

Utah Climate and Water Report

December 2014



Fresh snow on Deseret Peak, December 1, 2014

Photo by Jordan Clayton

Utah Climate and Water Report

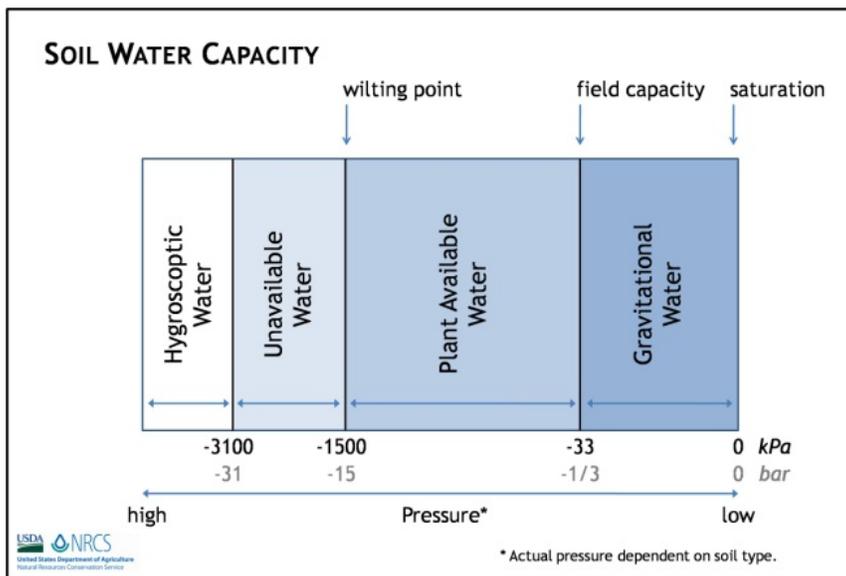
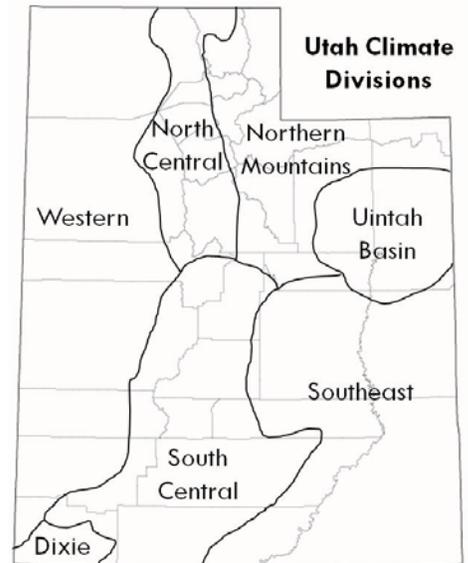
The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from 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.

Climate and Water Information

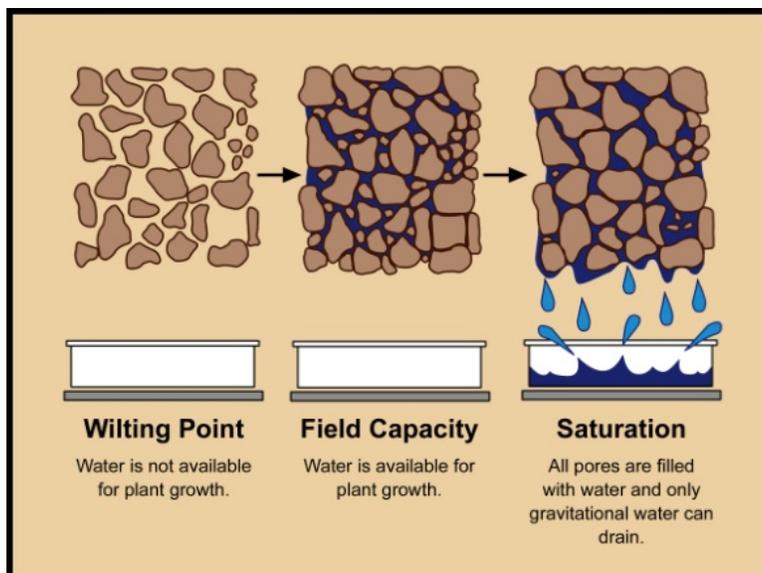
Soil Climate Analysis Network

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.

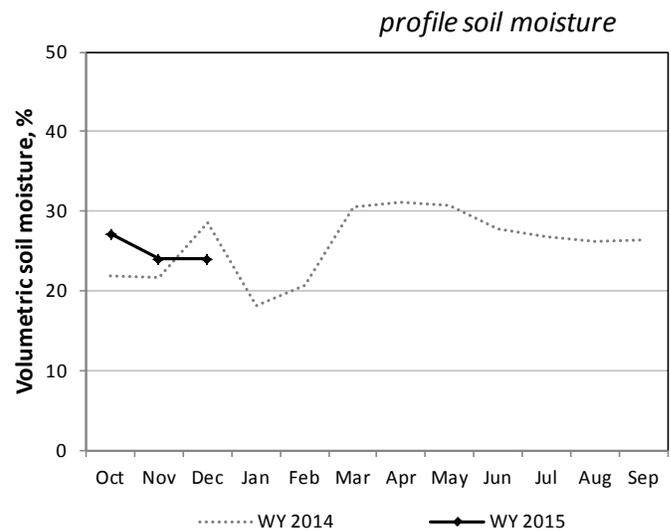
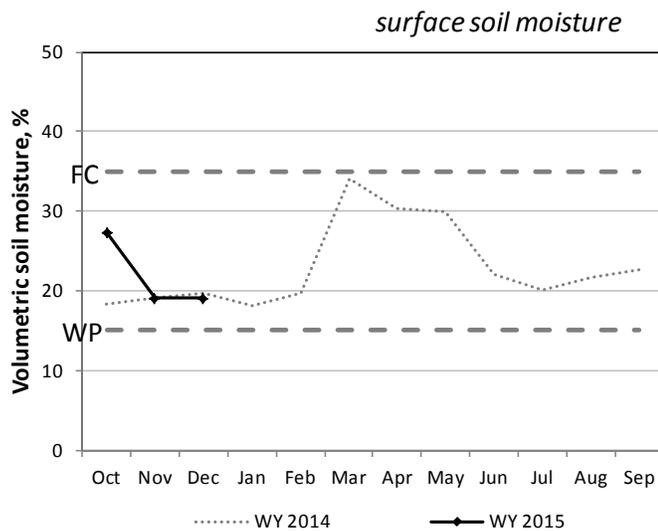
North Central

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	0.0	0.0	14	16	20	22	18	49	50	51	52	55
Cache Junction	0.1	0.1	18	16	28	27	36	47	49	49	52	55
Grantsville	0.0	0.0	2	16	26	26	56	56	57	59	62	

* 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.

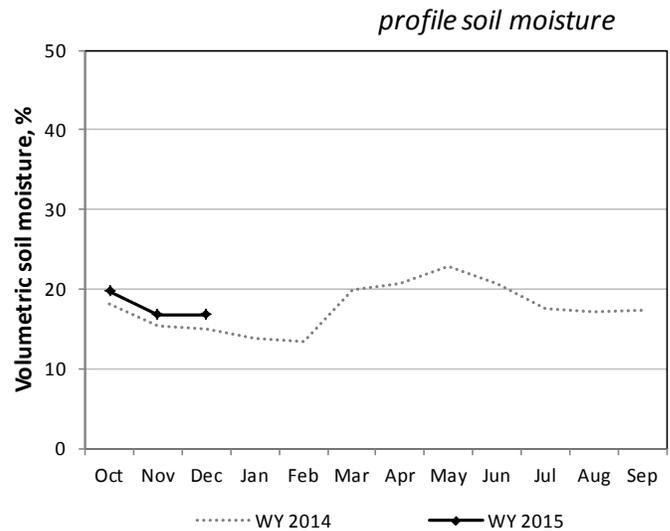
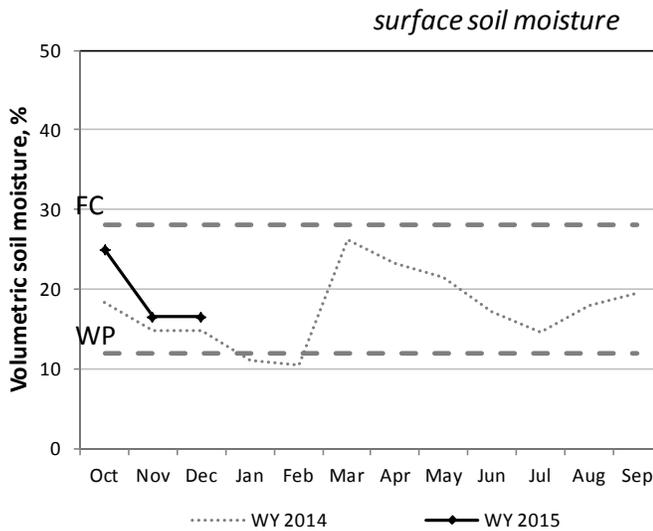
Northern Mountains

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	0.2	0.2	8	13	16	14	11	45	46	46	46	47
Buffalo Jump	0.2	0.2	8	12	14	9	-	46	46	46	47	-
Morgan	0.1	0.1	25	20	26	33	19	54	53	52	50	52

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Northern Mountains



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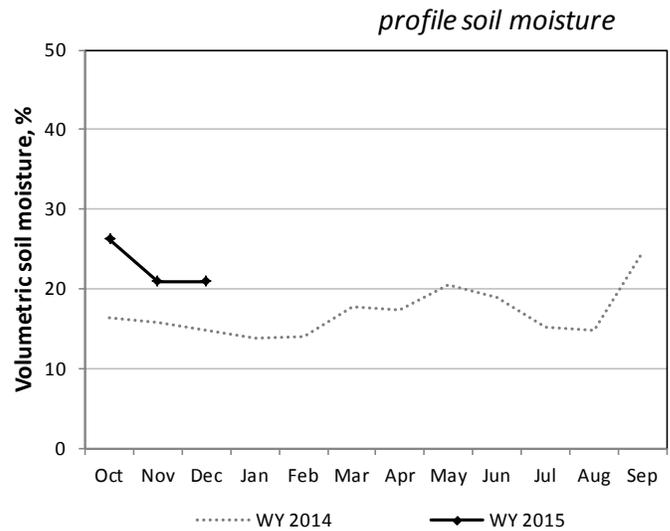
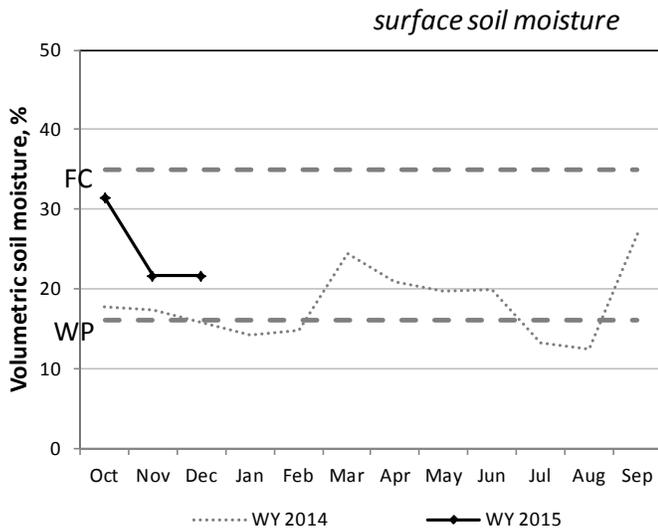
Uintah Basin

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	0.3	0.3	12	14	22	12	5	50	46	47	48	56
Little Red Fox	0.2	0.2	9	29	38	36	39	43	48	50	51	53
Split Mountain	0.3	0.3	12	21	21	20	12	44	47	49	51	56

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Uintah Basin



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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.

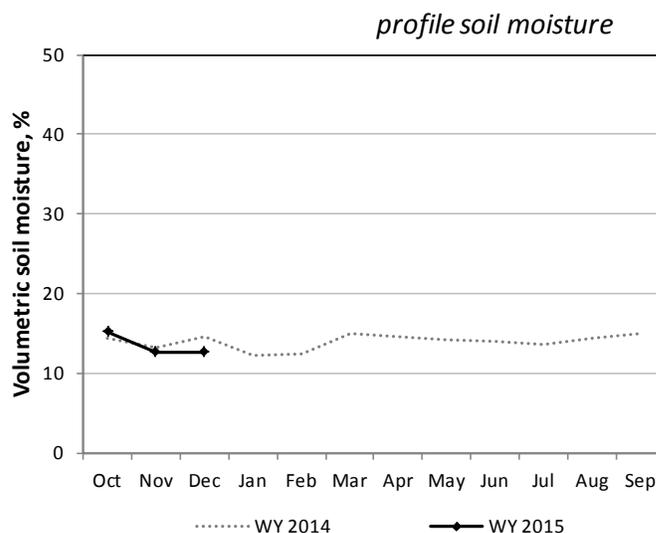
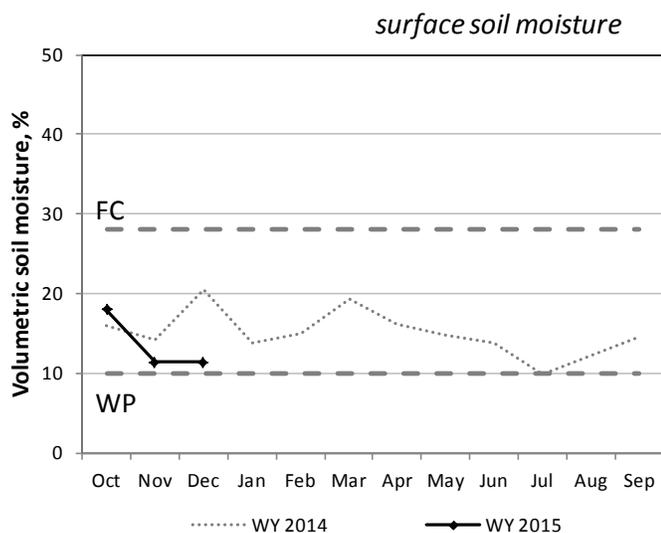
Southeast

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
			in.					in.				
			volume %					° F				
SOUTHEAST												
Price	0.1	0.1	1	13	18	15	18	48	51	53	55	57
Green River	0.2	0.2	13	10	8	6	8	50	50	52	55	60
Harm's Way	0.3	0.3	6	1	13	13	6	52	51	53	54	56
West Summit	0.2	0.2	10	16	15	14	16	47	48	50	49	53
Eastland	0.2	0.2	8	10	10	22	20	53	53	53	54	56
Alkali Mesa	0.2	0.2	5	8		16	17	55	55	58	57	57
McCracken Mesa	0.1	0.1	8	15	16	16	14	58	59	58	59	63

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Southeast



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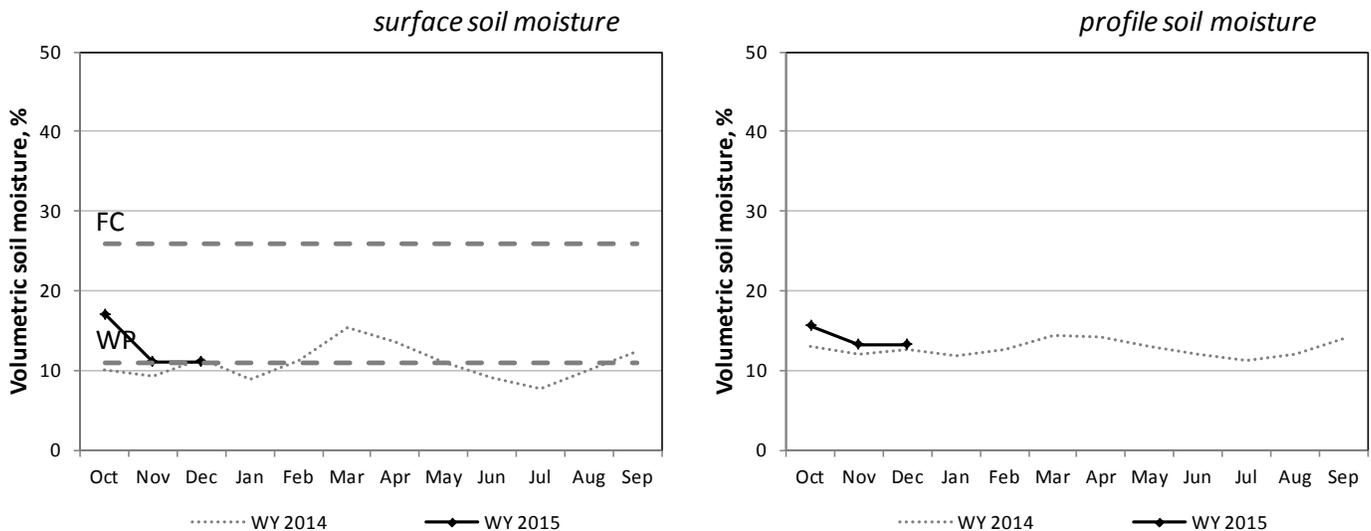
South Central

Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	<i>in.</i>	<i>in.</i>	<i>volume %</i>					<i>° F</i>				
SOUTH CENTRAL												
Nephi	0.1	0.1	12	15	14	7	3	53	53	54	55	58
Ephraim	0.3	0.3	20	30	31	38	37	50	51	51	52	55
Holden	0.5	0.5	4	5	0	13	13	56	56	56	57	61
Milford	0.0	0.0	15	22	23	28	18	53	54	53	56	59
Manderfield	0.0	0.0	16	16	14	11	5	53	54	54	54	55
Cirleville	0.0	0.0	9	18	13	8	15	50	52	51	53	57
Panguitch	0.1	0.1	6	18	13	20	32	43	43	42	46	50
Cave Valley	0.0	0.0	1	1	3	3	5	54	54	55	55	55
Vermillion	0.0	0.0	0	2	4	8	8	47	47	49	50	54
Spooky	0.0	0.0	0	1	2	12	2	53	56	58	61	63

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South Central



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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.

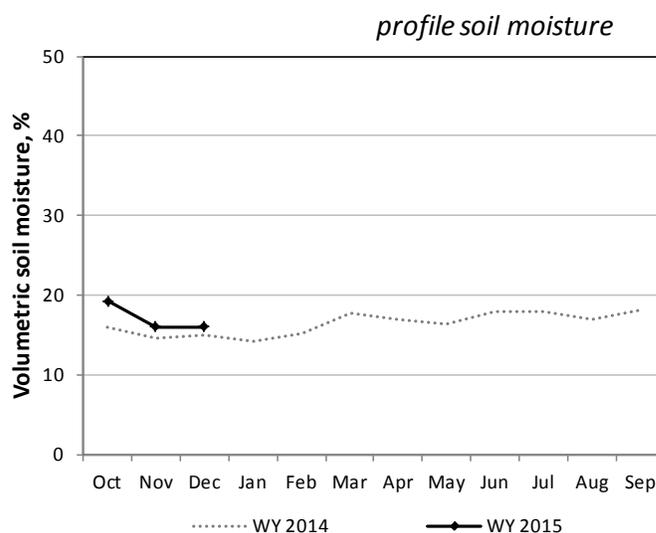
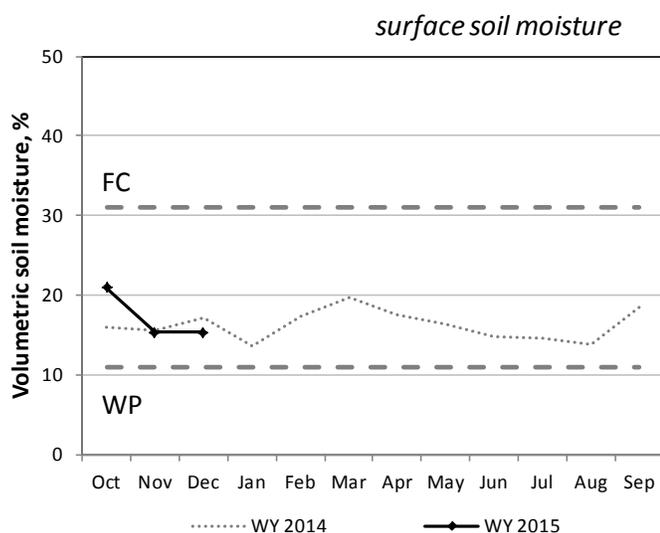
Western and Dixie

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	0.0	0.0	2	11	11	15	16	47	48	50	51	53
Park Valley	0.0	0.0	2	5	14	39	26	51	51	51	53	57
Goshute	0.0	0.0	16	1	46	29	30	53	53	53	52	56
Dugway	0.0	0.0	26	32	38		13	55	56	55	56	57
Tule Valley	0.0	0.0	11	12	23	13	10	62	62	62	61	64
Hal's Canyon	0.2	0.2	1	5	10	11	10	53	55	56	57	61
Enterprise	0.0	0.0	6	27	25	14	16	52	56	57	57	61
DIXIE												
Sand Hollow	0.0	0.0	0	1	0	1	0	64	66	66	65	69

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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.

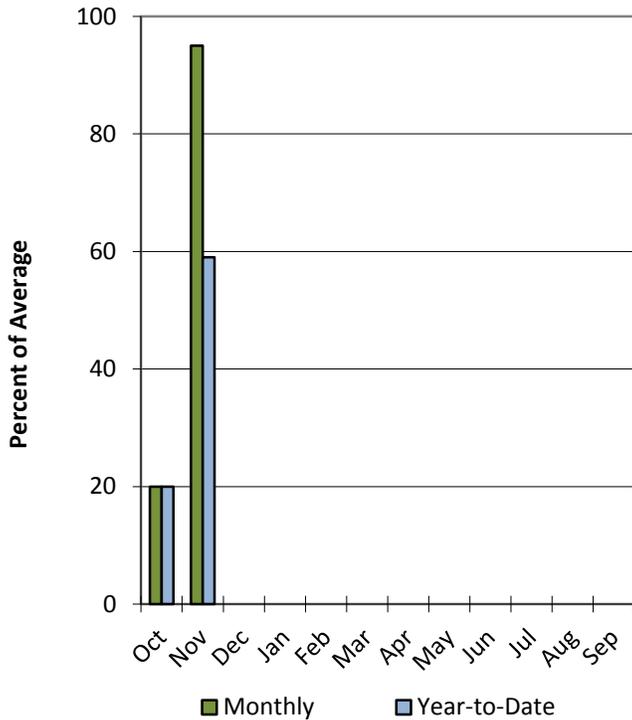
Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

Statewide Utah

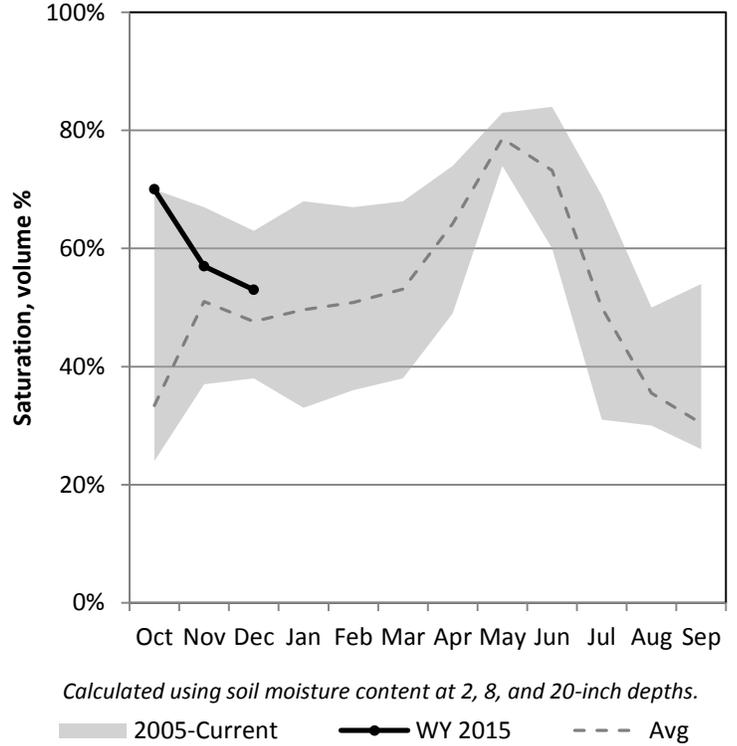
12/1/2014

Precipitation in November was near average at 95%, which brings the seasonal accumulation (Oct-Nov) to 59% of average. Soil moisture is at 53% compared to 56% last year. Reservoir storage is at 58% of capacity, compared to 56% last year.

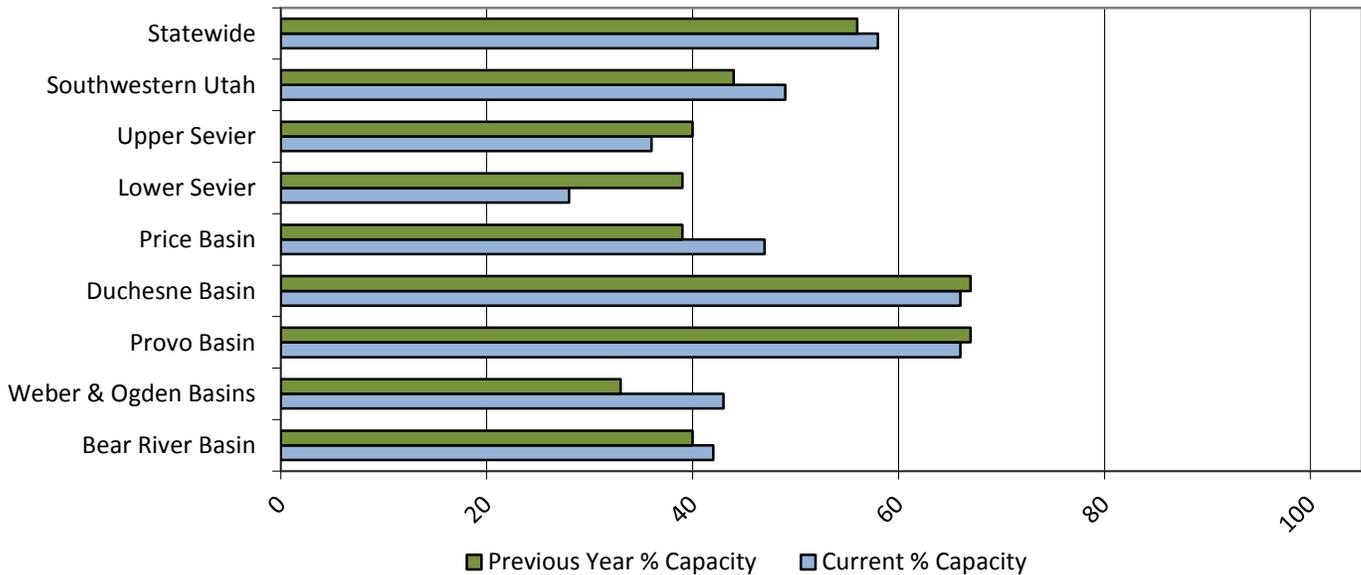
Precipitation



Soil Moisture



Reservoir Storage



Utah Hydrologic Summary

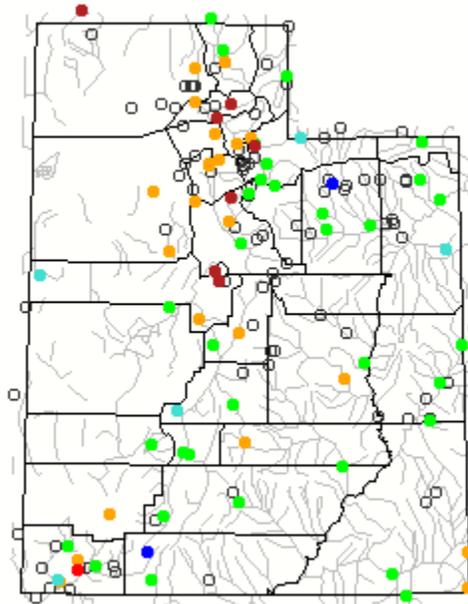
December 1, 2014

Current Conditions

Current runoff, as shown in the USGS graphic below, is mostly near and above average for non-regulated stream flow across many areas of Utah. Monthly precipitation across the state improved substantially from the previous month with a November average of 95% compared to 20% average in October bringing the seasonal accumulation (Oct-Nov) to 59% of average. Soil moisture has dropped but reported values are still above or near average across the state. Reservoir storage is slightly higher than last year, near 58% of capacity across the state compared to 56% last year.

Current Utah Stream Flow - Courtesy US Geological Survey

Thursday, December 04, 2014 15:00ET



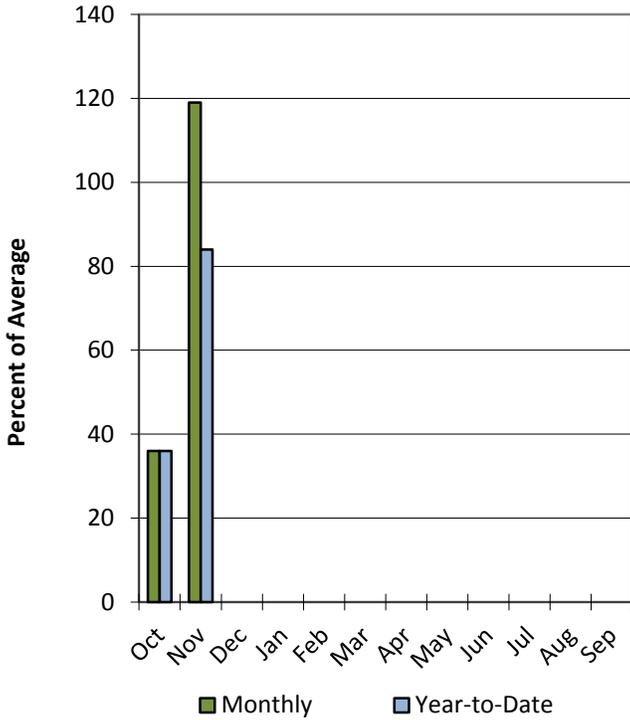
Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Bear River Basin

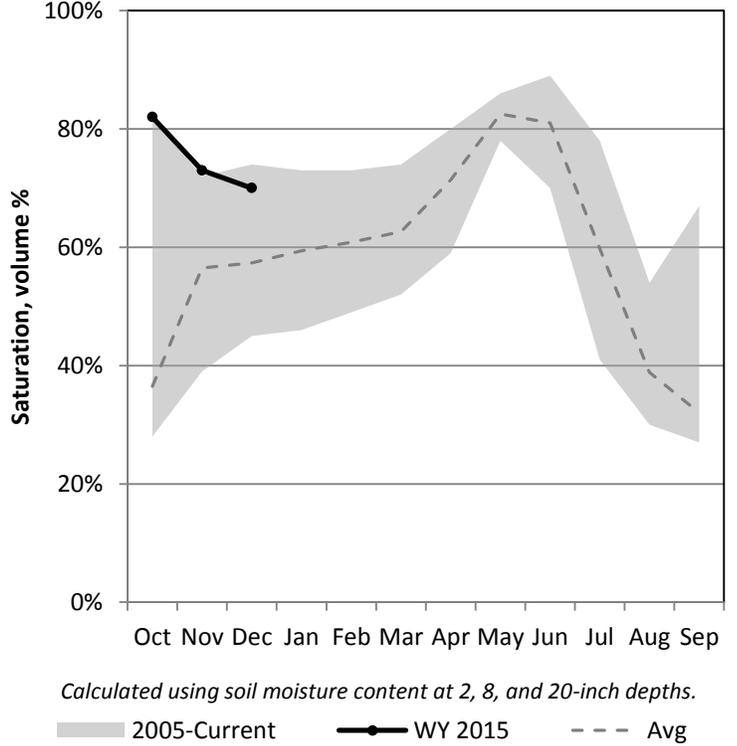
12/1/2014

Precipitation in November was above average at 119%, which brings the seasonal accumulation (Oct-Nov) to 84% of average. Soil moisture is at 70% compared to 58% last year. Reservoir storage is at 42% of capacity, compared to 40% last year. The water availability index for the Bear River is 51%.

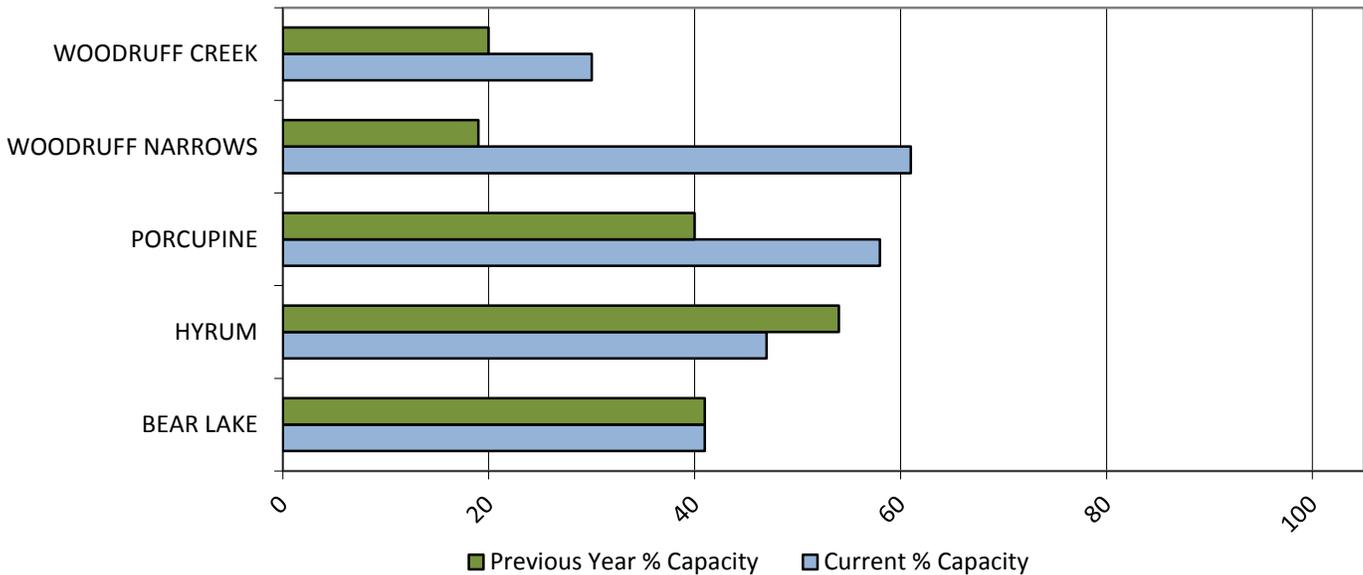
Precipitation



Soil Moisture



Reservoir Storage

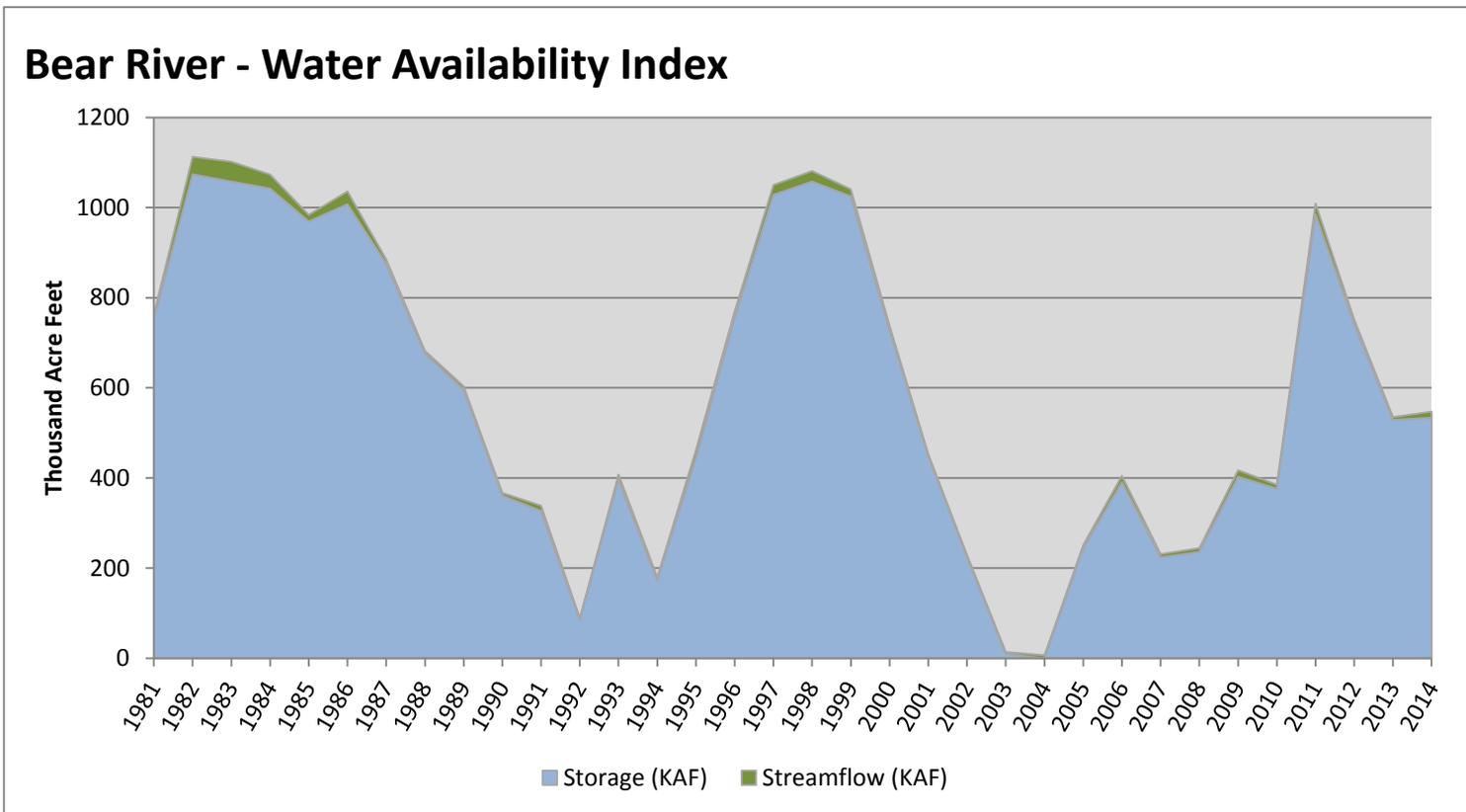


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	533.62	13.62	547.24	51	0.12	95, 13, 89, 88

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

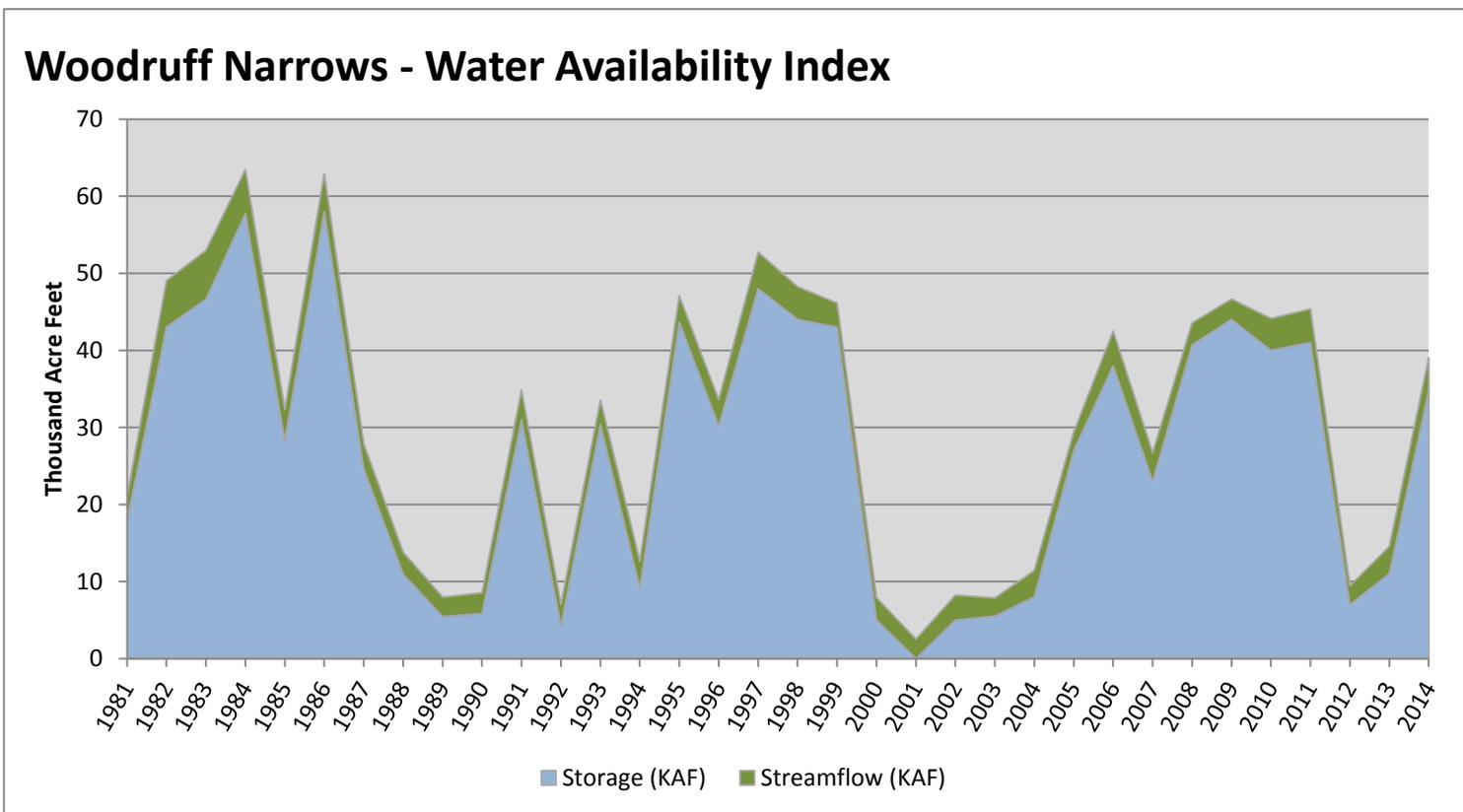


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	34.81	4.24	39.05	63	1.07	96, 91, 06, 08

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

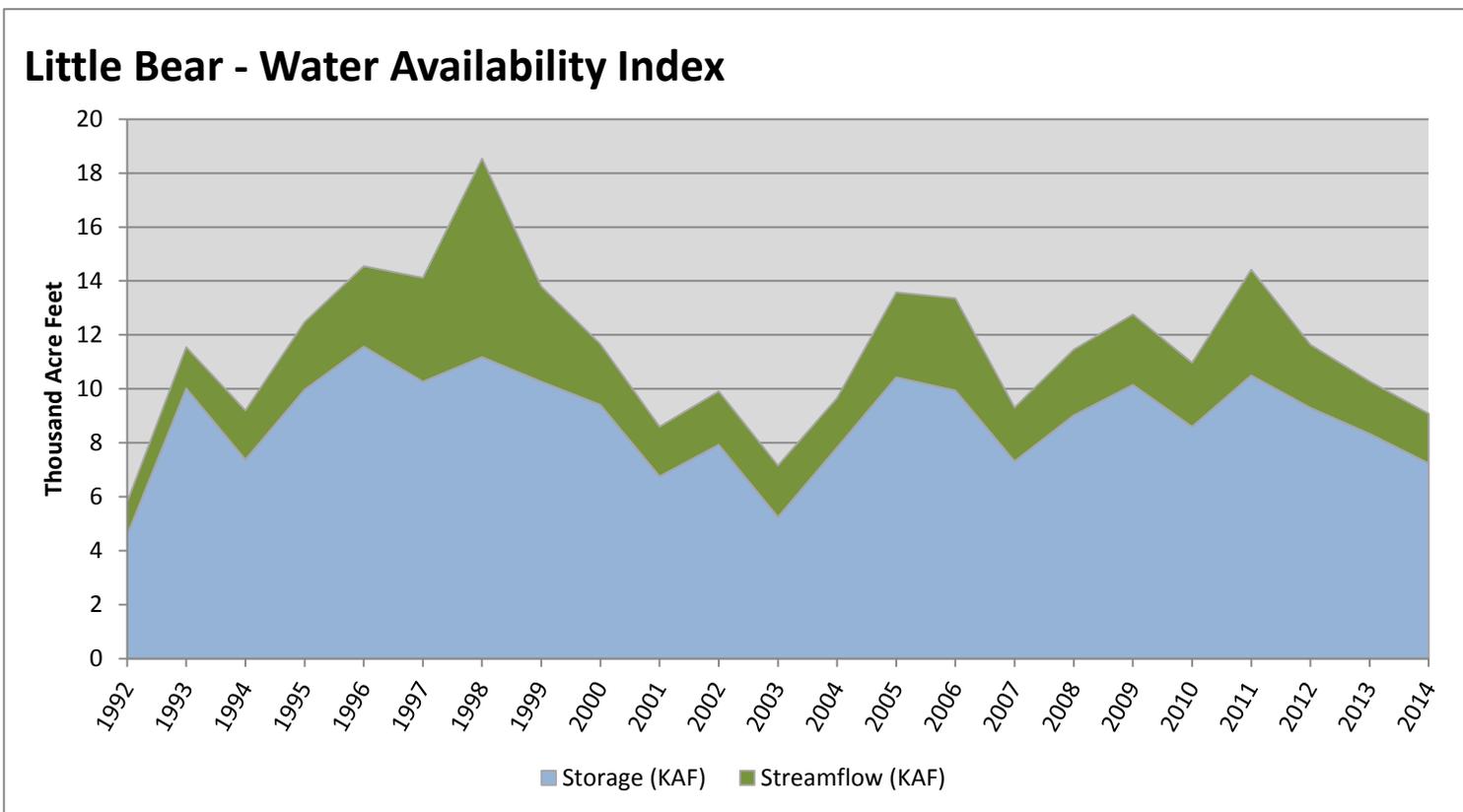


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	7.24	1.84	9.08	17	-2.78	03, 01, 94, 07

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

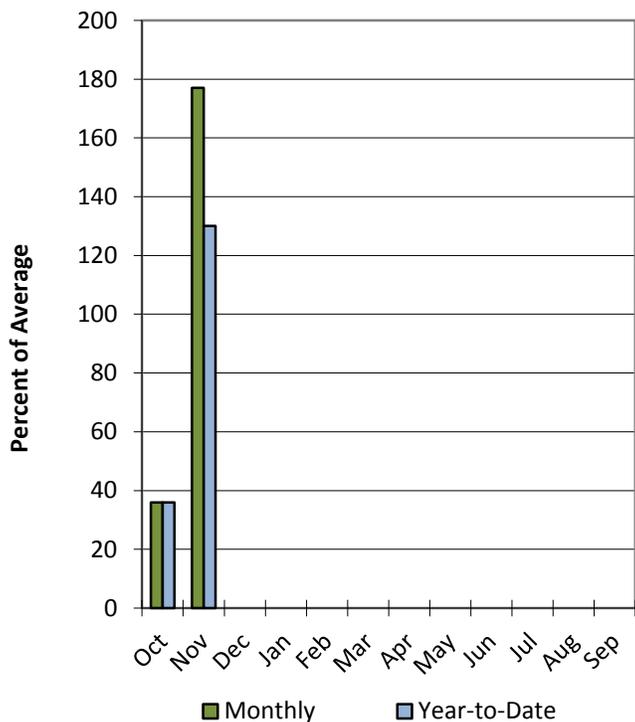


Raft River Basin

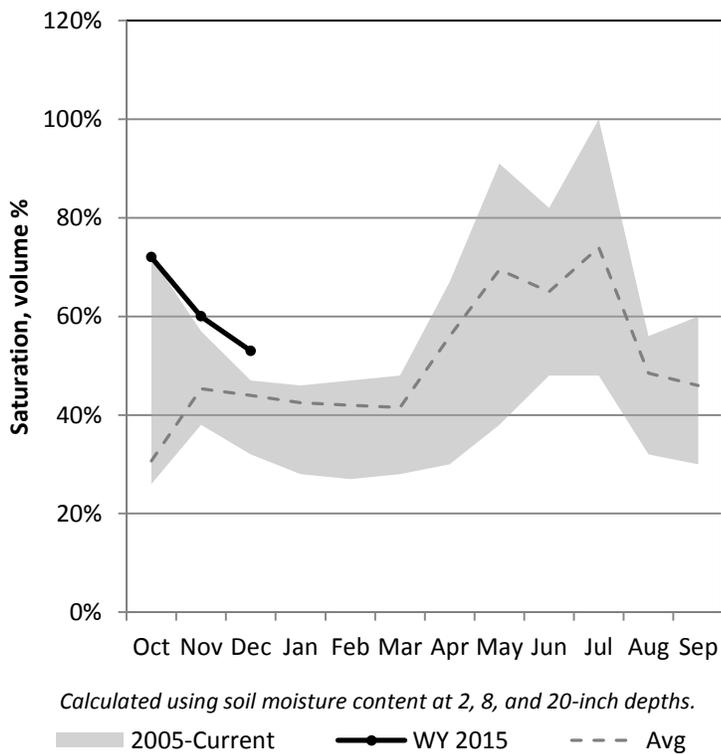
12/1/2014

Precipitation in November was much above average at 177%, which brings the seasonal accumulation (Oct-Nov) to 130% of average. Soil moisture is at 53% compared to 32% last year.

Precipitation



Soil Moisture

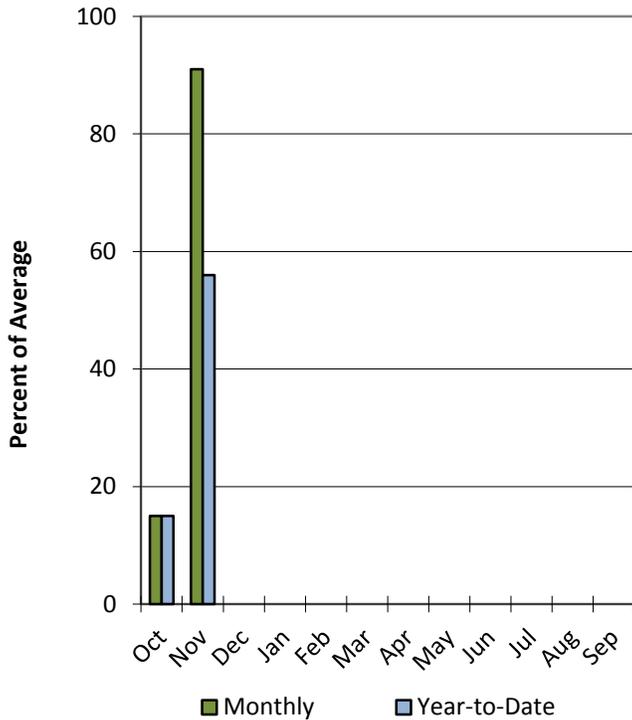


Weber & Ogden River Basins

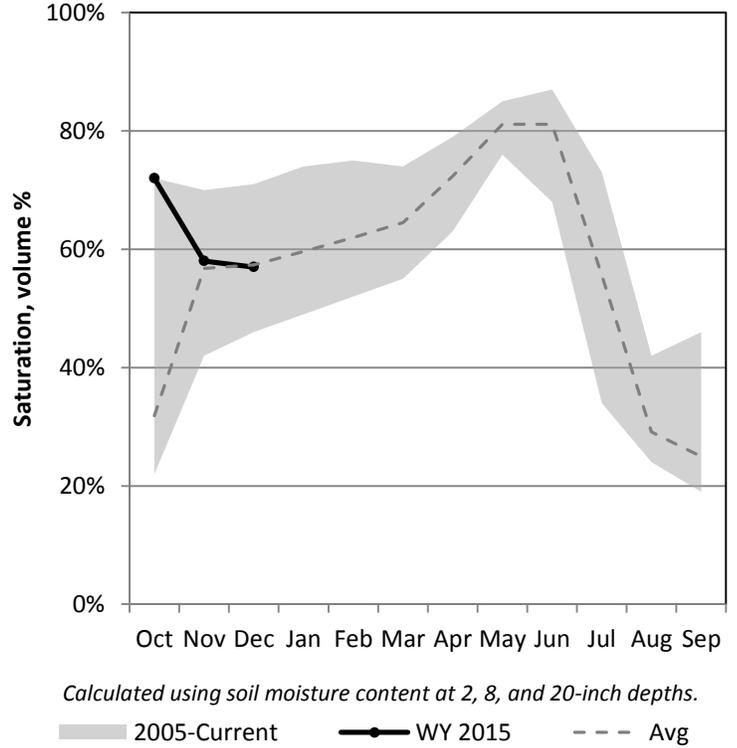
12/1/2014

Precipitation in November was near average at 91%, which brings the seasonal accumulation (Oct-Nov) to 56% of average. Soil moisture is at 57% compared to 47% last year. Reservoir storage is at 43% of capacity, compared to 33% last year. The water availability index for the Ogden River is 49% and 35% for the Weber River.

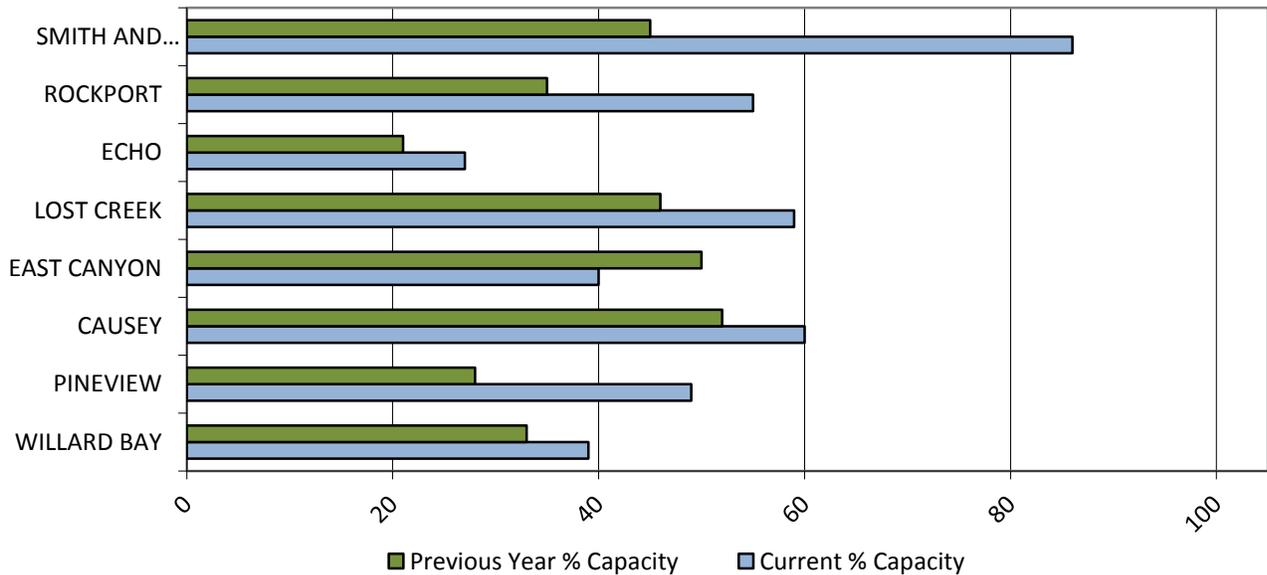
Precipitation



Soil Moisture



Reservoir Storage

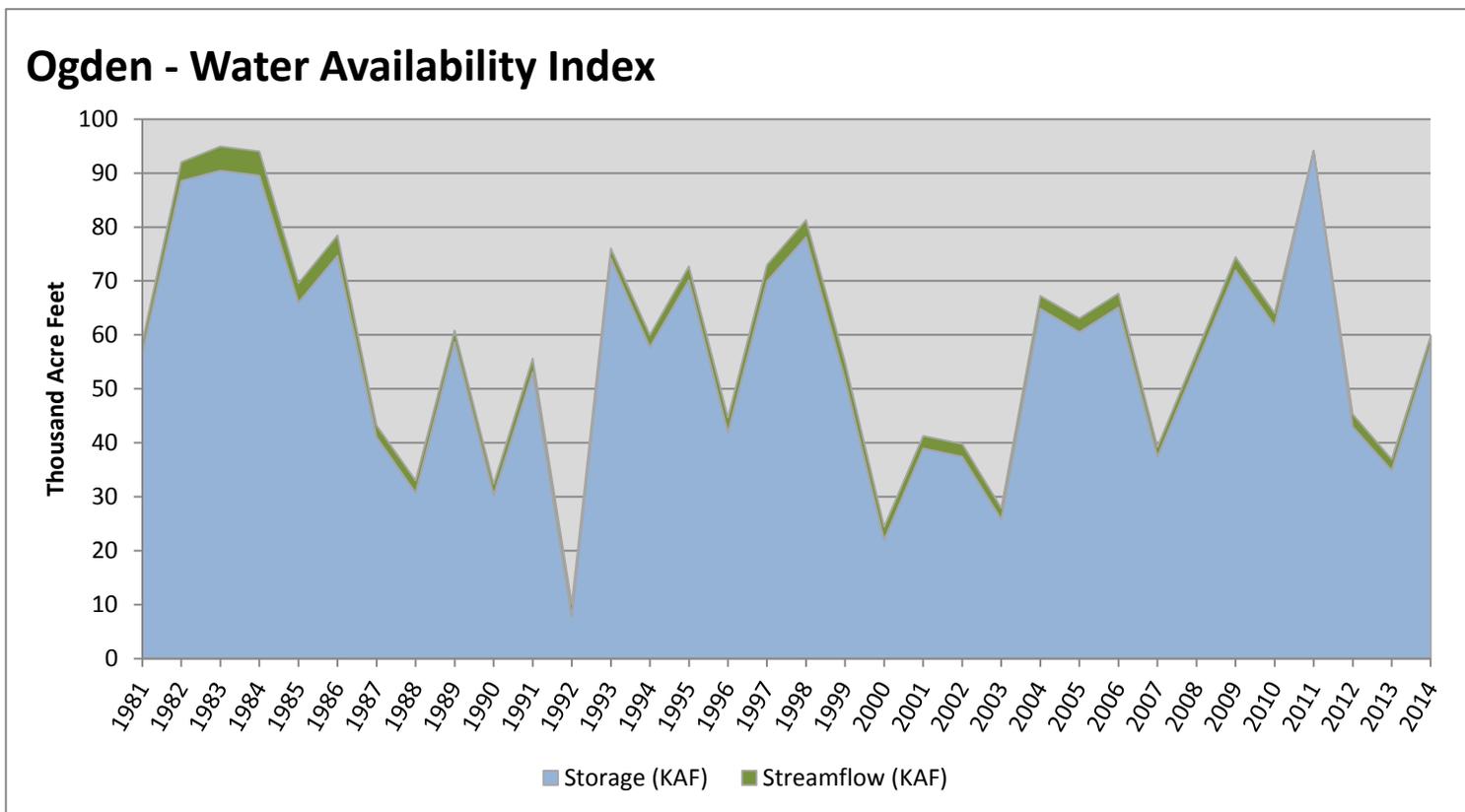


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	58.11	1.76	59.87	49	-0.12	08, 81, 94, 89

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

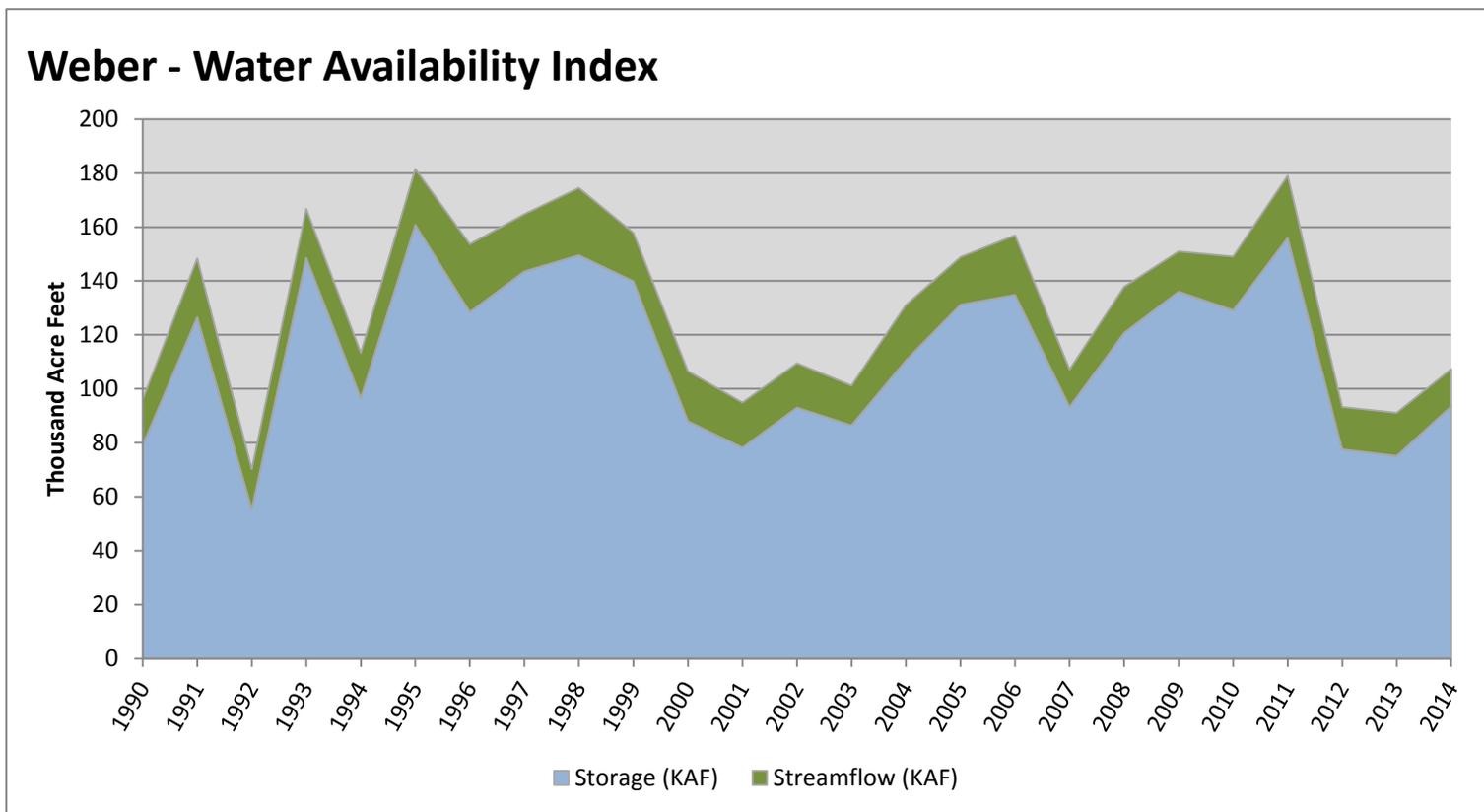


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM* Storage	November Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Weber	93.57	13.77	107.34	35	-1.28	00, 07, 02, 94

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

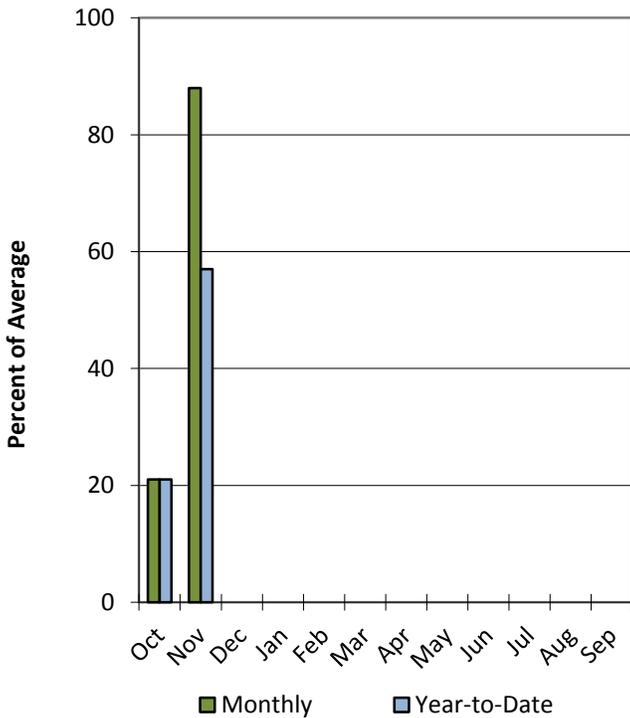


Provo & Jordan River Basins

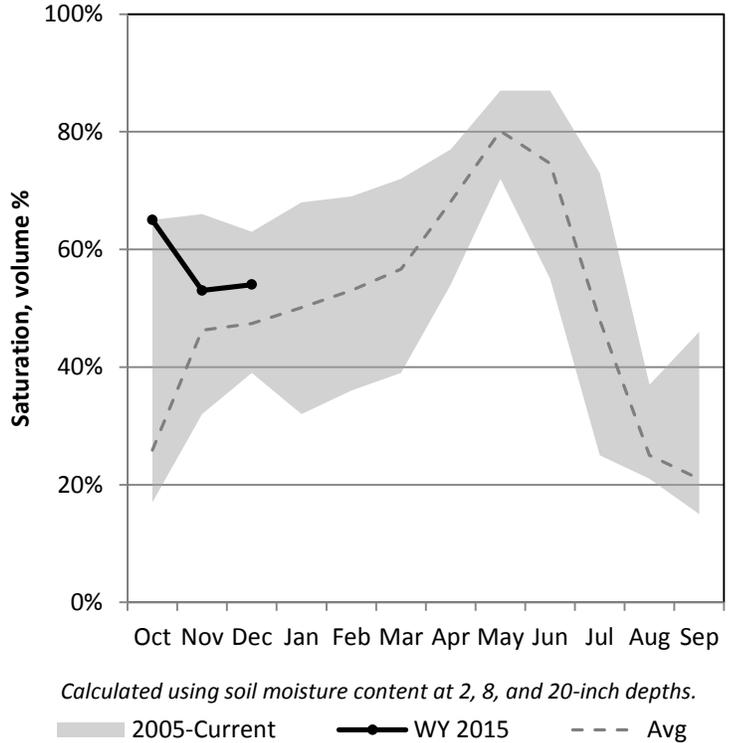
12/1/2014

Precipitation in November was below average at 88%, which brings the seasonal accumulation (Oct-Nov) to 57% of average. Soil moisture is at 54% compared to 57% last year. Reservoir storage is at 66% of capacity, compared to 67% last year. The water availability index for the Provo River is 35%.

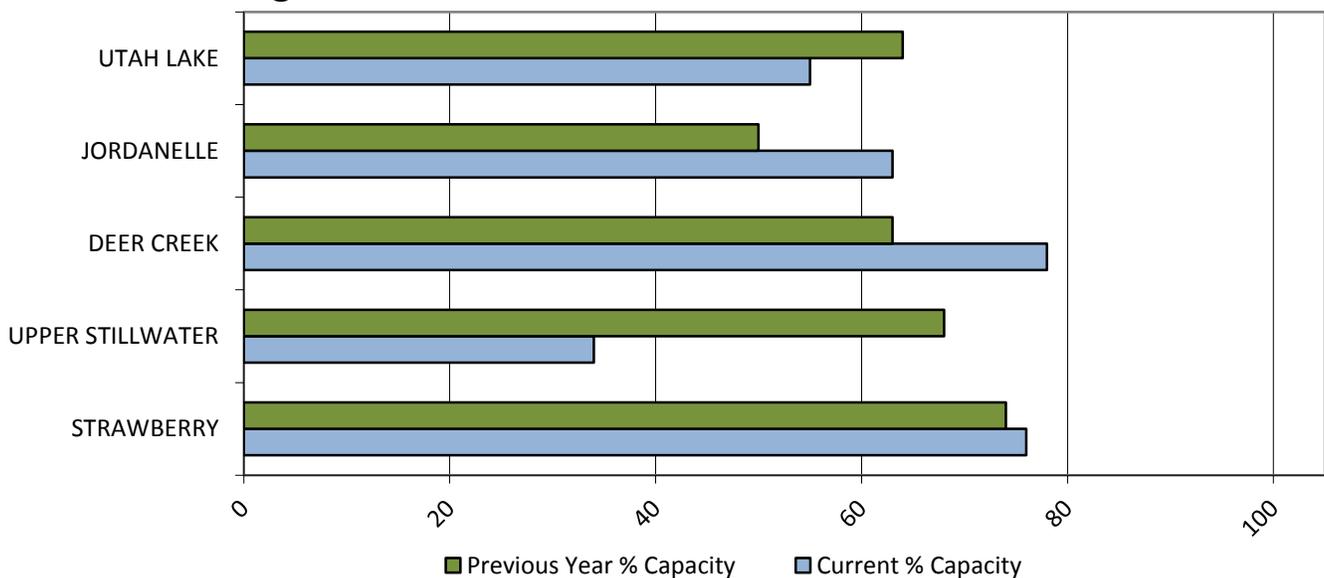
Precipitation



Soil Moisture



Reservoir Storage

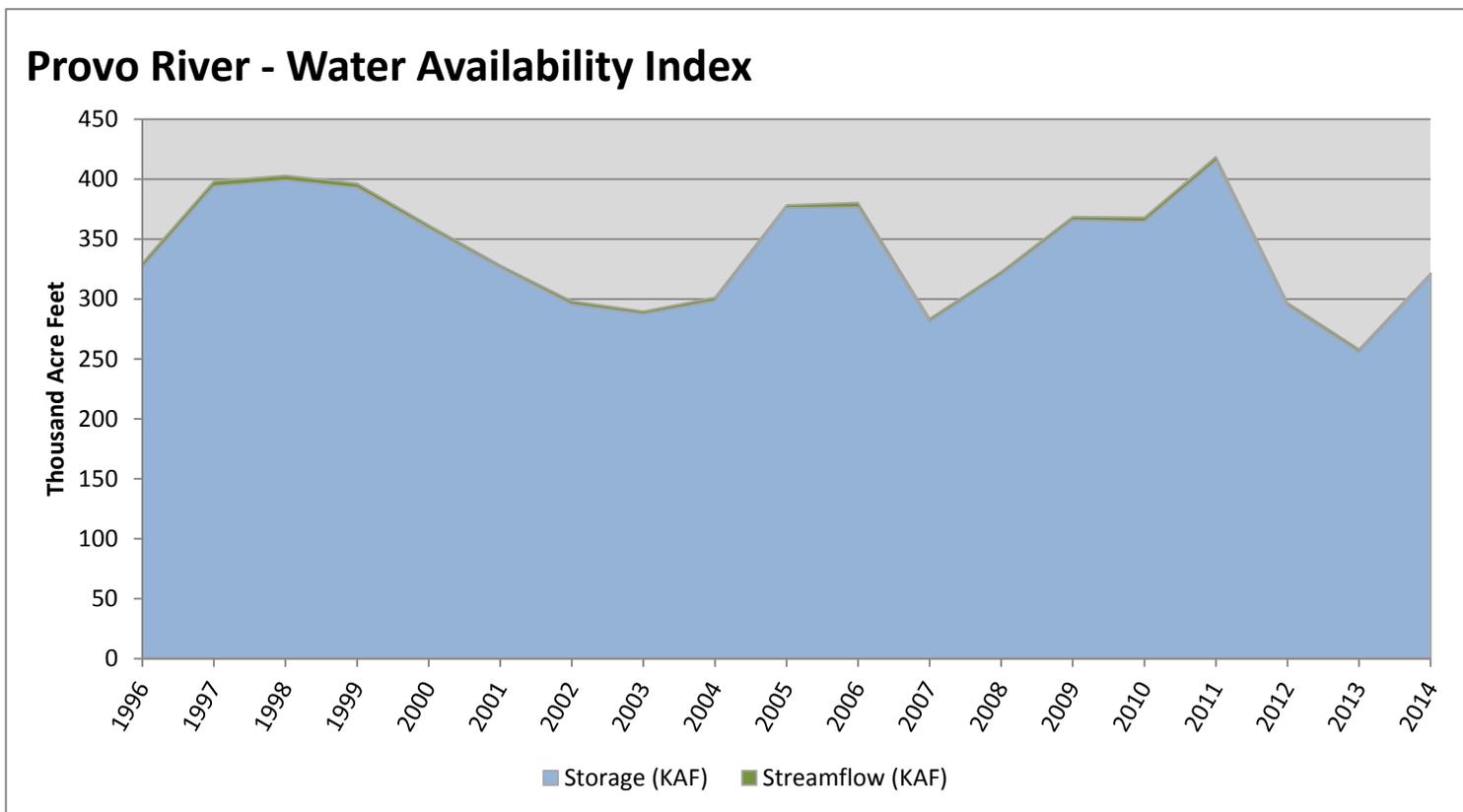


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	319.58	1.99	321.57	35	-1.25	02, 04, 08, 01

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

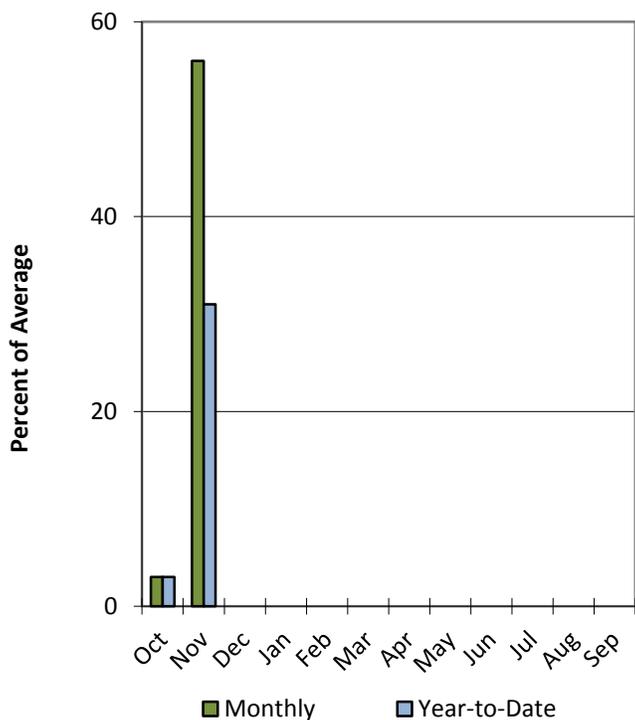


Tooele & Vernon Creek Basins

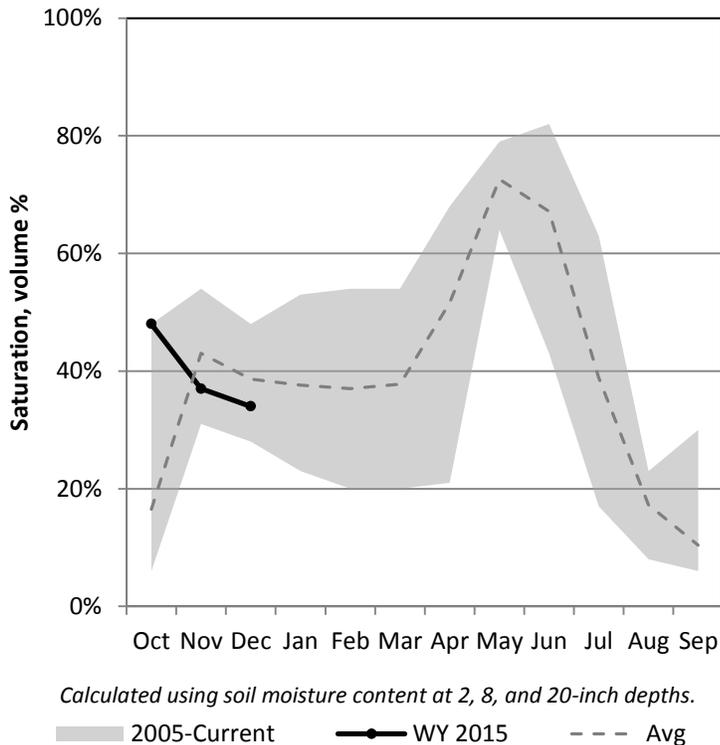
12/1/2014

Precipitation in November was much below average at 56%, which brings the seasonal accumulation (Oct-Nov) to 31% of average. Soil moisture is at 34% compared to 37% last year. Reservoir storage is at 23% of capacity, compared to 24% last year.

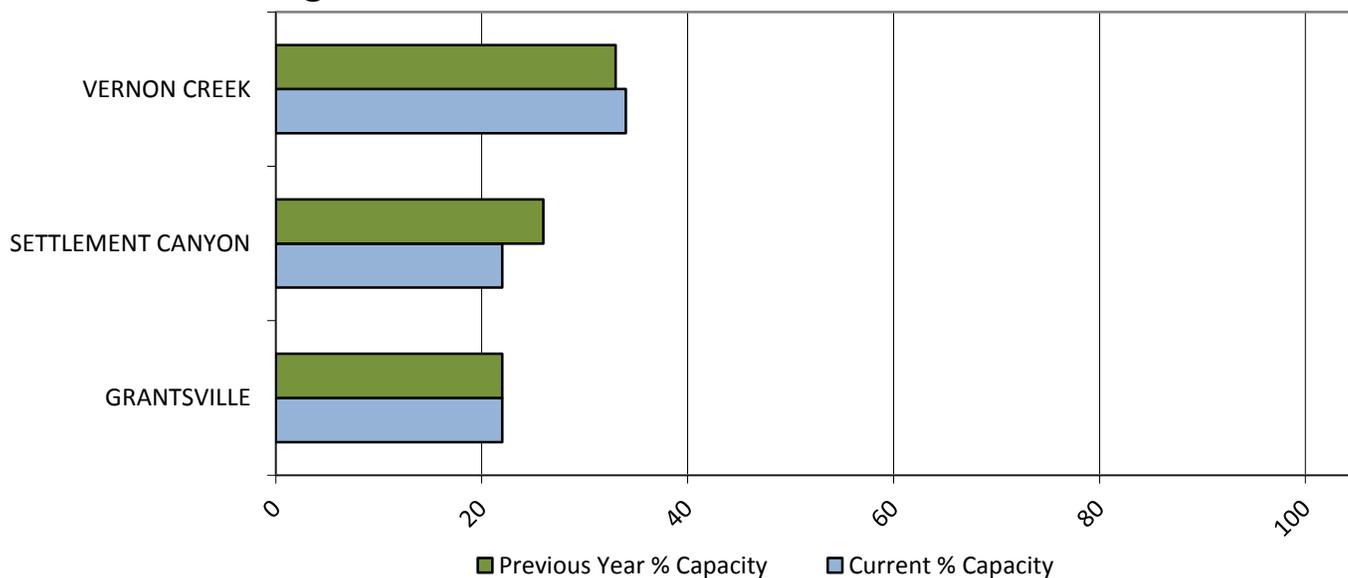
Precipitation



Soil Moisture



Reservoir Storage

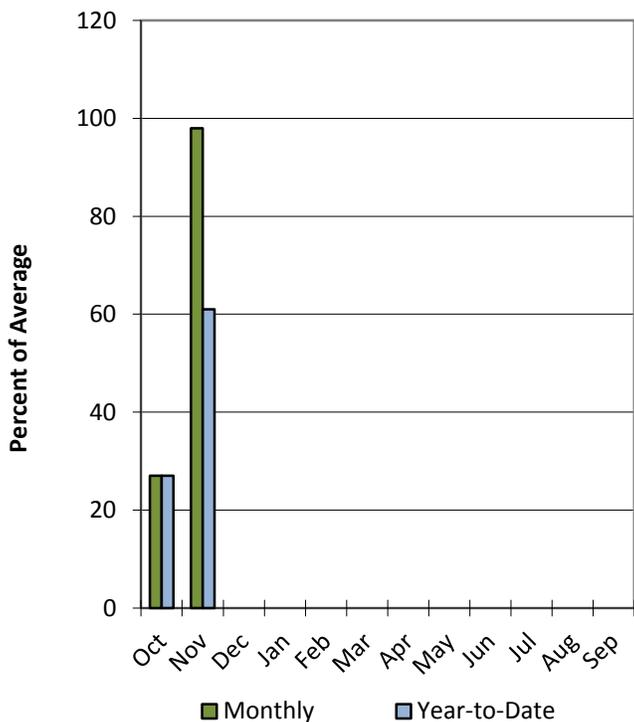


Northeastern Uintah Basin

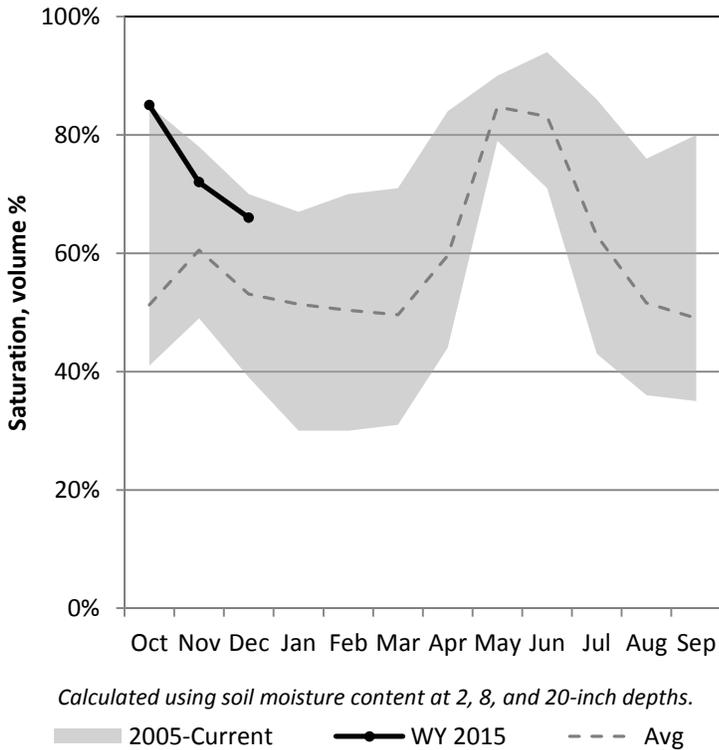
12/1/2014

Precipitation in November was near average at 98%, which brings the seasonal accumulation (Oct-Nov) to 61% of average. Soil moisture is at 66% compared to 69% last year. Reservoir storage is at 88% of capacity, compared to 75% last year.

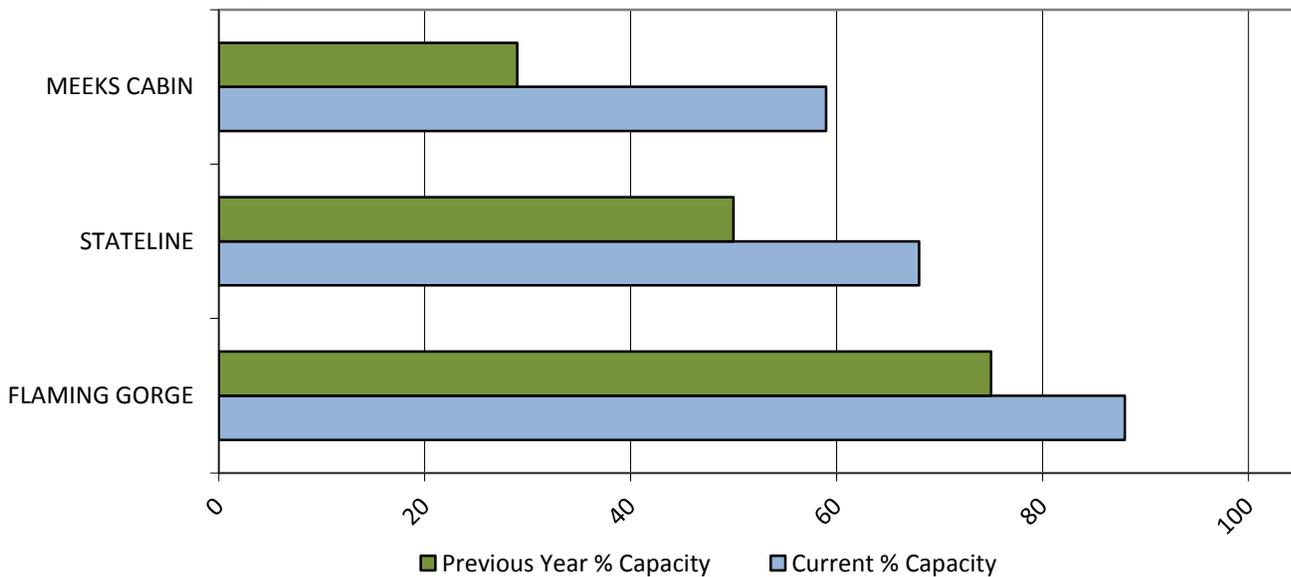
Precipitation



Soil Moisture



Reservoir Storage

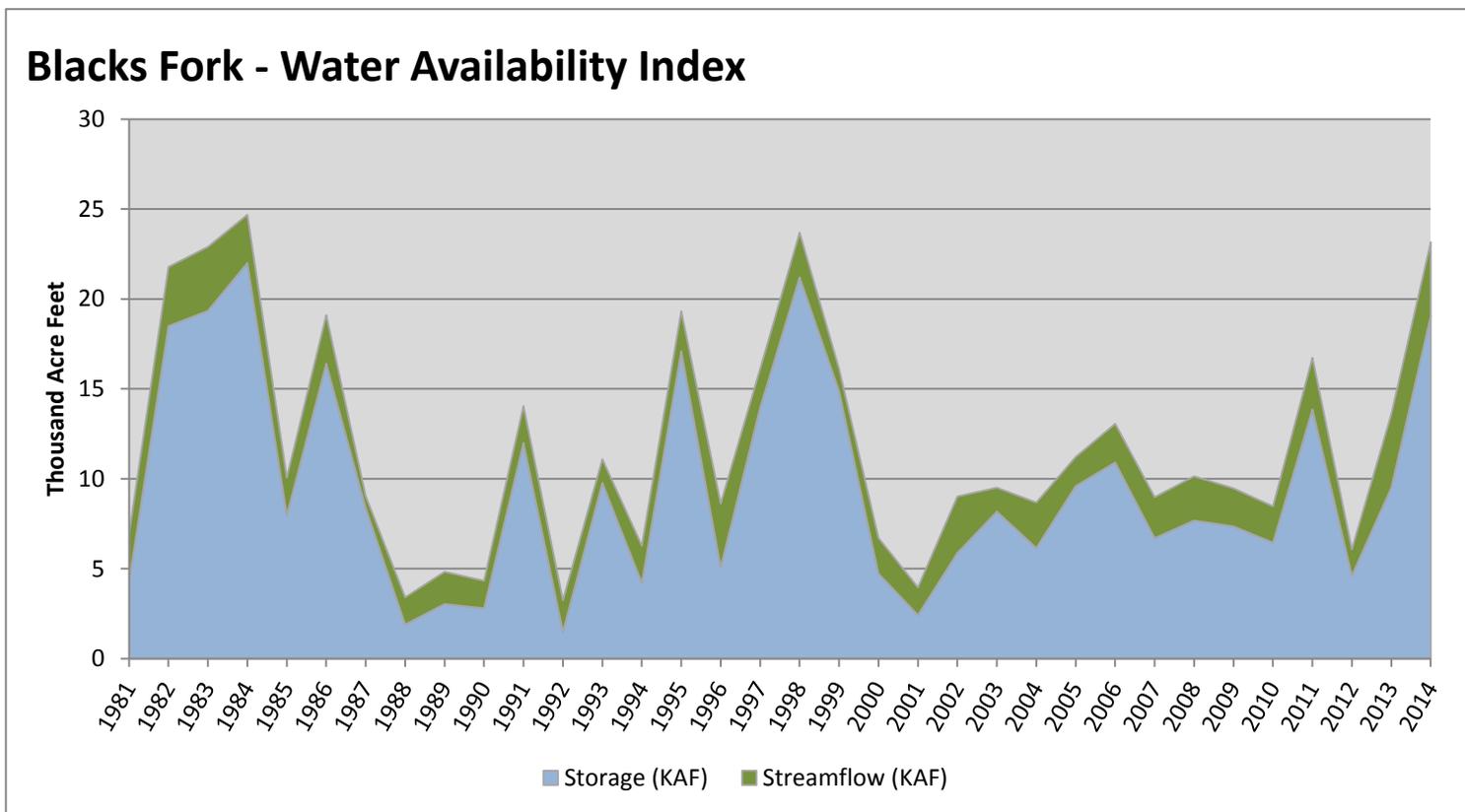


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	19.07	4.09	23.16	91	3.45	82, 83, 98, 84

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

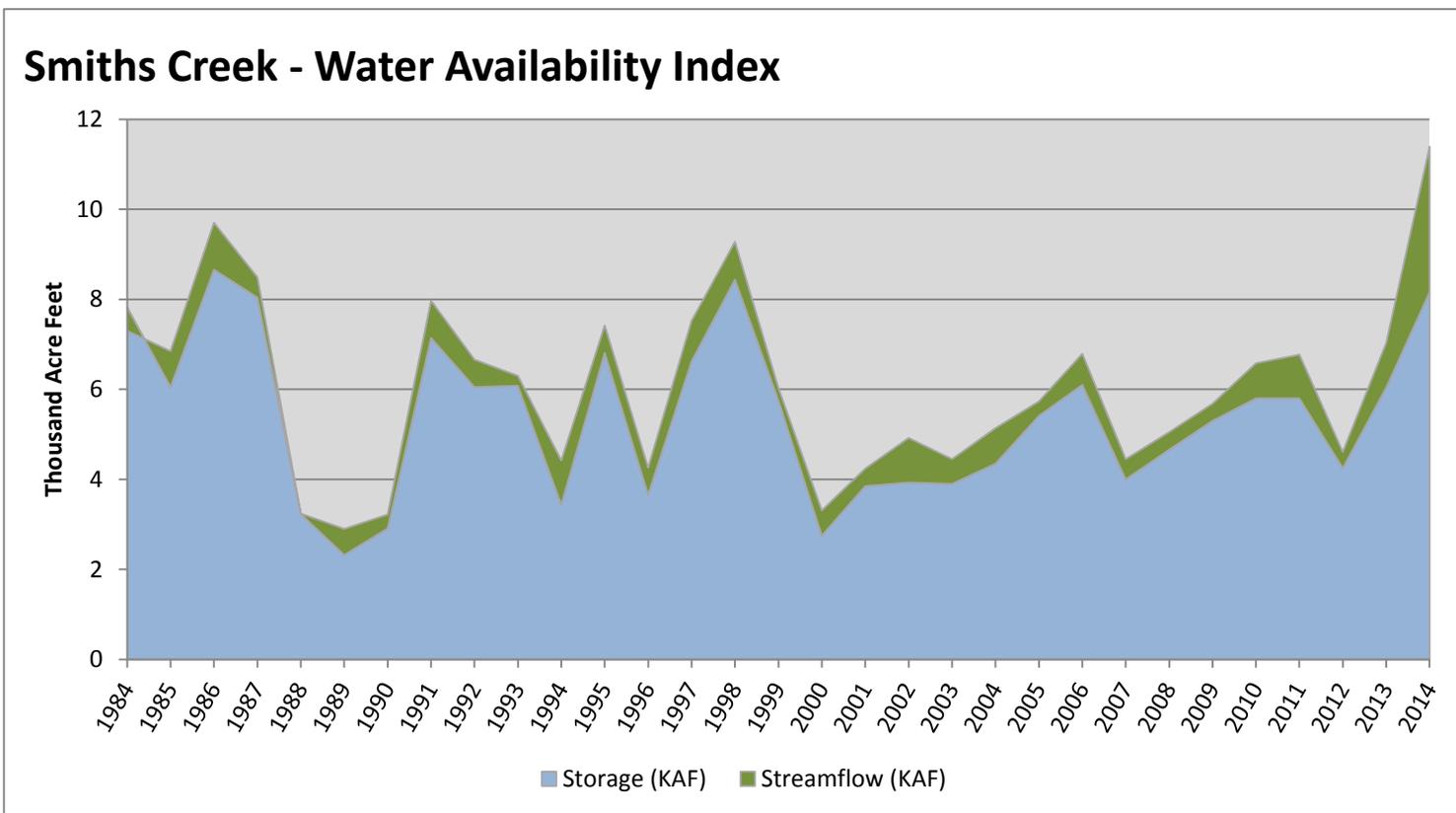


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	8.16	3.23	11.39	97	3.91	86, 98, 87, 91

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

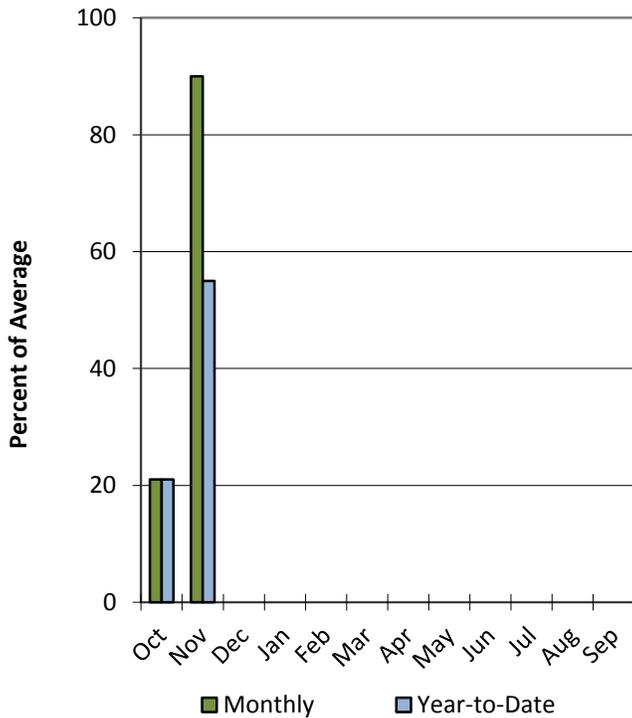


Duchesne River Basin

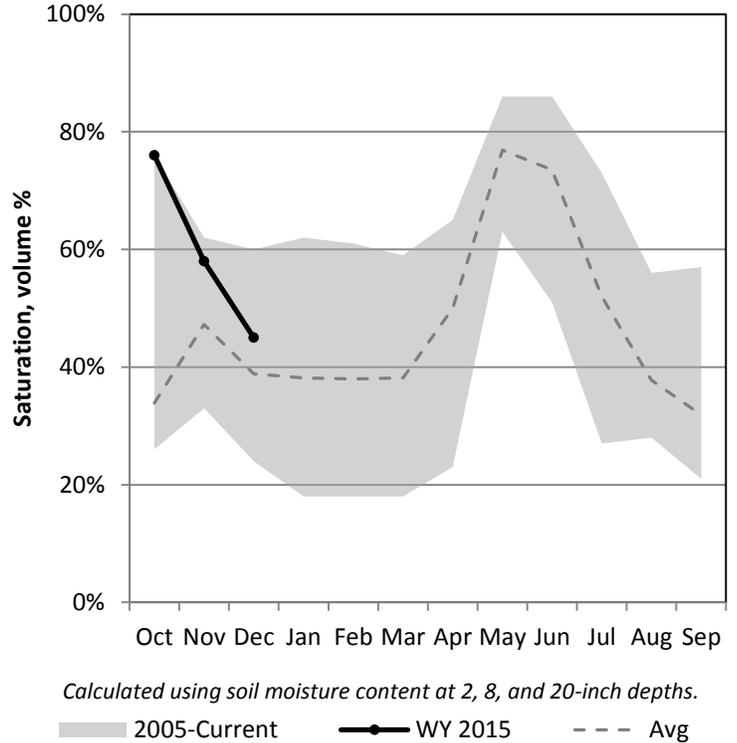
12/1/2014

Precipitation in November was near average at 90%, which brings the seasonal accumulation (Oct-Nov) to 55% of average. Soil moisture is at 45% compared to 44% last year. Reservoir storage is at 74% of capacity, compared to 71% last year. The water availability index for the Western Uintahs is 82% and 26% for the Eastern Uintahs.

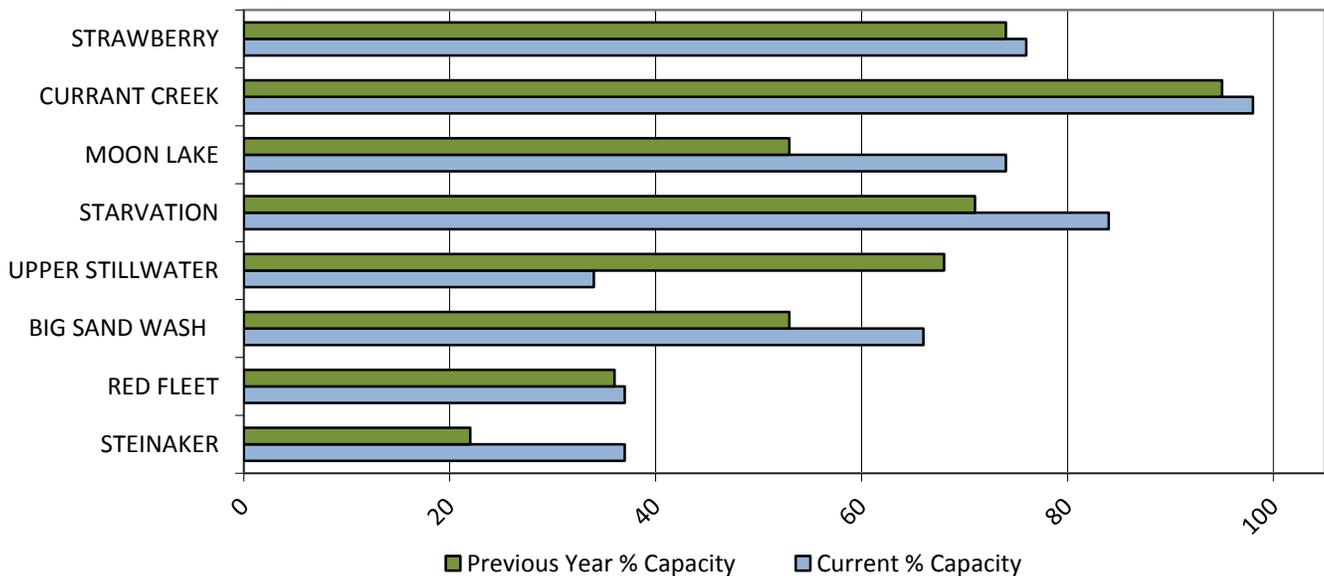
Precipitation



Soil Moisture



Reservoir Storage

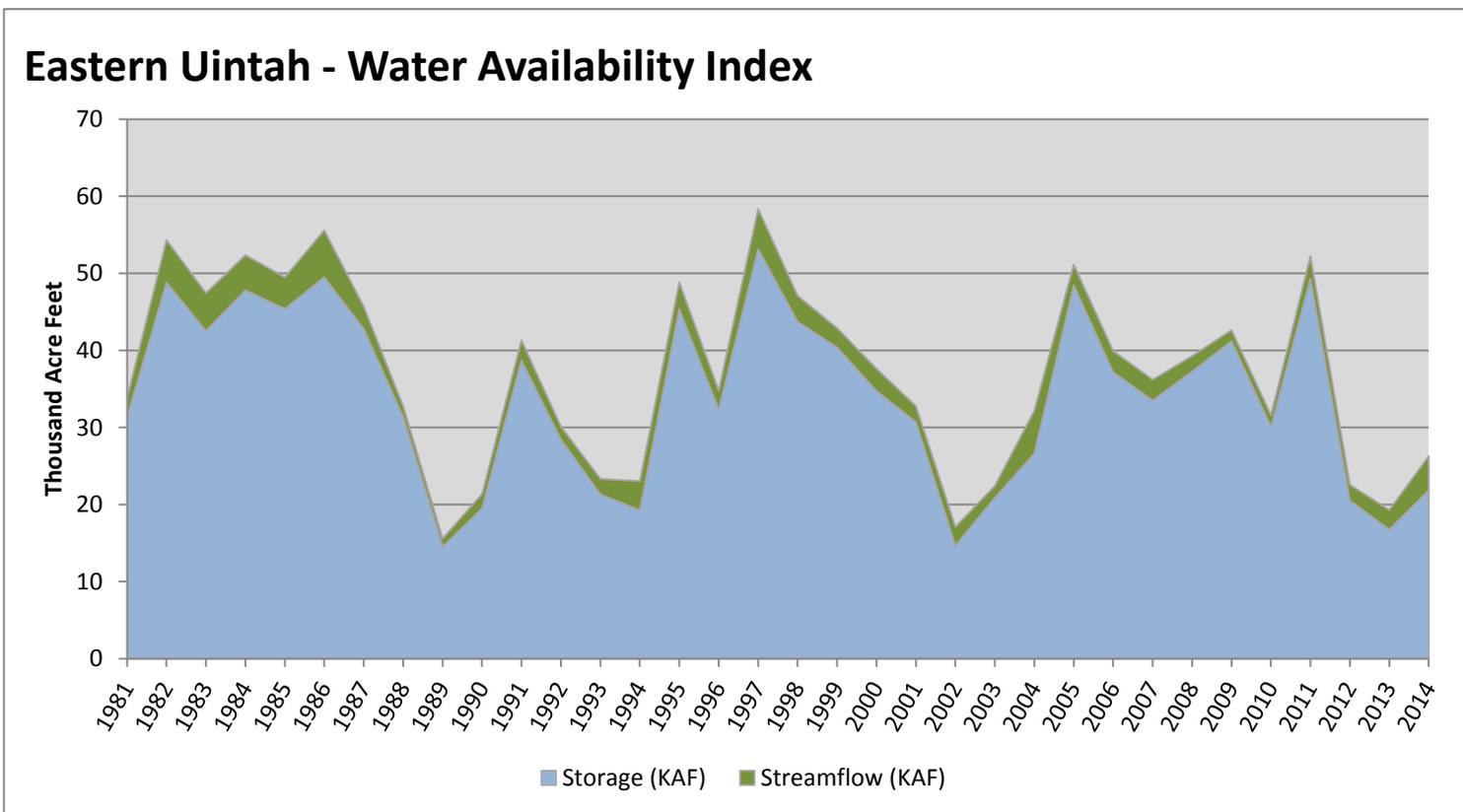


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uintah	21.85	4.44	26.29	26	-2.02	94, 93, 92, 10

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

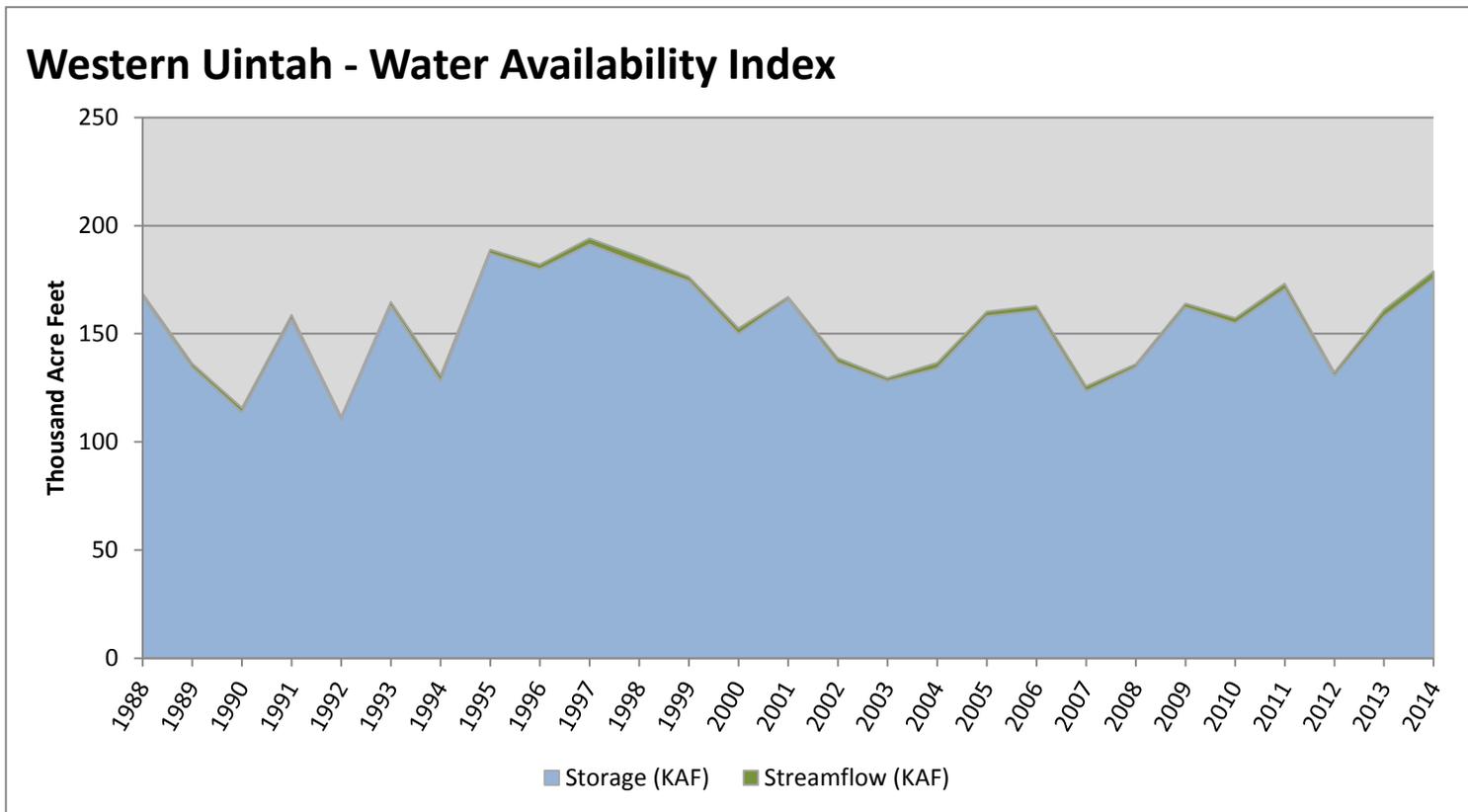


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uintah	175.50	3.43	178.93	82	2.68	11, 99, 96, 98

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

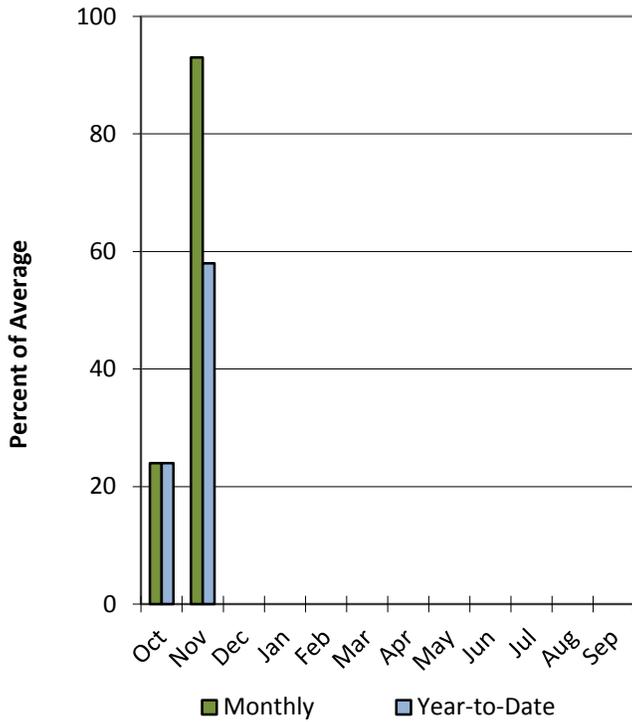


Lower Sevier River Basin

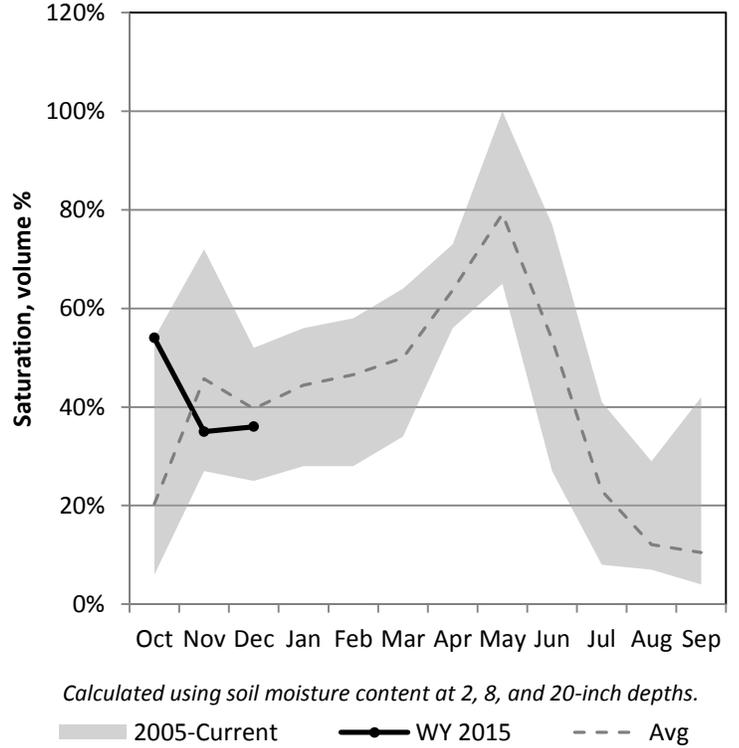
12/1/2014

Precipitation in November was near average at 93%, which brings the seasonal accumulation (Oct-Nov) to 58% of average. Soil moisture is at 36% compared to 39% last year. Reservoir storage is at 28% of capacity, compared to 39% last year. The water availability index for the Lower Sevier is 20%.

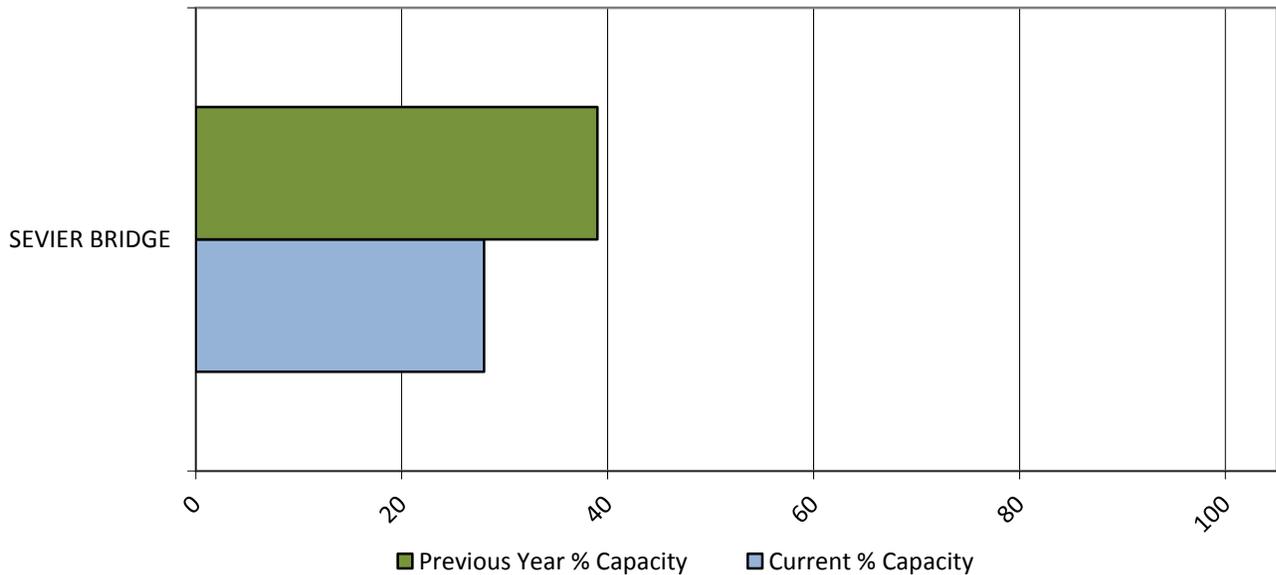
Precipitation



Soil Moisture



Reservoir Storage

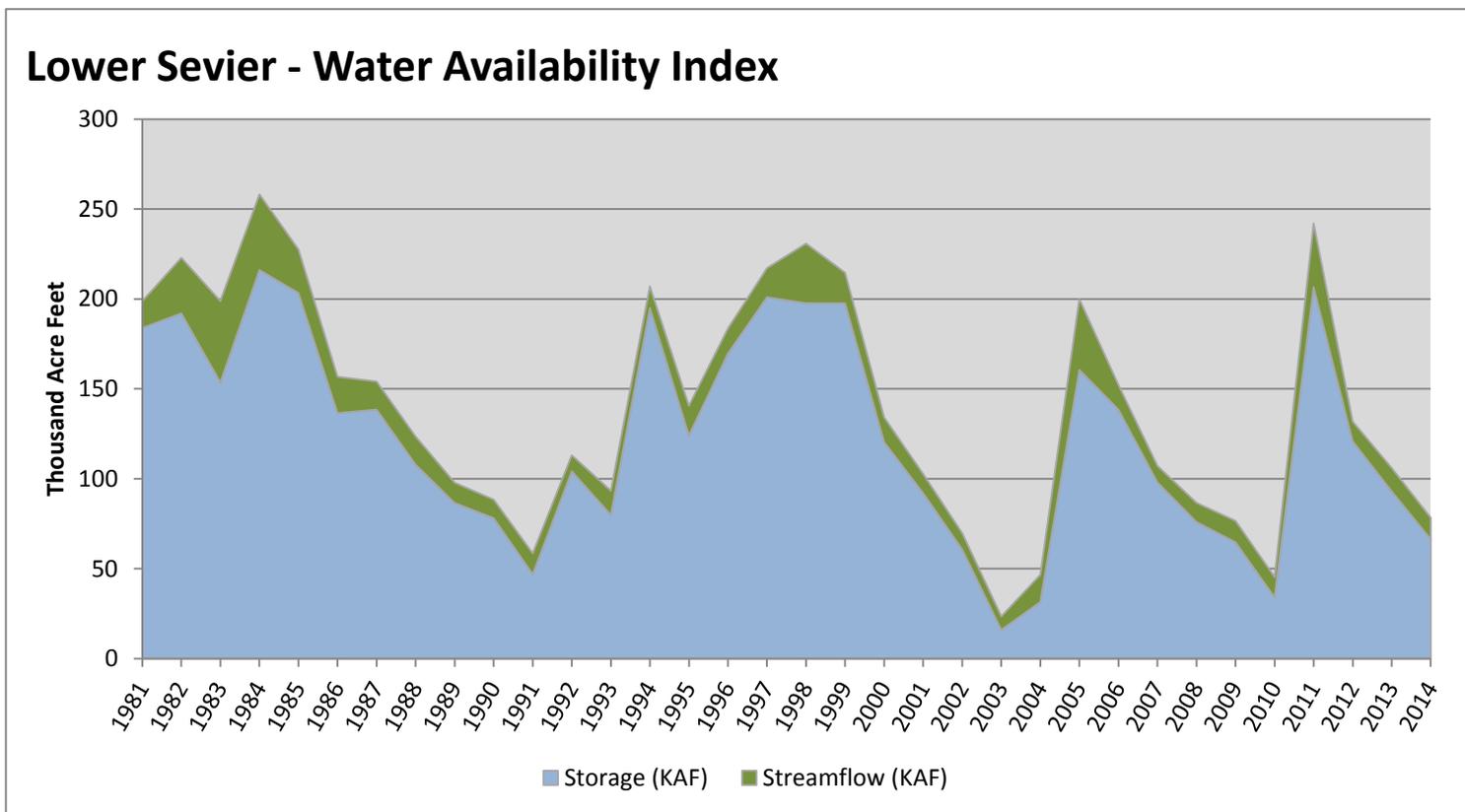


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	66.38	11.96	78.34	20	-2.5	02, 09, 08, 90

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

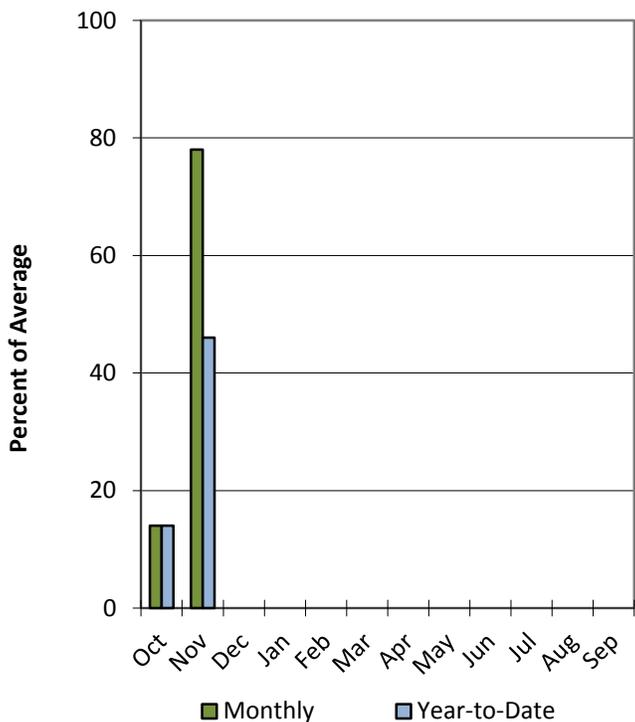


Upper Sevier River Basin

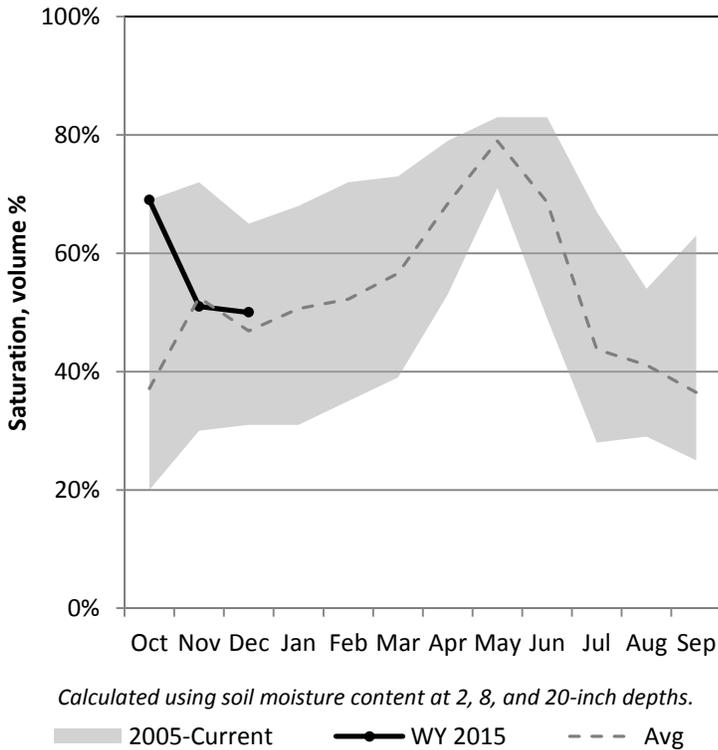
12/1/2014

Precipitation in November was below average at 78%, which brings the seasonal accumulation (Oct-Nov) to 46% of average. Soil moisture is at 50% compared to 63% last year. Reservoir storage is at 36% of capacity, compared to 40% last year. The water availability index for the Upper Sevier is 37%.

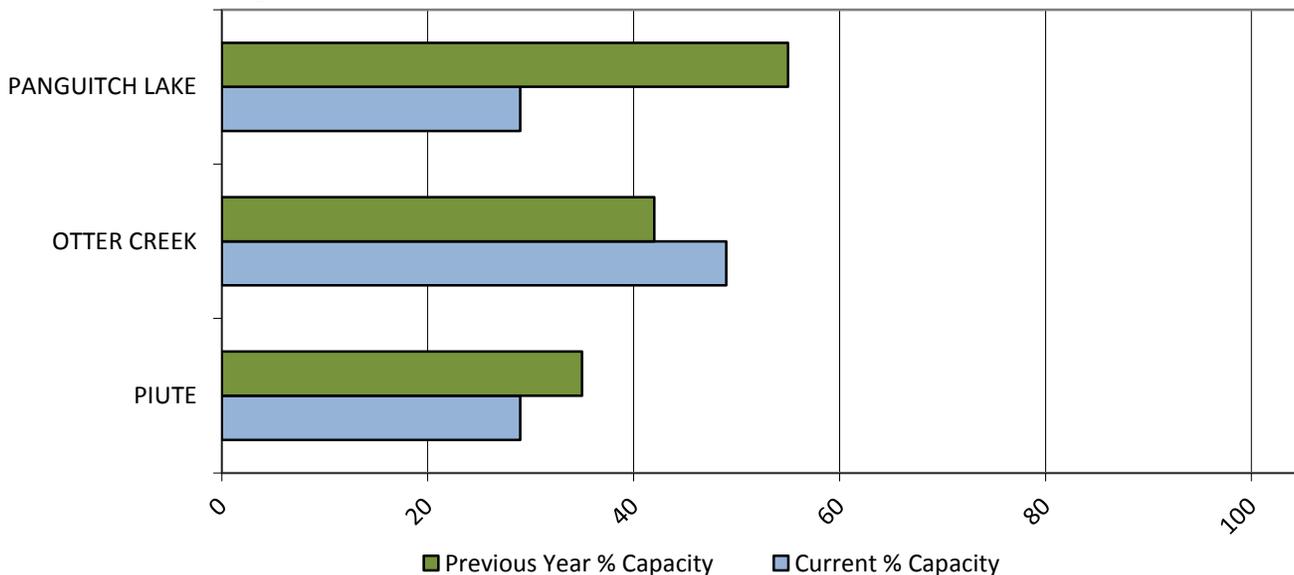
Precipitation



Soil Moisture



Reservoir Storage

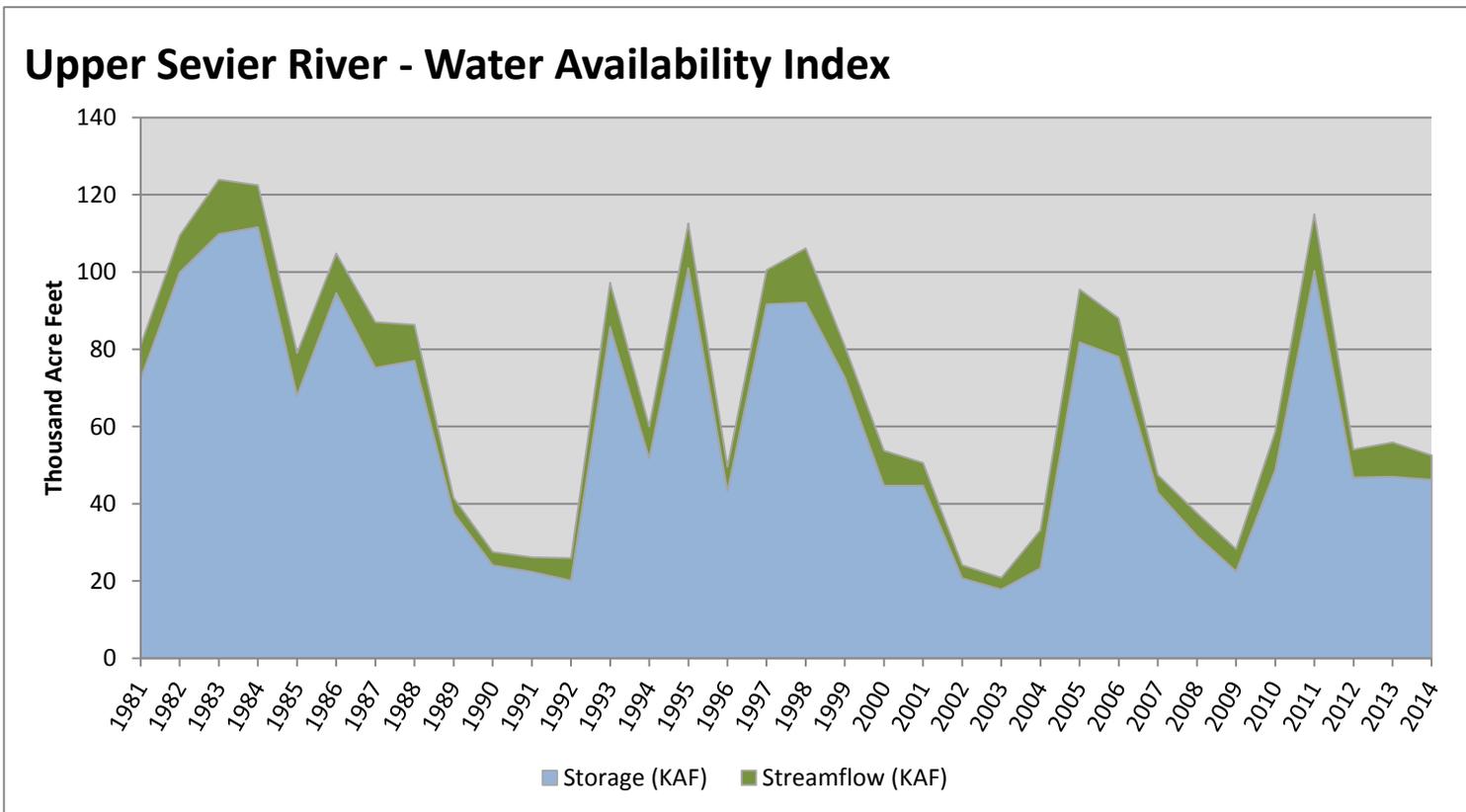


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	46.21	6.32	52.53	37	-1.07	96, 01, 00, 12

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

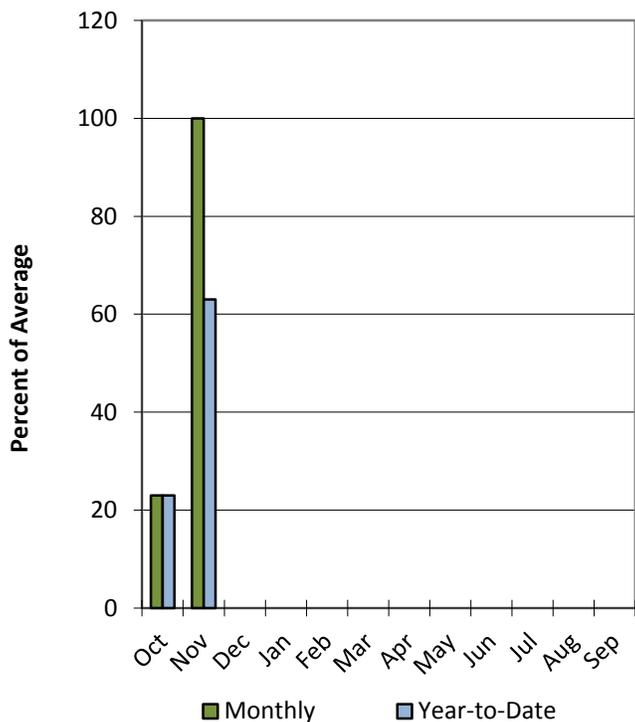


San Pitch River Basin

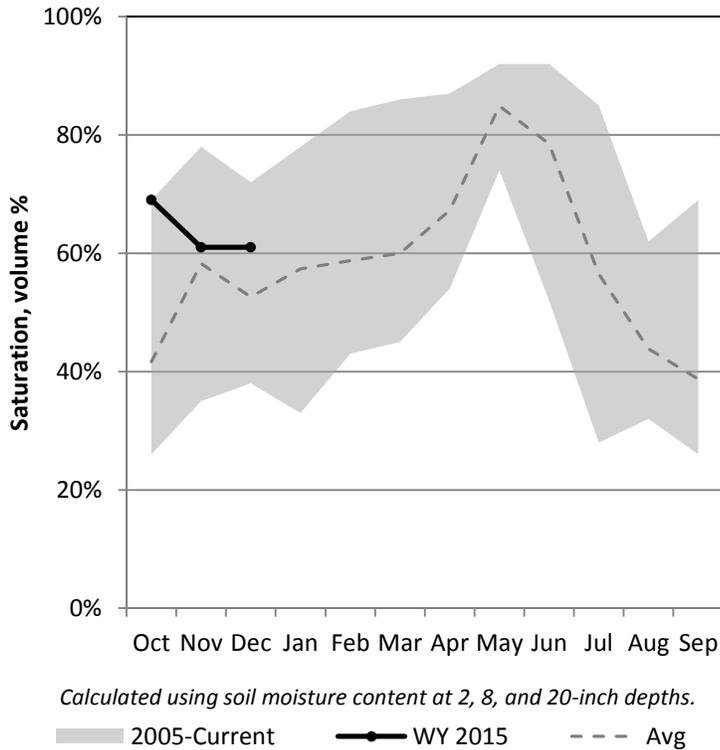
12/1/2014

Precipitation in November was near average at 100%, which brings the seasonal accumulation (Oct-Nov) to 63% of average. Soil Moisture is at 61% compared to 69% last year. Reservoir storage is at 0% of capacity, compared to 0% last year. The water availability index for the San Pitch is 14%.

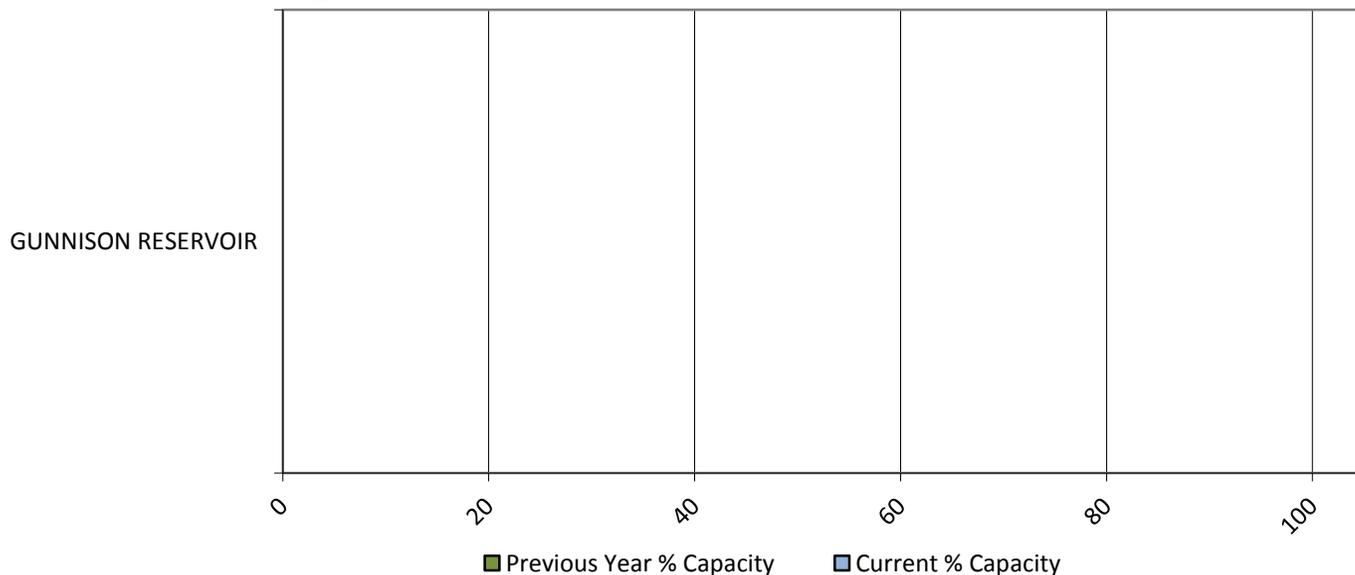
Precipitation



Soil Moisture



Reservoir Storage

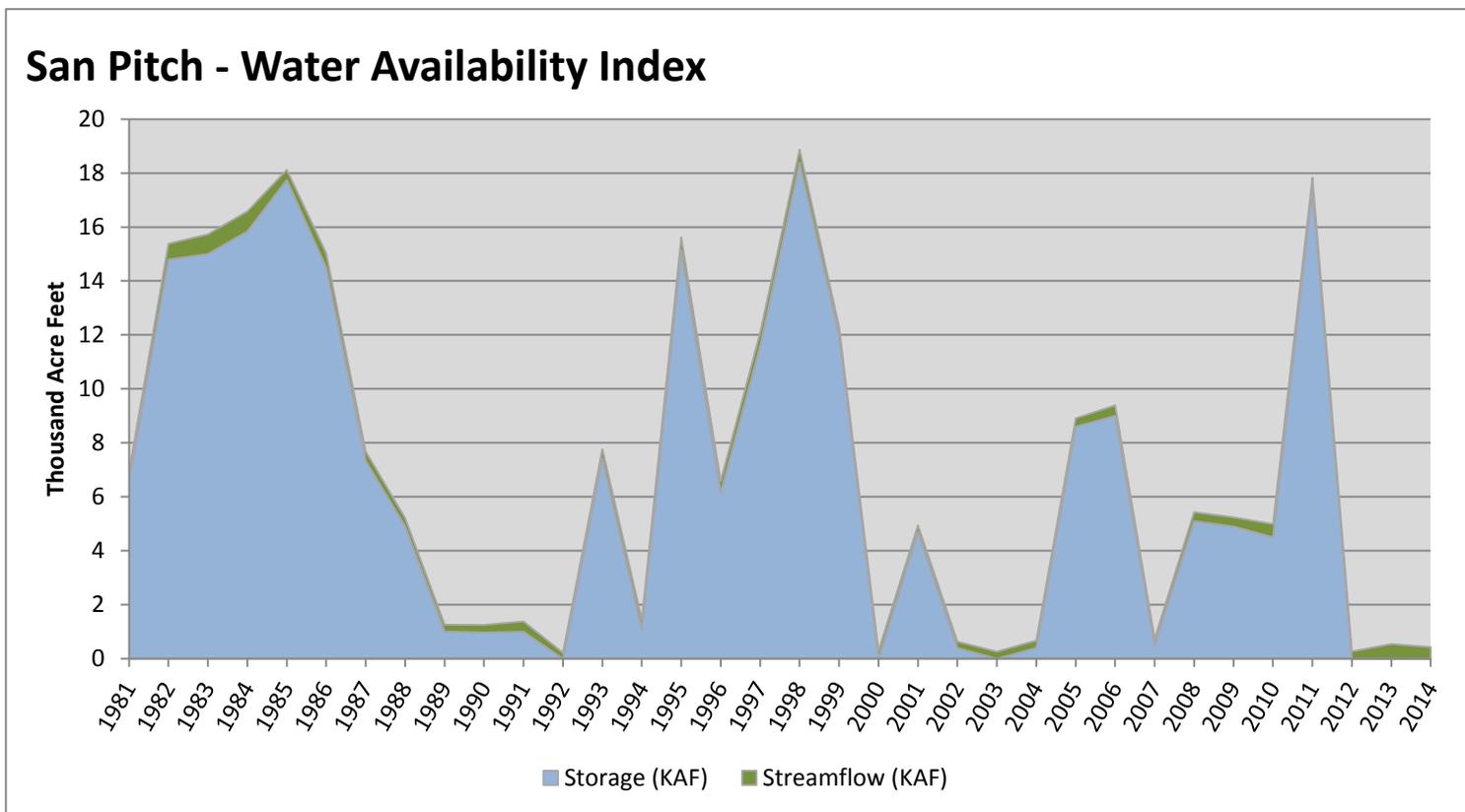


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	0.00	0.43	0.43	14	-2.98	12, 00, 13, 02

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

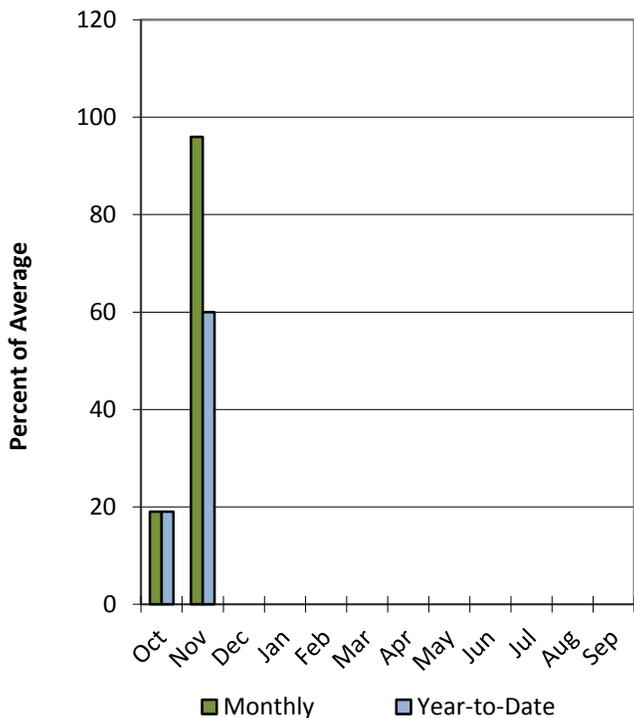


Price & San Rafael Basins

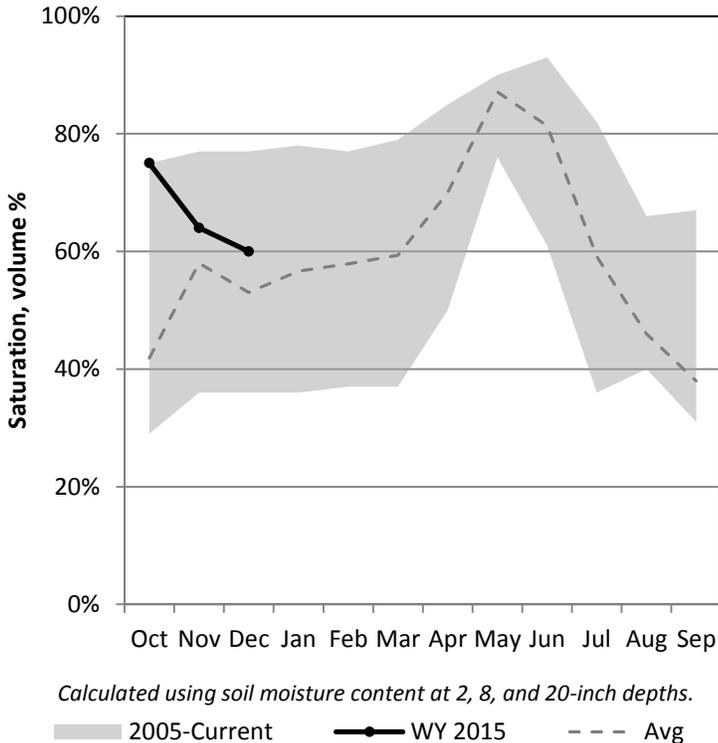
12/1/2014

Precipitation in November was near average at 96%, which brings the seasonal accumulation (Oct-Nov) to 60% of average. Soil moisture is at 60% compared to 66% last year. Reservoir storage is at 47% of capacity, compared to 39% last year. The water availability index for the Price River is 97%, and 46% for Joe's Valley.

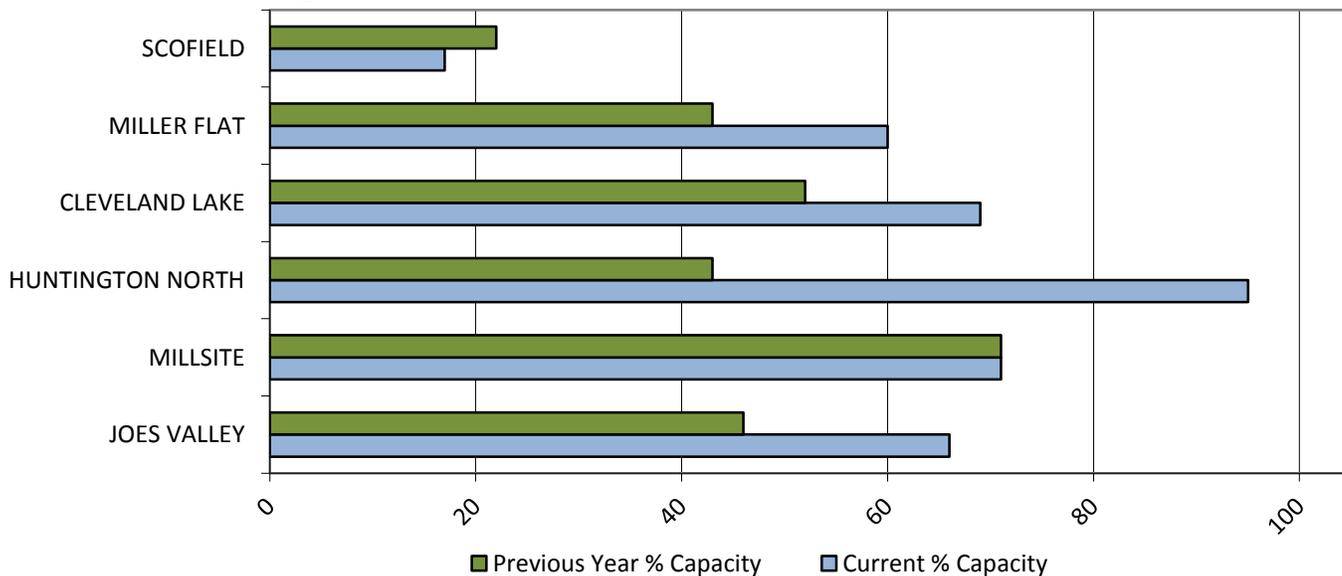
Precipitation



Soil Moisture



Reservoir Storage

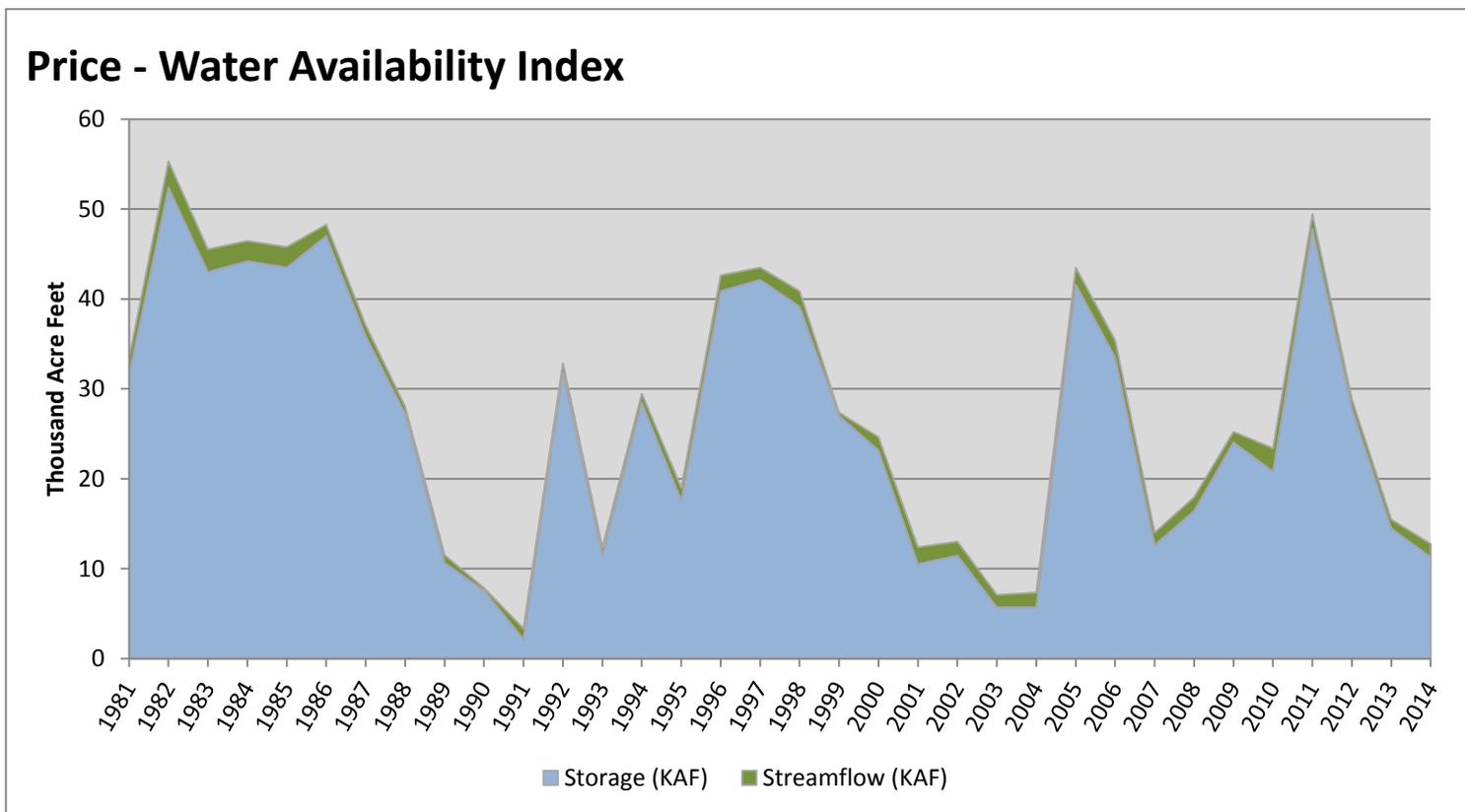


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	11.29	1.47	12.76	23	-2.26	93, 01, 02, 07

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

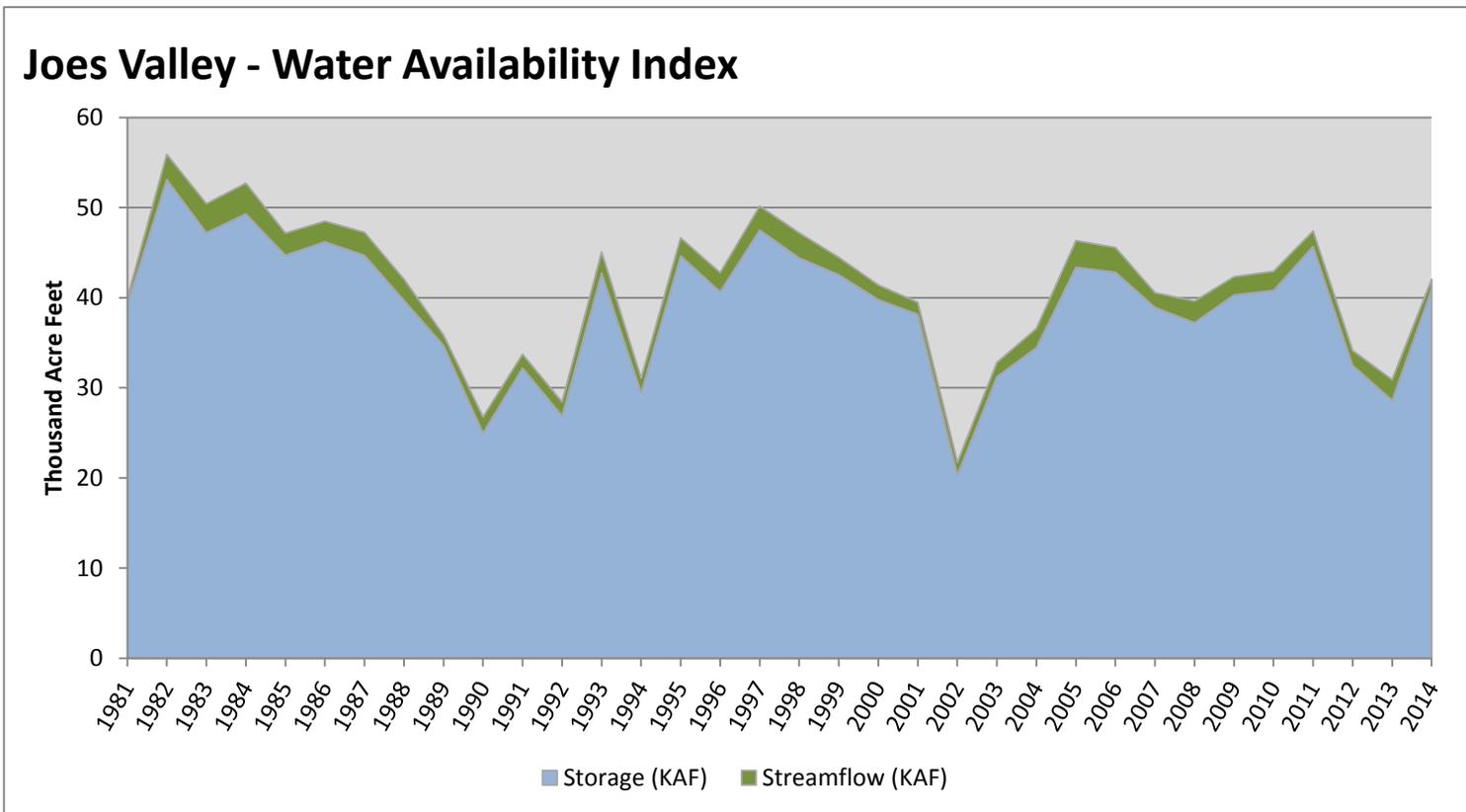


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joos Valley	40.95	1.09	42.04	46	-0.36	07, 00, 88, 09

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

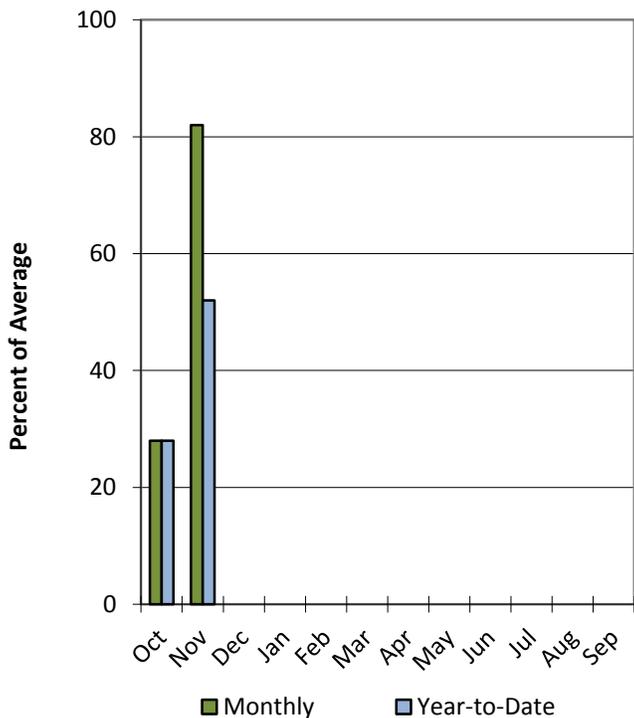


Southeastern Utah Basin

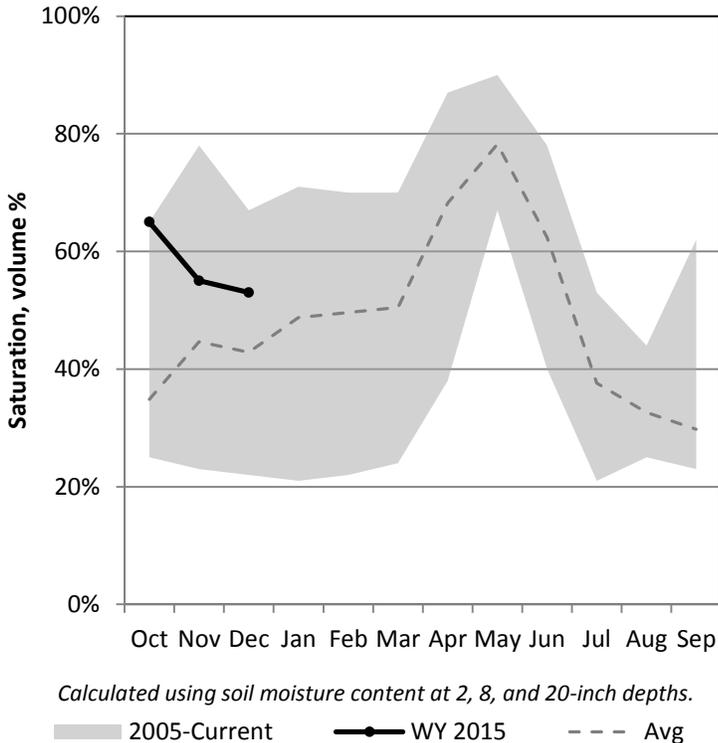
12/1/2014

Precipitation in November was below average at 82%, which brings the seasonal accumulation (Oct-Nov) to 52% of average. Soil moisture is at 53% compared to 65% last year. Reservoir storage is at 50% of capacity, compared to 37% last year. The water availability index for Moab is 75%.

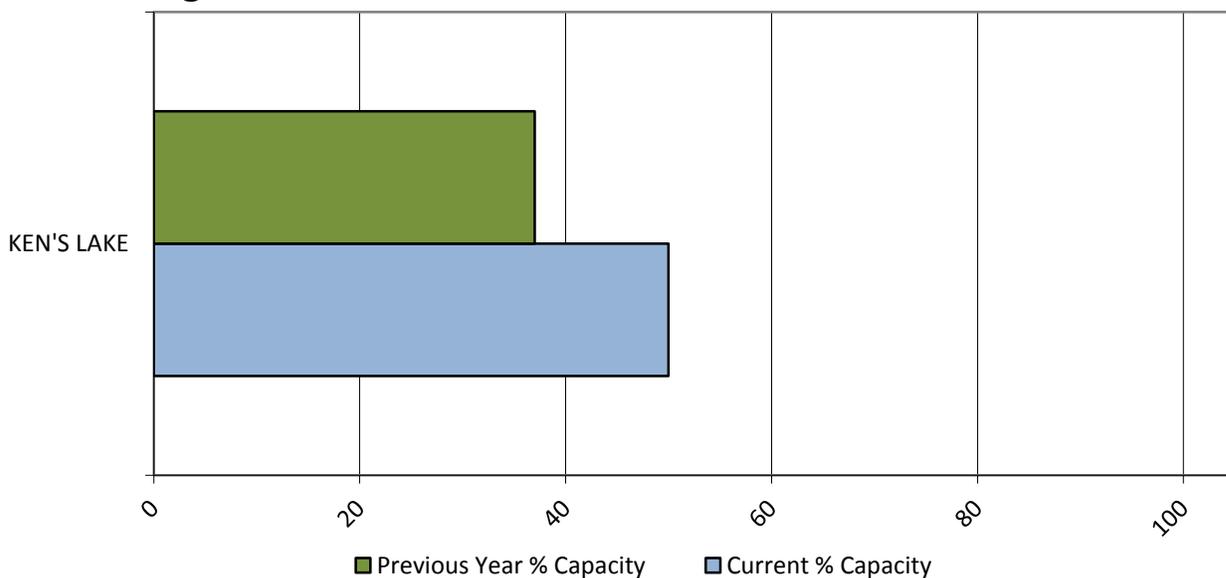
Precipitation



Soil Moisture



Reservoir Storage

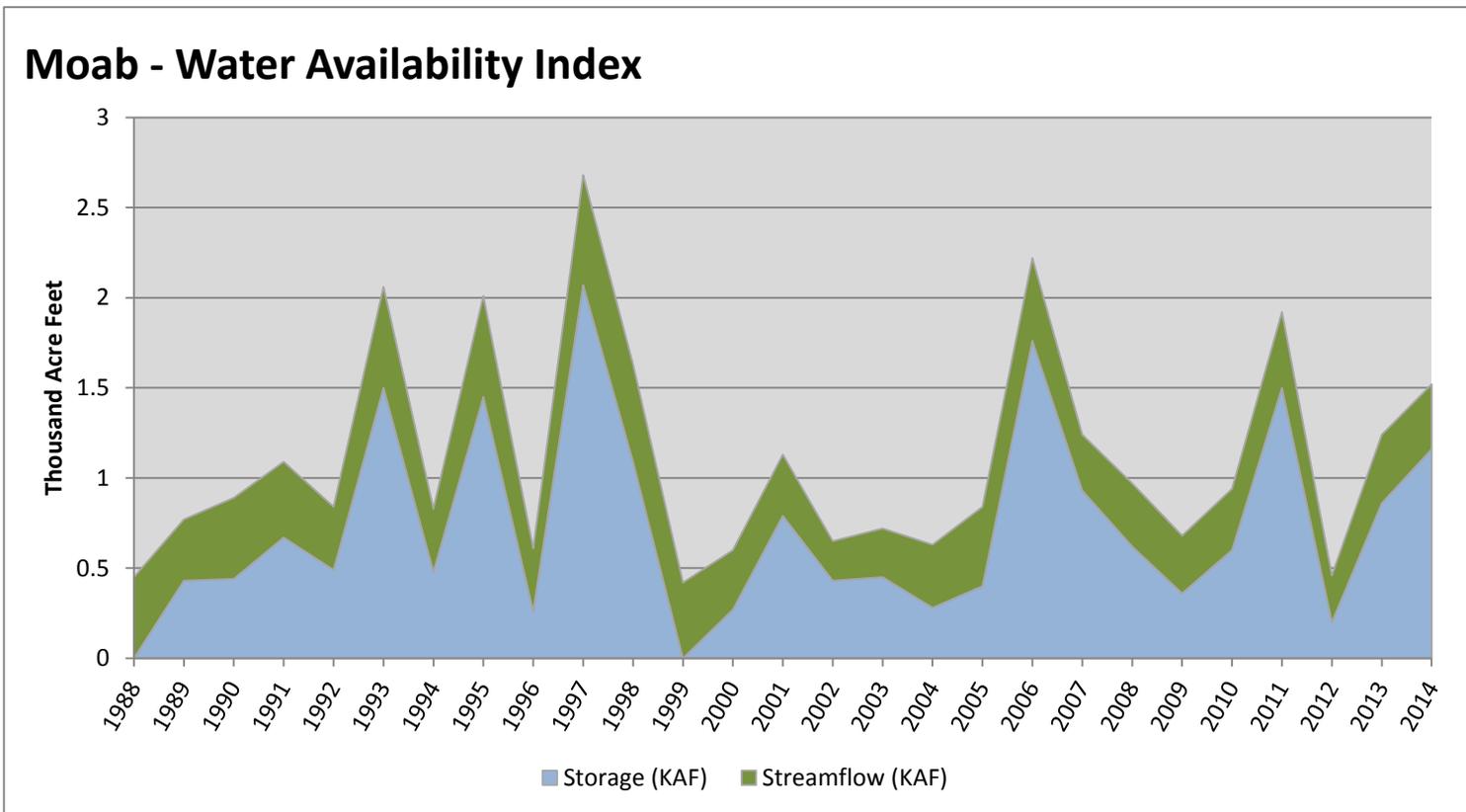


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	1.16	0.36	1.52	75	2.08	07, 13, 98, 11

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

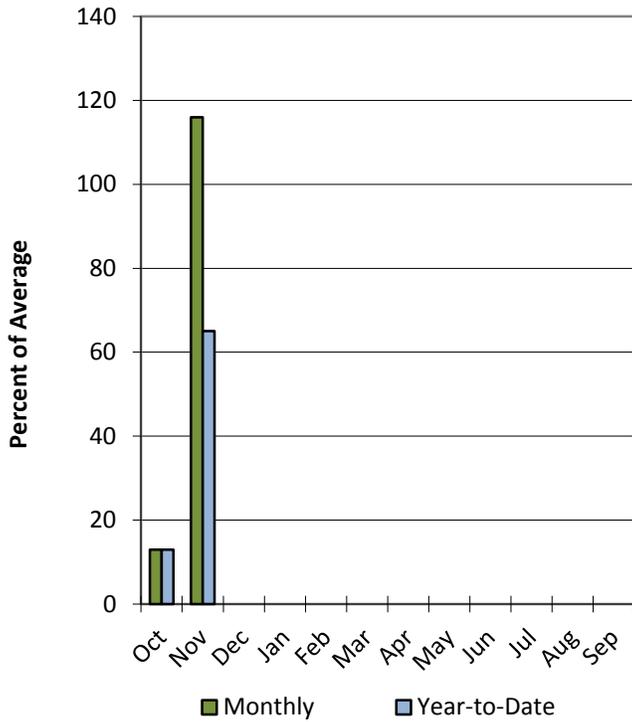


Dirty Devil Basin

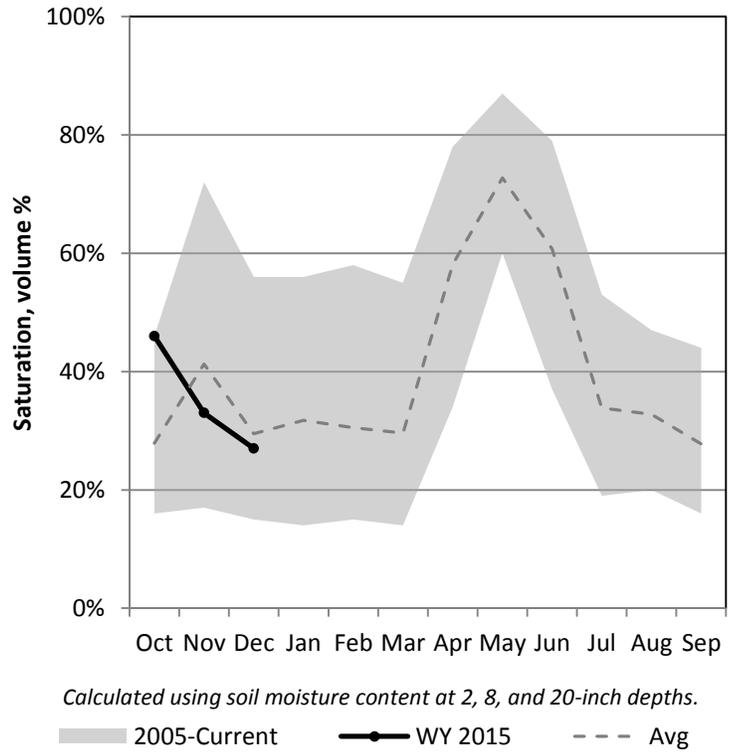
12/1/2014

Precipitation in November was above average at 116%, which brings the seasonal accumulation (Oct-Nov) to 65% of average. Soil moisture is at 27% compared to 39% last year.

Precipitation



Soil Moisture

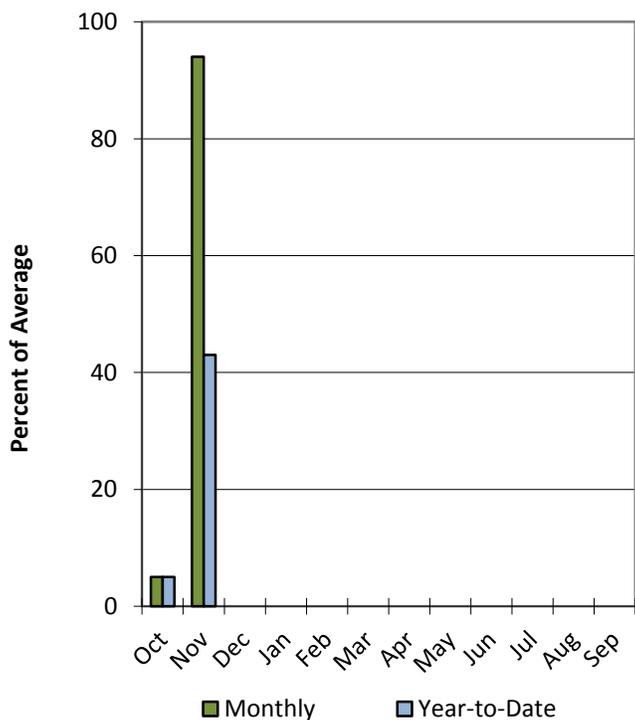


Escalante River Basin

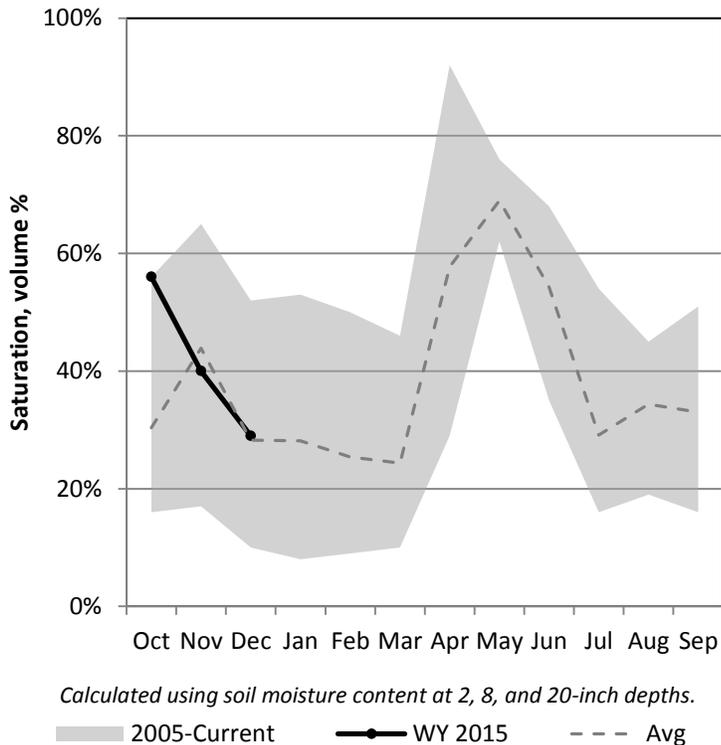
12/1/2014

Precipitation in November was near average at 94%, which brings the seasonal accumulation (Oct-Nov) to 43% of average. Soil moisture is at 29% compared to 42% last year.

Precipitation



Soil Moisture

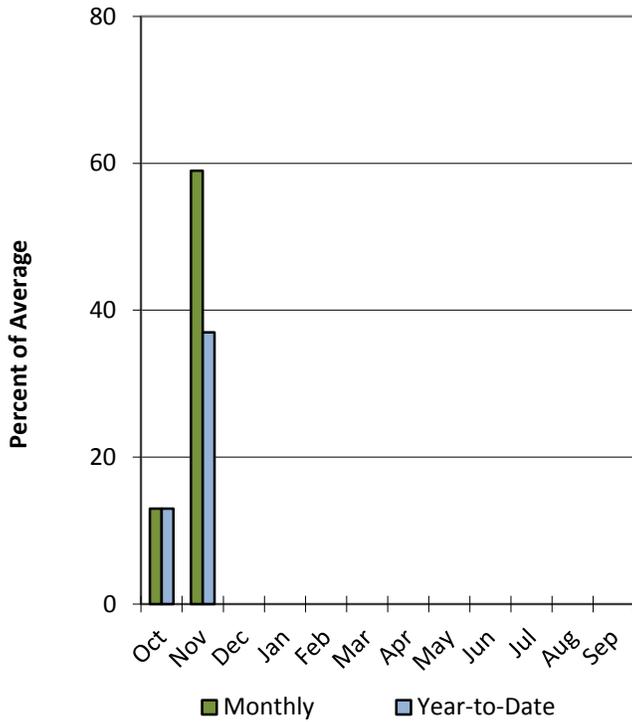


Beaver River Basin

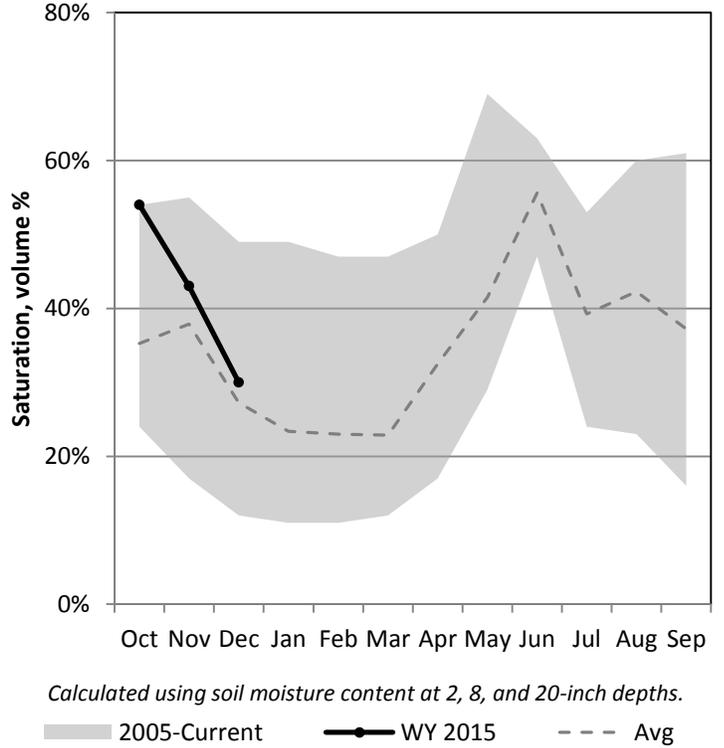
12/1/2014

Precipitation in November was much below average at 59%, which brings the seasonal accumulation (Oct-Nov) to 37% of average. Soil moisture is at 30% compared to 45% last year. Reservoir storage is at 24% of capacity, compared to 32% last year. The water availability index for the Beaver River is 37%.

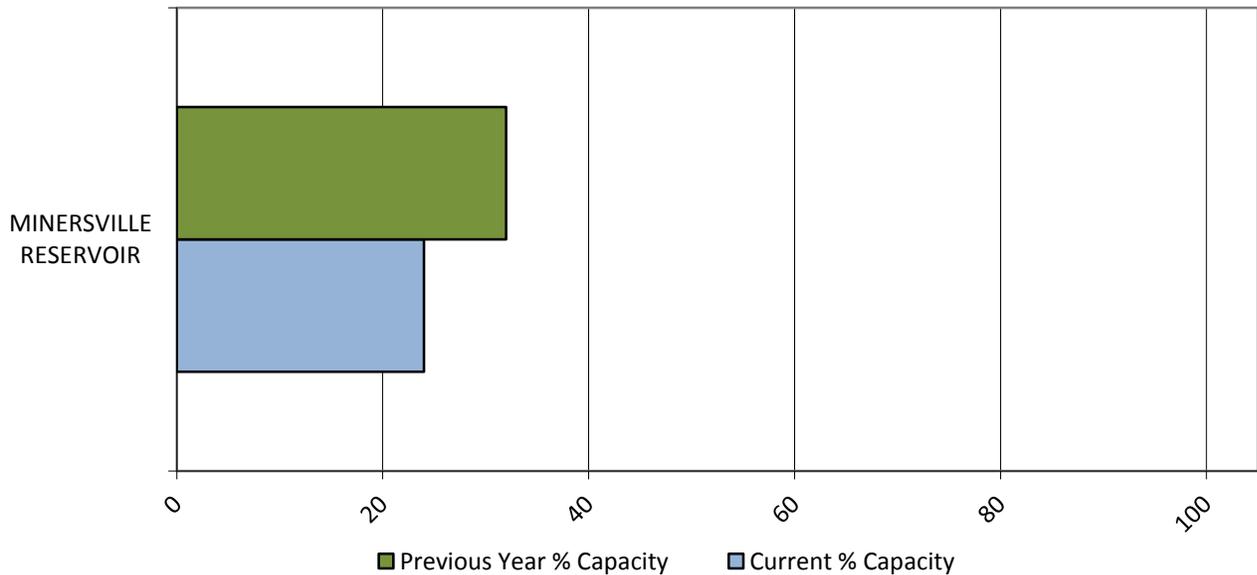
Precipitation



Soil Moisture



Reservoir Storage

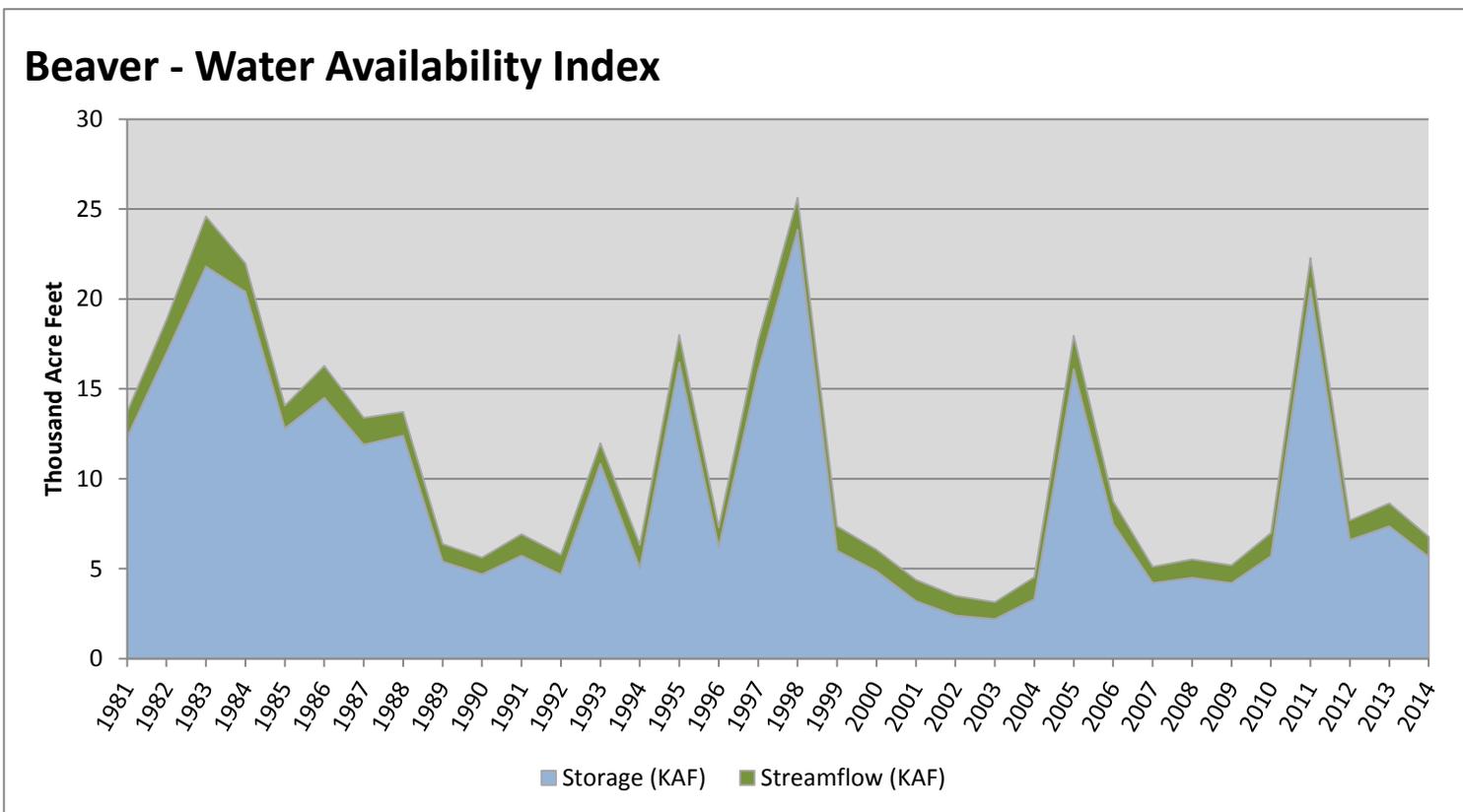


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	5.66	1.11	6.77	37	-1.07	94, 89, 91, 10

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

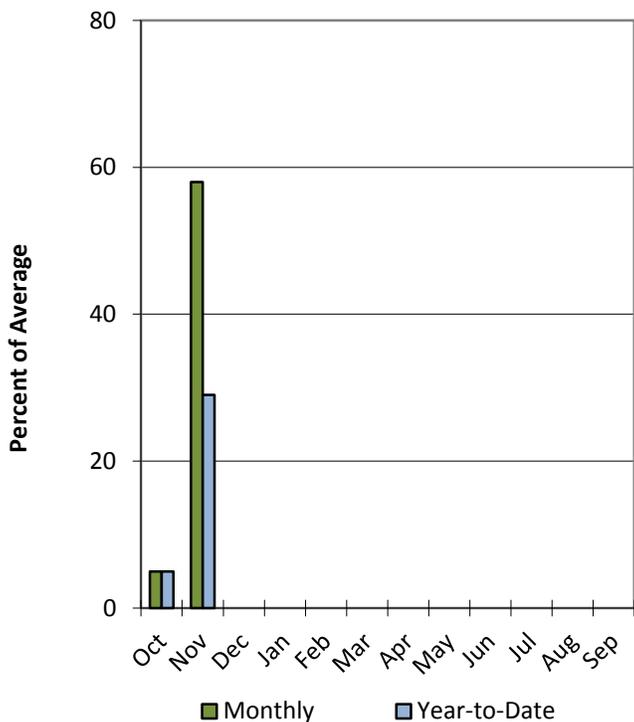


Southwestern Utah Basin

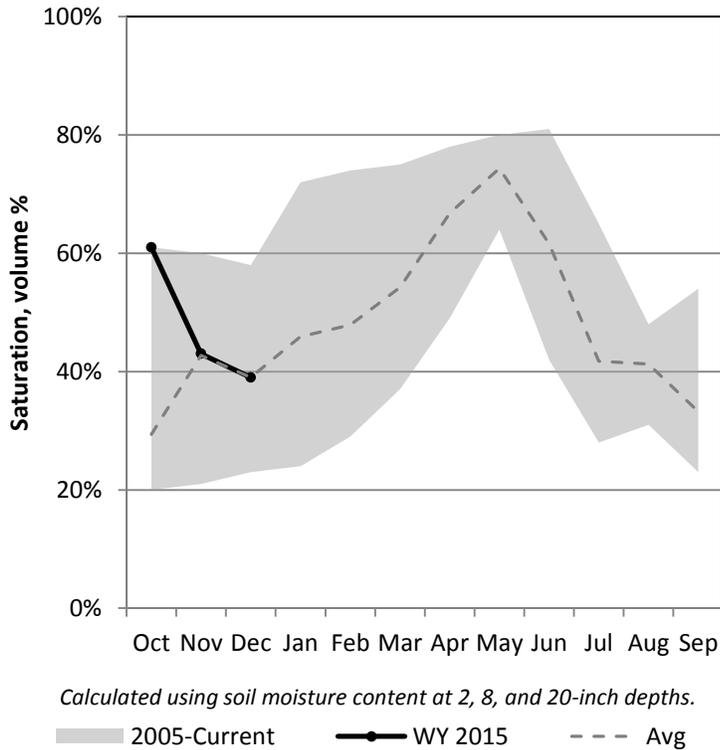
12/1/2014

Precipitation in November was much below average at 58%, which brings the seasonal accumulation (Oct-Nov) to 29% of average. Soil moisture is at 39% compared to 53% last year. Reservoir storage is at 49% of capacity, compared to 44% last year. The water availability index for the Virgin River is 28%.

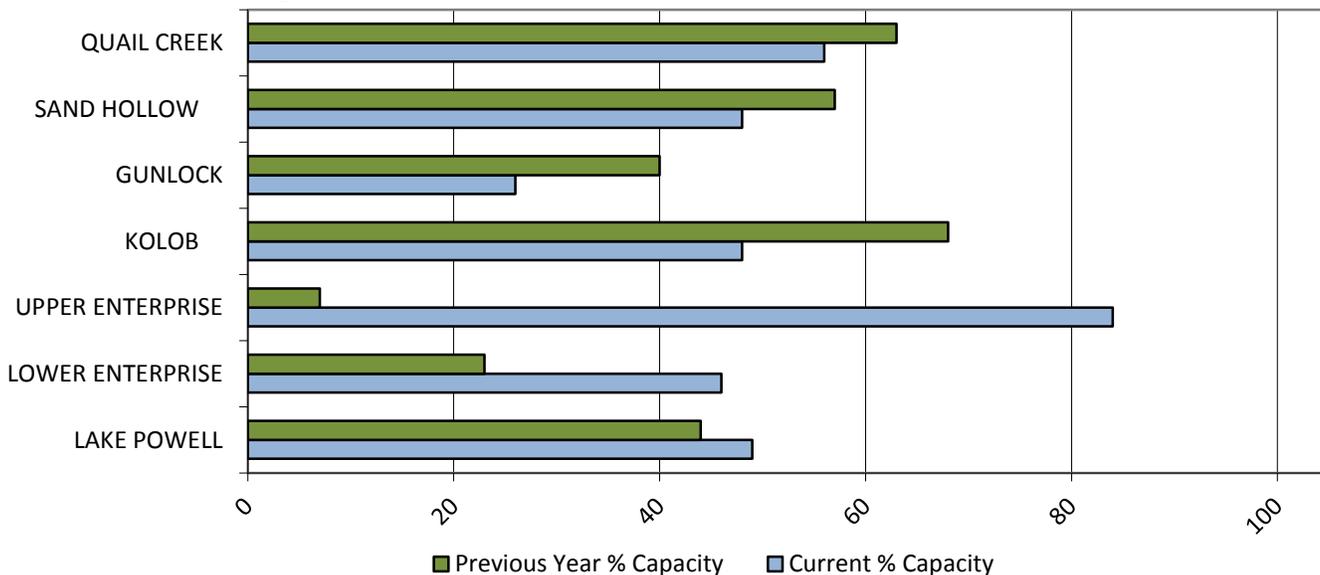
Precipitation



Soil Moisture



Reservoir Storage

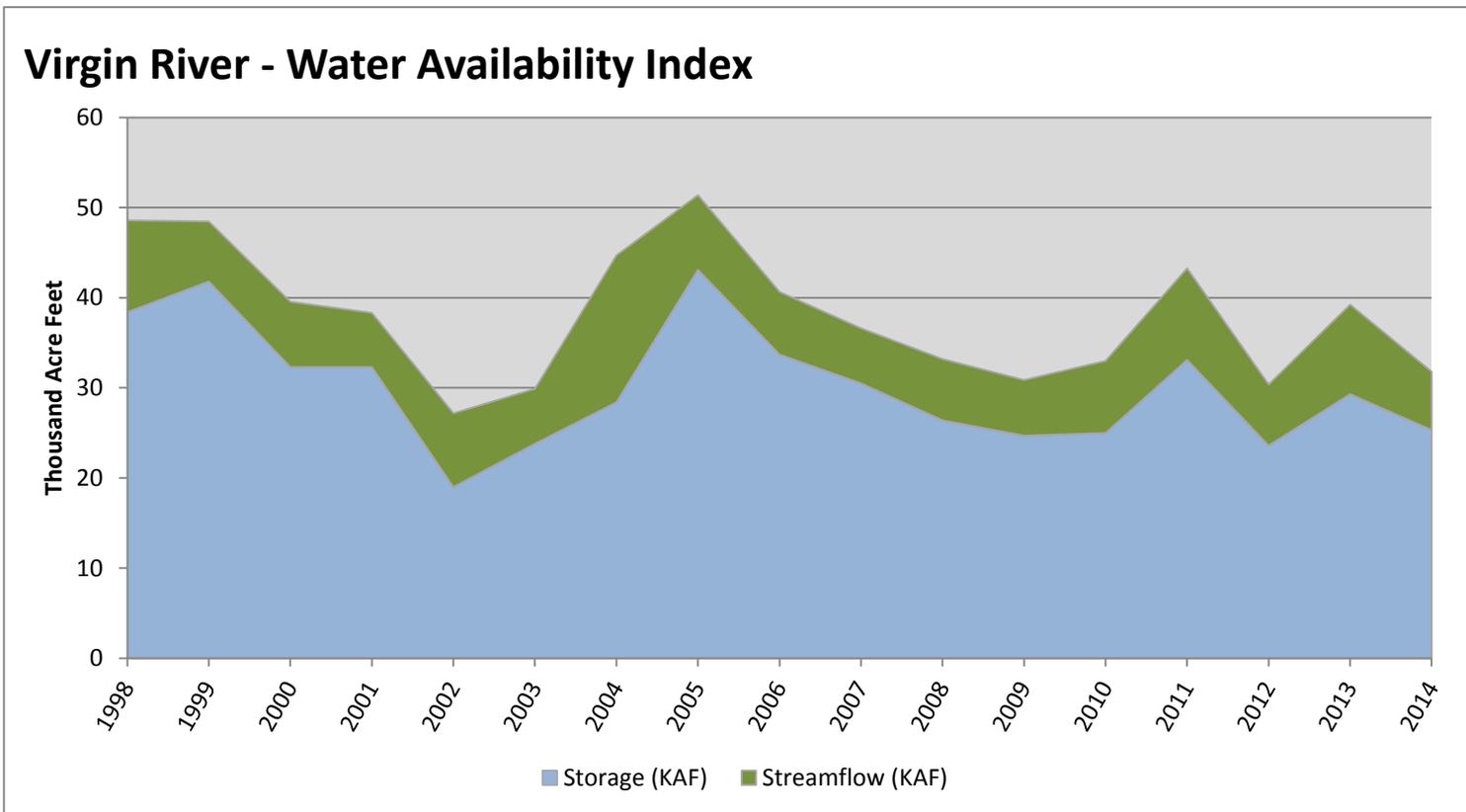


December 1, 2014

Water Availability Index

Basin or Region	Nov EOM [*] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	25.32	6.47	31.79	28	-1.85	12, 09, 10, 08

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



December 1, 2014

Water Availability Index

Basin or Region	Nov EOM* Storage	November Flow	Storage + Flow	Percentile	WAI#	Years with similar WAI
	KAF^	KAF^	KAF^	%		
Bear River	534	13.6	547	51	0.1	95, 13, 89, 88
Woodruff Narrows	34.8	4.2	39.1	63	1.1	96, 91, 06, 08
Little Bear	7.2	1.8	9.1	17	-2.8	03, 01, 94, 07
Ogden	58.1	1.8	59.9	49	-0.1	08, 81, 94, 89
Weber	93.6	13.8	107.3	35	-1.3	00, 07, 02, 94
Provo River	319.6	2.0	321.6	35	-1.3	02, 04, 08, 01
Western Uintah	175.5	3.4	178.9	82	2.7	11, 99, 96, 98
Eastern Uintah	21.9	4.4	26.3	26	-2.0	94, 93, 92, 10
Blacks Fork	19.1	4.1	23.2	91	3.5	82, 83, 98, 84
Price	11.3	1.5	12.8	23	-2.3	93, 01, 02, 07
Smiths Creek	8.2	3.2	11.4	97	3.9	86, 98, 87, 91
Joes Valley	41.0	1.1	42.0	46	-0.4	07, 00, 88, 09
Moab	1.2	0.4	1.5	75	2.1	07, 13, 98, 11
Upper Sevier River	46.2	6.3	52.5	37	-1.1	96, 01, 00, 12
San Pitch	0.0	0.4	0.4	14	-3.0	12, 00, 13, 02
Lower Sevier	66.4	12.0	78.3	20	-2.5	02, 09, 08, 90
Beaver	5.7	1.1	6.8	37	-1.1	94, 89, 91, 10
Virgin River	25.3	6.5	31.8	28	-1.9	12, 09, 10, 08

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

