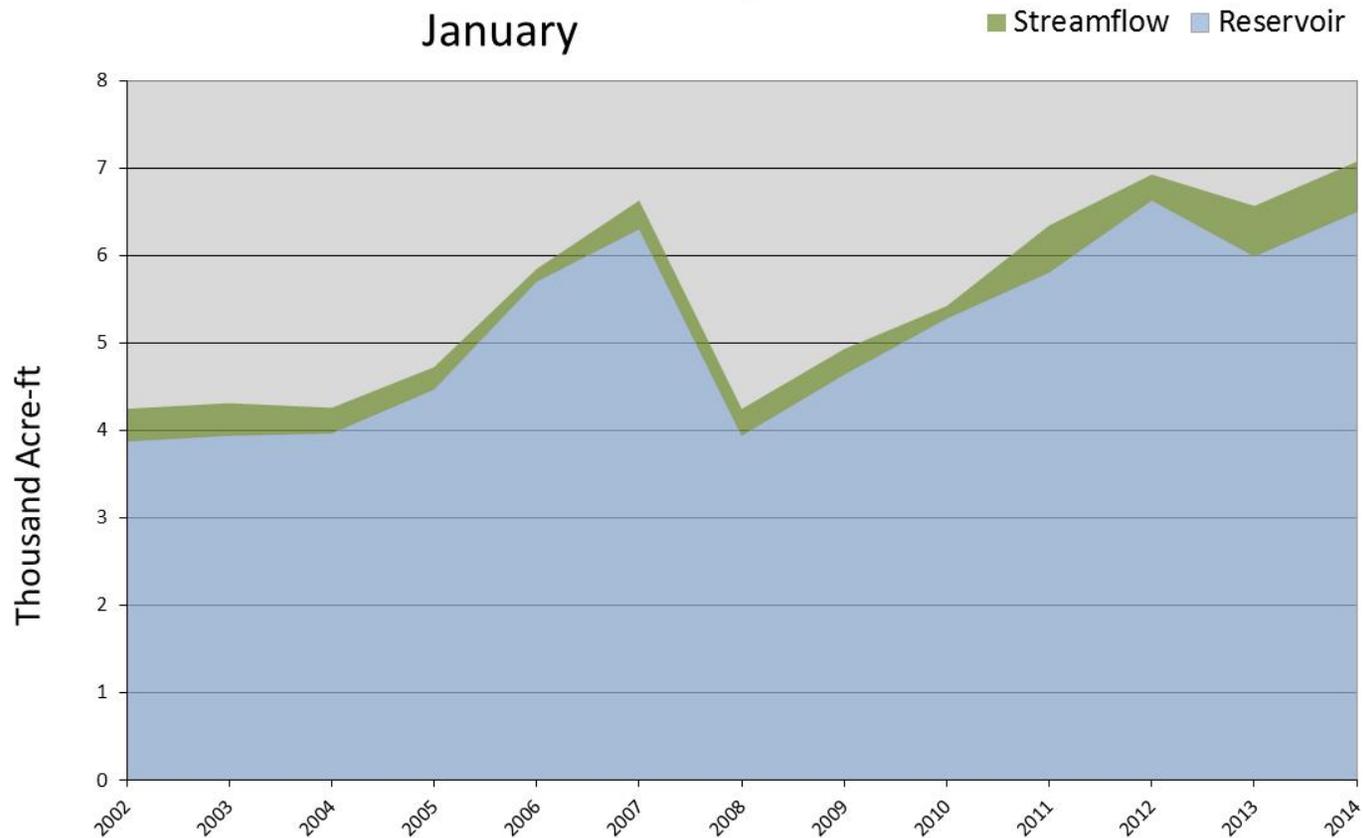
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Stateline Reservoir	December Observed Flow EF Smiths Creek	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Smiths Creek	6.5	0.6	7.1	3.57	93	07, 12

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

Smiths Creek - Water Availability Index
January

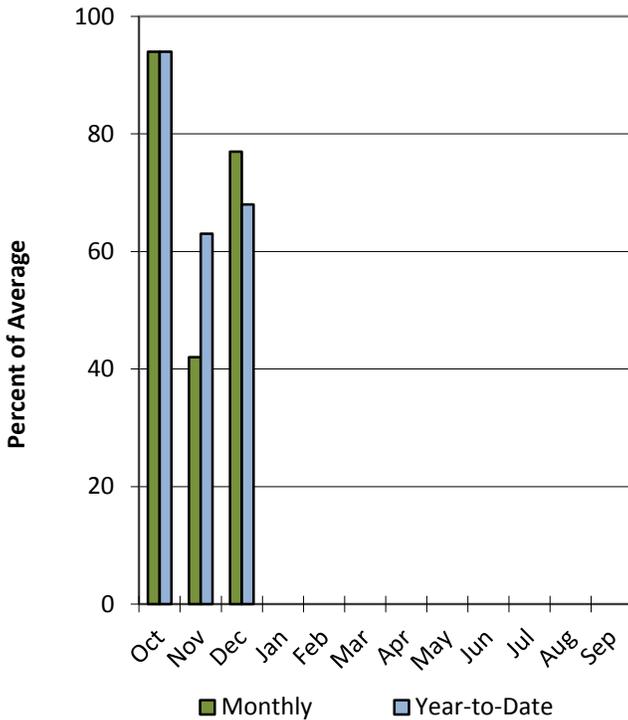


Duchesne River Basin

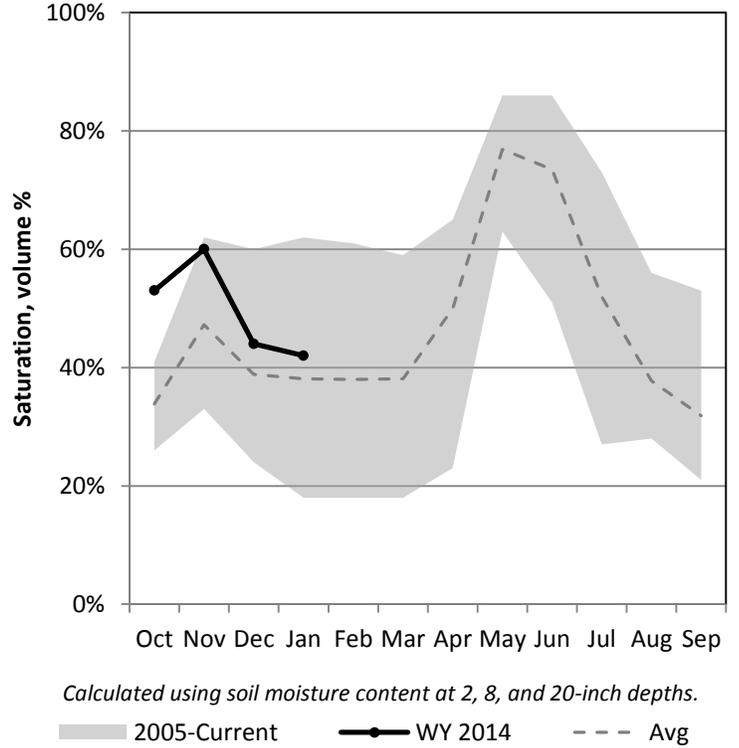
1/1/2014

Precipitation in December was below average at 77%, which brings the seasonal accumulation (Oct-Dec) to 68% of average. Soil moisture is at 42% compared to 31% last year. Reservoir storage is at 73% of capacity, compared to 75% last year. The water availability index for the Western Uintahs is 78% and 9% for the Eastern Uintahs.

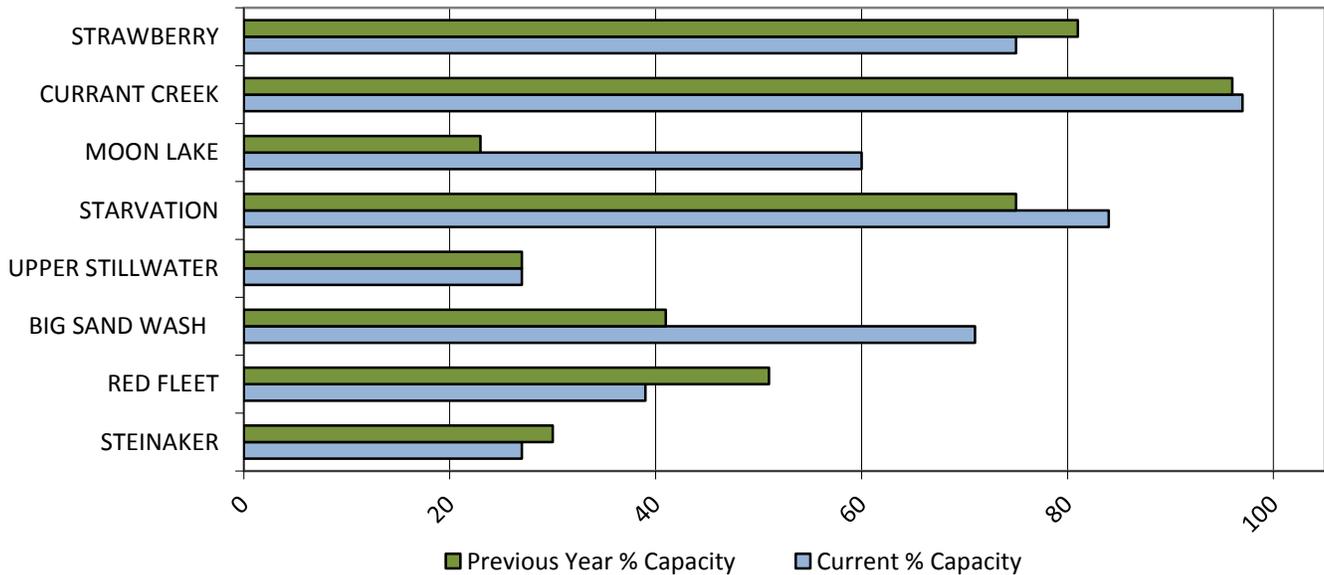
Precipitation



Soil Moisture



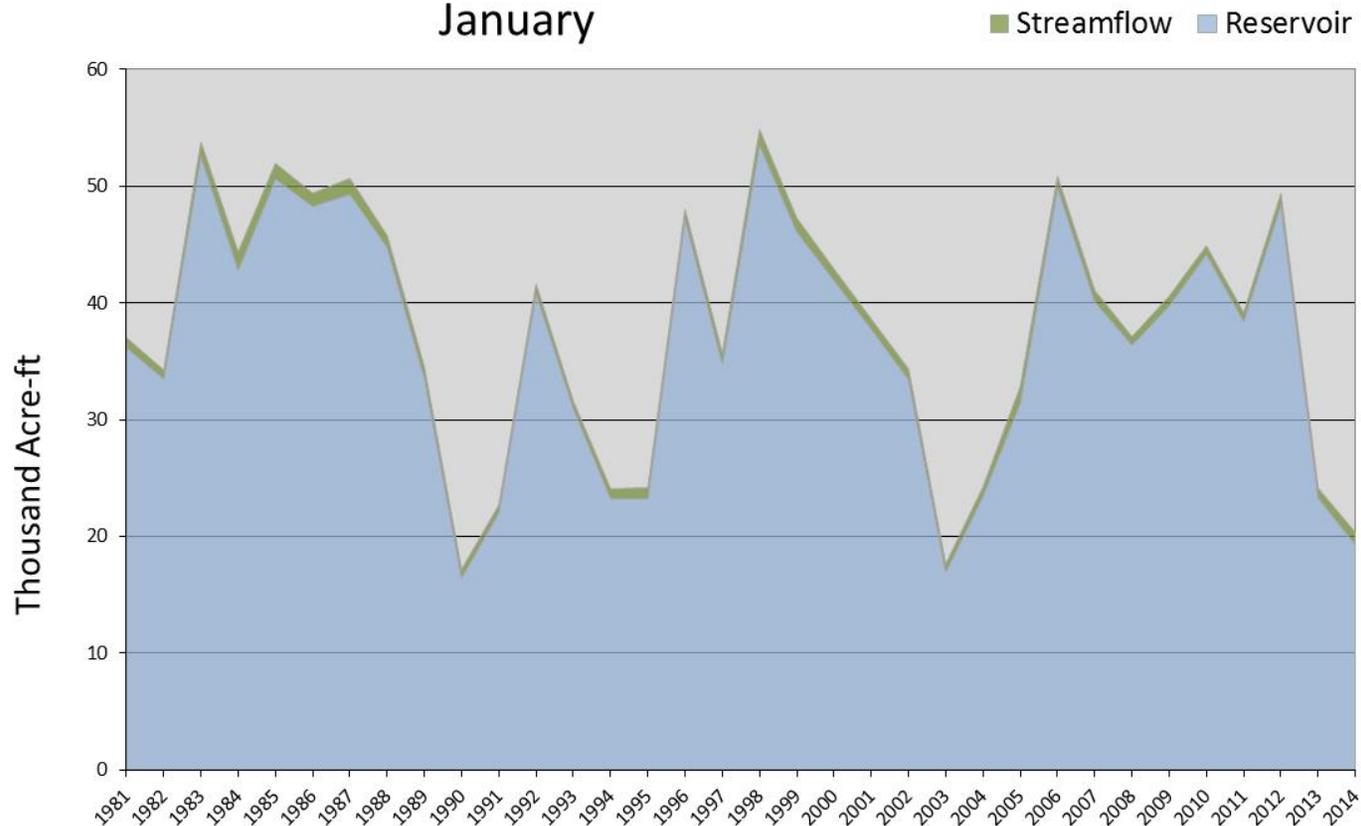
Reservoir Storage



January 1, 2014		Water Availability Index				
Basin or Region	December EOM* Red Fleet and Steinaker	December accumulated flow Big Brush Creek (<i>observed</i>)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Eastern Uintah	19.3	1.0	20.3	-3.45	9	90, 03, 91, 94

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

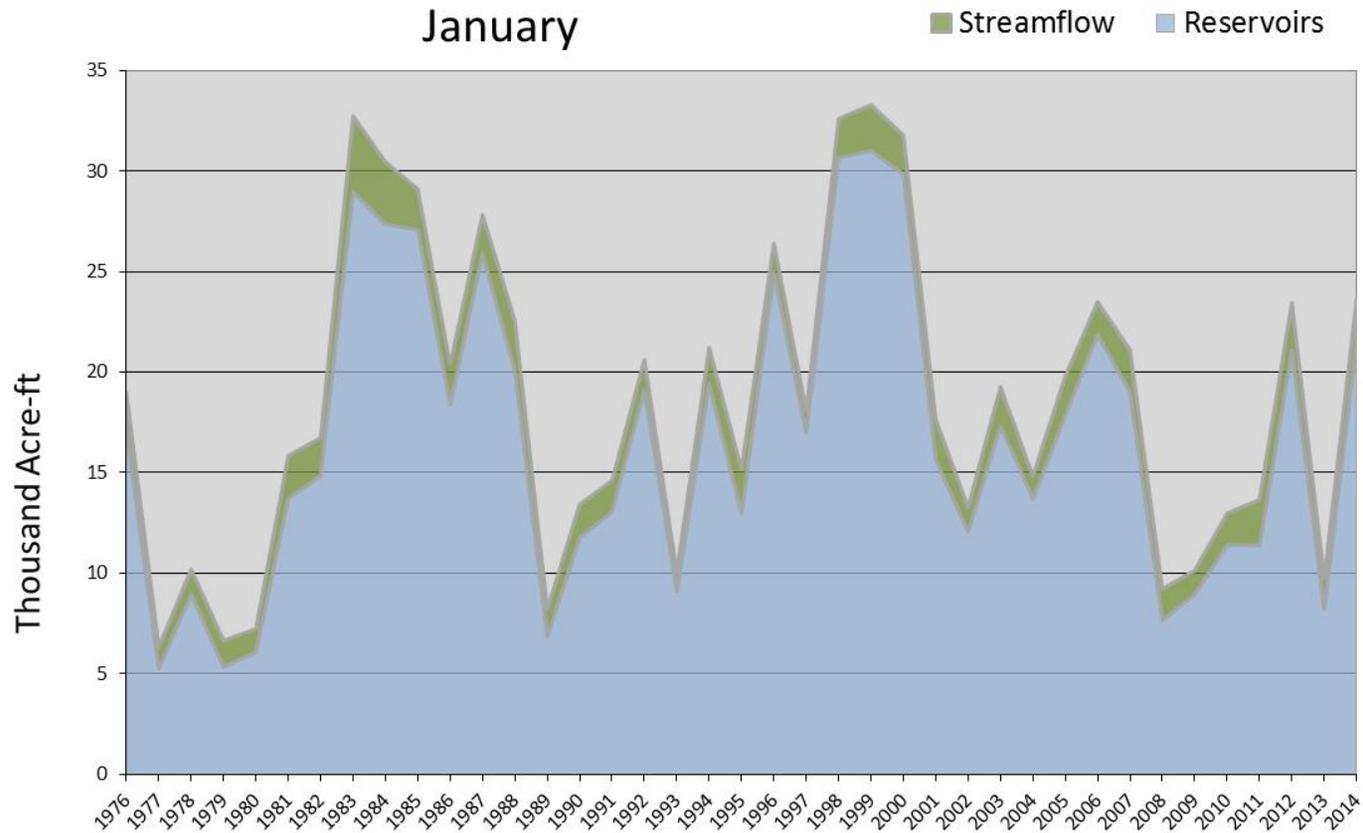
Eastern Uintah - Water Availability Index
January



January 1, 2014		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> [^]	<i>KAF</i>	<i>KAF</i>		%	
Moon Lake	21.5	2.1	23.6	2.29	78	12, 06, 96, 87

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

Moon Lake - Water Availability Index
January

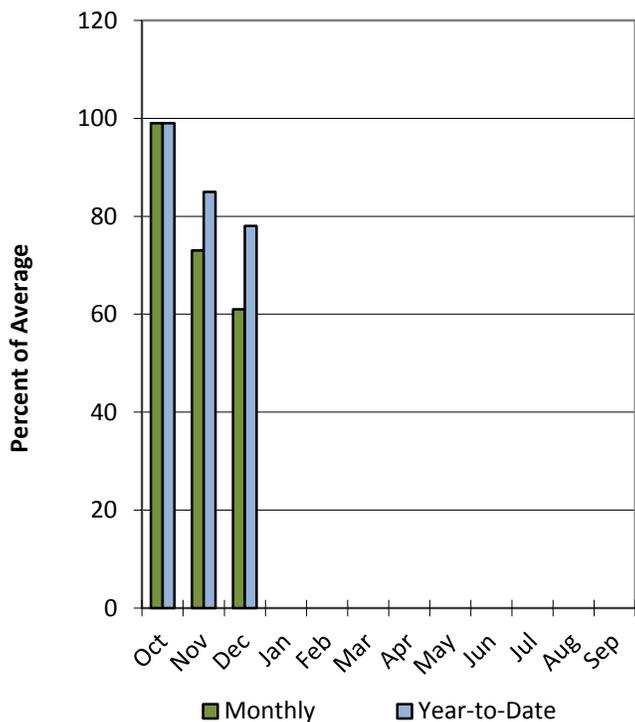


Price & San Rafael Basins

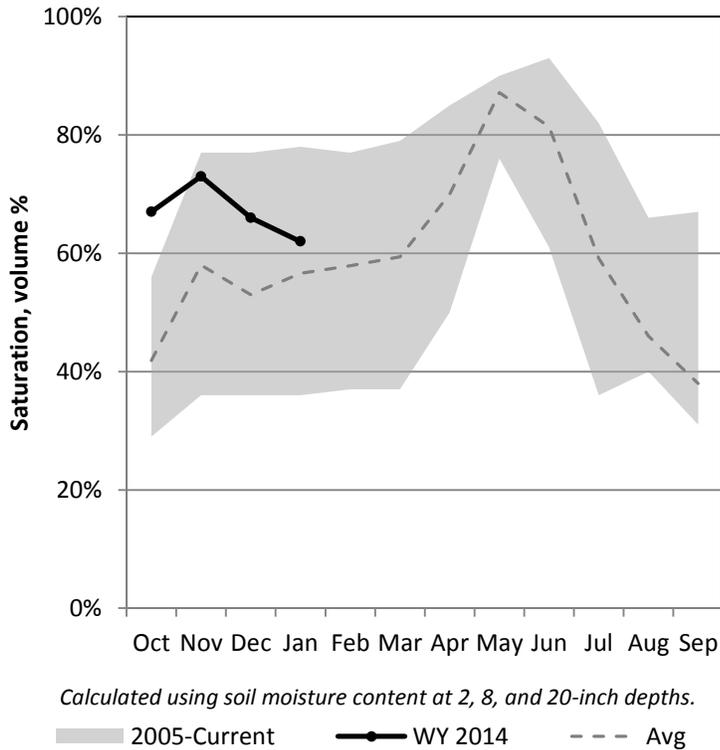
1/1/2014

Precipitation in December was much below average at 61%, which brings the seasonal accumulation (Oct-Dec) to 78% of average. Soil moisture is at 62% compared to 38% last year. Reservoir storage is at 39% of capacity, compared to 46% last year. The water availability index for the Price River is 22%, and 15% for Joe's Valley.

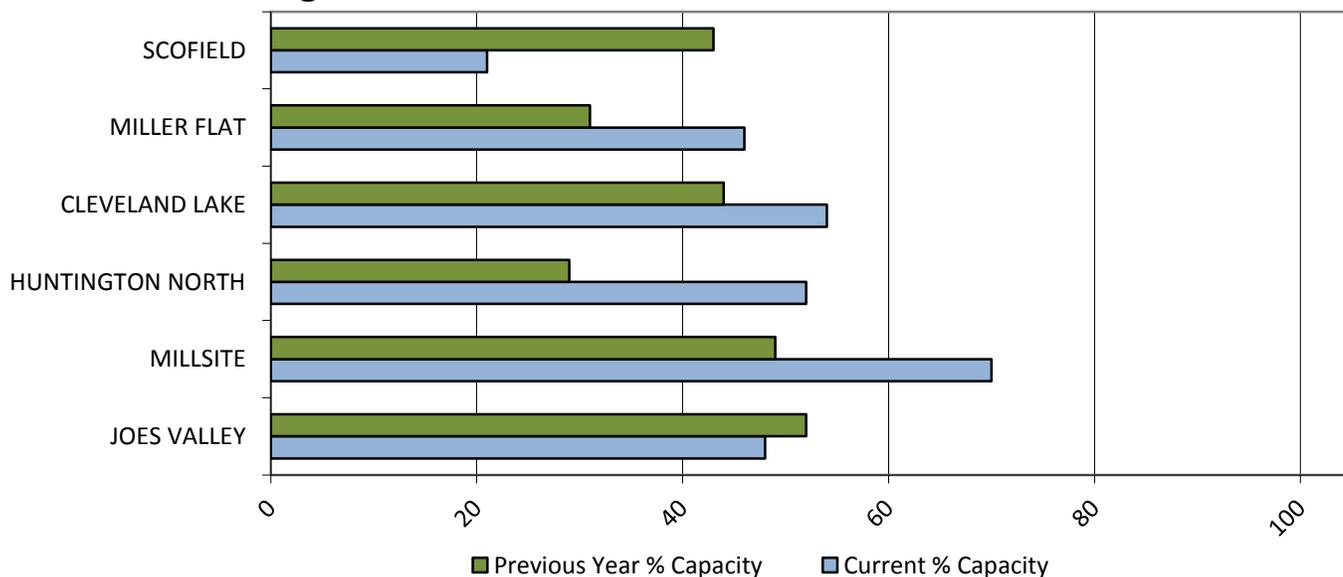
Precipitation



Soil Moisture



Reservoir Storage



January 1, 2014

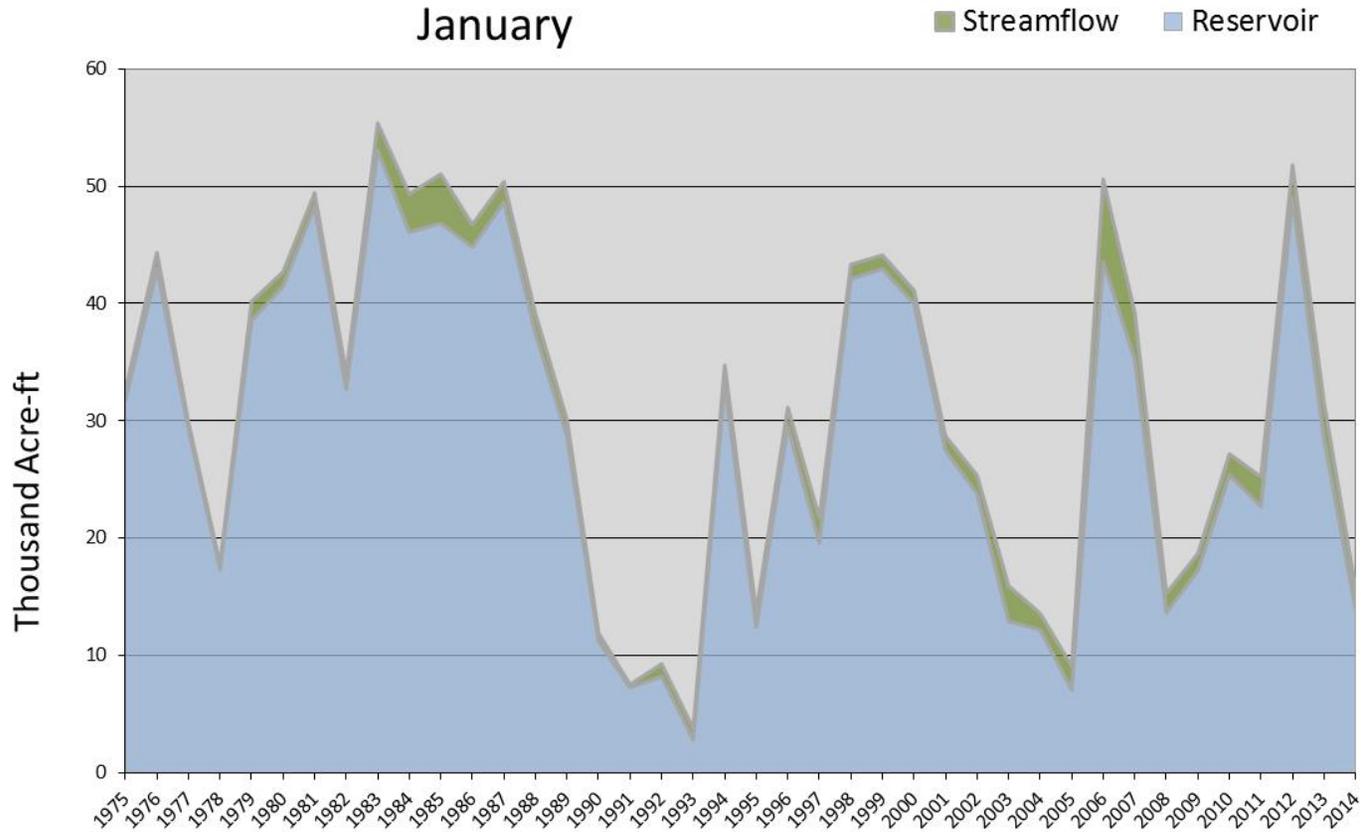
Water Availability Index

Basin or Region	December EOM* Scofield	December accumulated inflow to Scofield (<i>calculated</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Price River	13.9	1.8	15.7	-2.34	22	95, 08, 03, 78

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

Price River - Water Availability Index

January



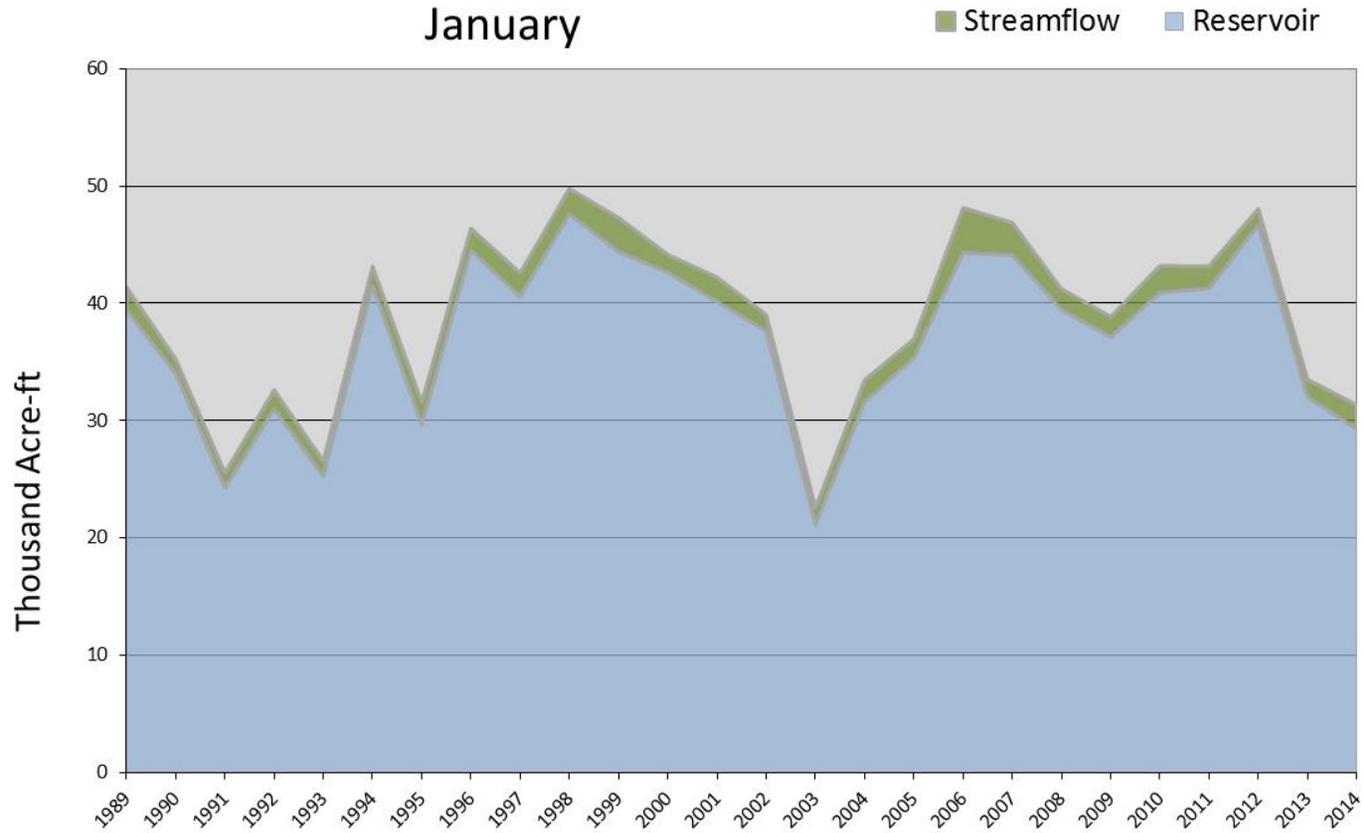
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Joe's Valley	December accumulated inflow to Joe's Valley (calculated)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Joe's Valley	29.3	2.0	31.3	-2.93	15	91, 93, 95, 92

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

Joe's Valley - Water Availability Index
January

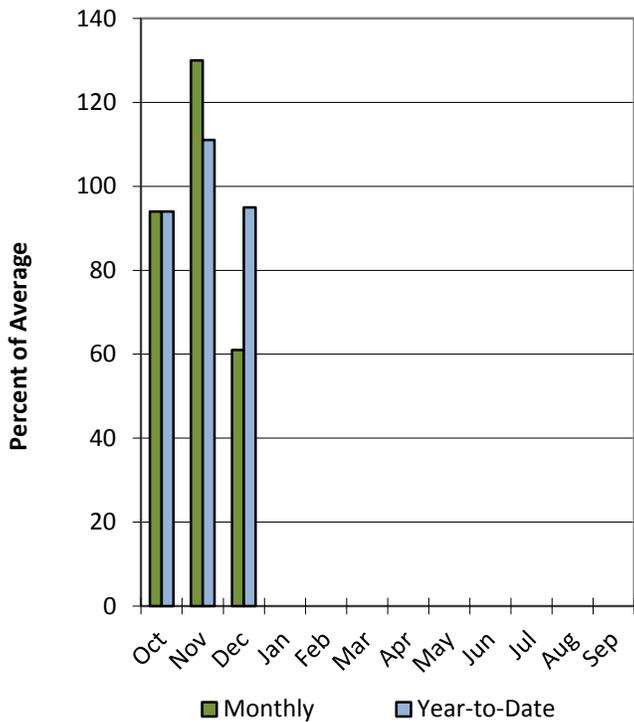


Southeastern Utah Basin

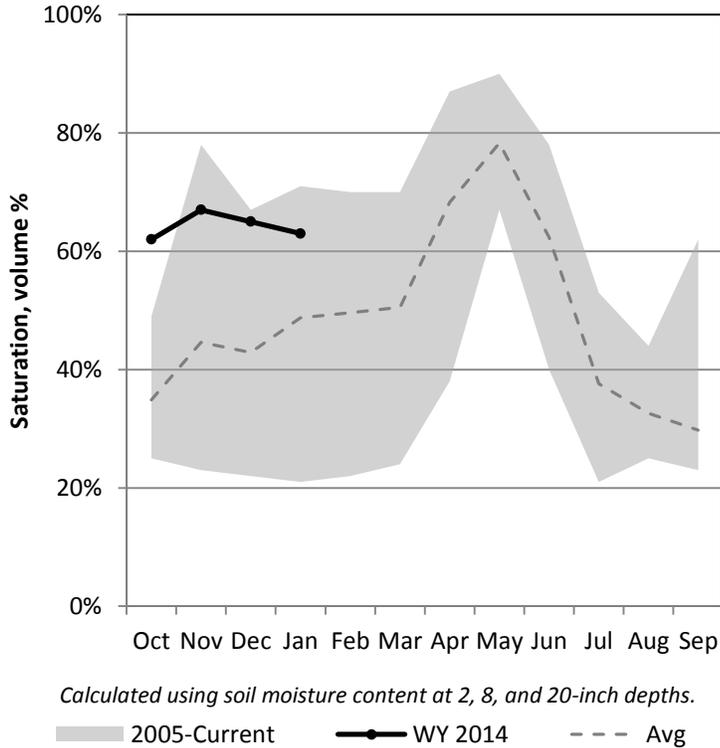
1/1/2014

Precipitation in December was much below average at 61%, which brings the seasonal accumulation (Oct-Dec) to 95% of average. Soil moisture is at 63% compared to 21% last year. Reservoir storage is at 43% of capacity, compared to 9% last year. The water availability index for Moab is 11%.

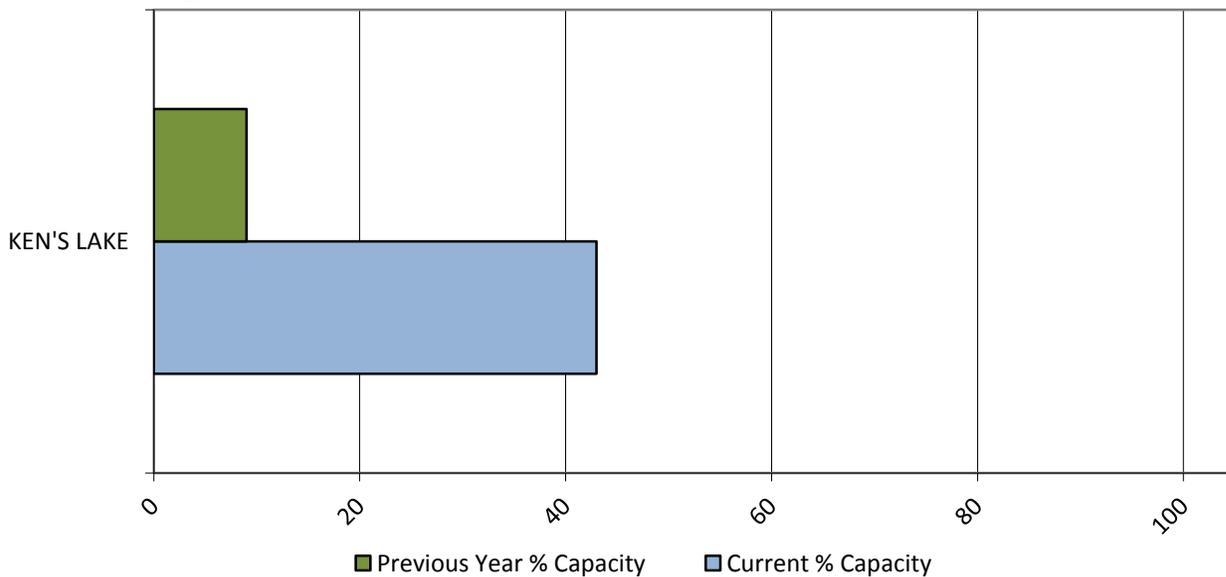
Precipitation



Soil Moisture



Reservoir Storage



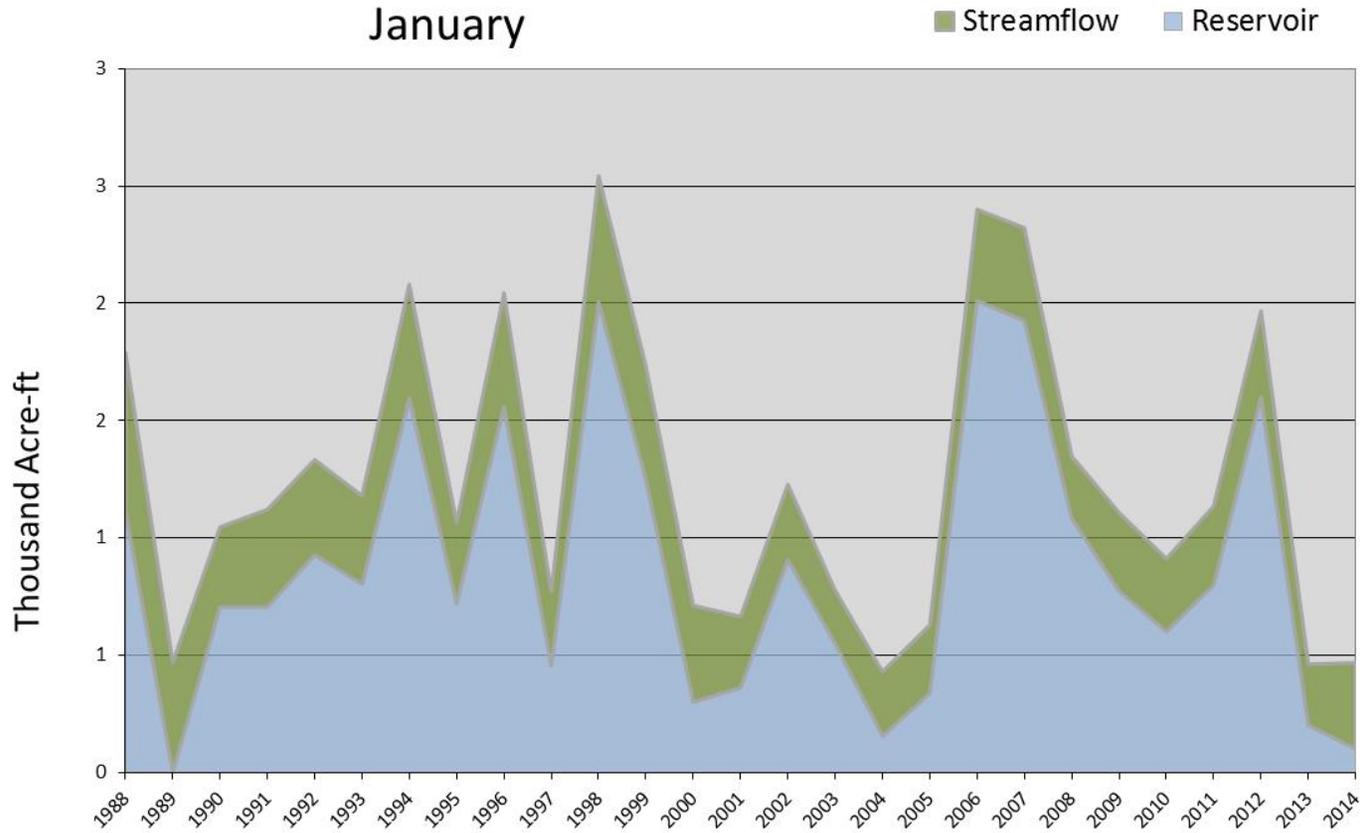
January 1, 2014

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 [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Moab	0.1	0.4	0.5	-3.27	11	04, 13, 89, 05

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

Moab - Water Availability Index
January

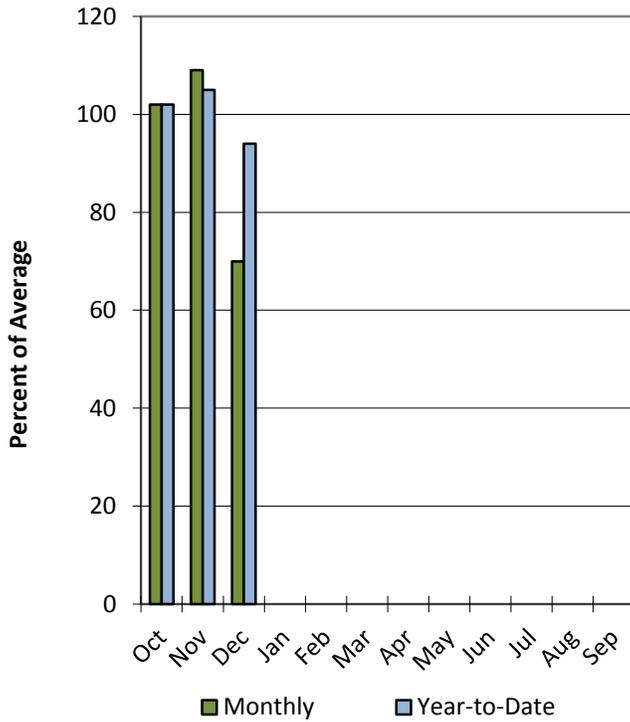


Dirty Devil Basin

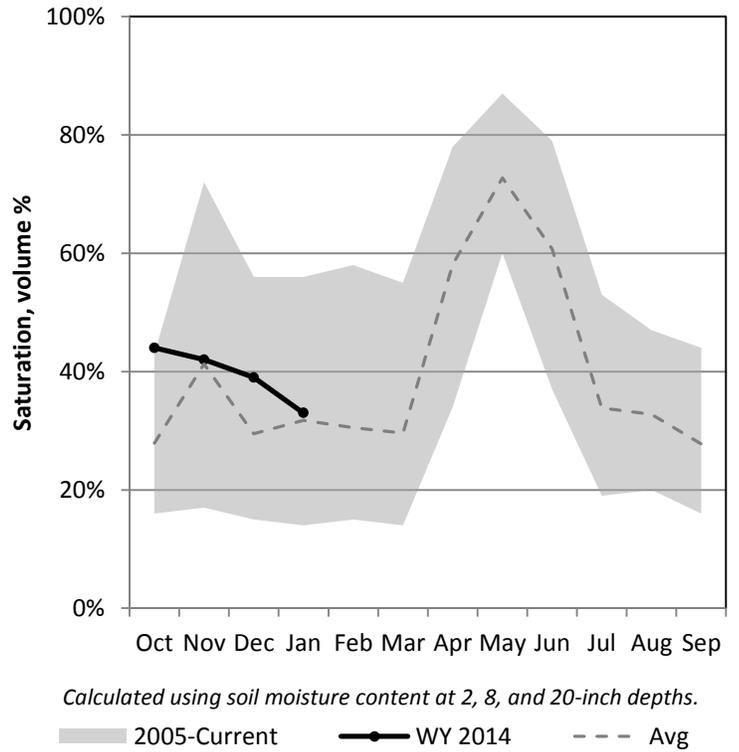
1/1/2014

Precipitation in December was below average at 70%, which brings the seasonal accumulation (Oct-Dec) to 94% of average. Soil moisture is at 33% compared to 20% last year.

Precipitation



Soil Moisture

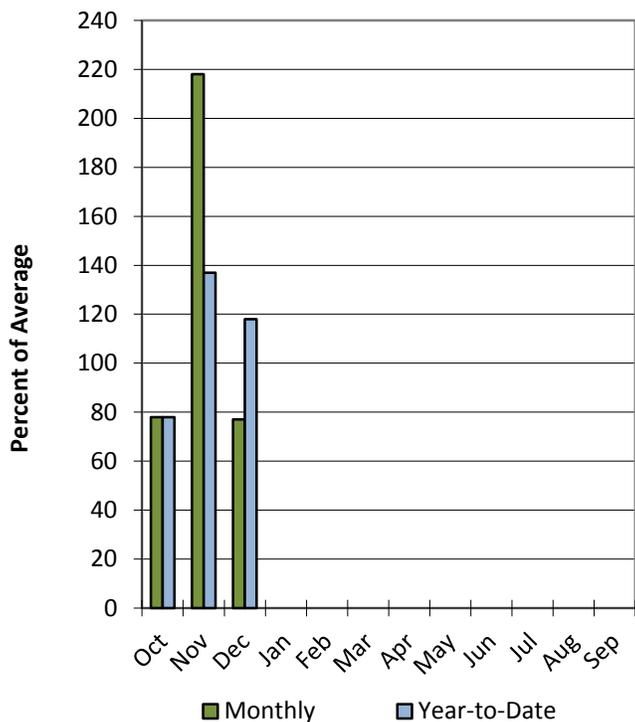


Escalante River Basin

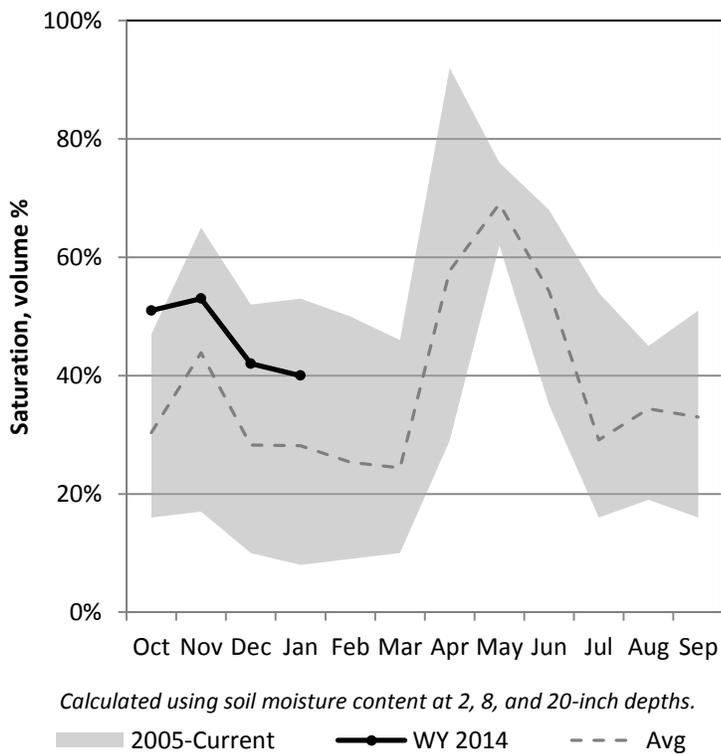
1/1/2014

Precipitation in December was below average at 77%, which brings the seasonal accumulation (Oct-Dec) to 118% of average. Soil moisture is at 40% compared to 22% last year.

Precipitation



Soil Moisture

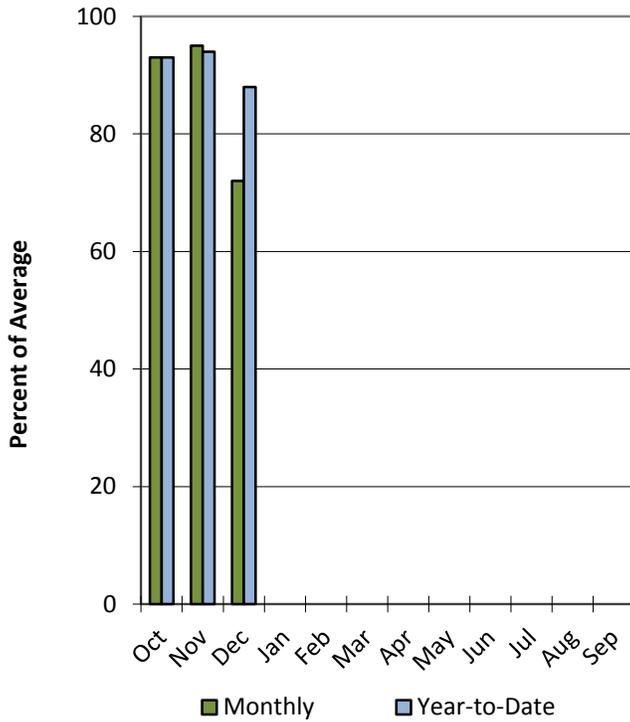


Upper Sevier River Basin

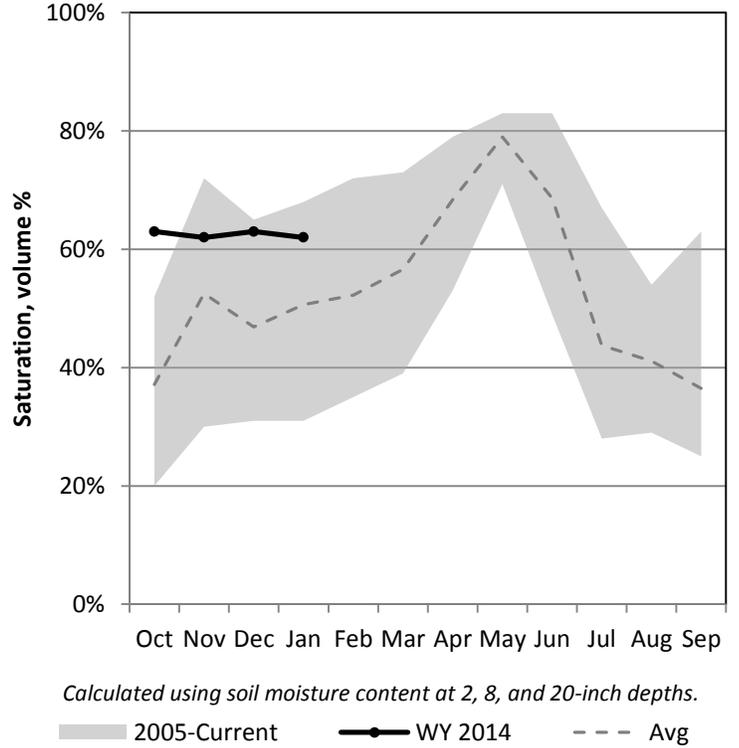
1/1/2014

Precipitation in December was below average at 72%, which brings the seasonal accumulation (Oct-Dec) to 88% of average. Soil moisture is at 62% compared to 43% last year. Reservoir storage is at 60% of capacity, compared to 47% last year. The water availability index for the Upper Sevier is 64%.

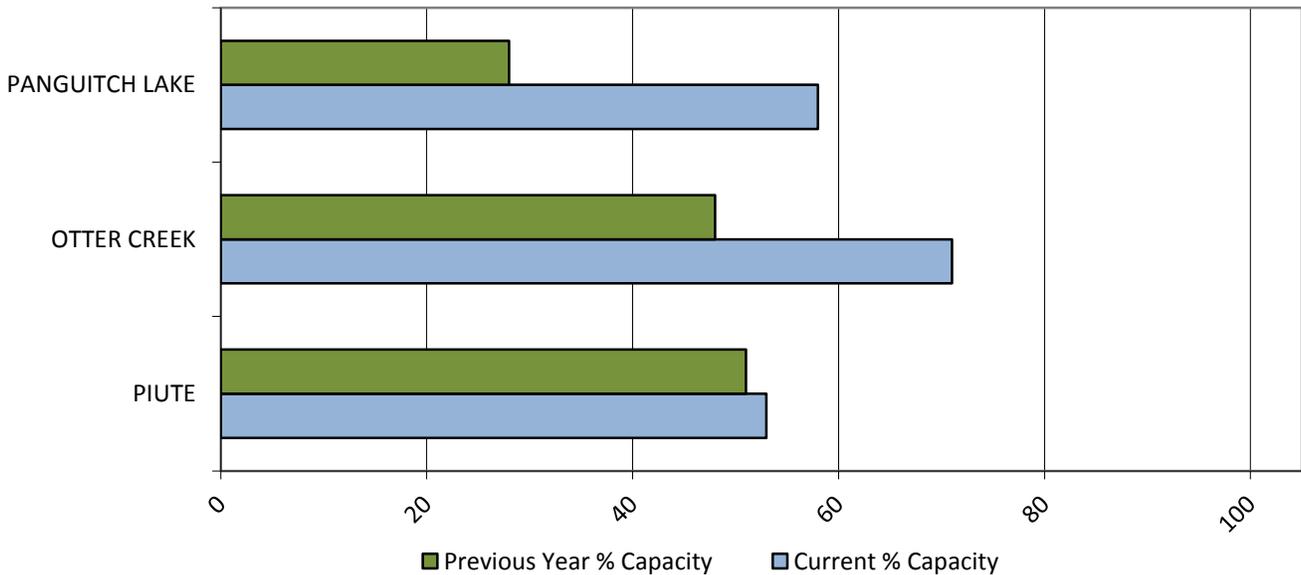
Precipitation



Soil Moisture



Reservoir Storage



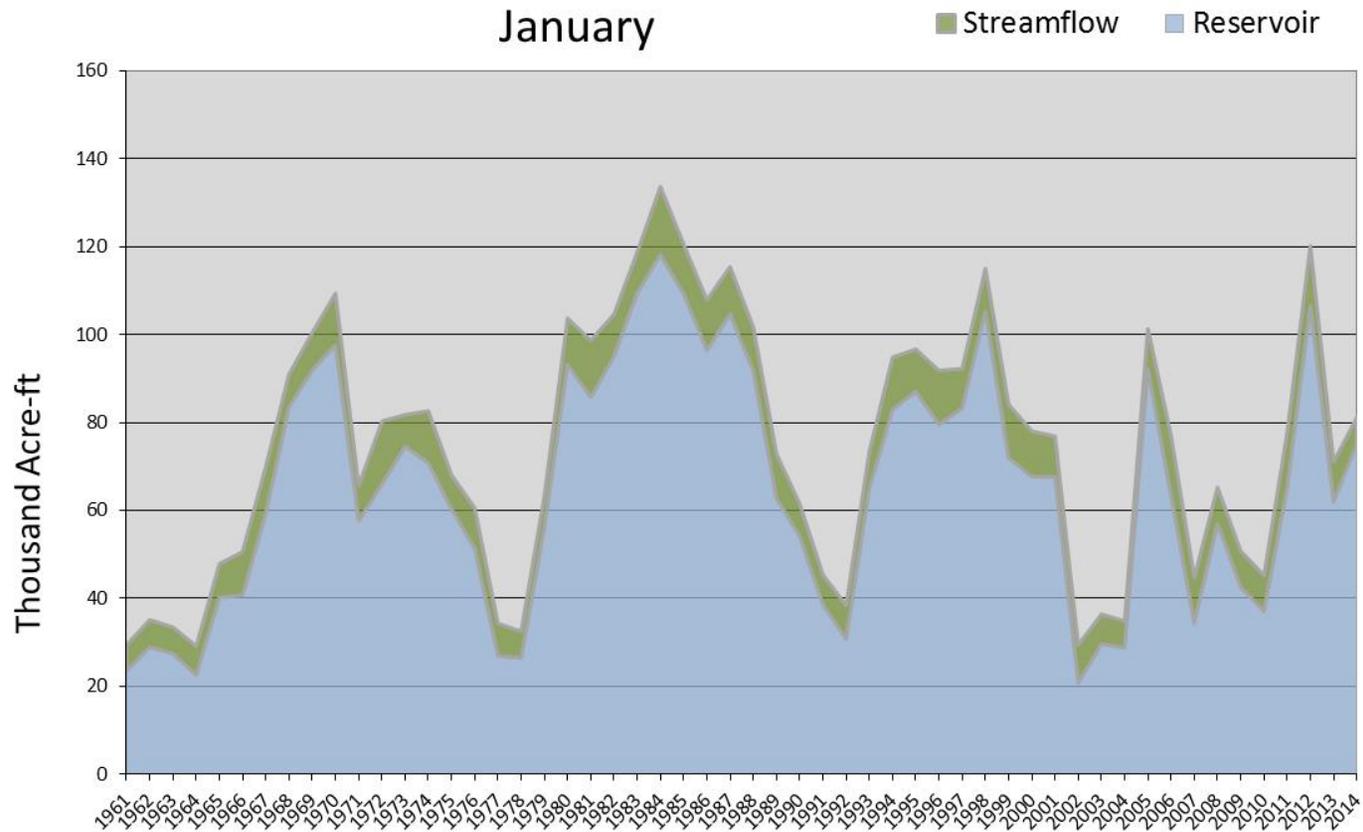
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Otter Creek and Piute	December accumulated flow at Kingston (<i>observed</i>)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Upper Sevier River	75	6.1	81	1.17	64	00, 72, 73, 74

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

Upper Sevier River - Water Availability Index

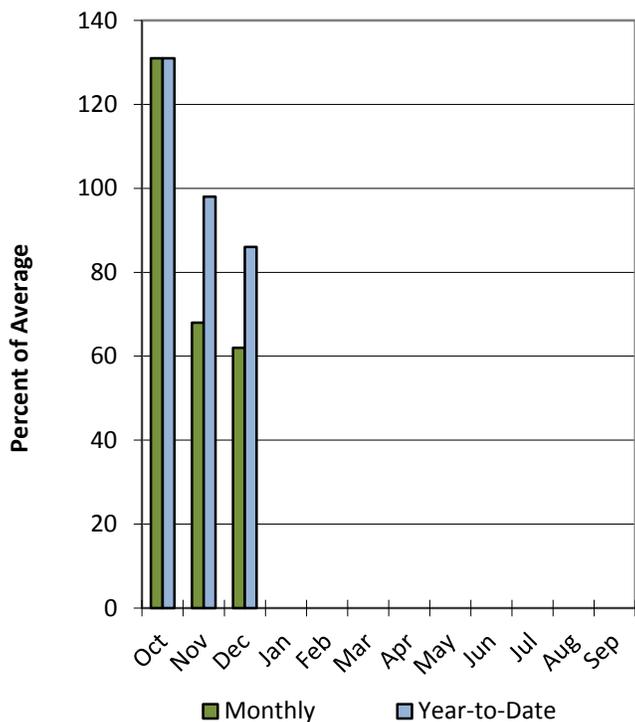


San Pitch River Basin

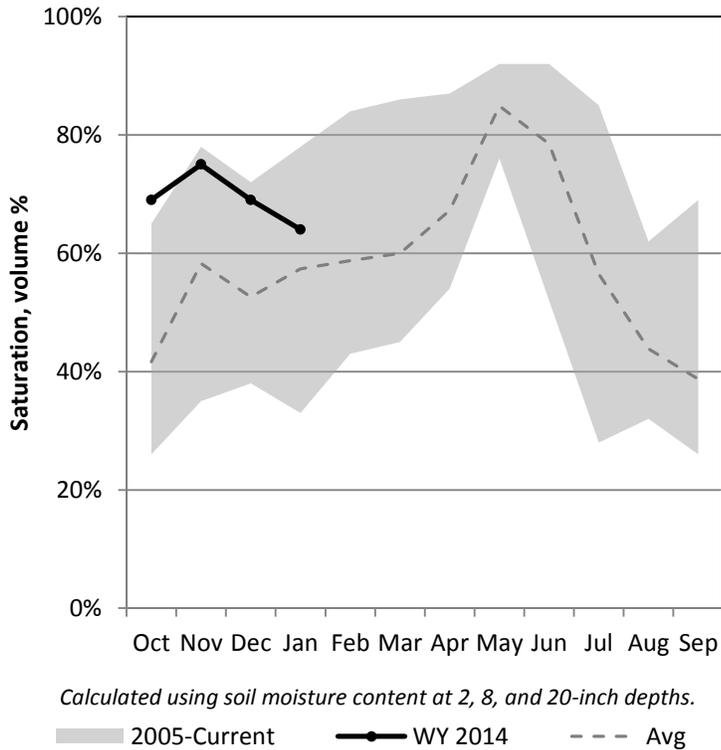
1/1/2014

Precipitation in December was much below average at 62%, which brings the seasonal accumulation (Oct-Dec) to 86% of average. Soil Moisture is at 64% compared to 49% last year. Reservoir storage is at 1% of capacity, compared to 2% last year.

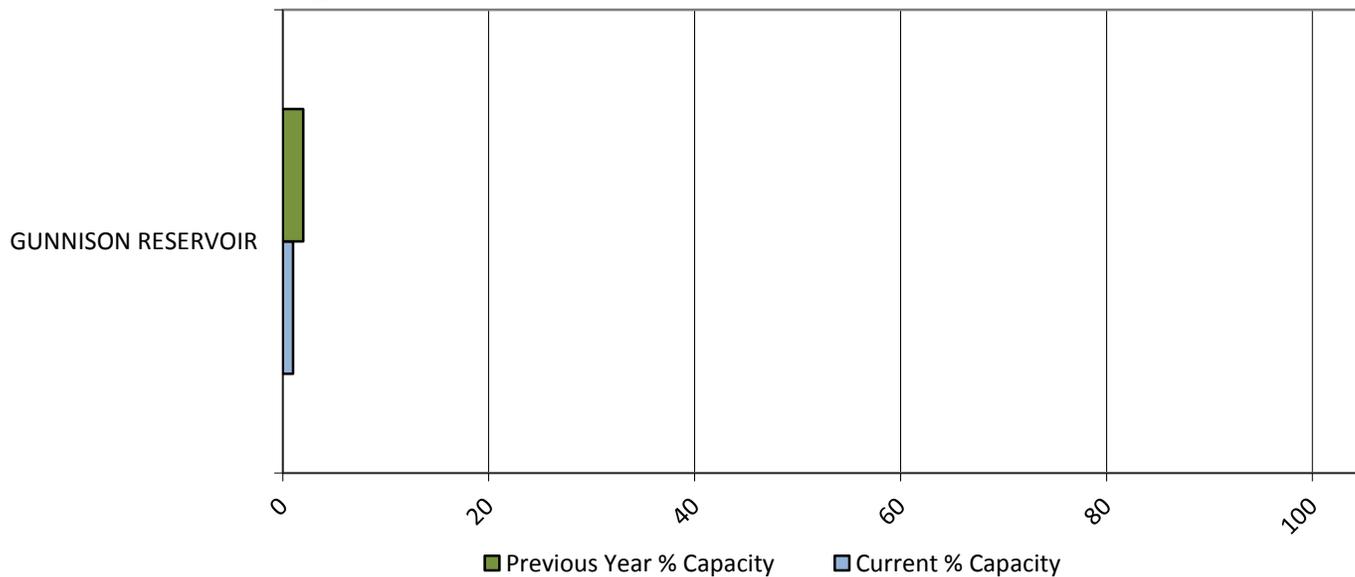
Precipitation



Soil Moisture



Reservoir Storage



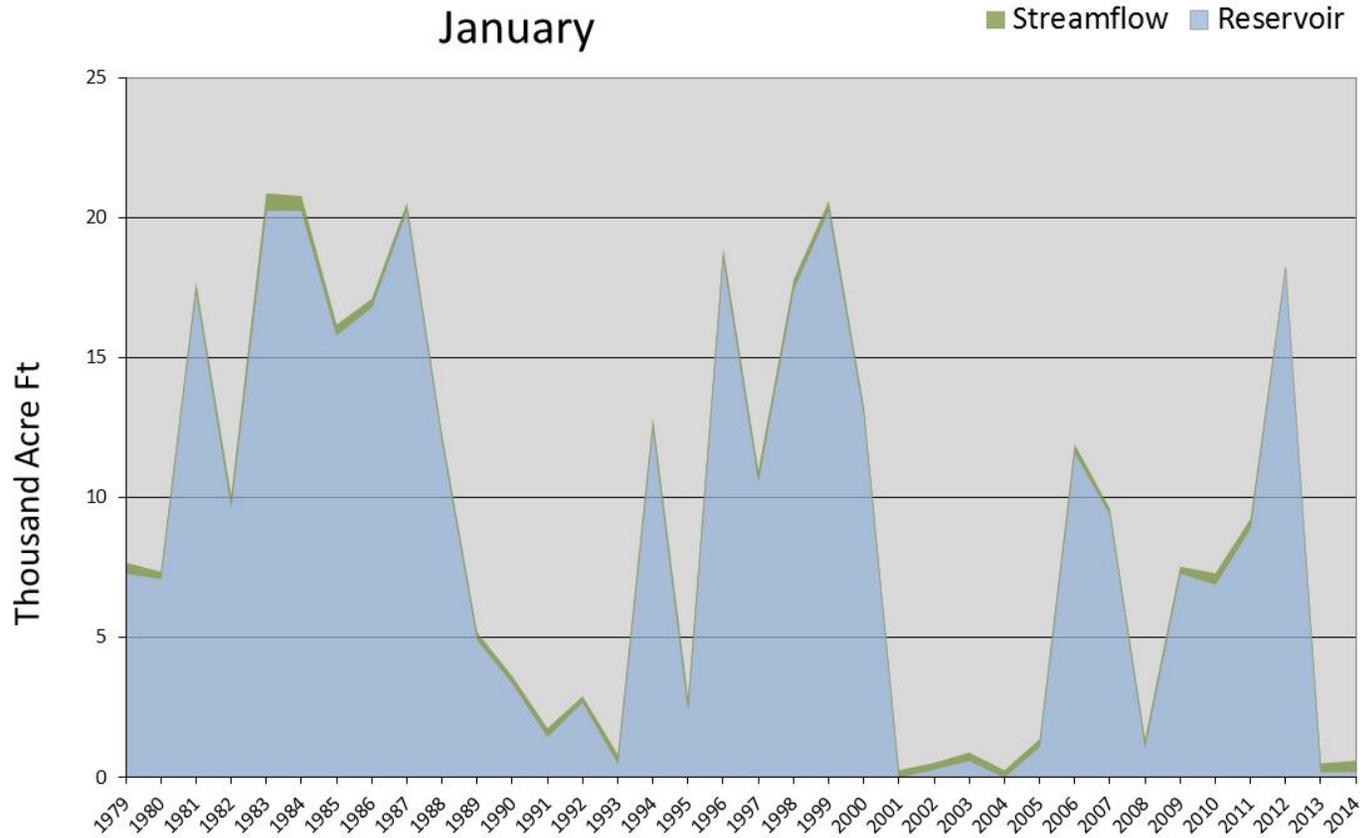
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Gunnison Reservoir	December accumulated flow Manti Creek (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
San Pitch	0.2	0.4	0.6	-3.04	14	13, 02, 93, 03

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

San Pitch River - Water Availability Index January

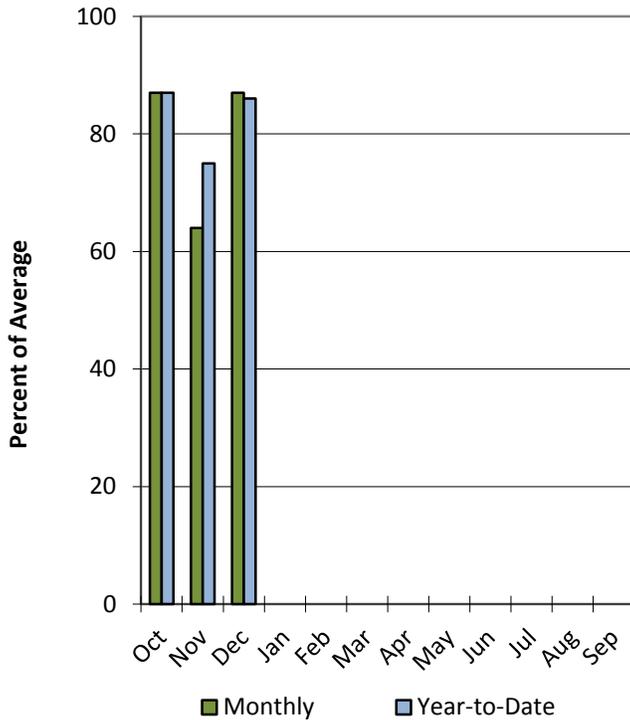


Lower Sevier River Basin

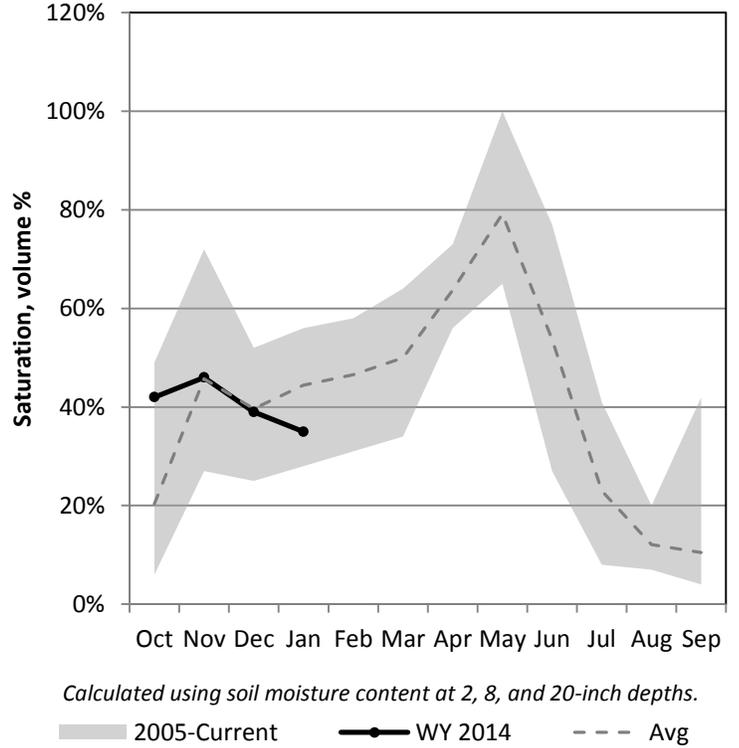
1/1/2014

Precipitation in December was below average at 87%, which brings the seasonal accumulation (Oct-Dec) to 86% of average. Soil moisture is at 35% compared to 33% last year. Reservoir storage is at 45% of capacity, compared to 60% last year. The water availability index for the Lower Sevier is 46%.

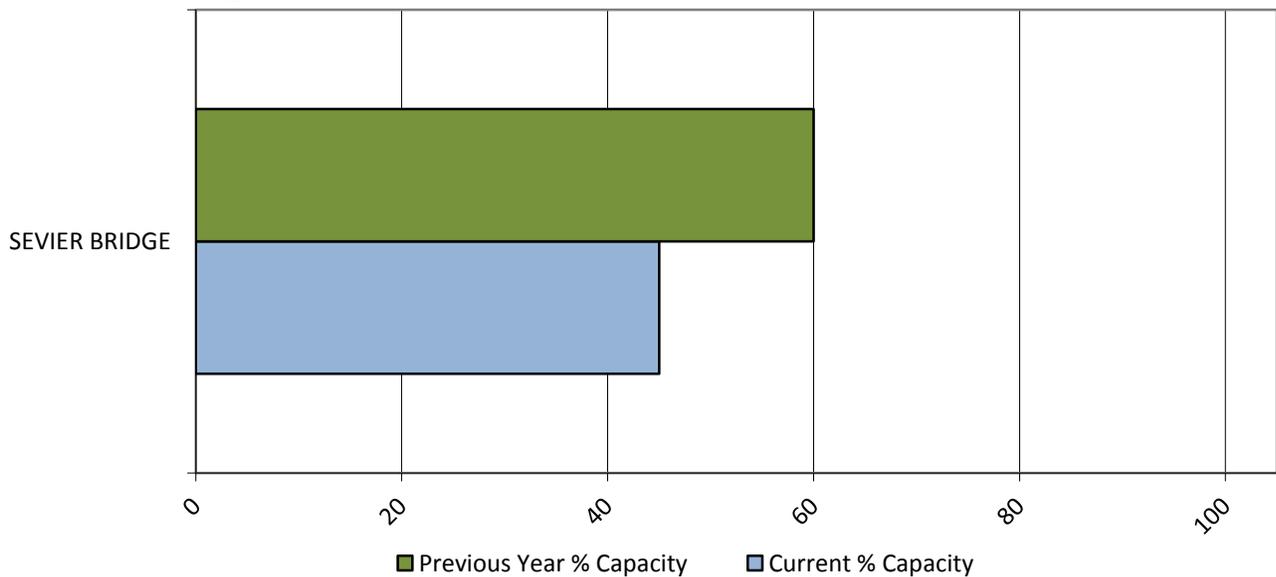
Precipitation



Soil Moisture



Reservoir Storage



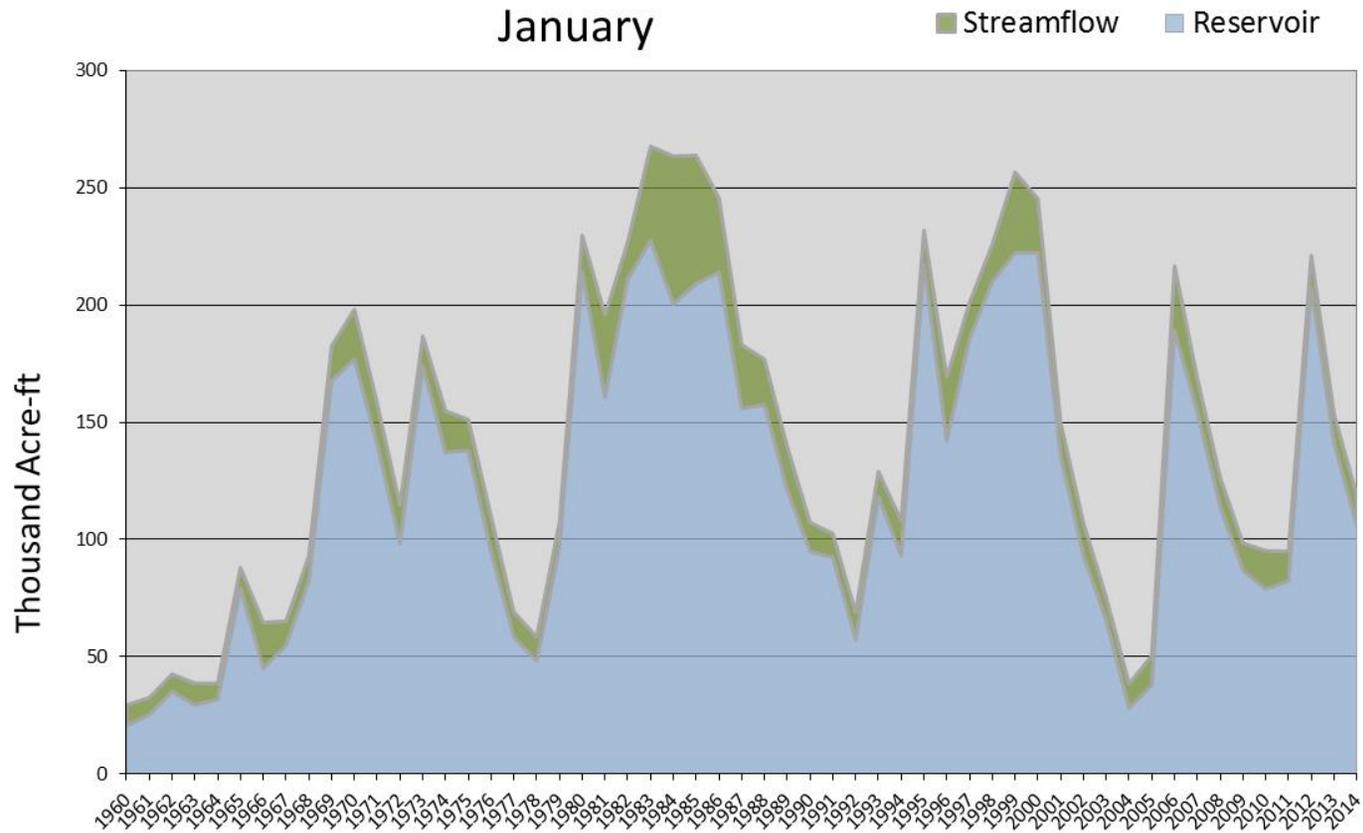
January 1, 2014

Water Availability Index

Basin or Region	December EOM* Sevier Bridge	December accumulated flow Sevier at Gunnison (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Lower Sevier River	106	13.0	119	-0.30	46	76, 72, 08, 93

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

Lower Sevier River - Water Availability Index

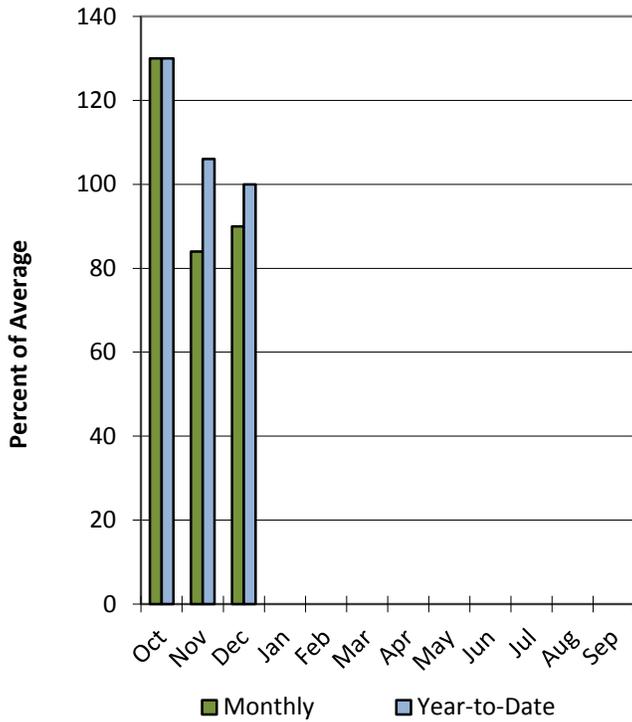


Beaver River Basin

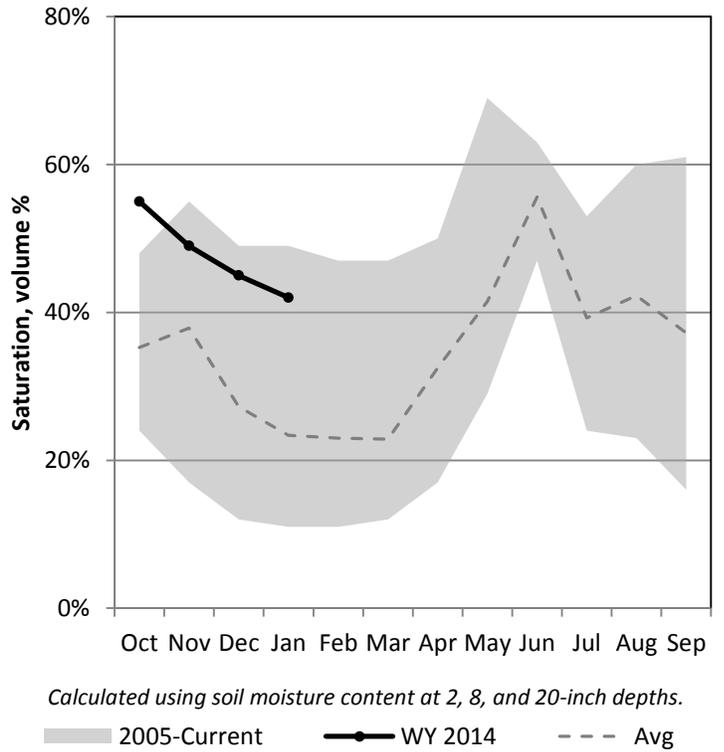
1/1/2014

Precipitation in December was near average at 90%, which brings the seasonal accumulation (Oct-Dec) to 100% of average. Soil moisture is at 42% compared to 36% last year. Reservoir storage is at 38% of capacity, compared to 36% last year. The water availability index for the Beaver River is 50%.

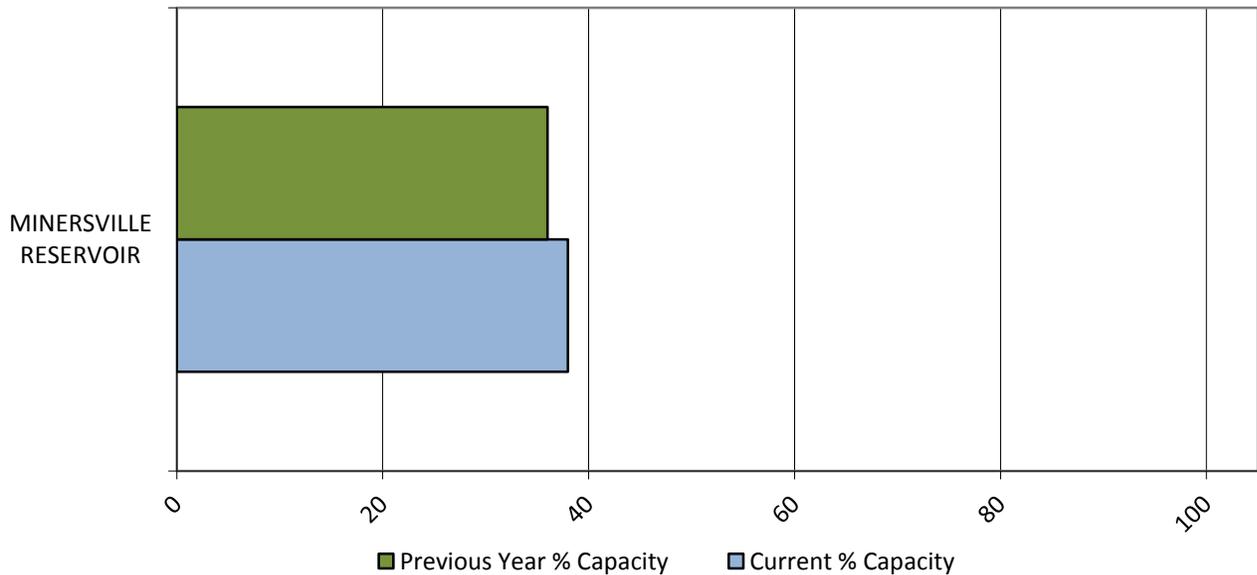
Precipitation



Soil Moisture



Reservoir Storage



January 1, 2014

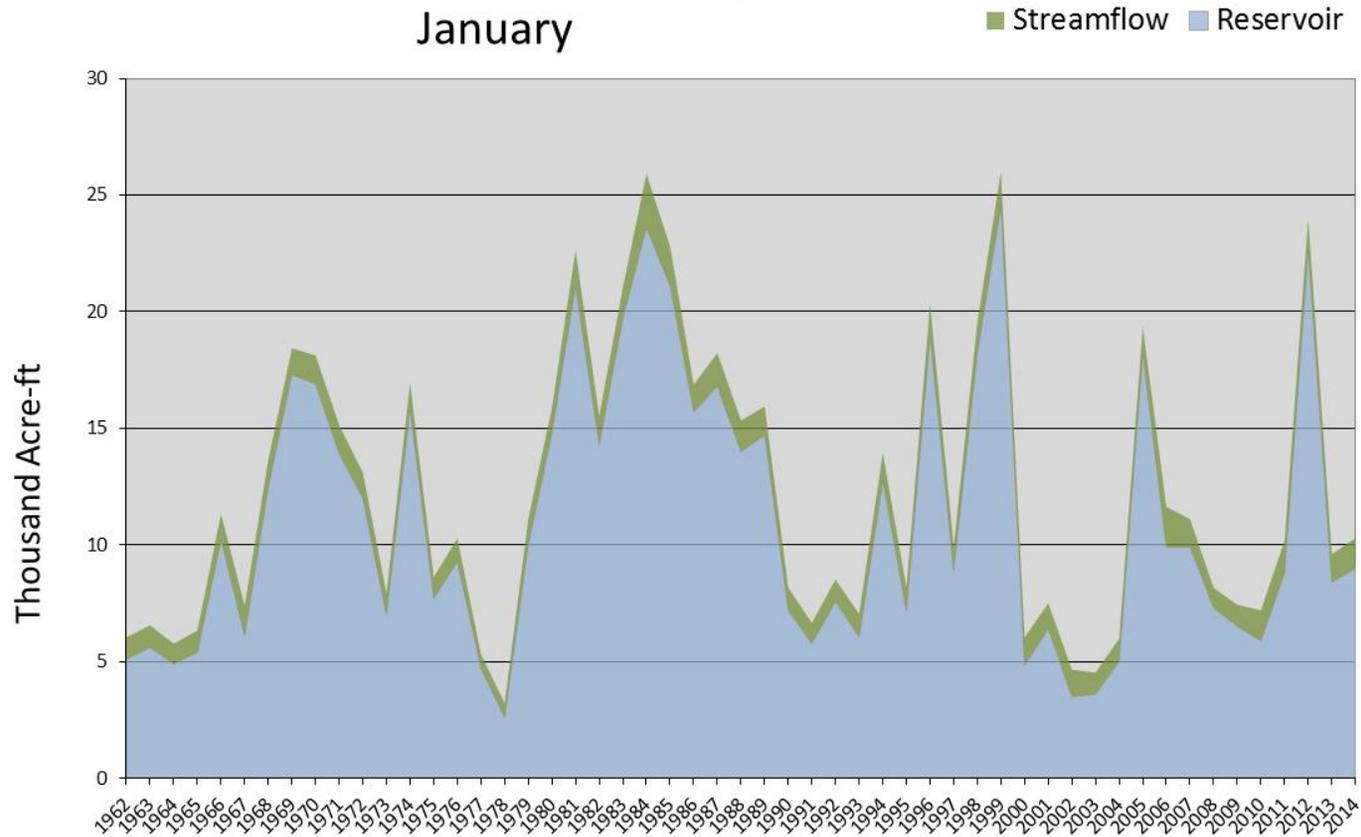
Water Availability Index

Basin or Region	December EOM*	December accumulated flow	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	Minersville Reservoir	Beaver River at Beaver (observed)				
	KAF [^]	KAF	KAF		%	
Beaver	9.0	1.3	9.3	0.00	50	11, 76, 07, 79

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

Beaver River - Water Availability Index

January

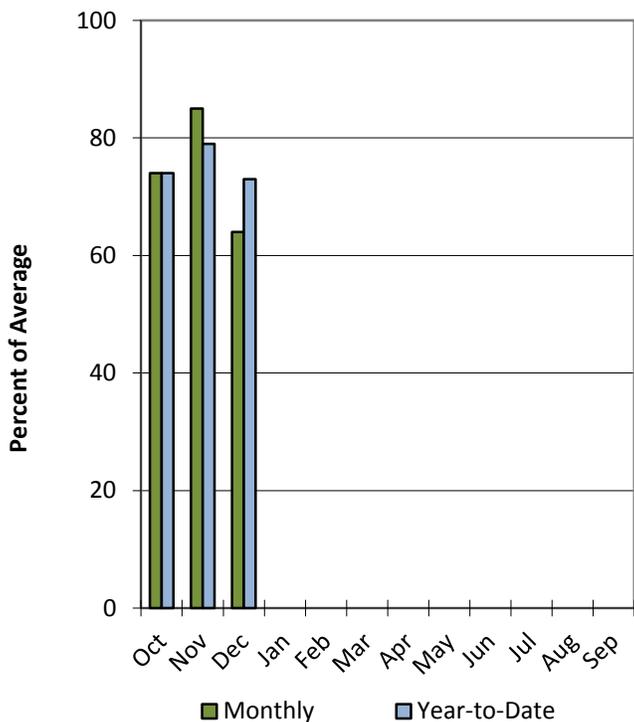


Southwestern Utah Basin

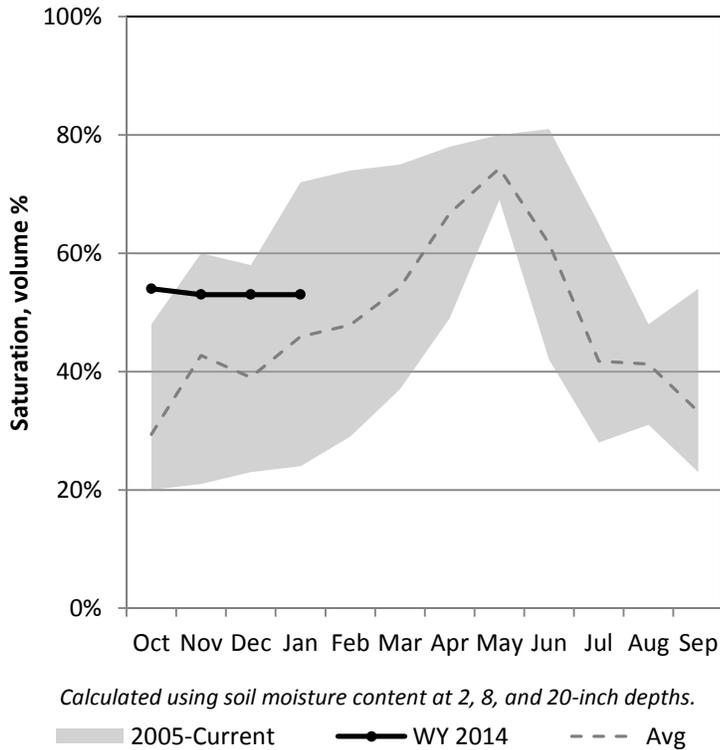
1/1/2014

Precipitation in December was much below average at 64%, which brings the seasonal accumulation (Oct-Dec) to 73% of average. Soil moisture is at 53% compared to 44% last year. Reservoir storage is at 42% of capacity, compared to 52% last year. The water availability index for the Virgin River is 33%.

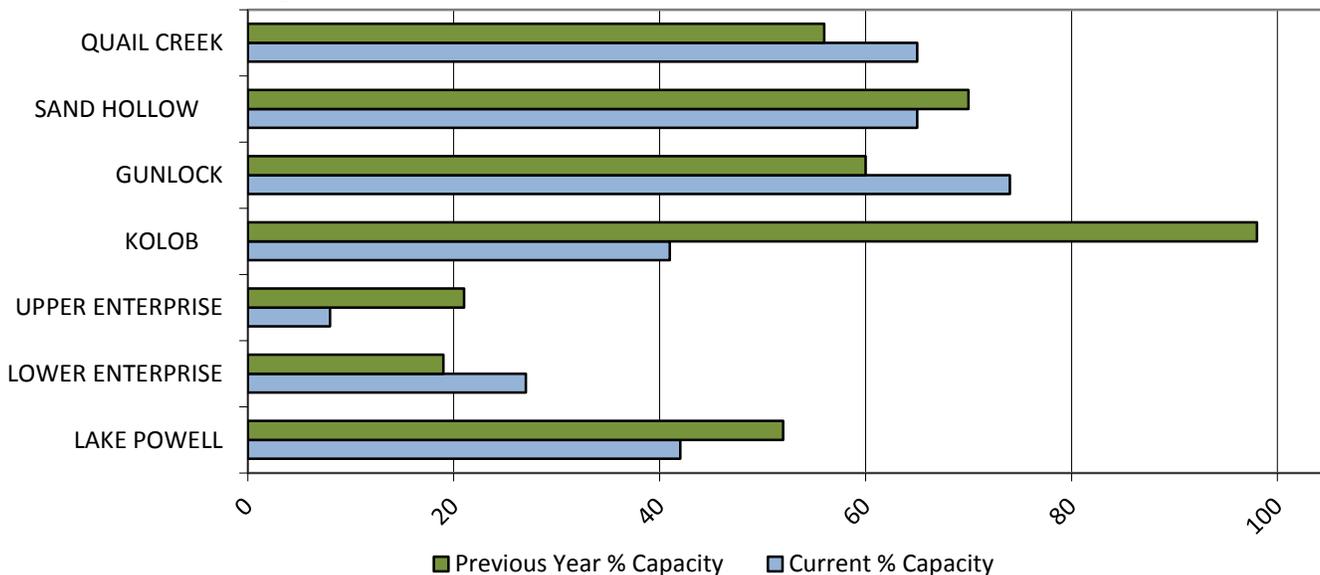
Precipitation



Soil Moisture



Reservoir Storage



1/1/2014

Water Availability Index

Basin or Region	August EOM* Reservoirs	Observed August stream flow	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Bear River	532	9.6	766	-1.20	36	56, 40, 30, 55
Woodruff Narrows	13	3.2	16	-1.45	33	95, 05, 81, 79
Little Bear	9	2.1	11	-2.36	22	02, 94, 95, 03
Ogden River	37	3.0	40	-2.82	16	91, 89, 08, 03
Weber River	143	4.0	147	-3.80	4	04, 93, 91
Provo	261	3.6	264	-3.37	10	95, 04, 08
West Uintah Basin	22	2.1	24	2.29	78	12, 06, 96, 87
Eastern Uintah	19.3	1.0	20	-3.45	9	90, 03, 91, 94
Blacks Fork	11.6	2.3	14	1.99	74	06, 07, 98, 12
Smiths Creek	6.5	0.6	7	3.57	93	07, 12
Price River	13.9	1.8	15.7	-2.34	22	95, 08, 03, 78
Joe's Valley	29.3	2.0	31.3	-2.93	15	91, 93, 95, 92
Moab	0.1	0.4	0.5	-3.27	11	04, 13, 89, 05
Upper Sevier River	75	6.1	81	1.17	64	00, 72, 73, 74
San Pitch	0	0.4	1	-3.04	14	13,02,93,03
Lower Sevier River	106	13.0	119	-0.30	46	76, 72, 08, 93
Beaver	9.0	1.3	9.3	0.00	50	11, 76, 07, 79
Virgin River	33.6	8.7	42.3	-1.39	33	09, 94, 12, 07

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

What is a Water Availability Index?

The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) with a value of zero (0) indicating median water supply as compared to historical analysis. WAI's are calculated in this fashion to be consistent with other hydroclimatic indicators such as the Palmer Drought Index and the Precipitation index.

Utah Snow Surveys has also chosen to display the WAI value as well as a PERCENT CHANCE OF NON-EXCEEDANCE. While this is a cumbersome name, it has the simplest application. It can be best thought of as a scale of 1 to 99 with 1 being the drought of record (driest possible conditions) and 99 being the flood of record (wettest possible conditions) and a value of 50 representing average conditions. This rating scale is a percentile rating as well, for example a WAI of 75% means that this years water supply is greater than 75% of all historical events and that only 25% of the time has it been exceeded. Conversely a WAI of 10% means that 90% of historical events have been greater than this one and that only 10% have had less total water supply. This scale is comparable between basins: a SWSI of 50% means the same relative ranking on watershed A as it does on watershed B, which may not be strictly true of the +4 to -4 scale.

For more information on the WAI go to: www.ut.nrcs.usda.gov/snow/ on the water supply page. The entire period of historical record for reservoir storage and streamflow is available.

January 1, 2014

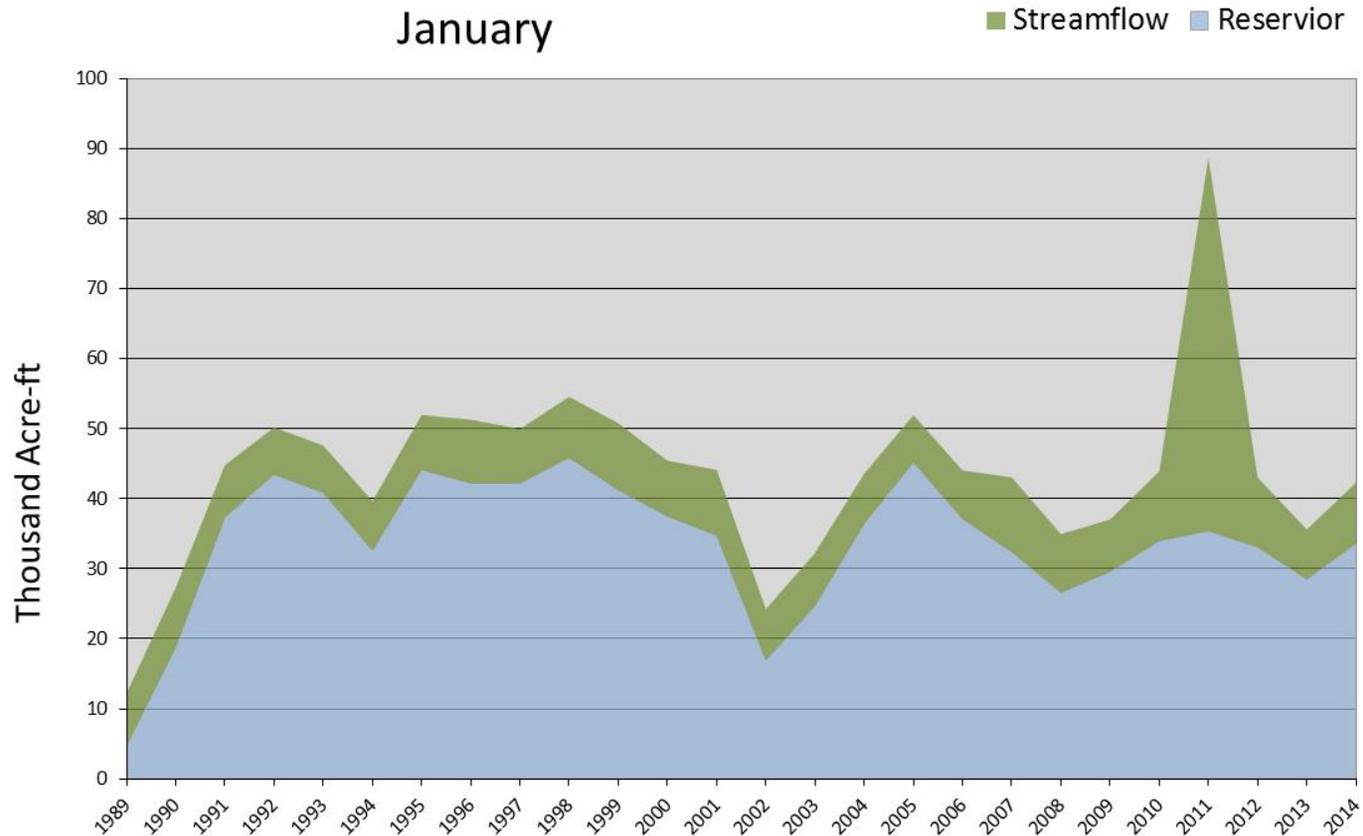
Water Availability Index

Basin or Region	December EOM* Reservoir	December accumulated flow Virgin and Santa Clara Rivers (<i>observed</i>)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Southwest	33.6	8.7	42.3	-1.39	33	09, 94, 12, 07

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

Southwest - Water Availability Index

January



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Salt Lake City, UT

