

Utah Climate and Water Report

February, 2014



Lake Fork Mountain, Utah

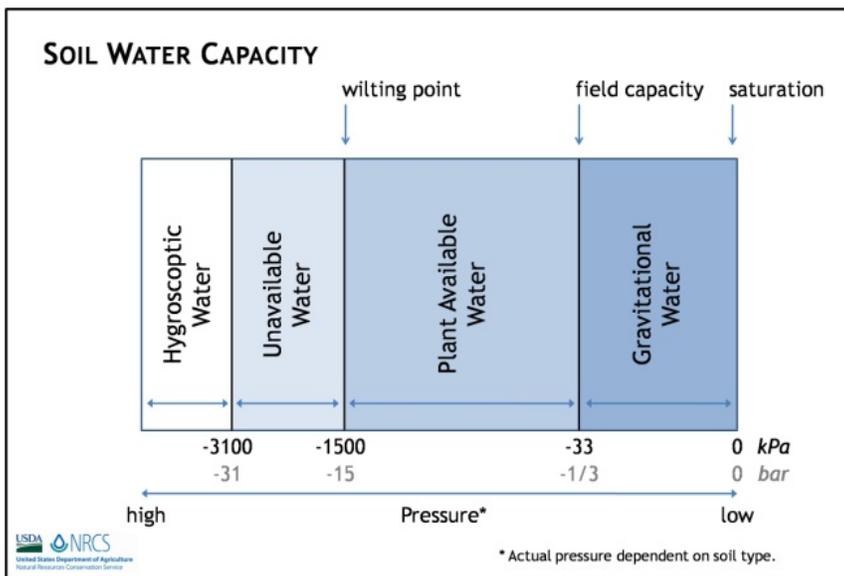
Photo by Kent Sutcliffe

Climate and Water Information

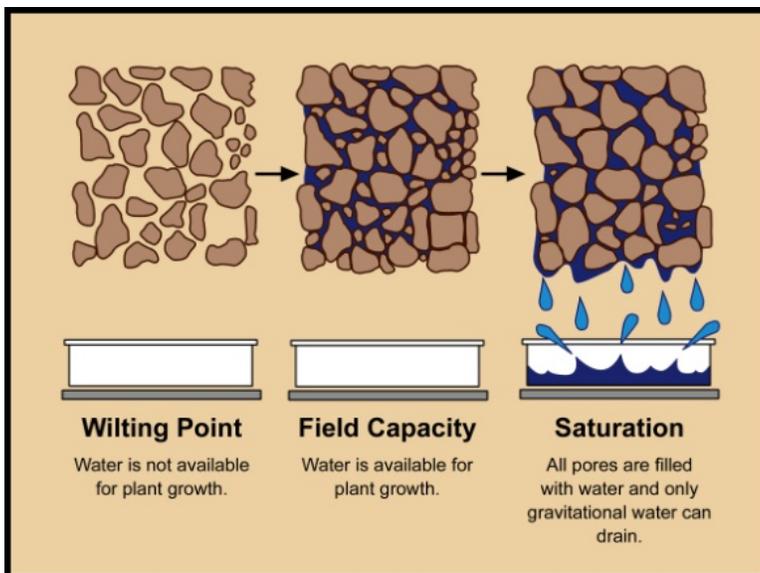
Soil Climate Analysis Network

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.

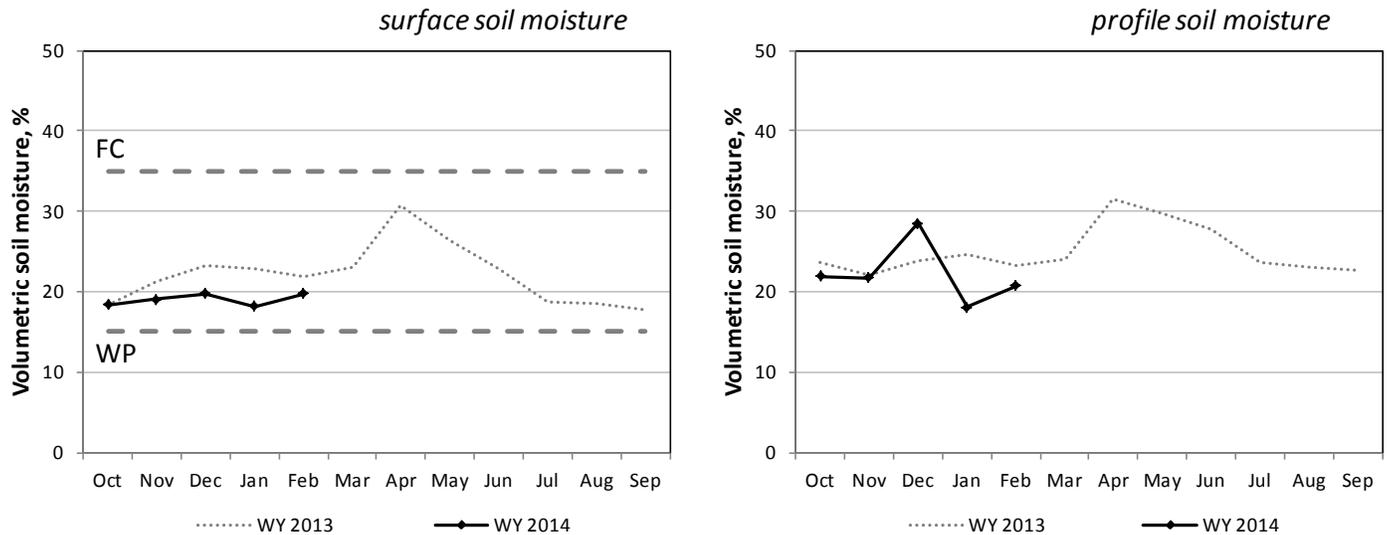
North Central

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	2.5	0.8	13	12	17	20	16	31	32	33	35	39
Cache Junction	2.9	0.5	19	18	22	23	23	30	31	30	33	38
Grantsville	3.1	0.7	22	24	26	27		32	33	35	40	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.

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.

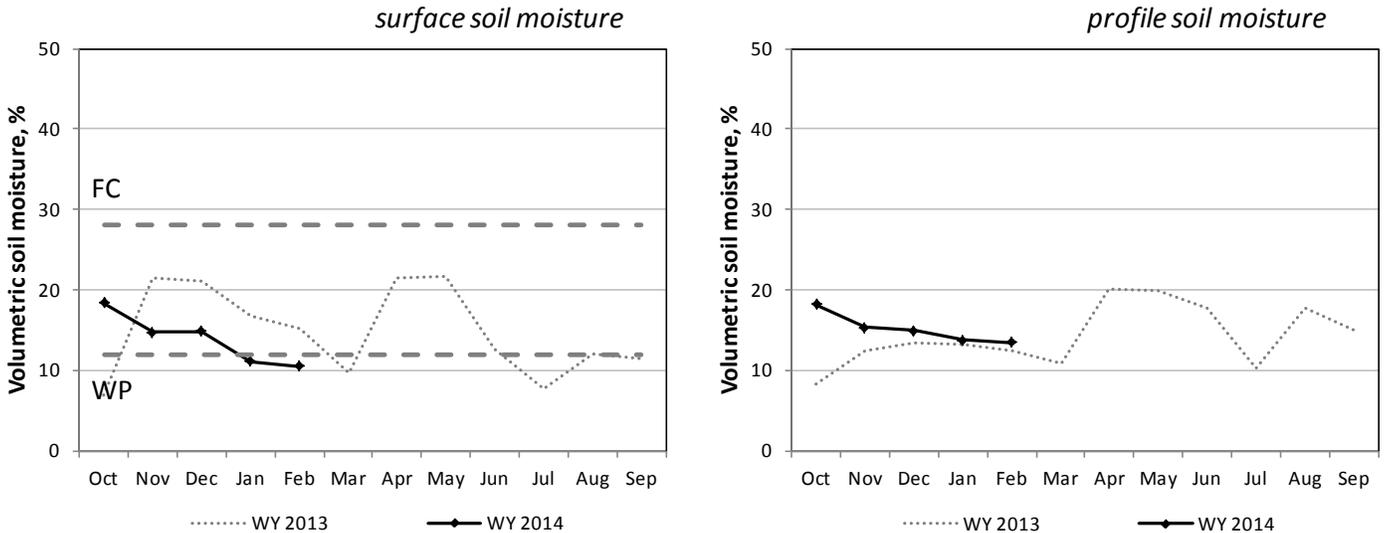
Northern Mountains

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	1.4	0.3	3	7	9	11	11	30	31	31	32	36
Buffalo Jump	1.9	0.3	7	9	9	7	-	30	30	30	32	-
Morgan	4.5	1.2	16	15	16	29	17	31	31	31	32	33

* 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.

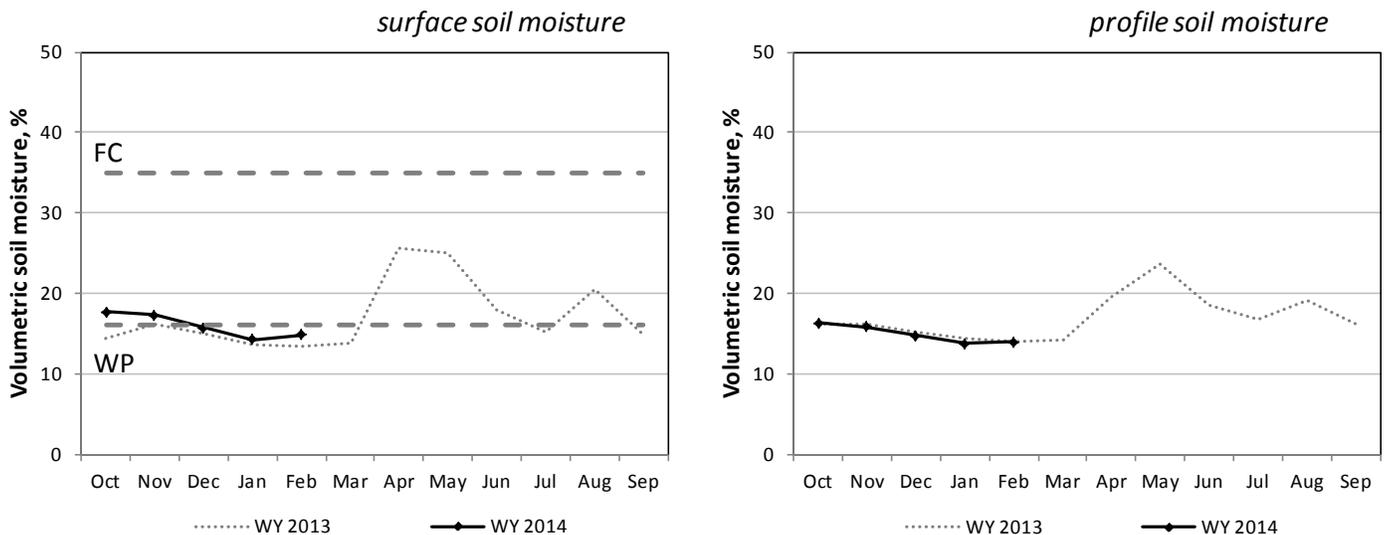
Uintah Basin

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>in.</i>	<i>volume %</i>					<i>°F</i>				
UINTAH BASIN												
Mountain Home	1.5	0.3	16	18	22	17	9	31	32	32	34	37
Little Red Fox	1.1	0.1	5	14	17	18	15	27	31	31	32	34
Split Mountain	2.5	0.3	8	16	11	11	11	28	30	28	31	35

* 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.

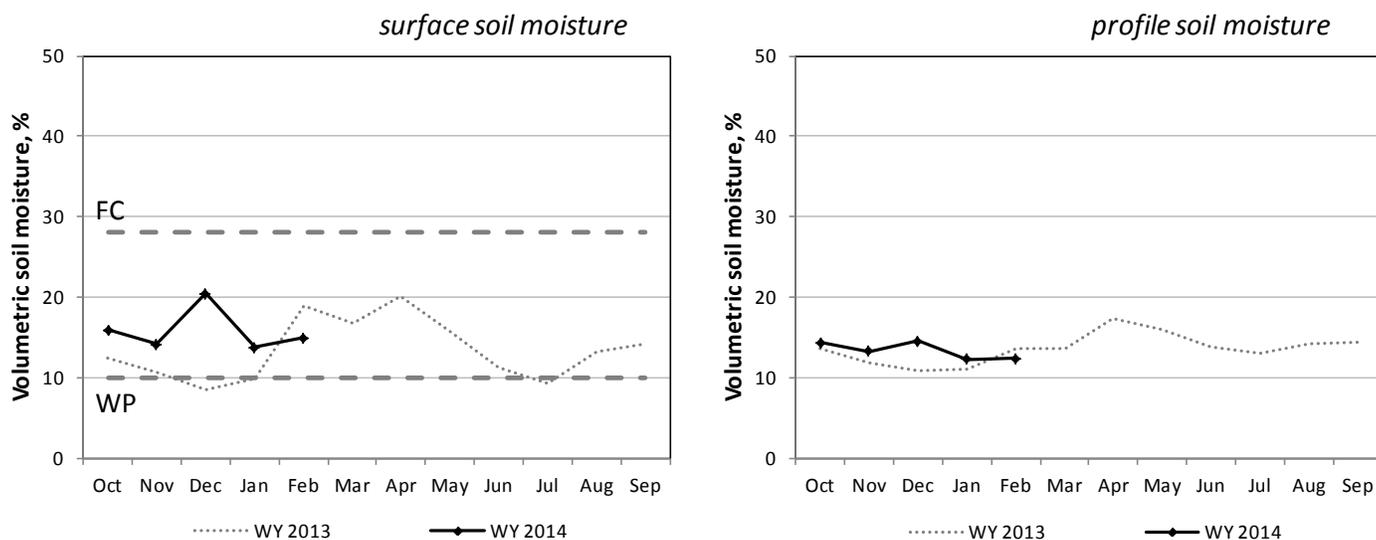
Southeast

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"
			in.					in.				
			volume %					°F				
SOUTHEAST												
Price	2.0	0.0	2	14	18	12	15	29	31	31	33	36
Green River	1.3	0.2	11	7	7	3	6	31	31	30	32	35
Harm's Way	3.3	0.2	15	9	15	13	5	32	32	32	32	37
West Summit	3.1	0.3	17	18	18	14	16	32	32	32	32	35
Eastland	3.3	0.2	28	23	25	28	19	33	33	33	35	39
Alkali Mesa	3.1	0.2	12	17	17	16	12	31	31	31	33	35
McCracken Mesa	2.9	0.1	19	24	22	14	12	35	37	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.

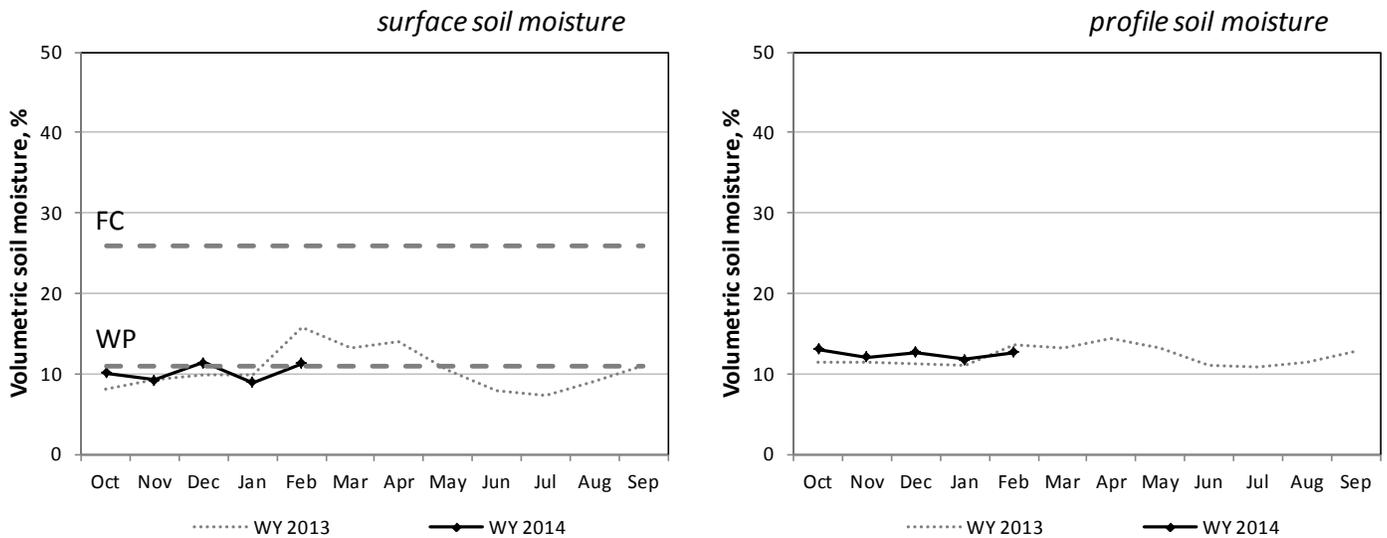
South Central

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>				
SOUTH CENTRAL												
Nephi	2.4	0.4	17	19	17	7		31	31	31	35	39
Ephraim	3.4	1.1	13	13	18	15	34	31	31	32	34	39
Holden	2.0	0.6	15	14	1	11	11	32	32	32	34	40
Milford	0.9	0.2	21	14	12	24	15	32	32	33	36	41
Manderfield	1.8	0.1	7	11	10	10	5	32	32	32	34	37
Circleville	1.0	0.2	22	22	8	7	15	32	32	31	33	38
Panguitch	1.5	0.2	13	19	12	19	30	30	30	30	32	37
Cave Valley	4.1	0.5	6	8	7	4	7	33	33	33	35	37
Vermillion	4.2	0.5	5	8	2	10	7	32	32	32	32	36
Spooky	2.7	0.6	10	9	7	23	2	35	34	35	38	39

* 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.

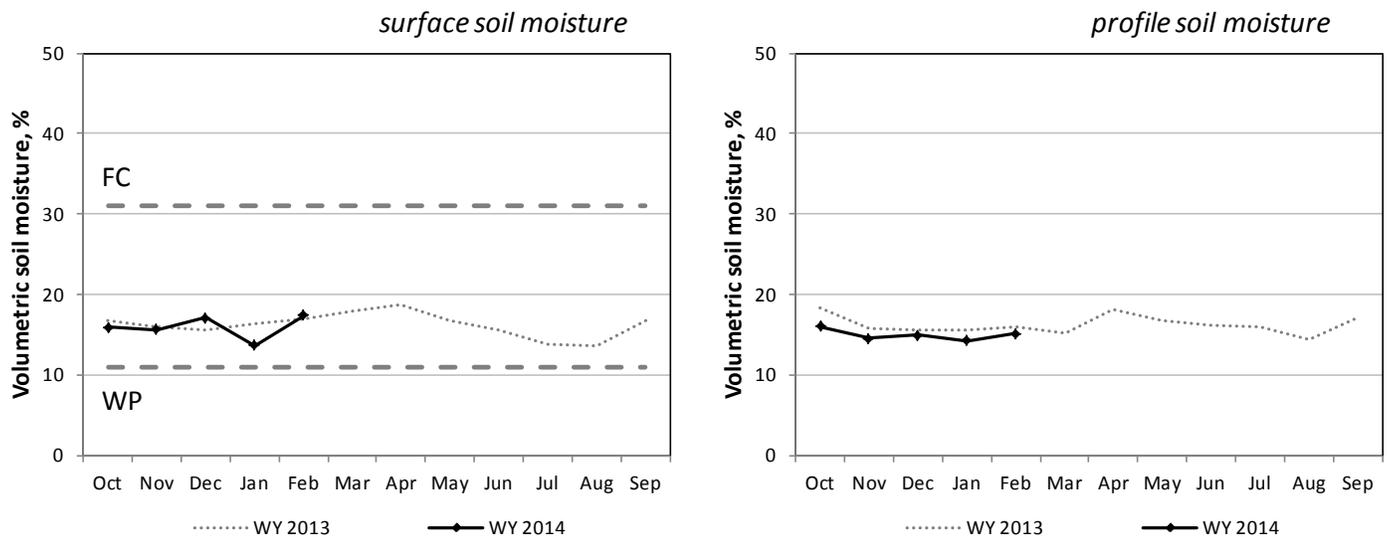
Western and Dixie

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>				
WESTERN												
Grouse Creek	2.2	0.9	5	13	11	14	15	30	32	33	35	38
Park Valley	2.2	0.4	8	7	12	25	22	31	31	32	34	39
Goshute	2.3	0.5	29	1	35	26	24	32	32	33	33	37
Dugway	2.1	0.4	28	30	41		11	32	32	33	36	37
Tule Valley	1.8	0.7	24	26	22	15	8	32	32	33	33	37
Hal's Canyon	1.7	0.3	6	7	9	9	7	32	31	31	33	37
Enterprise	1.1	0.2	14	24	20	12	14	32	33	34	36	40
DIXIE												
Sand Hollow	1.1	1.2	11	11	9	9	0	38	41	44	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

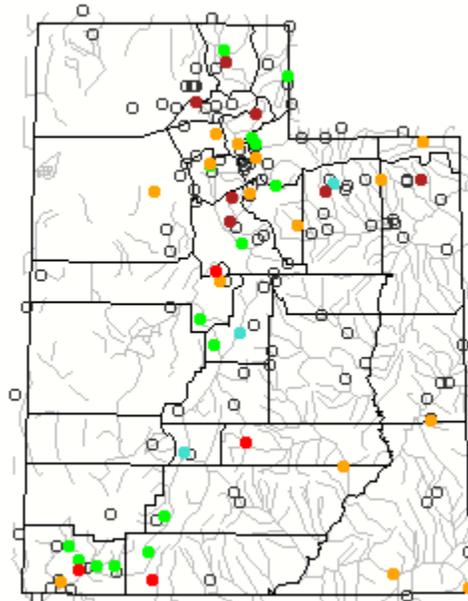
February 1, 2014

Current Conditions

Soil moisture values across the state are near to below normal in the north and above normal in the south. Precipitation across most of the state was below average for January (60%-85%) which brings seasonal precipitation (Oct-Jan) to about 90% of average. Snowpack's across the state are below normal in the north (70%-80%) and a little less in the south 60%-90% of median. Reservoir storage is much lower than last year at 48% of capacity compared to 57%. Overall, water supply conditions are below normal in both northern and southern Utah.

Current Utah Streamflow - Courtesy US Geological Survey

Tuesday, February 04, 2014 12:30ET



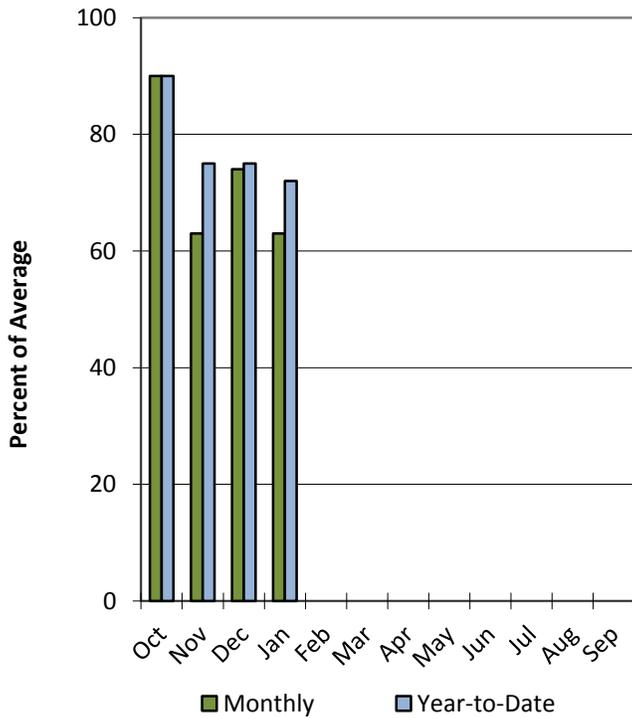
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Statewide Utah

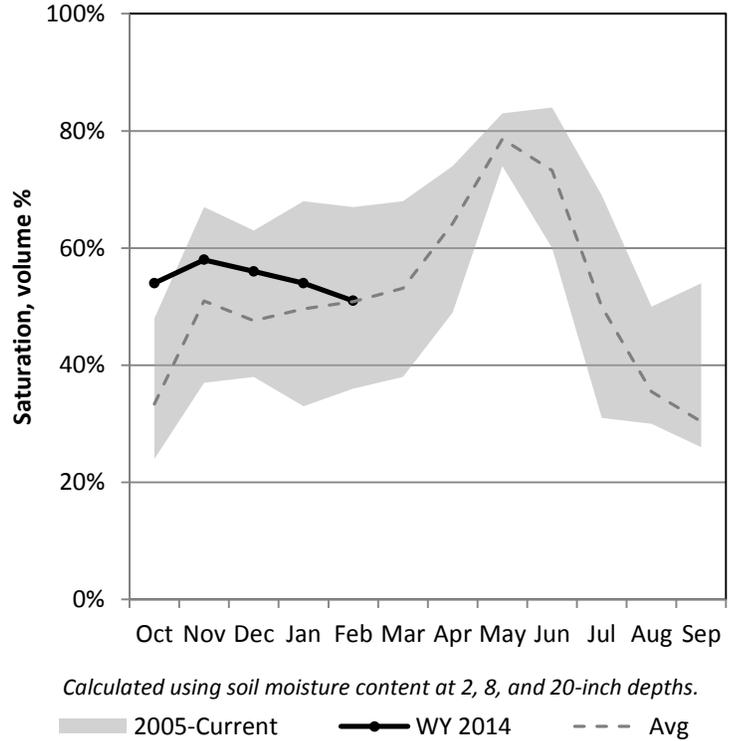
2/1/2014

Precipitation in January was much below average at 63%, which brings the seasonal accumulation (Oct-Jan) to 72% of average. Soil moisture is at 51% compared to 46% last year. Reservoir storage is at 48% of capacity, compared to 57% last year.

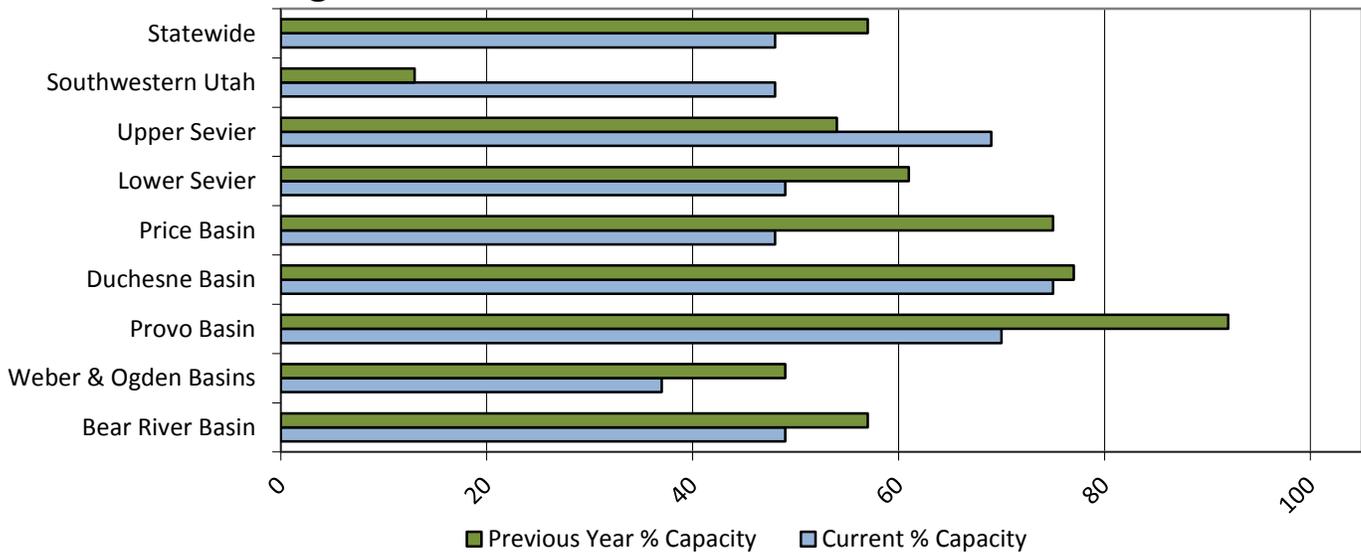
Precipitation



Soil Moisture



Reservoir Storage

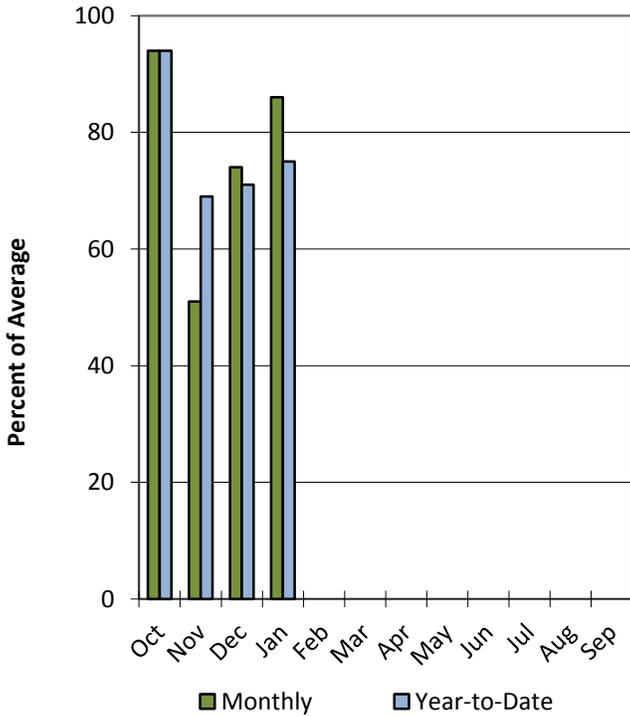


Bear River Basin

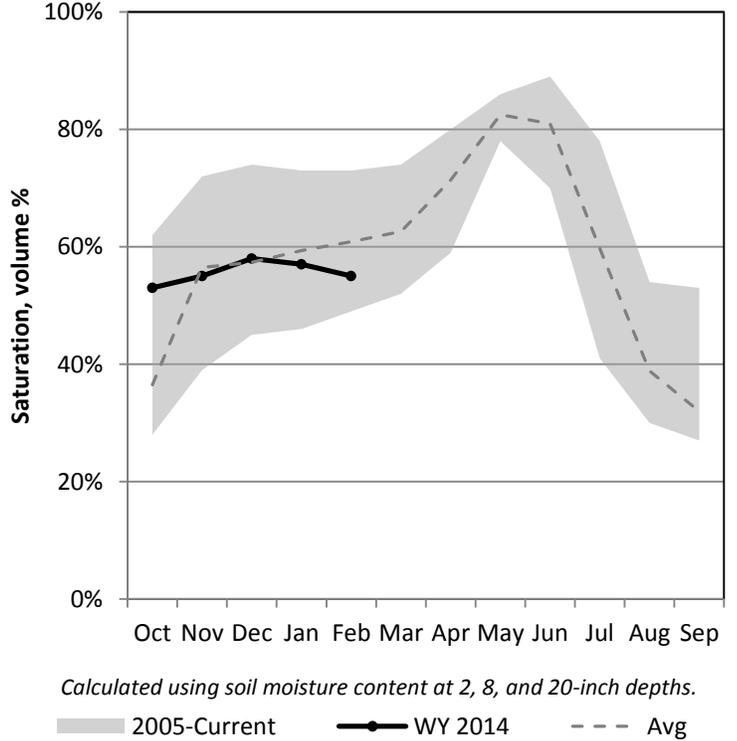
2/1/2014

Precipitation in January was below average at 86%, which brings the seasonal accumulation (Oct-Jan) to 75% of average. Soil moisture is at 55% compared to 64% last year. Reservoir storage is at 49% of capacity, compared to 57% last year. The water availability index for the Bear River is 34%.

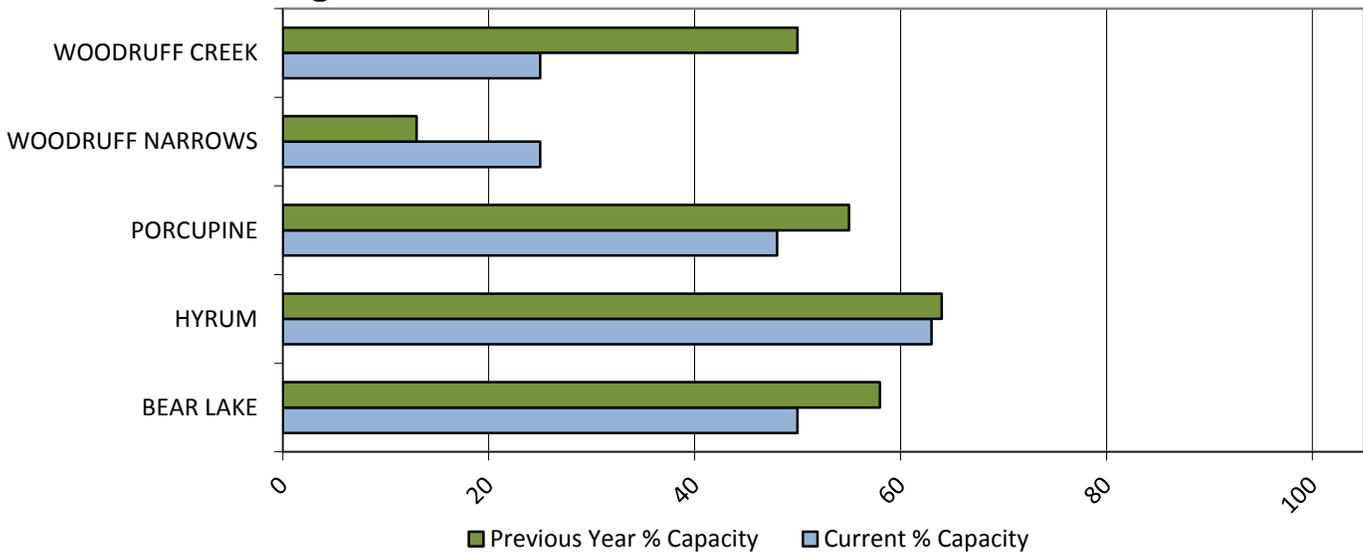
Precipitation



Soil Moisture



Reservoir Storage



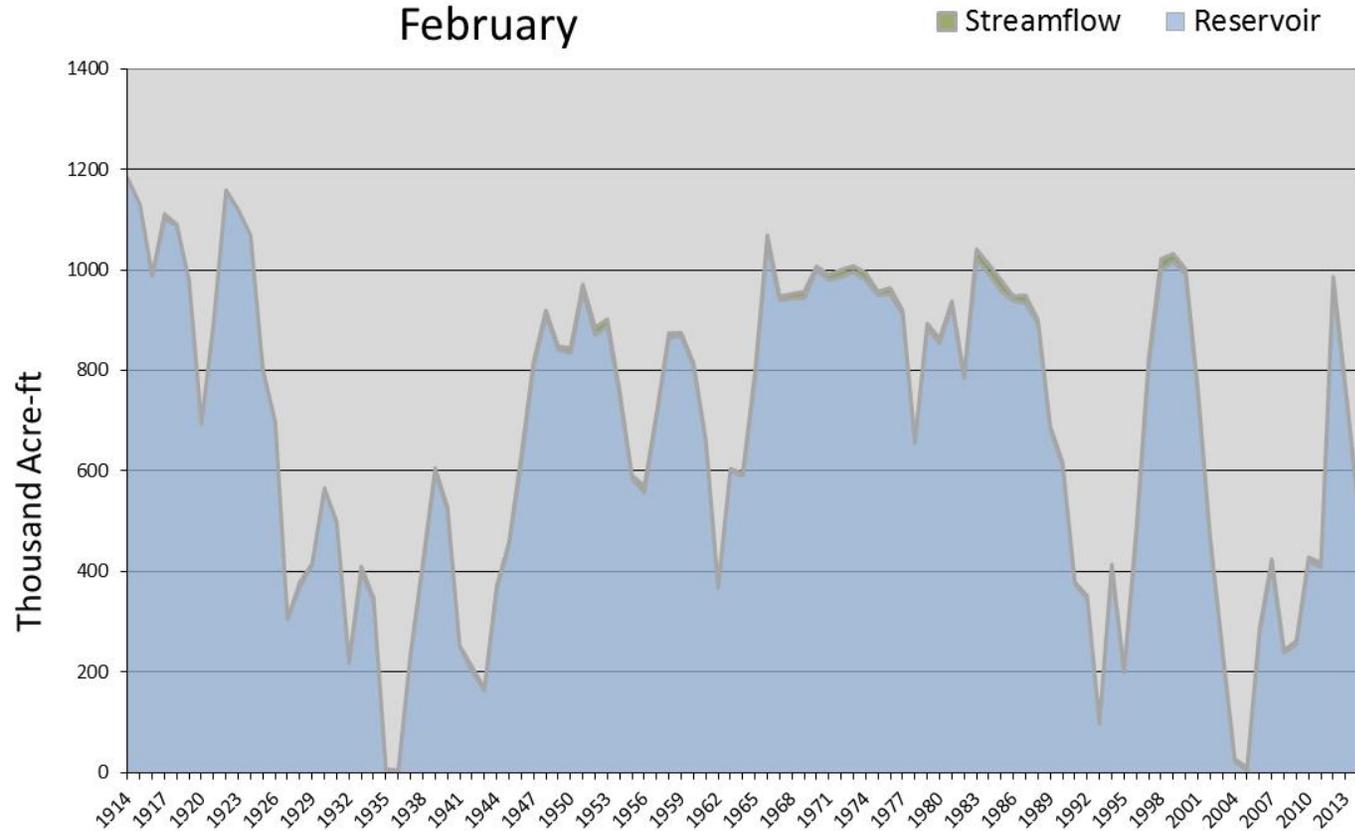
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Bear Lake	January accumulated inflow to Bear Lake (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Bear River	536	4	540	-1.36	34	31, 40, 30, 56

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

Bear Lake - Water Availability Index February



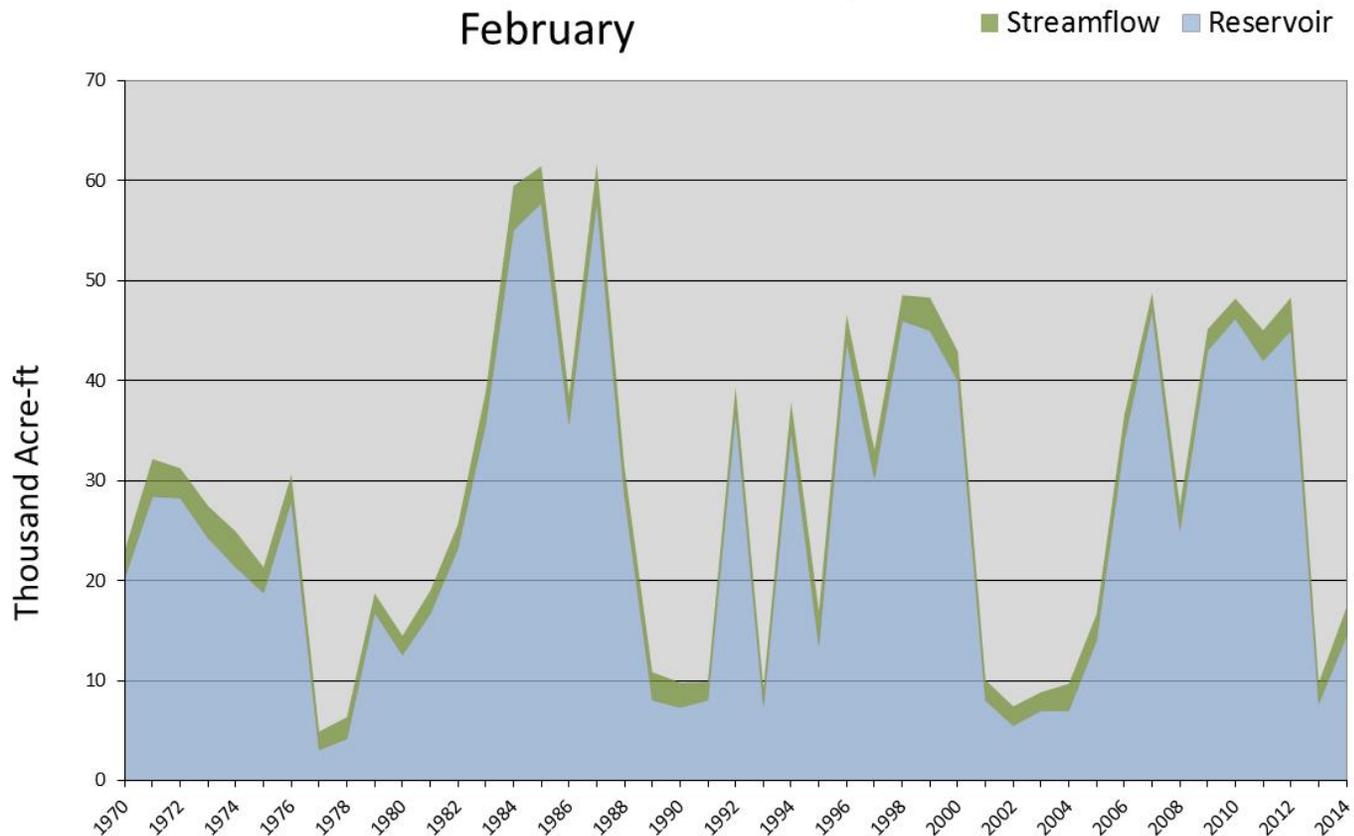
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Woodruff Narrows Reservoir	January Observed Streamflow Bear at Stateline	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Woodruff Narrows	14.4	2.9	17.3	-1.45	33	05, 95, 79, 81

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

Woodruff Narrows - Water Availability Index February



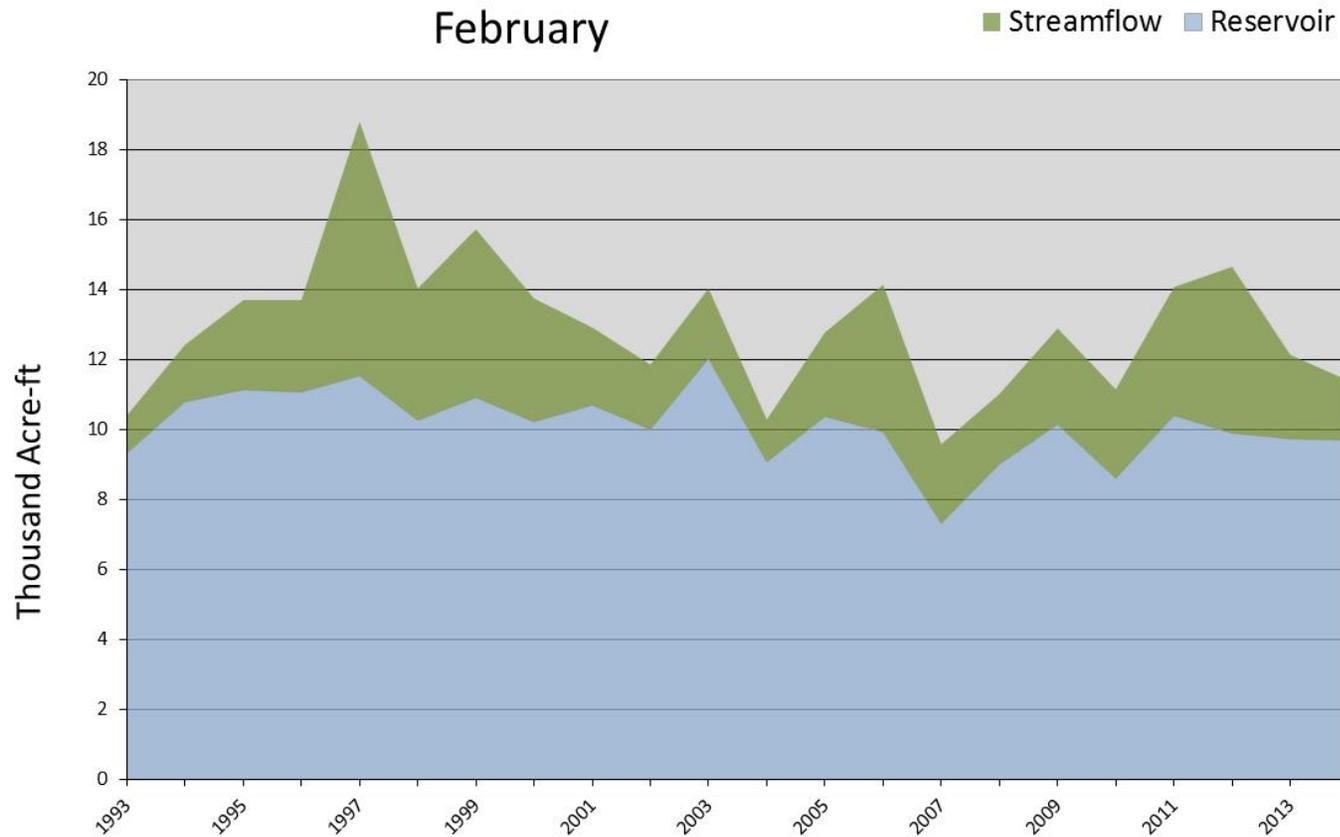
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Hyrum Reservoir	January Observed Streamflow Little Bear nr Paradise	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Little Bear	9.7	1.7	11.4	-1.99	26	08, 10, 02, 13

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

Little Bear River - Water Availability Index
February

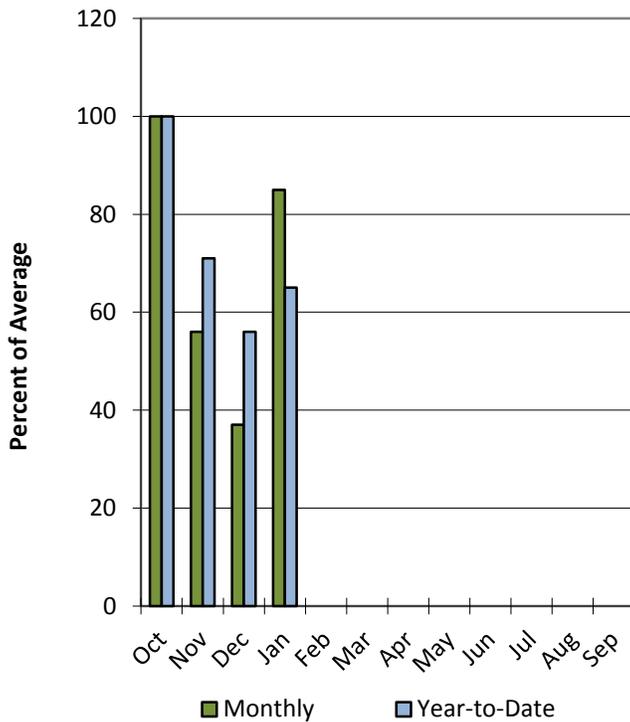


Raft River Basin

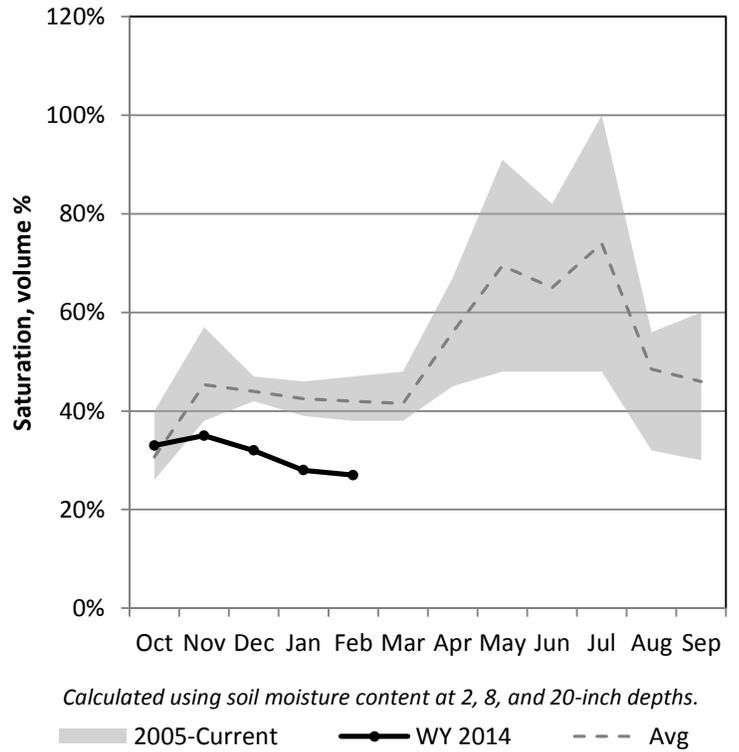
2/1/2014

Precipitation in January was below average at 85%, which brings the seasonal accumulation (Oct-Jan) to 65% of average. Soil moisture is at 27% compared to 47% last year.

Precipitation



Soil Moisture

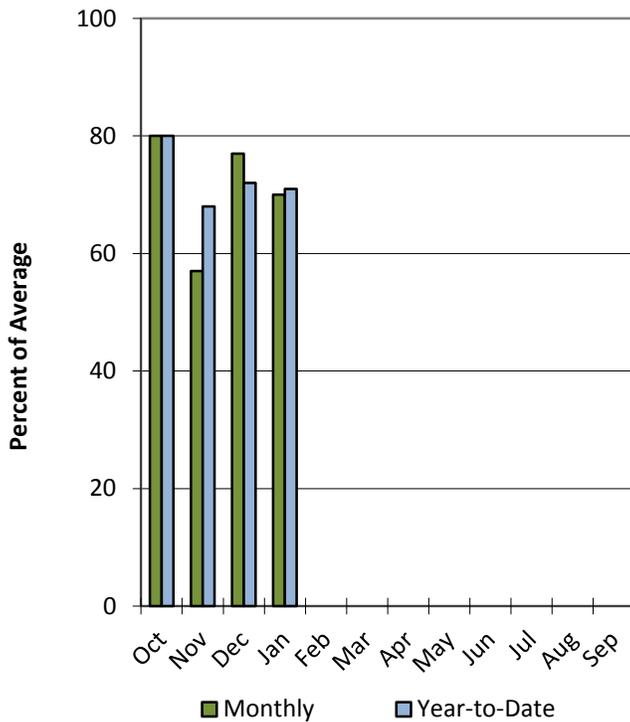


Weber & Ogden River Basins

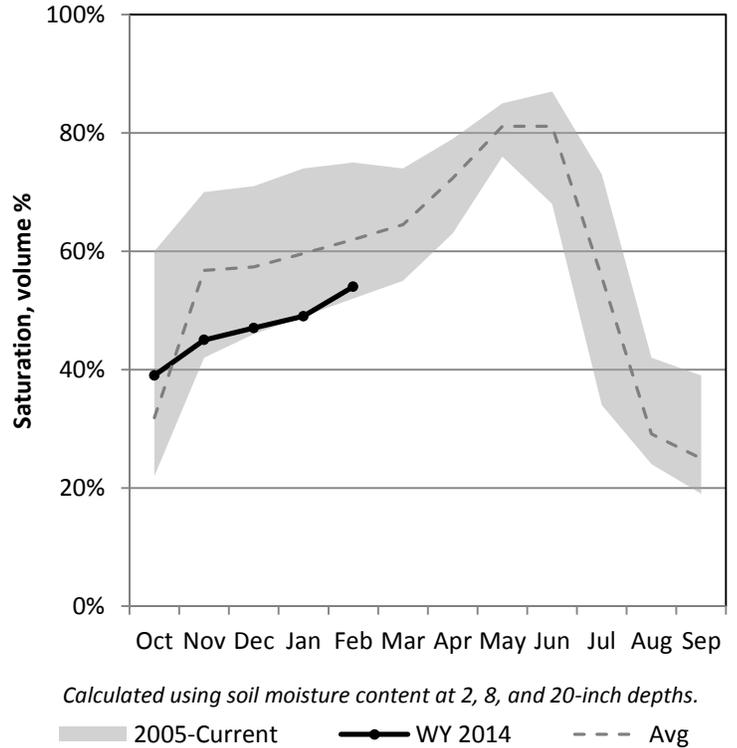
2/1/2014

Precipitation in January was below average at 70%, which brings the seasonal accumulation (Oct-Jan) to 71% of average. Soil moisture is at 54% compared to 61% last year. Reservoir storage is at 37% of capacity, compared to 49% last year. The water availability index for the Ogden River is 18% and 4% for the Weber River.

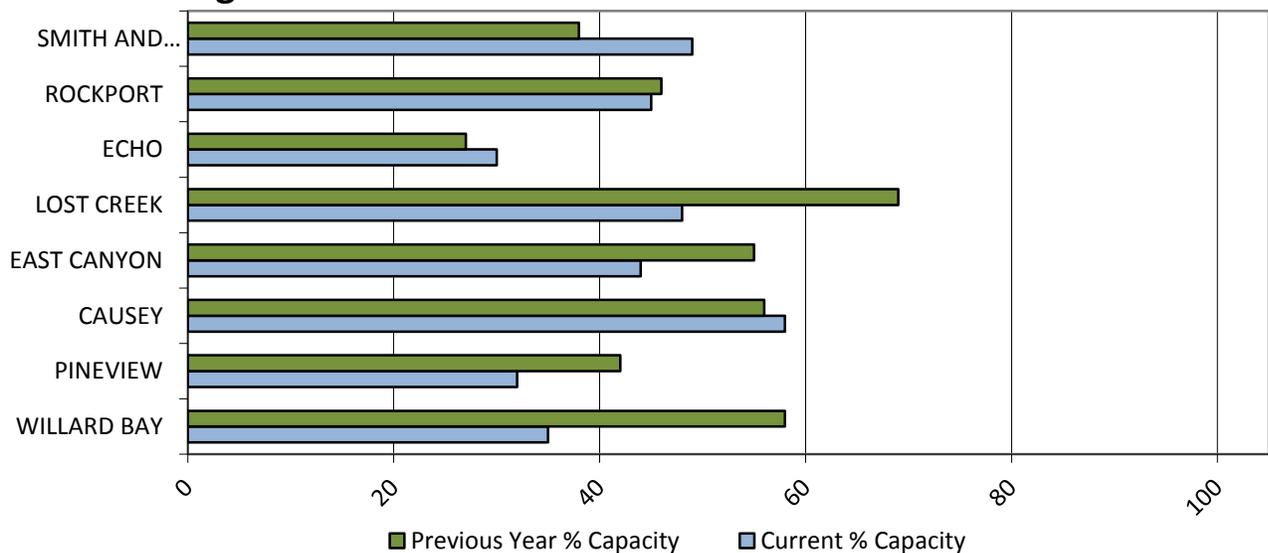
Precipitation



Soil Moisture



Reservoir Storage



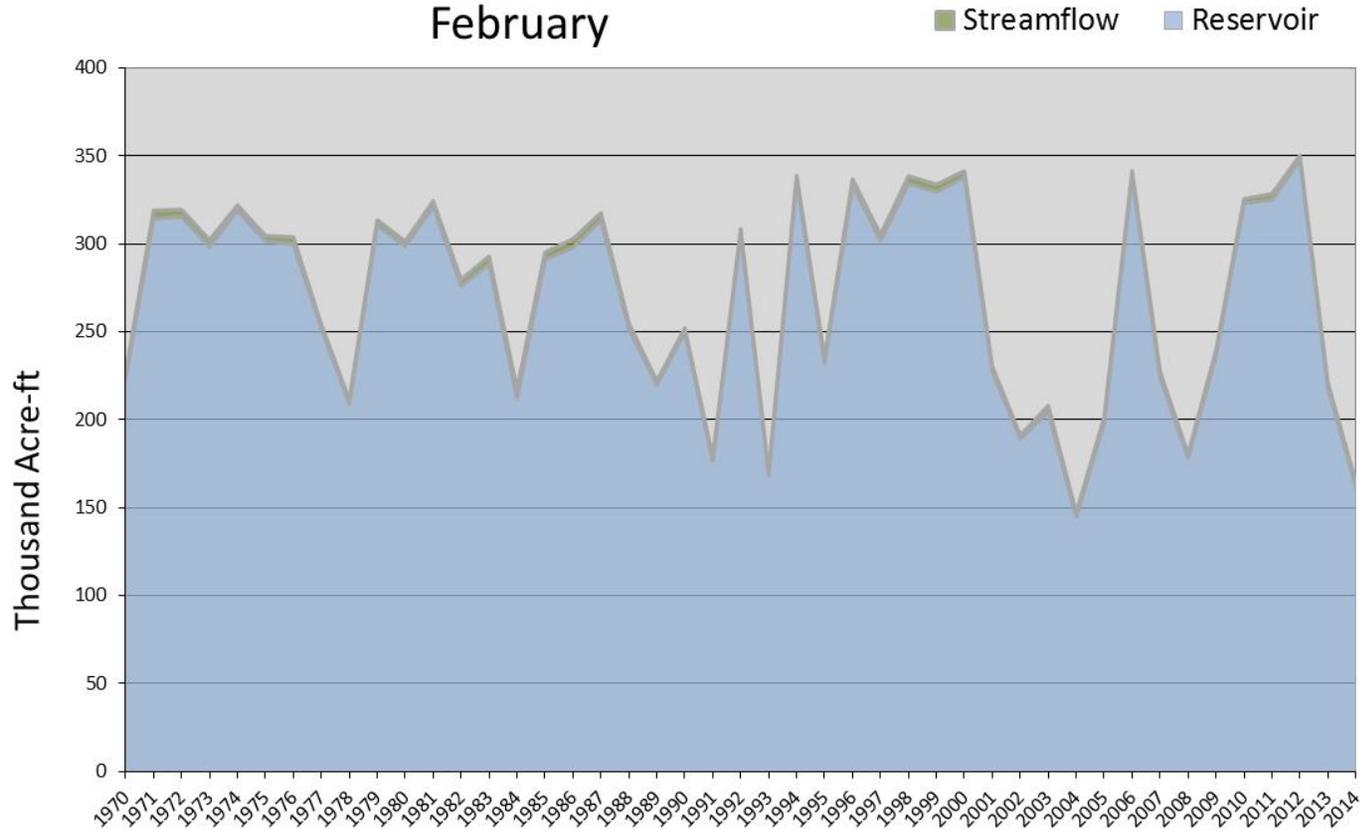
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Reservoirs	January accumulated flow at Weber near Oakley (observed)	Reservoirs + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Weber River	162	3	165	-3.80	4	04, 93, 91

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

Weber River - Water Availability Index February



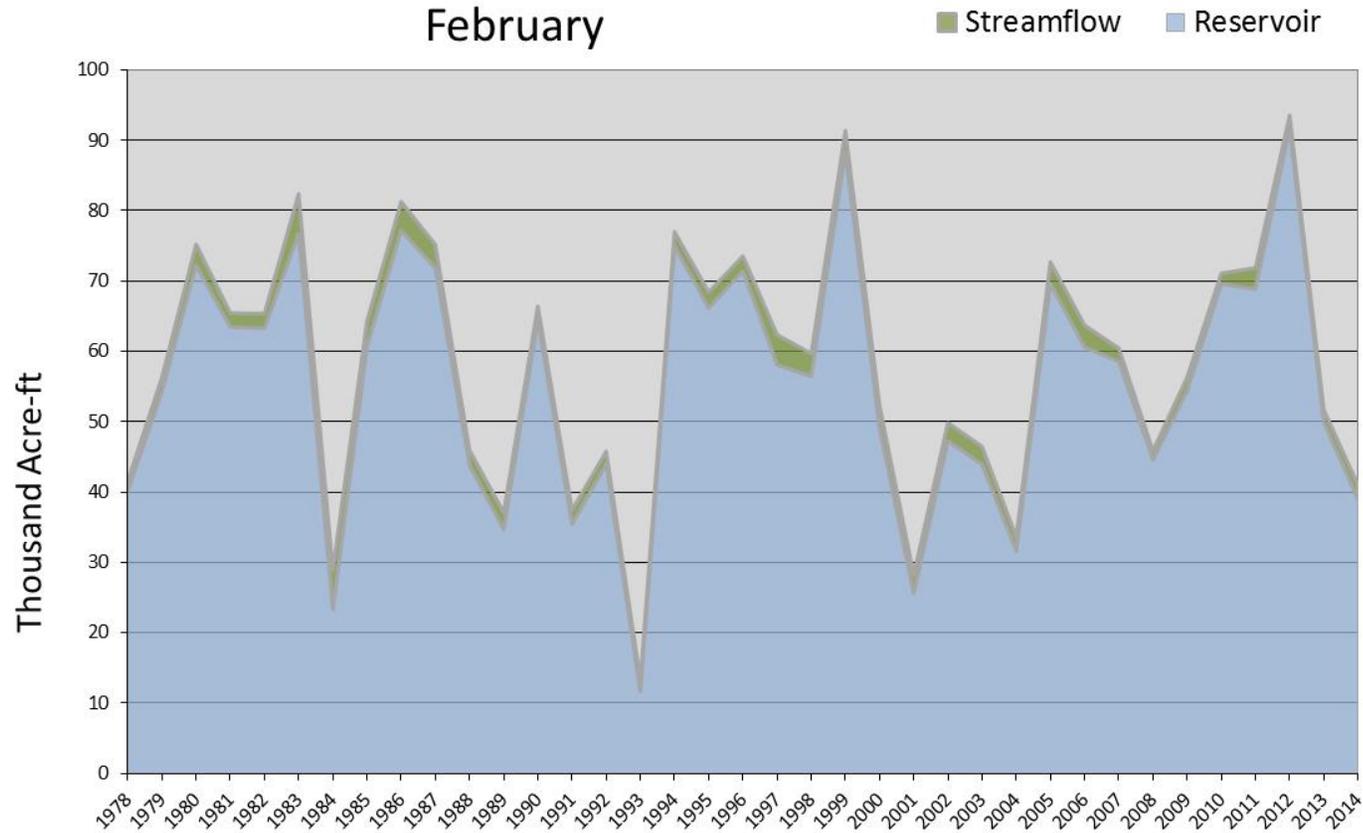
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Pine View & Causey	January accumulated flow at South Fork Ogden (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Ogden River	39.0	2.0	41.0	-2.63	18	89, 91, 78, 92

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

Ogden River - Water Availability Index February

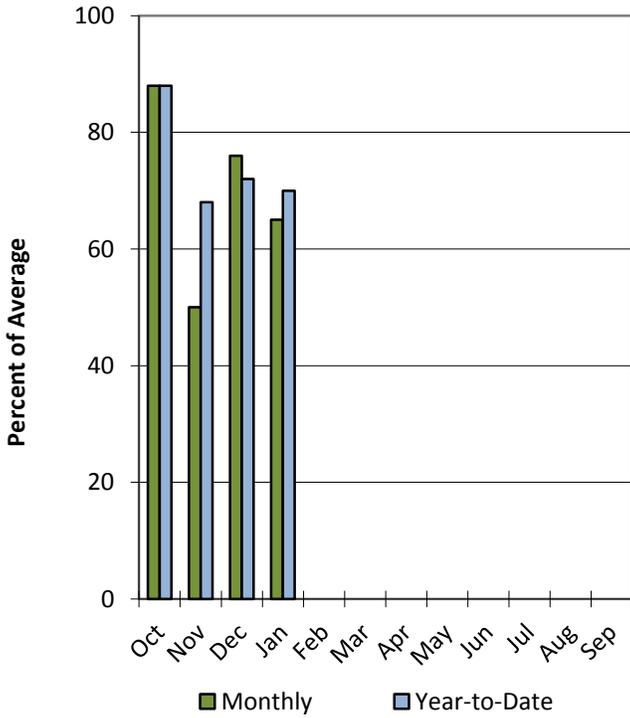


Provo & Jordan River Basins

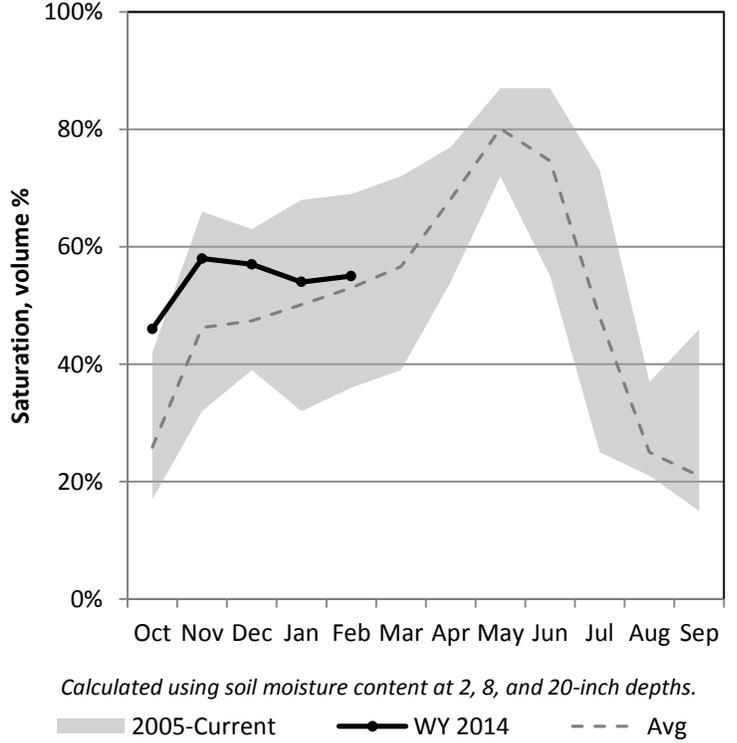
2/1/2014

Precipitation in January was much below average at 65%, which brings the seasonal accumulation (Oct-Jan) to 70% of average. Soil moisture is at 55% compared to 52% last year. Reservoir storage is at 70% of capacity, compared to 77% last year. The water availability index for the Provo River is 5%.

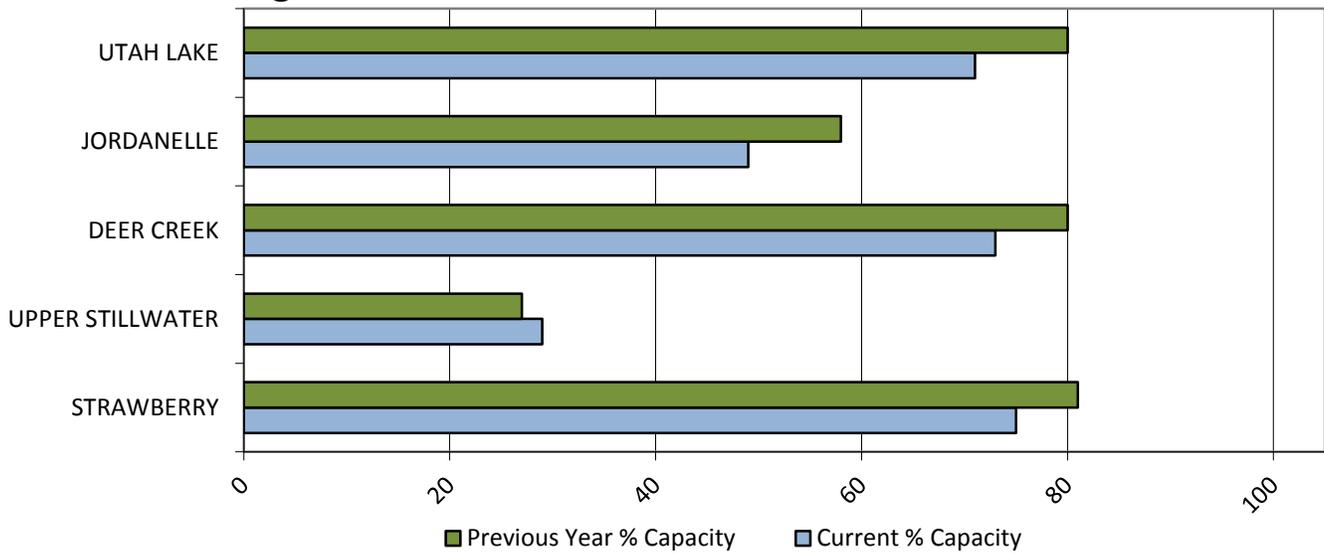
Precipitation



Soil Moisture

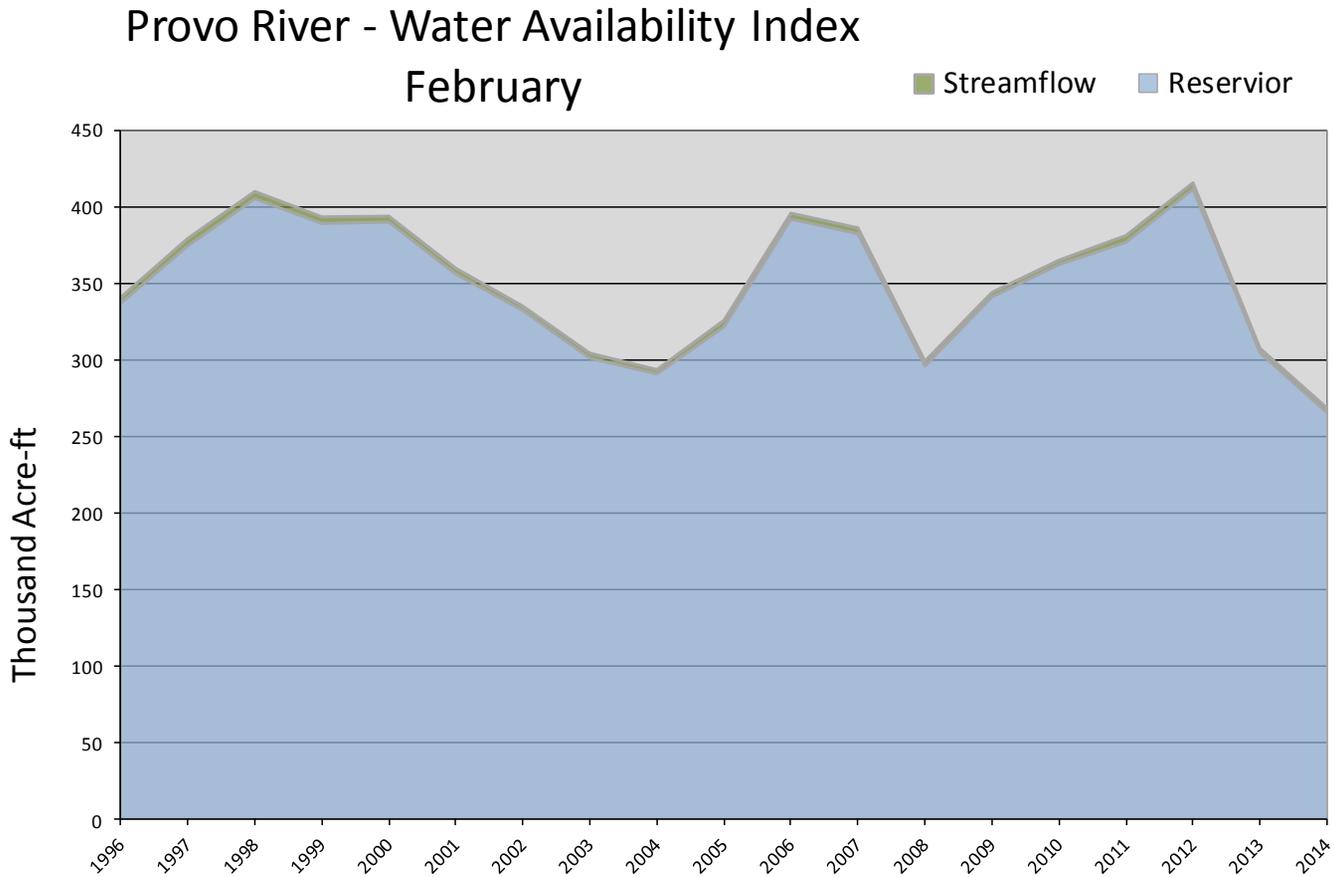


Reservoir Storage



<i>February 1, 2014</i>	Water Availability Index					
Basin or Region	January EOM* Deer Creek, Jordanelle	January accumulated flow Provo River at Woodland (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> ^	<i>KAF</i>	<i>KAF</i>		%	
Provo	265	3.0	268	-3.75	5	08, 04

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

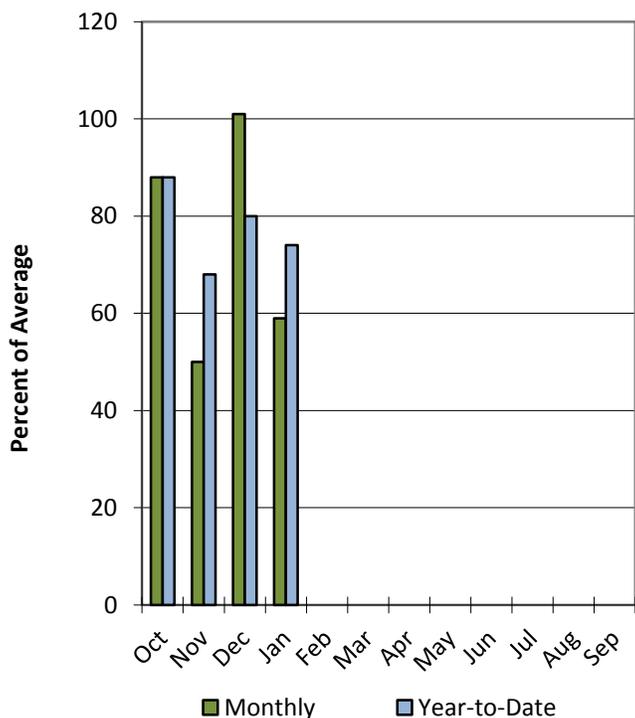


Tooele & Vernon Creek Basins

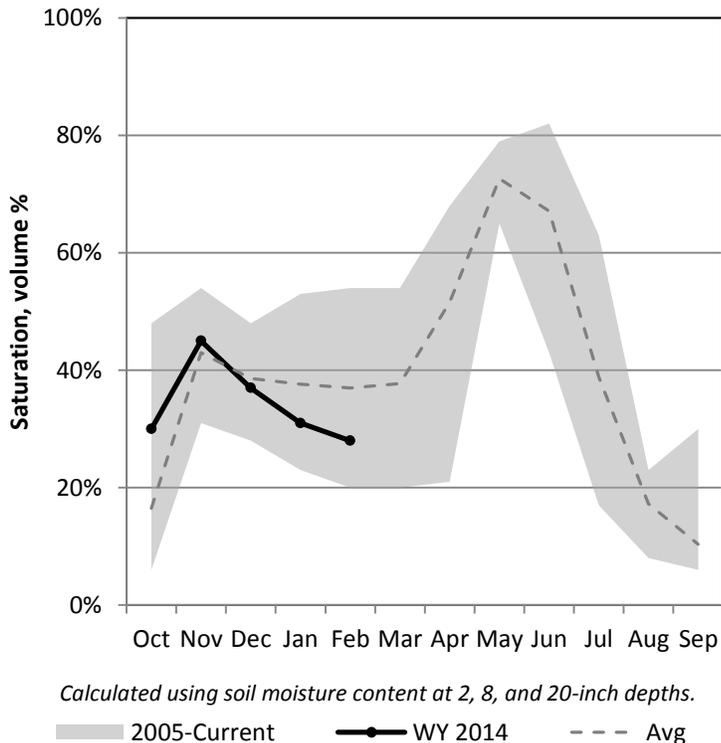
2/1/2014

Precipitation in January was much below average at 59%, which brings the seasonal accumulation (Oct-Jan) to 74% of average. Soil moisture is at 28% compared to 37% last year. Reservoir storage is at 48% of capacity, compared to 27% last year.

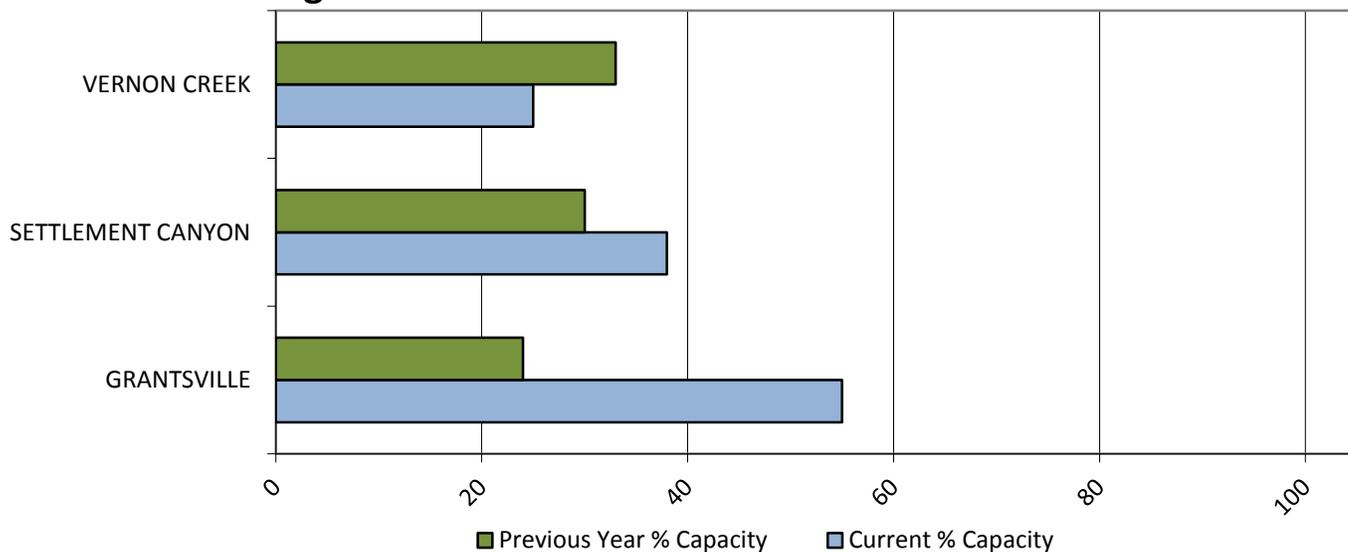
Precipitation



Soil Moisture



Reservoir Storage

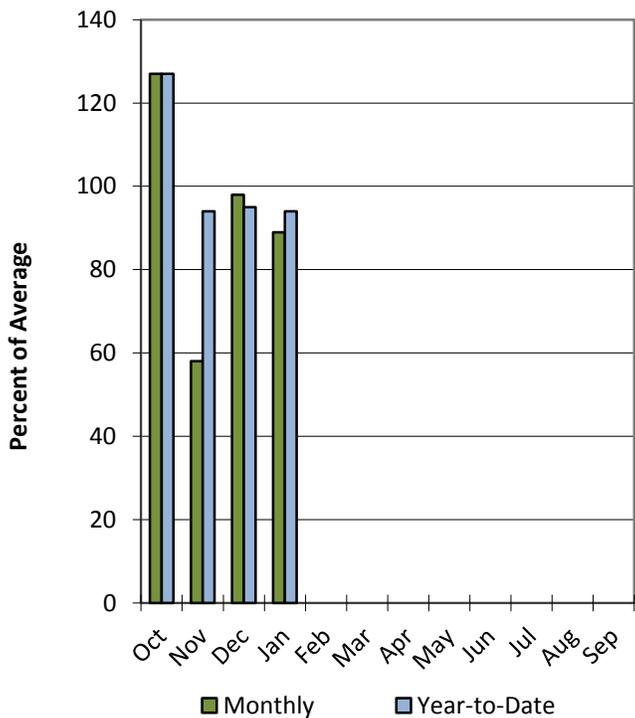


Northeastern Uintah Basin

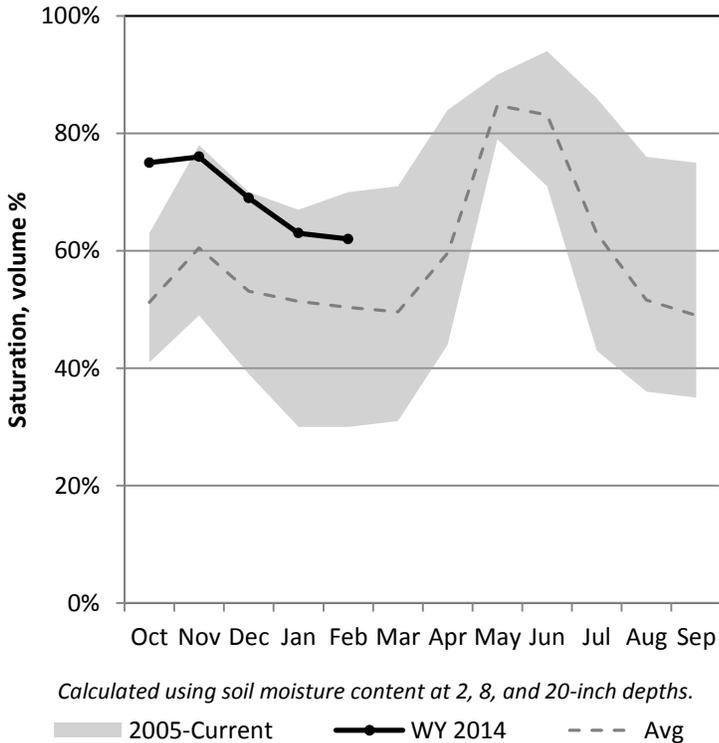
2/1/2014

Precipitation in January was below average at 89%, which brings the seasonal accumulation (Oct-Jan) to 94% of average. Soil moisture is at 62% compared to 42% last year. Reservoir storage is at 76% of capacity, compared to 79% last year.

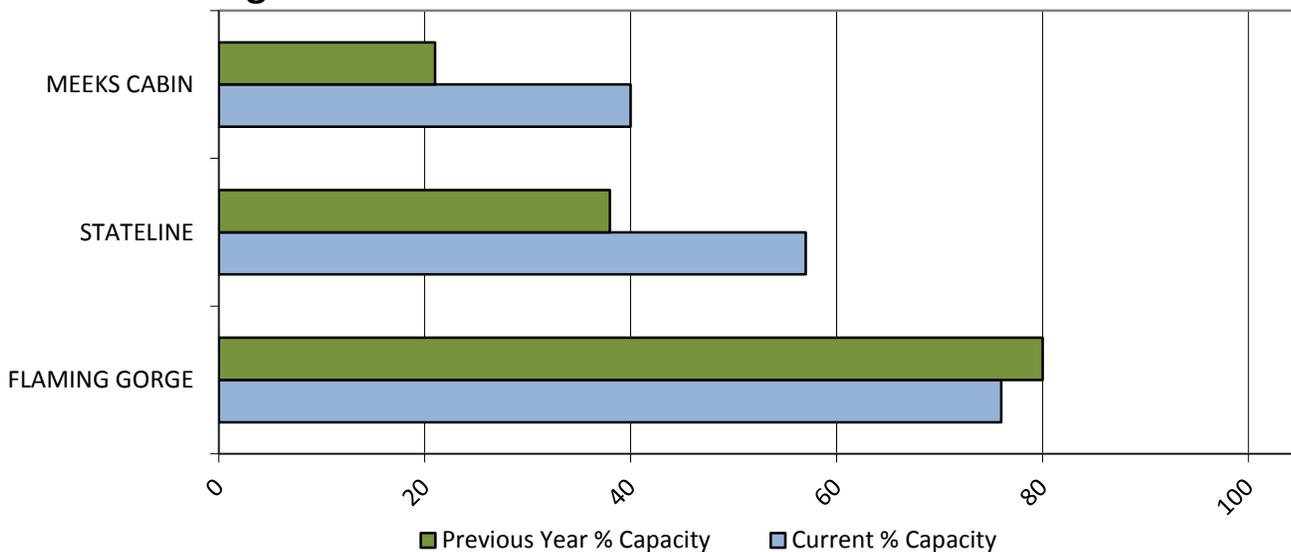
Precipitation



Soil Moisture



Reservoir Storage



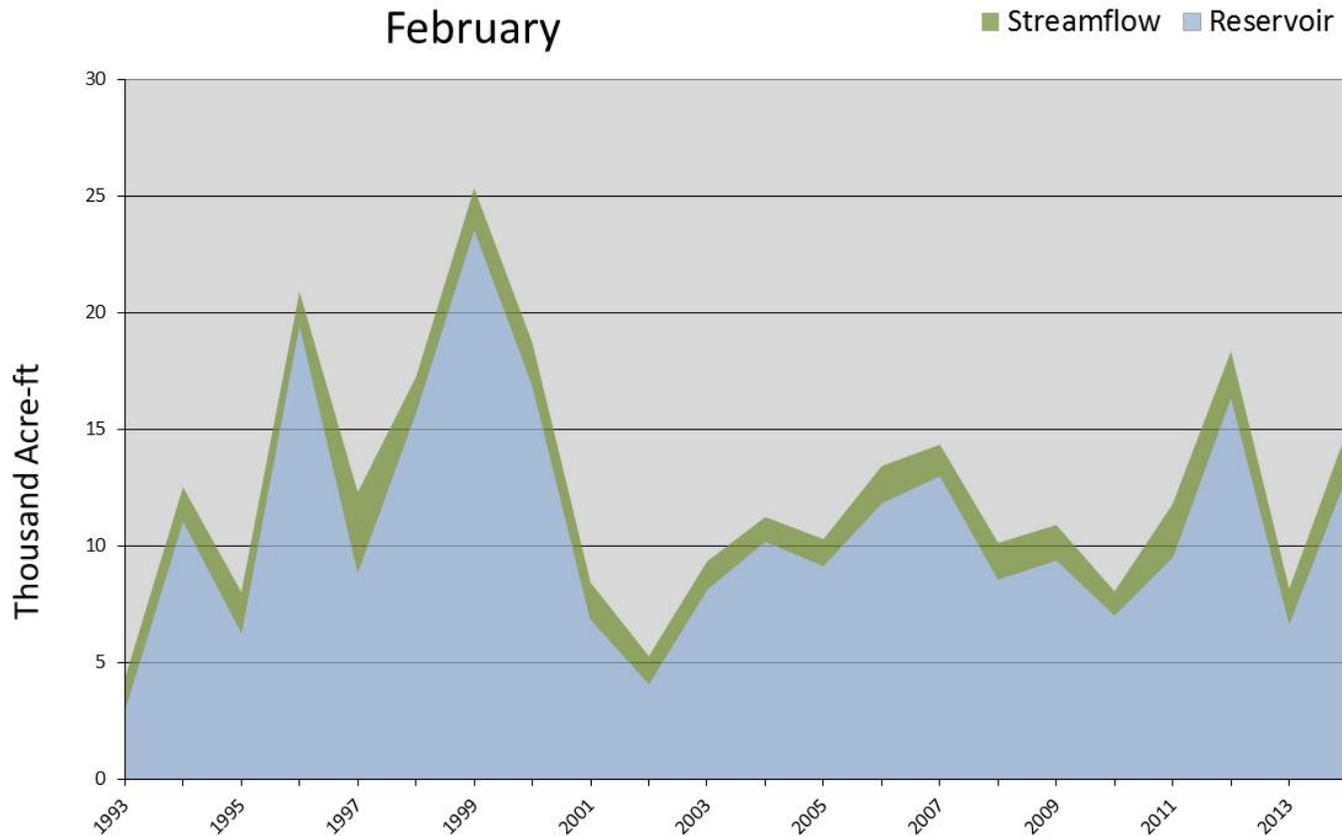
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Meeks Cabin Reservoir	January 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	13.1	1.9	15.0	1.99	74	06, 07, 98, 12

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

Blacks Fork - Water Availability Index
February

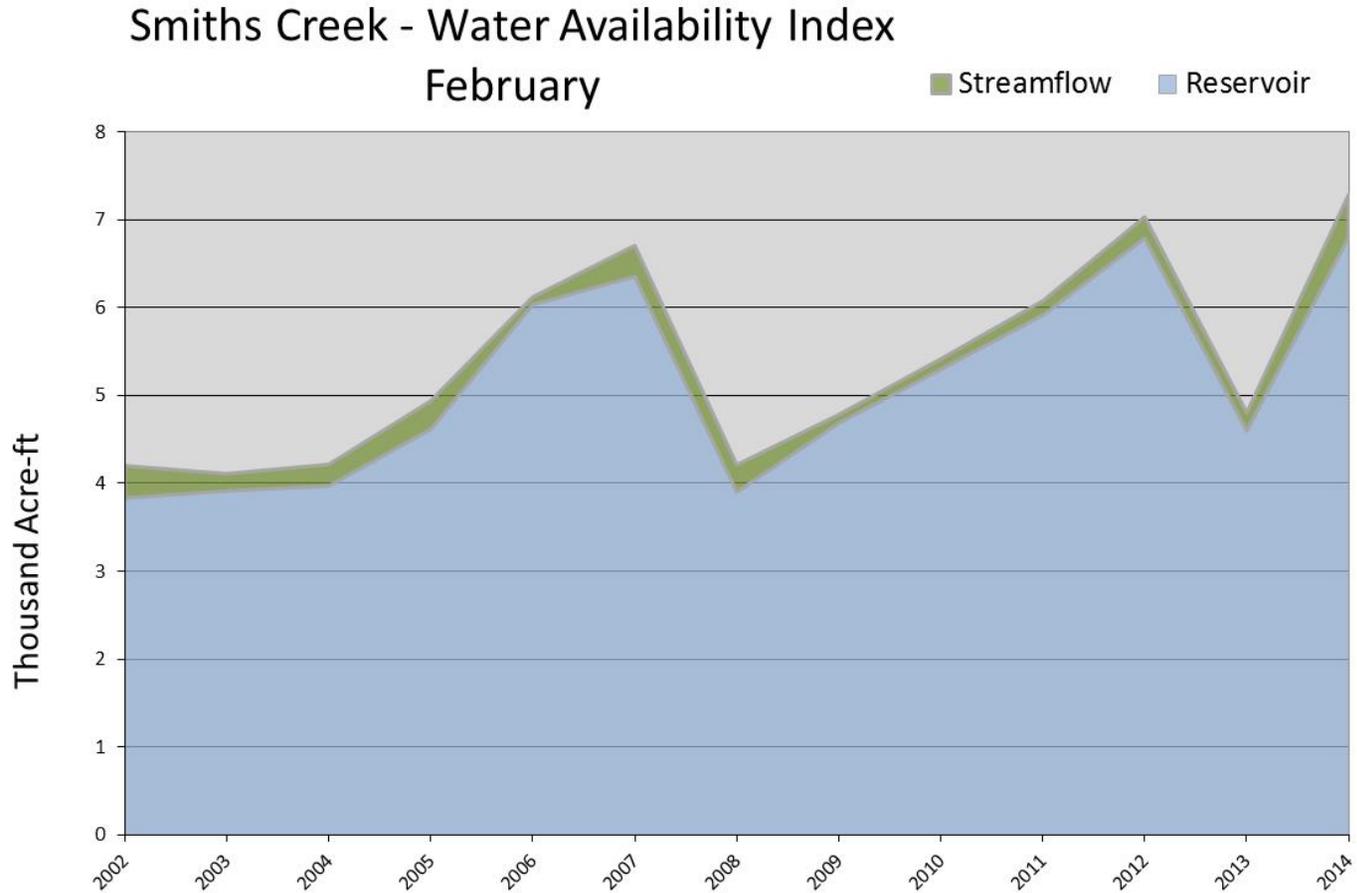


February 1, 2014

Water Availability Index

Basin or Region	January EOM* Stateline Reservoir	January Observed Flow EF Smiths Creek	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Smiths Creek	6.8	0.5	7.3	3.57	93	12, 07

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

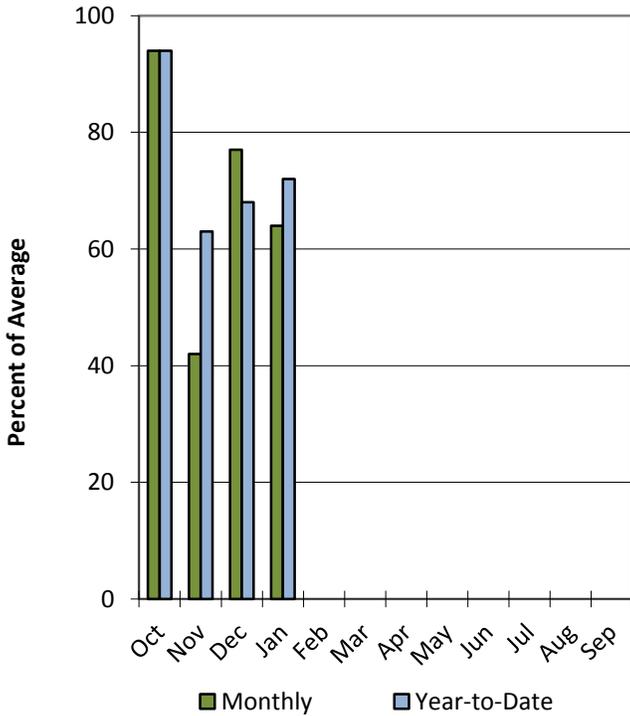


Duchesne River Basin

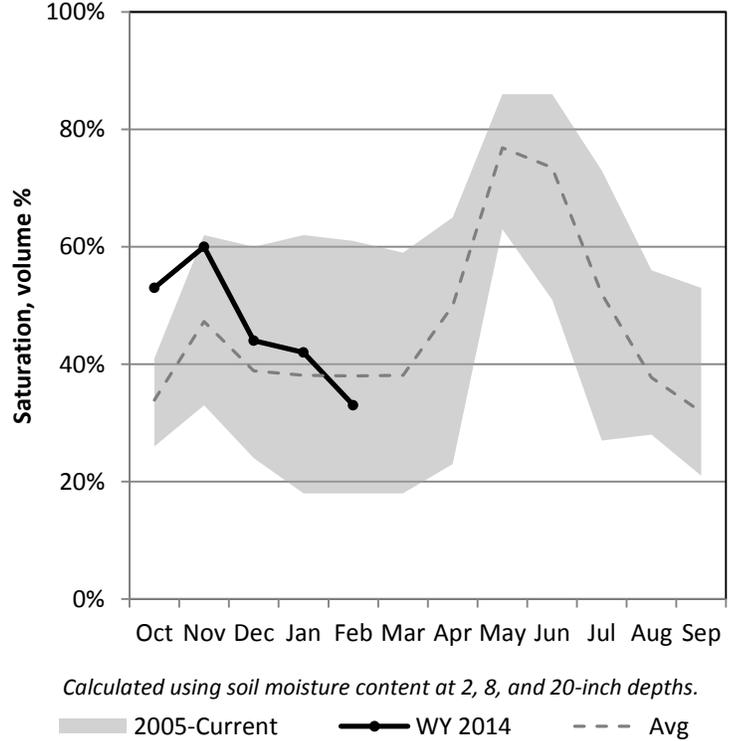
2/1/2014

Precipitation in January was much below average at 64%, which brings the seasonal accumulation (Oct-Jan) to 72% of average. Soil moisture is at 33% compared to 33% last year. Reservoir storage is at 74% of capacity, compared to 76% last year. The water availability index for the Western Uintahs is 78% and 11% for the Eastern Uintahs.

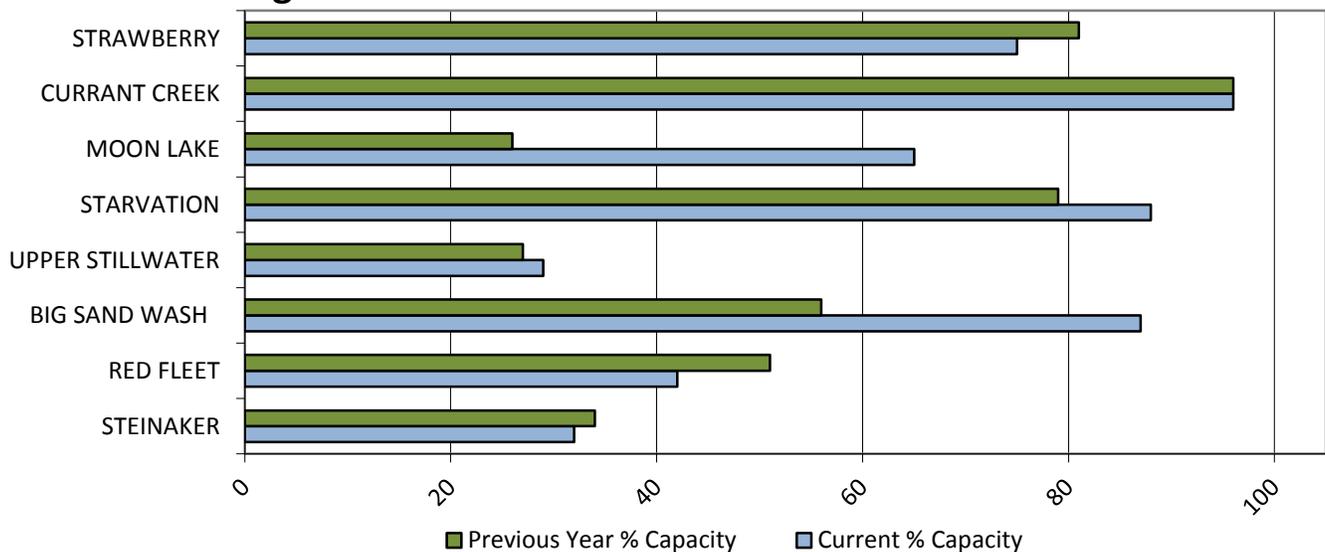
Precipitation



Soil Moisture



Reservoir Storage



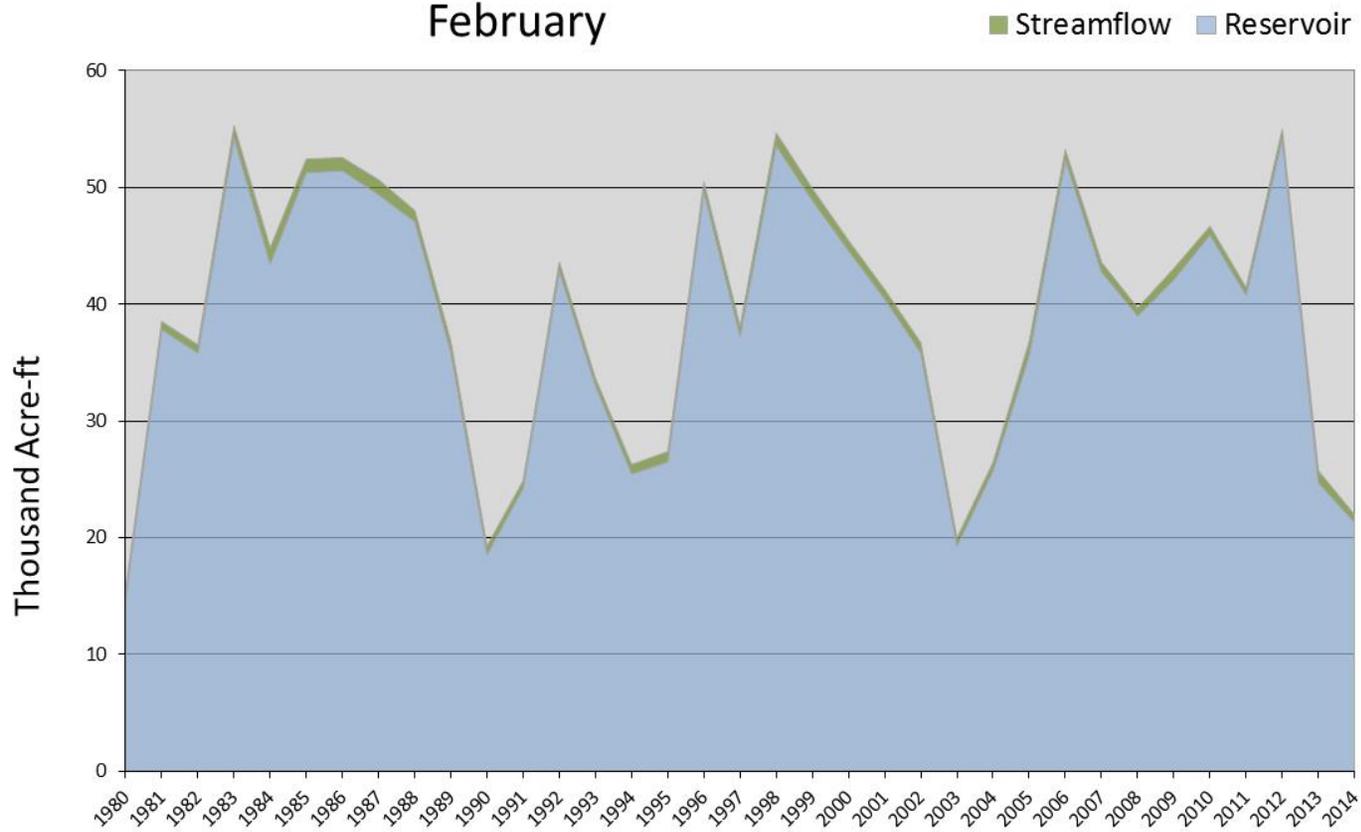
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Red Fleet and Steinaker	January accumulated flow Big Brush Creek (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Eastern Uintah	21.3	0.7	22.0	-3.24	11	90, 03, 91, 13

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

Eastern Uintah - Water Availability Index
February



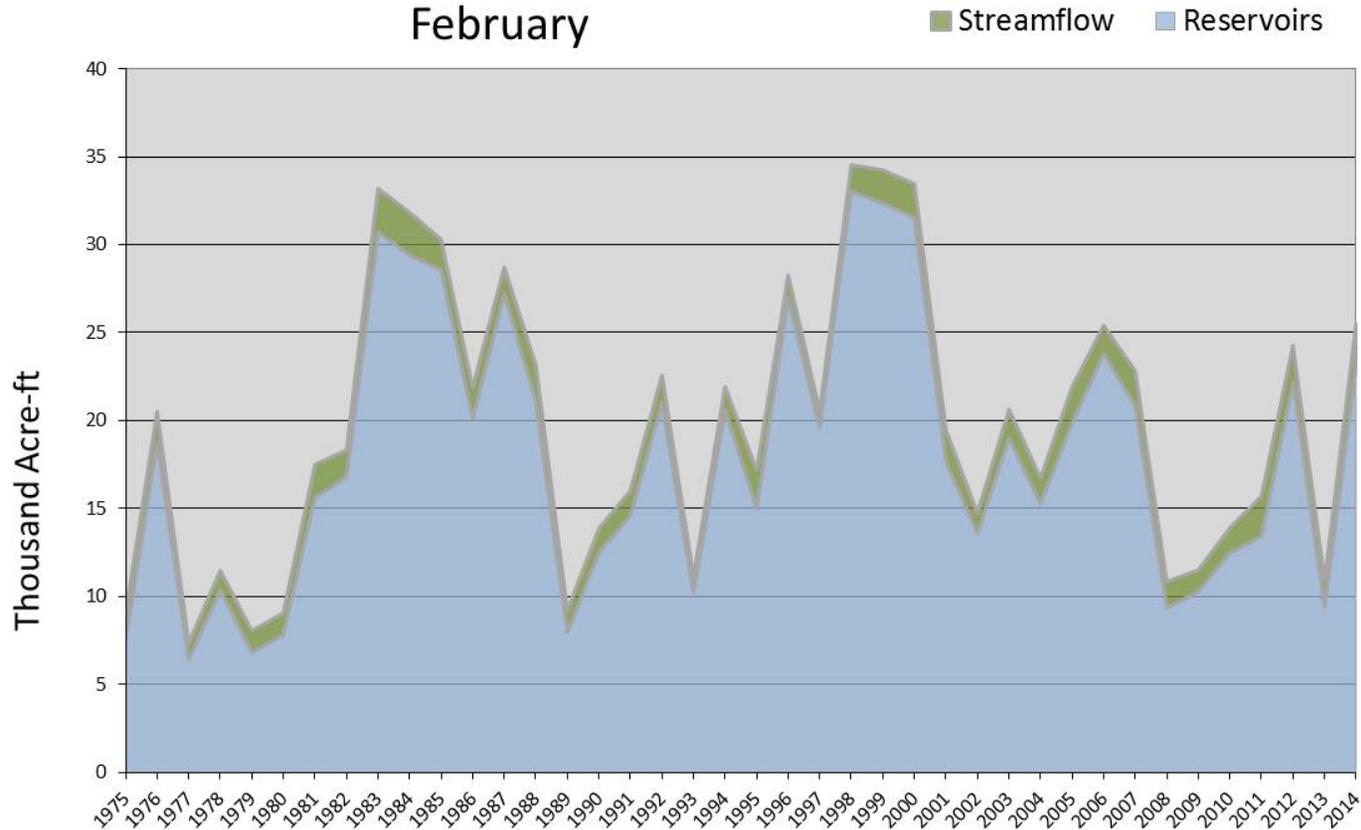
February 1, 2014

Water Availability Index

Basin or Region	January EOM* Moon Lake	January accumulated flow Lake Fork Creek above Moon Lake (observed)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Moon Lake	23.1	2.4	25.5	2.34	78	12, 06, 96, 87

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

Moon Lake - Water Availability Index February

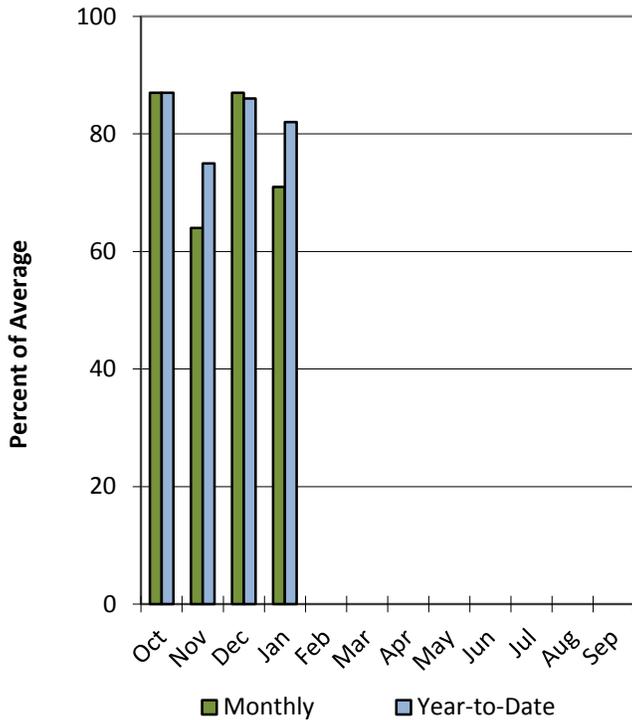


Lower Sevier River Basin

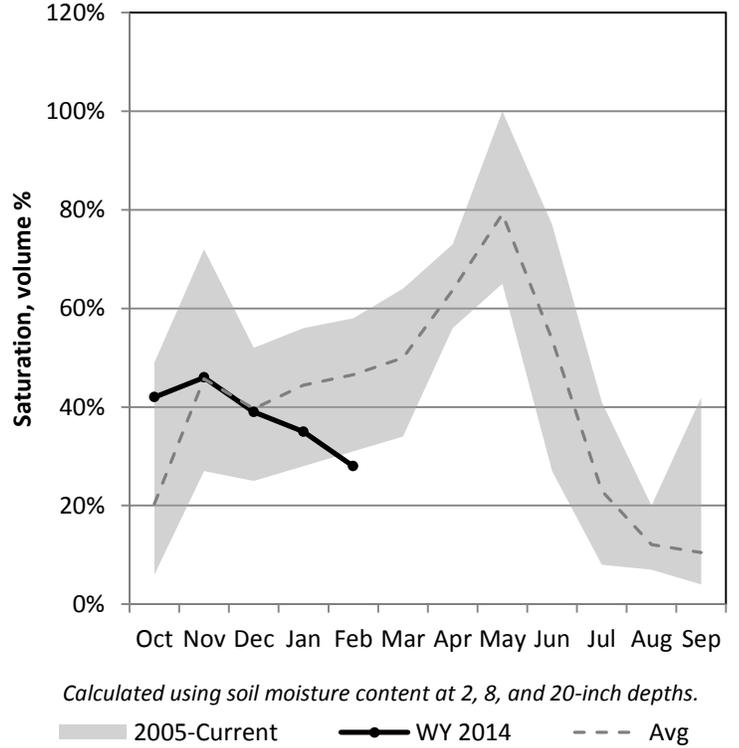
2/1/2014

Precipitation in January was below average at 71%, which brings the seasonal accumulation (Oct-Jan) to 82% of average. Soil moisture is at 28% compared to 32% last year. Reservoir storage is at 49% of capacity, compared to 61% last year. The water availability index for the Lower Sevier is 45%.

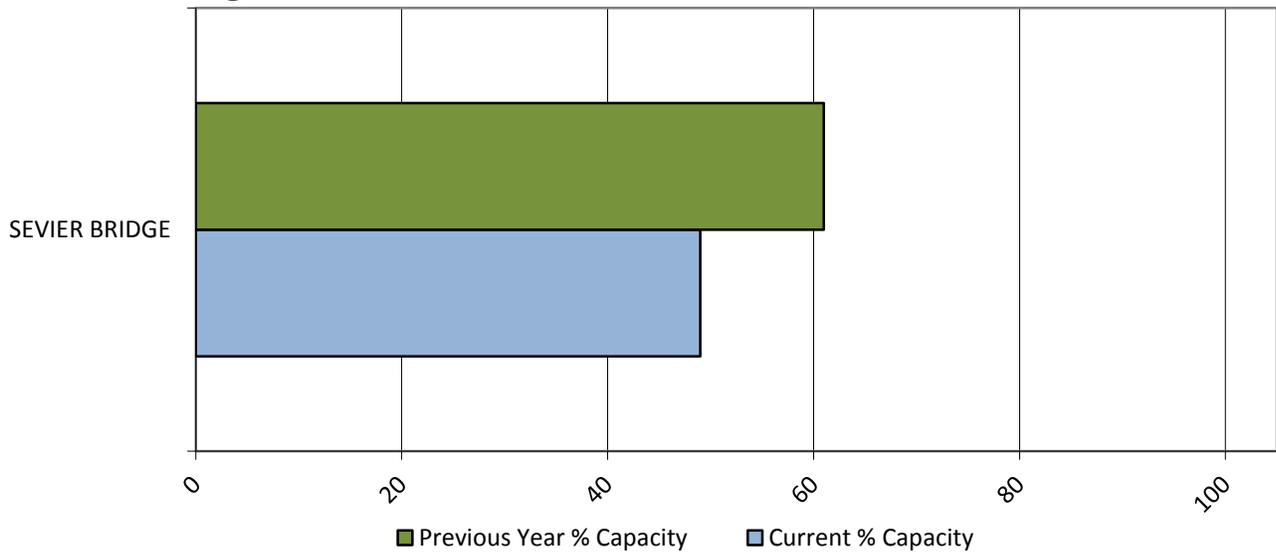
Precipitation



Soil Moisture



Reservoir Storage

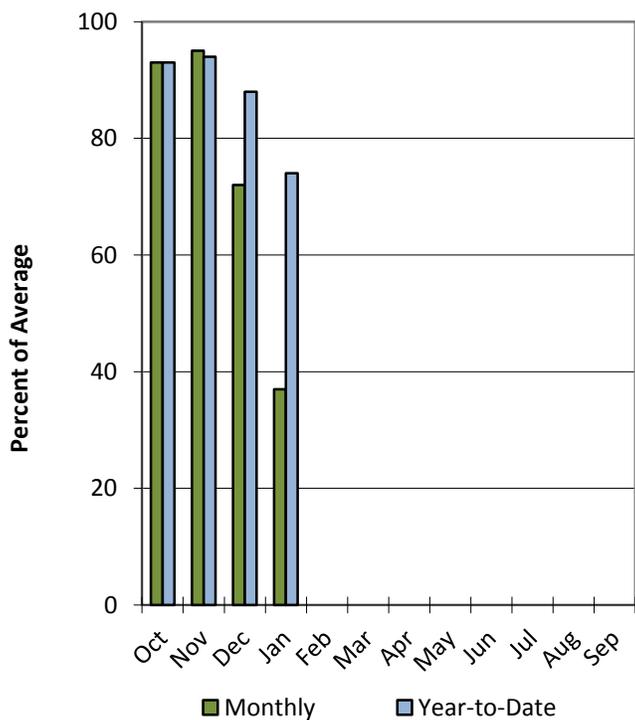


Upper Sevier River Basin

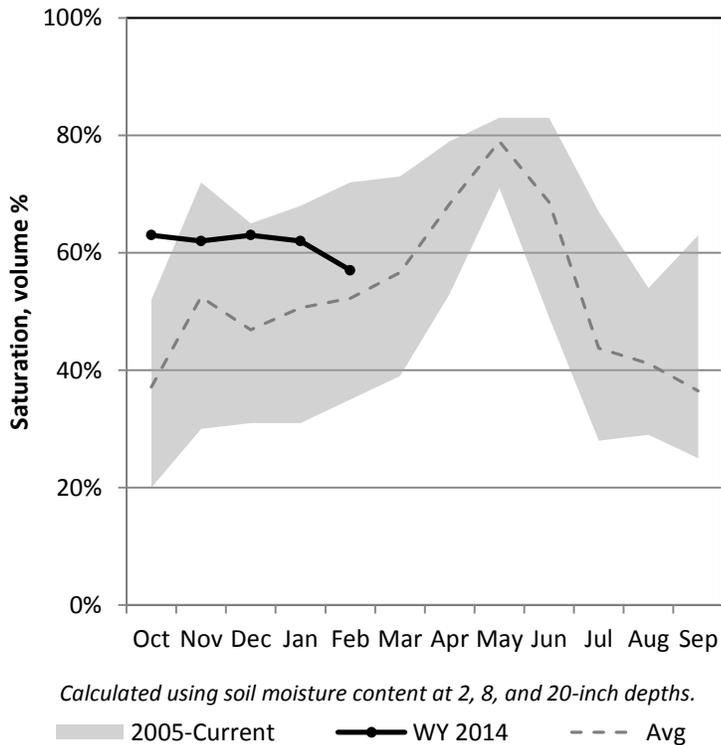
2/1/2014

Precipitation in January was much below average at 37%, which brings the seasonal accumulation (Oct-Jan) to 74% of average. Soil moisture is at 57% compared to 45% last year. Reservoir storage is at 69% of capacity, compared to 54% last year. The water availability index for the Upper Sevier is 67%.

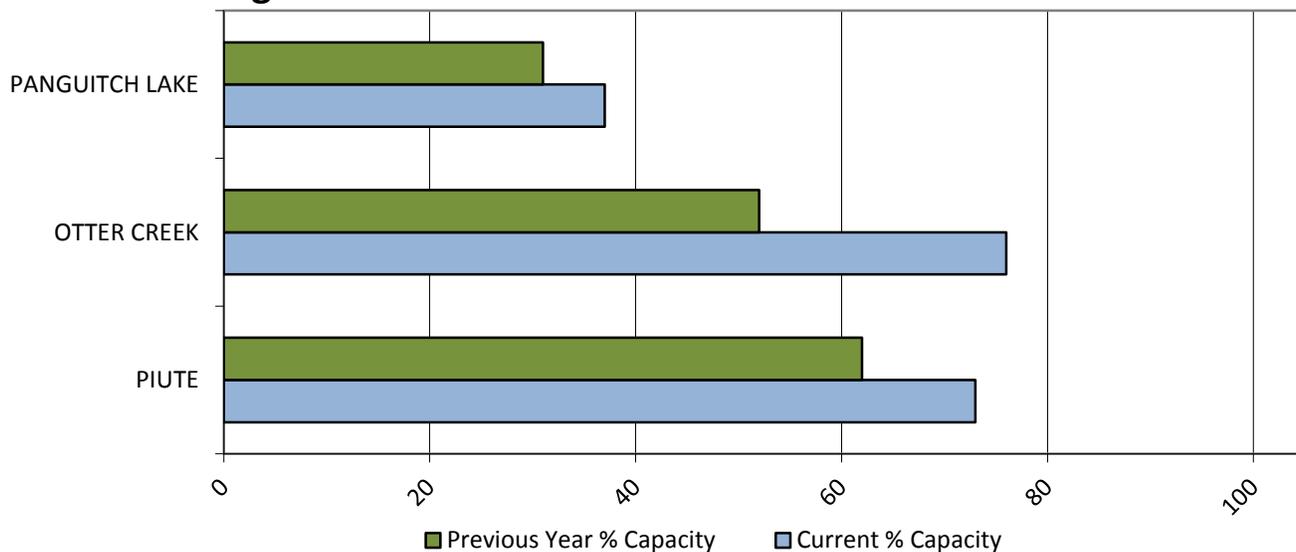
Precipitation



Soil Moisture



Reservoir Storage

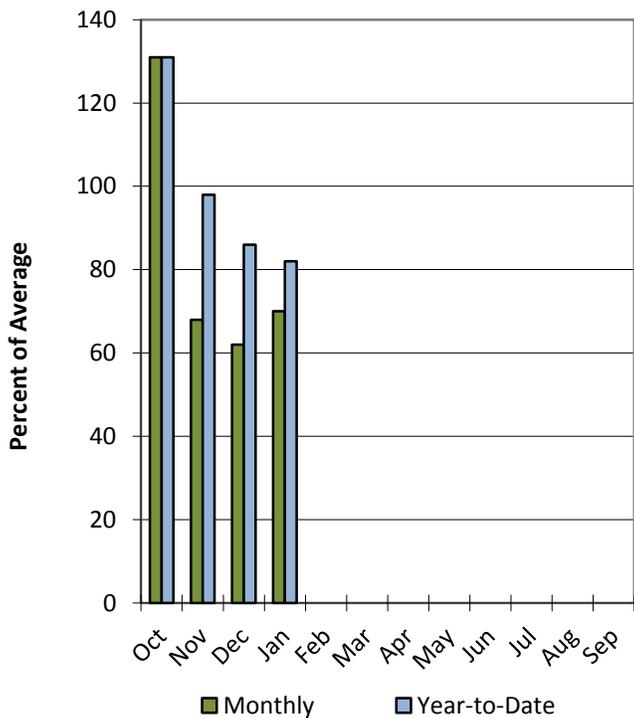


San Pitch River Basin

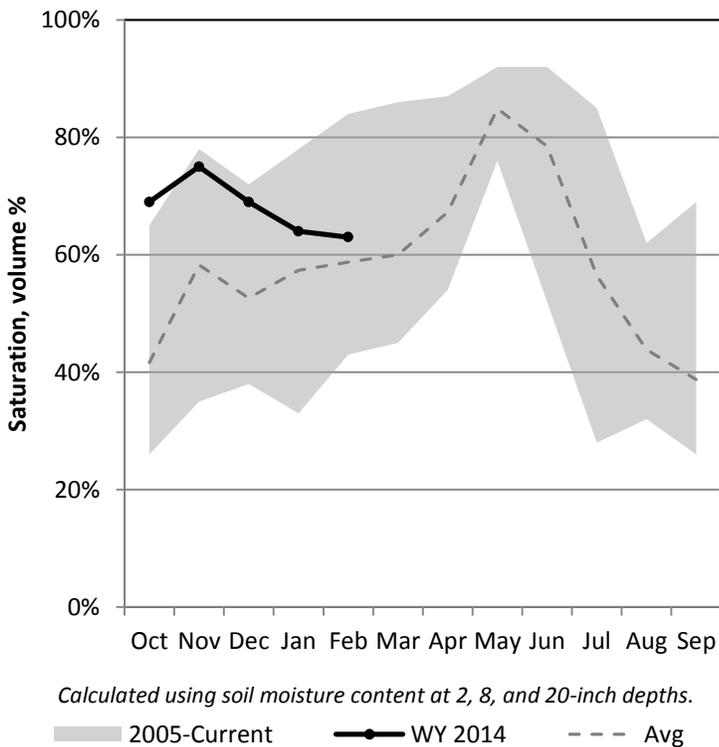
2/1/2014

Precipitation in January was below average at 70%, which brings the seasonal accumulation (Oct-Jan) to 82% of average. Soil Moisture is at 63% compared to 49% last year. Reservoir storage is at 2% of capacity, compared to 2% last year.

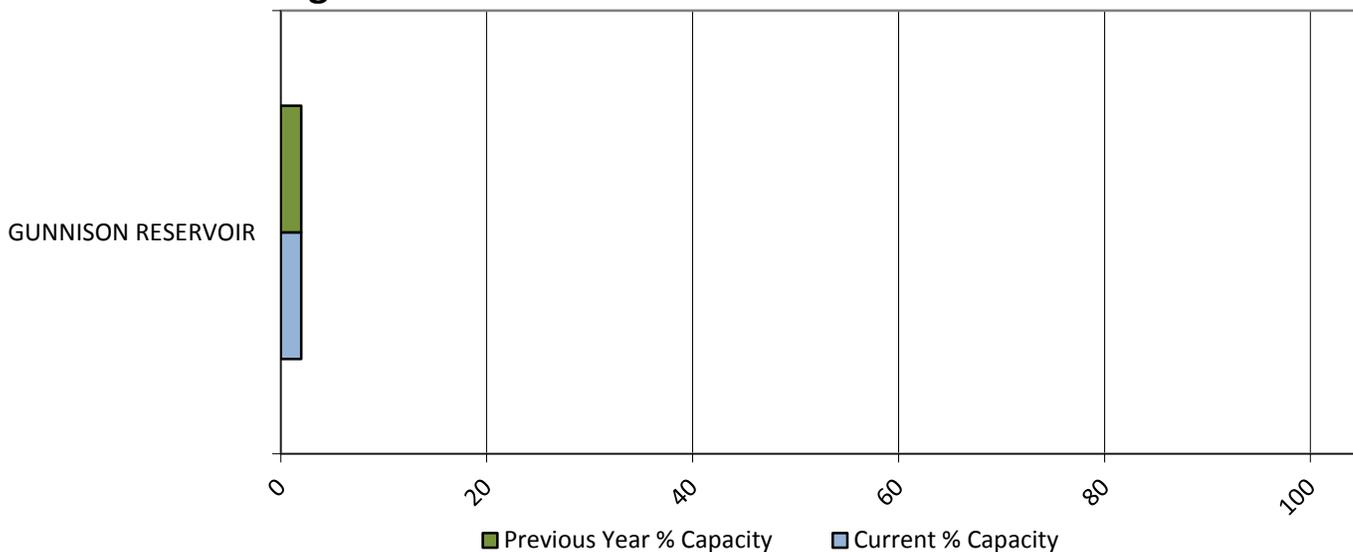
Precipitation



Soil Moisture



Reservoir Storage

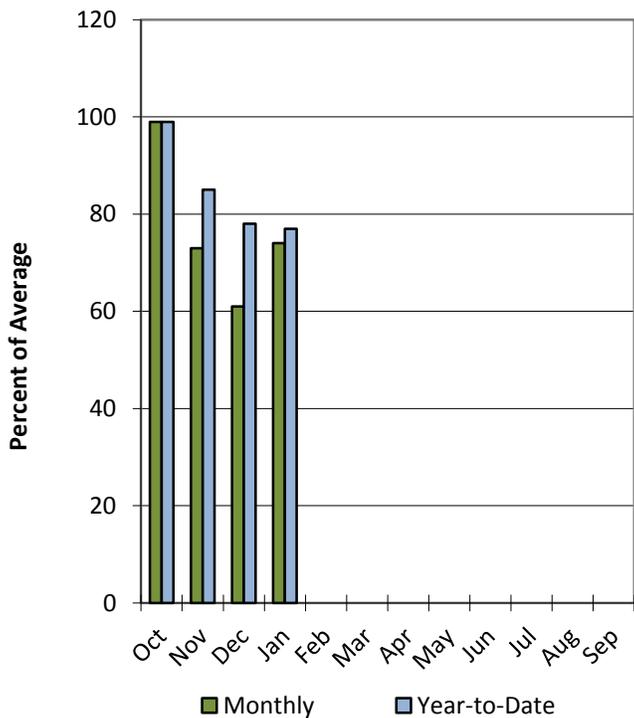


Price & San Rafael Basins

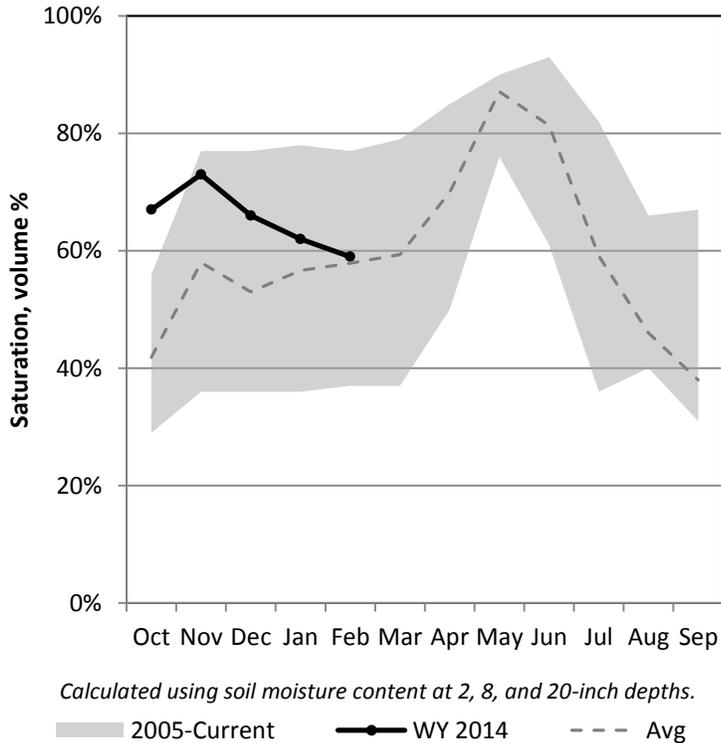
2/1/2014

Precipitation in January was below average at 74%, which brings the seasonal accumulation (Oct-Jan) to 77% of average. Soil moisture is at 59% compared to 37% last year. Reservoir storage is at 40% of capacity, compared to 48% last year. The water availability index for the Price River is 20%, and 22% for Joe's Valley.

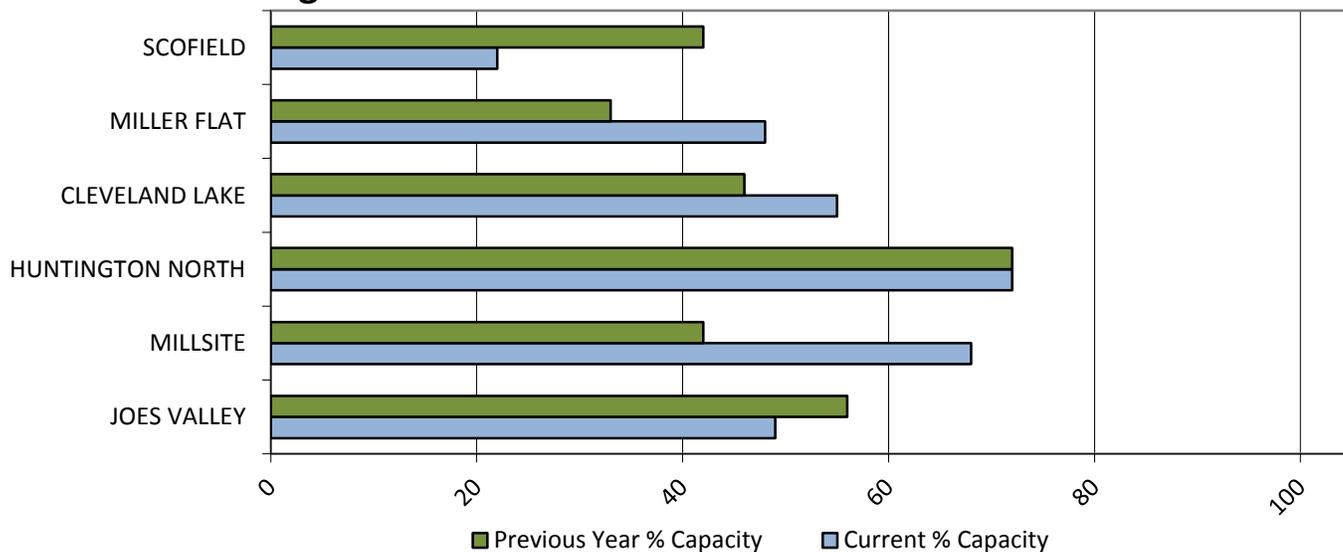
Precipitation



Soil Moisture



Reservoir Storage

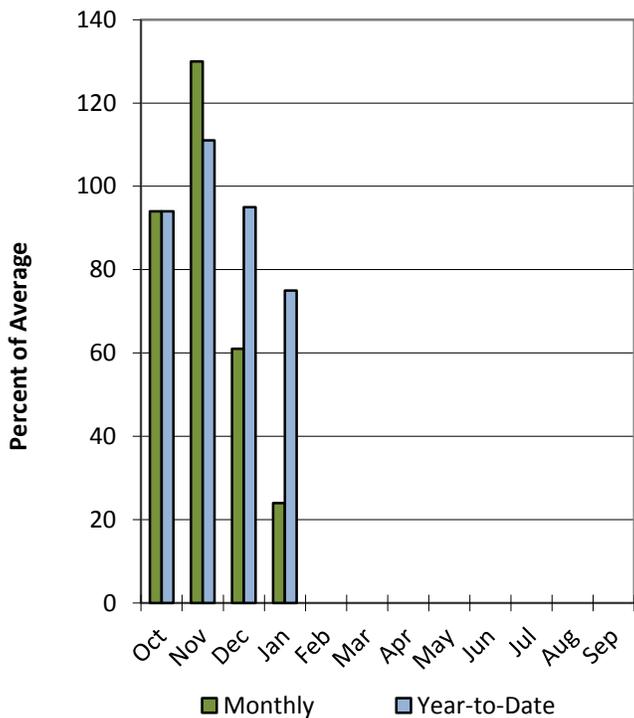


Southeastern Utah Basin

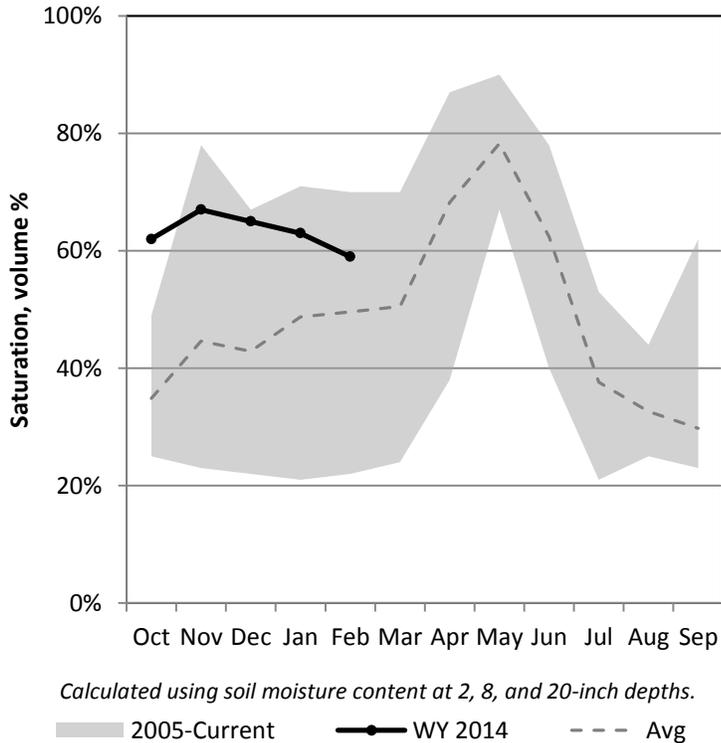
2/1/2014

Precipitation in January was much below average at 24%, which brings the seasonal accumulation (Oct-Jan) to 75% of average. Soil moisture is at 59% compared to 22% last year. Reservoir storage is at 48% of capacity, compared to 13% last year. The water availability index for Moab is 57%.

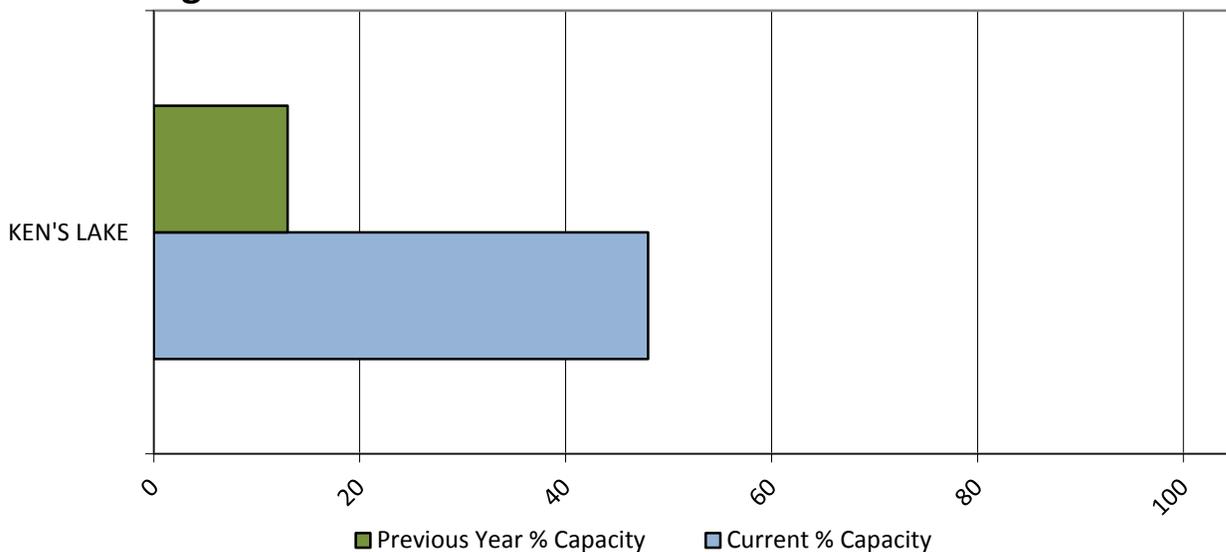
Precipitation



Soil Moisture



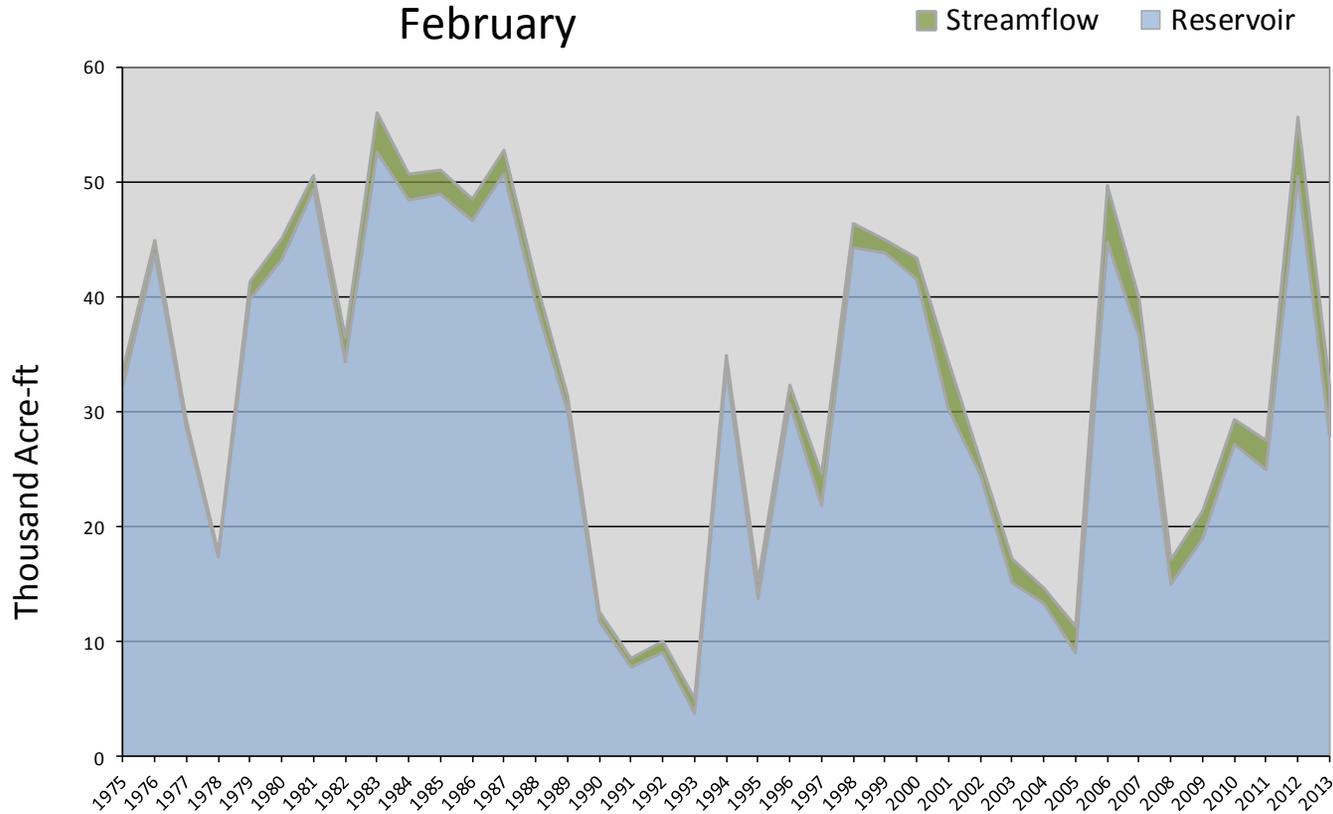
Reservoir Storage



February 1, 2014	Water Availability Index					
Basin or Region	January EOM* Scofield	January accumulated inflow to Scofield (calculated)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Price River	14.5	1.5	16.0	-2.54	20	04, 95, 08, 03

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

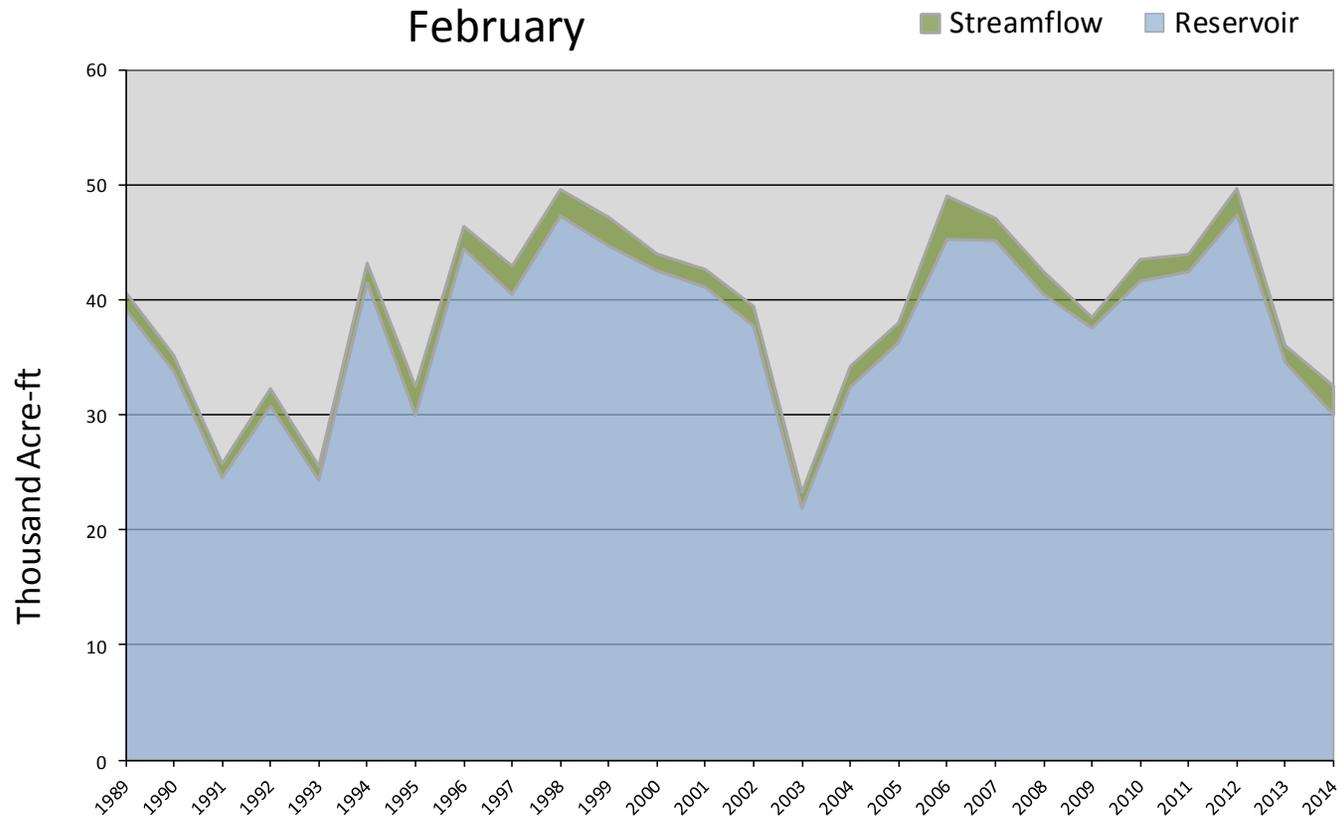
Price River - Water Availability Index
February



February 1, 2014		Water Availability Index				
Basin or Region	January EOM* Joe's Valley	January accumulated inflow to Joe's Valley (calculated)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Joe's Valley	30.0	2.5	32.5	-2.31	22	92, 95, 04, 90

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

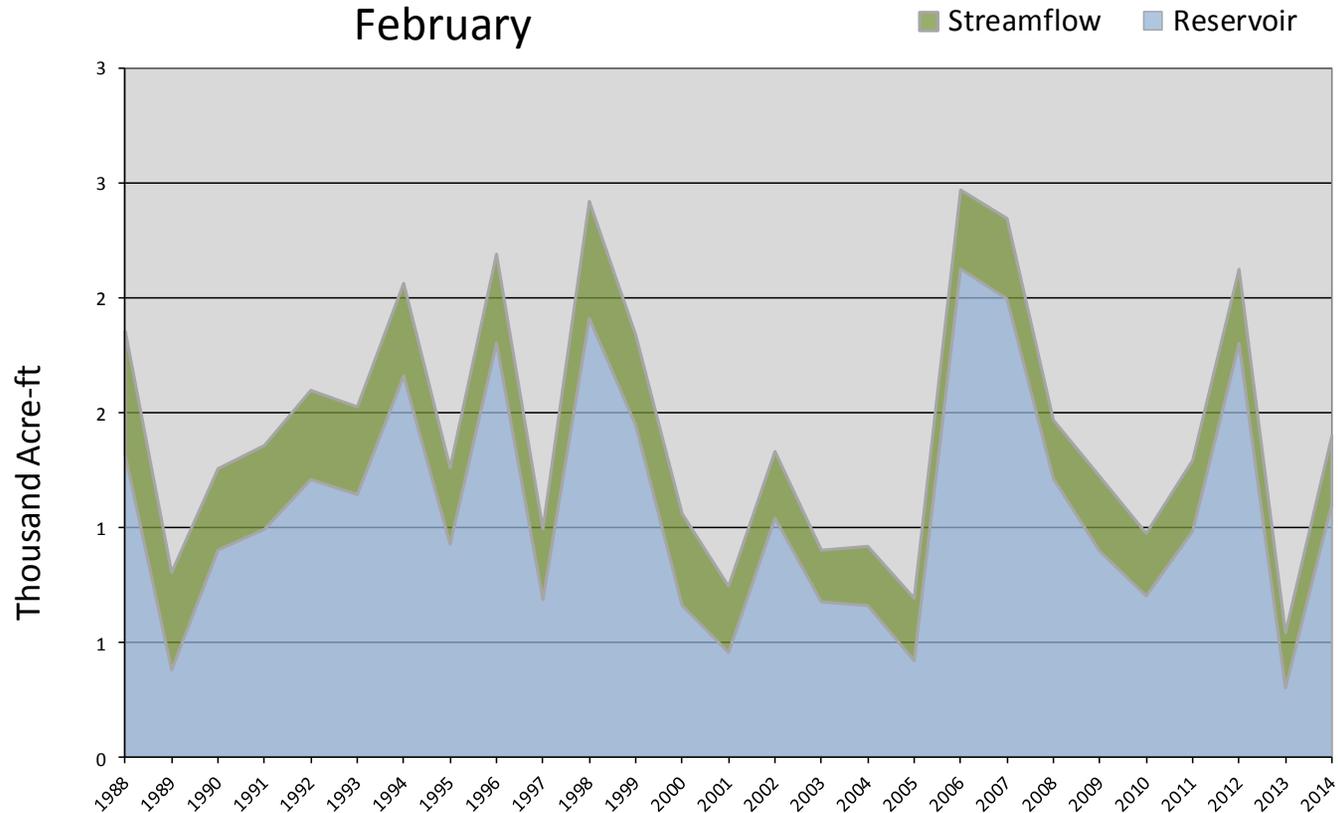
Joe's Valley - Water Availability Index
February



February 1, 2014	Water Availability Index					
Basin or Region	January EOM* Ken's Lake Reservoir	January accumulated flow Mill Creek at Sheley (<i>observed</i>)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Moab	1.1	0.3	1.4	0.60	57	02, 91, 08, 93

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

Moab - Water Availability Index
February

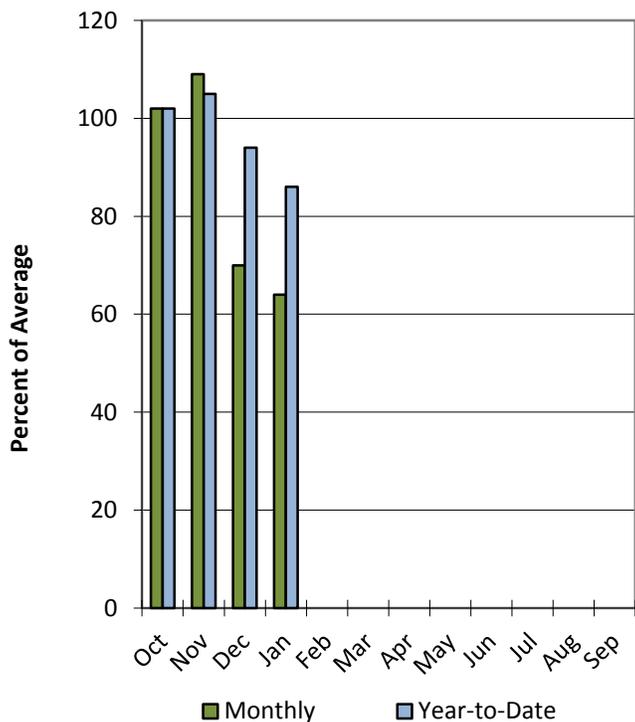


Dirty Devil Basin

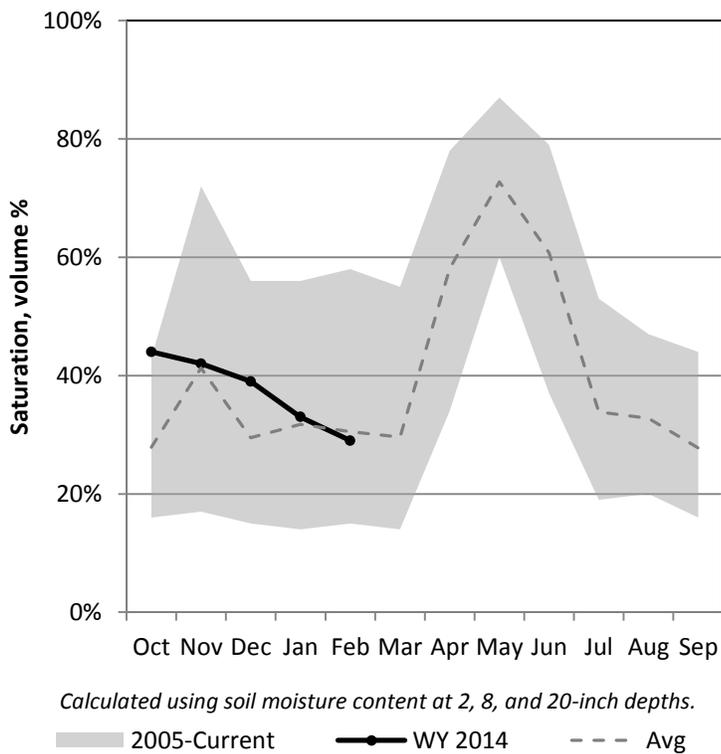
2/1/2014

Precipitation in January was much below average at 64%, which brings the seasonal accumulation (Oct-Jan) to 86% of average. Soil moisture is at 29% compared to 18% last year.

Precipitation



Soil Moisture

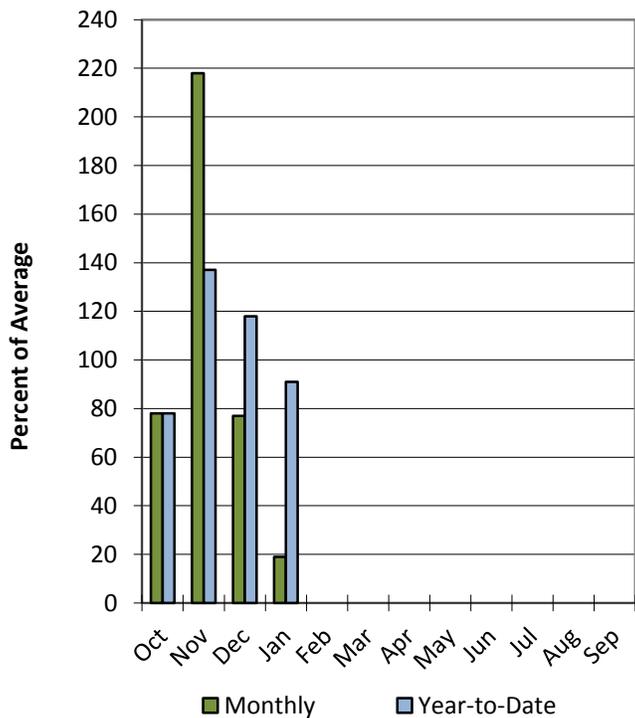


Escalante River Basin

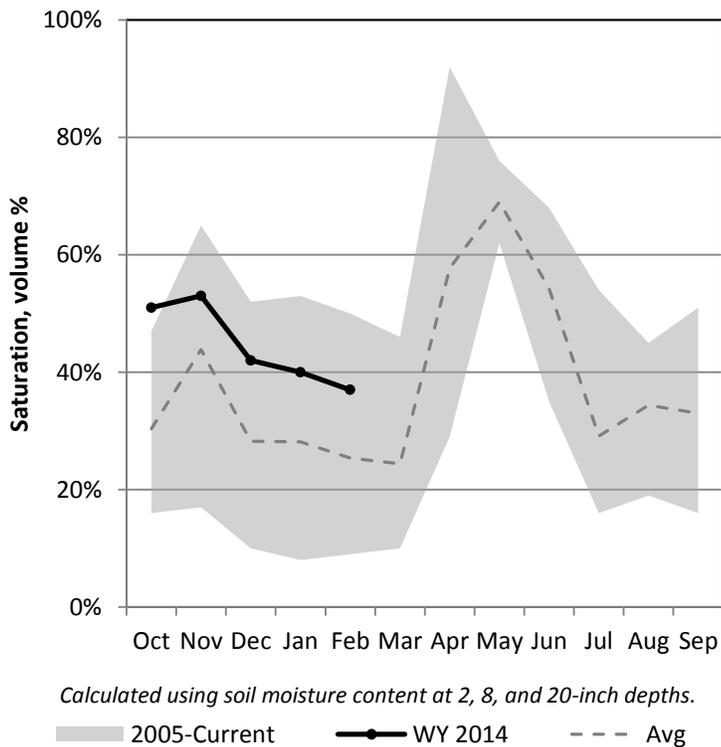
2/1/2014

Precipitation in January was much below average at 19%, which brings the seasonal accumulation (Oct-Jan) to 91% of average. Soil moisture is at 37% compared to 20% last year.

Precipitation



Soil Moisture

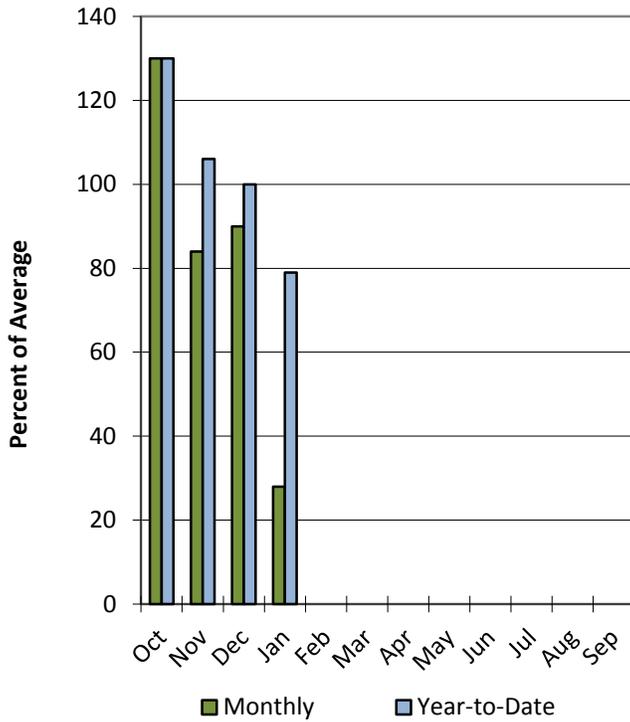


Beaver River Basin

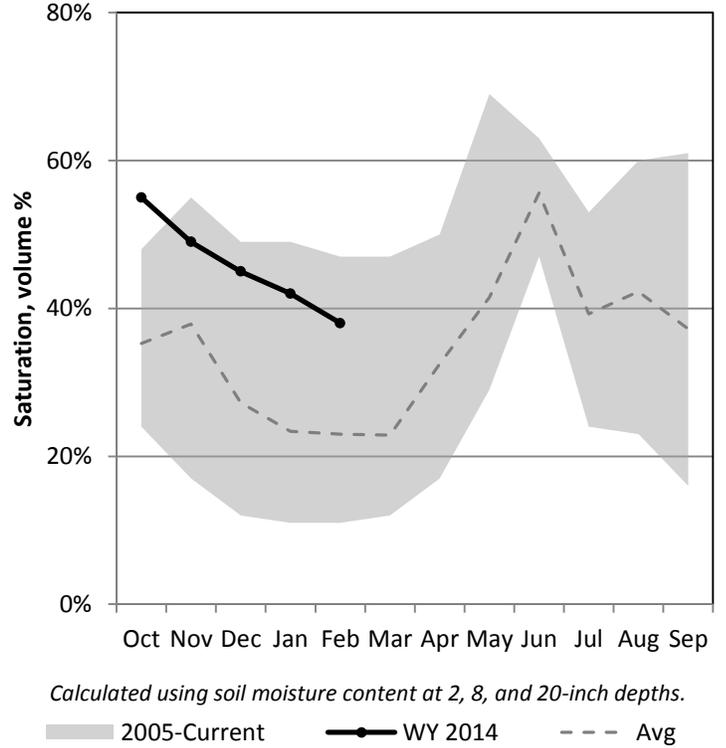
2/1/2014

Precipitation in January was much below average at 28%, which brings the seasonal accumulation (Oct-Jan) to 79% of average. Soil moisture is at 38% compared to 35% last year. Reservoir storage is at 46% of capacity, compared to 45% last year. The water availability index for the Beaver River is 46%.

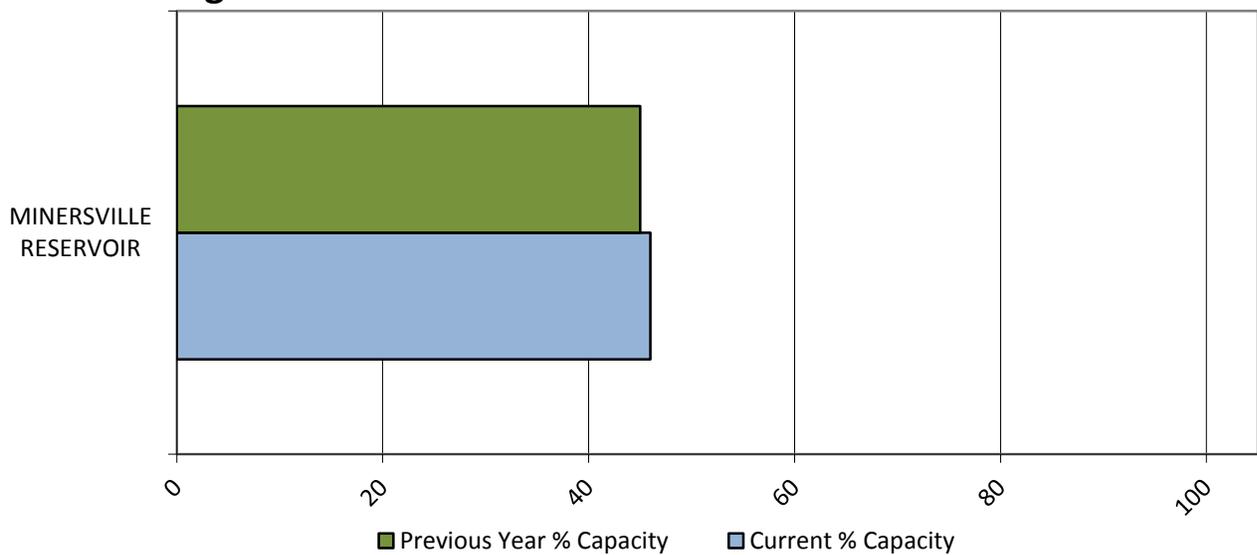
Precipitation



Soil Moisture



Reservoir Storage

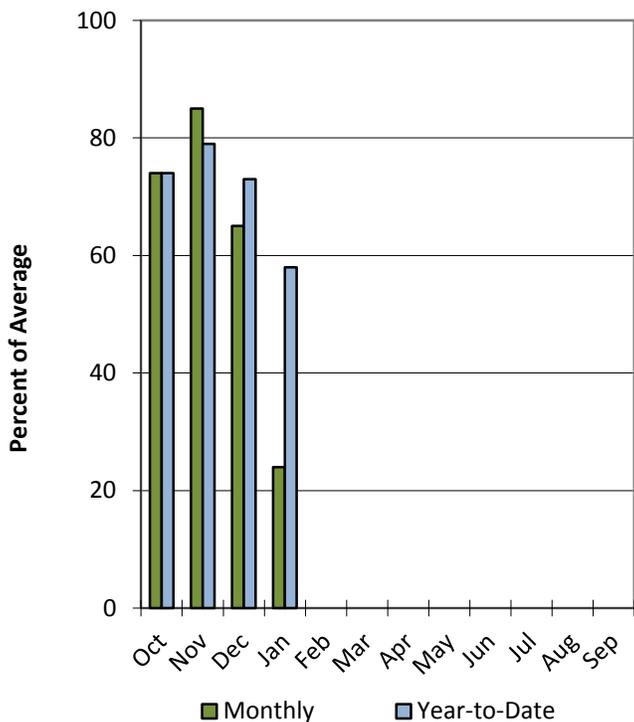


Southwestern Utah Basin

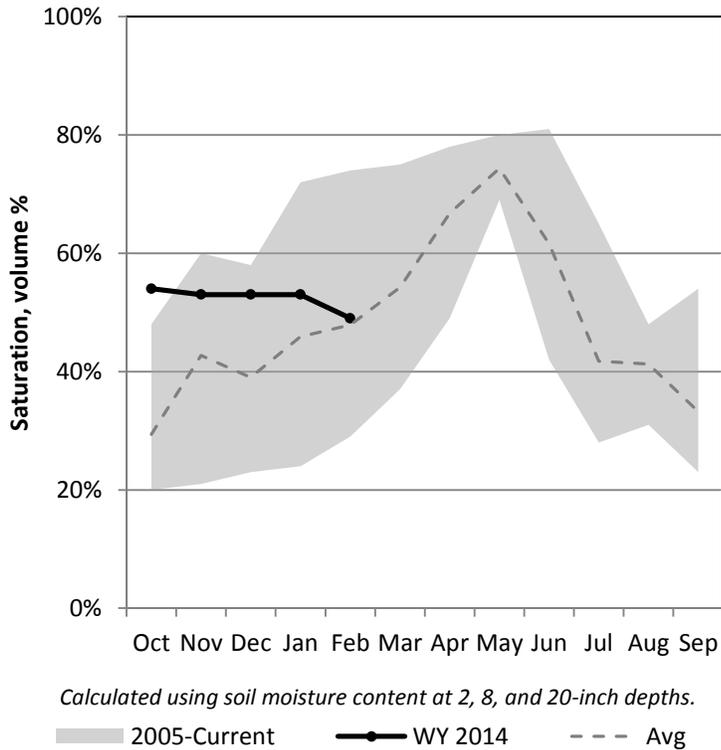
2/1/2014

Precipitation in January was much below average at 24%, which brings the seasonal accumulation (Oct-Jan) to 58% of average. Soil moisture is at 49% compared to 48% last year. Reservoir storage is at 40% of capacity, compared to 50% last year. The water availability index for the Virgin River is 56%.

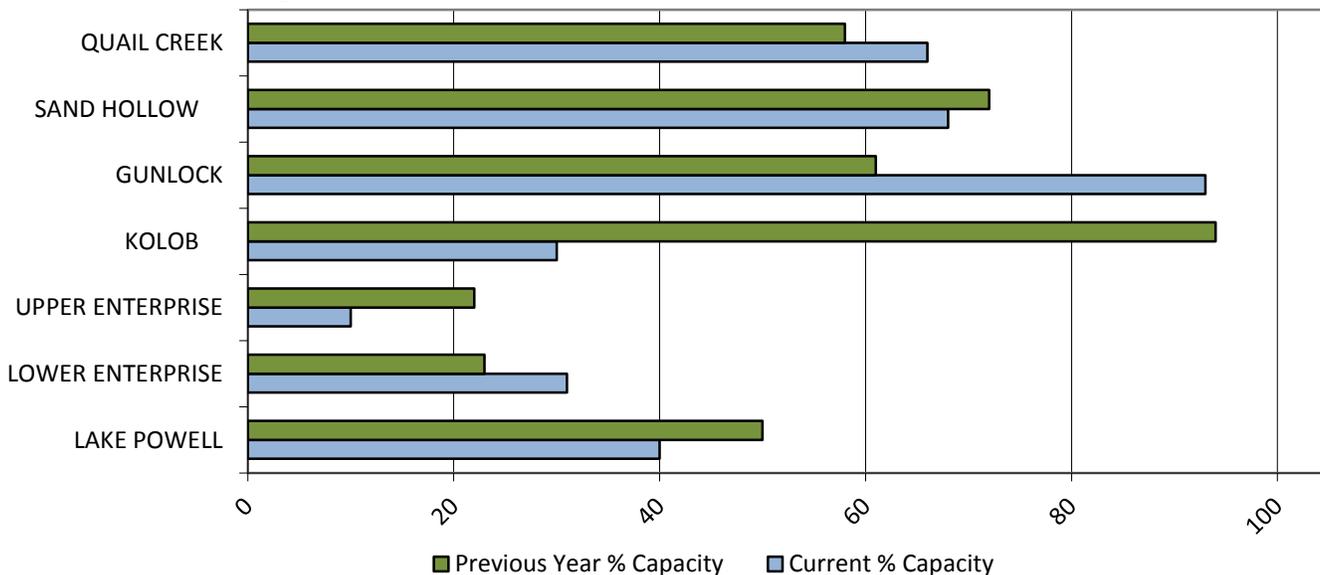
Precipitation



Soil Moisture



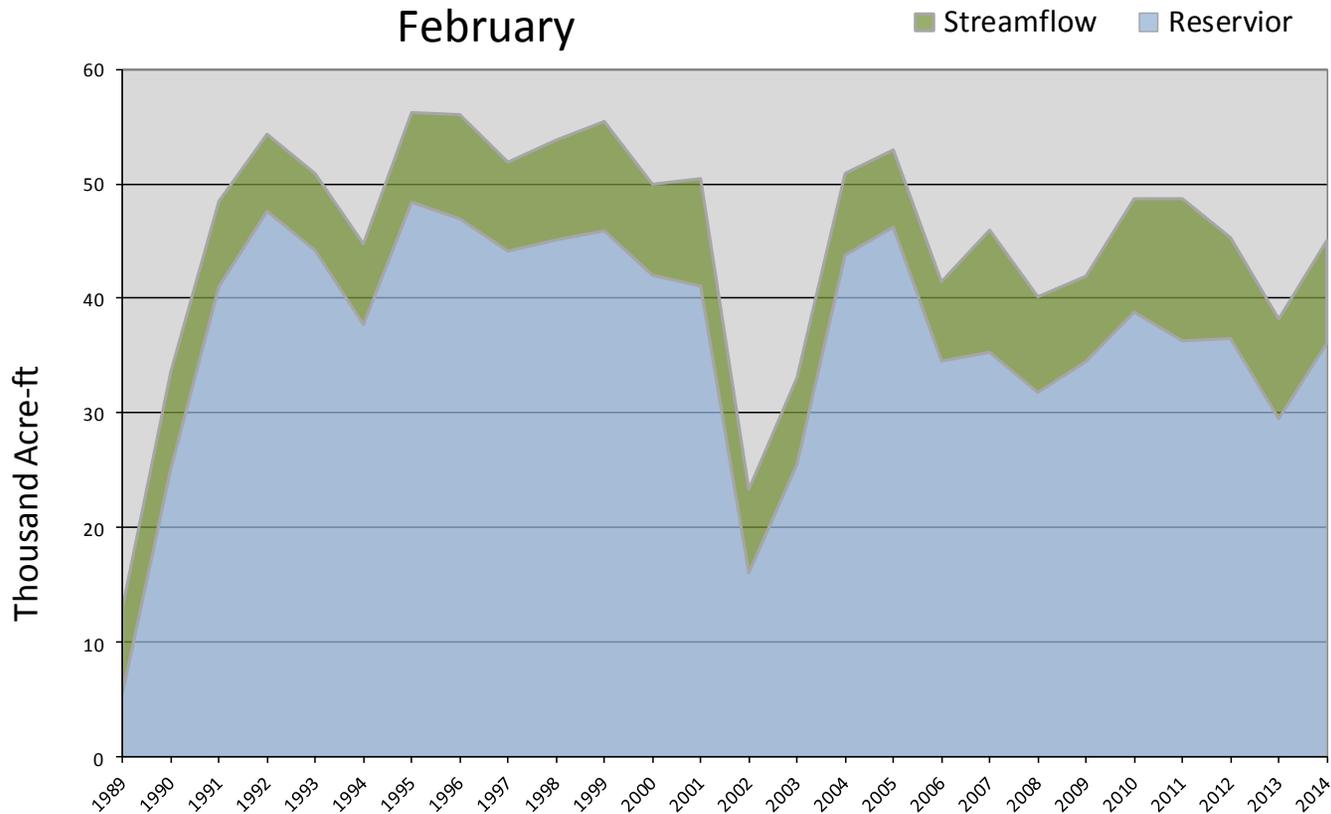
Reservoir Storage



February 1, 2014	Water Availability Index					
Basin or Region	January EOM* Reservoir	January accumulated flow Virgin and Santa Clara Rivers (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Southwest	36.1	8.9	45.0	0.46	56	00, 12, 91, 01

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

Southwest - Water Availability Index
February



2/1/2014

Water Availability Index

Basin or Region	January EOM* Reservoirs	Observed January stream flow	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Bear River	536	4.0	540	-1.36	34	31, 40, 30, 56
Woodruff Narrows	14.4	2.9	17.3	-1.45	33	05, 95, 79, 81
Little Bear	9.7	1.7	11.4	-1.99	26	08, 10, 02, 13
Ogden River	39	2.0	41	-2.63	18	89, 91, 78, 92
Weber River	162	3.0	165	-3.80	4	04, 93, 91
Provo	265	3.0	268	-3.75	5	08, 04
West Uintah Basin	23	2.4	26	2.34	78	12, 06, 96, 87
Eastern Uintah	21.3	0.7	22	-3.24	11	90, 03, 91, 13
Blacks Fork	13.1	1.9	15	1.99	74	06, 07, 98, 12
Smiths Creek	6.8	0.5	7	3.57	93	12, 07
Price River	14.5	1.5	16.0	-2.54	20	04, 95, 08, 03
Joe's Valley	30.0	2.5	32.5	-2.31	22	92, 95, 04, 90
Moab	1.1	0.3	1.4	0.60	57	02, 91, 08, 93
Upper Sevier River	92	8.0	100	1.43	67	74,97,07,69
San Pitch	0.0	0.3	0.3	-3.94	13	13,93,03
Lower Sevier River	117	11.6	128	-0.45	45	94,72,79,93
Beaver	10.6	1.2	11.8	-0.77	46	08,13,98,77
Virgin River	36.1	8.9	45.0	0.46	56	00, 12, 91, 01

*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.

Issued by

Jason Weller
Chief
Natural Resources Conservation Service
U.S. Department of Agriculture

Released by

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

Prepared by

Snow Survey Staff
Randall Julander, Supervisor
Troy Brosten, Assistant Supervisor
Beau Uriona, Hydrologist
Amy Burke, Hydrologist
Jordan Clayton, Hydrologist
Bob Nault, Electronics Technician
Kent Sutcliffe, Soil Scientist



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

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



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

