COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES   January 1, 2019
ROOM 818, 1313 SHERMAN ST., DENVER, CO 80203
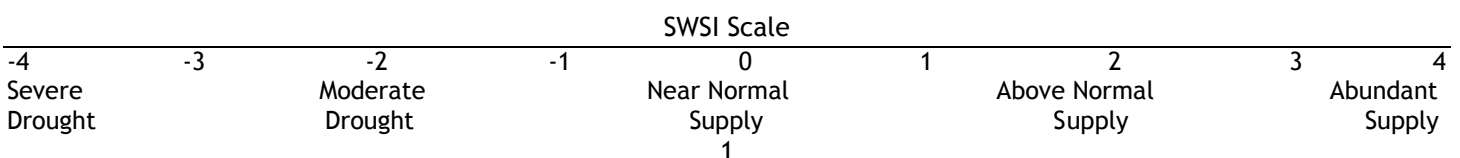303-866-3581; www.water.state.co.us

The Surface Water Supply Index (SWSI) is used as an indicator of water supply conditions in the seven major river basins of the state and in each of the 41 smaller watersheds, or HUCs. The Colorado Water Conservation Board (CWCB) completed a major revision to the Colorado Drought Plan in 2010. At that time, Colorado adopted a revised SWSI analysis based on the components shown below, which vary depending on the time of year. The revised SWSI is based on a ranking of total volume in a HUC or major river basin ranked against similar volumes in historical years. For instance, in January, the total volume in a HUC is based on the forecasted runoff at specific locations plus the volume in storage in specific reservoirs, all within the HUC. That total volume is ranked against similar total volumes that occurred each January between 1970 and 2010.

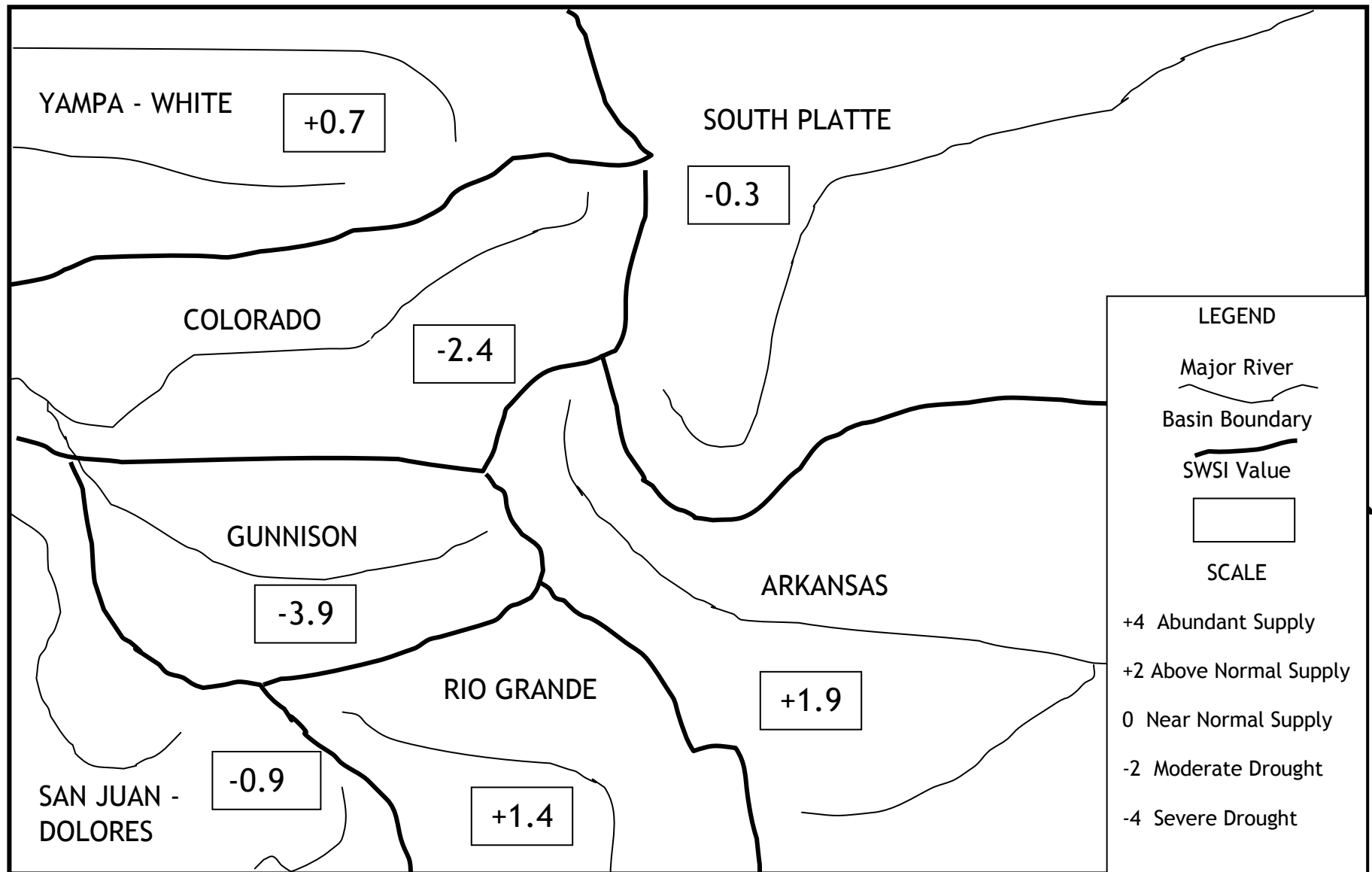| Time Period	SWSI Components
January 1 – June 1	Forecasted Runoff + Reservoir Storage
July 1 – September 1	Previous Month's Streamflow + Reservoir Storage
October 1 –December 1	Reservoir Storage

In 2015, CWCB and the Division of Water Resources (DWR) (both Divisions of the Colorado Department of Natural Resources) completed a software project to implement an automated calculation of the SWSI and to document the underlying hydrologic data. July 1, 2015 was the first month that the automated DNR SWSI was published. The results of each month's analysis are summarized within this report and additional information, maps & data are available at: http://water.state.co.us/DWRDocs/Reports/Pages/SWSIReport.aspx. This report also contains updates about current regional conditions and water matters prepared by each DWR Division Office.

The SWSI calculation for the spring season (January 1 to June 1) is normally based on forecasted runoff (total volume for the runoff season) and reservoir storage at the end of the last month. However, for January 2019, NRCS decided not to publish streamflow forecasts for Colorado. Therefore the SWSI calculation for January 1, 2019 is based solely on reservoir storage at the end of last month, in this case December 31. For this effort, the SWSI is calculated by comparing storage (ignoring streamflow forecasts) for each December 31 from 1970-2010. The following SWSI values were computed for each of the seven major basins for January 1, 2019. Water supply conditions, as represented by water in storage, are below normal in all but the San-Juan Dolores and South Platte River basins and well below normal in the Colorado and Gunnison basins. In an effort to reflect current snowpack conditions for the record, we have included several NRCS graphs from snotel data and Upper Colorado River Basin streamflow forecasts.

Basin	January 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	1.9	-0.1	-0.8
Colorado	-2.4	0.3	-3.5
Gunnison	-3.9	0.0	-6.3
Rio Grande	1.4	-0.3	-1.7
San Juan-Dolores	-0.9	0.0	-2.5
South Platte	-0.3	0.5	-3.7
Yampa-White	0.7	0.2	-3.4

SWSI Scale

-4	-3	-2	-1	0	1	2	3	4
Severe Drought		Moderate Drought		Near Normal Supply		Above Normal Supply		Abundant Supply

SURFACE WATER SUPPLY INDEX FOR COLORADO BY MAJOR RIVER BASIN

YAMPA - WHITE

+0.7

SOUTH PLATTE

-0.3

COLORADO

-2.4

GUNNISON

-3.9

ARKANSAS

+1.9

RIO GRANDE

+1.4

SAN JUAN - DOLORES

-0.9

LEGEND

Major River

Basin Boundary

SWSI Value

SCALE

+4 Abundant Supply

+2 Above Normal Supply

0   Near Normal Supply

-2 Moderate Drought

-4 Severe Drought

January 1, 2019

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC

CDSS Colorado's Decision Support Systems

SWSI January 1, 2019

Legend

SWSI - Current Report

- SWSI Not Applicable (-99.99)
- Extremely Dry (-3.0 to -4.2)
- Moderately Dry (-2.0 to -2.9)
- Slightly Dry (-1.0 to -1.9)
- Near Average (-0.9 to 0.9)
- Slightly Wet (1.0 to 1.9)
- Moderately Wet (2.0 to 2.9)
- Extremely Wet (3.0 to 4.2)
- Water Division

Location

Notes

113.64   0   56.82   113.64 Miles

1: 3,600,000

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 1/14/2019 9:13:51 AM

January 1, 2019 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

Basin	HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Total Vol (AF)
Arkansas	11020006	Huerfano	-2.80	16	0
Arkansas	11020010	Purgatoire	1.27	65	20,470
Arkansas	11020005	Upper Arkansas-Lake Meredith	0.92	61	26,500
Arkansas	11020009	Upper Arkansas-John Martin Reservoir	2.09	75	155,200
Arkansas	11020001	Arkansas Headwaters	-0.74	41	157,233
Arkansas	11020002	Upper Arkansas	1.90	73	196,800
Colorado	14010005	Colorado Headwaters-Plateau	-3.21	11	5,006
Colorado	14010002	Blue	-3.59	7	51,029
Colorado	14010004	Roaring Fork	-3.90	3	59,985
Colorado	14010001	Colorado Headwaters	1.98	74	104,400
Colorado	14010003	Eagle	N/A		
Gunnison	14020003	Tomichi	0.22	53	200
Gunnison	14020004	North Fork Gunnison	-0.41	45	2,642
Gunnison	14020006	Uncompahgre	-0.38	45	45,914
Gunnison	14020001	East-Taylor	-2.46	21	58,963
Gunnison	14020002	Upper Gunnison	-4.03	2	358,611
Gunnison	14020005	Lower Gunnison	N/A		
Gunnison	14030003	San Miguel	N/A		
Rio Grande	13010002	Alamosa-Trinchera	-3.50	8	3,430
Rio Grande	13010005	Conejos	0.21	52	19,300
Rio Grande	13010001	Rio Grande Headwaters	2.82	84	38,645
Rio Grande	13010004	Saguache	N/A		
San Juan-Dolores	14080105	Middle San Juan	0.00	50	429
San Juan-Dolores	14080107	Mancos	-3.87	4	1,715
San Juan-Dolores	14080104	Animas	-3.50	8	6,880
San Juan-Dolores	14080101	Upper San Juan	-3.46	9	33,819
San Juan-Dolores	14030002	Upper Dolores	-0.79	41	168,233
San Juan-Dolores	14080102	Piedra	N/A		
South Platte	10190005	St. Vrain	-0.83	40	46,700
South Platte	10190003	Middle South Platte-Cherry Creek	-3.16	12	64,500
South Platte	10190007	Cache La Poudre	-0.29	47	123,900
South Platte	10190001	South Platte Headwater	0.23	53	145,100
South Platte	10190012	Middle South Platte-Sterling	2.31	78	169,500
South Platte	10190002	Upper South Platte	-3.28	11	237,700
South Platte	10190006	Big Thompson	0.46	56	452,462
South Platte	10190004	Clear	N/A		
Yampa-White	14050001	Upper Yampa	0.68	58	33,700
Yampa-White	10180001	North Platte Headwaters	N/A		
Yampa-White	14050002	Lower Yampa	N/A		
Yampa-White	14050003	Little Snake	N/A		
Yampa-White	14050005	Upper White	N/A		

NEP is non exceedance percentage for total reservoir storage and streamflow forecast in HUC. Some HUCs do not have any reservoirs considered in the SWSI and are shown as "N/A". Total Vol is the volume of reservoir storage in the HUC plus the streamflow forecast. NEP is calculated compared to the volume historically occurring this month during the period 1970-2010. The following table lists each component considered in each HUC.

SWSI Color Scale:

-4.0 (Severe Drought)	0.0 (Normal)	4.0 (Abundant Supply)

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
11020001	Arkansas Headwaters	CLEAR CREEK RESERVOIR	6,600	52
		TWIN LAKES RESERVOIR	36,275	35
		HOMESTAKE RESERVOIR	41,200	75
		TURQUOISE LAKE	73,158	34
11020006	Huerfano	CUCHARAS RESERVOIR*	0	16
11020010	Purgatoire	TRINIDAD LAKE	20,470	65
11020002	Upper Arkansas	PUEBLO RESERVOIR	196,800	73
11020009	Upper Arkansas-John Martin Reservoir	ADOBE CREEK RESERVOIR	9,000	22
		JOHN MARTIN RESERVOIR	146,200	76
11020005	Upper Arkansas-Lake Meredith	LAKE HENRY	4,800	62
		MEREDITH RESERVOIR	21,700	63
14010002	Blue	GREEN MOUNTAIN RESERVOIR	51,029	7
14010001	Colorado Headwaters	WOLFORD MOUNTAIN RESERVOIR	34,700	70
		WILLIAMS FORK RESERVOIR	69,700	62
14010005	Colorado Headwaters-Plateau	VEGA RESERVOIR	5,006	11
14010004	Roaring Fork	RUEDI RESERVOIR	59,985	3
14020001	East-Taylor	TAYLOR PARK RESERVOIR	58,963	21
14020004	North Fork Gunnison	PAONIA RESERVOIR	2,642	45
14020003	Tomichi	VOUGA RESERVOIR NEAR DOYLEVILLE	200	53
14020006	Uncompahgre	RIDGEWAY RESERVOIR	45,914	45
14020002	Upper Gunnison	FRUITLAND RESERVOIR	300	33
		SILVER JACK RESERVOIR	782	2
		CRAWFORD RESERVOIR	1,155	1
		MORROW POINT RESERVOIR	107,568	6
		BLUE MESA RESERVOIR	248,806	2
13010002	Alamosa-Trinchera	MOUNTAIN HOME**	0	1
		TERRACE RESERVOIR	3,430	23
13010005	Conejos	PLATORO RESERVOIR	19,300	52
13010001	Rio Grande Headwaters	RIO GRANDE RESERVOIR**	45	2
		CONTINENTAL RESERVOIR	14,600	99
		SANTA MARIA RESERVOIR	24,000	93
14080104	Animas	LEMON RESERVOIR	6,880	8
14080107	Mancos	JACKSON GULCH RESERVOIR	1,715	4
14080105	Middle San Juan	LONG HOLLOW RESERVOIR	429	50
14030002	Upper Dolores	GROUNDHOG RESERVOIR	200	3
		MCPHEE RESERVOIR	168,033	43
14080101	Upper San Juan	VALLECITO RESERVOIR	33,819	9
10190006	Big Thompson	LAKE LOVELAND RESERVOIR	0	6
		MARIANO RESERVOIR	700	9
		WILLOW CREEK RESERVOIR	6,440	61
		LONE TREE RESERVOIR	6,500	58
		BOYD LAKE	31,500	55
		CARTER LAKE	58,700	23
		LAKE GRANBY	348,622	59

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190007	Cache La Poudre	CHAMBERS LAKE	3,300	64
		BLACK HOLLOW RESERVOIR	4,100	99
		HALLIGAN RESERVOIR	4,100	66
		CACHE LA POUDRE	6,100	52
		WINDSOR RESERVOIR	7,900	22
		FOSSIL CREEK RESERVOIR	9,200	89
		COBB LAKE	15,200	57
		HORSETOOTH RESERVOIR	74,000	39
10190003	Middle South Platte-Cherry Creek	HORSECREEK RESERVOIR	0	1
		BARR LAKE	16,800	18
		MILTON RESERVOIR	18,700	96
		STANDLEY RESERVOIR	29,000	25
10190012	Middle South Platte-Sterling	PREWITT RESERVOIR	16,300	62
		JULESBURG RESERVOIR	16,500	31
		EMPIRE RESERVOIR	24,000	65
		JACKSON LAKE RESERVOIR	24,300	69
		RIVERSIDE RESERVOIR	41,200	81
		POINT OF ROCKS RESERVOIR	47,200	56
10190001	South Platte Headwater	ANTERO RESERVOIR	18,900	58
		SPINNEY MOUNTAIN RESERVOIR	27,000	49
		ELEVENMILE CANYON RESERVOIR	99,200	59
10190005	St. Vrain	TERRY RESERVOIR	4,800	31
		MARSHALL RESERVOIR	5,200	47
		UNION RESERVOIR	8,900	26
		BUTTONROCK (RALPH PRICE) RESERVOIR	12,900	25
		GROSS RESERVOIR	14,900	44
10190002	Upper South Platte	CHEESMAN LAKE	60,000	44
		DILLON RESERVOIR	177,700	10
14050001	Upper Yampa	YAMCOLO RESERVOIR	2,500	28
		STAGECOACH RESERVOIR NR OAK CREEK	31,200	94

NEP is non exceedance percentage (percentile) for volume of the component compared to this month during the historical period 1970-2010.

*Empty, filling restriction
**Empty for repairs

Water Volume NEP Color Scale: | 0 (Well Below Normal) | 50 (Normal) | 100 (Well Above Normal) |

Basinwide Conditions Assessment

The SWSI value for the month was -0.3.

Northeast Colorado experienced slightly below average temperatures in much of the basin at the beginning and end of December, with above average temperatures during the middle part of December. Unfortunately the much welcomed snow that occurred during the month of November did not continue into the month of December. The South Platte Basin Snowpack, percent of average, dropped from near 149% at the end of November to 112% at the end of December. The South Platte River basin experienced slightly below average precipitation in the mountains and foothills, and below average precipitation on much of the eastern plains. Reservoirs in the South Platte River basin continue into the reservoir fill season, with storage levels throughout the basin increasing.

The USDA Drought Monitor rating for northeast Colorado remained fairly constant throughout the month of December, with a rating of DO (abnormally dry) in the westerly (mountainous/foothill areas) areas of Larimer County, portions of Weld and Washington Counties, and encompassing all of Gilpin, Jefferson, Douglas, Adams, Morgan and Arapaho Counties; a rating of portions of Lincoln, El Paso, Teller, Elbert, Clear Creek and Park Counties rated as D1-D2 (moderate to severe). Boulder County and the remainder of the eastern plains in the South Platte and Republican River basins continue to receive near average precipitation and are not currently in a drought condition.

The overall basin near average temperatures and slightly below average precipitation during the month of December resulted in just below average flows at the Kersey gage near the City of Greeley, with the average daily flows for the month of December approximately 580 cfs, 84% of the historic mean value of 693 cfs. The average daily flows at the Julesburg gage for the month of November was 216 cfs, 52% of the historic mean value of 417 cfs, partly due to diversions to recharge and junior reservoir storage.

The reservoir fill season began November 1st, with reservoir storage throughout the South Platte River Basin continuing through the month of December. Reservoir calls from November continuing into late December have been controlled by a Riverside 1909 call on the lower portion of the South Platte River. The North Sterling 1922 continued until the last week in December at the bottom end of the basin. Cold temperatures and reservoir levels toward the end of December have resulted in a 1948 McLellan Reservoir call located below Chatfield Reservoir beginning on January 2, with no call located on the South Platte River to the state line into January.

The temperature and precipitation outlook into January and February, prepared by National Weather Service, Basin indicates a slight chance of above average temperatures and average precipitation in the South Platte River Basin.

SOUTH PLATTE RIVER NR. KERSEY, FLOW BY WATER YEAR

REPRESENTATIVE RESERVOIRS

South Platte Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Historical Period Recent Period

South Platte-DataComposite-SWSI

SWSI

South Platte River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service

Current as Pct of Normal: 110%
Current as Pct of Avg: 104%
Current as Pct of Last Year: 129%

Current as Pct of Peak: 50%
Normal as Pct of Peak: 45%
Pct of Normal Needed to Reach Peak: 92%
Normal Peak Date: Apr 26

Snow Water Equivalent (inches)

Median
WY2016
WY2017
WY2018
Average
WY2019

Basinwide Conditions Assessment

The SWSI value for the month was +1.9.

Outlook

The Pueblo Winter Water system grand total was 17,510 acre-feet at the end of December representing a large decrease from last year's storage to date, which was 74,132 acre-feet. The previous five-year average for this period is 59,421 acre-feet and the 20-year average for this period has been 57,382 acre-feet, indicating below average storage so far this year.

Conservation storage in John Martin Reservoir is about 52% of last year's storage at the end of December. Storage since November 1, 2018 has been 9,112 acre-feet while storage a year ago for the same period was 17,647 acre-feet.

On a positive note, while the current storage program is much lower than average, snowpack for the basin is higher than average at 121% whereas the same time last year it was only 55% of average.

Administrative/Management Concerns

 The Arkansas River Compact Administration meeting was held in Lamar, Colorado on December 6-7, 2018. Colorado and Kansas staff will continue to work together on the efforts of the Special Engineering Committee, with meetings expected to occur in early 2019, to move forward with finalizing the Highland Canal water right as a source of water for the John Martin Permanent Pool.

Arkansas Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
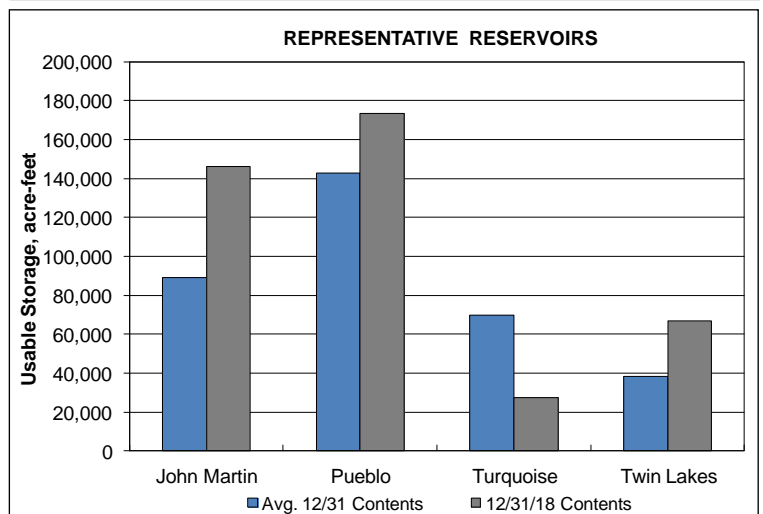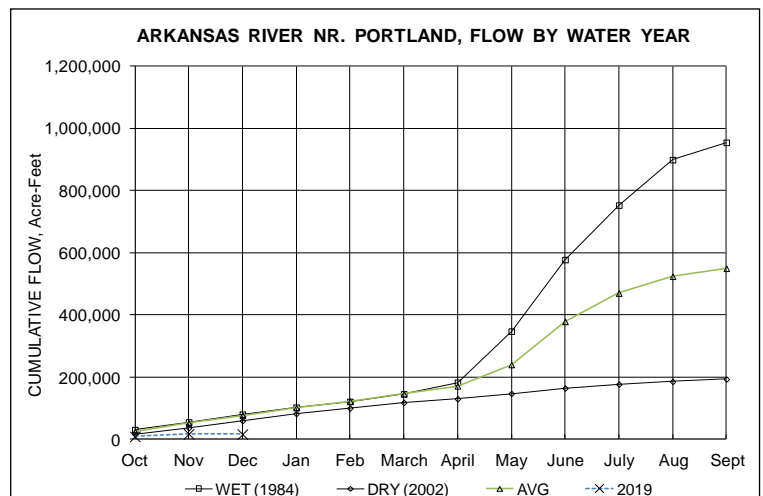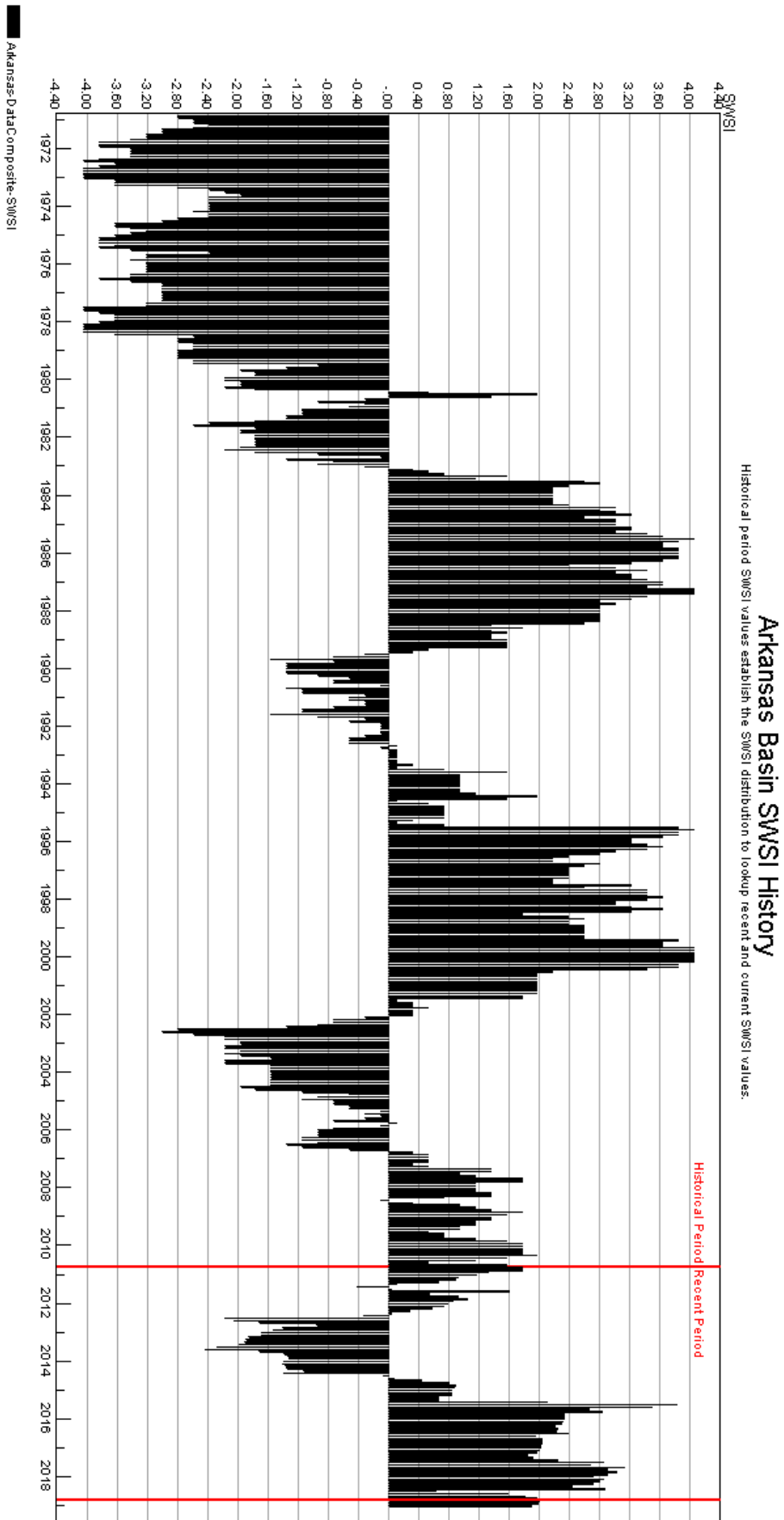
Arkansas River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Current as Pct of Normal: 122%
Current as Pct of Avg: 116%
Current as Pct of Last Year: 222%
Current as Pct of Peak: 59%
Normal as Pct of Peak: 49%
Pct of Normal Needed to Reach Peak: 80%
Normal Peak Date: Apr 11

USDA
United States Department of Agriculture
Natural Resources Conservation Service

Legend:
Median
WY2016
WY2017
WY2018
Average
WY2019
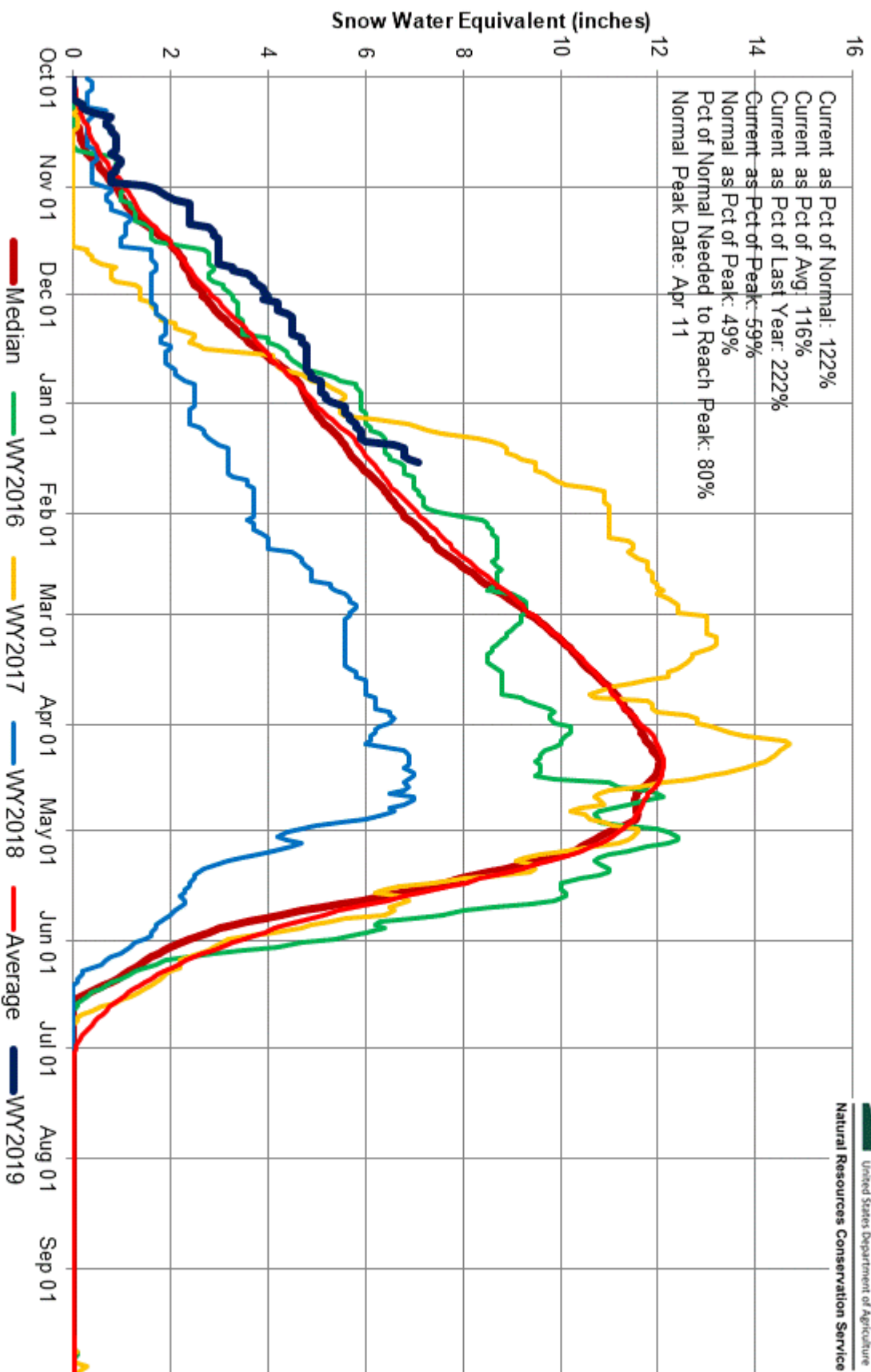
Basinwide Conditions Assessment

The SWSI value for the month was +1.4.

Flow at the gaging station Rio Grande near Del Norte averaged 133 cfs (70% of normal) during December. The Conejos River near Mogote had a mean flow of 40 cfs (70% of normal) during the month. There wasn't enough late season rain or early season snowmelt to bring local streamflow back up to average levels during December.

Alamosa received 0.32 inches of precipitation during December, 0.03 inches below normal. Alamosa's total precipitation of 5.77 inches during 2018 was 1.54 inches below the annual average. For the year, the average temperature was 2.5 degrees above normal. This continues a five year trend of above average annual temperature in Alamosa.

Outlook

Stream flow in the basin should be below average for the next few months as the basin recovers from the dismal 2018 runoff. Currently, the Natural Resources Conservation Service (NRCS) forecasts for the 2019 runoff are unavailable.

Recent National Weather Service climate forecasts call for slightly warmer and wetter than normal conditions in the San Luis Valley for the remainder of the winter with a very probable chance for heavy April and May snowstorms.

Administrative/Management Concerns

Pursuant to the provisions of the Rio Grande Compact, Colorado delivered approximately 90,000 acre-feet to New Mexico and Texas and easily met the delivery requirement for 2018. A small delivery credit will be available for the 2019 delivery requirement. Closed Basin Project delivery to the Rio Grande totaled about 8,000 acre-feet.

2018 saw marginal snowpack accumulation in January, a snowy late February and early March, and a dry April that forced well below average runoff during April and May. Early and mid-May snowstorms blanketed the basin but could not change the runoff dramatically. The poor runoff and drought conditions affected the entire Rio Grande basin. There was very little monsoonal activity during August and September, thus exaggerating the low streamflow conditions throughout the basin.

Reservoir storage is generally poor, with a basinwide storage total of about 80% of average. But with Rio Grande and Mountain Home Reservoirs drained for repairs and Sanchez and Terrace Reservoirs very low due to irrigation demand during 2018, a big snowpack is badly needed.

Case No. 15CW3024, Groundwater Use Rules for Water Division No. 3 went to trial during a portion of January and February, 2018. A decision has not yet been rendered by the Water Judge. Groundwater Management Subdistrict No. 1 continued well depletion replacement in 2018 with a mixture of reservoir releases, headgate bypasses, and Closed Basin Project production delivered to the Rio Grande. Formation of another six or seven subdistricts either occurred during 2018 or will in 2019.

Public Use Impact

In summary, 2018 was a generally very poor year for runoff. Lack of surface water and precipitation during the irrigation season increased the need for irrigation well pumping from the Valley's aquifers. These aquifers declined in content and pressure during 2018, a vicious reverse to the recent trend of aquifer recovery. Crop yields were good in areas with sufficient water supplies. Commodity prices were down from previous years.

RIO GRANDE NR. DEL NORTE, FLOW BY WATER YEAR

REPRESENTATIVE RESERVOIRS

Rio Grande Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period Recent Period

Rio Grande-Data-Composite-SWSI

14
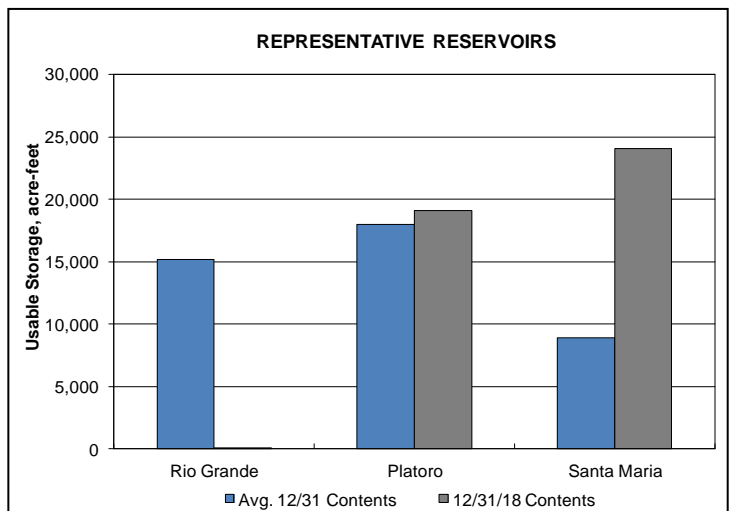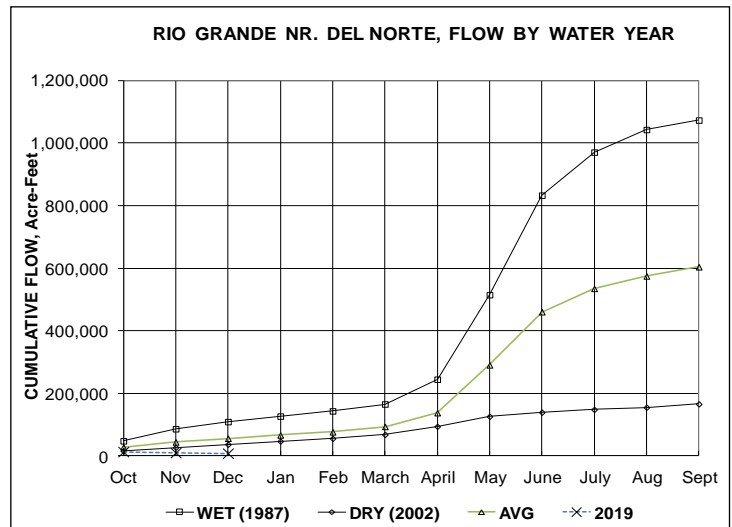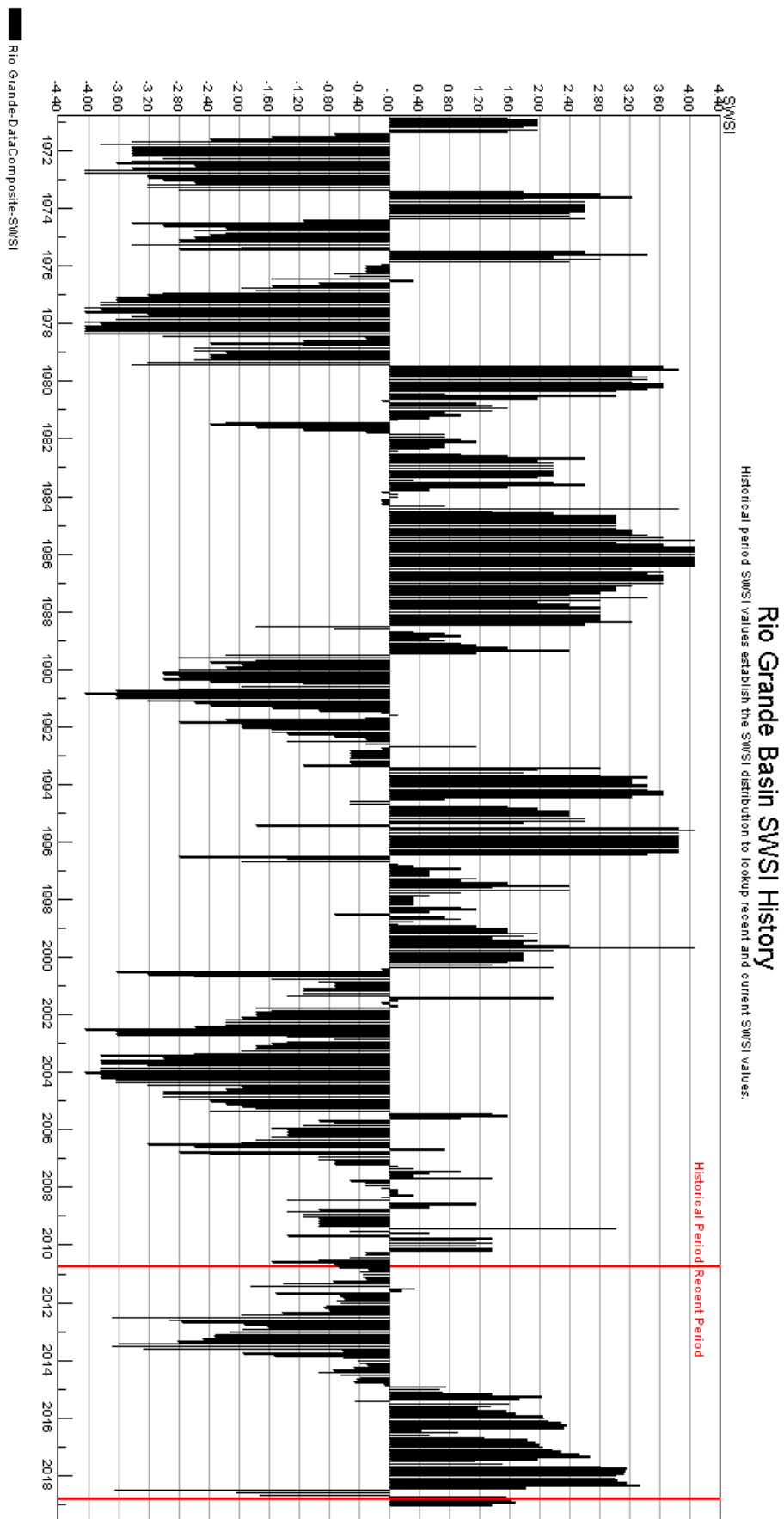
Upper Rio Grande River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Snow Water Equivalent (inches)

Current as Pct of Normal: 82%
Current as Pct of Avg: 84%
Current as Pct of Last Year: 273%
Current as Pct of Peak: 47%
Normal as Pct of Peak: 57%
Pct of Normal Needed to Reach Peak: 123%
Normal Peak Date: Apr 10

Median
WY2016
WY2017
WY2018
Average
WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service

15
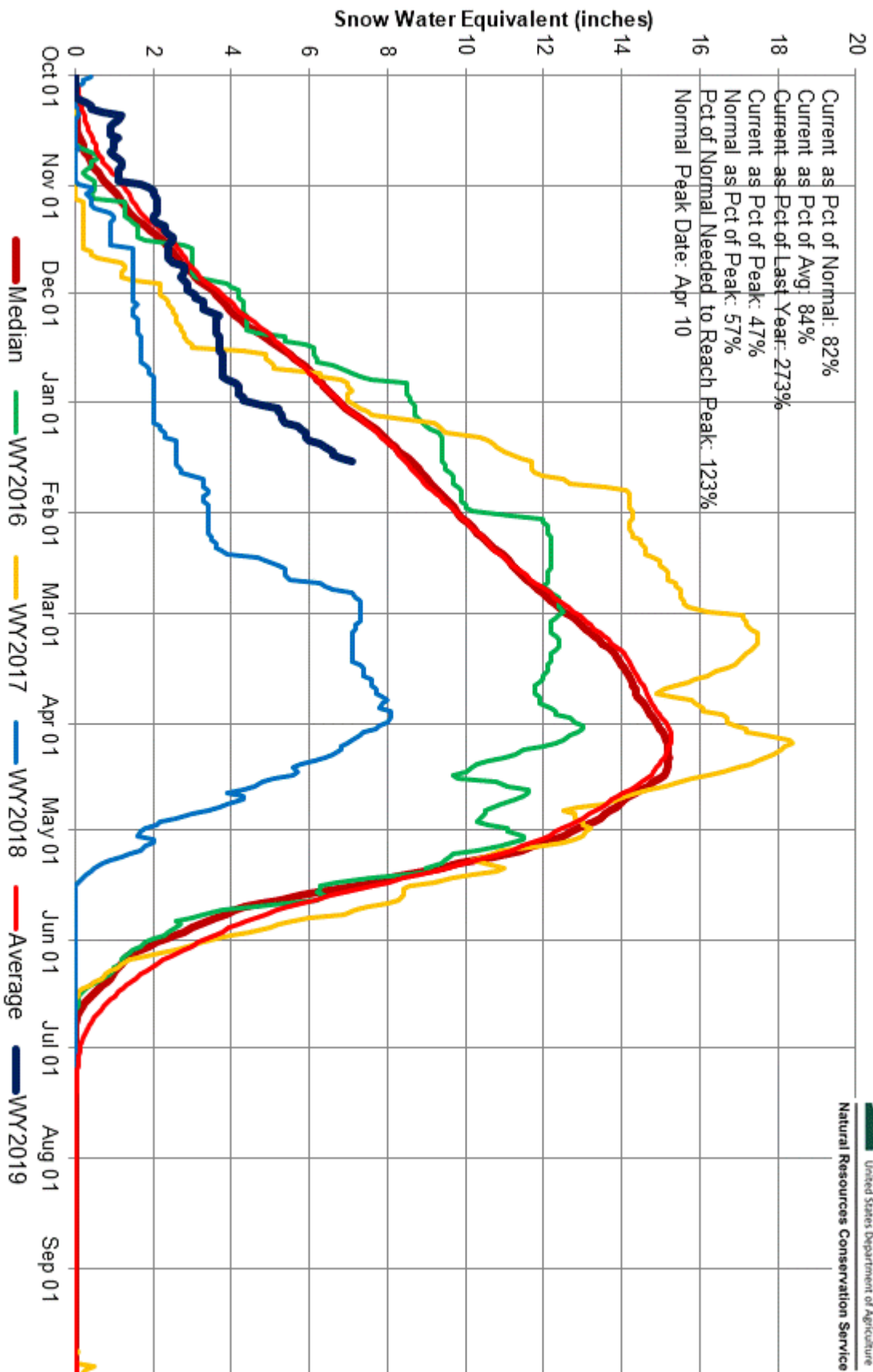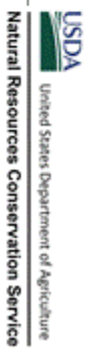
Basinwide Conditions Assessment

The SWSI value for the month was -3.9.

Precipitation in the Gunnison basin during December were predominantly 70-90% of average with a small area in the Taylor River drainage receiving only 50-70% of average. Temperatures during December were near average for the entire basin, which helped keep snow that fell in the lower valleys in late December on the ground. Snowpack conditions on January 1st are much improved from 2018, but are not yet above the median in any drainage in Division 4. For example, the basins above Blue Mesa, Ridgway and Paonia Reservoirs contain 97%, 92% and 78% of the 30-year median on January 1st.

Conditions continue to be significantly better than in 2018, however, as SWE in the basins above Blue Mesa, Ridgway and Paonia Reservoirs are 146%, 304% and 671% of last years values on the same date. In fact, the Park Reservoir Snotel gauge contains 12.1 inches of SWE, which is already close to surpassing last years peak of 12.8 inches.

Outlook

The Colorado Basin River Forecast Center (CBRFC) released their first April to July runoff forecasts on January 1st. Their forecast includes 500,000 acre-feet (ac-ft) of runoff into Blue Mesa (74% of average), 74,000 ac-ft of runoff into Ridgway (73% of average) and 65,000 ac-ft of runoff into Paonia (68% of average). Runoff forecasts basin wide are for a lower amount than is depicted by the SWE because a significant amount of snowmelt is expected to infiltrate into the parched soils from 2018. Last, NRCS non-exceedance projections for snowpack in the Gunnison basin indicate that if we receive average snow during the remaining accumulation season we would end with 96% of the 30-year median peak SWE.

Administrative/Management Concerns

Blue Mesa Reservoir Reservoir levels have increased slightly to 250,000 ac-ft, but likely won't change significantly until spring runoff. The inflow forecast mentioned above places the Aspinall Unit in the moderately dry category as defined in the Record of Decision for operations, which would require only a 5,000 cfs peak flow and no bankfull duration flows at Whitewater for the endangered fish. Current projections for end of month content based upon these operations forecast a max content in Blue Mesa and end of season content of 456000 acre-feet and 385,000 ac-ft, respectively, which is higher than last year, but not nearly to the normal end of year target of 580,000 ac-ft.

Taylor Park Reservoir physical content remains stable at around 59,000 ac-ft. Storage in each account, however, continues to change as the Aspinall Unit water exchanged into Taylor Park continues to be paid back at a rate of approximately 100 ac-ft per day and the first fill account gains a similar amount each day. Total first fill account storage on January 1st stands at 39,054 acre-feet with 19,924 ac-ft of Aspinall Unit water left in Taylor Park to be repaid. Projections for account storage prepared by Reclamation and DWR, based upon the CBRFC inflow forecasts, forecast that Taylor Park Reservoir would end the season in 2019 with 40,000 ac-ft of carryover, which is nearly 8,000 ac-ft more than in 2018, but would still represent the third lowest amount since modern accounting practices have been in place.

Total carryover into the 2019 water year for the over 100 Grand Mesa reservoirs was a mere 8% of capacity, which is the lowest ever recorded! Greater than average runoff will be required to fill these reservoirs to capacity in 2019.

Public Use Impacts

Snow conditions at basin ski resorts, such as Telluride and Crested Butte, continue to be good. Cold temperatures at Telluride allowed them to continue snowmaking operations throughout December. Hopefully this will continue during the next few months!

UNCOMPAHGRE RIVER NR. RIDGWAY, FLOW BY WATER YEAR

WET (1984) — DRY (1977) — AVG — 2019

REPRESENTATIVE RESERVOIRS

Avg. 12/31 Contents — 12/31/18 Contents

16

Gunnison Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

■ Gunnison-DataComposite-SWSI

Historical Period Recent Period

17
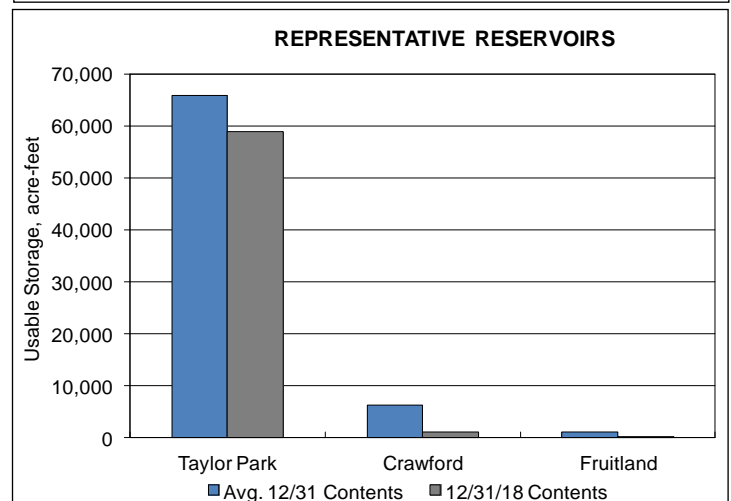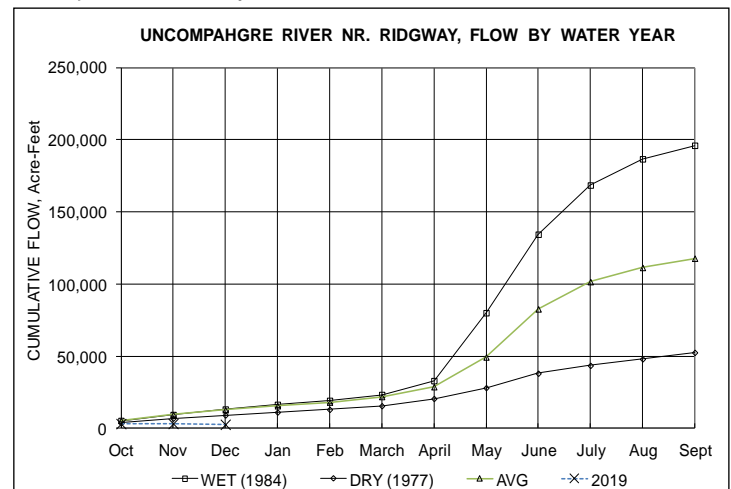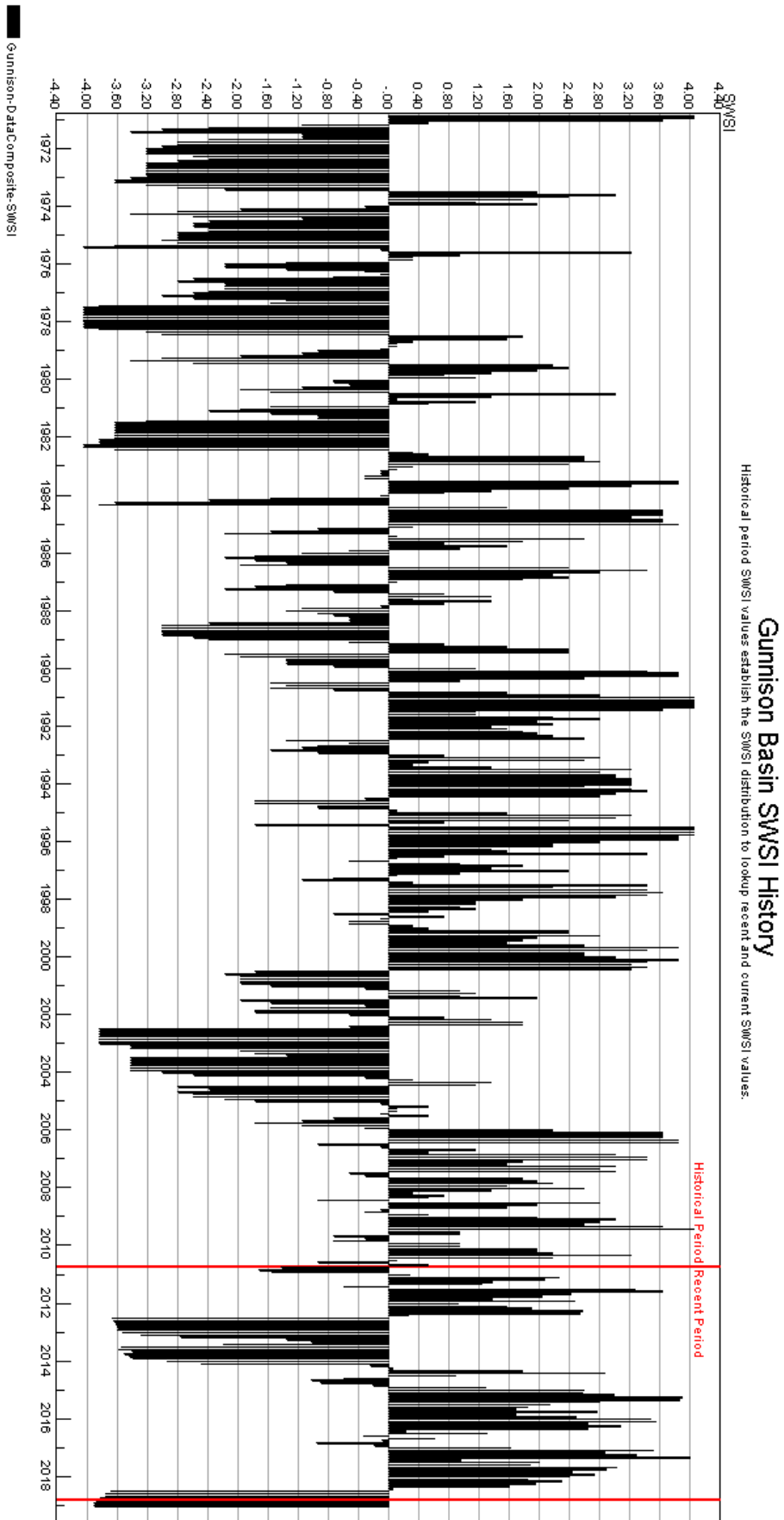
Gunnison River Basin Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Jan 17, 2019

Snow Water Equivalent (inches)

Current as Pct of Normal: 100%
Current as Pct of Avg: 94%
Current as Pct of Last Year: 213%
Current as Pct of Peak: 50%
Normal as Pct of Peak: 50%
Pct of Normal Needed to Reach Peak: 101%
Normal Peak Date: Apr 06

Median
WY2016
WY2017
WY2018
Average
WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service
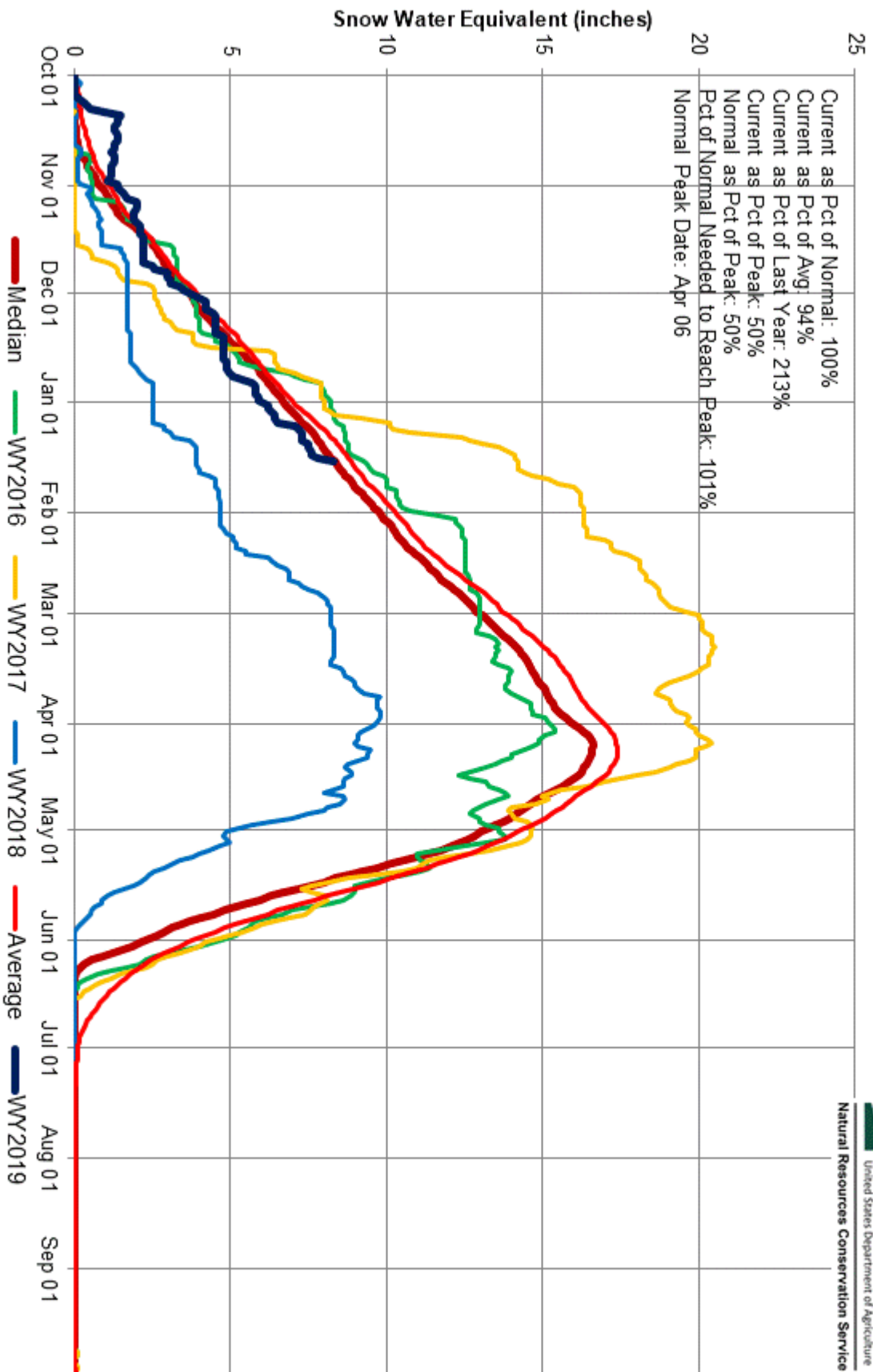
Basinwide Conditions Assessment

The SWSI value for the month was -2.4.

Outlook

Colorado River flows are running below average with tributary flows also running below average throughout January. As of January 17, the Upper Colorado River Basin snowpack was 96 percent of median snow water equivalent and 98 percent of average precipitation. Forecasts call for average to above average precipitation below average temperatures for western Colorado through January.

Administrative/Management Concerns

The call on the Colorado River main stem remains the Shoshone Hydro Power right for 1250cfs. Accordingly, Green Mountain Reservoir is releasing to pass inflows, provide contract and HUP obligations and make C-BT replacements.

Public Use Impacts

For the 18th year, the ESPN Winter X-Games return to Aspen January 24-27. Buttermilk Ski Mountain, part of Aspen Snowmass, makes a significant amount of snow to accommodate the large jumps needed for the events and the super pipe. The games also have a massive economic impact in the Roaring Fork Valley and make it the highest occupancy weekend of the year in Aspen Snowmass.

COLORADO RIVER NR. DOTSERO, FLOW BY WATER YEAR

REPRESENTATIVE RESERVOIRS

Colorado Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Colorado-DataComposite-SWSI

Historical Period Recent Period

20

Colorado River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Current as Pct of Normal: 105%
Current as Pct of Avg: 100%
Current as Pct of Last Year: 143%
Current as Pct of Peak: 54%
Normal as Pct of Peak: 51%
Pct of Normal Needed to Reach Peak: 95%
Normal Peak Date: Apr 10

Snow Water Equivalent (inches)

Median — WY2016 — WY2017 — WY2018 — Average — WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service

Basinwide Conditions Assessment

The SWSI value for the month was +0.7.

December precipitation was well below average in the Yampa, White, and North Platte River basins. Precipitation for the month, as measured at the SNOTEL sites operated by NRCS, was reported at 64% of average for the Yampa, White, and North Platte River basins. Total precipitation for the water year as a percent of average to date in the combined basins at the end of December was 101%. Snowpack in the Yampa, White, and North Platte River basins was at 104% of average.

The Yampa River (YAMABVCO) gage remains open through the winter.

Outlook

As of December 31st Fish Creek Reservoir was storing approximately 1,990 AF, 48% of capacity. The capacity of Fish Creek Reservoir is 4,167 AF. Yamcolo Reservoir was storing 2,500 AF (29% capacity) at the end of December 2018. The capacity of Yamcolo Reservoir is 8,700 AF. The G3 website is down for Elkhead Reservoir. On December 31, 2018, Stagecoach Reservoir was storing 31,200 AF, 85% of capacity.

Water stored in Fish Creek Reservoir is used primarily for municipal purposes, Yamcolo Reservoir for irrigation purposes, and Elkhead Creek Reservoir for municipal, industrial, recreational, and fish recovery releases. Stagecoach Reservoir is primarily used for recreation though a significant amount of stored water is allocated for municipal, industrial, irrigation and augmentation uses.

Public Use Impacts

Stagecoach Reservoir is closed to motorized boating. Only non-motorized, ANS-Exempt watercraft may be used. Please see website for current fishing conditions. Ice is in early season conditions and may be unstable. Limited campsites are available during the winter (October 1 through May 15) in the Pinnacle campground on a first-come/first-serve basis and include 30 amp electrical hookups. Water is not available and the dump station is closed. Winter trails are groomed and open for use.

At Steamboat Lake State Park, winter camping with electrical outlets is available on a first-come/first-serve basis in the Marina parking lot. Camper cabins are open and reservable year-round by calling 970-879-7019. The road into Dutch Hill towards the Marina and Swim Beach areas is open. The Dutch Hill Campground areas are closed for the season and Sage Flats is closed for construction. Check the park conditions website for the fishing report. Ice on Steamboat Lake is about 6-8" thick in most areas. There is about 6"-8" of snow on top of the ice. Refer to the CPW ice safety website listed above.

YAMPA RIVER AT STEAMBOAT, FLOW BY WATER YEAR

Steamboat Ski Resort currently has 169 trails open with 16 lifts. Steamboat Ski Resort has received 109 inches to date.

Yampa-White Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

■ Yampa-White-Data-Composite-SWSI
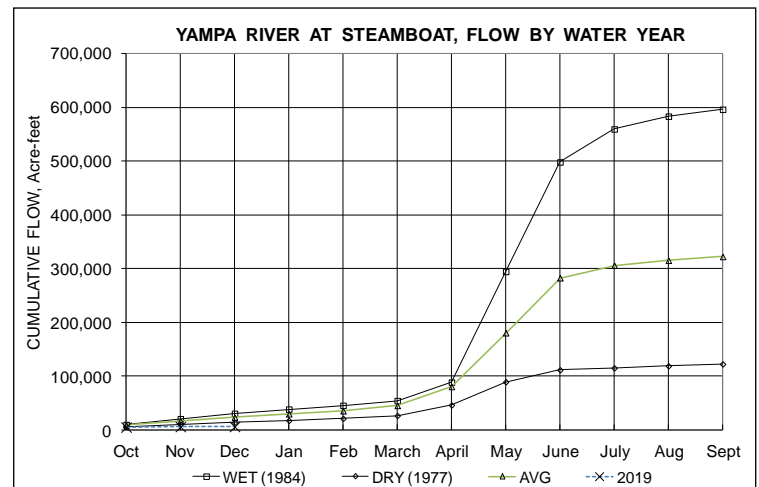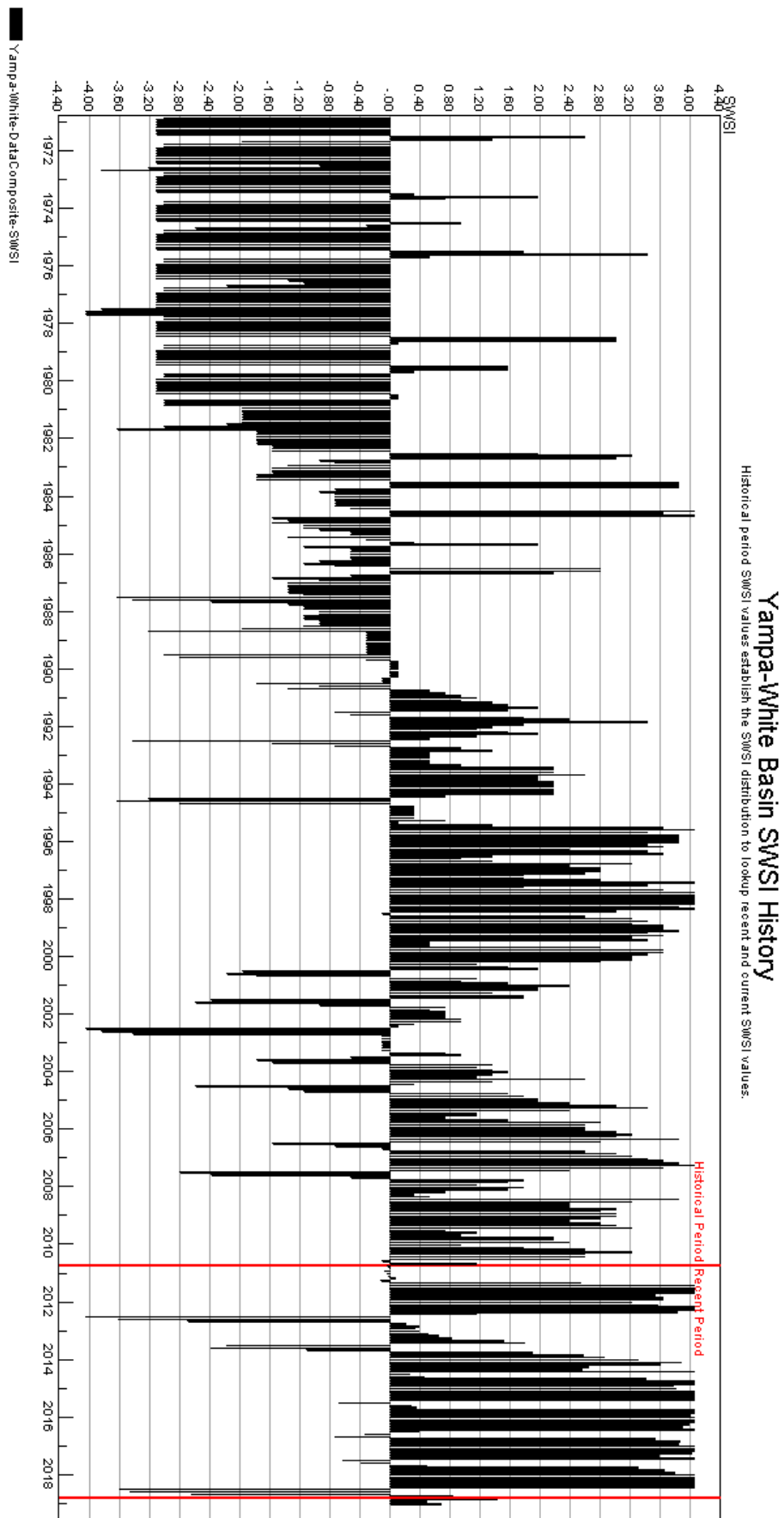
Yampa & White River Basins Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Current as Pct of Normal: 101%
Current as Pct of Avg: 95%
Current as Pct of Last Year: 135%
Current as Pct of Peak: 51%
Normal as Pct of Peak: 50%
Pct of Normal Needed to Reach Peak: 99%
Normal Peak Date: Apr 10

Snow Water Equivalent (inches)

Median — WY2016 — WY2017 — WY2018 — Average — WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service

Laramie & North Platte River Basins Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Snow Water Equivalent (inches)

Current as Pct of Normal: 97%
Current as Pct of Avg: 93%
Current as Pct of Last Year: 115%
Current as Pct of Peak: 50%
Normal as Pct of Peak: 52%
Pct of Normal Needed to Reach Peak: 103%
Normal Peak Date: Apr 11

Median
WY2016
WY2017
WY2018
Average
WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service

Basinwide Conditions Assessment

The SWSI value for the month was -0.9.

Flow at the Animas River at Durango averaged 136 cfs (61% of average). The flow at the Dolores River at Dolores estimated average is 35 cfs (61% of average). The La Plata River at Hesperus averaged 4.6 cfs (57% of average). Precipitation in Durango was 0.79 inches for the month, 50% of the 30-year average of 1.58 inches. Precipitation to date in Durango, for the water year is 4.85 inches, 96% of the 30-year average of 5.04 inches. End of last month precipitation to date, for the water year was 122% of average. The average high and low temperatures for the month of December in Durango were 43o and 17o. In comparison, the 30-year average high and low for the month is 41o and 14o. At the end of the month Vallecito Reservoir contained 34,678 acre-feet compared to its average content of 55,416 acre-feet (63% of average). McPhee Reservoir was up to 168,056 acre-feet compared to its average content of 260,172 (65% of average), while Lemon Reservoir was up to 7,235 acre-feet as compared to its average content of 19,671 acre-feet (37% of average).

Outlook

Precipitation (0.79 inches) was well below average for December in Durango. There were 92 years out of 124 years of record where there was more precipitation than this year. The flows in the rivers within the basin remained well below average for this time of year. There are 107 out of 108 years of record where the total flow past the Animas River at Durango stream gauge was more than this year. There were 94 out of 108 years of record where the total flow past the Dolores stream gauge was more than this year and 88 out of 102 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year. On December 31, the NRCS SNOTEL sites reported an average snow-water-equivalent within the basin at 62%. Last month the average snow-water-equivalent at the end of the month was 70%.

ANIMAS RIVER NR. DURANGO, FLOW BY WATER YEAR

REPRESENTATIVE RESERVOIRS

San Juan-Dolores Basin SWSI History

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

San Juan-Dolores-Data-Composite-SWSI

Historical Period | Recent Period
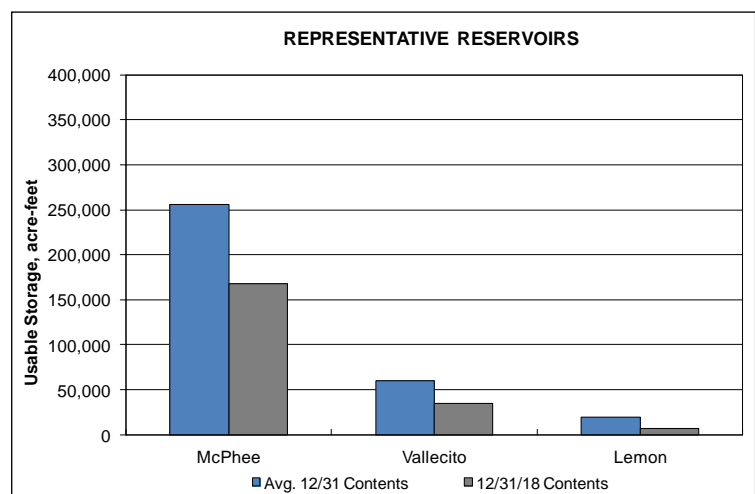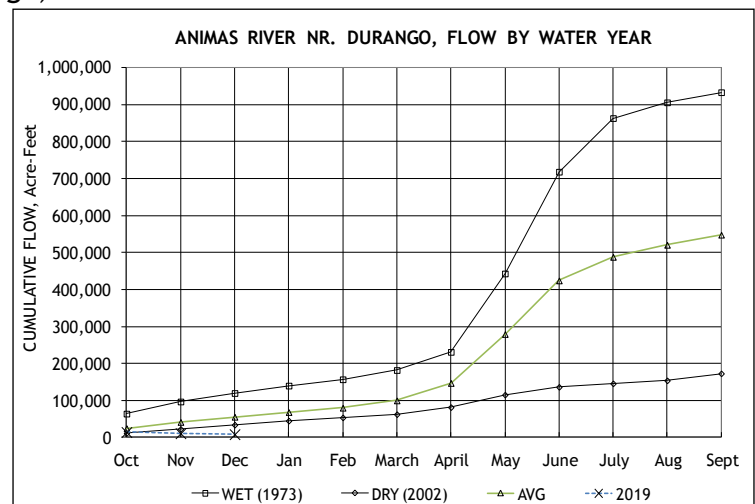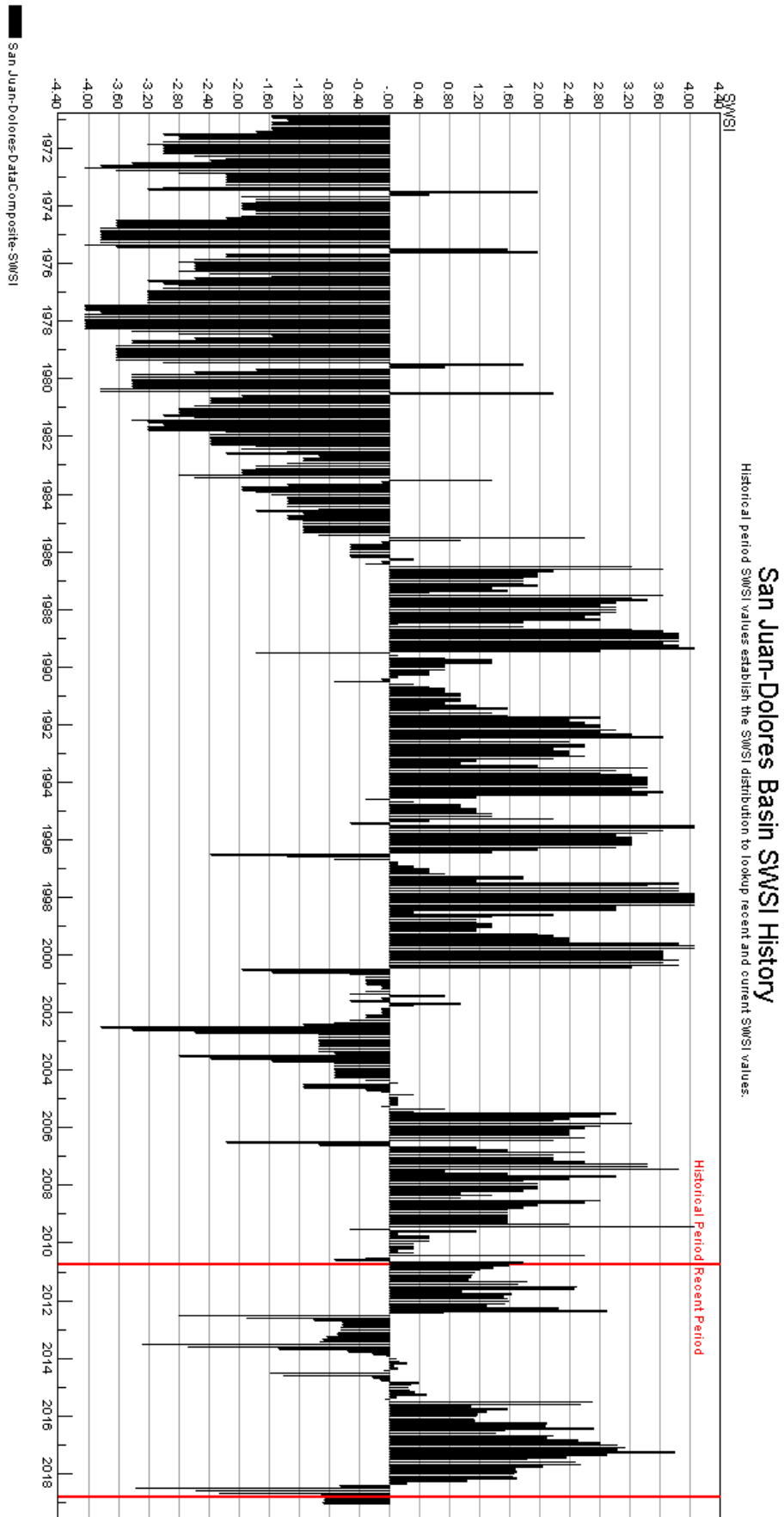
San Miguel, Dolores, Animas & San Juan River Basins Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Jan 17, 2019

Snow Water Equivalent (inches)

Current as Pct of Normal: 89%
Current as Pct of Avg: 85%
Current as Pct of Last Year: 264%
Current as Pct of Peak: 45%
Normal as Pct of Peak: 51%
Pct of Normal Needed to Reach Peak: 111%
Normal Peak Date: Apr 06

Median — WY2016 — WY2017 — WY2018 — Average — WY2019

USDA
United States Department of Agriculture
Natural Resources Conservation Service
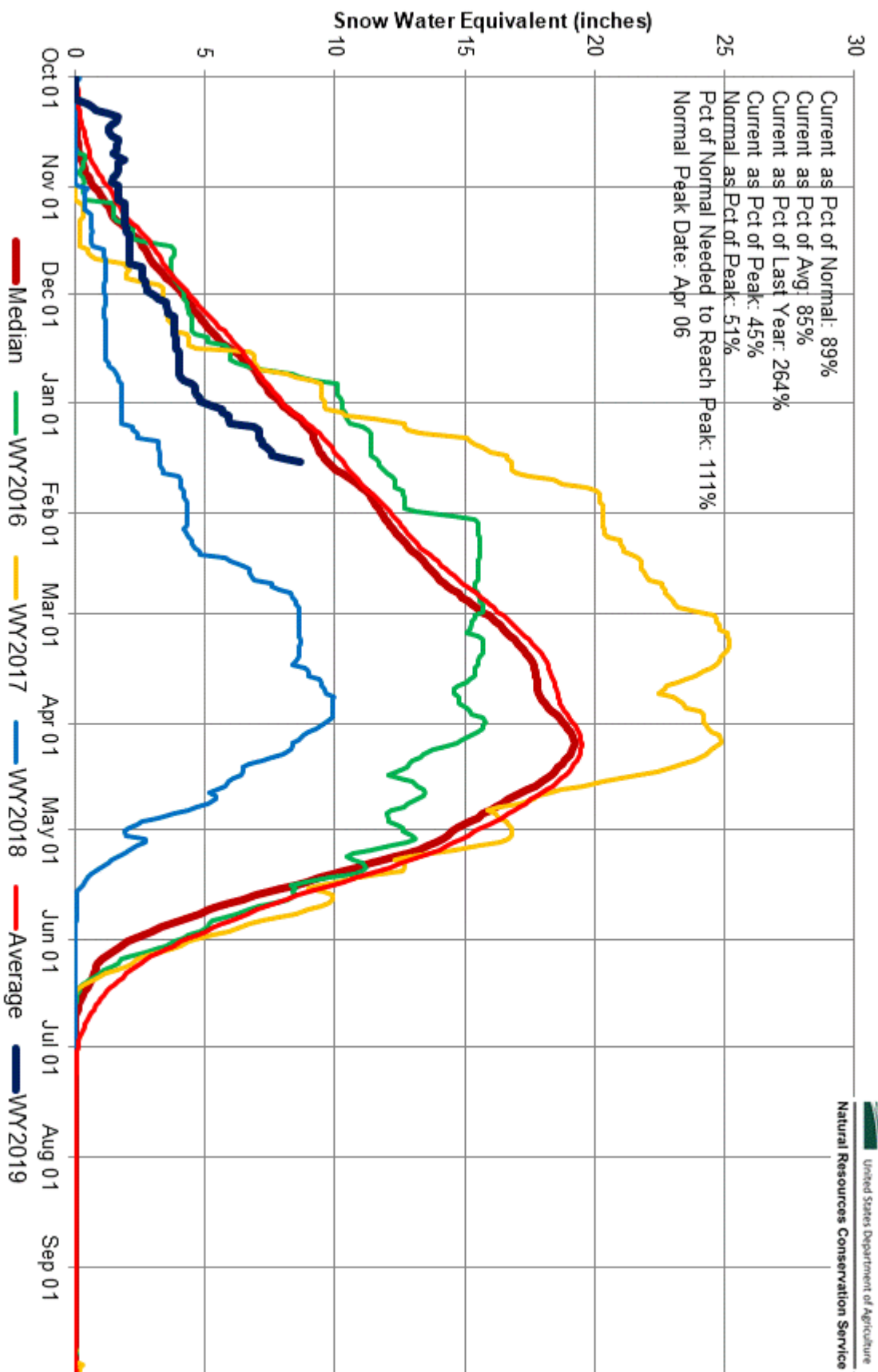
Colorado Basin River Forecast Center January 1, 2019 Water Supply Forecast

Conditions Map [Help]

Lat: 38.77 Lng: -105.81, Zoom: 7
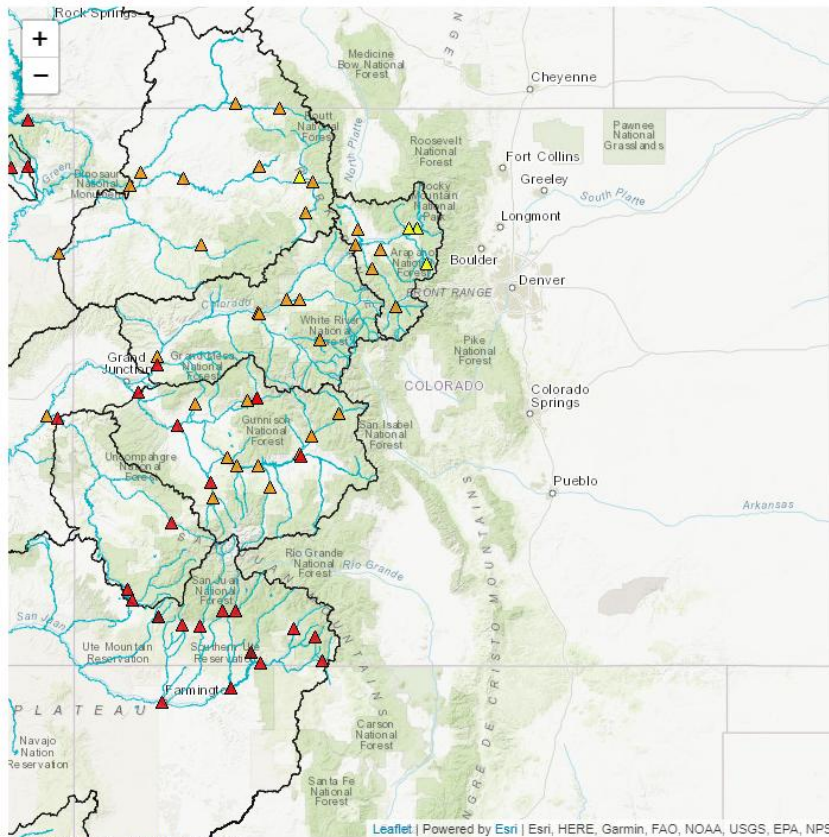
> ▸ River Conditions
> ▸ Snow Conditions
> ▾ **Water Supply Forecasts**
>
> First of Month Forecast Date: 2019-1-1   Help
> Latest Model Run Date: 2019-01-17
>
> ☑ Show   Hide Other Types
>
> ⦿ First of Month Forecast Percent Average
> ○ First of Month Forecast Percent Median
> ○ Latest Model Guidance Percent Average
> ○ Latest Model Guidance Percent Median
>
> ▲ < 30%
> ▲ 30-50%
> ▲ 50-70%
> ▲ 70-90%
> ▲ 90-100%
> ▲ 100-110%
> ▲ 110-130%
> ▲ 130-150%
> ▲ 150-200%
> ▲ 200-300%
> ▲ 300-500%
> ▲ >500%
> ▲ Regulated
> △ No Forecast
>
> ▸ Peak Flood Probablity
> ▸ Reservoir Conditions
> ▸ Daily Precipitation
> ▸ Monthly Precipitation

Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Jan 17, 2019
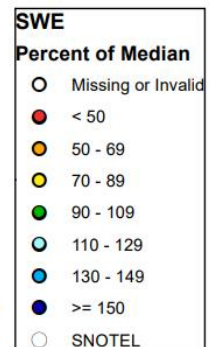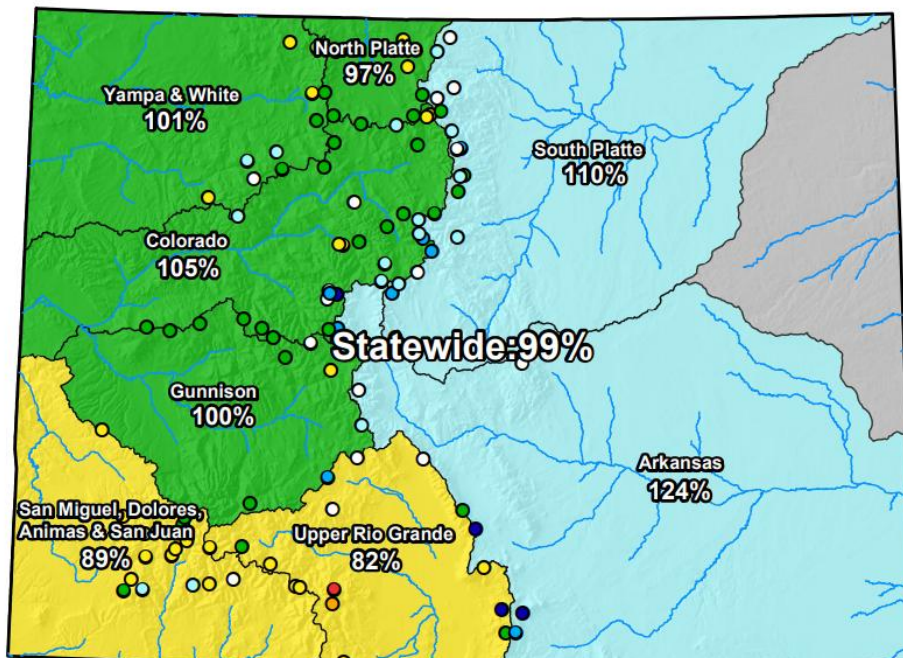
HUC 14080107 (Mancos) Surface Water Supply - JAN
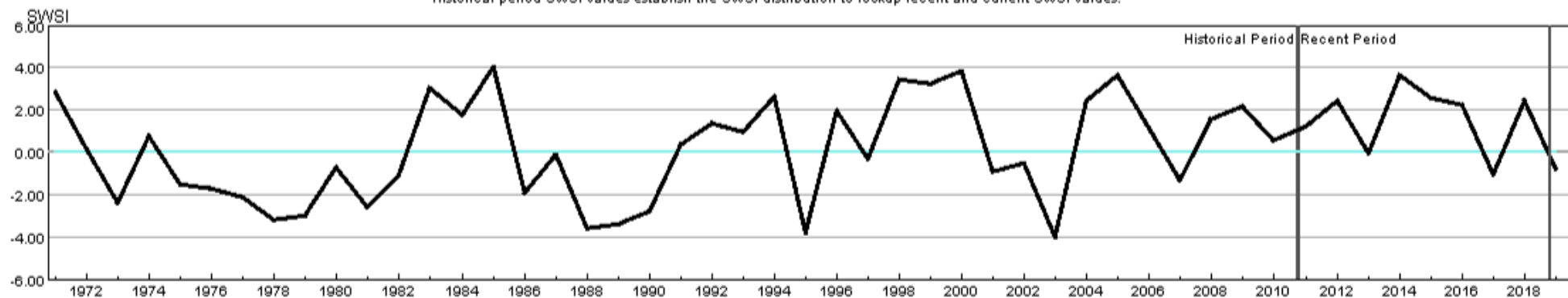### Monthly component volumes
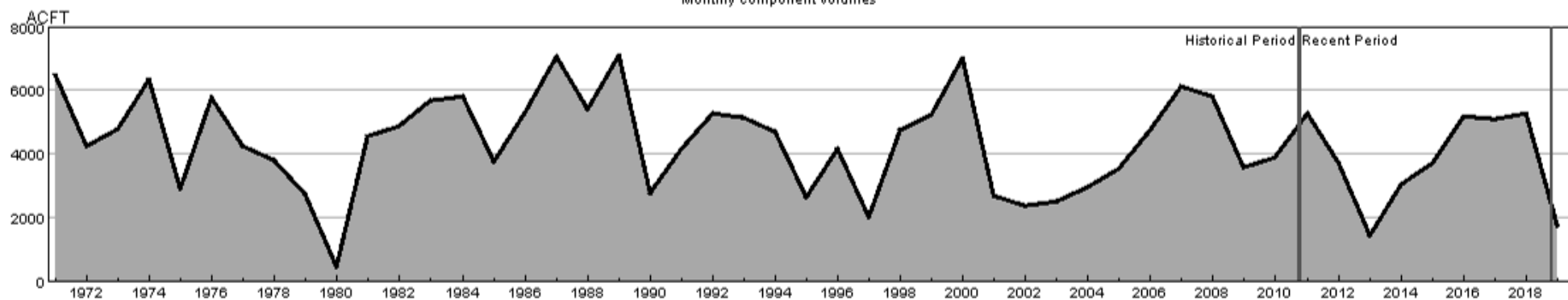
HUC:14080107-JAN-DataComposite
HUC:14080107-JAN-PrevMoStreamflow
HUC:14080107-JAN-ForecastedRunoff
HUC:14080107-JAN-ReservoirStorage
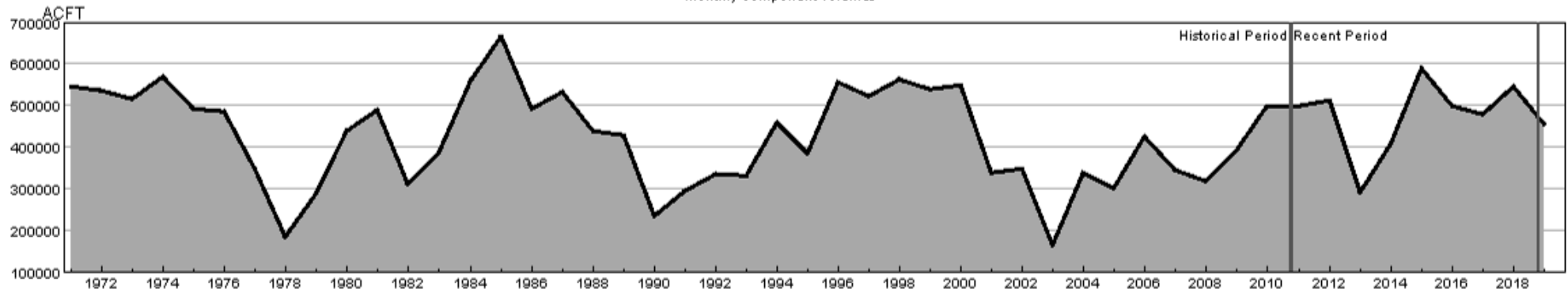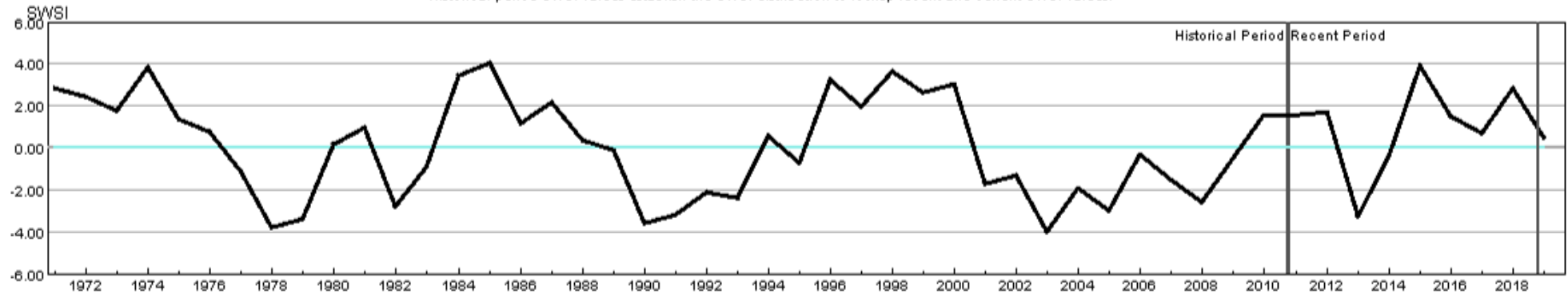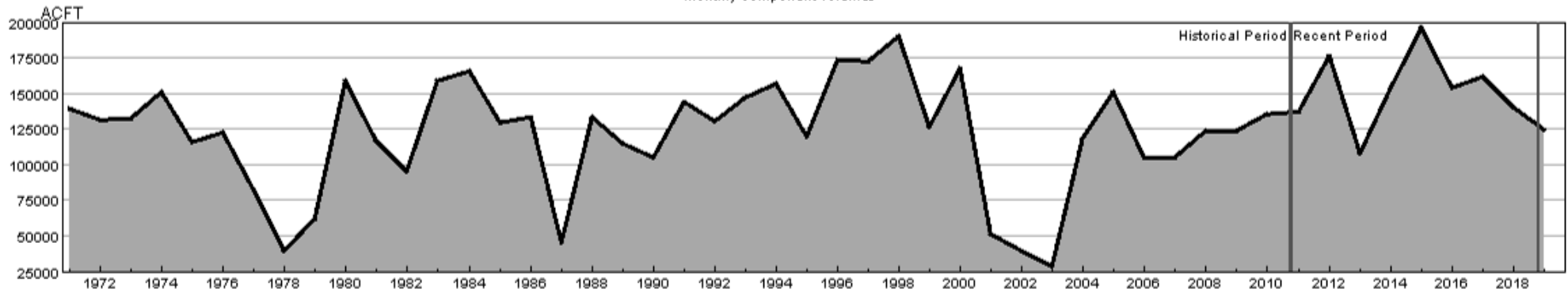
HUC 14080107 (Mancos) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
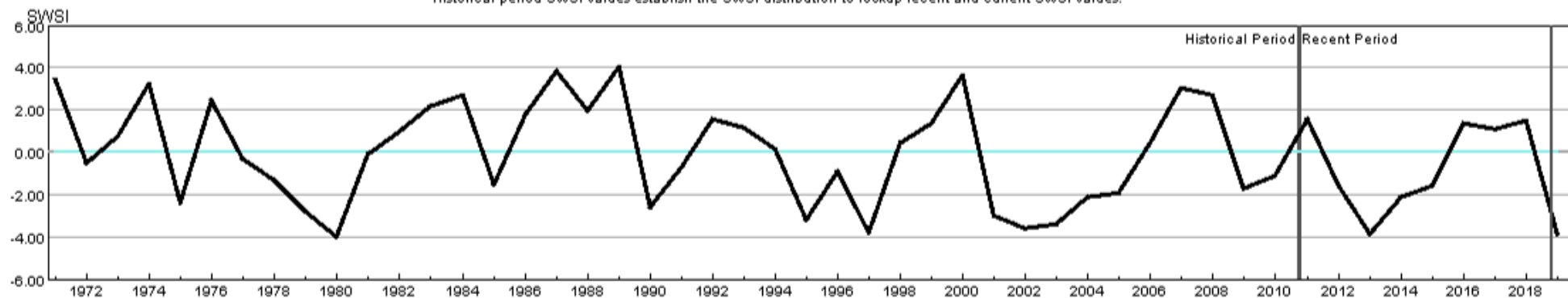
HUC:14080107-JAN-PrevMoStreamflow-SWSI
HUC:14080107-JAN-ForecastedRunoff-SWSI
HUC:14080107-JAN-ReservoirStorage-SWSI
HUC:14080107-JAN-DataComposite-SWSI

HUC 10180001 (North Platte Headwaters) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

1	
1	
1	
0	
0	
0	

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018
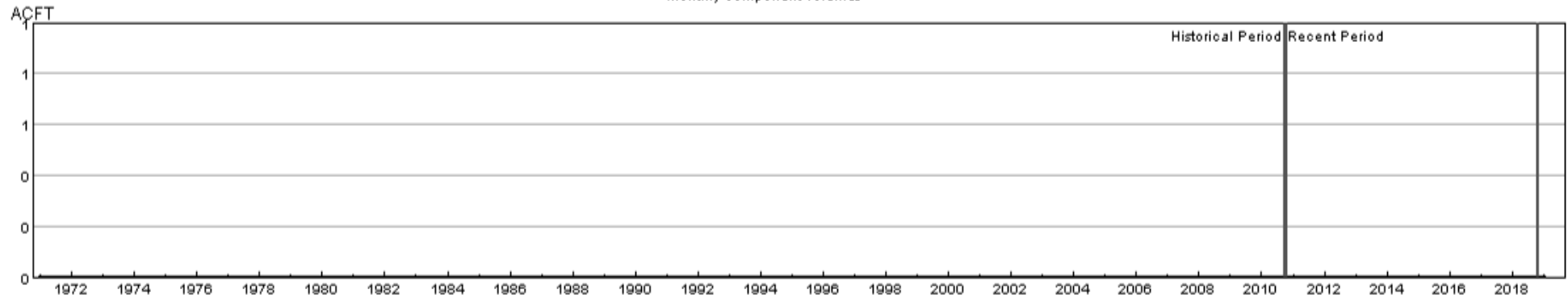
HUC:10180001-JAN-DataComposite
HUC:10180001-JAN-PrevMoStreamflow
HUC:10180001-JAN-ForecastedRunoff
HUC:10180001-JAN-ReservoirStorage

HUC 10180001 (North Platte Headwaters) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00	
0.80	
0.60	
0.40	
0.20	
0.00	

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018
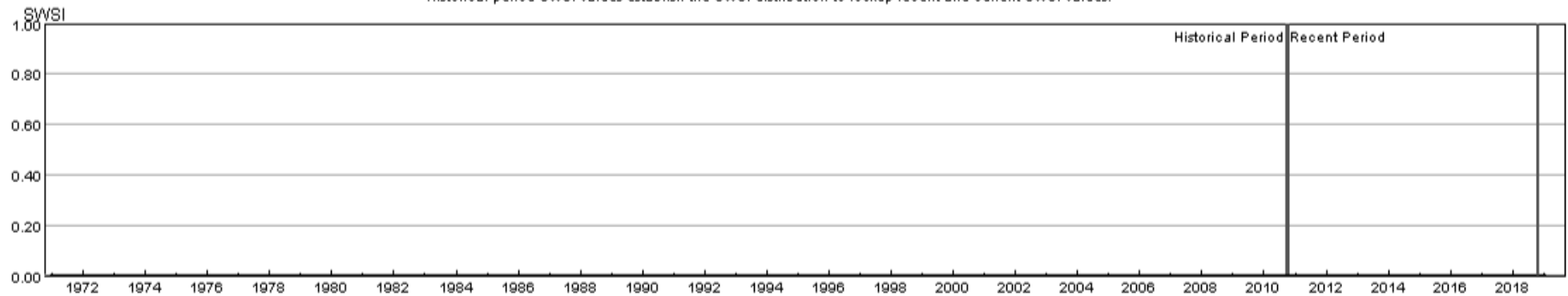
HUC:10180001-JAN-PrevMoStreamflow-SWSI
HUC:10180001-JAN-ForecastedRunoff-SWSI
HUC:10180001-JAN-ReservoirStorage-SWSI
HUC:10180001-JAN-DataComposite-SWSI

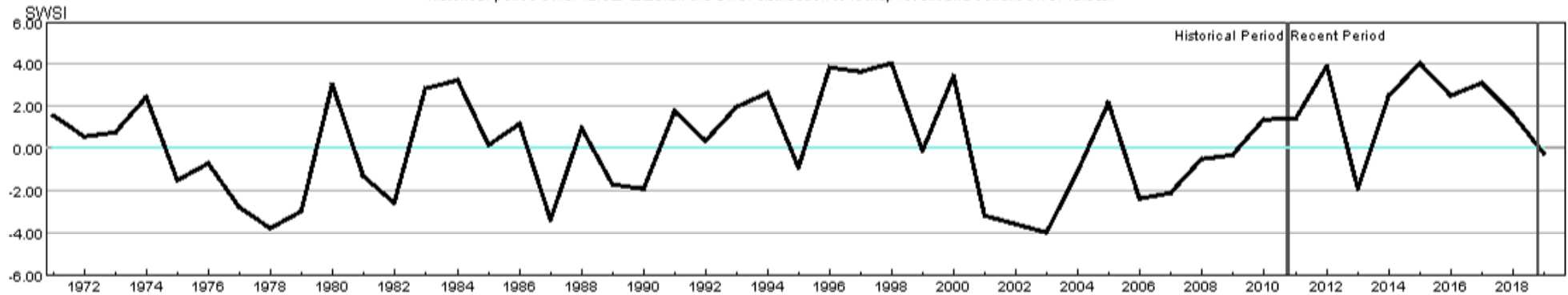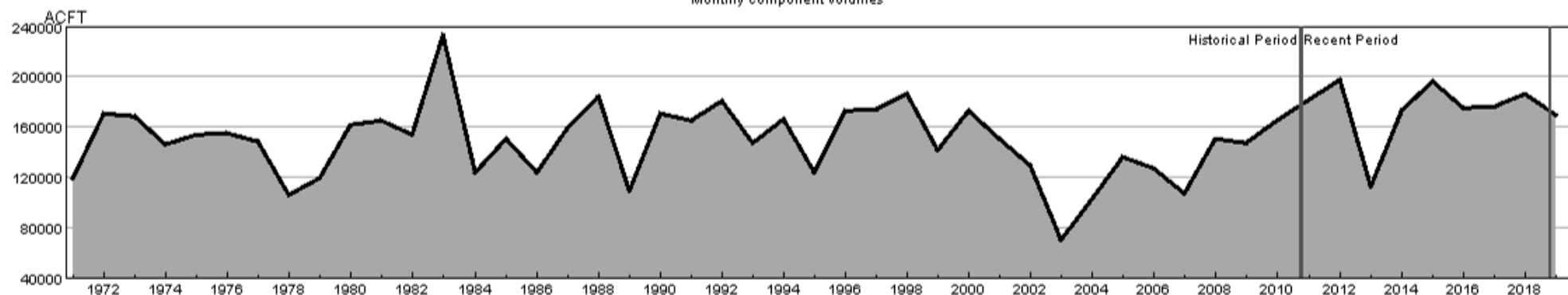# HUC 10190001 (South Platte Headwater) Surface Water Supply - JAN

Monthly component volumes
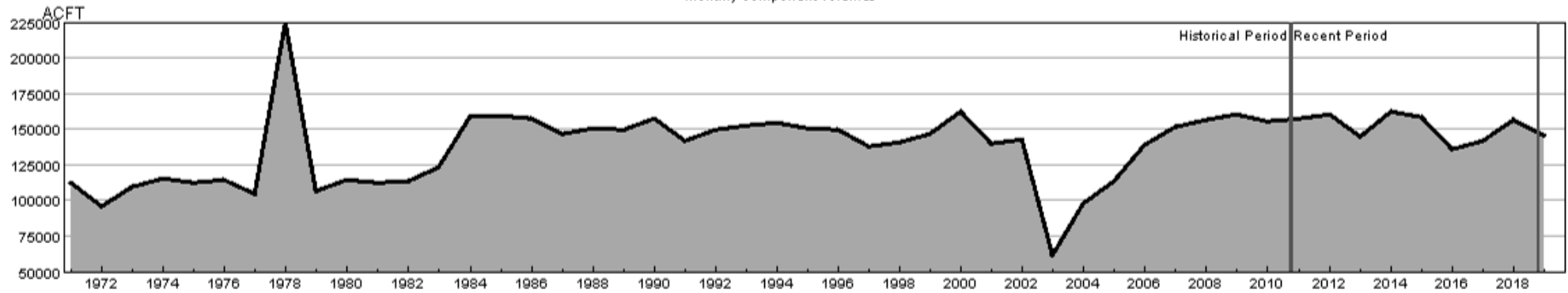
Legend:
- HUC:10190001-JAN-DataComposite
- HUC:10190001-JAN-PrevMoStreamflow
- HUC:10190001-JAN-ForecastedRunoff
- HUC:10190001-JAN-ReservoirStorage

HUC 10190001 (South Platte Headwater) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
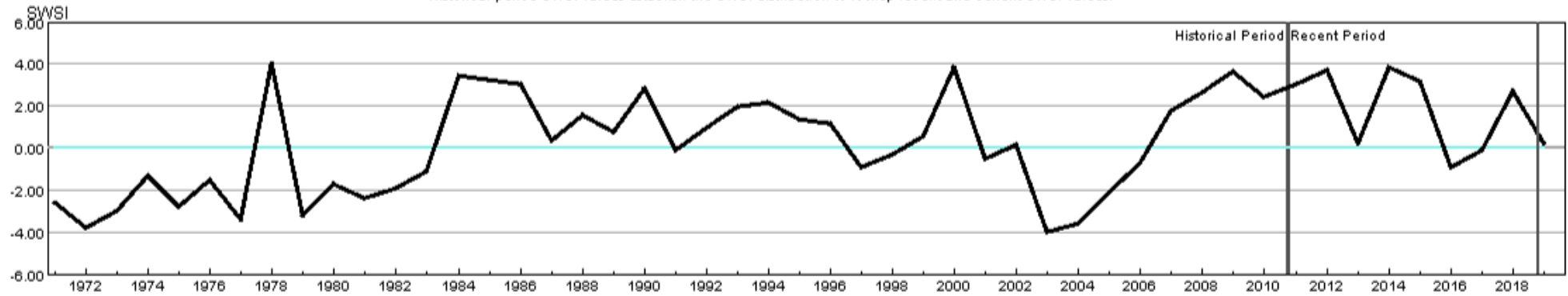
Legend:
- HUC:10190001-JAN-PrevMoStreamflow-SWSI
- HUC:10190001-JAN-ForecastedRunoff-SWSI
- HUC:10190001-JAN-ReservoirStorage-SWSI
- HUC:10190001-JAN-DataComposite-SWSI

HUC 10190002 (Upper South Platte) Surface Water Supply - JAN

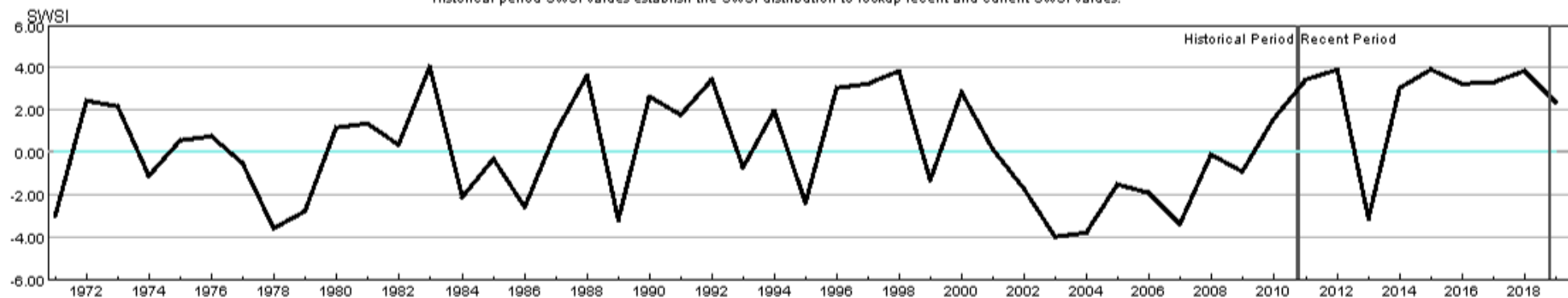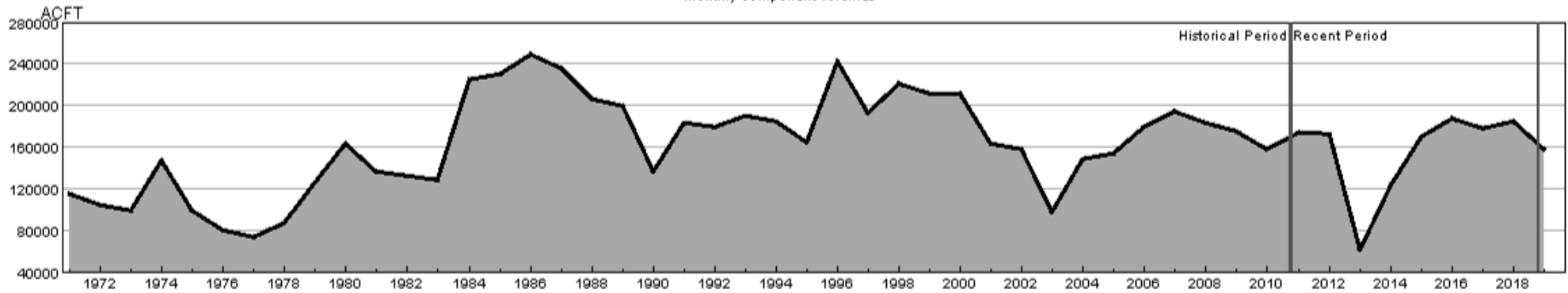Monthly component volumes

ACFT

Historical Period | Recent Period
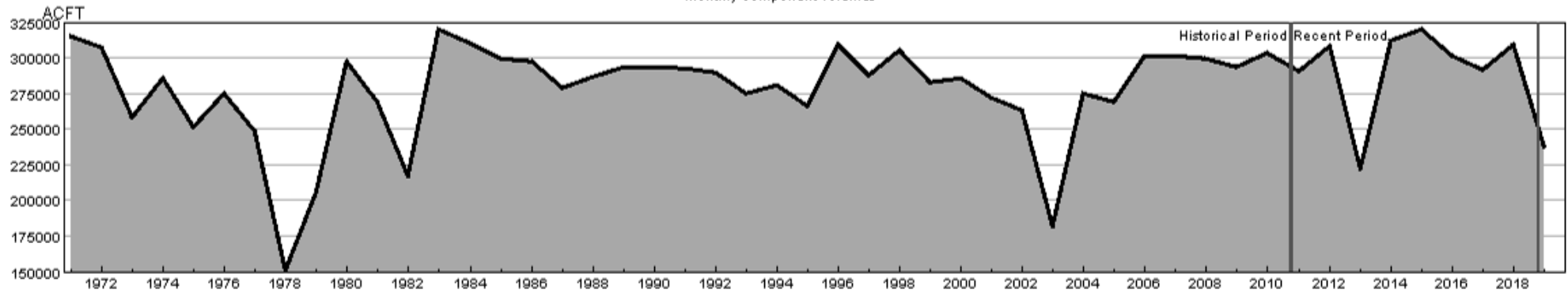
HUC:10190002-JAN-DataComposite
HUC:10190002-JAN-PrevMoStreamflow
HUC:10190002-JAN-ForecastedRunoff
HUC:10190002-JAN-ReservoirStorage

HUC 10190002 (Upper South Platte) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period
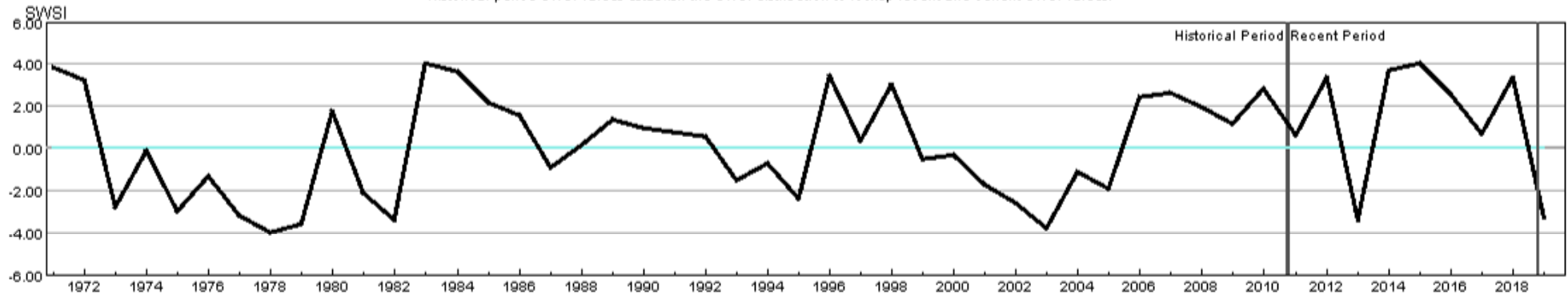
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HUC:10190002-JAN-ForecastedRunoff-SWSI
HUC:10190002-JAN-ReservoirStorage-SWSI
HUC:10190002-JAN-DataComposite-SWSI

# HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply - JAN

Monthly component volumes
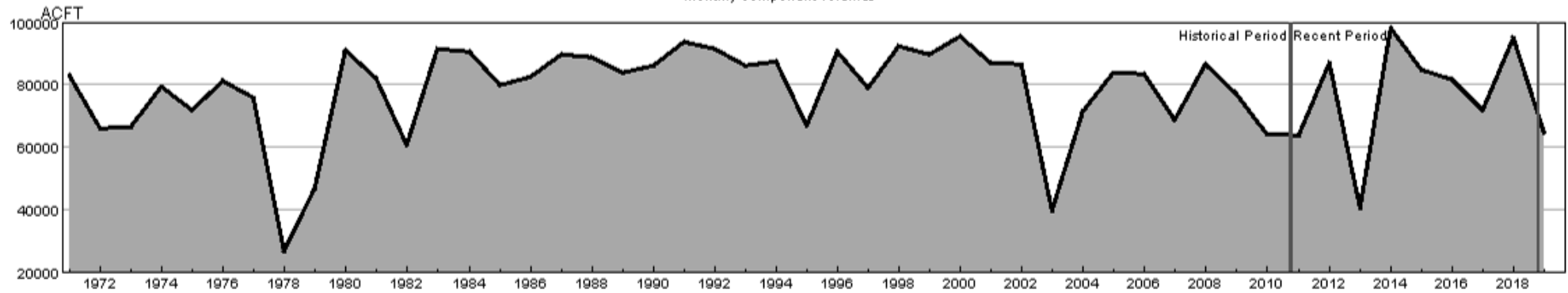
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HUC:10190003-JAN-PrevMoStreamflow
HUC:10190003-JAN-ForecastedRunoff
HUC:10190003-JAN-ReservoirStorage

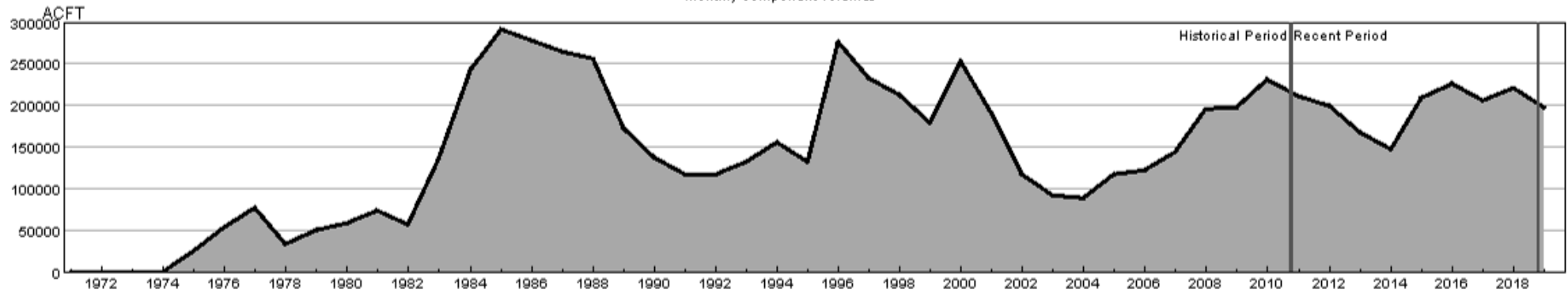# HUC 10190003 (Middle South Platte-Cherry Creek) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
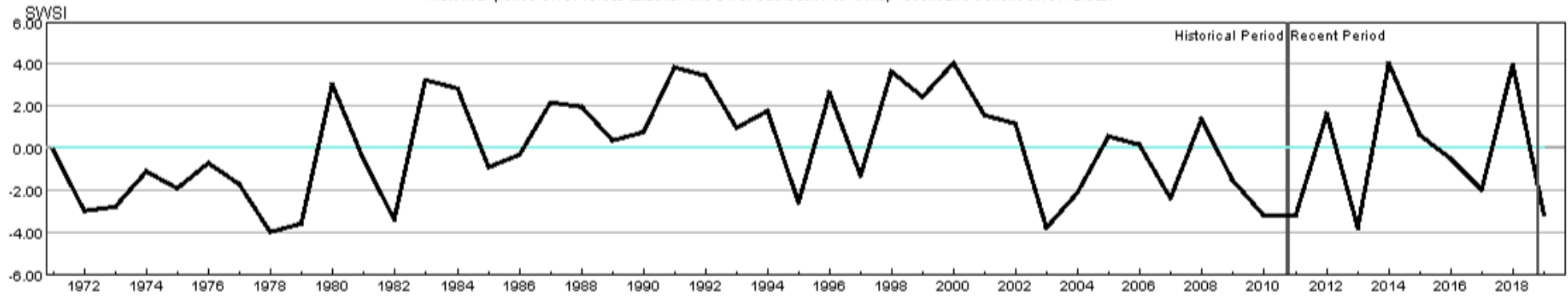
HUC:10190003-JAN-PrevMoStreamflow-SWSI
HUC:10190003-JAN-ForecastedRunoff-SWSI
HUC:10190003-JAN-ReservoirStorage-SWSI
HUC:10190003-JAN-DataComposite-SWSI

HUC 10190004 (Clear) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:10190004-JAN-DataComposite
HUC:10190004-JAN-PrevMoStreamflow
HUC:10190004-JAN-ForecastedRunoff
HUC:10190004-JAN-ReservoirStorage

HUC 10190004 (Clear) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

| 1.00 |
| 0.80 |
| 0.60 |
| 0.40 |
| 0.20 |
| 0.00 |

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018
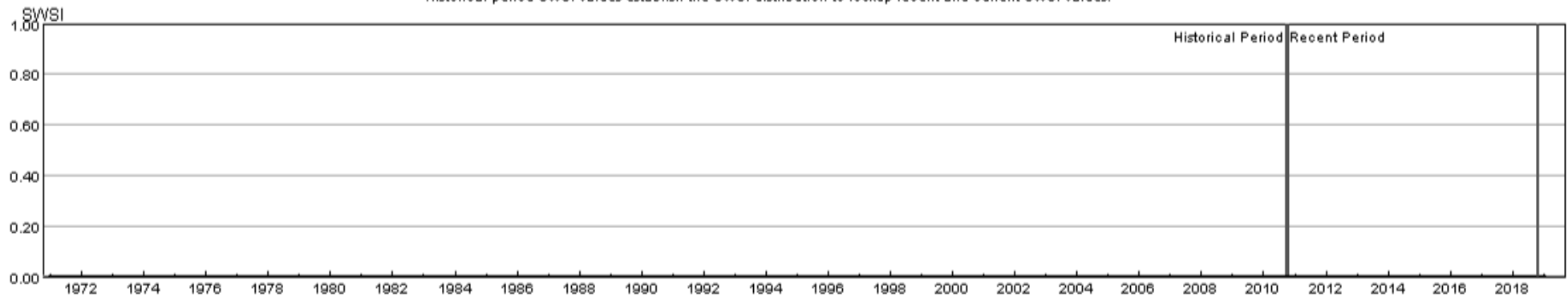
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HUC:10190004-JAN-ForecastedRunoff-SWSI
HUC:10190004-JAN-ReservoirStorage-SWSI
HUC:10190004-JAN-DataComposite-SWSI

HUC 10190005 (St. Vrain) Surface Water Supply - JAN
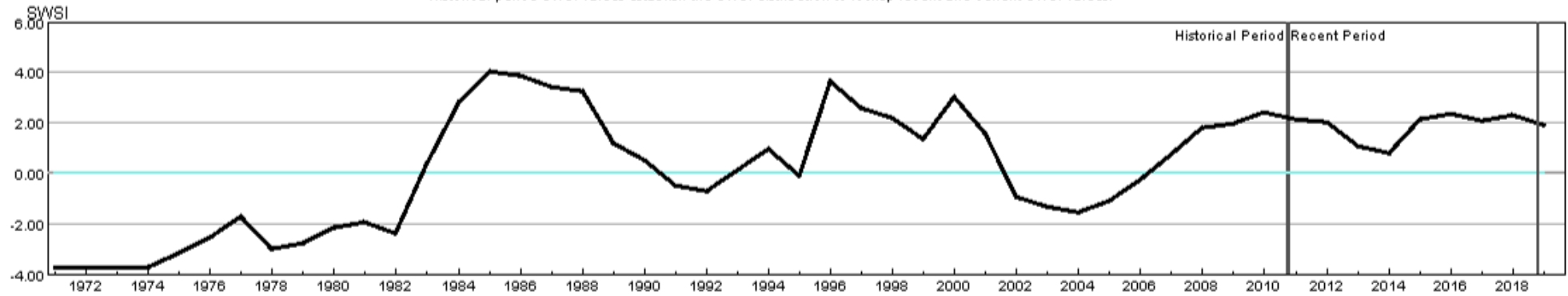Monthly component volumes
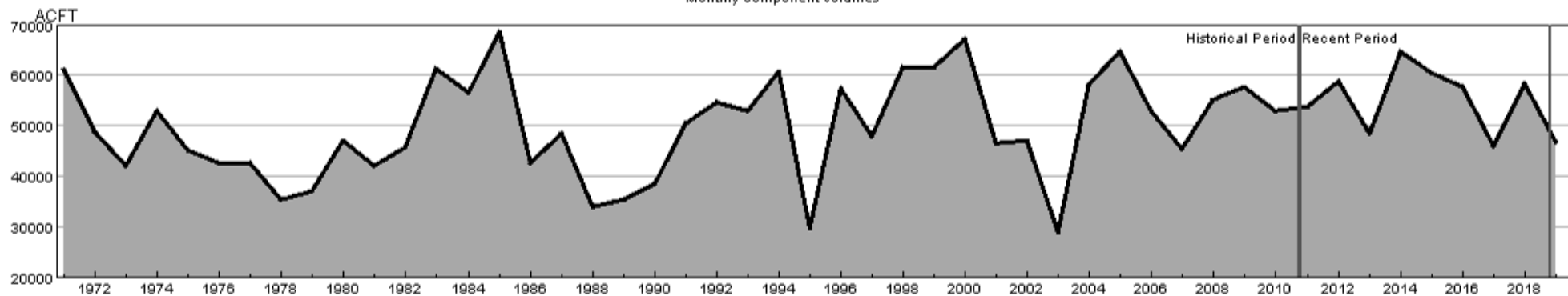
HUC:10190005-JAN-DataComposite
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HUC:10190005-JAN-ForecastedRunoff
HUC:10190005-JAN-ReservoirStorage
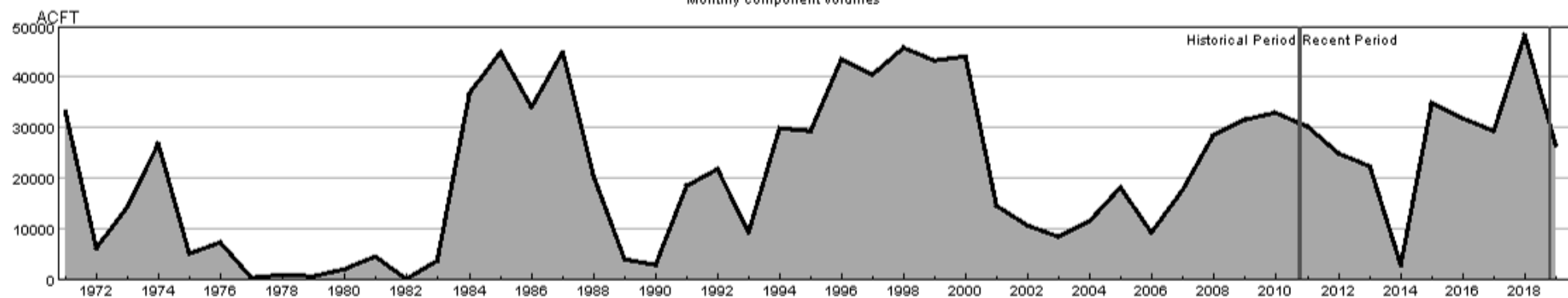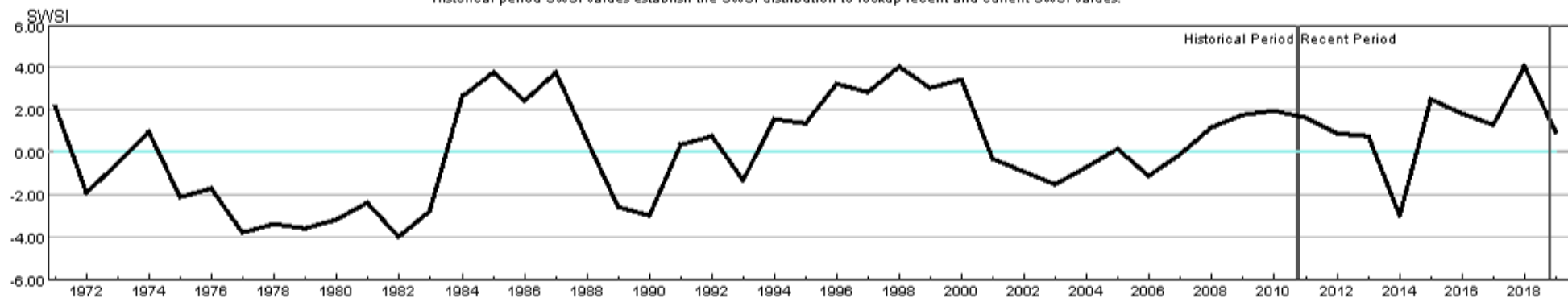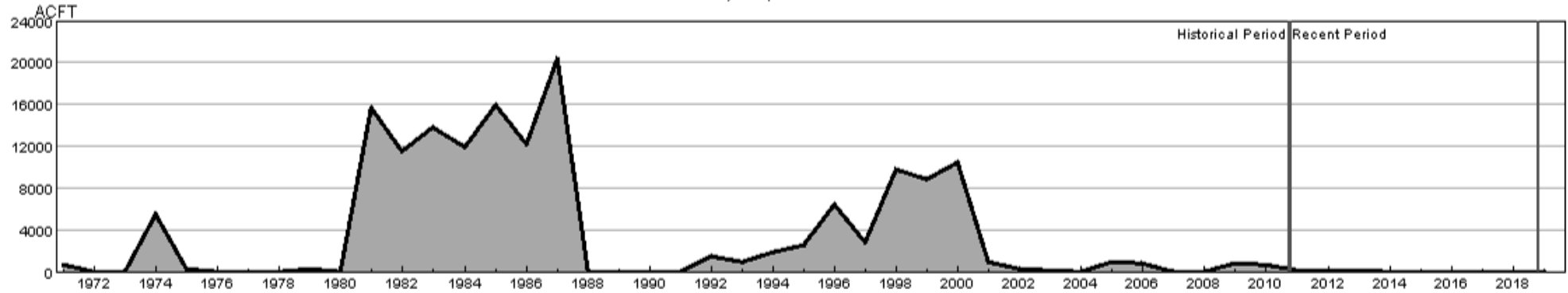
HUC 10190005 (St. Vrain) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:10190005-JAN-PrevMoStreamflow-SWSI
HUC:10190005-JAN-ForecastedRunoff-SWSI
HUC:10190005-JAN-ReservoirStorage-SWSI
HUC:10190005-JAN-DataComposite-SWSI

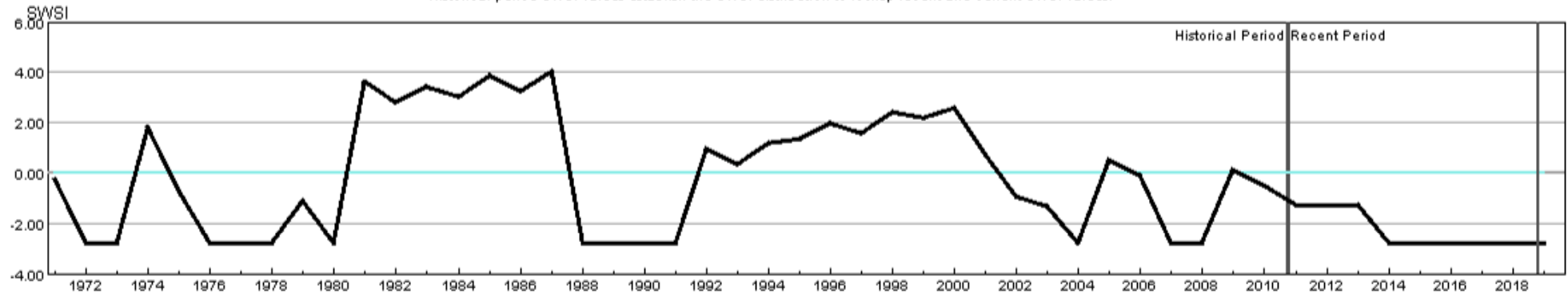# HUC 10190006 (Big Thompson) Surface Water Supply - JAN
Monthly component volumes

HUC:10190006-JAN-DataComposite
HUC:10190006-JAN-PrevMoStreamflow
HUC:10190006-JAN-ForecastedRunoff
HUC:10190006-JAN-ReservoirStorage
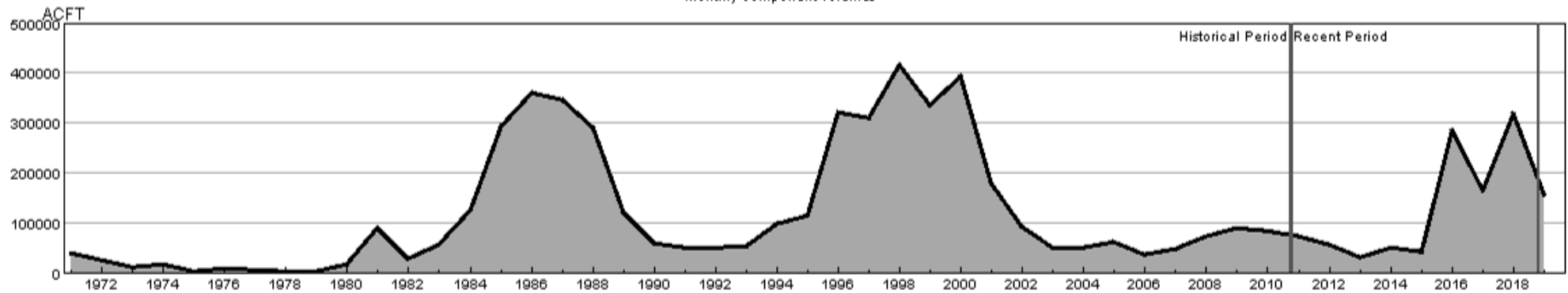
HUC 10190006 (Big Thompson) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:10190006-JAN-PrevMoStreamflow-SWSI
HUC:10190006-JAN-ForecastedRunoff-SWSI
HUC:10190006-JAN-ReservoirStorage-SWSI
HUC:10190006-JAN-DataComposite-SWSI

HUC 10190007 (Cache La Poudre) Surface Water Supply - JAN
Monthly component volumes

Historical Period | Recent Period

HUC:10190007-JAN-DataComposite
HUC:10190007-JAN-PrevMoStreamflow
HUC:10190007-JAN-ForecastedRunoff
HUC:10190007-JAN-ReservoirStorage

HUC 10190007 (Cache La Poudre) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Historical Period | Recent Period

HUC:10190007-JAN-PrevMoStreamflow-SWSI
HUC:10190007-JAN-ForecastedRunoff-SWSI
HUC:10190007-JAN-ReservoirStorage-SWSI
HUC:10190007-JAN-DataComposite-SWSI

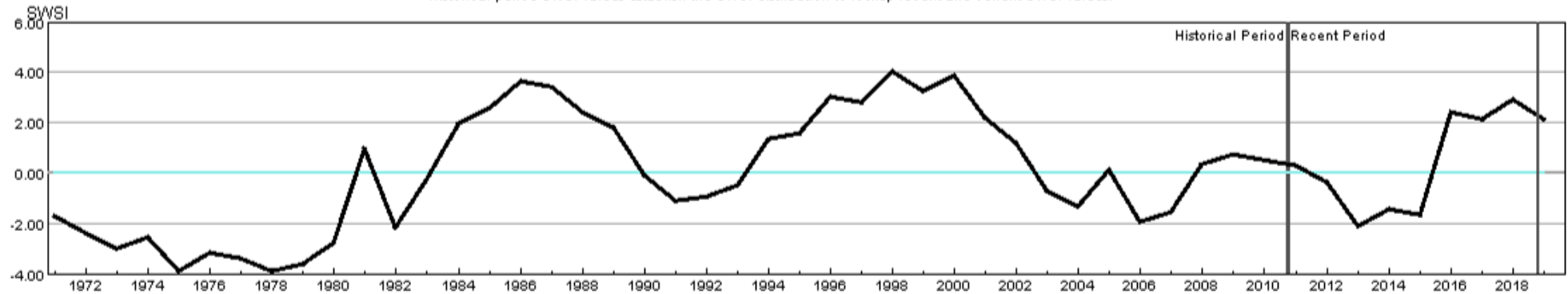## HUC 10190012 (Middle South Platte-Sterling) Surface Water Supply - JAN
Monthly component volumes

HUC:10190012-JAN-DataComposite
HUC:10190012-JAN-PrevMoStreamflow
HUC:10190012-JAN-ForecastedRunoff
HUC:10190012-JAN-ReservoirStorage

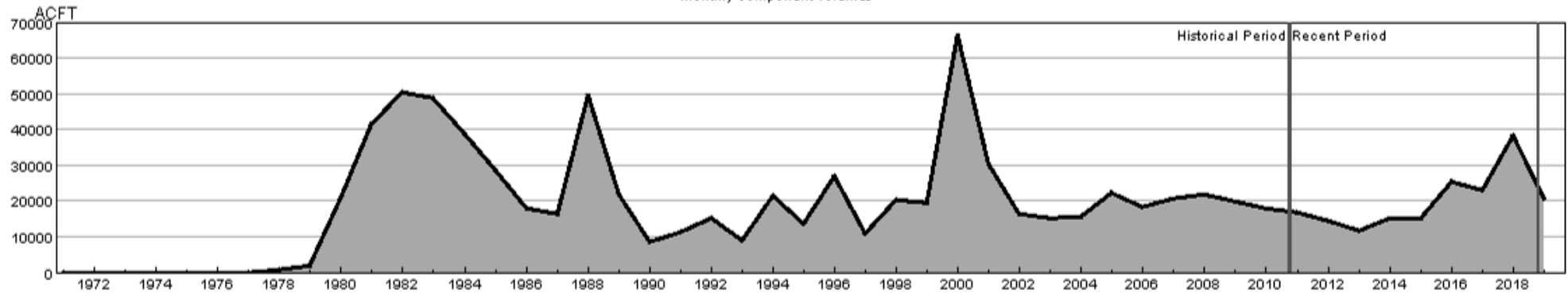## HUC 10190012 (Middle South Platte-Sterling) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:10190012-JAN-PrevMoStreamflow-SWSI
HUC:10190012-JAN-ForecastedRunoff-SWSI
HUC:10190012-JAN-ReservoirStorage-SWSI
HUC:10190012-JAN-DataComposite-SWSI

HUC 11020001 (Arkansas Headwaters) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

HUC:11020001-JAN-DataComposite
HUC:11020001-JAN-PrevMoStreamflow
HUC:11020001-JAN-ForecastedRunoff
HUC:11020001-JAN-ReservoirStorage

HUC 11020001 (Arkansas Headwaters) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period
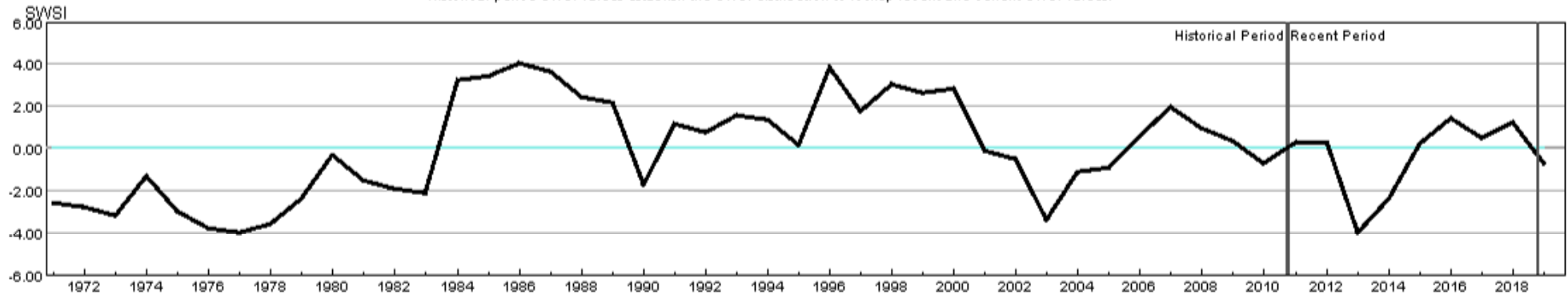
HUC:11020001-JAN-PrevMoStreamflow-SWSI
HUC:11020001-JAN-ForecastedRunoff-SWSI
HUC:11020001-JAN-ReservoirStorage-SWSI
HUC:11020001-JAN-DataComposite-SWSI

HUC 11020002 (Upper Arkansas) Surface Water Supply - JAN
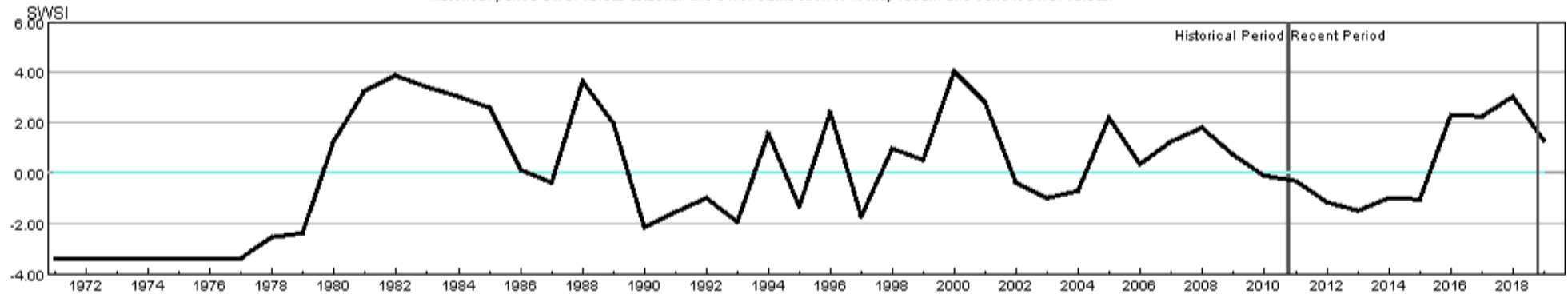Monthly component volumes

HUC:11020002-JAN-DataComposite
HUC:11020002-JAN-PrevMoStreamflow
HUC:11020002-JAN-ForecastedRunoff
HUC:11020002-JAN-ReservoirStorage
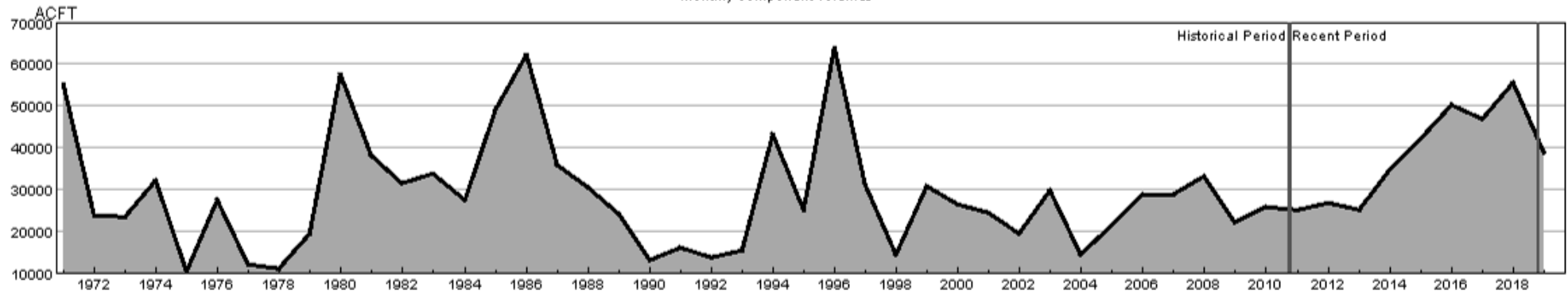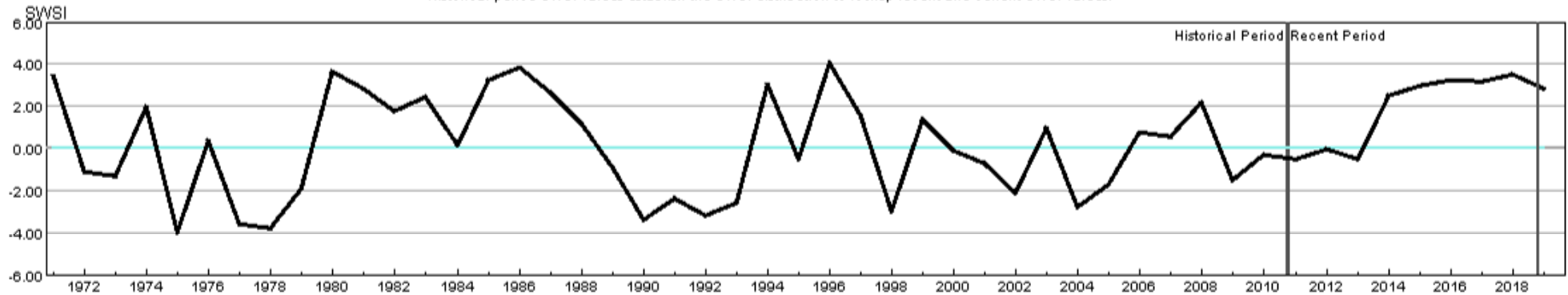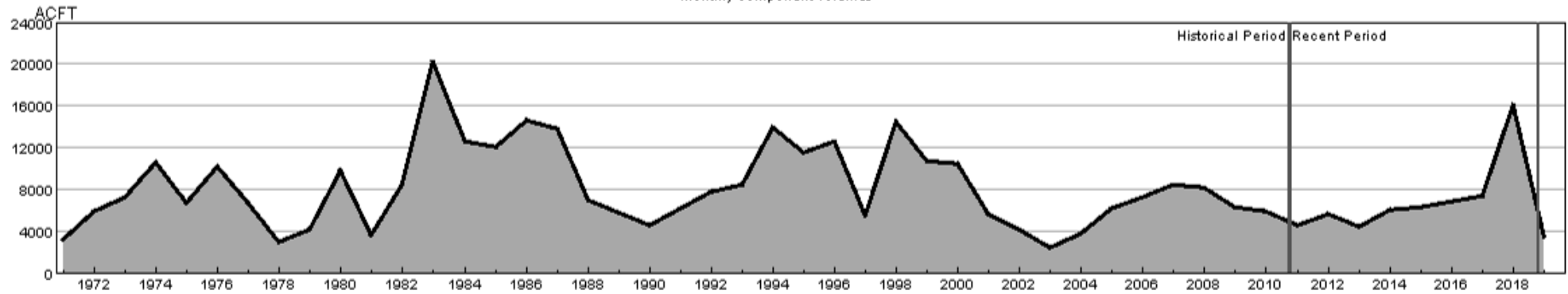
HUC 11020002 (Upper Arkansas) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:11020002-JAN-PrevMoStreamflow-SWSI
HUC:11020002-JAN-ForecastedRunoff-SWSI
HUC:11020002-JAN-ReservoirStorage-SWSI
HUC:11020002-JAN-DataComposite-SWSI

HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

Legend:
- HUC:11020005-JAN-DataComposite
- HUC:11020005-JAN-PrevMoStreamflow
- HUC:11020005-JAN-ForecastedRunoff
- HUC:11020005-JAN-ReservoirStorage

HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

Legend:
- HUC:11020005-JAN-PrevMoStreamflow-SWSI
- HUC:11020005-JAN-ForecastedRunoff-SWSI
- HUC:11020005-JAN-ReservoirStorage-SWSI
- HUC:11020005-JAN-DataComposite-SWSI

HUC 11020006 (Huerfano) Surface Water Supply - JAN
Monthly component volumes

Historical Period | Recent Period

HUC:11020006-JAN-DataComposite
HUC:11020006-JAN-PrevMoStreamflow
HUC:11020006-JAN-ForecastedRunoff
HUC:11020006-JAN-ReservoirStorage

HUC 11020006 (Huerfano) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Historical Period | Recent Period

HUC:11020006-JAN-PrevMoStreamflow-SWSI
HUC:11020006-JAN-ForecastedRunoff-SWSI
HUC:11020006-JAN-ReservoirStorage-SWSI
HUC:11020006-JAN-DataComposite-SWSI

HUC 11020009 (Upper Arkansas–John Martin Reservoir) Surface Water Supply - JAN

Monthly component volumes

HUC:11020009-JAN-DataComposite
HUC:11020009-JAN-PrevMoStreamflow
HUC:11020009-JAN-ForecastedRunoff
HUC:11020009-JAN-ReservoirStorage

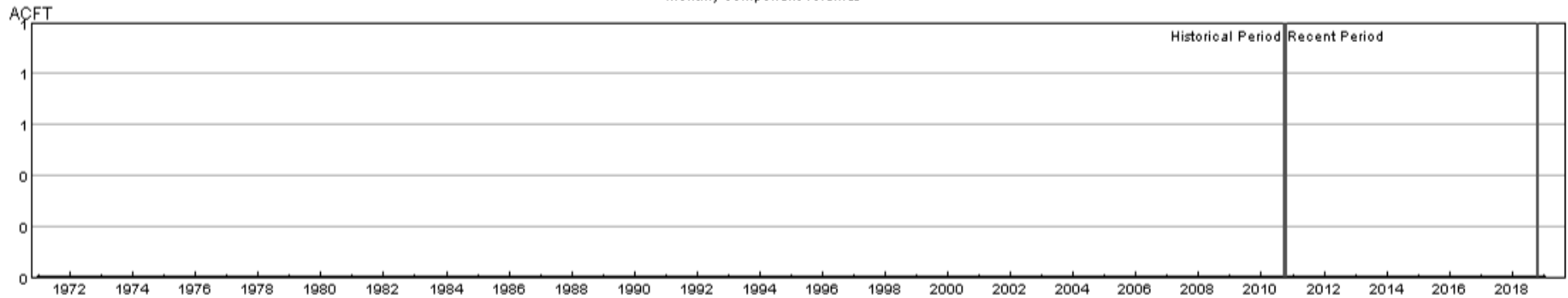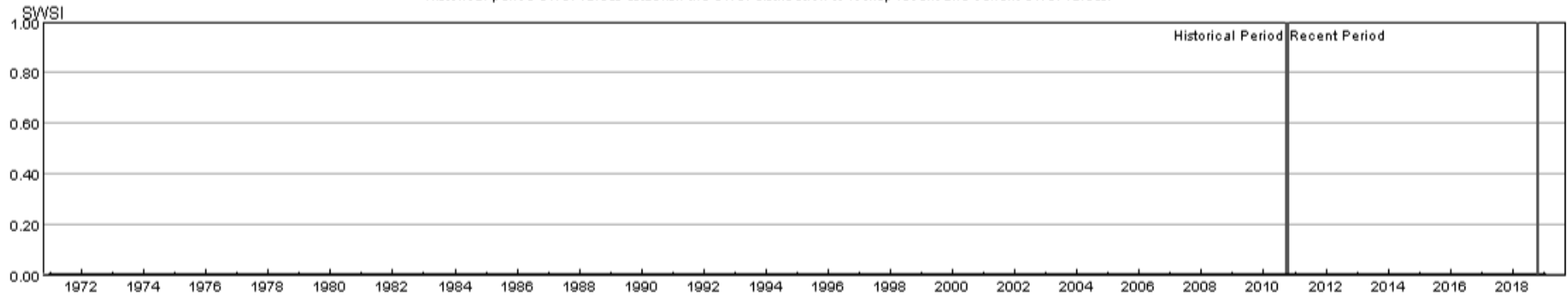# HUC 11020009 (Upper Arkansas–John Martin Reservoir) SWSI Values - JAN
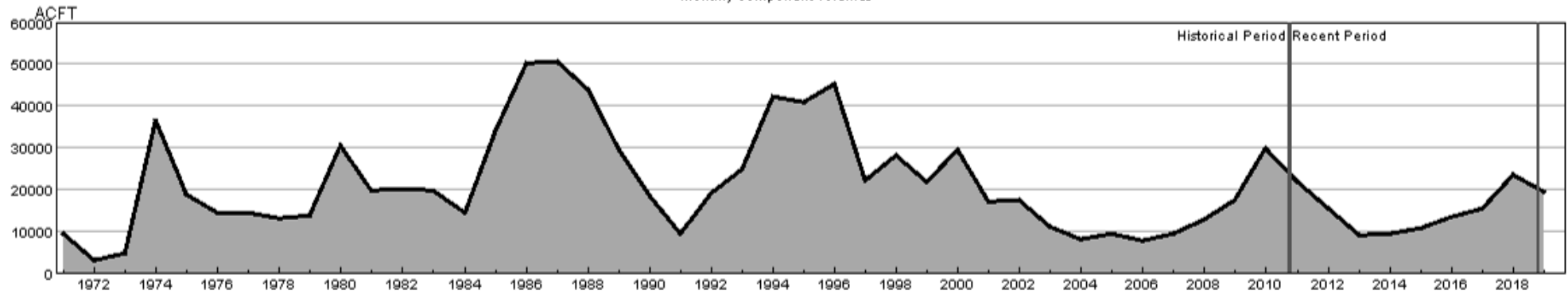
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:11020009-JAN-PrevMoStreamflow-SWSI
HUC:11020009-JAN-ForecastedRunoff-SWSI
HUC:11020009-JAN-ReservoirStorage-SWSI
HUC:11020009-JAN-DataComposite-SWSI

HUC 11020010 (Purgatoire) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

HUC:11020010-JAN-DataComposite
HUC:11020010-JAN-PrevMoStreamflow
HUC:11020010-JAN-ForecastedRunoff
HUC:11020010-JAN-ReservoirStorage

HUC 11020010 (Purgatoire) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

HUC:11020010-JAN-PrevMoStreamflow-SWSI
HUC:11020010-JAN-ForecastedRunoff-SWSI
HUC:11020010-JAN-ReservoirStorage-SWSI
HUC:11020010-JAN-DataComposite-SWSI

HUC 13010001 (Rio Grande Headwaters) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period
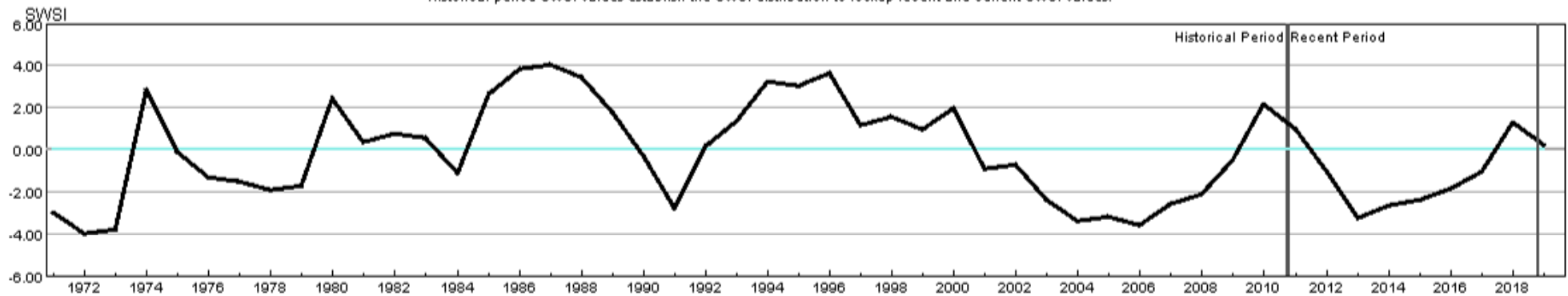
HUC:13010001-JAN-DataComposite
HUC:13010001-JAN-PrevMoStreamflow
HUC:13010001-JAN-ForecastedRunoff
HUC:13010001-JAN-ReservoirStorage

HUC 13010001 (Rio Grande Headwaters) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

HUC:13010001-JAN-PrevMoStreamflow-SWSI
HUC:13010001-JAN-ForecastedRunoff-SWSI
HUC:13010001-JAN-ReservoirStorage-SWSI
HUC:13010001-JAN-DataComposite-SWSI

HUC 13010002 (Alamosa-Trinchera) Surface Water Supply - JAN
Monthly component volumes

HUC:13010002-JAN-DataComposite
HUC:13010002-JAN-PrevMoStreamflow
HUC:13010002-JAN-ForecastedRunoff
HUC:13010002-JAN-ReservoirStorage

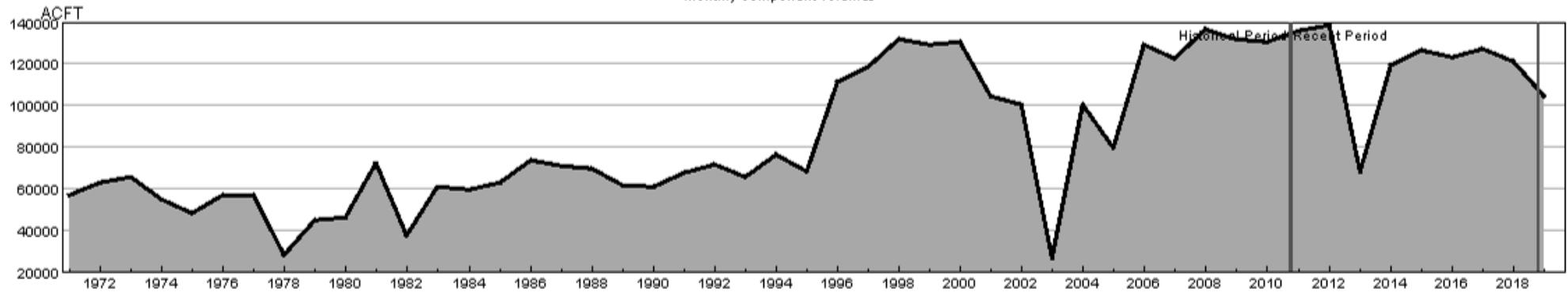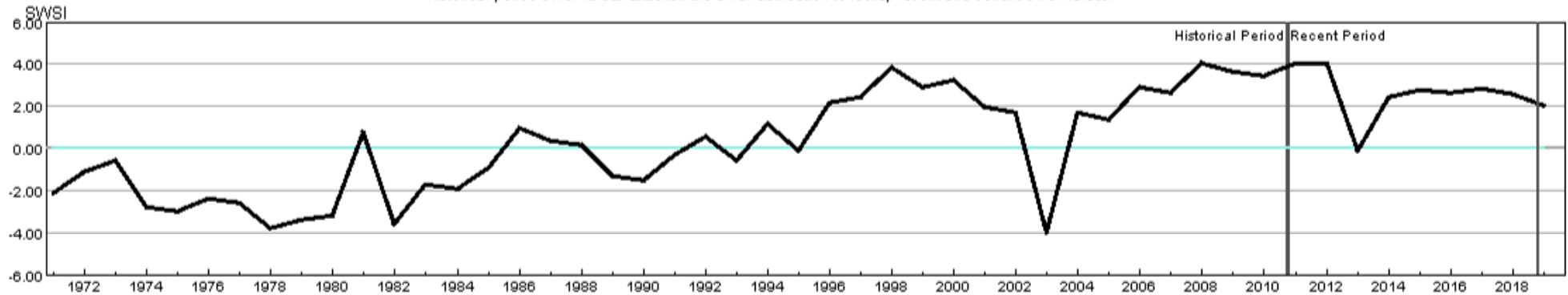HUC 13010002 (Alamosa-Trinchera) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
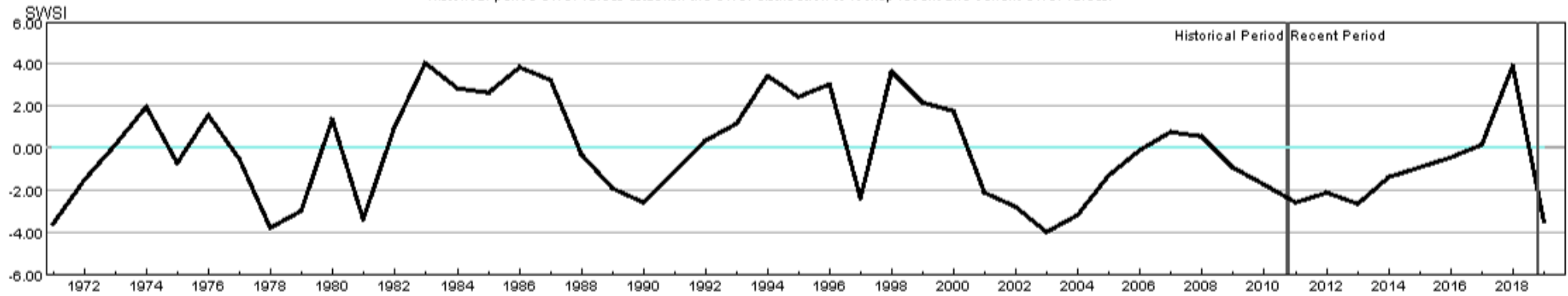
HUC:13010002-JAN-PrevMoStreamflow-SWSI
HUC:13010002-JAN-ForecastedRunoff-SWSI
HUC:13010002-JAN-ReservoirStorage-SWSI
HUC:13010002-JAN-DataComposite-SWSI

HUC 13010004 (Saguache) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

1
1
1
0
0
0

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:13010004-JAN-DataComposite
HUC:13010004-JAN-PrevMoStreamflow
HUC:13010004-JAN-ForecastedRunoff
HUC:13010004-JAN-ReservoirStorage

HUC 13010004 (Saguache) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00
0.80
0.60
0.40
0.20
0.00

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:13010004-JAN-PrevMoStreamflow-SWSI
HUC:13010004-JAN-ForecastedRunoff-SWSI
HUC:13010004-JAN-ReservoirStorage-SWSI
HUC:13010004-JAN-DataComposite-SWSI
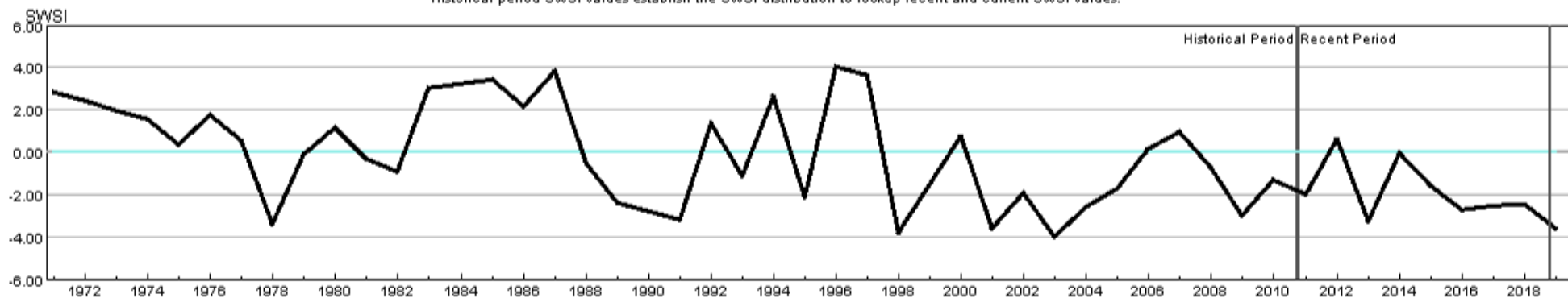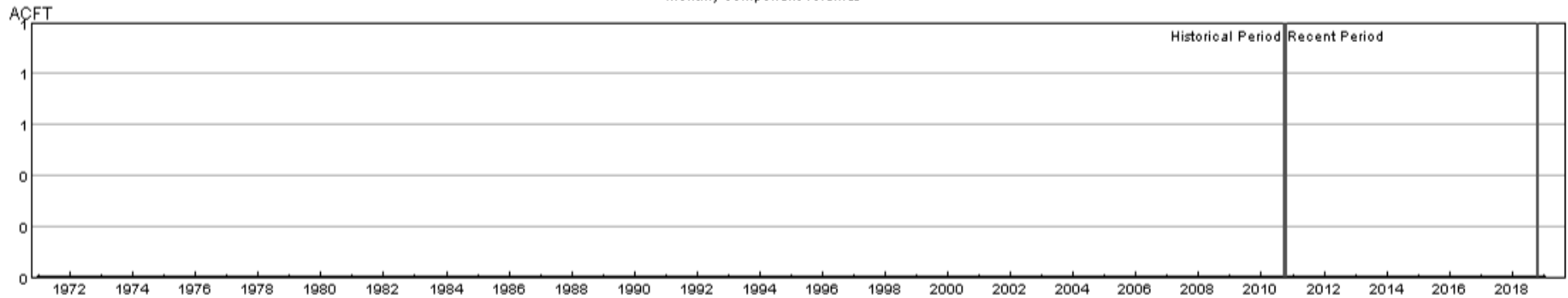
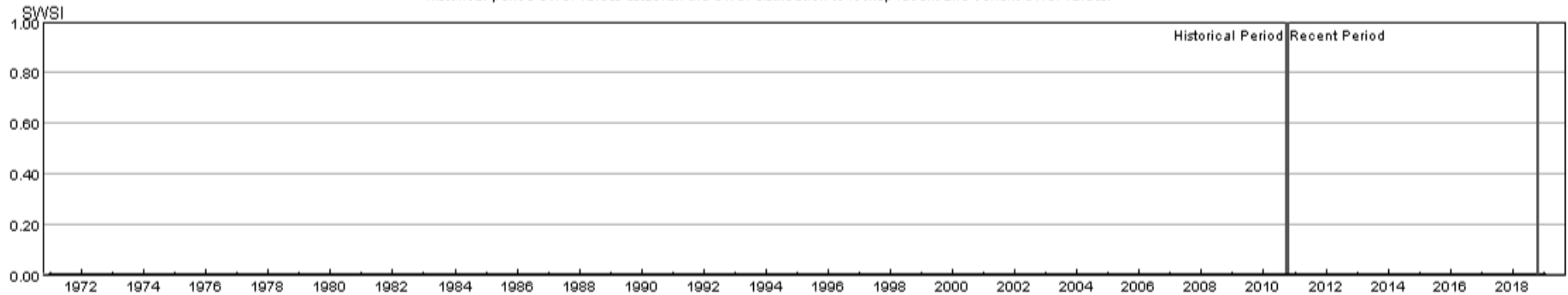## HUC 13010005 (Conejos) Surface Water Supply - JAN
Monthly component volumes

HUC:13010005-JAN-DataComposite
HUC:13010005-JAN-PrevMoStreamflow
HUC:13010005-JAN-ForecastedRunoff
HUC:13010005-JAN-ReservoirStorage

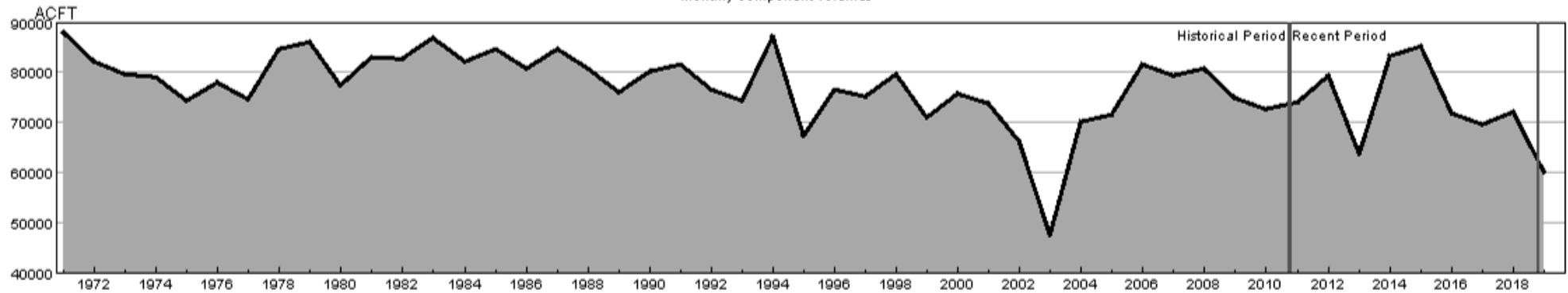## HUC 13010005 (Conejos) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:13010005-JAN-PrevMoStreamflow-SWSI
HUC:13010005-JAN-ForecastedRunoff-SWSI
HUC:13010005-JAN-ReservoirStorage-SWSI
HUC:13010005-JAN-DataComposite-SWSI

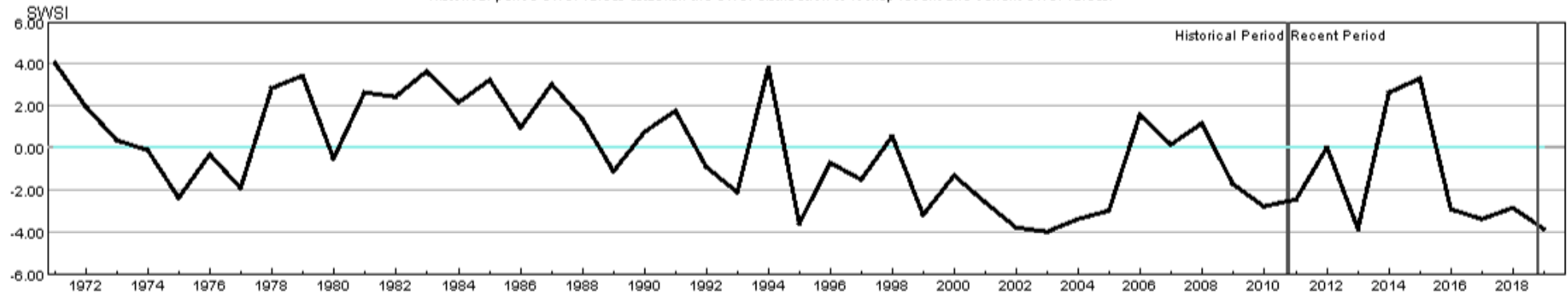## HUC 14010001 (Colorado Headwaters) Surface Water Supply - JAN
Monthly component volumes

HUC:14010001-JAN-DataComposite
HUC:14010001-JAN-PrevMoStreamflow
HUC:14010001-JAN-ForecastedRunoff
HUC:14010001-JAN-ReservoirStorage

HUC 14010001 (Colorado Headwaters) SWSI Values - JAN
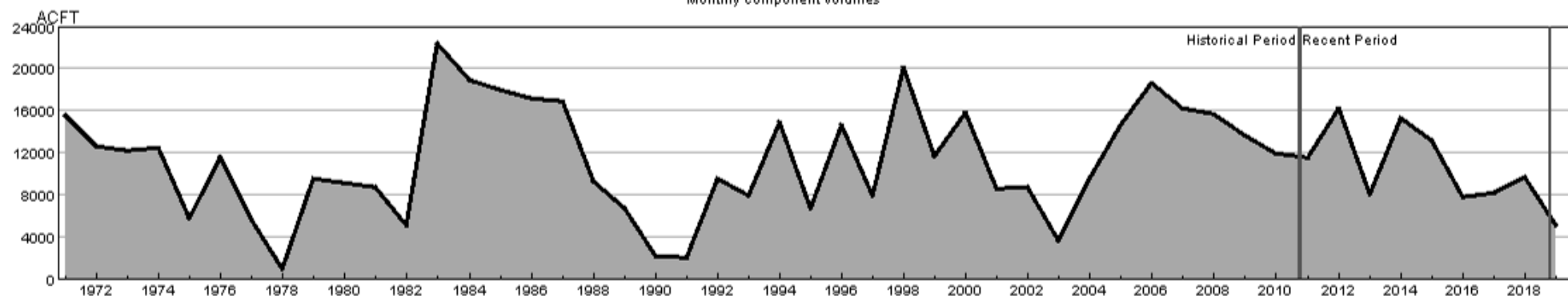### Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:14010001-JAN-PrevMoStreamflow-SWSI
HUC:14010001-JAN-ForecastedRunoff-SWSI
HUC:14010001-JAN-ReservoirStorage-SWSI
HUC:14010001-JAN-DataComposite-SWSI

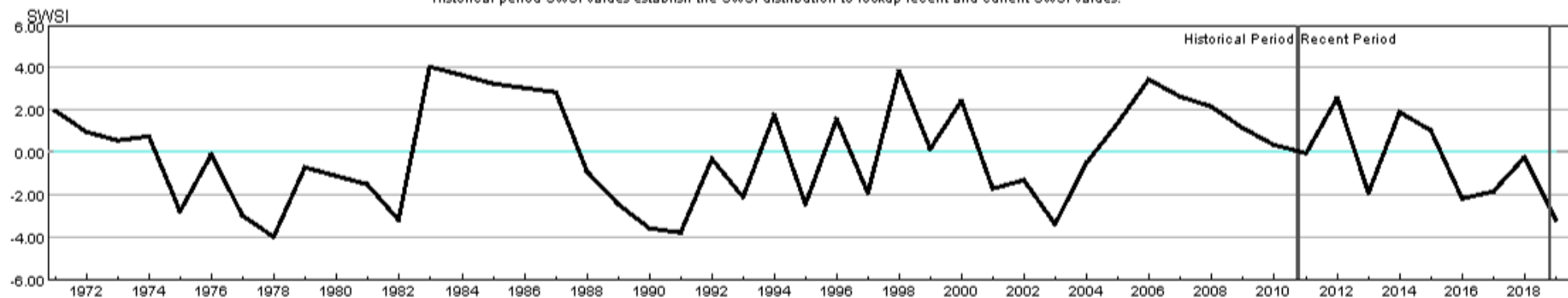## HUC 14010002 (Blue) Surface Water Supply - JAN
Monthly component volumes

HUC:14010002-JAN-DataComposite
HUC:14010002-JAN-PrevMoStreamflow
HUC:14010002-JAN-ForecastedRunoff
HUC:14010002-JAN-ReservoirStorage
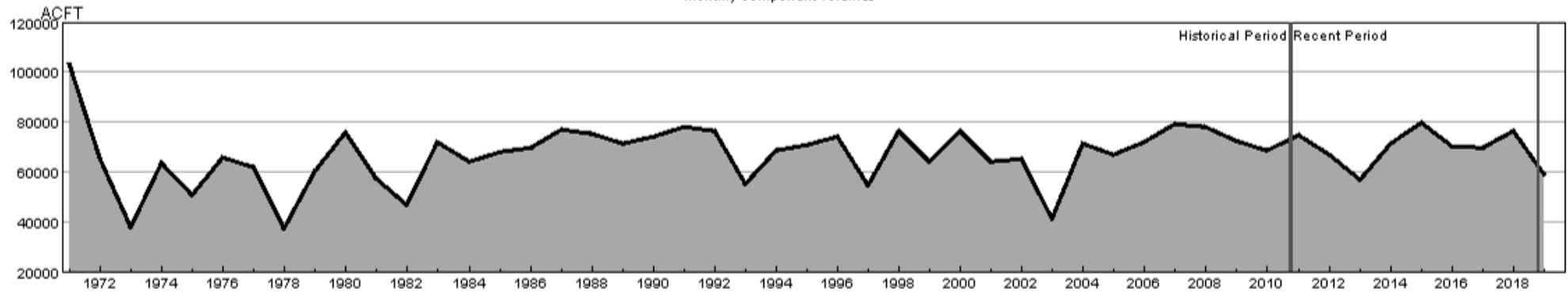
HUC 14010002 (Blue) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:14010002-JAN-PrevMoStreamflow-SWSI
HUC:14010002-JAN-ForecastedRunoff-SWSI
HUC:14010002-JAN-ReservoirStorage-SWSI
HUC:14010002-JAN-DataComposite-SWSI

HUC 14010003 (Eagle) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14010003-JAN-DataComposite
HUC:14010003-JAN-PrevMoStreamflow
HUC:14010003-JAN-ForecastedRunoff
HUC:14010003-JAN-ReservoirStorage

HUC 14010003 (Eagle) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

| 1.00 |
| 0.80 |
| 0.60 |
| 0.40 |
| 0.20 |
| 0.00 |

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14010003-JAN-PrevMoStreamflow-SWSI
HUC:14010003-JAN-ForecastedRunoff-SWSI
HUC:14010003-JAN-ReservoirStorage-SWSI
HUC:14010003-JAN-DataComposite-SWSI

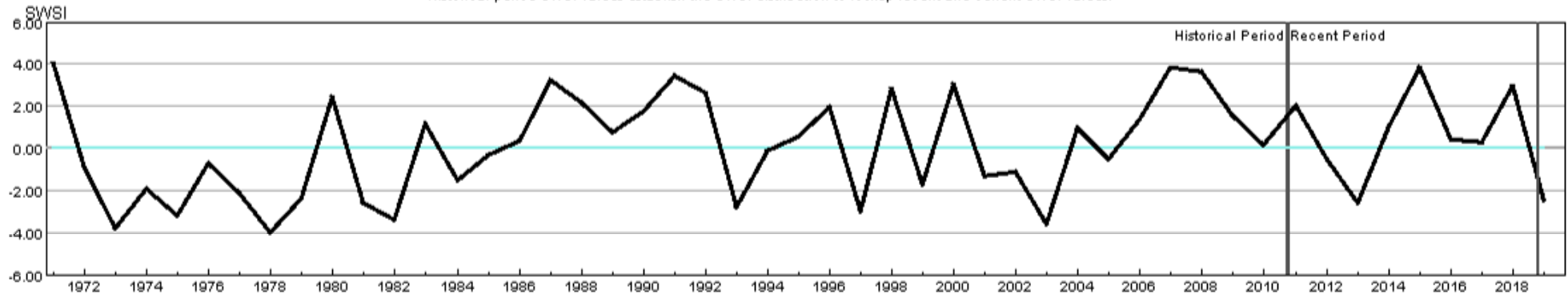# HUC 14010004 (Roaring Fork) Surface Water Supply - JAN
Monthly component volumes

Legend:
- HUC:14010004-JAN-DataComposite
- HUC:14010004-JAN-PrevMoStreamflow
- HUC:14010004-JAN-ForecastedRunoff
- HUC:14010004-JAN-ReservoirStorage

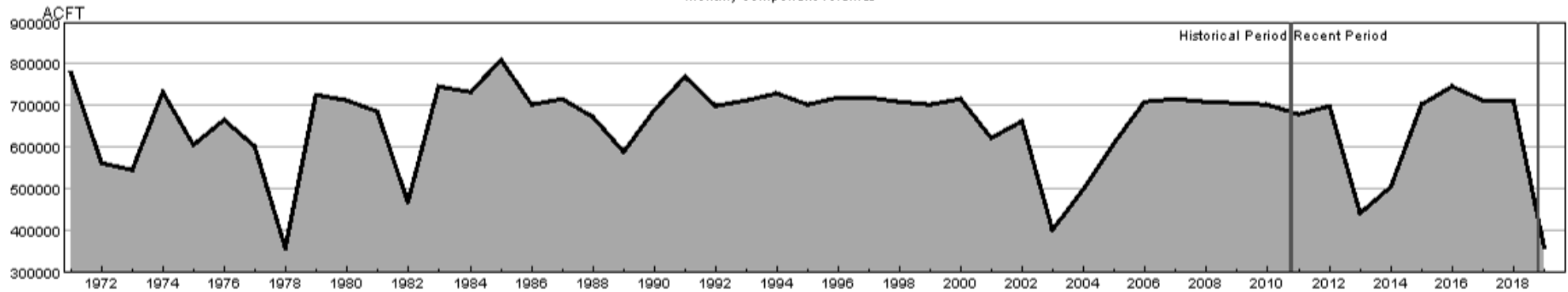# HUC 14010004 (Roaring Fork) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Legend:
- HUC:14010004-JAN-PrevMoStreamflow-SWSI
- HUC:14010004-JAN-ForecastedRunoff-SWSI
- HUC:14010004-JAN-ReservoirStorage-SWSI
- HUC:14010004-JAN-DataComposite-SWSI

HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply - JAN
Monthly component volumes

Historical Period | Recent Period

HUC:14010005-JAN-DataComposite
HUC:14010005-JAN-PrevMoStreamflow
HUC:14010005-JAN-ForecastedRunoff
HUC:14010005-JAN-ReservoirStorage

HUC 14010005 (Colorado Headwaters-Plateau) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Historical Period | Recent Period

HUC:14010005-JAN-PrevMoStreamflow-SWSI
HUC:14010005-JAN-ForecastedRunoff-SWSI
HUC:14010005-JAN-ReservoirStorage-SWSI
HUC:14010005-JAN-DataComposite-SWSI
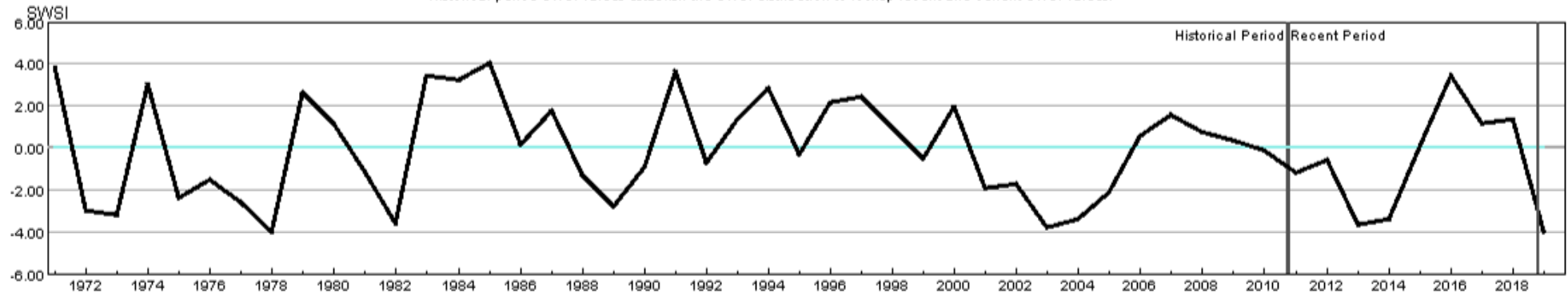
HUC 14020001 (East-Taylor) Surface Water Supply - JAN
Monthly component volumes

Legend:
- HUC:14020001-JAN-DataComposite
- HUC:14020001-JAN-PrevMoStreamflow
- HUC:14020001-JAN-ForecastedRunoff
- HUC:14020001-JAN-ReservoirStorage
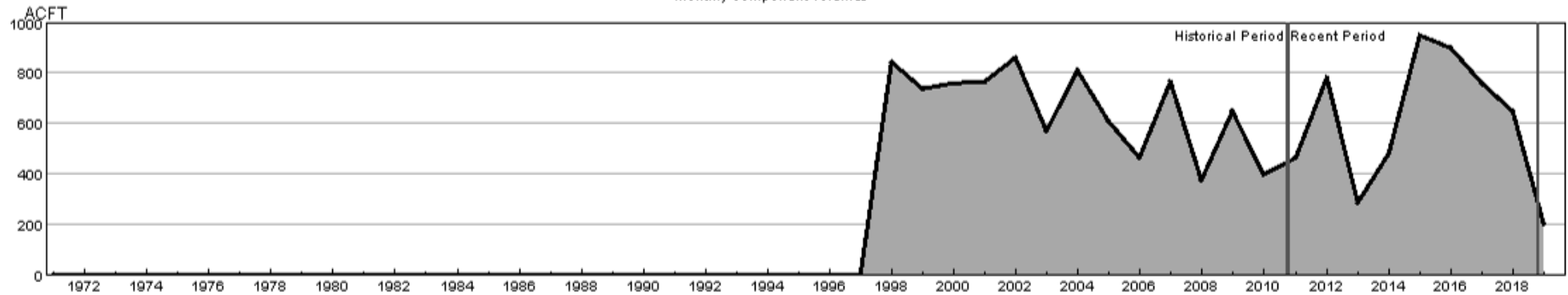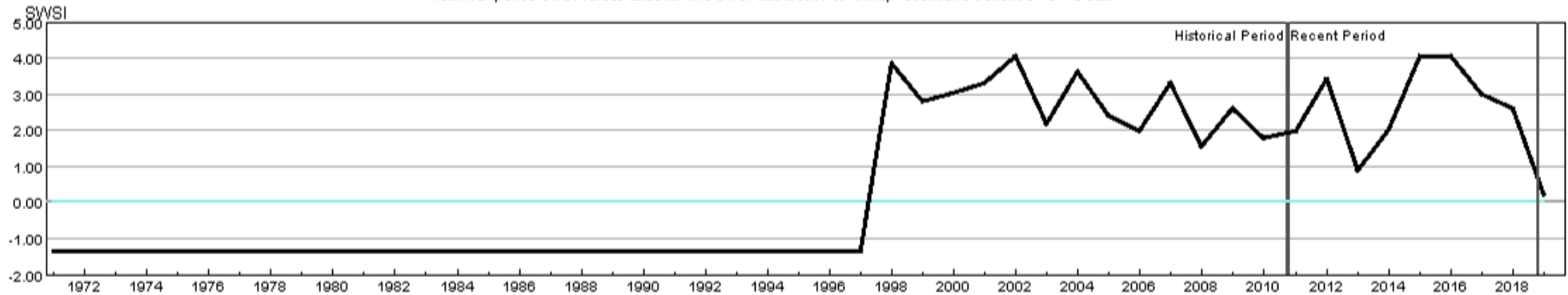
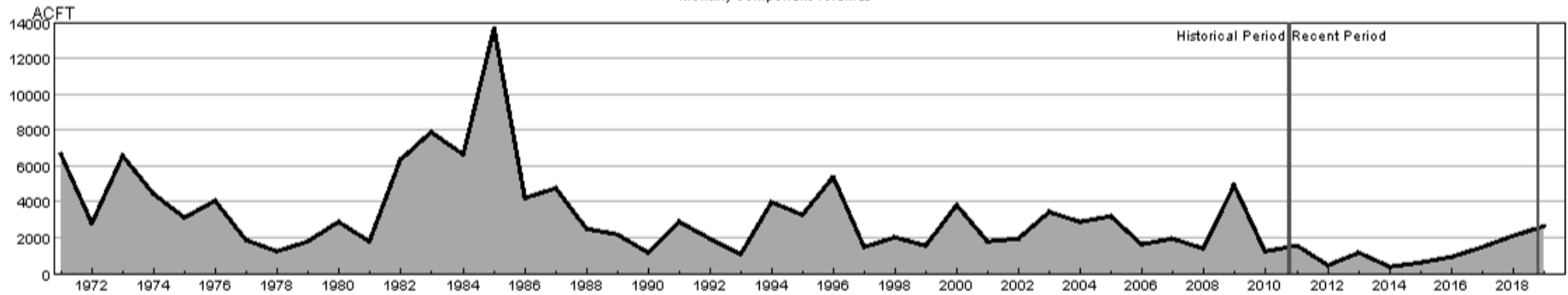# HUC 14020001 (East-Taylor) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Legend:
- HUC:14020001-JAN-PrevMoStreamflow-SWSI
- HUC:14020001-JAN-ForecastedRunoff-SWSI
- HUC:14020001-JAN-ReservoirStorage-SWSI
- HUC:14020001-JAN-DataComposite-SWSI

HUC 14020002 (Upper Gunnison) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

— HUC:14020002-JAN-DataComposite
— HUC:14020002-JAN-PrevMoStreamflow
— HUC:14020002-JAN-ForecastedRunoff
— HUC:14020002-JAN-ReservoirStorage

HUC 14020002 (Upper Gunnison) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

— HUC:14020002-JAN-PrevMoStreamflow-SWSI
— HUC:14020002-JAN-ForecastedRunoff-SWSI
— HUC:14020002-JAN-ReservoirStorage-SWSI
— HUC:14020002-JAN-DataComposite-SWSI
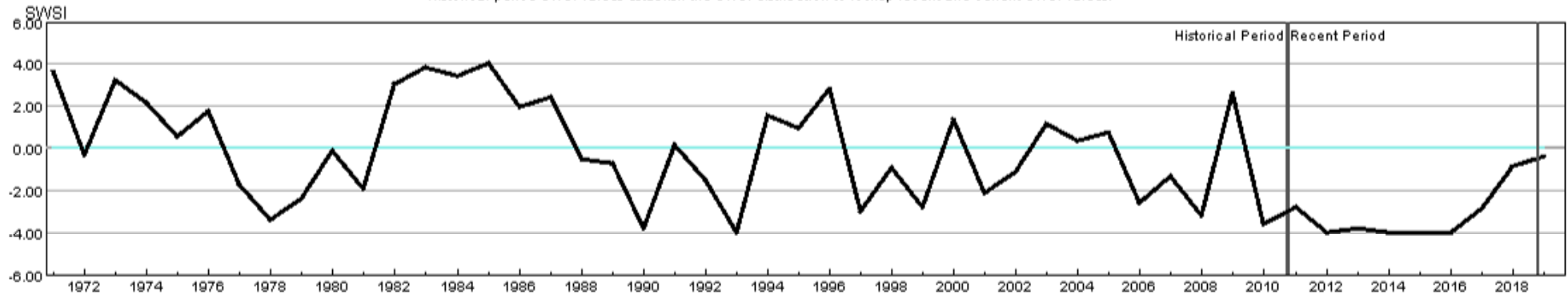
HUC 14020003 (Tomichi) Surface Water Supply - JAN
Monthly component volumes

Legend:
- HUC:14020003-JAN-DataComposite
- HUC:14020003-JAN-PrevMoStreamflow
- HUC:14020003-JAN-ForecastedRunoff
- HUC:14020003-JAN-ReservoirStorage

HUC 14020003 (Tomichi) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Legend:
- HUC:14020003-JAN-PrevMoStreamflow-SWSI
- HUC:14020003-JAN-ForecastedRunoff-SWSI
- HUC:14020003-JAN-ReservoirStorage-SWSI
- HUC:14020003-JAN-DataComposite-SWSI

HUC 14020004 (North Fork Gunnison) Surface Water Supply - JAN
Monthly component volumes

HUC:14020004-JAN-DataComposite
HUC:14020004-JAN-PrevMoStreamflow
HUC:14020004-JAN-ForecastedRunoff
HUC:14020004-JAN-ReservoirStorage

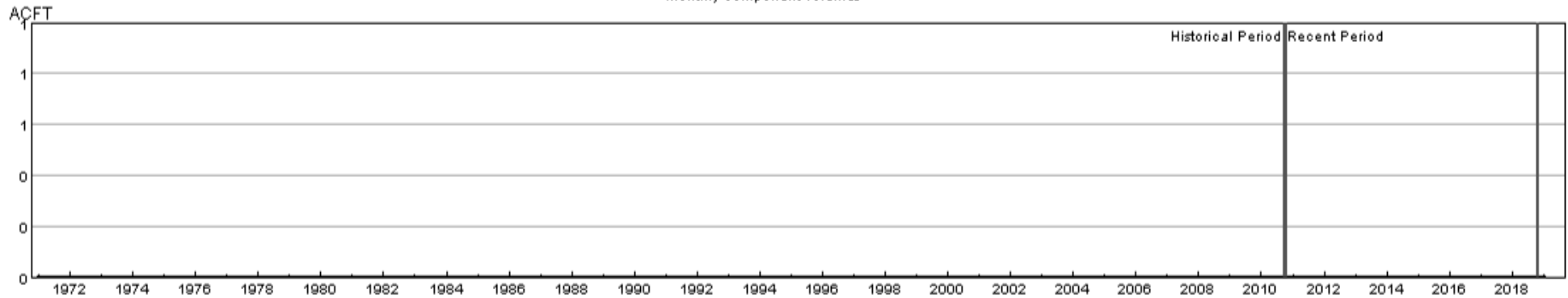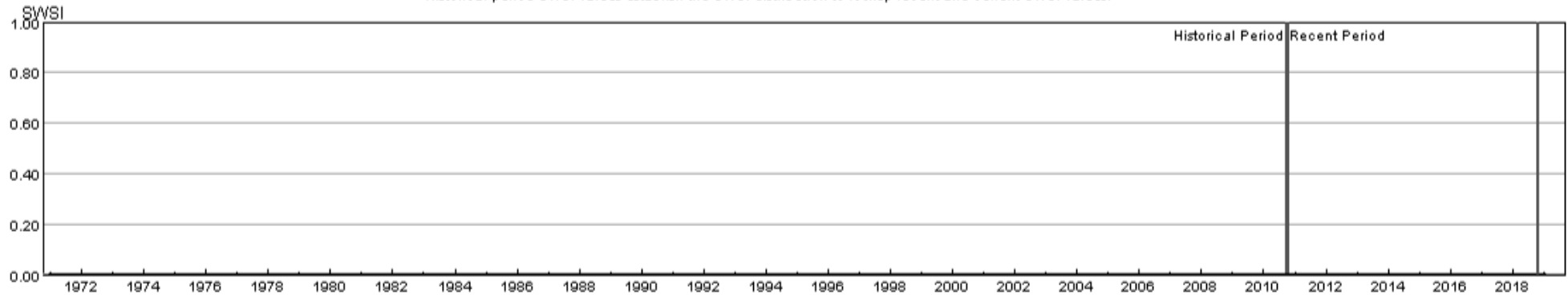# HUC 14020004 (North Fork Gunnison) SWSI Values - JAN
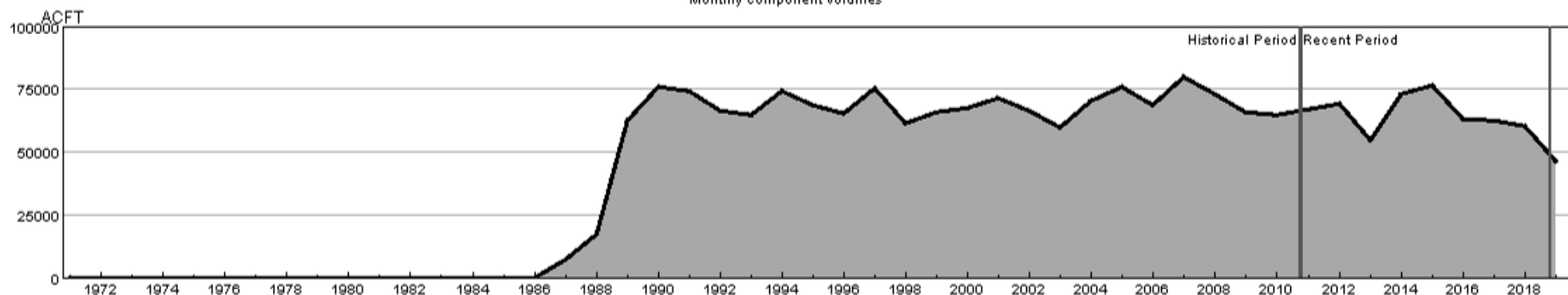## Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC:14020004-JAN-PrevMoStreamflow-SWSI
HUC:14020004-JAN-ForecastedRunoff-SWSI
HUC:14020004-JAN-ReservoirStorage-SWSI
HUC:14020004-JAN-DataComposite-SWSI

HUC 14020005 (Lower Gunnison) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

1

1

1

0

0

0

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14020005-JAN-DataComposite
HUC:14020005-JAN-PrevMoStreamflow
HUC:14020005-JAN-ForecastedRunoff
HUC:14020005-JAN-ReservoirStorage

HUC 14020005 (Lower Gunnison) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00

0.80

0.60

0.40

0.20

0.00

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14020005-JAN-PrevMoStreamflow-SWSI
HUC:14020005-JAN-ForecastedRunoff-SWSI
HUC:14020005-JAN-ReservoirStorage-SWSI
HUC:14020005-JAN-DataComposite-SWSI

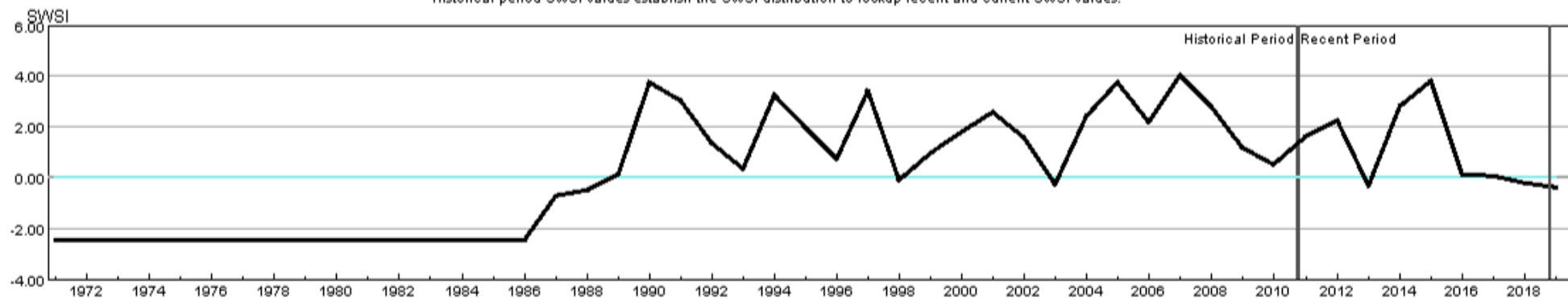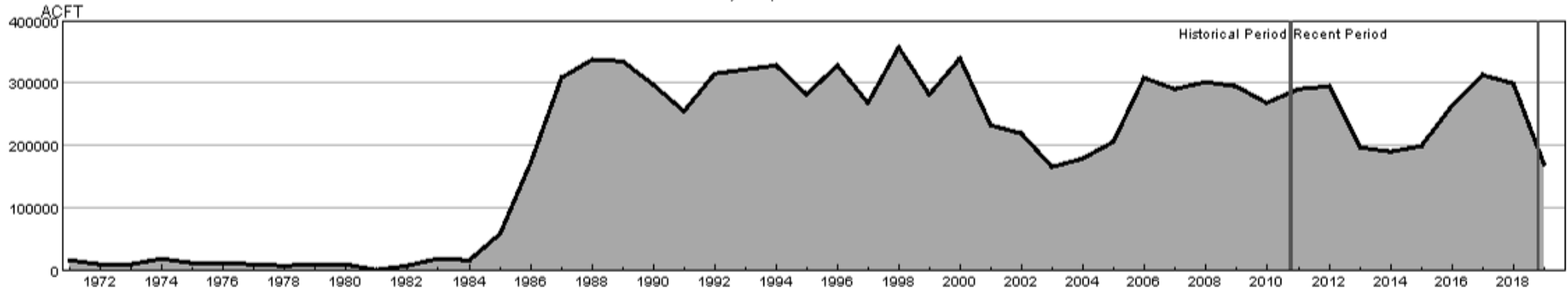## HUC 14020006 (Uncompahgre) Surface Water Supply - JAN
Monthly component volumes

Historical Period | Recent Period

— HUC:14020006-JAN-DataComposite
— HUC:14020006-JAN-PrevMoStreamflow
— HUC:14020006-JAN-ForecastedRunoff
— HUC:14020006-JAN-ReservoirStorage

HUC 14020006 (Uncompahgre) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Historical Period | Recent Period

— HUC:14020006-JAN-PrevMoStreamflow-SWSI
— HUC:14020006-JAN-ForecastedRunoff-SWSI
— HUC:14020006-JAN-ReservoirStorage-SWSI
— HUC:14020006-JAN-DataComposite-SWSI

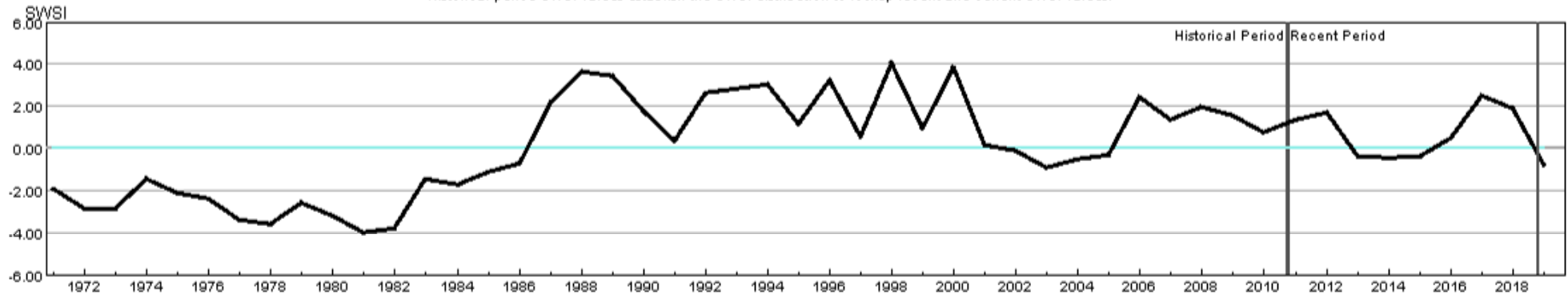# HUC 14030002 (Upper Dolores) Surface Water Supply - JAN
Monthly component volumes

Legend:
- HUC:14030002-JAN-DataComposite
- HUC:14030002-JAN-PrevMoStreamflow
- HUC:14030002-JAN-ForecastedRunoff
- HUC:14030002-JAN-ReservoirStorage

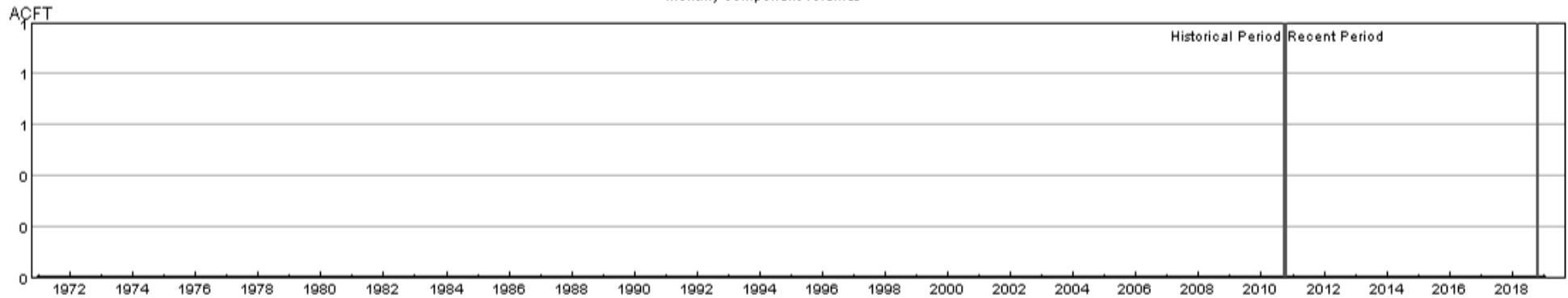# HUC 14030002 (Upper Dolores) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Legend:
- HUC:14030002-JAN-PrevMoStreamflow-SWSI
- HUC:14030002-JAN-ForecastedRunoff-SWSI
- HUC:14030002-JAN-ReservoirStorage-SWSI
- HUC:14030002-JAN-DataComposite-SWSI
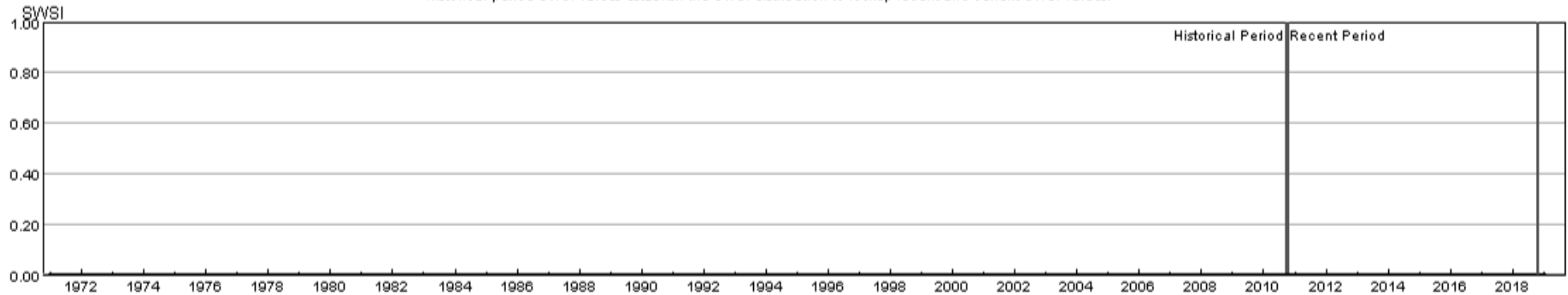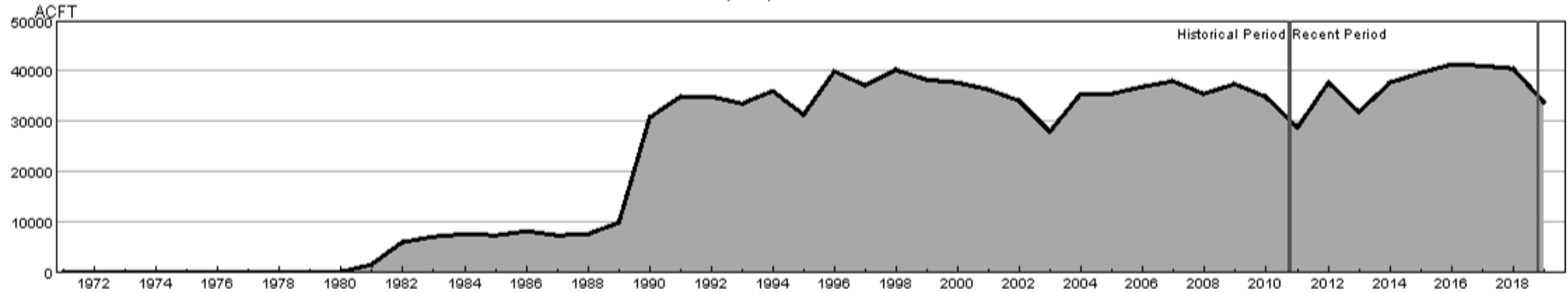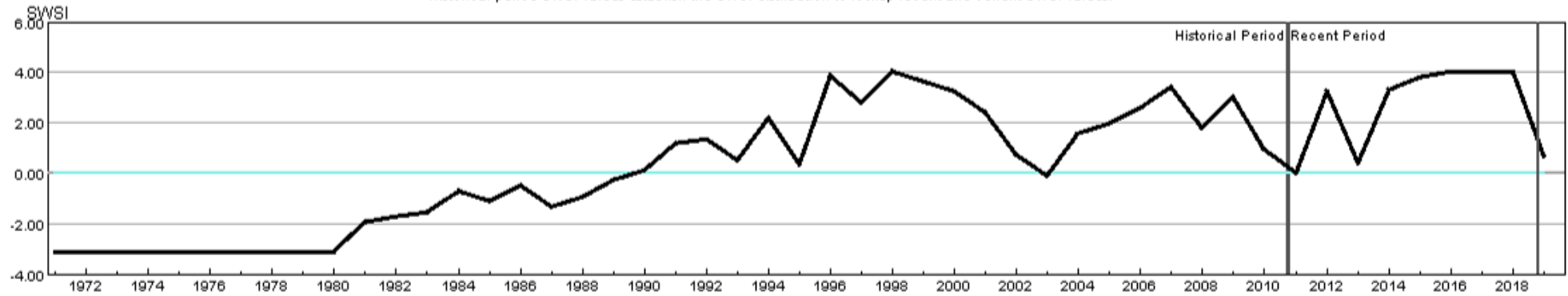
HUC 14030003 (San Miguel) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC 14030003 (San Miguel) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00

0.80

0.60

0.40

0.20

0.00

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC 14050001 (Upper Yampa) Surface Water Supply - JAN
Monthly component volumes

HUC 14050001 (Upper Yampa) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

HUC 14050002 (Lower Yampa) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14050002-JAN-DataComposite
HUC:14050002-JAN-PrevMoStreamflow
HUC:14050002-JAN-ForecastedRunoff
HUC:14050002-JAN-ReservoirStorage
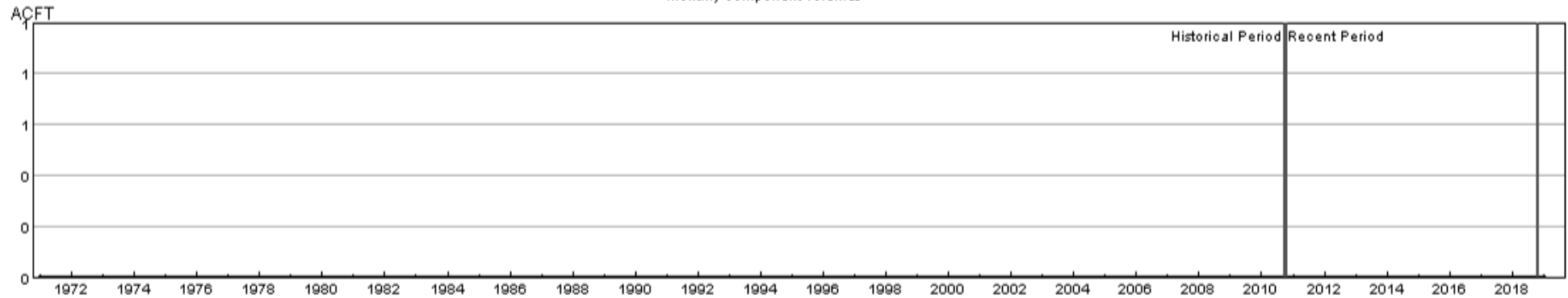
HUC 14050002 (Lower Yampa) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00
0.80
0.60
0.40
0.20
0.00

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14050002-JAN-PrevMoStreamflow-SWSI
HUC:14050002-JAN-ForecastedRunoff-SWSI
HUC:14050002-JAN-ReservoirStorage-SWSI
HUC:14050002-JAN-DataComposite-SWSI
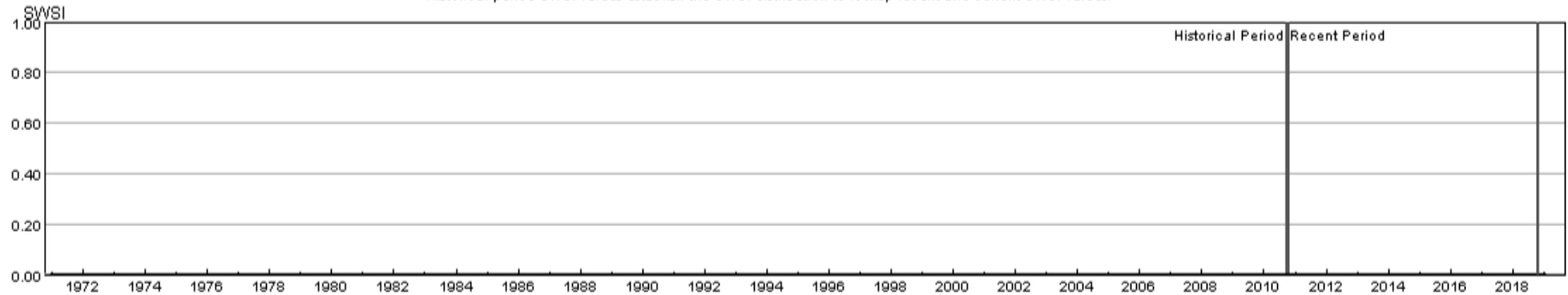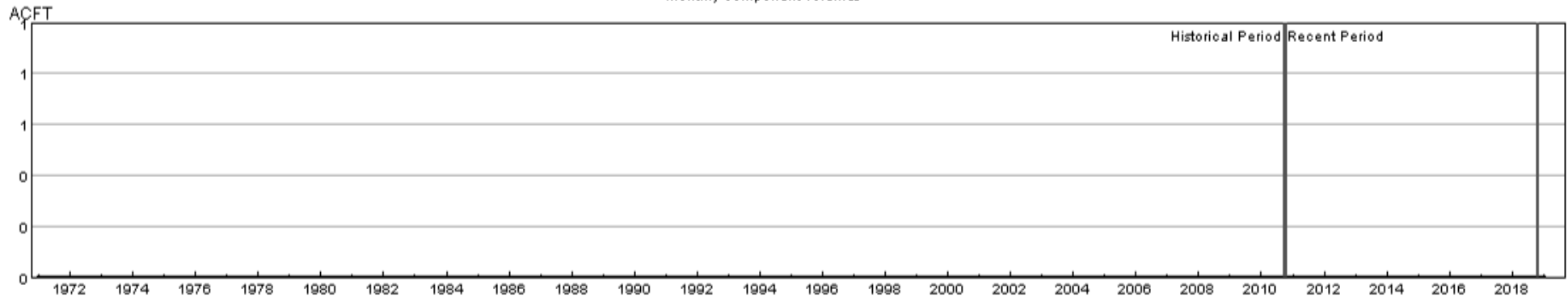
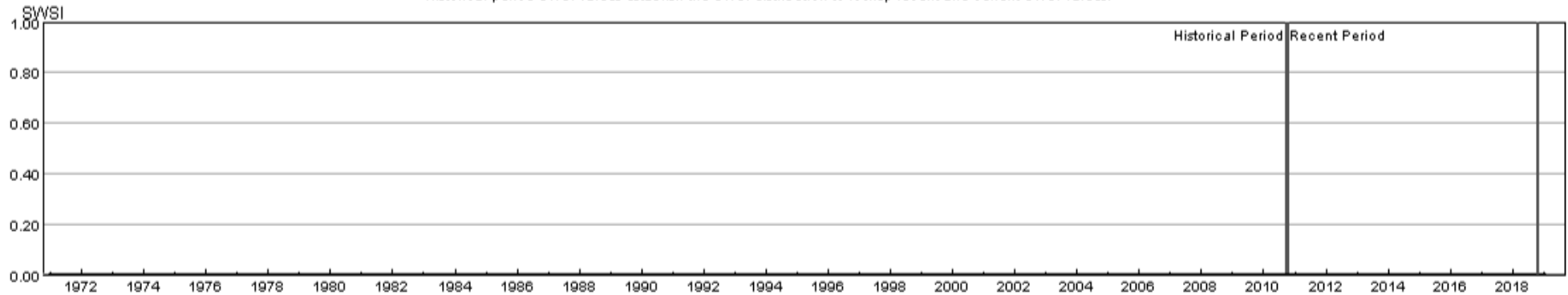# HUC 14050003 (Little Snake) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

— HUC:14050003-JAN-DataComposite
— HUC:14050003-JAN-PrevMoStreamflow
— HUC:14050003-JAN-ForecastedRunoff
— HUC:14050003-JAN-ReservoirStorage
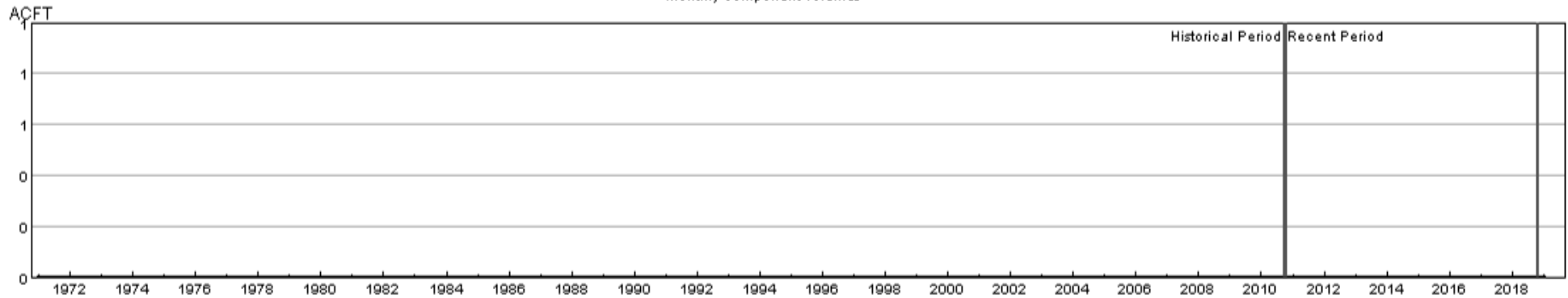
HUC 14050003 (Little Snake) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

1.00

0.80

0.60

0.40

0.20

0.00

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

— HUC:14050003-JAN-PrevMoStreamflow-SWSI
— HUC:14050003-JAN-ForecastedRunoff-SWSI
— HUC:14050003-JAN-ReservoirStorage-SWSI
— HUC:14050003-JAN-DataComposite-SWSI
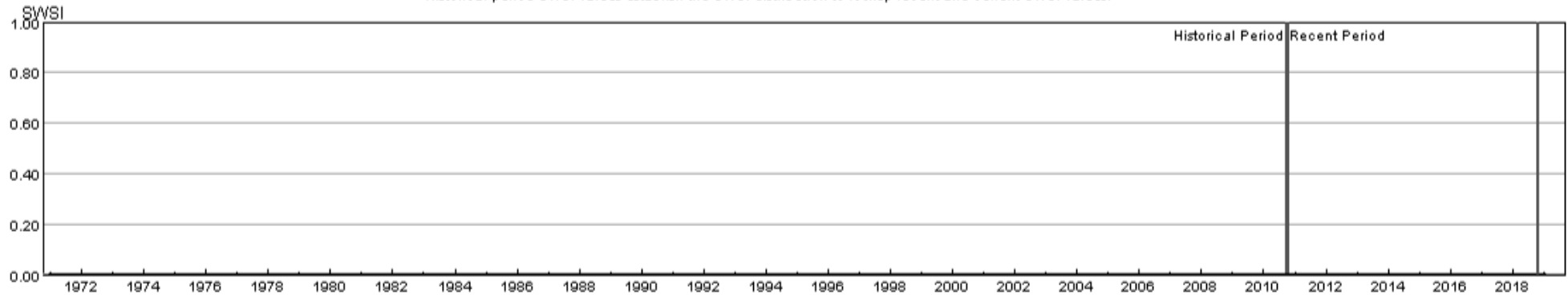
HUC 14050005 (Upper White) Surface Water Supply - JAN
Monthly component volumes

ACFT

Historical Period | Recent Period

| | 1972 | 1974 | 1976 | 1978 | 1980 | 1982 | 1984 | 1986 | 1988 | 1990 | 1992 | 1994 | 1996 | 1998 | 2000 | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 |

HUC:14050005-JAN-DataComposite
HUC:14050005-JAN-PrevMoStreamflow
HUC:14050005-JAN-ForecastedRunoff
HUC:14050005-JAN-ReservoirStorage

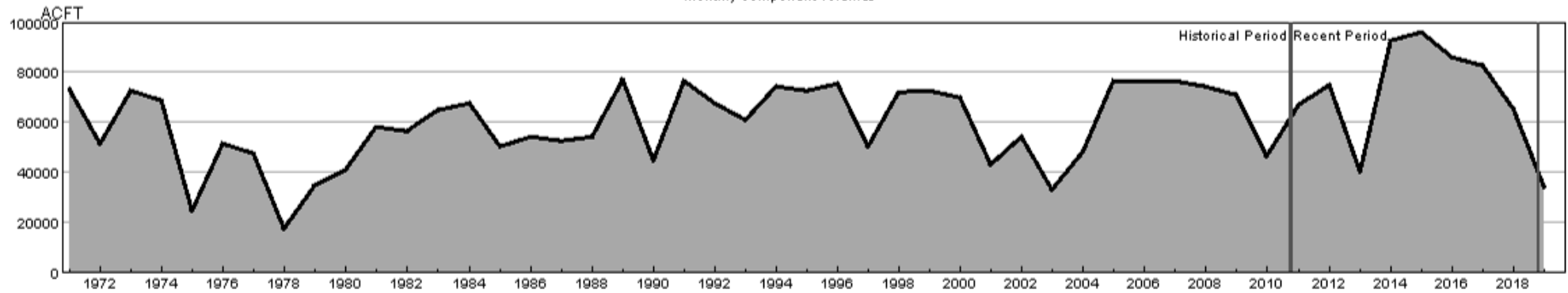# HUC 14050005 (Upper White) SWSI Values - JAN
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

1.00															Historical Period	Recent Period							
0.80																							
0.60																							
0.40																							
0.20																							
0.00	1972	1974	1976	1978	1980	1982	1984	1986	1988	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018

HUC:14050005-JAN-PrevMoStreamflow-SWSI
HUC:14050005-JAN-ForecastedRunoff-SWSI
HUC:14050005-JAN-ReservoirStorage-SWSI
HUC:14050005-JAN-DataComposite-SWSI

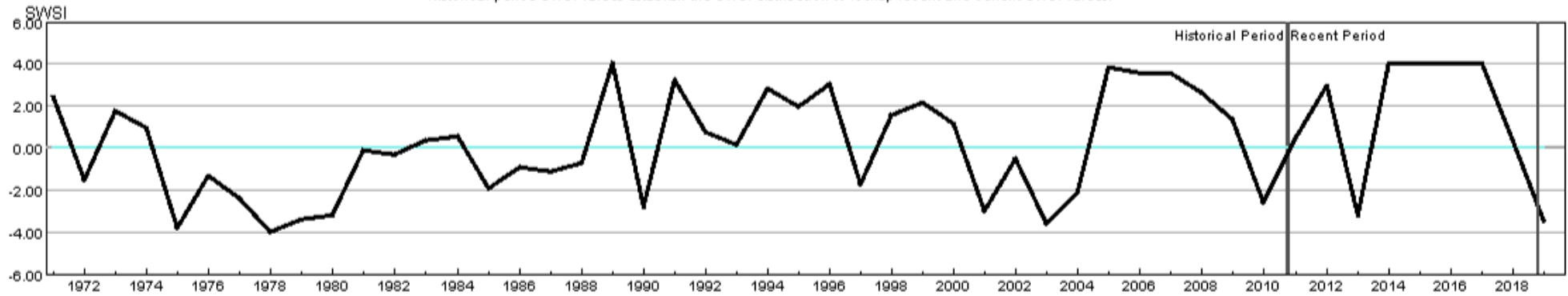# HUC 14080101 (Upper San Juan) Surface Water Supply - JAN

Monthly component volumes

Legend:
- HUC:14080101-JAN-DataComposite
- HUC:14080101-JAN-PrevMoStreamflow
- HUC:14080101-JAN-ForecastedRunoff
- HUC:14080101-JAN-ReservoirStorage
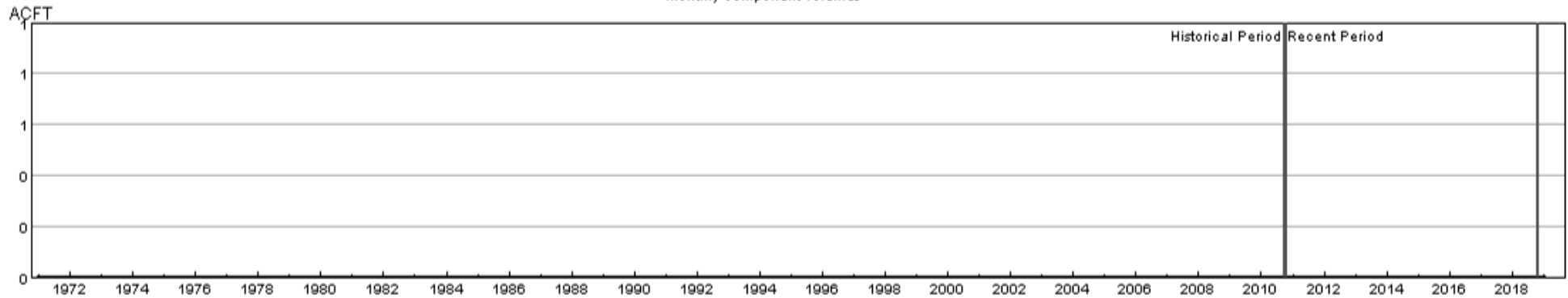
HUC 14080101 (Upper San Juan) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

Legend:
- HUC:14080101-JAN-PrevMoStreamflow-SWSI
- HUC:14080101-JAN-ForecastedRunoff-SWSI
- HUC:14080101-JAN-ReservoirStorage-SWSI
- HUC:14080101-JAN-DataComposite-SWSI

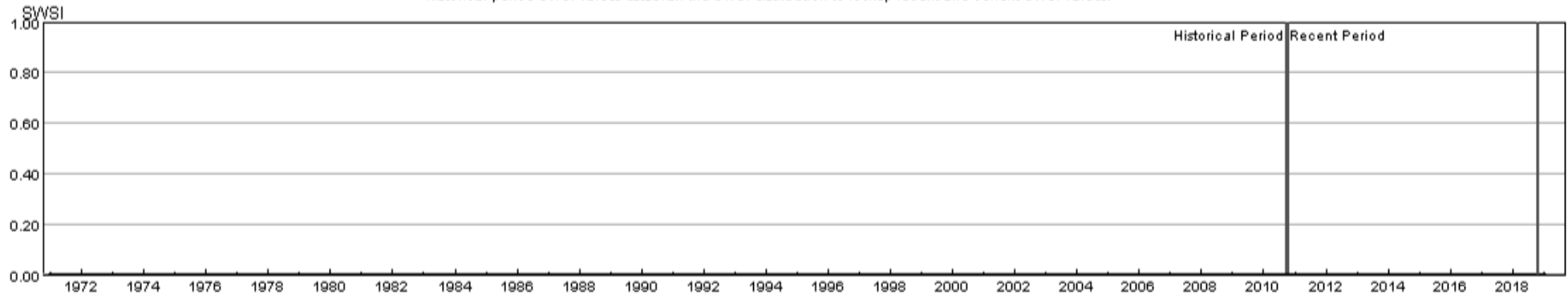# HUC 14080102 (Piedra) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14080102-JAN-DataComposite
HUC:14080102-JAN-PrevMoStreamflow
HUC:14080102-JAN-ForecastedRunoff
HUC:14080102-JAN-ReservoirStorage

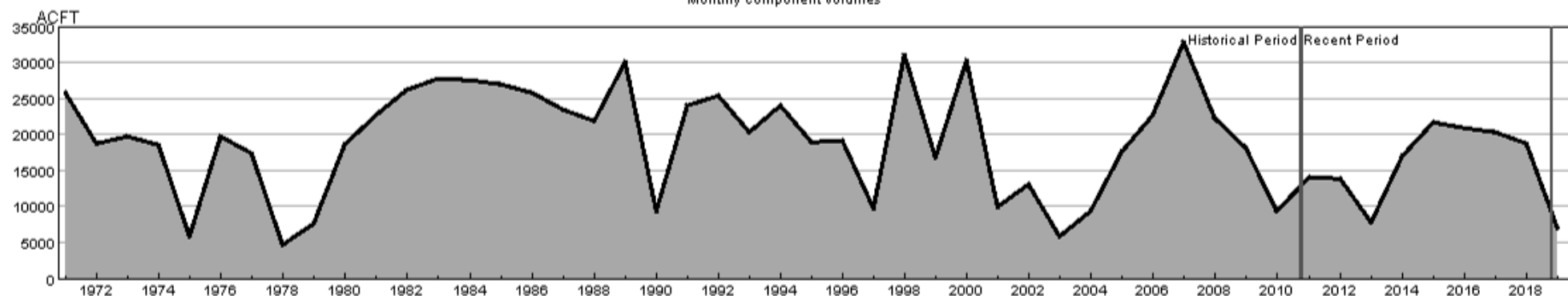# HUC 14080102 (Piedra) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

1.00

0.80

0.60

0.40

0.20

0.00

Historical Period | Recent Period

1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

HUC:14080102-JAN-PrevMoStreamflow-SWSI
HUC:14080102-JAN-ForecastedRunoff-SWSI
HUC:14080102-JAN-ReservoirStorage-SWSI
HUC:14080102-JAN-DataComposite-SWSI

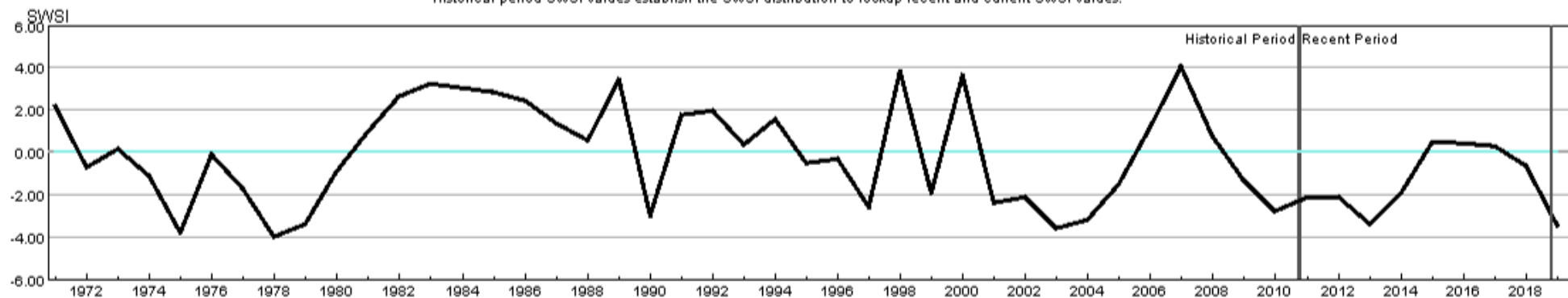**HUC 14080104 (Animas) Surface Water Supply - JAN**

Monthly component volumes

ACFT

Historical Period | Recent Period

HUC:14080104-JAN-DataComposite
HUC:14080104-JAN-PrevMoStreamflow
HUC:14080104-JAN-ForecastedRunoff
HUC:14080104-JAN-ReservoirStorage

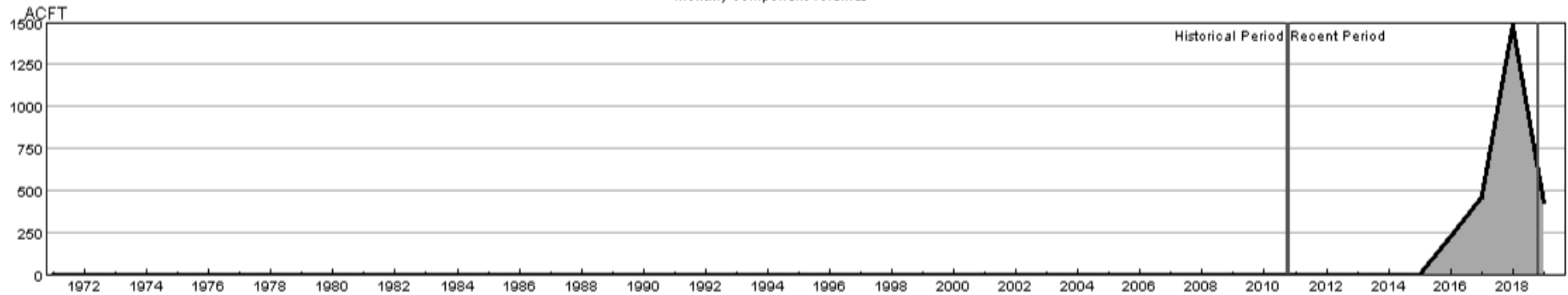**HUC 14080104 (Animas) SWSI Values - JAN**

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

HUC:14080104-JAN-PrevMoStreamflow-SWSI
HUC:14080104-JAN-ForecastedRunoff-SWSI
HUC:14080104-JAN-ReservoirStorage-SWSI
HUC:14080104-JAN-DataComposite-SWSI

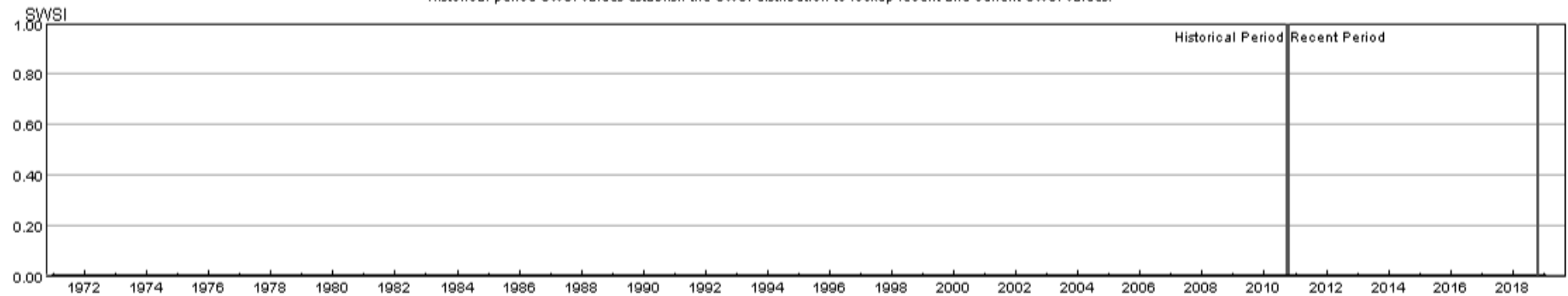# HUC 14080105 (Middle San Juan) Surface Water Supply - JAN

Monthly component volumes

ACFT

Historical Period | Recent Period

- HUC:14080105-JAN-DataComposite
- HUC:14080105-JAN-PrevMoStreamflow
- HUC:14080105-JAN-ForecastedRunoff
- HUC:14080105-JAN-ReservoirStorage

HUC 14080105 (Middle San Juan) SWSI Values - JAN

Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.

SWSI

Historical Period | Recent Period

- HUC:14080105-JAN-PrevMoStreamflow-SWSI
- HUC:14080105-JAN-ForecastedRunoff-SWSI
- HUC:14080105-JAN-ReservoirStorage-SWSI
- HUC:14080105-JAN-DataComposite-SWSI