

Utah Climate and Water Report

February 2015



Wasatch Range near Brighton, mid-January, 2015

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.

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- b) North Central
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2) General Hydrological Conditions

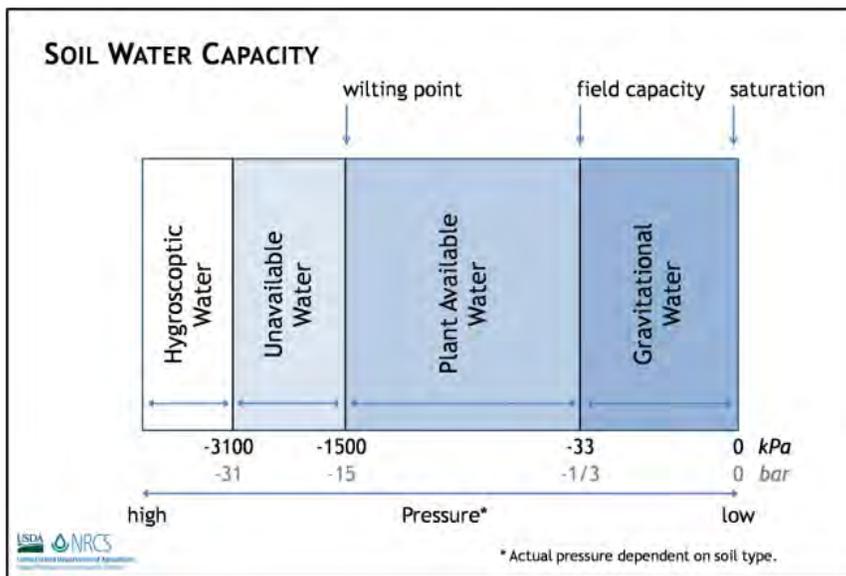
- a) SNOTEL Water Year to Date Precipitation
- b) Bear River Basin
 - Water Availability Index
- c) Weber and Ogden River Basins
 - Water Availability Index
- d) Utah Lake, Jordan River, and Tooele Valley Basins
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 - Water Availability Index

Climate and Water Information

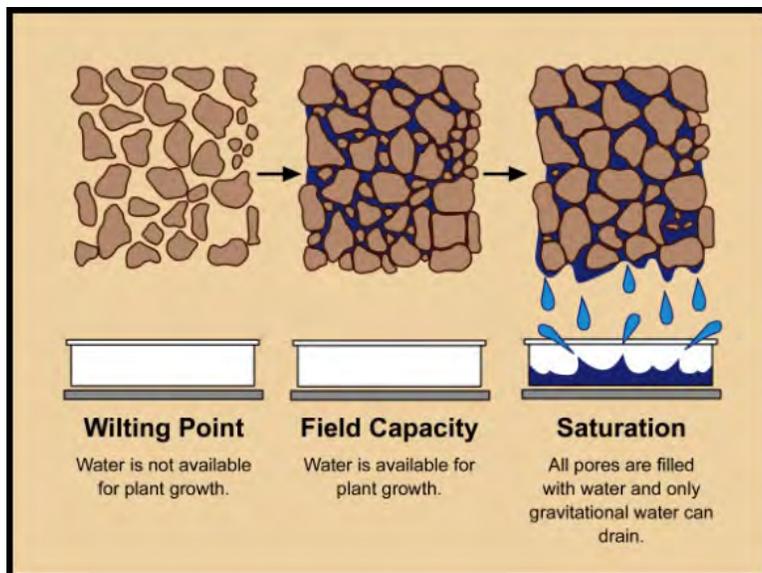
Soil Climate Analysis Network

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.

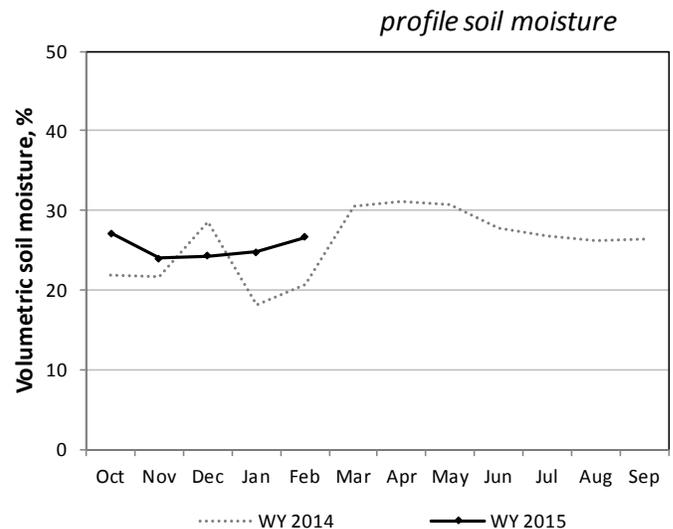
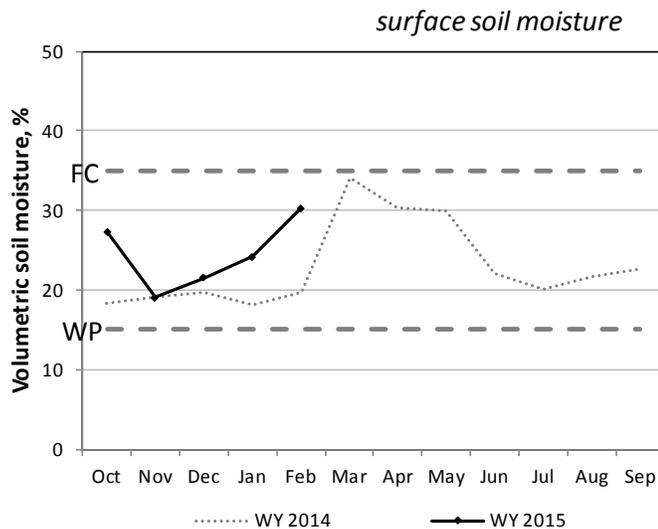
North Central

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 | 3.5 | 0.7 | 37 | 32 | 38 | 21 | 17 | 31 | 33 | 33 | 35 | 39 |
| Cache Junction | 3.5 | 1.1 | 36 | 32 | 38 | 25 | 34 | 35 | 36 | 36 | 38 | 41 |
| Grantsville | 1.4 | 0.4 | 11 | 18 | 23 | 27 | | 37 | 40 | 42 | 44 | 47 |

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

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.

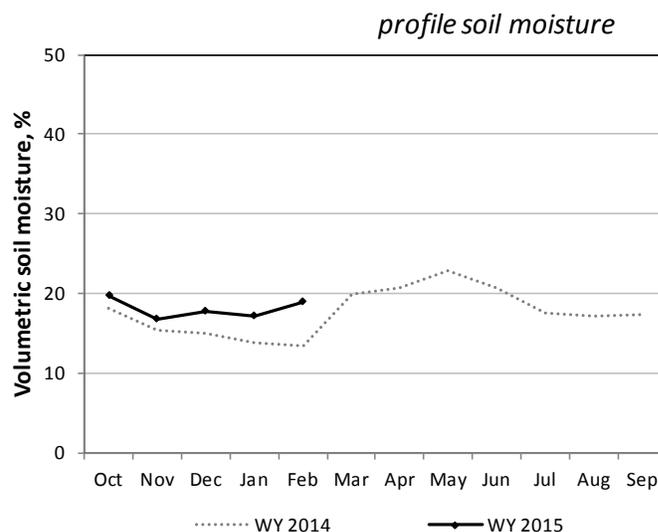
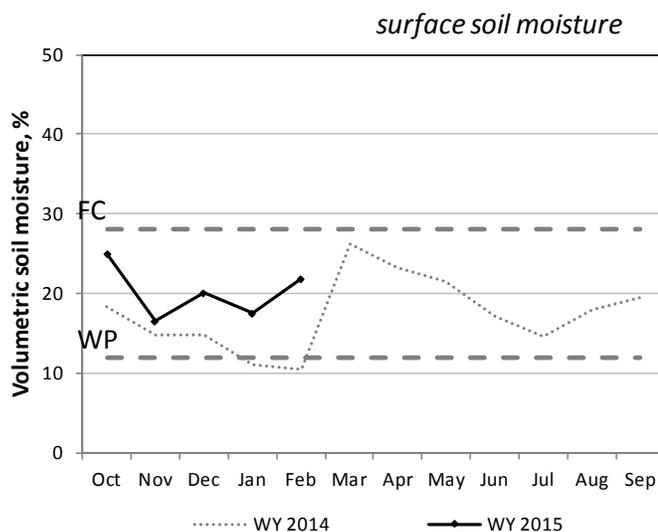
Northern Mountains

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 | 2.2 | 0.8 | 20 | 22 | 26 | 17 | 12 | 32 | 33 | 33 | 34 | 37 |
| Buffalo Jump | 2.3 | 0.9 | 9 | 12 | 13 | 8 | - | 32 | 31 | 31 | 34 | - |
| Morgan | 4.2 | 0.9 | 32 | 29 | 30 | 34 | 20 | 35 | 36 | 37 | 35 | 36 |

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

Northern Mountains



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

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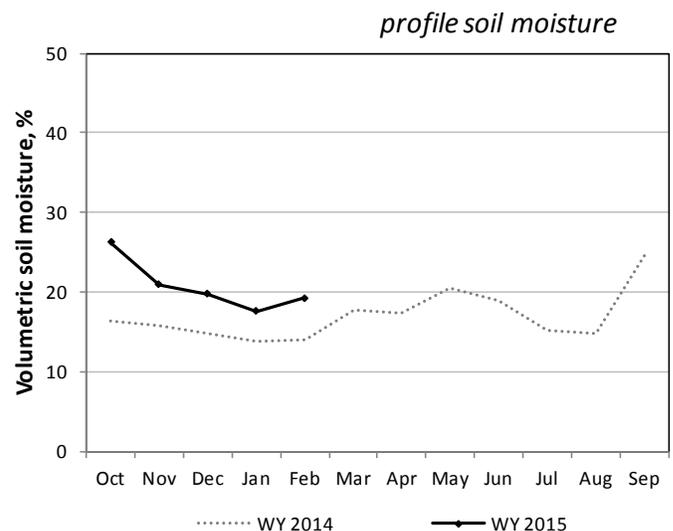
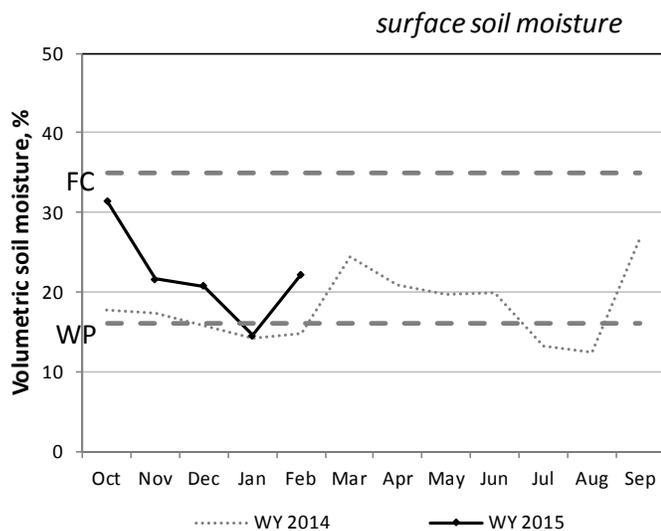
Uintah Basin

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 | 1.8 | 0.9 | 28 | 12 | 18 | 11 | 1 | 35 | 32 | 31 | 34 | 44 |
| Little Red Fox | 1.9 | 0.9 | 26 | 32 | 28 | 34 | 35 | 32 | 32 | 32 | 33 | 36 |
| Split Mountain | 1.6 | 0.3 | 22 | 25 | 15 | 17 | 10 | 31 | 33 | 31 | 33 | 37 |

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

Uintah Basin



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

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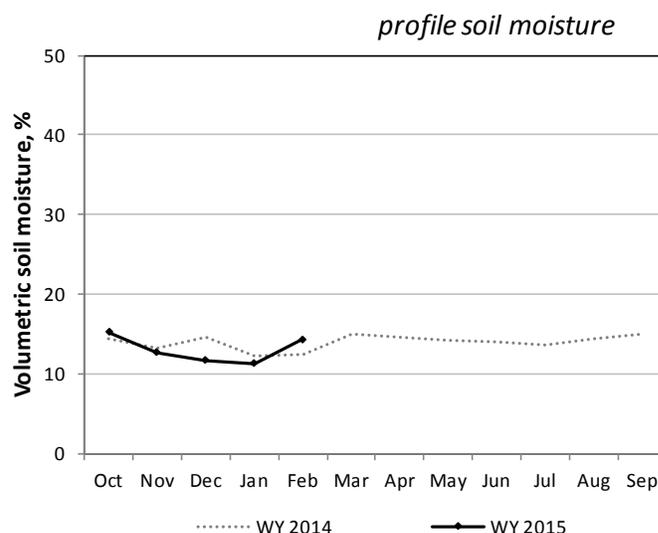
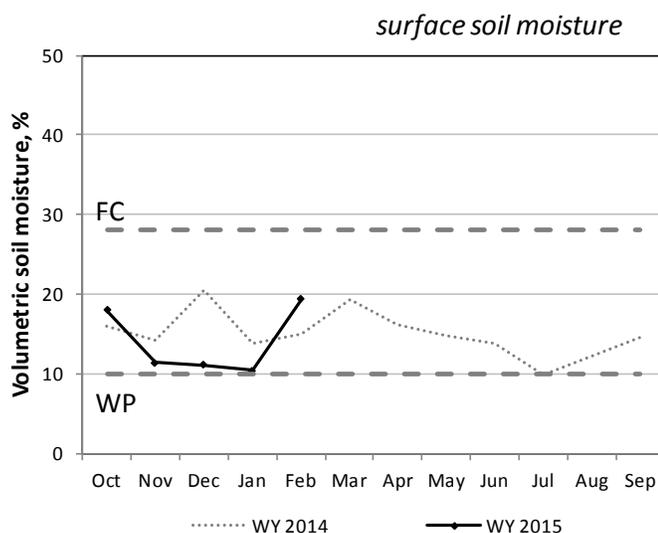
Southeast

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" |
| | | | in. | | | | | in. | | | | |
| | | | volume % | | | | | ° F | | | | |
| SOUTHEAST | | | | | | | | | | | | |
| Price | 1.3 | 0.5 | 10 | 21 | 27 | 12 | 15 | 35 | 37 | 37 | 36 | 38 |
| Green River | 1.5 | 0.8 | 25 | 18 | 7 | 5 | 6 | 37 | 38 | 40 | 37 | 40 |
| Harm's Way | | | | | | | | | | | | |
| West Summit | 2.3 | 0.9 | 23 | 27 | 14 | 13 | 15 | 32 | 32 | 33 | 33 | 36 |
| Eastland | 2.6 | 1.1 | 27 | 24 | 21 | 20 | 18 | 32 | 32 | 34 | 35 | 38 |
| Alkali Mesa | 3.1 | 1.6 | 22 | 7 | | 14 | 15 | 34 | 34 | 37 | 36 | 37 |
| McCracken Mesa | 2.6 | 1.3 | 24 | 26 | 25 | 14 | 12 | 35 | 39 | 40 | 41 | 44 |

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Southeast



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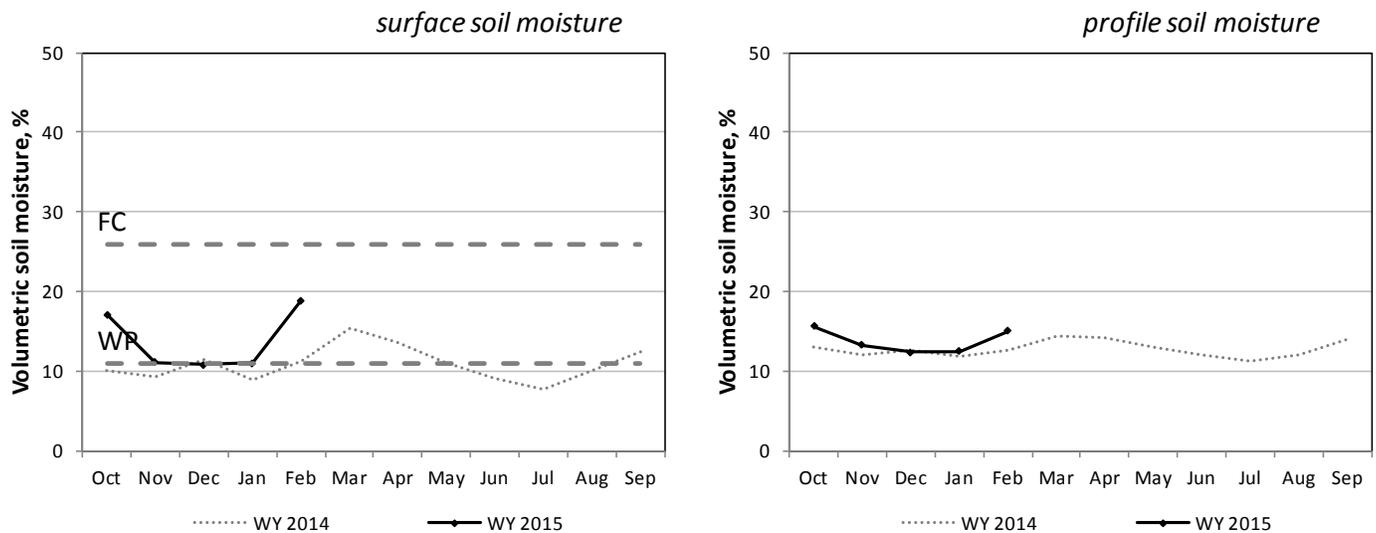
South Central

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 | 3.5 | 1.0 | 31 | 32 | 30 | 8 | 0 | 36 | 37 | 38 | 39 | 41 |
| Ephraim | 2.5 | 0.5 | 30 | 36 | 35 | 38 | 35 | 36 | 37 | 38 | 37 | 39 |
| Holden | 2.3 | 0.6 | 11 | 6 | 0 | 12 | 11 | 38 | 39 | 40 | 41 | 44 |
| Milford | 1.7 | 0.5 | 28 | 30 | 26 | 25 | 16 | 37 | 39 | 39 | 39 | 43 |
| Manderfield | 1.9 | 0.3 | 37 | 27 | 25 | 10 | 5 | 35 | 36 | 37 | 37 | 39 |
| Circleville | 1.2 | 0.3 | 8 | 22 | 12 | 8 | 13 | 34 | 36 | 37 | 37 | 40 |
| Panguitch | 2.3 | 0.9 | 16 | 32 | 32 | 19 | 32 | 31 | 32 | 32 | 34 | 39 |
| Cave Valley | 4.5 | 1.6 | 7 | 9 | 8 | 6 | 7 | 34 | 35 | 38 | 40 | 39 |
| Vermillion | 4.0 | 2.4 | 10 | 5 | 6 | 5 | 6 | 32 | 31 | 32 | 34 | 38 |
| Spooky | 2.5 | 2.1 | 8 | 12 | 6 | 11 | 1 | 35 | 37 | 39 | 41 | 43 |

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

South Central



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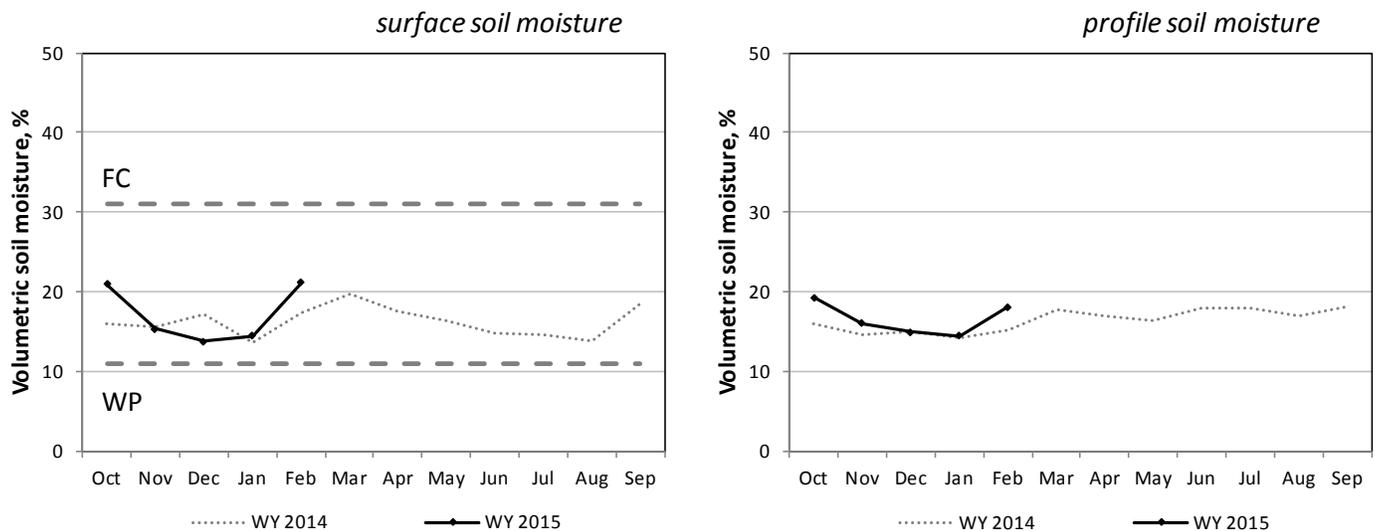
Western and Dixie

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 | 4.3 | 0.8 | 19 | 24 | 27 | 30 | 28 | 32 | 33 | 35 | 36 | 38 |
| Park Valley | 2.1 | 0.6 | 10 | 17 | 28 | 37 | 24 | 34 | 34 | 35 | 37 | 40 |
| Goshute | 1.6 | 0.8 | 30 | 1 | 38 | 17 | 27 | 34 | 36 | 37 | 37 | 40 |
| Dugway | 1.4 | 0.5 | 18 | 19 | 31 | | | 43 | 45 | 46 | | |
| Tule Valley | 1.2 | 1.0 | 23 | 23 | 21 | 16 | 8 | 33 | 39 | 43 | 42 | 43 |
| Hal's Canyon | 1.2 | 0.7 | 12 | 14 | 10 | 10 | 8 | 35 | 36 | 40 | 41 | 43 |
| Enterprise | 2.7 | 1.1 | 18 | 41 | 35 | 14 | 14 | 35 | 38 | 39 | 40 | 43 |
| DIXIE | | | | | | | | | | | | |
| Sand Hollow | 2.7 | 0.9 | 7 | 7 | 6 | 0 | 0 | 43 | 45 | 48 | 49 | 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.

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.

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Utah Hydrologic Summary

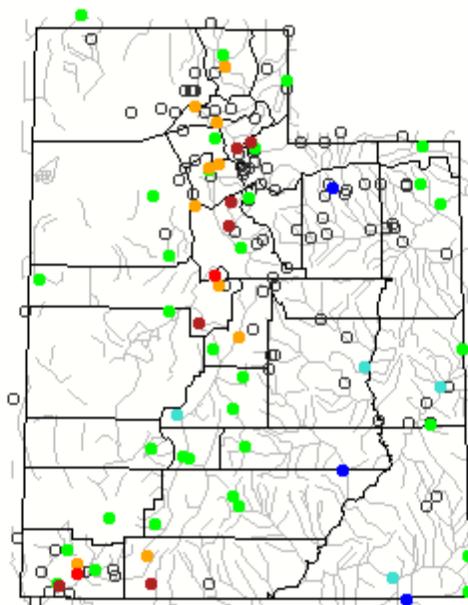
February 1, 2015

Current Conditions

Snowpacks across the state range from near 50% of median in southwest Utah to near normal on the Bear and central Wasatch Plateau. Much of the rest of the state is between 70 and 90% of median. Soil moisture values across the state are near to above normal. Precipitation across most of the state was much below average for January (46%) which brings seasonal precipitation (Oct-Jan) to about 70% of average. Reservoir storage is about the same as last year at 61% of capacity compared to 60%. Overall, water supply conditions are below to near normal across the state and much below normal in southwest Utah.

Current Utah Streamflow - Courtesy US Geological Survey

Monday, February 02, 2015 16:30ET



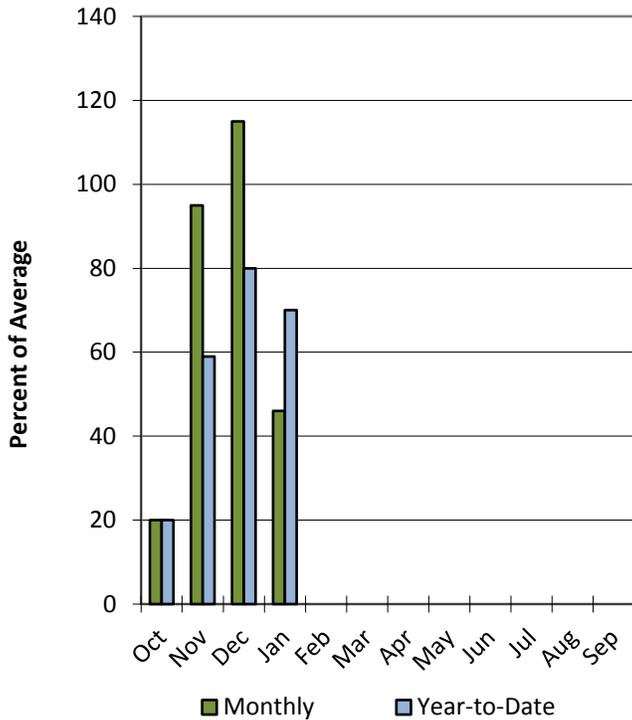
| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-----------------------------|--------------------------|-----------------|--------------------------|-----------------------------|------|---------------|
| | | | | | | | |
| Low | <10 Much below normal | 10-24 Below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

Statewide Utah

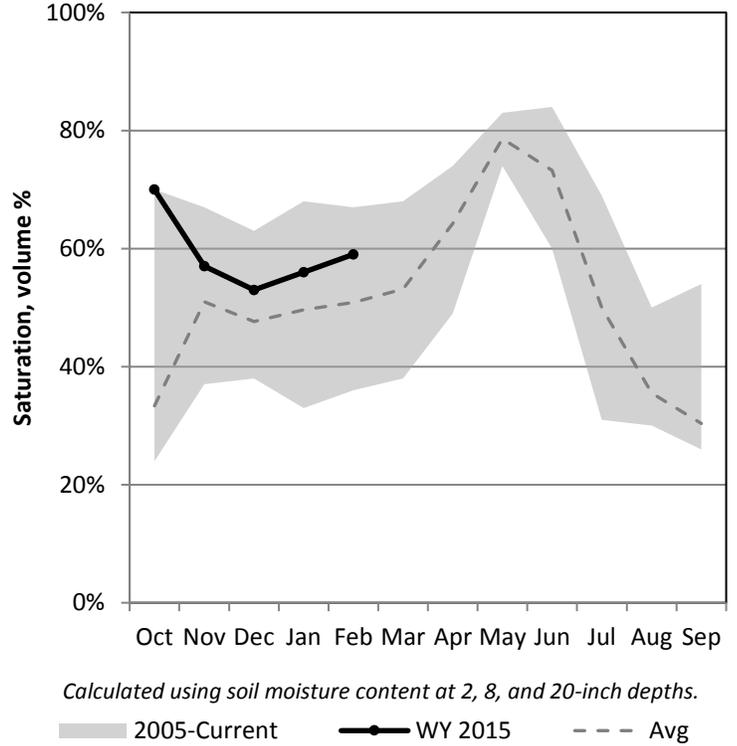
2/1/2015

Precipitation in January was much below average at 46%, which brings the seasonal accumulation (Oct-Jan) to 70% of average. Soil moisture is at 59% compared to 51% last year. Reservoir storage is at 61% of capacity, compared to 60% last year.

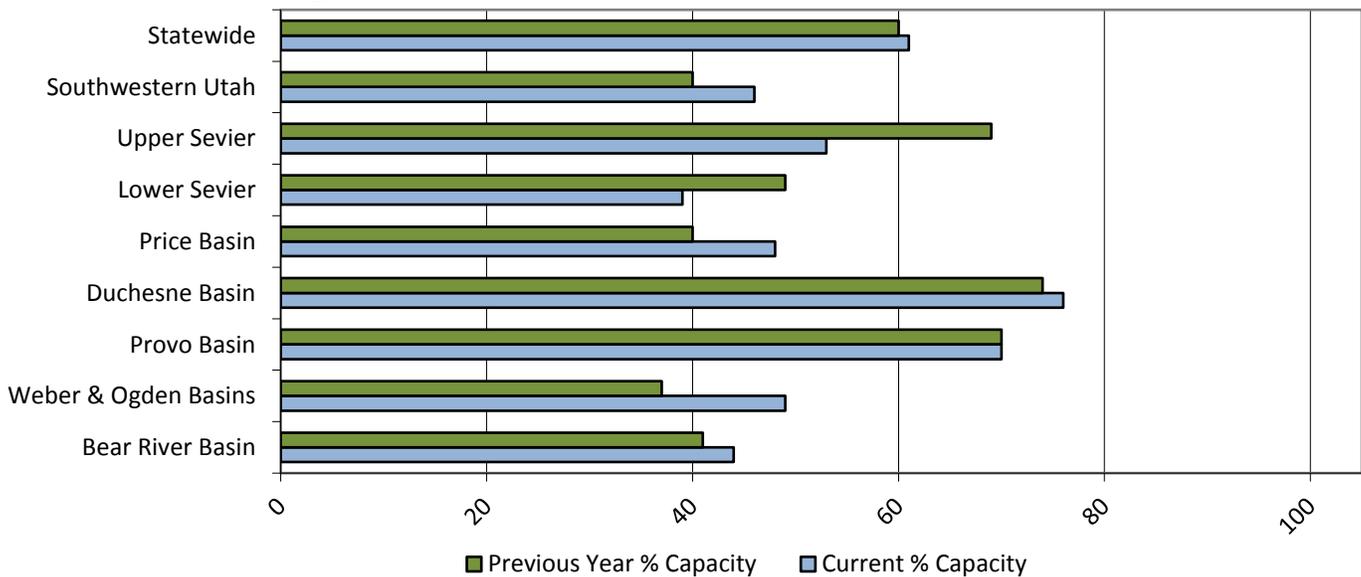
Precipitation



Soil Moisture



Reservoir Storage



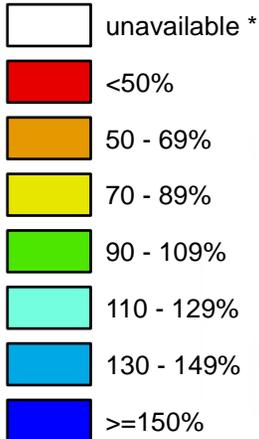
Utah

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

Raft River
↓

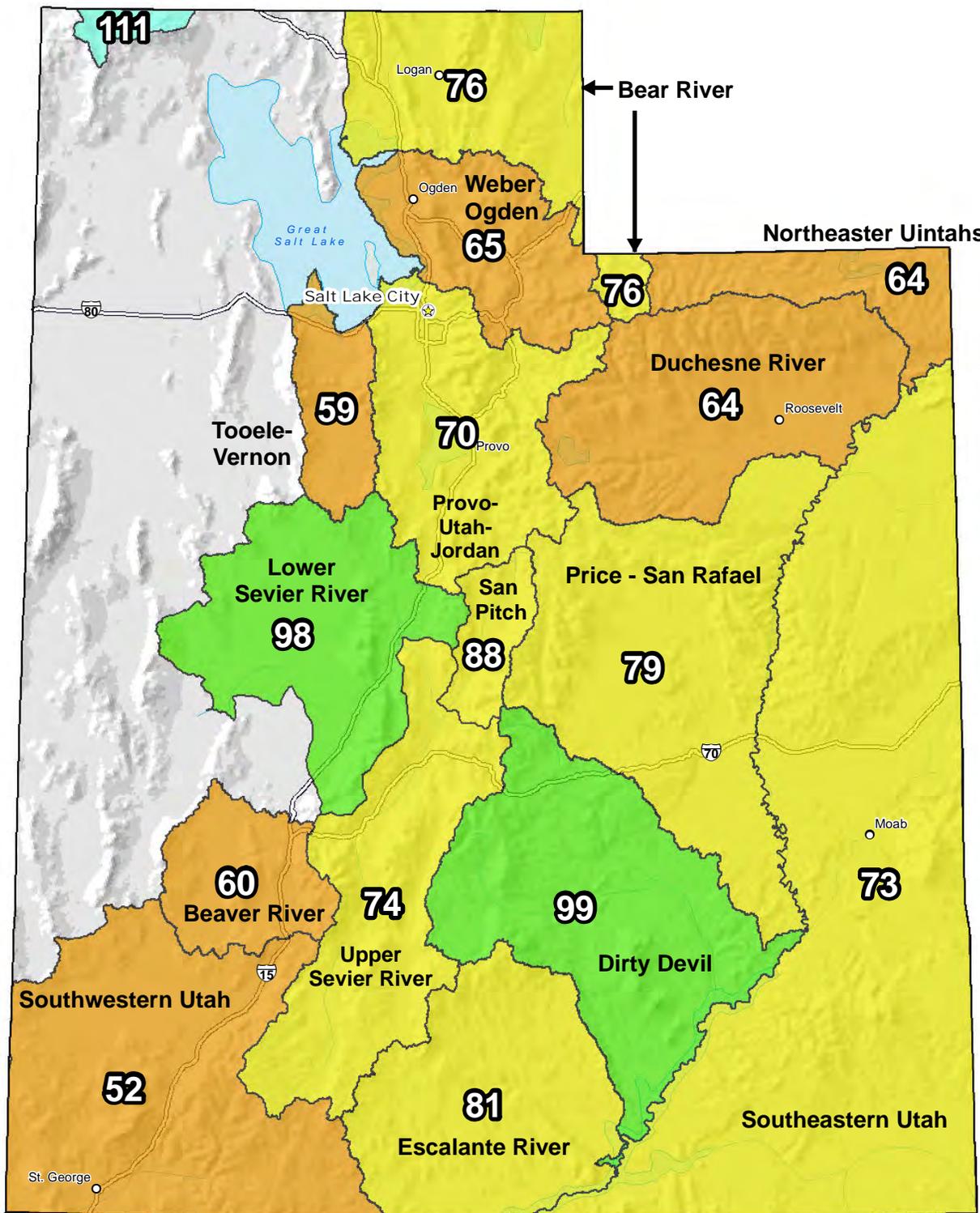
Feb 01, 2015

**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).

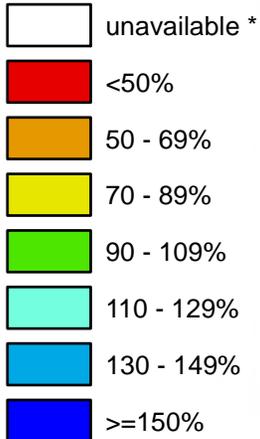
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Utah

SNOTEL Current Snow Water Equivalent (SWE) % of Normal

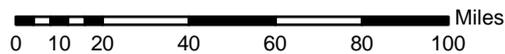
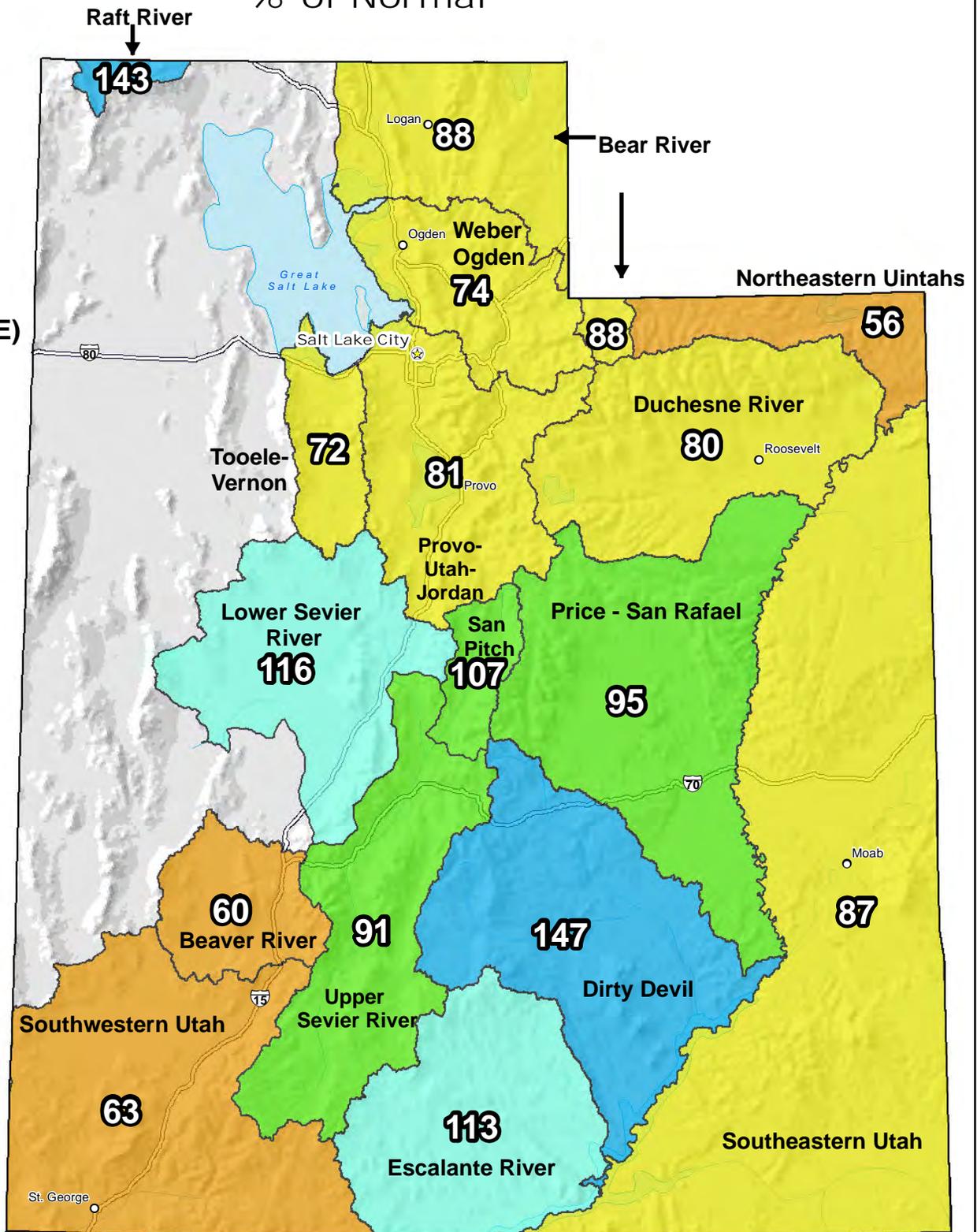
Feb 01, 2015

**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).

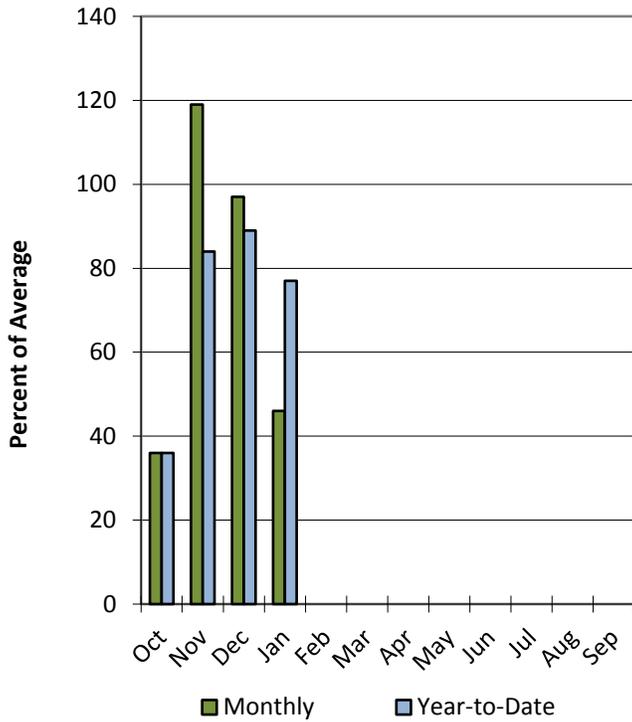
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Bear River Basin

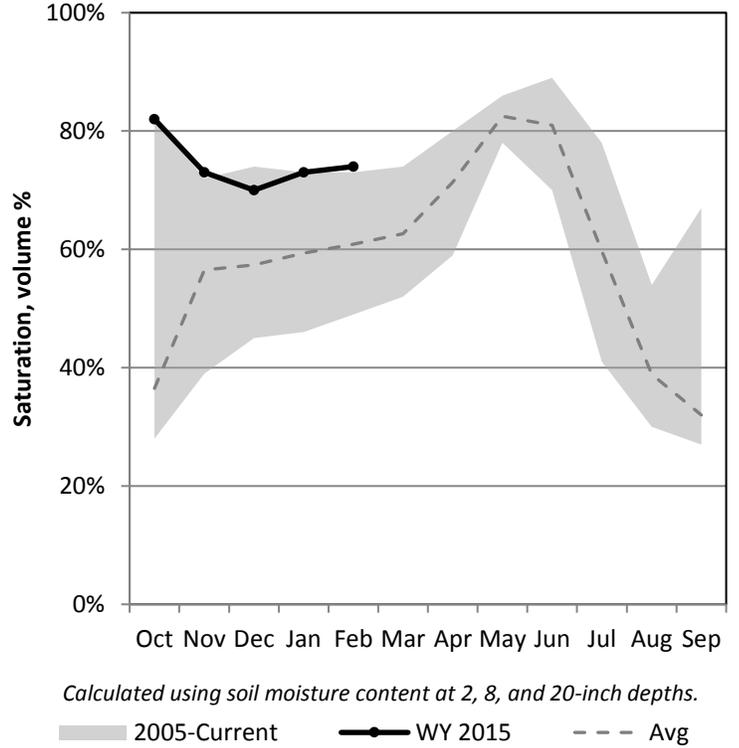
2/1/2015

Precipitation in January was much below average at 46%, which brings the seasonal accumulation (Oct-Jan) to 77% of average. Soil moisture is at 74% compared to 55% last year. Reservoir storage is at 44% of capacity, compared to 41% last year. The water availability index for the Bear River is 50%, 67% for Woodruff Narrows and 33% for the Little Bear.

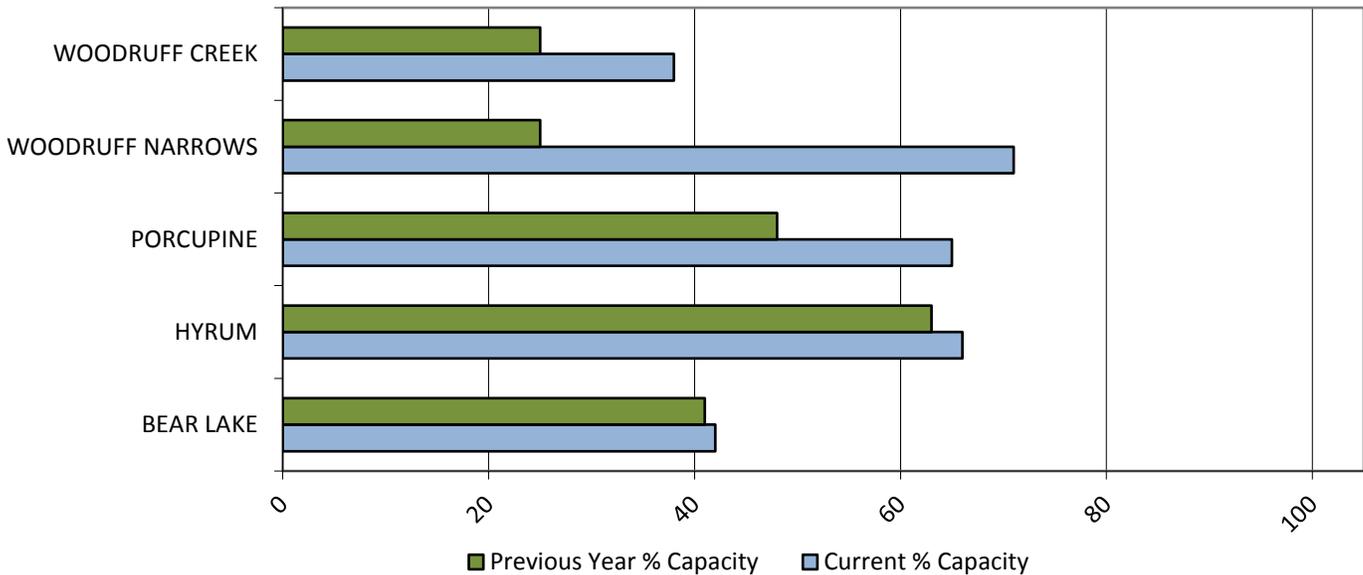
Precipitation



Soil Moisture



Reservoir Storage

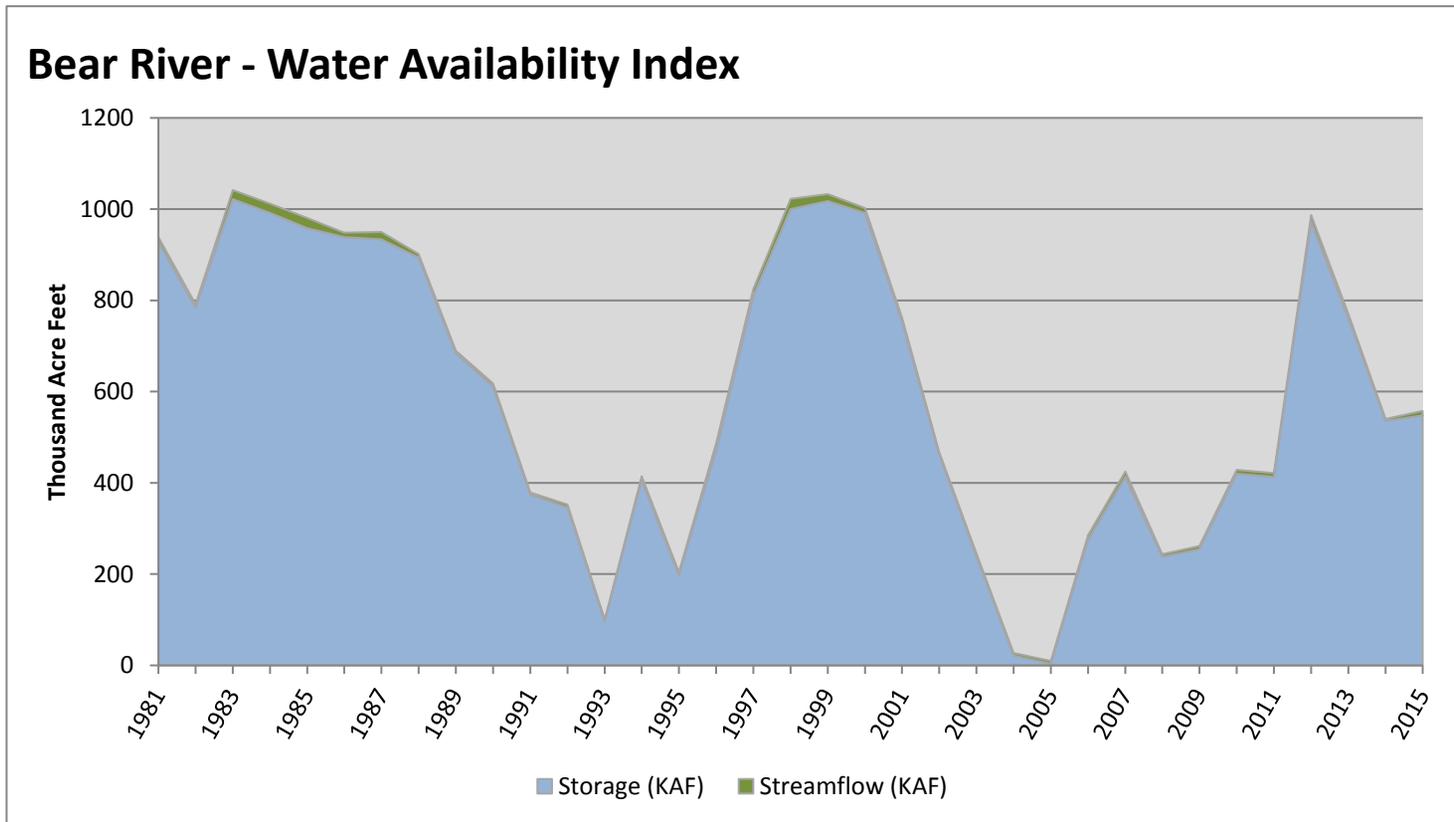


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|-------------------|------------------|--------------|----------------|------------|----------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Bear River | 548.09 | 9.79 | 557.88 | 50 | 0 | 96, 14, 90, 89 |

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

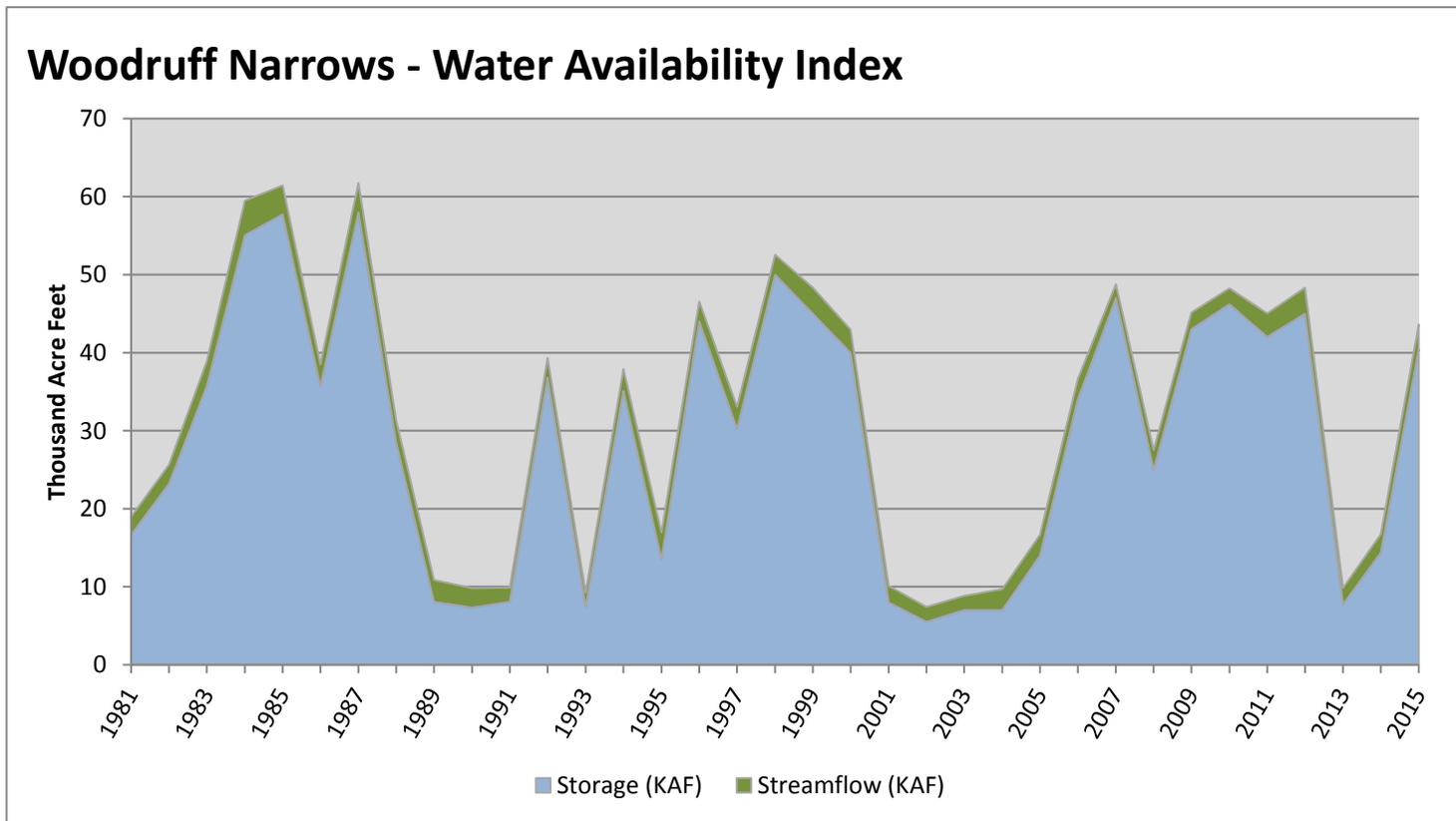


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|-------------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Woodruff Narrows | 40.42 | 3.20 | 43.62 | 67 | 1.39 | 92, 00, 11, 09 |

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

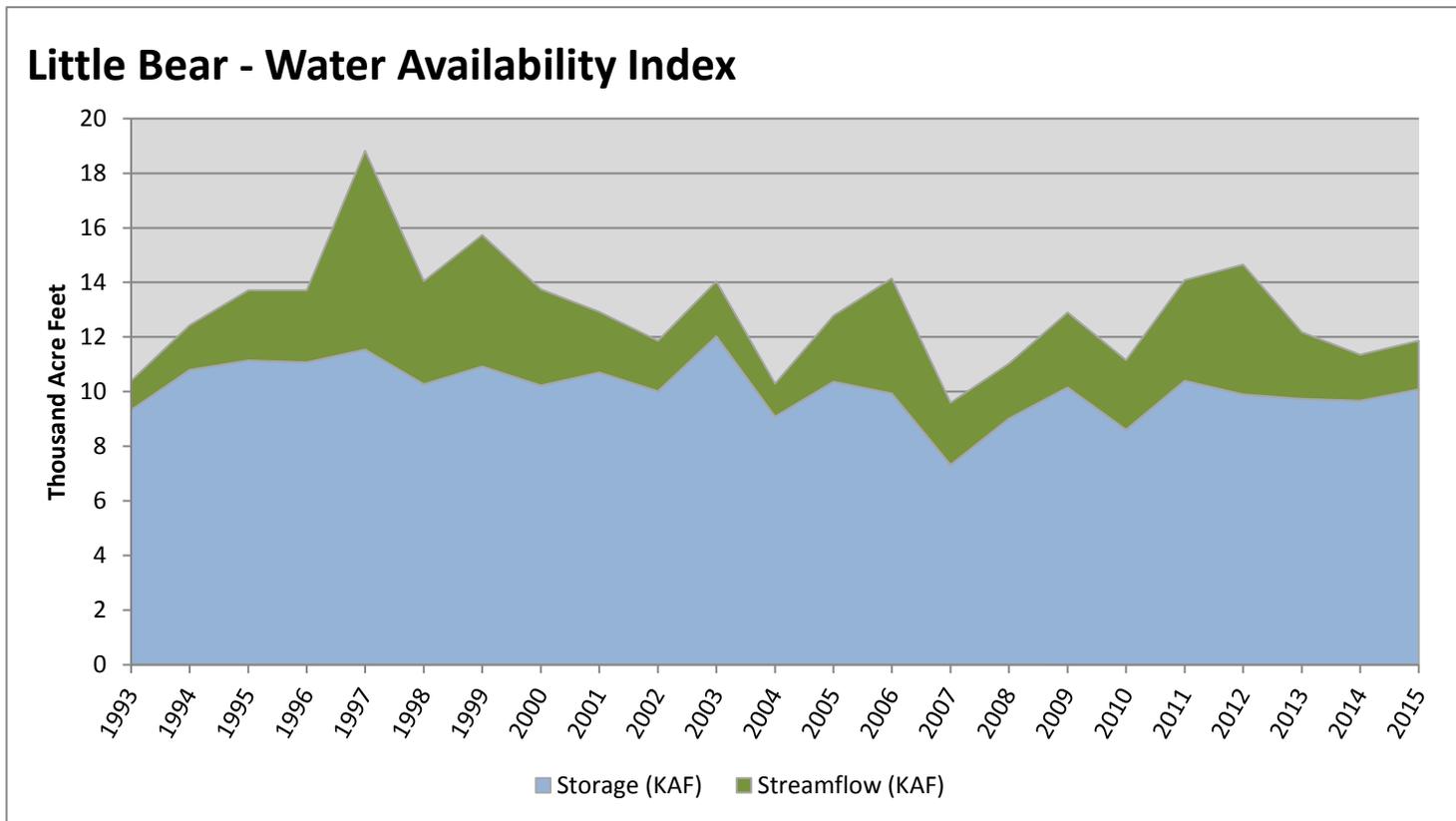


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|--------------------|------------------|--------------|----------------|------------|--------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Little Bear | 10.09 | 1.77 | 11.86 | 33 | -1.39 | 14, 02, 13, 94 |

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

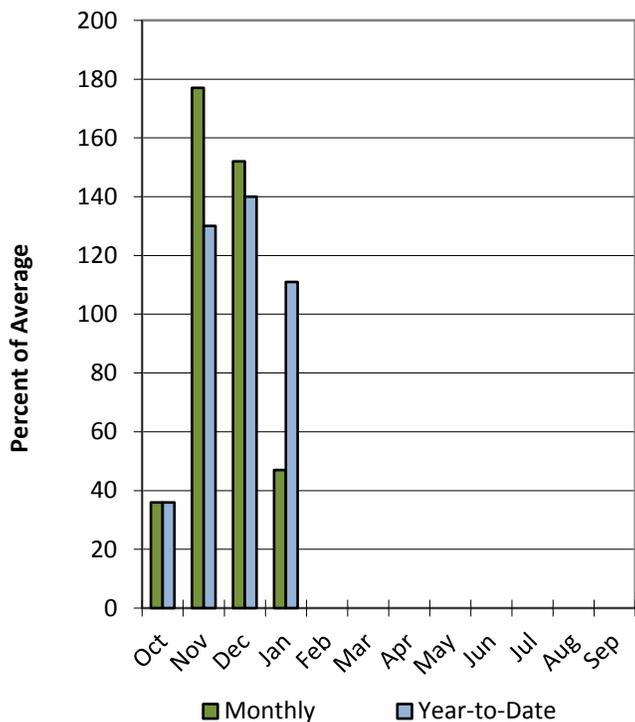


Raft River Basin

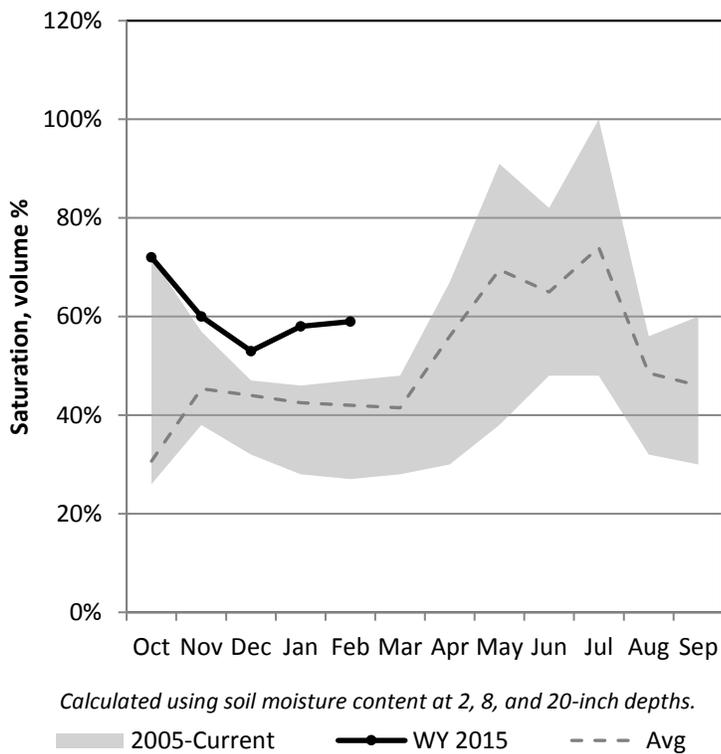
2/1/2015

Precipitation in January was much below average at 47%, which brings the seasonal accumulation (Oct-Jan) to 111% of average. Soil moisture is at 59% compared to 27% last year.

Precipitation



Soil Moisture

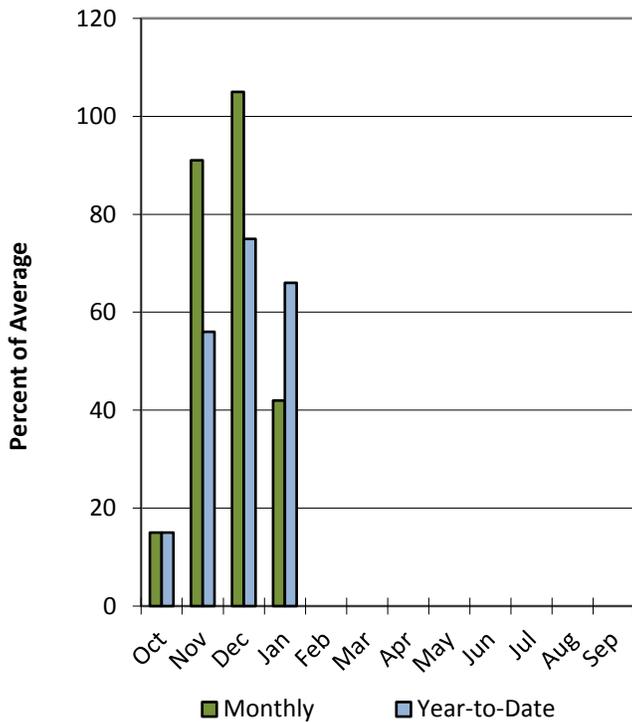


Weber & Ogden River Basins

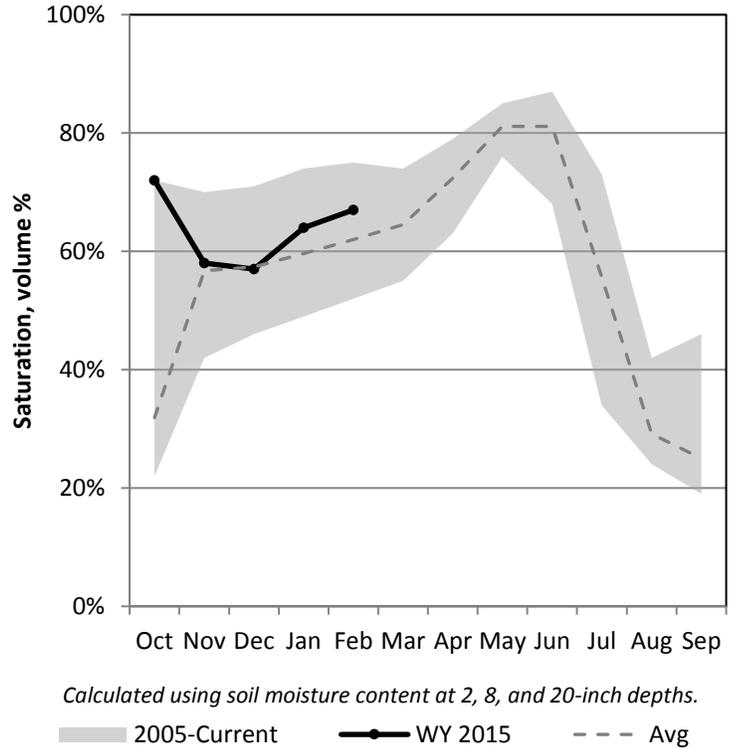
2/1/2015

Precipitation in January was much below average at 42%, which brings the seasonal accumulation (Oct-Jan) to 66% of average. Soil moisture is at 67% compared to 54% last year. Reservoir storage is at 49% of capacity, compared to 37% last year. The water availability index for the Ogden River is 69% and 38% for the Weber River.

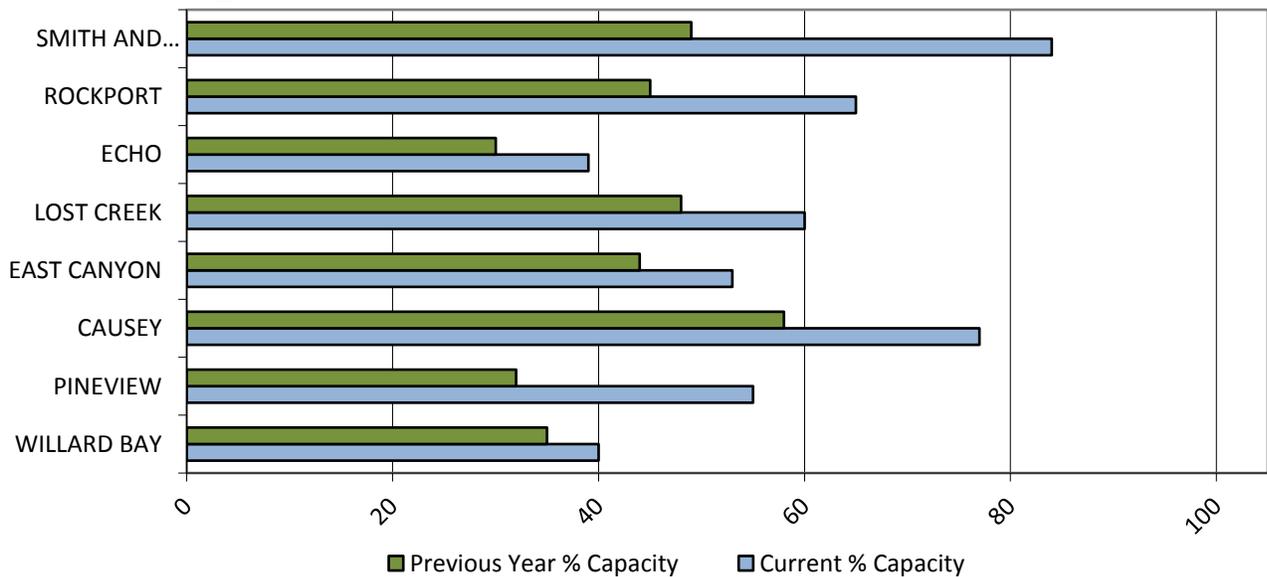
Precipitation



Soil Moisture



Reservoir Storage

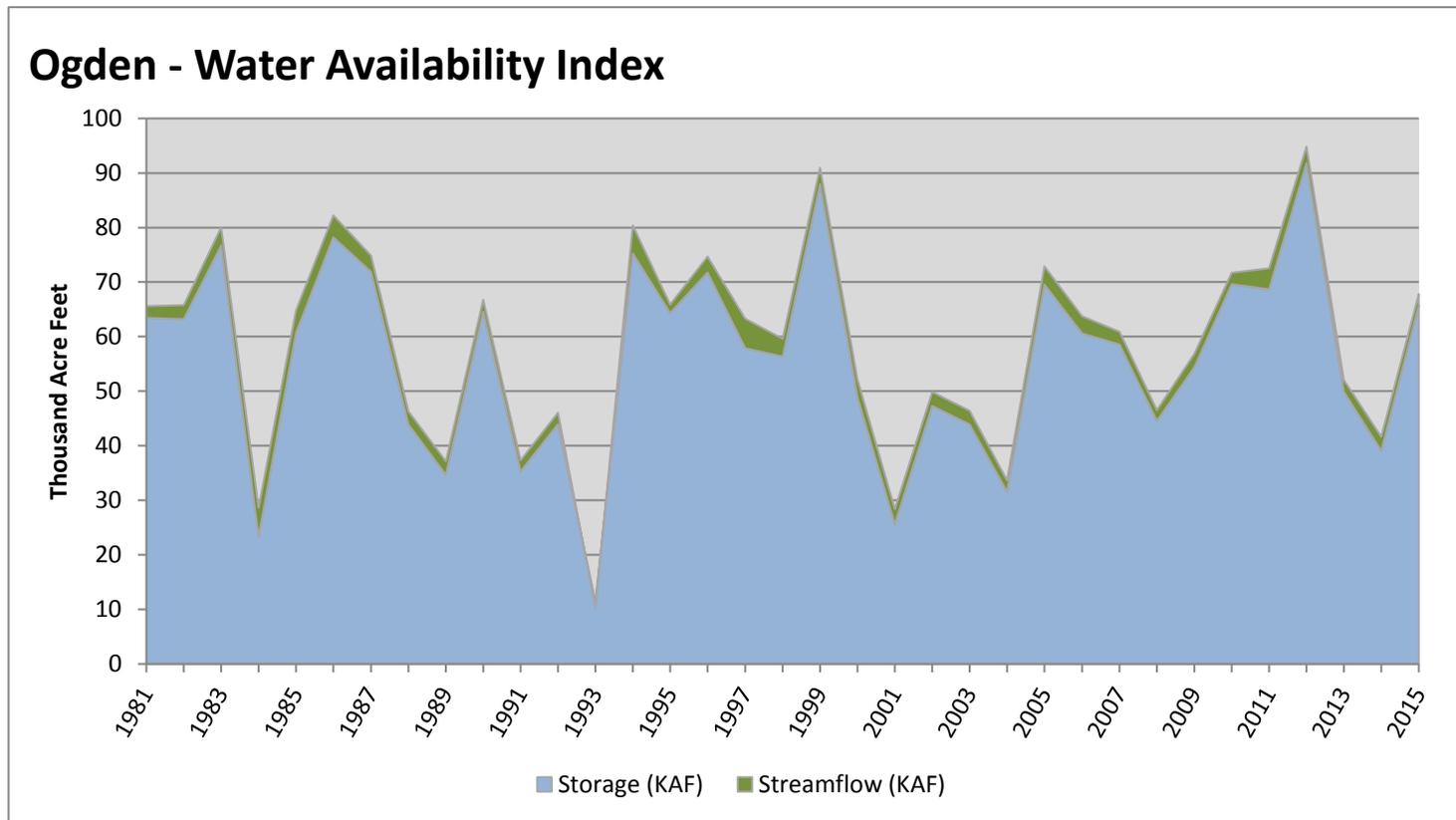


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|-----------------|------------------|--------------|----------------|------------|-------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Ogden | 65.66 | 2.14 | 67.80 | 69 | 1.62 | 95, 90, 10, 11 |

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

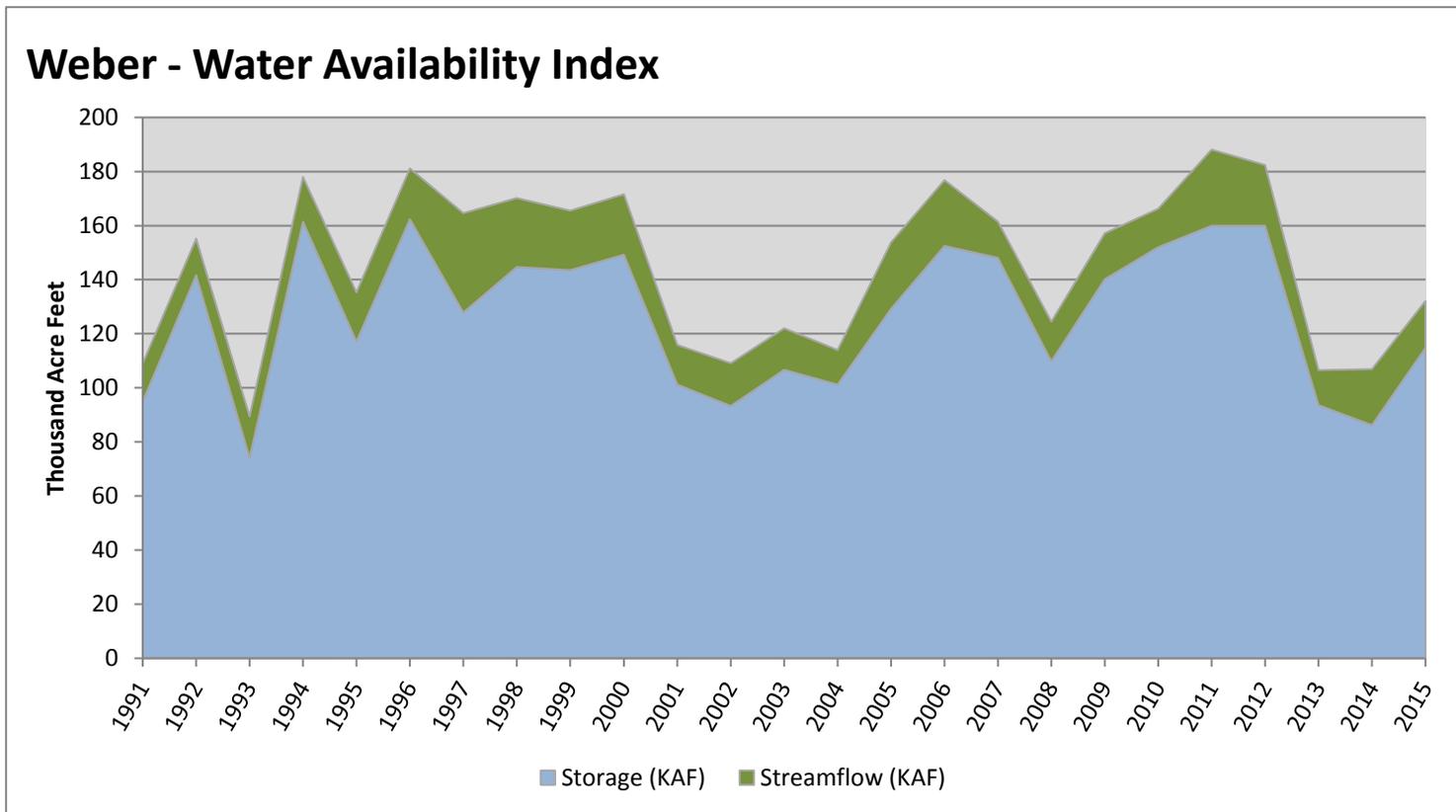


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|-----------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Weber | 114.83 | 17.26 | 132.09 | 38 | -0.96 | 03, 08, 95, 05 |

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

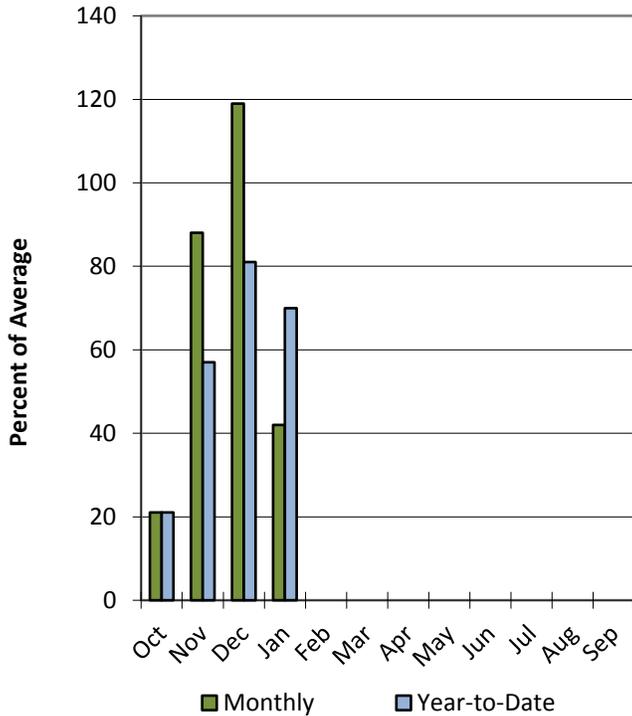


Provo & Jordan River Basins

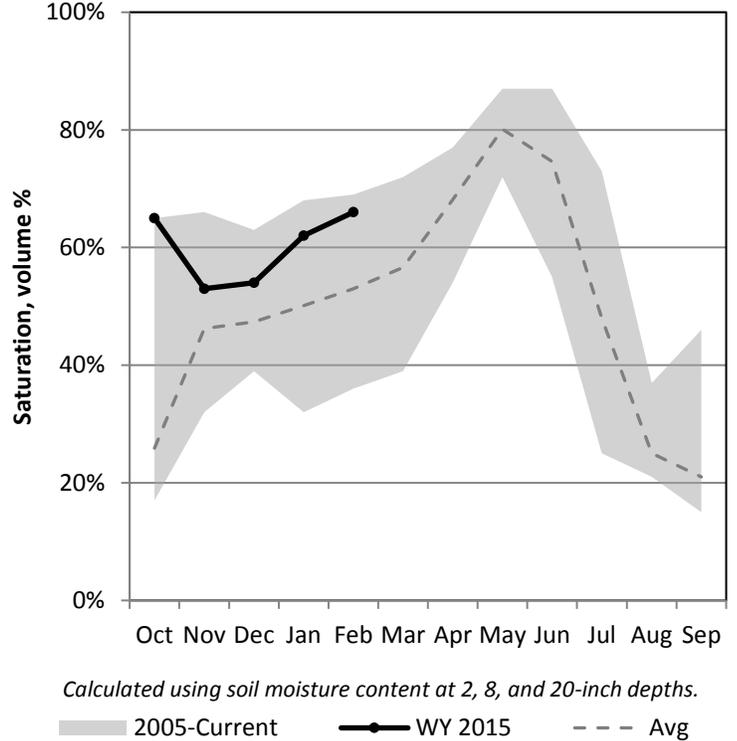
2/1/2015

Precipitation in January was much below average at 42%, which brings the seasonal accumulation (Oct-Jan) to 70% of average. Soil moisture is at 66% compared to 55% last year. Reservoir storage is at 70% of capacity, compared to 70% last year. The water availability index for the Provo River is 38%.

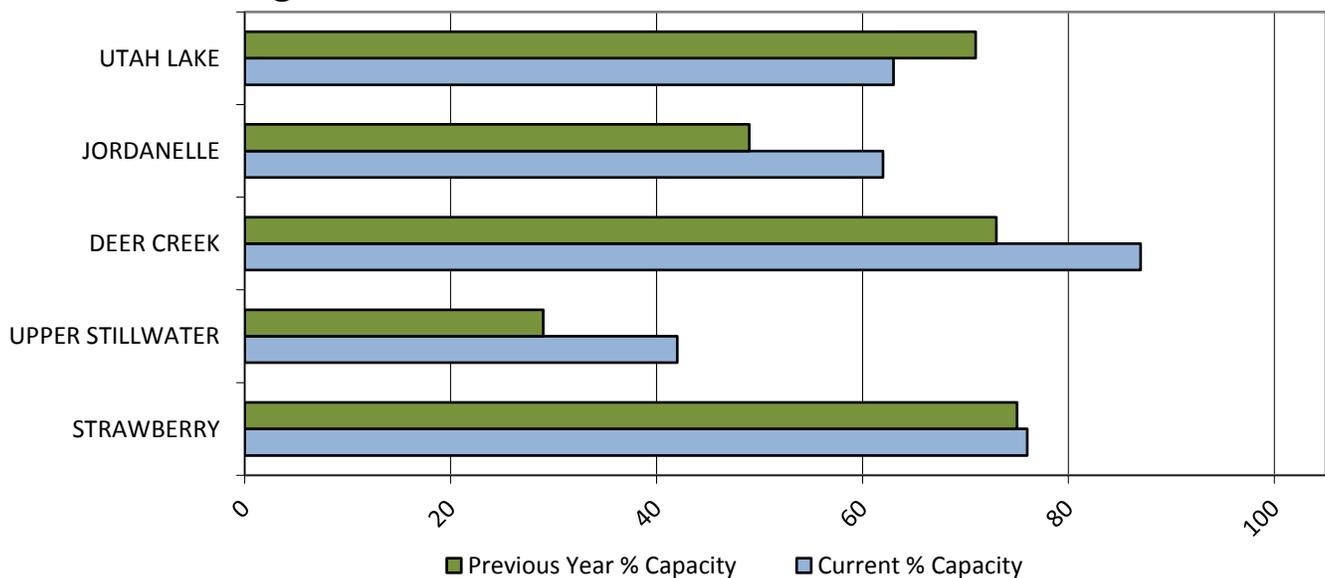
Precipitation



Soil Moisture



Reservoir Storage

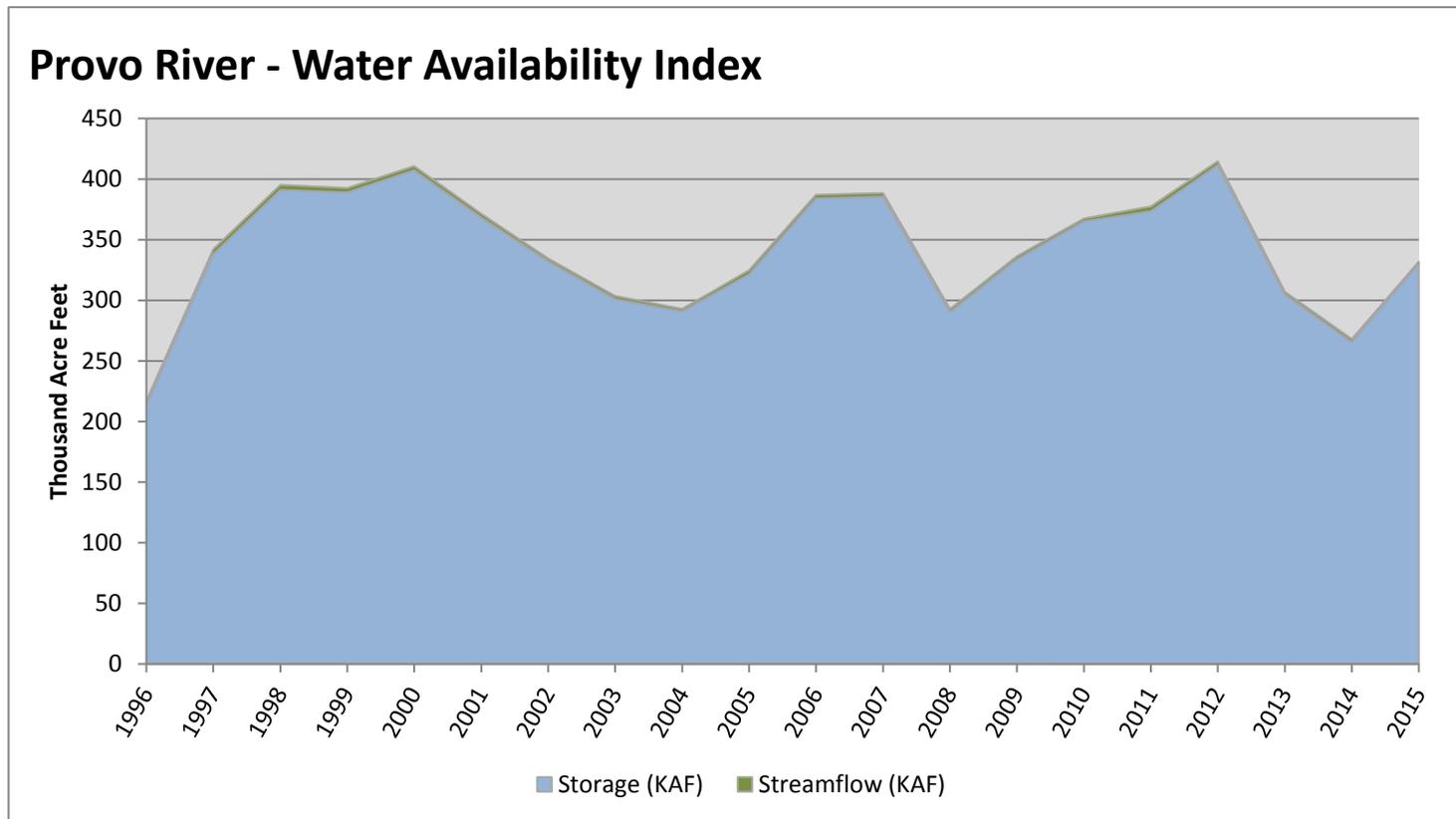


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|--------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Provo River | 330.35 | 1.41 | 331.76 | 38 | -0.99 | 13, 05, 02, 09 |

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

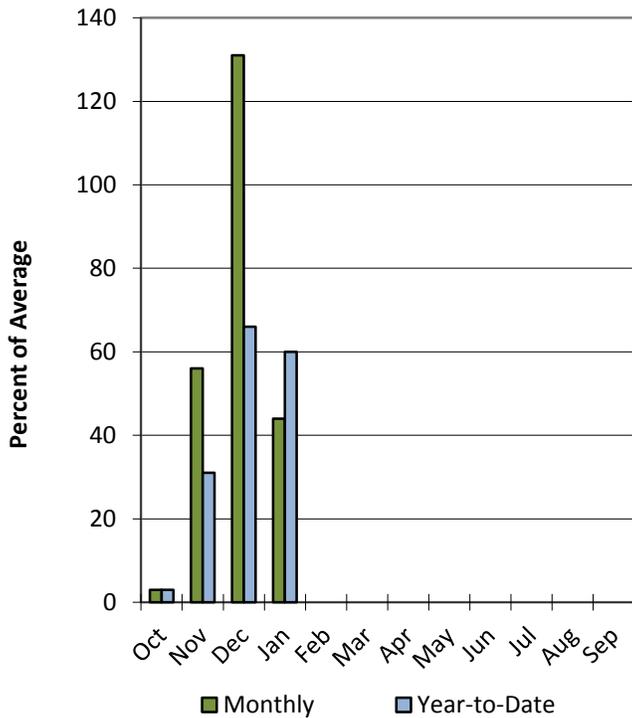


Tooele & Vernon Creek Basins

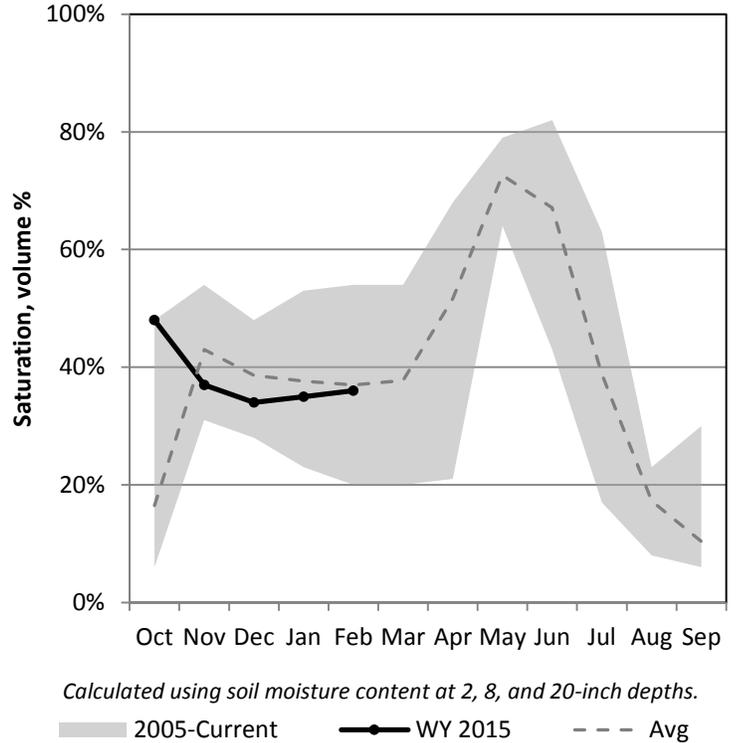
2/1/2015

Precipitation in January was much below average at 44%, which brings the seasonal accumulation (Oct-Jan) to 60% of average. Soil moisture is at 36% compared to 28% last year. Reservoir storage is at 37% of capacity, compared to 53% last year.

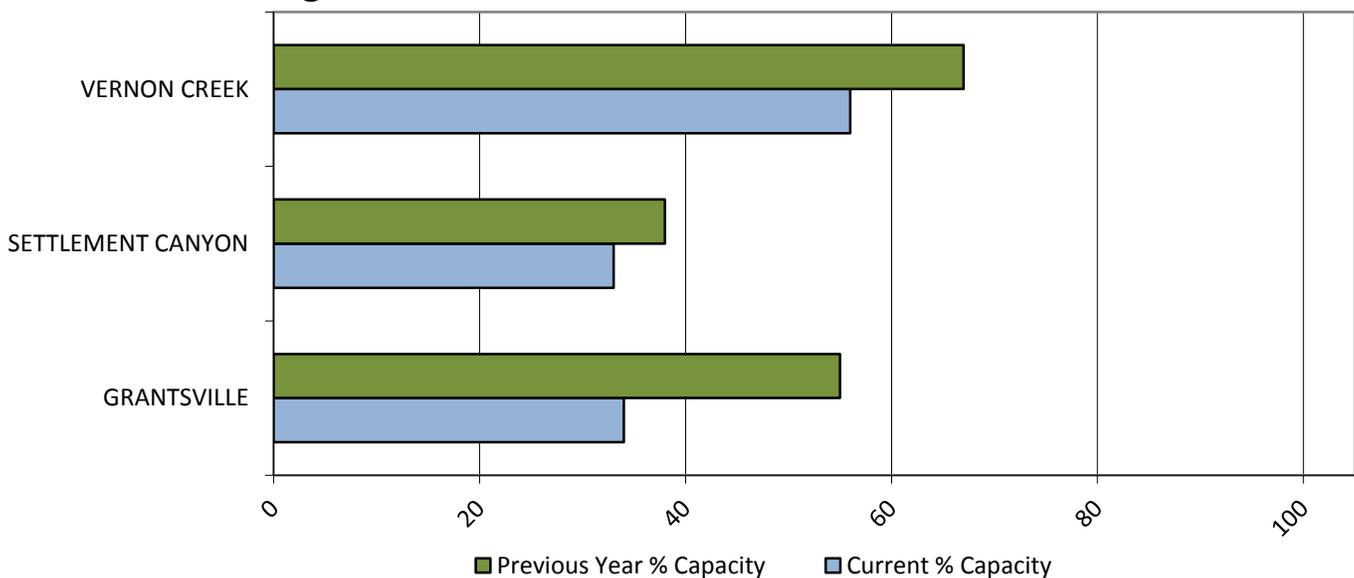
Precipitation



Soil Moisture



Reservoir Storage

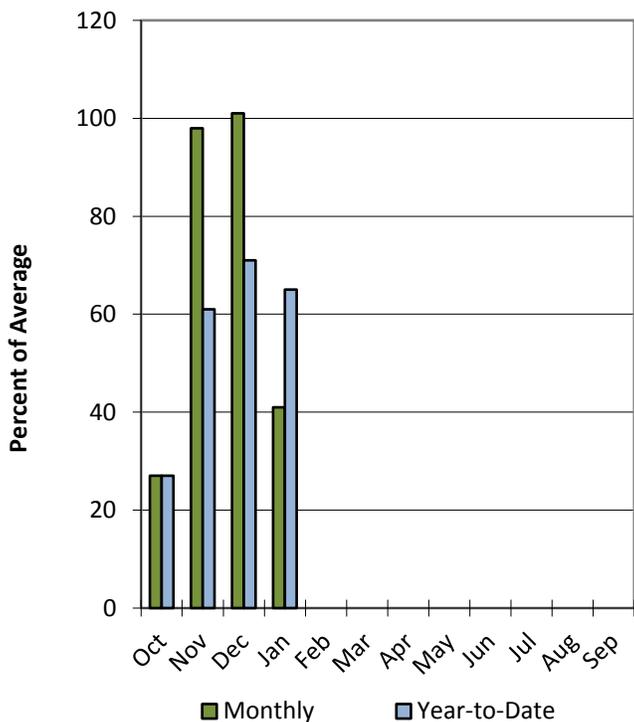


Northeastern Uintah Basin

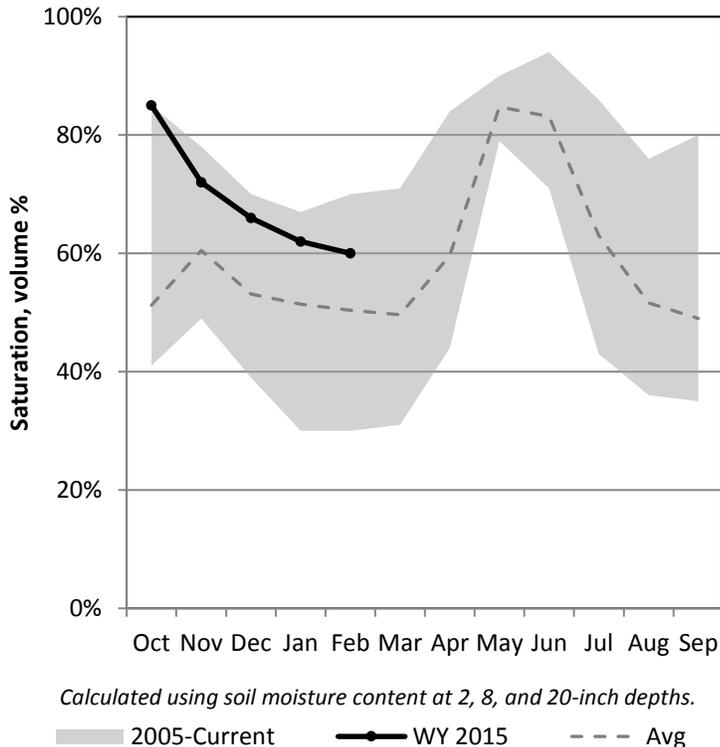
2/1/2015

Precipitation in January was much below average at 41%, which brings the seasonal accumulation (Oct-Jan) to 65% of average. Soil moisture is at 60% compared to 62% last year. Reservoir storage is at 86% of capacity, compared to 76% last year. The Water Availability Index for Blacks Fork is 97% and 91% for Smiths Creek.

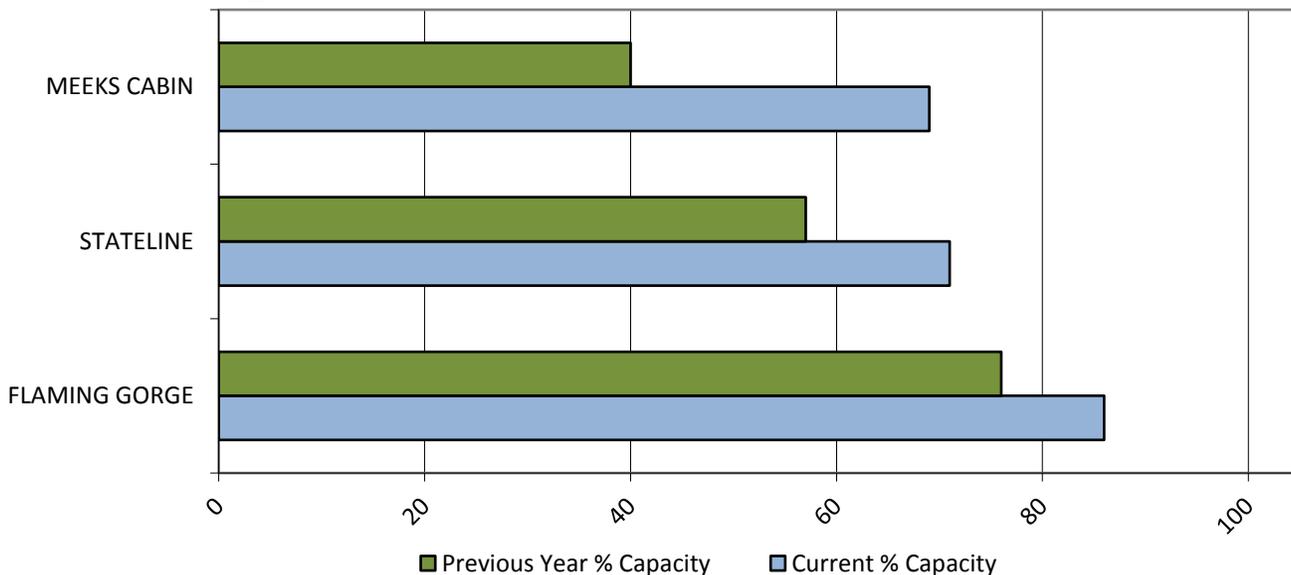
Precipitation



Soil Moisture



Reservoir Storage

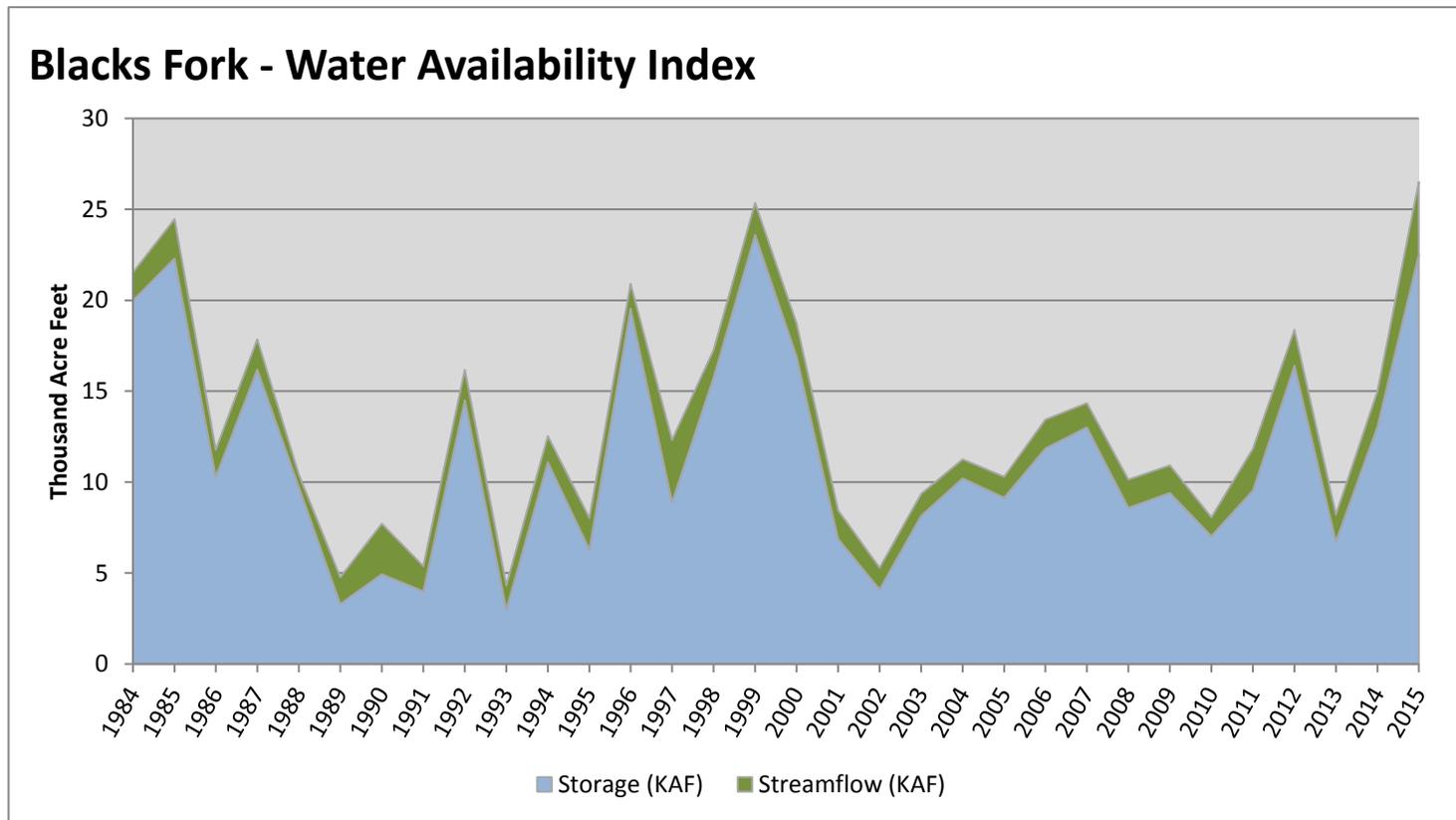


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|--------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Blacks Fork | 22.51 | 4.00 | 26.51 | 97 | 3.91 | 99, 85, 84, 96 |

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

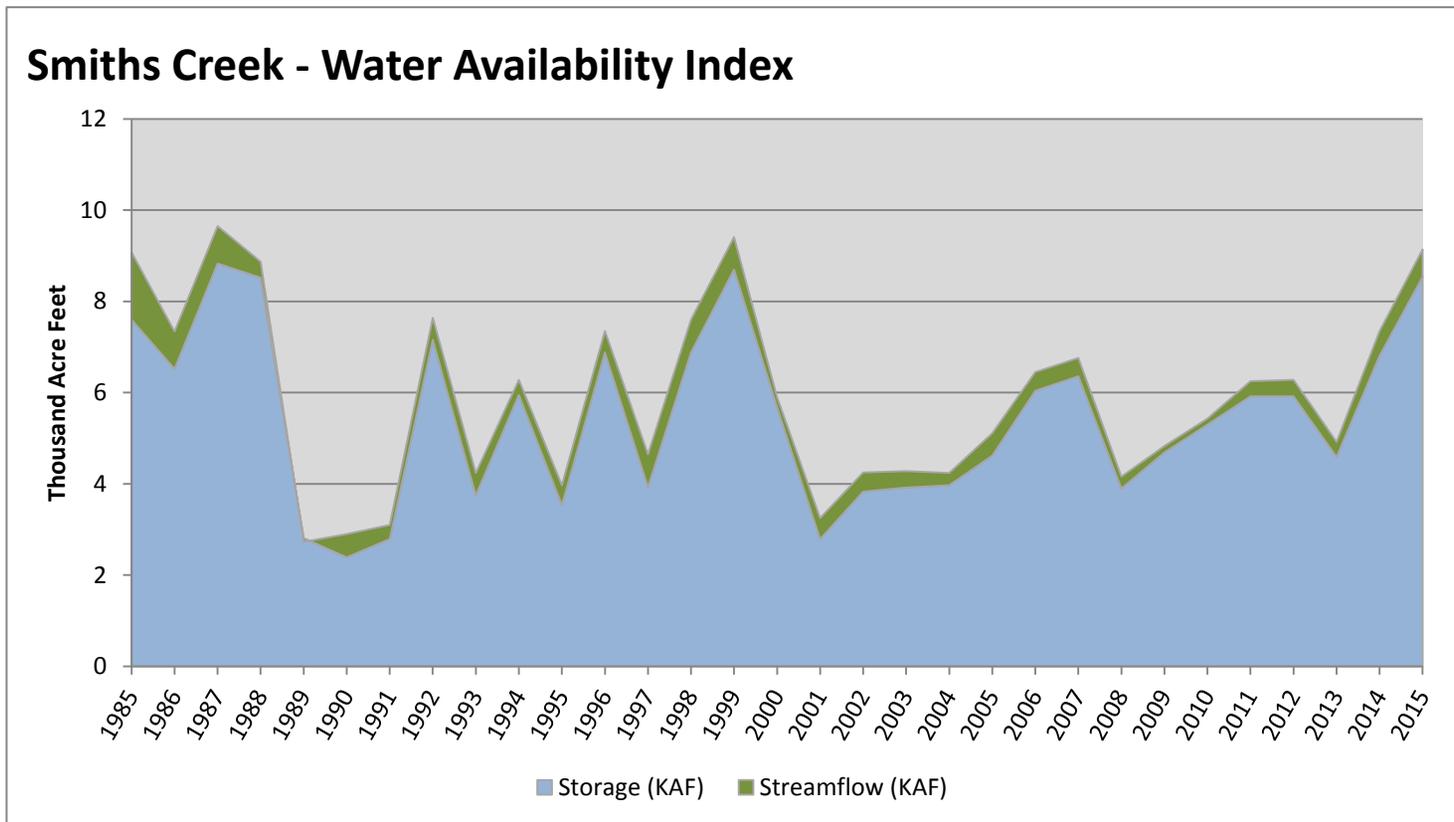


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|---------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Smiths Creek | 8.54 | 0.60 | 9.14 | 91 | 3.39 | 88, 85, 99, 87 |

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

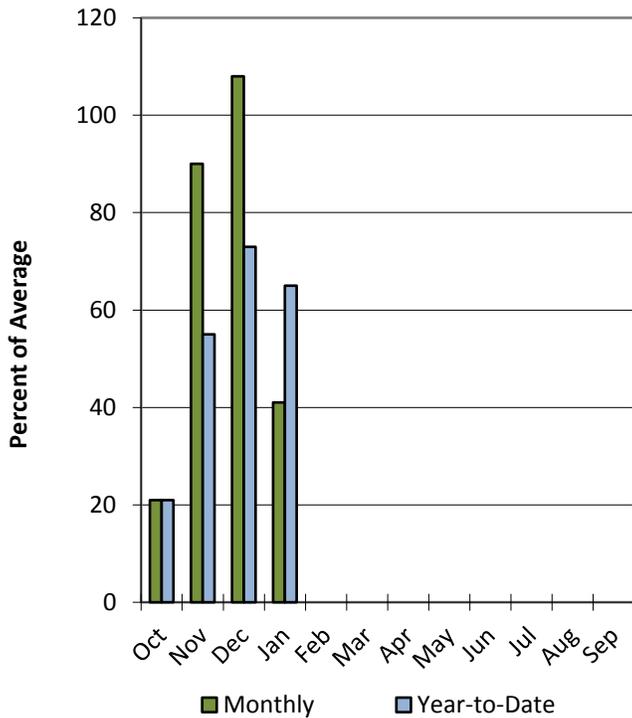


Duchesne River Basin

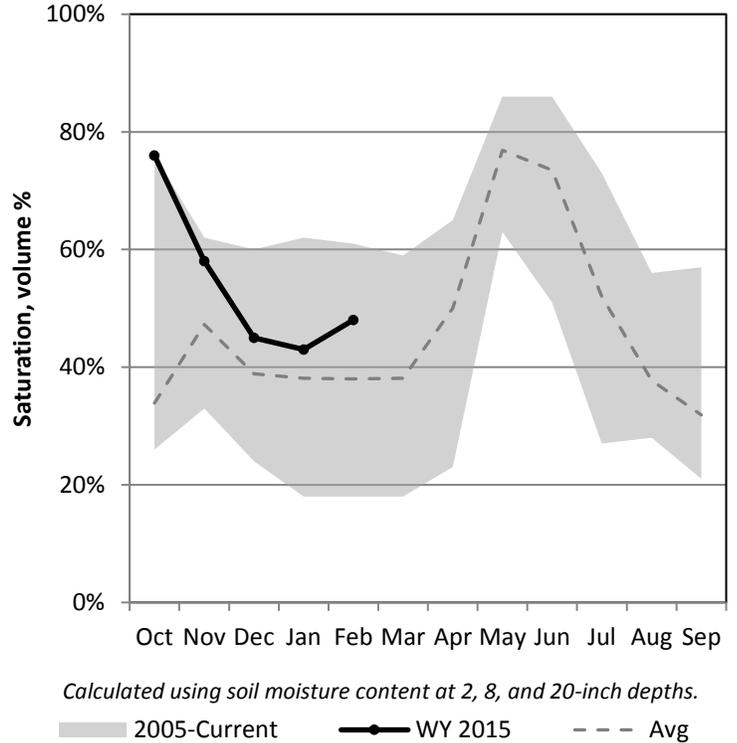
2/1/2015

Precipitation in January was much below average at 41%, which brings the seasonal accumulation (Oct-Jan) to 65% of average. Soil moisture is at 48% compared to 33% last year. Reservoir storage is at 76% of capacity, compared to 74% last year. The water availability index for the Western Uintahs is 90% and 25% for the Eastern Uintahs.

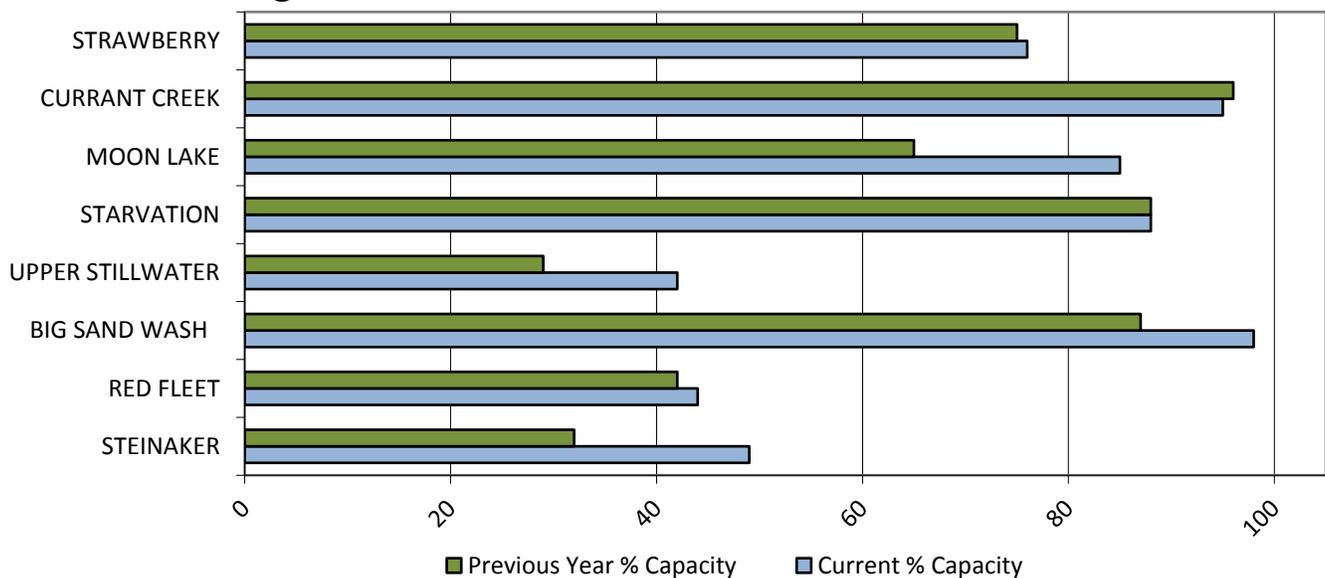
Precipitation



Soil Moisture



Reservoir Storage

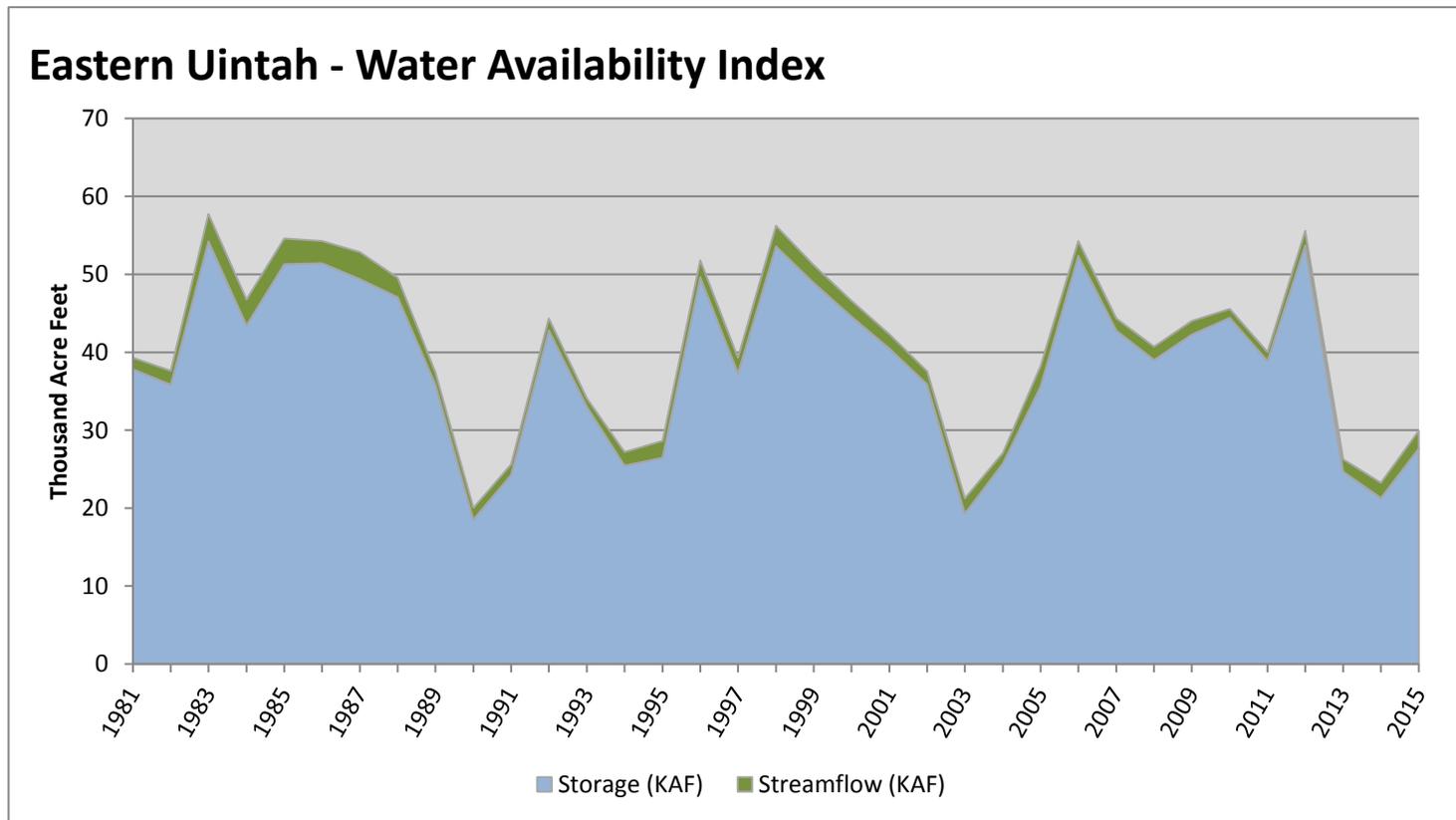


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|-----------------------|------------------|--------------|----------------|------------|--------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Eastern Uintah | 27.65 | 2.26 | 29.91 | 25 | -2.08 | 94, 95, 93, 89 |

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

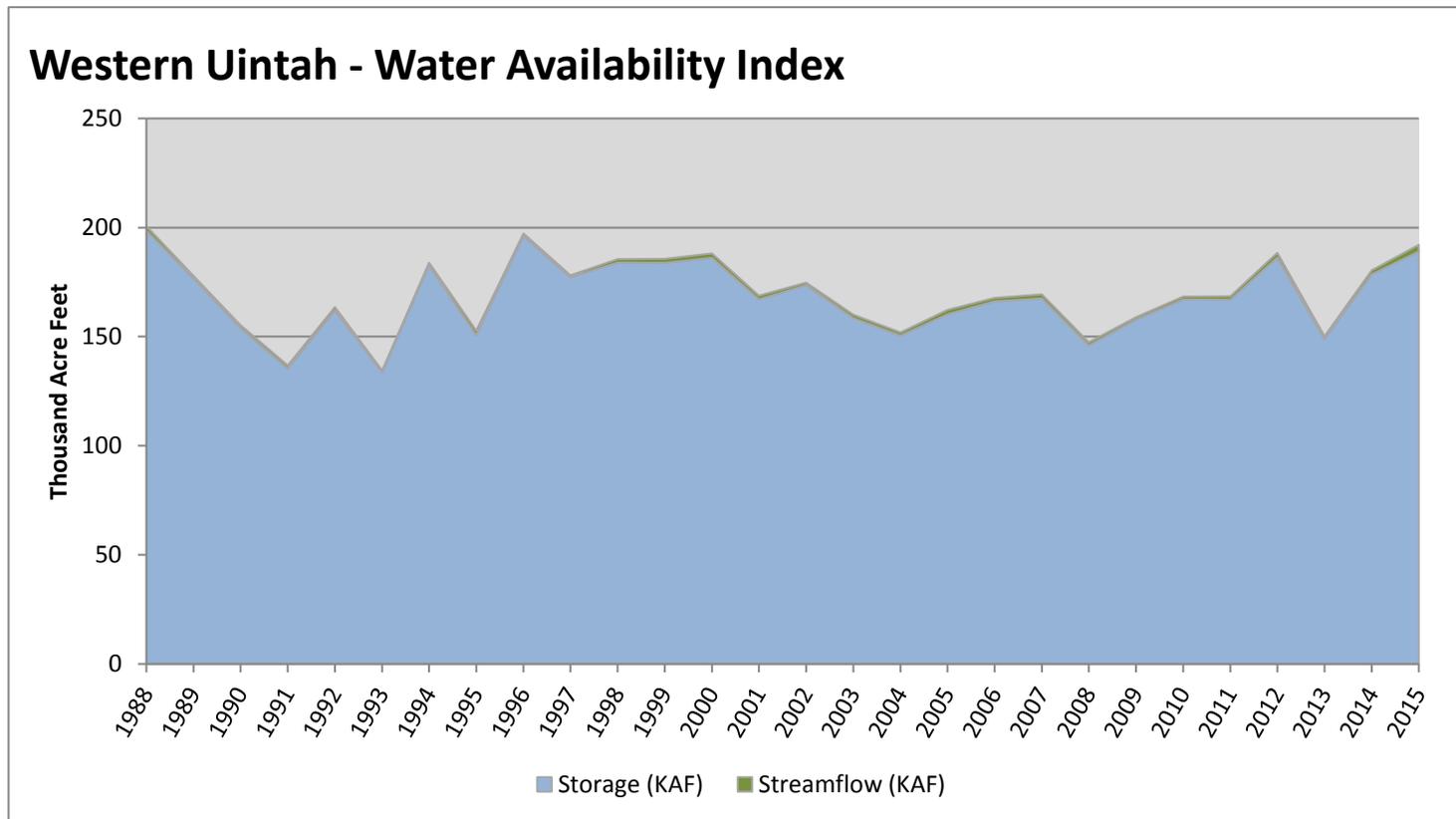


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|-----------------------|------------------|--------------|----------------|------------|------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Western Uintah | 189.01 | 3.14 | 192.15 | 90 | 3.3 | 00, 12, 96, 88 |

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

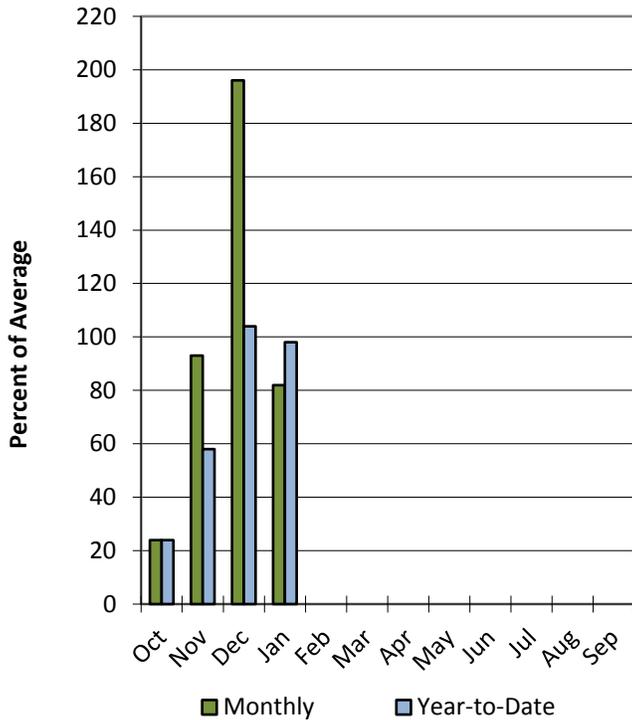


Lower Sevier River Basin

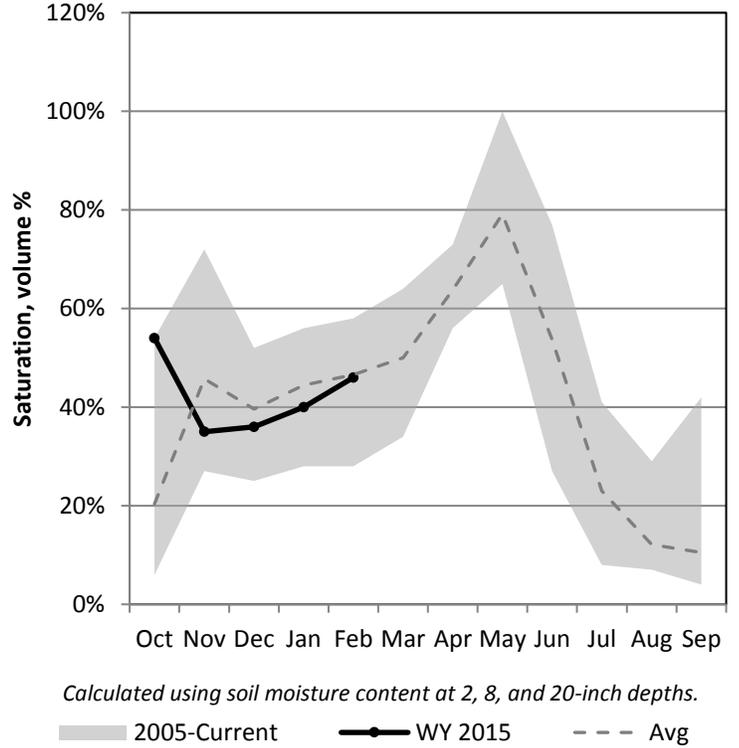
2/1/2015

Precipitation in January was below average at 82%, which brings the seasonal accumulation (Oct-Jan) to 98% of average. Soil moisture is at 46% compared to 28% last year. Reservoir storage is at 39% of capacity, compared to 49% last year. The water availability index for the Lower Sevier is 17%.

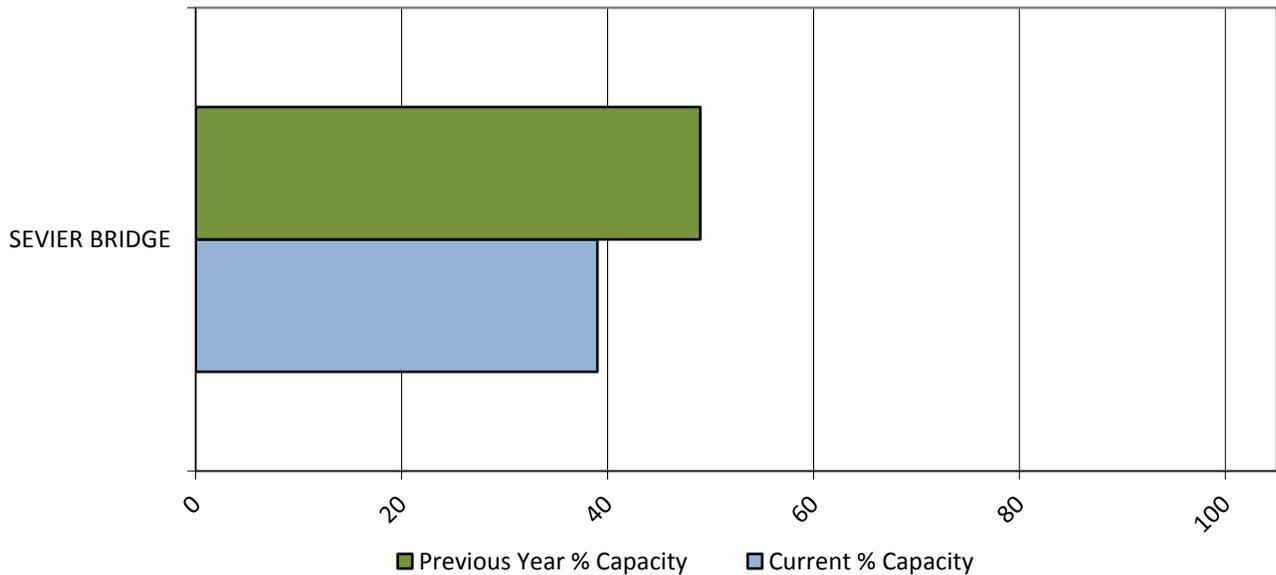
Precipitation



Soil Moisture



Reservoir Storage

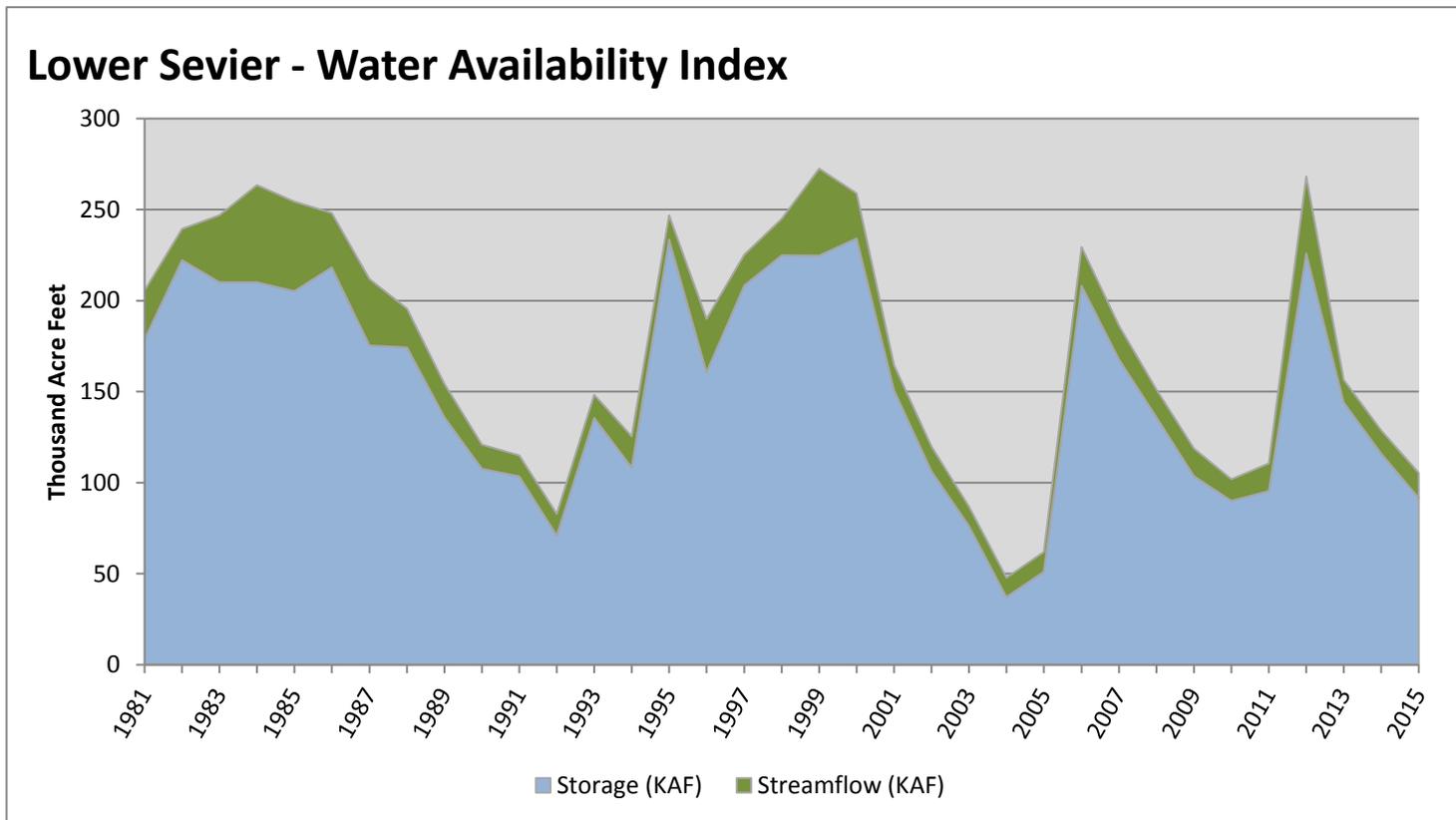


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|---------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Lower Sevier | 91.61 | 13.70 | 105.31 | 17 | -2.78 | 03, 10, 11, 91 |

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

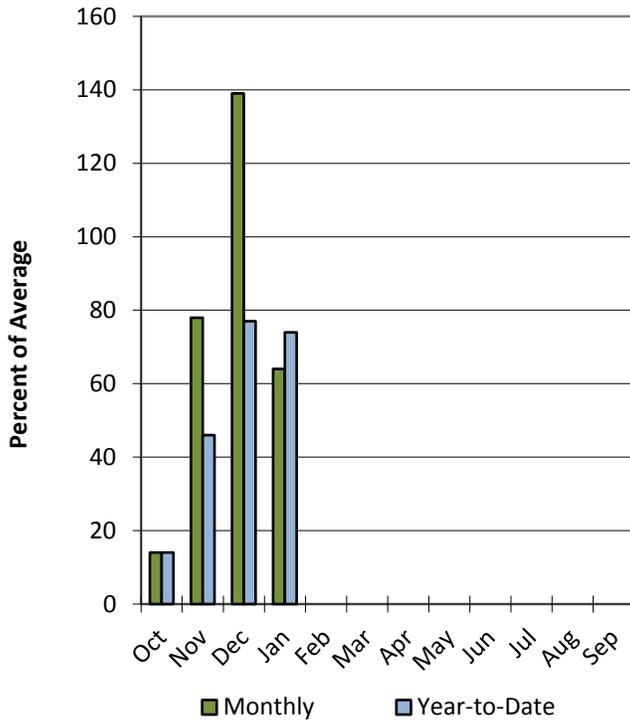


Upper Sevier River Basin

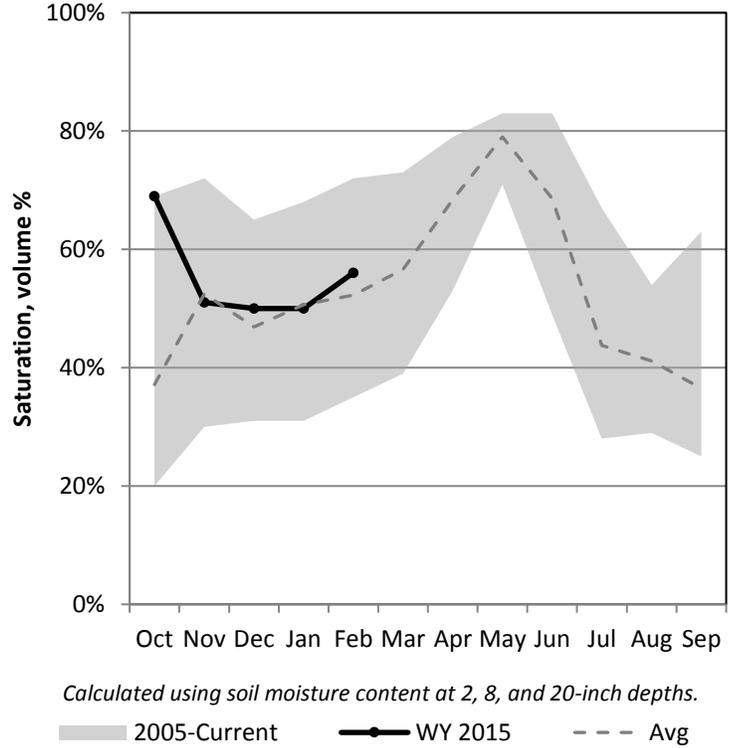
2/1/2015

Precipitation in January was much below average at 64%, which brings the seasonal accumulation (Oct-Jan) to 74% of average. Soil moisture is at 56% compared to 57% last year. Reservoir storage is at 53% of capacity, compared to 69% last year. The water availability index for the Upper Sevier is 33%.

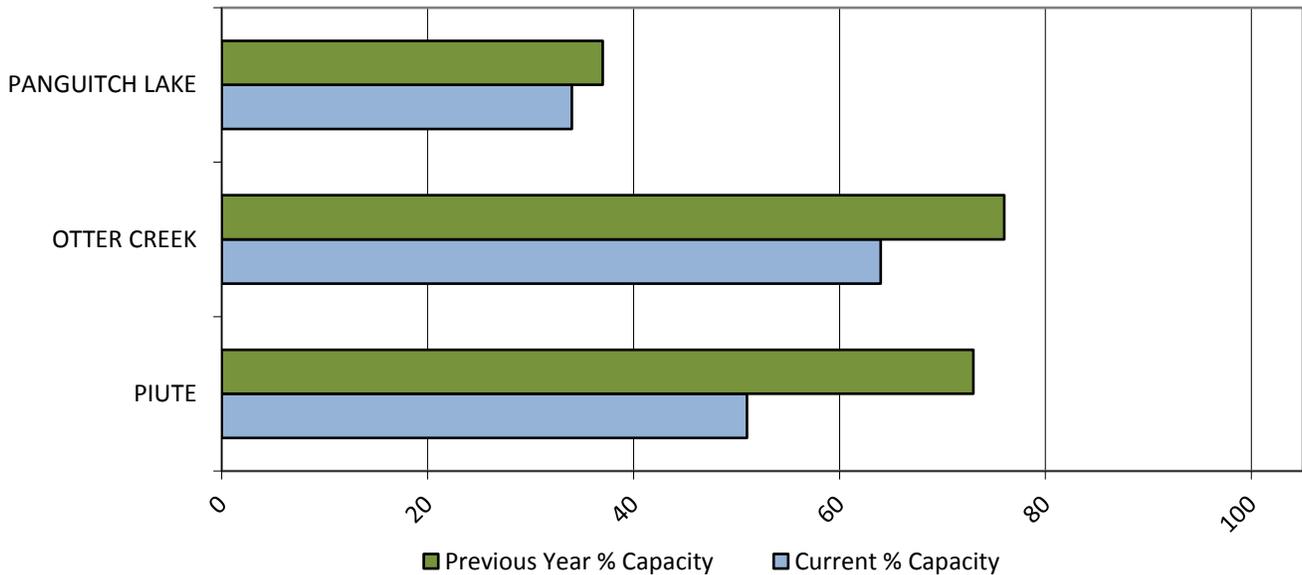
Precipitation



Soil Moisture



Reservoir Storage

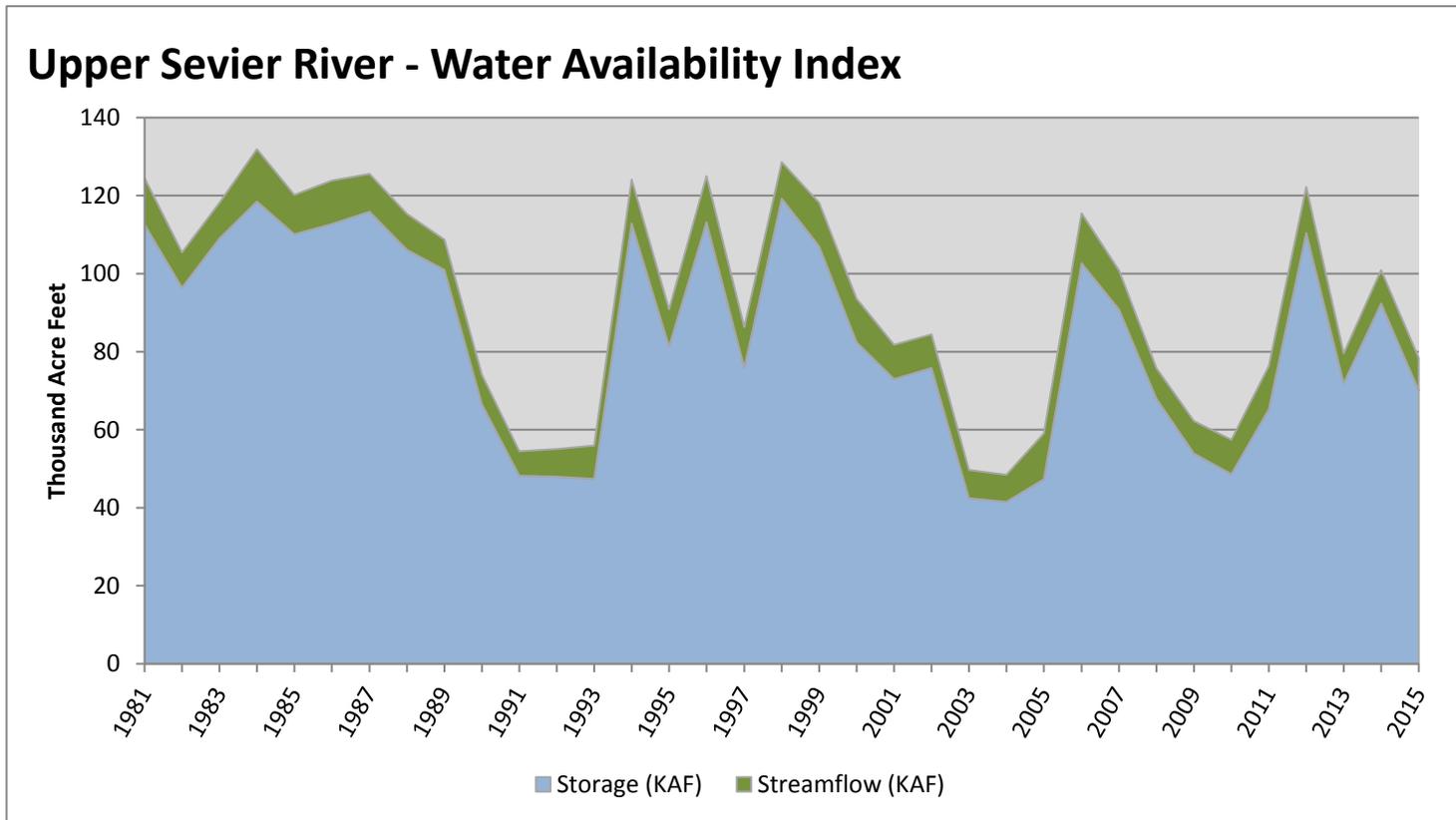


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|---------------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Upper Sevier River | 70.05 | 8.34 | 78.39 | 33 | -1.39 | 08, 11, 13, 01 |

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

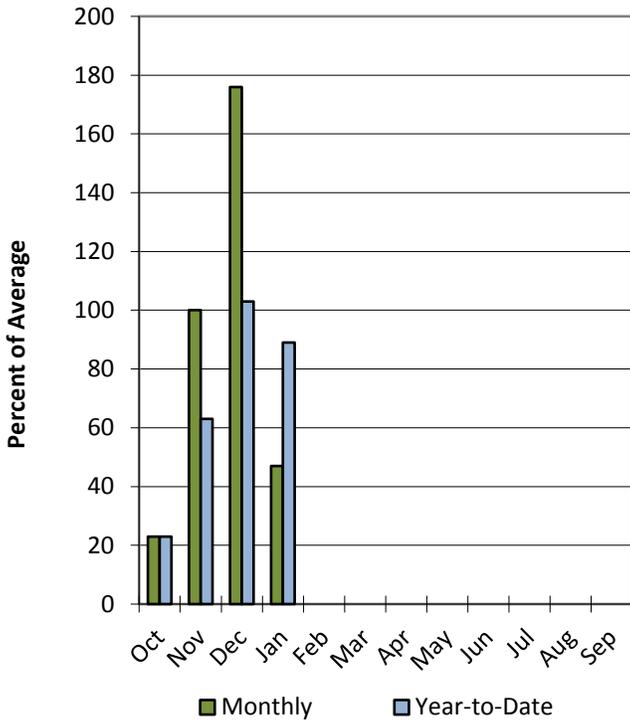


San Pitch River Basin

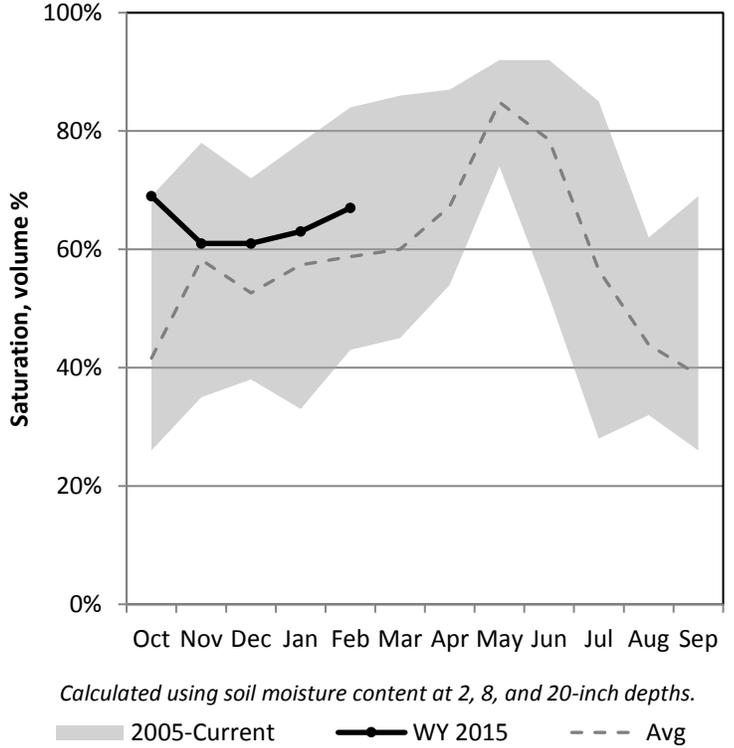
2/1/2015

Precipitation in January was much below average at 47%, which brings the seasonal accumulation (Oct-Jan) to 89% of average. Soil Moisture is at 67% compared to 63% last year. Reservoir storage is at 1% of capacity, compared to 2% last year. The water availability index for the San Pitch is 3%.

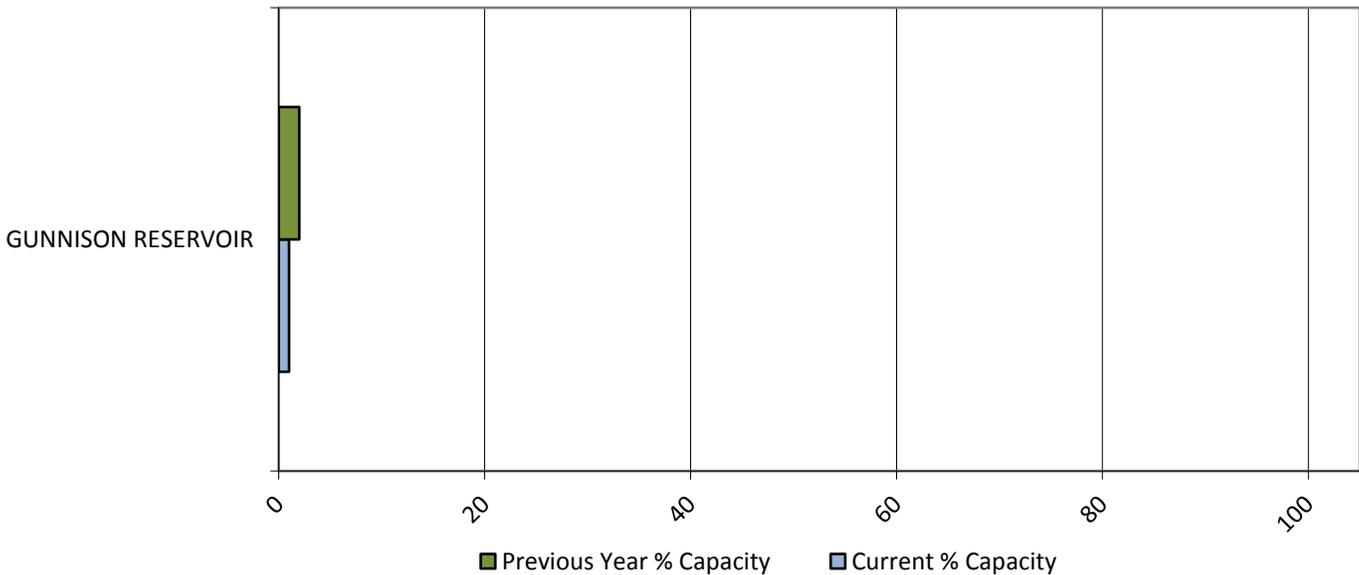
Precipitation



Soil Moisture



Reservoir Storage

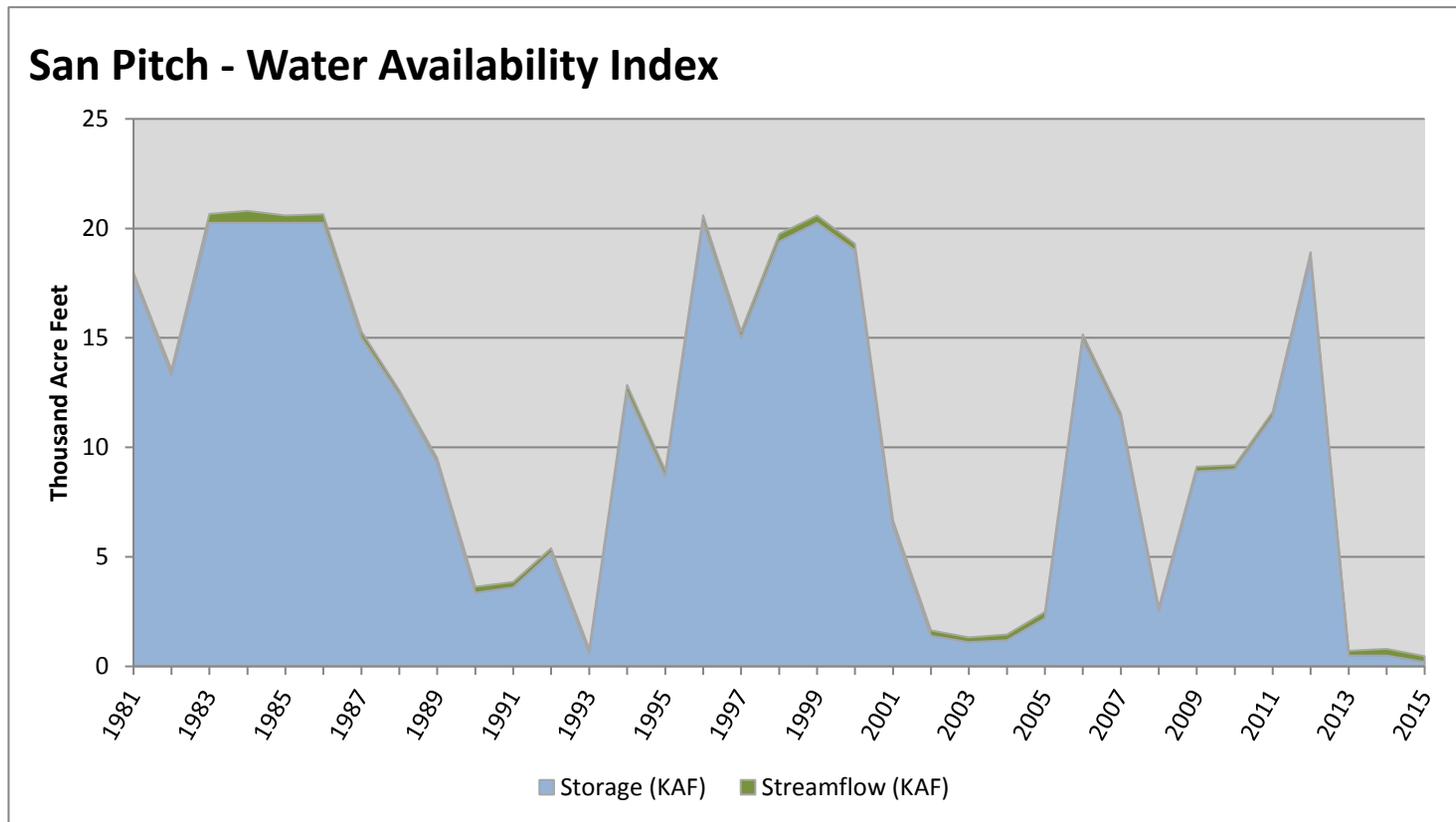


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|------------------|------------------|--------------|----------------|------------|--------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| San Pitch | 0.20 | 0.26 | 0.46 | 3 | -3.94 | 13, 93, 14, 03 |

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

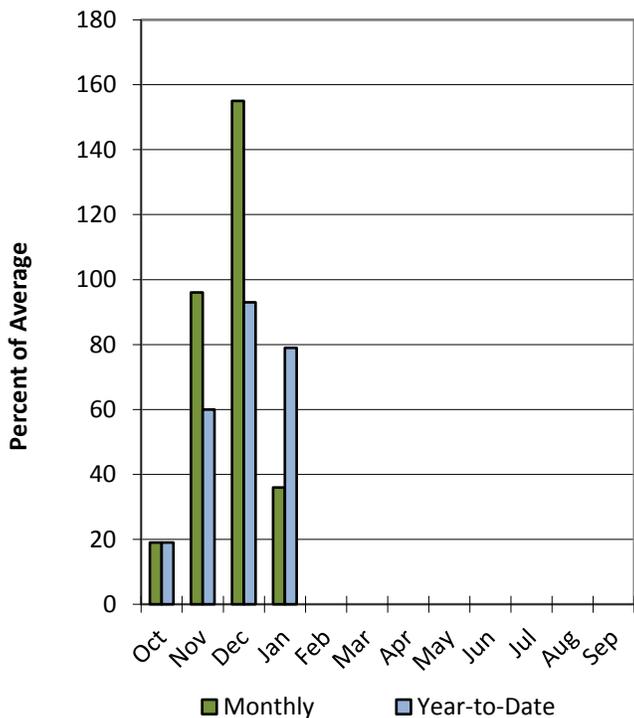


Price & San Rafael Basins

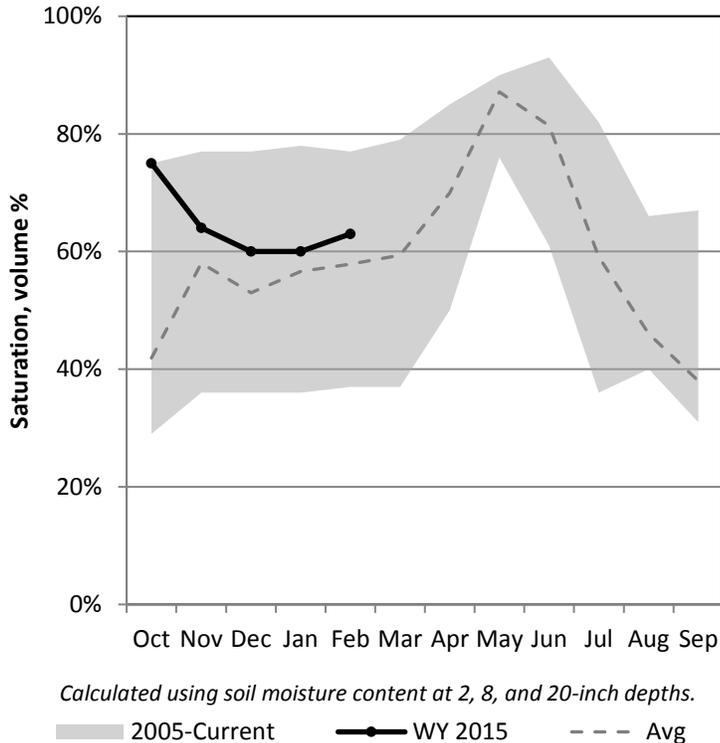
2/1/2015

Precipitation in January was much below average at 36%, which brings the seasonal accumulation (Oct-Jan) to 79% of average. Soil moisture is at 63% compared to 59% last year. Reservoir storage is at 48% of capacity, compared to 40% last year. The water availability index for the Price River is 17%, and 42% for Joe's Valley.

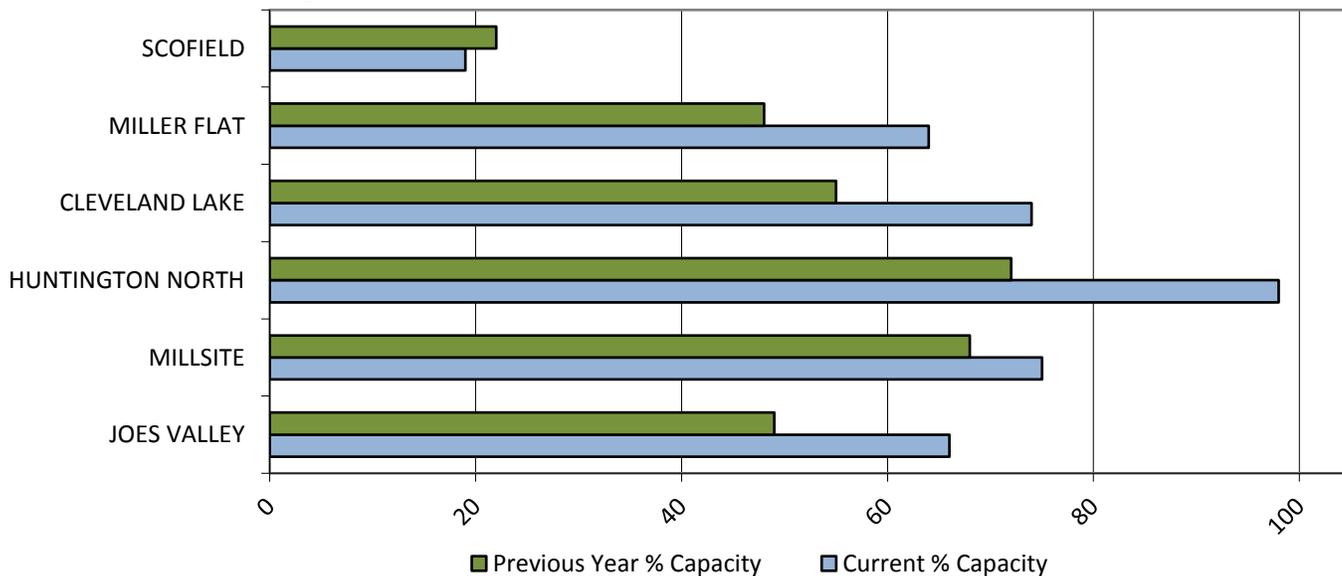
Precipitation



Soil Moisture



Reservoir Storage

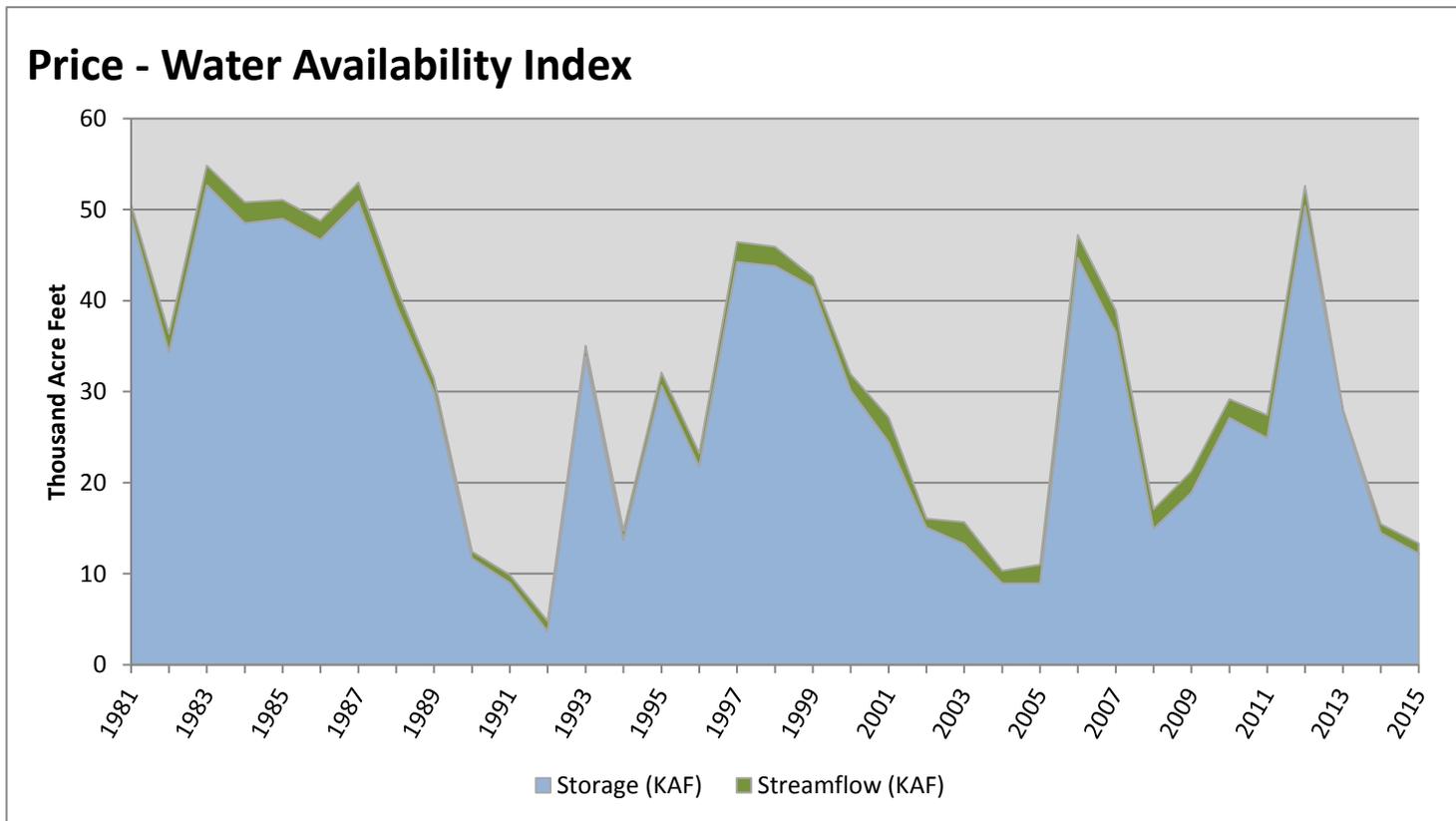


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|-----------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Price | 12.23 | 1.10 | 13.33 | 17 | -2.78 | 05, 90, 94, 14 |

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

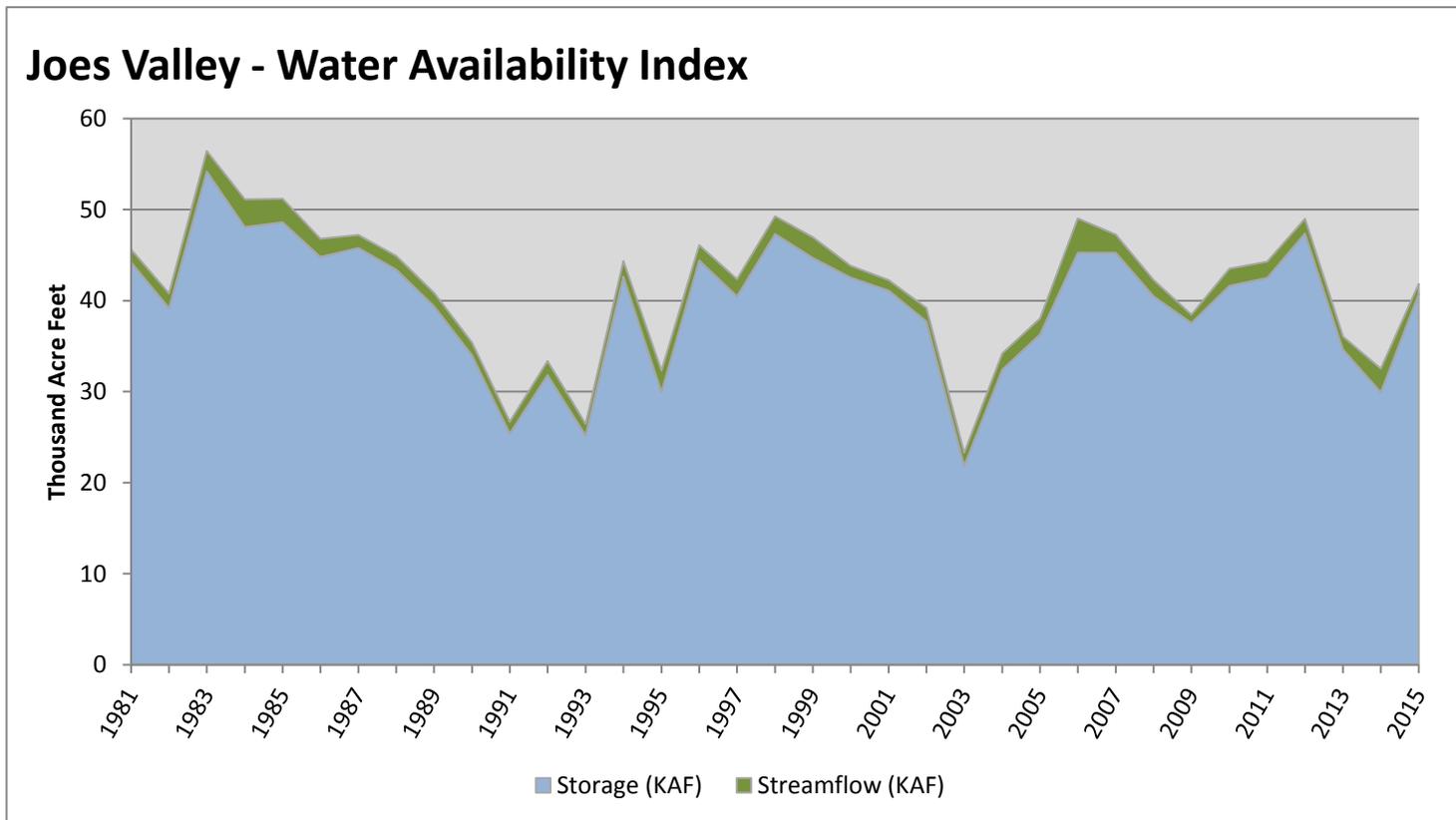


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|---------------------|------------------|--------------|----------------|------------|--------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Joese Valley | 40.71 | 1.14 | 41.85 | 42 | -0.69 | 82, 89, 01, 08 |

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

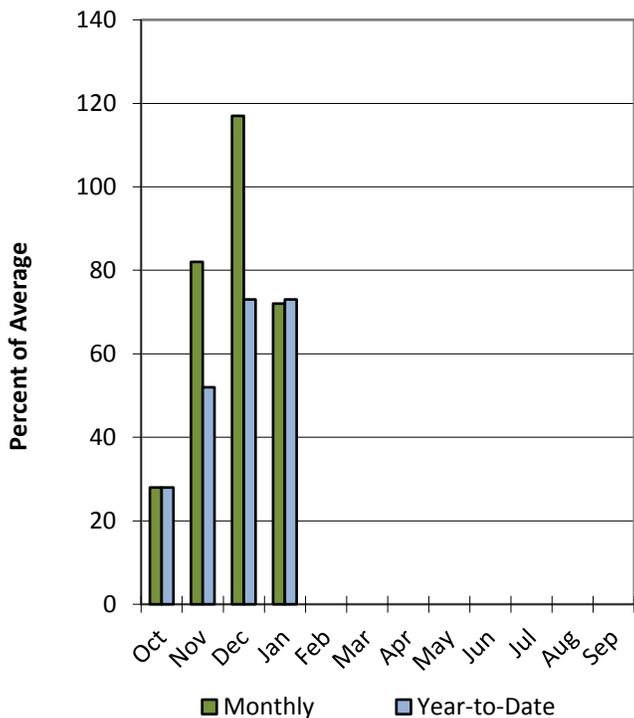


Southeastern Utah Basin

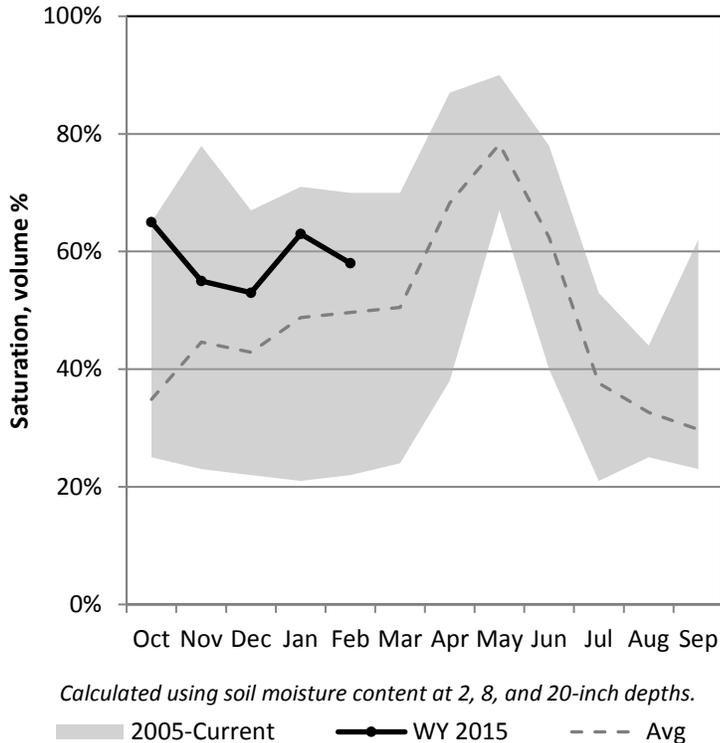
2/1/2015

Precipitation in January was below average at 72%, which brings the seasonal accumulation (Oct-Jan) to 73% of average. Soil moisture is at 58% compared to 59% last year. Reservoir storage is at 59% of capacity, compared to 48% last year. The water availability index for Moab is 69%.

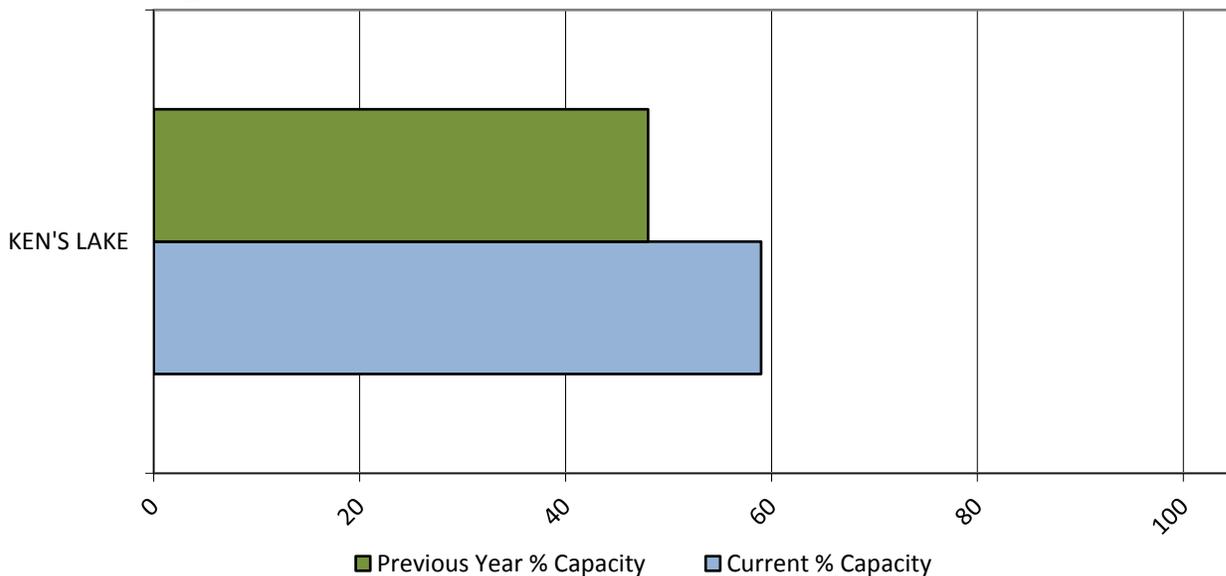
Precipitation



Soil Moisture



Reservoir Storage

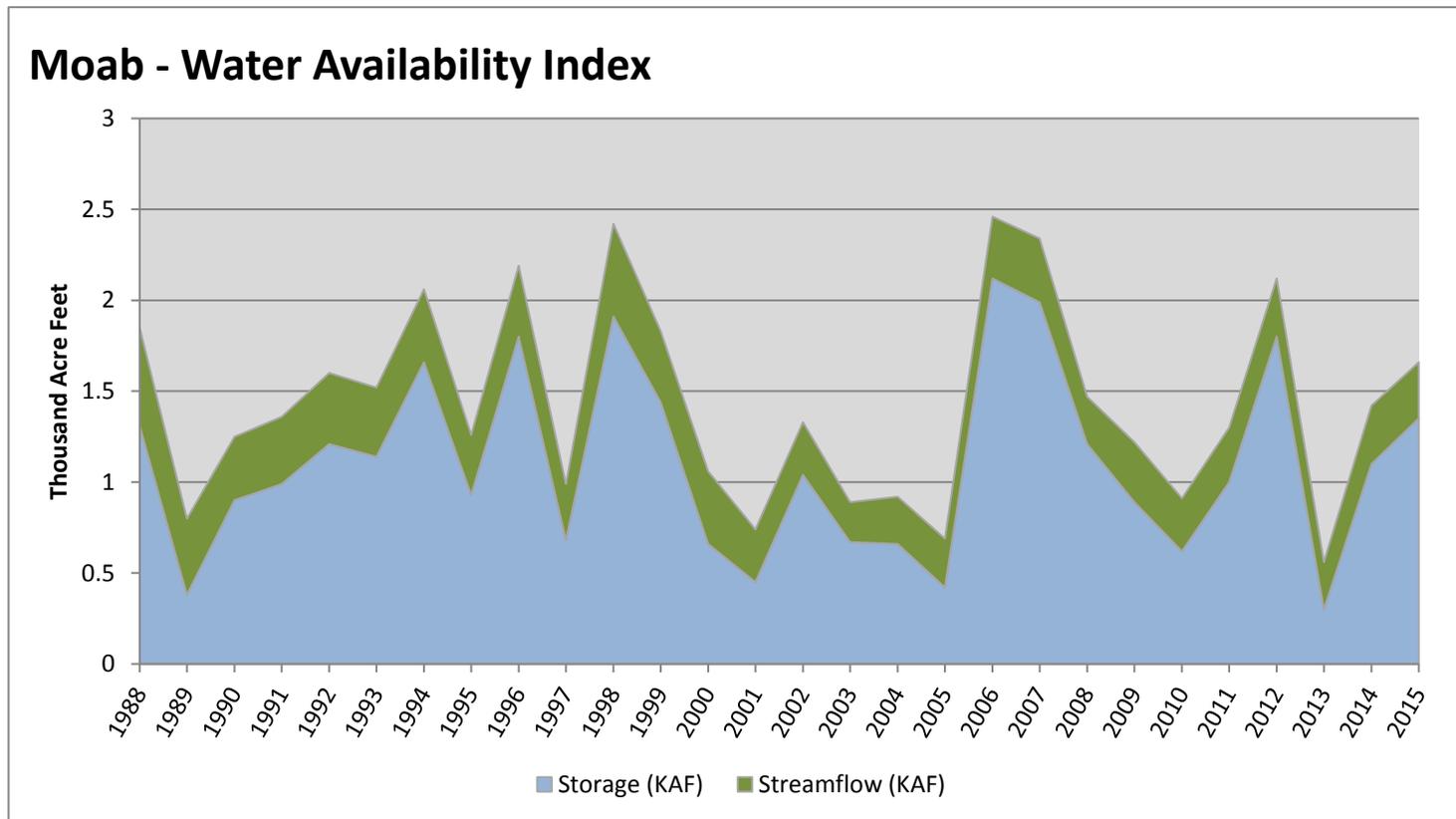


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similiar WAI |
|-----------------|------------------|--------------|----------------|------------|-------------|-------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Moab | 1.35 | 0.31 | 1.66 | 69 | 1.58 | 93, 92, 99, 88 |

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

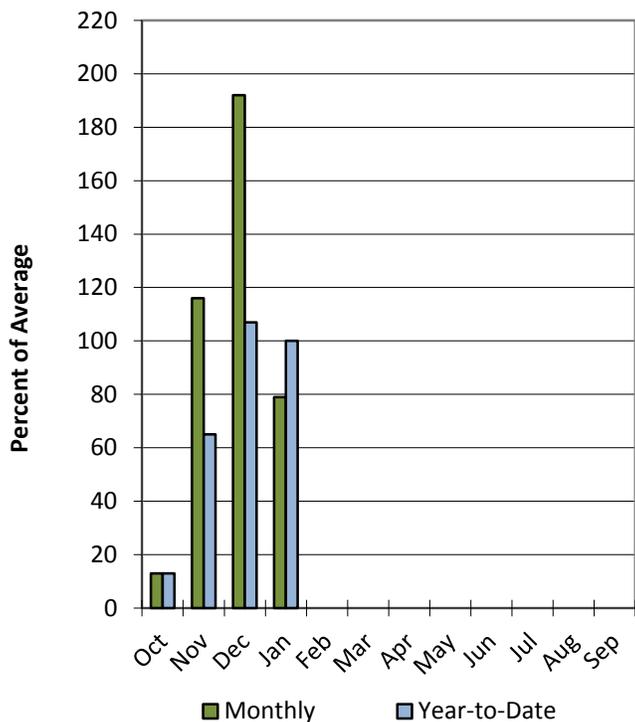


Dirty Devil Basin

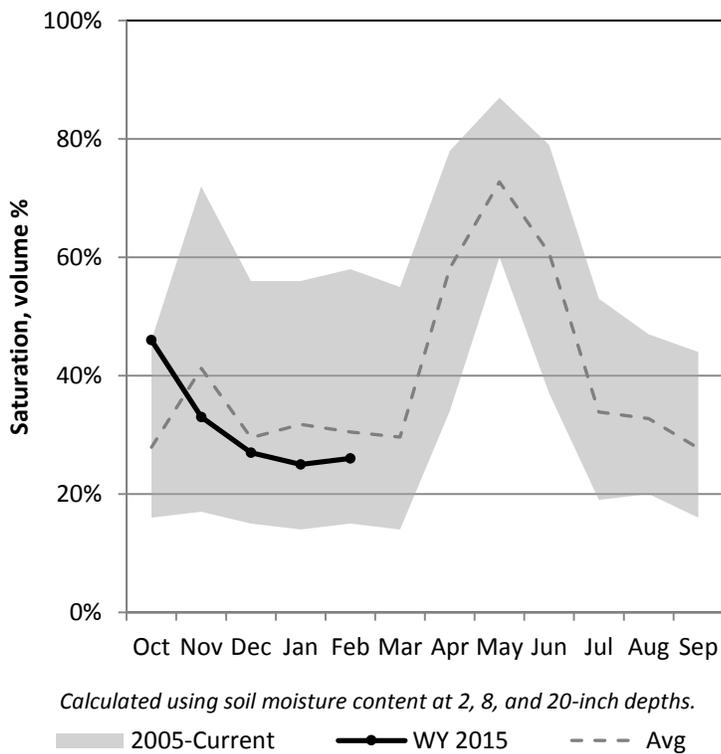
2/1/2015

Precipitation in January was below average at 79%, which brings the seasonal accumulation (Oct-Jan) to 100% of average. Soil moisture is at 26% compared to 29% last year.

Precipitation



Soil Moisture

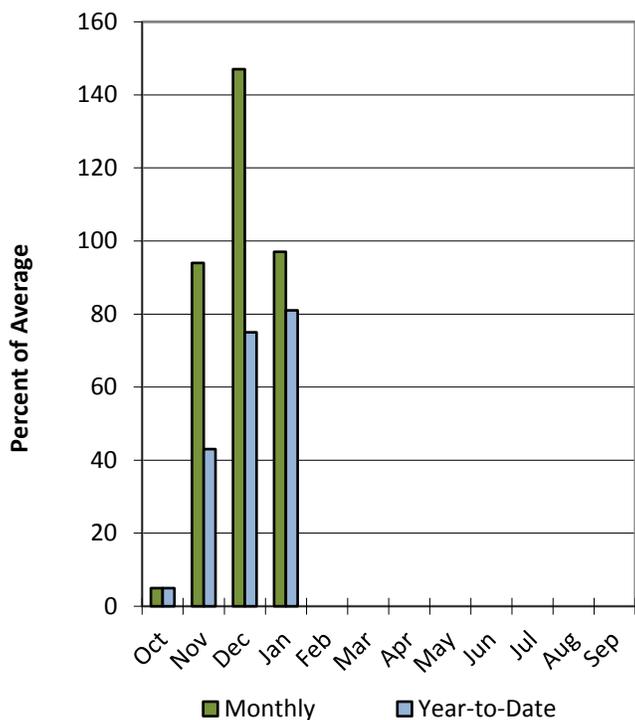


Escalante River Basin

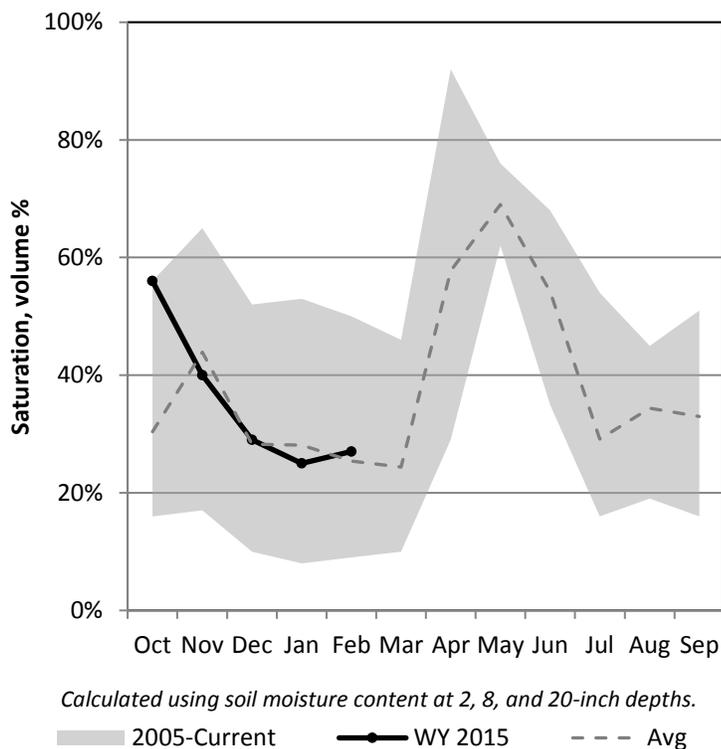
2/1/2015

Precipitation in January was near average at 97%, which brings the seasonal accumulation (Oct-Jan) to 81% of average. Soil moisture is at 27% compared to 37% last year.

Precipitation



Soil Moisture

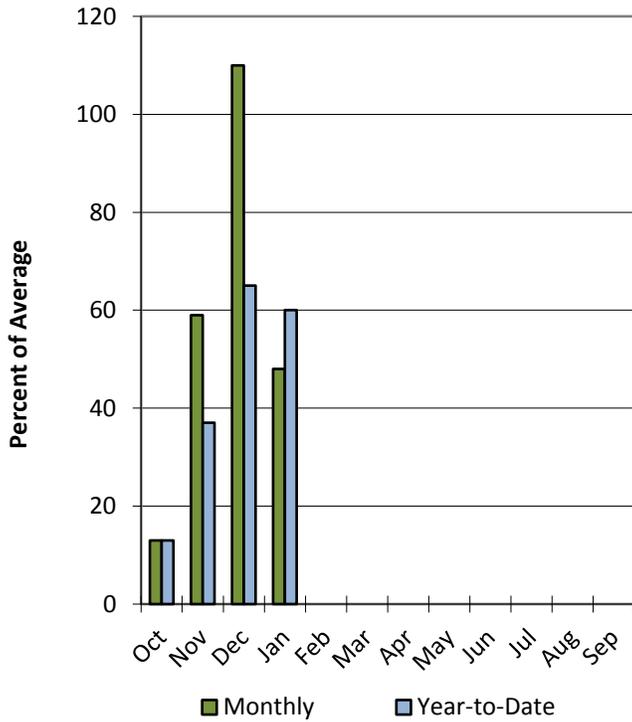


Beaver River Basin

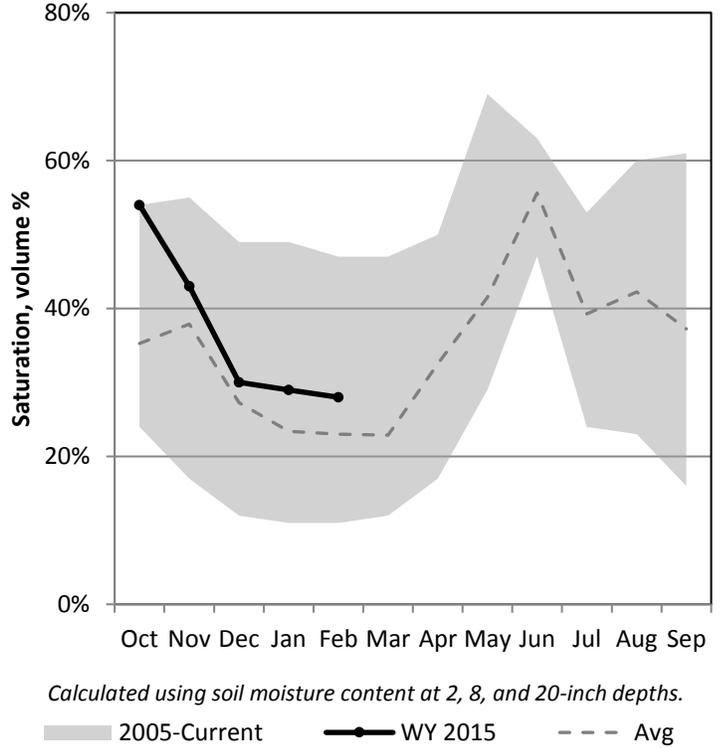
2/1/2015

Precipitation in January was much below average at 48%, which brings the seasonal accumulation (Oct-Jan) to 60% of average. Soil moisture is at 28% compared to 38% last year. Reservoir storage is at 40% of capacity, compared to 46% last year. The water availability index for the Beaver River is 42%.

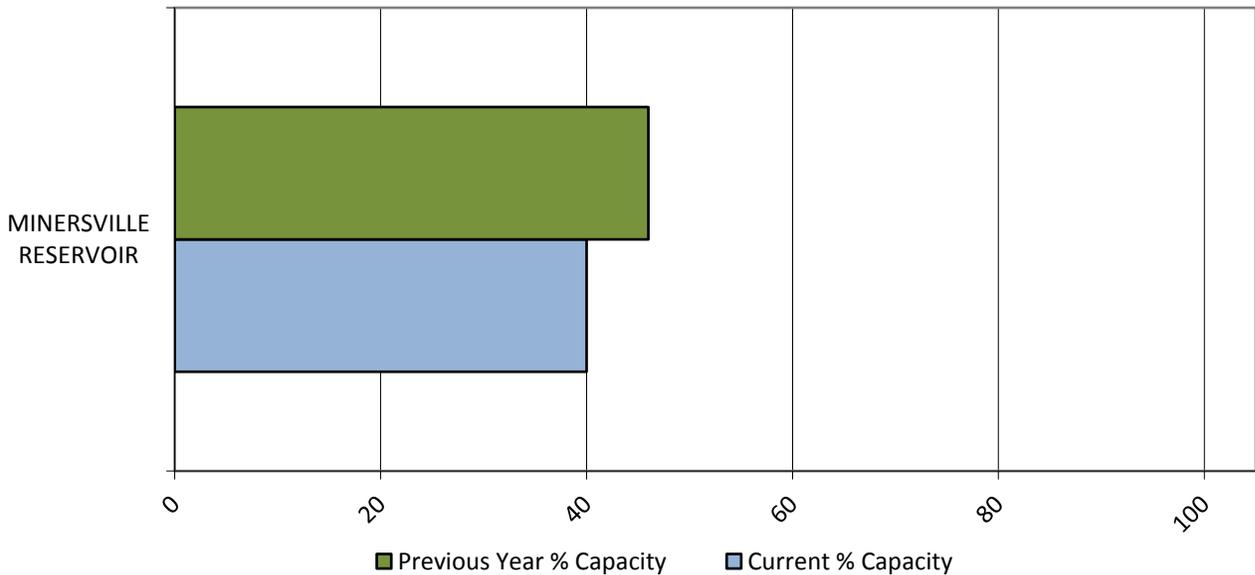
Precipitation



Soil Moisture



Reservoir Storage

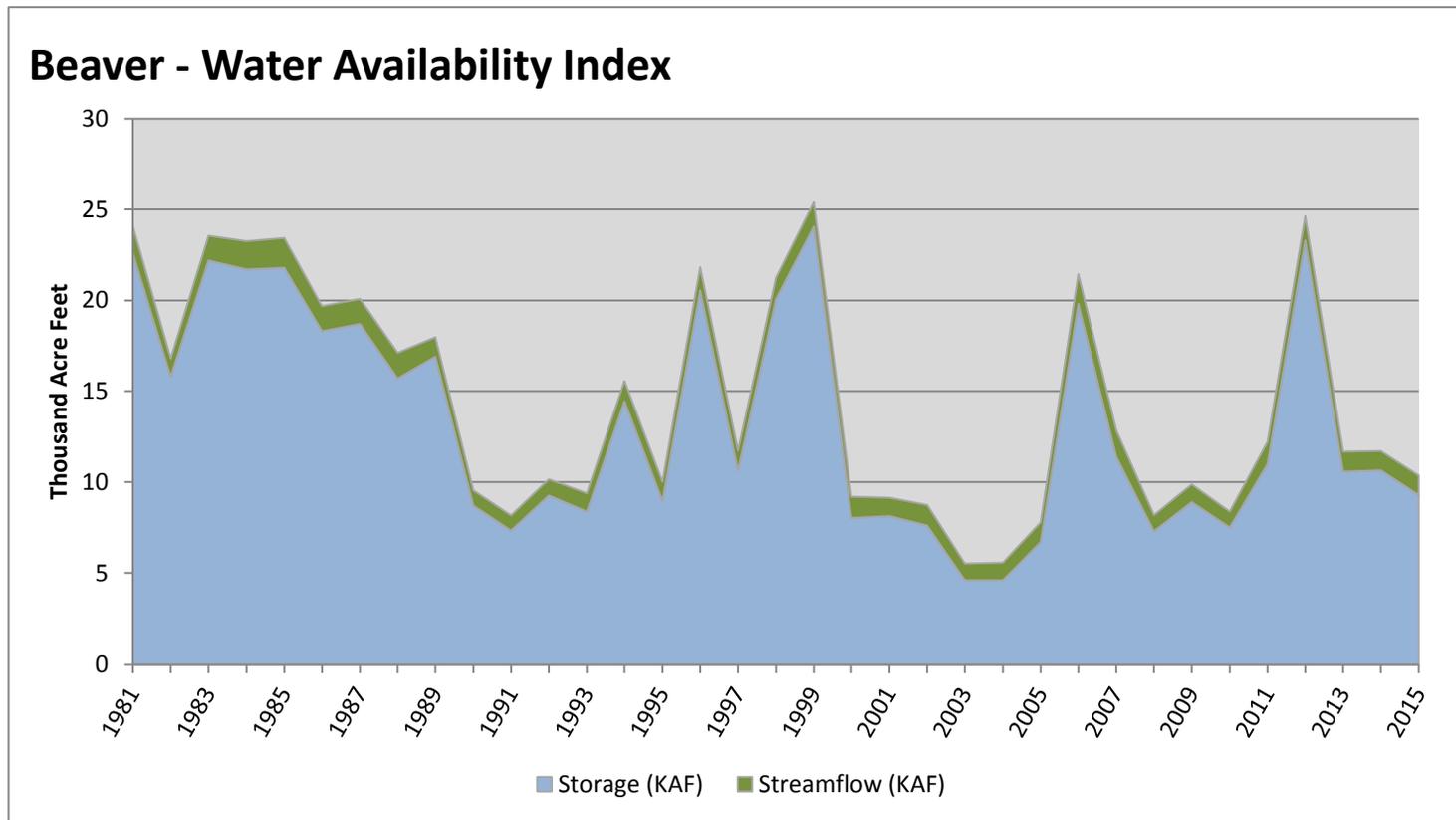


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|-----------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Beaver | 9.28 | 1.09 | 10.37 | 42 | -0.69 | 95, 92, 13, 14 |

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

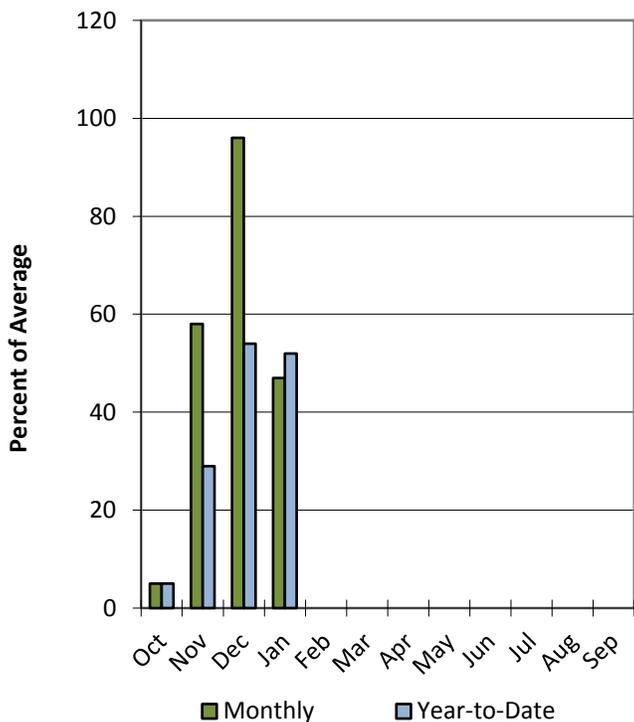


Southwestern Utah Basin

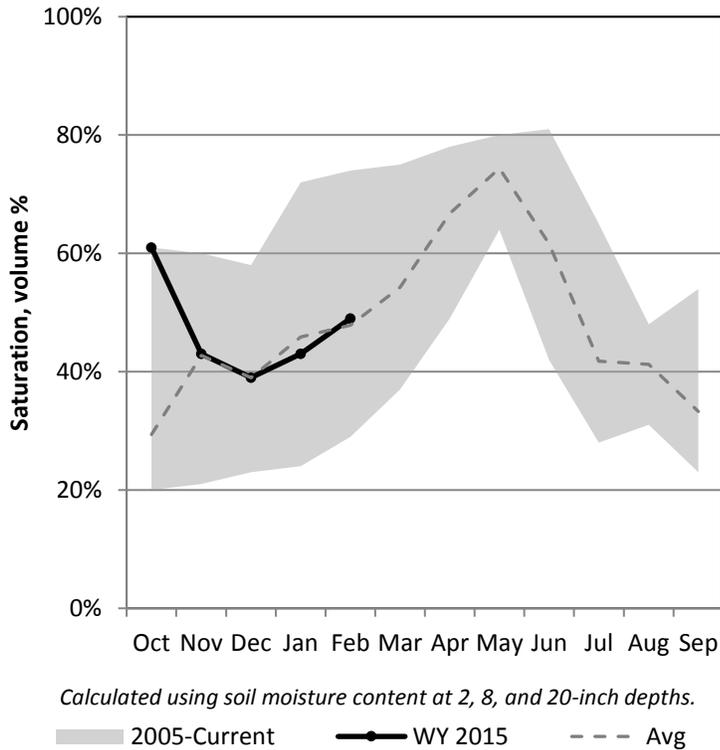
2/1/2015

Precipitation in January was much below average at 47%, which brings the seasonal accumulation (Oct-Jan) to 52% of average. Soil moisture is at 49% compared to 49% last year. Reservoir storage is at 46% of capacity, compared to 40% last year. The water availability index for the Virgin River is 21%.

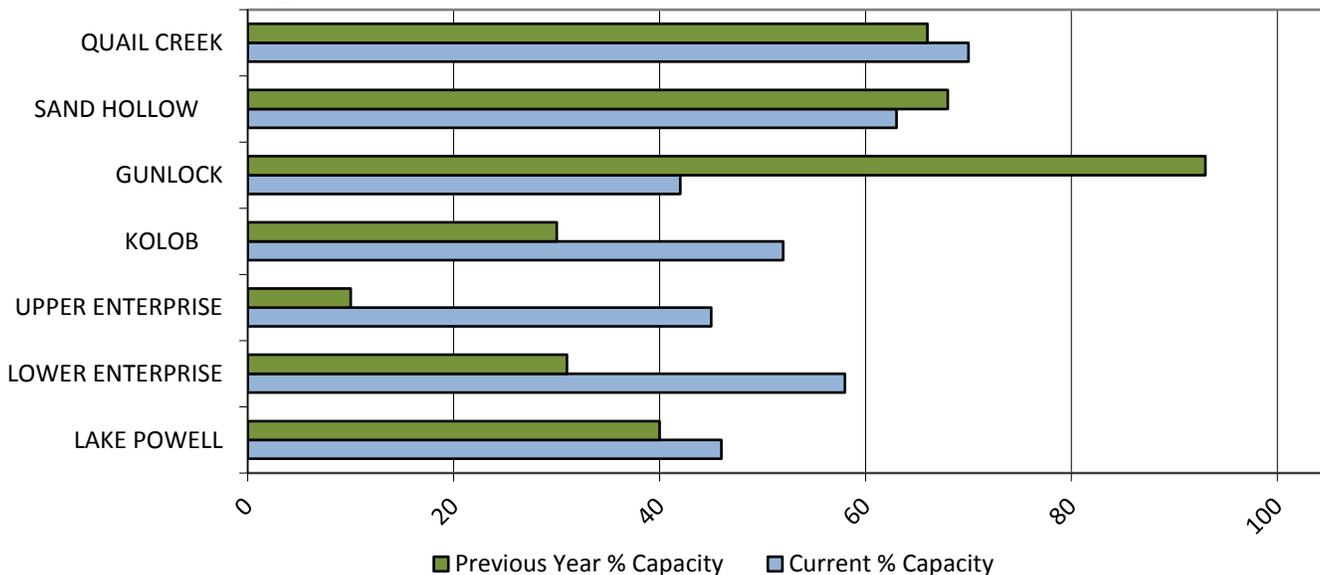
Precipitation



Soil Moisture



Reservoir Storage

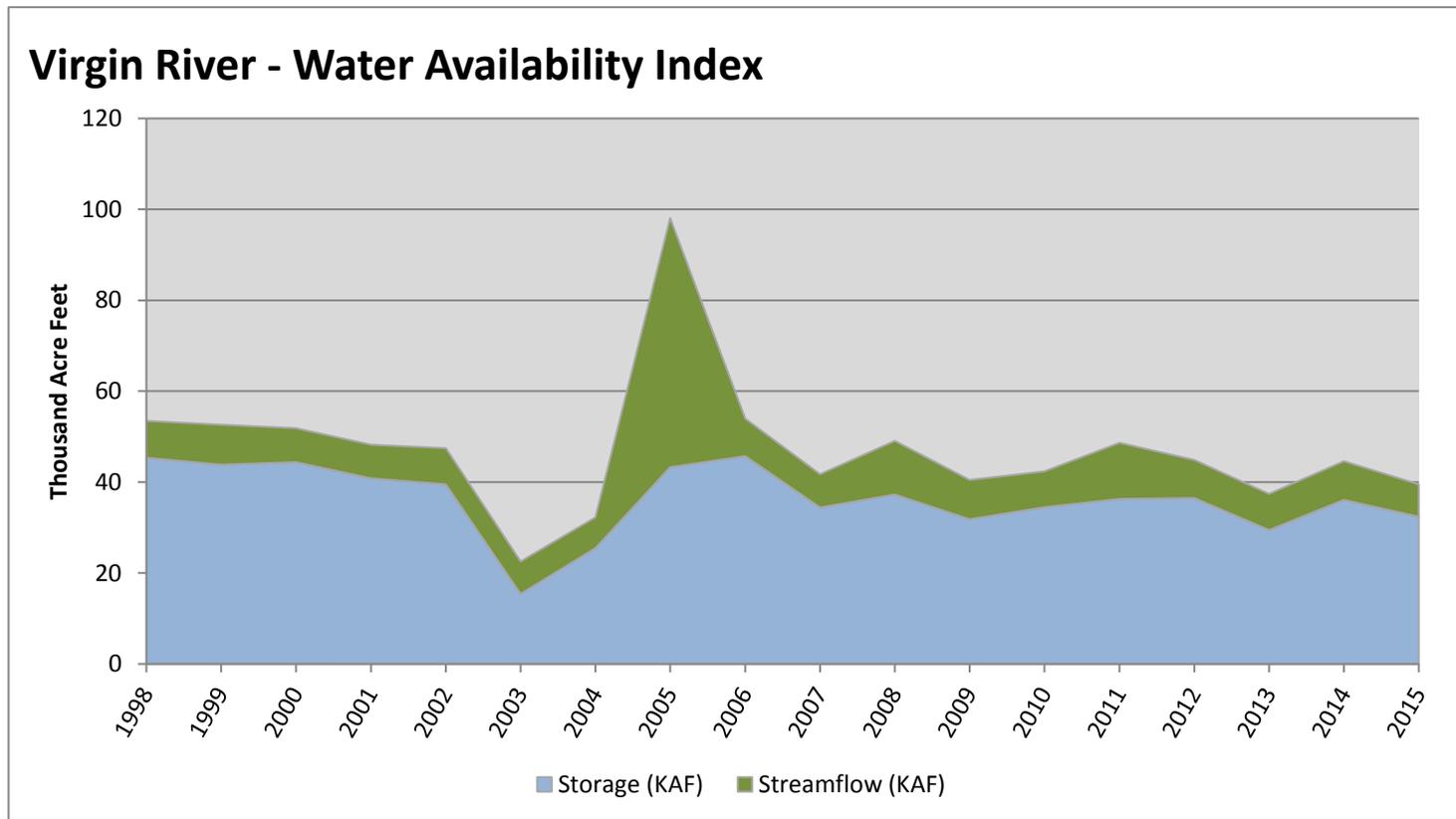


February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM [*] Storage | January Flow | Storage + Flow | Percentile | WAI [#] | Years with similiar WAI |
|---------------------|------------------------------|------------------|------------------|------------|------------------|-------------------------|
| | KAF [^] | KAF [^] | KAF [^] | % | | |
| Virgin River | 32.41 | 7.13 | 39.54 | 21 | -2.41 | 04, 13, 09, 07 |

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



February 1, 2015

Water Availability Index

| Basin or Region | Jan EOM* Storage | January Flow | Storage + Flow | Percentile | WAI# | Years with similar WAI |
|---------------------------|---------------------|--------------|----------------|------------|-------------|------------------------|
| | KAF^ | KAF^ | KAF^ | % | | |
| Bear River | 548 | 9.8 | 558 | 50 | 0.0 | 96, 14, 90, 89 |
| Woodruff Narrows | 40.4 | 3.2 | 43.6 | 67 | 1.4 | 92, 00, 11, 09 |
| Little Bear | 10.1 | 1.8 | 11.9 | 33 | -1.4 | 14, 02, 13, 94 |
| Ogden | 65.7 | 2.1 | 67.8 | 69 | 1.6 | 95, 90, 10, 11 |
| Weber | 114.8 | 17.3 | 132.1 | 38 | -1.0 | 03, 08, 95, 05 |
| Provo River | 330.4 | 1.4 | 331.8 | 38 | -1.0 | 13, 05, 02, 09 |
| Western Uintah | 189.0 | 3.1 | 192.2 | 90 | 3.3 | 00, 12, 96, 88 |
| Eastern Uintah | 27.7 | 2.3 | 29.9 | 25 | -2.1 | 94, 95, 93, 89 |
| Blacks Fork | 22.5 | 4.0 | 26.5 | 97 | 3.9 | 99, 85, 84, 96 |
| Price | 12.2 | 1.1 | 13.3 | 17 | -2.8 | 05, 90, 94, 14 |
| Smiths Creek | 8.5 | 0.6 | 9.1 | 91 | 3.4 | 88, 85, 99, 87 |
| Joes Valley | 40.7 | 1.1 | 41.9 | 42 | -0.7 | 82, 89, 01, 08 |
| Moab | 1.4 | 0.3 | 1.7 | 69 | 1.6 | 93, 92, 99, 88 |
| Upper Sevier River | 70.1 | 8.3 | 78.4 | 33 | -1.4 | 08, 11, 13, 01 |
| San Pitch | 0.2 | 0.3 | 0.5 | 3 | -3.9 | 13, 93, 14, 03 |
| Lower Sevier | 91.6 | 13.7 | 105.3 | 17 | -2.8 | 03, 10, 11, 91 |
| Beaver | 9.3 | 1.1 | 10.4 | 42 | -0.7 | 95, 92, 13, 14 |
| Virgin River | 32.4 | 7.1 | 39.5 | 21 | -2.4 | 04, 13, 09, 07 |

*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.

Issued by

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

Released by

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

Prepared by

Snow Survey Staff
Randall Julander, Supervisor
Troy Brosten, Assistant Supervisor
Beau Uriona, Hydrologist
Jordan Clayton, Hydrologist
Kent Sutcliffe, Soil Scientist
Jeffrey O'Connell, Hydrologist
Bob Nault, Electronics Technician



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/>

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



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Salt Lake City, UT

