

Utah Climate and Water Report

March 2011



Panguitch SCAN

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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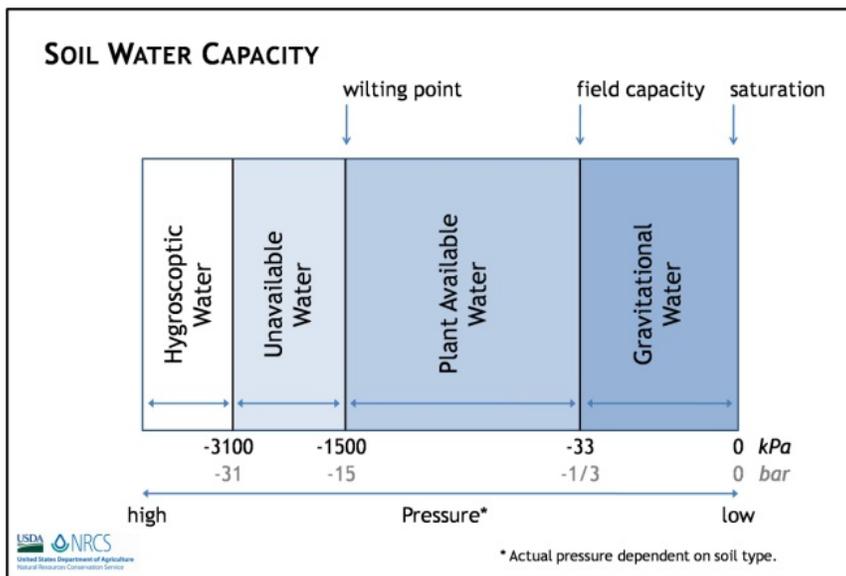
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Climate and Water Information

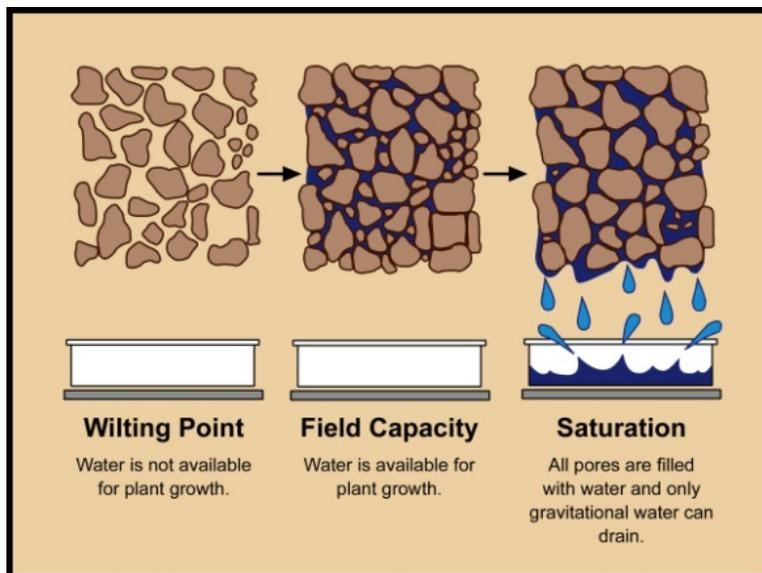
Soil Climate Analysis Network

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

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

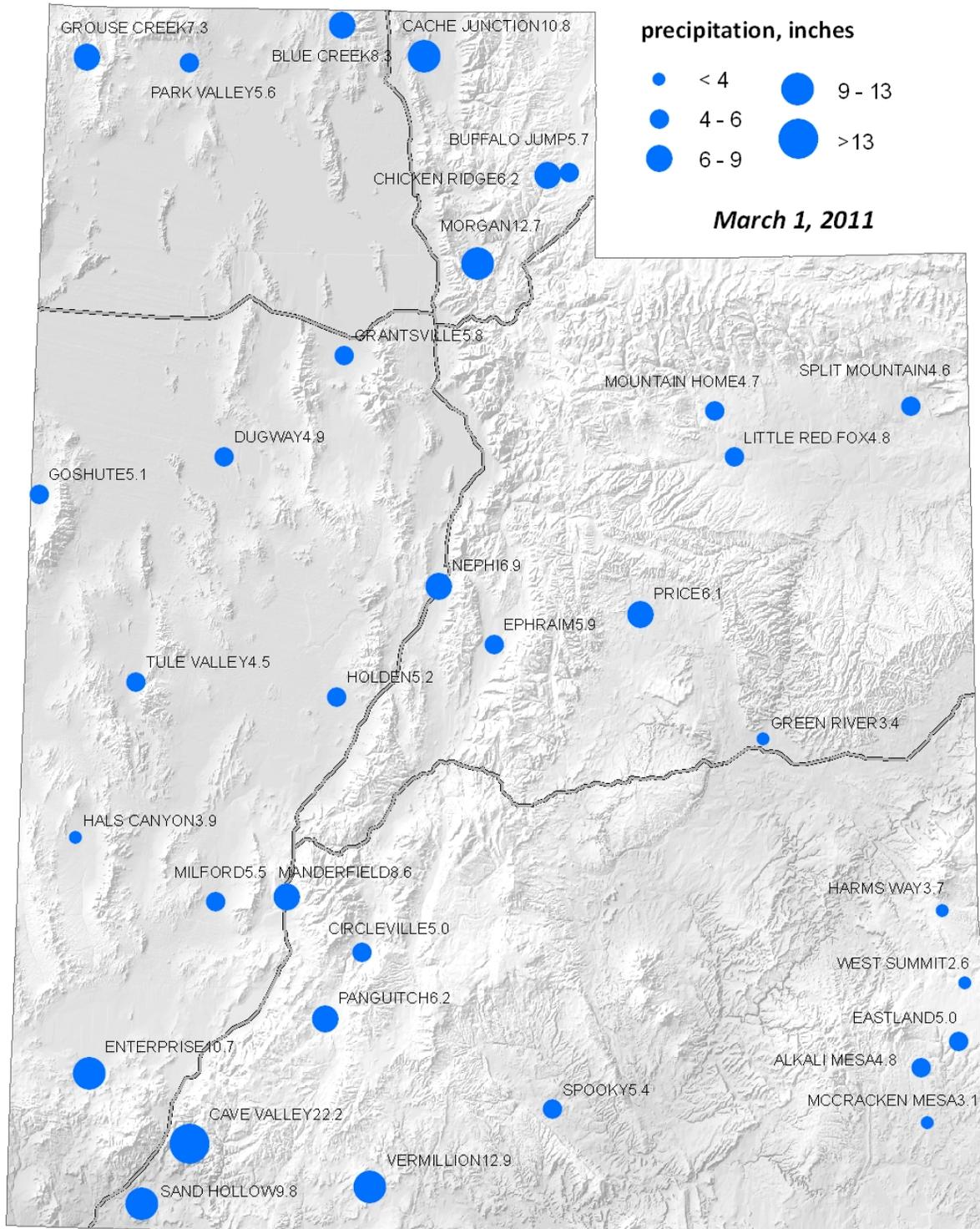


Explanation of soil water capacity definitions. Field capacity (FC) and wilting point (WP) are calculated in the laboratory for each soil horizon. The amount of water held between field capacity and wilting point is plant available.



Visual explanation of soil water capacity definitions.

Utah SCAN Water Year Precipitation *



*since October 1, 2010. Data based on the first reading of the day.

Provisional Data Subject to Revision

Prepared by the USDA/NRCS Utah DCO
 Salt Lake City, Utah
<http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html>
 Science contact: Karen Vaughan
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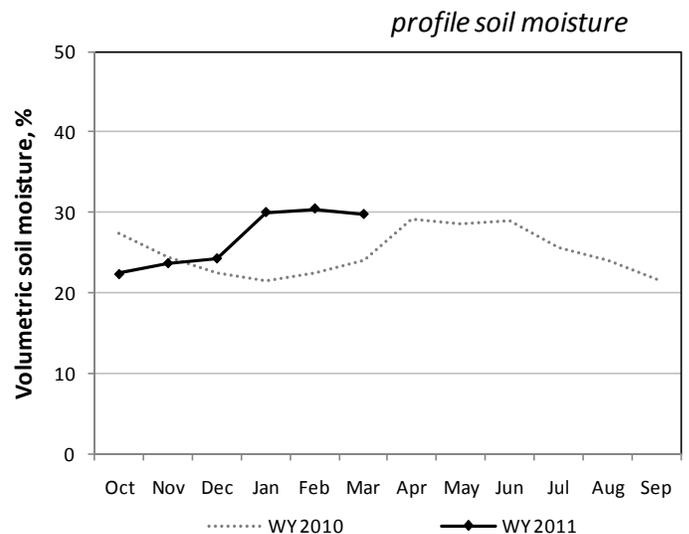
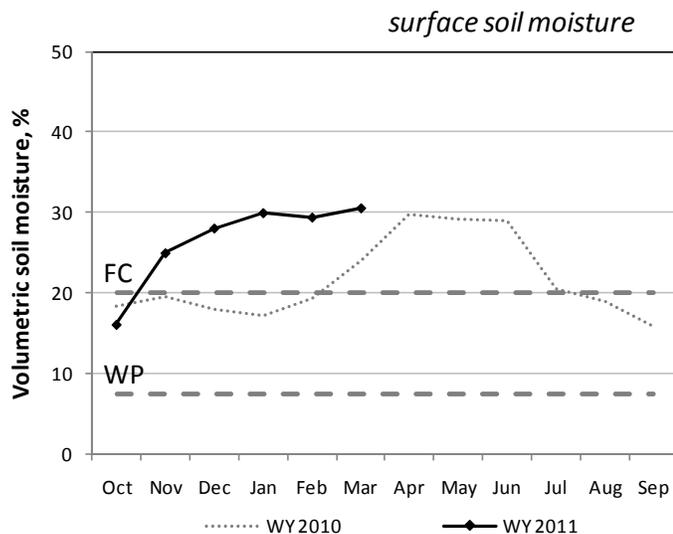
North Central

Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
NORTH CENTRAL														
Blue Creek	<i>Box Elder</i>	8.3	1.0	32	33	33	37	34	22	32	33	33	35	38
Cache Junction	<i>Cache</i>	10.8	1.4	32	36	40	40	34	38	32	33	34	36	39
Grantsville	<i>Tooele</i>	5.8	0.3	32	22	2	24	26	22	35	37	39	42	46

*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. 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

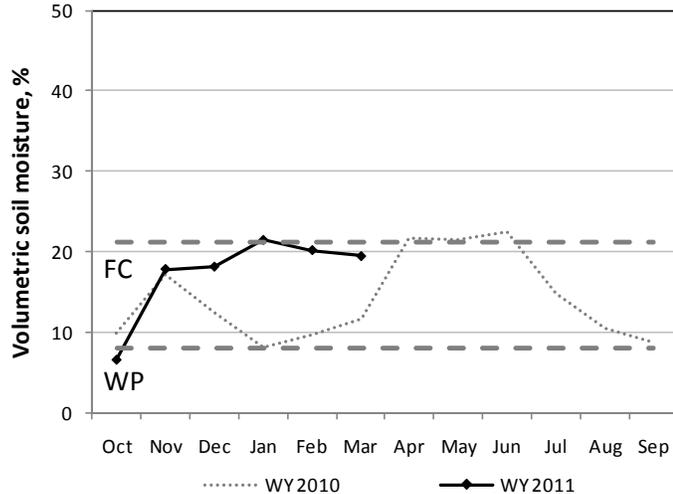
Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
NORTHERN MOUNTAINS														
Chicken Ridge	<i>Morgan</i>	6.2	0.5	32	19	14	20	18	23	33	33	34	34	33
Buffalo Jump	<i>Rich</i>	5.7	0.4	32	9	12	16	14	-	30	31	32	34	-
Morgan	<i>Morgan</i>	12.7	1.5	32	25	27	28	17	8	33	33	33	33	34

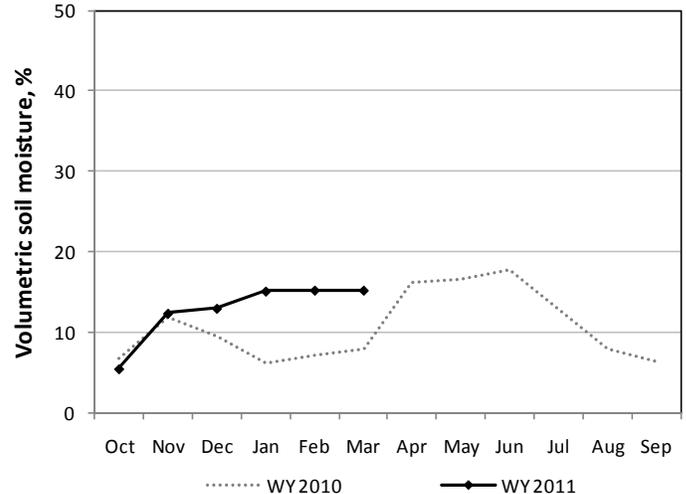
*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

Northern Mountains

surface soil moisture



profile soil moisture



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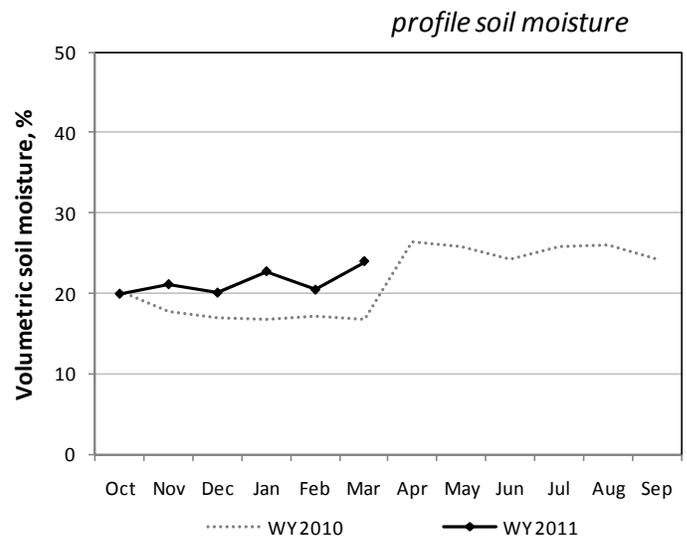
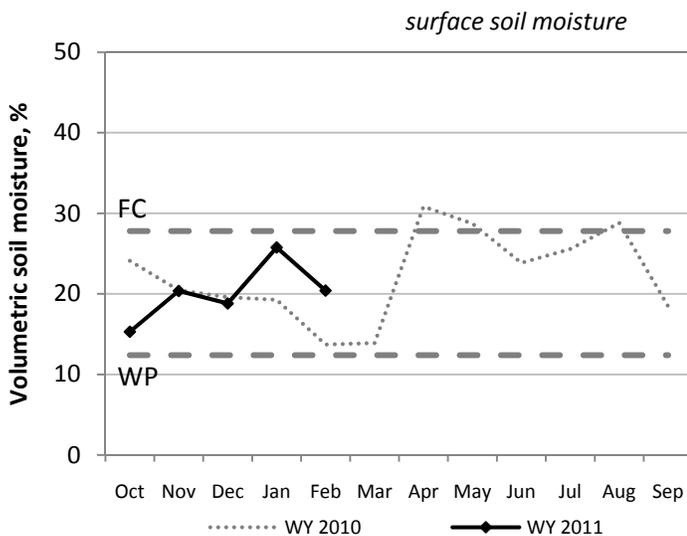
Uintah Basin

Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
UINTAH BASIN														
Mountain Home	<i>Duchesne</i>	4.7	0.6	32	25	32	33	19	11	32	33	33	34	37
Little Red Fox	<i>Duchesne</i>	4.8	0.7	32	21	36	46	39	44	32	31	32	33	35
Split Mountain	<i>Uintah</i>	4.6	0.3	32	11	19	13	12	9	32	31	30	30	33

*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

Uintah Basin



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

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

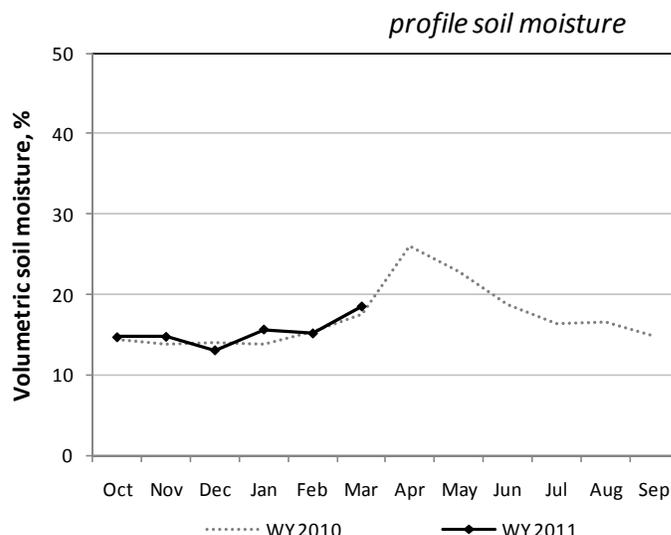
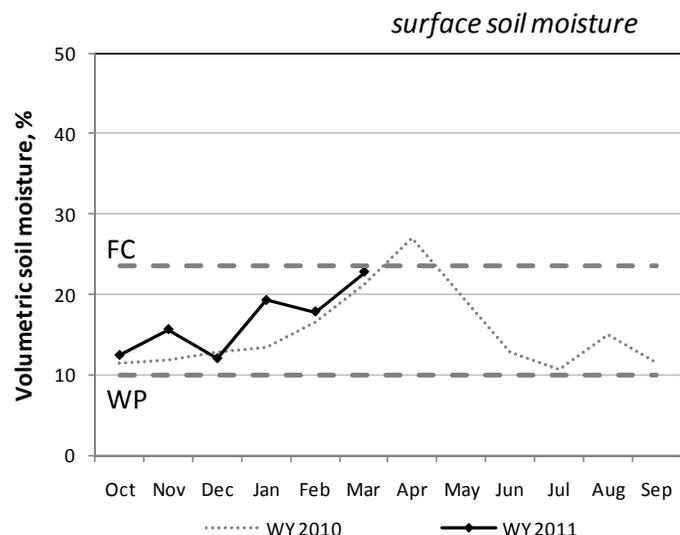
Southeast

Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
SOUTHEAST														
Price	<i>Carbon</i>	6.1	1.0	32	13	26	31	12	15	33	34	33	34	36
Green River	<i>Emery</i>	3.4	0.0	32	16	18	15	4	8	36	38	40	39	40
Harm's Way	<i>San Juan</i>	3.7	0.1	32	23	21	30	27	13	33	33	33	35	37
West Summit	<i>San Juan</i>	2.6	0.3	32	15	17	15	13	18	31	32	32	32	36
Eastland	<i>San Juan</i>	5.0	0.3	32	31	28	25	32	35	32	33	33	35	38
Alkali Mesa	<i>San Juan</i>	4.8	0.2	32	22	29	28	17	12	32	32	32	34	36
McCracken Mesa	<i>San Juan</i>	3.1	0.1	32	20	24	23	15	13	39	41	41	40	43

*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

Southeast



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

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

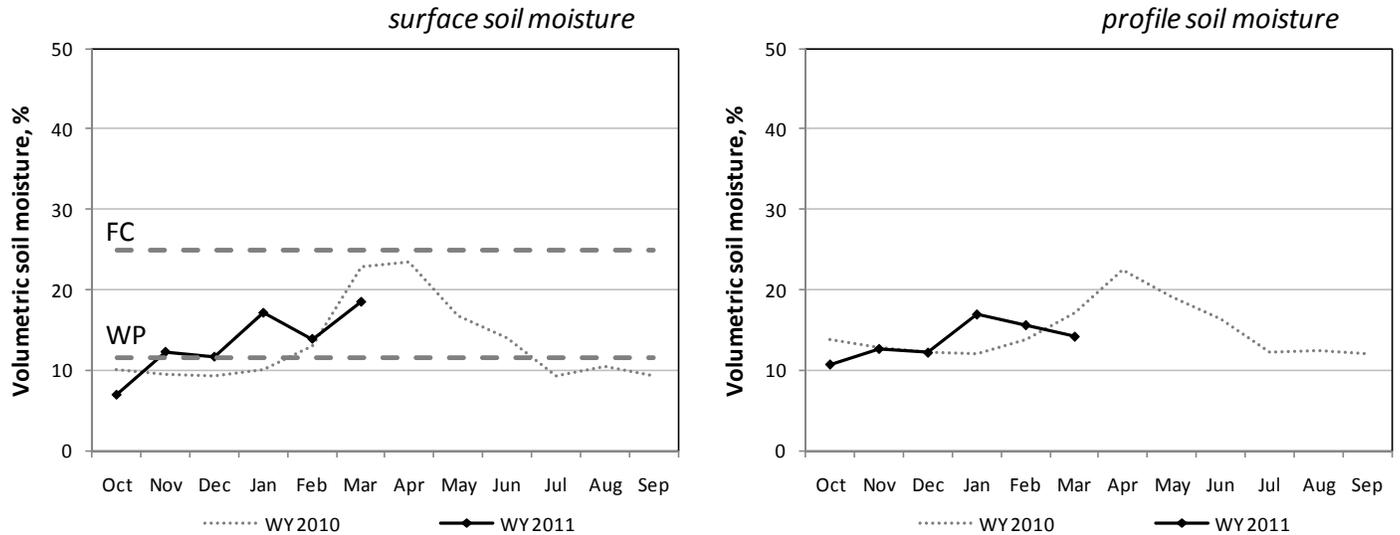
South Central

Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
SOUTH CENTRAL														
Nephi	<i>Juab</i>	6.9	1.1	32	32	32	29	14	nd	32	32	33	35	38
Ephraim	<i>Sanpete</i>	5.9	1.0	32	27	18	32	27	29	31	32	32	33	37
Holden	<i>Millard</i>	5.2	0.5	32	15	13	12	20	11	35	35	35	35	39
Milford	<i>Beaver</i>	5.5	0.4	32	37	41	38	38	15	32	32	33	35	39
Manderfield	<i>Beaver</i>	8.6	0.5	32	18	30	30	23	10	32	33	33	35	37
Circleville	<i>Piute</i>	5.0	0.4	32	29	12	14	17	7	32	32	32	33	37
Panguitch	<i>Garfield</i>	6.2	0.7	32	12	20	15	27	32	31	31	31	33	37
Cave Valley	<i>Washington</i>	22.2	2.0	32	0	8	6	6	6	33	33	33	35	36
Vermillion	<i>Kane</i>	12.9	1.9	32	6	5	4	13	25	32	32	32	33	35
Spooky	<i>Kane</i>	5.4	0.6	32	8	8	8	23	3	37	36	39	39	40

*since October 1, 2010. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

South Central



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

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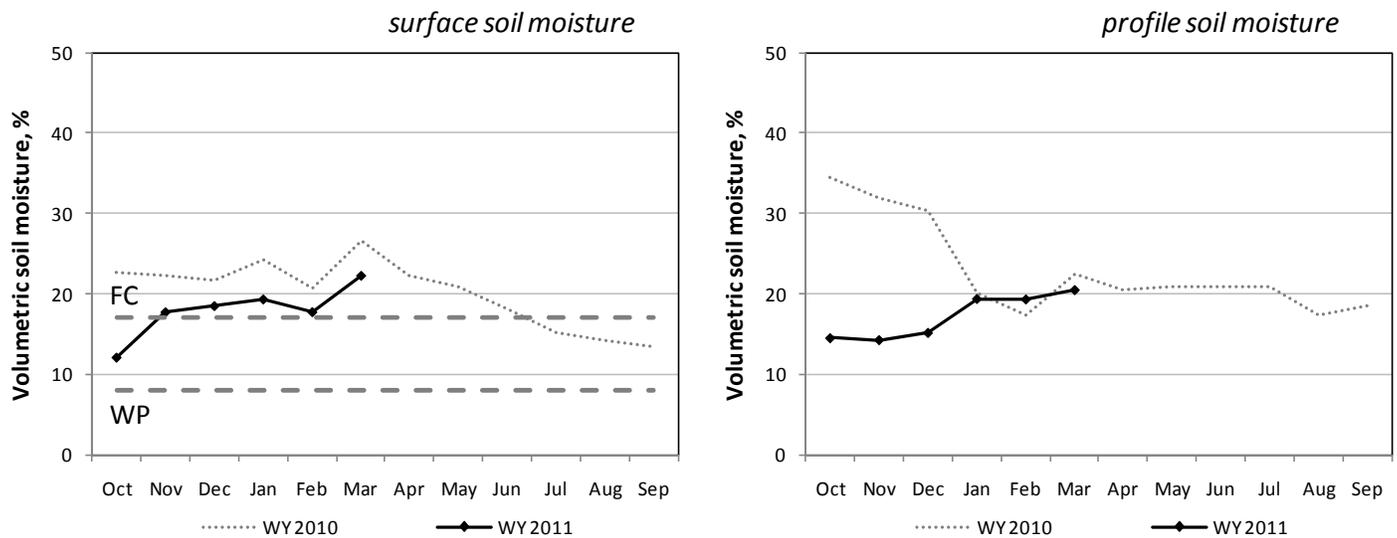
Western and Dixie

Soil Climate Analysis Network (SCAN)

Site name	County	Precip to Date*	Monthly Precip	Avg Air Temp	Soil Moisture					Soil Temperature				
					2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
		<i>in.</i>	<i>in.</i>	<i>° F</i>	<i>volume %</i>					<i>° F</i>				
WESTERN														
Grouse Creek	<i>Box Elder</i>	7.3	0.6	32	7	23	26	29	28	32	33	34	35	38
Park Valley	<i>Box Elder</i>	5.6	1.2	32	8	16	26	29	27	32	32	33	35	39
Goshute	<i>Tooele</i>	5.1	0.9	32	19	34	23	26	29	32	33	33	34	38
Dugway	<i>Tooele</i>	4.9	0.4	32	22	34	37	nd	11	35	36	37	39	40
Tule Valley	<i>Millard</i>	4.5	0.4	32	27	27	20	21	6	32	34	36	37	40
Hal's Canyon	<i>Millard</i>	3.9	0.2	32	4	19	20	7	7	32	33	33	34	37
Enterprise	<i>Washington</i>	10.7	0.8	32	19	43	40	28	33	34	35	35	36	39
DIXIE														
Sand Hollow	<i>Washington</i>	9.8	1.6	32	6	6	6	9	4	38	42	46	47	48

*since October 1, 2010, (nd) no data. Monthly Precip is the amount of precipitation accumulated in the past month and Avg Air Temp is the average air temperature measured at the SCAN station. Soil moisture and temperature values reflect conditions measured on the first of the month.

Western & Dixie



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

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

2010 Minimum Soil Temperatures at Utah SCAN sites

Minimum soil temperatures and number of days less than or equal to 32°F.

Site Name	2-inch		4-inch		8-inch		20-inch		40-inch	
	min. temp	#								
	°F	days								
Alkali Mesa	23	34	22	45	29	5	34	0	36	0
Blue Creek	20	64	24	26	26	22	33	0	38	0
Buffalo Jump	19	125	24	121	26	113	31	68	R	
Cache Junction	22	83	24	54	27	50	34	0	38	0
Chicken Ridge	23	133	26	102	26	92	33	0	35	0
Circleville	19	82	21	96	21	127	29	29	37	0
Dugway	15	56	21	39	26	28	35	0	37	0
Eastland	28	38	31	23	32	0	34	0	36	0
Enterprise	23	52	29	32	30	27	34	0	40	0
Ephraim	18	105	26	56	30	6	35	0	38	0
Grantsville	22	65	27	42	32	7	38	0	46	0
Green River	15	99	16	94	21	89	27	44	35	0
Holden	26	27	27	29	29	21	33	0	41	0
Lightning Ridge	32	12	34	0	33	0	33	0	35	0
Little Red Fox	28	43	29	44	30	41	33	0	36	0
McCracken Mesa	26	55	31	8	33	0	36	0	40	0
Milford	22	43	27	26	29	11	36	0	42	0
Morgan	24	80	26	82	27	56	32	1	34	0
Mountain Home	25	27	28	19	30	11	34	0	38	0
Nephi	24	34	27	22	30	6	36	0	39	0
Panguitch	25	53	28	35	29	29	33	0	38	0
Price	15	79	21	71	25	50	32	0	37	0
Sand Hollow	33	0	36	0	40	0	43	0	46	0
Split Mountain	18	53	20	52	23	51	28	41	34	0
West Summit	20	53	22	55	28	6	33	0	36	0

min. temp, minimum temperature recorded; #, number of days less than or equal to 32°F; R, bedrock; site installation not complete in time to calculate 2010 frost depth at Harm's Way, Goshute, Hal's Canyon, Tule Valley, Vermillion, Cave Valley, Grouse Creek, Spooky, Manderfield, and Park Valley.

Utah Hydrologic Summary

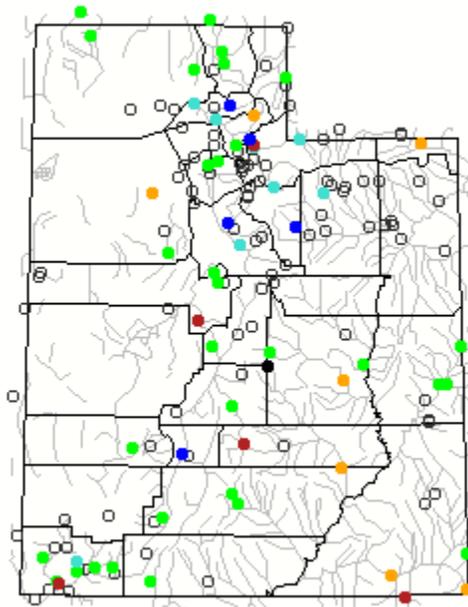
March 1, 2011

Current Conditions

Soil moisture uniformly across the state are extremely high – at or above recorded levels. Precipitation across the state was near to above normal for February (96%-124%). Snowpack across the state remains above average and in some cases is above the average for April 1. Reservoir storage is generally high across the state as well. Water supply conditions across the state are excellent.

Current Utah Streamflow - Courtesy US Geological Survey

Wed., Mar. 02, 2011 15:30ET



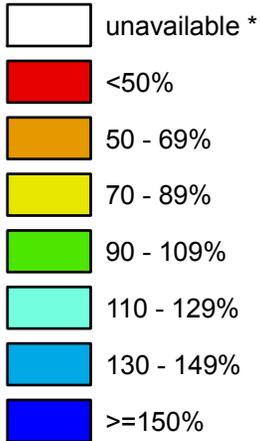
Explanation - Percentile classes							
							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not ranked

Utah

SNOTEL Current Snow Water Equivalent (SWE) % of Normal

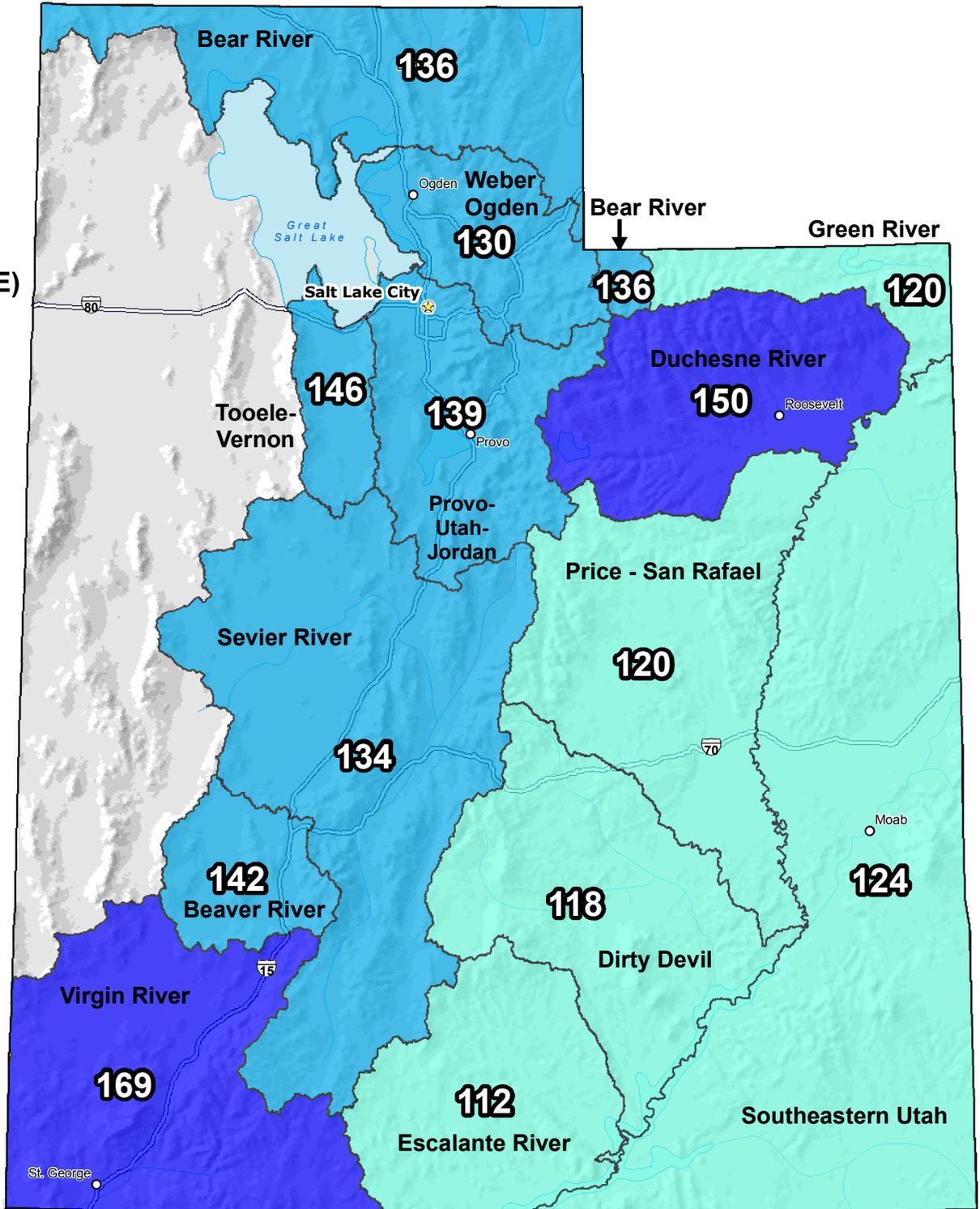
Mar 01, 2011

**Snow Water Equivalent (SWE)
Basin-wide
Percent of
1971-2000
Normal**



* Data unavailable at time of posting or measurement is not representative at this time of year

**Provisional Data
Subject to Revision**



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

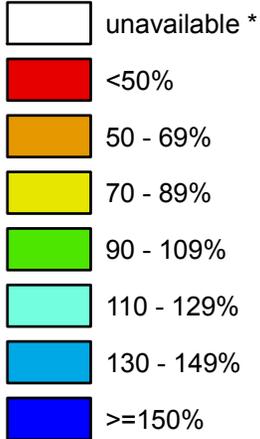
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Utah

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

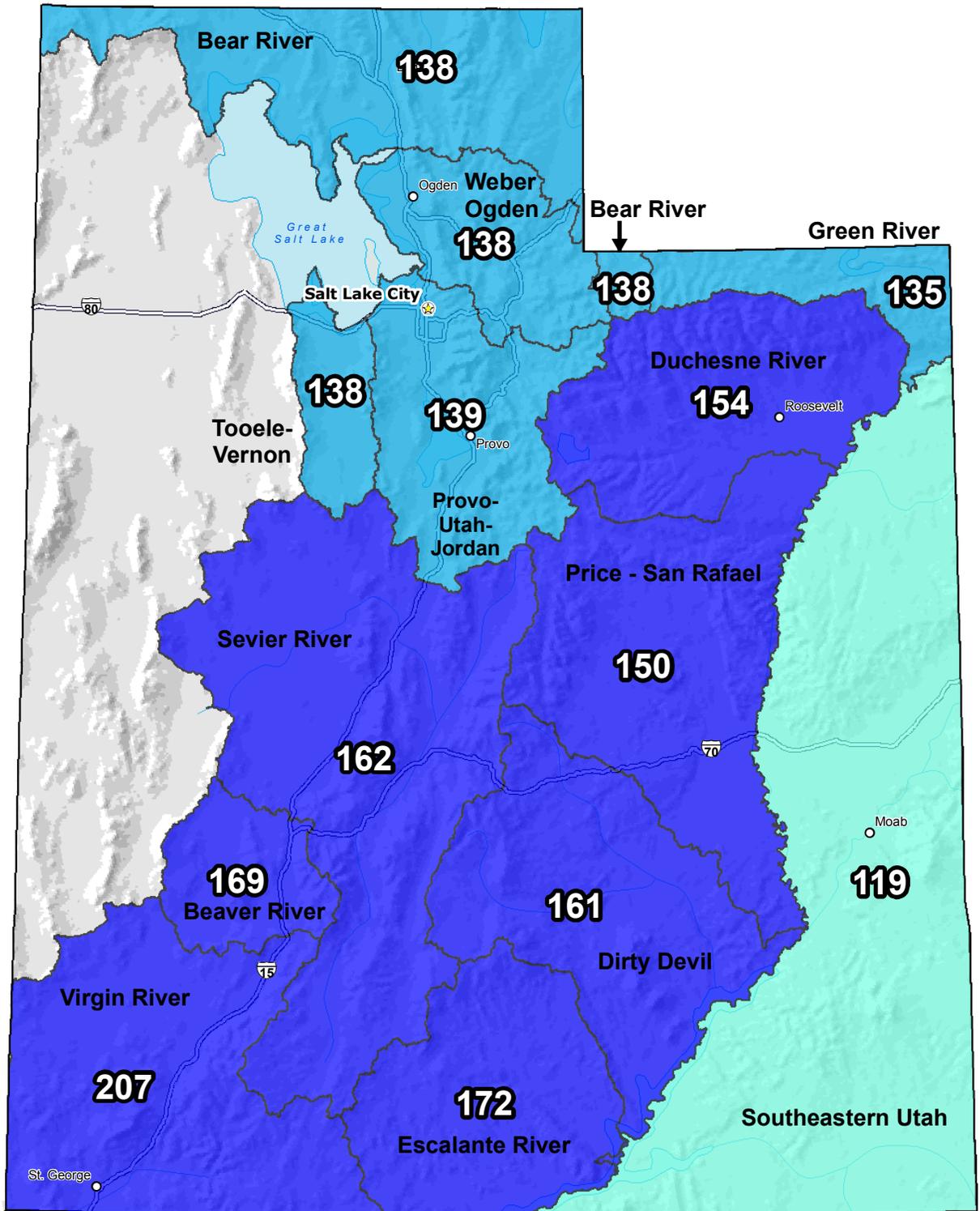
Mar 01, 2011

**Water Year
(Oct 1) to Date
Precipitation
Basin-wide
Percent of
1971-2000
Normal**



* Data unavailable at time of posting or measurement is not representative at this time of year

**Provisional Data
Subject to Revision**



The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

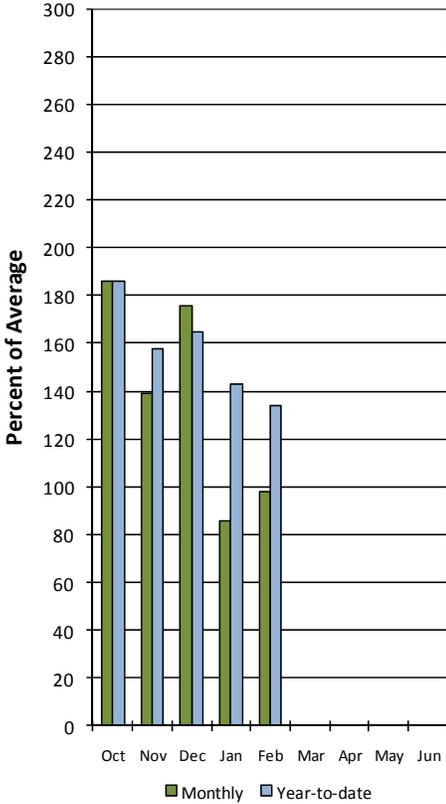
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Bear River Basin March 1, 2011

Precipitation in February was average at 98% which brings the water year accumulation to 134%. Reservoir storage is low at 35% of capacity, which is 1% lower than this time last year. Soil moisture is at 69% compared to 51% last year.

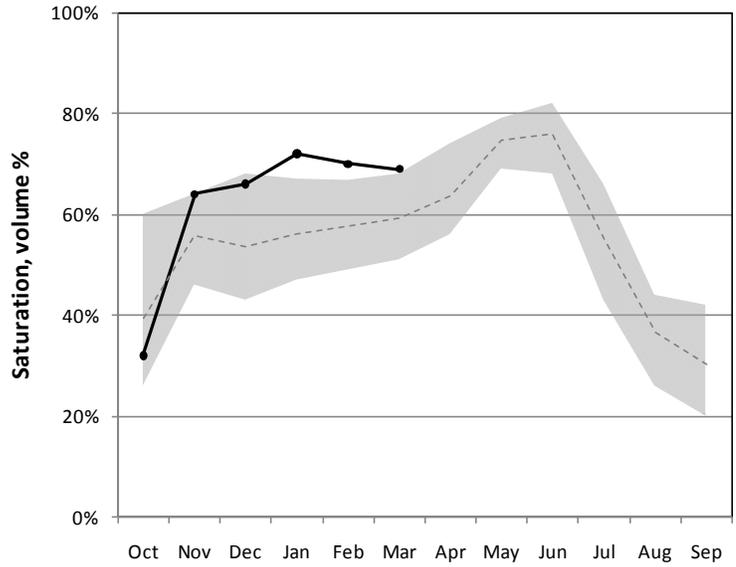
Bear River Precipitation

3/1/2011



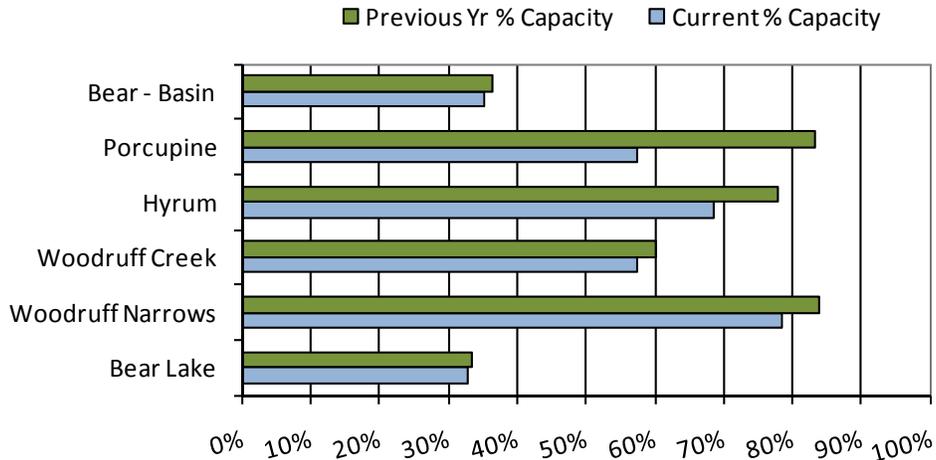
Bear River Soil Moisture

—●— WY 2011 - - - - mean



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Bear River Reservoir Storage



March 1, 2011

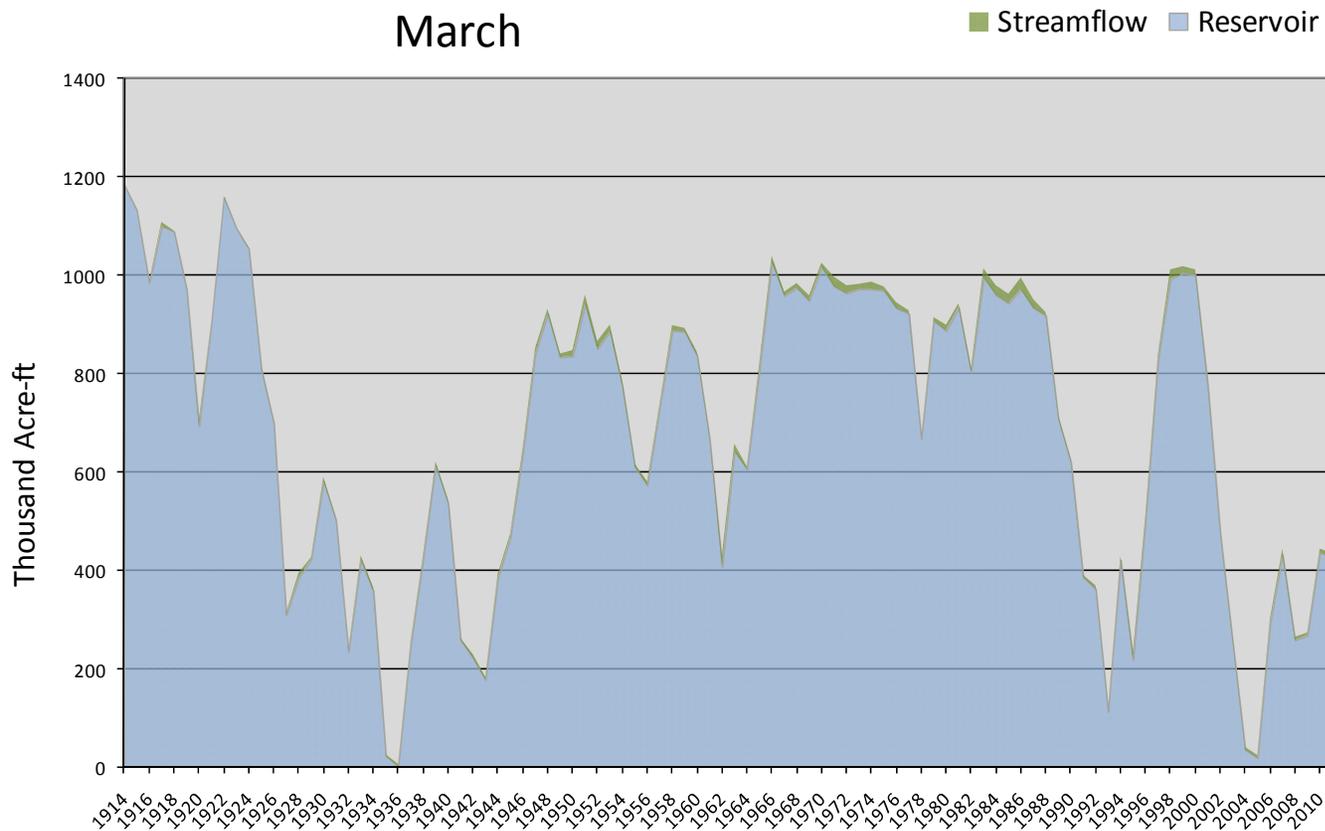
Water Availability Index

Basin or Region	February EOM* Bear Lake	February accumulated inflow to Bear Lake (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Bear River	427	7.3	434	-1.89	27	33,38,07,10

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

Bear Lake - Water Availability Index

March



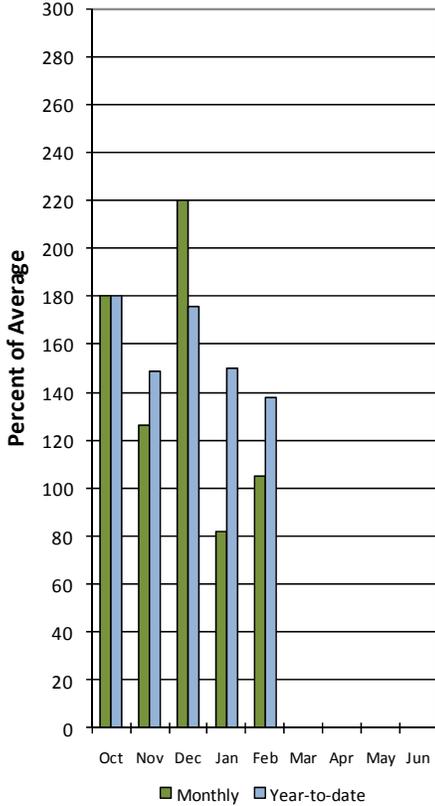
Weber and Ogden River Basin

March 1, 2011

Precipitation in February was average at 105% which brings the water year accumulation to 138%. Reservoir storage is at 72% of capacity, which is 2% lower than this time last year. Soil moisture is at 67% compared to 50% last year.

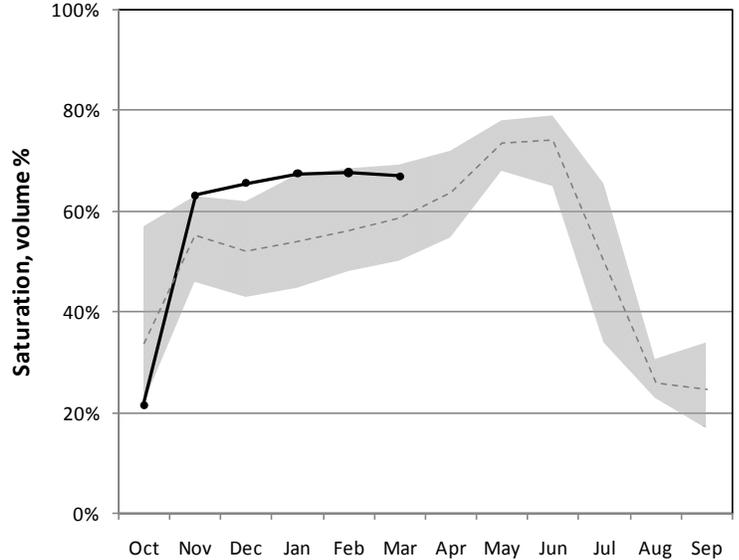
Weber River Precipitation

3/1/2011



Weber River Soil Moisture

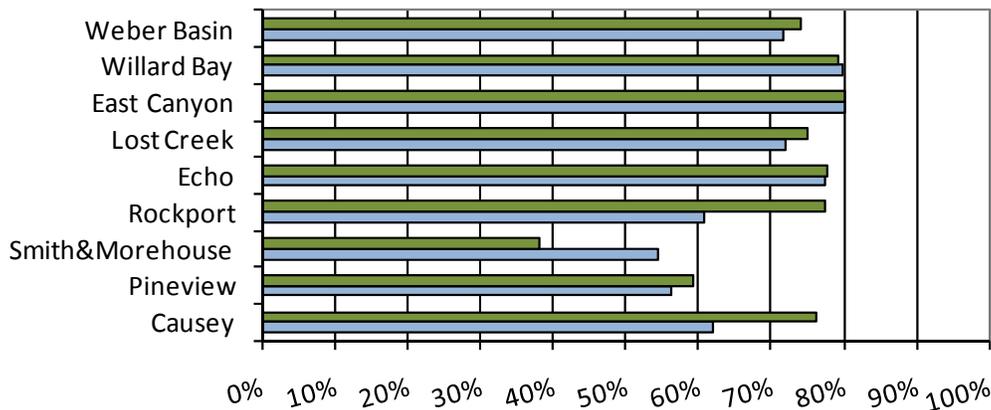
— WY2011 - - - - mean



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Weber Basin Reservoir Storage

■ Previous Yr % Capacity ■ Current % Capacity



March 1, 2011

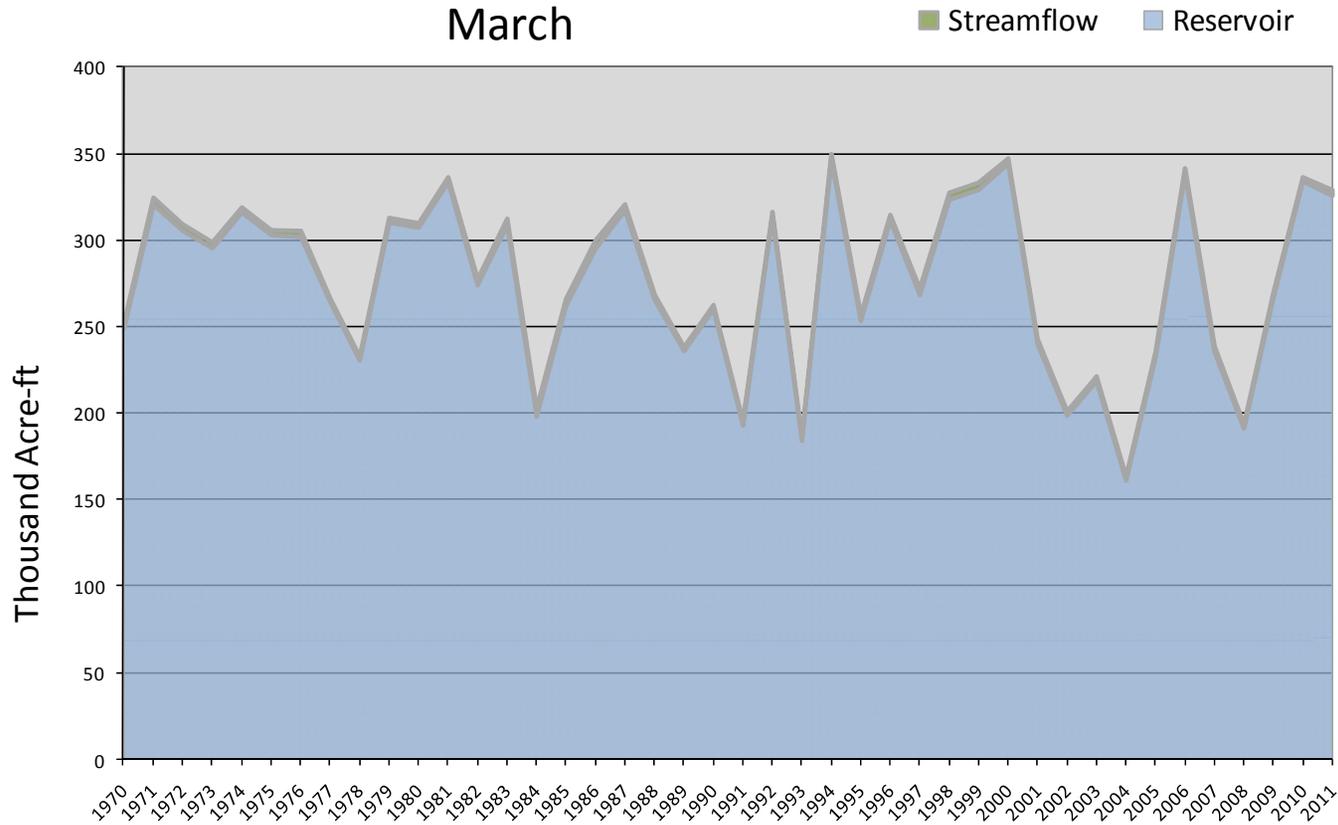
Water Availability Index

Basin or Region	February EOM* Reservoirs	February accumulated flow at Weber near Oakley (observed)	Reservoirs + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Weber River	326	3.2	325	2.81	84	71,98,99,10

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

Weber River - Water Availability Index

March



March 1, 2011

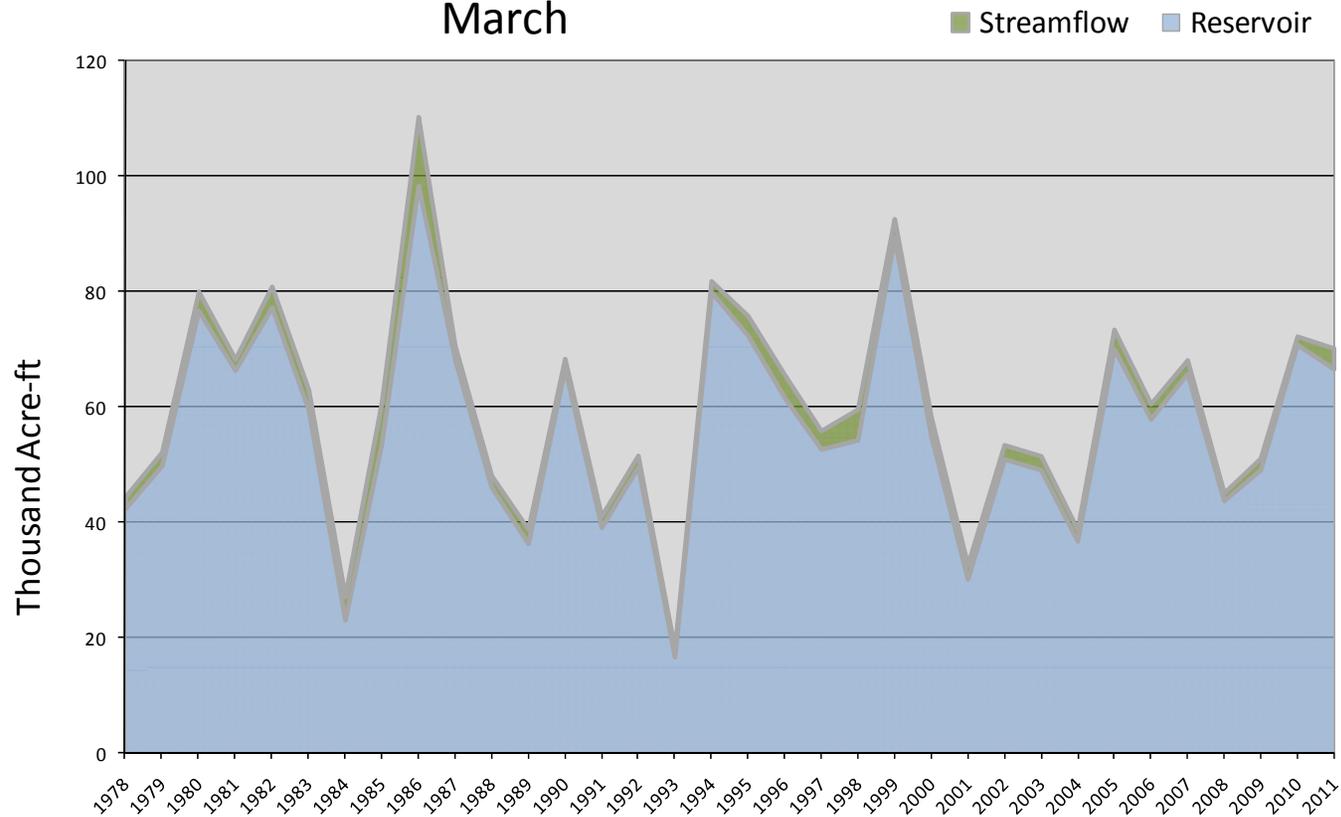
Water Availability Index

Basin or Region	February EOM* Pine View & Causey	February accumulated flow at South Fork Ogden (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Ogden River	66.6	3.6	70.2	1.79	71	81,87,90,10

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

Ogden River - Water Availability Index

March

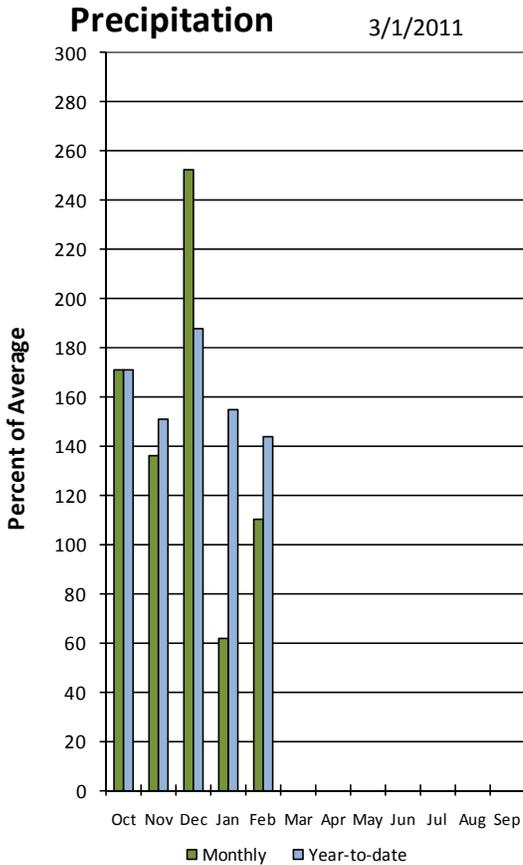


Utah Lake, Jordan River, & Tooele Valley Basins

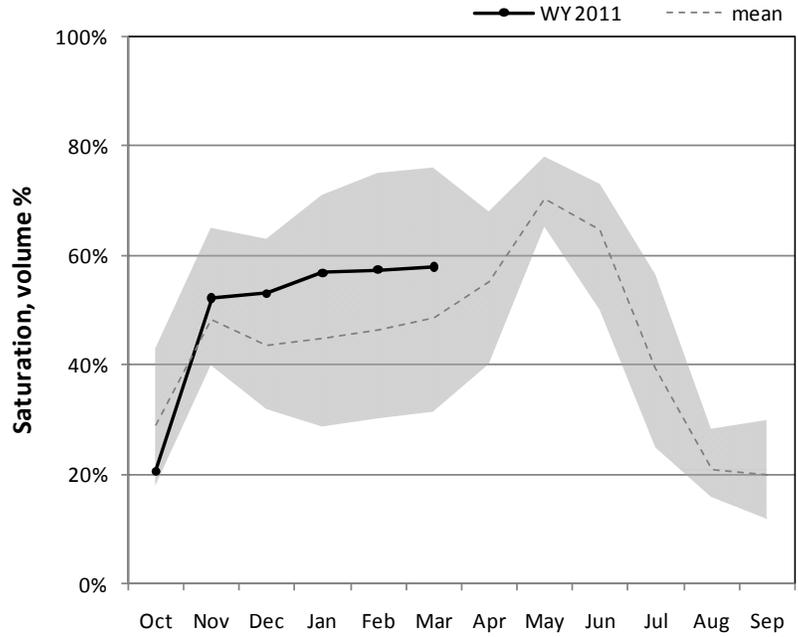
March 1, 2010

Precipitation in February was above average at 110%, bringing water year accumulation to 144%. Reservoir storage is at 91% of capacity, which is 1% more than this time last year. Soil moisture is at 58% compared to 32% last year at this time.

Jordan / Provo River

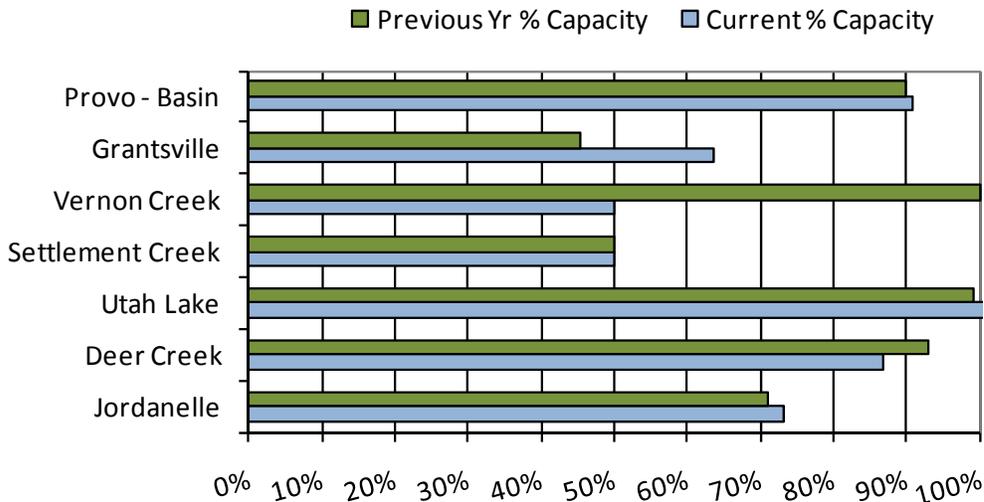


Jordan / Provo River Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Provo River Reservoir Storage



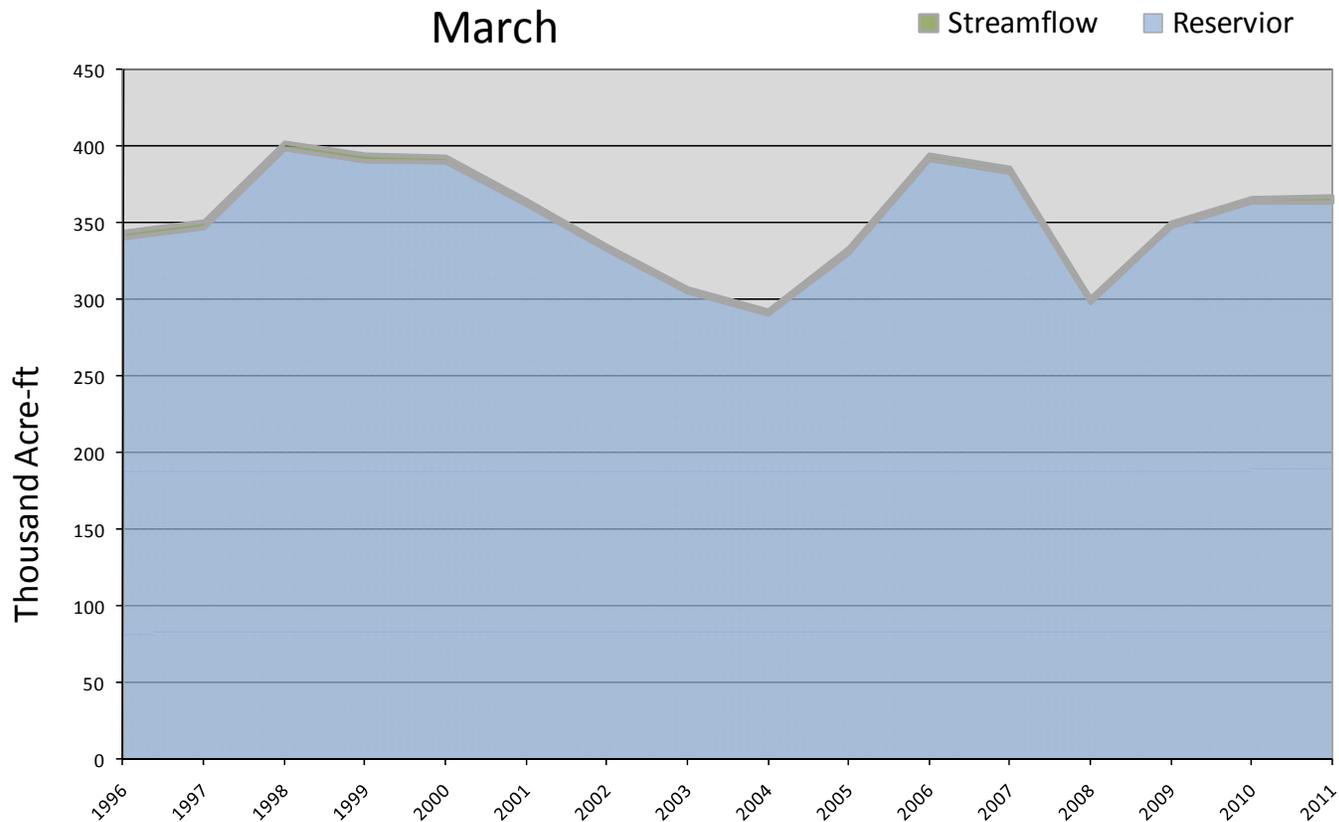
March 1, 2011

Water Availability Index

Basin or Region	February EOM* Deer Creek, Jordanelle	February accumulated flow Provo River at Woodland (<i>observed</i>)	Reservoir + Streamflow	WAI [#]	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Provo	364	4.0	368	1.23	65%	01, 10, 07, 00

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

Provo River - Water Availability Index
March

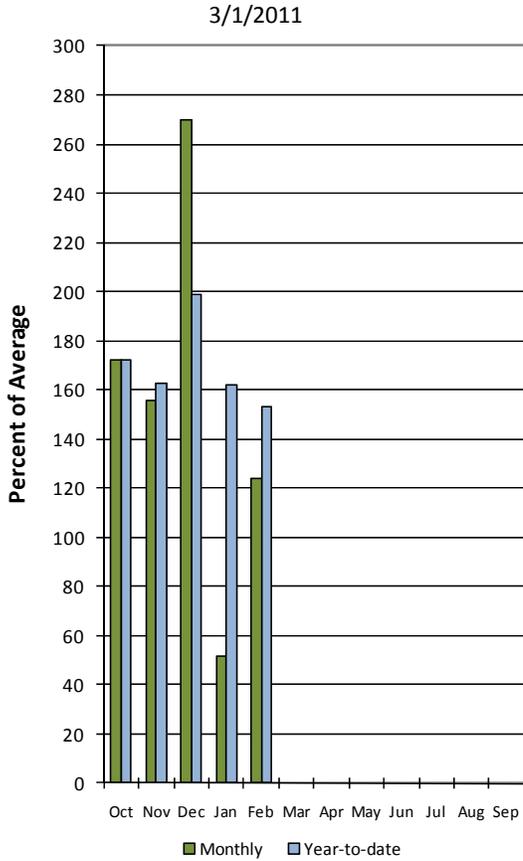


Utah Lake, Jordan River, and Tooele Valley Basins

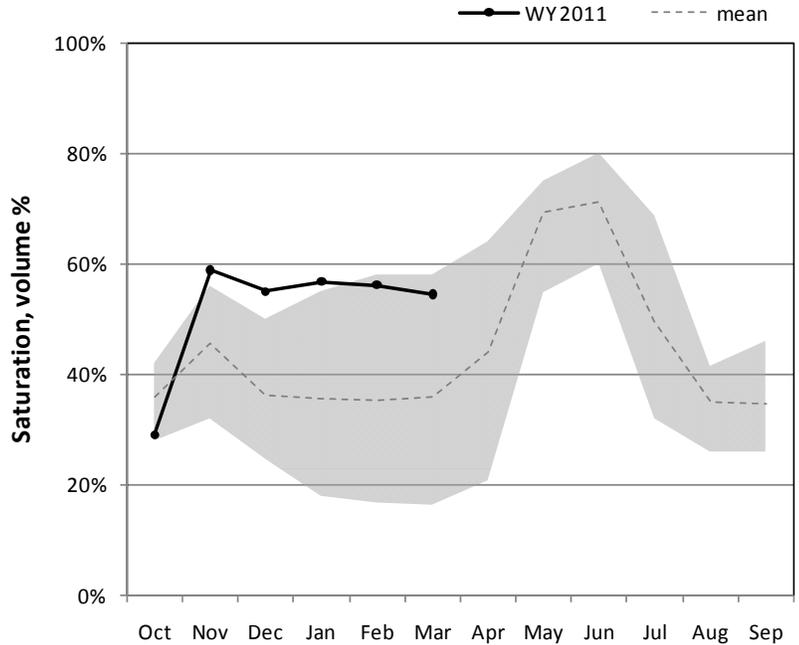
Uintah Basin and Dagget SCDs March 1, 2011

Precipitation in February was above average at 124%, bringing the water year accumulation to 153%. Reservoir storage is at 85% of capacity, which is at level this time last year. Soil moisture is at 55% compared to 16% last year.

Uintah Precipitation

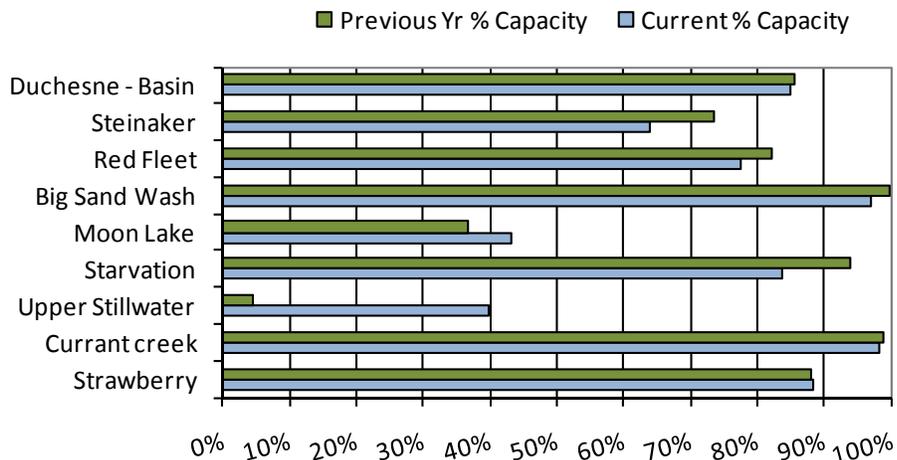


Uintah Basin Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Uintah Basin Reservoir Storage



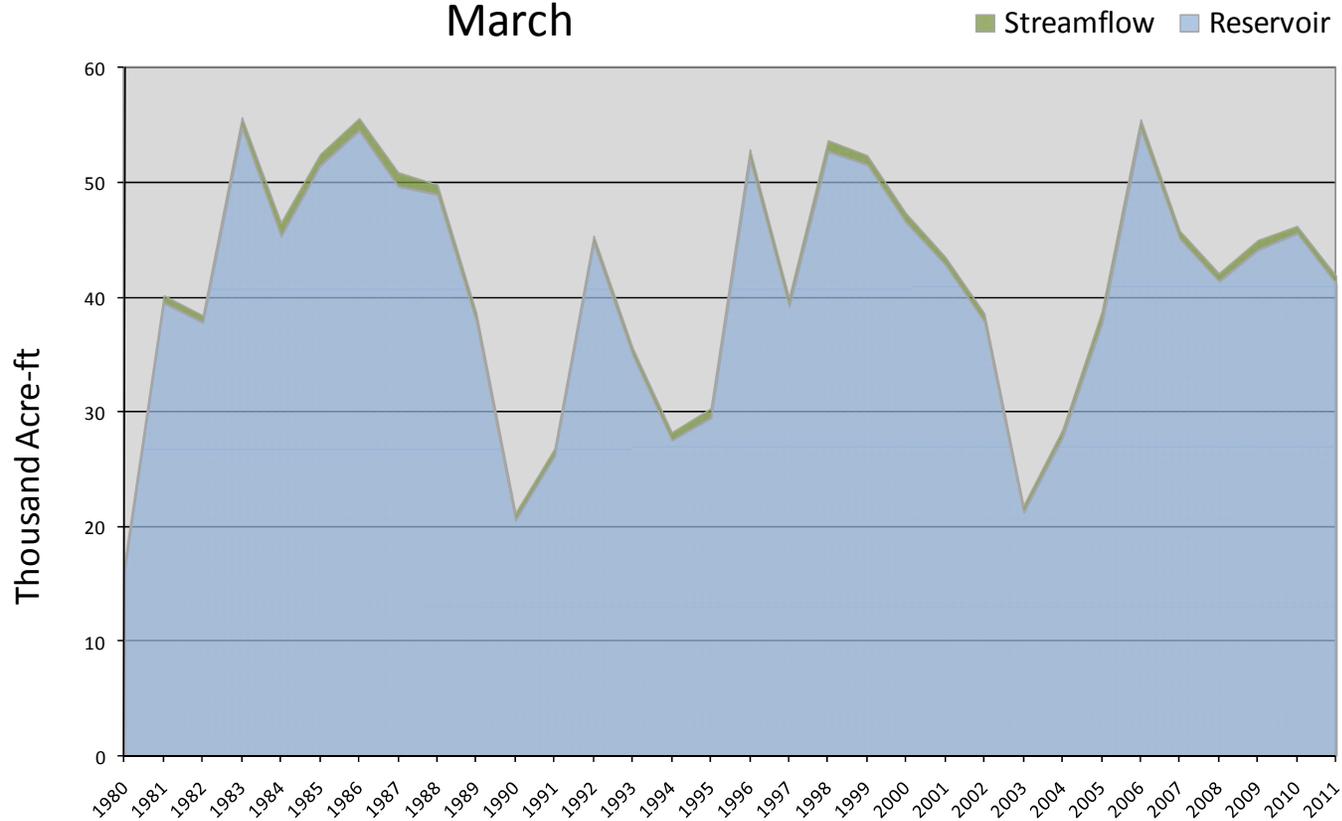
March 1, 2011

Water Availability Index

Basin or Region	February EOM* Red Fleet and Steinaker	February accumulated flow Big Brush Creek (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Eastern Uintah	41.2	0.7	41.9	-0.38	45	97, 81, 08, 01

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

Eastern Uintah - Water Availability Index
March



March 1, 2011

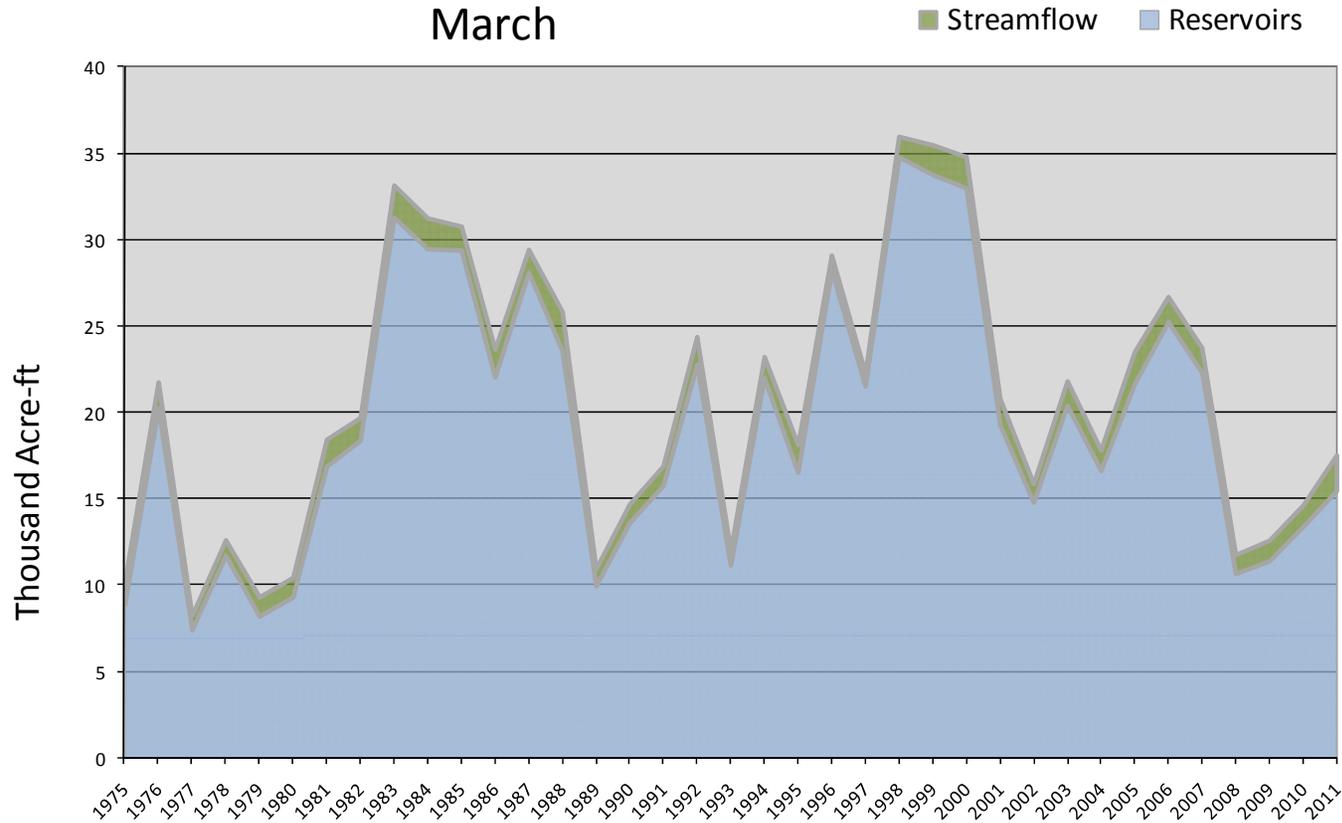
Water Availability Index

Basin or Region	February EOM* Moon Lake	February accumulated flow Lake Fork Creek above Moon Lake (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	<i>KAF</i> [^]	<i>KAF</i>	<i>KAF</i>		%	
Moon Lake	15.5	2.1	17.6	-1.10	37	02, 91, 04, 95

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

Moon Lake - Water Availability Index

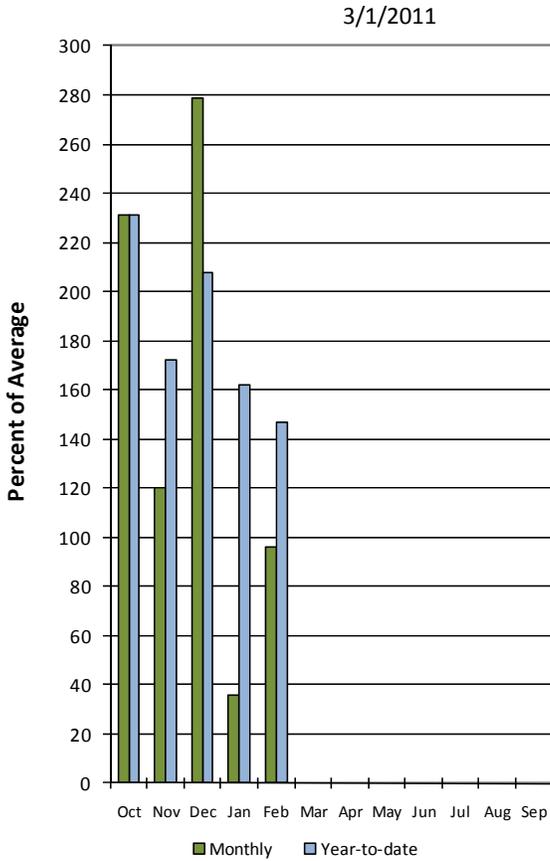
March



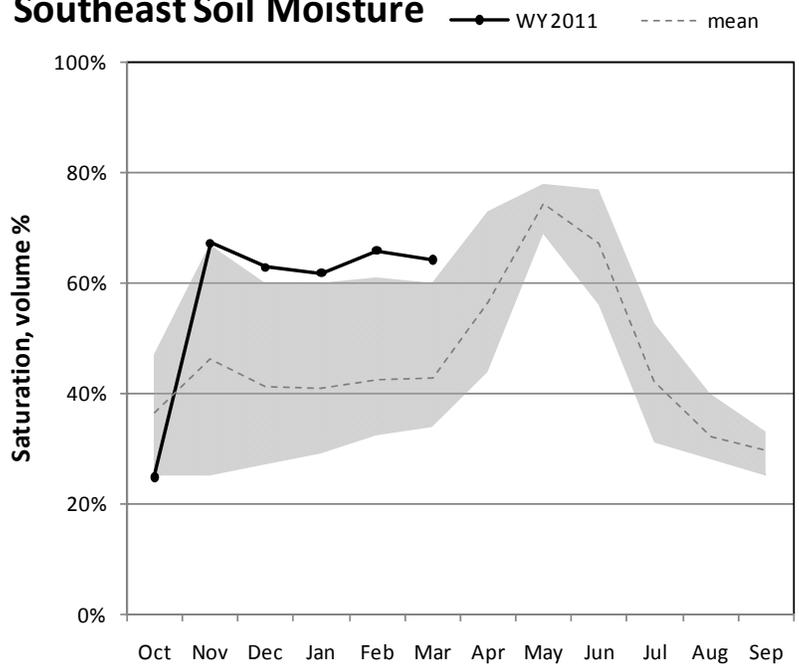
Southeast – Carbon, Emery, Wayne, Grand, and San Juan Counties March 1, 2011

Precipitation in February was average at 96%, bringing the water year accumulation to 147%. Reservoir storage is at 55% of capacity, which is 1% higher at this time last year. Soil moisture is at 64% compared to 34% last year.

Southeast Utah Precipitation

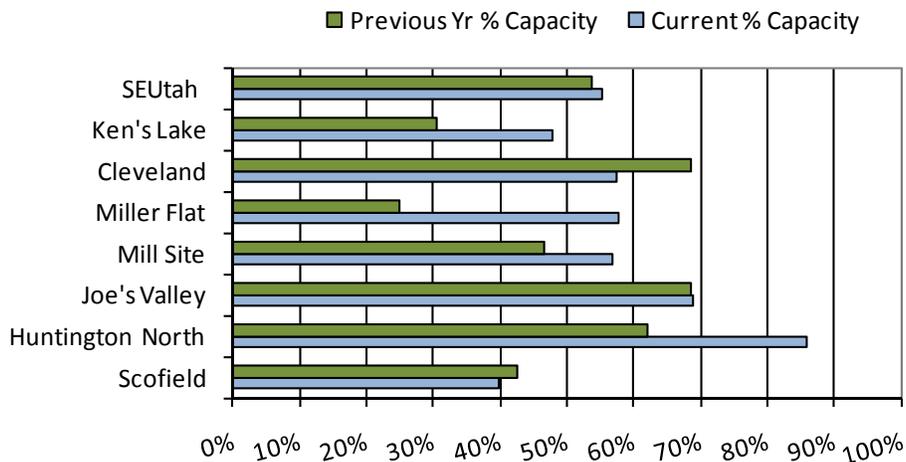


Southeast Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Southeast Utah Reservoir Storage



March 1, 2011

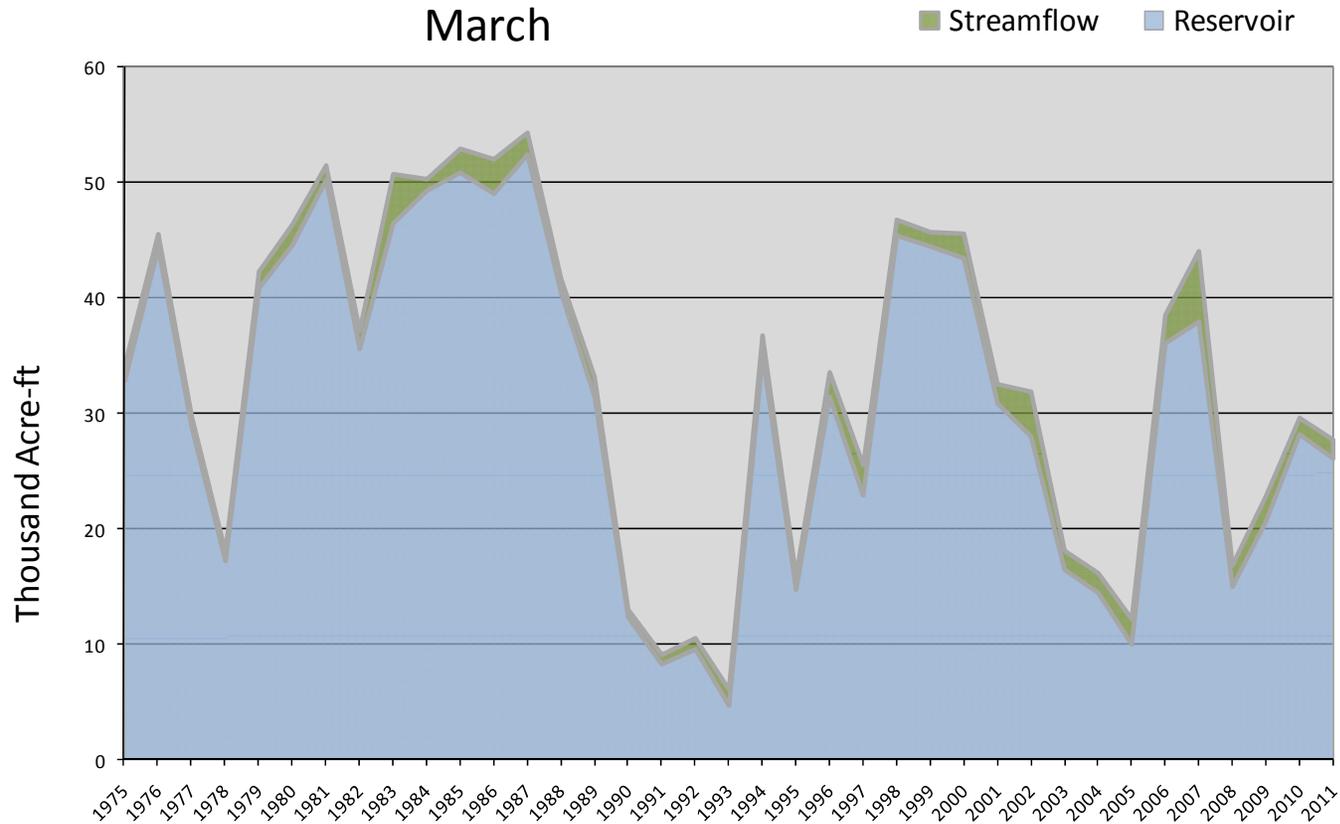
Water Availability Index

Basin or Region	February EOM* Scofield	February accumulated inflow to Scofield (calculated)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Price River	26.2	1.6	27.8	-1.32	34	09, 97, 10, 77

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

Price River - Water Availability Index

March



March 1, 2011

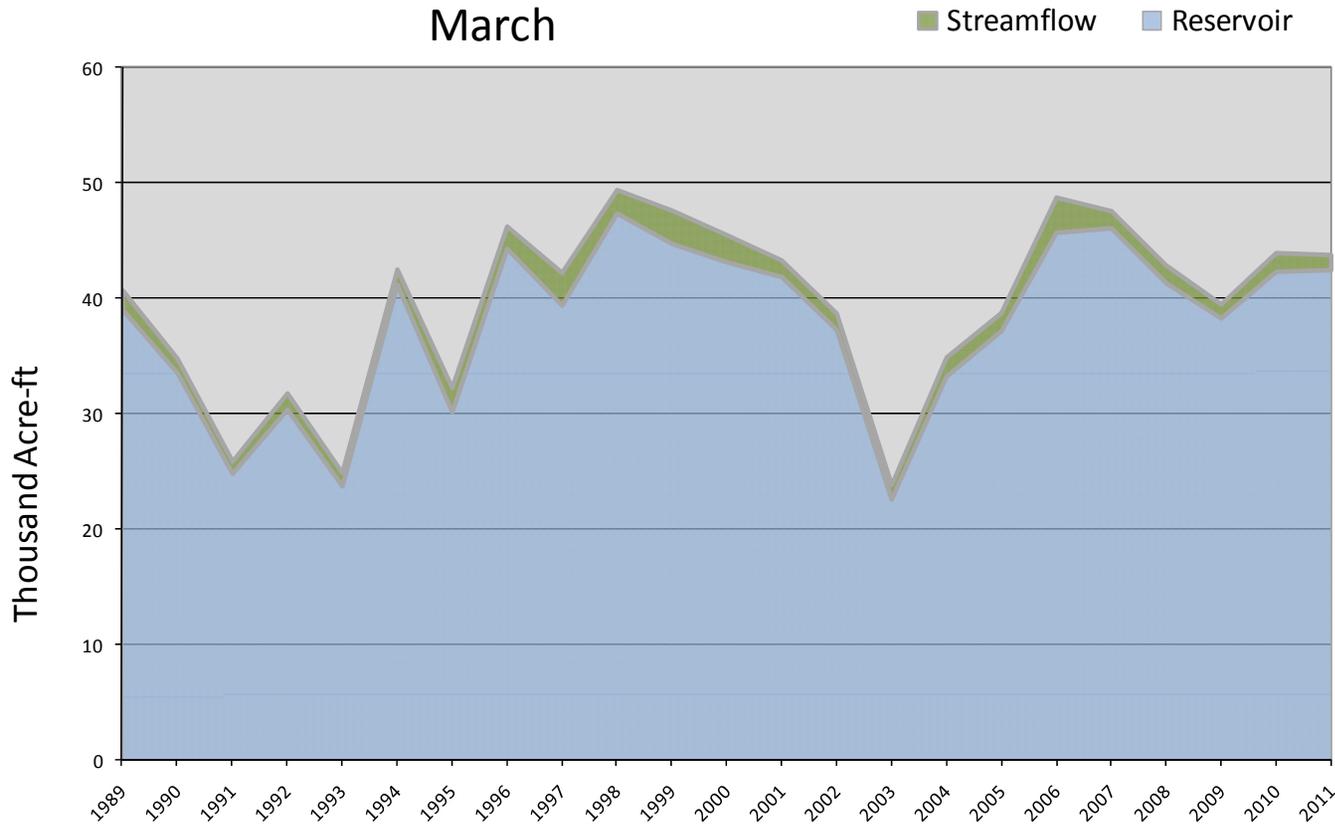
Water Availability Index

Basin or Region	February EOM* Joe's Valley	February accumulated inflow to Joe's Valley (calculated)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Joe's Valley	42.5	1.3	43.8	1.39	67	08, 01, 10, 00

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

Joe's Valley - Water Availability Index

March



March 1, 2011

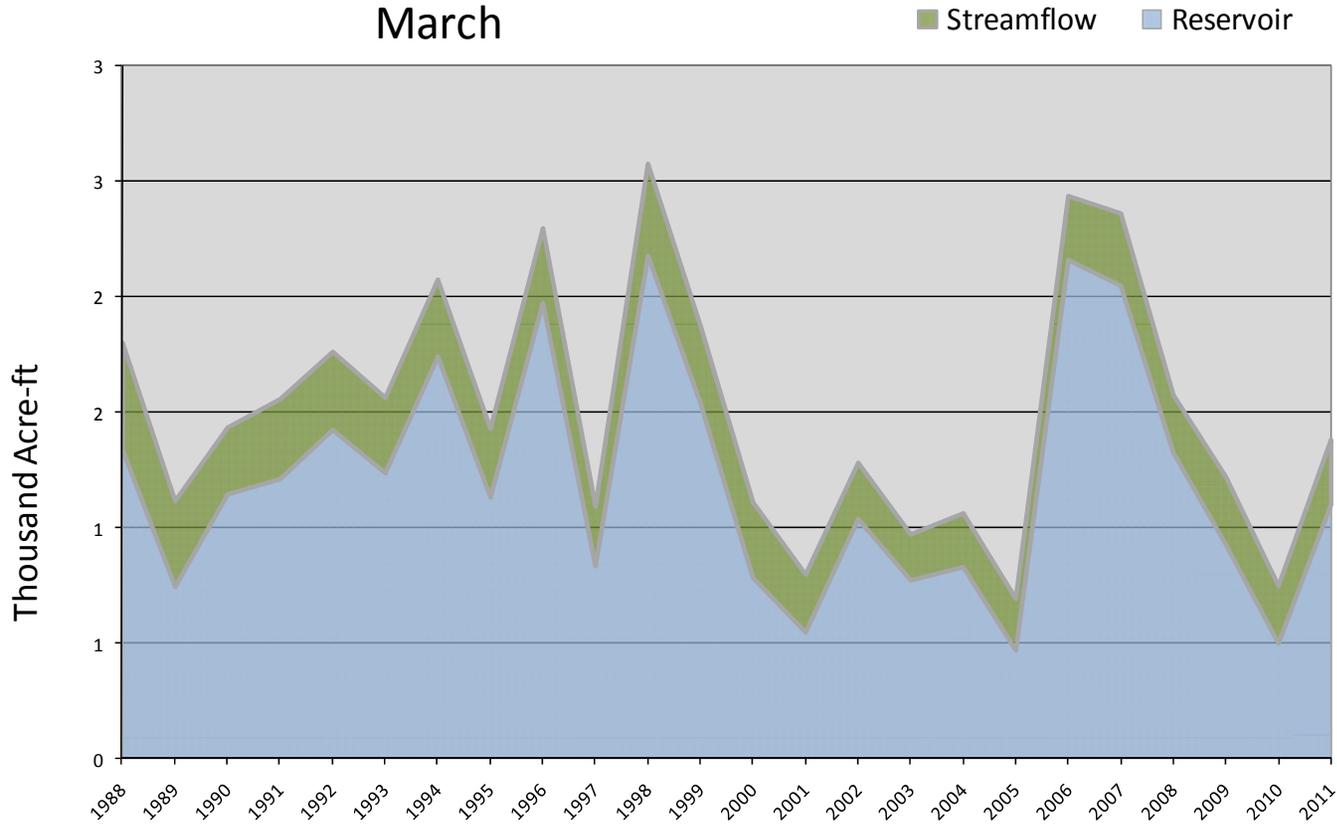
Water Availability Index

Basin or Region	January EOM* Ken's Lake Reservoir	January accumulated flow Mill Creek at Sheley (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Moab	1.0	0.3	1.3	-0.17	48	90, 95, 02, 91

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

Moab - Water Availability Index

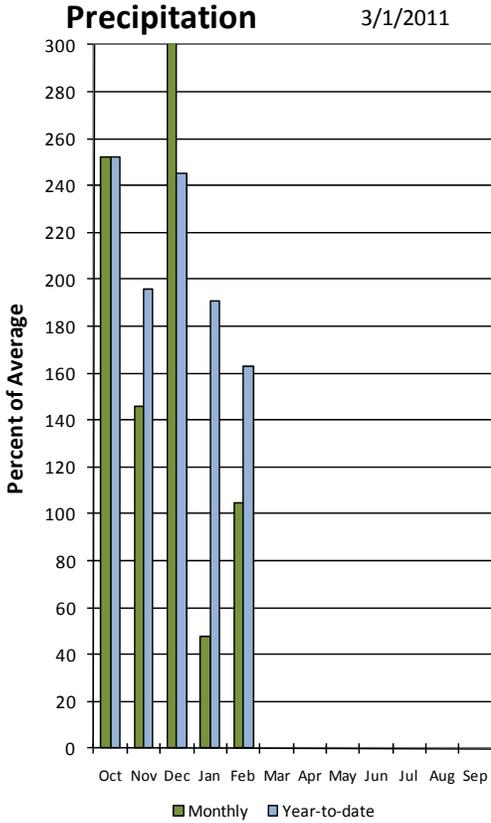
March



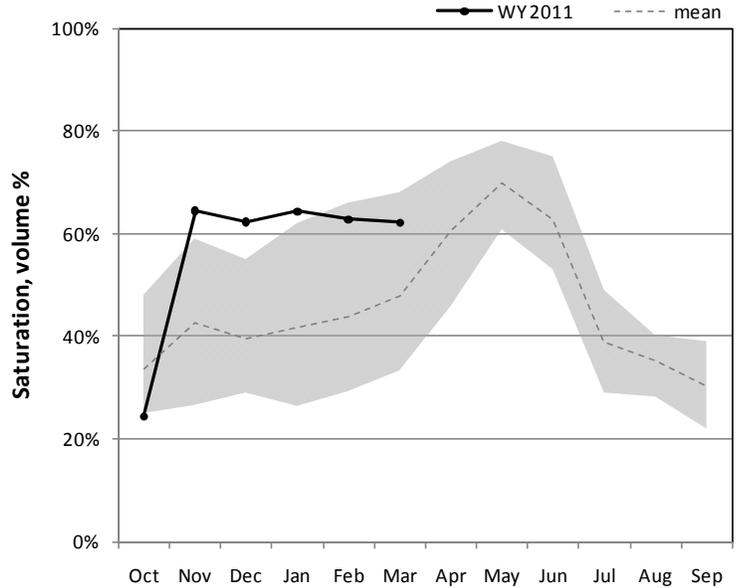
Sevier and Beaver River Basins March 1, 2011

Precipitation in February was near average at 105%, which brings the seasonal accumulation (Oct-Feb) to 163% of average. Reservoir storage is at 59% of capacity, 12% more than last year. Soil moisture is at 62% of saturation compared to 33% last year.

Sevier /Beaver River

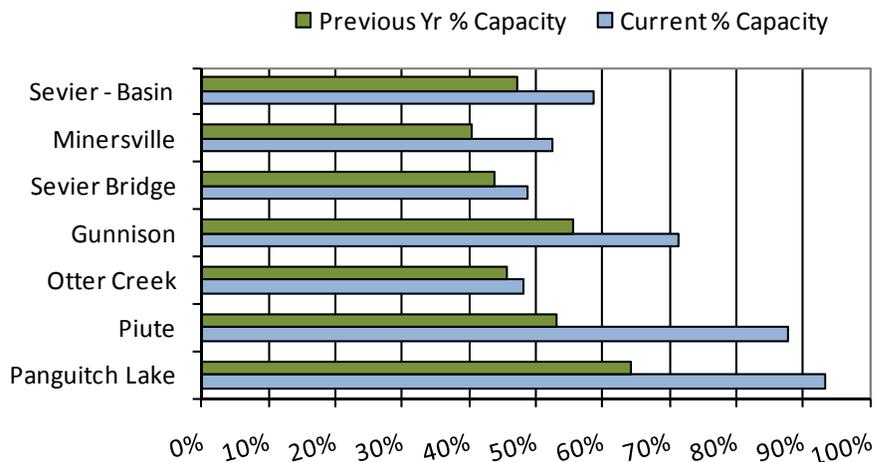


Sevier / Beaver River Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Sevier River Reservoir Storage



March 1, 2011

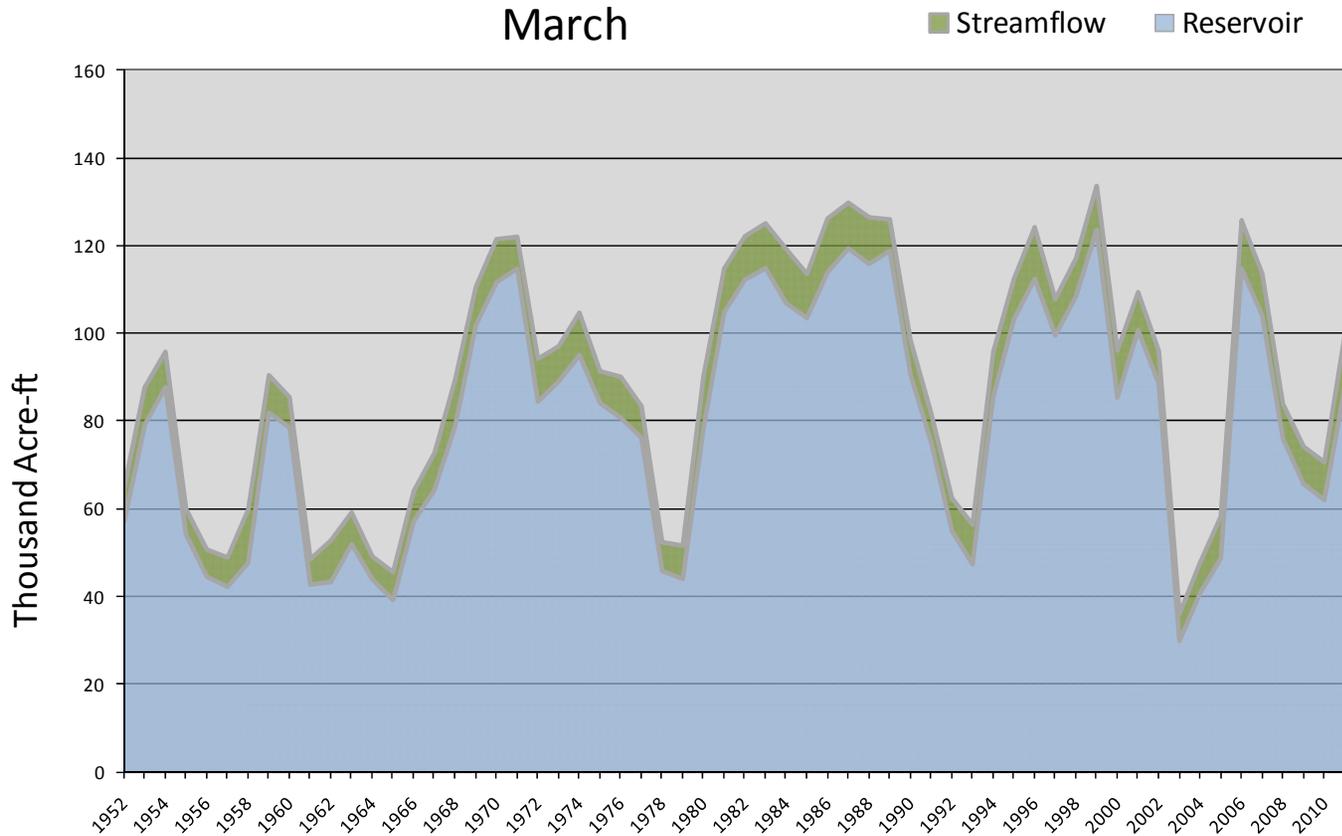
Water Availability Index

Basin or Region	February EOM* Otter Creek and Piute	February accumulated flow at Kingston (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Upper Sevier River	88.2	11.9	100.1	1.25	65	73,90,74,97

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

Upper Sevier River - Water Availability Index

March



March 1, 2011

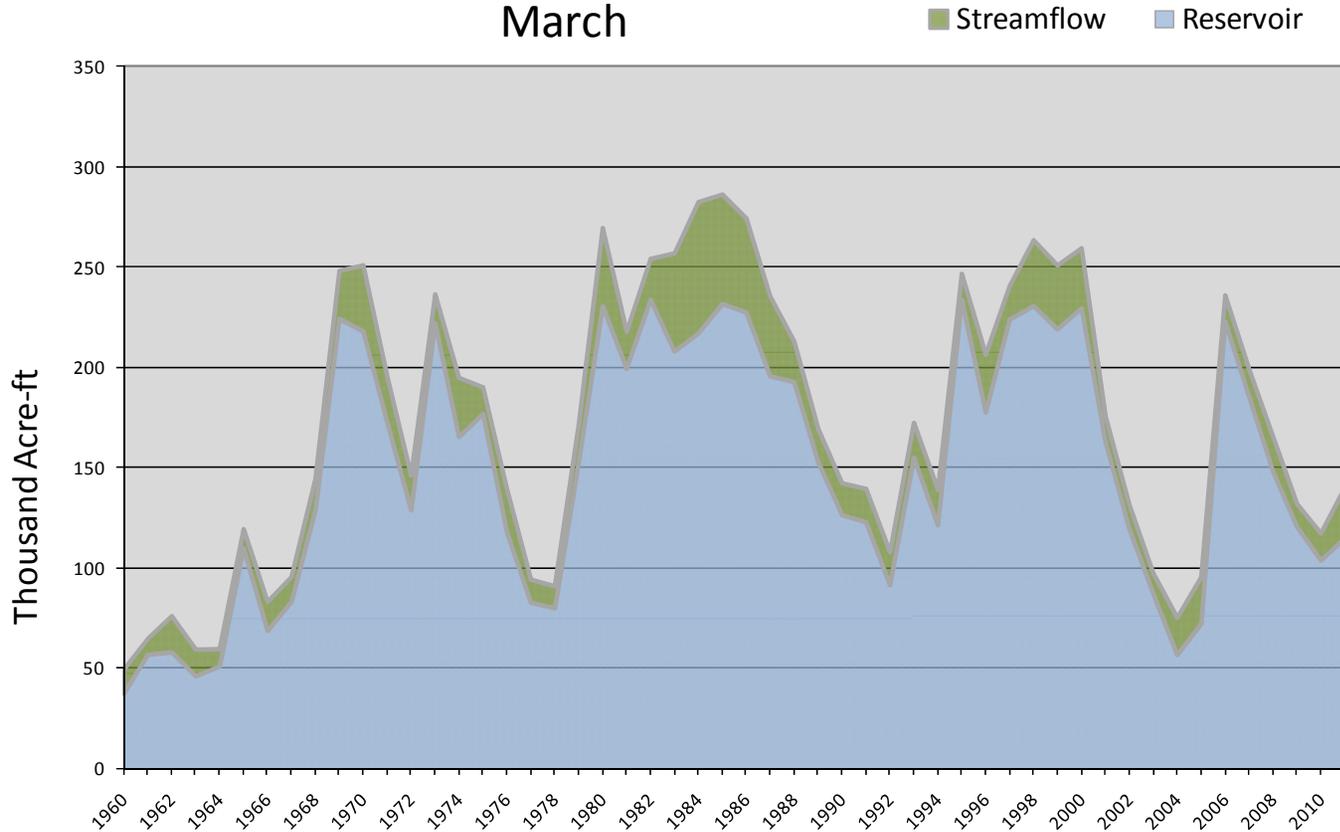
Water Availability Index

Basin or Region	February EOM* Sevier Bridge	February accumulated flow Sevier at Gunnison (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Lower Sevier River	114.8	25.3	140.1	-0.80	40	76,91,90,68

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

Lower Sevier River - Water Availability Index

March



March 1, 2011

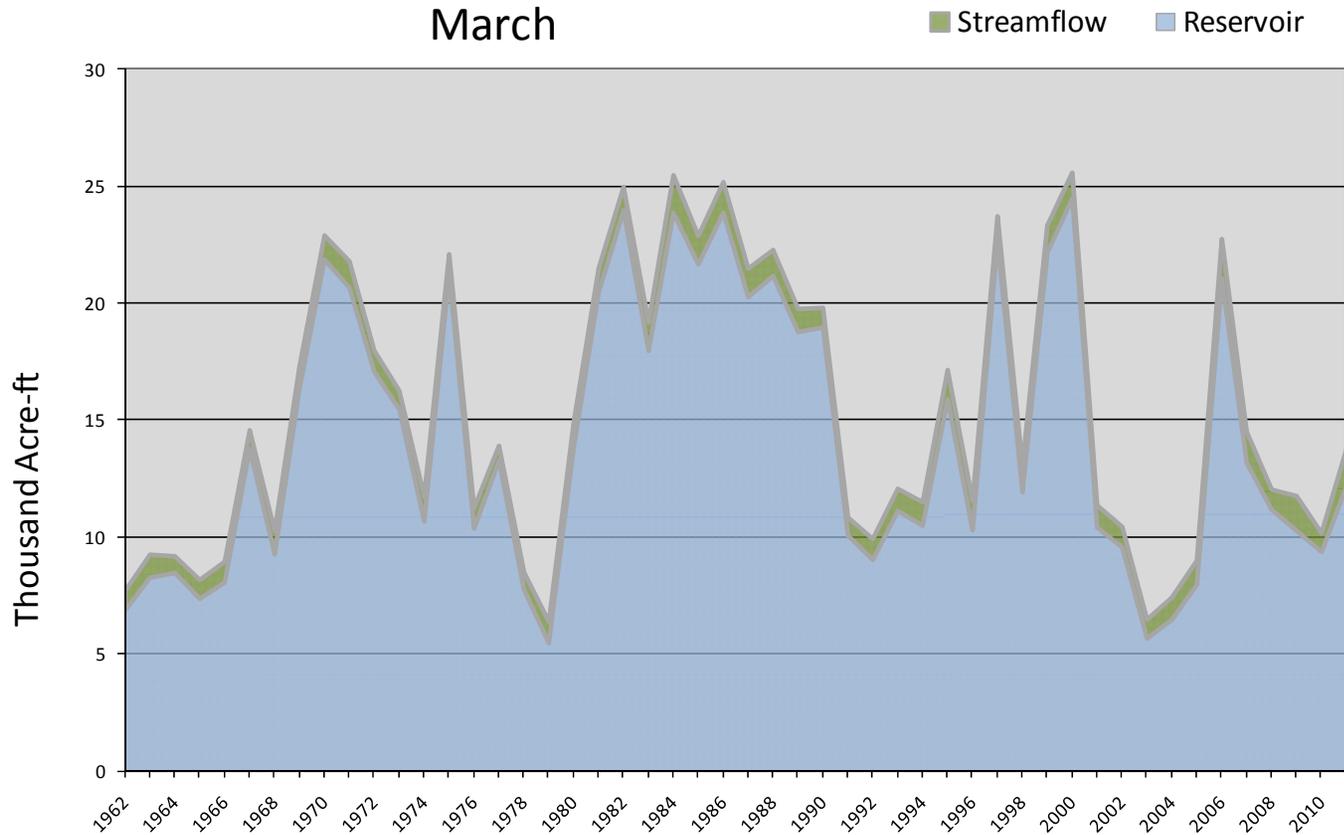
Water Availability Index

Basin or Region	February EOM* Minersville Reservoir	February accumulated flow Beaver River at Beaver (<i>observed</i>)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Beaver	12.2	1.6	13.8	0.00	50	93,98,77,07

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

Beaver River Water Availability Index

March

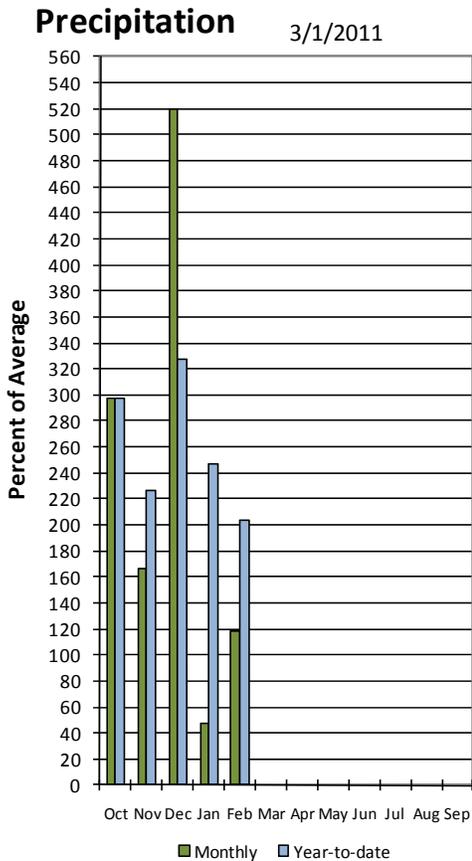


Southwest – E. Garfield, Kane, Washington, & Iron Counties

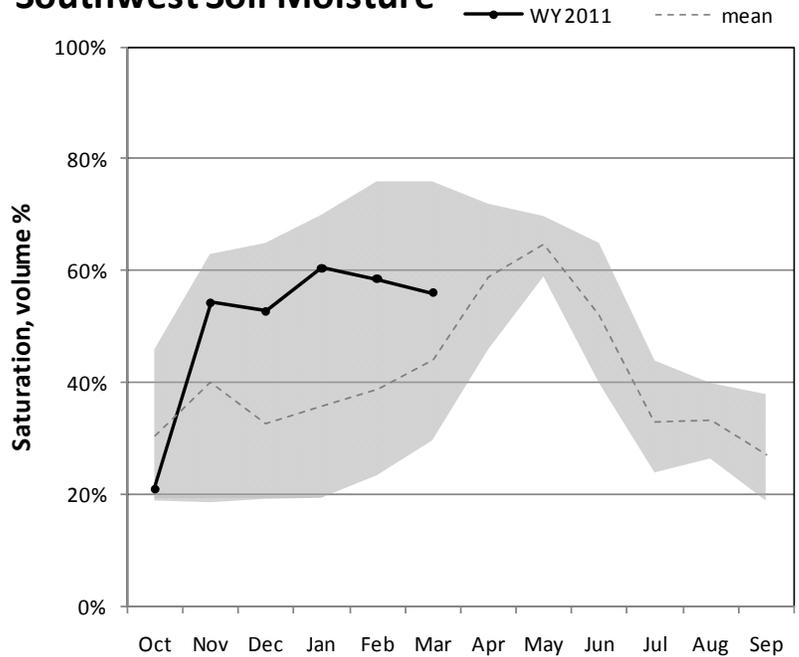
March 1, 2011

Precipitation in February was above average at 118%, bringing water year accumulation to 204%. Reservoir storage is at 88% of capacity, 25% higher than last year at this time. Soil moisture is at 56% compared to 30% at this time last year.

Southwest Utah

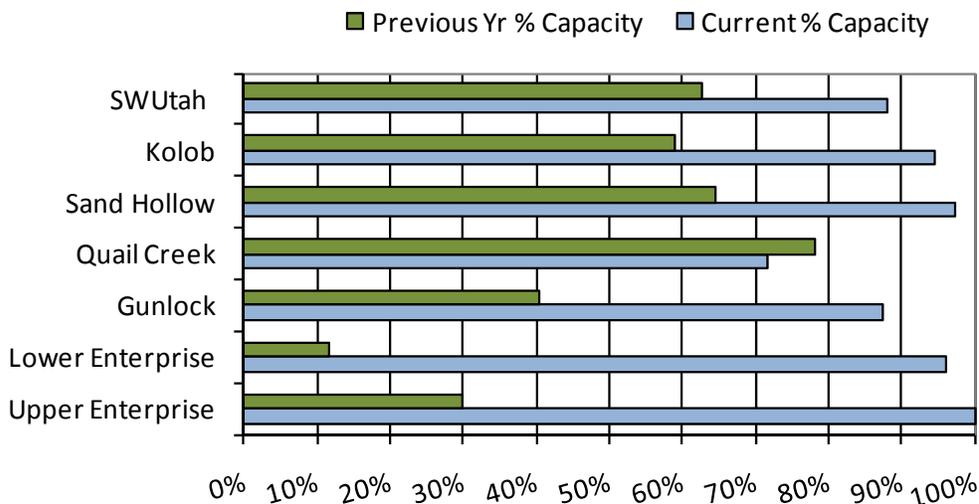


Southwest Soil Moisture



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.

March Southwest Utah Reservoir Storage



March 1, 2011

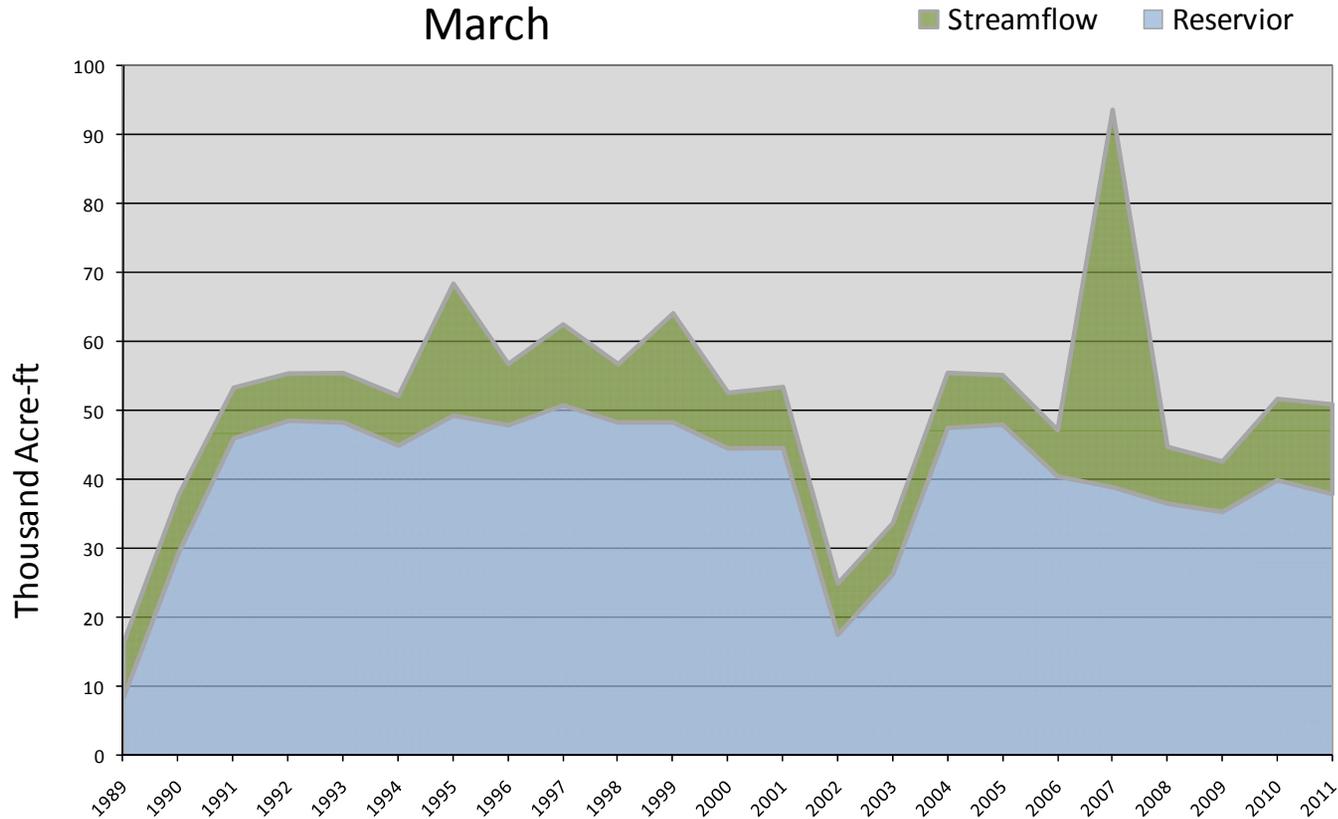
Water Availability Index

Basin or Region	February EOM* Reservoir	February accumulated flow Virgin and Santa Clara Rivers (observed)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	KAF^	KAF	KAF		%	
Southwest	38.0	13.0	51.0	2.43	79%	92, 99, 96, 05

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

Southwest - Water Availability Index

March



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

