

Utah Climate and Water Report

April, 2014



Dolomite Cliffs above Tony Grove Lake, Utah, March 13, 2013

Photo by Bob Nault, NRCS

Utah Climate and Water Report

The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from the United States Geological Survey, reservoir data from the Bureau of Reclamation, and other sources), geography including high elevation United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Snowpack Telemetry (SNOTEL) data, and agriculturally important data from the USDA-NRCS Soil Climate Analysis Network (SCAN). Data on precipitation, soil moisture, soil temperature, reservoir storage, and streamflow are analyzed and presented. These data analyses can be used to increase irrigation efficiency and agricultural production. As with all data and analyses, there are limitations due to data quality, quantity, and spatial application.

Report Content

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- c) Uintah Basin
- d) Southeast
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- f) Western and Dixie

2) General Hydrological Conditions

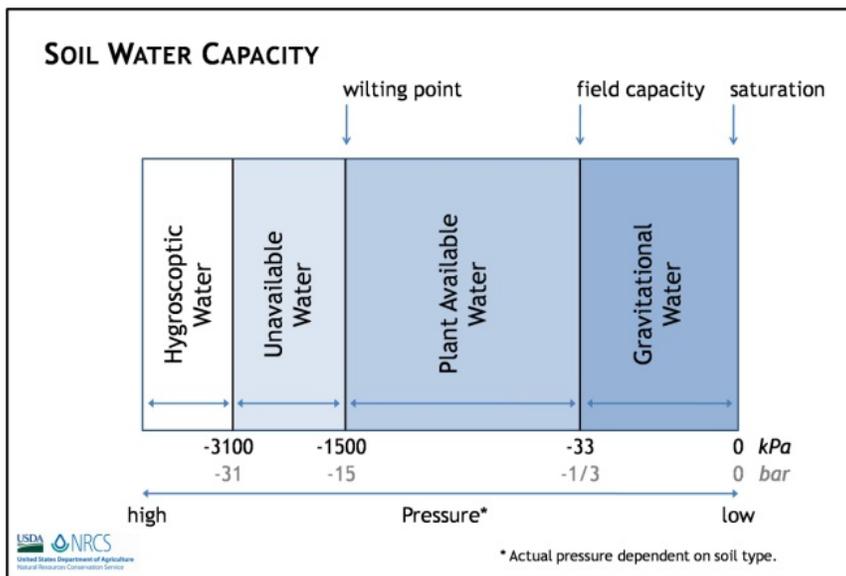
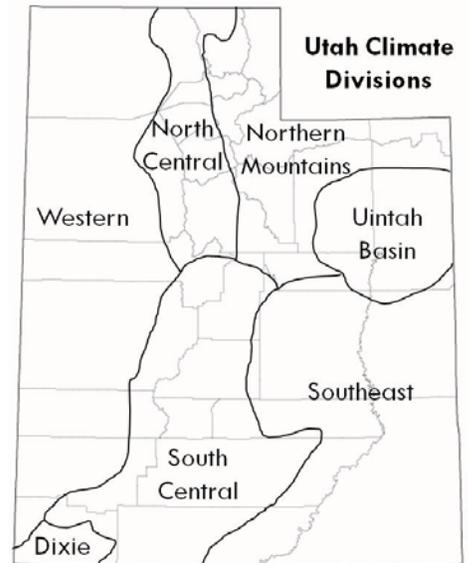
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Climate and Water Information

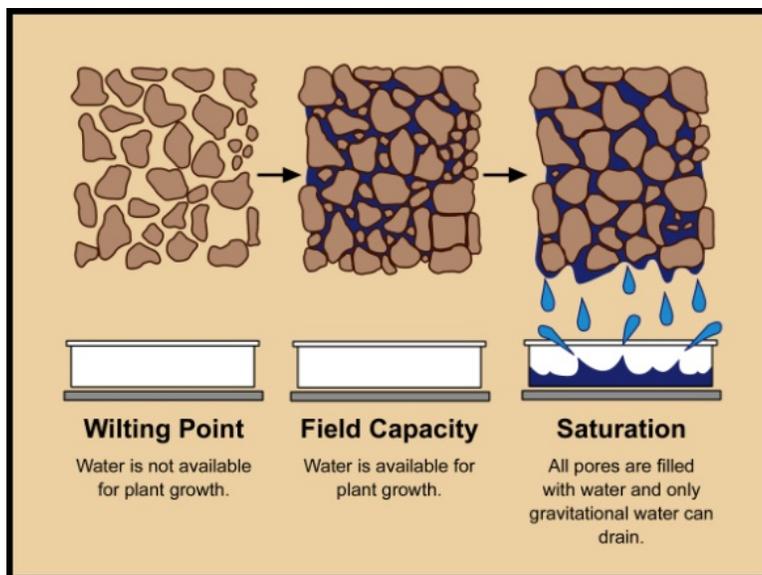
Soil Climate Analysis Network

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.

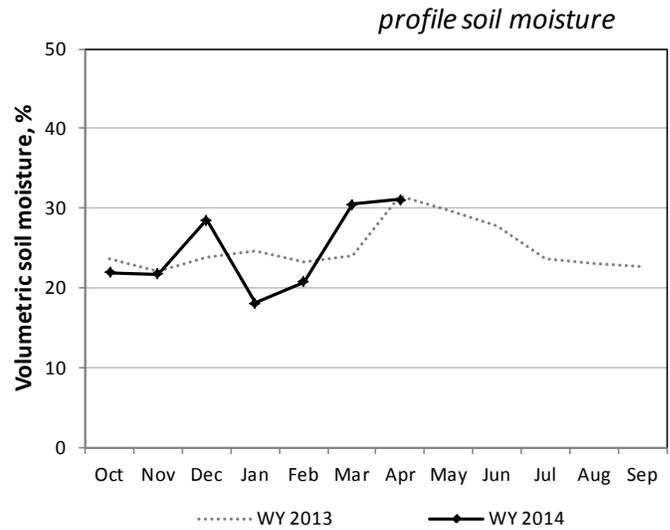
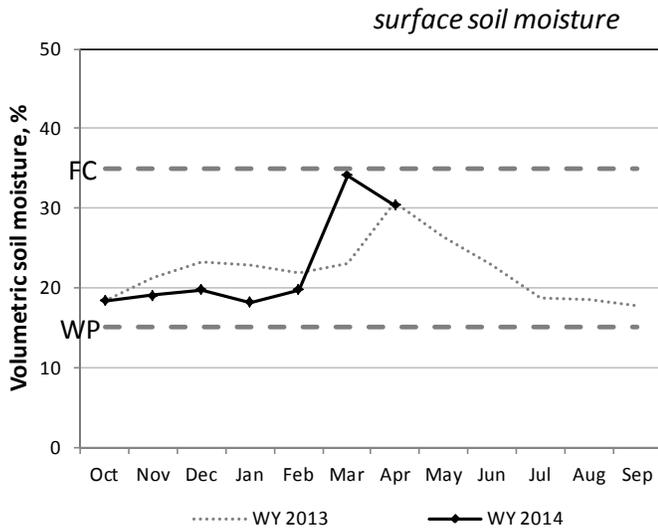
North Central

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>				
NORTH CENTRAL												
Blue Creek	6.4	1.8	32	32	38	34	18	39	41	41	41	42
Cache Junction	7.9	2.7	38	35	42	36	35	43	44	42	42	42
Grantsville	5.2	1.1	9	15	23	38		45	47	47	47	48

* 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.

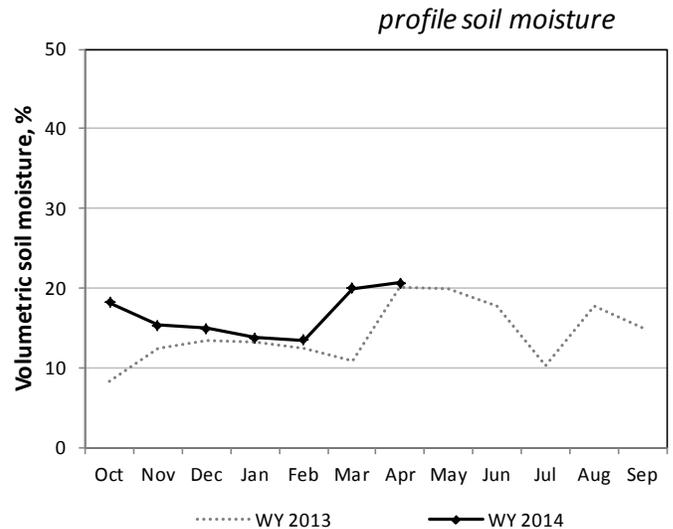
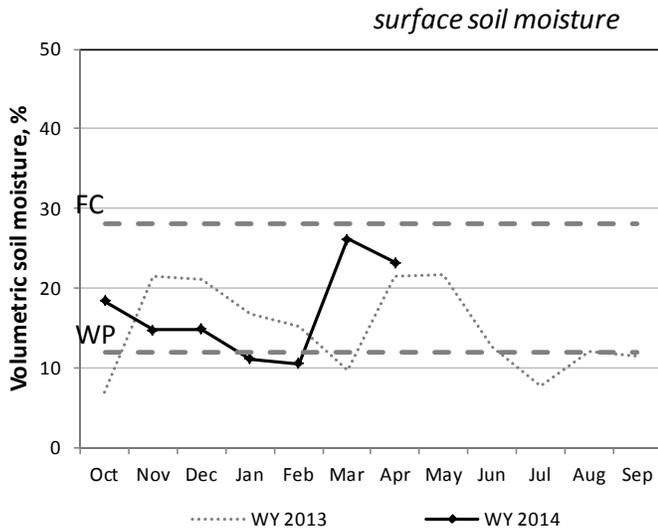
Northern Mountains

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	2.9	0.9	21	23	28	23	12	33	33	33	34	36
Buffalo Jump	3.8	1.1	16	19	18	16	-	37	38	38	38	-
Morgan	8.8	1.7	27	25	28	32	20	42	42	43	41	41

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Northern Mountains



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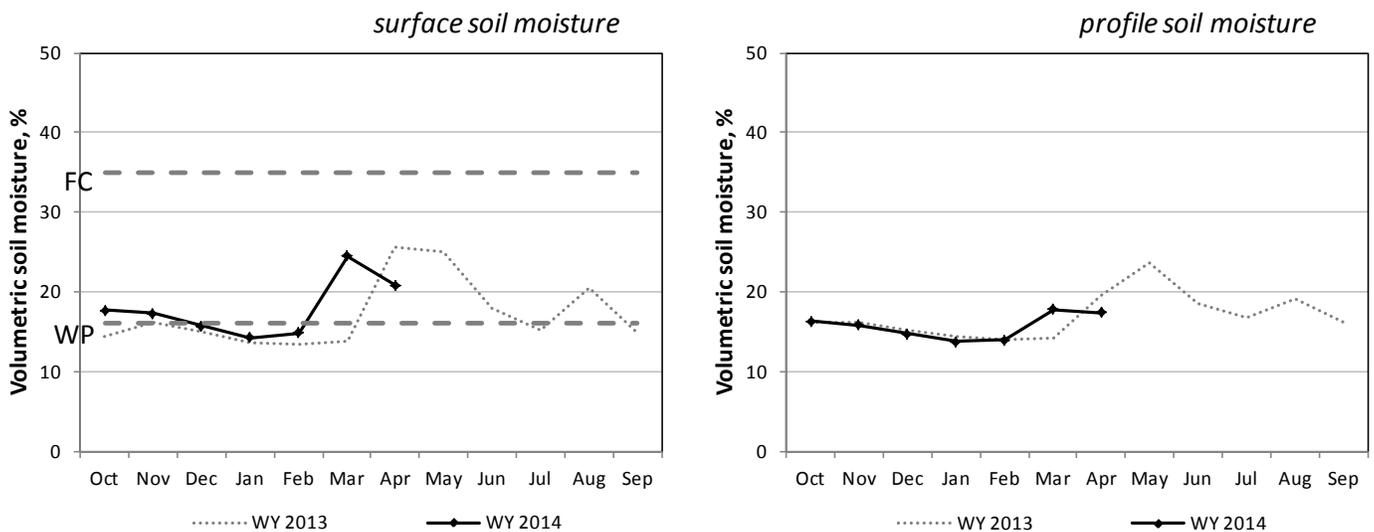
Uintah Basin

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	2.3	0.3	23	32	35	22	10	39	40	40	41	42
Little Red Fox	1.5	0.2	3	16	19	20	17	44	46	46	45	44
Split Mountain	3.8	1.1	11	22	18	16	11	44	46	45	44	43

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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.

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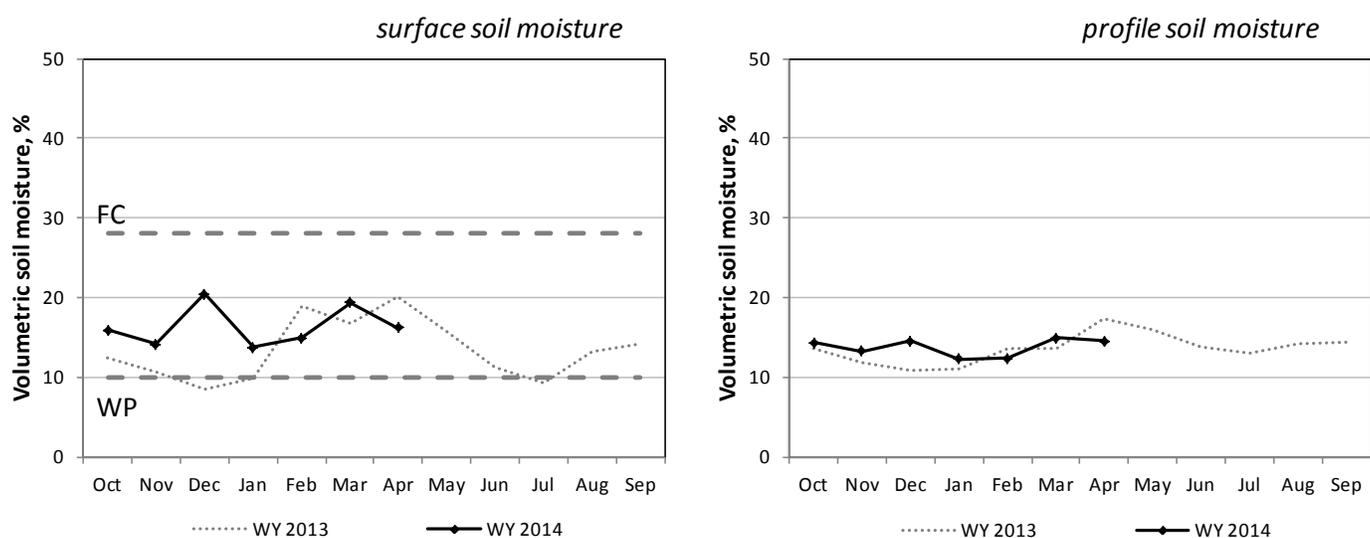
Southeast

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>° F</i>				
SOUTHEAST												
Price	3.2	0.4	4	16	21	14	16	38	43	45	46	46
Green River	2.0	0.2	7	10	9	5	7	49	49	50	49	49
Harm's Way	4.1	0.2	13	1	21	17	7	47	45	47	44	44
West Summit	4.1	0.6	20	26	27	25	16	41	42	44	41	41
Eastland	4.4	0.8	20	20	25	32	32	43	44	44	43	43
Alkali Mesa	3.8	0.4	10	12	17	18	13	44	44	47	45	44
McCracken Mesa	3.8	0.6	10	23	23	16	13	52	54	53	50	50

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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.

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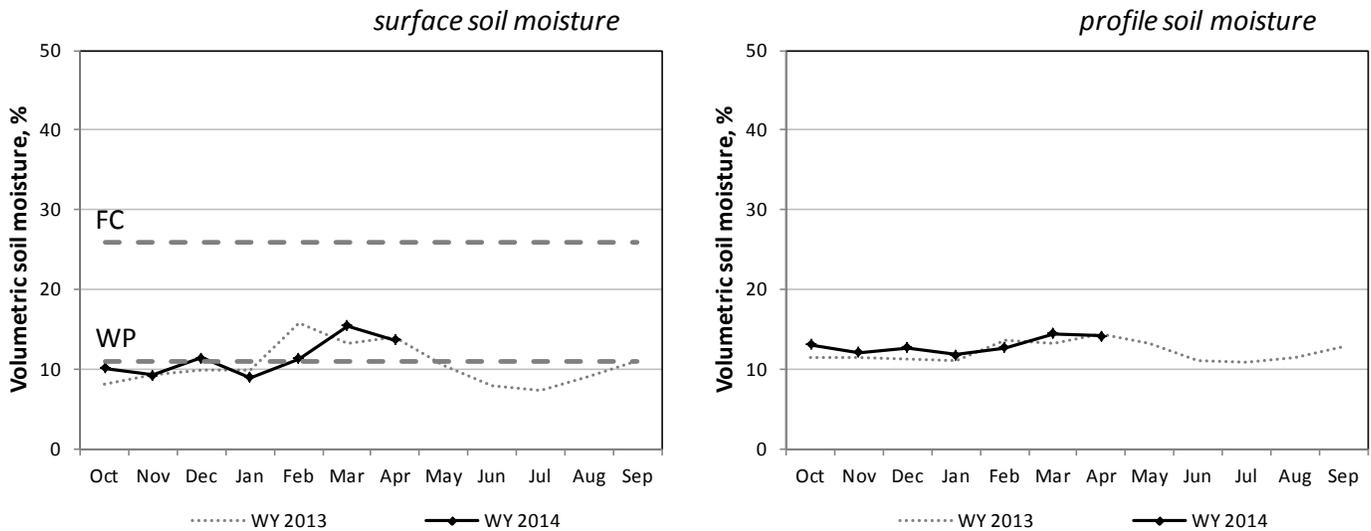
South Central

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
	in.		in.	2"	4"	8"	20"	40"	2"	4"	8"	20"
SOUTH CENTRAL												
Nephi	5.2	1.4	17	21	21	12	0	43	43	44	44	44
Ephraim	5.2	0.8	13	17	26	25	33	40	41	42	40	42
Holden	3.6	1.0	6	9	3	14	12	45	46	46	45	47
Milford	2.0	0.7	17	22	15	26	16	47	48	47	47	47
Manderfield	3.4	1.0	13	15	11	10	5	39	40	41	43	43
Circleville	2.2	0.6	25	24	15	9	15	40	41	42	44	44
Panguitch	2.7	0.7	19	33	23	20	30	37	37	37	38	40
Cave Valley	5.7	0.6	4	7	7	5	7	45	46	47	45	44
Vermillion	5.8	0.4	0	7	7	13	7	43	44	44	43	43
Spooky	3.8	0.5	5	6	6	24	3	53	52	52	51	51

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South Central



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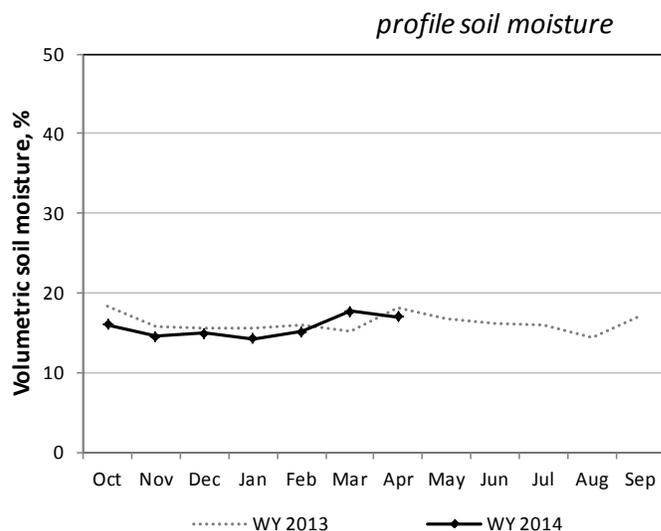
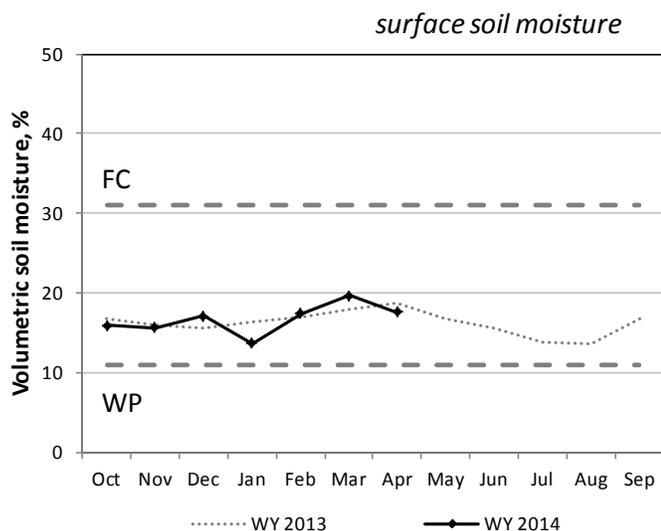
Western and Dixie

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	5.7	1.4	14	23	24	28	19	37	39	41	41	42
Park Valley	4.2	0.7	9	13	18	25	23	42	43	44	44	44
Goshute	3.8	0.5	16	1	39	35	23	37	39	43	43	44
Dugway	3.9	0.5	18	26	36		15	41	43	45	46	46
Tule Valley	2.9	0.6	19	14	21	19	10	45	48	50	50	51
Hal's Canyon	2.4	0.4	6	9	13	12	8	41	44	48	47	47
Enterprise	2.4	0.6	12	26	22	14	15	45	47	48	47	48
DIXIE												
Sand Hollow	2.4	0.4	4	5	1	2	0	59	60	60	57	57

* 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, solar radiation, soil temperature, and soil moisture.

Utah Hydrologic Summary

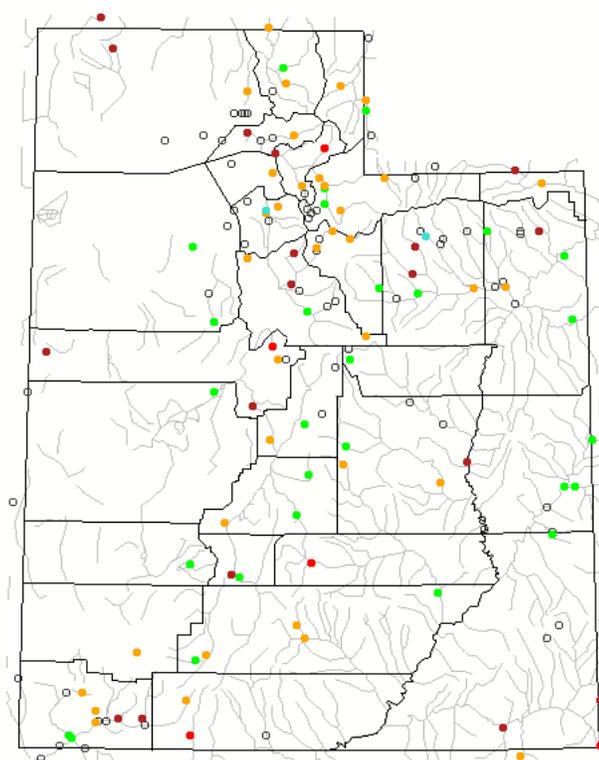
April 1, 2014

Current Conditions

Northern Utah snowpacks have continued to increase slightly during March, while southern Utah remains below normal. March precipitation ranged from 34% in the southwest to 122% of average on the Bear. This brings the year to date precipitation to below normal statewide at 84%. Soil moisture values are about normal in the north and, in general, slightly above normal in the south. In this case, the higher soil moisture values are the unfortunate result of an earlier than normal meltout. As of April 1, year-to-date snowpacks range from 120% on the Bear and 100% on the Weber to 46% over southwest Utah. Snowpacks for the remainder of the state, basically from the Provo to the Sevier, are in the 70% to 90% of normal range. Overall, general runoff conditions are near average in northern Utah and below to much below average in the south.

Current Utah Stream Flow - Courtesy US Geological Survey

Thursday, April 03, 2014 14:30ET



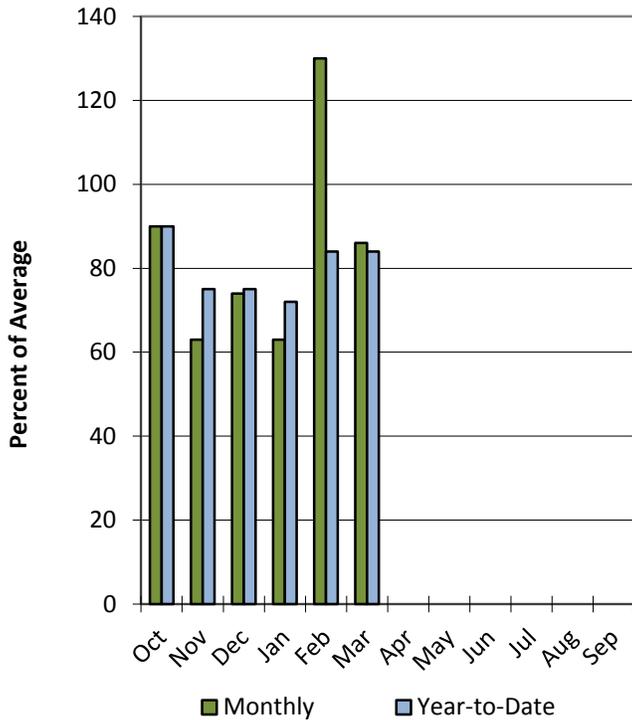
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Statewide Utah

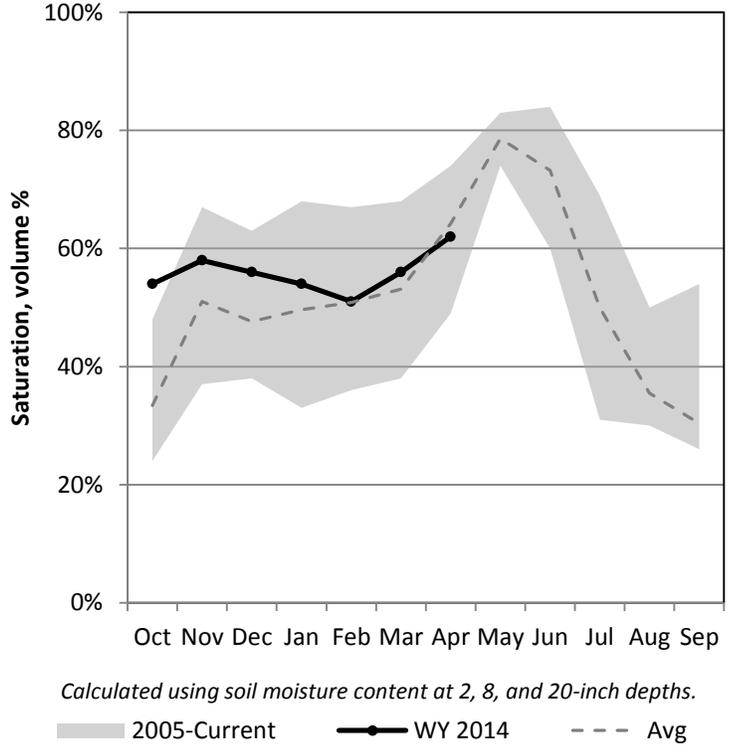
4/1/2014

Precipitation in March was below average at 86%, which brings the seasonal accumulation (Oct-Mar) to 84% of average. Soil moisture is at 62% compared to 64% last year. Reservoir storage is at 48% of capacity, compared to 56% last year.

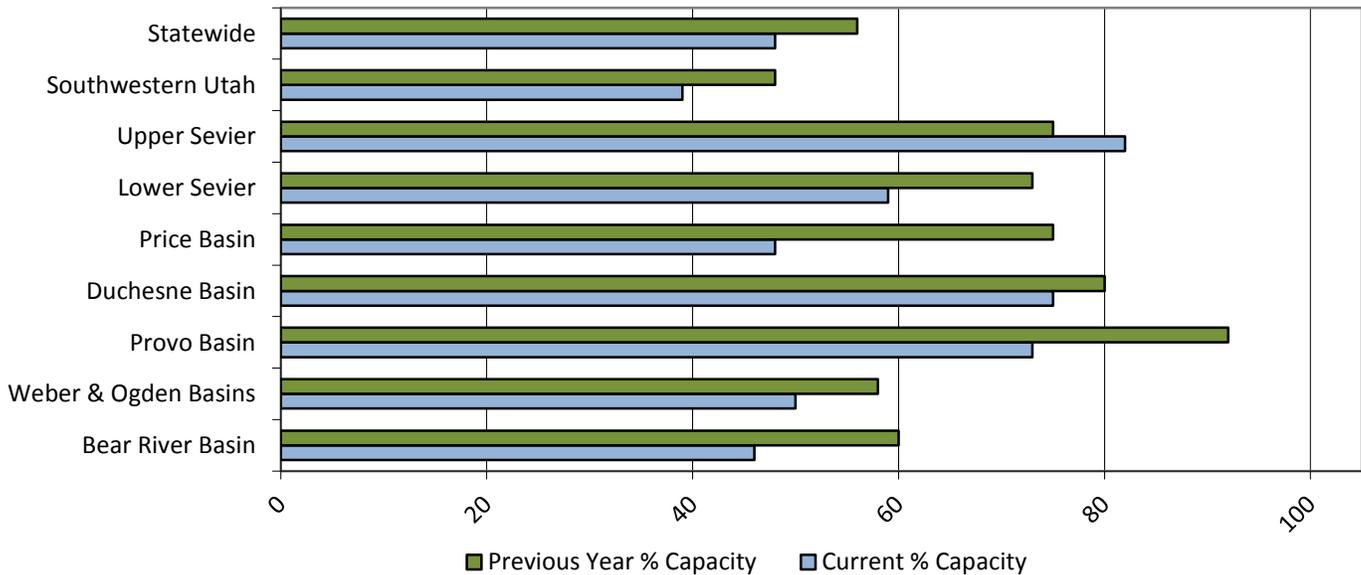
Precipitation



Soil Moisture



Reservoir Storage

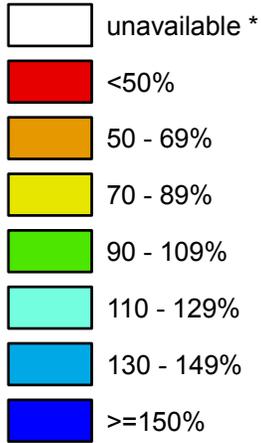


Utah

SNOTEL Current Snow Water Equivalent (SWE) % of Normal

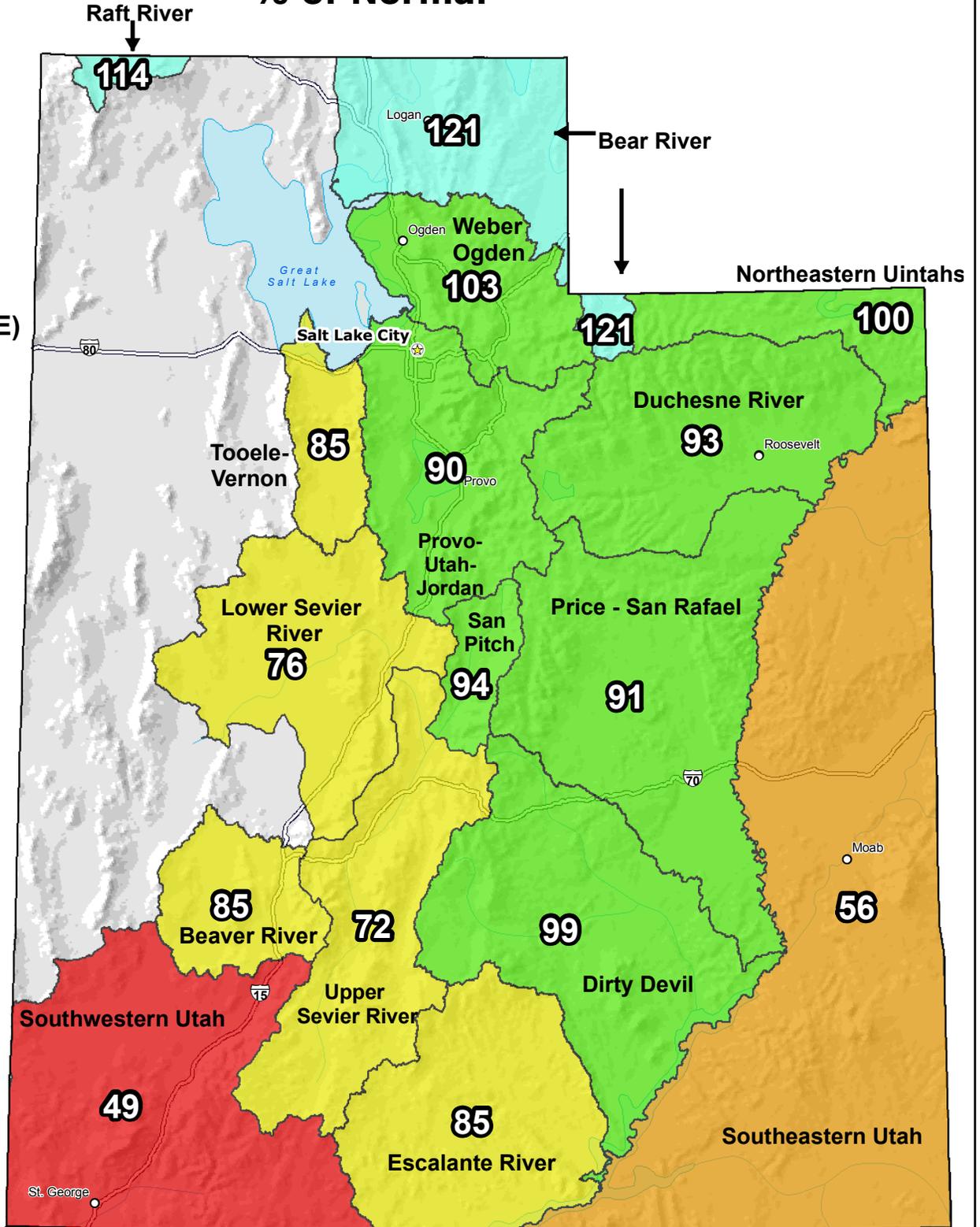
Apr 03, 2014

**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

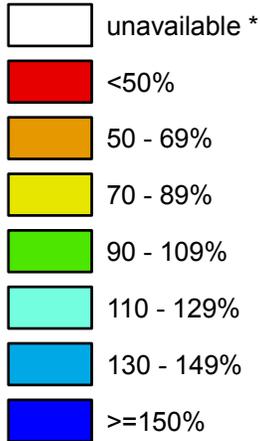
Utah

SNOTEL Water Year (Oct 1) to Date Precipitation

% of Normal

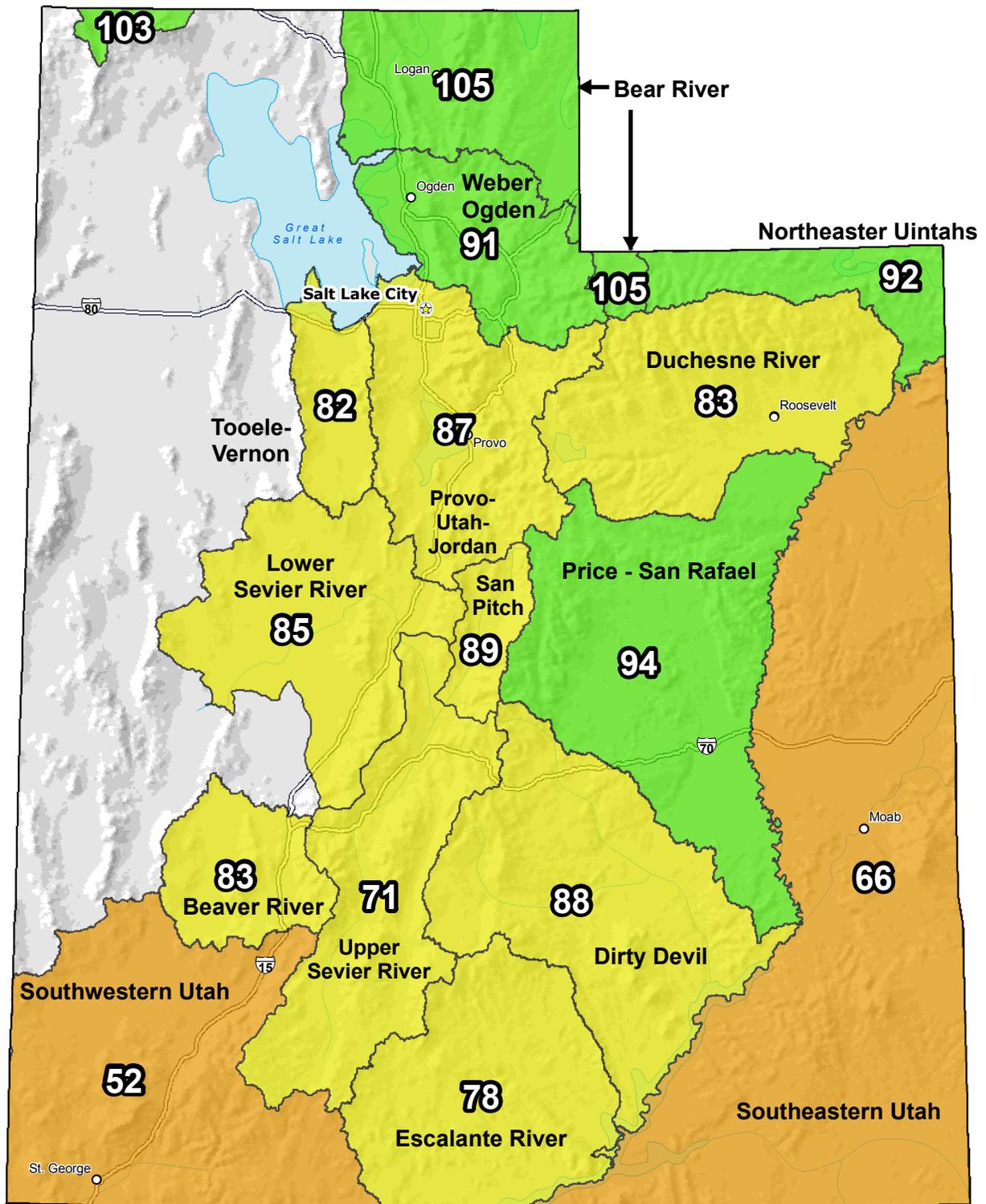
Apr 03, 2014

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).

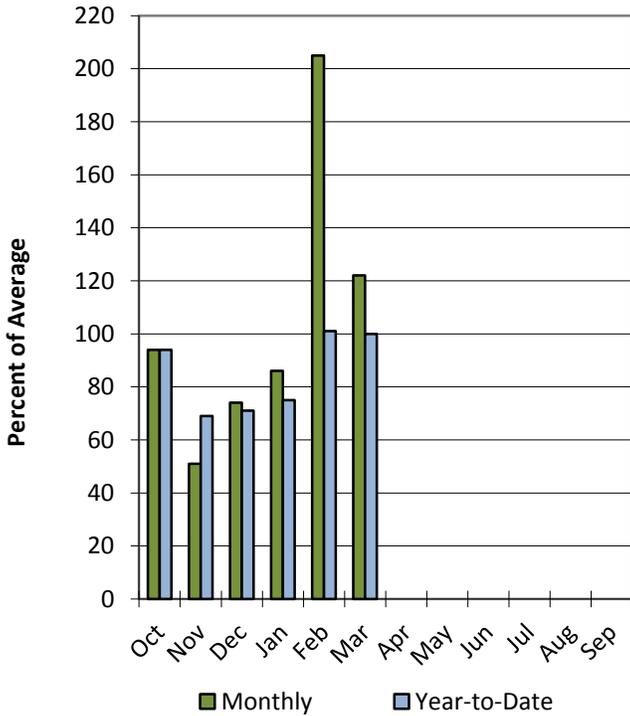
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Bear River Basin

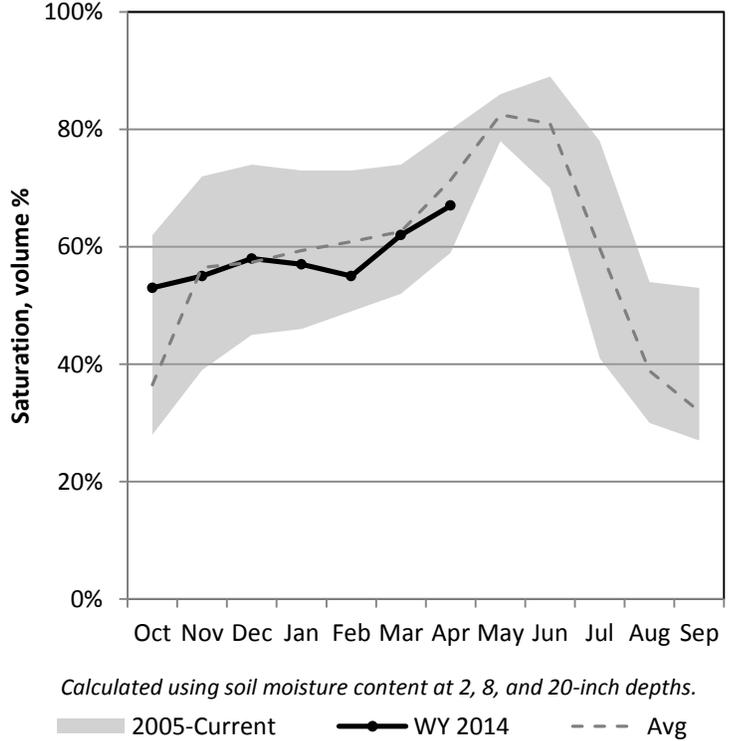
4/1/2014

Precipitation in March was above average at 122%, which brings the seasonal accumulation (Oct-Mar) to 100% of average. Soil moisture is at 67% compared to 73% last year. Reservoir storage is at 46% of capacity, compared to 60% last year. The water availability index for the Bear River is 34%.

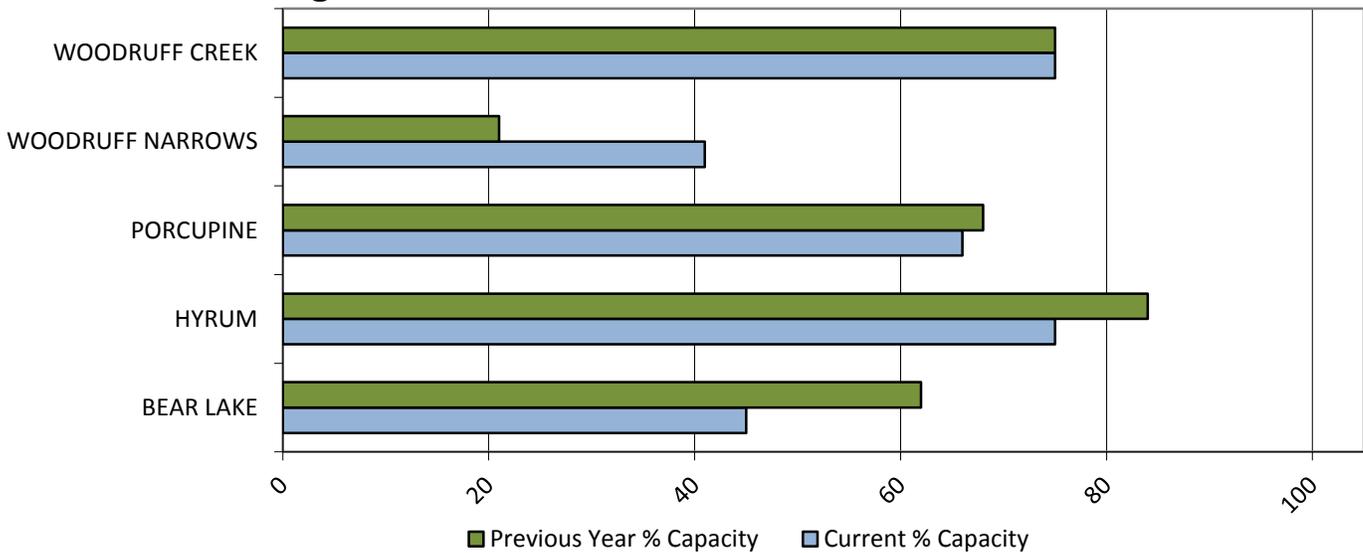
Precipitation



Soil Moisture

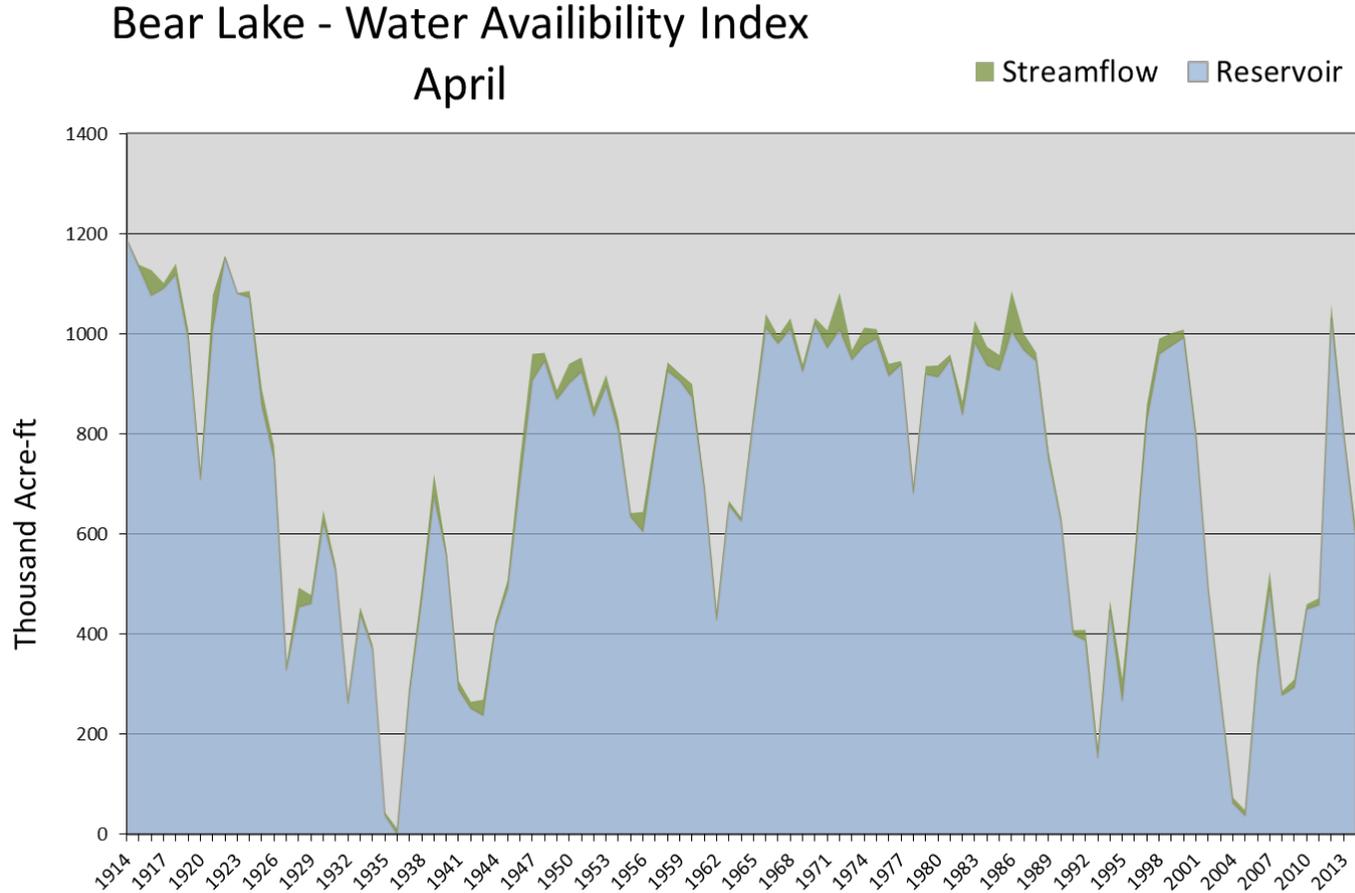


Reservoir Storage



April 1, 2014	Water Availability Index					
Basin or Region	March EOM* Bear Lake	March 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	590	19	609	-1.31	34	96, 40, 64, 90

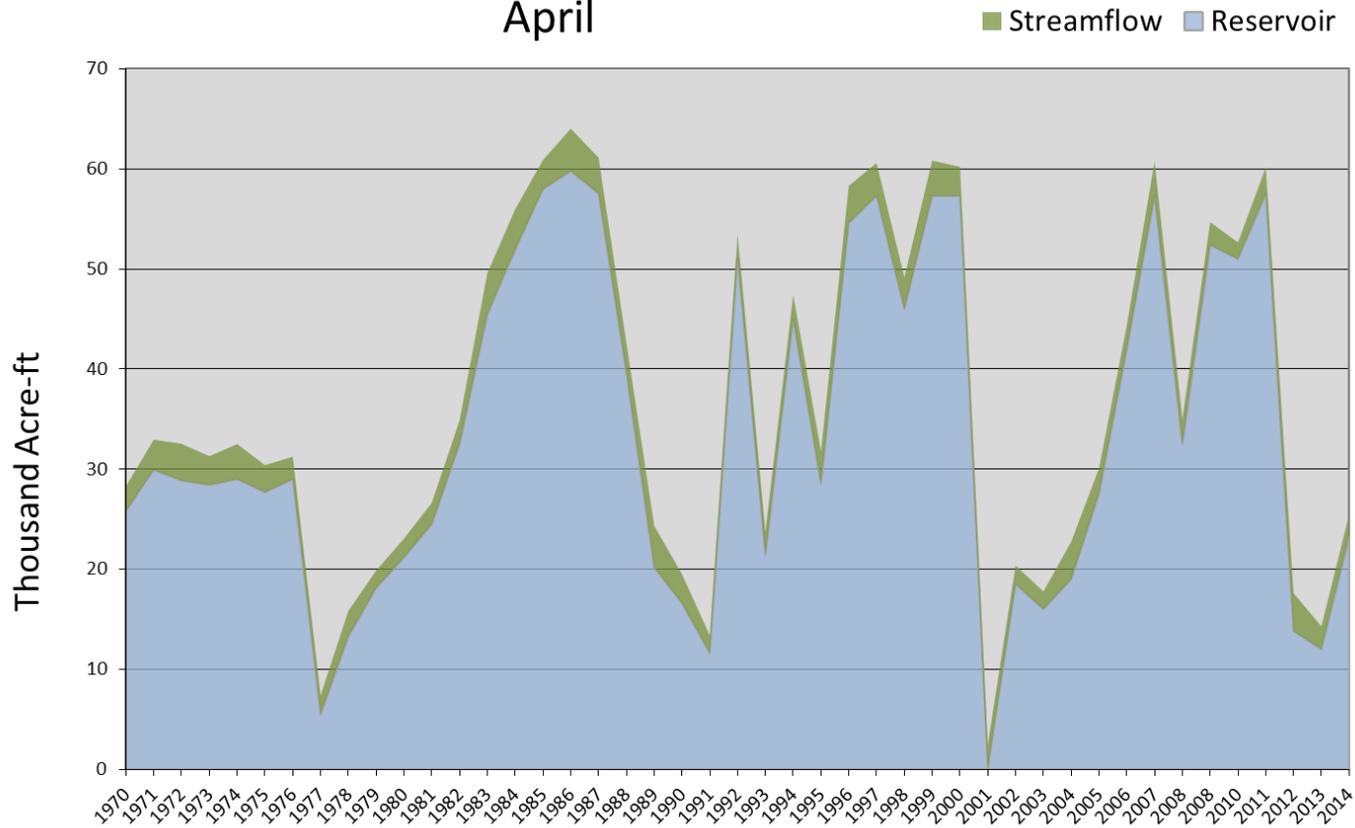
**EOM, end of month; # WAI, water availability index; ^KAF, thousand acre-feet.*



April 1, 2014		Water Availability Index				
Basin or Region	March EOM* Woodruff Narrows Reservoir	March Observed Streamflow Bear at Stateline	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Woodruff Narrows	23.2	2.2	25.5	-1.45	33	93, 89, 81, 70

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

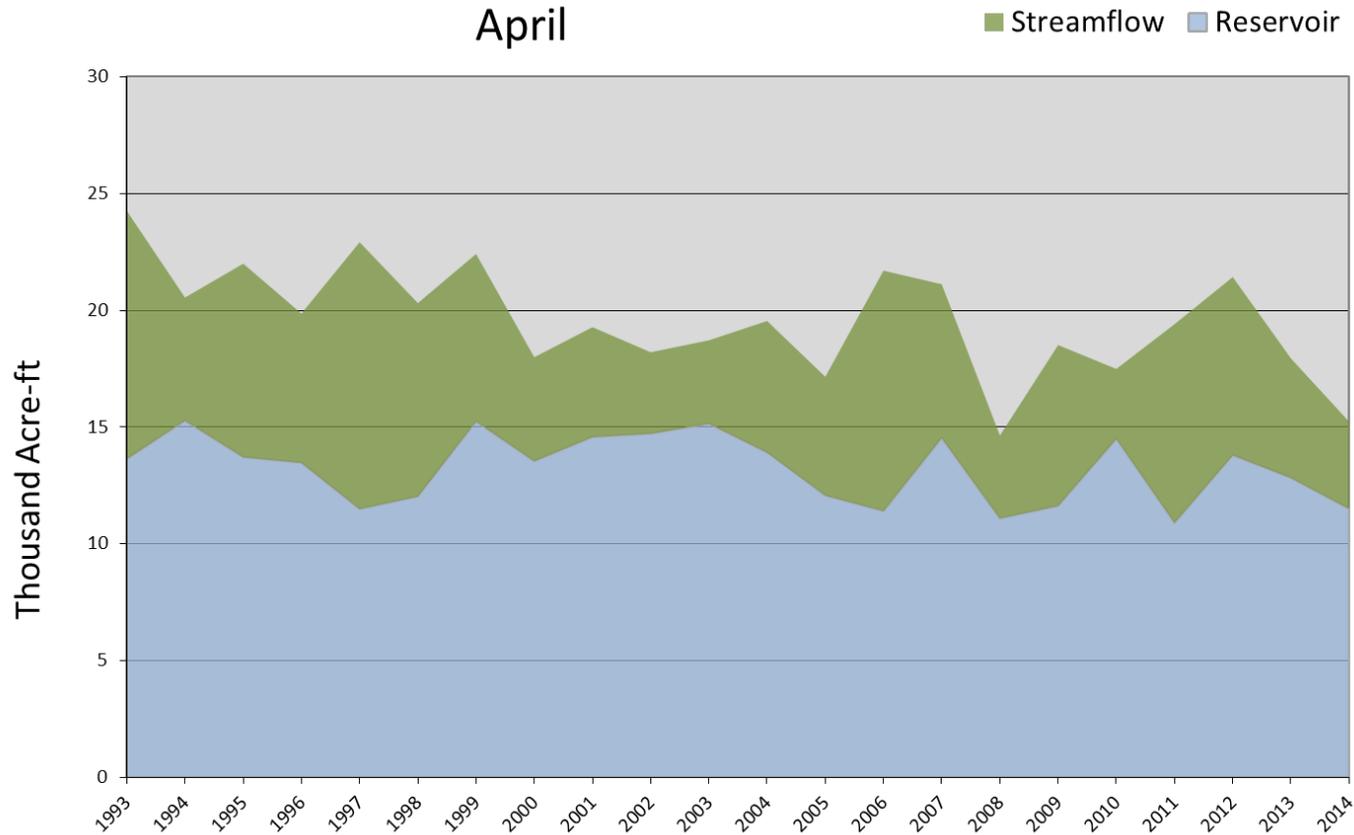
Woodruff Narrows - Water Availability Index
April



April 1, 2014	Water Availability Index					
Basin or Region	March EOM* Hyrum Reservoir	March 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	11.5	3.7	15.2	-3.44	9	08, 05, 10

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

Little Bear River - Water Availability Index
April

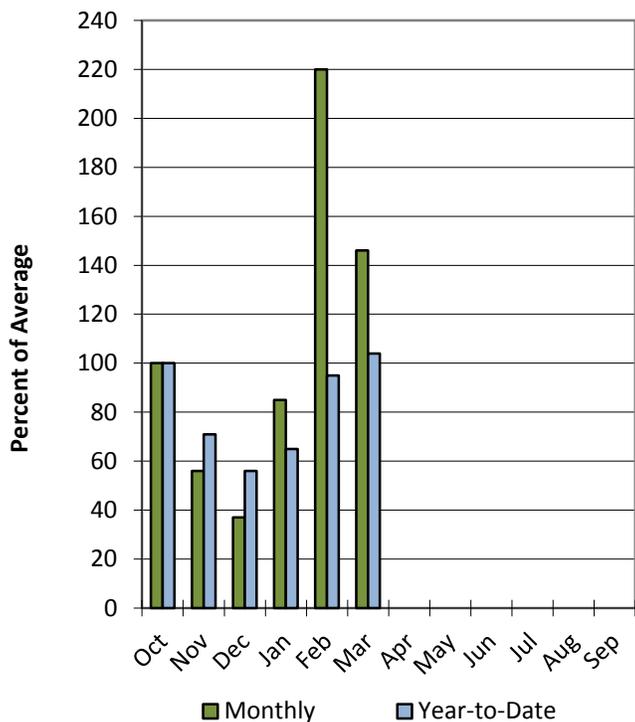


Raft River Basin

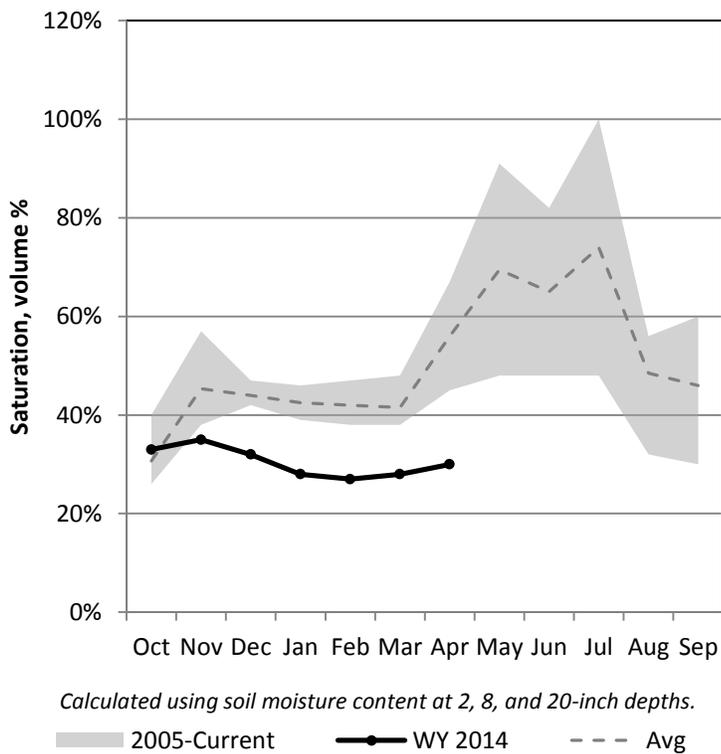
4/1/2014

Precipitation in March was much above average at 146%, which brings the seasonal accumulation (Oct-Mar) to 104% of average. Soil moisture is at 30% compared to 62% last year.

Precipitation



Soil Moisture

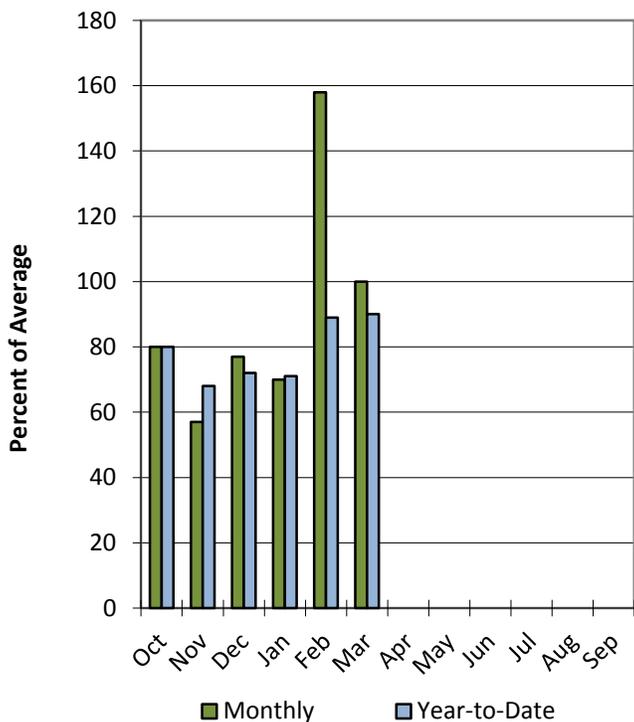


Weber & Ogden River Basins

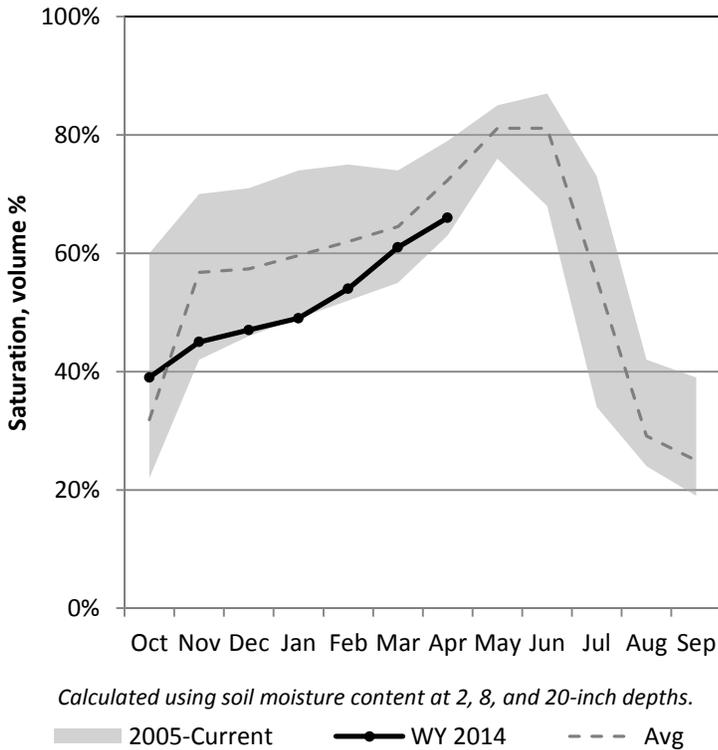
4/1/2014

Precipitation in March was near average at 100%, which brings the seasonal accumulation (Oct-Mar) to 90% of average. Soil moisture is at 66% compared to 72% last year. Reservoir storage is at 50% of capacity, compared to 58% last year. The water availability index for the Ogden River is 39% and 9% for the Weber River.

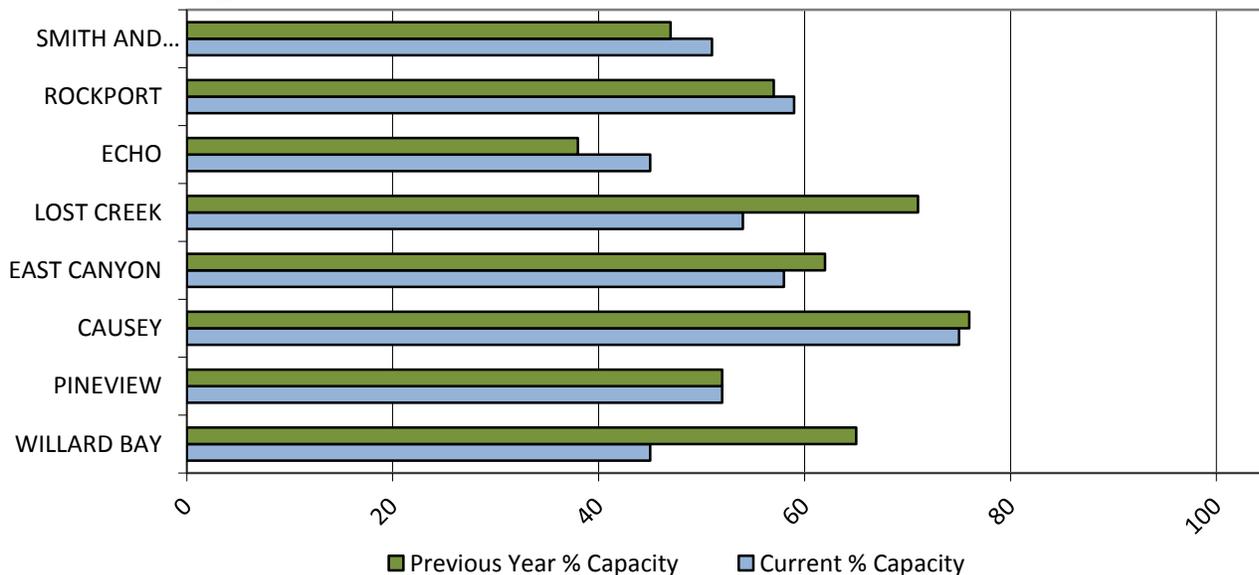
Precipitation



Soil Moisture



Reservoir Storage



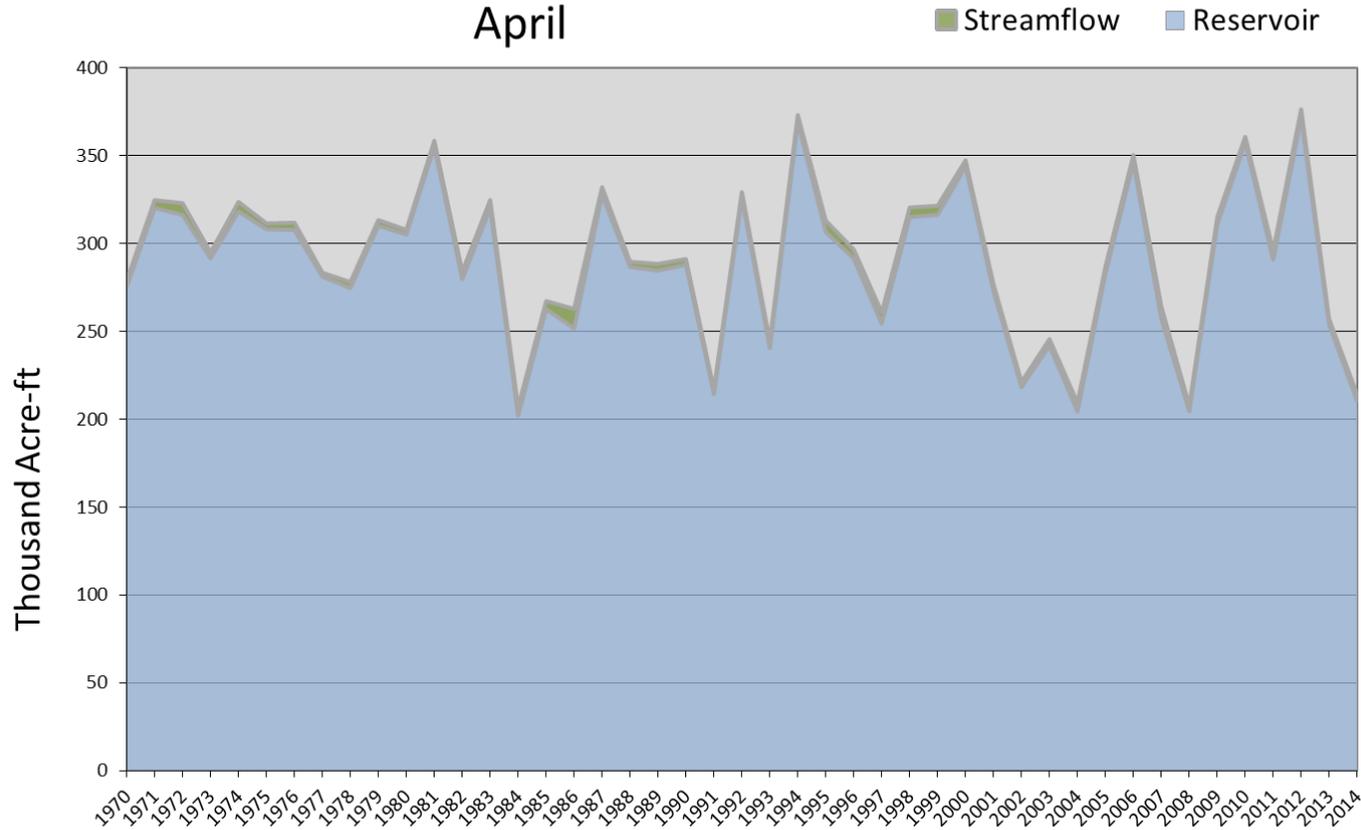
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Reservoirs	March accumulated flow at Weber near Oakley (observed)	Reservoirs + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Weber River	210	3.7	214	-3.43	9	08, 04, 91, 02

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

Weber River - Water Availability Index April



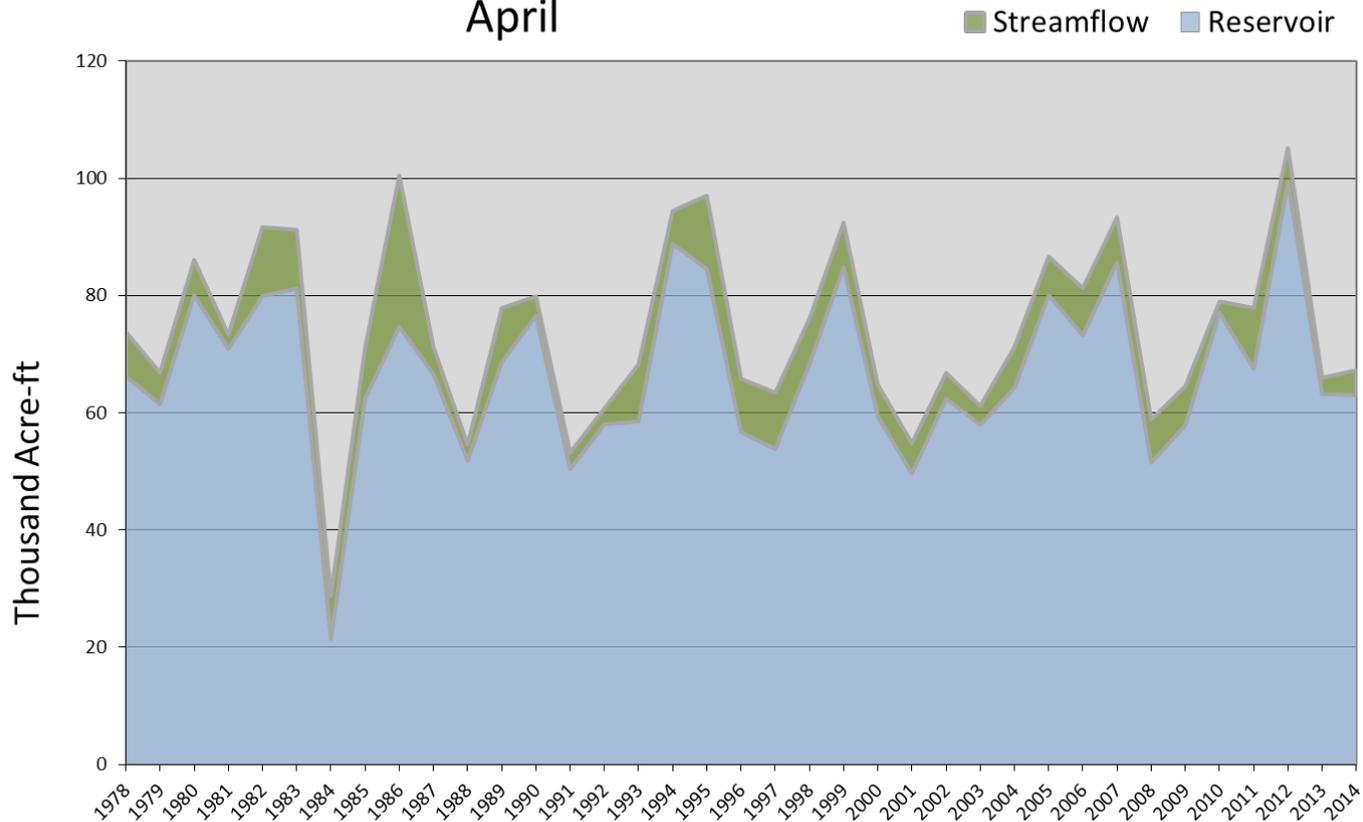
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Pine View & Causey	March accumulated flow at South Fork Ogden (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Ogden River	63.0	4.2	67.2	-0.88	39	02, 79, 93, 85

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

Ogden River - Water Availability Index April

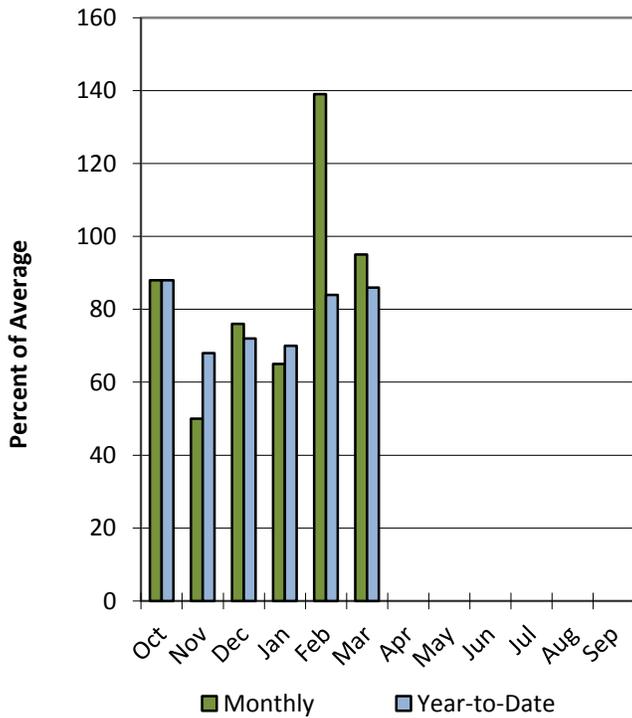


Provo & Jordan River Basins

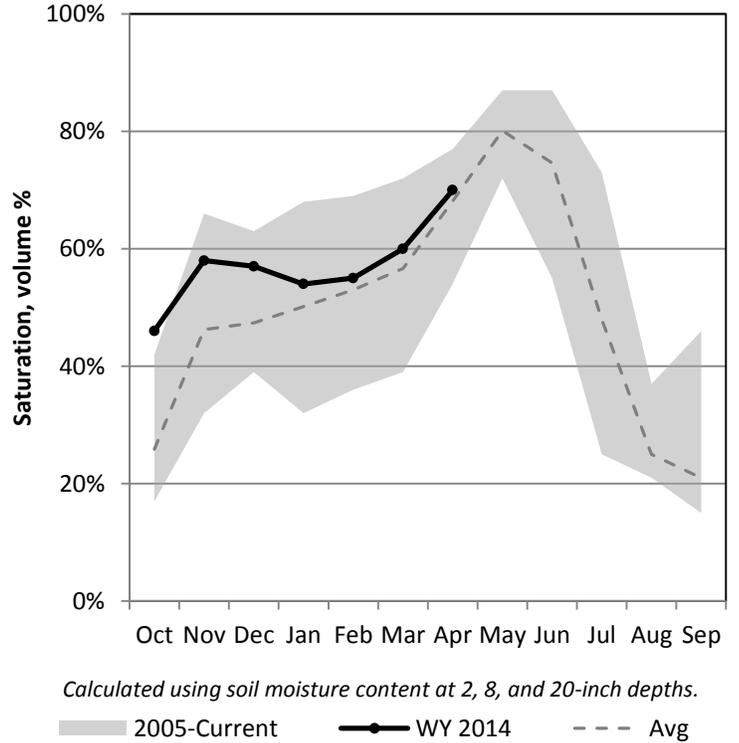
4/1/2014

Precipitation in March was near average at 95%, which brings the seasonal accumulation (Oct-Mar) to 86% of average. Soil moisture is at 70% compared to 73% last year. Reservoir storage is at 73% of capacity, compared to 80% last year. The water availability index for the Provo River is 5%.

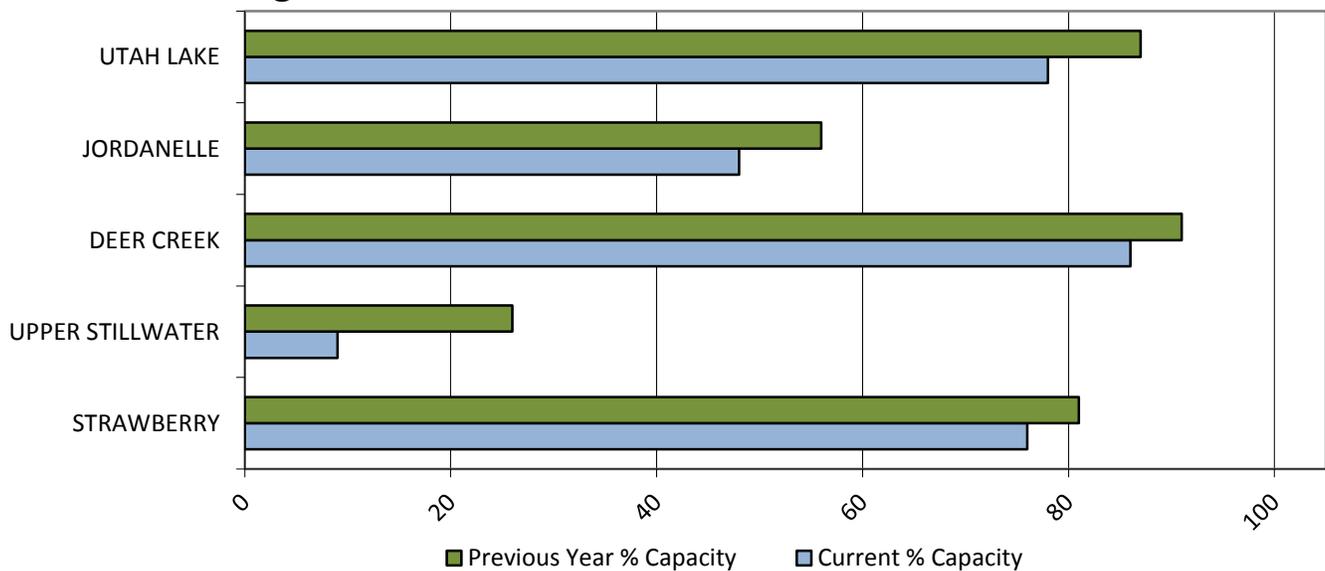
Precipitation



Soil Moisture



Reservoir Storage



April 1, 2014

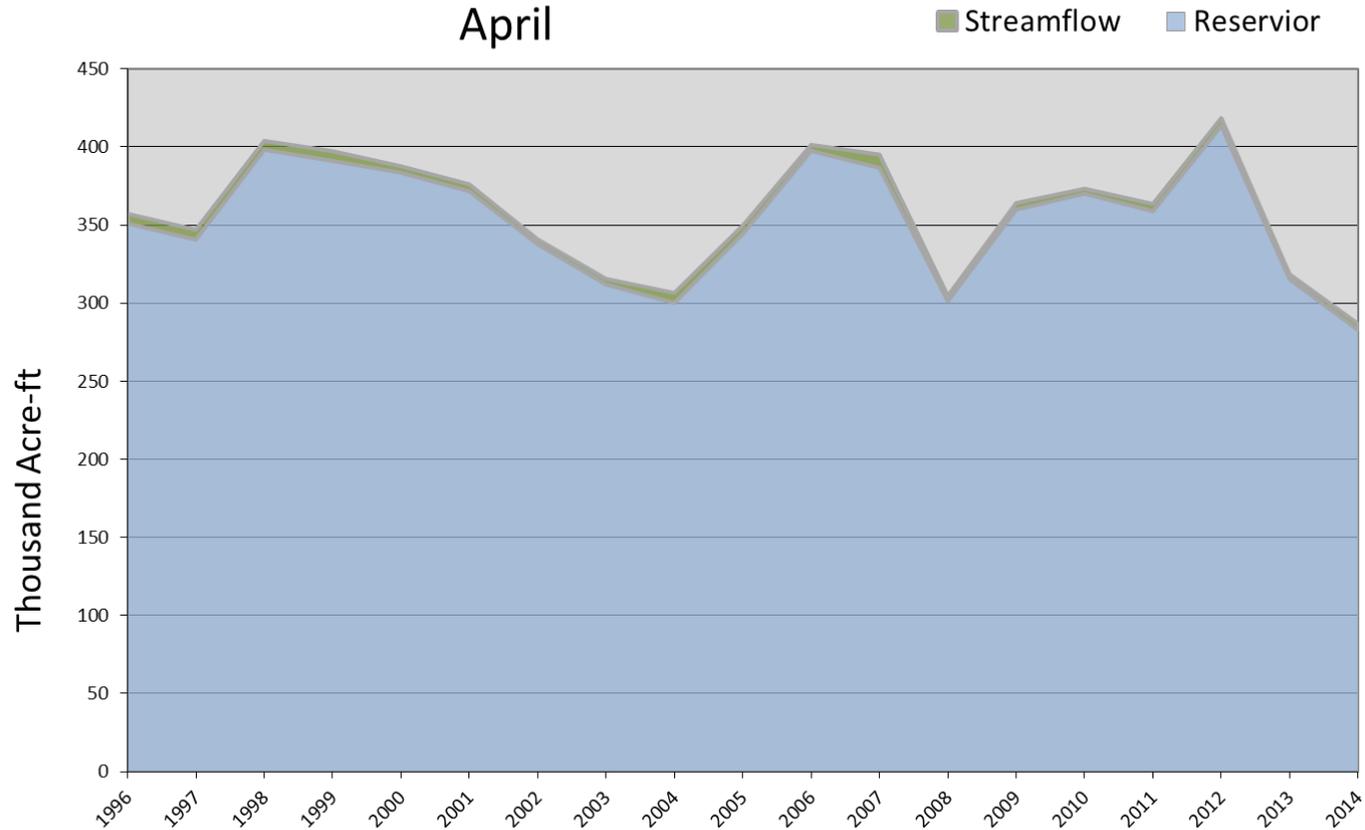
Water Availability Index

Basin or Region	March EOM* Deer Creek, Jordanelle	March 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	283	3.9	287	-3.75	5	08, 04

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

Provo River - Water Availability Index

April

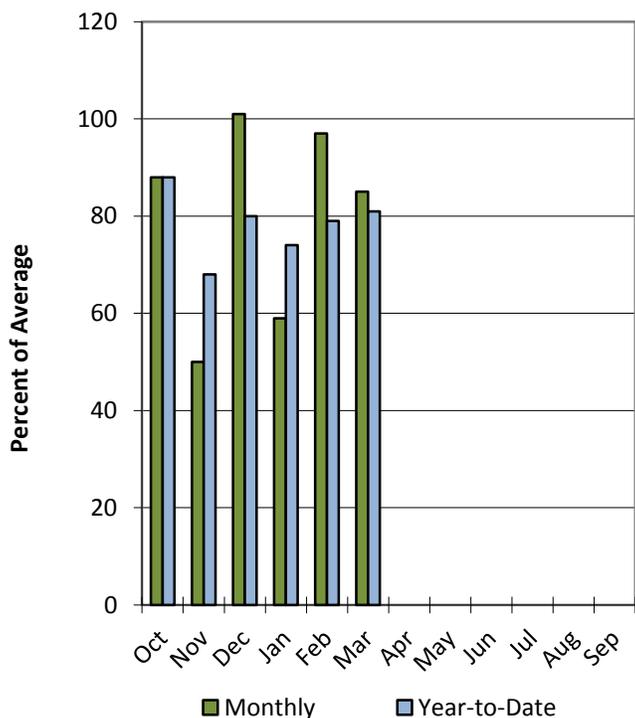


Tooele & Vernon Creek Basins

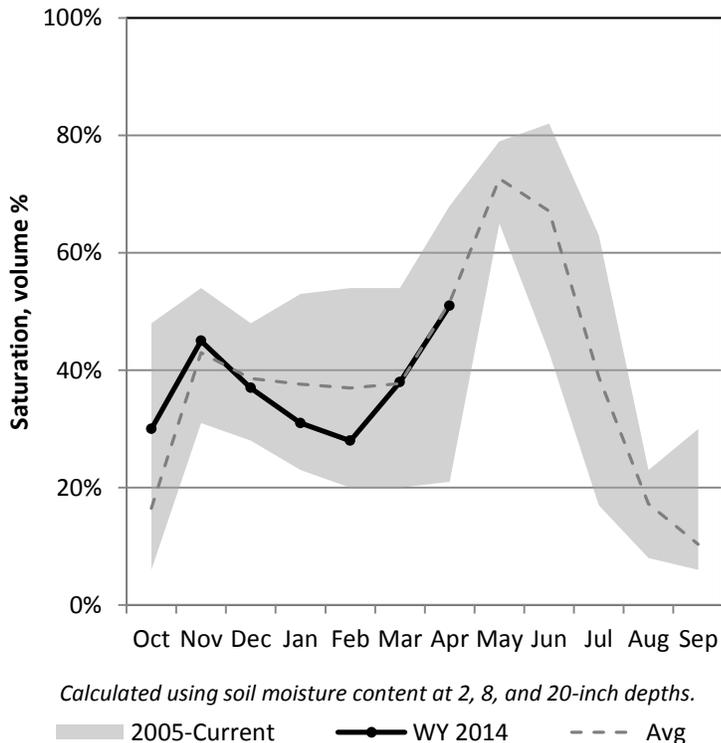
4/1/2014

Precipitation in March was below average at 85%, which brings the seasonal accumulation (Oct-Mar) to 81% of average. Soil moisture is at 51% compared to 58% last year. Reservoir storage is at 62% of capacity, compared to 59% last year.

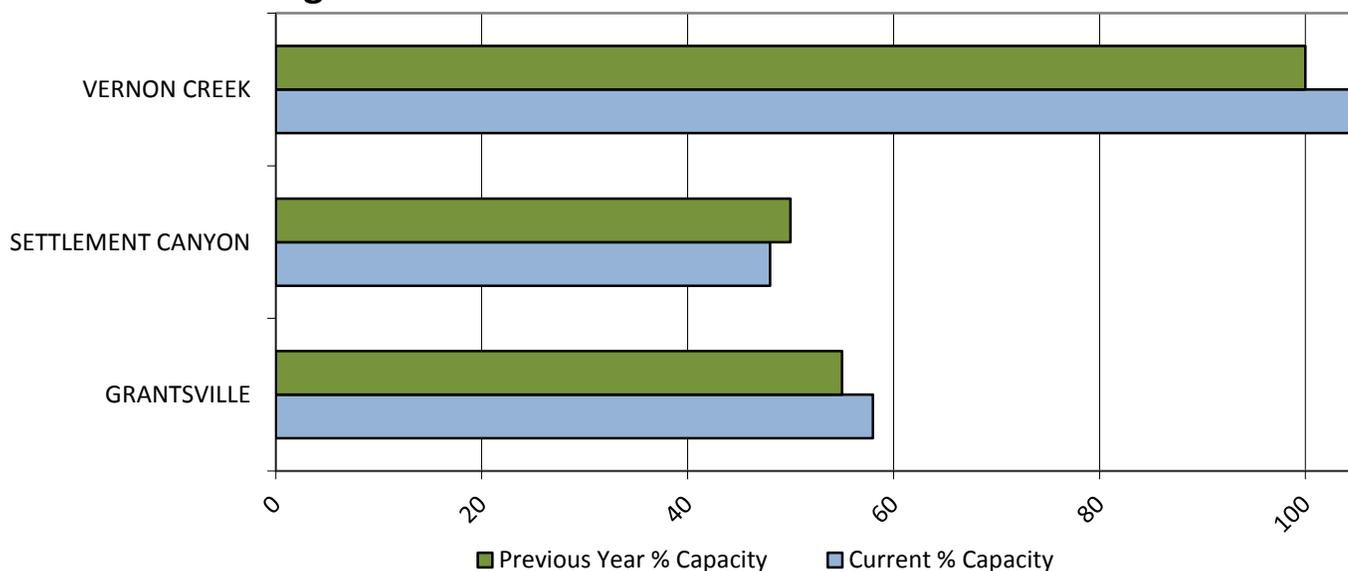
Precipitation



Soil Moisture



Reservoir Storage

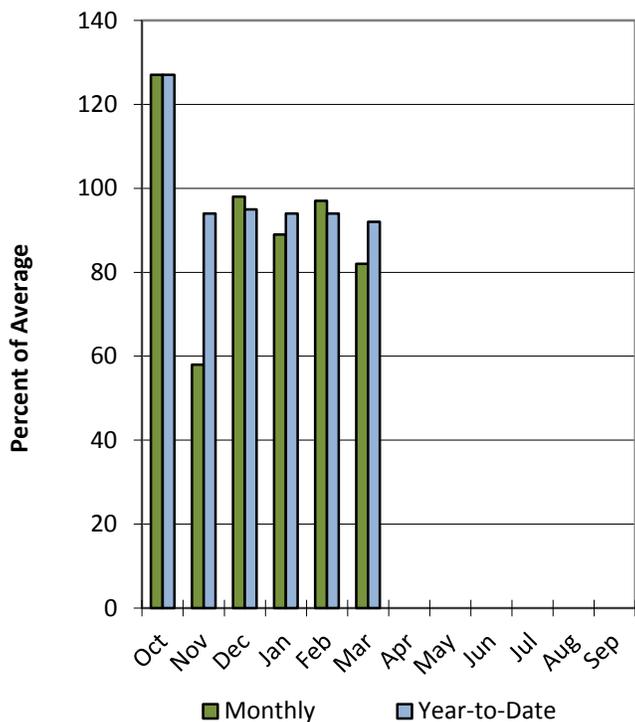


Northeastern Uintah Basin

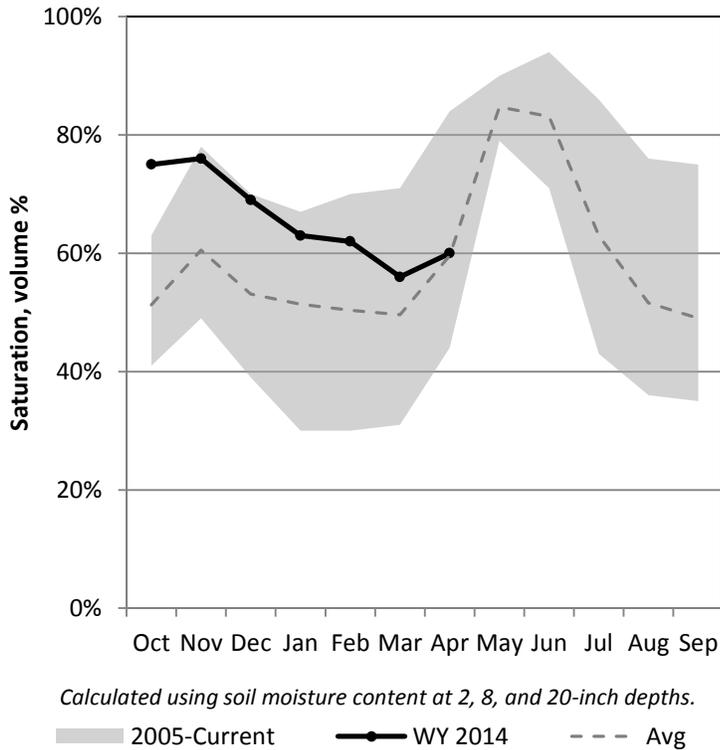
4/1/2014

Precipitation in March was below average at 82%, which brings the seasonal accumulation (Oct-Mar) to 92% of average. Soil moisture is at 60% compared to 52% last year. Reservoir storage is at 77% of capacity, compared to 79% last year.

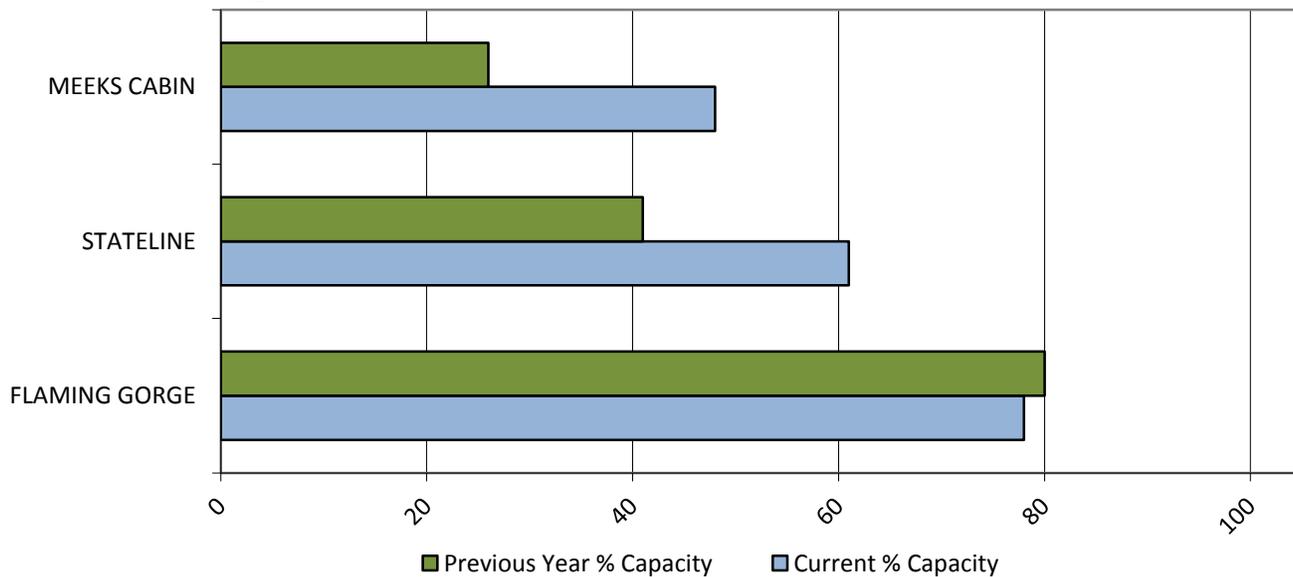
Precipitation



Soil Moisture



Reservoir Storage



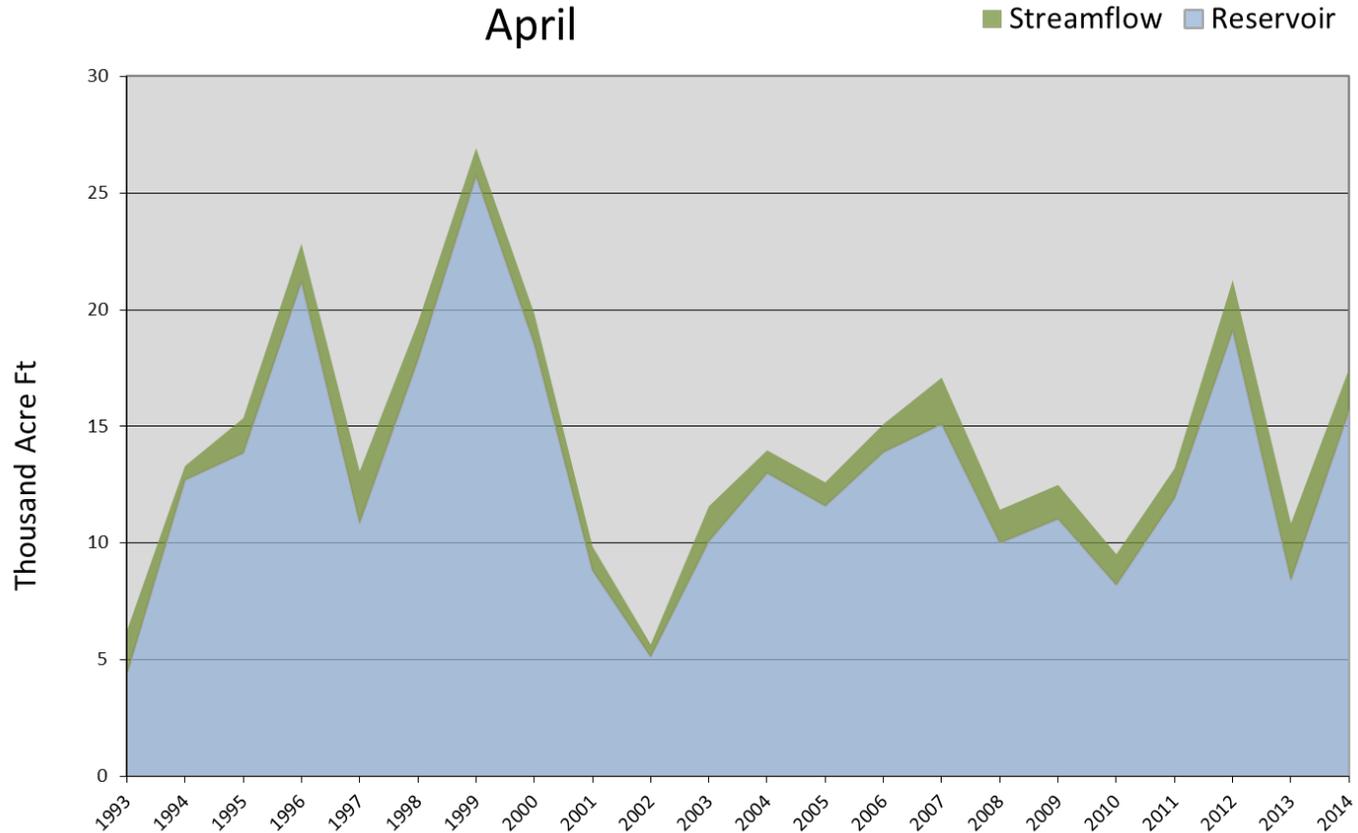
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Meeks Cabin Reservoir	March 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	15.7	1.8	17.5	1.99	74	95, 07, 98, 00

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

Blacks Fork River - Water Availability Index
April



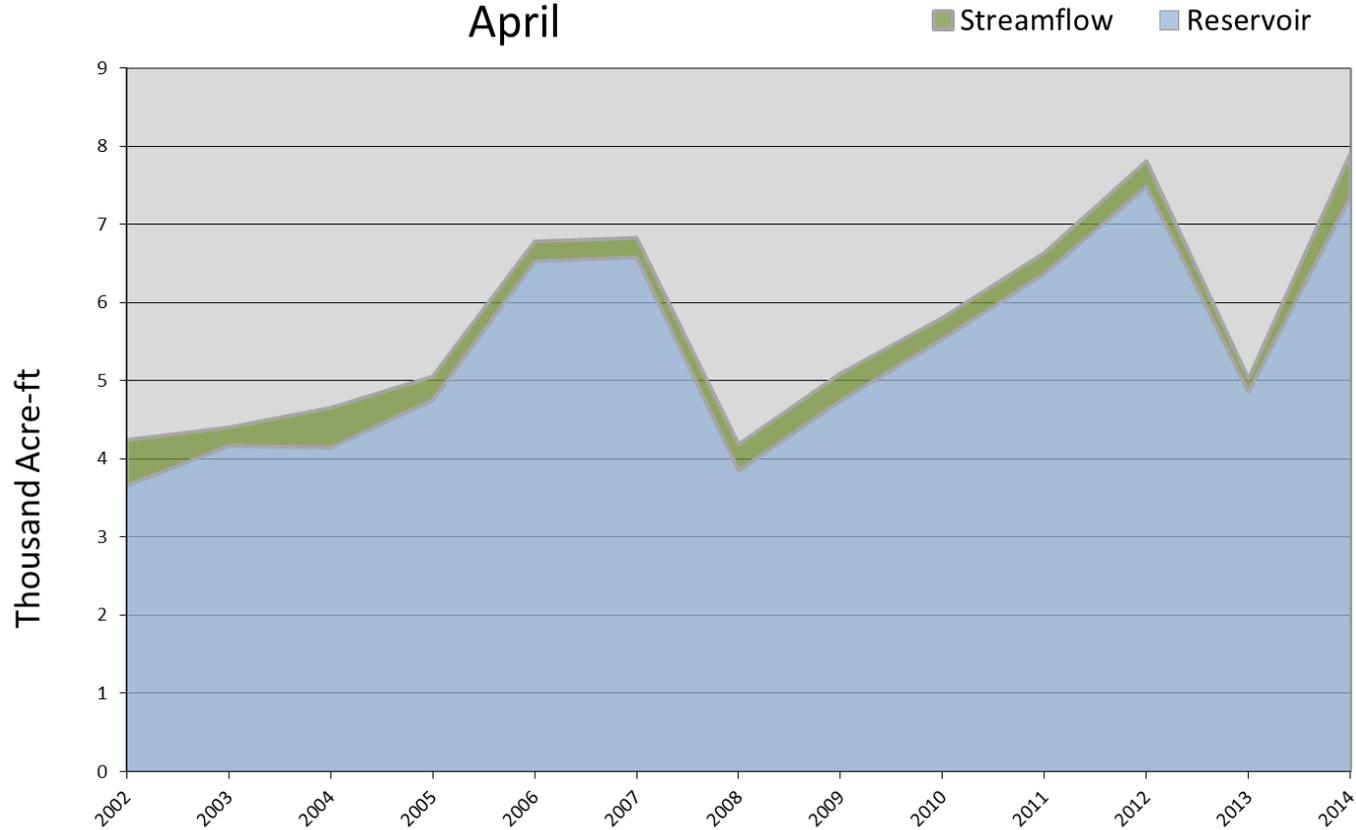
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Stateline Reservoir	March Observed Flow EF Smiths Creek	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Smiths Creek	7.4	0.5	7.9	3.6	93	07, 12

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

Smiths Creek - Water Availability Index
April

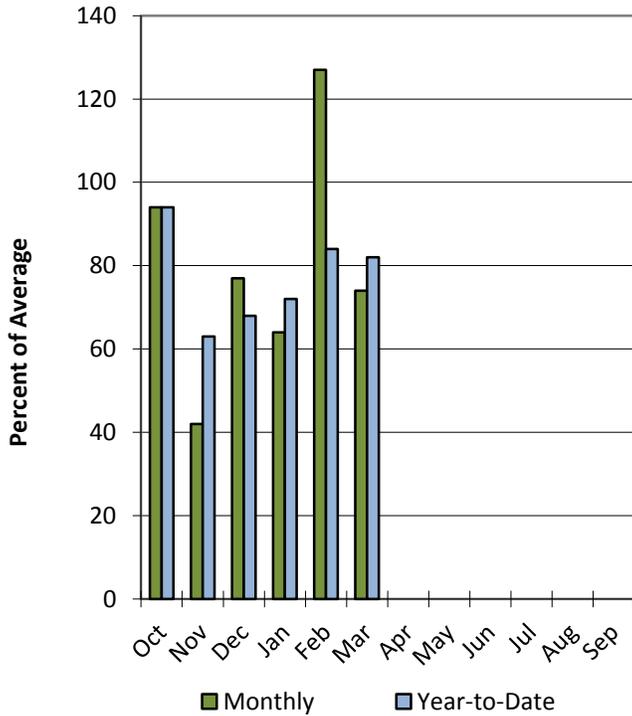


Duchesne River Basin

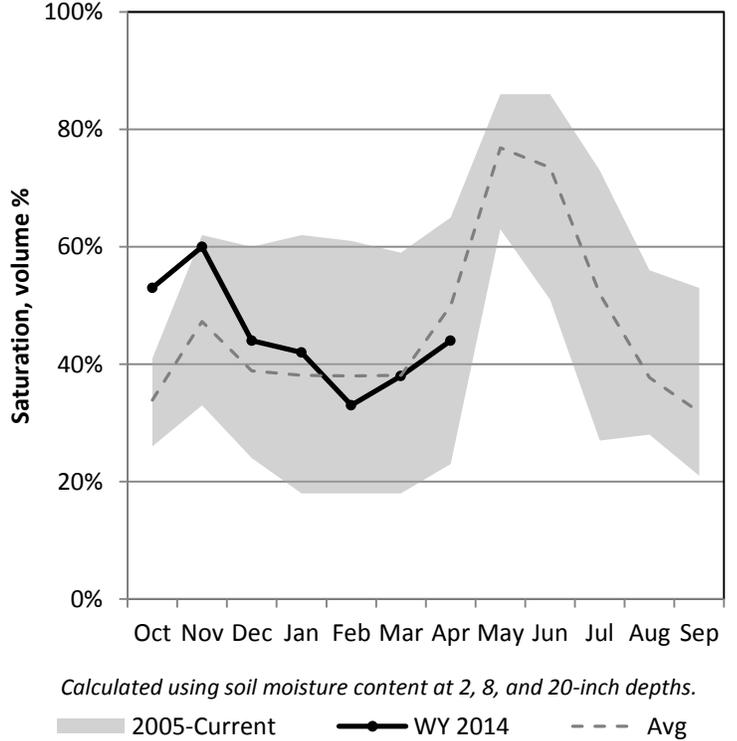
4/1/2014

Precipitation in March was below average at 74%, which brings the seasonal accumulation (Oct-Mar) to 82% of average. Soil moisture is at 44% compared to 51% last year. Reservoir storage is at 76% of capacity, compared to 79% last year. The water availability index for the Western Uintahs is 73% and 11% for the Eastern Uintahs.

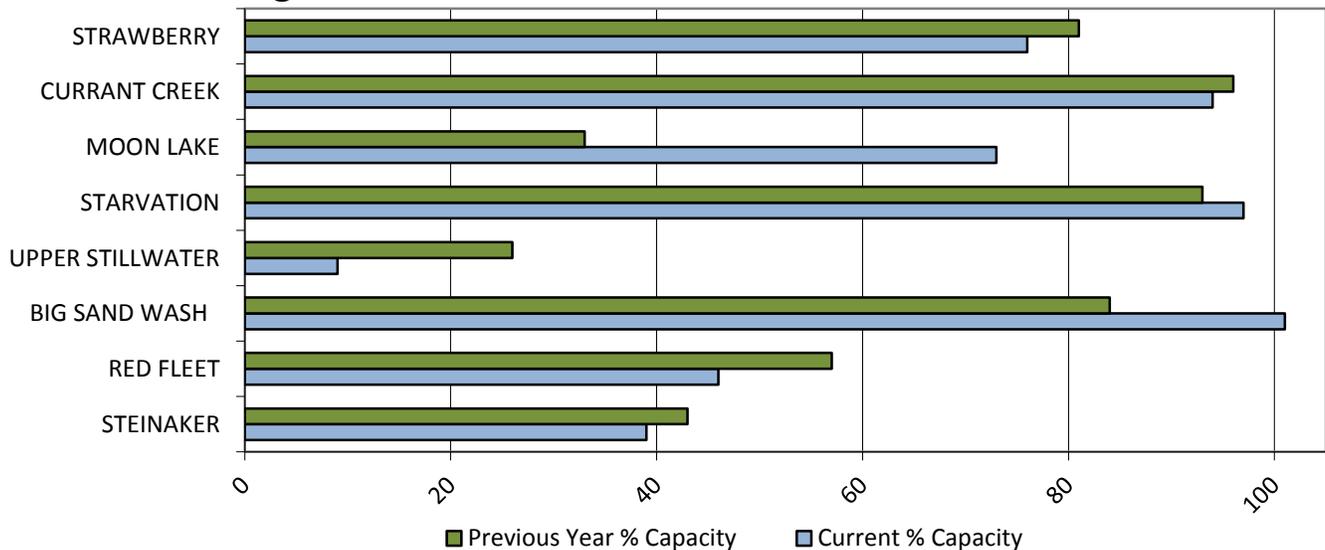
Precipitation



Soil Moisture



Reservoir Storage



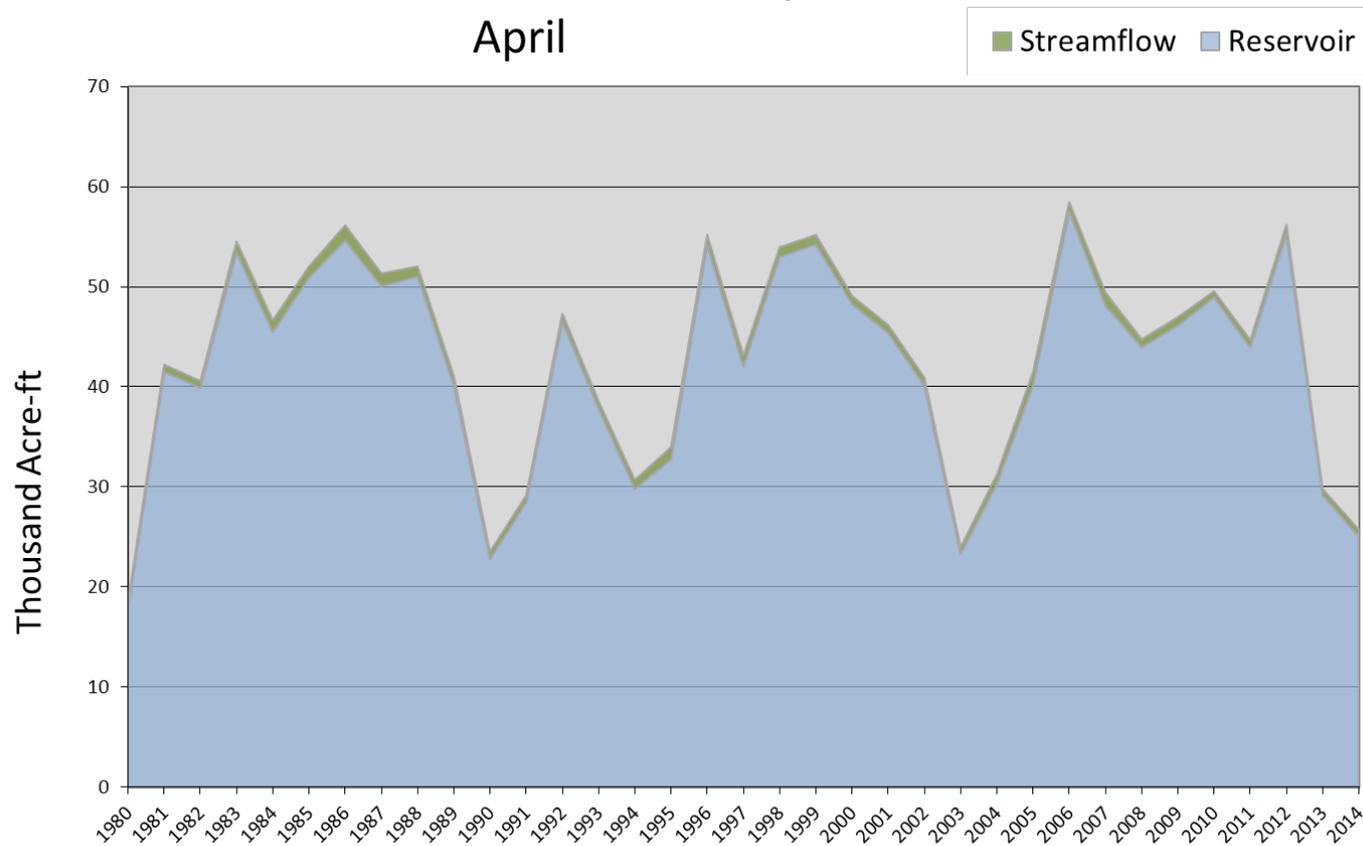
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Red Fleet and Steinaker	March accumulated flow Big Brush Creek (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Eastern Uintah	25.0	0.7	25.7	-3.24	11	90, 03, 91, 13

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

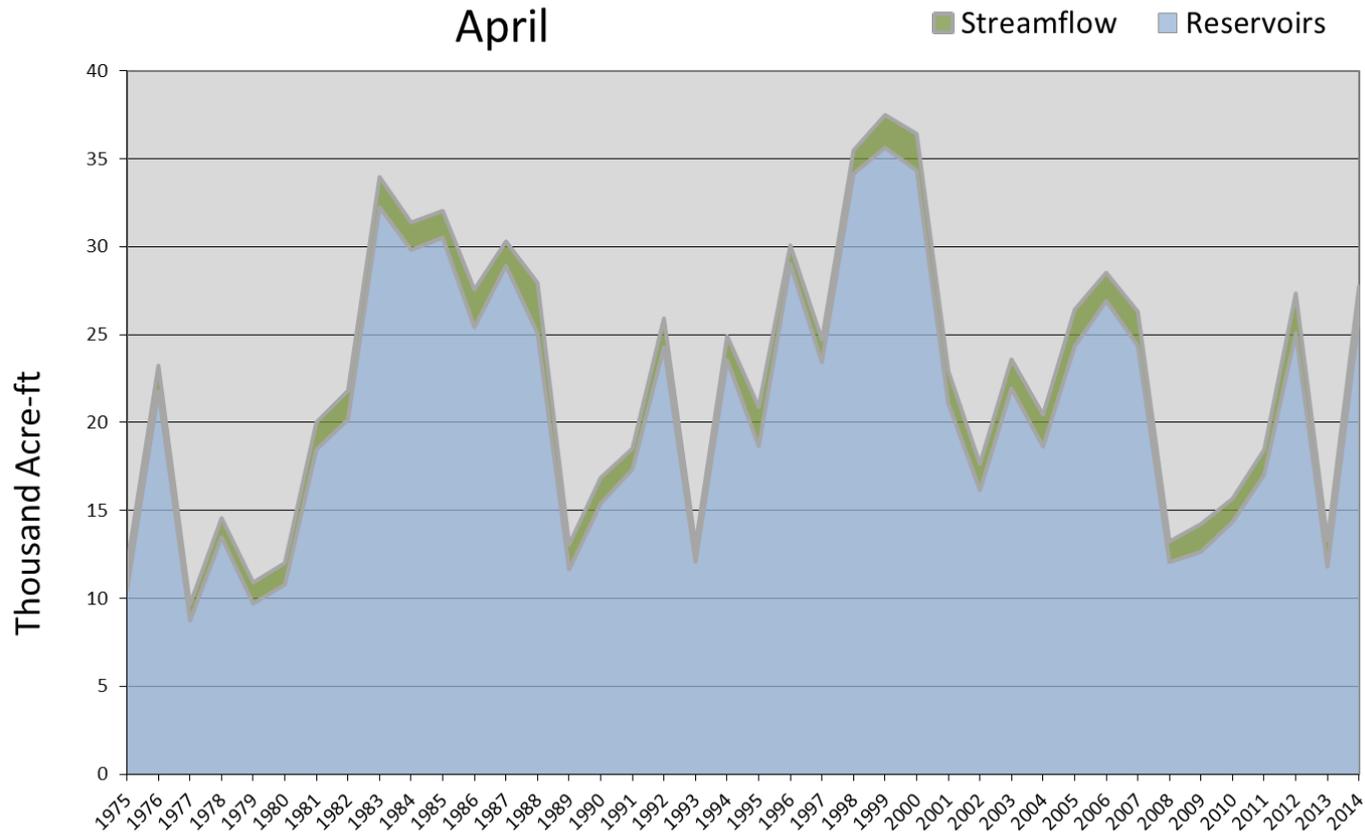
Eastern Uintah - Water Availability Index
April



April 1, 2014		Water Availability Index				
Basin or Region	March EOM* Moon Lake	March accumulated flow Lake Fork River above Moon Lake (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Moon Lake	26.0	1.8	27.7	1.93	73	12, 86, 88, 06

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

Moon Lake - Water Availability Index
April

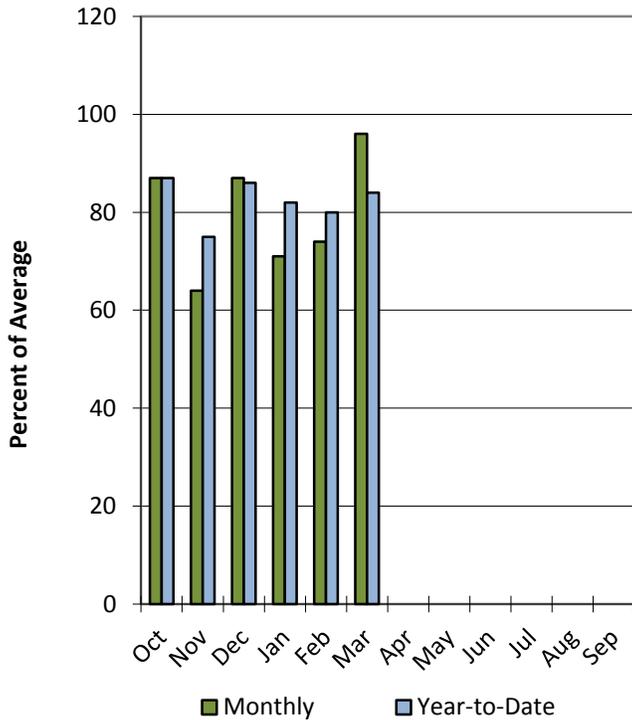


Lower Sevier River Basin

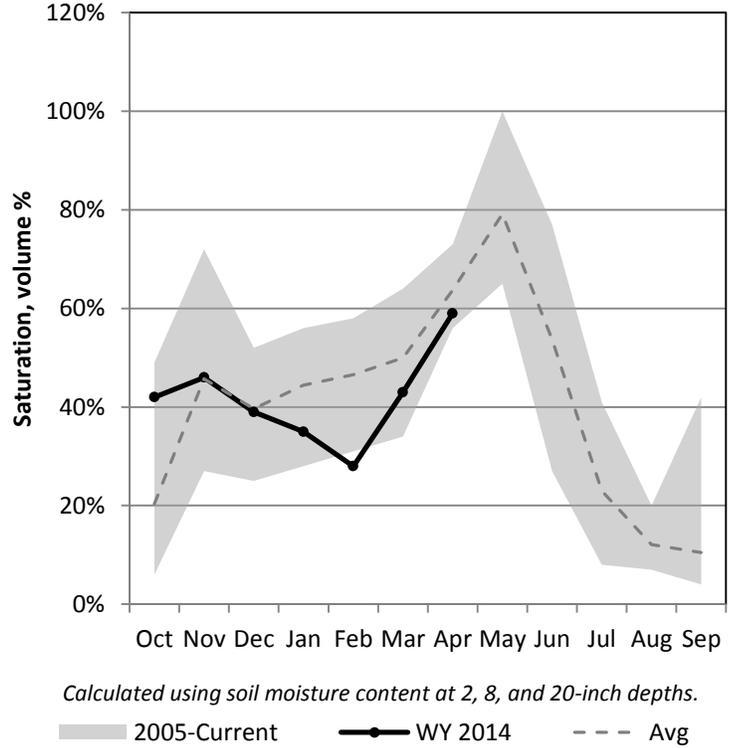
4/1/2014

Precipitation in March was near average at 96%, which brings the seasonal accumulation (Oct-Mar) to 84% of average. Soil moisture is at 59% compared to 65% last year. Reservoir storage is at 59% of capacity, compared to 73% last year. The water availability index for the Lower Sevier is 32%.

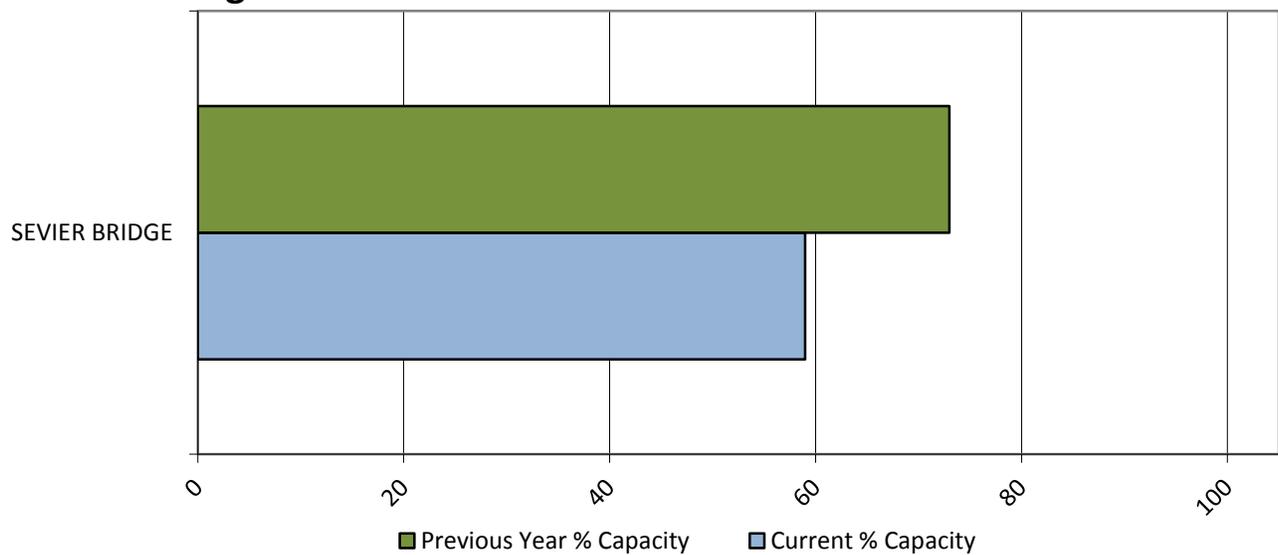
Precipitation



Soil Moisture



Reservoir Storage



April 1, 2014

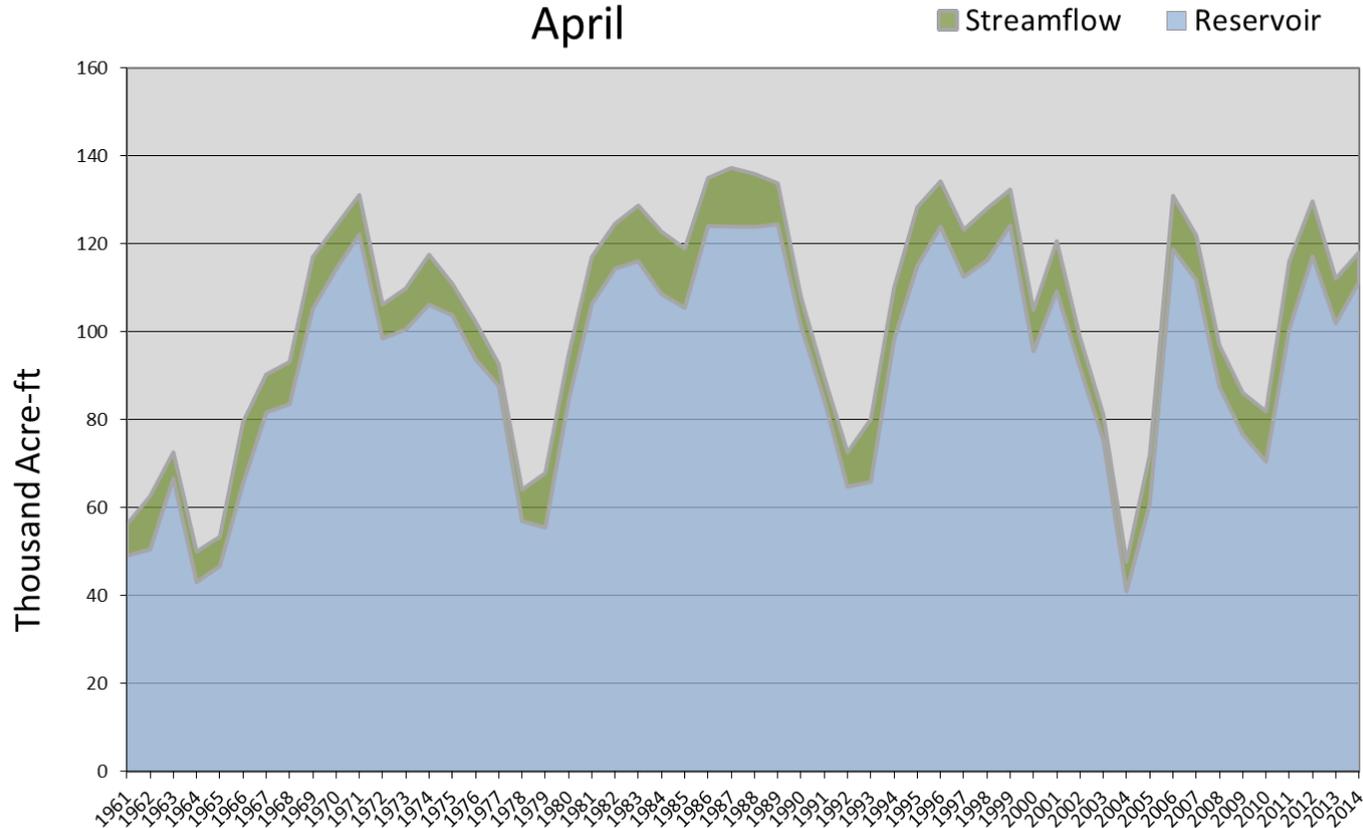
Water Availability Index

Basin or Region	March EOM* Otter Creek and Piute	March 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	111.4	6.7	118.1	1.56	69	69, 74, 85, 01

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

Upper Sevier River - Water Availability Index

April



April 1, 2014

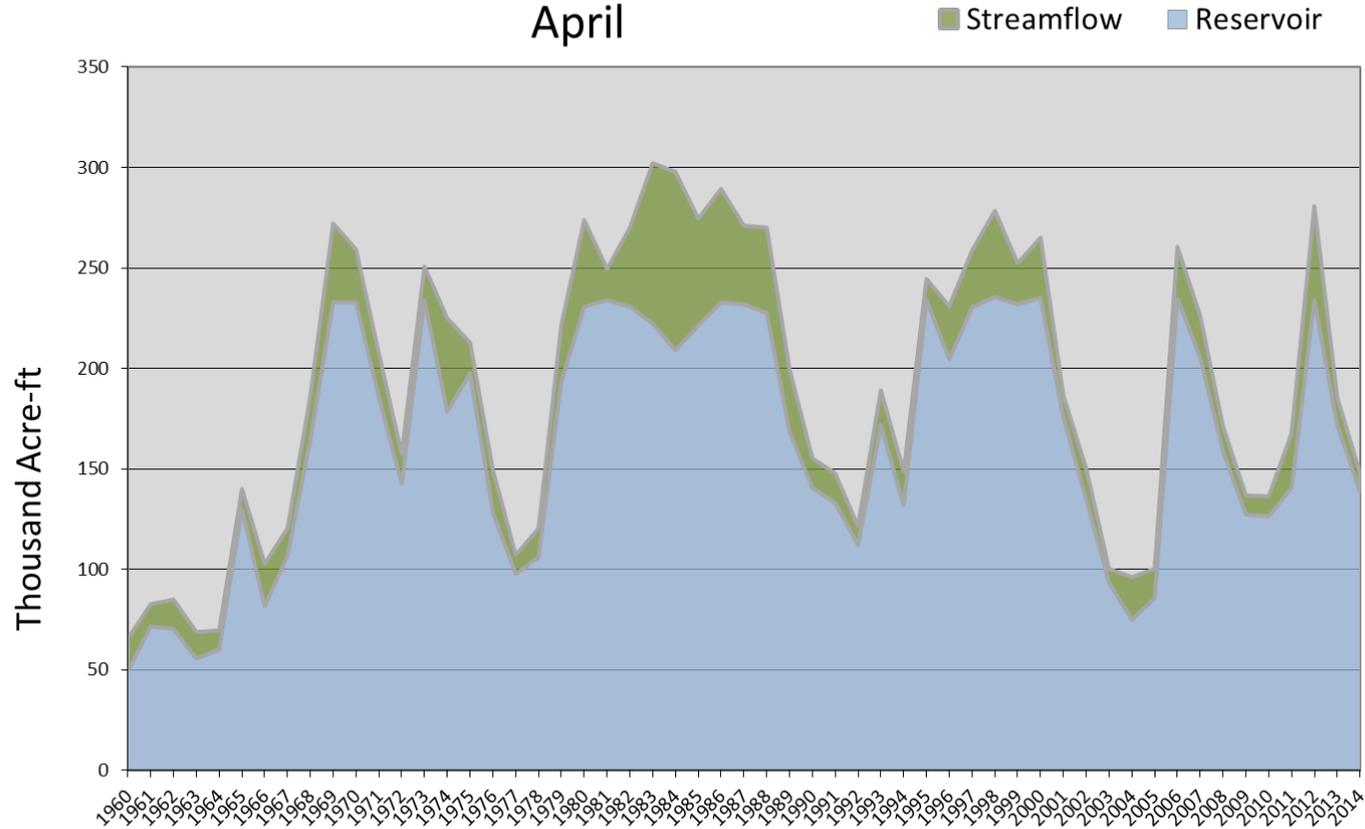
Water Availability Index

Basin or Region	March EOM* Sevier Bridge	March accumulated flow Sevier at Gunnison (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Lower Sevier River	138.8	9.1	147.9	-1.49	32	65, 91, 94, 76

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

Lower Sevier River - Water Availability Index

April



April 1, 2014

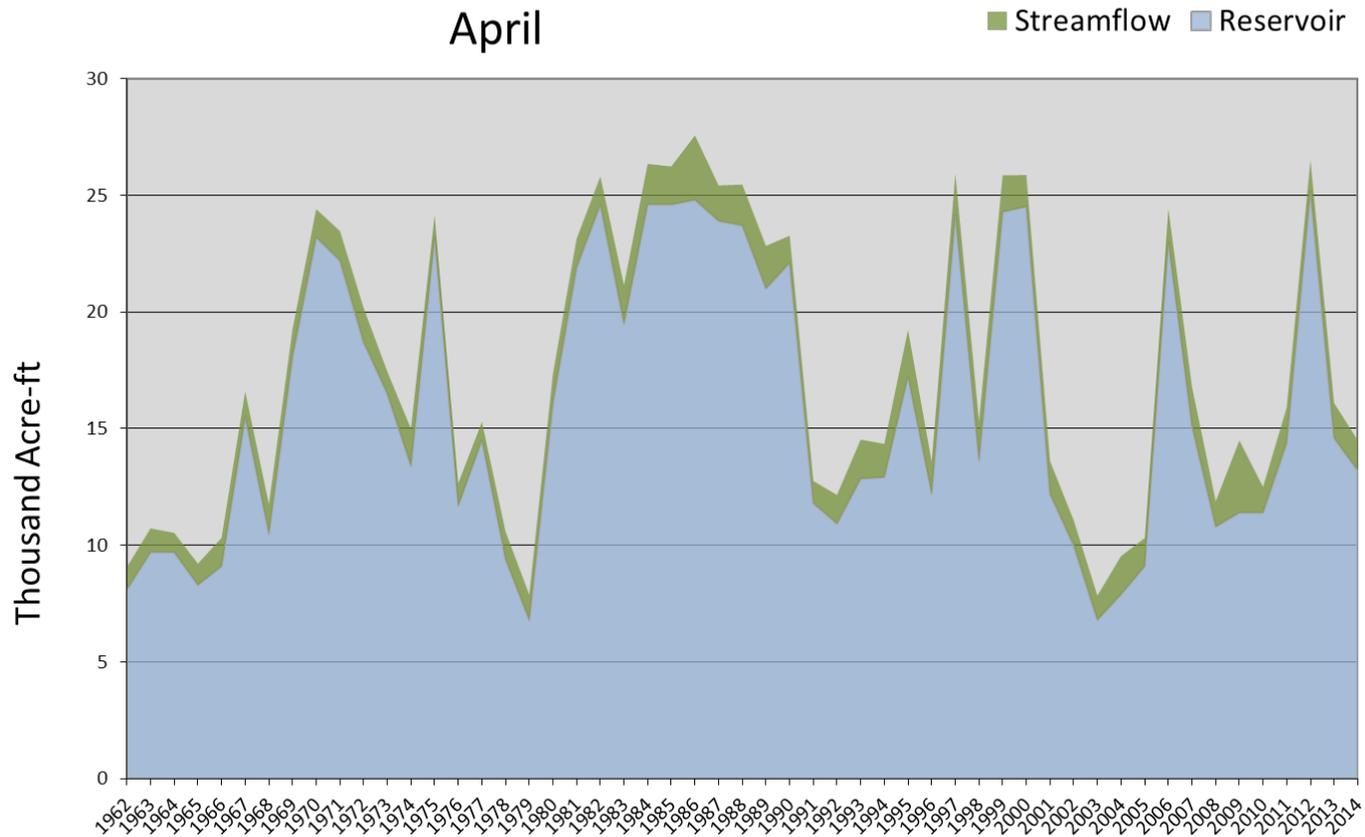
Water Availability Index

Basin or Region	March EOM* Minersville Reservoir	March accumulated flow Beaver River at Beaver <i>(observed)</i>	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Beaver	13.2	1.3	14.5	-0.77	41	94,09,93,74

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

Beaver River - Water Availability Index

April



April 1, 2014

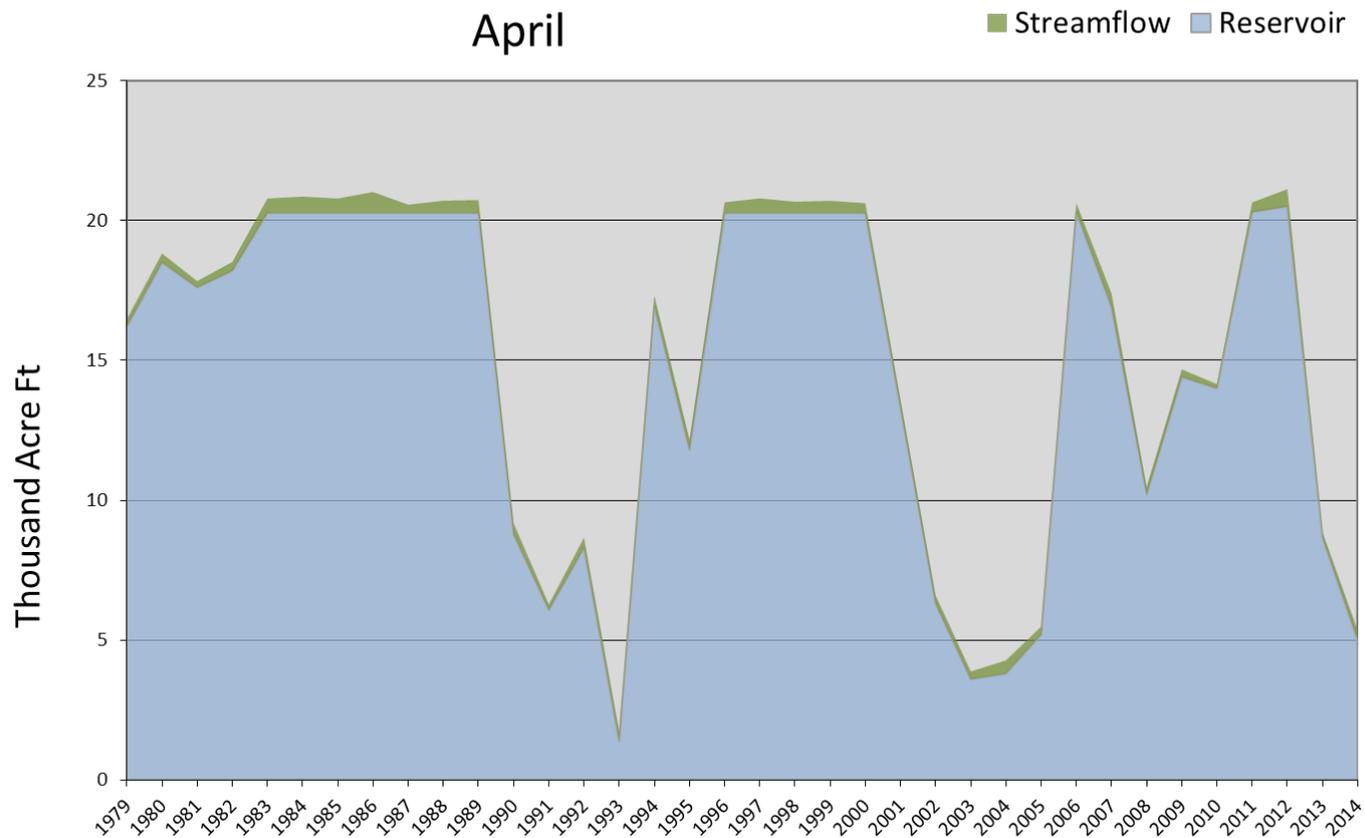
Water Availability Index

Basin or Region	March EOM* Gunnison Reservoir	March accumulated flow Manti Creek (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Manti Creek	5.0	0.4	5.4	-3.27	11	03,04,05,91

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

San Pitch River - Water Availability Index

April

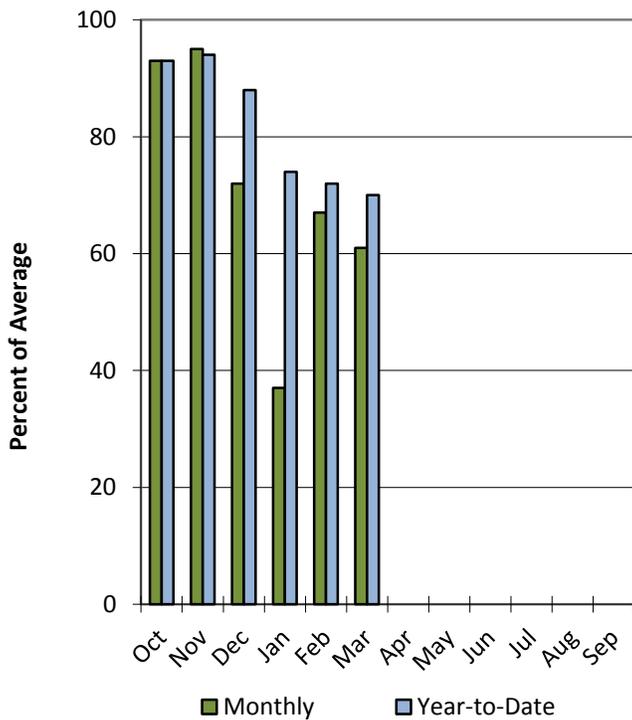


Upper Sevier River Basin

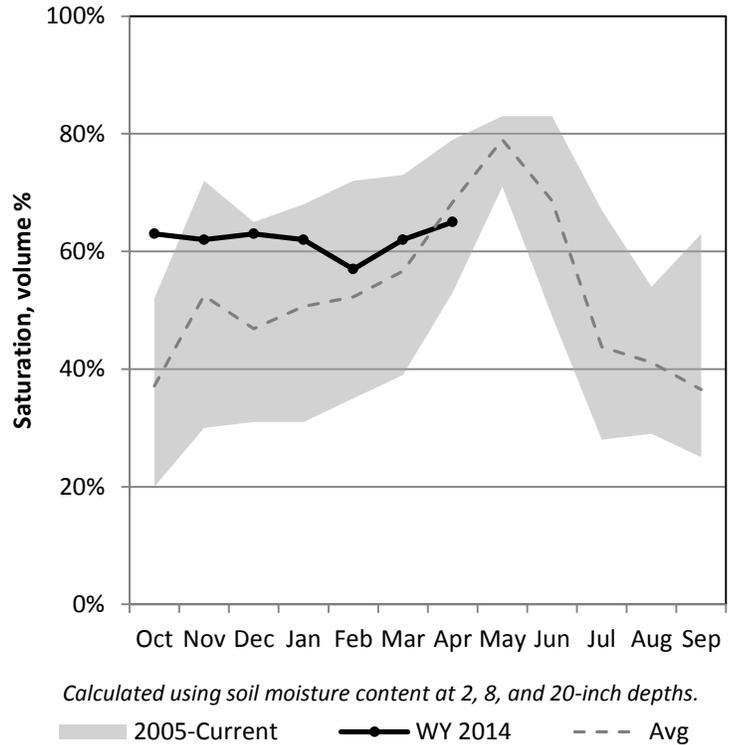
4/1/2014

Precipitation in March was much below average at 61%, which brings the seasonal accumulation (Oct-Mar) to 70% of average. Soil moisture is at 65% compared to 64% last year. Reservoir storage is at 82% of capacity, compared to 75% last year. The water availability index for the Upper Sevier is 69%.

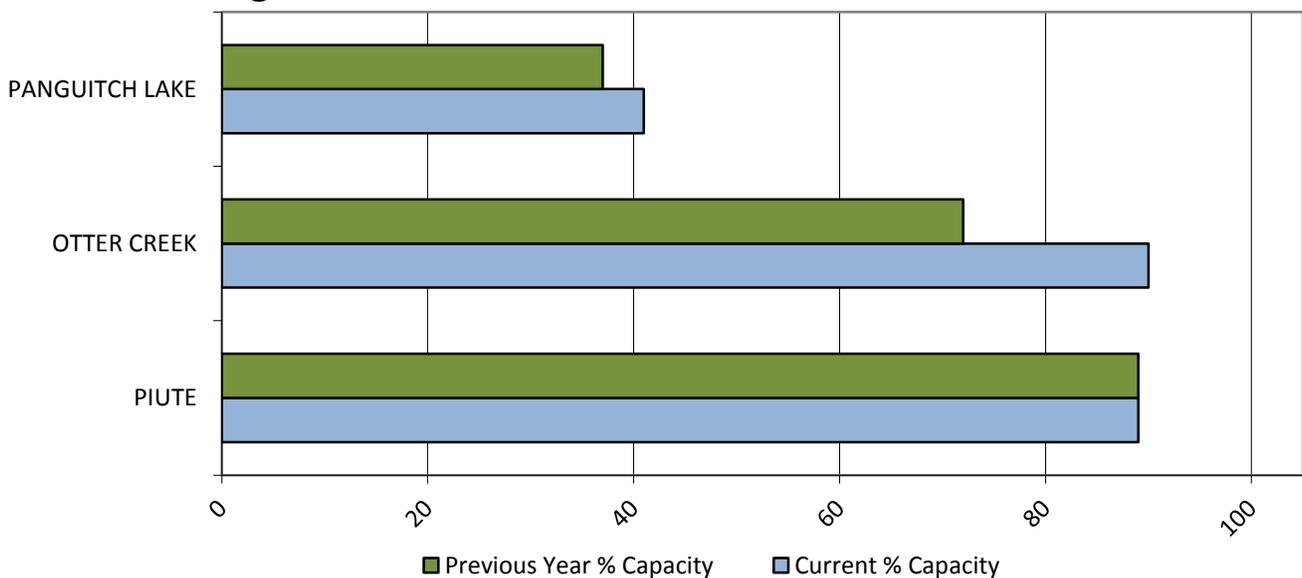
Precipitation



Soil Moisture



Reservoir Storage

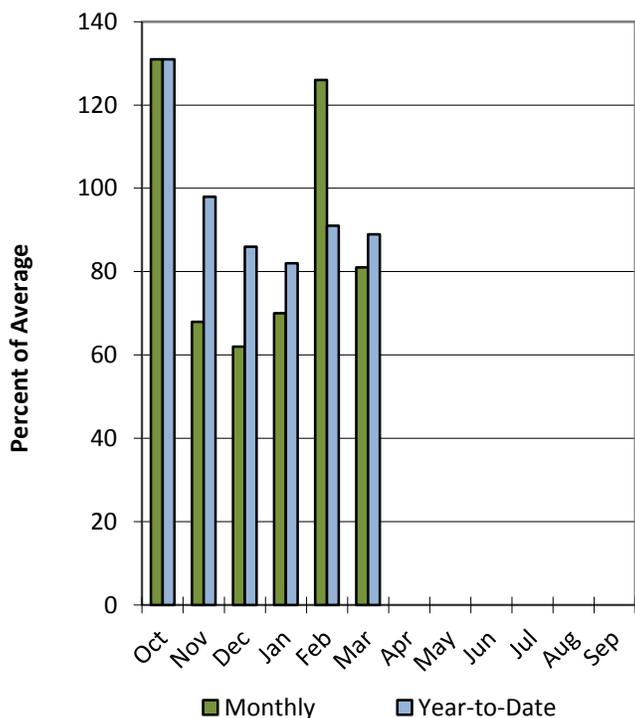


San Pitch River Basin

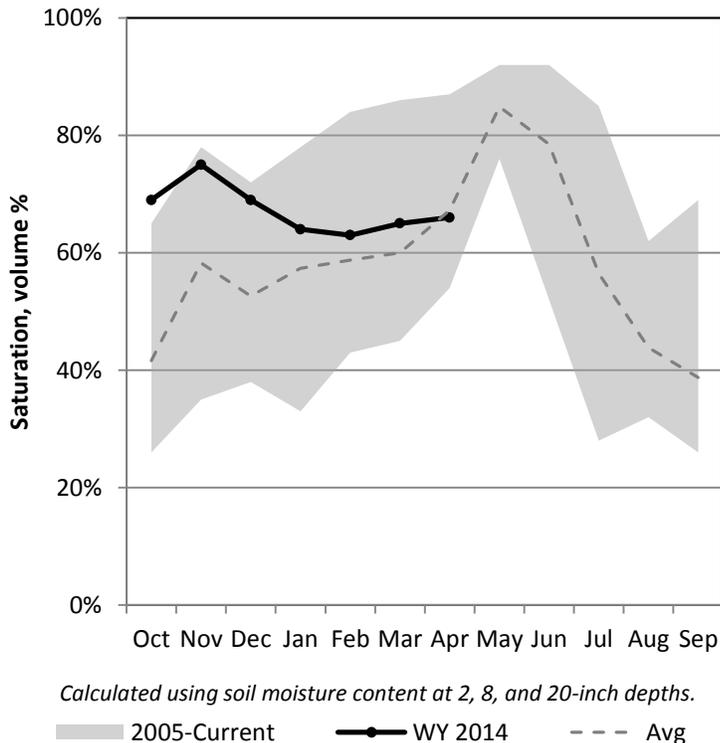
4/1/2014

Precipitation in March was below average at 81%, which brings the seasonal accumulation (Oct-Mar) to 89% of average. Soil Moisture is at 66% compared to 63% last year. Reservoir storage is at 24% of capacity, compared to 43% last year. The water availability index for the San Pitch is 11%.

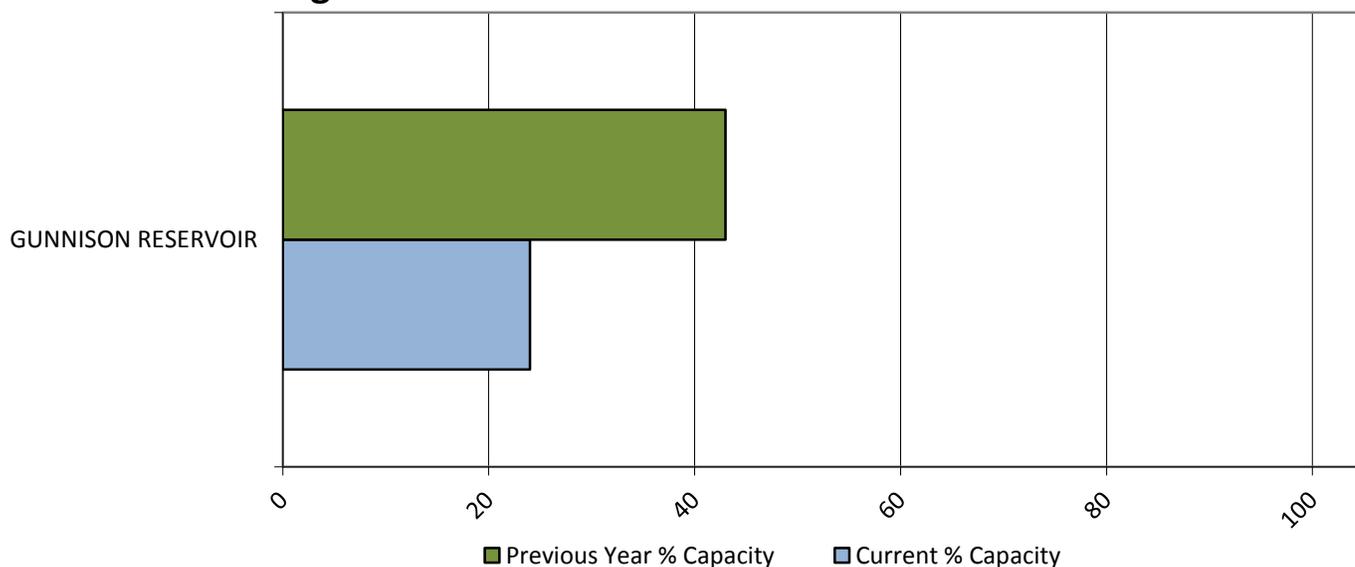
Precipitation



Soil Moisture



Reservoir Storage

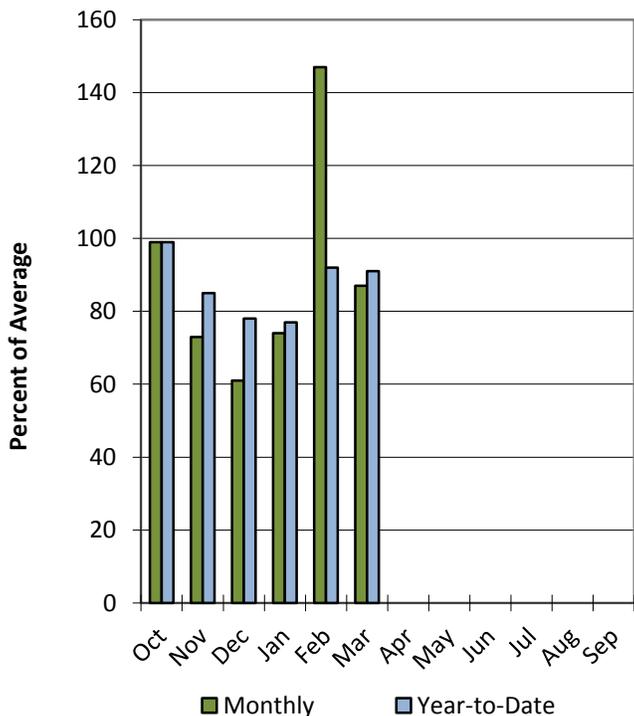


Price & San Rafael Basins

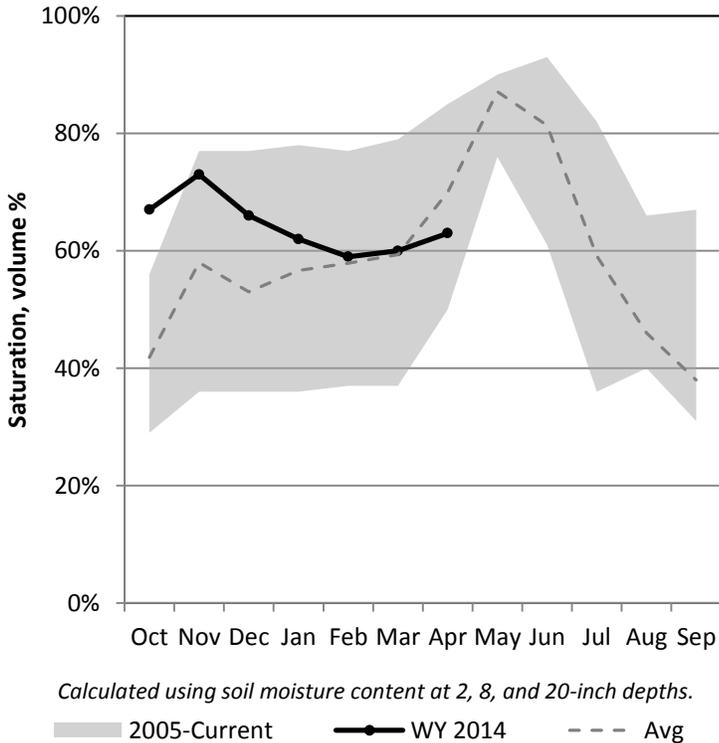
4/1/2014

Precipitation in March was below average at 87%, which brings the seasonal accumulation (Oct-Mar) to 91% of average. Soil moisture is at 63% compared to 57% last year. Reservoir storage is at 45% of capacity, compared to 48% last year. The water availability index for the Price River is 20%, and 22% for Joe's Valley.

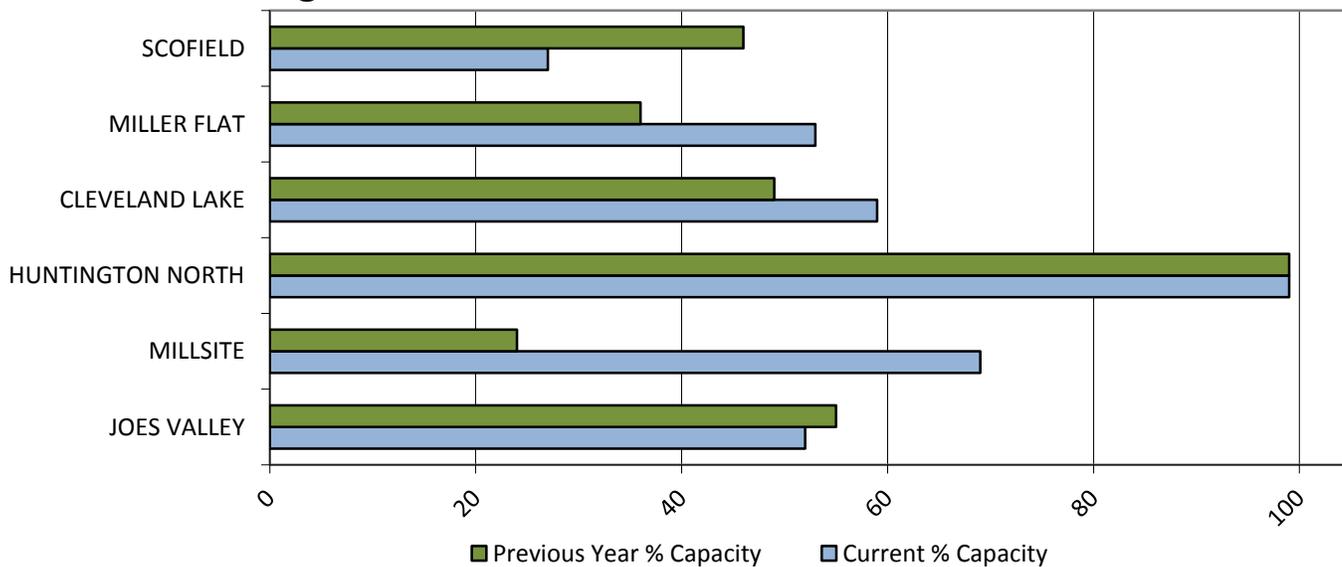
Precipitation



Soil Moisture



Reservoir Storage

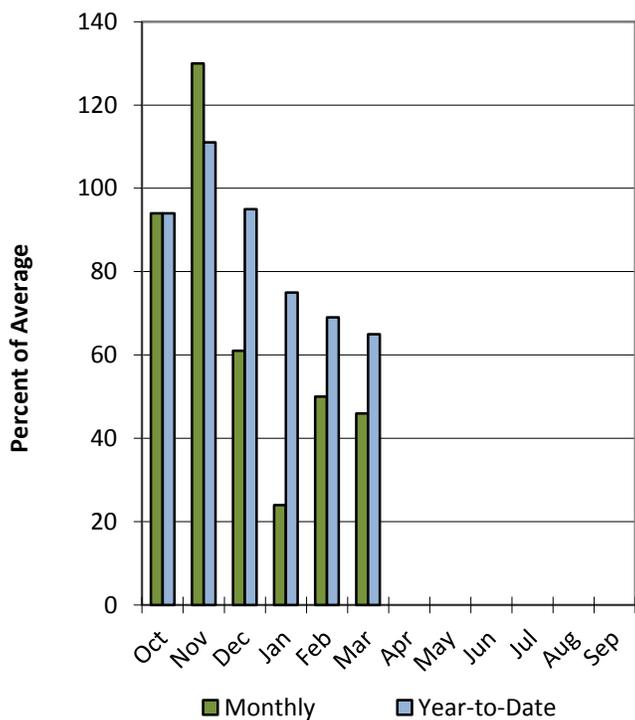


Southeastern Utah Basin

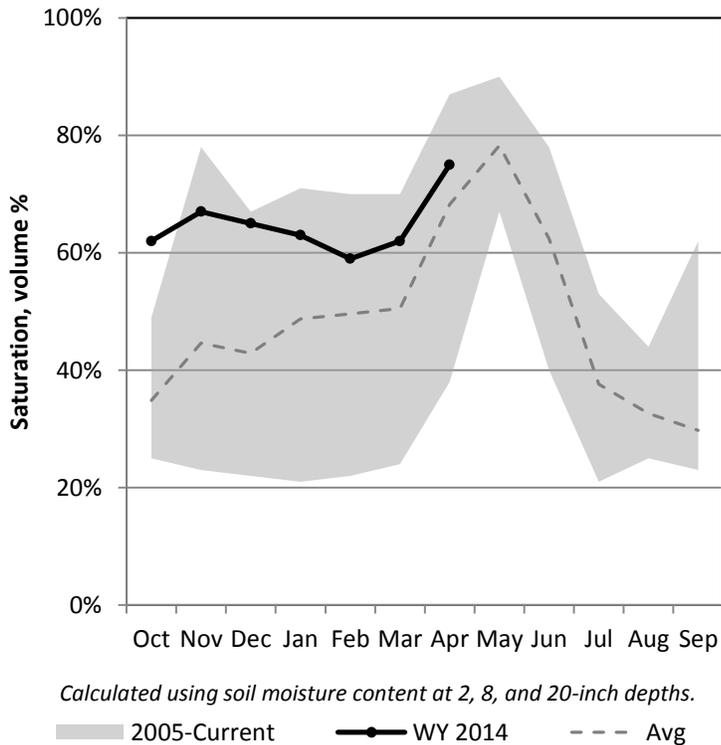
4/1/2014

Precipitation in March was much below average at 46%, which brings the seasonal accumulation (Oct-Mar) to 65% of average. Soil moisture is at 75% compared to 48% last year. Reservoir storage is at 53% of capacity, compared to 18% last year. The water availability index for Moab is 50%.

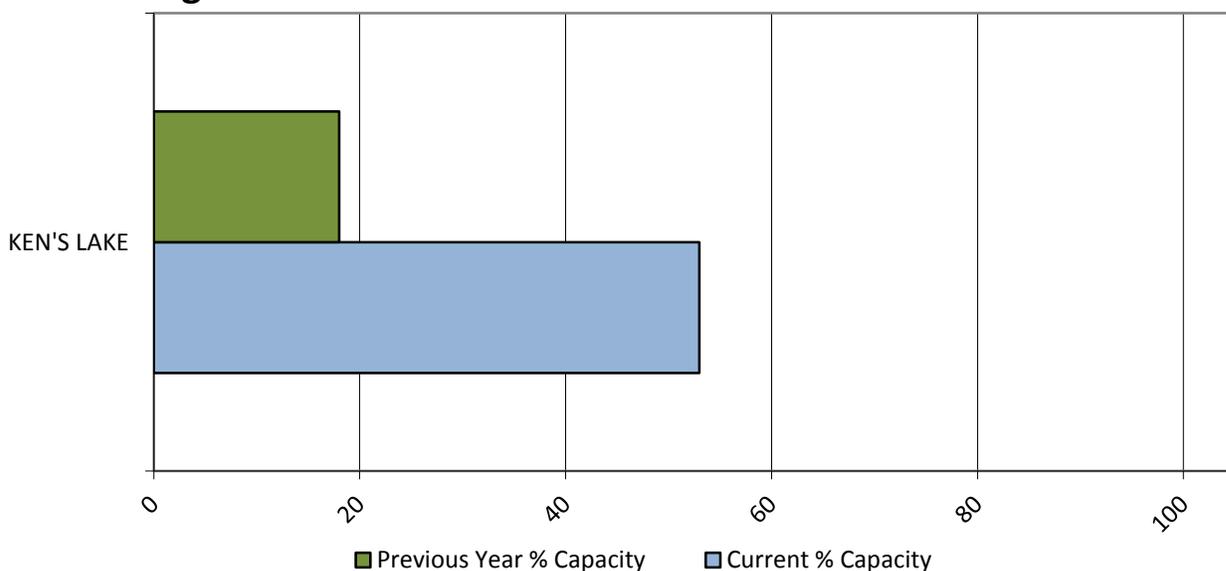
Precipitation



Soil Moisture



Reservoir Storage



April 1, 2014

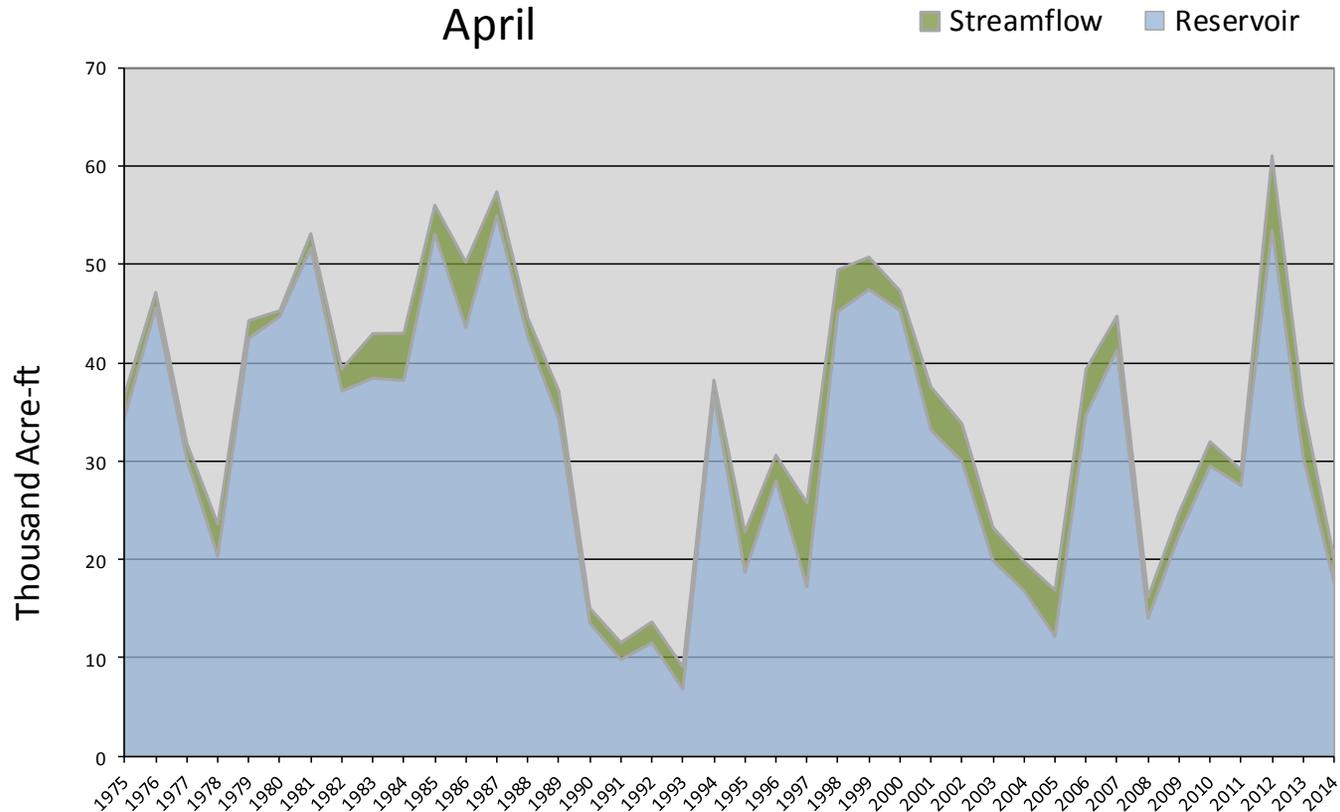
Water Availability Index

Basin or Region	March EOM*	March accumulated inflow to Scofield (calculated)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF			
Price River	17.7	2.4	20.1	-2.54	20	05, 04, 95, 03

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

Price River - Water Availability Index

April



April 1, 2014

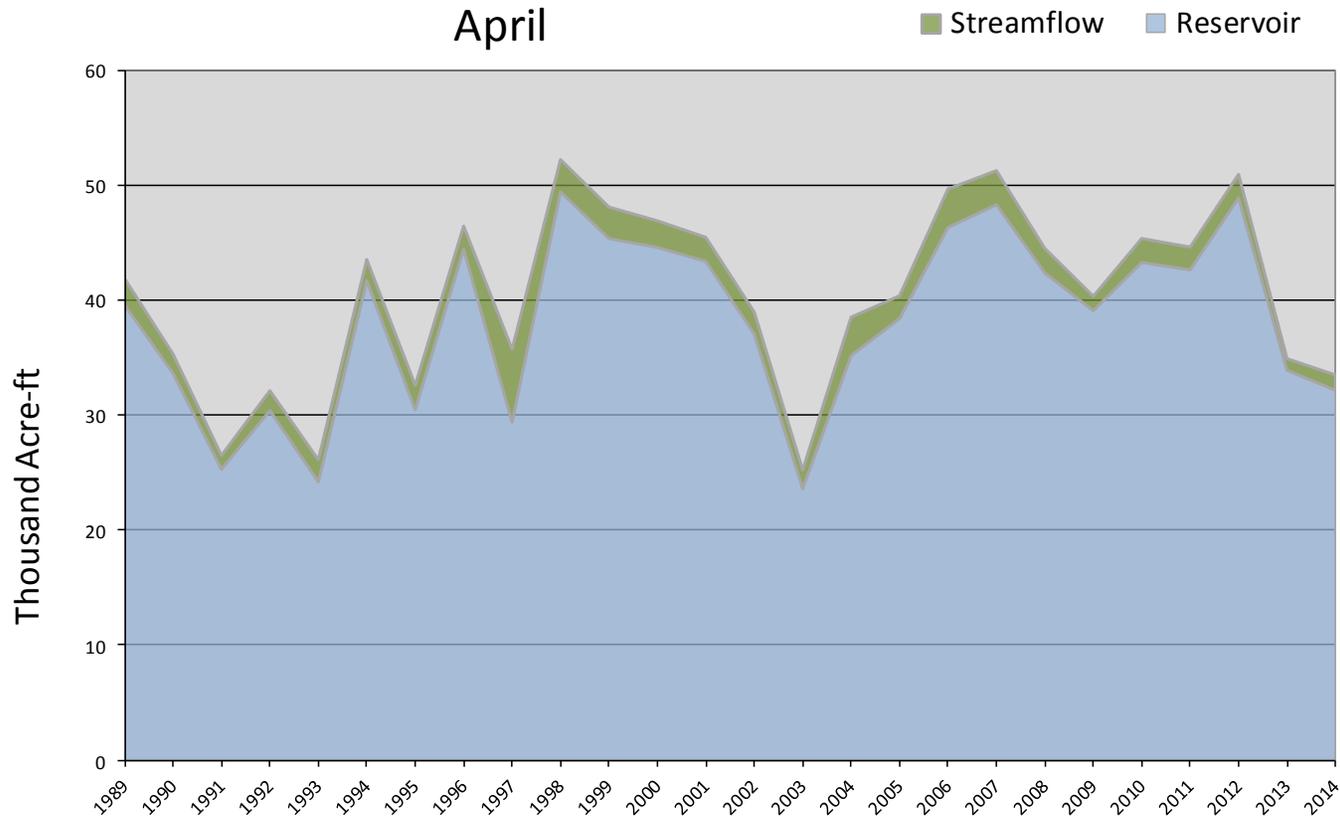
Water Availability Index

Basin or Region	March EOM*	March accumulated inflow to Joe's Valley	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	Joe's Valley	(calculated)				
	KAF [^]	KAF	KAF		%	
Joe's Valley	32.2	1.3	33.5	-2.31	22	92, 95, 13, 90

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

Joe's Valley - Water Availability Index

April



April 1, 2014

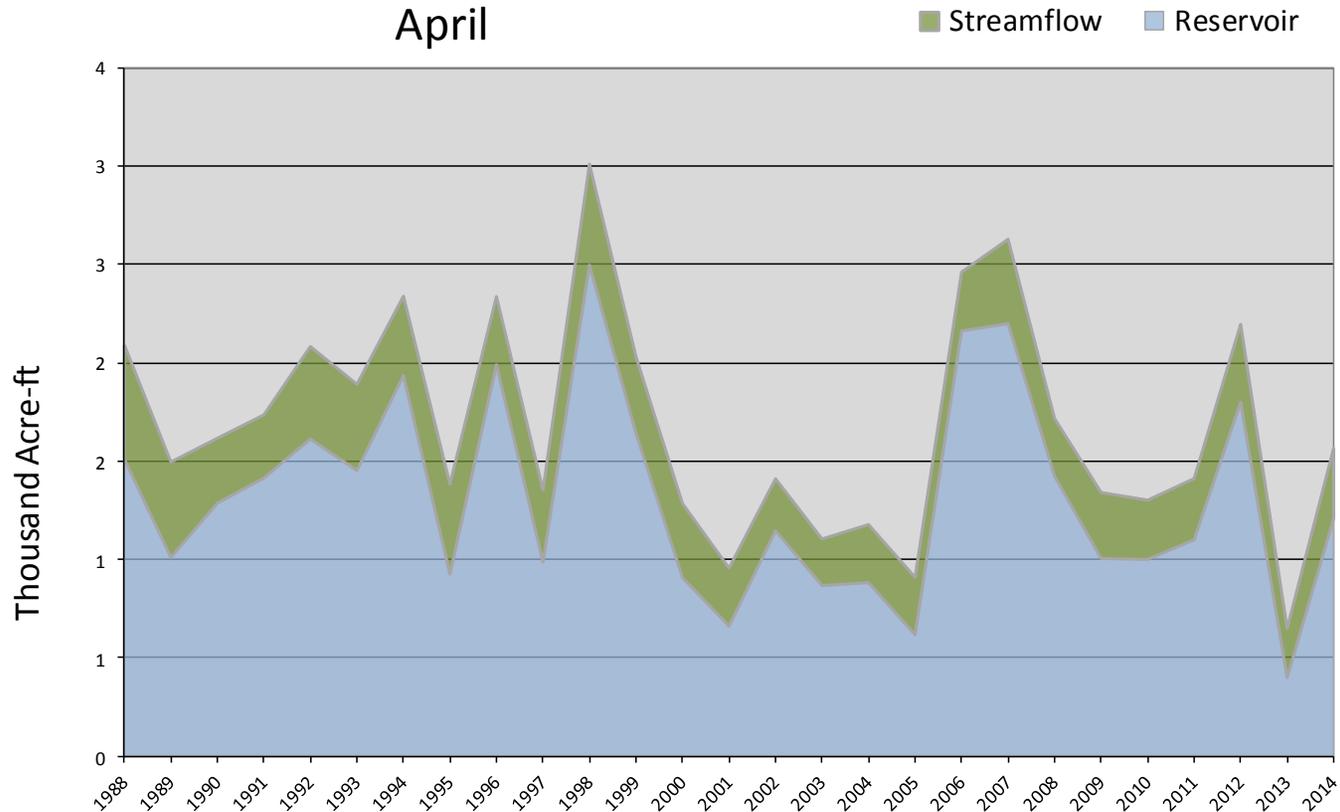
Water Availability Index

Basin or Region	March EOM* Ken's Lake Reservoir	March 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	1.2	0.4	1.6	0.00	50	11, 89, 90, 08

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

Moab - Water Availability Index

April

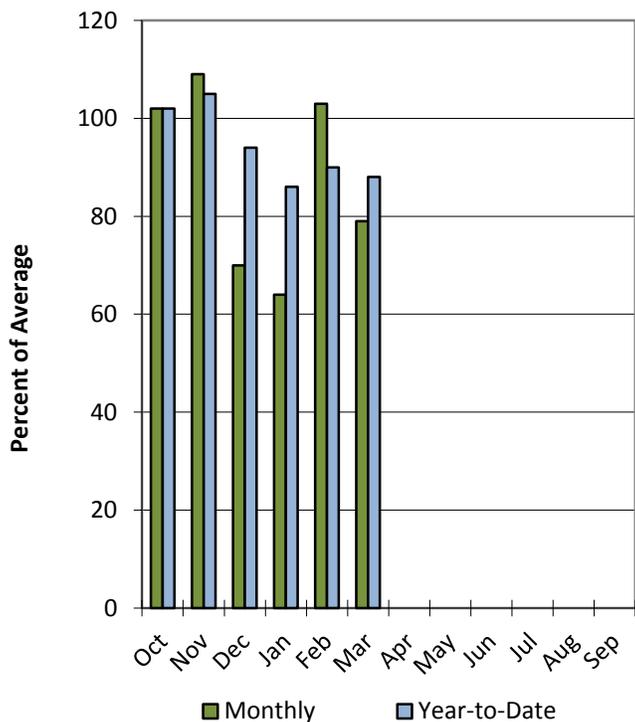


Dirty Devil Basin

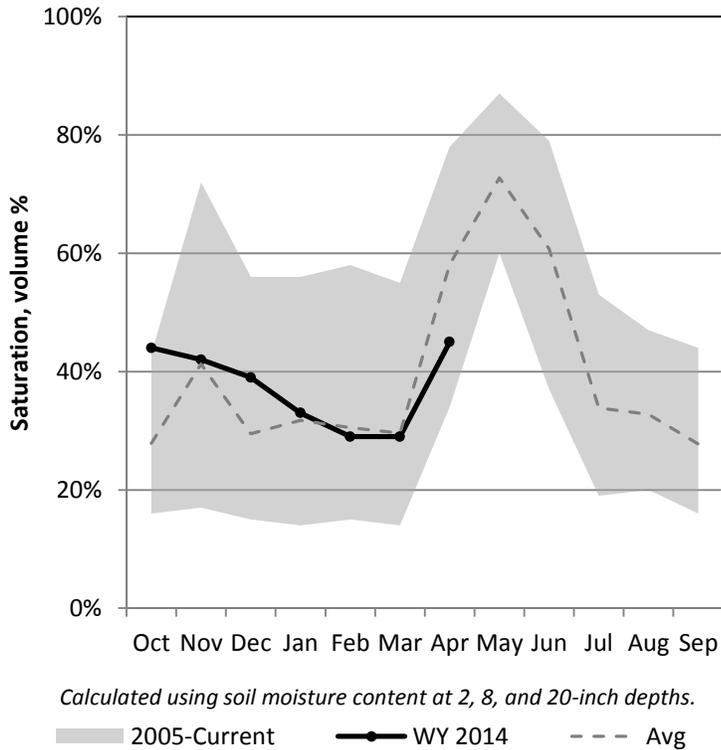
4/1/2014

Precipitation in March was below average at 79%, which brings the seasonal accumulation (Oct-Mar) to 88% of average. Soil moisture is at 45% compared to 67% last year.

Precipitation



Soil Moisture

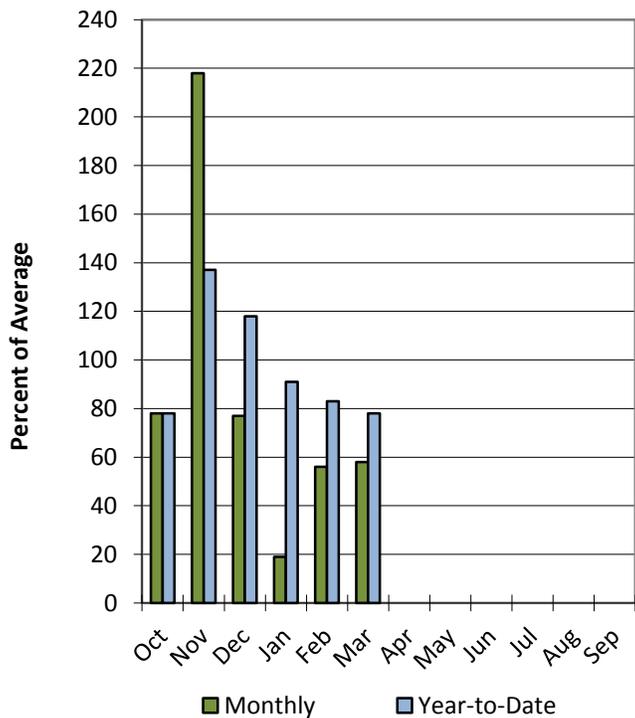


Escalante River Basin

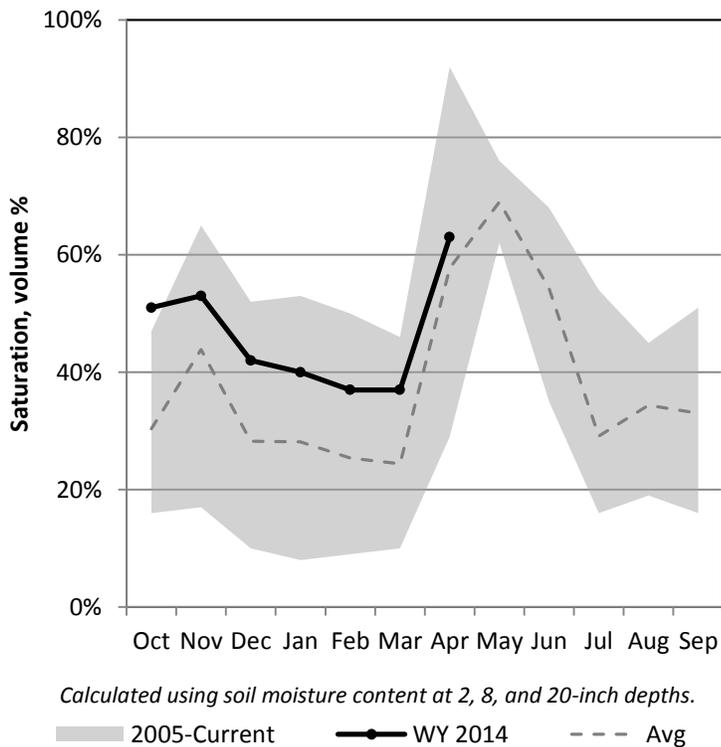
4/1/2014

Precipitation in March was much below average at 58%, which brings the seasonal accumulation (Oct-Mar) to 78% of average. Soil moisture is at 63% compared to 58% last year.

Precipitation



Soil Moisture

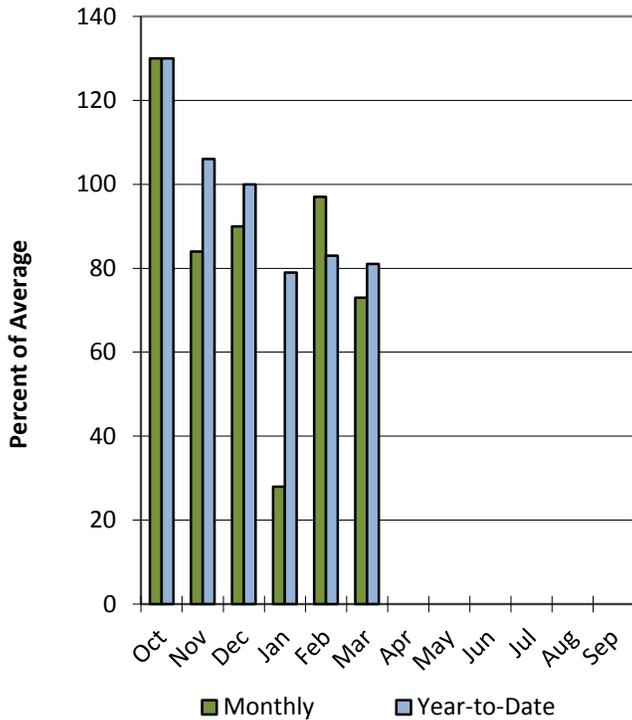


Beaver River Basin

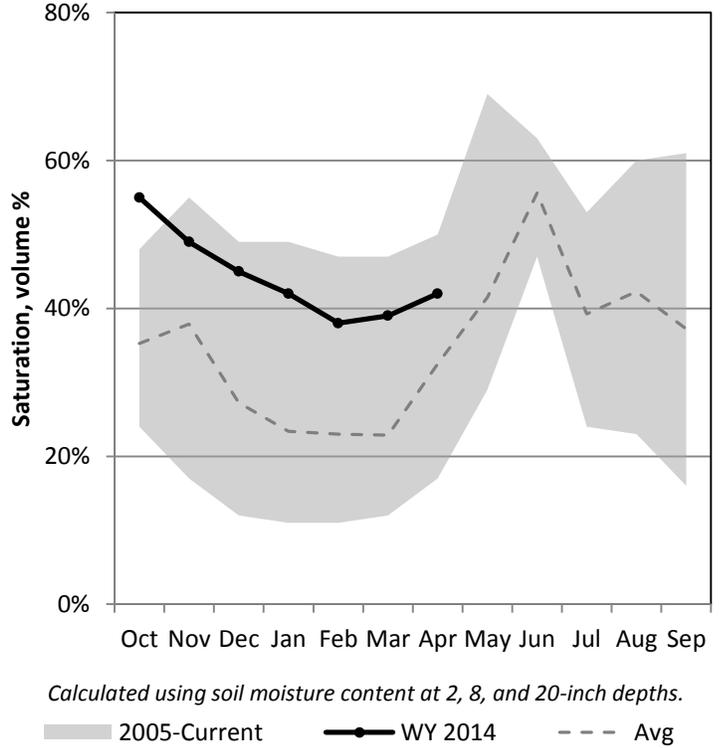
4/1/2014

Precipitation in March was below average at 73%, which brings the seasonal accumulation (Oct-Mar) to 81% of average. Soil moisture is at 42% compared to 38% last year. Reservoir storage is at 57% of capacity, compared to 63% last year. The water availability index for the Beaver River is 41%.

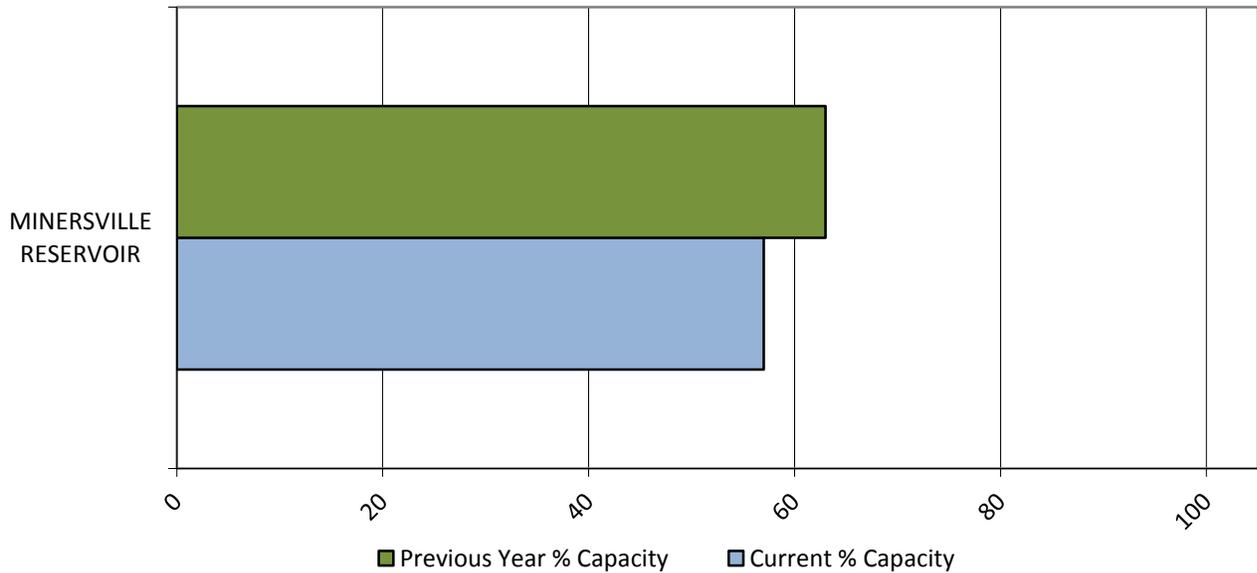
Precipitation



Soil Moisture



Reservoir Storage

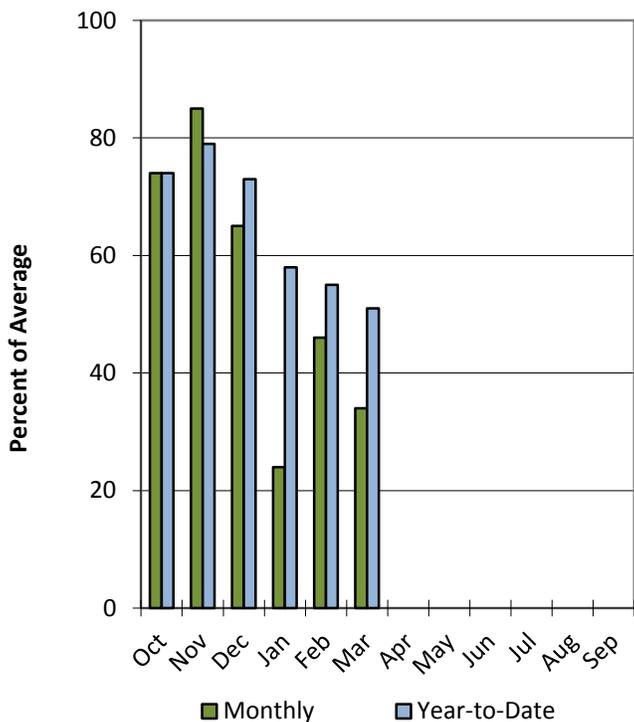


Southwestern Utah Basin

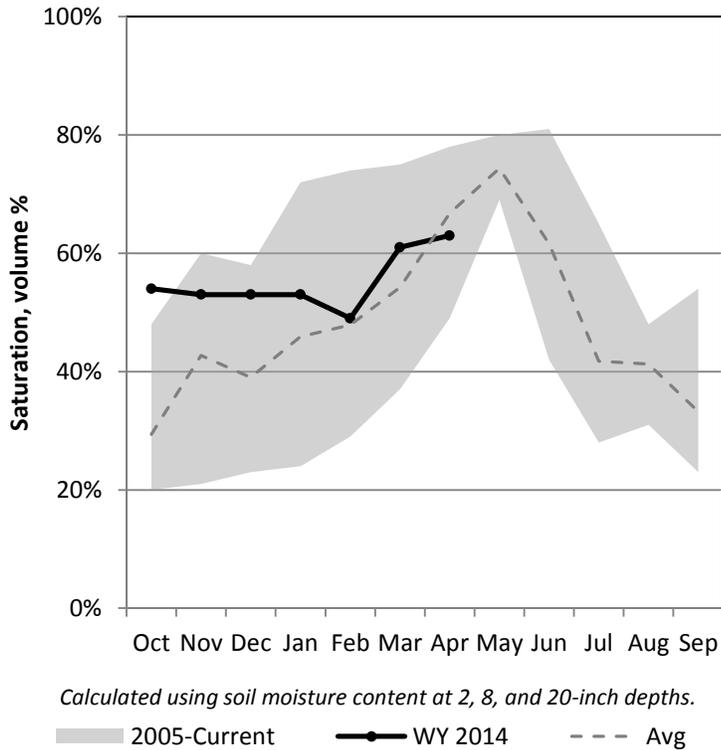
4/1/2014

Precipitation in March was much below average at 34%, which brings the seasonal accumulation (Oct-Mar) to 51% of average. Soil moisture is at 63% compared to 63% last year. Reservoir storage is at 39% of capacity, compared to 48% last year. The water availability index for the Virgin River is 11%.

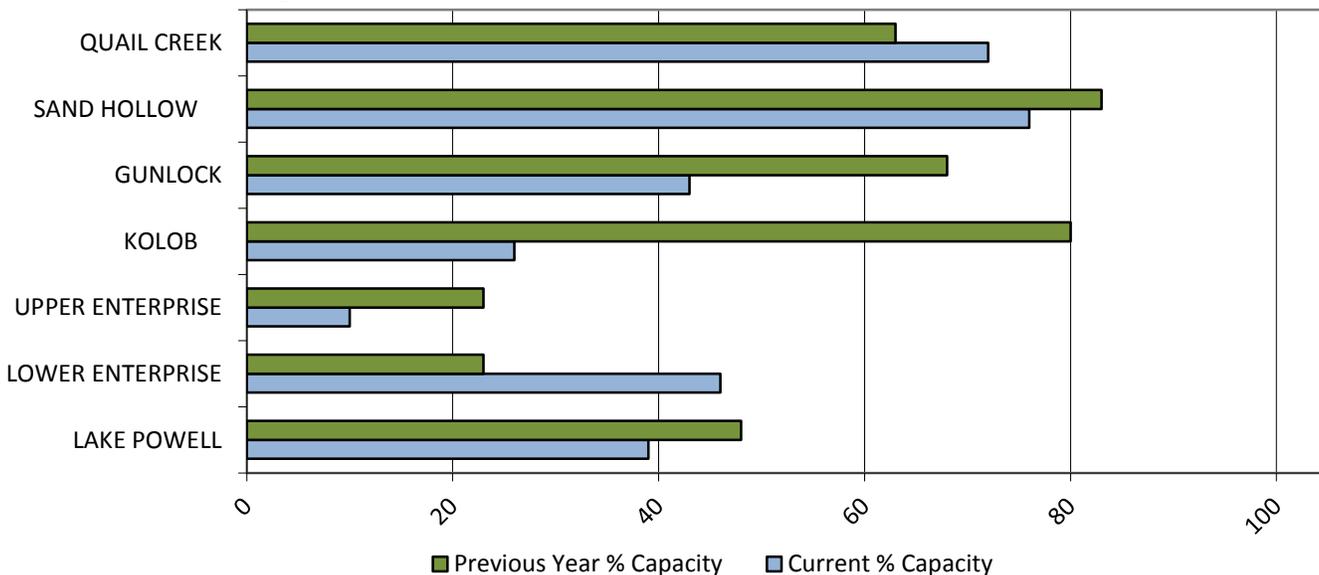
Precipitation



Soil Moisture



Reservoir Storage



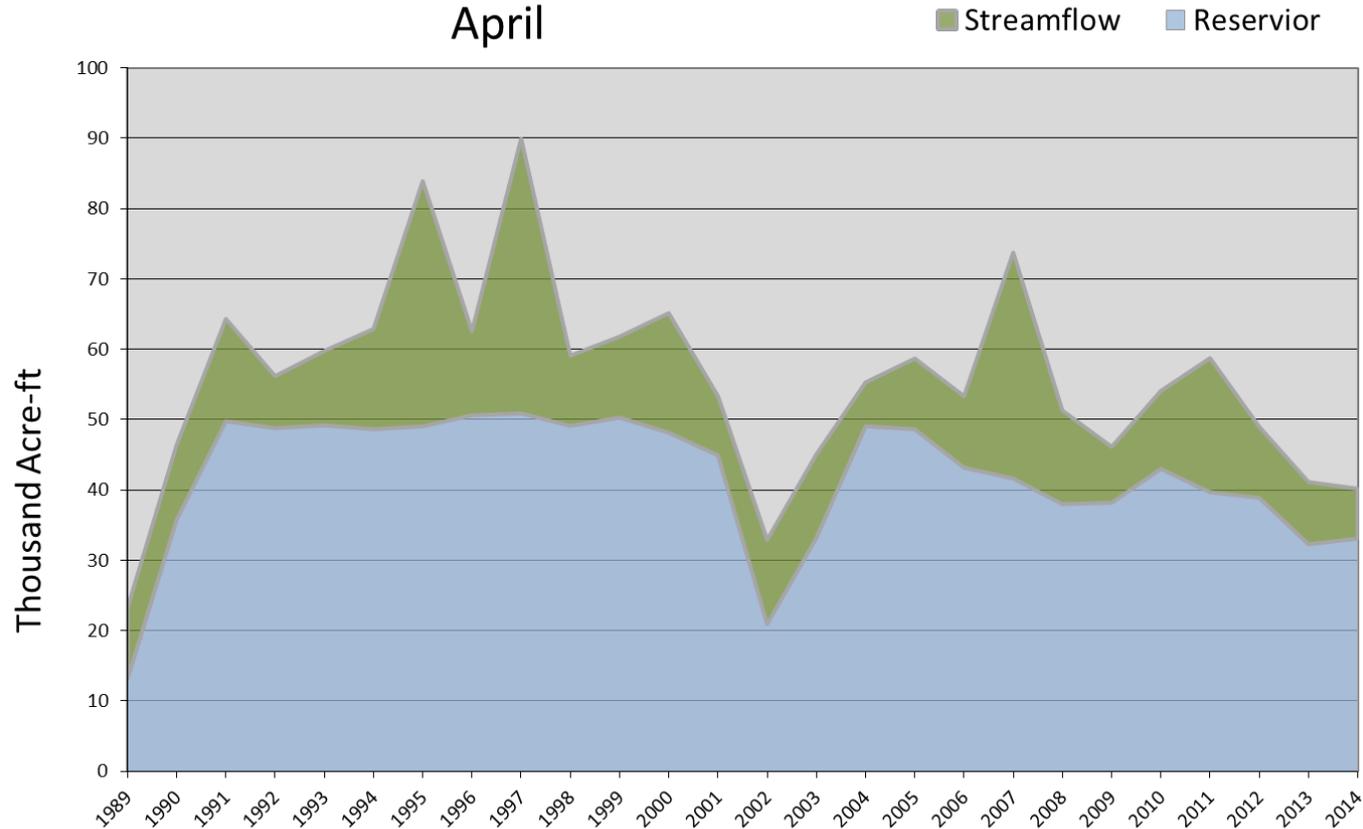
April 1, 2014

Water Availability Index

Basin or Region	March EOM* Reservoir	March accumulated flow Virgin and Santa Clara Rivers (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Southwest	33.1	7.1	40.2	-3.24	11	89, 02, 13, 03

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

Southwest - Water Availability Index April



4/1/2014

Water Availability Index

Basin or Region	February EOM* Reservoirs	Observed February Streamflow	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	KAF [^]	KAF	KAF		%	
Bear River	590	19.3	609	-1.31	34	96, 40, 64, 90
Woodruff Narrows	23.2	2.2	25.5	-1.45	33	93, 89, 81, 70
Little Bear	11.5	3.7	15.2	-3.44	9	08, 05, 10
Ogden River	63	4.2	67.2	-0.88	39	02, 79, 93, 85
Weber River	210	3.7	214	-3.43	9	08, 04, 91, 02
Provo	283	3.9	287	-3.75	5	08, 04
West Uintah Basin	26	1.8	28	1.93	73	12, 86, 88, 06
Eastern Uintah	25.0	0.7	26	-3.24	11	90, 03, 91, 13
Blacks Fork	15.7	1.8	17.5	1.99	74	95, 07, 98, 00
Smiths Creek	7.4	0.5	7.9	3.57	93	07, 12
Price River	53.5	7.5	61.0	-2.54	20	05, 04, 95, 03
Joe's Valley	32.2	1.3	33.5	-2.31	22	92, 95, 13, 90
Moab	1.2	0.4	1.6	0.00	50	11, 89, 90, 08
Upper Sevier River	111	6.7	118	1.56	69	69, 74, 85, 01
San Pitch	5.0	0.4	5.4	-3.27	11	03, 04, 05, 91
Lower Sevier River	139	9.1	148	-1.49	32	65, 91, 94, 76
Beaver	13.2	1.3	14.5	-0.77	41	94, 09, 93, 74
Virgin River	33.1	7.1	40.2	-3.24	11	89, 02, 13, 03

*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.

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<http://www.ut.nrcs.usda.gov/snow/>

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