COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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February 1, 2021

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: https://dwr.colorado.gov/services/water-administration/drought-and-swsi. This report also contains updates about current regional conditions and water matters prepared by each DWR Division Office.

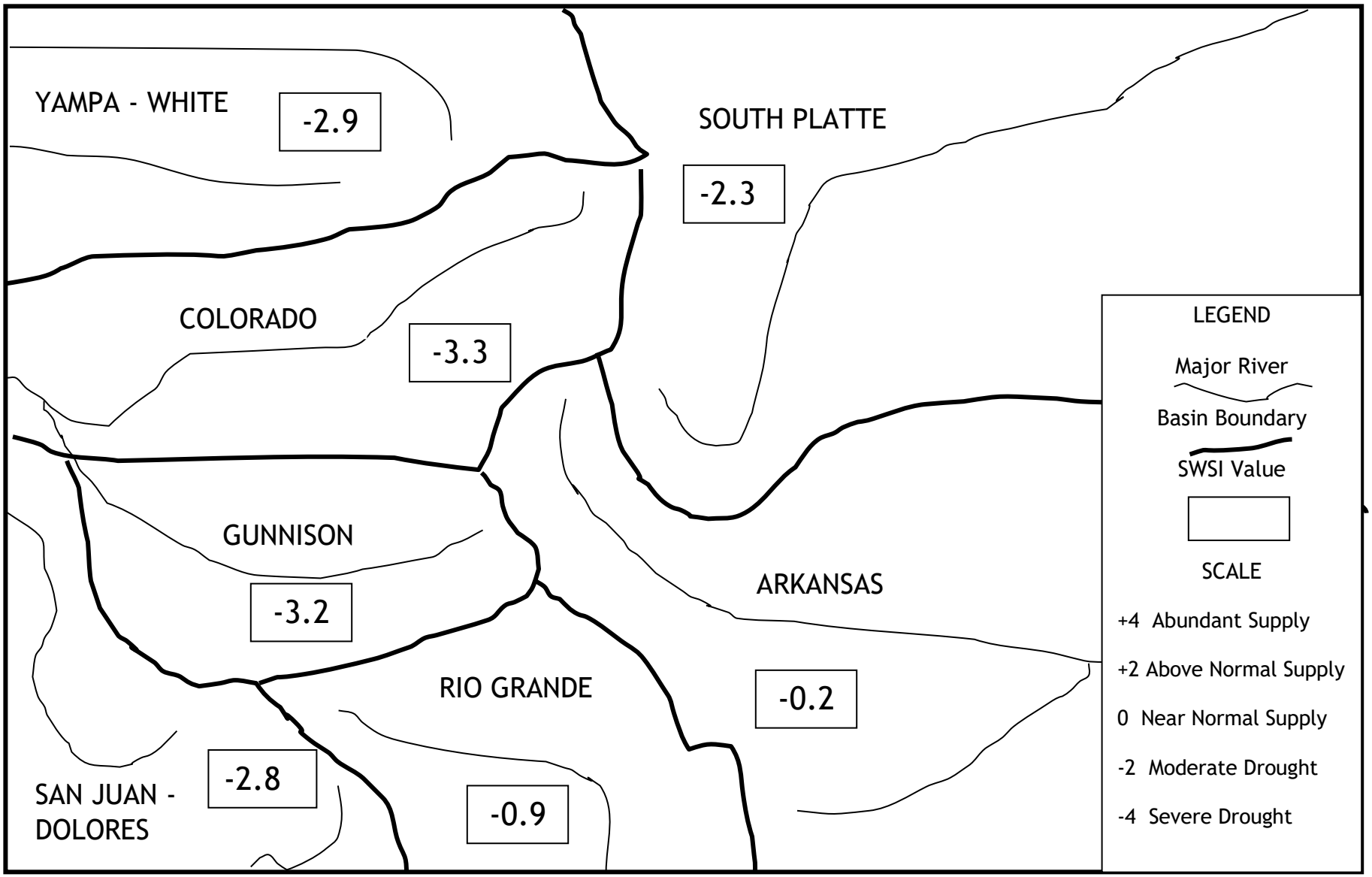
The SWSI calculation for the winter/spring season (January 1 to June 1) is based on reservoir storage at the end of last month, in this case January 31, plus the forecasted streamflow runoff volume for the runoff season (April through September in most basins). The following SWSI values were computed for each of the seven major basins for February 1, 2021. The following SWSI values were computed for each of the seven major basins for February 1, 2021. Water supply conditions, as represented by water in storage, range from below normal in the Arkansas River Basin to well below normal in the Colorado and Gunnison River Basins.

Basin	February 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	-0.2	-0.2	-1.8
Colorado	-3.3	-0.4	-2.6
Gunnison	-3.2	-0.1	-2.7
Rio Grande	-0.9	0.0	0.3
San Juan-Dolores	-2.8	-0.1	-2.1
South Platte	-2.3	-0.6	-3.6
Yampa-White	-2.9	-0.8	-2.3

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

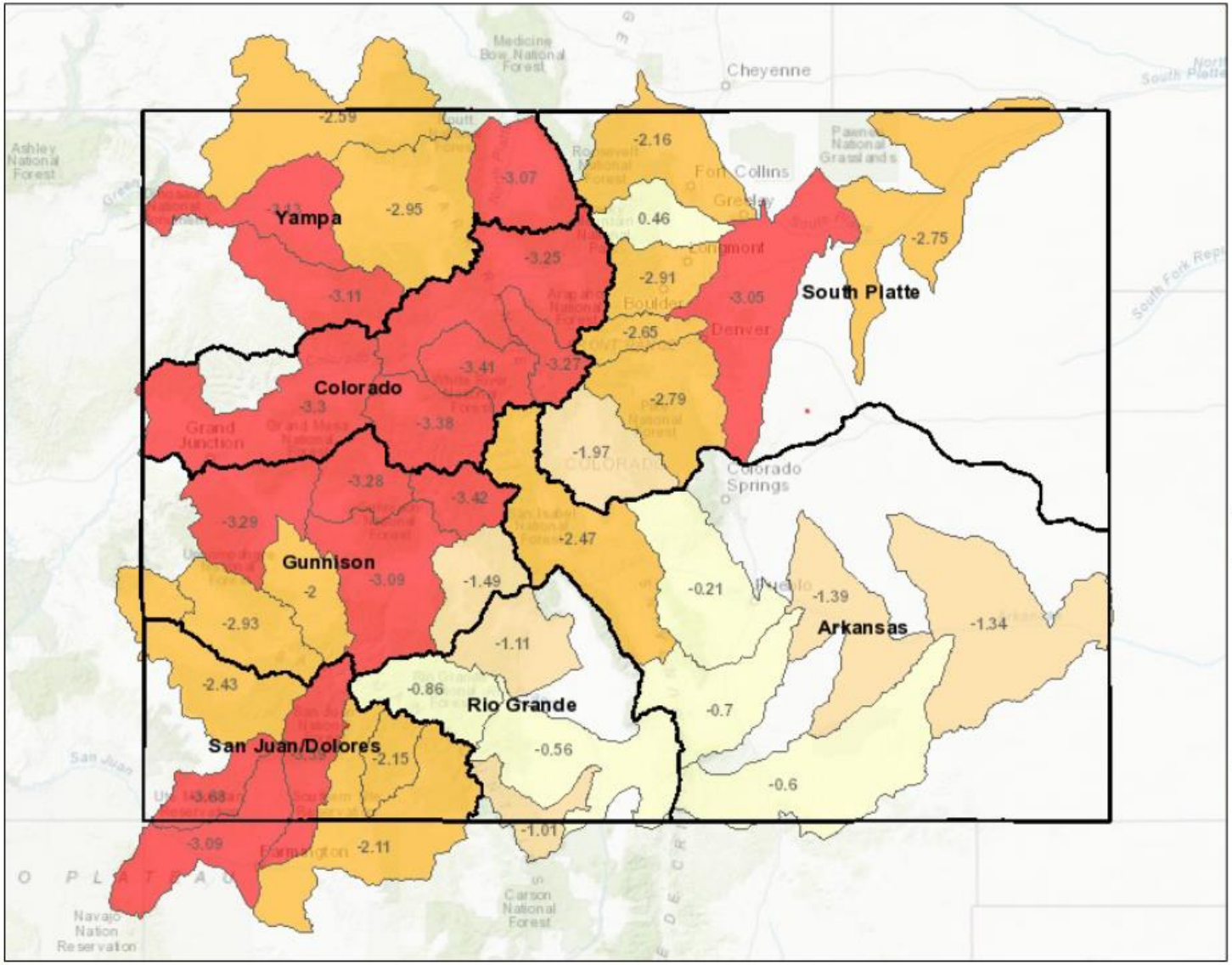


February 1, 2020

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC

COLORADO
Division of Water Resources
Department of Natural Resources

SWSI February 1, 2021

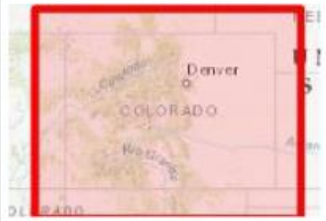


Legend

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: 2/16/2021 7:56:27 AM

February 1, 2021 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

Basin	HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Forecast Flow NEP	Total Vol (AF)
Arkansas	11020006	Huerfano	-0.71	13	54	22,800
	11020010	Purgatoire	-0.61	43	46	58,900
	11020005	Upper Arkansas-Lake Meredith	-1.40	52	30	310,090
	11020001	Arkansas Headwaters	-2.48	38	19	319,634
	11020009	Upper Arkansas-John Martin Reservoir	-1.34	46	41	409,947
	11020002	Upper Arkansas	-0.21	66	31	463,810
Colorado	14010003	Eagle	-3.42	N/A	9	210,000
	14010002	Blue	-3.27	27	11	245,411
	14010004	Roaring Fork	-3.38	3	12	500,241
	14010001	Colorado Headwaters	-3.25	82	10	982,880
	14010005	Colorado Headwaters-Plateau	-3.30	10	10	1,414,450
Gunnison	14020003	Tomichi	-1.49	61	32	45,289
	14030003	San Miguel	-2.93	N/A	15	77,000
	14020006	Uncompahgre	-2.00	46	19	137,151
	14020004	North Fork Gunnison	-3.29	11	11	151,600
	14020001	East-Taylor	-3.43	40	10	244,064
	14020005	Lower Gunnison	-3.30	N/A	10	770,000
	14020002	Upper Gunnison	-3.09	14	20	1,051,292
Rio Grande	13010004	Saguache	-1.12	N/A	37	25,000
	13010002	Alamosa-Trinchera	-0.57	35	43	126,138
	13010005	Conejos	-1.01	32	41	180,255
	13010001	Rio Grande Headwaters	-0.87	84	34	440,845
San Juan-Dolores	14080105	Middle San Juan	-3.09	50	11	11,594
	14080107	Mancos	-3.69	13	6	14,243
	14080102	Piedra	-2.15	N/A	24	120,000
	14080104	Animas	-3.39	22	9	280,675
	14030002	Upper Dolores	-2.43	41	22	327,368
	14080101	Upper San Juan	-2.11	9	26	428,376
South Platte	10190004	Clear	-2.65	N/A	18	82,000
	10190001	South Platte Headwater	-1.98	42	24	174,400
	10190005	St. Vrain	-2.92	37	15	179,094
	10190007	Cache La Poudre	-2.17	27	27	294,304
	10190002	Upper South Platte	-2.79	14	16	364,500
	10190006	Big Thompson	0.47	58	18	531,121
	10190003	Middle South Platte-Cherry Creek	-3.06	6	18	617,000
	10190012	Middle South Platte-Sterling	-2.76	21	18	719,600
Yampa-White	10180001	North Platte Headwaters	-3.08	N/A	13	94,000
	14050005	Upper White	-3.11	N/A	13	155,000
	14050003	Little Snake	-2.60	N/A	19	181,000
	14050001	Upper Yampa	-2.95	90	12	437,210
	14050002	Lower Yampa	-3.14	N/A	12	500,000

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)

February 1, 2021 SWSI Component Information – Streamflow Forecast & Reservoir Storage - By HUC

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
11020001	Arkansas Headwaters	CLEAR CREEK RESERVOIR	5,846	38
		TWIN LAKES RESERVOIR	21,310	10
		HOMESTAKE RESERVOIR	40,260	70
		TURQUOISE LAKE	72,218	46
		ARKANSAS RIVER AT SALIDA	180,000	19
11020006	Huerfano	CUCHARAS RESERVOIR*	0	13
		HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	11,900	64
11020010	Purgatoire	TRINIDAD LAKE	16,900	43
		PURGATOIRE RIVER AT TRINIDAD	42,000	46
11020002	Upper Arkansas	PUEBLO RESERVOIR	198,810	66
		PUEBLO RESERVOIR INFLOW	265,000	31
11020009	Upper Arkansas-John Martin Reservoir	HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	11,900	64
		ADOBE CREEK RESERVOIR	31,688	50
		PURGATOIRE RIVER AT TRINIDAD	42,000	46
		JOHN MARTIN RESERVOIR	48,459	42
		PUEBLO RESERVOIR INFLOW	265,000	31
11020005	Upper Arkansas-Lake Meredith	LAKE HENRY	4,850	57
		HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	11,900	64
		MEREDITH RESERVOIR	17,440	47
		PUEBLO RESERVOIR INFLOW	265,000	31
14010002	Blue	GREEN MOUNTAIN RESERVOIR	65,411	27
		BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	180,000	11
14010001	Colorado Headwaters	WOLFORD MOUNTAIN RESERVOIR	53,580	98
		WILLIAMS FORK RESERVOIR	69,300	69
		COLORADO RIVER NEAR DOTSERO	860,000	10
14010005	Colorado Headwaters-Plateau	VEGA RESERVOIR	4,450	10
		COLORADO RIVER NEAR CAMEO	1,410,000	10
14010003	Eagle	EAGLE RIVER BELOW GYPSUM	210,000	9
14010004	Roaring Fork	RUEDI RESERVOIR	60,241	3
		ROARING FORK AT GLENWOOD SPRINGS	440,000	12
14020001	East-Taylor	TAYLOR R INF TO TAYLOR PARK RESERVOIR	64,000	9
		TAYLOR PARK RESERVOIR	65,064	40
		EAST RIVER AT ALMONT	115,000	11
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	770,000	10
14020004	North Fork Gunnison	PAONIA RESERVOIR	1,600	11
		NORTH FORK GUNNISON R NR SOMERSET	150,000	11
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	77,000	15
14020003	Tomichi	VOUGA RESERVOIR NEAR DOYLEVILLE	289	61
		TOMICHI CREEK AT GUNNISON, CO	45,000	32

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
14020006	Uncompahgre	RIDGEWAY RESERVOIR	53,151	46
		UNCOMPAHGRE RIVER AT COLONA	84,000	19
14020002	Upper Gunnison	SILVER JACK RESERVOIR	183	2
		FRUITLAND RESERVOIR	251	14
		CRAWFORD RESERVOIR	1,943	2
		LAKE FORK AT GATEVIEW, CO	93,000	29
		MORROW POINT RESERVOIR	105,833	1
		BLUE MESA RESERVOIR	400,082	15
		GUNNISON R INF TO BLUE MESA RESERVOIR	450,000	20
13010002	Alamosa-Trinchera	MOUNTAIN HOME	2,067	25
		TERRACE RESERVOIR	5,071	39
		TRINCHERA CK	12,400	58
		UTE CREEK	12,600	54
		SANGRE DE CRISTO	16,000	55
		CULEBRA CREEK AT SAN LUIS	22,000	55
		ALAMOSA CREEK ABOVE TERRACE RESERVOIR	56,000	37
13010005	Conejos	PLATORO RESERVOIR	14,255	32
		CONEJOS RIVER NEAR MOGOTE	166,000	41
13010001	Rio Grande Headwaters	CONTINENTAL RESERVOIR	8,693	91
		SANTA MARIA RESERVOIR	13,779	84
		RIO GRANDE RESERVOIR	18,373	62
		RIO GRANDE NEAR DEL NORTE	400,000	34
13010004	Saguache	SAGUACHE CREEK NEAR SAGUACHE, CO	25,000	37
14080104	Animas	LEMON RESERVOIR	10,675	22
		FLORIDA RIVER INFLOW TO LEMON RESERVOIR	30,000	13
		ANIMAS RIVER AT DURANGO	240,000	8
14080107	Mancos	JACKSON GULCH RESERVOIR	2,743	13
		MANCOS RIVER NEAR MANCOS	11,500	6
14080105	Middle San Juan	LONG HOLLOW RESERVOIR	594	50
		LA PLATA RIVER AT HESPERUS	11,000	11
14080102	Piedra	PIEDRA RIVER NEAR ARBOLES	120,000	24
14030002	Upper Dolores	GROUNDHOG RESERVOIR	4,500	7
		DOLORES RIVER BELOW MCPHEE RESERVOIR	155,000	22
		MCPHEE RESERVOIR	167,868	43
14080101	Upper San Juan	VALLECITO RESERVOIR	38,376	9
		LOS PINOS RIVER NEAR BAYFIELD	120,000	13
		SAN JUAN RIVER NEAR CARRACAS	270,000	32
10190006	Big Thompson	MARIANO RESERVOIR	2,200	18
		LAKE LOVELAND RESERVOIR	2,300	7
		LONE TREE RESERVOIR	2,400	9
		WILLOW CREEK RESERVOIR	6,046	12
		BOYD LAKE	29,500	44
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	64,000	18
		CARTER LAKE	90,536	74
		LAKE GRANBY	334,139	65

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
10190007	Cache La Poudre	BLACK HOLLOW RESERVOIR	2,800	44
		HALLIGAN RESERVOIR	2,800	15
		CACHE LA POUDRE	5,100	17
		CHAMBERS LAKE	5,100	86
		WINDSOR RESERVOIR	6,000	12
		FOSSIL CREEK RESERVOIR	7,900	62
		COBB LAKE	15,500	59
		HORSETOOTH RESERVOIR	83,104	34
		CACHE LA POUDRE R AT CANYON MOUTH	166,000	27
10190004	Clear Creek	CLEAR CREEK AT GOLDEN	82,000	18
10190003	Middle South Platte-Cherry Creek	HORSECREEK RESERVOIR	0	1
		MILTON RESERVOIR	8,700	8
		BARR LAKE	14,600	4
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	29,000	24
		STANDLEY RESERVOIR	30,700	30
		BOULDER CREEK NEAR ORODELL	42,000	17
		SAINT VRAIN CREEK AT LYONS	63,000	14
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	64,000	18
		CLEAR CREEK AT GOLDEN	82,000	18
		SOUTH PLATTE RIVER AT SOUTH PLATTE	117,000	16
		CACHE LA POUDRE R AT CANYON MOUTH	166,000	27
10190012	Middle South Platte-Sterling	PREWITT RESERVOIR	11,900	24
		JULESBURG RESERVOIR	12,300	1
		JACKSON LAKE RESERVOIR	23,700	44
		EMPIRE RESERVOIR	26,700	75
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	29,000	24
		RIVERSIDE RESERVOIR	36,200	44
		BOULDER CREEK NEAR ORODELL	42,000	17
		POINT OF ROCKS RESERVOIR	45,800	25
		SAINT VRAIN CREEK AT LYONS	63,000	14
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	64,000	18
		CLEAR CREEK AT GOLDEN	82,000	18
		SOUTH PLATTE RIVER AT SOUTH PLATTE	117,000	16
		CACHE LA POUDRE R AT CANYON MOUTH	166,000	27
10190001	South Platte Headwater	ANTERO RESERVOIR	19,500	63
		SPINNEY MOUNTAIN RESERVOIR	21,200	40
		ELEVENMILE CANYON RESV INFLOW	38,000	24
		ELEVENMILE CANYON RESERVOIR	95,700	21
10190005	St. Vrain	MARSHALL RESERVOIR	5,000	38
		TERRY RESERVOIR	5,100	50
		UNION RESERVOIR	7,394	11
		GROSS RESERVOIR	11,400	36
		BUTTONROCK (RALPH PRICE) RESERVOIR	16,200	99
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	29,000	24
		BOULDER CREEK NEAR ORODELL	42,000	17
		SAINT VRAIN CREEK AT LYONS	63,000	14

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
10190002	Upper South Platte	CHEESMAN LAKE	42,300	10
		SOUTH PLATTE RIVER AT SOUTH PLATTE	117,000	16
		DILLON RESERVOIR	205,200	19
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	181,000	19
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	500,000	12
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	94,000	13
14050005	Upper White	WHITE RIVER NEAR MEEKER	155,000	13
14050001	Upper Yampa	YAMCOLO RESERVOIR	4,610	32
		STAGECOACH RESERVOIR NR OAK CREEK	32,600	99
		ELKHEAD CREEK ABOVE LONG GULCH	39,000	20
		YAMPA RIVER AT STEAMBOAT SPRINGS	141,000	6
		ELK RIVER NEAR MILNER, CO	220,000	10

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

*No longer exists

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

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Basinwide Conditions Assessment

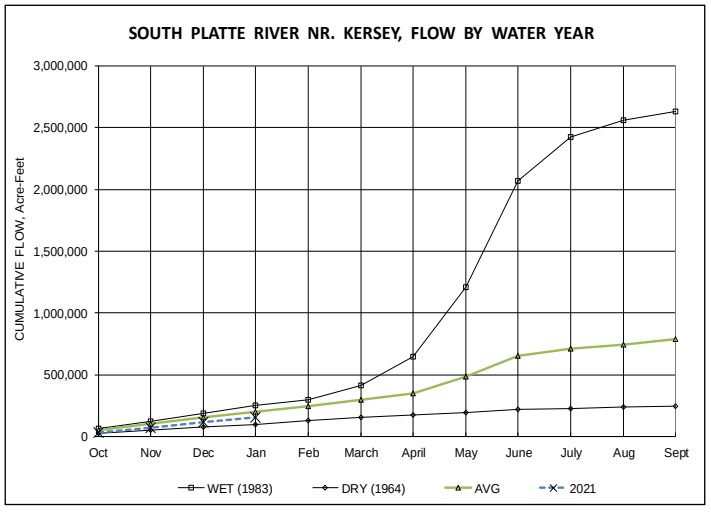
The SWSI value for the month was -2.3.

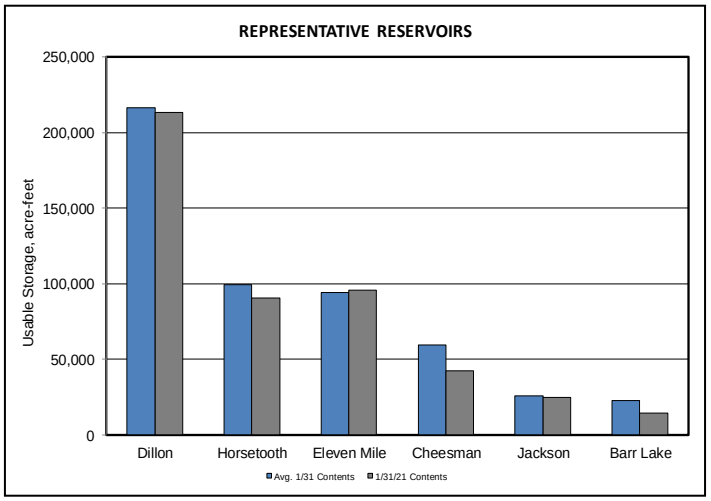
The South Platte River basin in northeastern Colorado experienced 50-70% of average precipitation and temperatures 1 to 3 degrees Fahrenheit above average throughout the basin during the month of January. As a result of above average temperatures and below average precipitation, the USDA South Platte Basin High/Low Snowpack Summary indicates that the basin total snowpack was near 75% of average at the end of January. The USDA NRCS Colorado Streamflow Forecasts Summary for January 1, 2021 projects streamflows below average throughout the basin, with 76% of Average for the entire basin, and a range of 71-84% for the tributaries within the South Platte basin drainage.

The trend of above average temperatures and below average precipitation throughout the basin resulted in continued widespread drought throughout. The month of January ended identical to the months of December with the the USDA Drought Monitor rating for the mountainous and foothill areas with a rating of D3 (Extreme drought), with the exception of portions of Larimer, Weld, Morgan, and Washington (northwest corner) Counties remaining at a rating of D2 (Severe Drought). Drought conditions in portions of Jefferson and Douglas Counties ended the month of January with a rating of D4 (Exceptional Drought).

The above conditions along with high demand for the filling of storage reservoirs throughout the basin, resulted in flows on the mainstem of the South Platte River basin below average throughout the basin. Flows at the Kersey gage downstream of the City of Greeley, were slightly below average with average daily flows for the month of January approximately 582 cfs, 88% of the historic mean value of 662 cfs. The average daily flows at the Julesburg gage for the month of January were 148 cfs, only 28% of the historic mean value of 537 cfs. The demand for filling of depleted reservoirs throughout Division 1 and below average flows of native water in the rivers will continue the trend of below average flows throughout the Winter into Spring, especially at the Julesburg gage near the state line.

With the continued trend of below average precipitation and below average streamflows, many reservoirs on the eastern plains remain depleted and continue to slowly fill in priority, resulting in senior calling water rights on the mainstem of the South Platte River and tributaries by reservoirs. The first one-half of the month of January was controlled by a Riverside 1907 or 1909 (Milton Reservoir bypass) on the upper end of the South Platte River, with the lower end of the river controlled by a call at Prewitt Reservoir 1910 or 1922 (North Sterling bypass) call on the lower end of the river. The second half of the month of January was controlled on the upper end by a 1909 call at the Burlington Canal below Denver for the filling of Barr Lake; a 1909 Evans No. 2 Canal located downstream of the Town of Fort Lupton to fill Milton Reservoir; and a Prewitt Reservoir Inlet Canal 1922 (North Sterling bypass) call located downstream of the City of Brush. With many of the reservoirs below average and the reservoirs on the eastern plains empty to near empty at the start of November and slowly filling throughout December and January, it is anticipated that the calls on the South Platte will be controlled by senior reservoir calls until they reach winter fill, into the Spring of 2021 snowmelt runoff season. Many tributaries have internal calls senior to those on the South Platte River controlling diversions within their individual sub-basins.

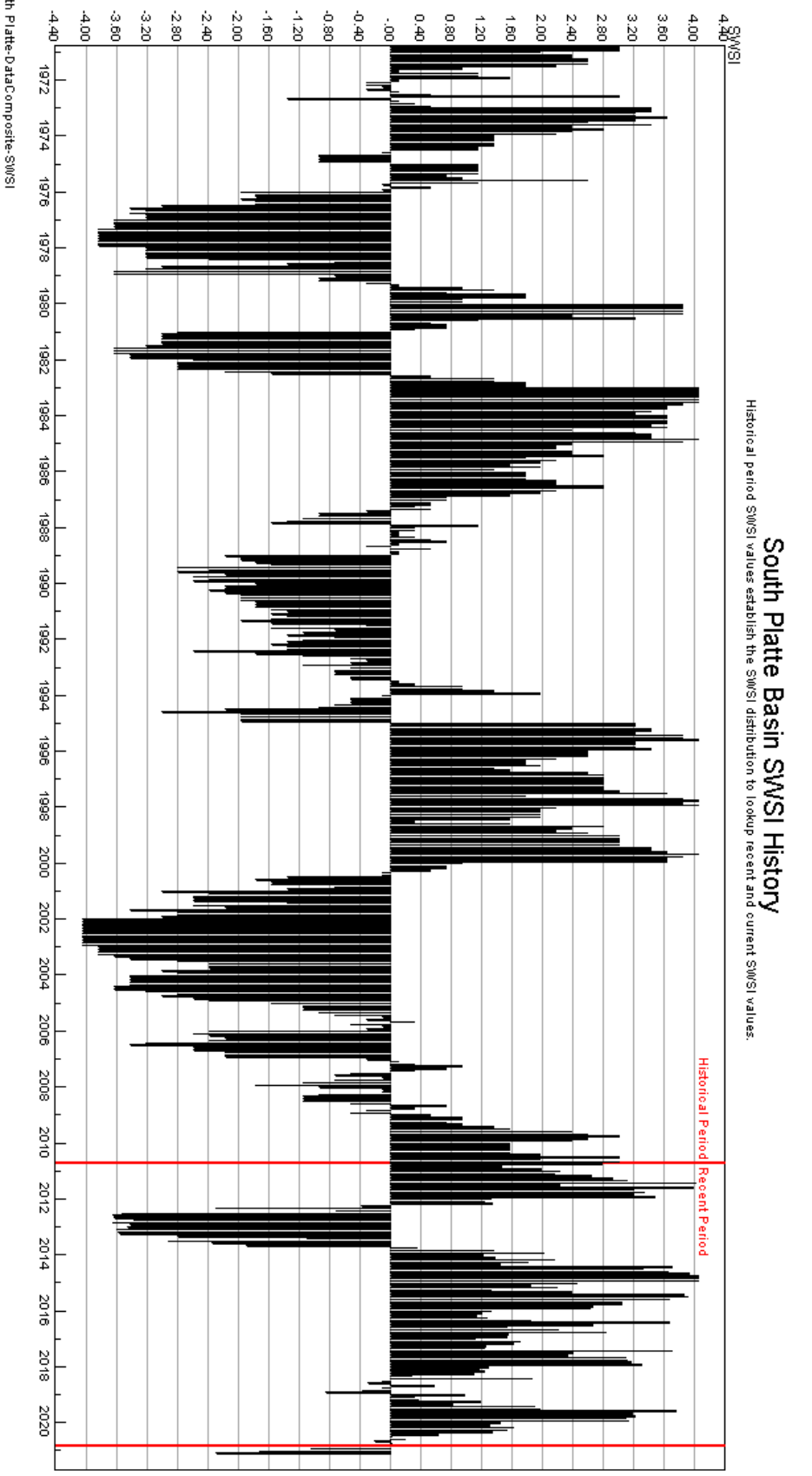




Reservoir storage levels throughout the South Platte River mainstem ended the month of January below the historical average at the 6 SWSI Representative Reservoirs (Dillon, Horsetooth, Eleven Mile, Cheeseman, Jackson, and Barr Lake) at 481,234 acre-feet volume, which is 93% of the long term average (1961-current). Additionally, 32 indexed reservoirs throughout Division 1 basin ended the month of January at 93% of the long term average with a storage volume of 735,733 acre-feet representing 65% of total full capacity for the reservoirs. This is slightly below the long term average of 69% of total full capacity for the end of January storage in the 32 indexed reservoirs throughout Division 1. Given the current below average precipitation

and native flows in the rivers and streams, it is expected much competition by reservoir priorities to fill in priority will be experienced throughout the Winter and Spring.

The temperature and precipitation outlook into February, March, and April prepared by the National Weather Service, in northeastern Colorado indicates an 40-50% probability of above average temperatures and a 33-40% probability of below precipitation throughout the South Platte River Basin and Republican River Basin.



Basinwide Conditions Assessment

The SWSI value for the month was -0.2.

Outlook

Reservoir storage in the Pueblo Winter Water Program (PWWP) totaled 60,666 acre-feet at the end of January. This is a large improvement over the 37,615 acre-feet of storage recorded at the end of December. This storage amount is also higher than last year's storage to date of 31,168 acre-feet, and represents 69% of the last twenty-year average.

Conservation storage in John Martin Reservoir has accumulated 7,817 acre-feet versus 20,228 acre-feet as of the end of January last year.

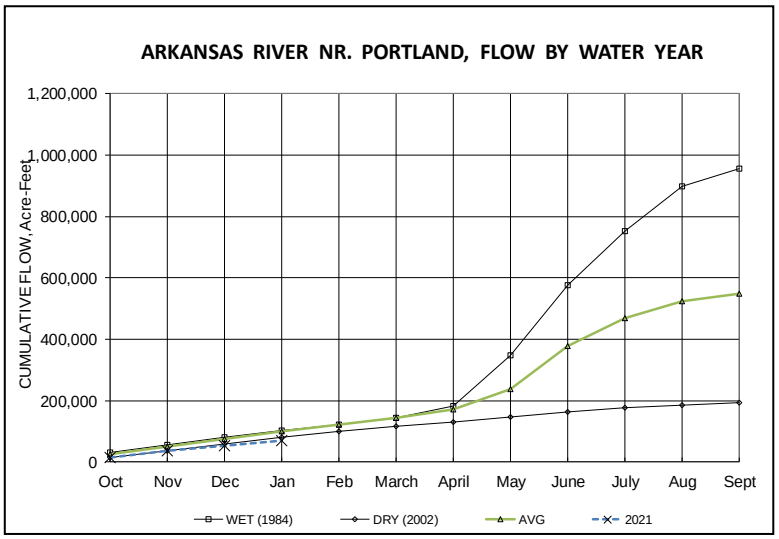
The current PWWP storage has improved over last year and snowpack for the basin has improved to 95% of average over the 89% of average recording at the end of December.

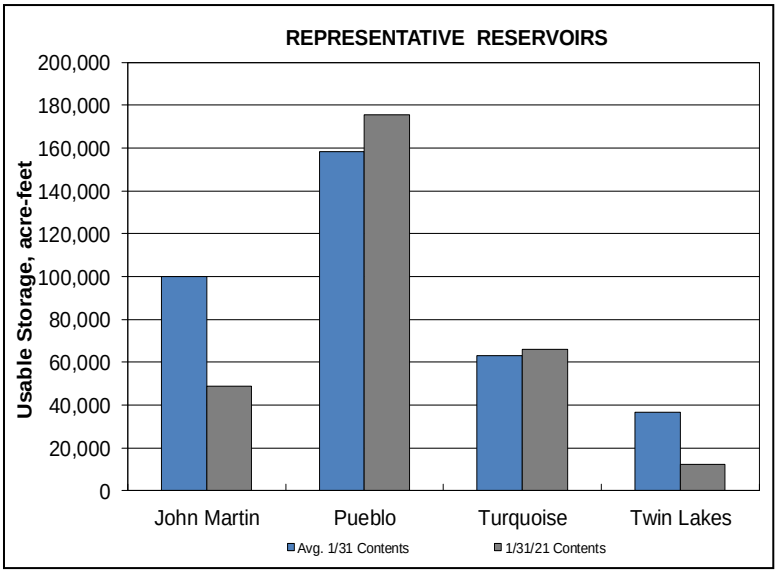
Administrative Concerns

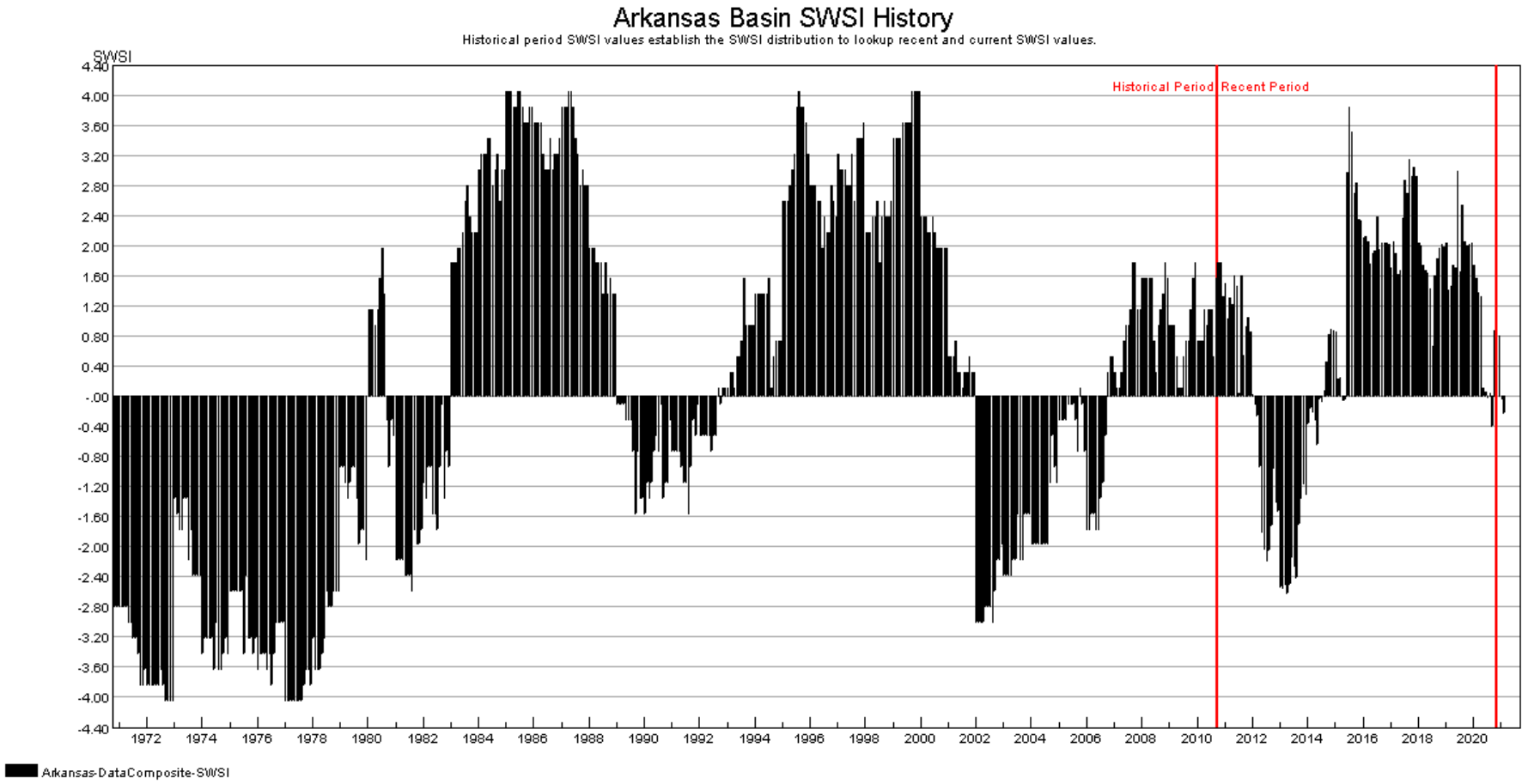
Given the below average accumulation of water during the Winter Water Program, there is some concern that the major well associations may face a shortage of critical augmentation water from reservoir storage.

Ongoing concerns still relate to the spilling of account water from Pueblo Reservoir and the Division is working with the various water programs to help mitigate that possibility.

Other projects underway in the Arkansas basin are the continued refinement of the scope of work for the ARK DSS Colors of Water online tools and full implementation of the new water user accounting uploader tool.






Arkansas Basin SWSI History
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
SWSI
Historical Period
Recent Period
4.40
4.00
3.60
3.20
2.80
2.40
2.00
1.60
1.20
0.80
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-.00
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-4.40
1972
1974
1976
1978
1980
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1984
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1992
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1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
Arkansas-DataComposite-SWSI

Basinwide Conditions Assessment

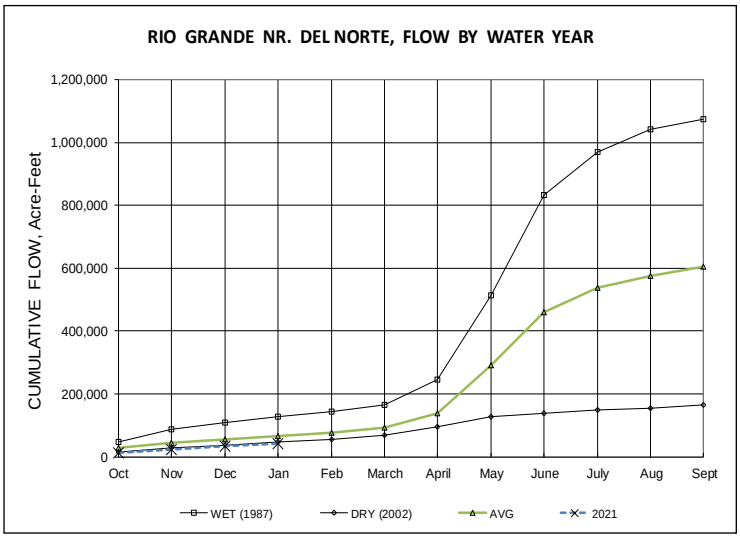
The SWSI value for the month was -0.9.

Flow at the gaging station Rio Grande near Del Norte averaged 135 cfs (78% of normal). The Conejos River near Mogote had a mean flow of 38 cfs (77% of normal). Streams in the upper Rio Grande basin are still recovering from the poor 2020 runoff and precipitation.

Outlook

February 1, 2021 Natural Resources Conservation Service stream flow forecasts are predicting runoff in area streams to be in the range of 58% (Rio San Antonio) to 100% (inflow to Costilla Reservoir of average during the 2021 irrigation season. Most of the basin streams are forecasted to yield 80 to 90% of average runoff during 2021.

Current National Weather Service forecasts for February through June, 2021 are calling for above normal temperatures and below normal precipitation in this area of the state. This is very concerning, the conditions of 2020 could be extended well into 2021.

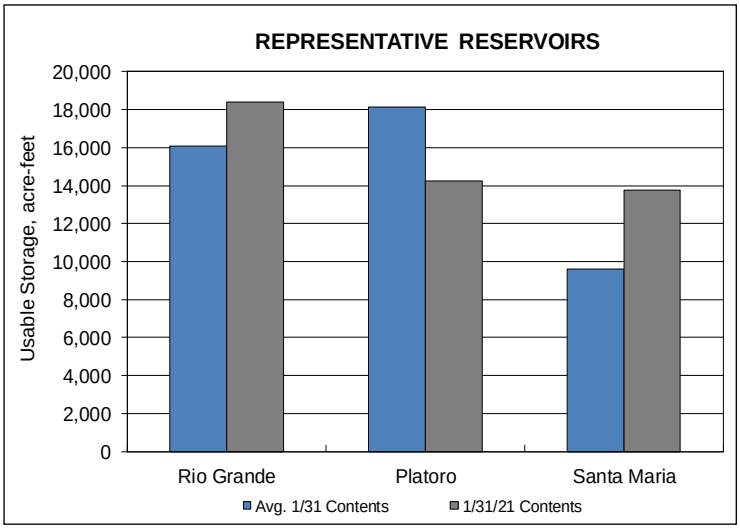


Administrative/Management Concerns

The very poor water supply conditions of 2020 resulted in a large draw on area reservoirs and aquifers. Diversion into ditches last year was severely limited by a runoff that resembled the droughts of 2002 for eastern side of the San Luis Valley and 2003 for the rest of the Valley. Use of the aquifers and releases from local reservoirs was needed to bridge the gap for some irrigators. Others were left to endure parched fields and reduced yields.

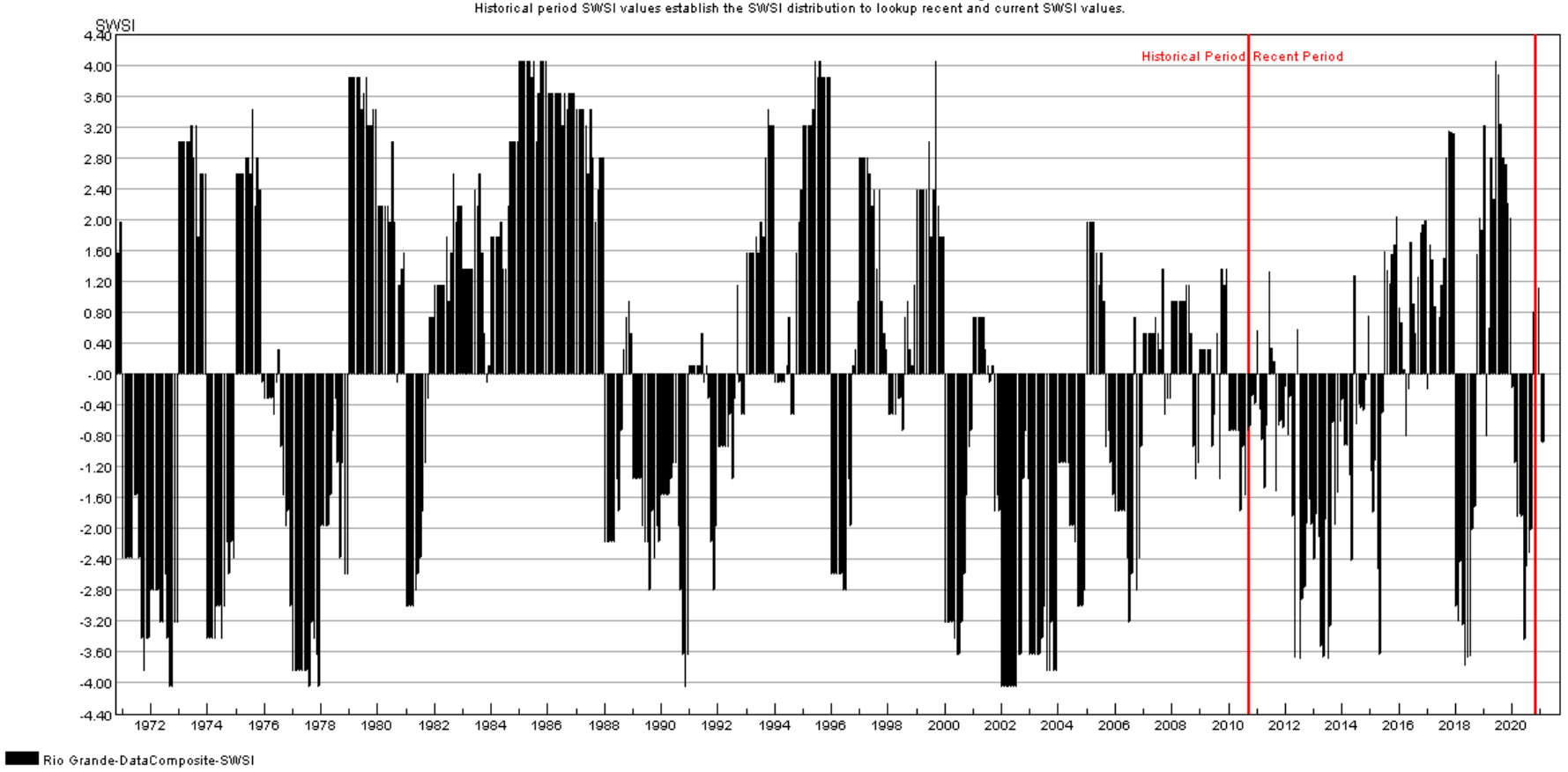
Public Use Impacts

Virtually no snowfall on the Valley floor and neighboring mountains during early January dropped the basin snowpack to below the long-term average levels. However, late month snowstorms bolstered the upper Rio Grande snow pack to just above normal levels for the end of January. There is hope the Rio Grande basin can hold its position as the snowpack leader for Colorado as spring approaches..



Rio Grande Basin SWSI History

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



Basinwide Conditions Assessment

The SWSI value for the month was -3.2.

Basin Wide Conditions Outlook

As with the rest of the state, Gunnison basin precipitation continued to be below average in January. Most of the basin received between 50 and 80 percent of average precipitation for the month. Precipitation since February 1st has been much more promising as several storm systems have improved conditions greatly. Snowpack conditions, as measured by the average snow water equivalent (SWE) at all Snotel stations throughout the Gunnison basin, stood at 73 percent on February 1st, but had risen to 86 percent by February 16th. While early February precipitation has brought improvements basin-wide, even better news is that the improvement is most evident in the areas that were in the worst shape. For instance, the basin above Paonia Reservoir has risen from 65 to 87 percent of the median since February 1st, while the basin above Ridgway Reservoir has risen from 90 to 97 percent and the basin above Taylor Park has risen from 76 to 91 percent of the median.

Outlook

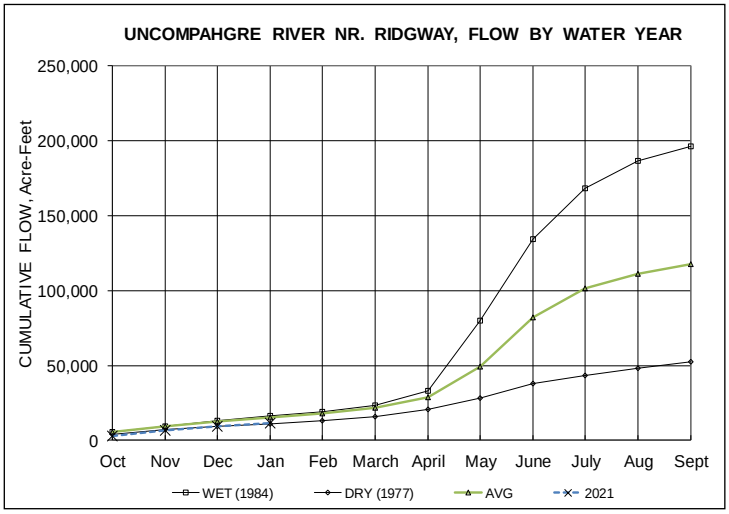
NOAA's El-Nino/Southern Oscillation (ENSO) forecast now predicts that the current La Niña will transition to neutral conditions in the April to June period. The long term forecast for the period from February through April continues to predict a likelihood of below average precipitation and above average temperatures.

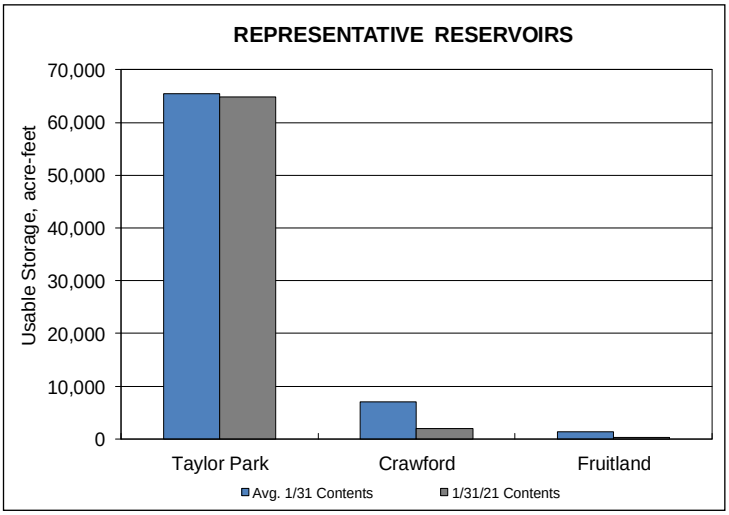
Administrative/Management Concerns

The transfer of Taylor Park Reservoir first fill account water into the Aspinall Unit continued at approximately 160 ac-ft per day through January. Physical storage in Taylor Park continues to decline by approximately 40 ac-ft per day as the releases to move water into the Aspinall Unit currently exceed inflows. As of February 1st, the first fill account contained a total of 93,365 ac-ft. At the current rate of fill the account will not be full until mid May, meaning that no second fill storage will be accumulated until spring runoff season. The Uncompahgre Valley Water Users Association (UVWUA) held their annual meeting on February 2nd and didn't state what their planned starting season allocation percentage would be. However, they are reportedly considering starting at less than 100 percent delivery for the first time in a few years because of the lower than average snowpack and storage to start the irrigating season.

Blue Mesa Reservoir inflows continue to match releases and have therefore remained flat at only 48 percent of capacity.

As mentioned previously, there is some positive news since the beginning of February. That is particularly the case in the hardest hit areas of the Gunnison like the North Fork Gunnison River and Surface Creek Valleys. The Park Reservoir snotel, which is used to gauge how well the 108 reservoirs in the Grand Mesa Water Users Association system may fill, has risen from only 55 percent of median SWE in mid January to 78 percent in mid February! While this is still well below the median, it places the area above the drought years of 2002, 2012 and 2018, which is a marked improvement. This provides a glimmer of hope for the orchards and farms in the Cedaredge area that conditions will be better than feared. Streamflow forecasts from February 1st only predict 52 percent of the median for Surface Creek due to the low soil moisture, but the next forecast should improve with the additional SWE. Likely the forecast will remain well below average, but water users welcome any improvement since the reservoir system on the Grand Mesa only carried over a record low 14% of capacity into the 2021 season.



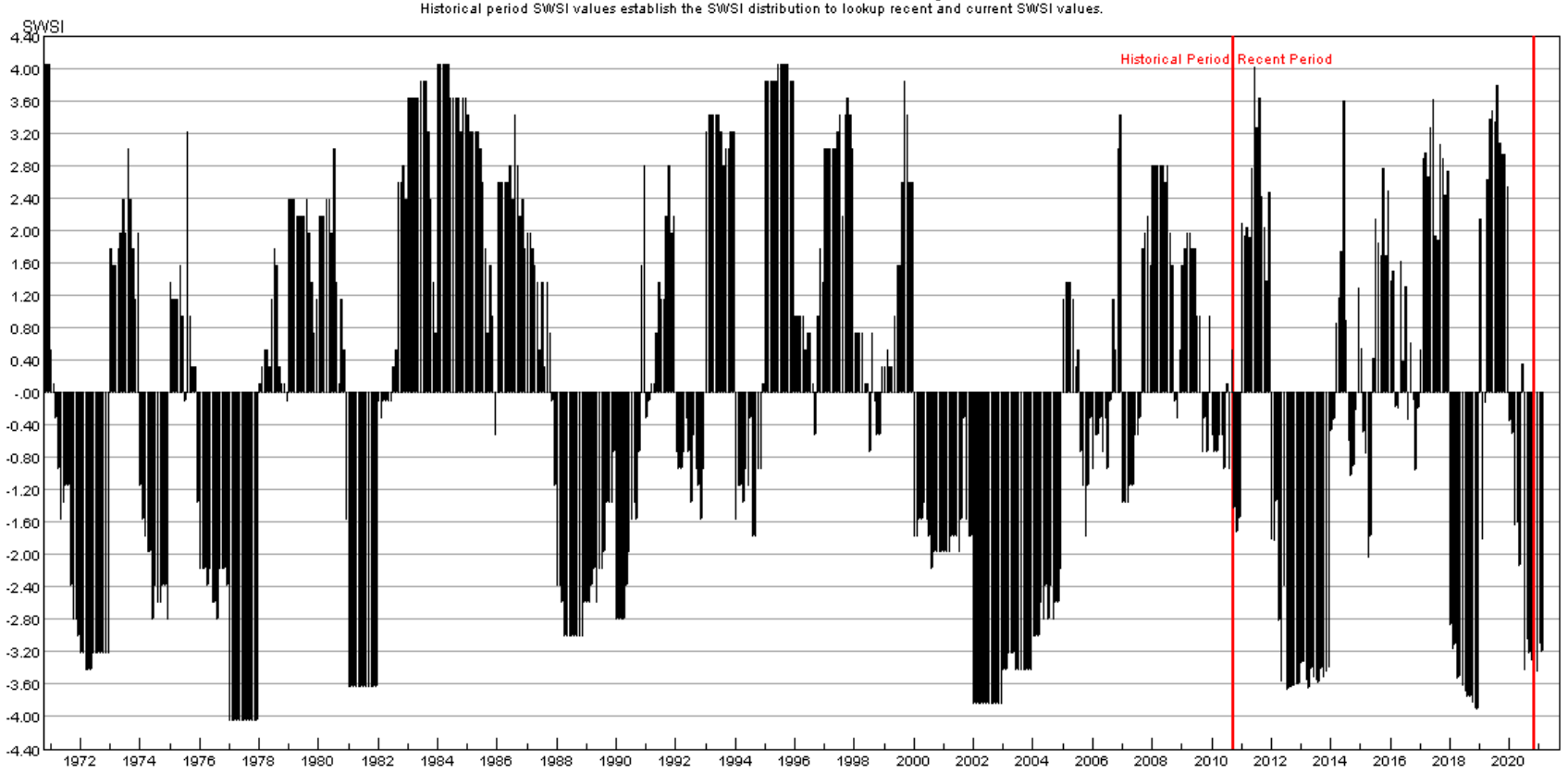


Public Use Impacts

Ski conditions at Telluride and Crested Butte remained marginal through January, but have improved with a number of powder days in the first two weeks of February. During the past few weeks, the base depth at Crested Butte and Telluride have improved from 30 inches to 59 and 61 inches, respectively. This has resulted in heavy use with tickets at some resorts selling out over Presidents Day weekend.

Gunnison Basin SWSI History

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



Basinwide Conditions Assessment

The SWSI value for the month was -3.3.

Outlook

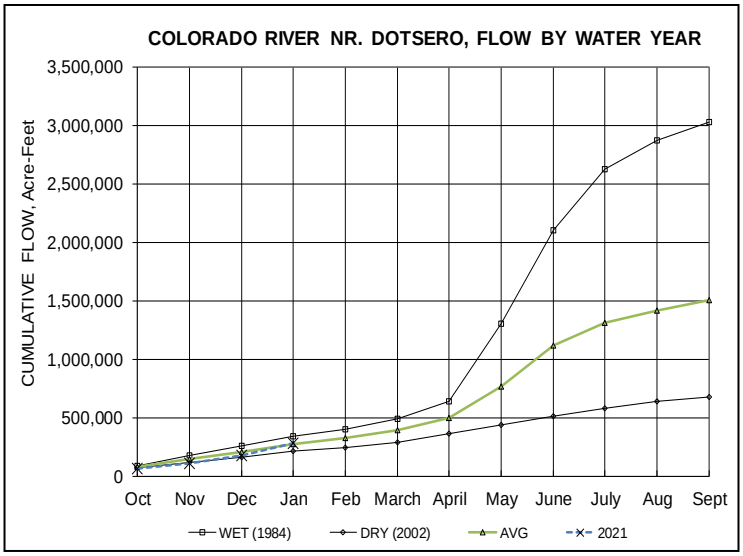
Colorado River flows are running below average with tributary flows also running below average throughout February. As of February 11, the Upper Colorado River Basin snowpack was 79 percent of median snow water equivalent and 71 percent of average precipitation. Forecasts call for below average precipitation and below average temperatures for western Colorado through February.

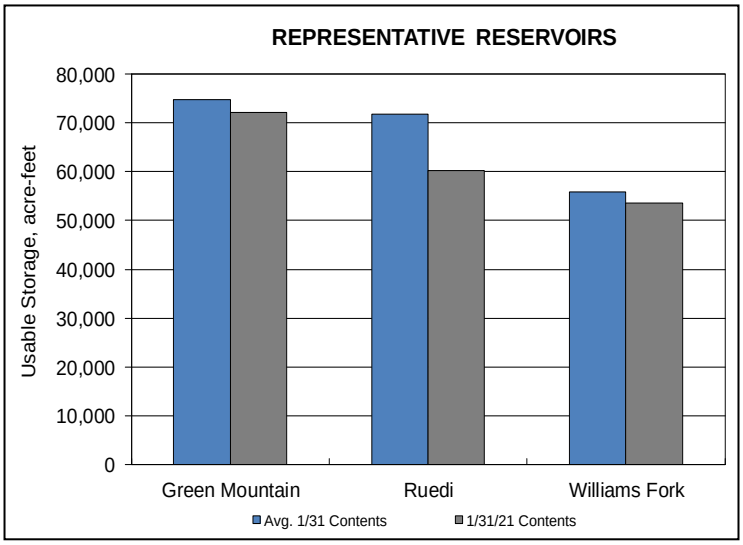
Administrative/Management Concerns

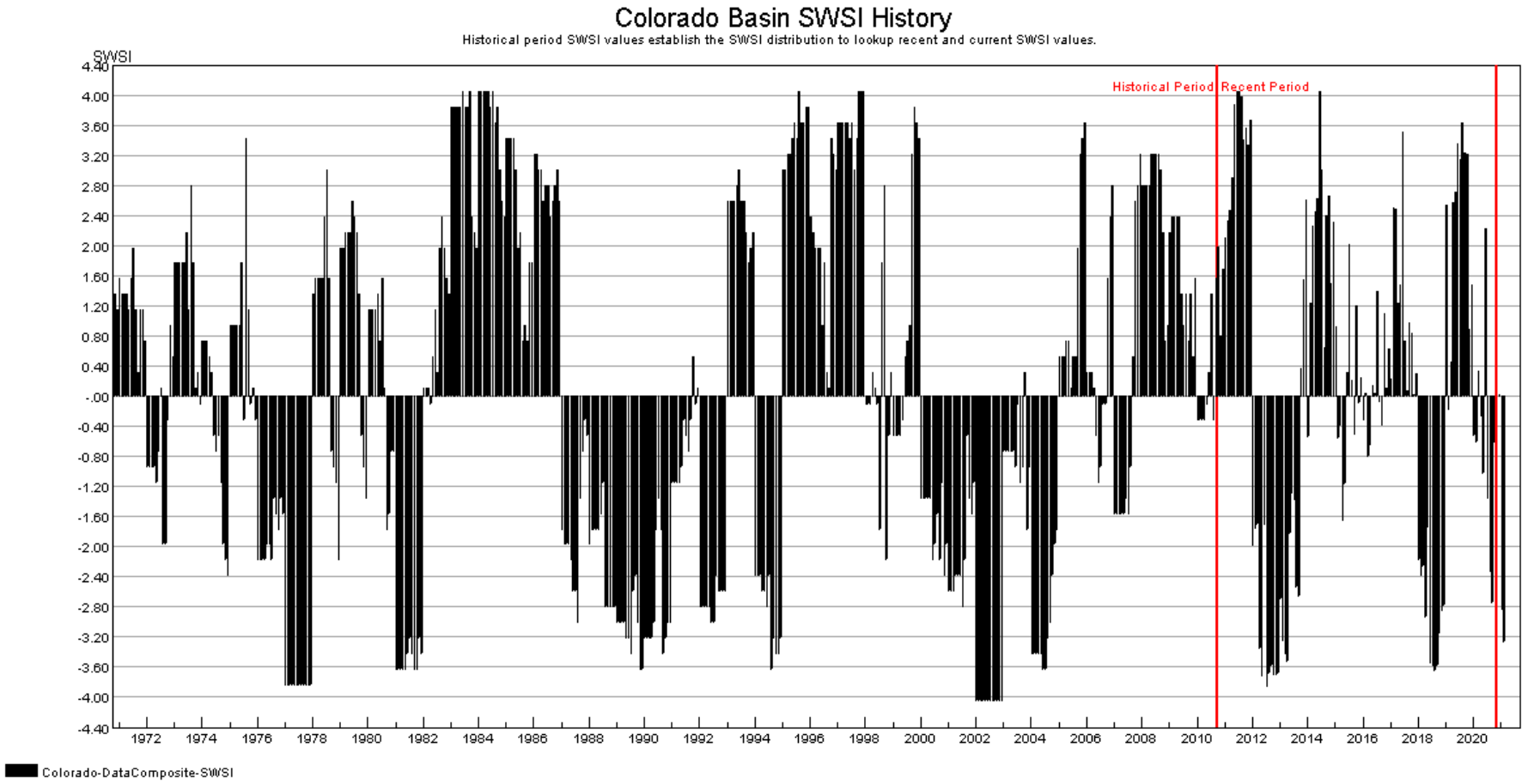
The call on the Colorado River main stem remains the Shoshone Hydro Power right for 1250cfs. Accordingly, Green Mountain Reservoir is releasing to pass inflows, provide contract and HUP obligations and make C-BT replacements.

Public Use Impacts

Be careful with ice dams in the river. A few ice dams have built up on the Roaring Fork River which can cause a backup of water that can be very dangerous when it releases as it can carry increase water flow, ice chunks and tree trunks.






Colorado Basin SWSI History
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
SWSI
Historical Period
Recent Period
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Colorado-DataComposite-SWSI

Basinwide Conditions Assessment

The SWSI value for the month was -2.9.

Snowpack *(25 sites)* – Yampa and White River basins were 66% of the monthly median for SWE. This is down from last year's SWE median of 108%. The North Platte River basin was 71% of the monthly median for SWE and is down from last year's SWE median of 106%. For the entire Yampa, White and North Platte River basins the lowest percent of median was at the Rabbit Ears SNOTEL site at 54%. The highest percent of median was at the Rawah RS SNOTEL station at 97%.
**Averages are from 1981-2010 records*

Precipitation (24 sites) – Yampa and White River basins were 57% of the monthly average, putting the basin at 60% of average for the water year to date. This is down from last year's monthly average of 112%, and down from last year's water year to date of 93%. North Platte River basin was 70% of the monthly average, putting the basin at 71% for the water year to date. This is down from last year's monthly average of 121%, and down for last year's water year to date of 104%. For the entire Yampa, White and North Platte River basins the lowest percent of average, at 39%, was the Burro Mountain SNOTEL station. The highest, at 103%, was the Divide Peak SNOTEL station, with 3.3 inches.
**Averages are from 1981-2010 records*

Temperatures – The average monthly temperature for NOAA Colorado Climate Division 2: Colorado River Drainage was **23.6° F**. This is +3.0°F from the average of 20.6°F. This temperature ranks 91 for lowest of the previous 126 years of data. For the NOAA Colorado Climate Division 4: Platte Drainage, the average temperature was **27.4°F**, +3.4°F from the average of 24.0°F, ranking 93.
**Averages are from 1901-2000 records*

Reservoir Outlook

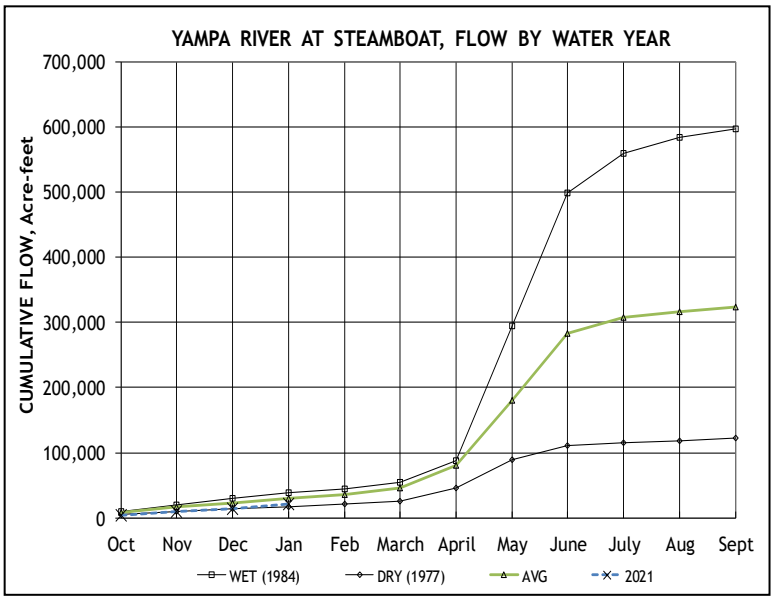
Elkhead Reservoir – January 31, 2021, 2020 capacity level was 15,909 AF of 25,550 AF – 62.3% capacity.

Fish Creek Reservoir – January 31, 2021 elevation was 9863.1' at 1,616 AF of 4,160 AF – 38.8% capacity.

Stagecoach Reservoir – January 31, 2021 capacity level was 32,564 AF of 36,500 AF – 89% of capacity, 116% of average, 93% of last year.

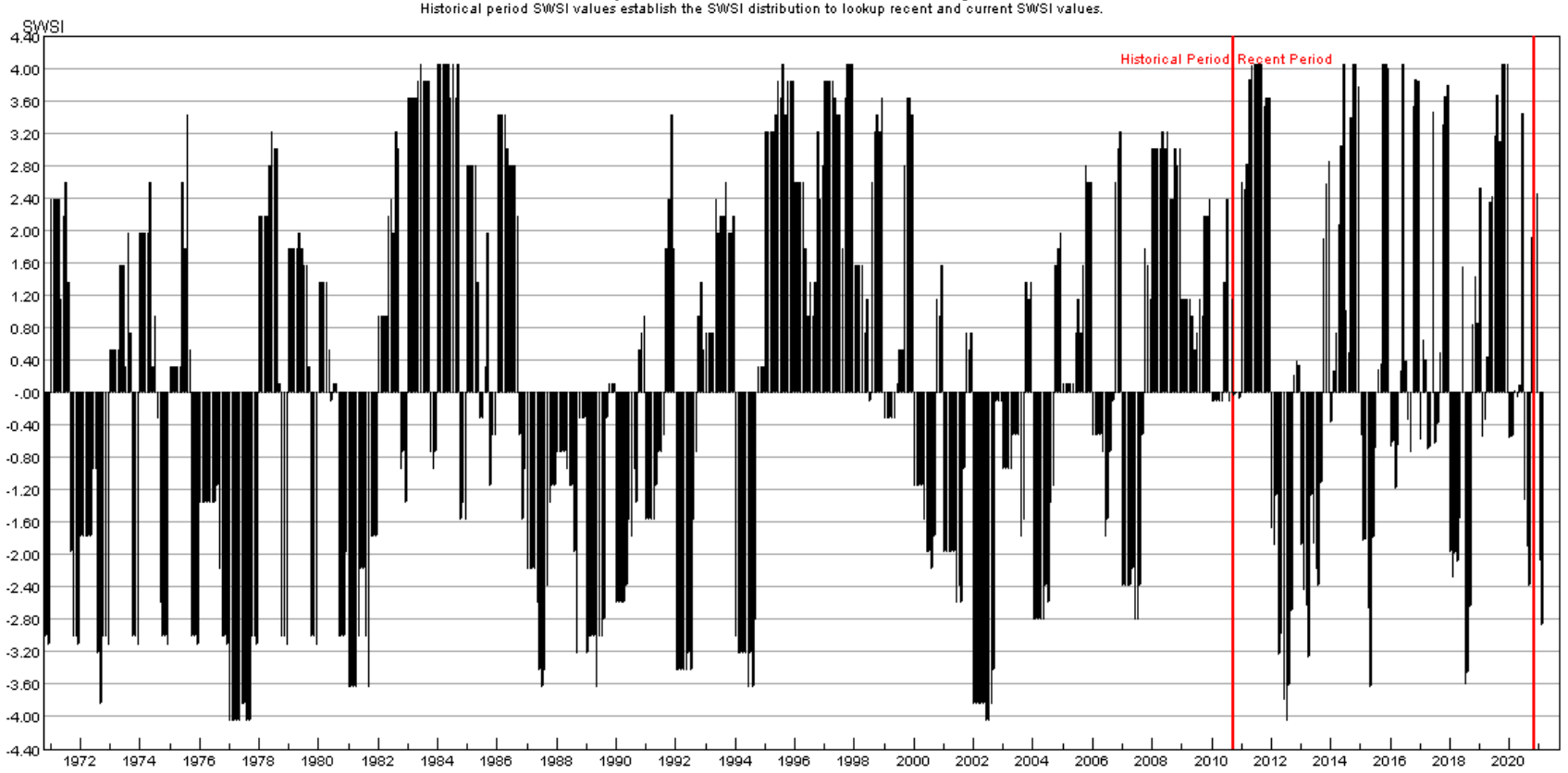
Yamcolo Reservoir – January 31, 2021 capacity level was at 4,610 AF of 8,700 AF – 53% of capacity, 79% of average, 58% of last year.

**Averages are from 1901-2000 records*



Yampa-White Basin SWSI History

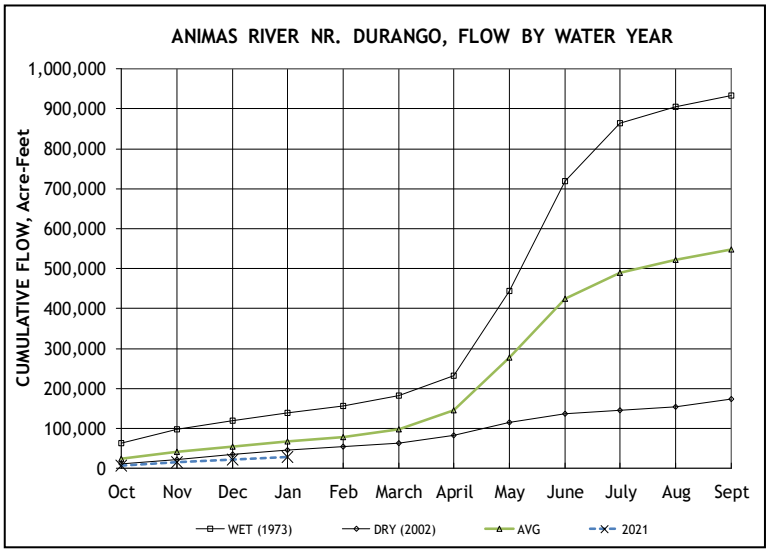
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



Basinwide Conditions Assessment

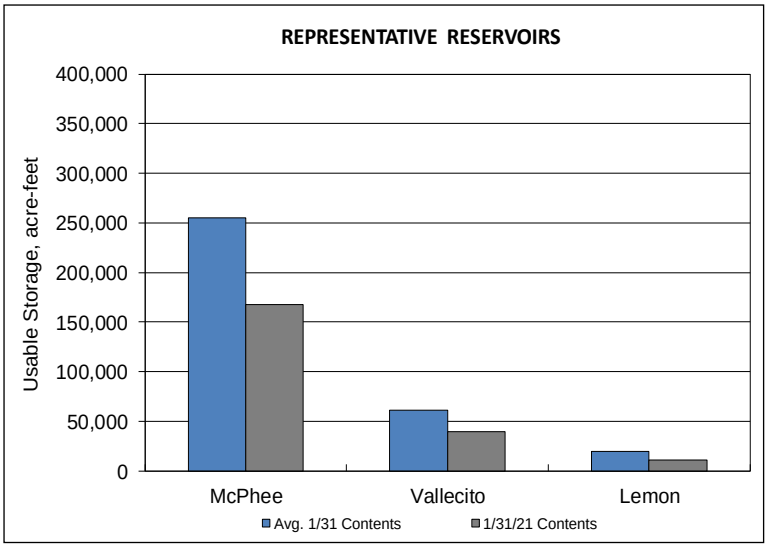
The SWSI value for the month was -2.8.

Flow at the Animas River at Durango averaged 111 cfs (55% of average). The flow at the Dolores River at Dolores was estimated to average 26 cfs (52% of average). The La Plata River at Hesperus was estimated to average 3.4 cfs (50% of average). Precipitation in Durango was 1.60 inches for the month, 79% of the 30-year average of 2.02 inches. Precipitation to date in Durango, for the water year is 3.31 inches, 49% of the 30-year average of 7.11 inches. The average high and low temperatures for the month of January in Durango were 42º and 15º. 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 39,232 acre-feet compared to its average content of 56,733 acre-feet (69% of average). McPhee Reservoir was up to 167,889 acre-feet compared to its average content of 258,955 (65% of average), while Lemon Reservoir was up to 11,020 acre-feet as compared to its average content of 19,535 acre-feet (56% of average).



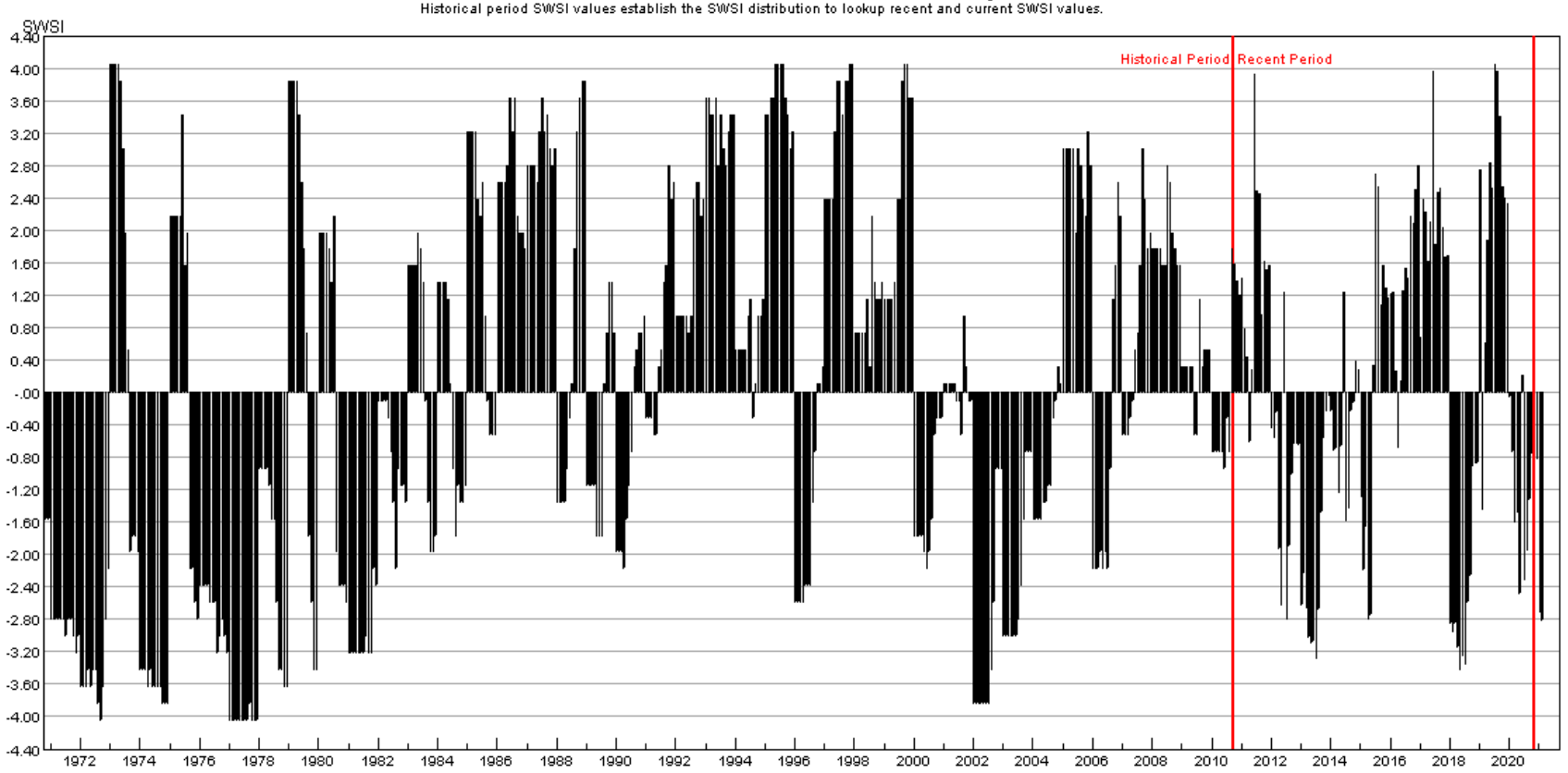
Outlook

Precipitation (1.60 inches) was below average for January in Durango. There were 54 years out of 126 years of record where there was more precipitation than this year. With the lack of moisture in the area, the flows in the rivers are well below average for the month. This is the 2nd worst period of record on the Animas River at Durango stream gauge out of 111 years of record. 1933 is the only year where the flows were recorded lower than this year. There were 106 out of 110 years of record where the total flow past the Dolores stream gauge was more than this year. There were 102 out of 104 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year. All of the reservoirs within the basin are well below average for this time of year. On January 31, the NRCS SNOTEL sites reported an average snow-water-equivalent within the basin at 81%. Last month the average snow-water-equivalent at the end of the month was 80%.



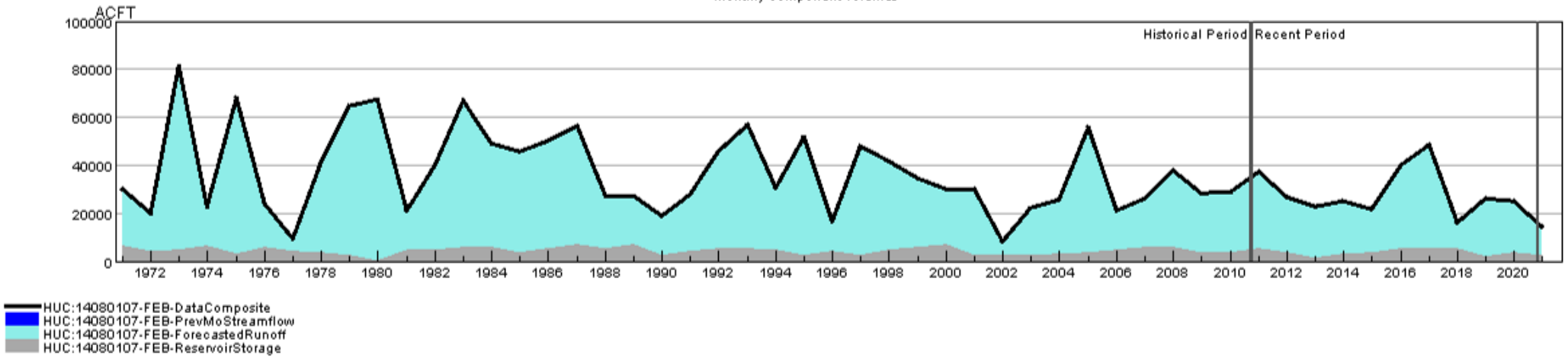
San Juan-Dolores Basin SWSI History

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



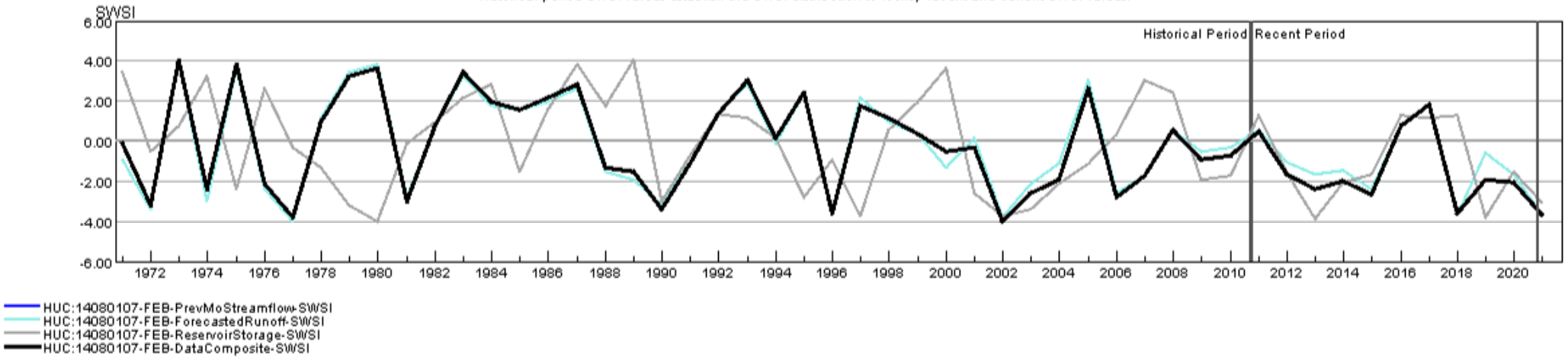
HUC 14080107 (Mancos) Surface Water Supply - FEB

Monthly component volumes



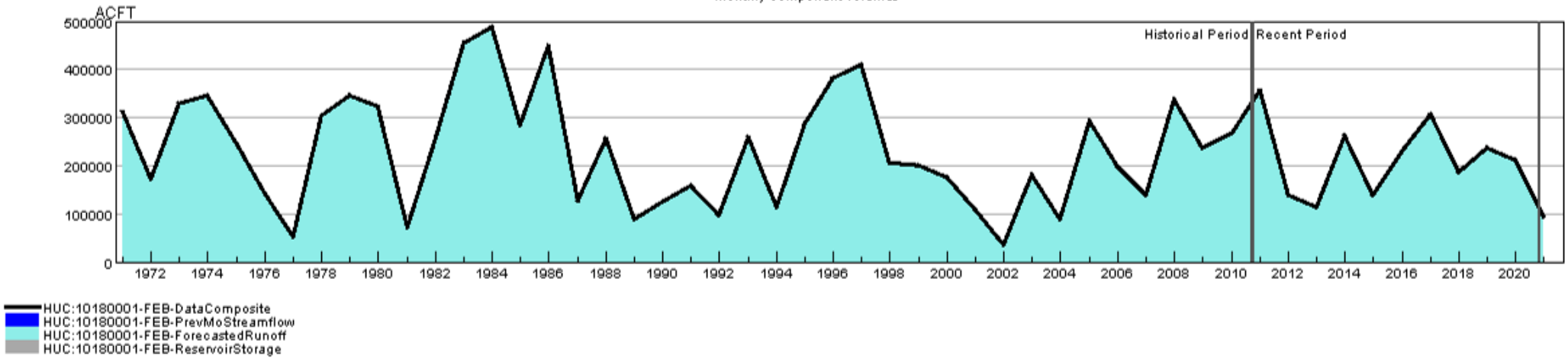
HUC 14080107 (Mancos) SWSI Values - FEB

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



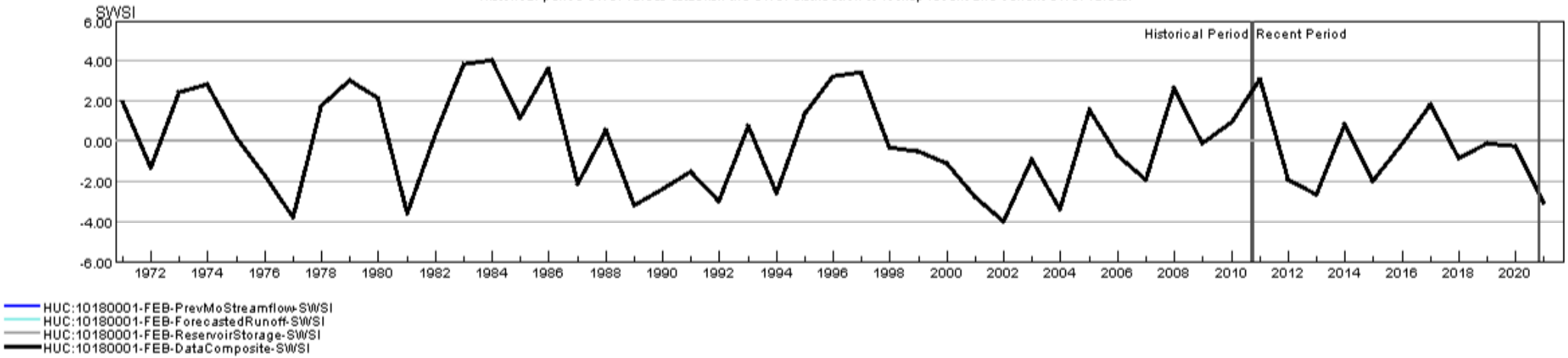
HUC 10180001 (North Platte Headwaters) Surface Water Supply - FEB

Monthly component volumes



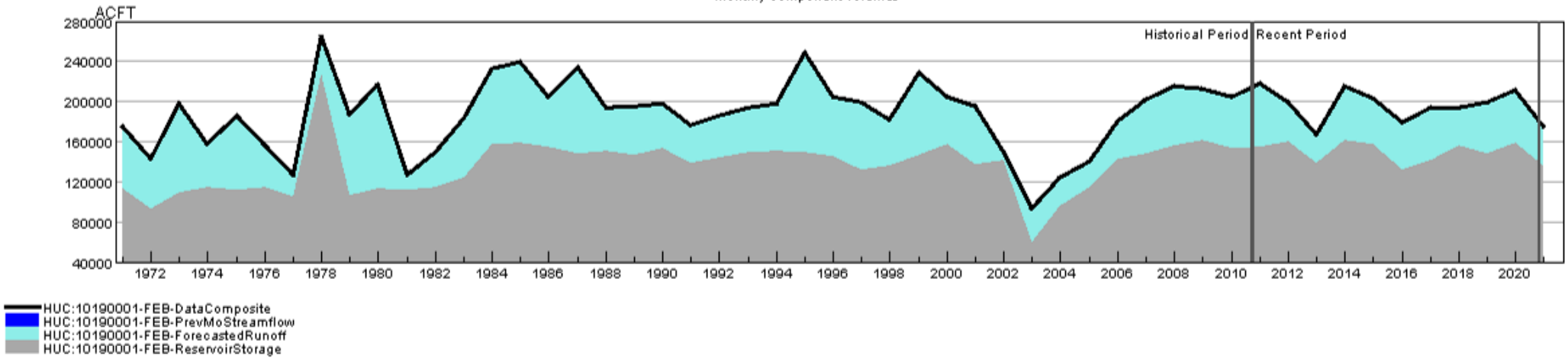
HUC 10180001 (North Platte Headwaters) SWSI Values - FEB

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



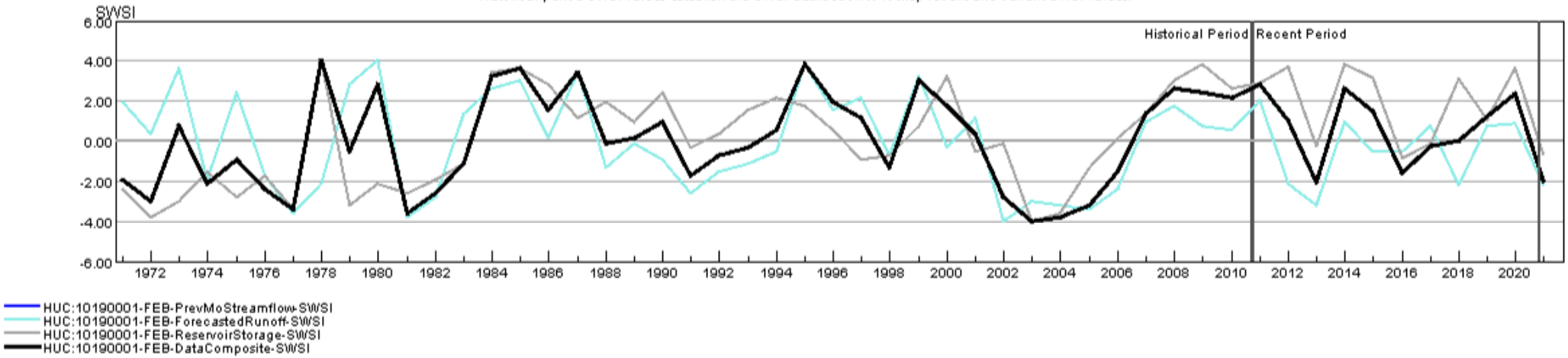
HUC 10190001 (South Platte Headwater) Surface Water Supply - FEB

Monthly component volumes



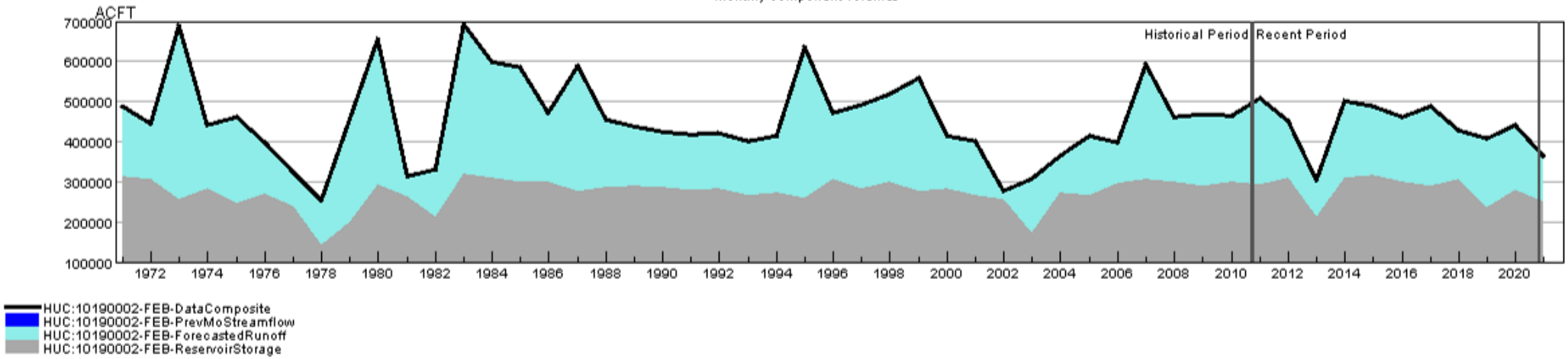
HUC 10190001 (South Platte Headwater) SWSI Values - FEB

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



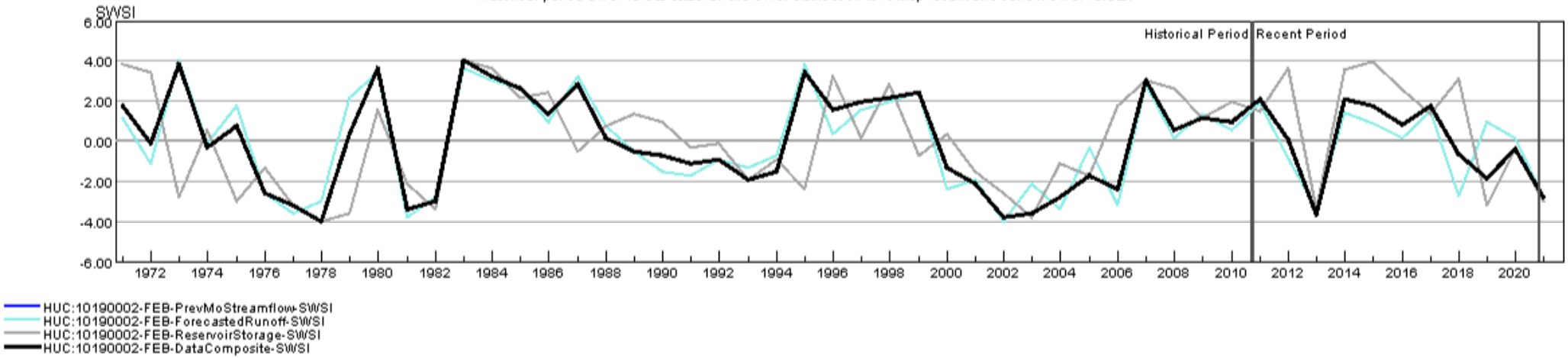
HUC 10190002 (Upper South Platte) Surface Water Supply - FEB

Monthly component volumes



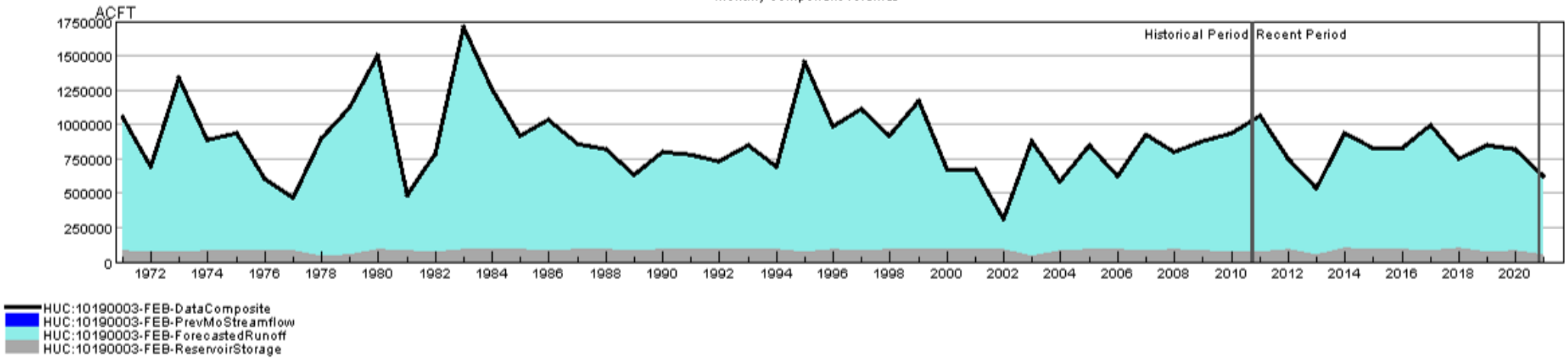
HUC 10190002 (Upper South Platte) SWSI Values - FEB

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



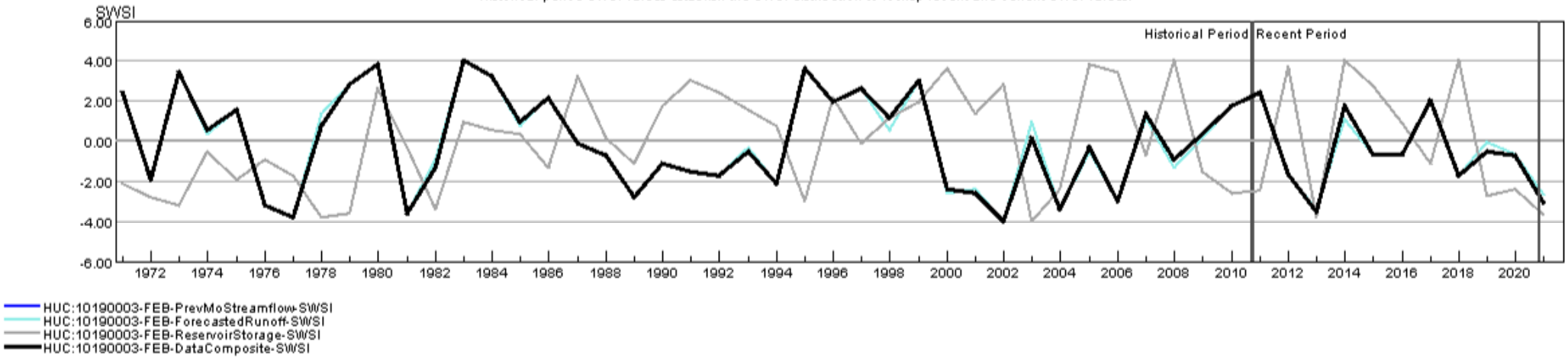
HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply - FEB

Monthly component volumes



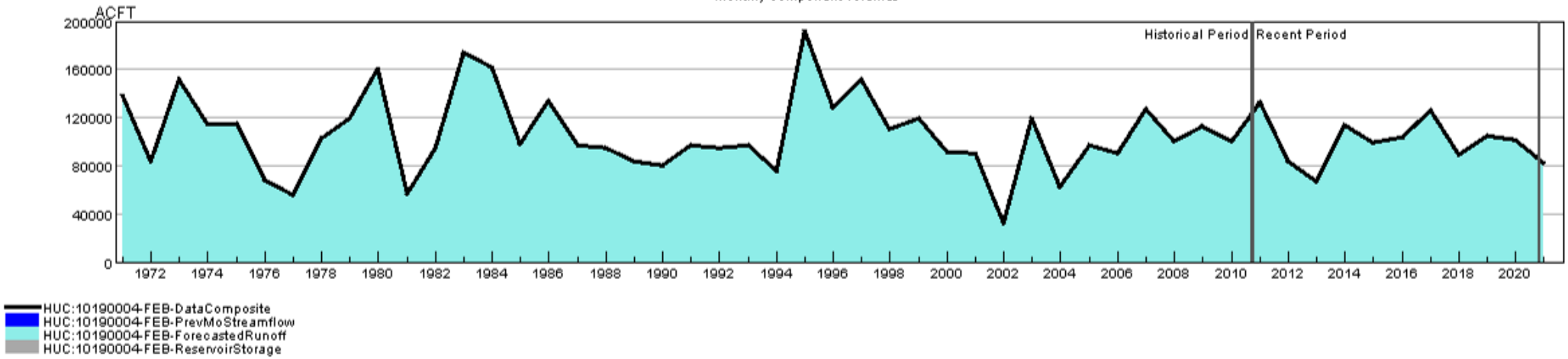
HUC 10190003 (Middle South Platte-Cherry Creek) SWSI Values - FEB

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



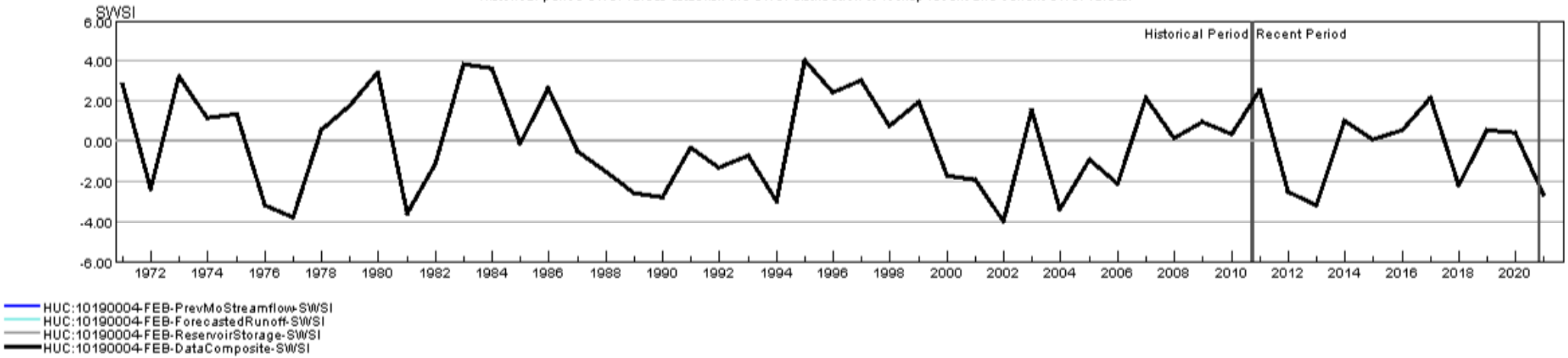
HUC 10190004 (Clear) Surface Water Supply - FEB

Monthly component volumes



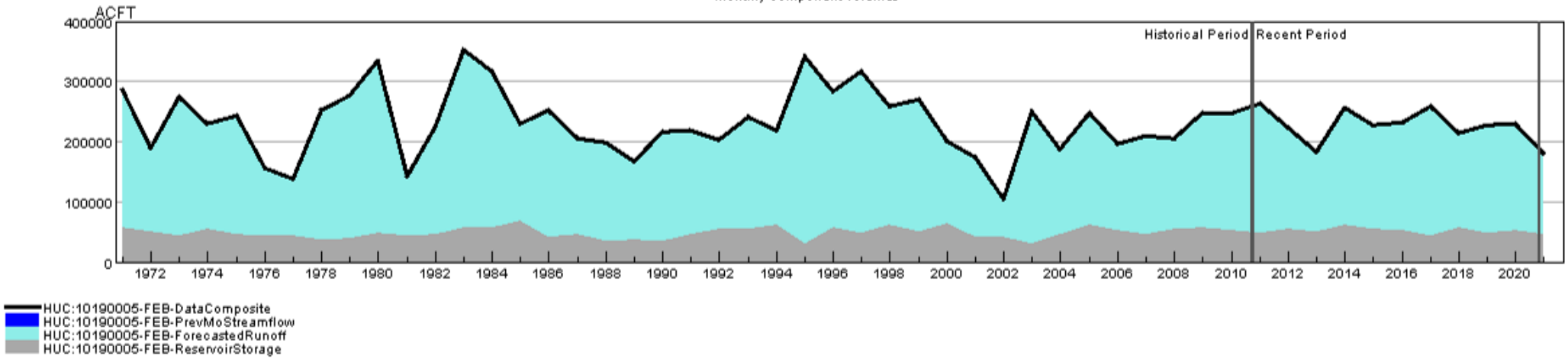
HUC 10190004 (Clear) SWSI Values - FEB

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



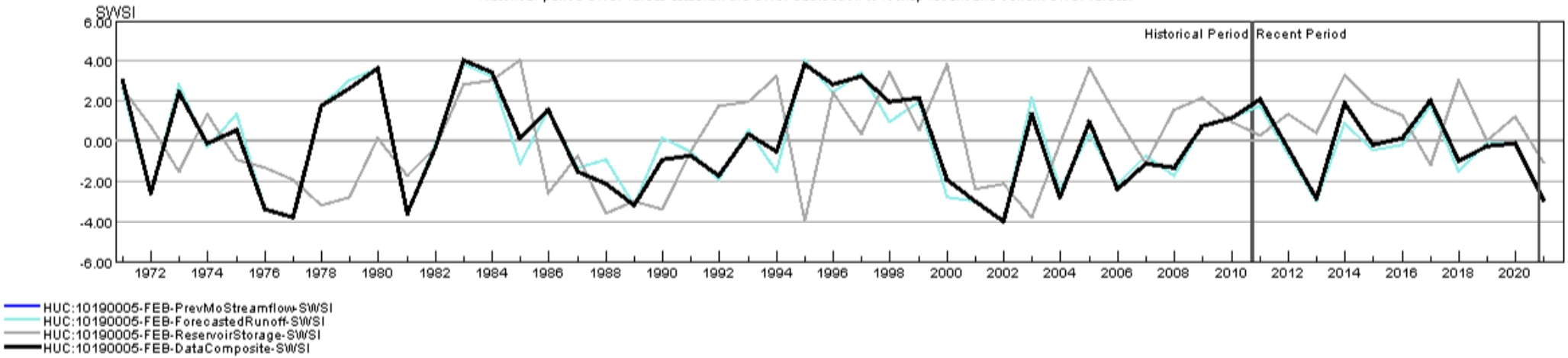
HUC 10190005 (St. Vrain) Surface Water Supply - FEB

Monthly component volumes



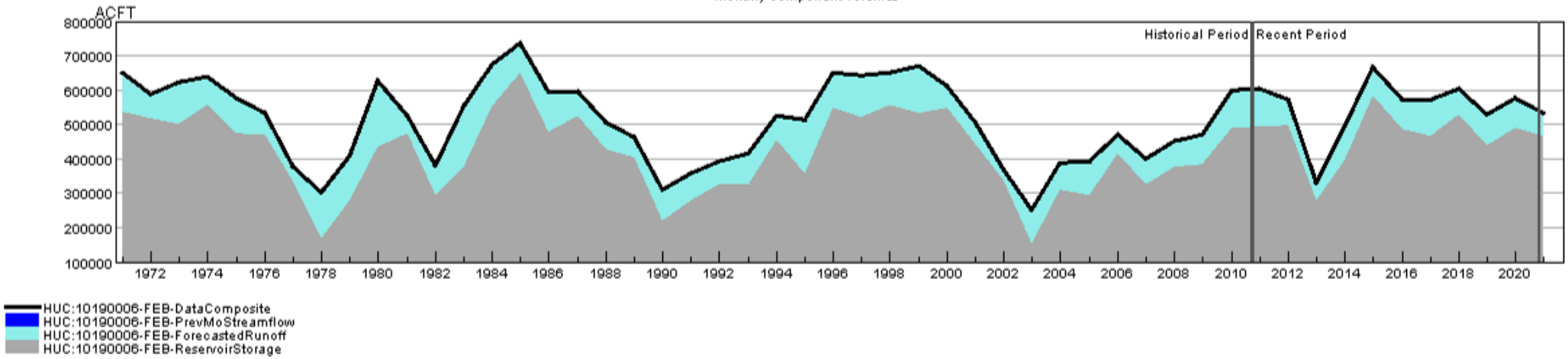
HUC 10190005 (St. Vrain) SWSI Values - FEB

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



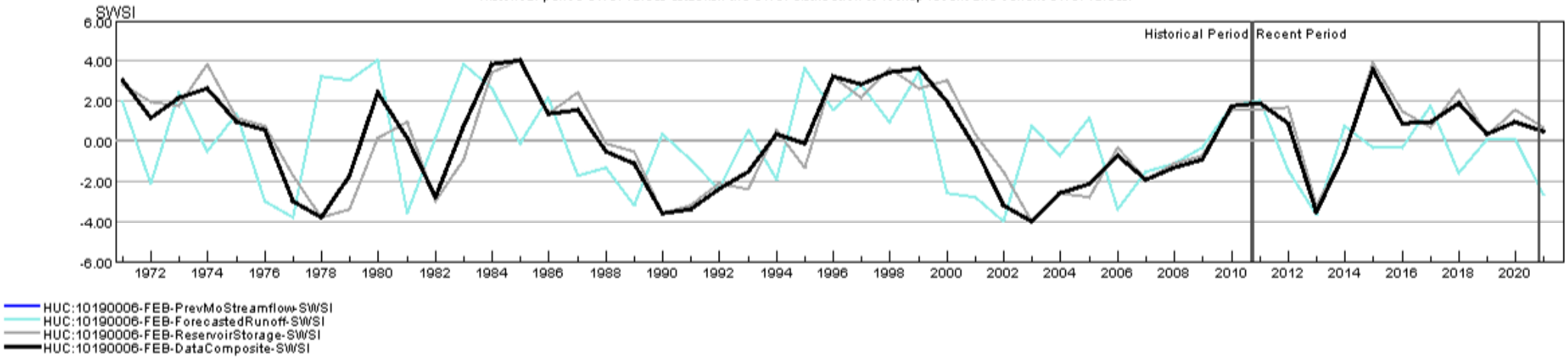
HUC 10190006 (Big Thompson) Surface Water Supply - FEB

Monthly component volumes



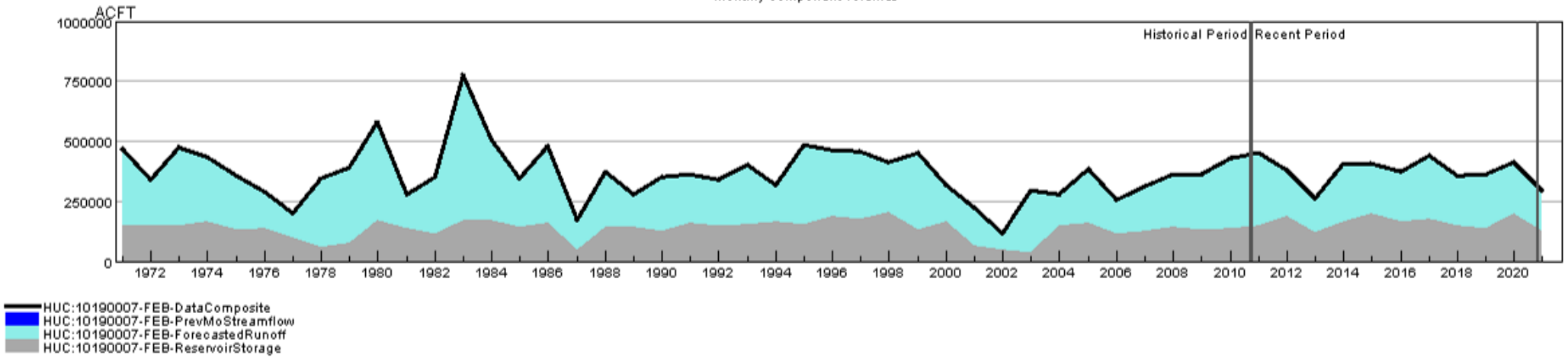
HUC 10190006 (Big Thompson) SWSI Values - FEB

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



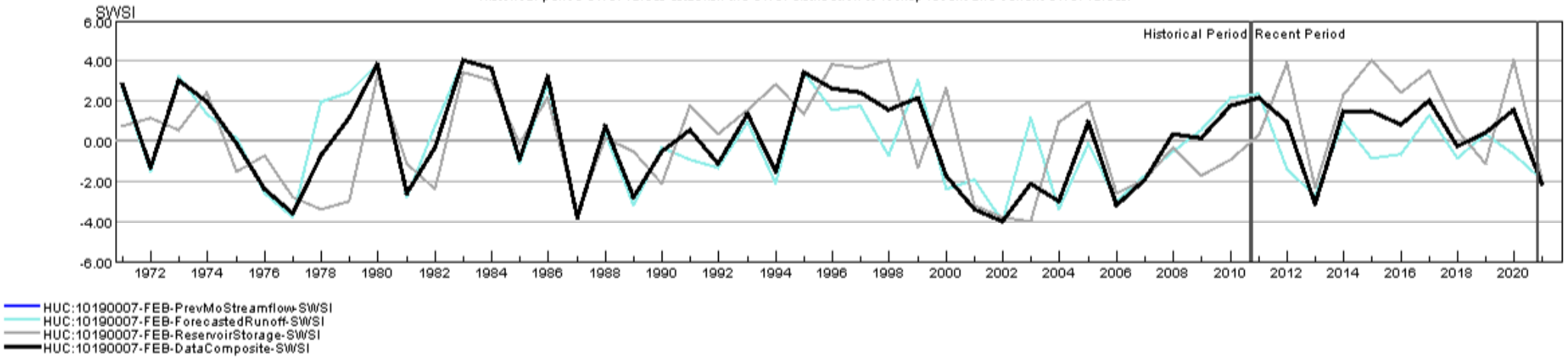
HUC 10190007 (Cache La Poudre) Surface Water Supply - FEB

Monthly component volumes



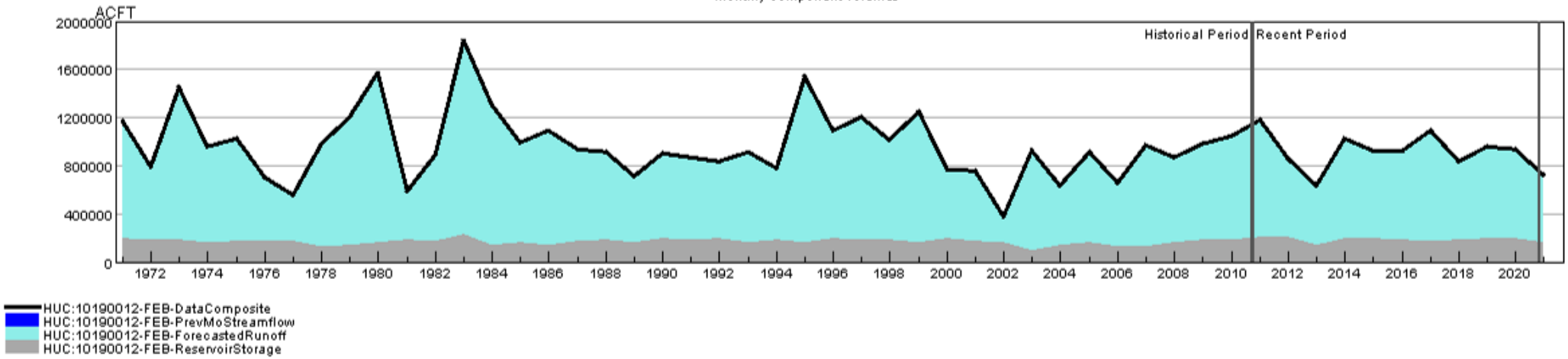
HUC 10190007 (Cache La Poudre) SWSI Values - FEB

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



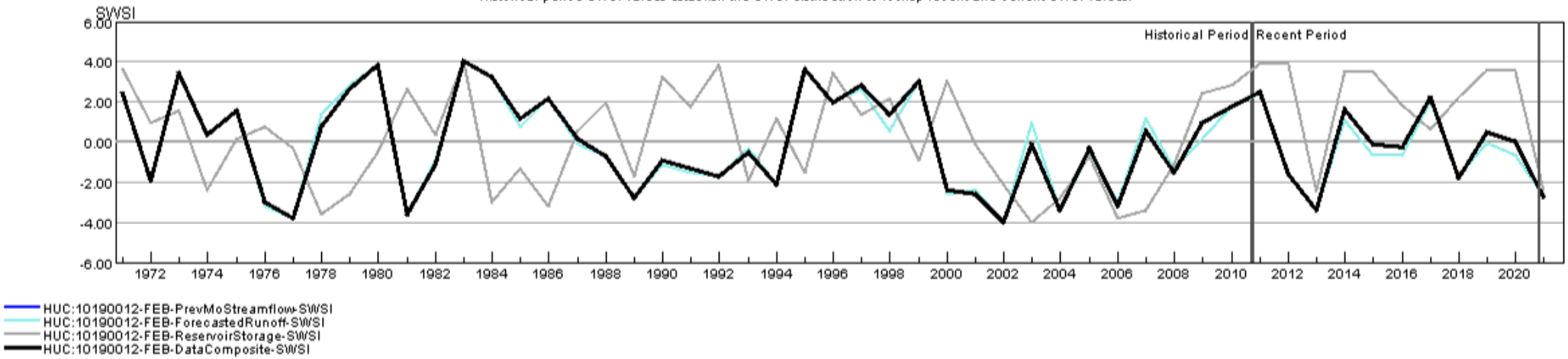
HUC 10190012 (Middle South Platte-Sterling) Surface Water Supply - FEB

Monthly component volumes



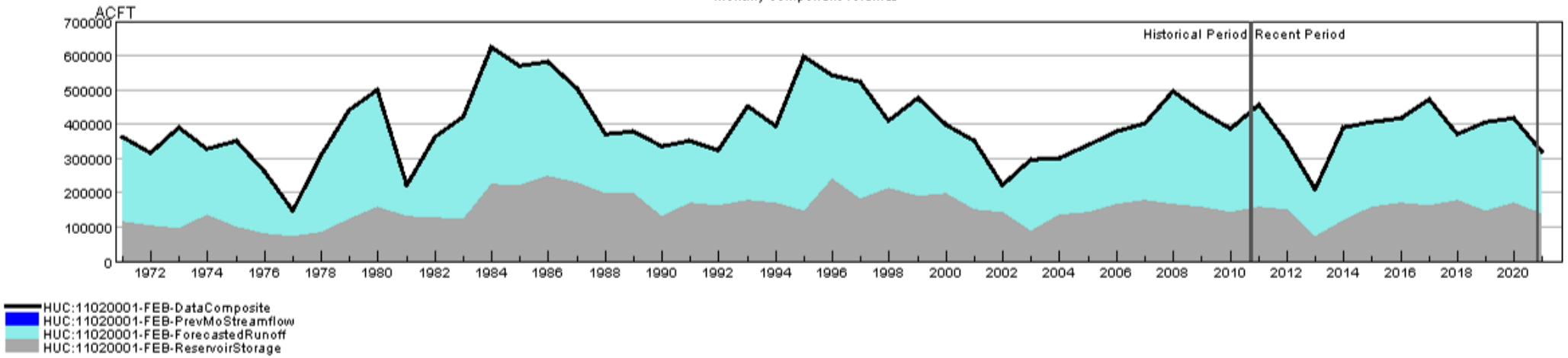
HUC 10190012 (Middle South Platte-Sterling) SWSI Values - FEB

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



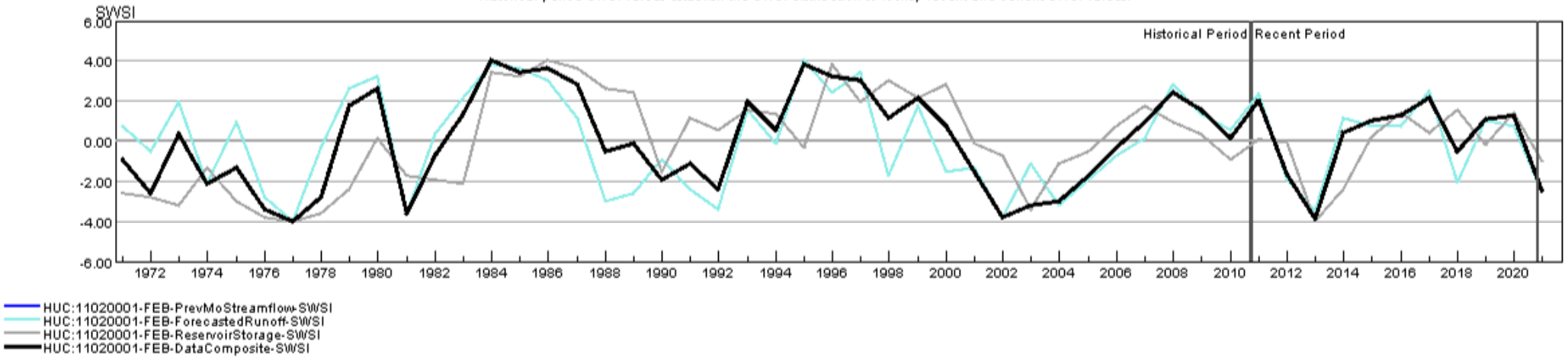
HUC 11020001 (Arkansas Headwaters) Surface Water Supply - FEB

Monthly component volumes



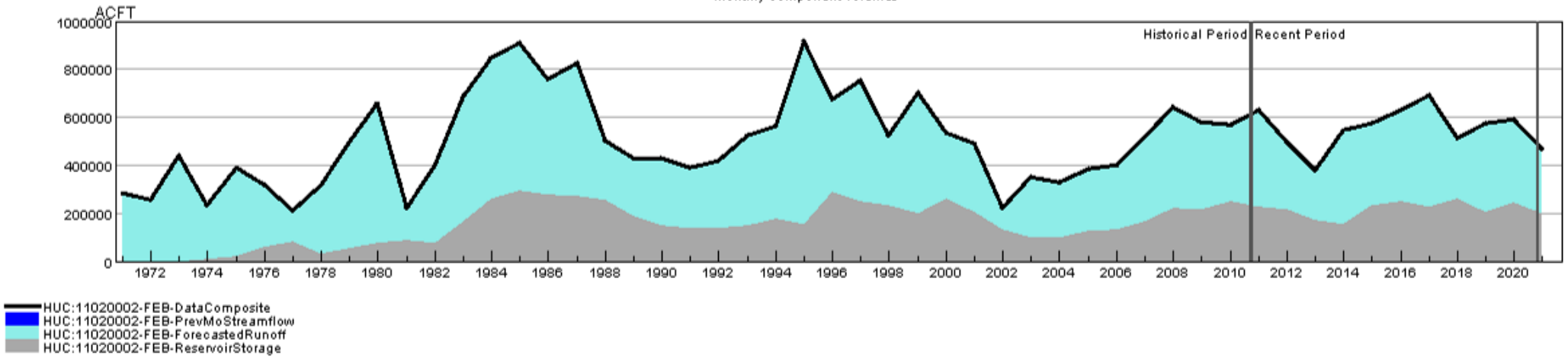
HUC 11020001 (Arkansas Headwaters) SWSI Values - FEB

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



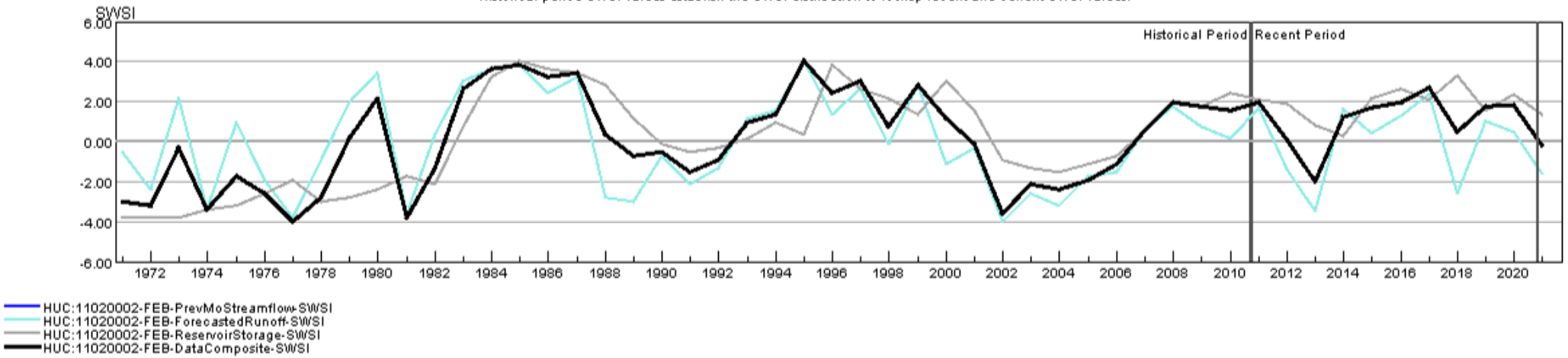
HUC 11020002 (Upper Arkansas) Surface Water Supply - FEB

Monthly component volumes



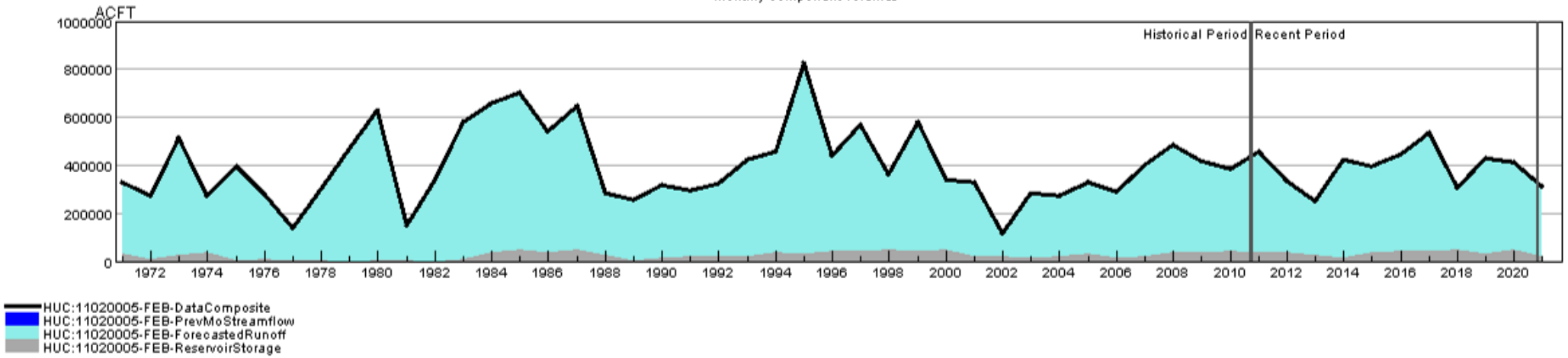
HUC 11020002 (Upper Arkansas) SWSI Values - FEB

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



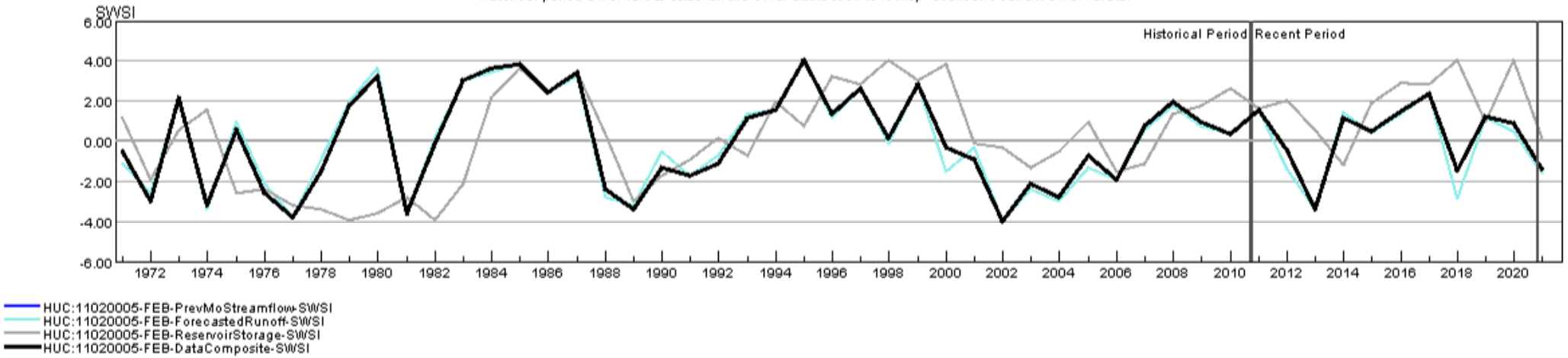
HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply - FEB

Monthly component volumes



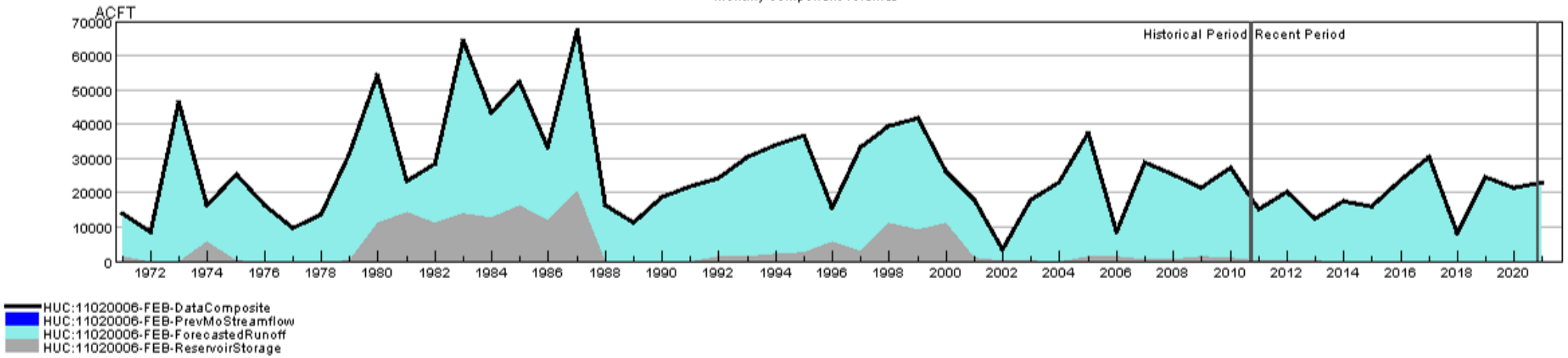
HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI Values - FEB

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



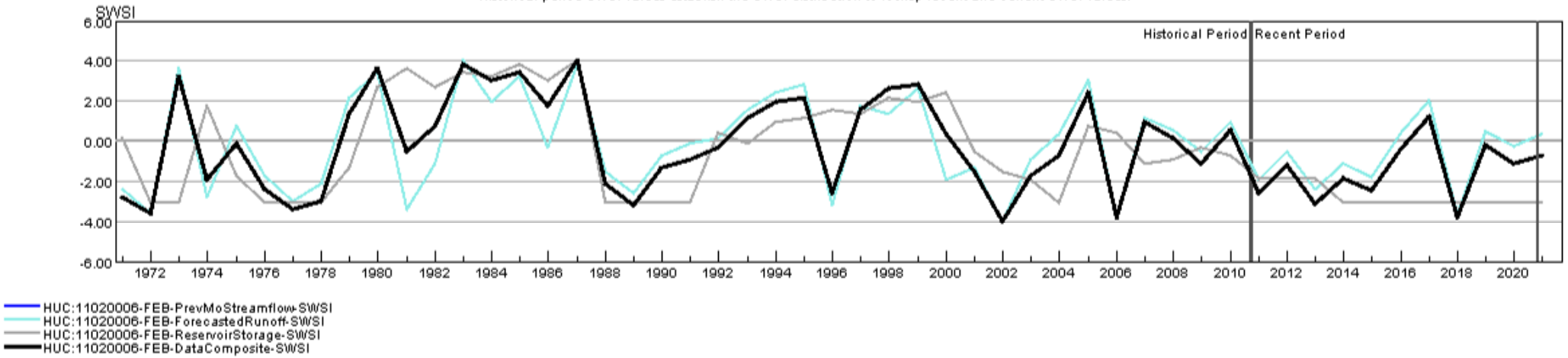
HUC 11020006 (Huerfano) Surface Water Supply - FEB

Monthly component volumes



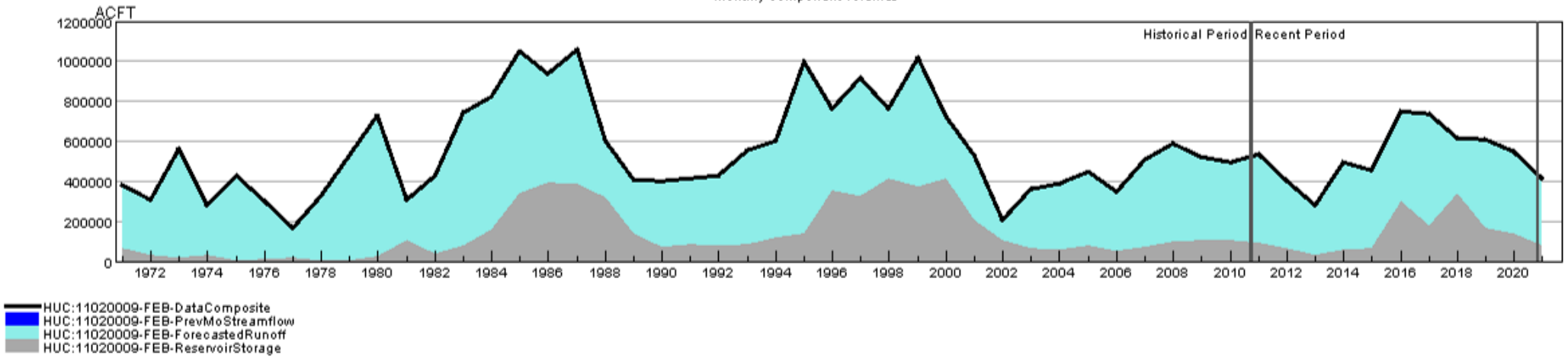
HUC 11020006 (Huerfano) SWSI Values - FEB

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



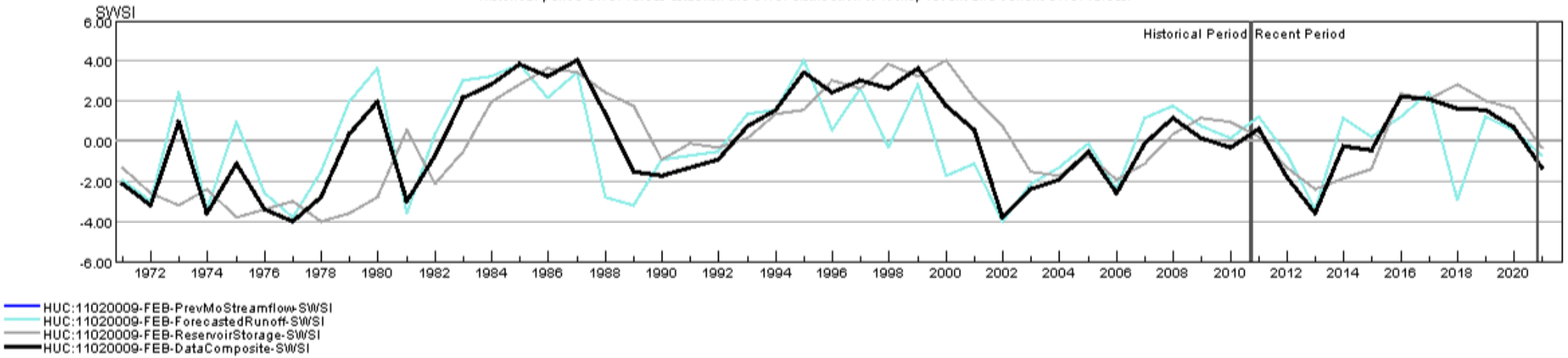
HUC 11020009 (Upper Arkansas-John Martin Reservoir) Surface Water Supply - FEB

Monthly component volumes



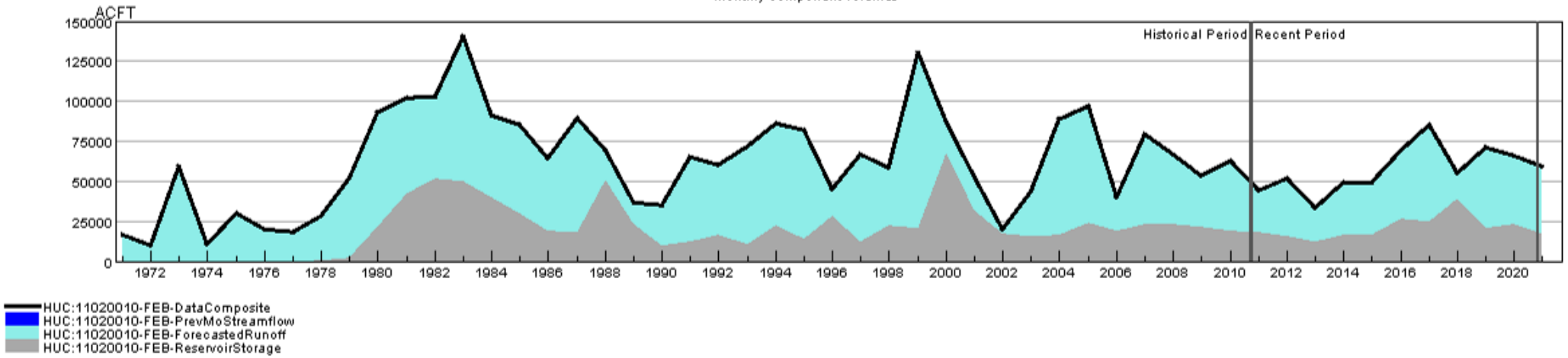
HUC 11020009 (Upper Arkansas-John Martin Reservoir) SWSI Values - FEB

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



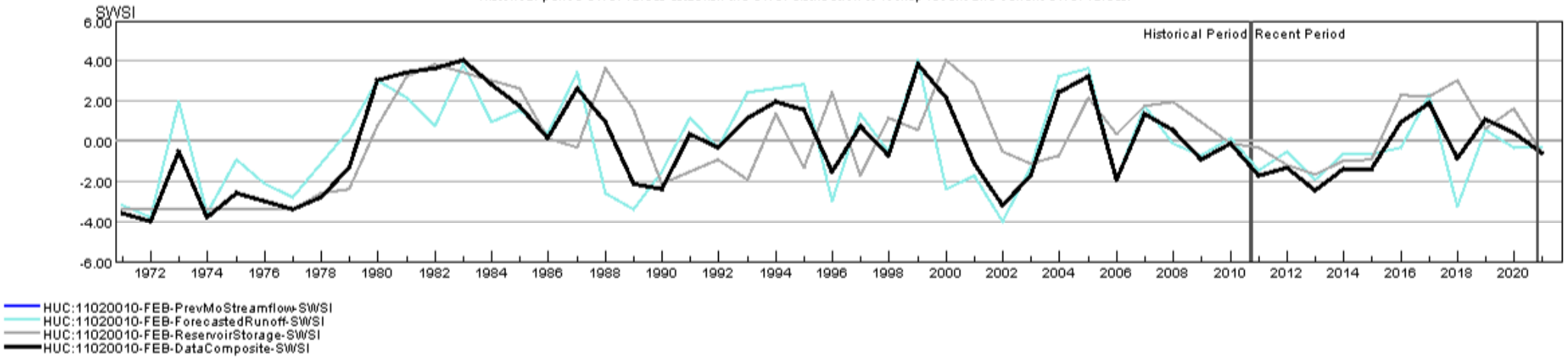
HUC 11020010 (Purgatoire) Surface Water Supply - FEB

Monthly component volumes



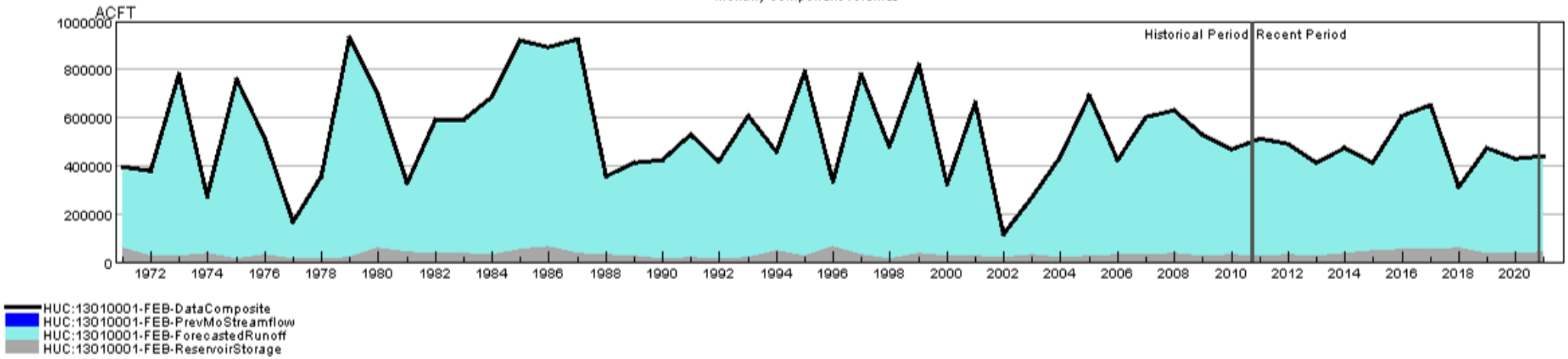
HUC 11020010 (Purgatoire) SWSI Values - FEB

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



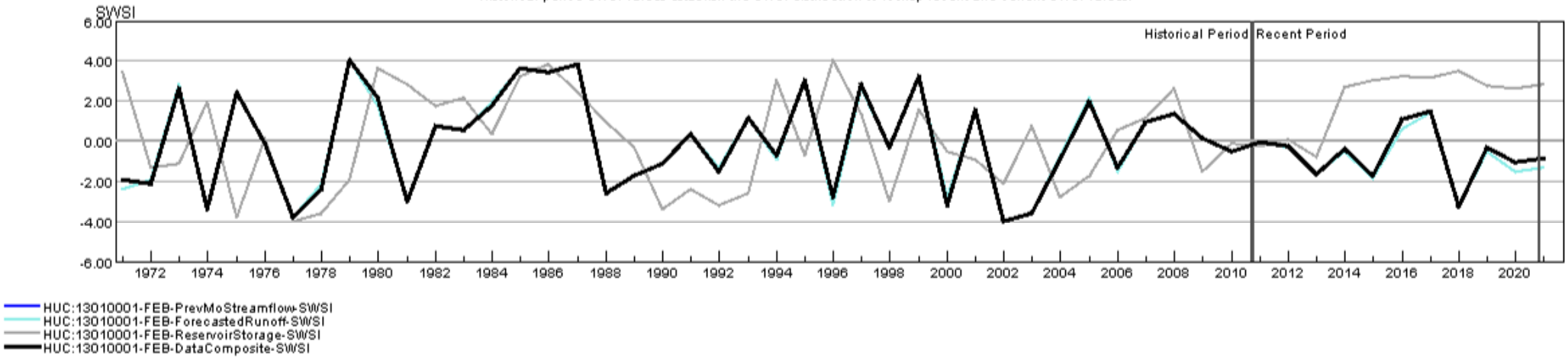
HUC 13010001 (Rio Grande Headwaters) Surface Water Supply - FEB

Monthly component volumes



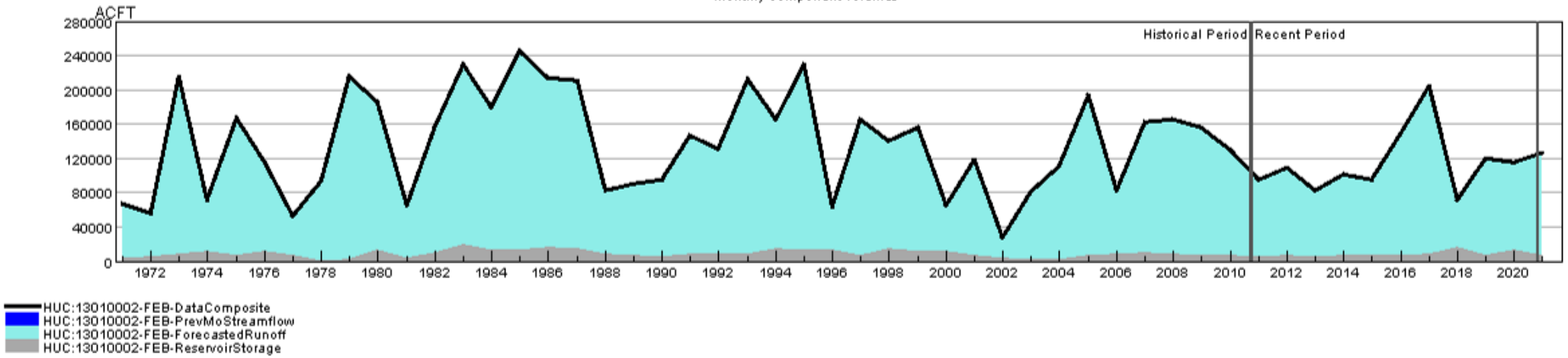
HUC 13010001 (Rio Grande Headwaters) SWSI Values - FEB

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



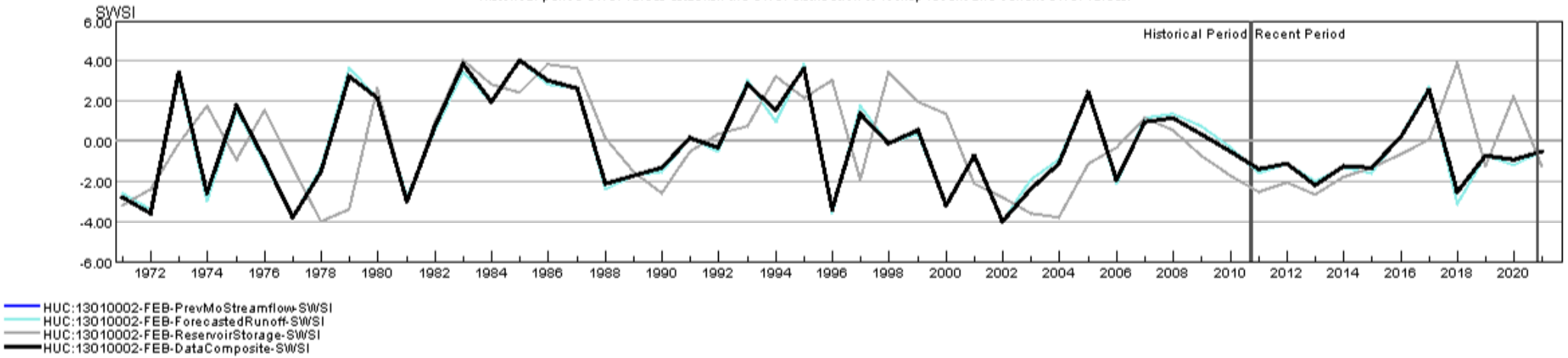
HUC 13010002 (Alamosa-Trinchera) Surface Water Supply - FEB

Monthly component volumes



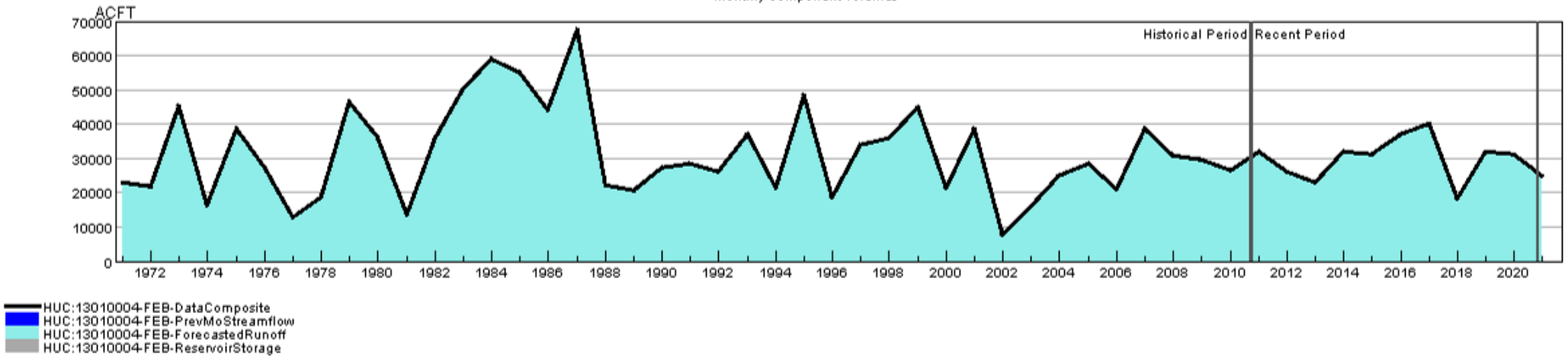
HUC 13010002 (Alamosa-Trinchera) SWSI Values - FEB

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



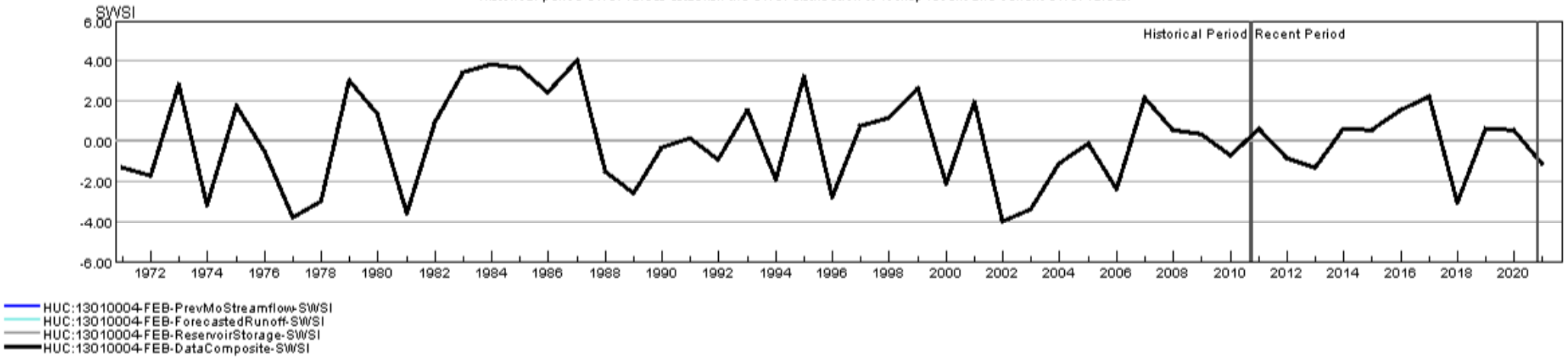
HUC 13010004 (Saguache) Surface Water Supply - FEB

Monthly component volumes



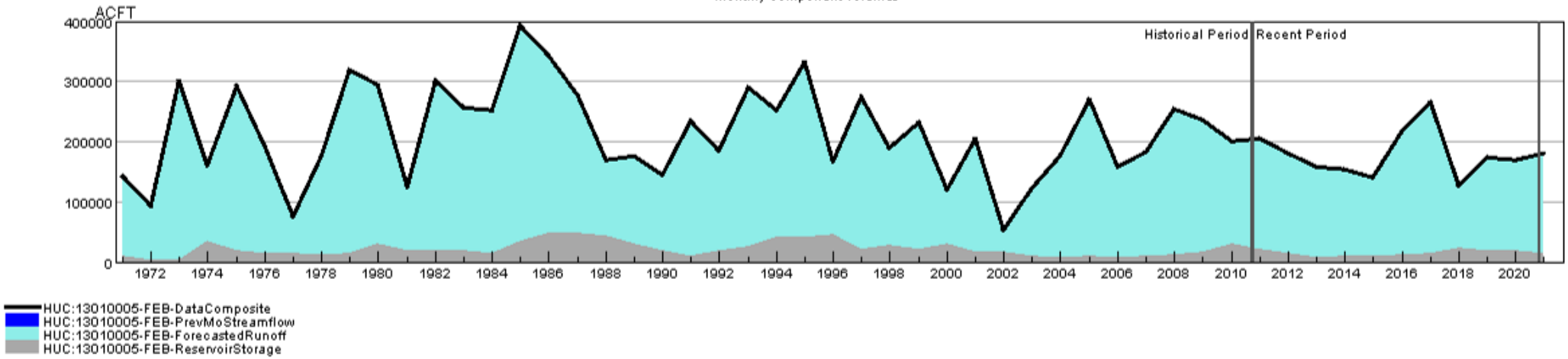
HUC 13010004 (Saguache) SWSI Values - FEB

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



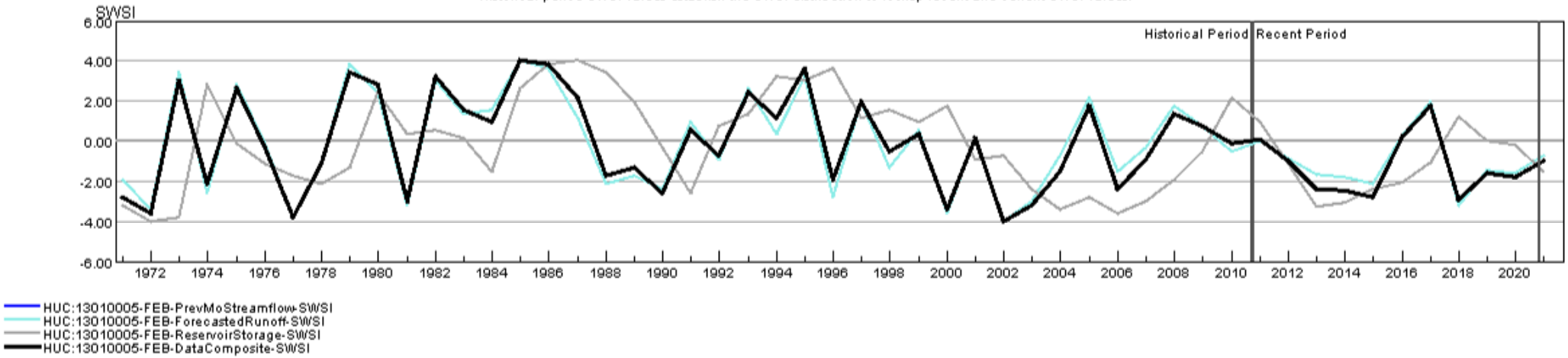
HUC 13010005 (Conejos) Surface Water Supply - FEB

Monthly component volumes



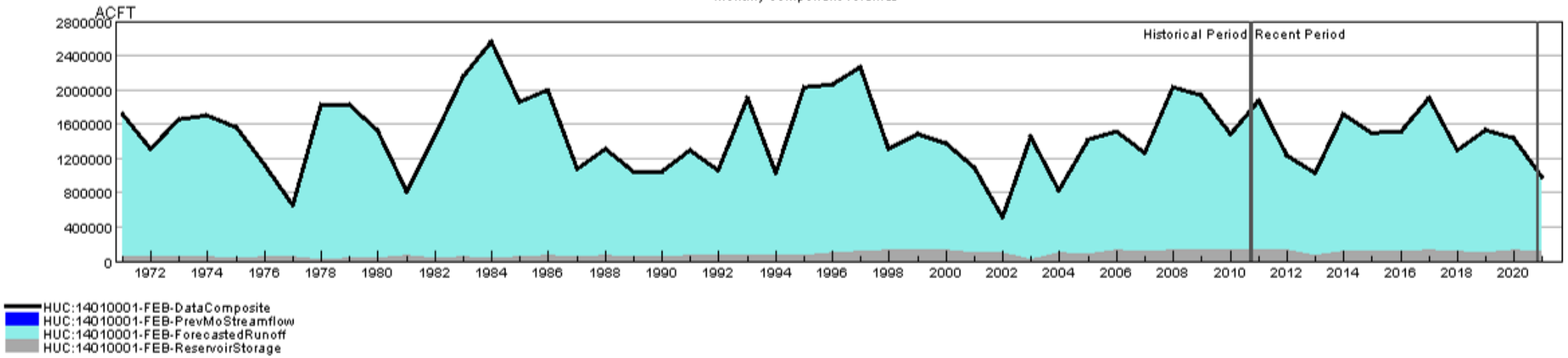
HUC 13010005 (Conejos) SWSI Values - FEB

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



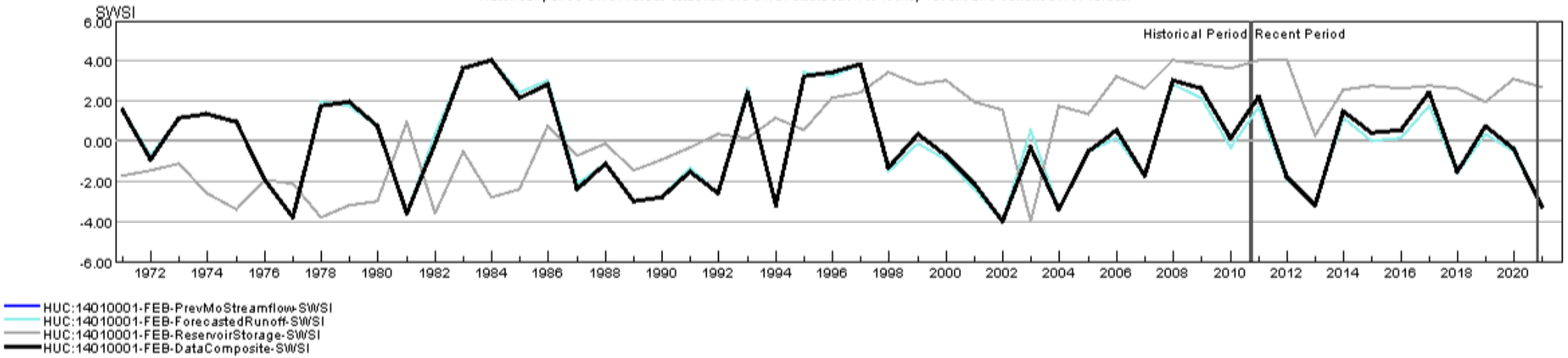
HUC 14010001 (Colorado Headwaters) Surface Water Supply - FEB

Monthly component volumes



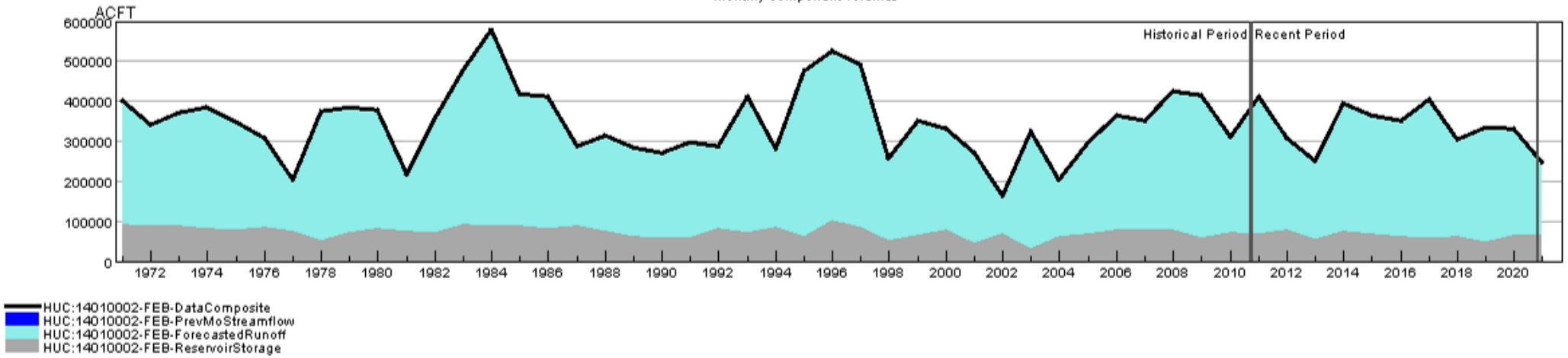
HUC 14010001 (Colorado Headwaters) SWSI Values - FEB

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



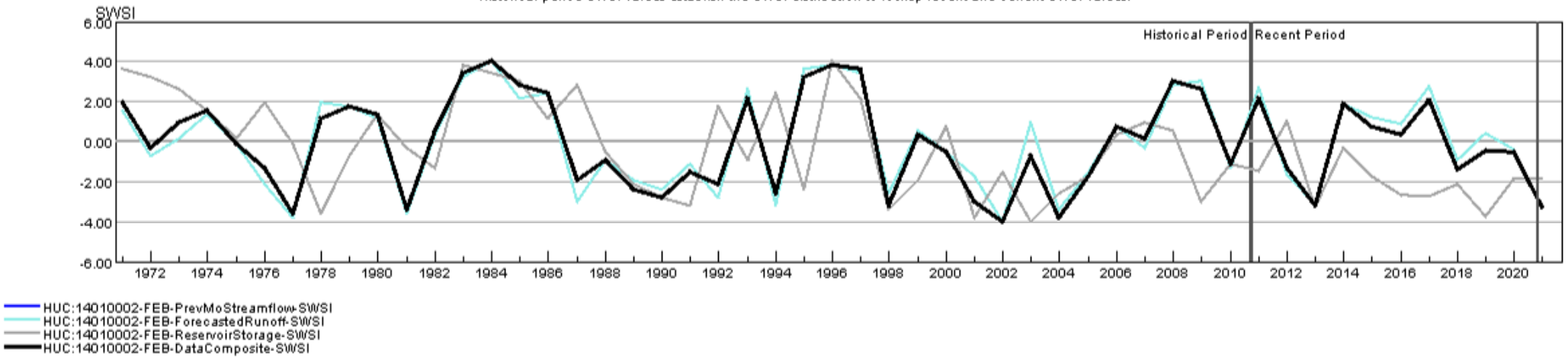
HUC 14010002 (Blue) Surface Water Supply - FEB

Monthly component volumes



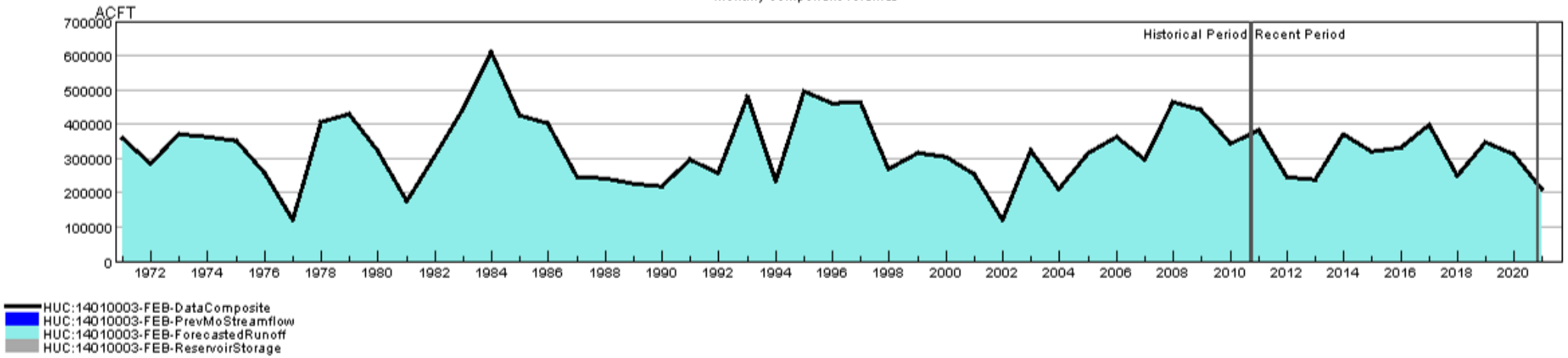
HUC 14010002 (Blue) SWSI Values - FEB

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



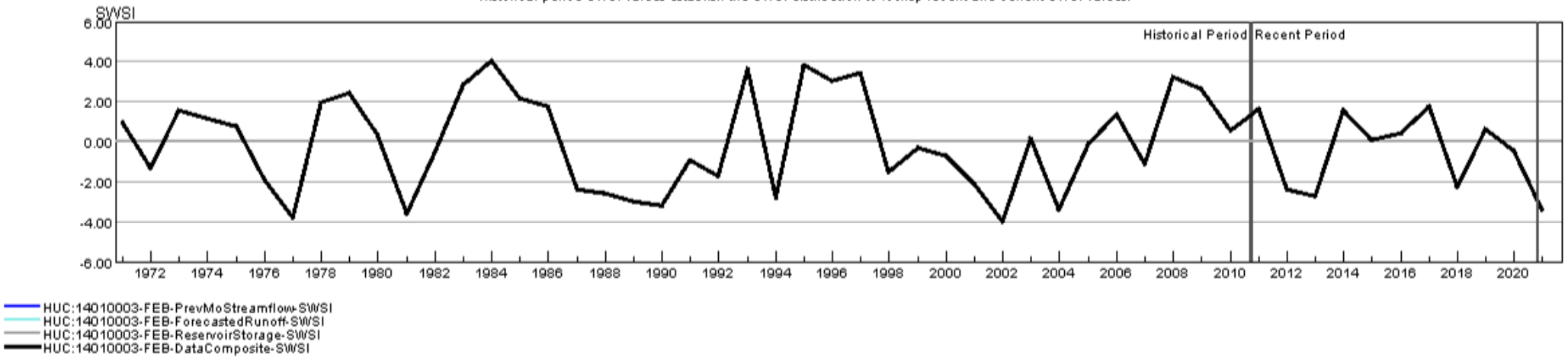
HUC 14010003 (Eagle) Surface Water Supply - FEB

Monthly component volumes



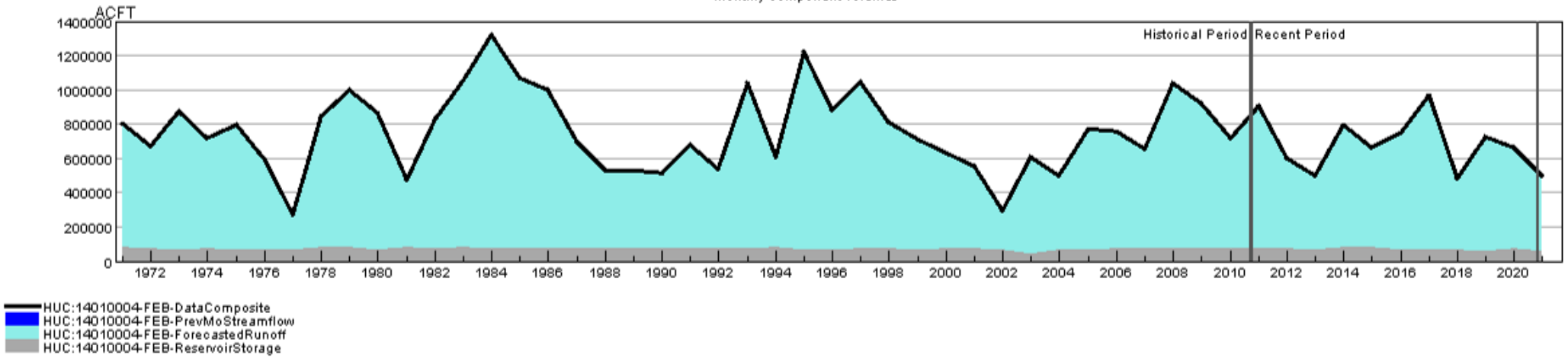
HUC 14010003 (Eagle) SWSI Values - FEB

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



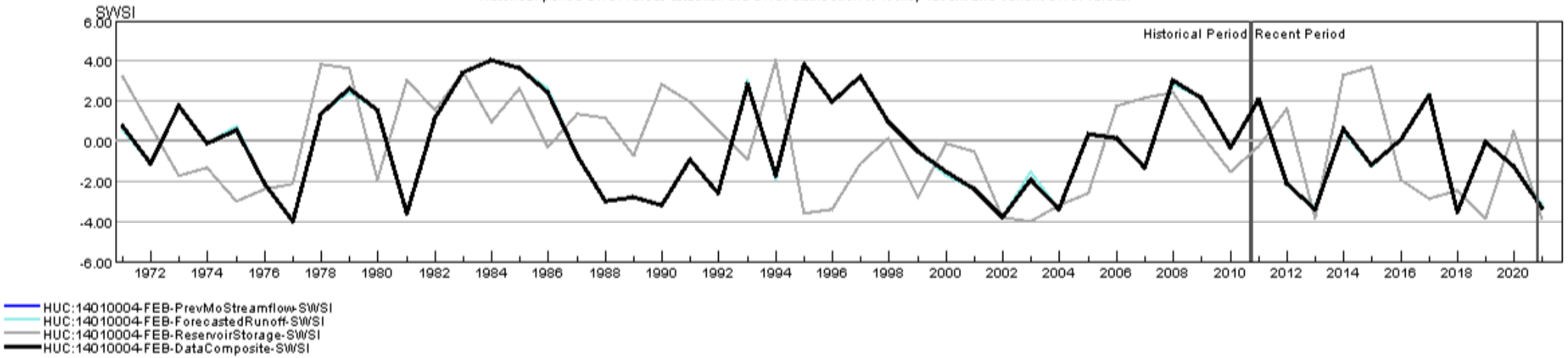
HUC 14010004 (Roaring Fork) Surface Water Supply - FEB

Monthly component volumes



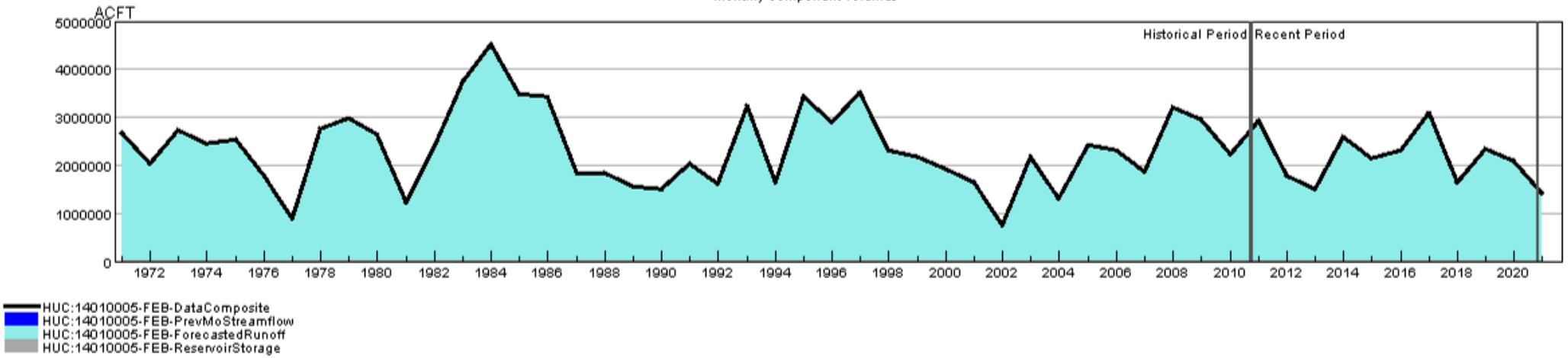
HUC 14010004 (Roaring Fork) SWSI Values - FEB

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



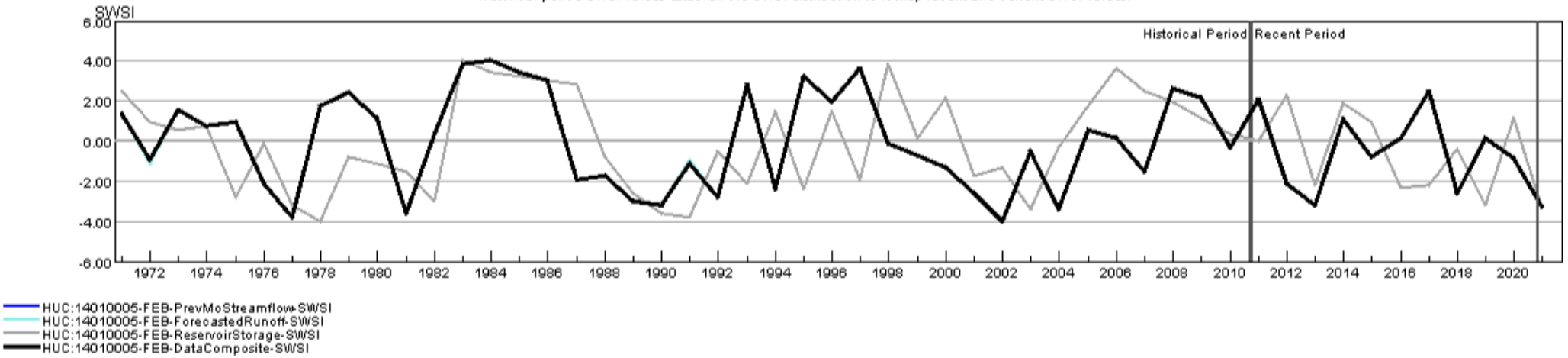
HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply - FEB

Monthly component volumes



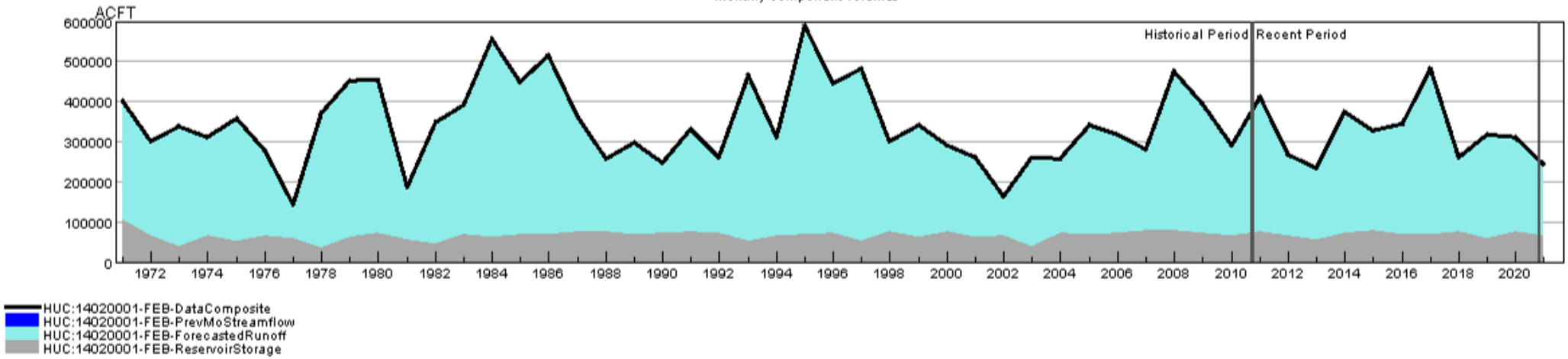
HUC 14010005 (Colorado Headwaters-Plateau) SWSI Values - FEB

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



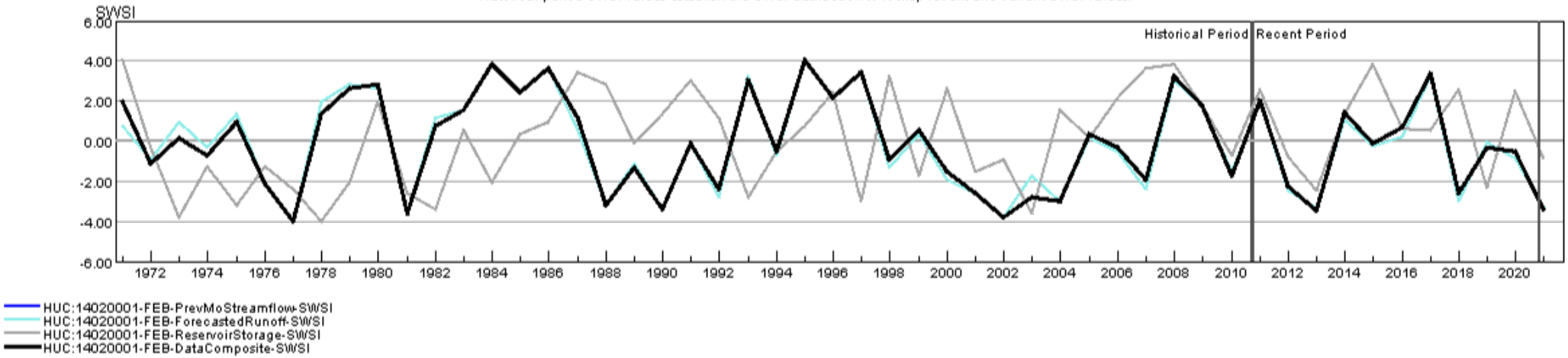
HUC 14020001 (East-Taylor) Surface Water Supply - FEB

Monthly component volumes



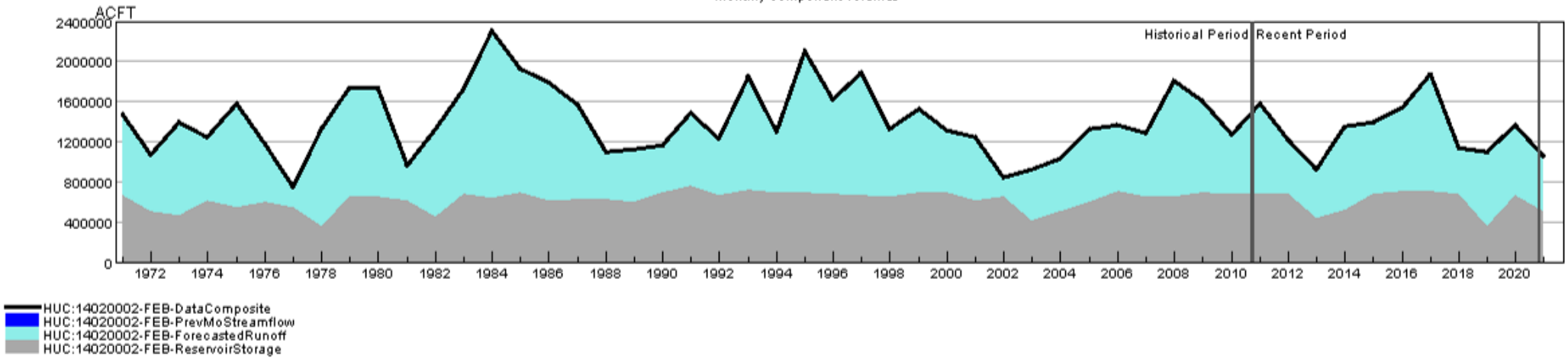
HUC 14020001 (East-Taylor) SWSI Values - FEB

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



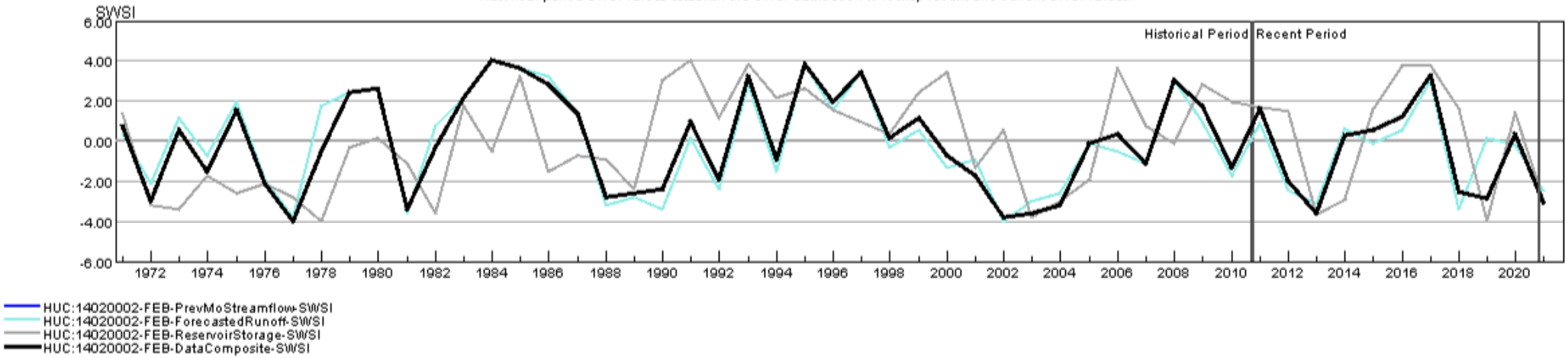
HUC 14020002 (Upper Gunnison) Surface Water Supply - FEB

Monthly component volumes



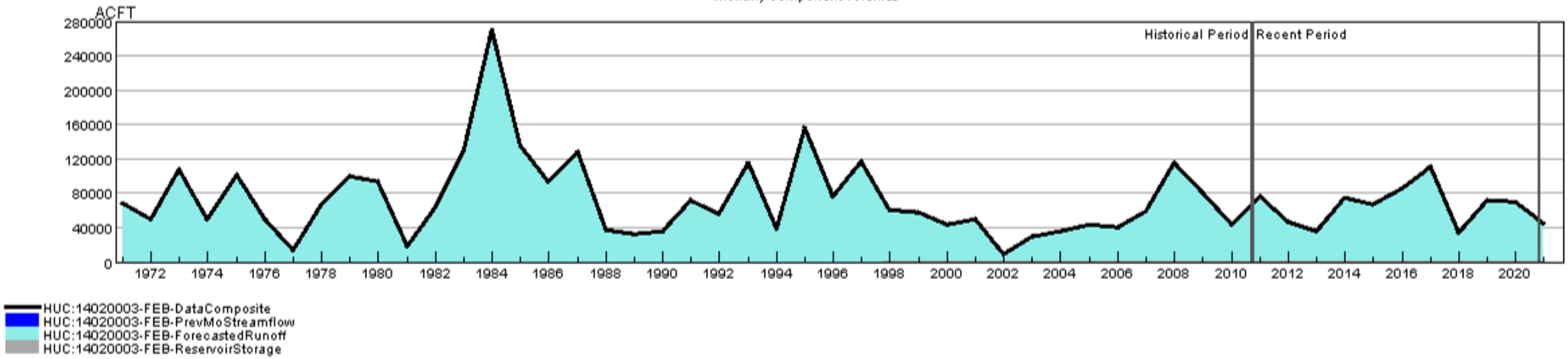
HUC 14020002 (Upper Gunnison) SWSI Values - FEB

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



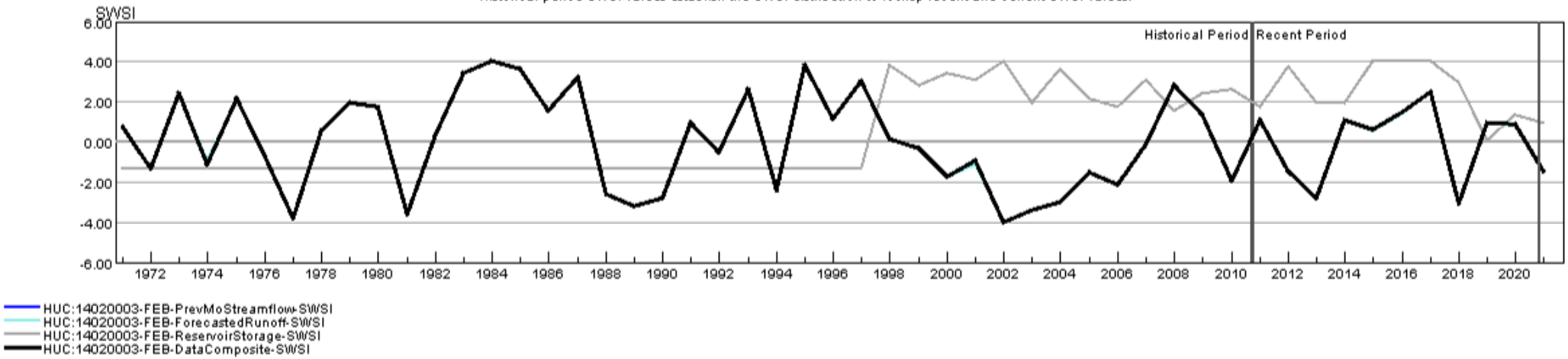
HUC 14020003 (Tomichi) Surface Water Supply - FEB

Monthly component volumes



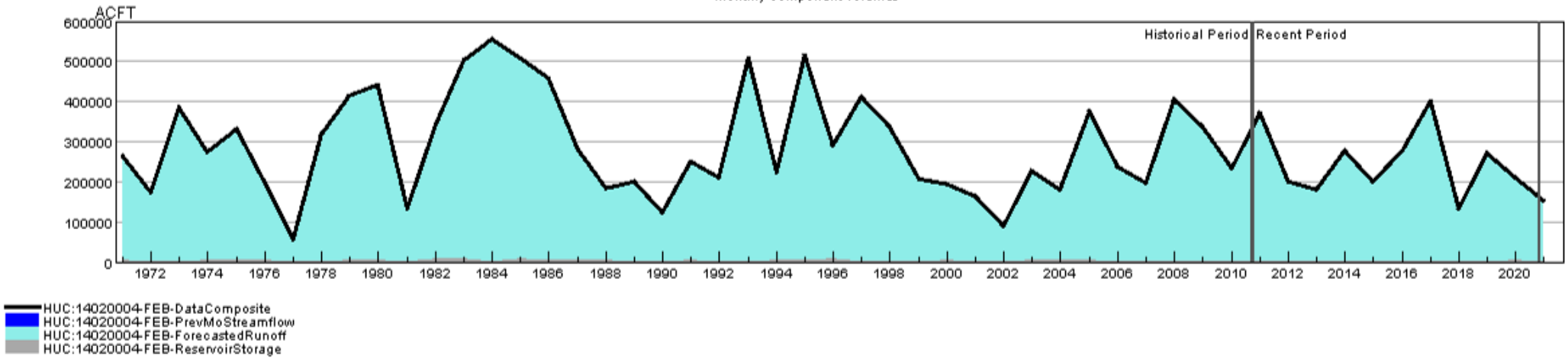
HUC 14020003 (Tomichi) SWSI Values - FEB

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



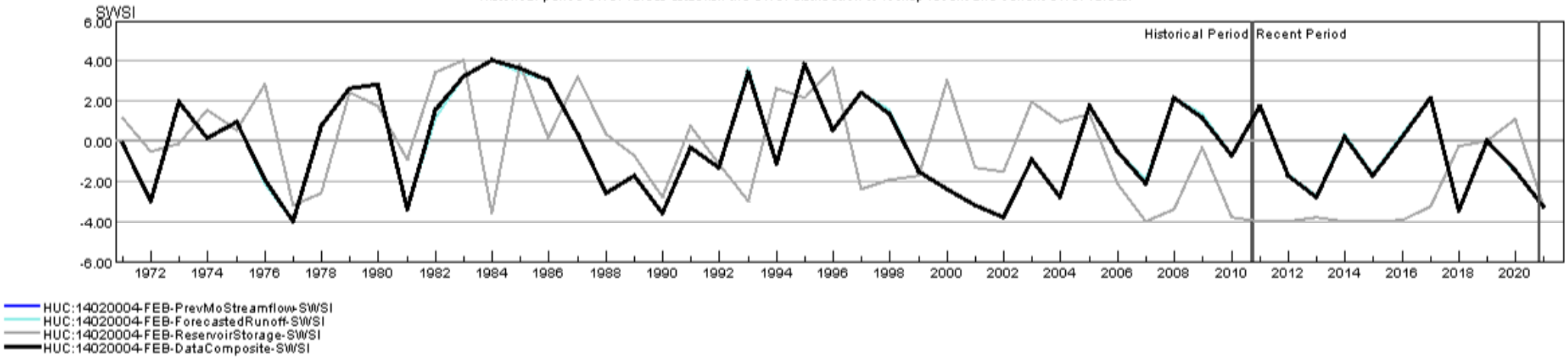
HUC 14020004 (North Fork Gunnison) Surface Water Supply - FEB

Monthly component volumes



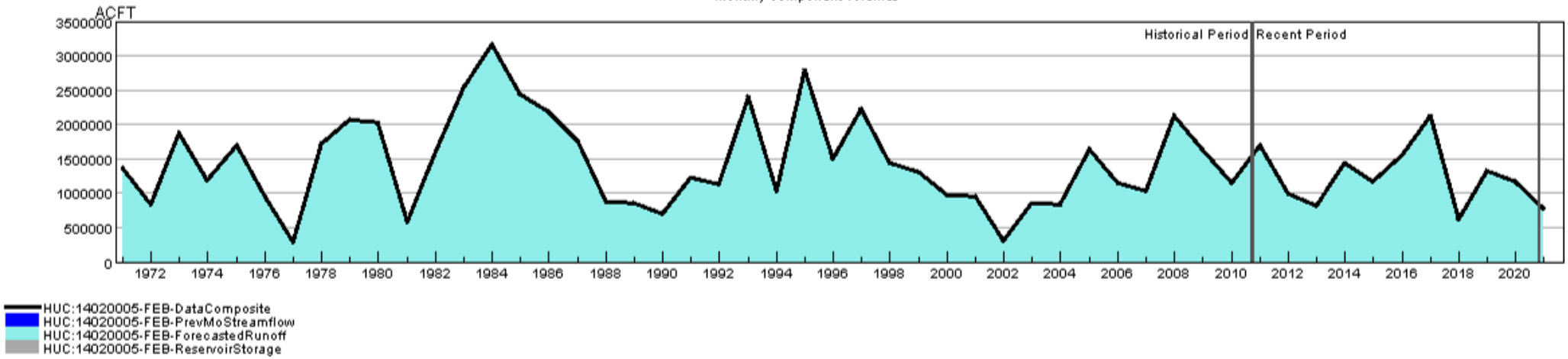
HUC 14020004 (North Fork Gunnison) SWSI Values - FEB

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



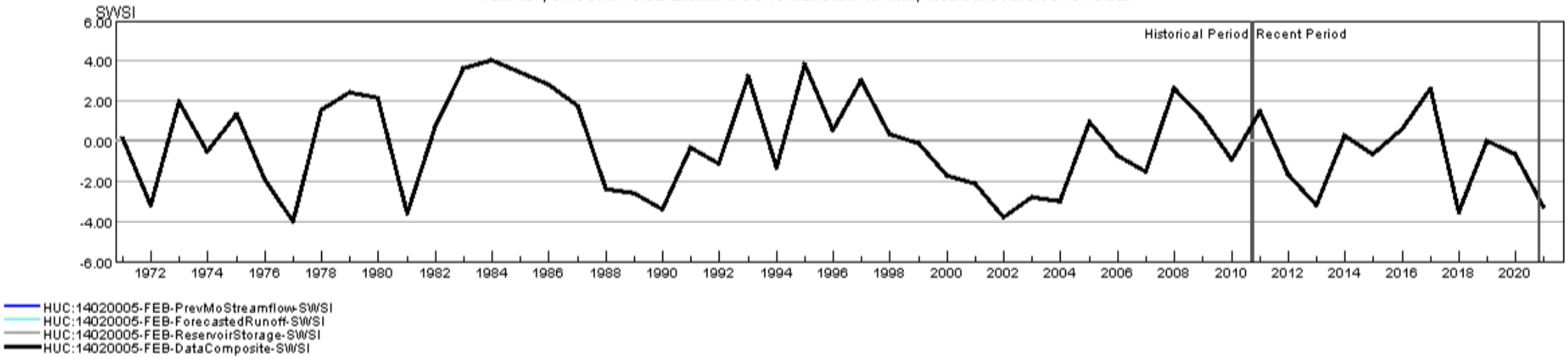
HUC 14020005 (Lower Gunnison) Surface Water Supply - FEB

Monthly component volumes



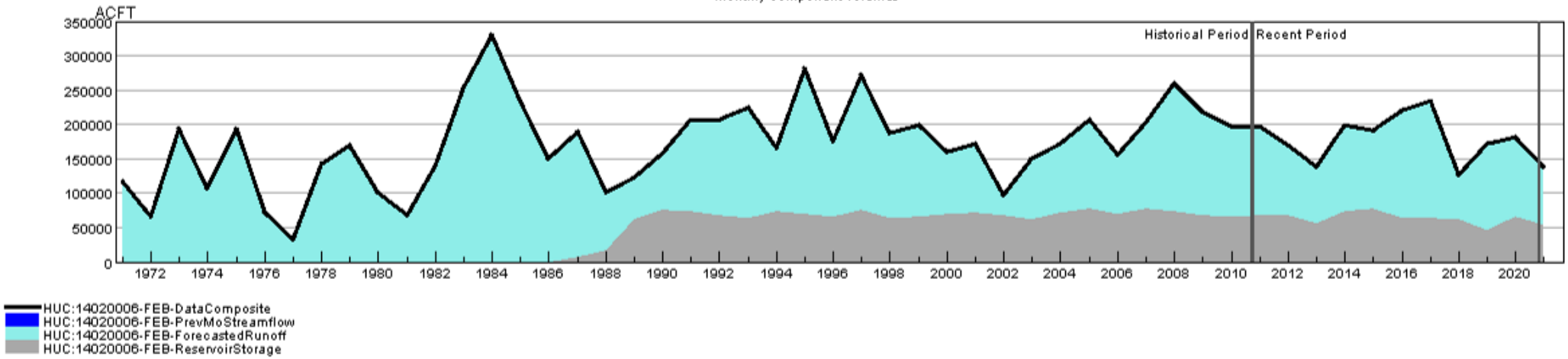
HUC 14020005 (Lower Gunnison) SWSI Values - FEB

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



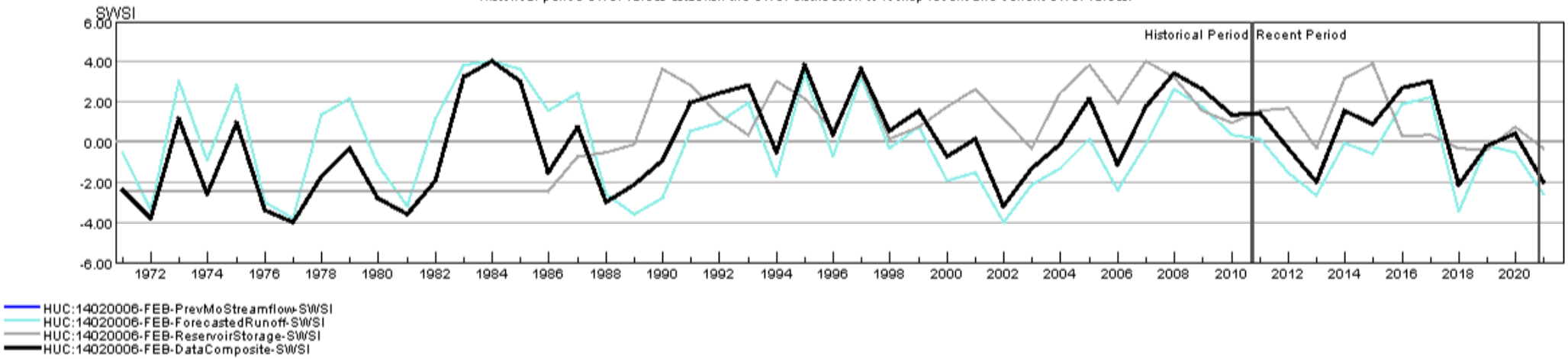
HUC 14020006 (Uncompahgre) Surface Water Supply - FEB

Monthly component volumes



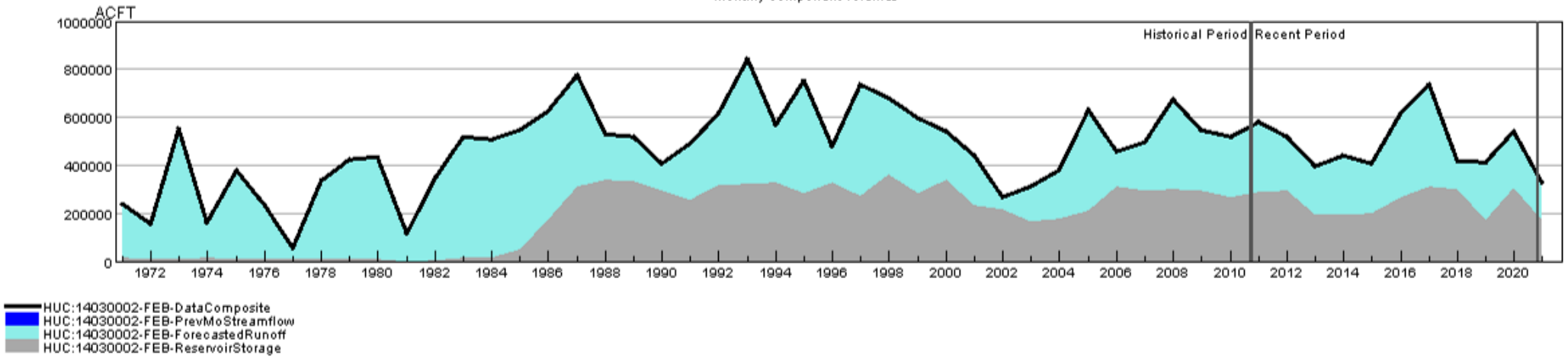
HUC 14020006 (Uncompahgre) SWSI Values - FEB

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



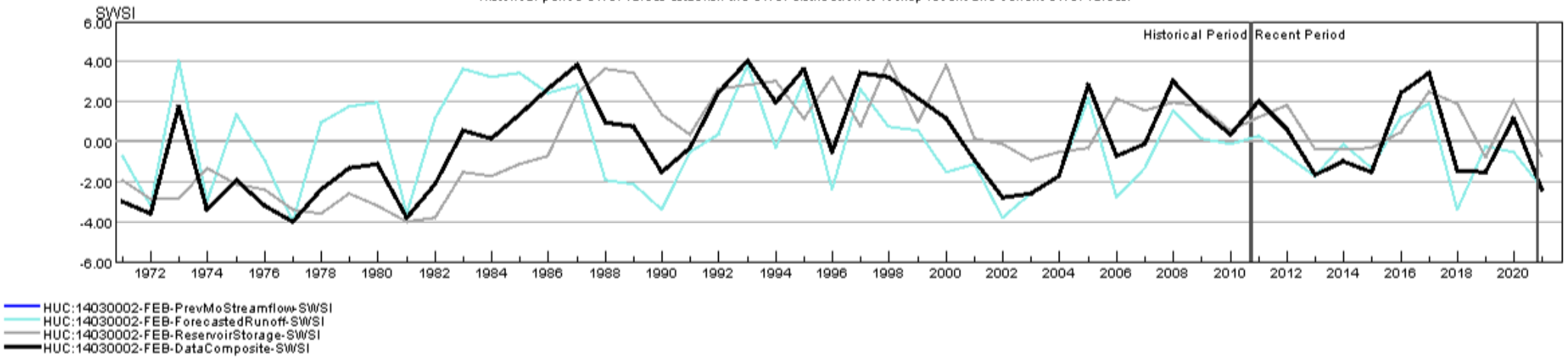
HUC 14030002 (Upper Dolores) Surface Water Supply - FEB

Monthly component volumes



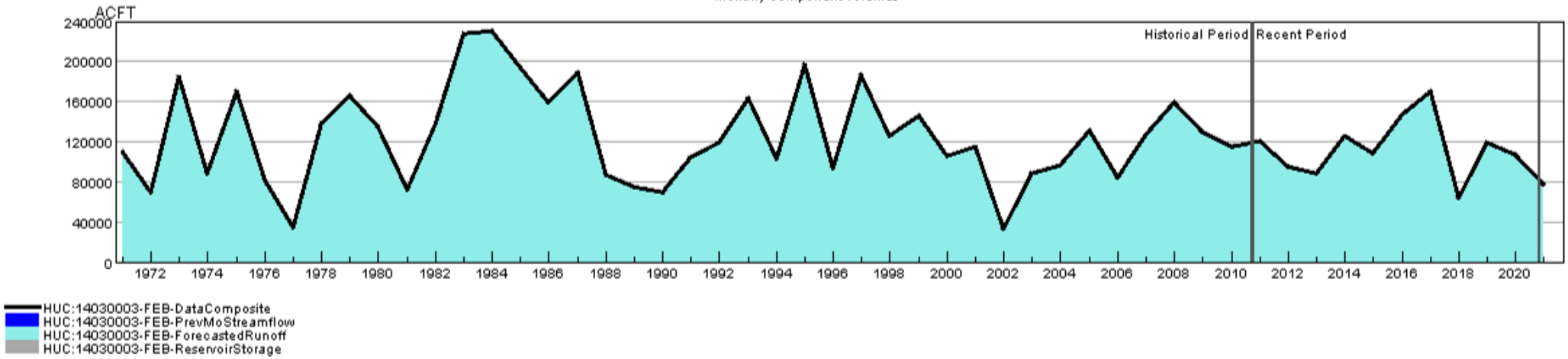
HUC 14030002 (Upper Dolores) SWSI Values - FEB

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



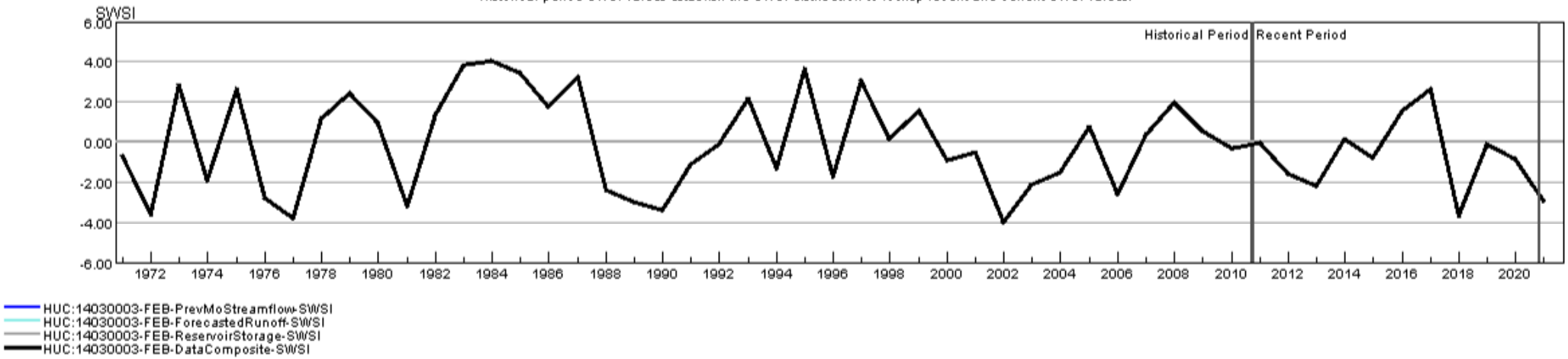
HUC 14030003 (San Miguel) Surface Water Supply - FEB

Monthly component volumes



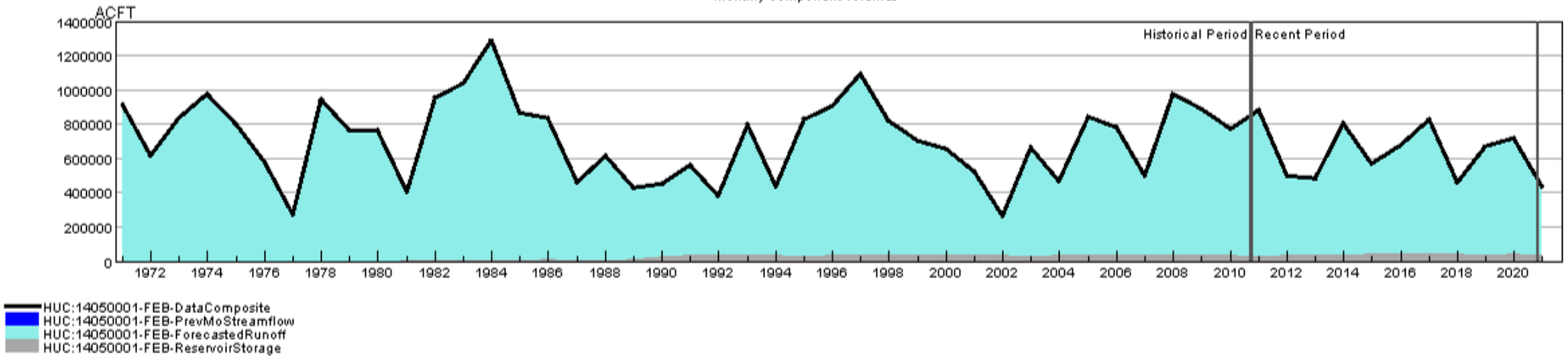
HUC 14030003 (San Miguel) SWSI Values - FEB

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



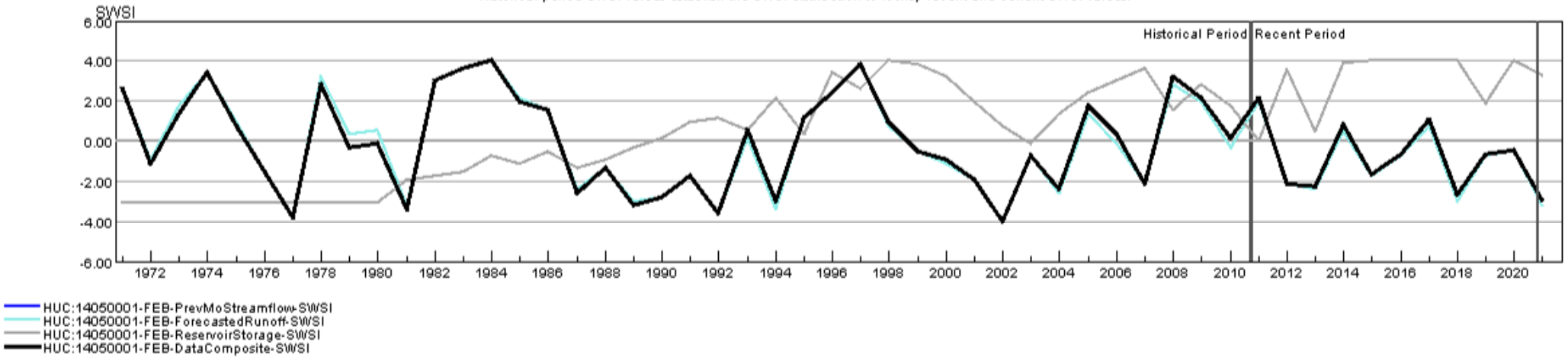
HUC 14050001 (Upper Yampa) Surface Water Supply - FEB

Monthly component volumes



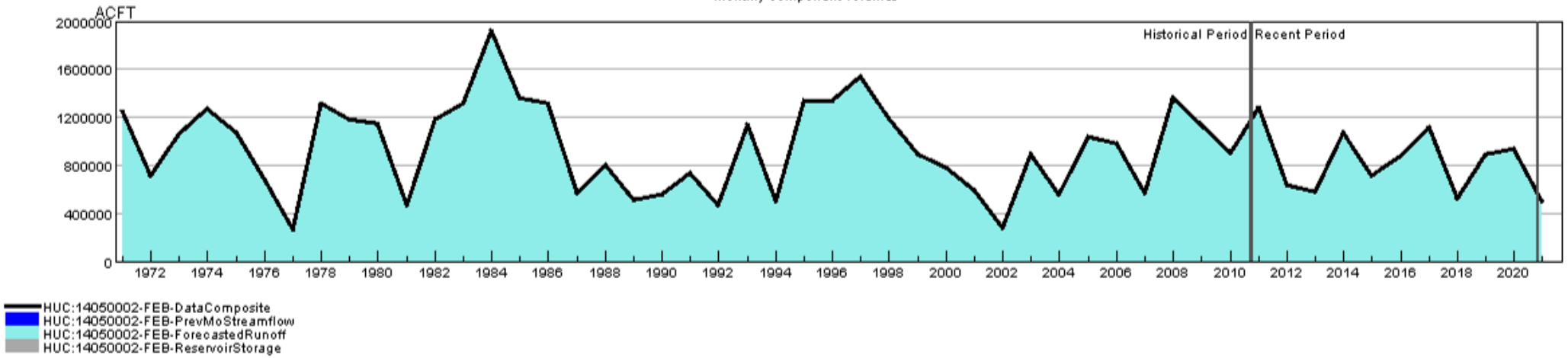
HUC 14050001 (Upper Yampa) SWSI Values - FEB

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



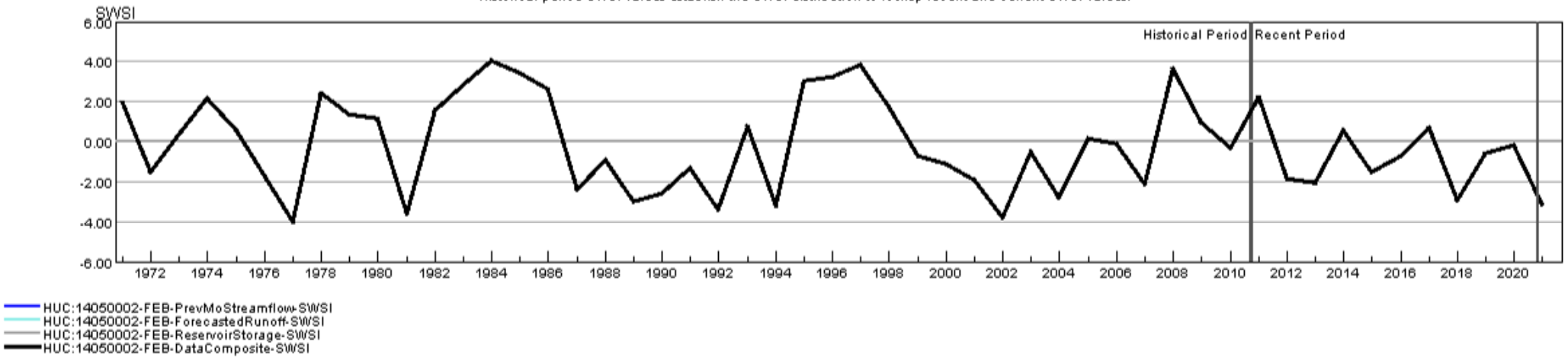
HUC 14050002 (Lower Yampa) Surface Water Supply - FEB

Monthly component volumes



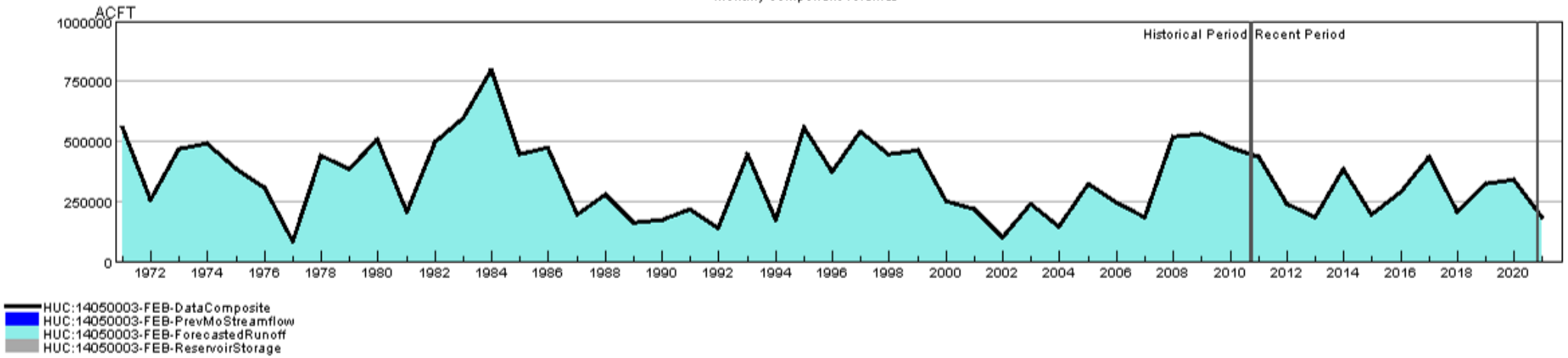
HUC 14050002 (Lower Yampa) SWSI Values - FEB

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



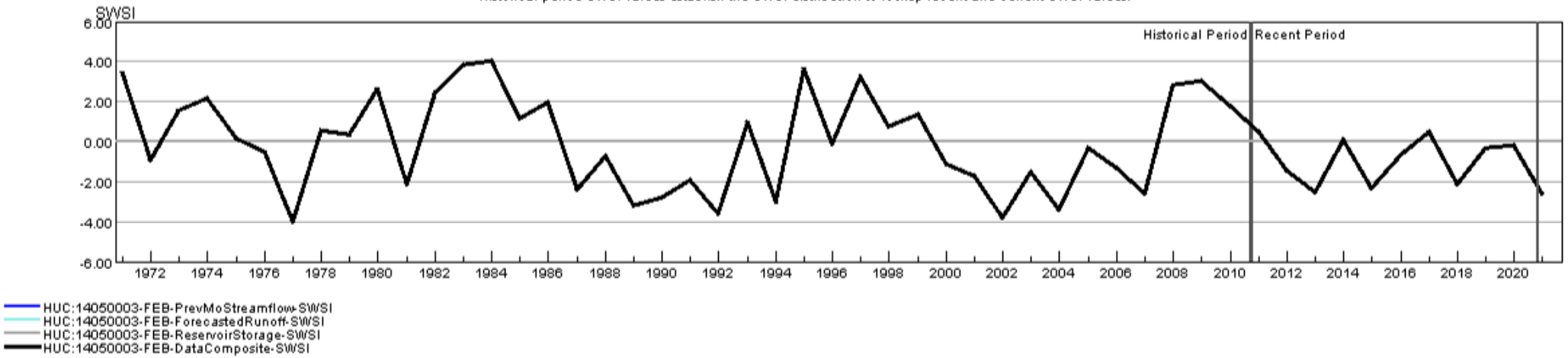
HUC 14050003 (Little Snake) Surface Water Supply - FEB

Monthly component volumes



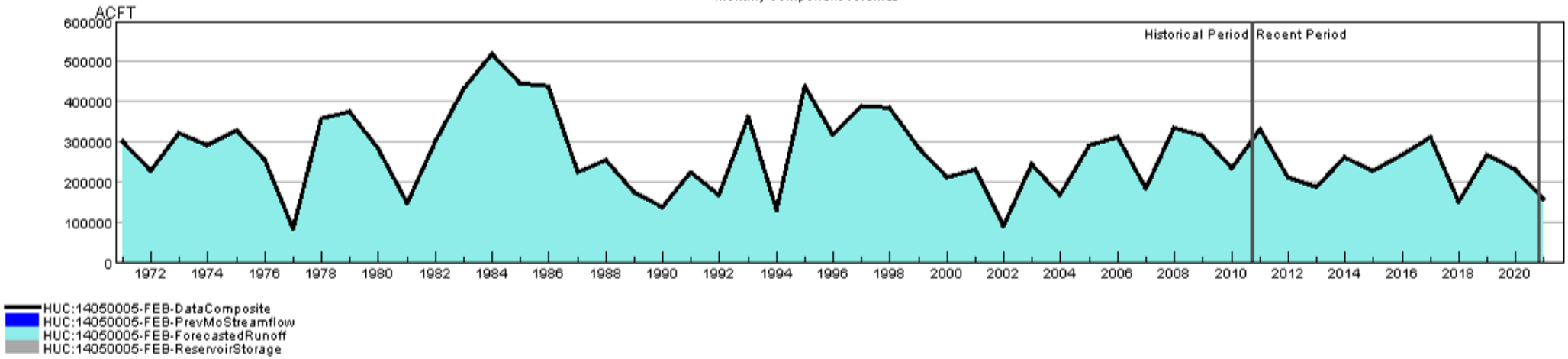
HUC 14050003 (Little Snake) SWSI Values - FEB

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



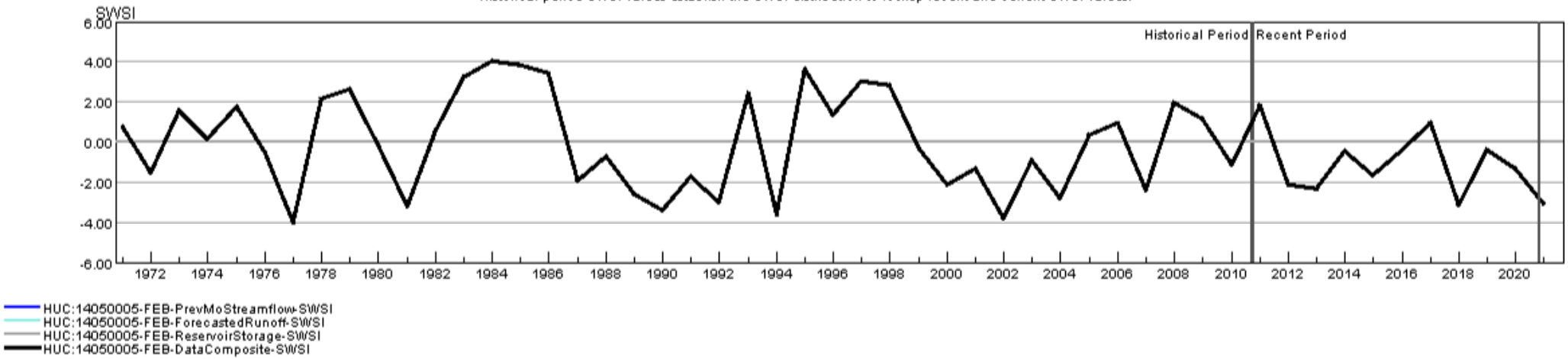
HUC 14050005 (Upper White) Surface Water Supply - FEB

Monthly component volumes



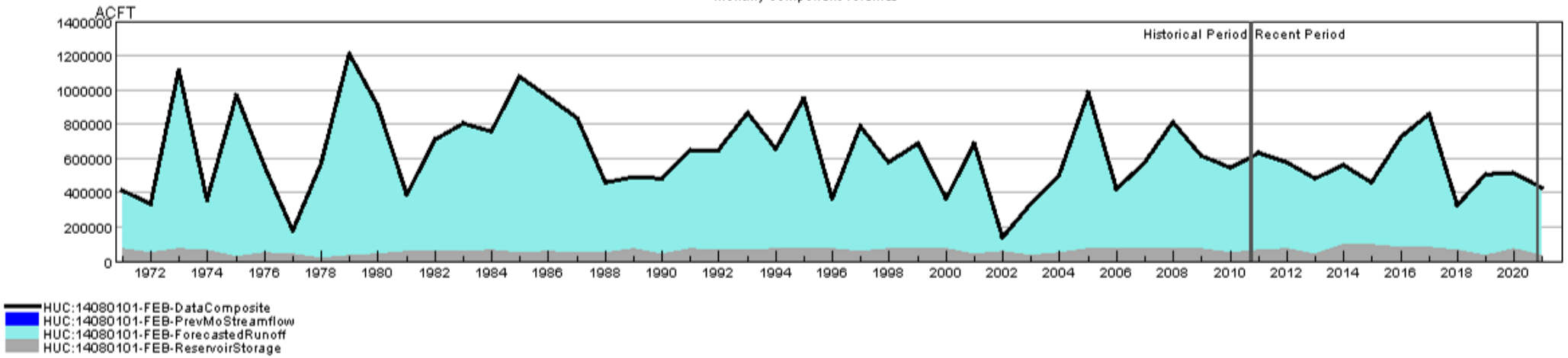
HUC 14050005 (Upper White) SWSI Values - FEB

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



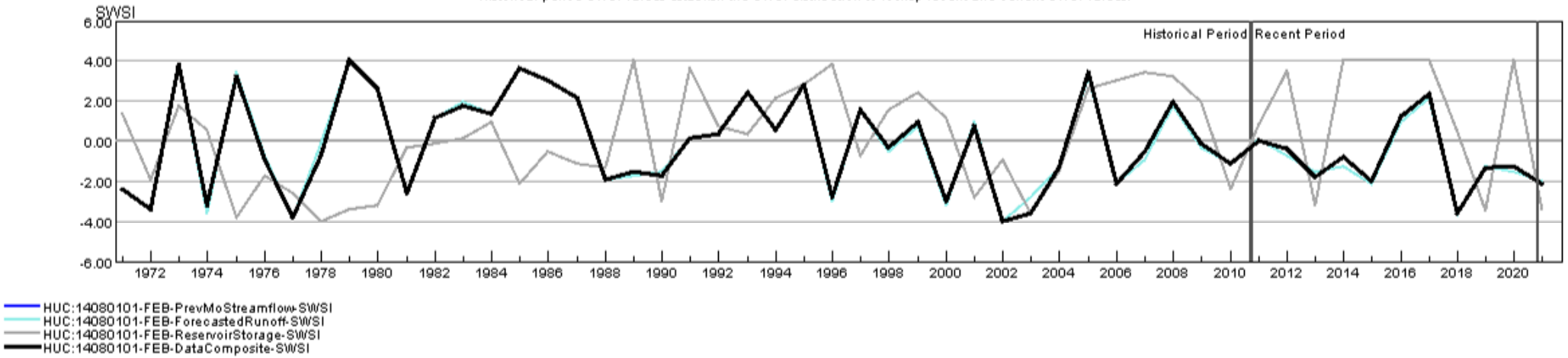
HUC 14080101 (Upper San Juan) Surface Water Supply - FEB

Monthly component volumes



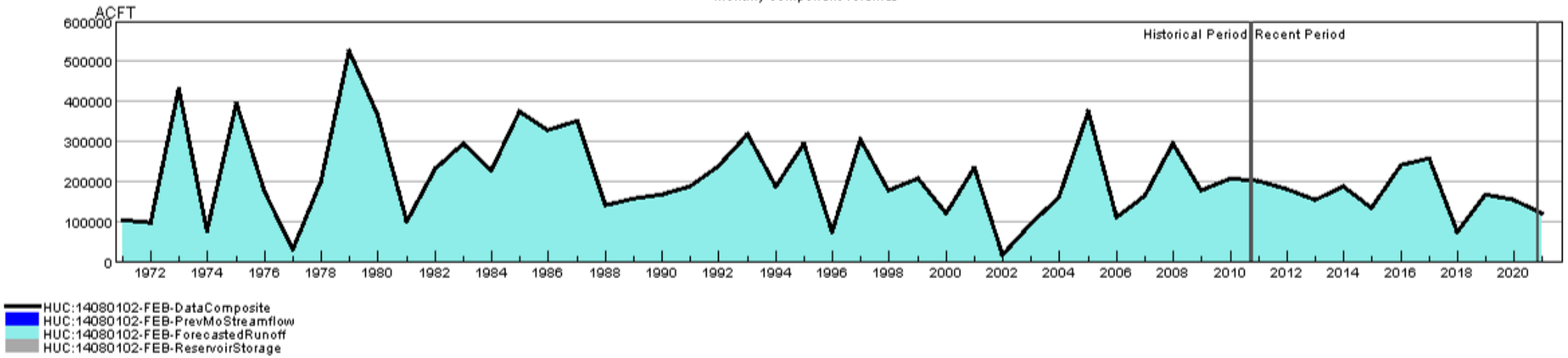
HUC 14080101 (Upper San Juan) SWSI Values - FEB

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



HUC 14080102 (Piedra) Surface Water Supply - FEB

Monthly component volumes



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

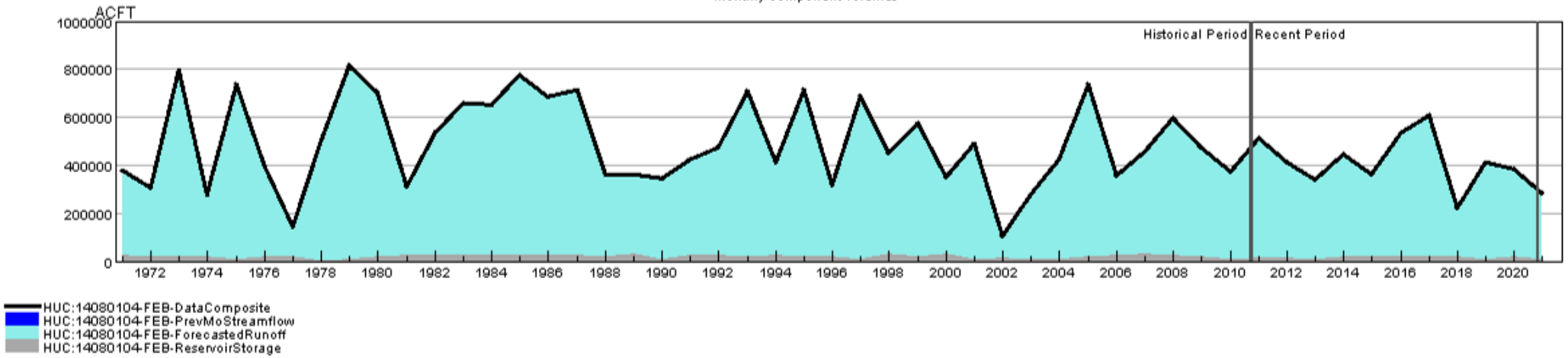
HUC 14080102 (Piedra) SWSI Values - FEB

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

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

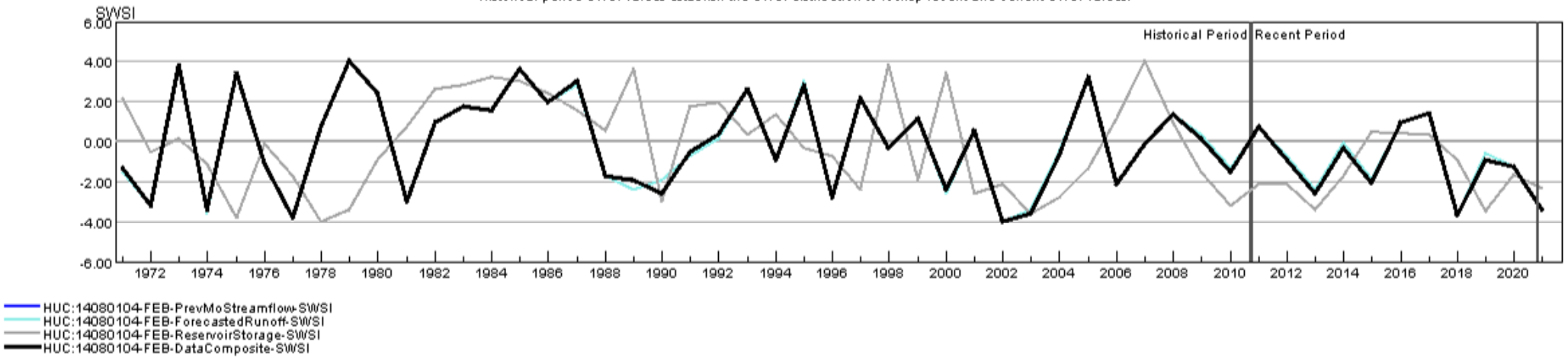
HUC 14080104 (Animas) Surface Water Supply - FEB

Monthly component volumes



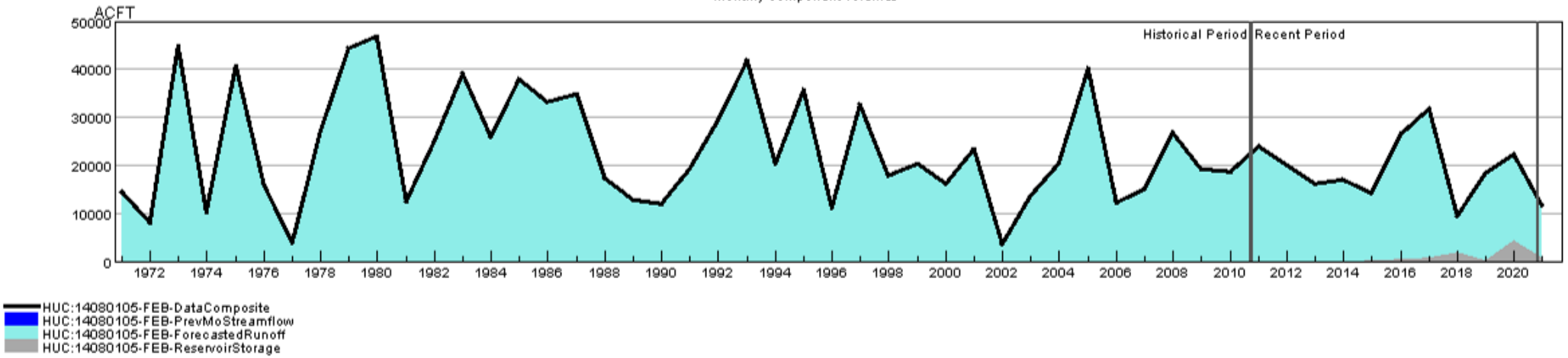
HUC 14080104 (Animas) SWSI Values - FEB

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



HUC 14080105 (Middle San Juan) Surface Water Supply - FEB

Monthly component volumes



HUC 14080105 (Middle San Juan) SWSI Values - FEB

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