

Utah Climate and Water Report

January, 2015



Crossing West Fork Blacks Fork, near Buck Pasture SNOTEL site

Photo by Troy Brosten

Utah Climate and Water Report

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

Report Content

1) Climate and Water Information – Soil Climate Analysis Network

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

2) General Hydrological Conditions

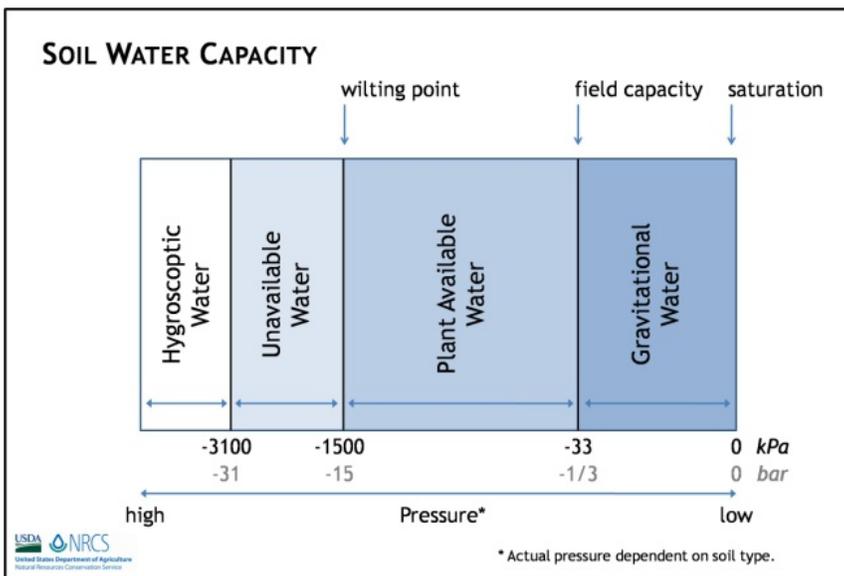
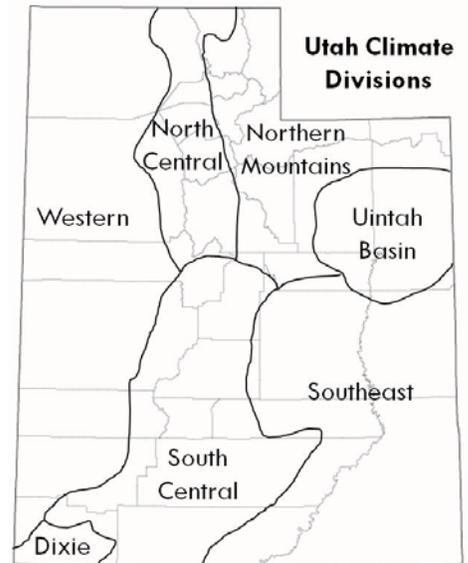
- a) SNOTEL Current Snow Water Equivalent (SWE) % of Normal
- b) SNOTEL Water Year to Date Precipitation
- c) Bear River Basin
 - Water Availability Index
- d) Weber and Ogden River Basins
 - Water Availability Index
- e) Utah Lake, Jordan River, and Tooele Valley Basins
 - Water Availability Index
-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

Climate and Water Information

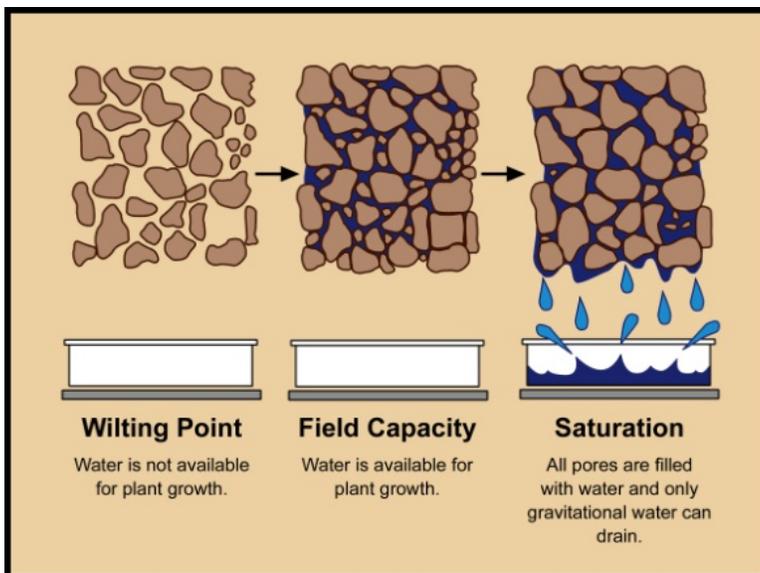
Soil Climate Analysis Network

Soil Climate Analysis Network (SCAN) stations are primarily located on low- to mid-elevation, agriculturally important landscapes that maintain representative soils. Elevations range from 3,000 to 7,000 ft. The SCAN network provides real-time soil moisture and temperature data coupled with additional climate information for use in natural resource planning, drought assessment, water resource management, and resource inventory. Stations are situated on non-irrigated, native soils, are remotely located, and collect hourly atmospheric and soils data that are available to the public online.

In order to summarize SCAN data, the 35 sites in Utah are grouped by climate divisions (North Central, Northern Mountains, Uintah Basin, Southeast, South Central, Dixie, and Western).



Explanation of soil water capacity definitions. Field capacity (FC) and wilting point (WP) are calculated in the laboratory for each soil horizon. The amount of water held between field capacity and wilting point is plant available.



Visual explanation of soil water capacity definitions.

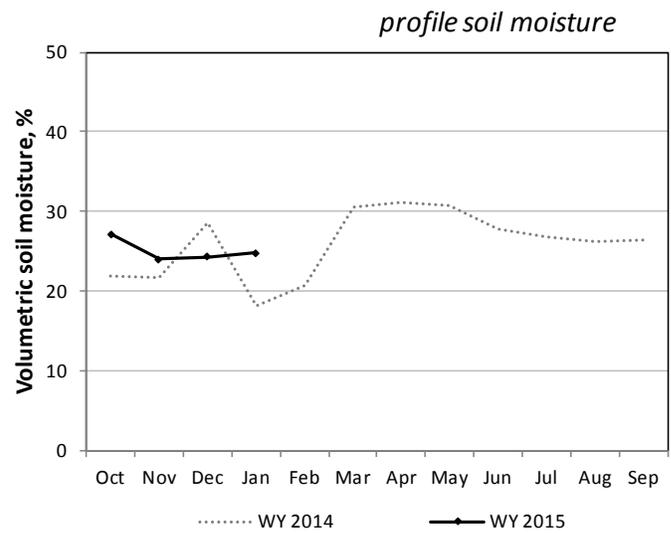
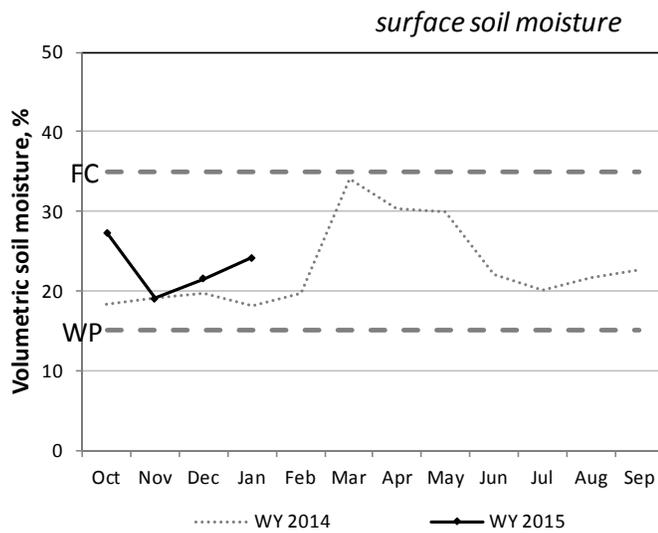
North Central

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>° F</i>				
NORTH CENTRAL												
Blue Creek	2.8	1.8	24	29	35	20	18	31	32	33	37	42
Cache Junction	2.4	0.9	22	27	26	26	34	31	33	35	40	45
Grantsville	1.0	0.7	5	17	22	26		27	33	37	46	51

* 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.

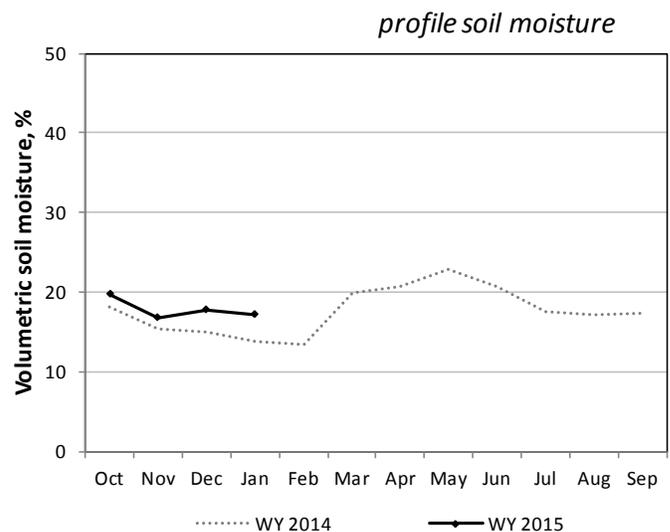
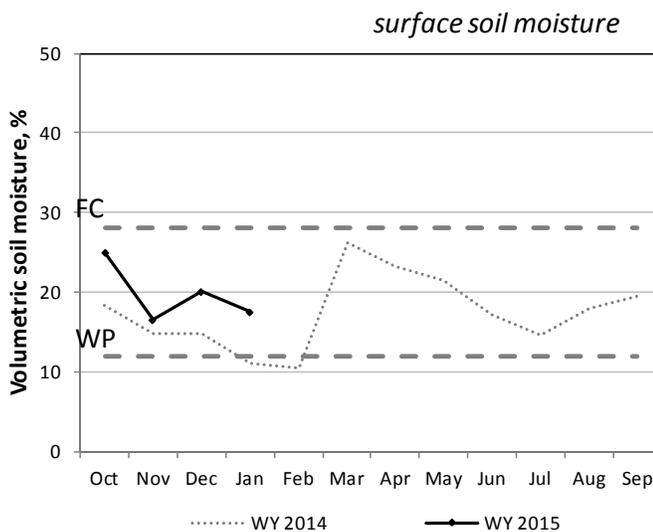
Northern Mountains

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	0.8	15	16	20	14	11	32	32	33	35	38
Buffalo Jump	1.3	0.5	6	10	12	8	-	26	28	31	35	-
Morgan	3.3	1.6	22	22	28	34	20	32	32	33	34	37

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Northern Mountains



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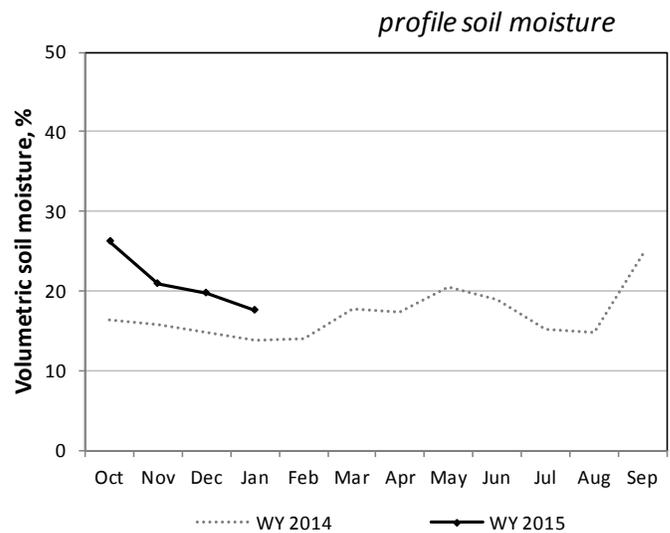
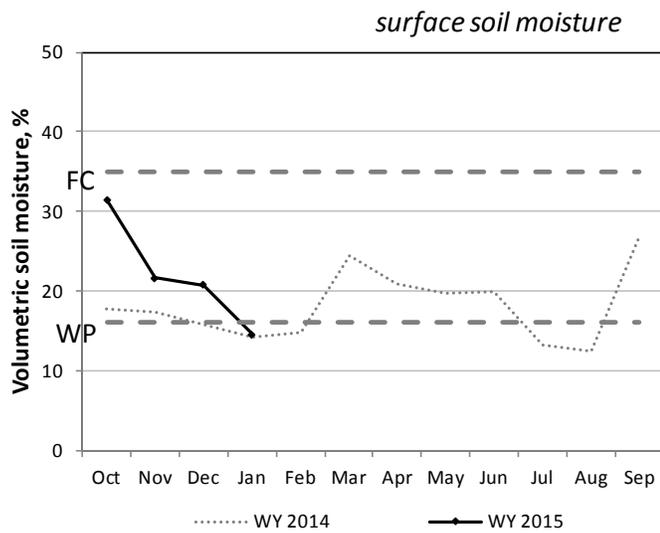
Uintah Basin

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	0.9	0.4	8	10	16	11	2	31	28	30	34	46
Little Red Fox	0.9	0.1	8	18	26	36	36	21	28	31	35	39
Split Mountain	1.3	0.4	7	13	13	18	11	18	20	30	35	41

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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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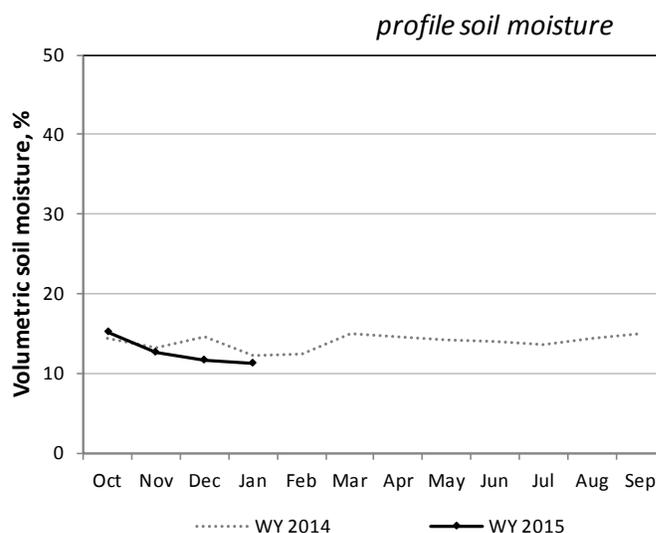
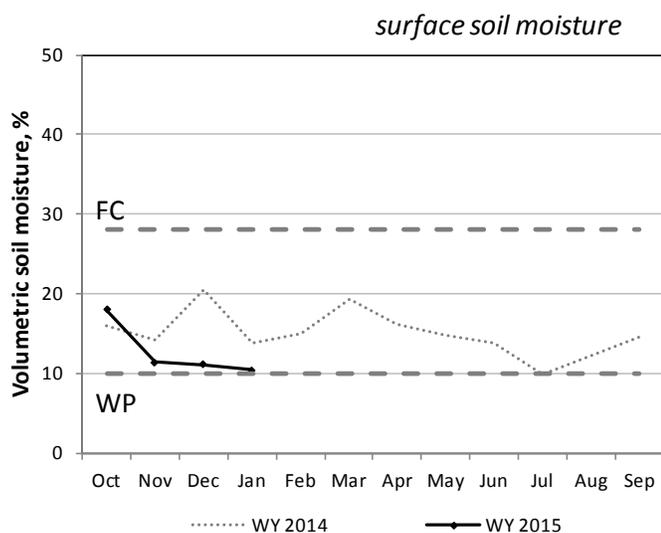
Southeast

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"
			volume %					° F				
SOUTHEAST												
Price	0.7	0.4	2	10	16	13	17	21	24	26	34	40
Green River	0.7	0.4	11	6	6	6	6	24	24	27	35	42
Harm's Way	1.6	0.6	8	4	11	11	5	30	28	31	36	41
West Summit	1.4	0.8	11	14	13	13	15	26	26	28	31	38
Eastland	1.5	0.9	8	10	8	20	18	25	26	28	34	40
Alkali Mesa	1.5	0.8	6	7		14	15	26	26	31	33	36
McCracken Mesa	1.3	0.8	14	15	13	14	12	28	30	31	38	45

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Southeast



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Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

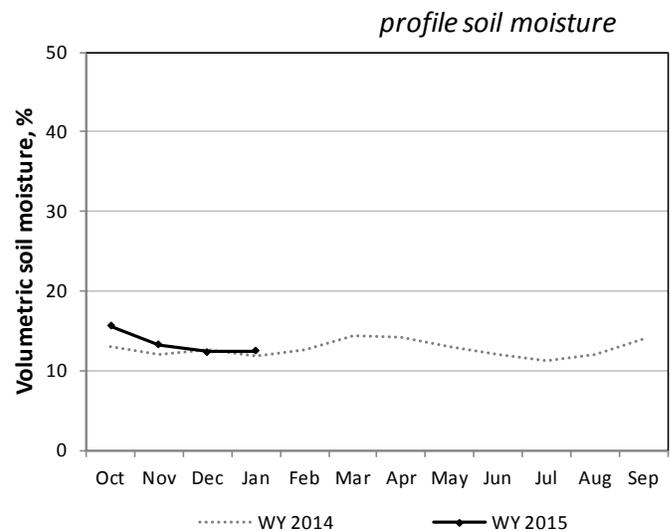
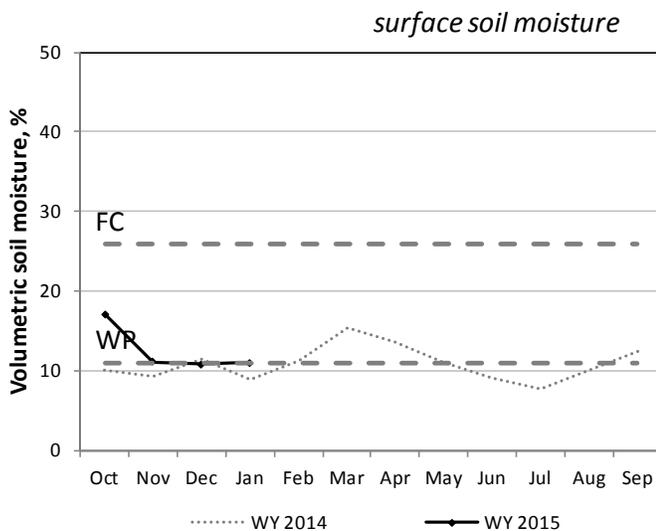
South Central

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	2.5	2.0	25	26	20	7	0	32	33	34	39	44
Ephraim	2.0	1.2	18	27	30	36	35	28	31	33	37	41
Holden	1.7	0.9	6	6	0	11	11	32	33	35	39	46
Milford	1.2	0.6	12	22	20	26	16	30	33	35	40	46
Manderfield	1.6	1.0	28	15	10	10	5	32	32	34	38	42
Circleville	0.9	0.7	13	11	6	8	14	22	22	27	36	43
Panguitch	1.4	0.9	5	16	11	19	31	23	23	27	34	42
Cave Valley	2.9	2.2	2	2	1	5	7	29	30	31	34	37
Vermillion	1.5	1.3	1	0	2	4	7	27	28	30	33	39
Spooky	0.5	0.4	0	0	0	11	1	30	30	32	40	45

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South Central



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

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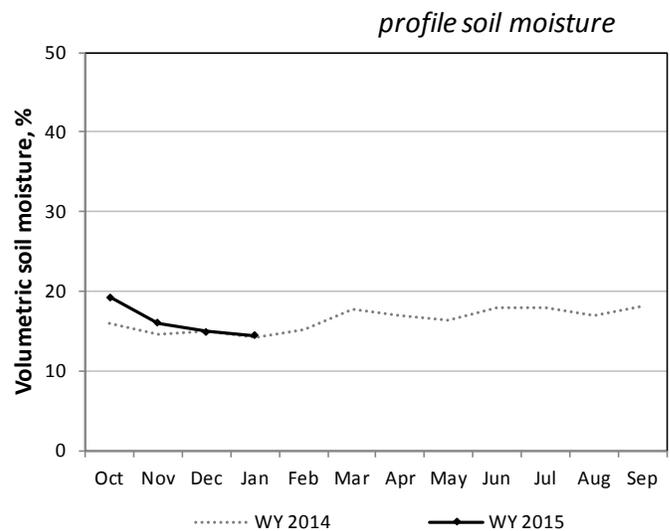
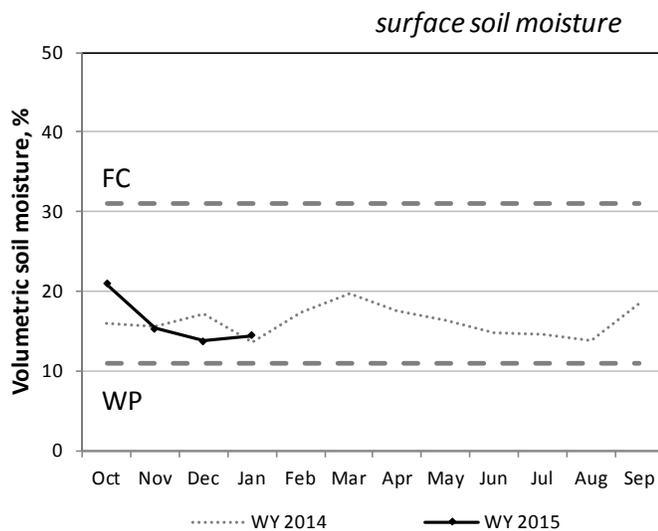
Western and Dixie

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>° F</i>				
WESTERN												
Grouse Creek	3.5	2.1	14	21	23	15	15	32	33	35	37	41
Park Valley	1.6	0.8	4	5	15	37	24	31	31	33	37	43
Goshute	0.8	0.4	15	0	25	30	18	26	29	32	35	42
Dugway	0.9	0.8	23	29	34		10	27	30	33	40	42
Tule Valley	0.2	0.1	12	10	19	12	8	26	30	34	37	44
Hal's Canyon	0.5	0.3	2	1	8	10	8	21	22	28	38	45
Enterprise	1.6	1.1	6	24	22	13	14	25	29	30	37	45
DIXIE												
Sand Hollow	1.6	0.8	0	1	1	0	0	30	32	33	39	50

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Western & Dixie



Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

Utah Hydrologic Summary

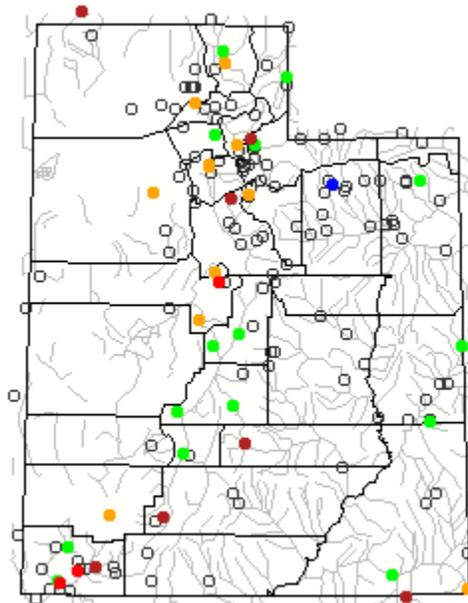
January 1, 2015

Current Conditions

Soil moisture values across the state are near to above normal in the north and near normal in the south. December precipitation was average or above for all of the state which brings seasonal precipitation (Oct-Dec) to about 80% of average. Snowpack's across the state are near to above normal in the north (80%-120%), and above to much above normal in central Utah (100%-170%) and below normal in southern Utah (70%-90%). Reservoir storage is similar to last year at 60% of capacity. Overall, water supply conditions are near normal in northern and central Utah and below normal in the south.

Current Utah Streamflow - Courtesy US Geological Survey

Monday, January 05, 2015 13:00ET



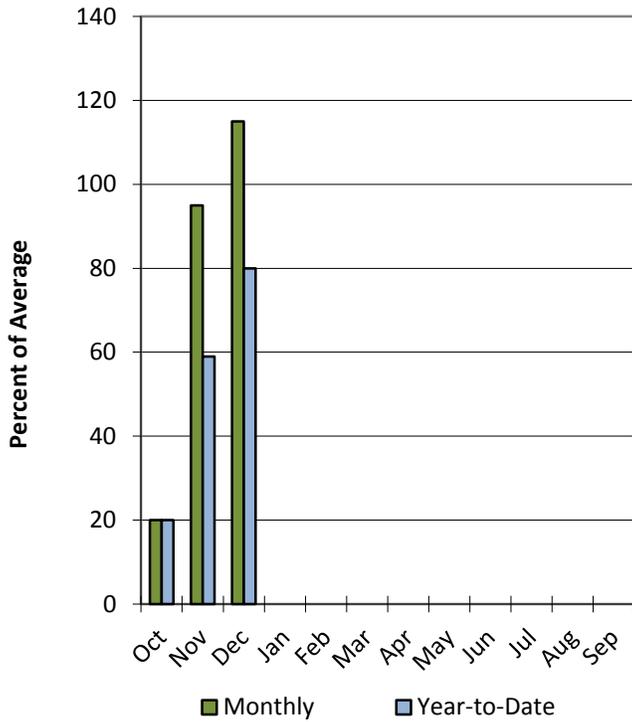
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Statewide Utah

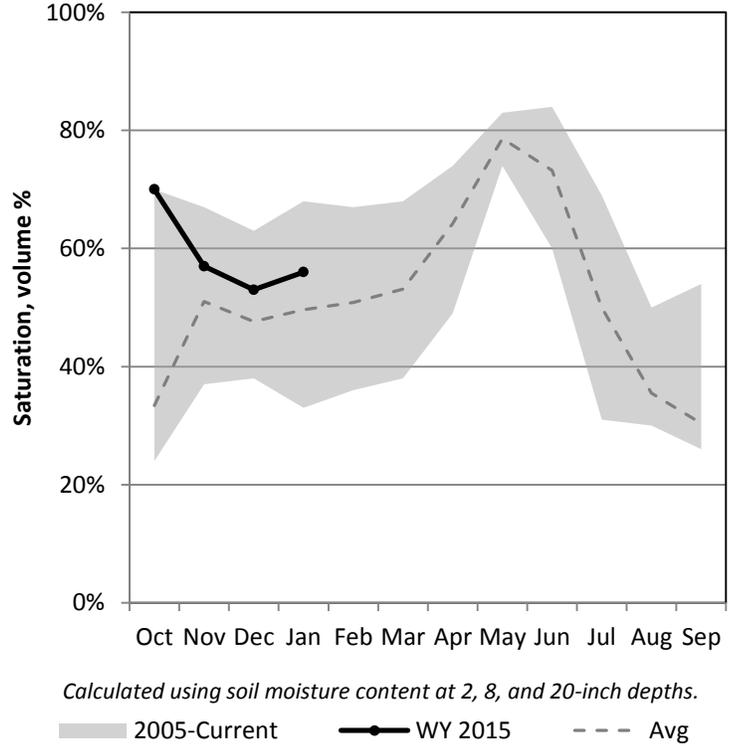
1/1/2015

Precipitation in December was above average at 115%, which brings the seasonal accumulation (Oct-Dec) to 80% of average. Soil moisture is at 56% compared to 54% last year. Reservoir storage is at 60% of capacity, compared to 58% last year.

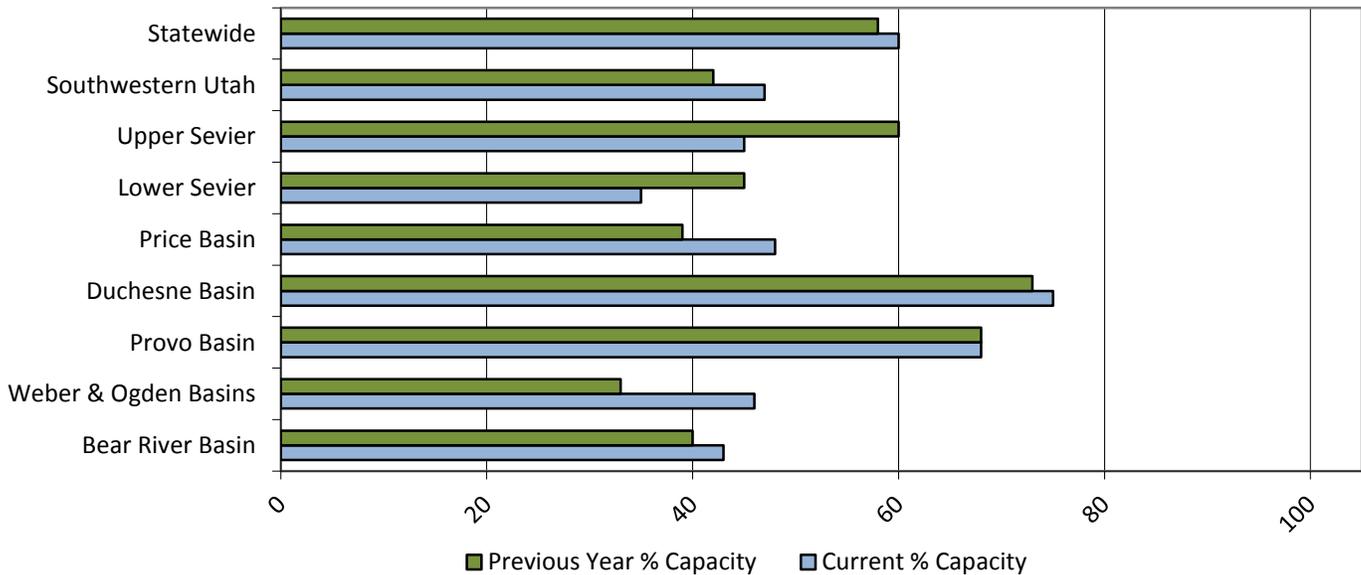
Precipitation



Soil Moisture



Reservoir Storage

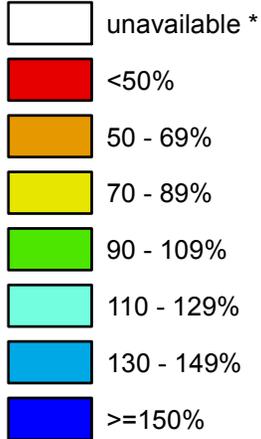


Utah

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

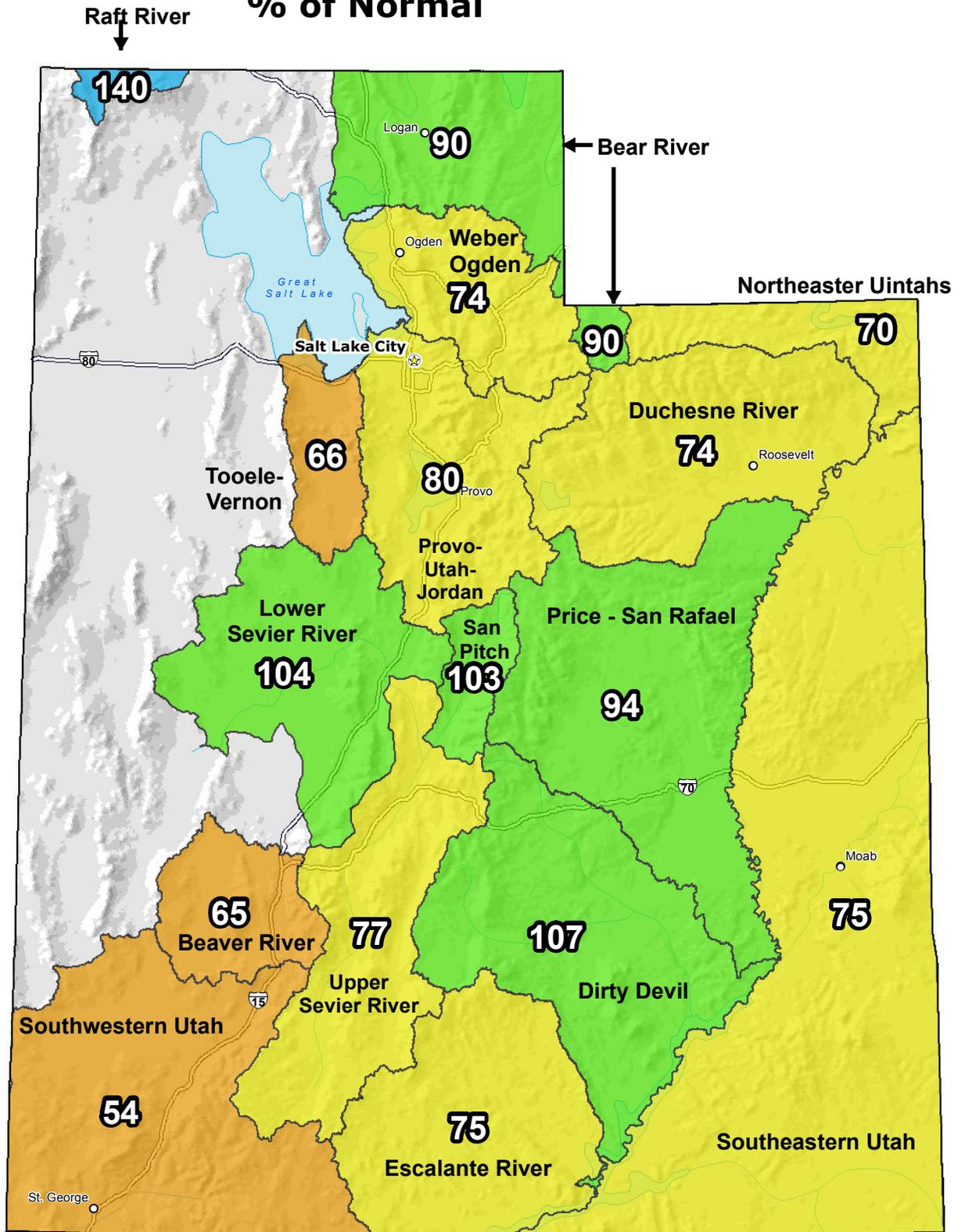
Jan 01, 2015

**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).

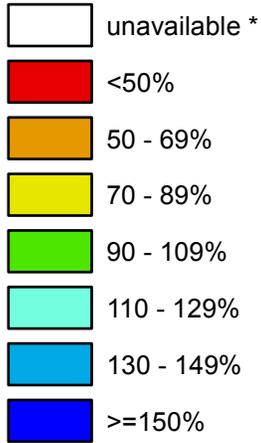
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Utah

SNOTEL Current Snow Water Equivalent (SWE) % of Normal

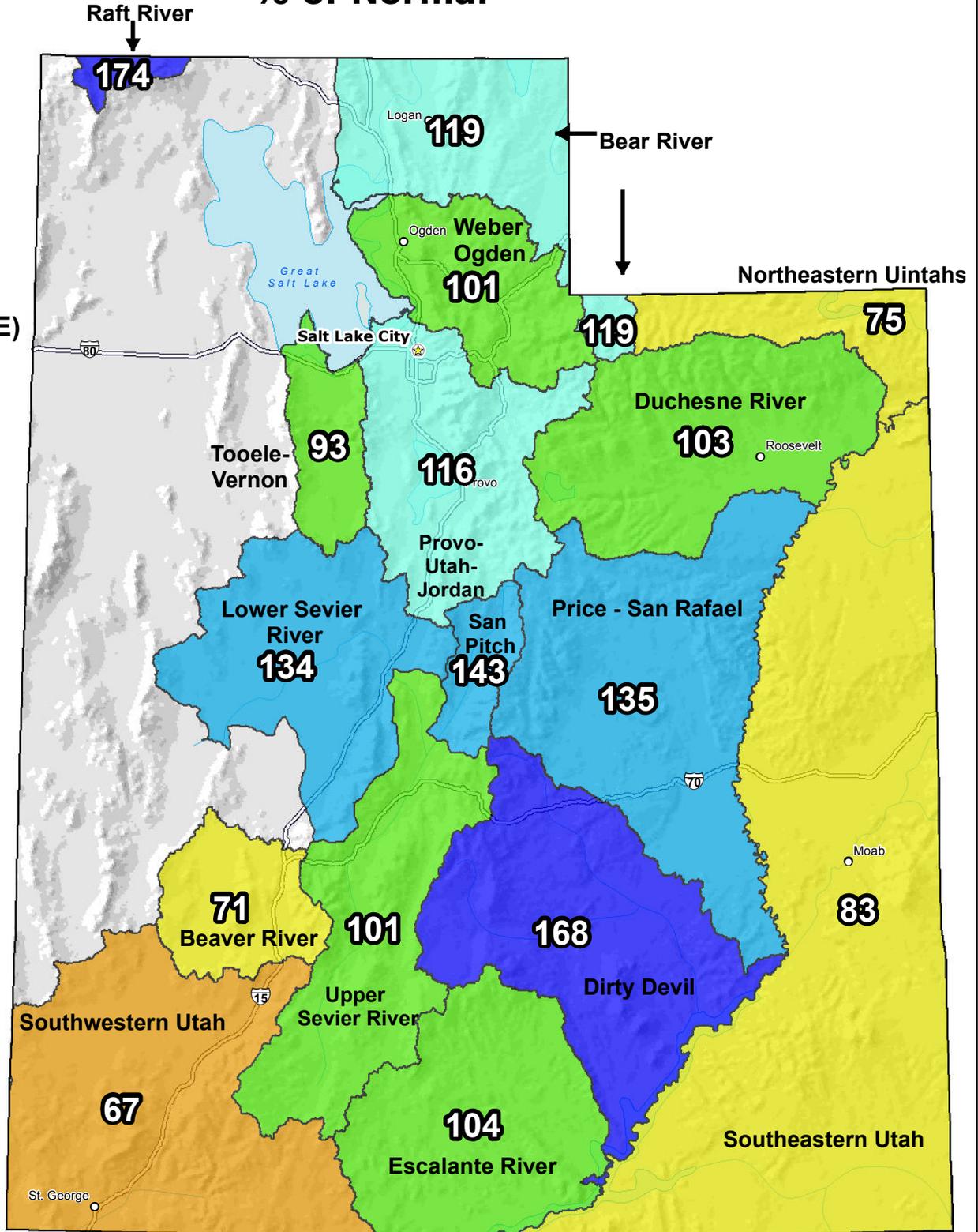
Jan 01, 2015

**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).

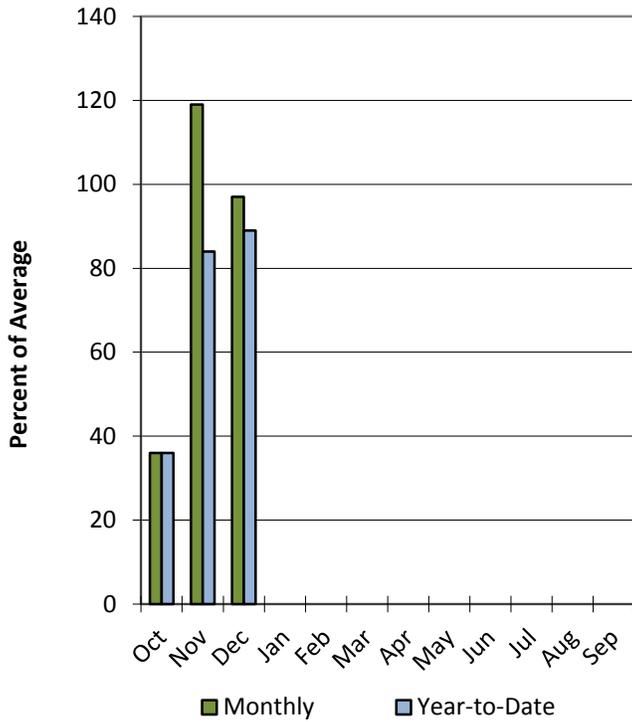
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Bear River Basin

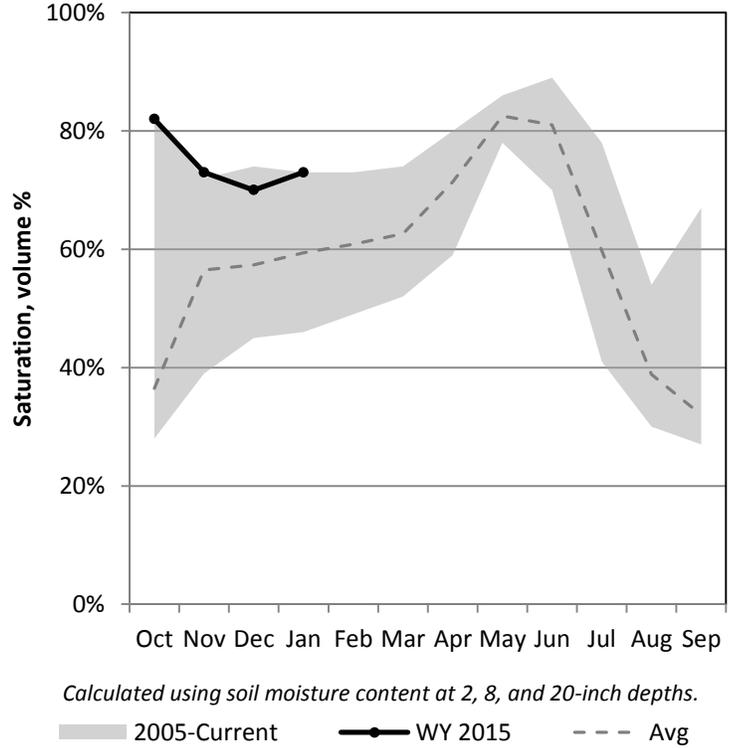
1/1/2015

Precipitation in December was near average at 97%, which brings the seasonal accumulation (Oct-Dec) to 89% of average. Soil moisture is at 73% compared to 57% last year. Reservoir storage is at 43% of capacity, compared to 40% last year. The water availability index for the Bear River is 50%.

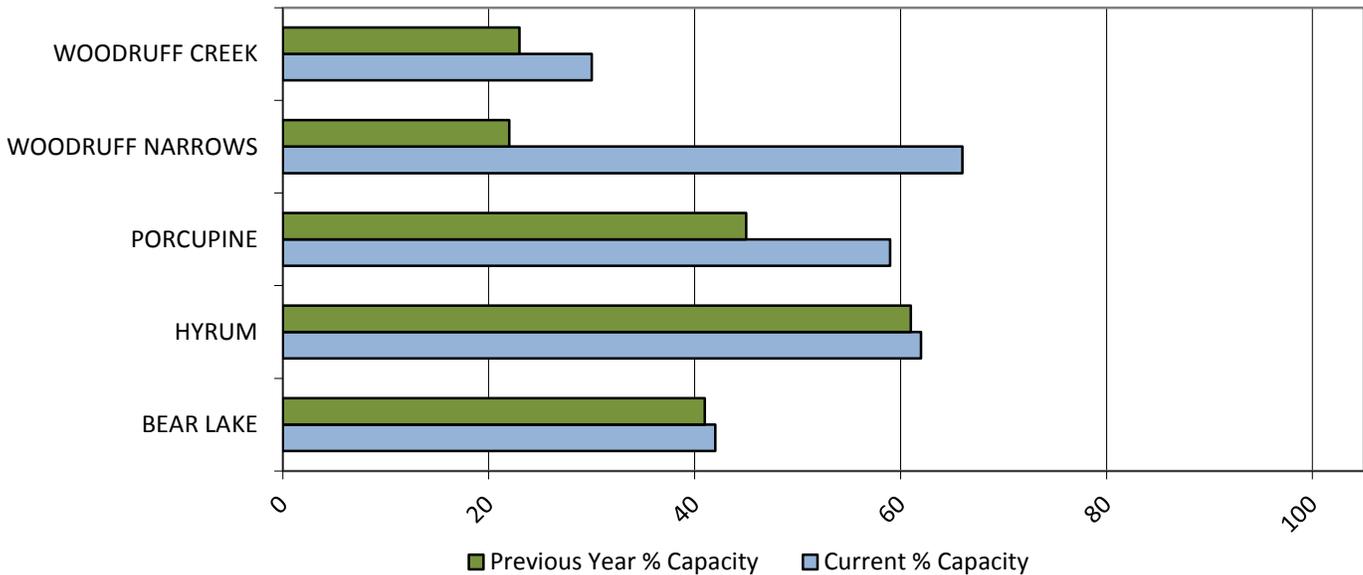
Precipitation



Soil Moisture



Reservoir Storage

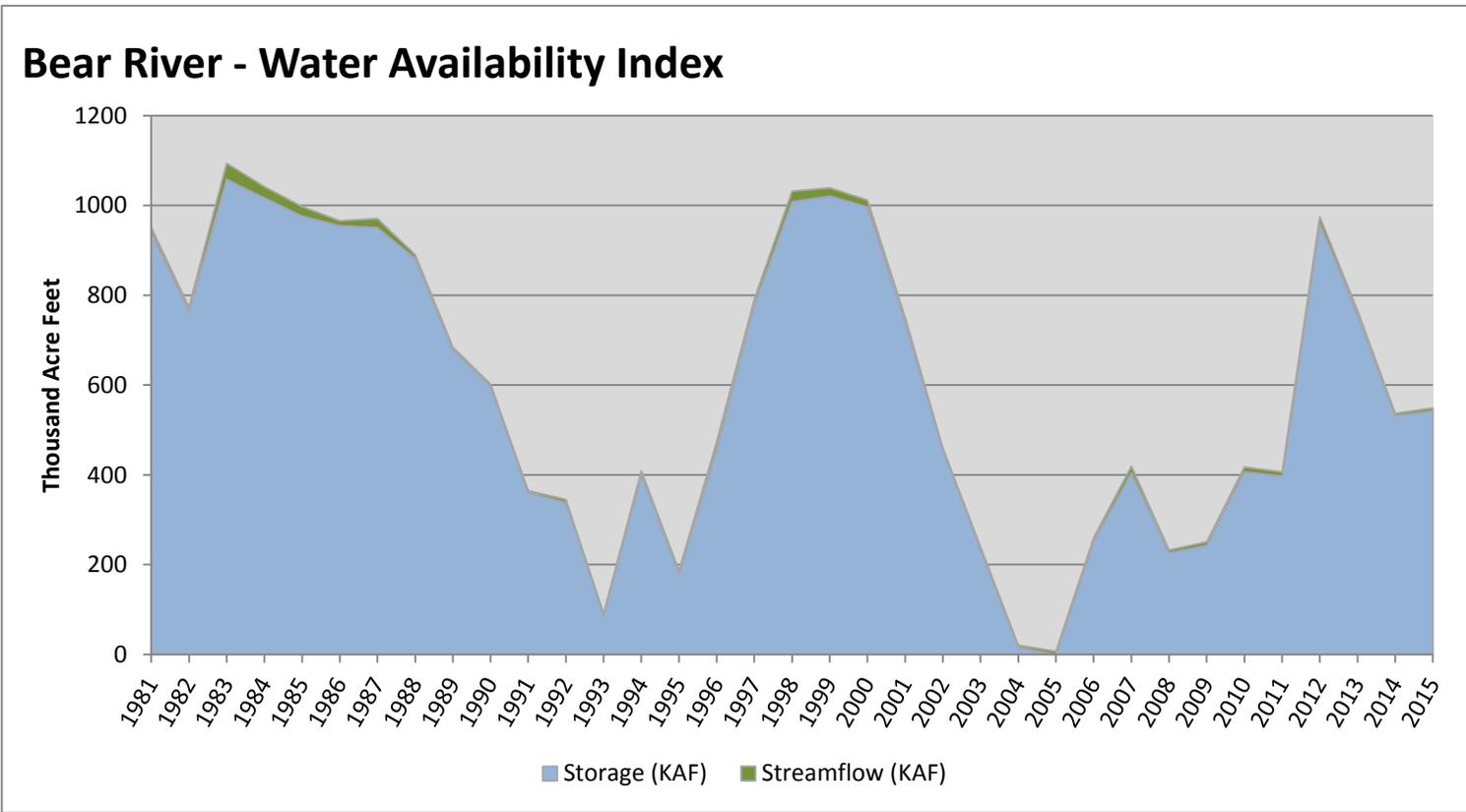


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	542.10	6.76	548.86	50	0	96, 14, 90, 89

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

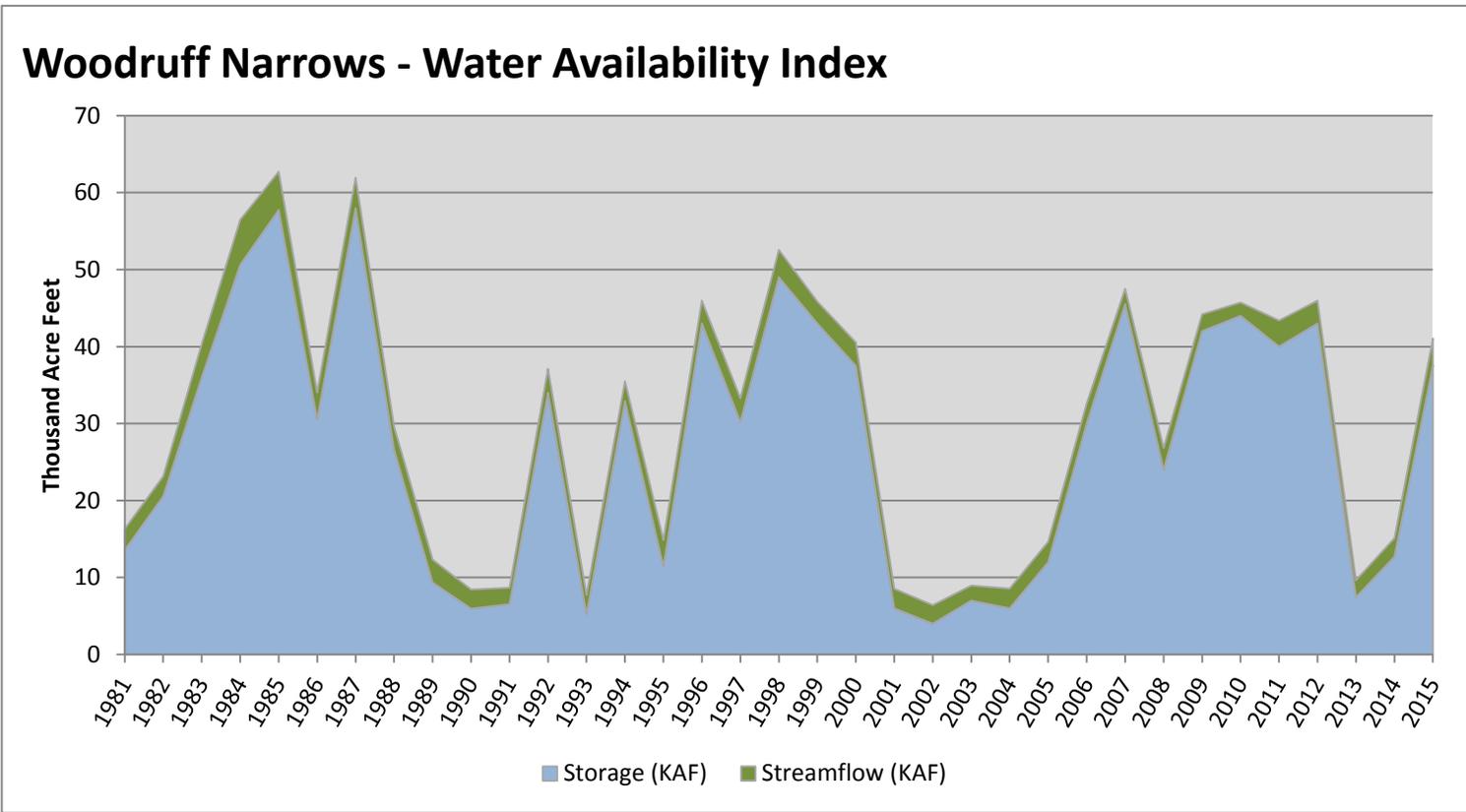


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	37.57	3.49	41.06	67	1.39	83, 00, 11, 09

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

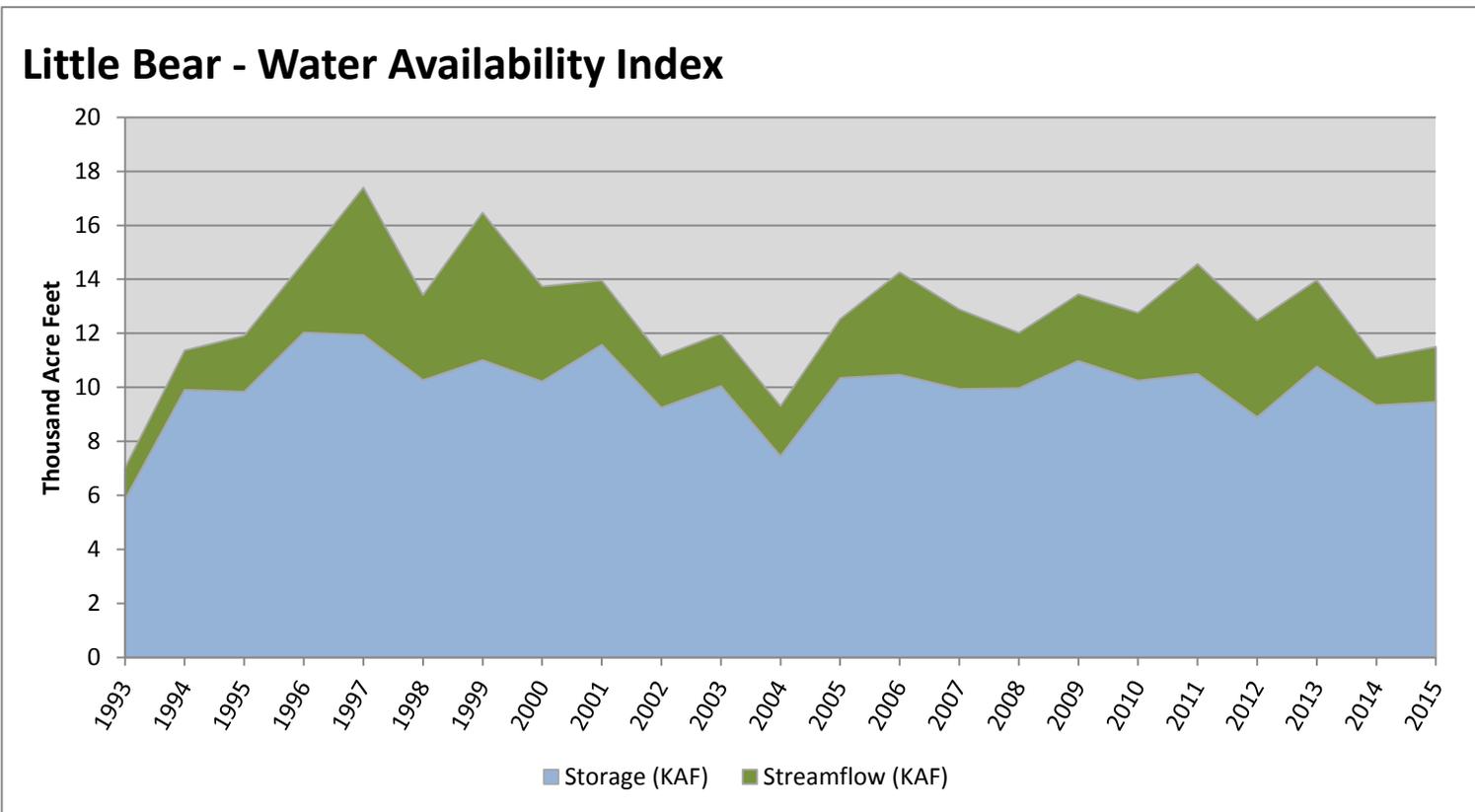


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	9.46	2.04	11.50	25	-2.08	02, 94, 95, 03

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

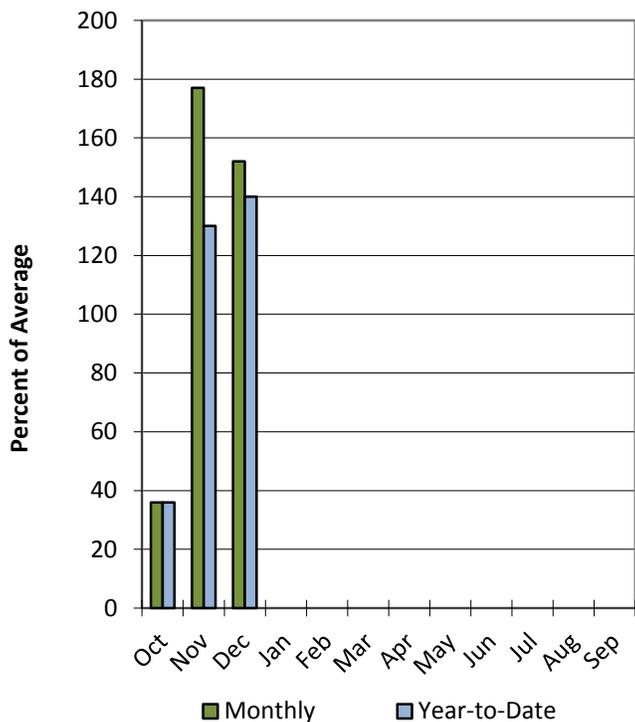


Raft River Basin

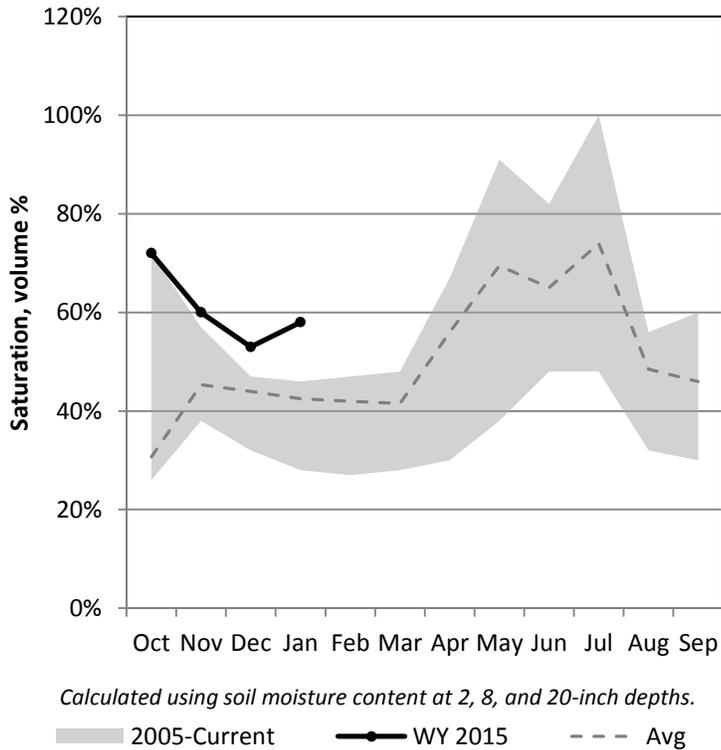
1/1/2015

Precipitation in December was much above average at 152%, which brings the seasonal accumulation (Oct-Dec) to 140% of average. Soil moisture is at 58% compared to 28% last year.

Precipitation



Soil Moisture

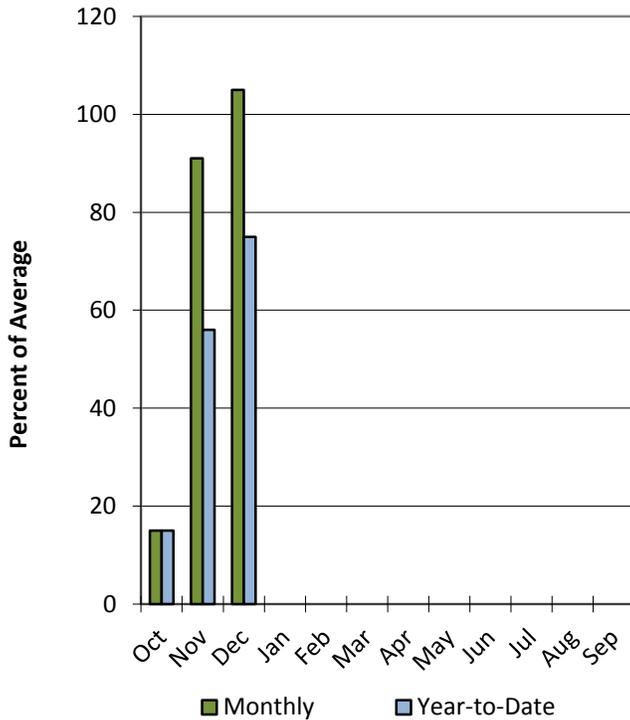


Weber & Ogden River Basins

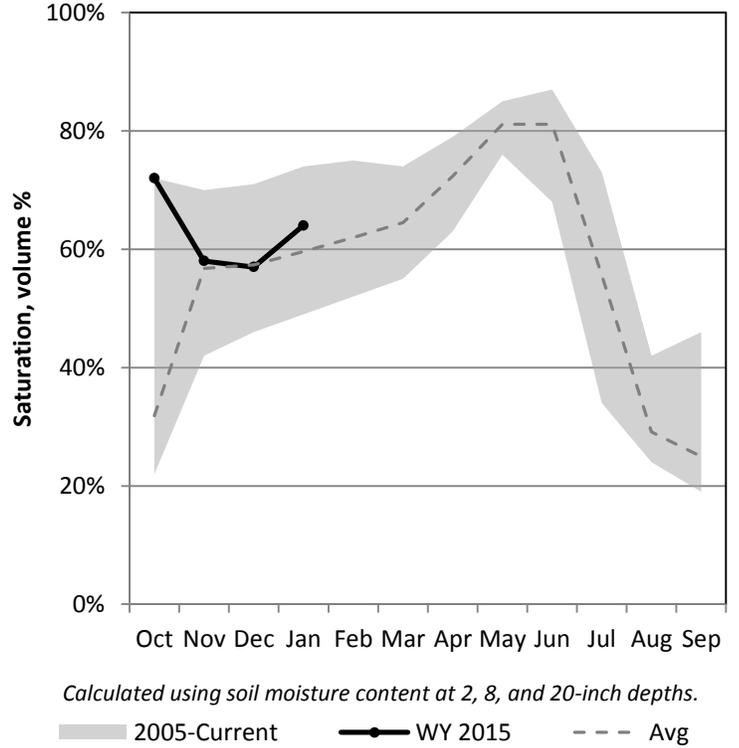
1/1/2015

Precipitation in December was near average at 105%, which brings the seasonal accumulation (Oct-Dec) to 75% of average. Soil moisture is at 64% compared to 49% last year. Reservoir storage is at 46% of capacity, compared to 33% last year. The water availability index for the Ogden River is 58% and 42% for the Weber River.

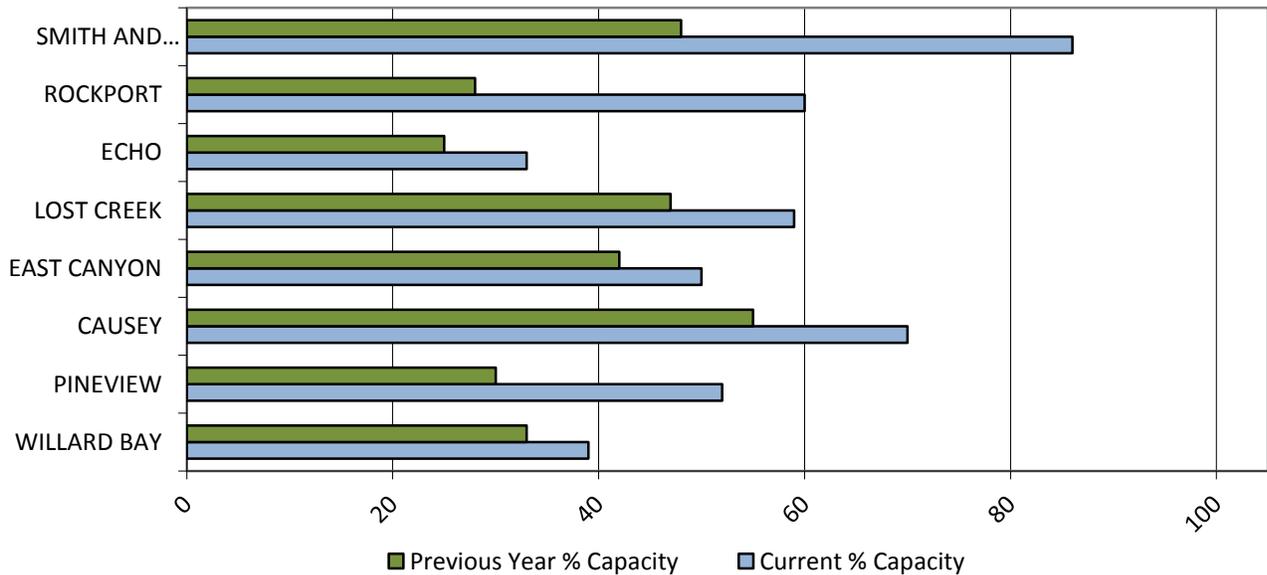
Precipitation



Soil Moisture



Reservoir Storage

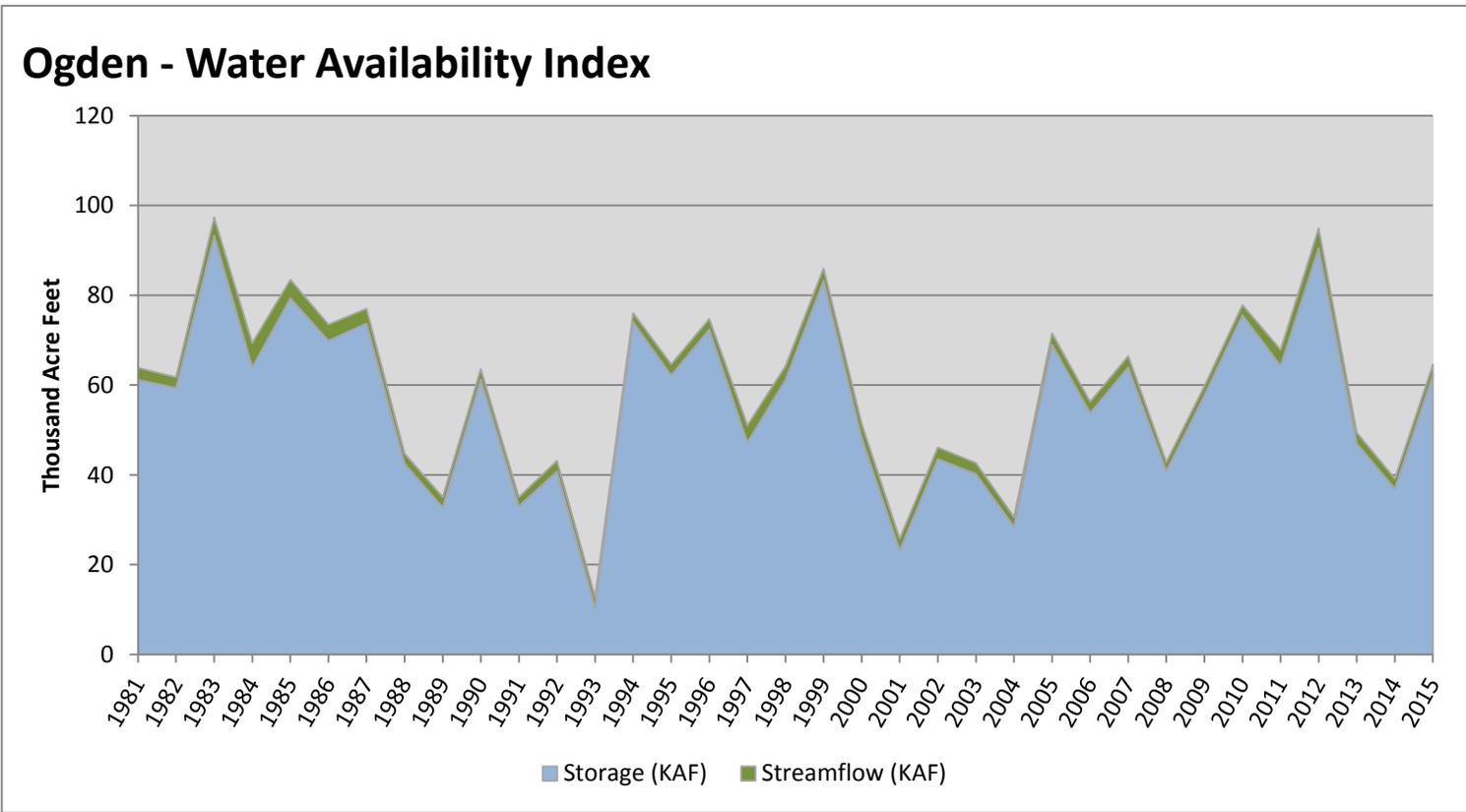


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	62.21	2.36	64.57	58	0.69	81, 98, 95, 07

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

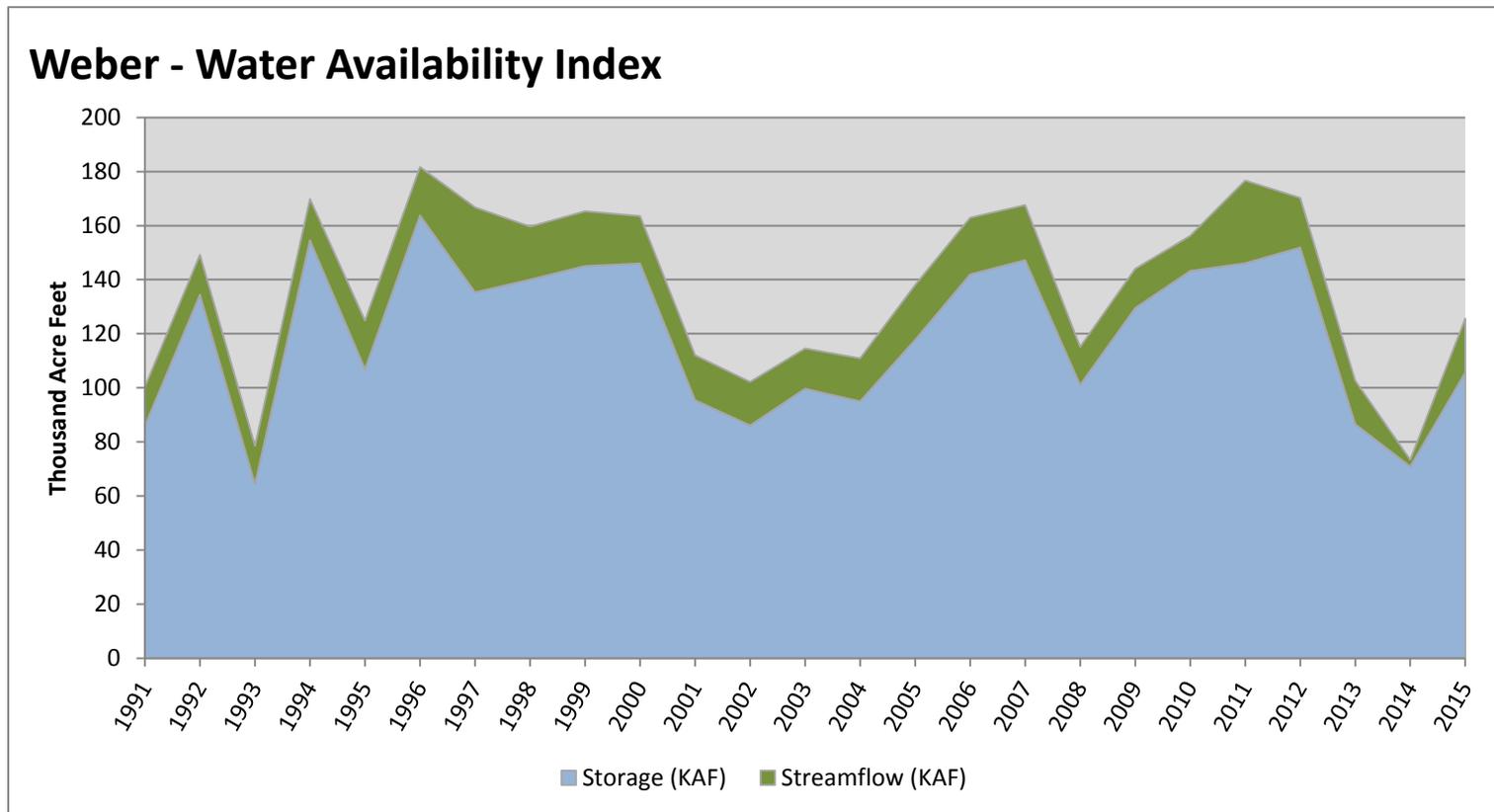


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similar WAI
	KAF^	KAF^	KAF^	%		
Weber	105.67	19.93	125.60	42	-0.64	08, 95, 05, 09

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

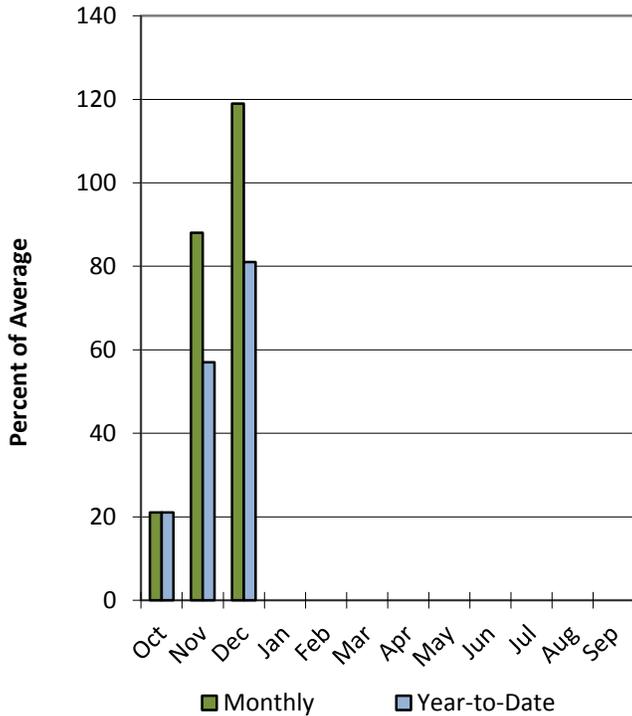


Provo & Jordan River Basins

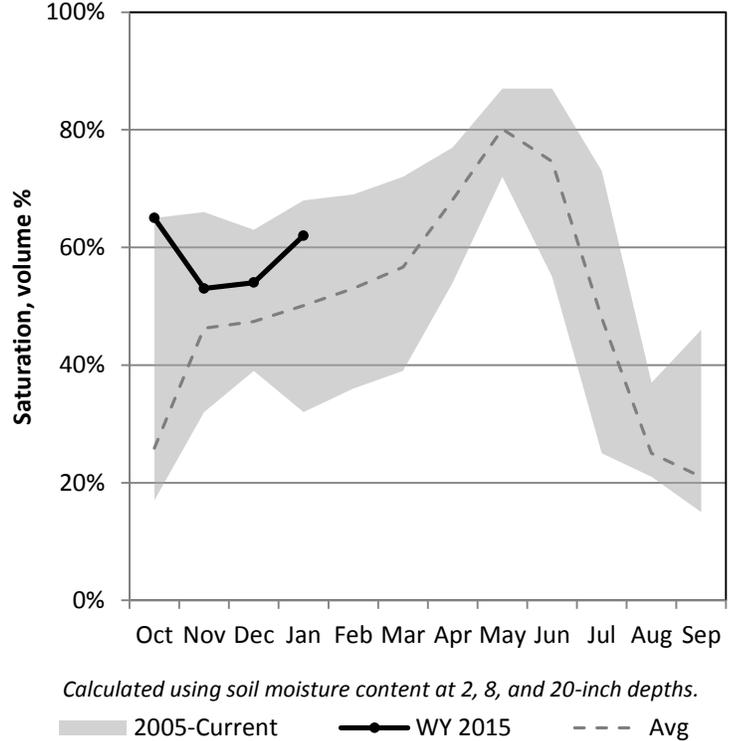
1/1/2015

Precipitation in December was above average at 119%, which brings the seasonal accumulation (Oct-Dec) to 81% of average. Soil moisture is at 62% compared to 54% last year. Reservoir storage is at 68% of capacity, compared to 68% last year. The water availability index for the Provo River is 38%.

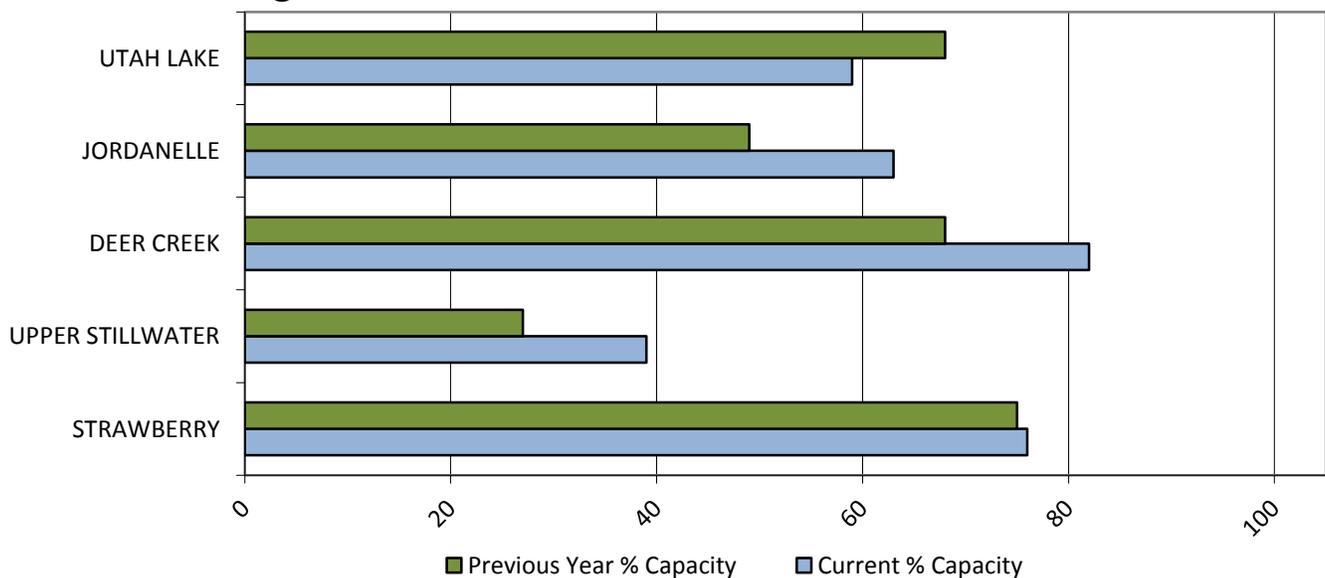
Precipitation



Soil Moisture



Reservoir Storage

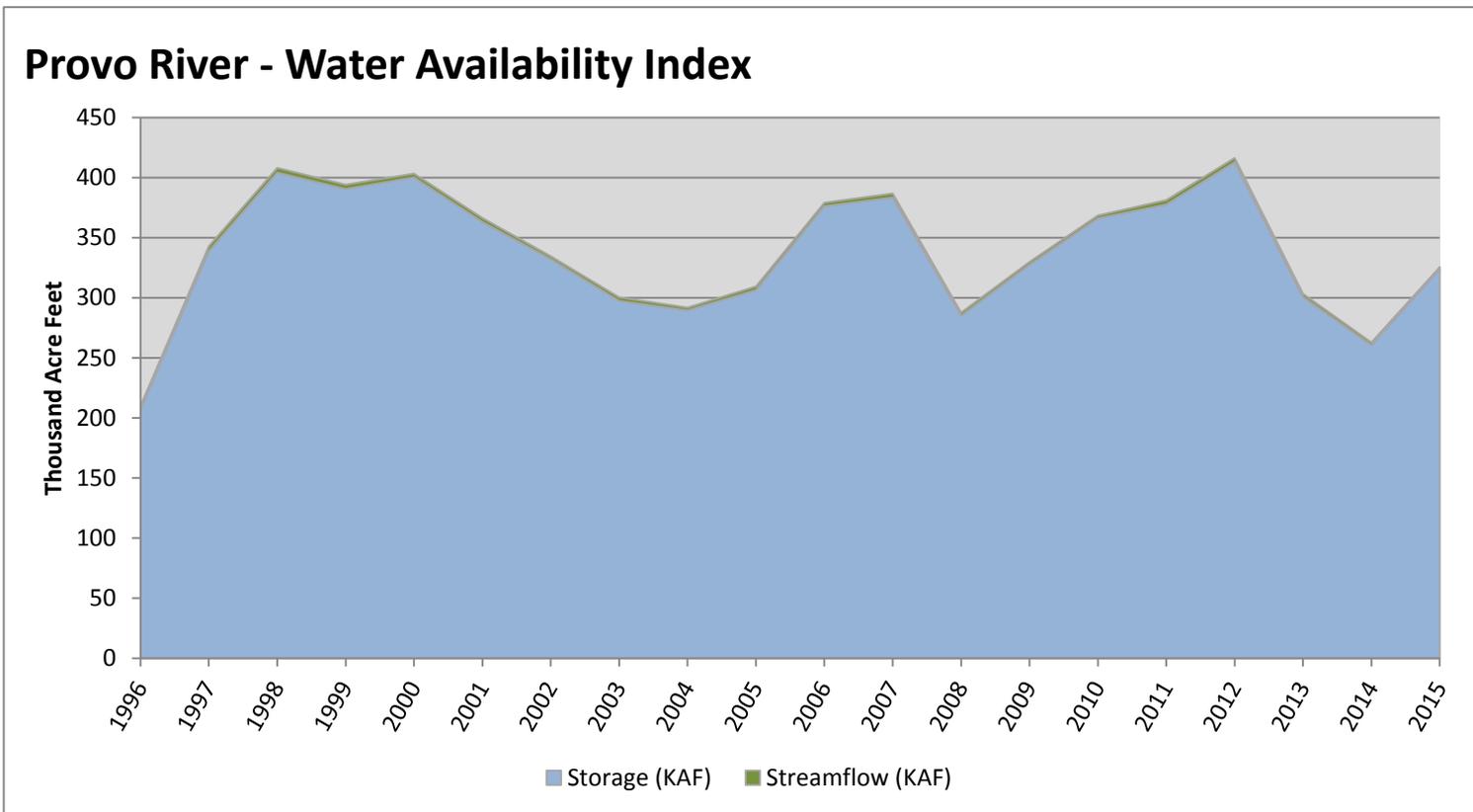


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	323.92	1.62	325.54	38	-0.99	13, 05, 09, 02

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

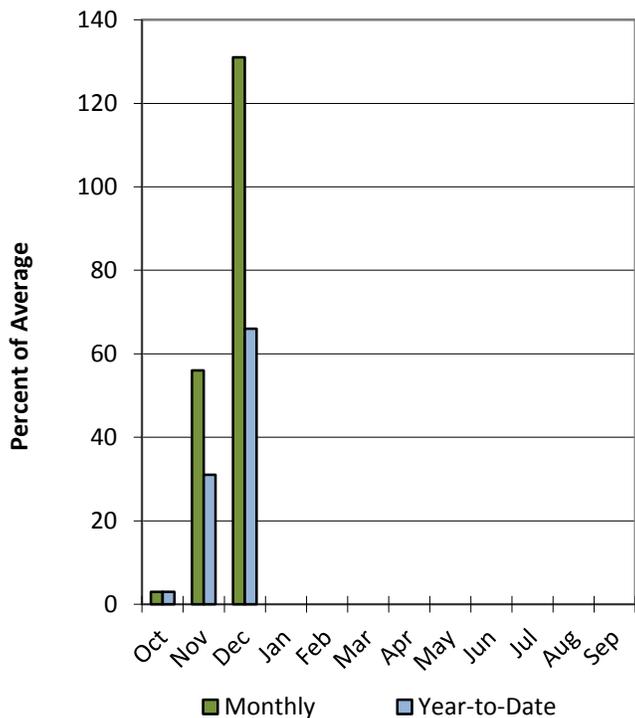


Tooele & Vernon Creek Basins

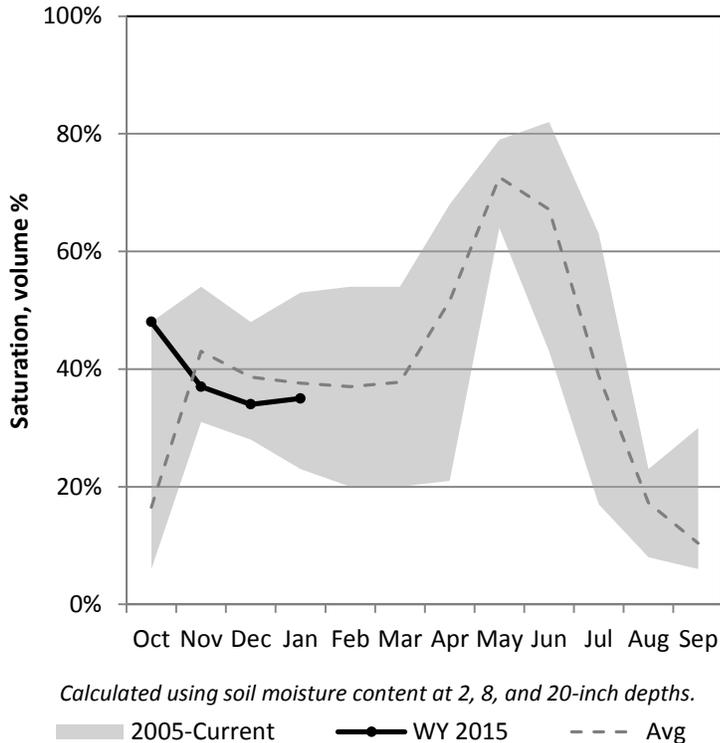
1/1/2015

Precipitation in December was much above average at 131%, which brings the seasonal accumulation (Oct-Dec) to 66% of average. Soil moisture is at 35% compared to 31% last year. Reservoir storage is at 27% of capacity, compared to 29% last year.

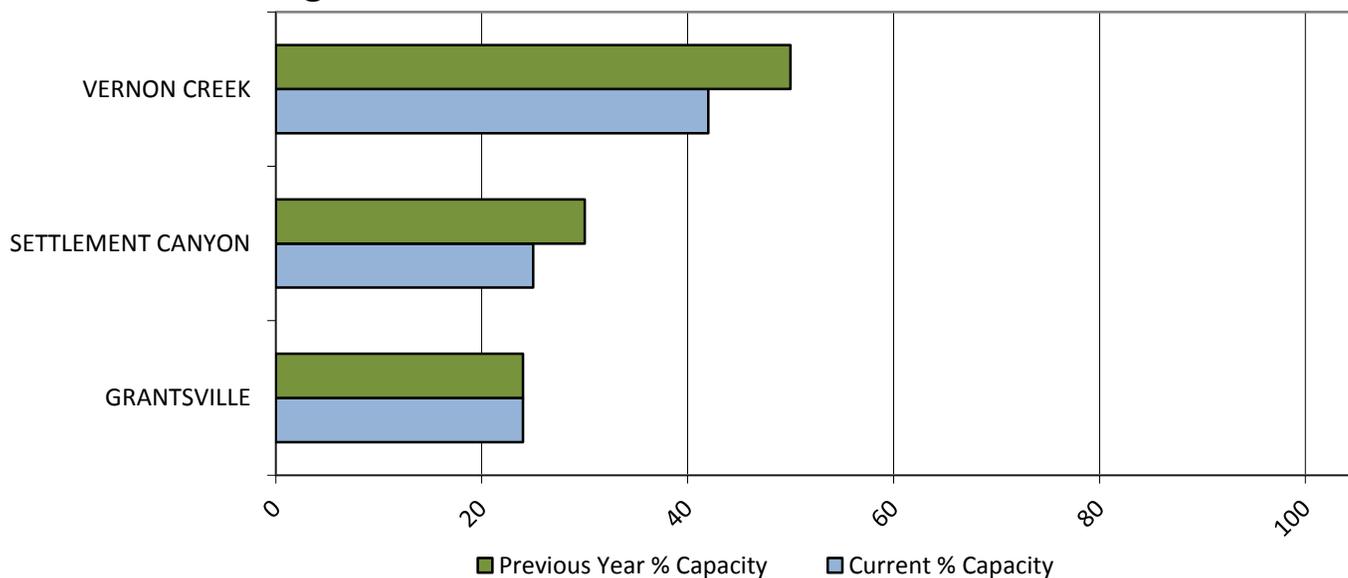
Precipitation



Soil Moisture



Reservoir Storage

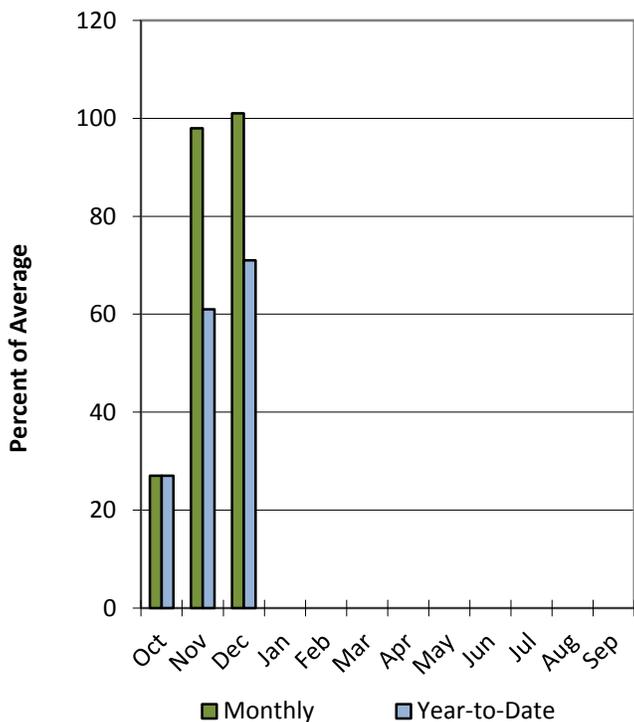


Northeastern Uintah Basin

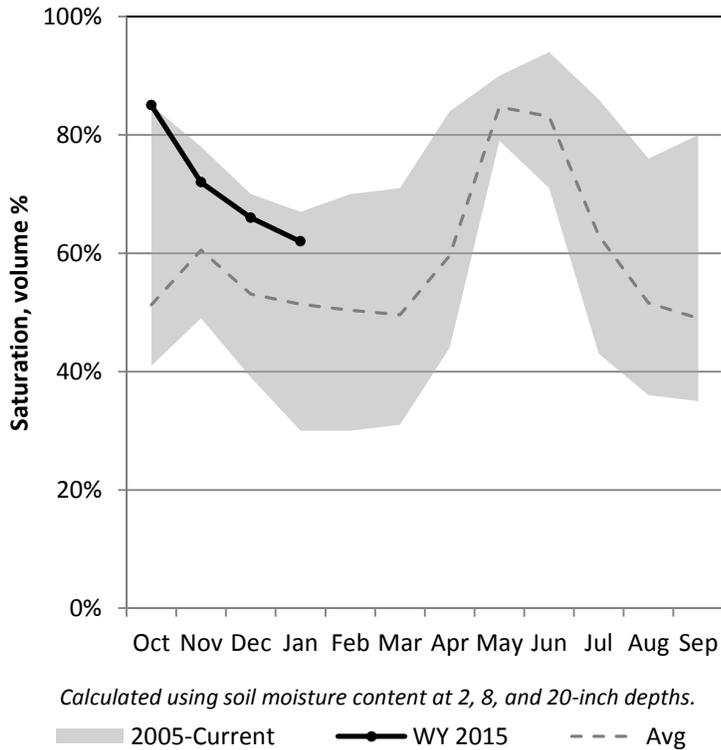
1/1/2015

Precipitation in December was near average at 101%, which brings the seasonal accumulation (Oct-Dec) to 71% of average. Soil moisture is at 62% compared to 63% last year. Reservoir storage is at 87% of capacity, compared to 75% last year.

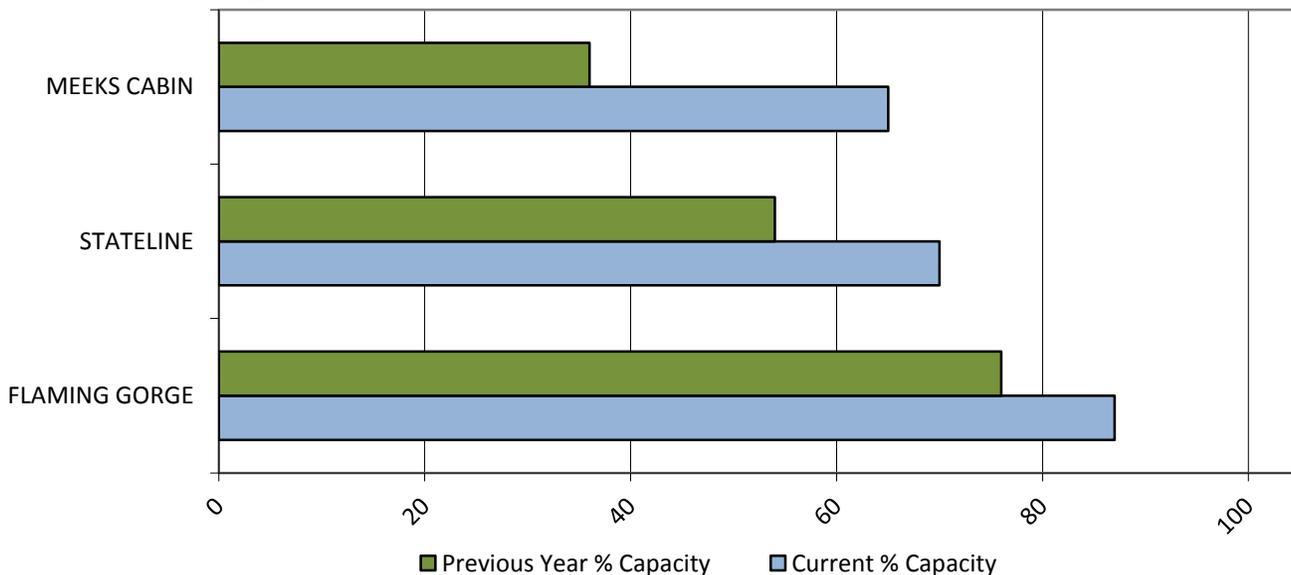
Precipitation



Soil Moisture



Reservoir Storage



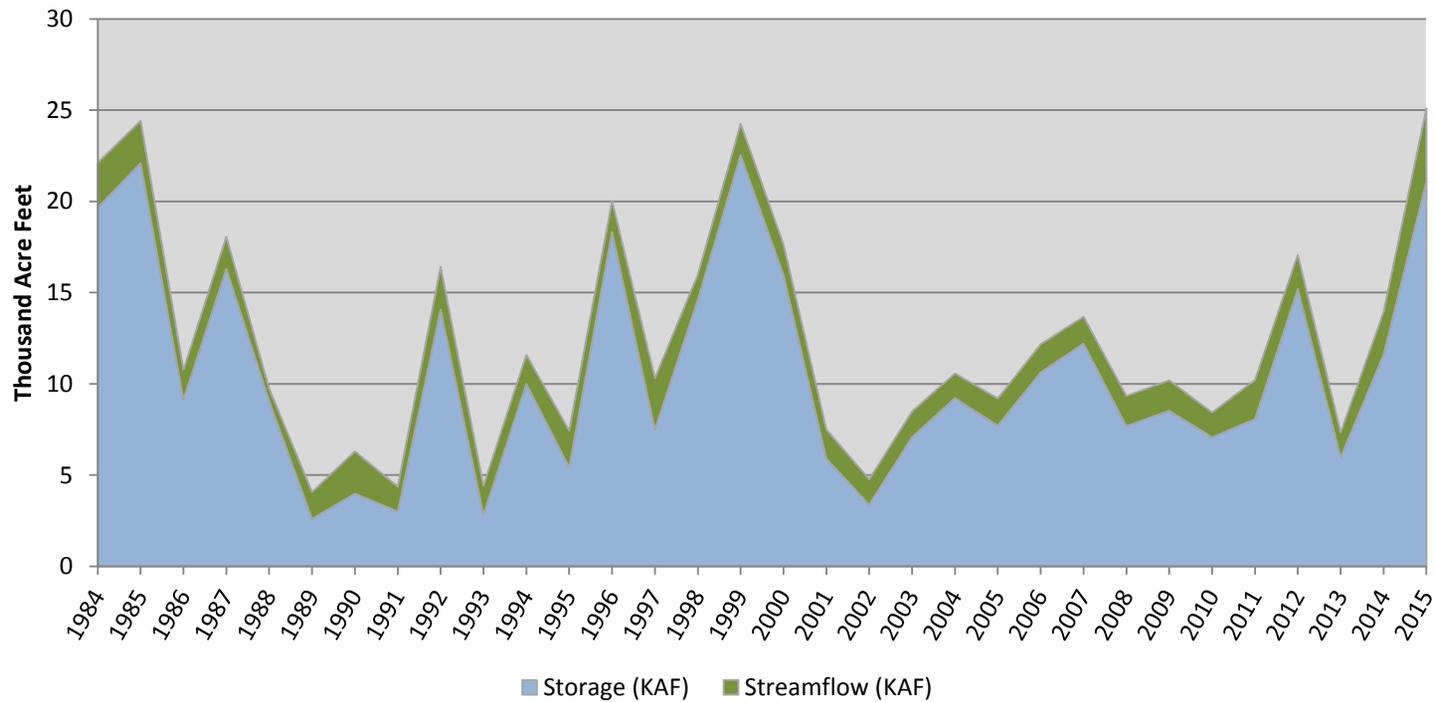
January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	21.10	4.00	25.10	97	3.91	85, 99, 84, 96

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

Blacks Fork - Water Availability Index

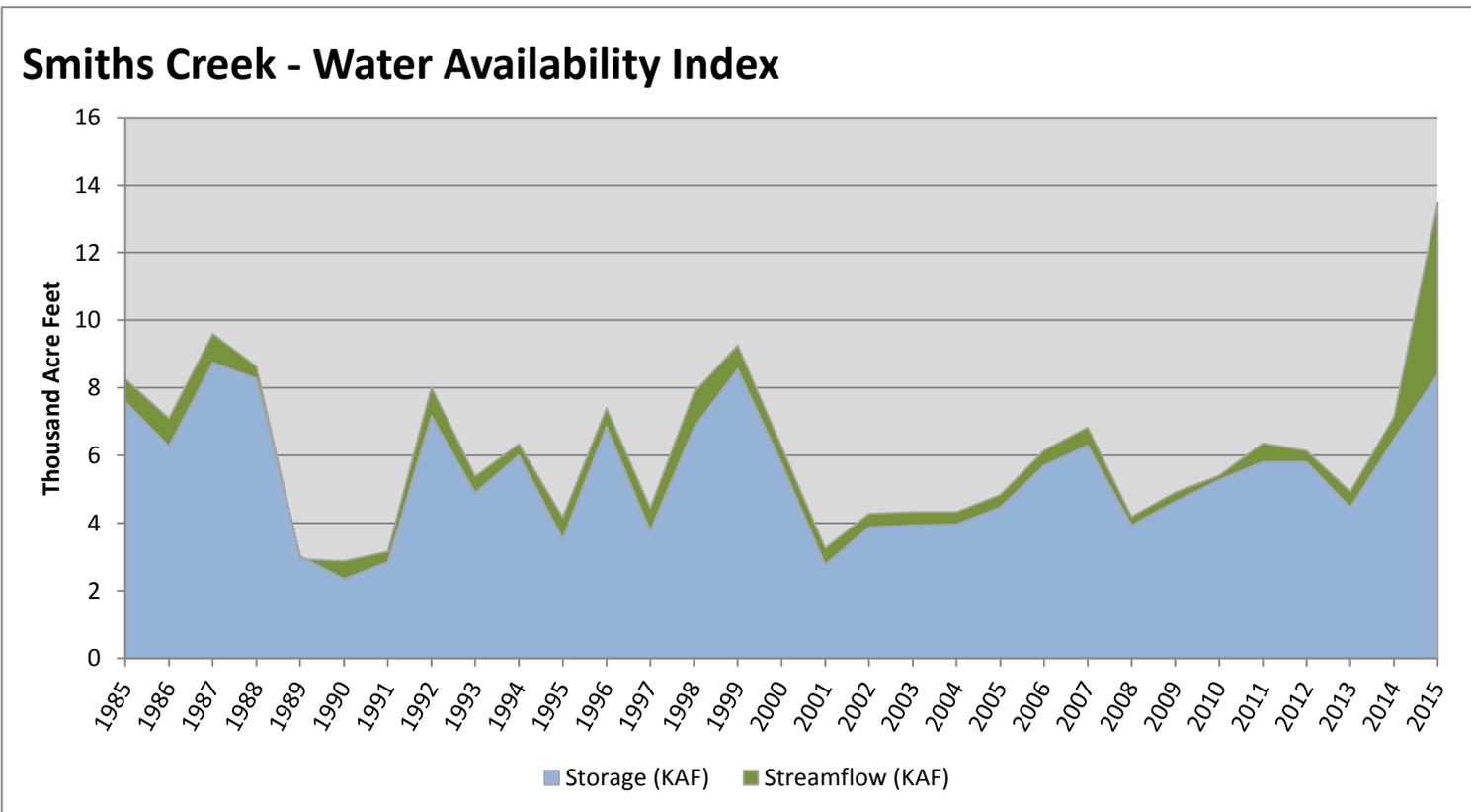


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	8.40	5.10	13.50	97	3.91	87, 99, 88, 85

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

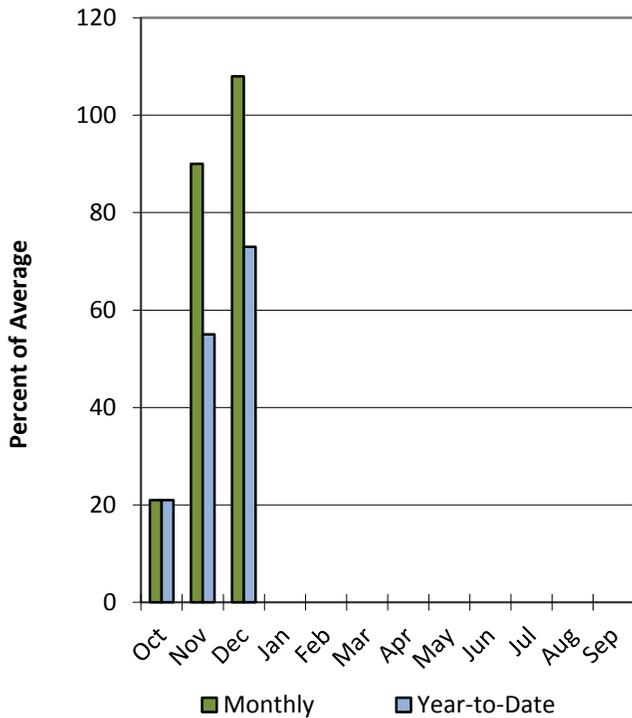


Duchesne River Basin

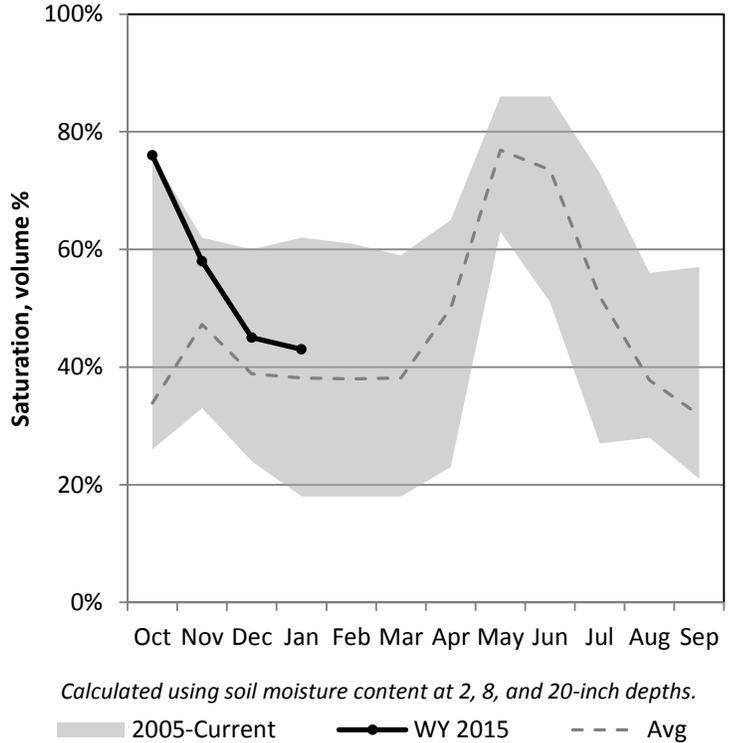
1/1/2015

Precipitation in December was near average at 108%, which brings the seasonal accumulation (Oct-Dec) to 73% of average. Soil moisture is at 43% compared to 42% last year. Reservoir storage is at 75% of capacity, compared to 73% last year. The water availability index for the Western Uintahs is 86% and 25% for the Eastern Uintahs.

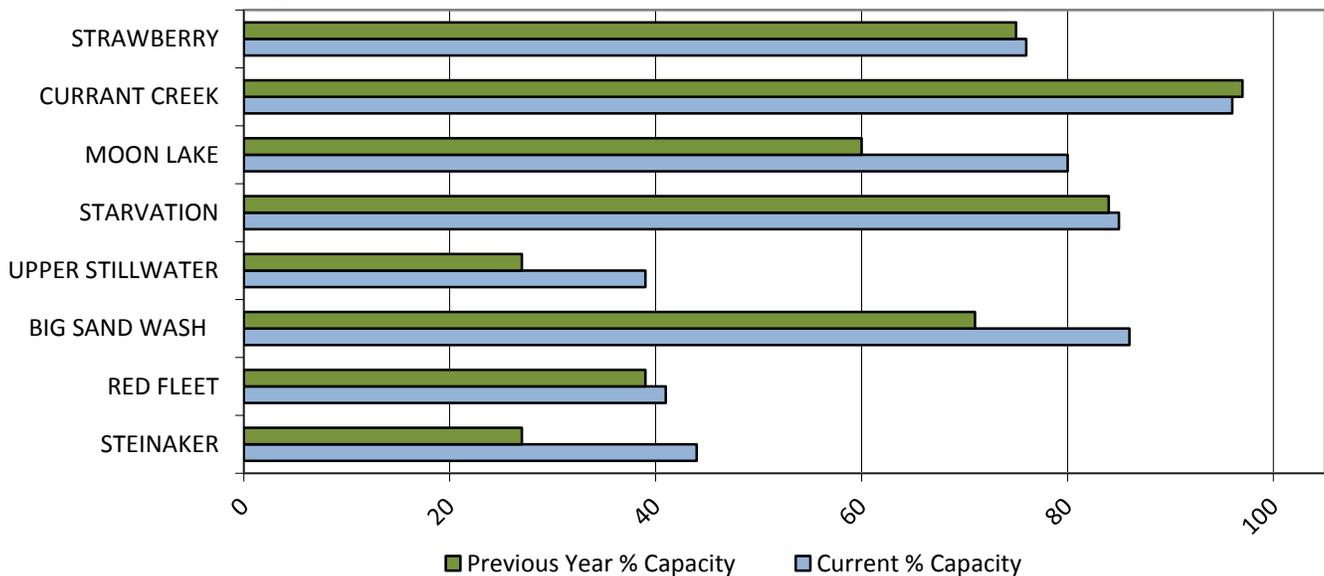
Precipitation



Soil Moisture



Reservoir Storage

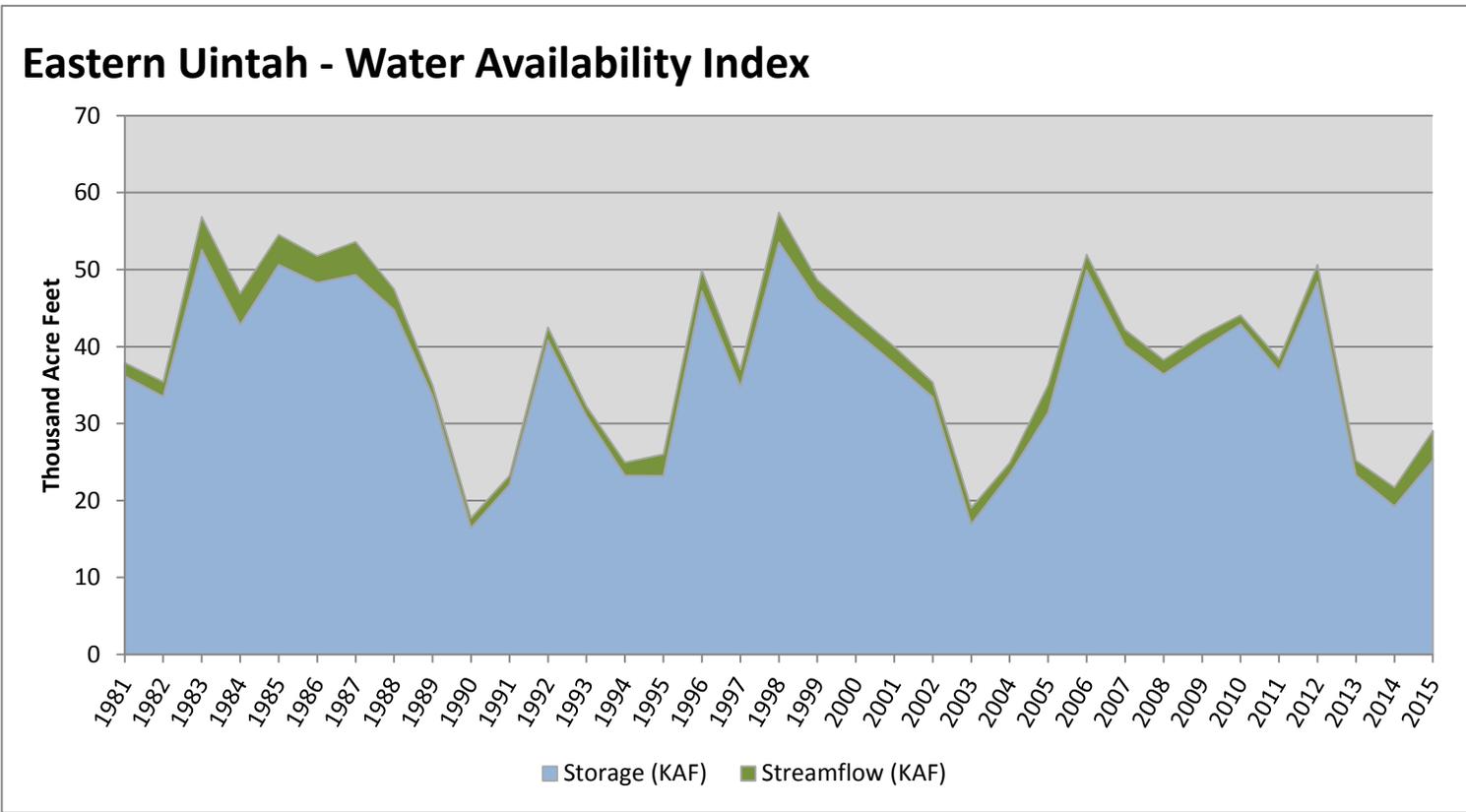


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uintah	25.24	3.82	29.06	25	-2.08	13, 95, 93, 89

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

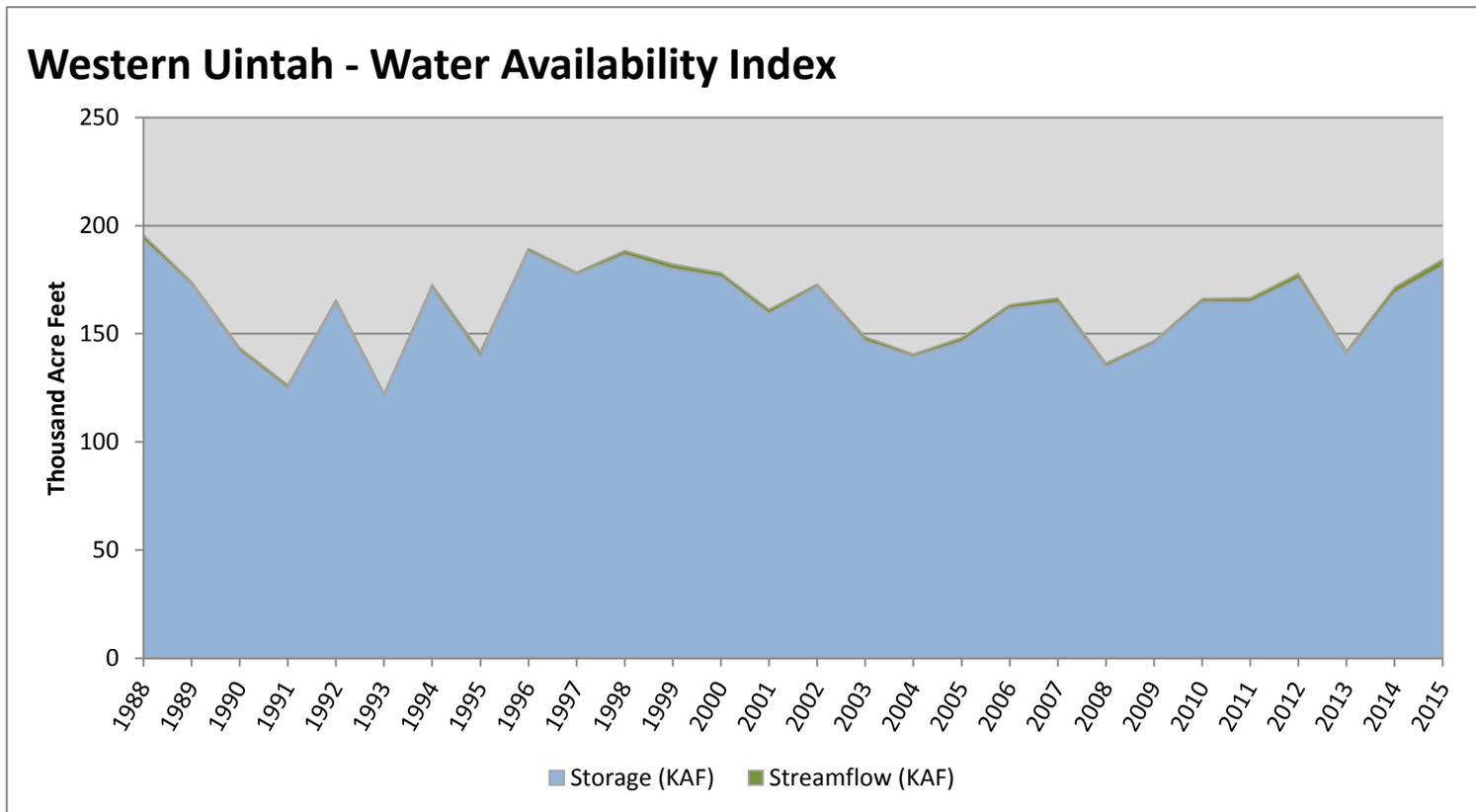


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uintah	181.30	3.14	184.44	86	3.02	97, 99, 98, 96

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

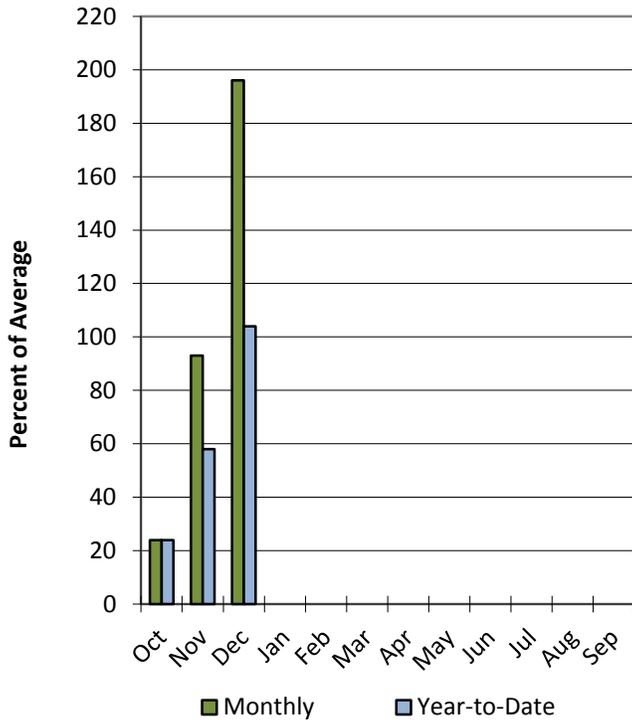


Lower Sevier River Basin

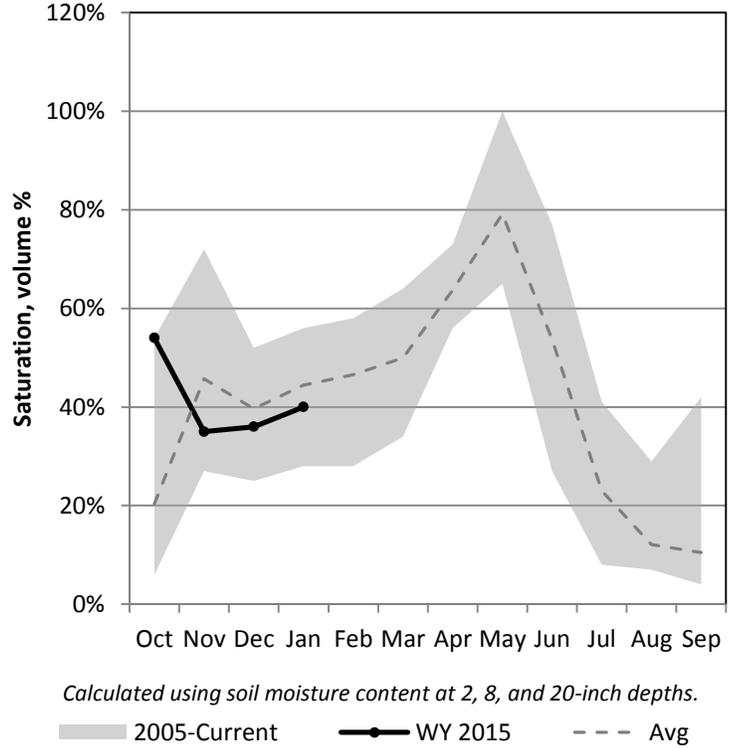
1/1/2015

Precipitation in December was much above average at 196%, which brings the seasonal accumulation (Oct-Dec) to 104% of average. Soil moisture is at 40% compared to 35% last year. Reservoir storage is at 35% of capacity, compared to 45% last year. The water availability index for the Lower Sevier is 14%.

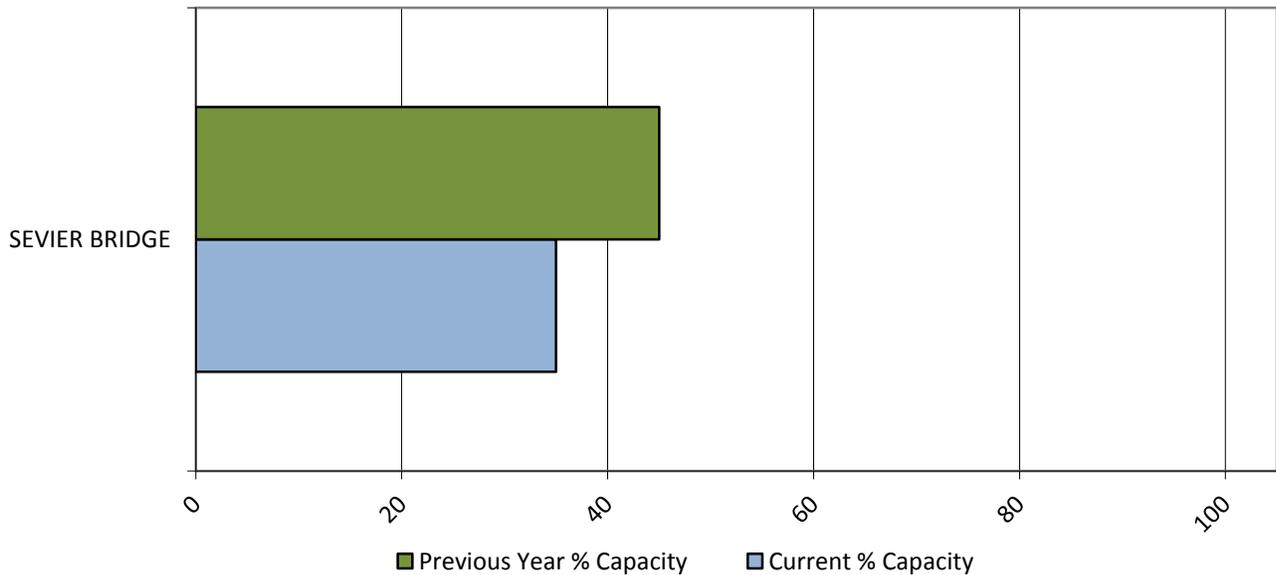
Precipitation



Soil Moisture



Reservoir Storage

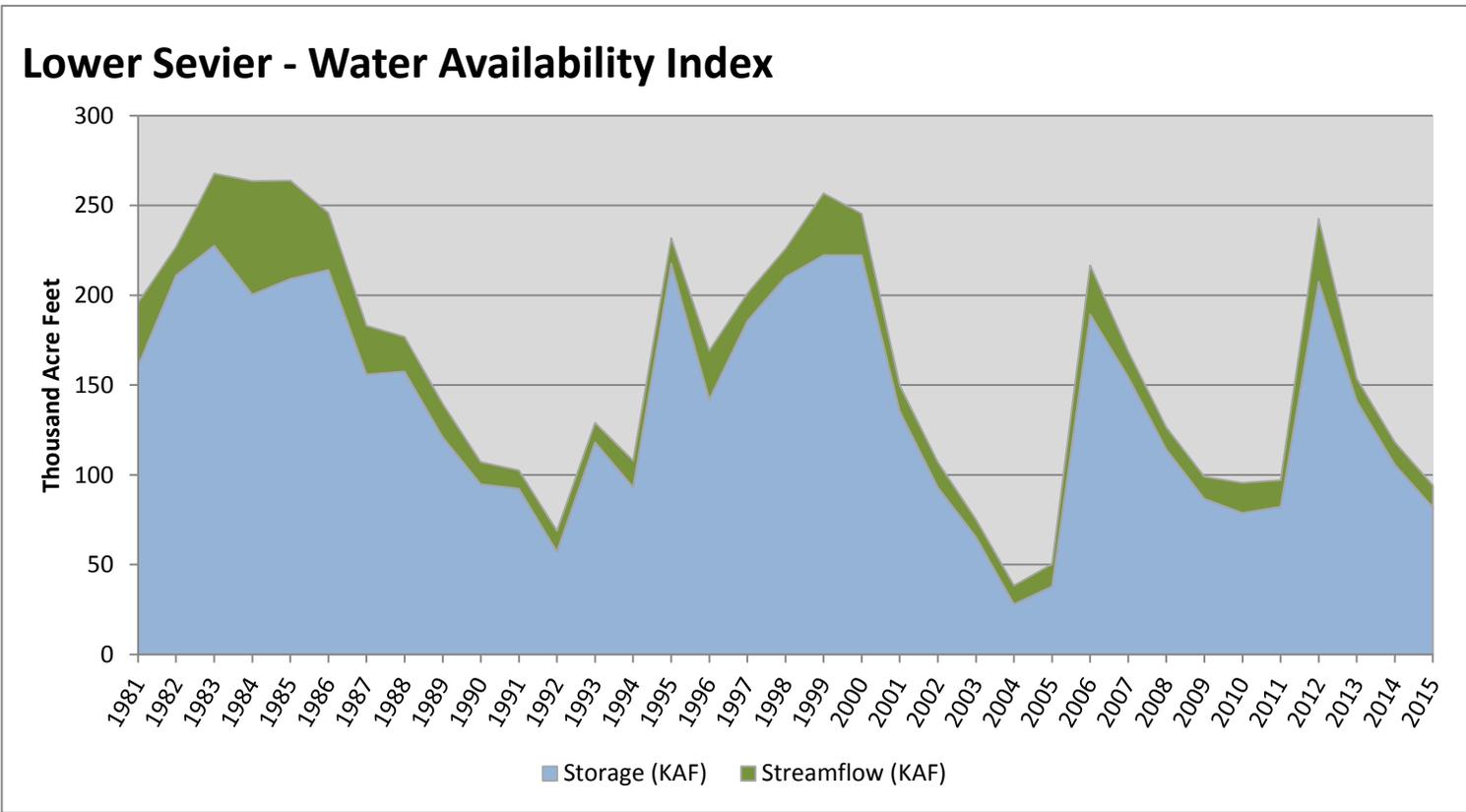


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	81.87	12.26	94.13	14	-3.01	92, 03, 10, 11

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

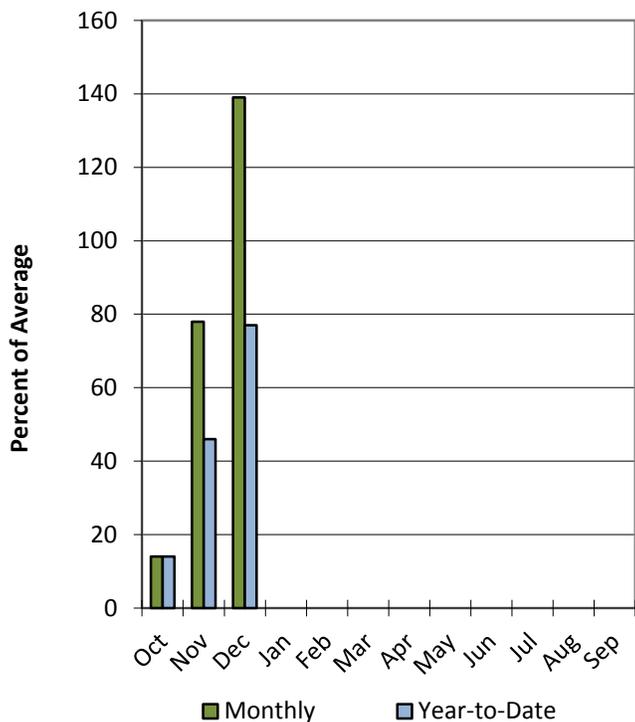


Upper Sevier River Basin

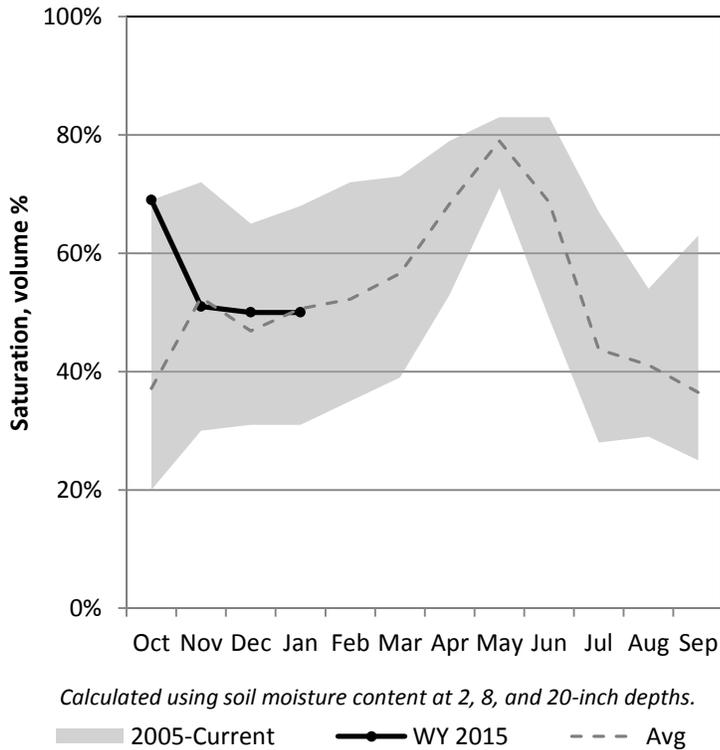
1/1/2015

Precipitation in December was much above average at 139%, which brings the seasonal accumulation (Oct-Dec) to 77% of average. Soil moisture is at 50% compared to 62% last year. Reservoir storage is at 45% of capacity, compared to 60% last year. The water availability index for the Upper Sevier is 31%.

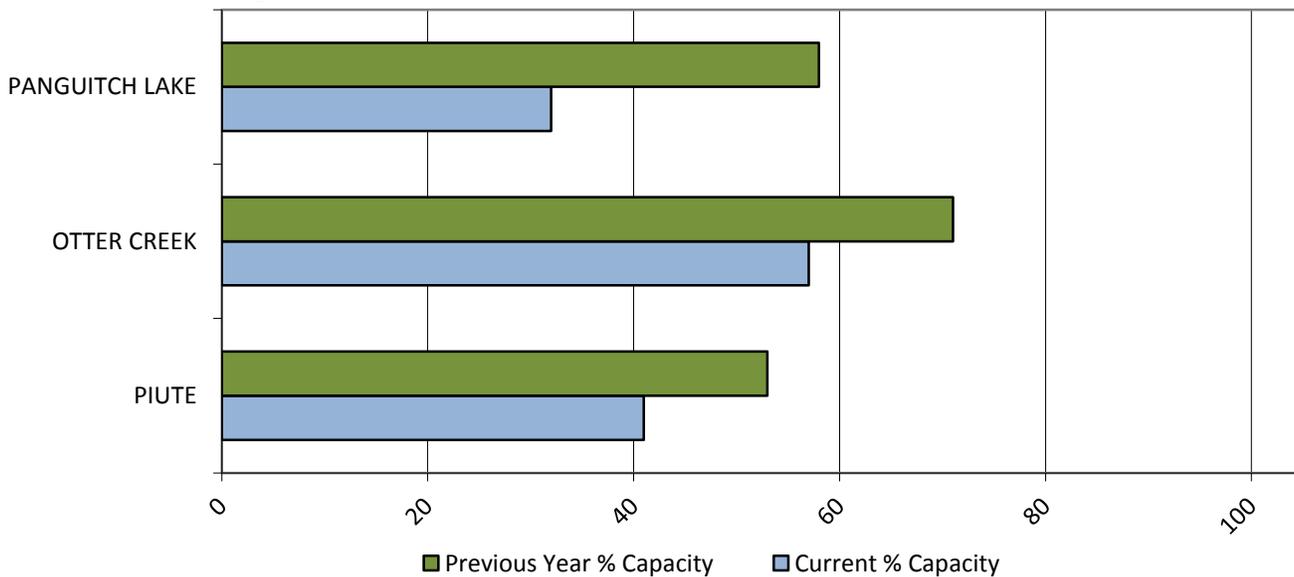
Precipitation



Soil Moisture



Reservoir Storage

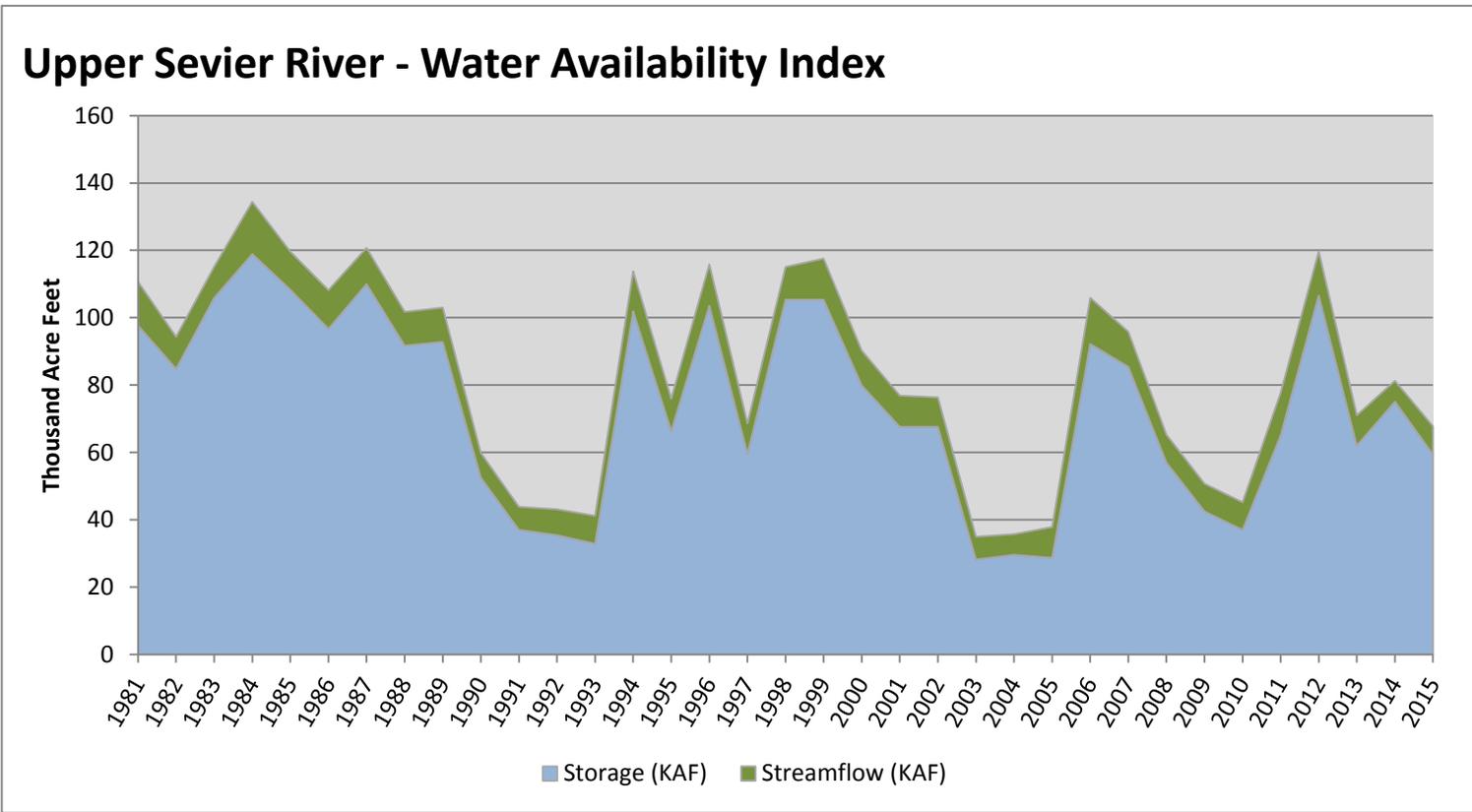


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [†] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	59.37	8.36	67.73	31	-1.62	90, 08, 97, 13

[†]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

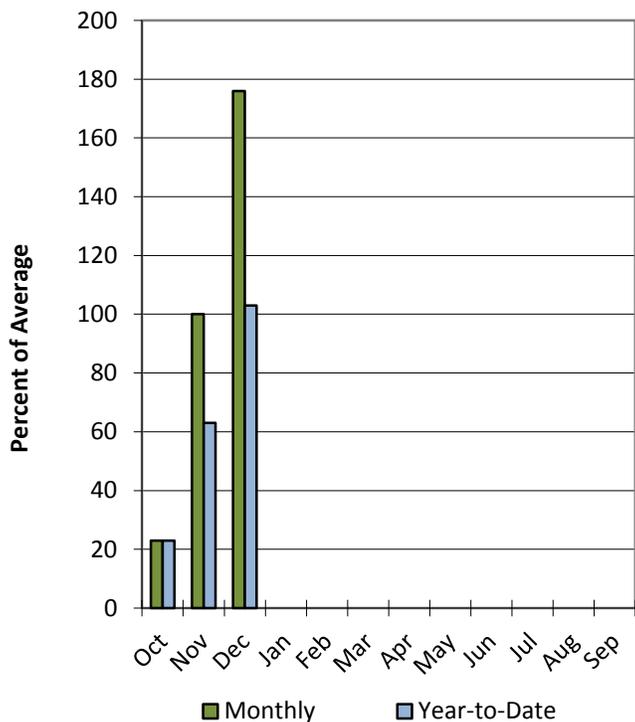


San Pitch River Basin

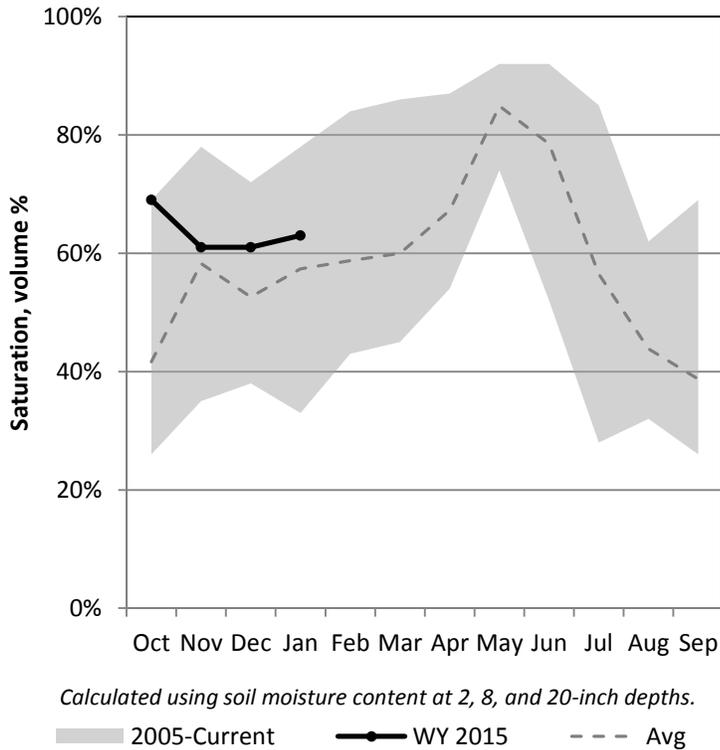
1/1/2015

Precipitation in December was much above average at 176%, which brings the seasonal accumulation (Oct-Dec) to 103% of average. Soil Moisture is at 63% compared to 64% last year. Reservoir storage is at 0% of capacity, compared to 1% last year. The water availability index for the San Pitch is 3%.

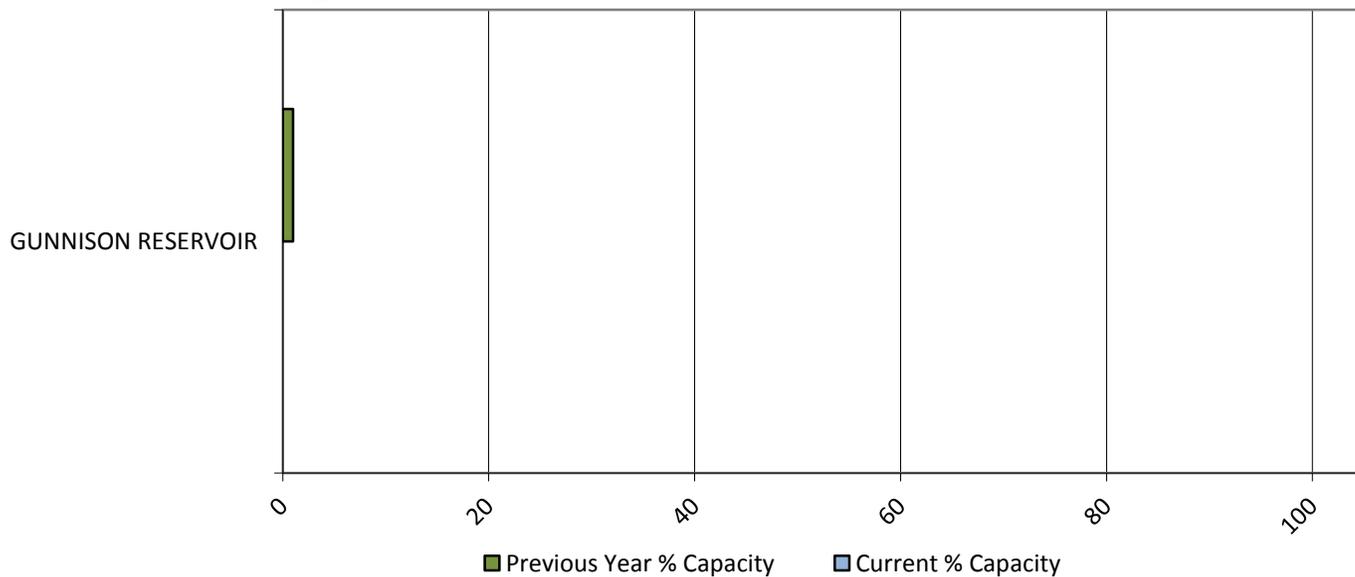
Precipitation



Soil Moisture



Reservoir Storage

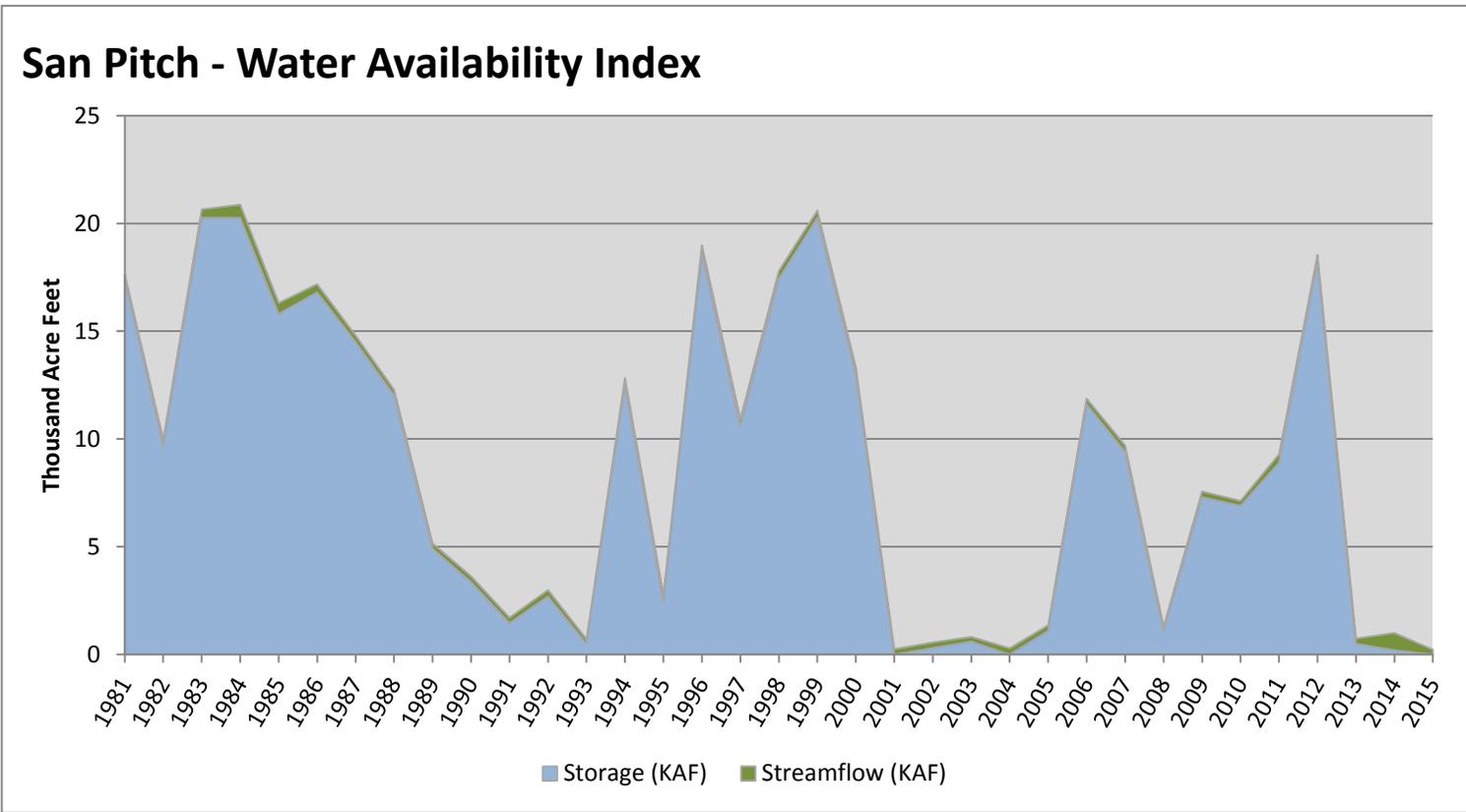


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	0.00	0.23	0.23	3	-3.94	01, 04, 02, 93

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

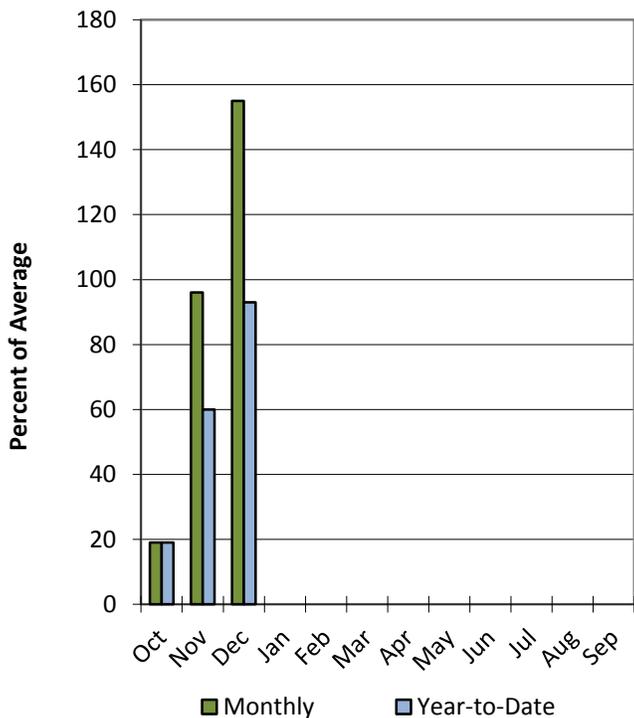


Price & San Rafael Basins

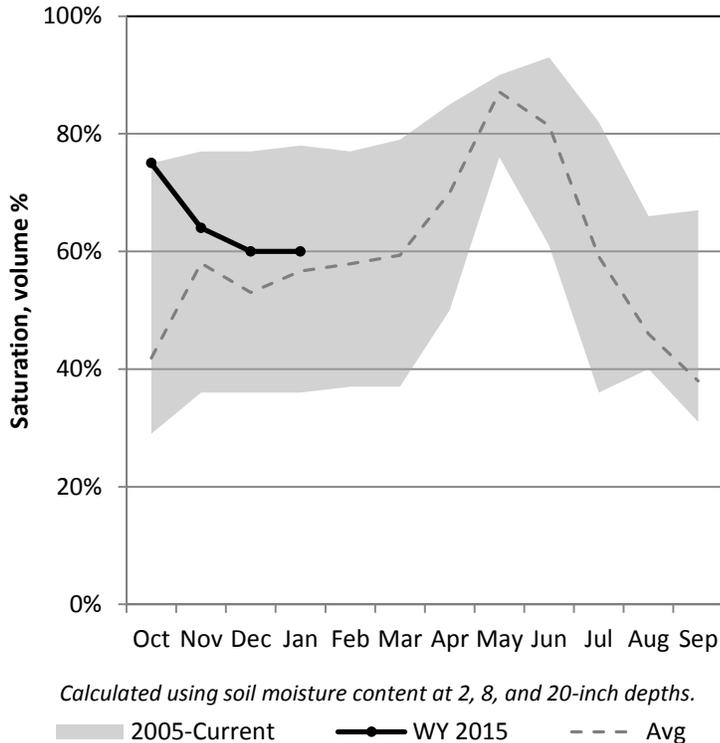
1/1/2015

Precipitation in December was much above average at 155%, which brings the seasonal accumulation (Oct-Dec) to 93% of average. Soil moisture is at 60% compared to 62% last year. Reservoir storage is at 48% of capacity, compared to 39% last year. The water availability index for the Price River is 97%, and 42% for Joe's Valley.

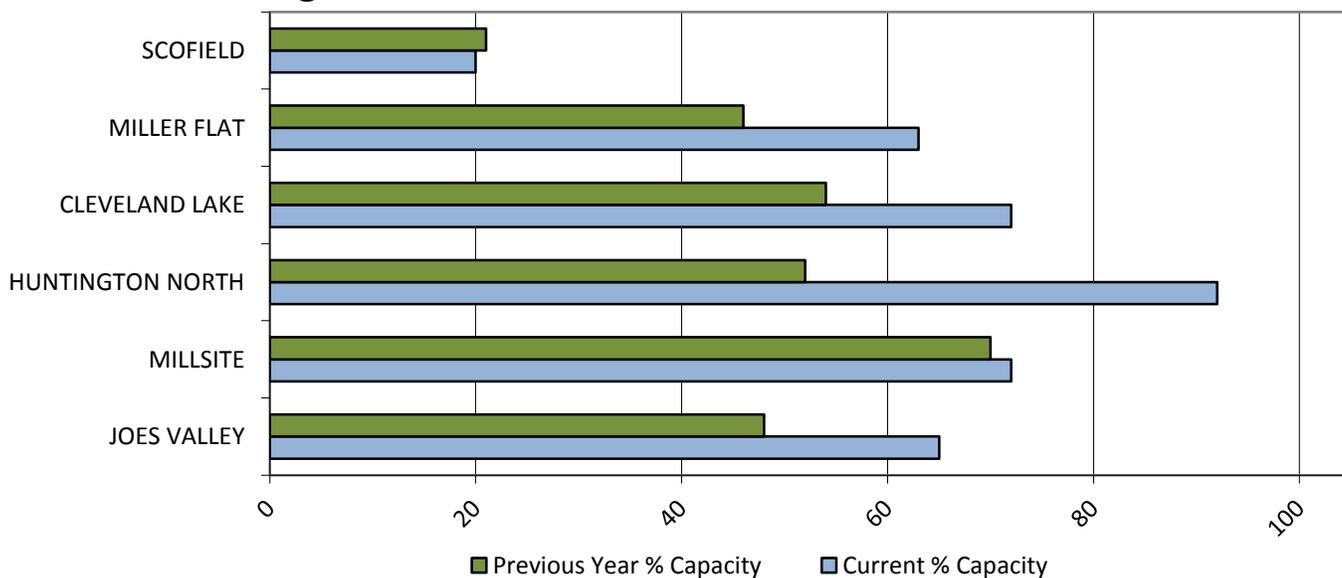
Precipitation



Soil Moisture



Reservoir Storage

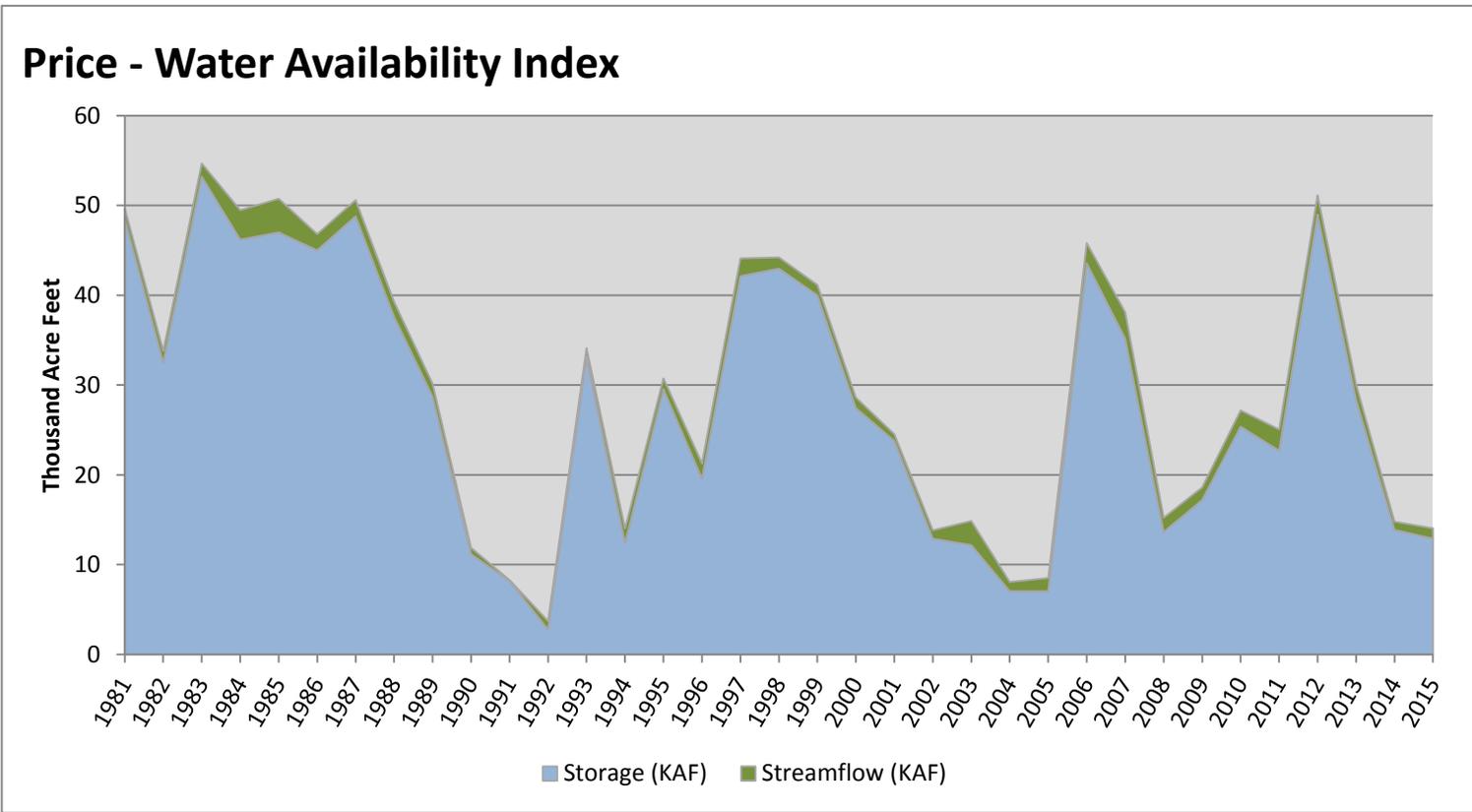


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	12.90	1.15	14.05	22	-2.31	02, 94, 14, 03

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

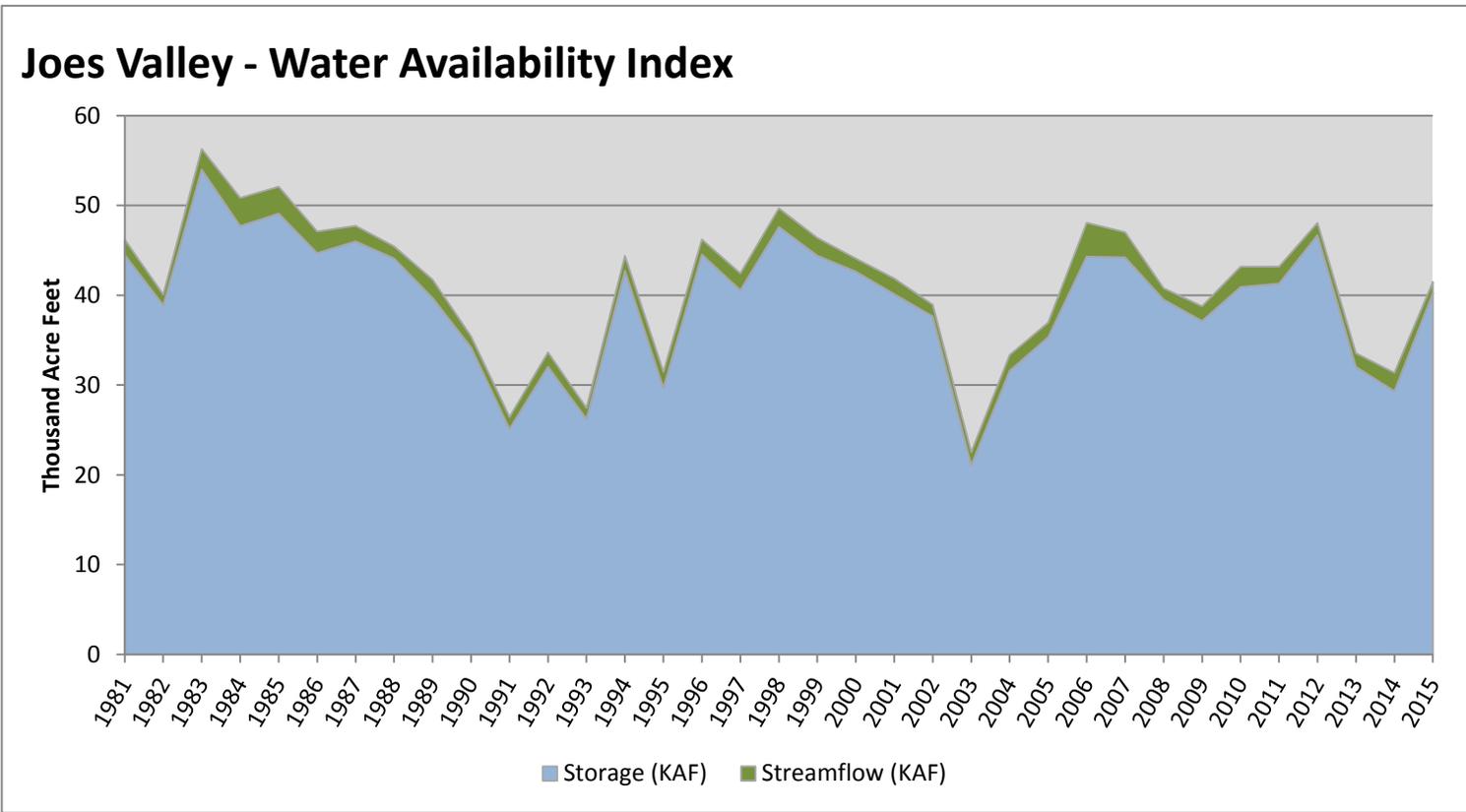


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joos Valley	40.25	1.24	41.49	42	-0.69	82, 08, 89, 01

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

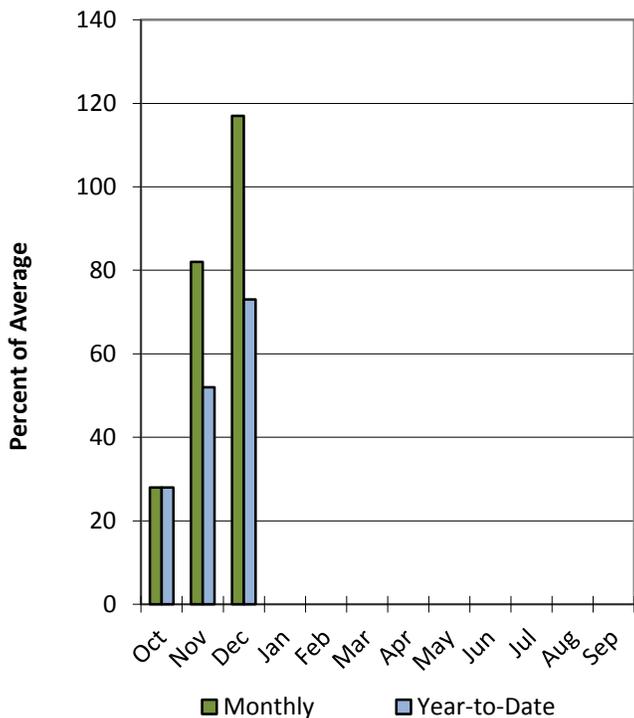


Southeastern Utah Basin

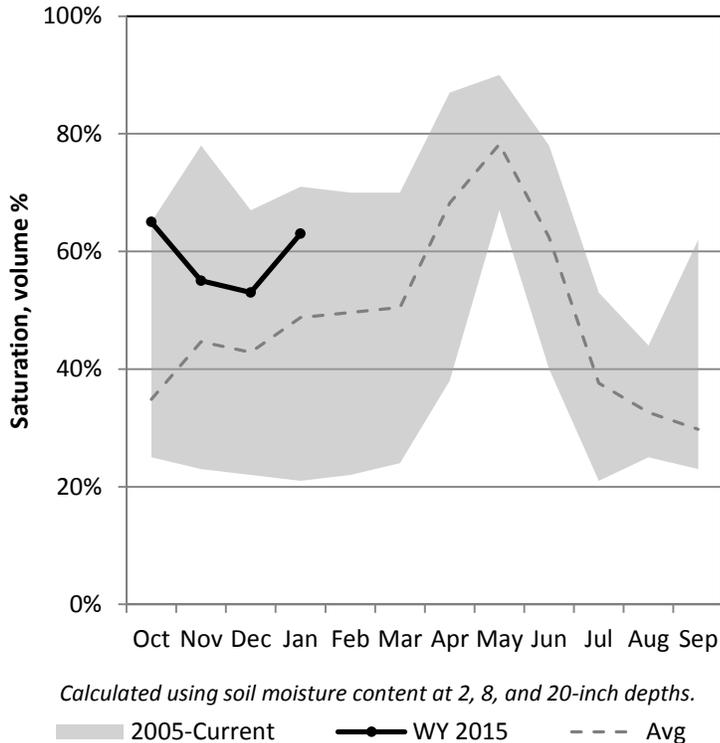
1/1/2015

Precipitation in December was above average at 117%, which brings the seasonal accumulation (Oct-Dec) to 73% of average. Soil moisture is at 63% compared to 63% last year. Reservoir storage is at 54% of capacity, compared to 43% last year. The water availability index for Moab is 69%.

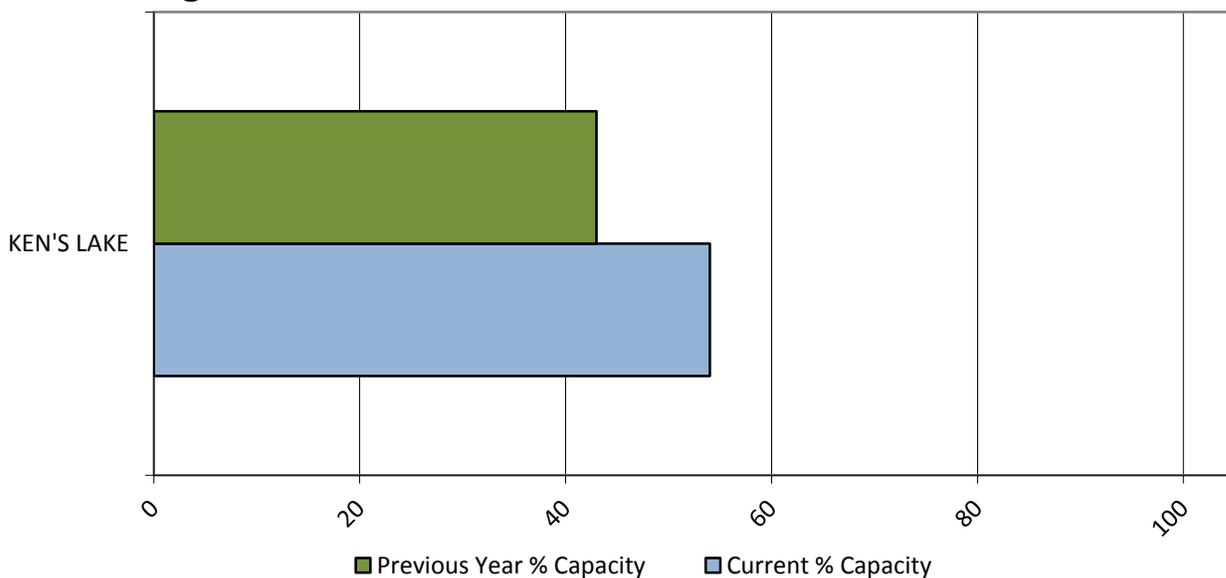
Precipitation



Soil Moisture



Reservoir Storage

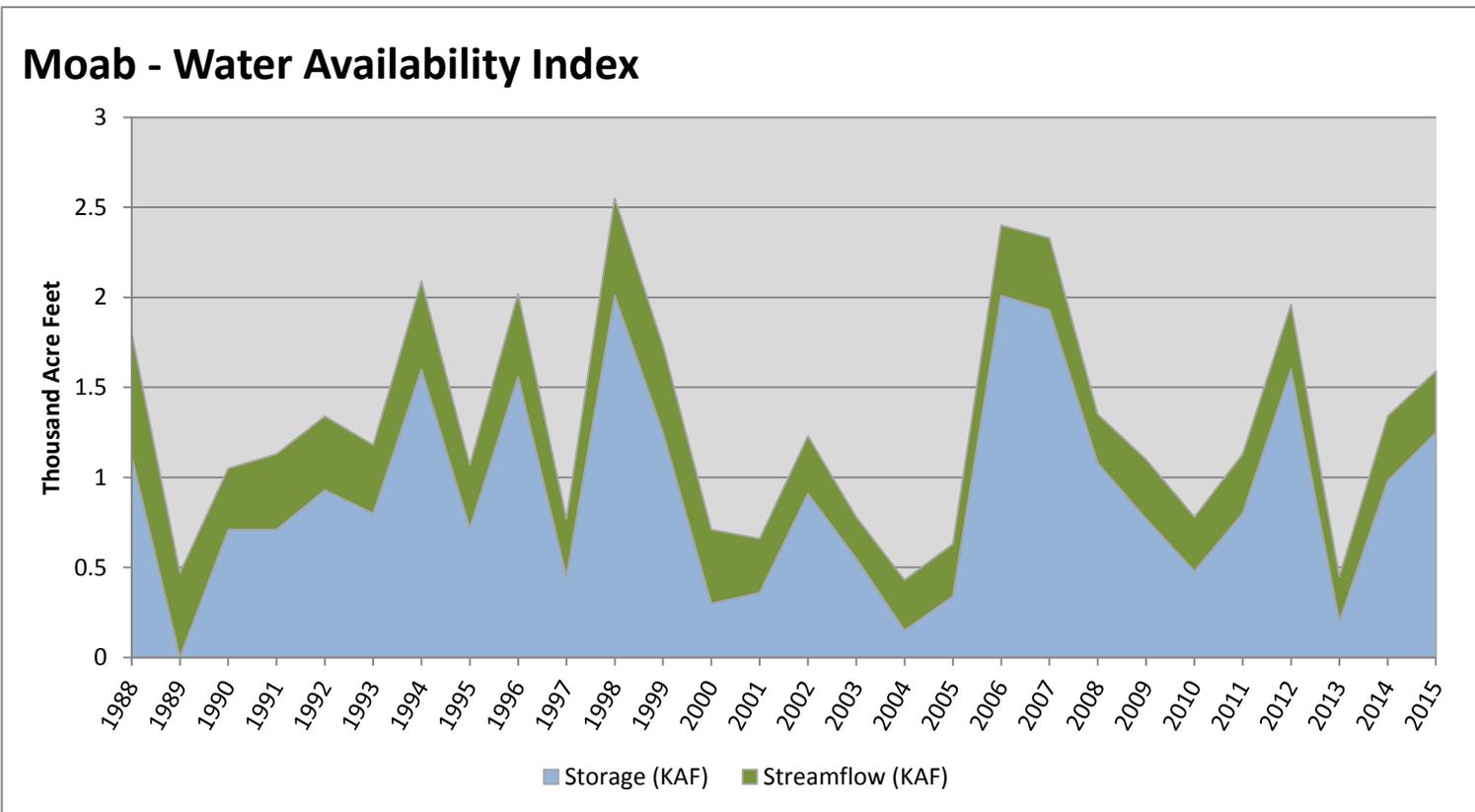


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	1.25	0.34	1.59	69	1.58	92, 08, 99, 88

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

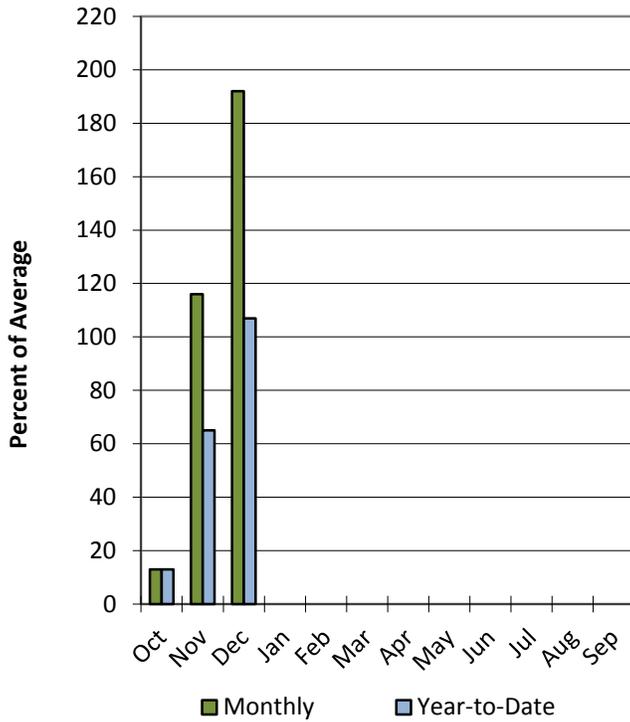


Dirty Devil Basin

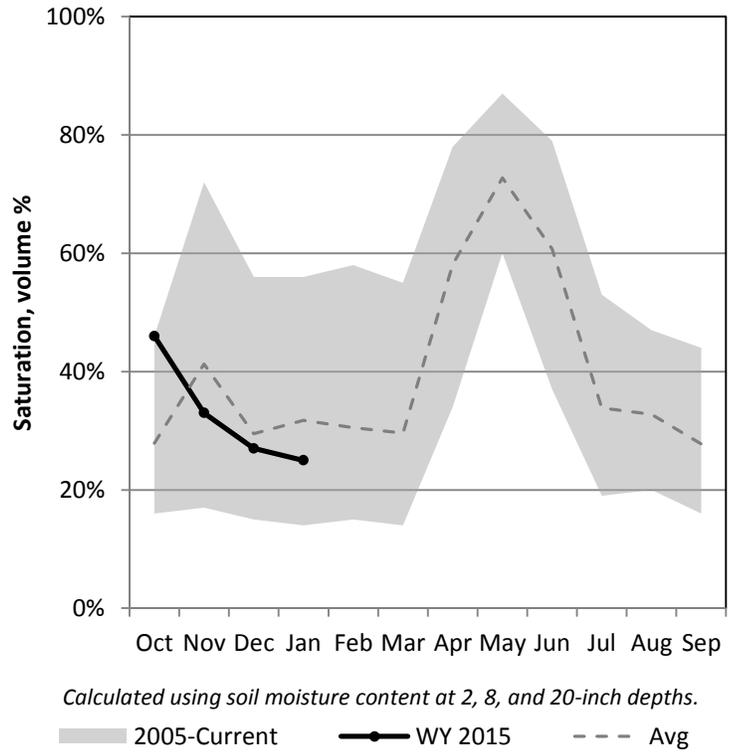
1/1/2015

Precipitation in December was much above average at 192%, which brings the seasonal accumulation (Oct-Dec) to 107% of average. Soil moisture is at 25% compared to 33% last year.

Precipitation



Soil Moisture

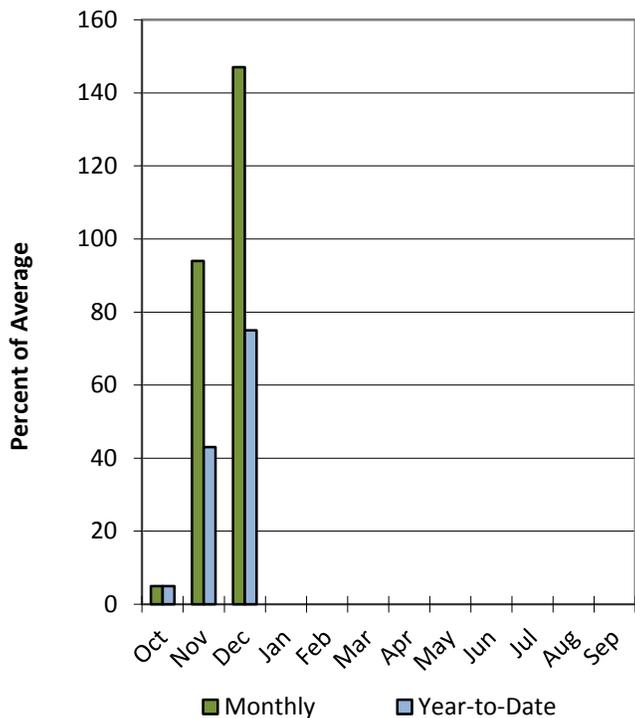


Escalante River Basin

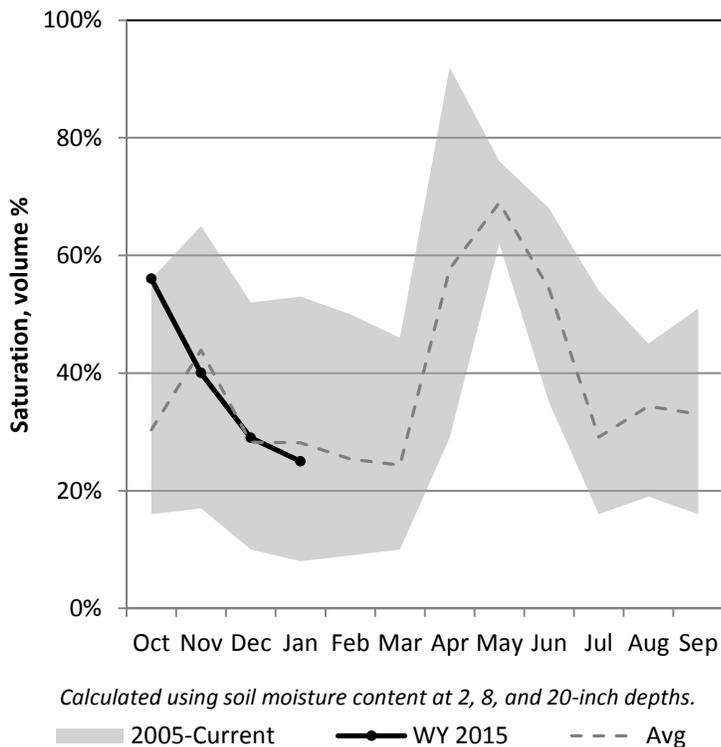
1/1/2015

Precipitation in December was much above average at 147%, which brings the seasonal accumulation (Oct-Dec) to 75% of average. Soil moisture is at 25% compared to 40% last year.

Precipitation



Soil Moisture

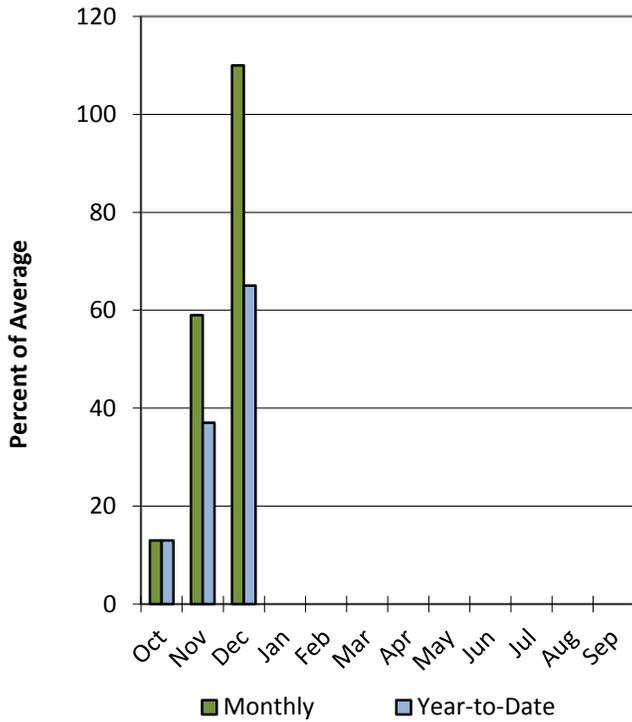


Beaver River Basin

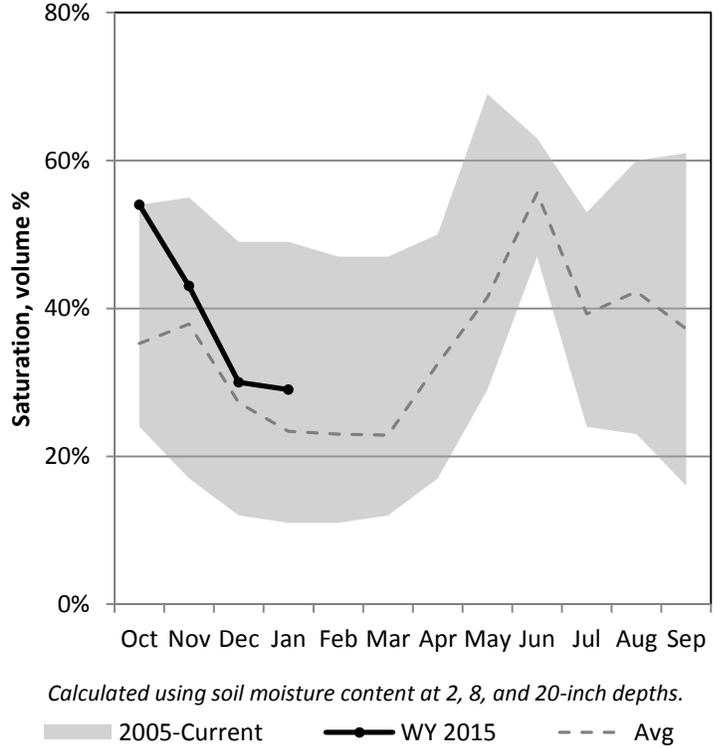
1/1/2015

Precipitation in December was above average at 110%, which brings the seasonal accumulation (Oct-Dec) to 65% of average. Soil moisture is at 29% compared to 42% last year. Reservoir storage is at 30% of capacity, compared to 38% last year. The water availability index for the Beaver River is 33%.

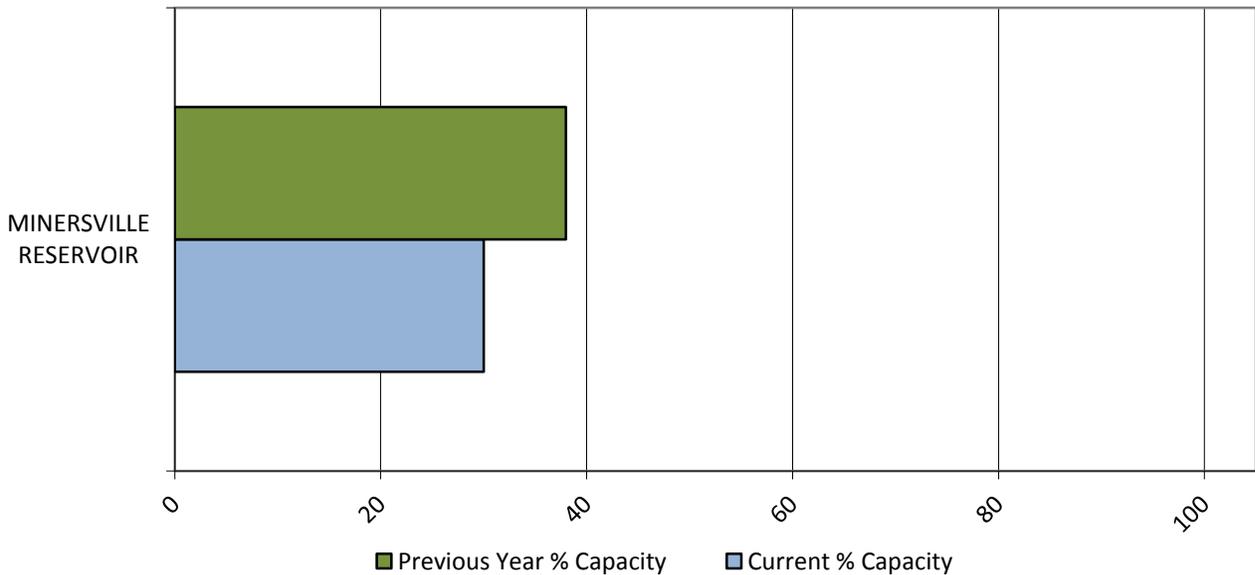
Precipitation



Soil Moisture



Reservoir Storage

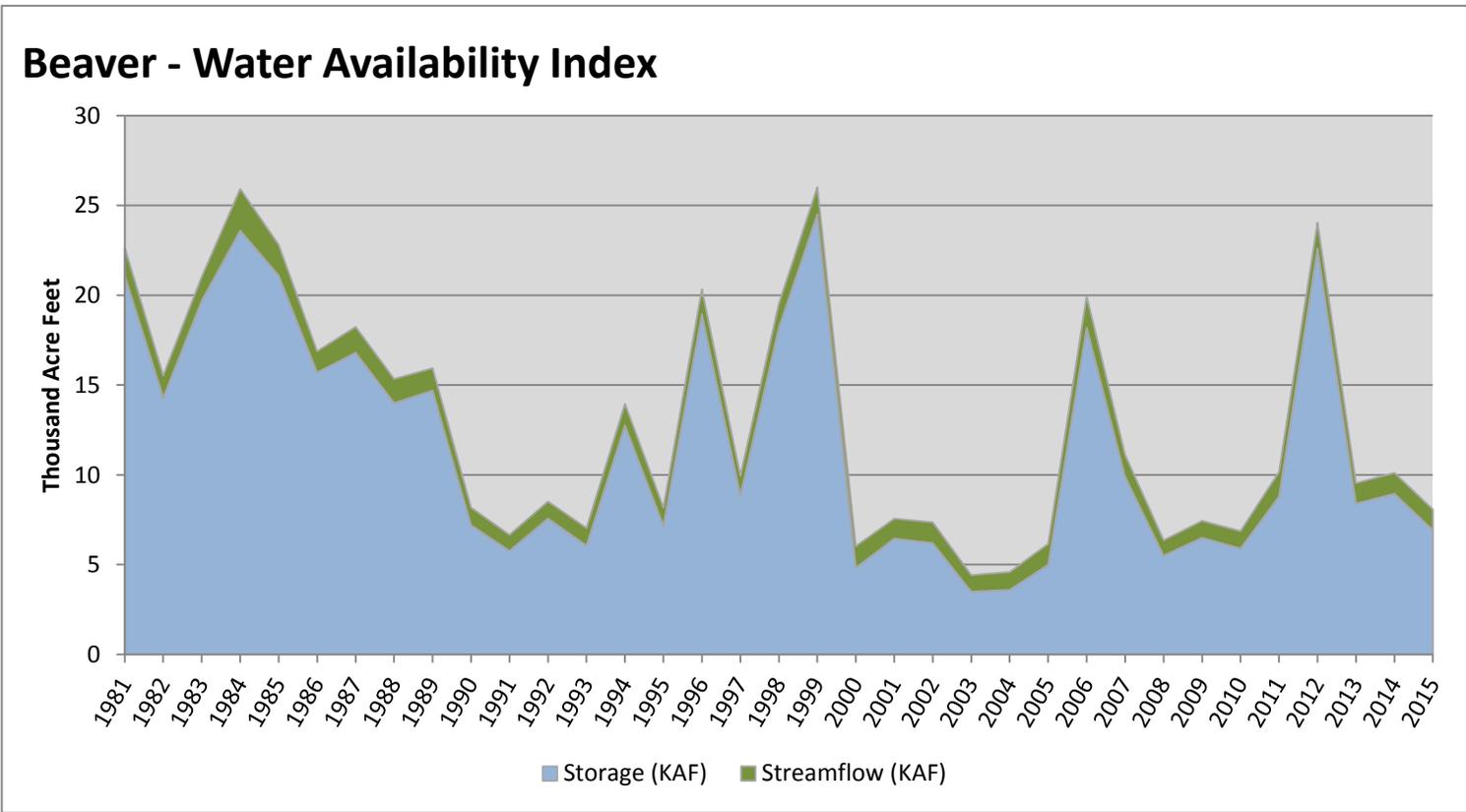


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [^] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	6.92	1.15	8.07	33	-1.39	09, 01, 90, 95

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.

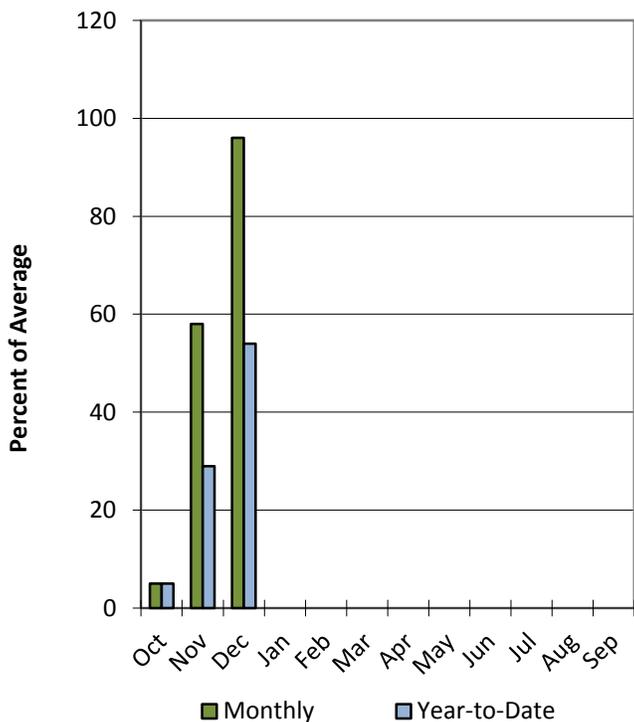


Southwestern Utah Basin

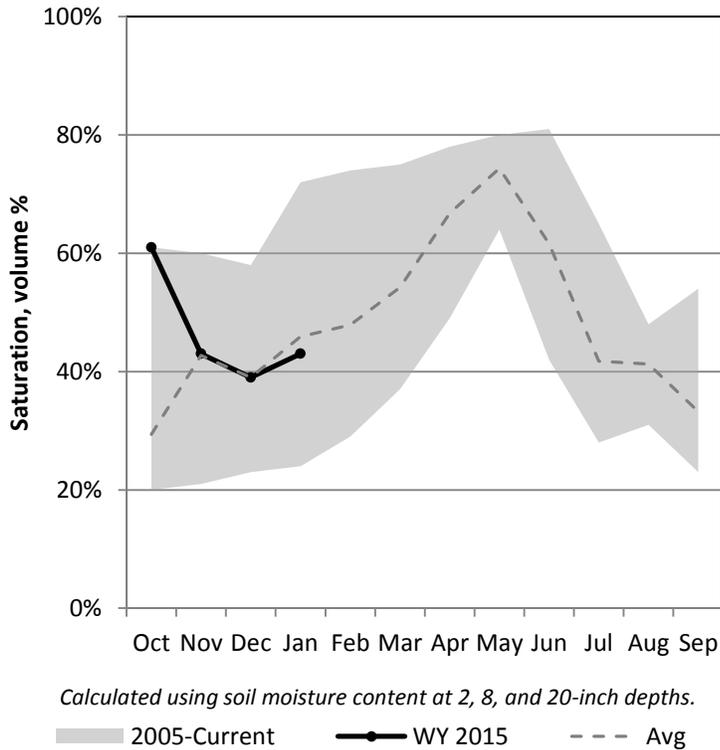
1/1/2015

Precipitation in December was near average at 96%, which brings the seasonal accumulation (Oct-Dec) to 54% of average. Soil moisture is at 43% compared to 53% last year. Reservoir storage is at 47% of capacity, compared to 42% last year. The water availability index for the Virgin River is 21%.

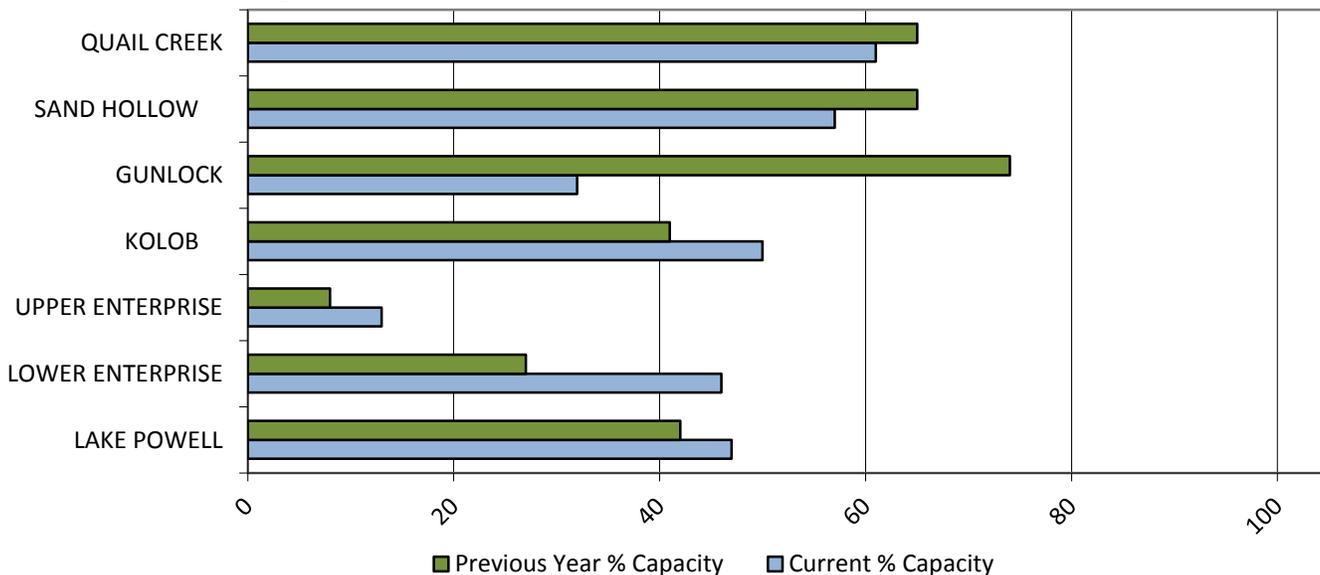
Precipitation



Soil Moisture



Reservoir Storage

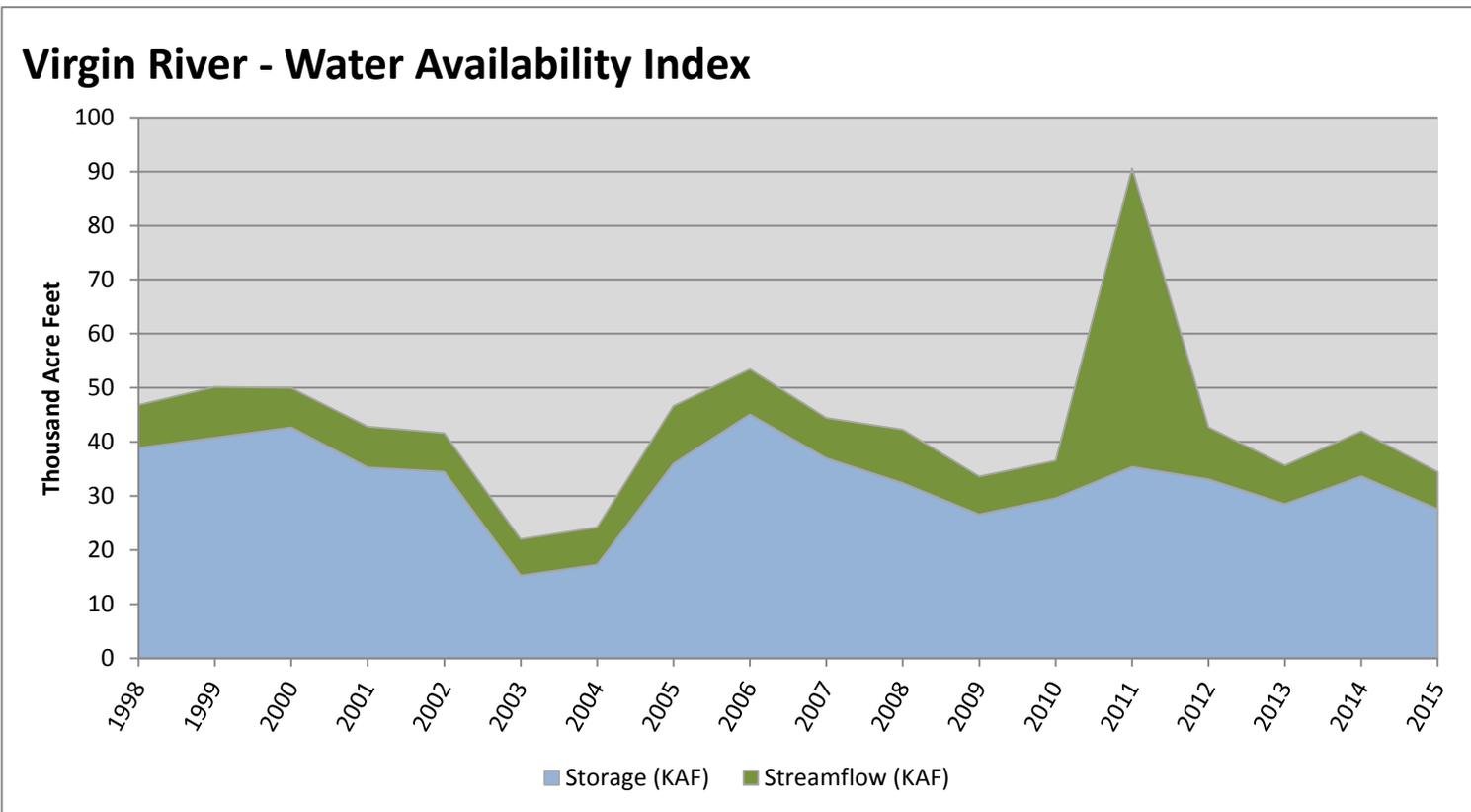


January 1, 2015

Water Availability Index

Basin or Region	Dec EOM [*] Storage	December Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	27.57	6.90	34.47	21	-2.41	04, 09, 13, 10

^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



January 1, 2015

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similar WAI
	KAF^	KAF^	KAF^	%		
Bear River	542	6.8	549	50	0.0	96, 14, 90, 89
Woodruff Narrows	37.6	3.5	41.1	67	1.4	83, 00, 11, 09
Little Bear	9.5	2.0	11.5	25	-2.1	02, 94, 95, 03
Ogden	62.2	2.4	64.6	58	0.7	81, 98, 95, 07
Weber	105.7	19.9	125.6	42	-0.6	08, 95, 05, 09
Provo River	323.9	1.6	325.5	38	-1.0	13, 05, 09, 02
Western Uintah	181.3	3.1	184.4	86	3.0	97, 99, 98, 96
Eastern Uintah	25.2	3.8	29.1	25	-2.1	13, 95, 93, 89
Blacks Fork	21.1	4.0	25.1	97	3.9	85, 99, 84, 96
Price	12.9	1.2	14.1	22	-2.3	02, 94, 14, 03
Smiths Creek	8.4	5.1	13.5	97	3.9	87, 99, 88, 85
Joes Valley	40.3	1.2	41.5	42	-0.7	82, 08, 89, 01
Moab	1.3	0.3	1.6	69	1.6	92, 08, 99, 88
Upper Sevier River	59.4	8.4	67.7	31	-1.6	90, 08, 97, 13
San Pitch	0.0	0.2	0.2	3	-3.9	01, 04, 02, 93
Lower Sevier	81.9	12.3	94.1	14	-3.0	92, 03, 10, 11
Beaver	6.9	1.2	8.1	33	-1.4	09, 01, 90, 95
Virgin River	27.6	6.9	34.5	21	-2.4	04, 09, 13, 10

*EOM, end of month; # WAI, water availibility 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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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.nrcs.usda.gov/snow/>

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