COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
ROOM 818, 1313 SHERMAN ST., DENVER, CO 80203
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February 1, 2022

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 1980 and 2020.

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.

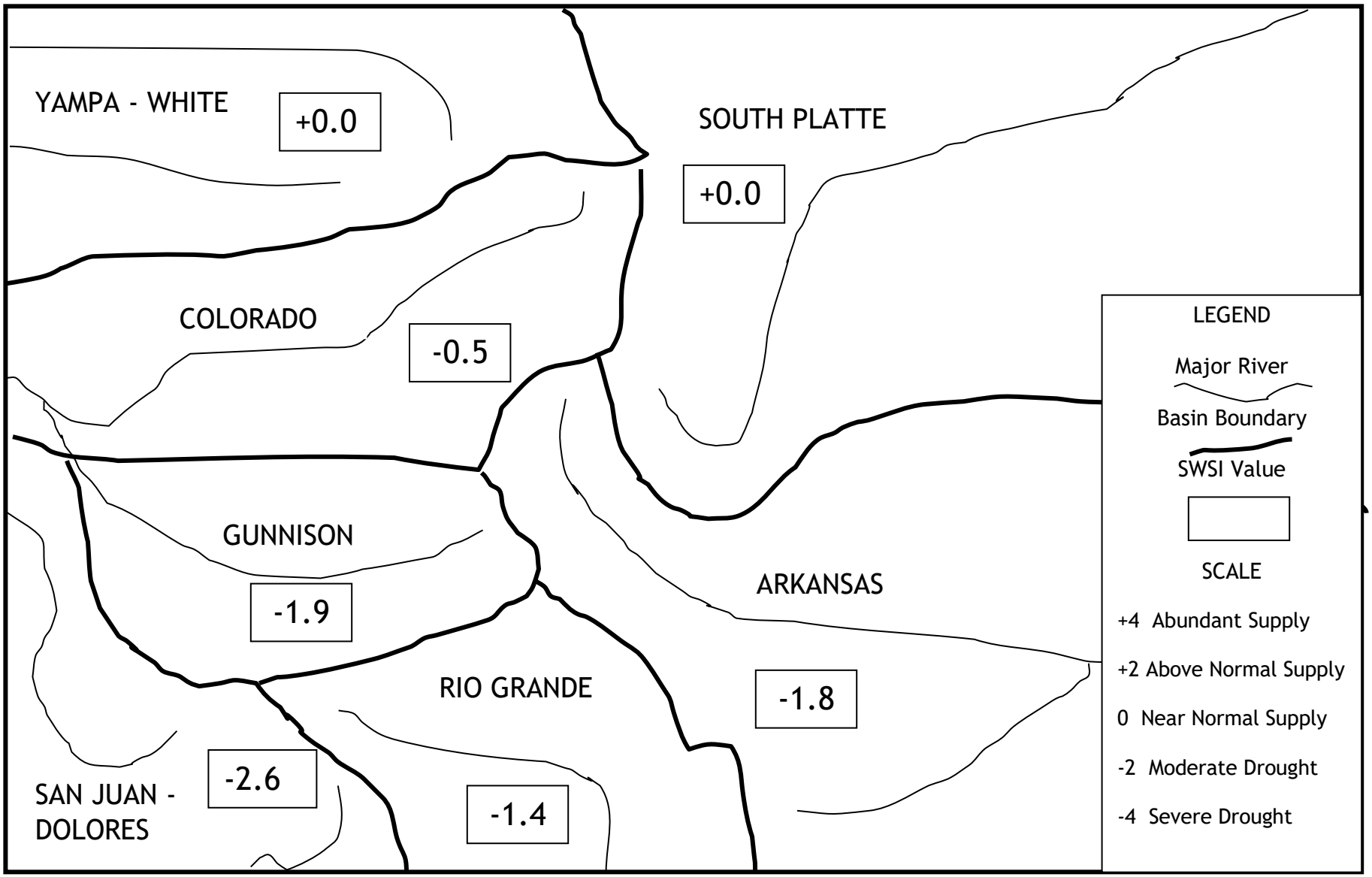
The SWSI calculation for the winter/spring season (January 1 to June 1) is based on reservoir storage at the end of last month, in this case January 31, plus the forecasted streamflow runoff volume for the runoff season (April through September in most basins). The following SWSI values were computed for each of the seven major basins for February 1, 2022. Water supply conditions, as represented by water in storage and forecasted streamflow runoff, range from normal in the Colorado, Yampa-White and South Platte Basins to below normal in the Arkansas, Gunnison, San Juan-Dolores and Rio Grande Basins.

Basin	February 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	-1.8	-0.5	-0.2
Colorado	-0.5	-1.8	2.6
Gunnison	-1.9	-1.5	1.1
Rio Grande	-1.4	-1.5	-0.5
San Juan-Dolores	-2.6	-1.8	0.4
South Platte	0.0	0.3	2.4
Yampa-White	0.0	-1.0	2.8

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

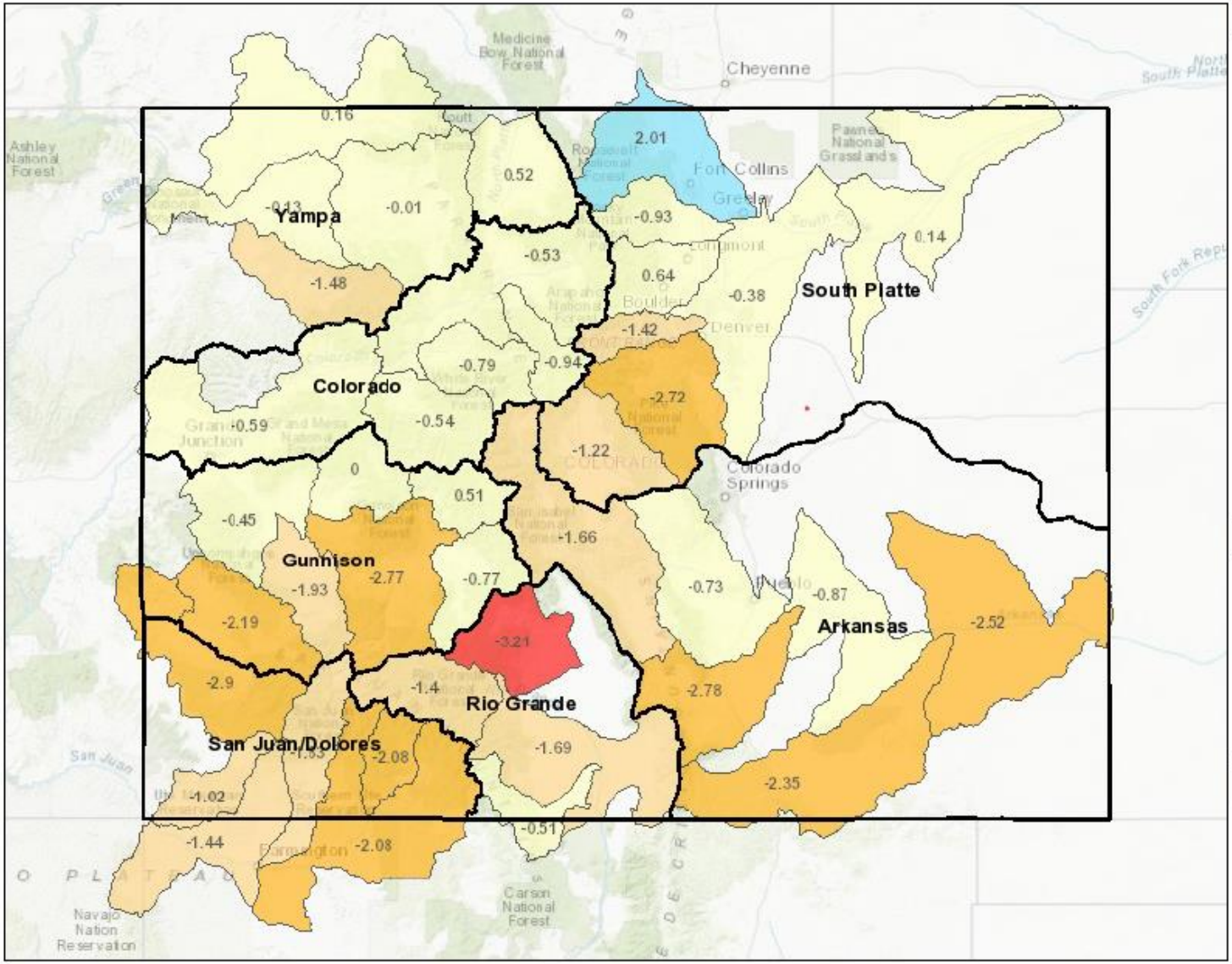


February 1, 2022

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC

COLORADO
Division of Water Resources
Department of Natural Resources

SWSI February 1, 2022



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: 3/11/2022 10:57:00 AM

February 1, 2022 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	-2.79	15	22	11,300
	11020010	Purgatoire	-2.36	57	24	43,496
	11020005	Upper Arkansas-Lake Meredith	-0.87	40	42	331,304
	11020001	Arkansas Headwaters	-1.67	17	46	352,529
	11020009	Upper Arkansas-John Martin Reservoir	-2.52	15	34	390,518
	11020002	Upper Arkansas	-0.73	47	44	497,344
Colorado	14010003	Eagle	-0.80	N/A	40	295,000
	14010002	Blue	-0.95	10	47	307,697
	14010004	Roaring Fork	-0.55	4	48	692,670
	14010001	Colorado Headwaters	-0.54	45	45	1,361,230
	14010005	Colorado Headwaters-Plateau	-0.60	8	43	2,114,881
Gunnison	14020003	Tomichi	-0.78	44	41	48,176
	14030003	San Miguel	-2.20	N/A	24	86,000
	14020006	Uncompahgre	-1.94	46	22	150,125
	14020004	North Fork Gunnison	0.00	2	50	240,405
	14020001	East-Taylor	0.51	16	59	341,326
	14020002	Upper Gunnison	-2.77	1	47	1,032,834
	14020005	Lower Gunnison	-0.45	N/A	45	1,170,000
Rio Grande	13010004	Saguache	-3.22	N/A	11	15,800
	13010002	Alamosa-Trinchera	-1.69	54	28	85,077
	13010005	Conejos	-0.52	29	49	184,220
	13010001	Rio Grande Headwaters	-1.41	79	26	421,908
San Juan-Dolores	14080105	Middle San Juan	-1.45	92	33	15,955
	14080107	Mancos	-1.02	43	41	17,047
	14080102	Piedra	-2.09		25	125,000
	14030002	Upper Dolores	-2.91	18	29	355,141
	14080104	Animas	-1.84	22	32	360,182
	14080101	Upper San Juan	-2.09	5	28	433,619
South Platte	10190004	Clear	-1.43	N/A	33	93,000
	10190001	South Platte Headwater	-1.23	59	26	188,100
	10190005	St. Vrain	0.65	67	61	244,376
	10190002	Upper South Platte	-2.73	13	19	367,861
	10190007	Cache La Poudre	2.02	89	67	453,246
	10190006	Big Thompson	-0.94	41	68	503,144
	10190003	Middle South Platte-Cherry Creek	-0.39	8	50	831,980
	10190012	Middle South Platte-Sterling	0.15	37	50	926,751
Yampa-White	14050005	Upper White	-1.48	N/A	32	210,000
	10180001	North Platte Headwaters	0.52	N/A	56	240,000
	14050003	Little Snake	0.16	N/A	52	290,000
	14050001	Upper Yampa	-0.02	32	51	688,263
	14050002	Lower Yampa	-0.14	N/A	48	875,000

NEP is non exceedance probability 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 1980-2020. 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, 2022 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	7,091	35
		HOMESTAKE RESERVOIR	28,828	39
		TWIN LAKES RESERVOIR	32,605	17
		TURQUOISE LAKE	64,005	13
		ARKANSAS RIVER AT SALIDA	220,000	46
11020006	Huerfano	CUCHARAS RESERVOIR*	0	15
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	5,500	25
		HUERFANO RIVER NEAR REDWING	5,800	24
11020010	Purgatoire	PURGATOIRE RIVER AT TRINIDAD	21,000	24
		TRINIDAD LAKE	22,496	57
11020002	Upper Arkansas	PUEBLO RESERVOIR	202,344	47
		PUEBLO RESERVOIR INFLOW	295,000	44
11020009	Upper Arkansas-John Martin Reservoir	CUCHARAS RIVER AT BOYD RANCH NR LA VETA	5,500	25
		HUERFANO RIVER NEAR REDWING	5,800	24
		PURGATOIRE RIVER AT TRINIDAD	21,000	24
		JOHN MARTIN RESERVOIR	31,542	9
		ADOBE CREEK RESERVOIR	31,676	35
		PUEBLO RESERVOIR INFLOW	295,000	44
11020005	Upper Arkansas-Lake Meredith	CUCHARAS RIVER AT BOYD RANCH NR LA VETA	5,500	25
		HUERFANO RIVER NEAR REDWING	5,800	24
		LAKE HENRY	7,388	94
		MEREDITH RESERVOIR	17,616	33
		PUEBLO RESERVOIR INFLOW	295,000	44
14010002	Blue	GREEN MOUNTAIN RESERVOIR	52,697	10
		BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	255,000	47
14010001	Colorado Headwaters	WOLFORD MOUNTAIN RESERVOIR	30,730	47
		WILLIAMS FORK RESERVOIR	60,500	26
		COLORADO RIVER NEAR DOTSERO	1,270,000	45
14010005	Colorado Headwaters-Plateau	VEGA RESERVOIR	4,881	8
		COLORADO RIVER NEAR CAMEO	2,110,000	43
14010003	Eagle	EAGLE RIVER BELOW GYPSUM	295,000	40
14010004	Roaring Fork	RUEDI RESERVOIR	57,670	4
		ROARING FORK AT GLENWOOD SPRINGS	635,000	48
14020001	East-Taylor	TAYLOR PARK RESERVOIR	58,326	16
		TAYLOR R INF TO TAYLOR PARK RESERVOIR	98,000	55
		EAST RIVER AT ALMONT	185,000	60
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	1,170,000	45
14020004	North Fork Gunnison	PAONIA RESERVOIR	405	2
		NORTH FORK GUNNISON R NR SOMERSET	240,000	50
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	86,000	24
14020003	Tomichi	VOUGA RESERVOIR NEAR DOYLEVILLE	176	44
		TOMICHI CREEK AT GUNNISON, CO	48,000	41

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
14020006	Uncompahgre	RIDGEWAY RESERVOIR	65,125	46
		UNCOMPAHGRE RIVER AT COLONA	85,000	22
14020002	Upper Gunnison	SILVER JACK RESERVOIR	1,097	4
		FRUITLAND RESERVOIR	1,349	66
		CRAWFORD RESERVOIR	2,261	5
		LAKE FORK AT GATEVIEW, CO	92,000	28
		MORROW POINT RESERVOIR	104,677	1
		BLUE MESA RESERVOIR	236,450	1
		GUNNISON R INF TO BLUE MESA RESERVOIR	595,000	50
13010002	Alamosa-Trinchera	SANGRE DE CRISTO	2,600	15
		TRINCHERA CK	3,800	8
		MOUNTAIN HOME	3,965	73
		UTE CREEK	4,000	8
		TERRACE RESERVOIR	4,512	24
		CULEBRA CREEK AT SAN LUIS	6,200	8
		ALAMOSA CREEK ABOVE TERRACE RESERVOIR	60,000	46
13010005	Conejos	PLATORO RESERVOIR	14,220	29
		CONEJOS RIVER NEAR MOGOTE	170,000	49
13010001	Rio Grande Headwaters	CONTINENTAL RESERVOIR	9,796	86
		SANTA MARIA RESERVOIR	12,263	65
		RIO GRANDE RESERVOIR	19,849	61
		RIO GRANDE NEAR DEL NORTE	380,000	26
13010004	Saguache	SAGUACHE CREEK NEAR SAGUACHE, CO	15,800	11
14080104	Animas	LEMON RESERVOIR	13,182	22
		FLORIDA RIVER INFLOW TO LEMON RESERVOIR	37,000	22
		ANIMAS RIVER AT DURANGO	310,000	32
14080107	Mancos	JACKSON GULCH RESERVOIR	4,047	43
		MANCOS RIVER NEAR MANCOS	13,000	41
14080105	Middle San Juan	LONG HOLLOW RESERVOIR	455	92
		LA PLATA RIVER AT HESPERUS	15,500	33
14080102	Piedra	PIEDRA RIVER NEAR ARBOLES	125,000	25
14030002	Upper Dolores	GROUNDHOG RESERVOIR	4,400	13
		MCPHEE RESERVOIR	166,741	18
		DOLORES RIVER BELOW MCPHEE RESERVOIR	184,000	29
14080101	Upper San Juan	VALLECITO RESERVOIR	38,619	5
		LOS PINOS RIVER NEAR BAYFIELD	130,000	18
		SAN JUAN RIVER NEAR CARRACAS	265,000	31
10190006	Big Thompson	MARIANO RESERVOIR	2,700	37
		LAKE LOVELAND RESERVOIR	5,500	24
		WILLOW CREEK RESERVOIR	6,032	10
		LONE TREE RESERVOIR	6,900	57
		BOYD LAKE	28,400	43
		CARTER LAKE	87,338	69
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	100,000	68
		LAKE GRANBY	266,274	37

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
10190007	Cache La Poudre	BLACK HOLLOW RESERVOIR	3,505	80
		CHAMBERS LAKE	4,768	72
		HALLIGAN RESERVOIR	5,076	59
		CACHE LA POUDRE	6,959	45
		FOSSIL CREEK RESERVOIR	8,683	61
		WINDSOR RESERVOIR	9,079	17
		COBB LAKE	17,800	68
		HORSETOOTH RESERVOIR	132,376	94
		CACHE LA POUDRE R AT CANYON MOUTH	265,000	67
10190004	Clear Creek	CLEAR CREEK AT GOLDEN	93,000	33
10190003	Middle South Platte-Cherry Creek	HORSECREEK RESERVOIR	2,400	9
		MILTON RESERVOIR	17,619	58
		BARR LAKE	19,761	9
		STANDLEY RESERVOIR	34,200	34
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	56
		BOULDER CREEK NEAR ORODELL	56,000	58
		CLEAR CREEK AT GOLDEN	93,000	33
		SAINT VRAIN CREEK AT LYONS	96,000	66
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	100,000	68
		SOUTH PLATTE RIVER AT SOUTH PLATTE	111,000	19
		CACHE LA POUDRE R AT CANYON MOUTH	265,000	67
10190012	Middle South Platte-Sterling	JULESBURG RESERVOIR	15,190	7
		JACKSON LAKE RESERVOIR	23,105	48
		PREWITT RESERVOIR	24,597	98
		EMPIRE RESERVOIR	27,212	67
		POINT OF ROCKS RESERVOIR	30,491	6
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	56
		RIVERSIDE RESERVOIR	48,156	90
		BOULDER CREEK NEAR ORODELL	56,000	58
		CLEAR CREEK AT GOLDEN	93,000	33
		SAINT VRAIN CREEK AT LYONS	96,000	66
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	100,000	68
		SOUTH PLATTE RIVER AT SOUTH PLATTE	111,000	19
		CACHE LA POUDRE R AT CANYON MOUTH	265,000	67
10190001	South Platte Headwater	ANTERO RESERVOIR	20,000	77
		SPINNEY MOUNTAIN RESERVOIR	30,100	42
		ELEVENMILE CANYON RESV INFLOW	39,000	26
		ELEVENMILE CANYON RESERVOIR	99,000	27
10190005	St. Vrain	MARSHALL RESERVOIR	4,600	20
		TERRY RESERVOIR	5,876	80
		BUTTONROCK (RALPH PRICE) RESERVOIR	11,256	10
		UNION RESERVOIR	12,644	97
		GROSS RESERVOIR	21,000	82
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	56
		BOULDER CREEK NEAR ORODELL	56,000	58
		SAINT VRAIN CREEK AT LYONS	96,000	66

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP by Month
10190002	Upper South Platte	CHEESMAN LAKE	65,361	46
		SOUTH PLATTE RIVER AT SOUTH PLATTE	111,000	19
		DILLON RESERVOIR	191,500	13
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	290,000	52
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	875,000	48
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	240,000	56
14050005	Upper White	WHITE RIVER NEAR MEEKER	210,000	32
14050001	Upper Yampa	YAMCOLO RESERVOIR	3,763	9
		STAGECOACH RESERVOIR NR OAK CREEK	27,500	37
		ELKHEAD CREEK ABOVE LONG GULCH	72,000	54
		YAMPA RIVER AT STEAMBOAT SPRINGS	225,000	36
		ELK RIVER NEAR MILNER, CO	360,000	51

NEP is non exceedance probability for volume of the component compared to this month during the historical period 1980-2020.

*No longer exists

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

Basinwide Conditions Assessment

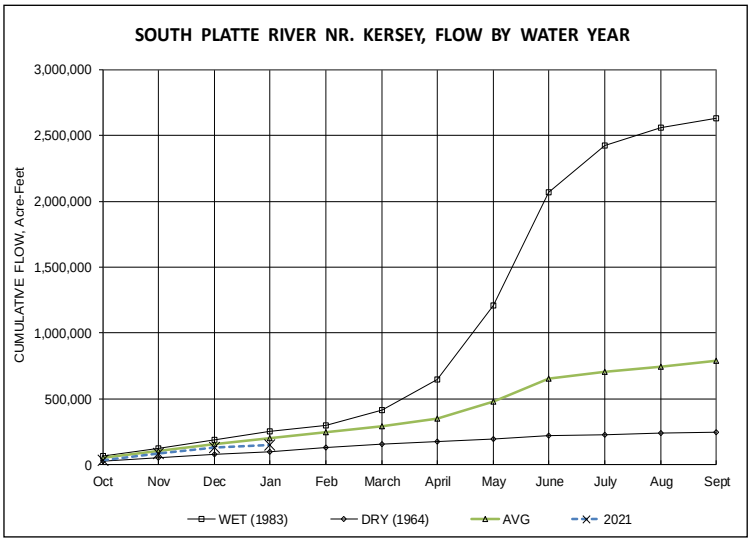
The SWSI value for the month was +0.0.

The trend of above average precipitation throughout the mountainous and foothill regions of the basin that was much welcomed in mid-December continued into January in the South Platte River Basin. The South Platte River basin in northeastern Colorado experienced 135% of average precipitation in the mountainous and foothill regions and slightly above 100% on the eastern plains for the month of January. Temperatures throughout the basin were approximately 2-3 degrees Fahrenheit below average in the mountainous and foothill regions with near average temperatures on the eastern plains, as reported by NOAA compared to the 1981-2010 period of record. . As a result, the USDA South Platte Basin High/Low Snowpack Summary indicates that the basin total snowpack was near 108% of average at the end of January, with regions north of the Boulder Creek drainage basin above average and areas south below average.

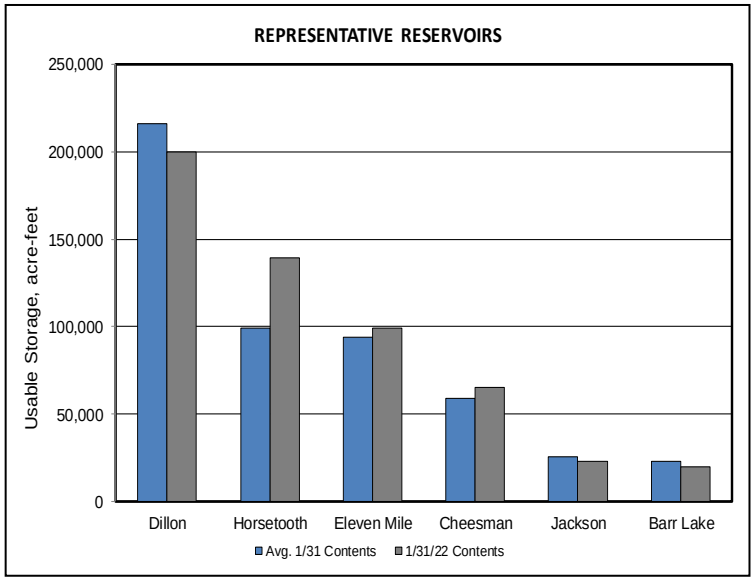
The USDA NRCS Colorado Streamflow Forecasts Summary for February 1, 2022 projects streamflows right at the long term average (100% of average) throughout the basin, with Boulder Creek basin being the dividing line with areas north well above average and areas to the south below average projected stream flows throughout the South Platte drainage basin.

The long lasting trend of below average precipitation and above average temperatures experienced last summer into this winter still control the drought conditions of the landscapes of northeastern Colorado, even given the much sought snow arriving throughout the basin during the months of December through January. Drought conditions slightly reversed the trend of increasing severity during the month of January with improvements throughout much of the basin, however drought conditions persist throughout the entire basin. The month of January ended with better conditions but still experiencing basin wide drought conditions with a USDA Drought Monitor drought rating of DO (Abnormally Dry) and D1 (Moderate Drought) throughout the mountainous areas; a rating of D2 (Severe Drought) throughout the foothills and much of the easterly plains; and a portion of remaining rating of D3 (Extreme Drought) shrinking but remaining in portions of Weld, Morgan, Washington, Adams, Arapahoe and Elbert Counties.

The below average temperatures resulting in freezing 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. Flows at the Kersey gage downstream of the City of Greeley, were well below average with average daily flows for the month of January at approximately 377 cfs, 57% of the historic mean value of 662 cfs. The average daily flows at the Julesburg gage for the month of January were 266 cfs, only 50% 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 early spring prior to snowmelt runoff.

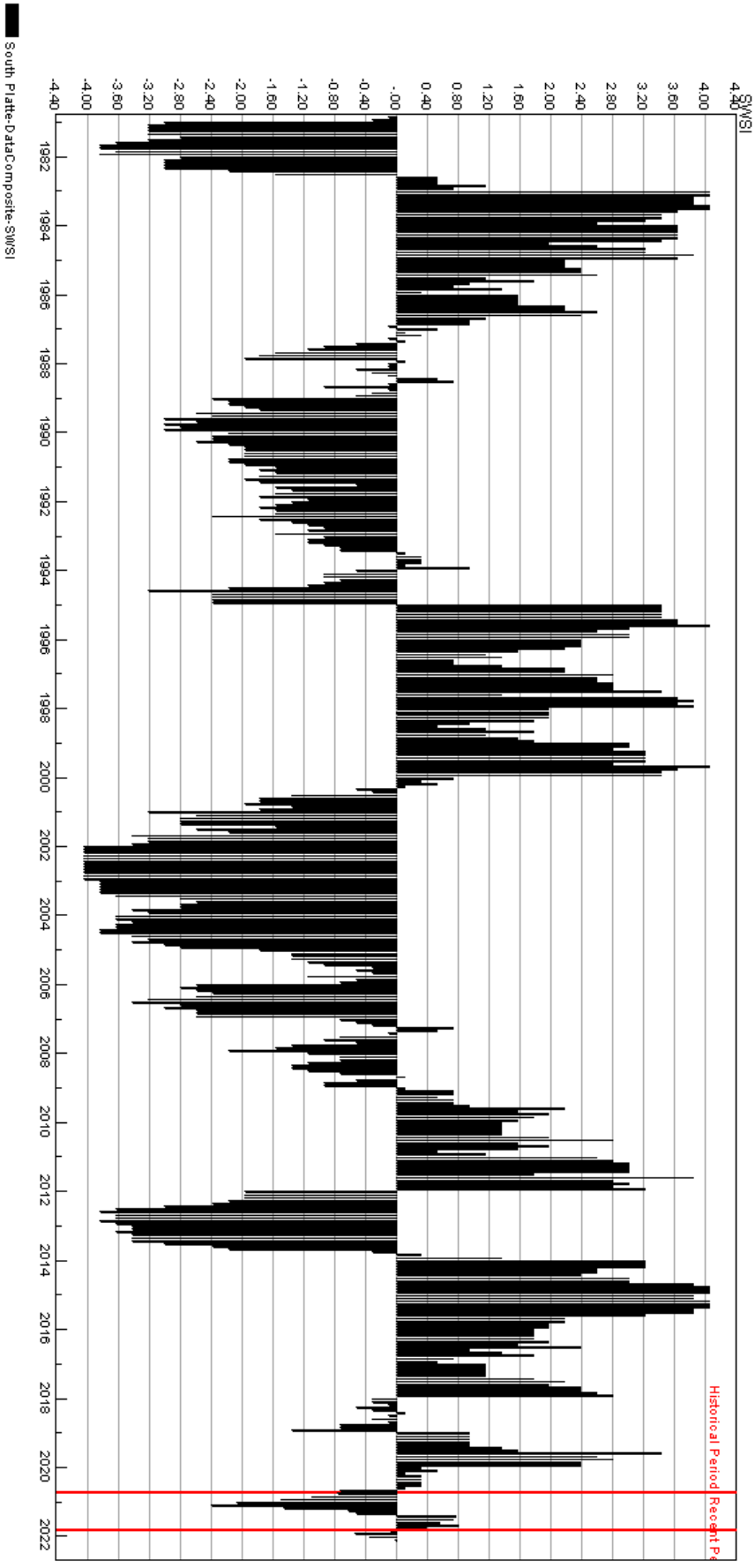


The month of January continued the reservoir filling season with senior reservoirs calling and filling in priority as water supply allows. The colder than average temperatures from late December through January has resulted in freezing conditions, slowing the fill of some reservoirs due to icing issues. Due to the freezing and icing conditions, the beginning of January only had a call placed at Chatfield Reservoir with a priority date of 1977, with no downstream calls placed on the South Platte River mainstem to the state line. Beginning on January 5th, a 1909 priority call at Burlington Canal, located near the City of Fort Lupton, began and continued throughout the month of January controlling the upper portion of the South Platte River basin. During January 20th through January 24th the 1909 Milton call was placed at the Riverside Reservoir diversion located downstream of the Town of Platteville. However, due to freezing conditions and Milton Reservoir reaching winter full conditions, no calls downstream of the Burlington Canal were placed during the last portion of the month of January. It is anticipated that as conditions allow, reservoirs will continue to fill in priority, with more junior reservoirs getting started in spring 2022 snowmelt runoff.



Reservoir storage levels throughout the South Platte River mainstem ended the month of January above the historical average at the 6 SWSI Representative Reservoirs (Dillon, Horsetooth, Eleven Mile, Cheeseman, Jackson, and Barr Lake) at 546,393 acre-feet volume, which is 106% of the long term average (1961-current). Additionally, 32 indexed reservoirs throughout Division 1 basin ended the month of January at 111% of the long term average with a storage volume of 873,325 acre-feet representing 77% of total full capacity for the reservoirs. This is slightly above the long term average of 69% of total full capacity for the end of January storage in the 32 indexed reservoirs throughout Division 1. The cold temperatures during the month of January slowed the filling of some reservoirs due to lower available native flows and operational challenges with infrastructure due to the freezing temperatures. However, the overall storage in the lower elevation reservoirs is well ahead of storage levels this time a year ago. Most tributary reservoirs continue to fill reservoirs with more senior priorities. It is anticipated that reservoirs will continue to fill in priority, with fairly senior calls throughout much of the winter into spring.

The temperature and precipitation outlook into March, April and May prepared by the National Weather Service, in northeastern Colorado indicates an 33-50% 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 -1.8.

Outlook

Reservoir storage in the Pueblo Winter Water Program (PWWP) totaled 66,515 acre-feet at the end of January. This is a large improvement over the 37,618 acre-feet of storage recorded at the end of December. This storage amount is also higher than last year's storage to date of 60,666 acre-feet.

Conservation storage in John Martin Reservoir has accumulated 10,684 acre-feet versus 7,817 acre-feet as of the end of January last year.

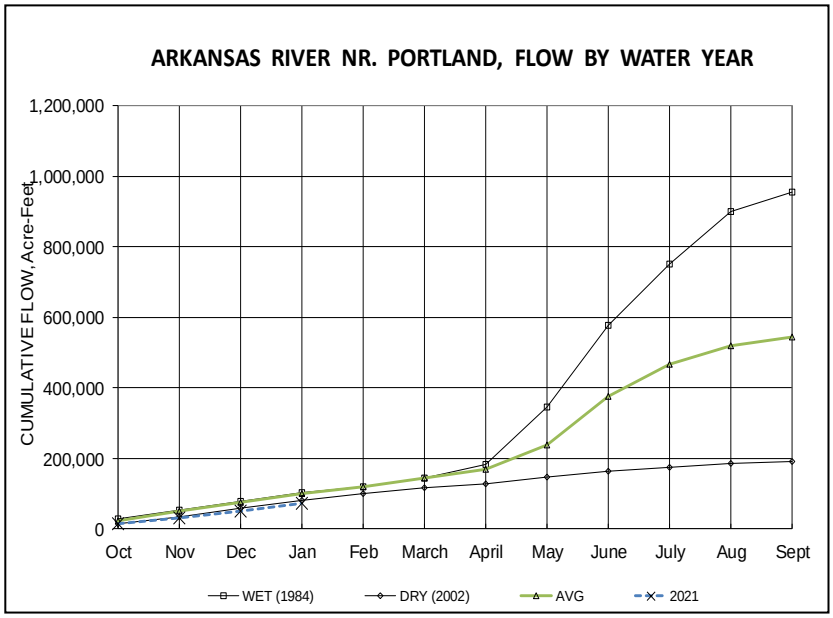
The current PWWP storage has improved over last year and snowpack for the basin has dropped to 82% of median over the 86% of average recording at the end of December.

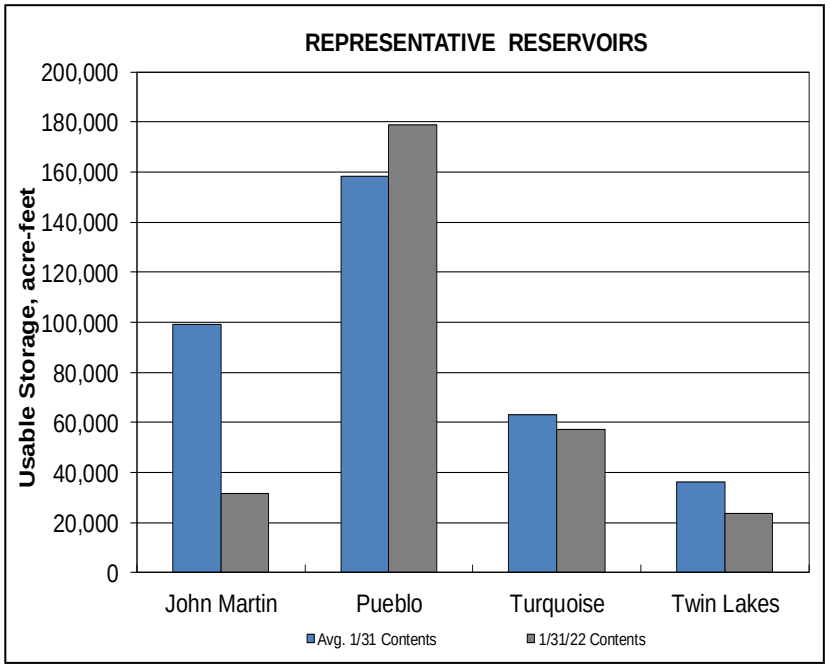
Snowpack improved for the basin at the end of January to 91% of the median for the year, which matches the median last year of 91%.

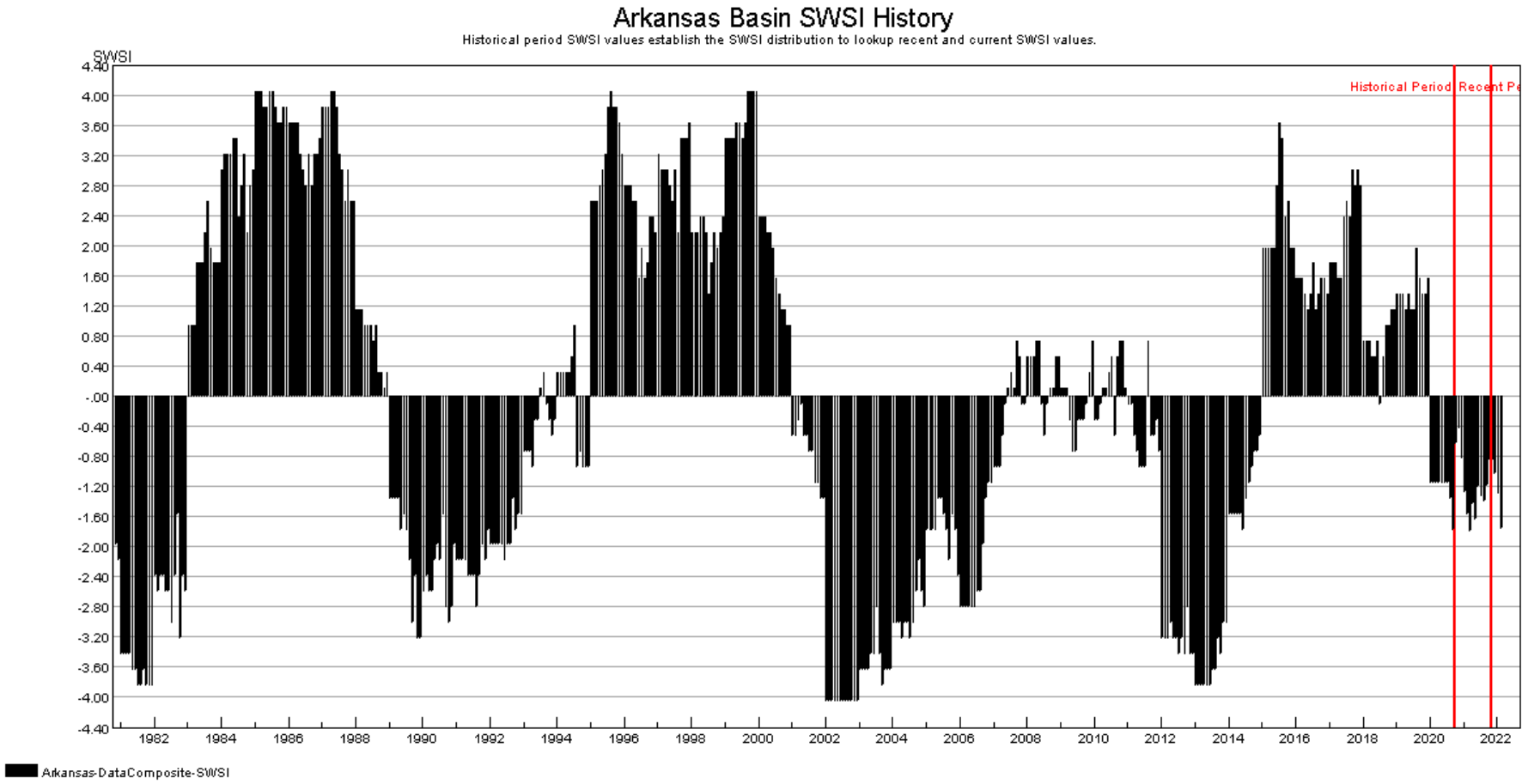
Administrative Concerns

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.






Arkansas Basin SWSI History
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
SWSI
4.40
4.00
3.60
3.20
2.80
2.40
2.00
1.60
1.20
0.80
0.40
-.00
-0.40
-0.80
-1.20
-1.60
-2.00
-2.40
-2.80
-3.20
-3.60
-4.00
-4.40
Historical Period
Recent Pe
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
Arkansas-DataComposite-SWSI

Basinwide Conditions Assessment

The SWSI value for the month was -1.4.

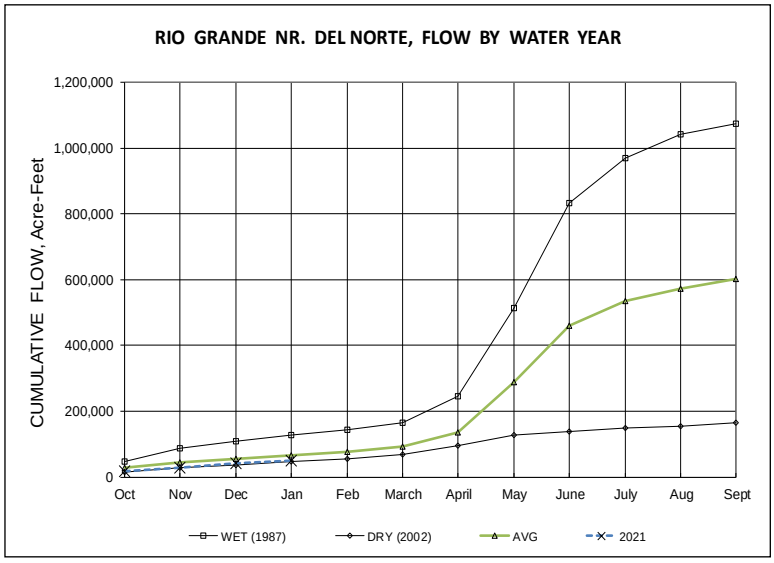
Basinwide Conditions Assessment

Flow at the gaging station Rio Grande near Del Norte averaged 140 cfs (81% of normal). The Conejos River near Mogote had a mean flow of 44 cfs (89% of normal). Streams in the upper Rio Grande basin are still recovering from the poor 2021 runoff and precipitation.

Outlook

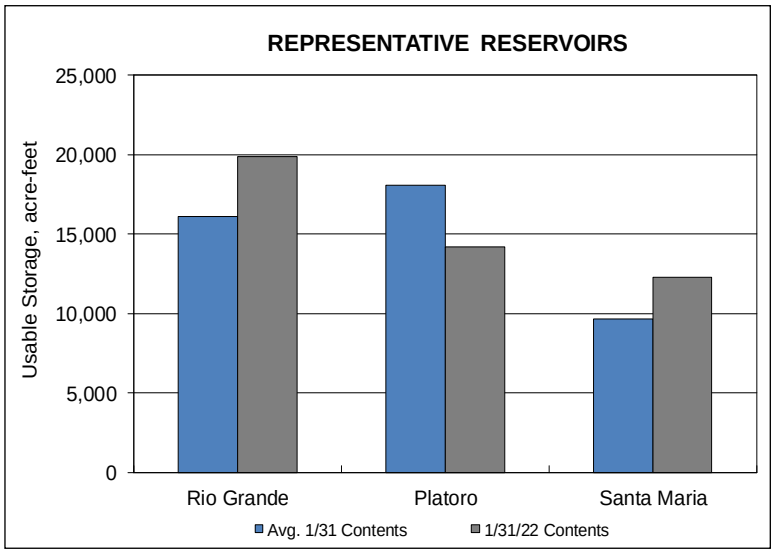
February 1, 2022 Natural Resources Conservation Service stream flow forecasts are predicting runoff in area streams to be in the range of 37% (Trinchera Creek and the Culebra River) to 101% (Conejos River and the Rio San Antonio) of average during the 2022 runoff season. The western and southwestern drainages of the upper Rio Grande Basin have the best streamflow forecasts currently. The Sangre de Cristo Mountain streams and the Saguache area are well below average for anticipated 2022 runoff.

Current National Weather Service forecasts for February through June, 2022, are calling for above normal temperatures and below normal precipitation in this area of the state.



Administrative / Management Concerns

The weather forecasts are very concerning. It appears the poor water supply conditions of 2020 and 2021 could be extended well into 2022. The past two years have resulted in a large draw on area reservoirs and aquifers. Diversion into ditches last year was limited by the poor runoff. 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.

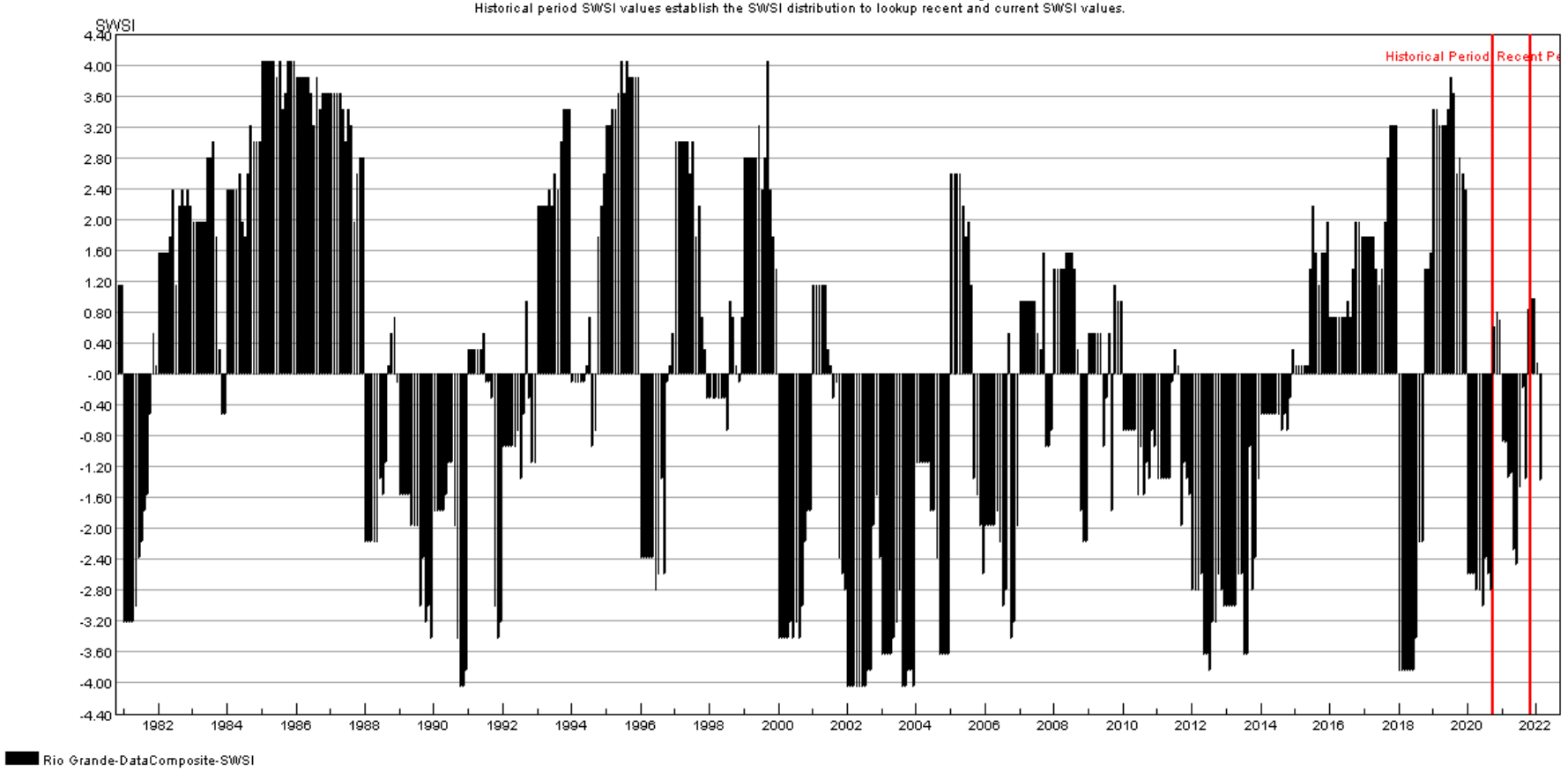


Public Use Impact

Virtually no snowfall on the Valley floor and neighboring mountains during most of January dropped the basin snowpack to below the long-term average levels. However, a good snowstorm hit the basin on February 2nd and brought the basinwide level to near the long-term average. There is hope the Rio Grande basin can hold its position near average or even improve.

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 -1.9.

Outlook

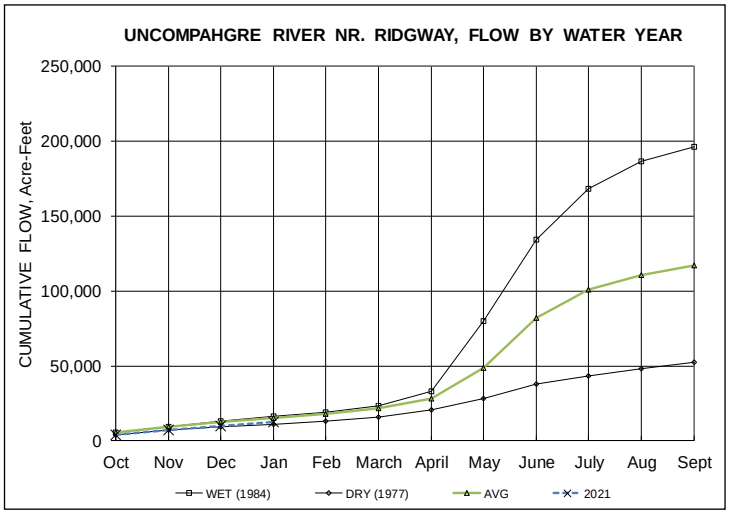
Snowpack levels in the Gunnison Basin remain slightly above average for this time of the year. However, certain conditions have caused anxiety to grow and have water users wondering if we are headed for another poor water supply year. Since the excellent snowpack accumulation in the month of December, the snowpack accumulation has gone rather flat and has trended drier than normal for January into February. The average snow water equivalent measurements from NRCS SNOTEL sites for the entire Gunnison Basin were at 115 percent of average on January 31st. But, the reference period of record was advanced from 1981 through 2010 to 1991 through 2020. The change in the period of record actually reduced the averages by about 5 percent. So, we are comparing to a drier average which makes things look better.

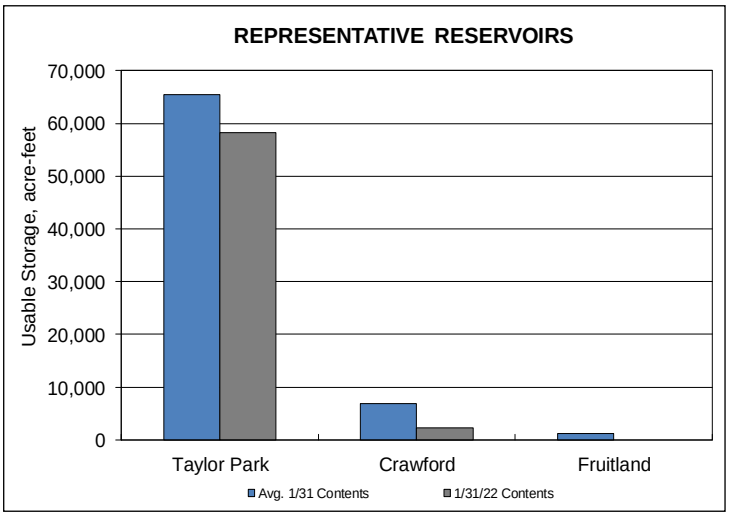
The current updated forecast for the April through July unregulated inflow into Blue Mesa Reservoir is at 585,000 acre-feet (92% of normal). Based on this forecast, Blue Mesa Reservoir is still not projected to fill by July 2022. History has shown that the forecast can change significantly between January and the end of the runoff season because January is still early in the snow accumulation period. The Colorado River Basin Forecast Center predicts the La Nina conditions present in the Pacific Ocean will most likely result in continued drier than normal conditions for the southern Rocky Mountains going into spring.

Currently, a determination of the magnitude of the spring peak for the Black Canyon water right and the peak flow target in the Lower Gunnison is 3530 cfs and 8070 cfs respectively. A final determination will be made on May 1, based on an updated runoff forecast.

Administrative/Management Concerns

Due to the extended drought conditions, Reclamation has been maintaining the flows in the Black Canyon at 325 cfs and has been maintaining a target flow in the lower Gunnison River at 650 cfs to 750 cfs. These low flows are as a result of continued drought criteria still in place due to Blue Mesa Reservoir storage level being well below the 600,000 acre-feet recovery threshold. The fluctuations in the flow in the Lower Gunnison River are dependent largely upon overnight low temperatures, as opposed to fluctuating releases from Crystal Dam.



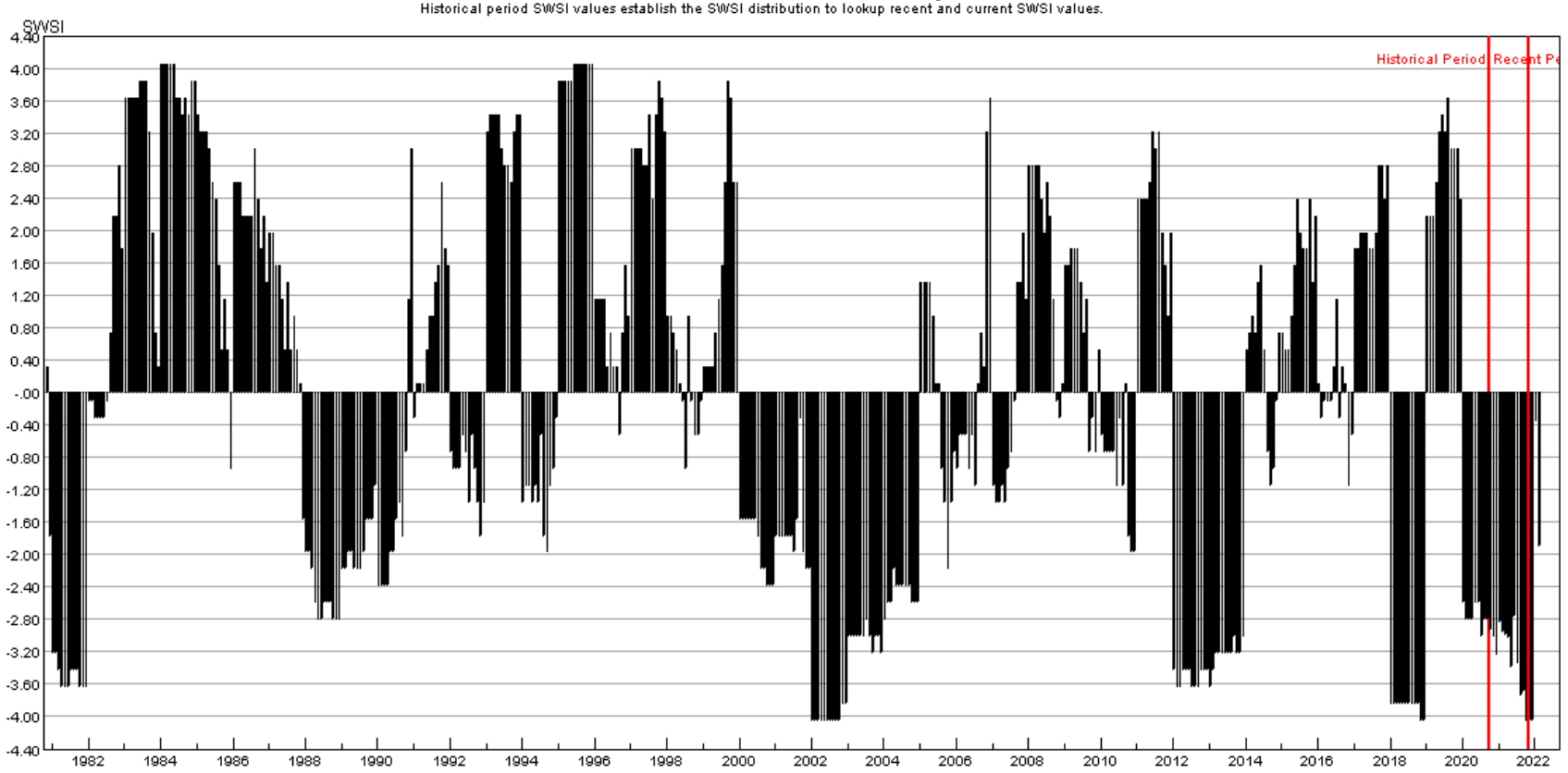


Public Use Impacts

According to a recent public statement made by the Bureau of Reclamation, the East Portal of the Black Canyon will be open to the public this spring after closure last year. The steep road in and out of the National Park and campground at East Portal can be subject to seasonal rock slides, which cause severe road damage and a risk to public safety. Reclamation completed a road improvement project and cliff stabilization project in 2021 to address these issues. The plan at this time is for the road to fully open this spring to the public after over a year of closure. The area is very popular with campers as well as fisherman and sightseeing enthusiasts.

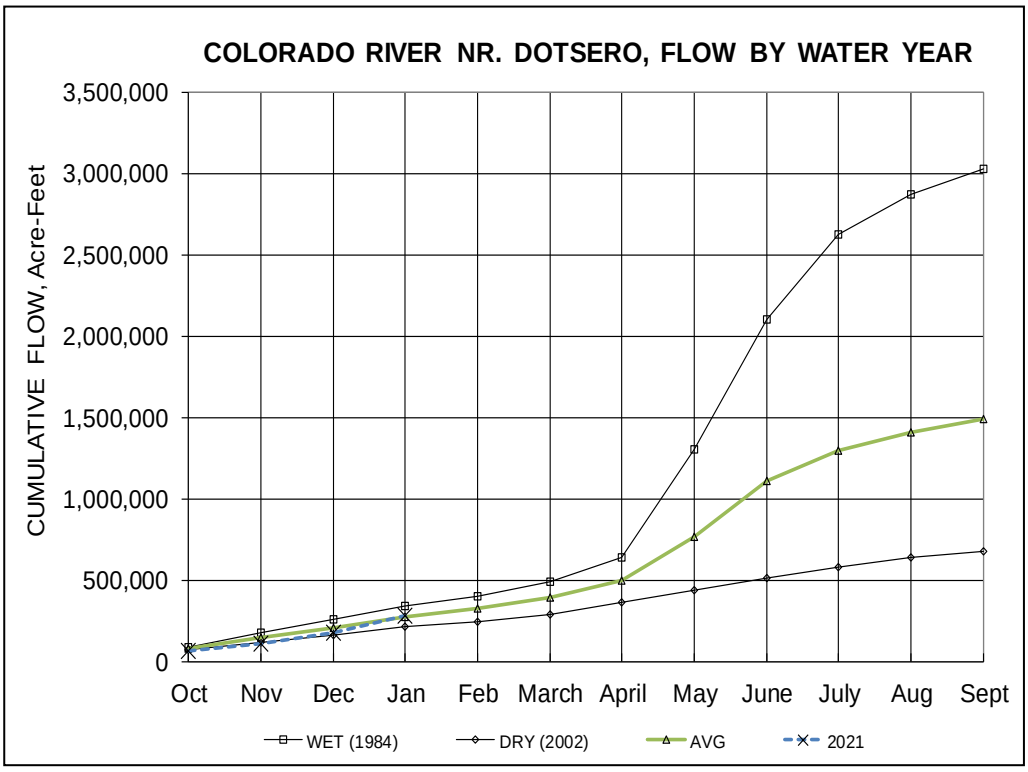
Gunnison Basin SWSI History

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



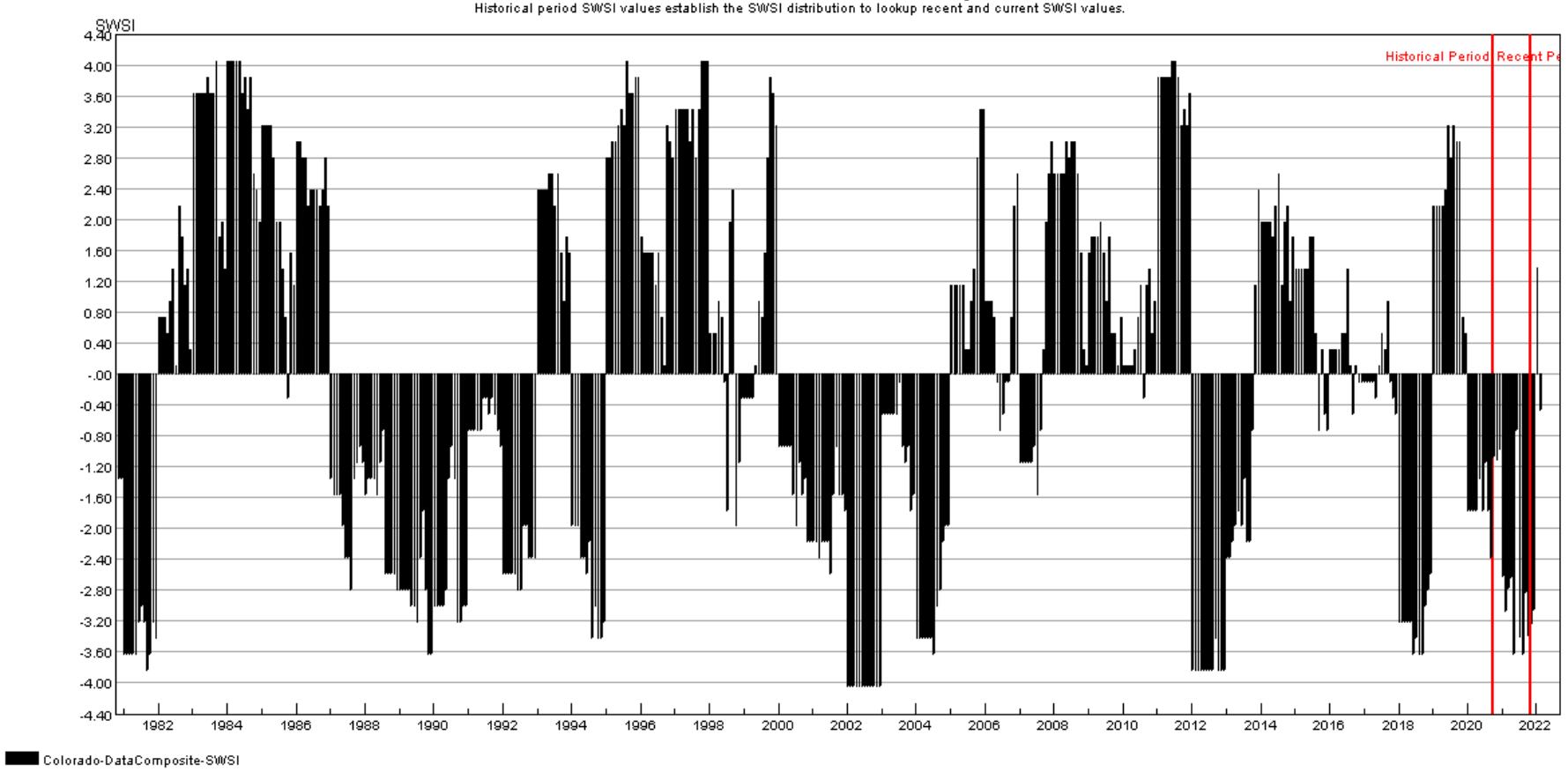
Basinwide Conditions Assessment
The SWSI value for the month was -0.5.

No Colorado Basin Report is available for February 1, 2022.



Colorado 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 +0.0.

Basin Wide Conditions Assessment:

Snowpack *(25 sites)* – Yampa, White and Little Snake river basins were **101%** of the monthly median for SWE. This is up from last year's monthly SWE median of 72%. The North Platte Headwaters were **113%** of the monthly median for SWE and is up from last year's monthly SWE median of 74%. For the entire Yampa, White, Little Snake and North Platte river basins, the lowest percent of median was at the Sage Creek Basin SNOTEL site at 68%. The highest percent of median was at the Never Summer SNOTEL station at 129%.

**Medians are from 1991-2020 records (Source: USDA National Water and Climate Center, Basin Data Reports for Colorado)*

Precipitation (24 sites) – Yampa, White and Little Snake river basins were **71%** of the monthly average, putting the basin at 110% of average for the water year to date. This is up from last year's monthly average of 66%, and up from last year's water year to date of 65%. North Platte headwaters were **100%** of the monthly average, putting the basin at 118% for the water year to date. This is up from last year's monthly average of 70%, and up from last year's water year to date of 73%. For the entire Yampa, White, Little Snake, and North Platte River basins the lowest percent of average, at 50%, was the Sand Stone RS SNOTEL station, with 1.7 inches. The highest, at 135%, was the Arapaho Ridge SNOTEL station, with 4.2 inches.

**Averages are from 1991-2020 records (Source: USDA National Water and Climate Center, Basin Data Reports for Colorado)*

Temperatures – The average monthly temperature for NOAA Colorado Climate Division 2: Colorado River Drainage was **23.0° F**. This is +2.4°F from the average of 20.6°F. This temperature ranks 89 for the lowest of the previous 128 years of data. For the NOAA Colorado Climate Division 4: Platte Drainage, the average temperature was **25.7°F**, +1.7°F from the average of 24.0°F, ranking 71.

**Averages are from 1901-2000 records (Source: NOAA National Centers for Environmental Information)*

Reservoir Outlook:

Elkhead Reservoir – January 31, 2021 capacity level was 15,100 AF of 25,600 AF –
59% capacity, 79% of median, 95% of last year.

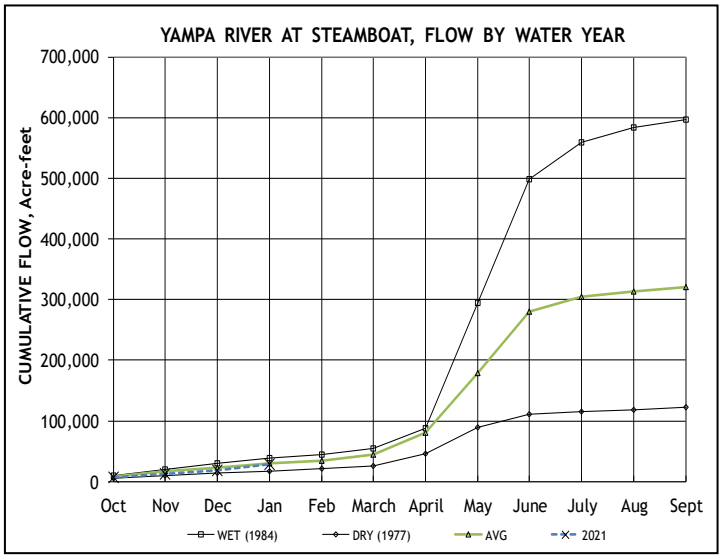
Yamcolo Reservoir – January 31, 2021 capacity level was at 3,800 AF of 8,700 AF –
43% of capacity, 57% of median, 83% of last year.

Stagecoach Reservoir – January 31, 2021 capacity level was 27,500 AF of 36,500 AF –
75% of capacity, 95% of median, 84% of last year.

High Savery Reservoir – January 31, 2021 capacity level was 6,000 AF of 22,400 AF –
27% of capacity, 52% of median, 69% of last year.

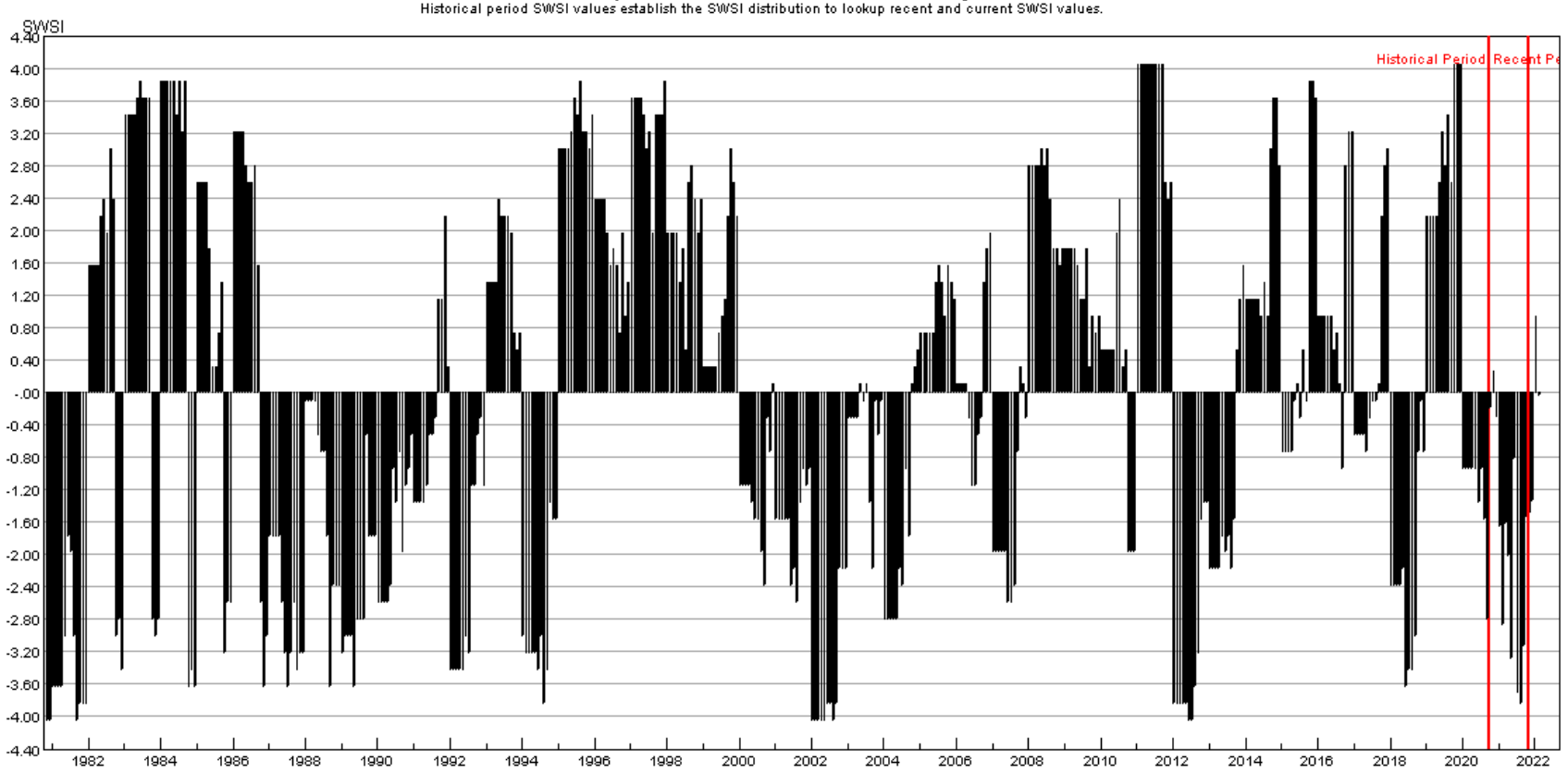
Fish Creek Reservoir – January 31, 2021 elevation was 9870' at 2,229 AF of 4,160 AF –
53.5% capacity.

**Medians are from 1991-2020 records (Source: USDA National Water and Climate Center, Basin Data Reports for Colorado)*



Yampa-White Basin SWSI History

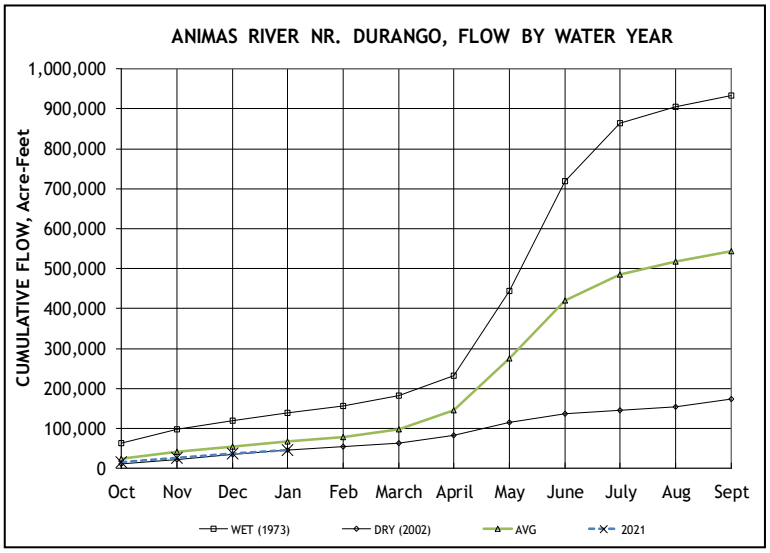
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



Basinwide Conditions Assessment

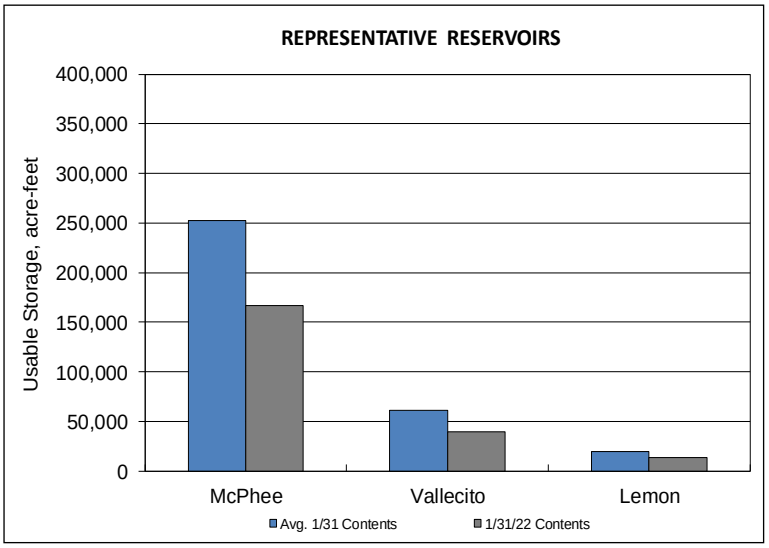
The SWSI value for the month was -2.6.

Flows at the Animas River at Durango averaged 153 cfs (76% of average). The flow at the Dolores River at Dolores was estimated to average 38 cfs (75% of average). The La Plata River at Hesperus averaged 5.1 cfs (75% of average). Precipitation in Durango was 0.15 inches for the month, 7.4% of the 30-year average of 2.03 inches. Precipitation to date in Durango for the water year is 5.76 inches, 86% of the 30-year average of 6.73 inches. The average high and low temperatures for the month of January in Durango were 47º and 15º. In comparison, the 30-year average high and low for the month is 41º and 15º. The average high temperature for the month was the 9th warmest out of 120 years of record. At the end of the month Vallecito Reservoir contained 39,474 acre-feet compared to its average content of 56,511 acre-feet (70% of average). McPhee Reservoir was up to 166,764 acre-feet compared to its average content of 256,426 (65% of average), while Lemon Reservoir was up to 13,520 acre-feet as compared to its average content of 19,383 acre-feet (70% of average).



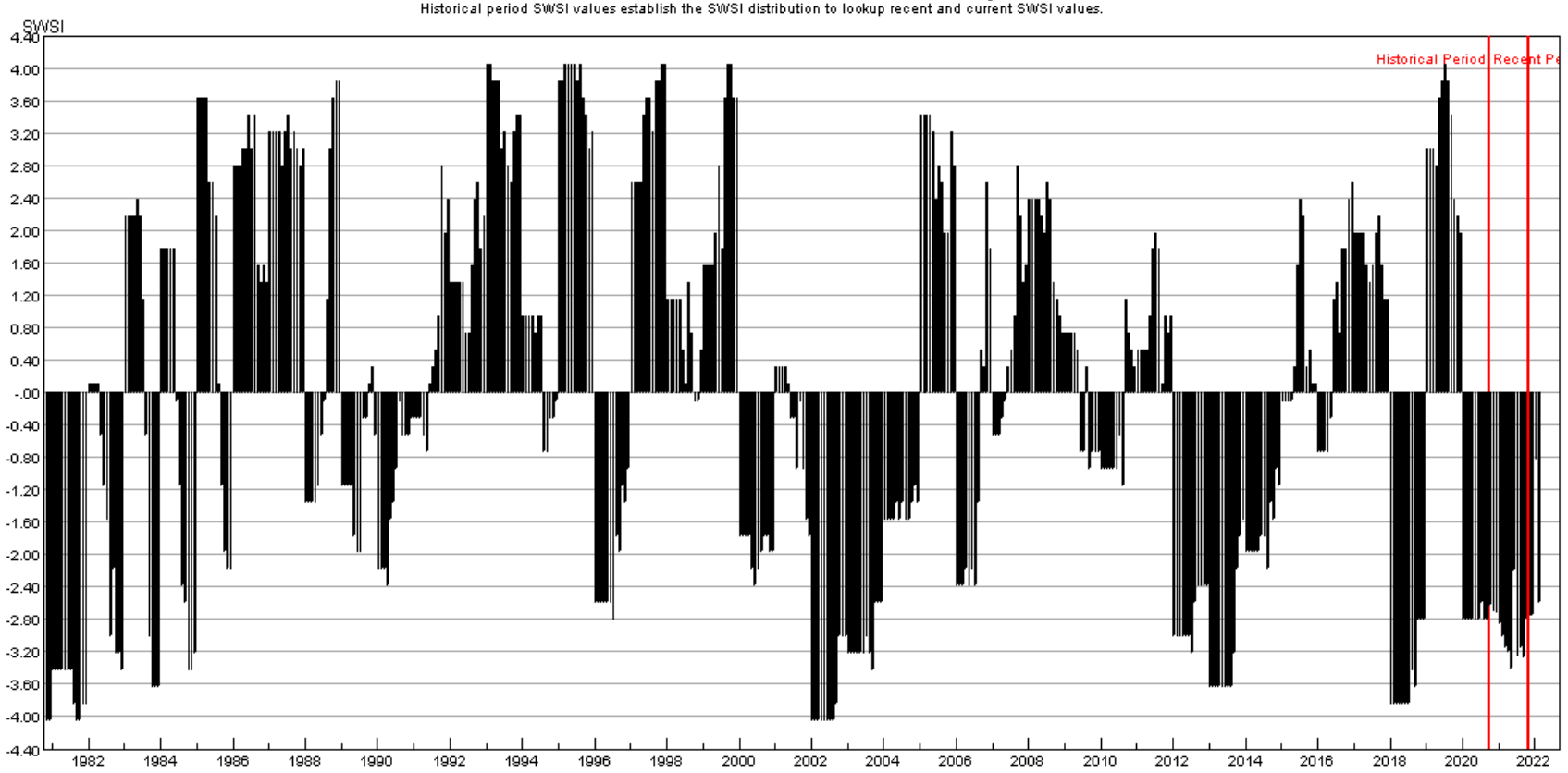
Outlook

Precipitation (0.15 inches) was well below average in Durango. There were 115 years out of 127 years of record where there was more precipitation than this year. The flows remain below average for the month but trended a little closer to average when comparing last month's flows. There were 99 out of 112 years of record where there was more flow at the Animas River at Durango gage than this year. There were 80 out of 111 years of record where the total flow past the Dolores stream gauge was more than this year. There were 73 out of 105 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 104%. Last month the average snow-water-equivalent at the end of the month was 144%.



San Juan-Dolores Basin SWSI History

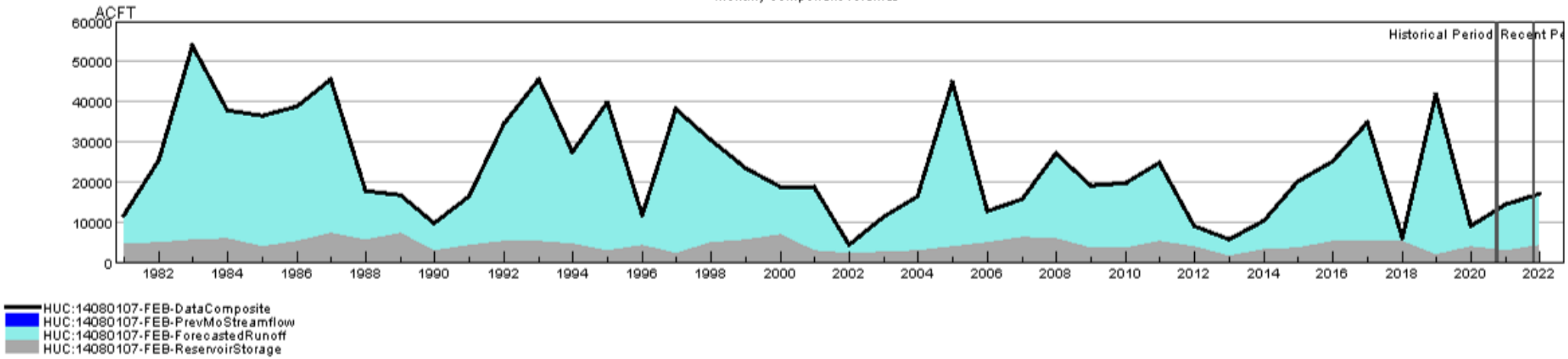
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



San Juan-Dolores-DataComposite-SWSI

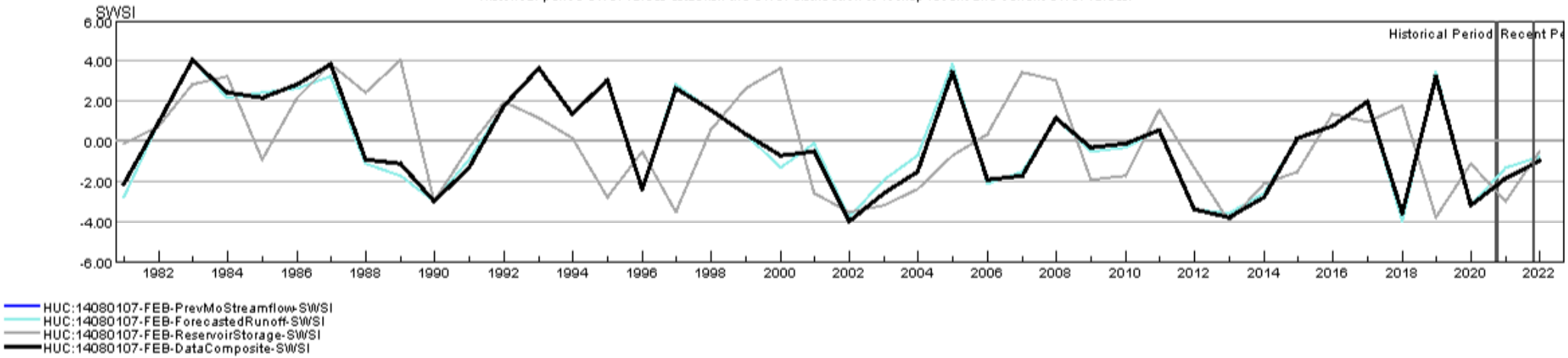
HUC 14080107 (Mancos) Surface Water Supply - FEB

Monthly component volumes



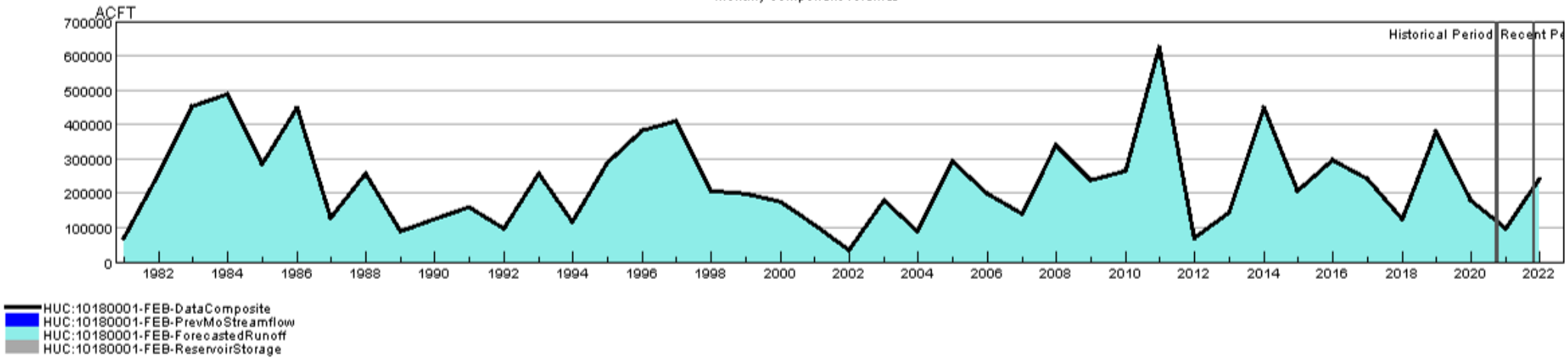
HUC 14080107 (Mancos) SWSI Values - FEB

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



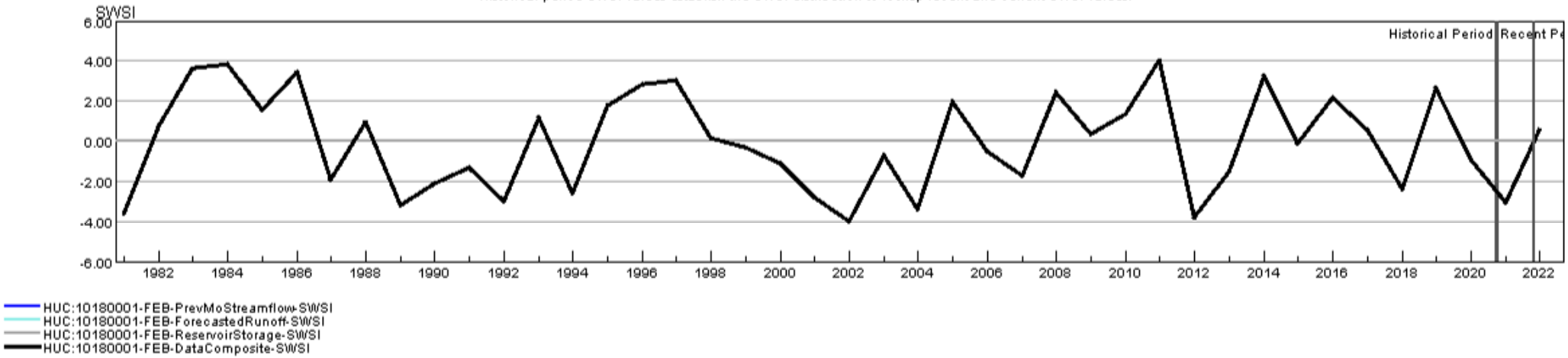
HUC 10180001 (North Platte Headwaters) Surface Water Supply - FEB

Monthly component volumes



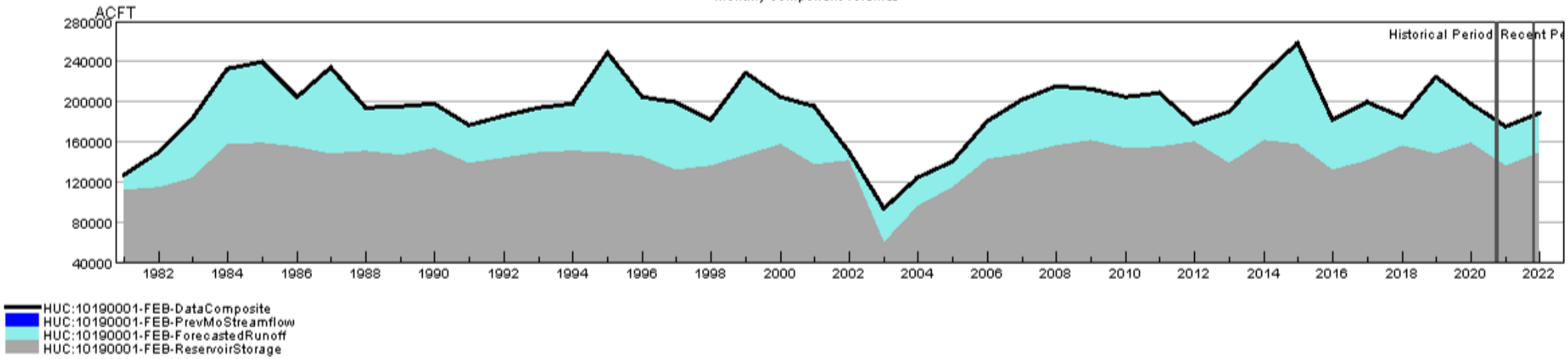
HUC 10180001 (North Platte Headwaters) SWSI Values - FEB

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



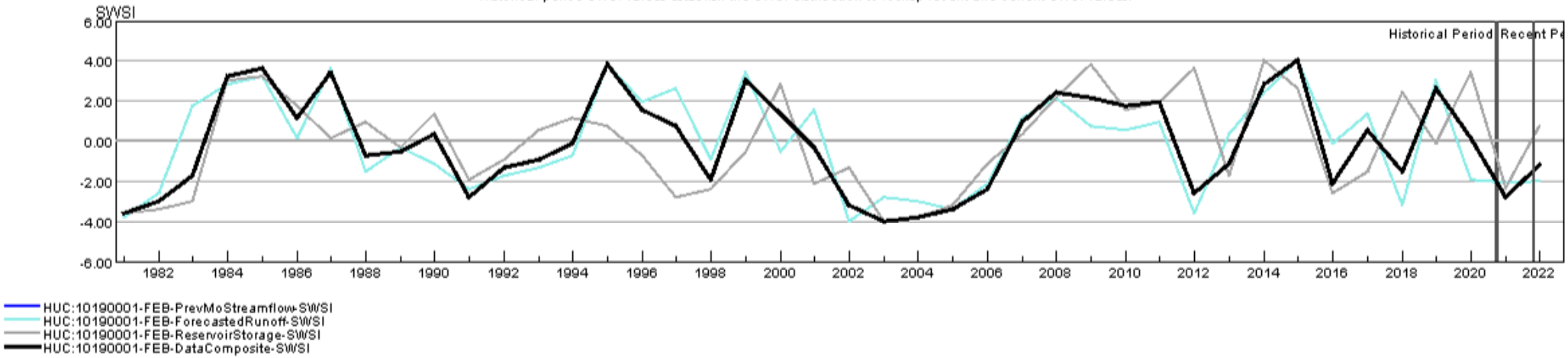
HUC 10190001 (South Platte Headwater) Surface Water Supply - FEB

Monthly component volumes



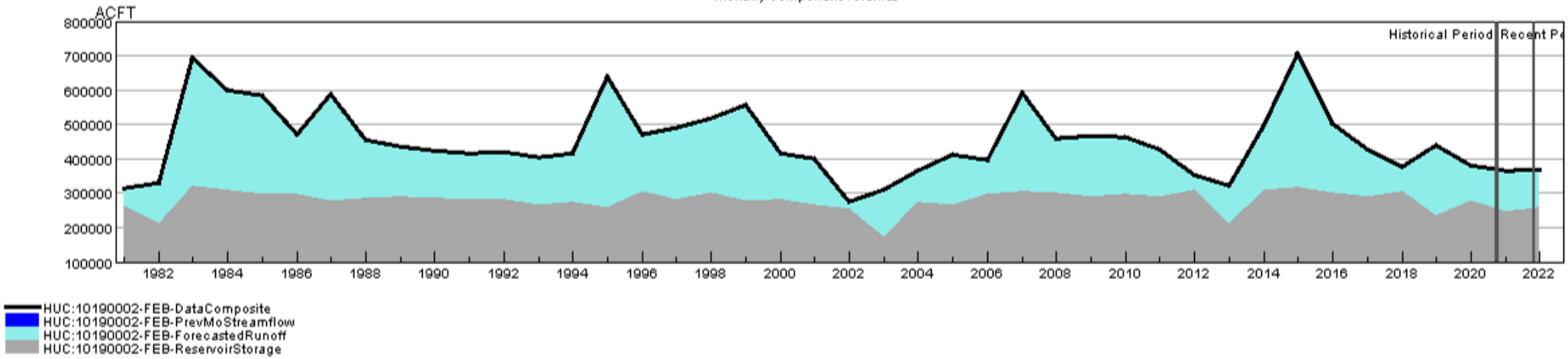
HUC 10190001 (South Platte Headwater) SWSI Values - FEB

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



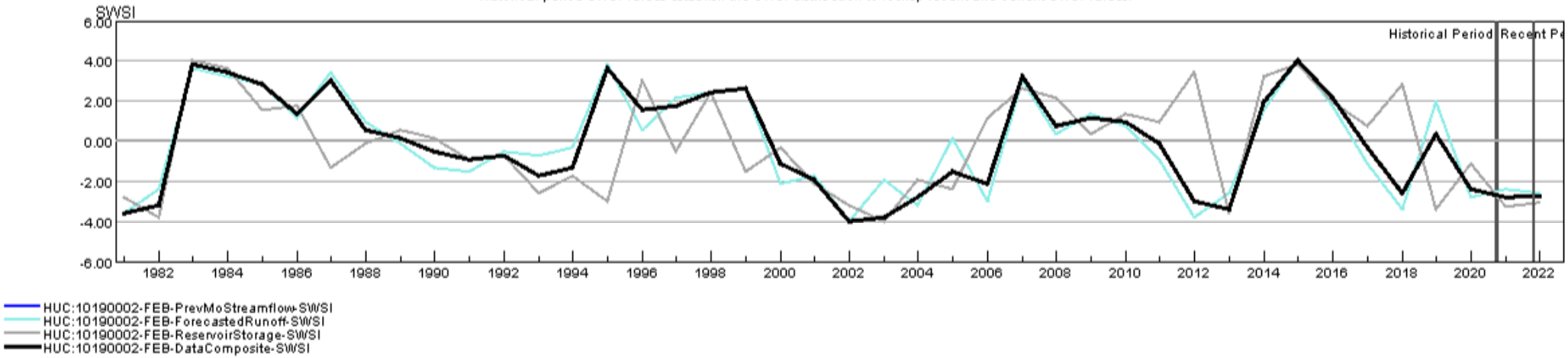
HUC 10190002 (Upper South Platte) Surface Water Supply - FEB

Monthly component volumes



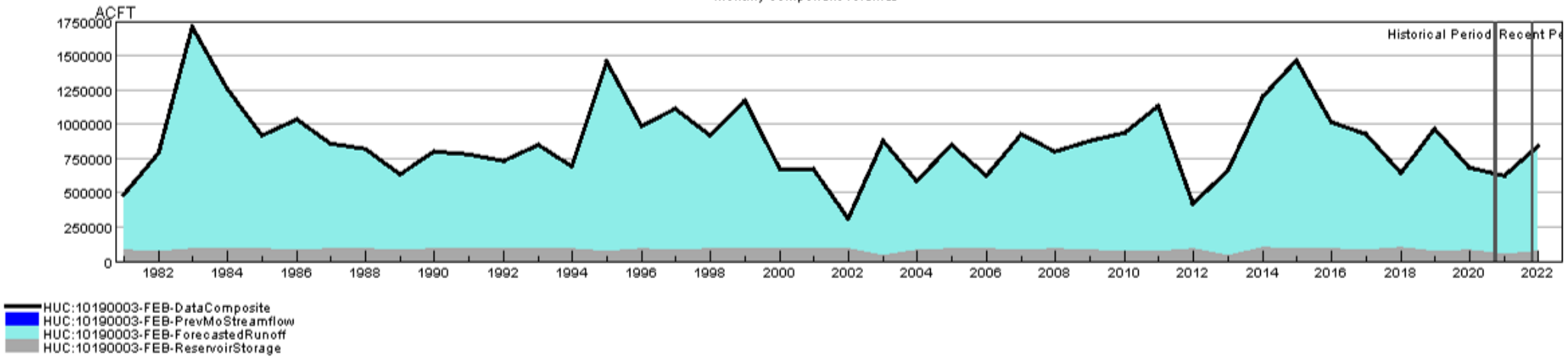
HUC 10190002 (Upper South Platte) SWSI Values - FEB

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



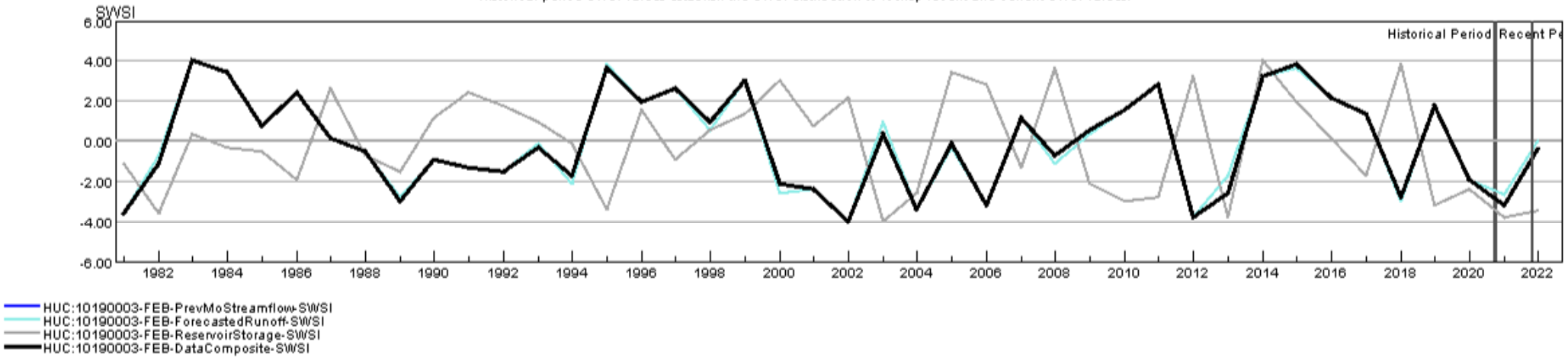
HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply - FEB

Monthly component volumes



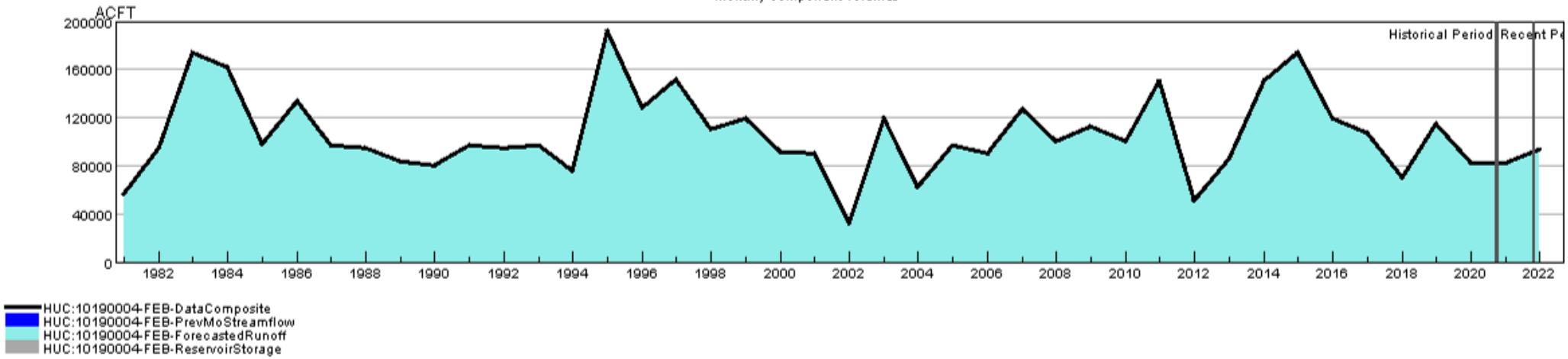
HUC 10190003 (Middle South Platte-Cherry Creek) SWSI Values - FEB

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



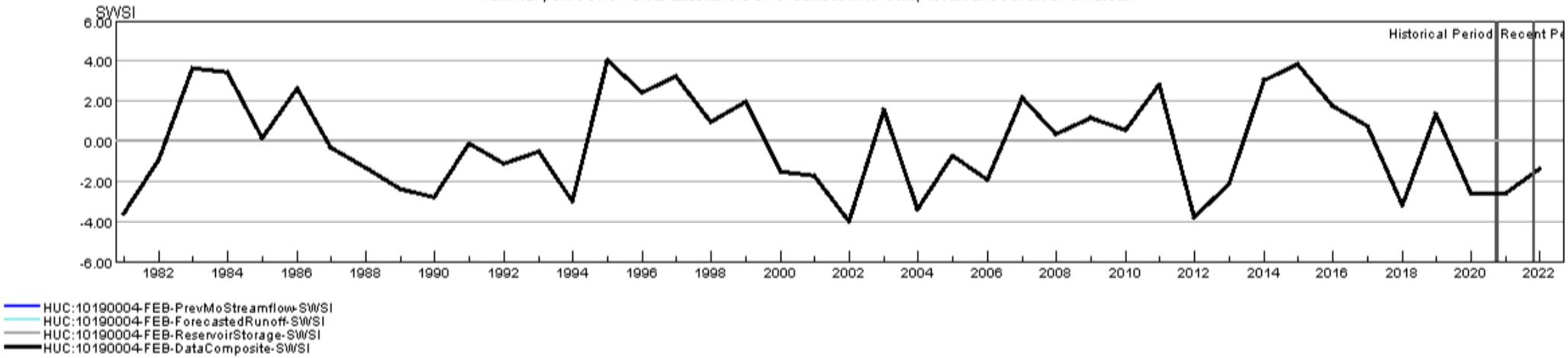
HUC 10190004 (Clear) Surface Water Supply - FEB

Monthly component volumes



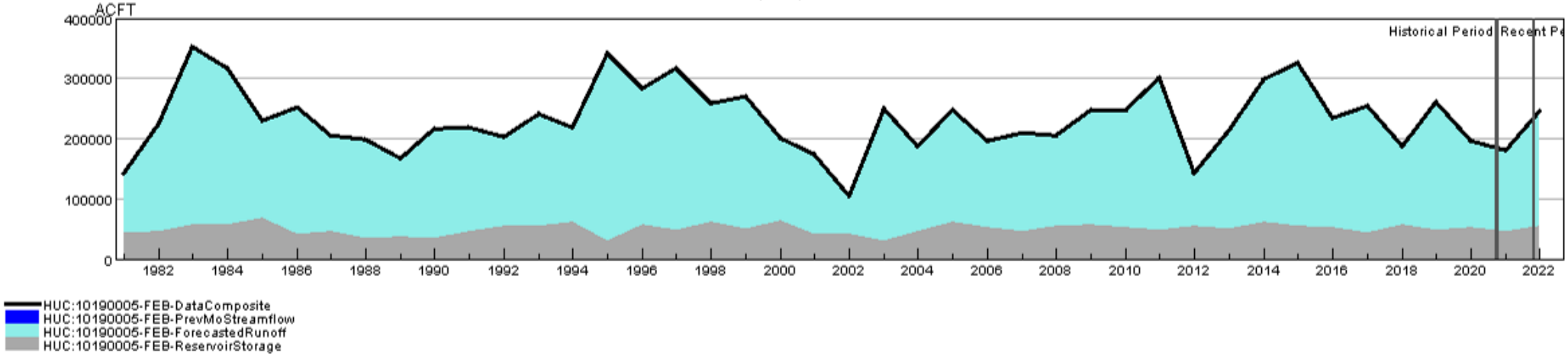
HUC 10190004 (Clear) SWSI Values - FEB

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



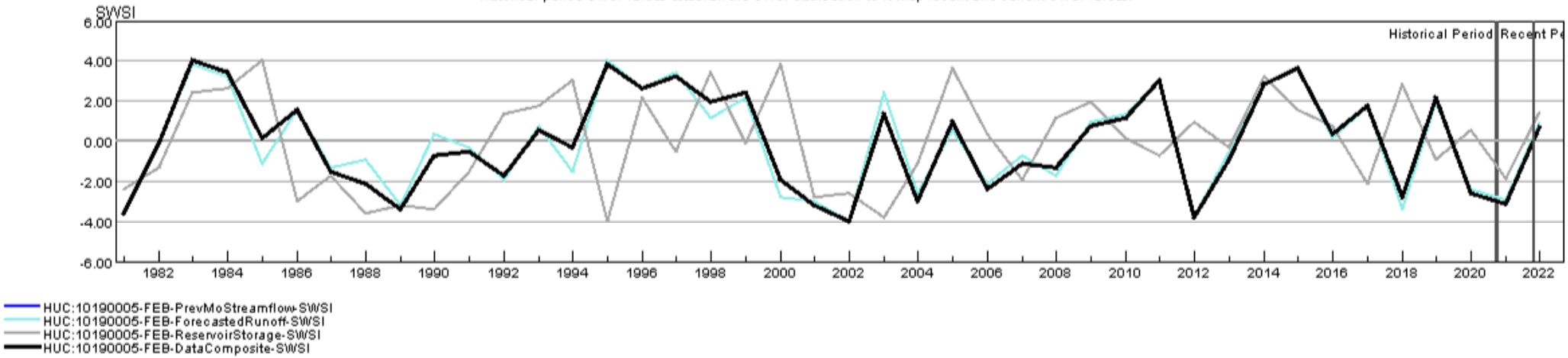
HUC 10190005 (St. Vrain) Surface Water Supply - FEB

Monthly component volumes



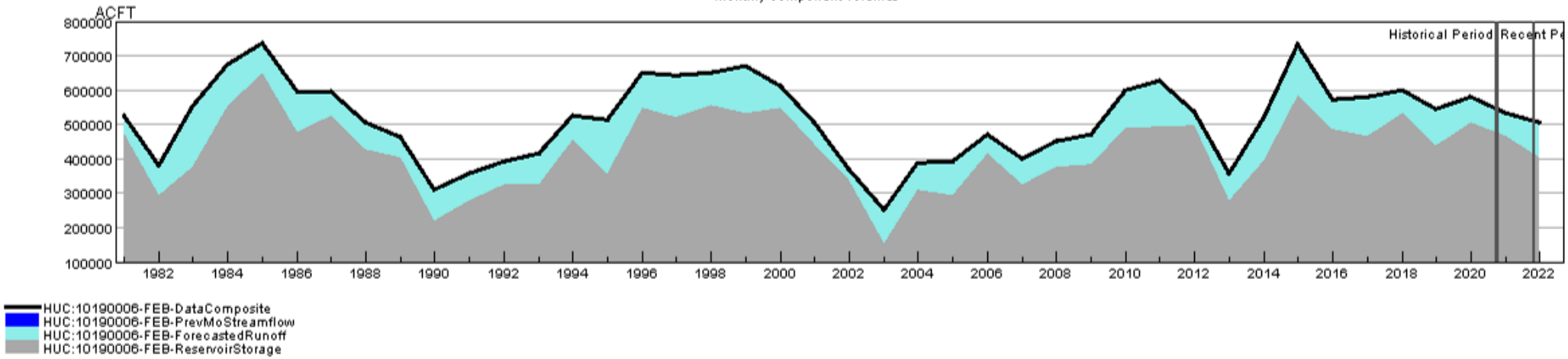
HUC 10190005 (St. Vrain) SWSI Values - FEB

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



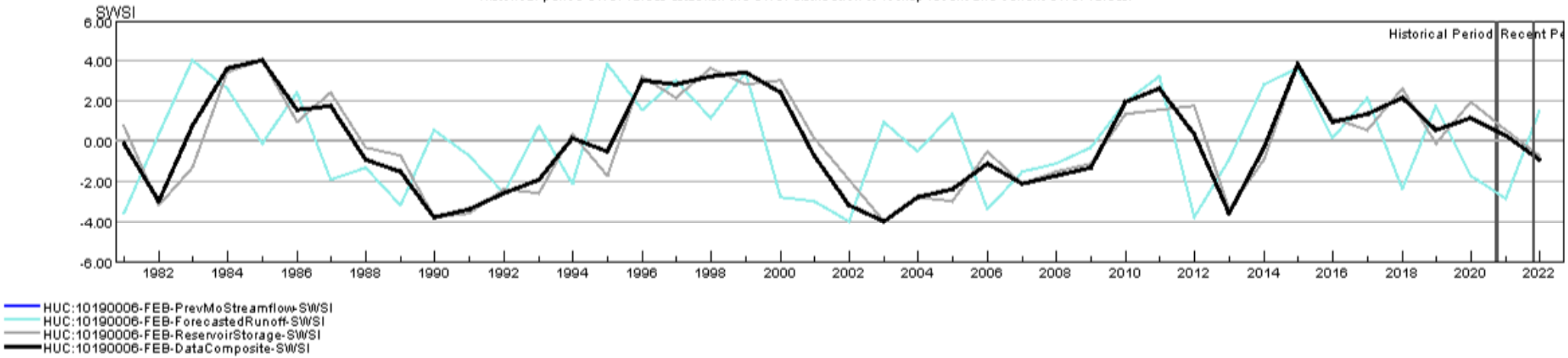
HUC 10190006 (Big Thompson) Surface Water Supply - FEB

Monthly component volumes



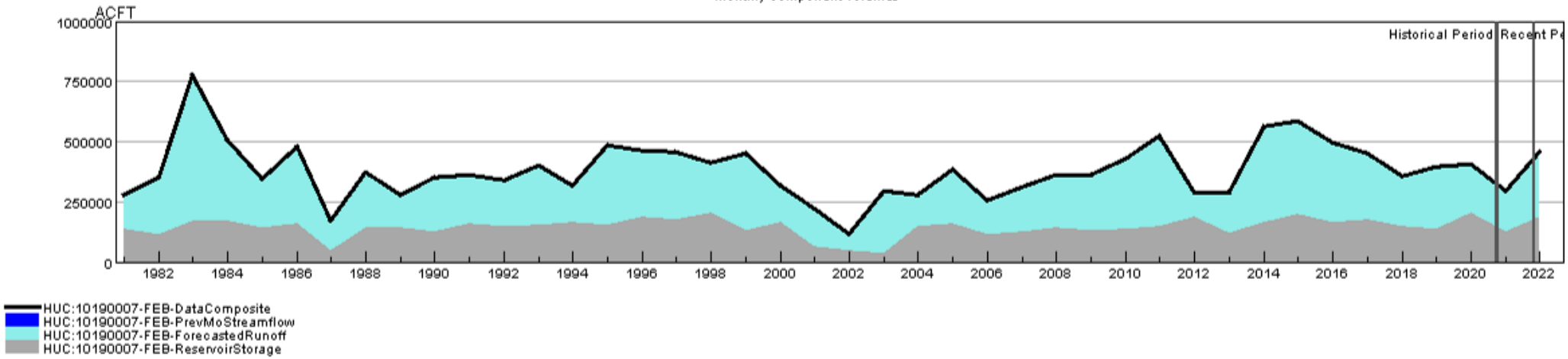
HUC 10190006 (Big Thompson) SWSI Values - FEB

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



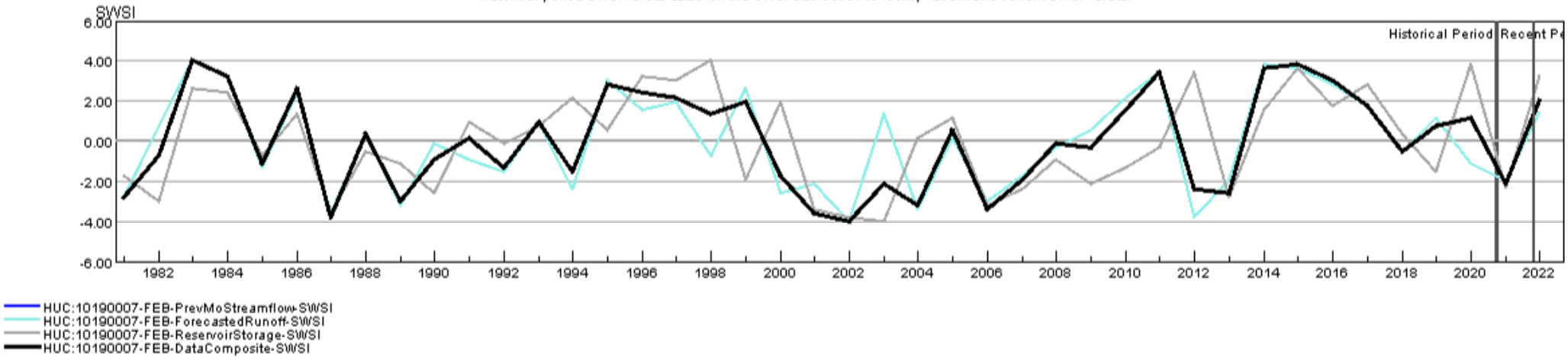
HUC 10190007 (Cache La Poudre) Surface Water Supply - FEB

Monthly component volumes



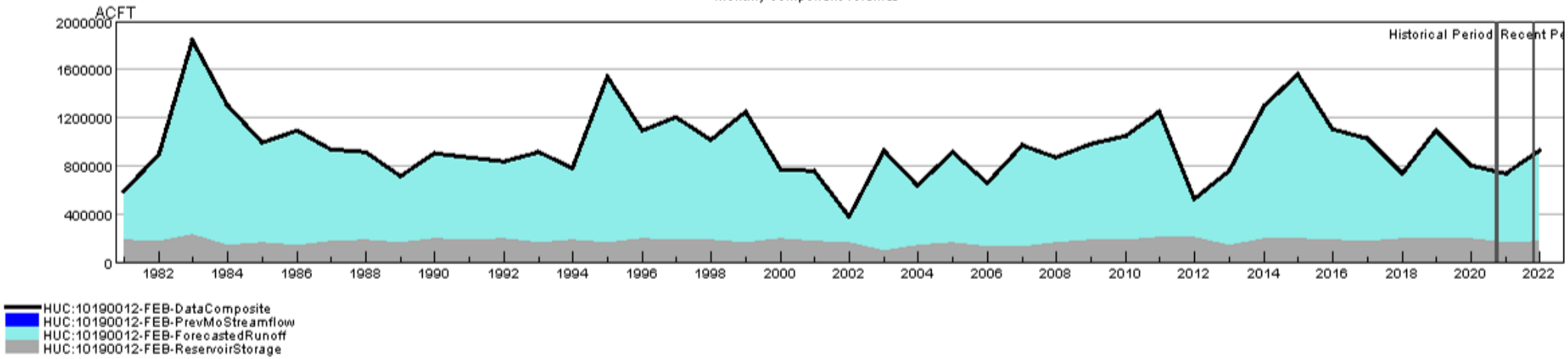
HUC 10190007 (Cache La Poudre) SWSI Values - FEB

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



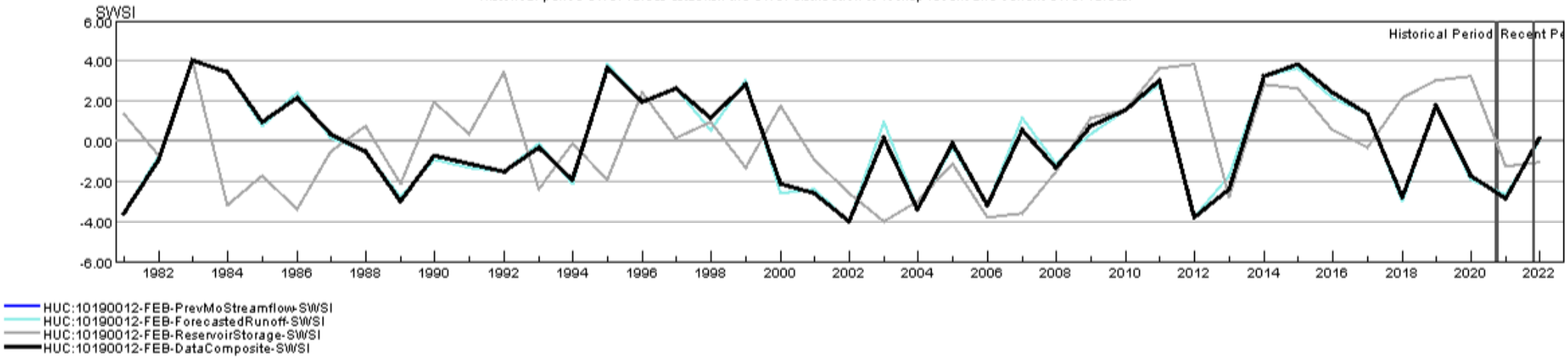
HUC 10190012 (Middle South Platte-Sterling) Surface Water Supply - FEB

Monthly component volumes



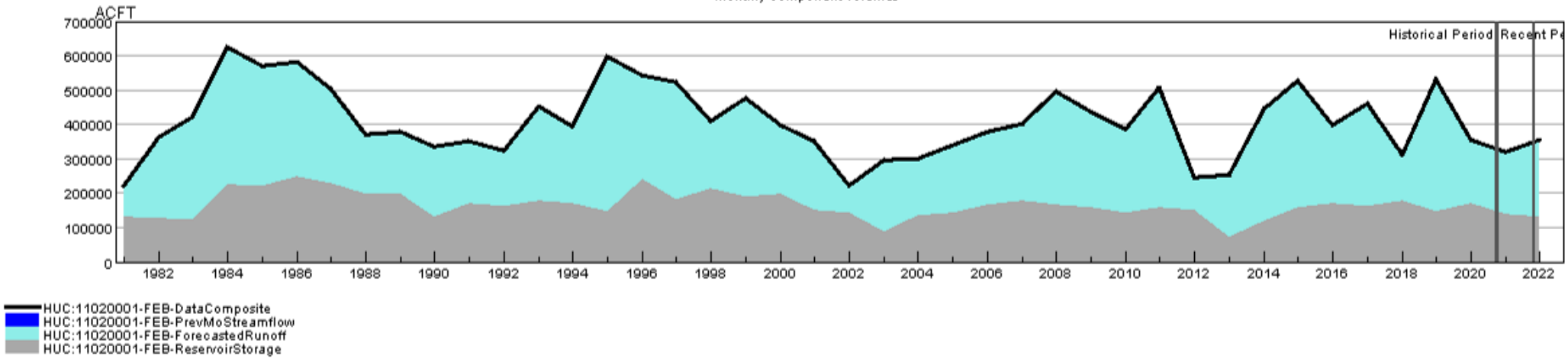
HUC 10190012 (Middle South Platte-Sterling) SWSI Values - FEB

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



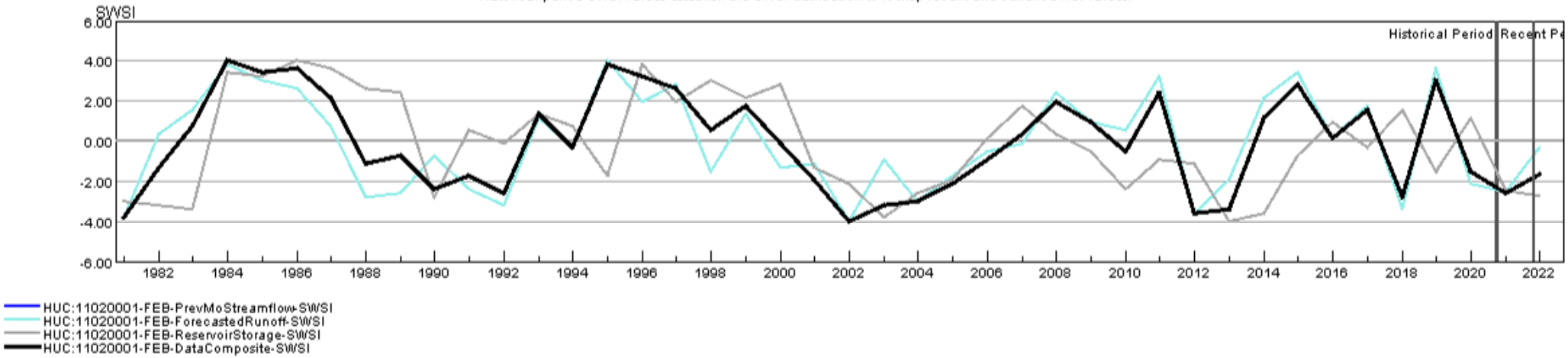
HUC 11020001 (Arkansas Headwaters) Surface Water Supply - FEB

Monthly component volumes



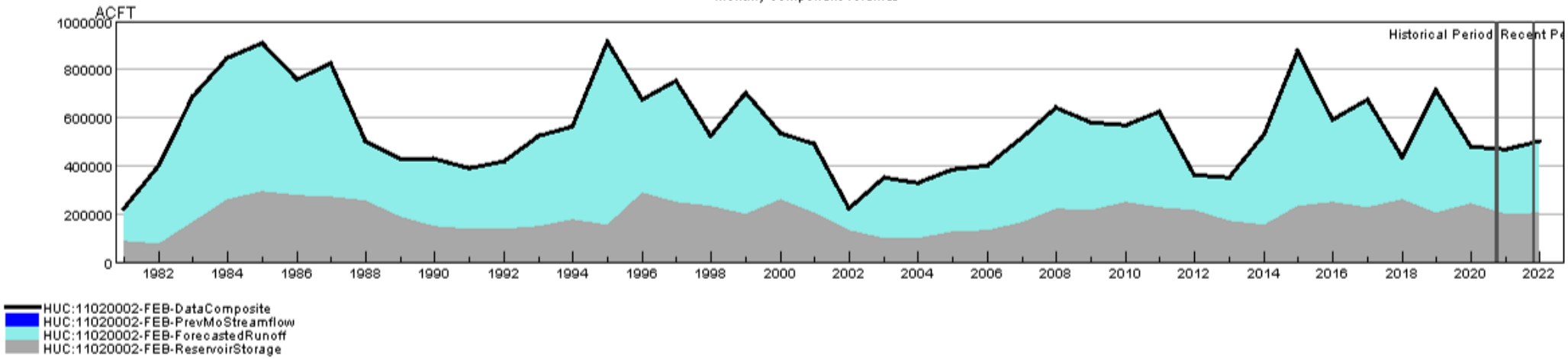
HUC 11020001 (Arkansas Headwaters) SWSI Values - FEB

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



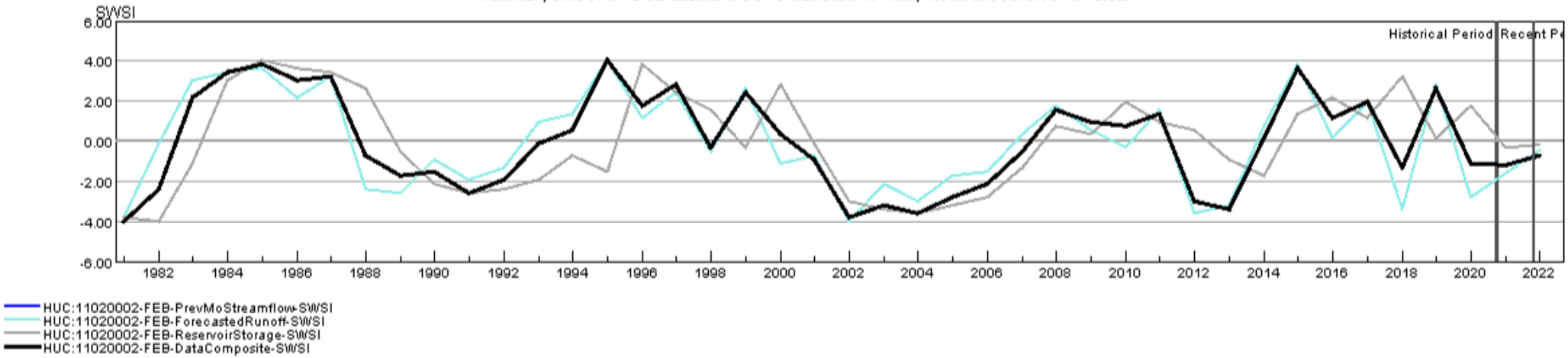
HUC 11020002 (Upper Arkansas) Surface Water Supply - FEB

Monthly component volumes



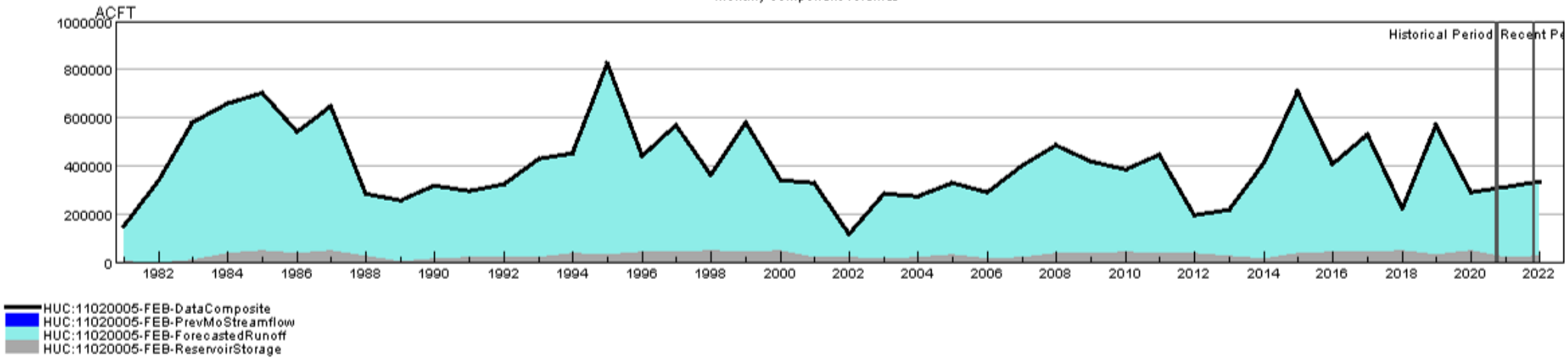
HUC 11020002 (Upper Arkansas) SWSI Values - FEB

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



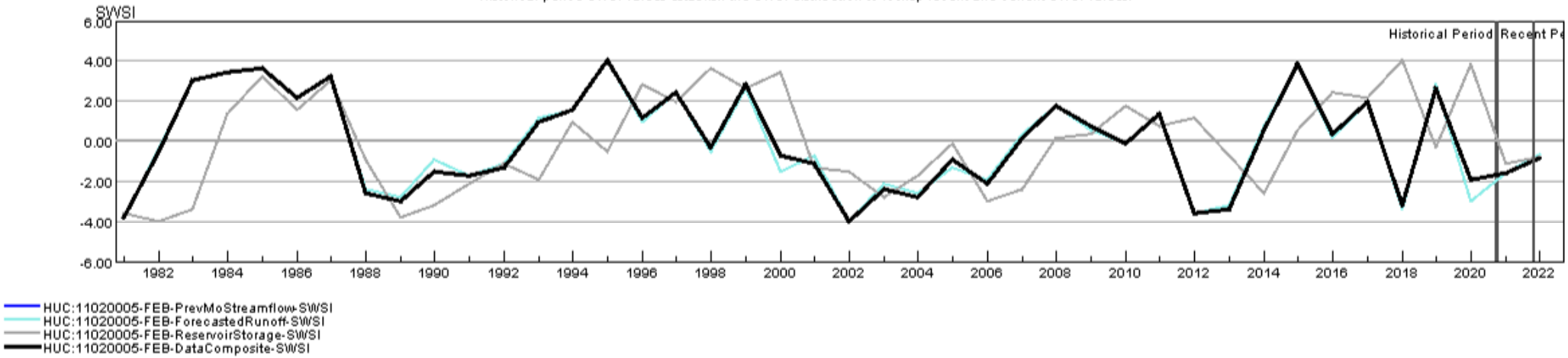
HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply - FEB

Monthly component volumes



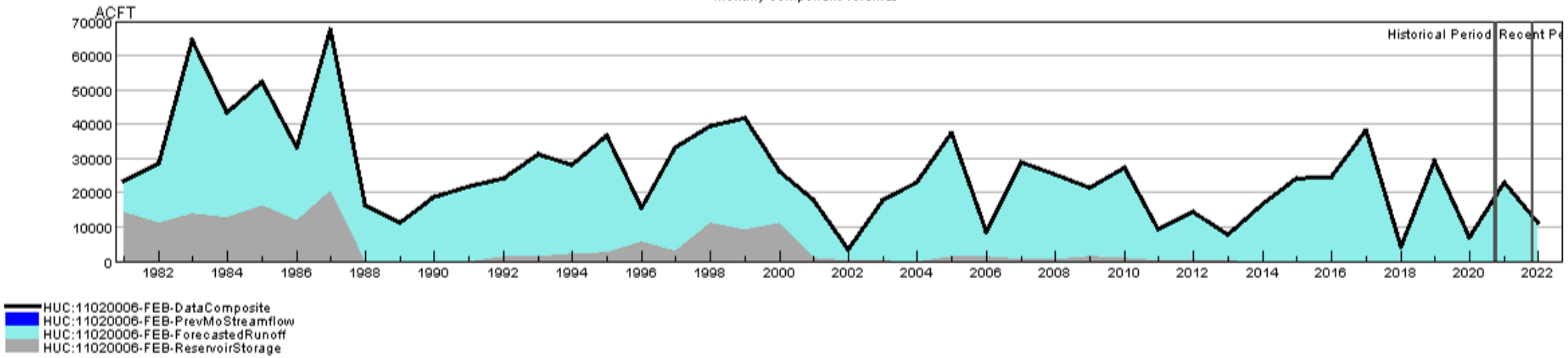
HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI Values - FEB

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



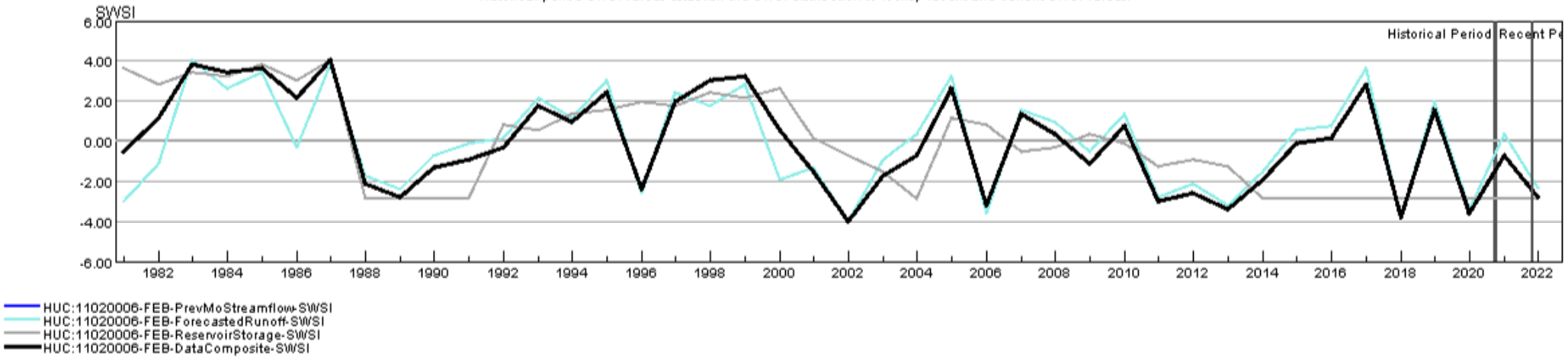
HUC 11020006 (Huerfano) Surface Water Supply - FEB

Monthly component volumes



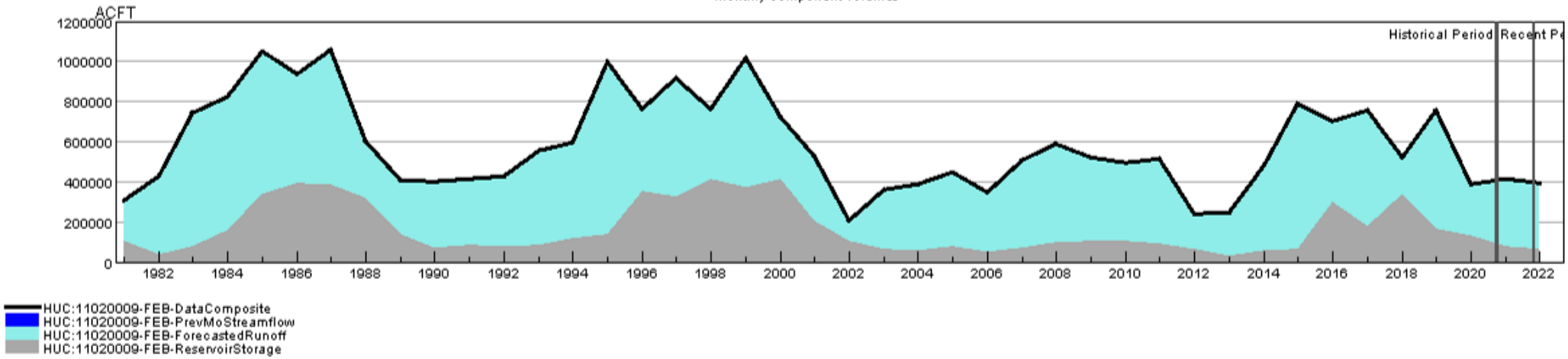
HUC 11020006 (Huerfano) SWSI Values - FEB

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



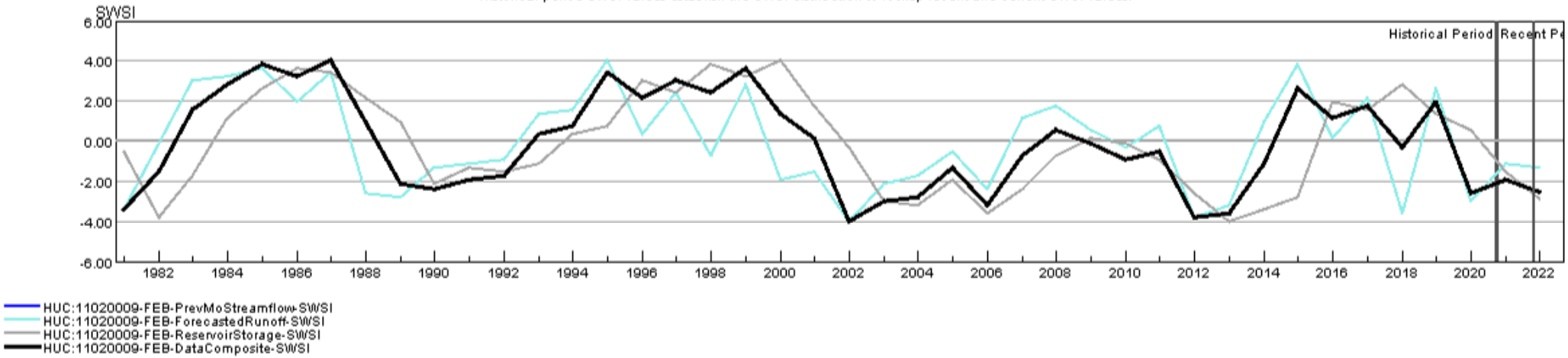
HUC 11020009 (Upper Arkansas-John Martin Reservoir) Surface Water Supply - FEB

Monthly component volumes



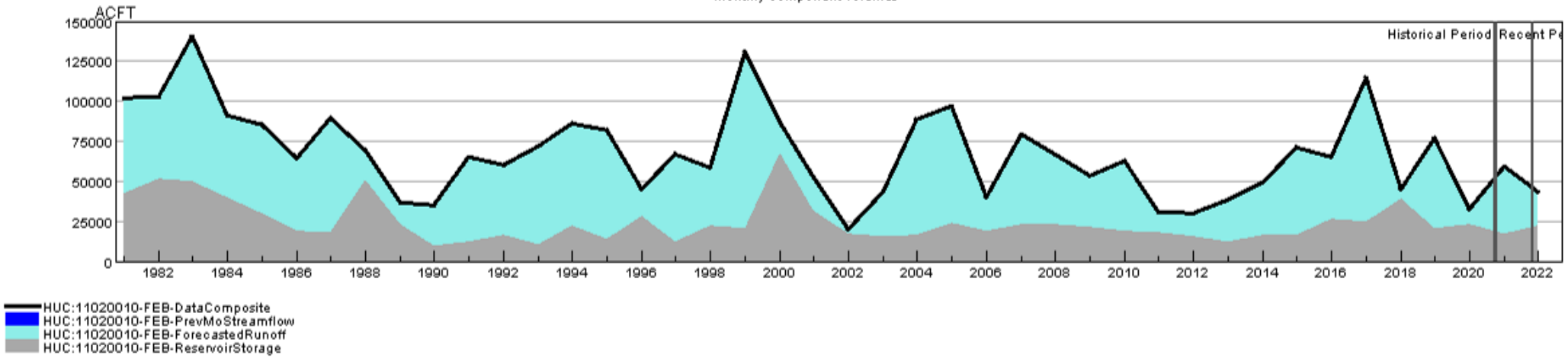
HUC 11020009 (Upper Arkansas-John Martin Reservoir) SWSI Values - FEB

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



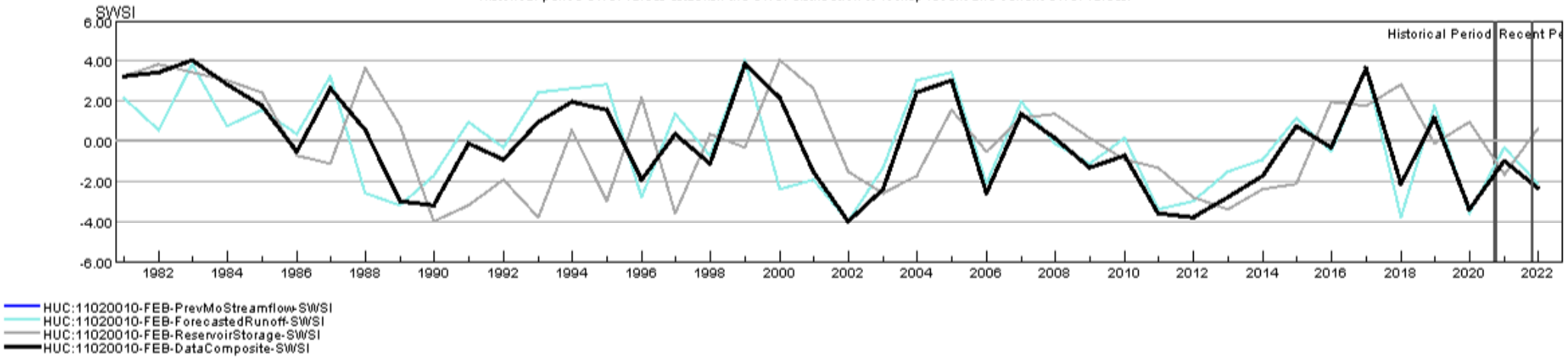
HUC 11020010 (Purgatoire) Surface Water Supply - FEB

Monthly component volumes



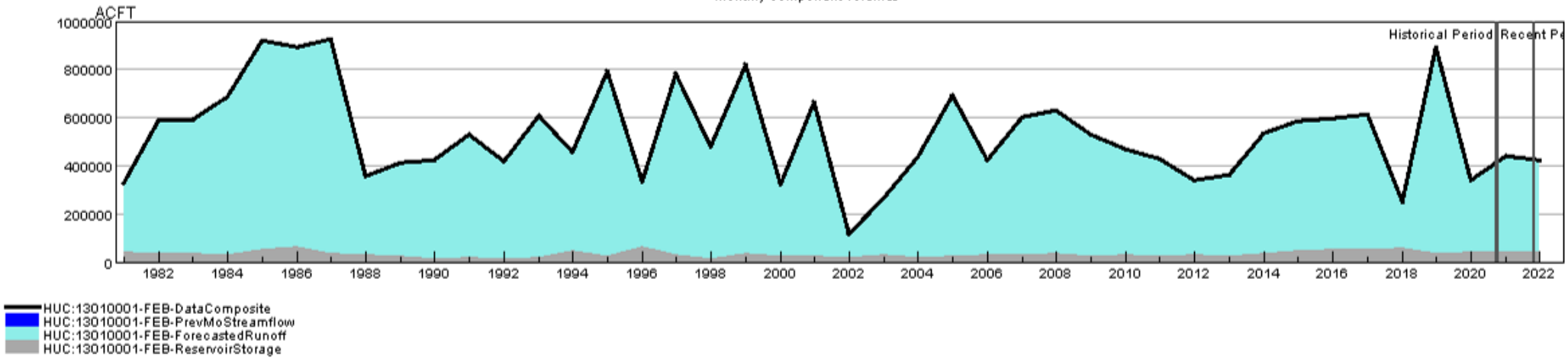
HUC 11020010 (Purgatoire) SWSI Values - FEB

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



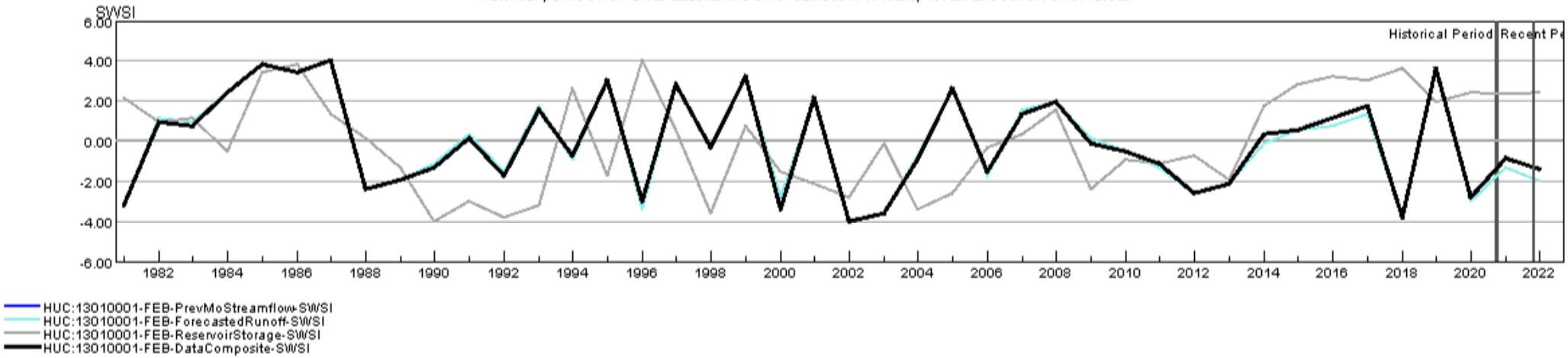
HUC 13010001 (Rio Grande Headwaters) Surface Water Supply - FEB

Monthly component volumes



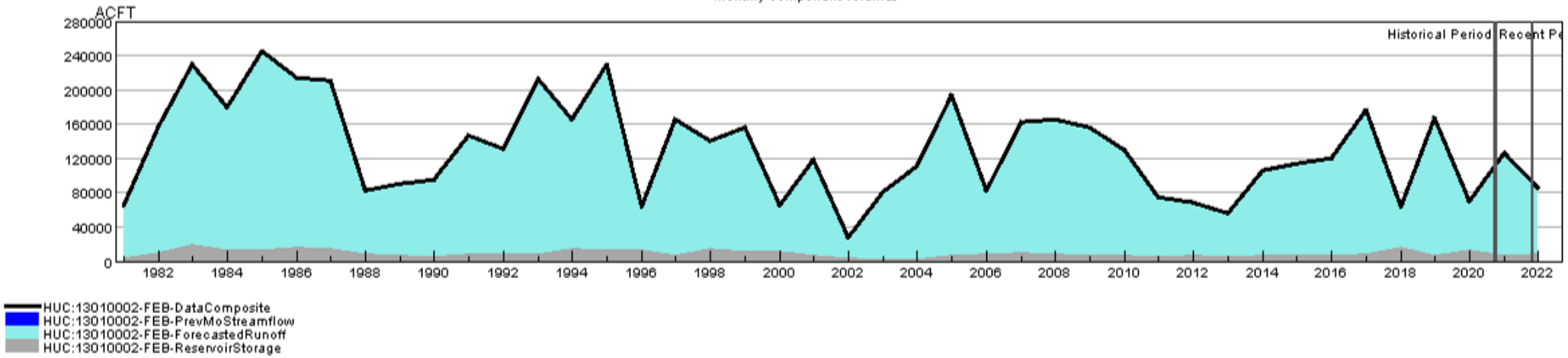
HUC 13010001 (Rio Grande Headwaters) SWSI Values - FEB

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



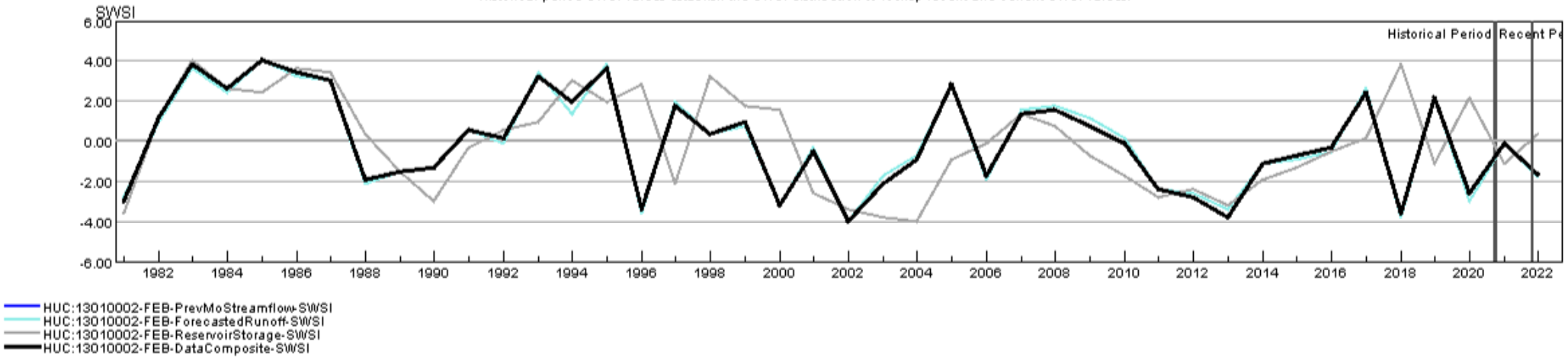
HUC 13010002 (Alamosa-Trinchera) Surface Water Supply - FEB

Monthly component volumes



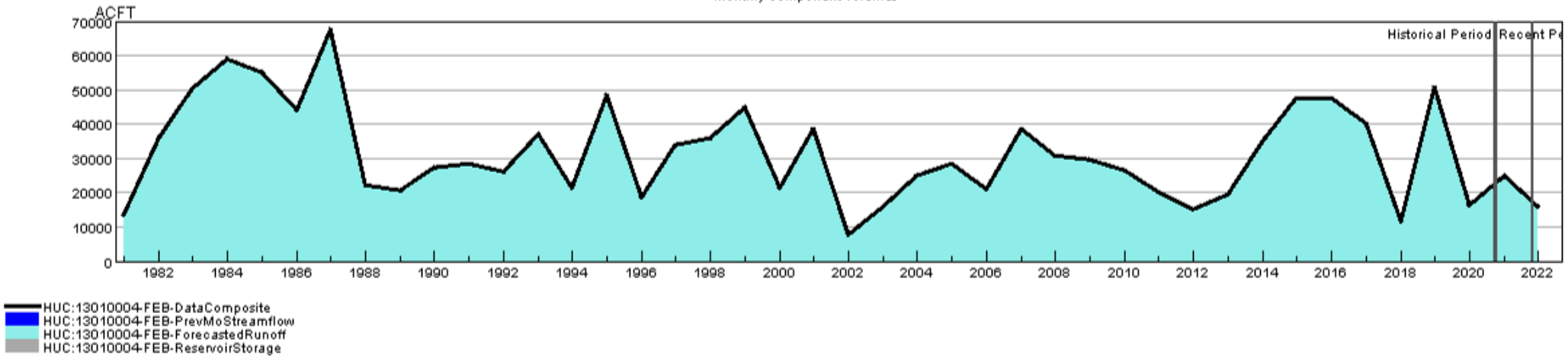
HUC 13010002 (Alamosa-Trinchera) SWSI Values - FEB

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



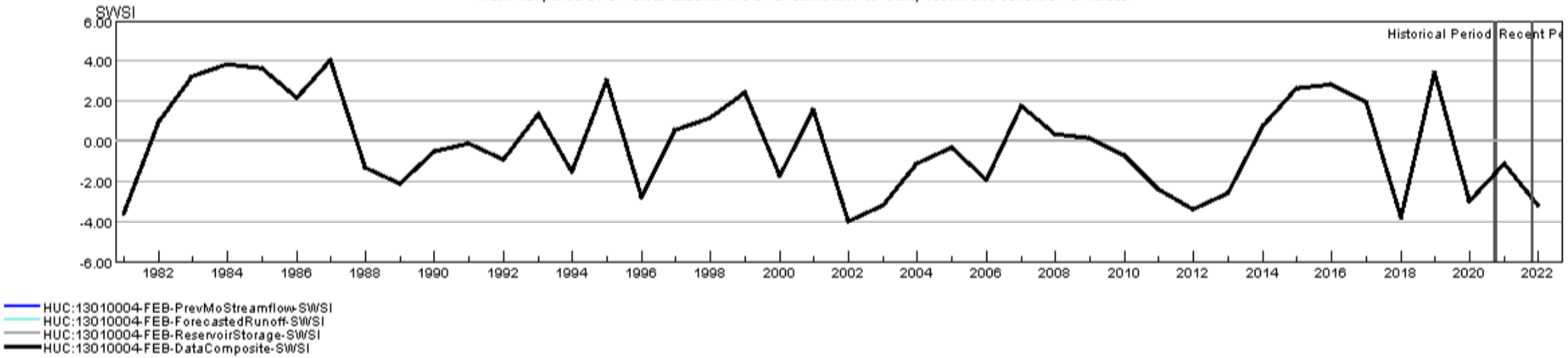
HUC 13010004 (Saguache) Surface Water Supply - FEB

Monthly component volumes



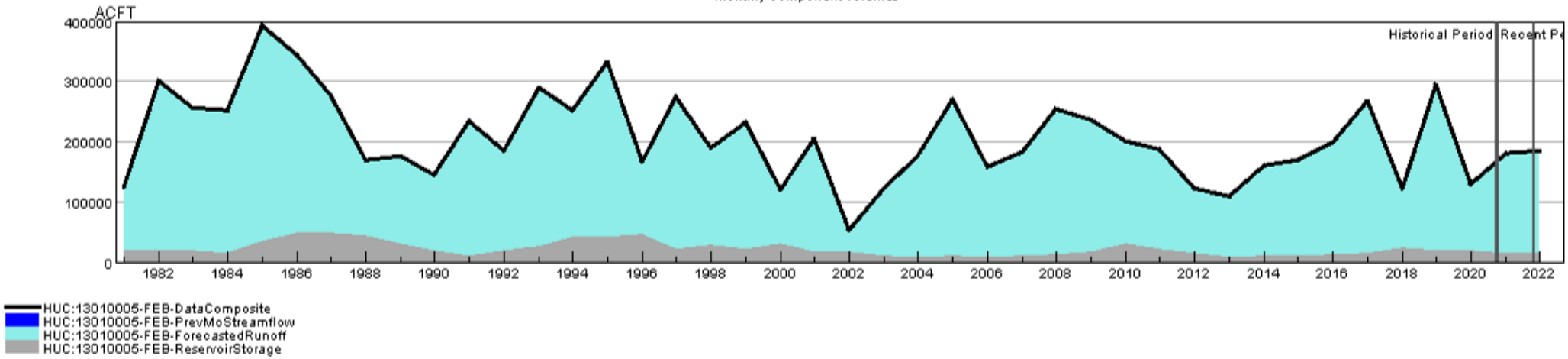
HUC 13010004 (Saguache) SWSI Values - FEB

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



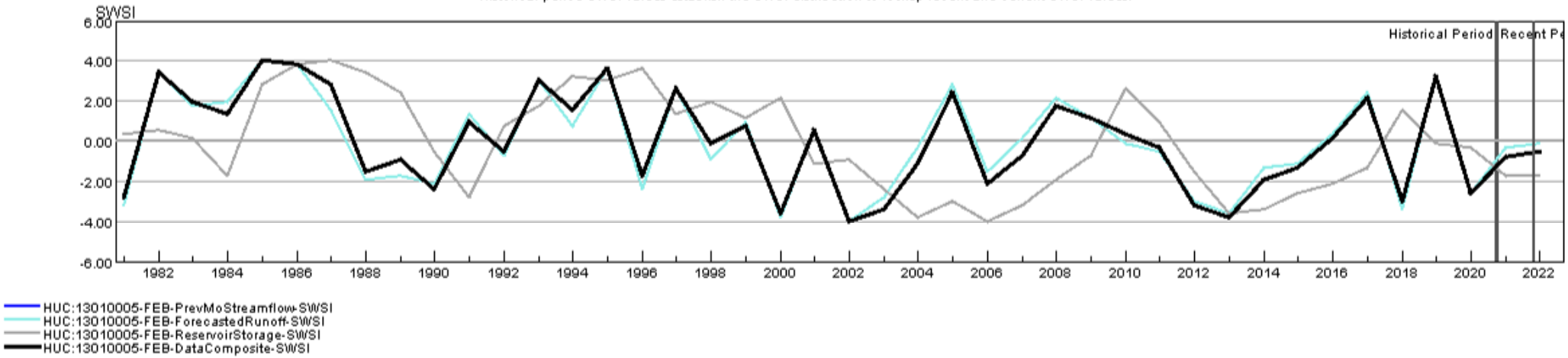
HUC 13010005 (Conejos) Surface Water Supply - FEB

Monthly component volumes



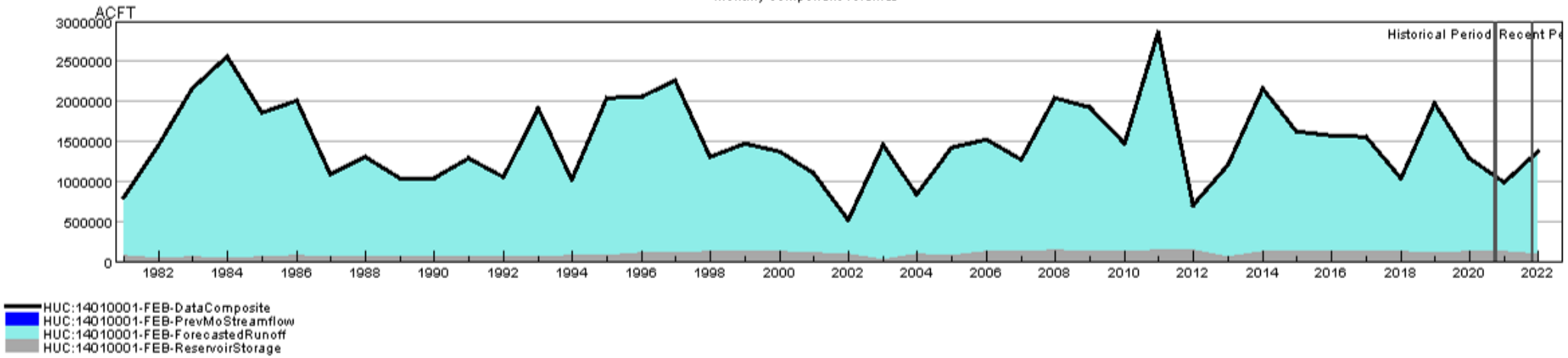
HUC 13010005 (Conejos) SWSI Values - FEB

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



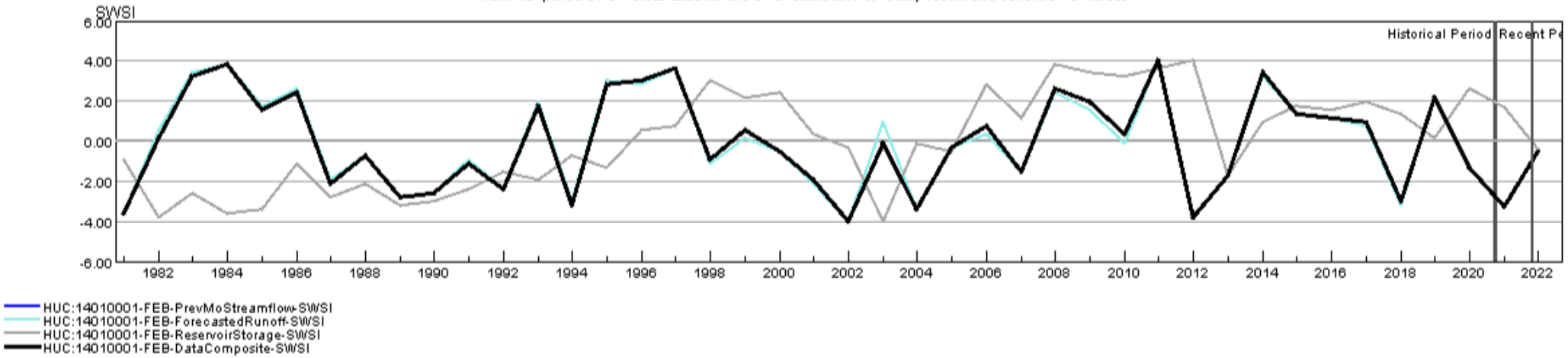
HUC 14010001 (Colorado Headwaters) Surface Water Supply - FEB

Monthly component volumes



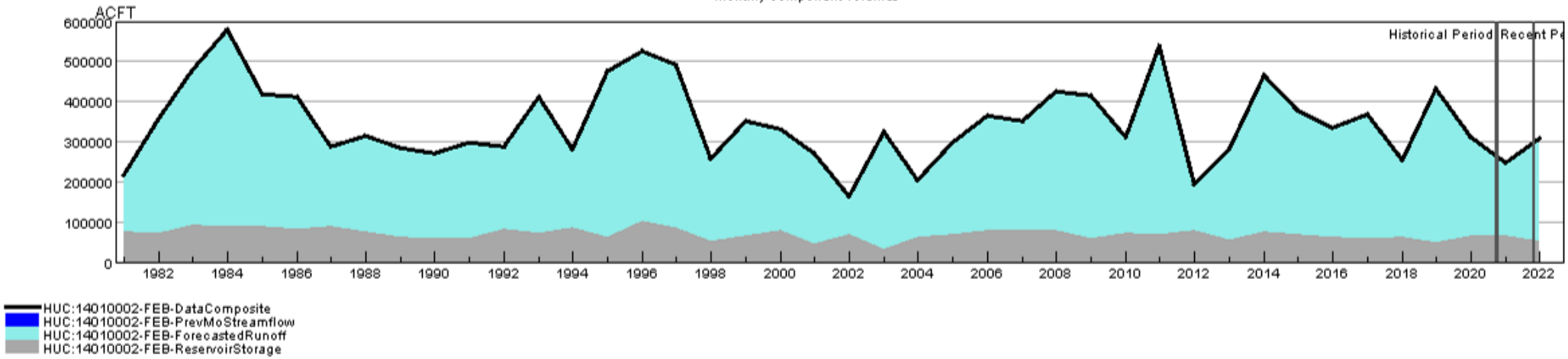
HUC 14010001 (Colorado Headwaters) SWSI Values - FEB

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



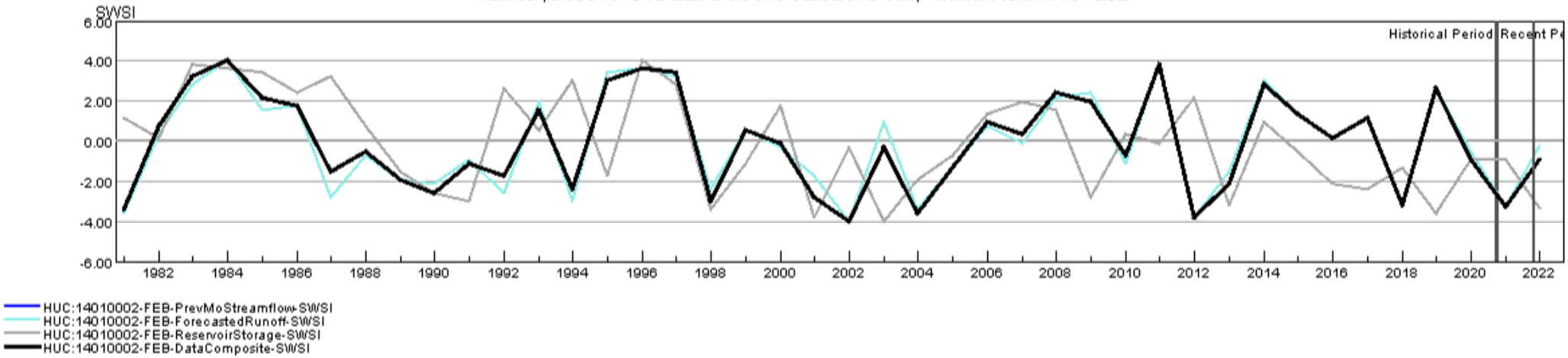
HUC 14010002 (Blue) Surface Water Supply - FEB

Monthly component volumes



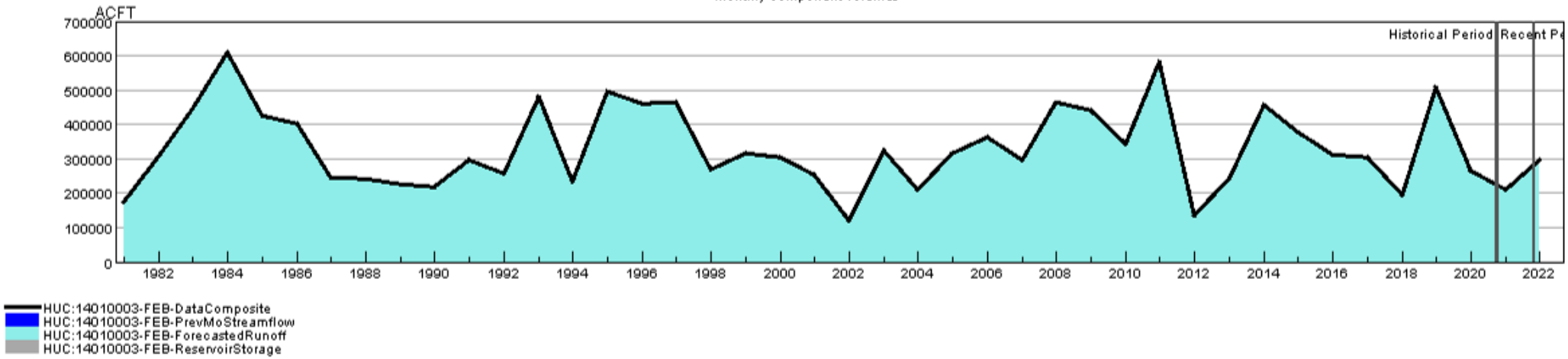
HUC 14010002 (Blue) SWSI Values - FEB

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



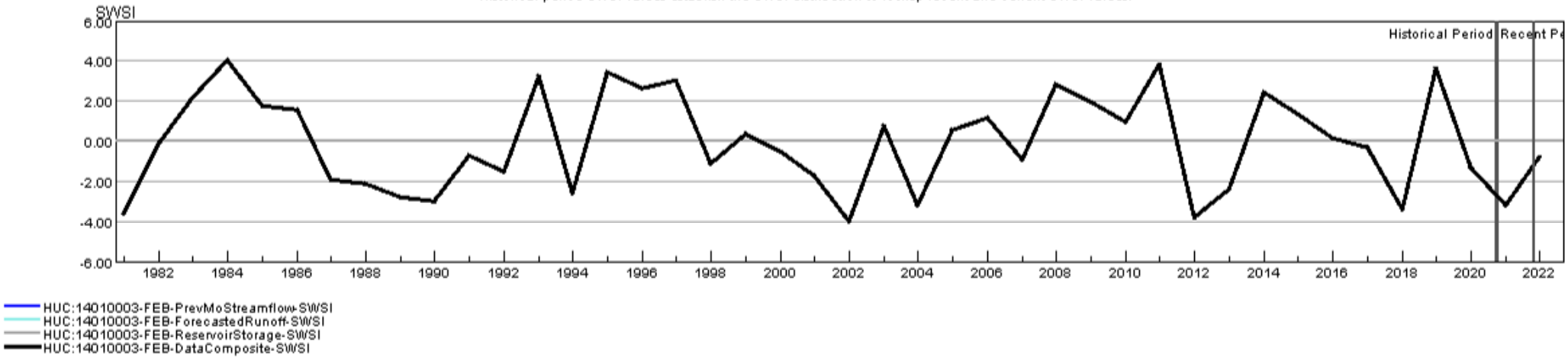
HUC 14010003 (Eagle) Surface Water Supply - FEB

Monthly component volumes



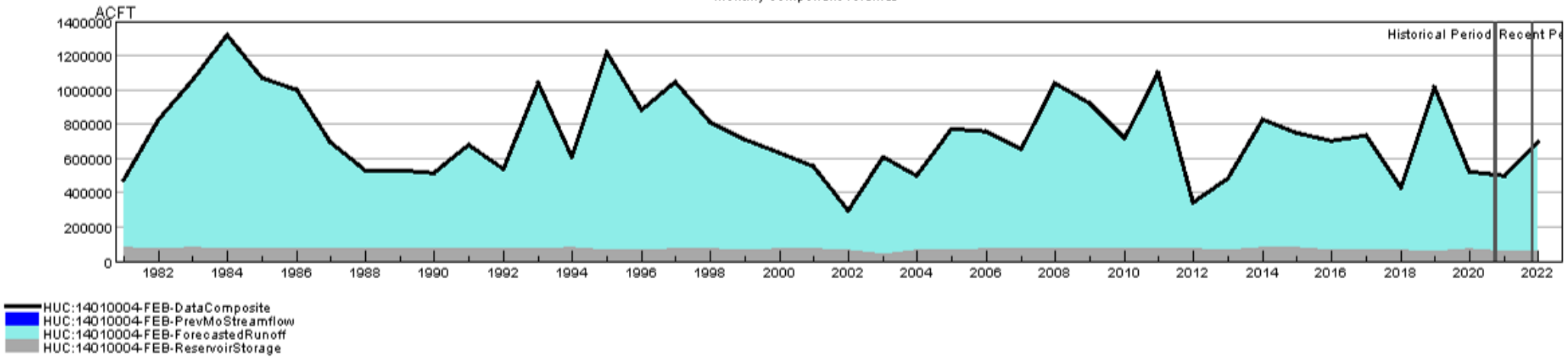
HUC 14010003 (Eagle) SWSI Values - FEB

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



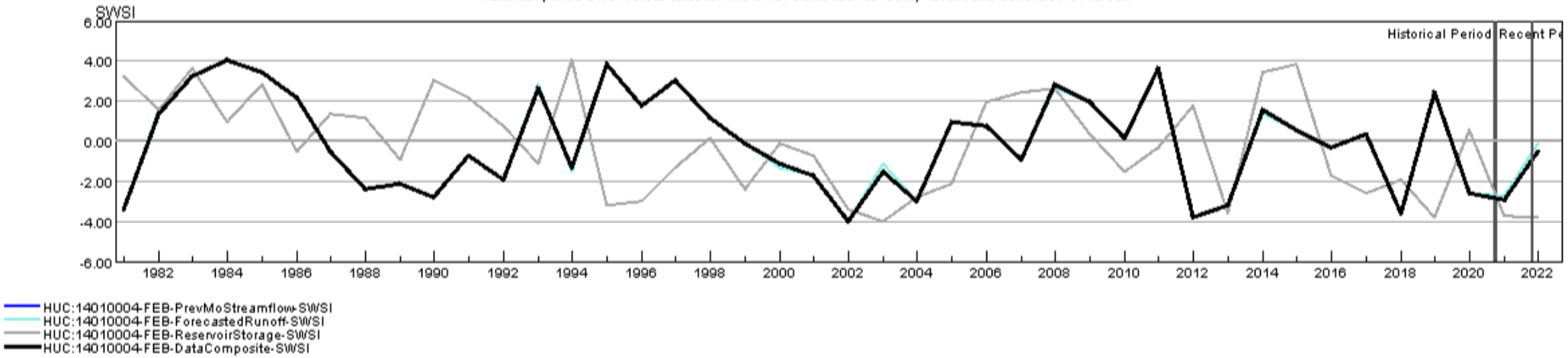
HUC 14010004 (Roaring Fork) Surface Water Supply - FEB

Monthly component volumes



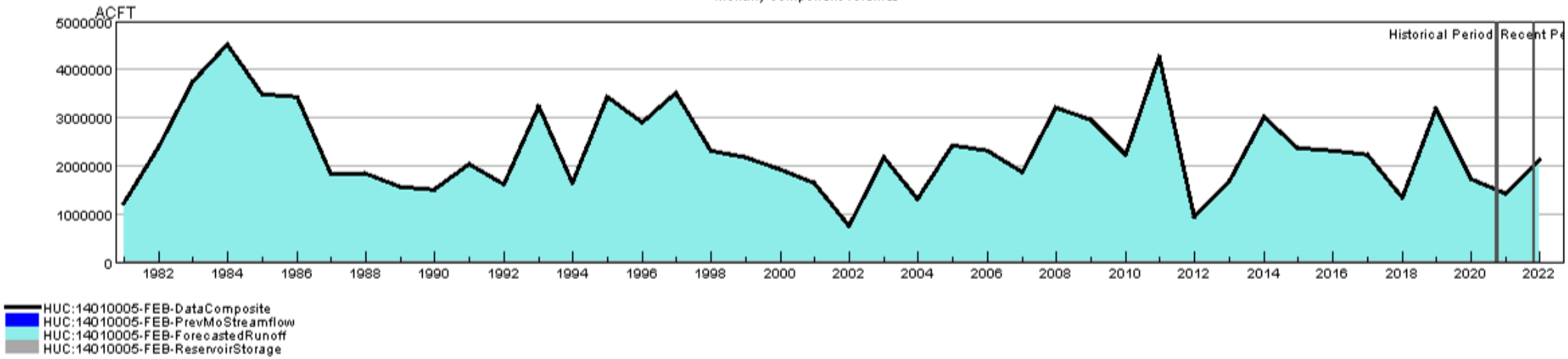
HUC 14010004 (Roaring Fork) SWSI Values - FEB

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



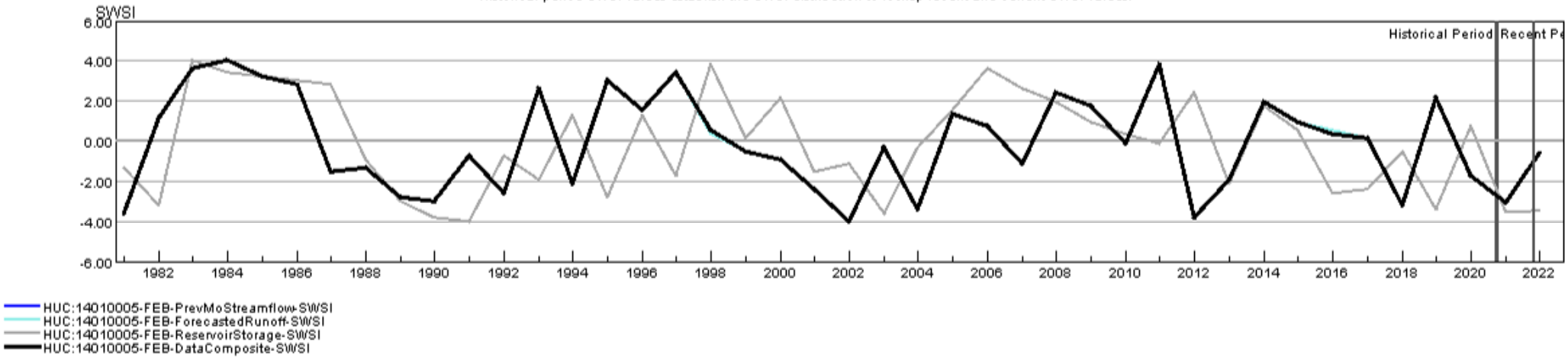
HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply - FEB

Monthly component volumes



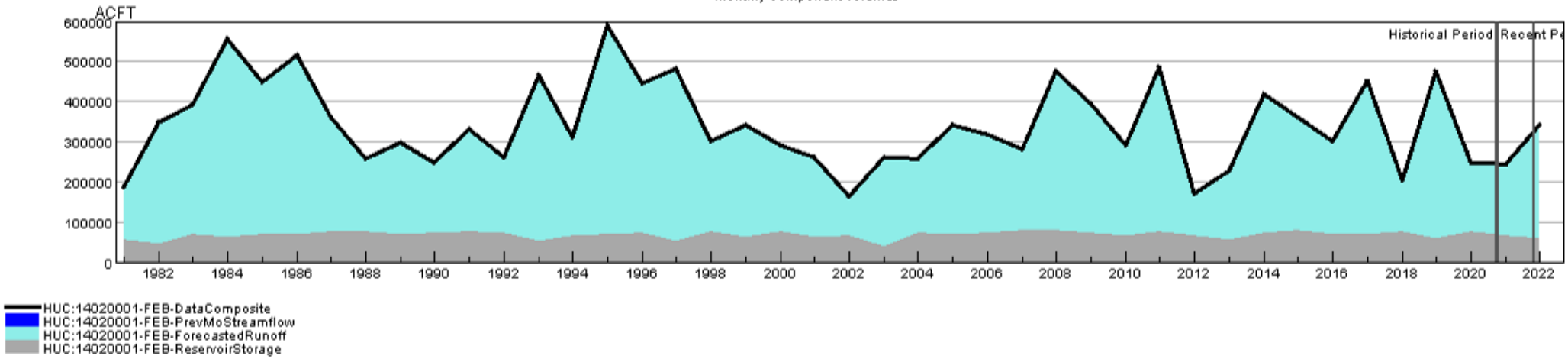
HUC 14010005 (Colorado Headwaters-Plateau) SWSI Values - FEB

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



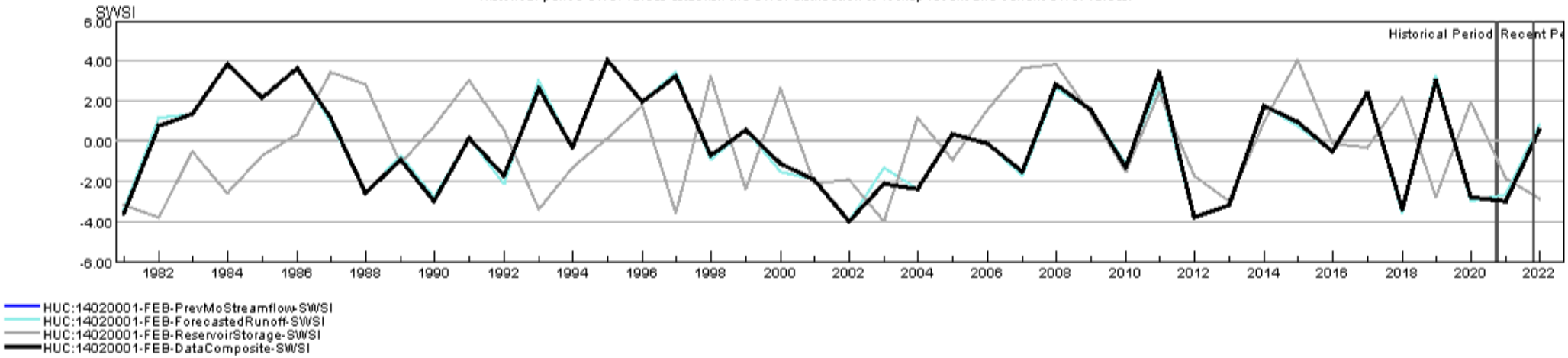
HUC 14020001 (East-Taylor) Surface Water Supply - FEB

Monthly component volumes



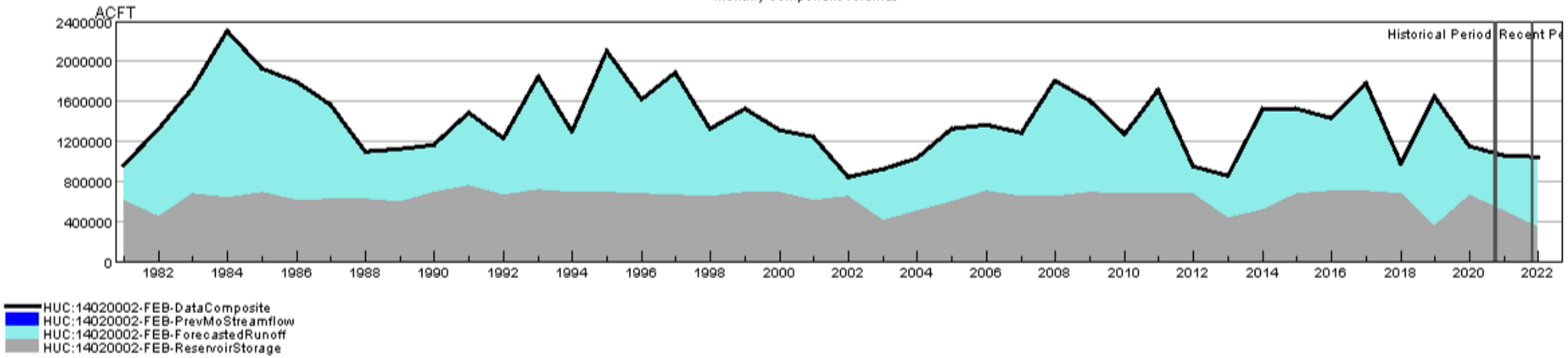
HUC 14020001 (East-Taylor) SWSI Values - FEB

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



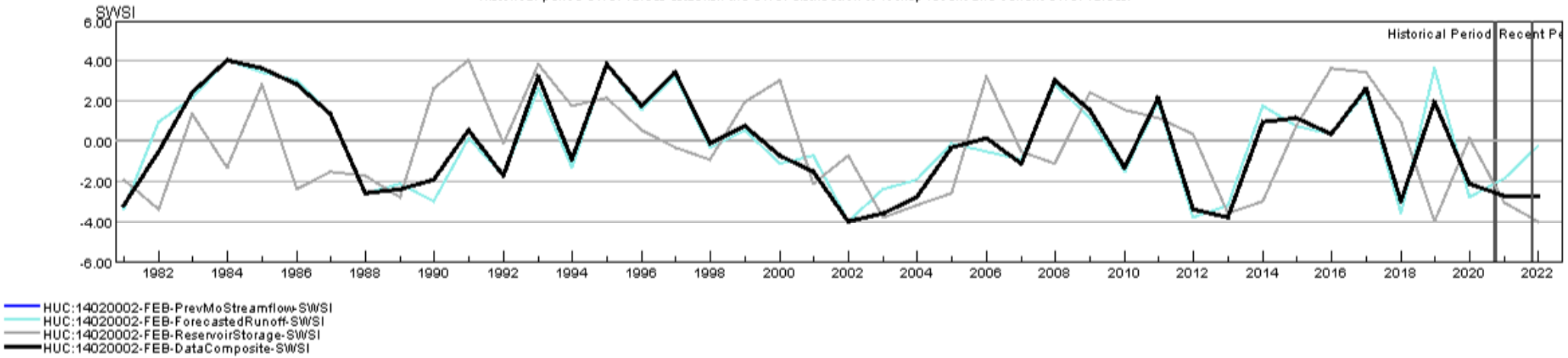
HUC 14020002 (Upper Gunnison) Surface Water Supply - FEB

Monthly component volumes



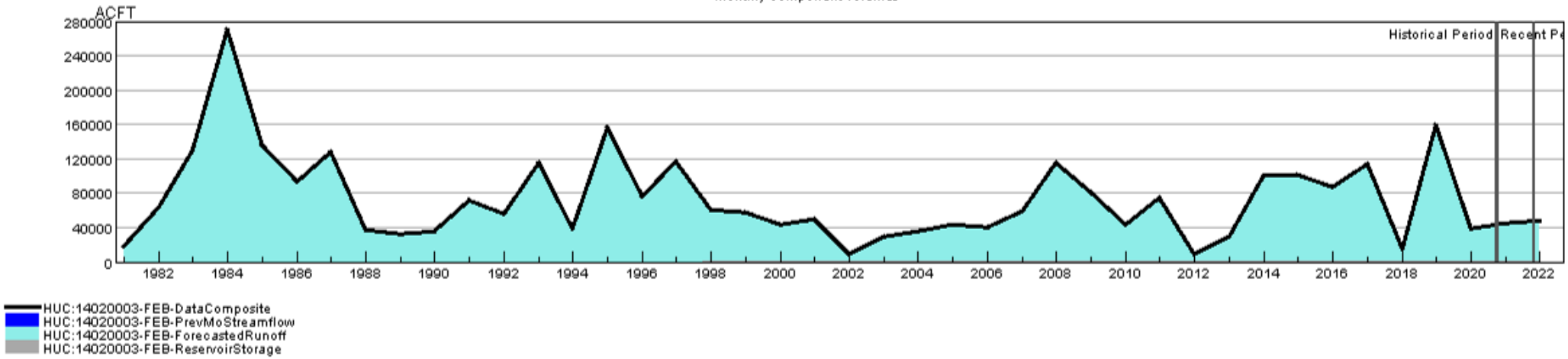
HUC 14020002 (Upper Gunnison) SWSI Values - FEB

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



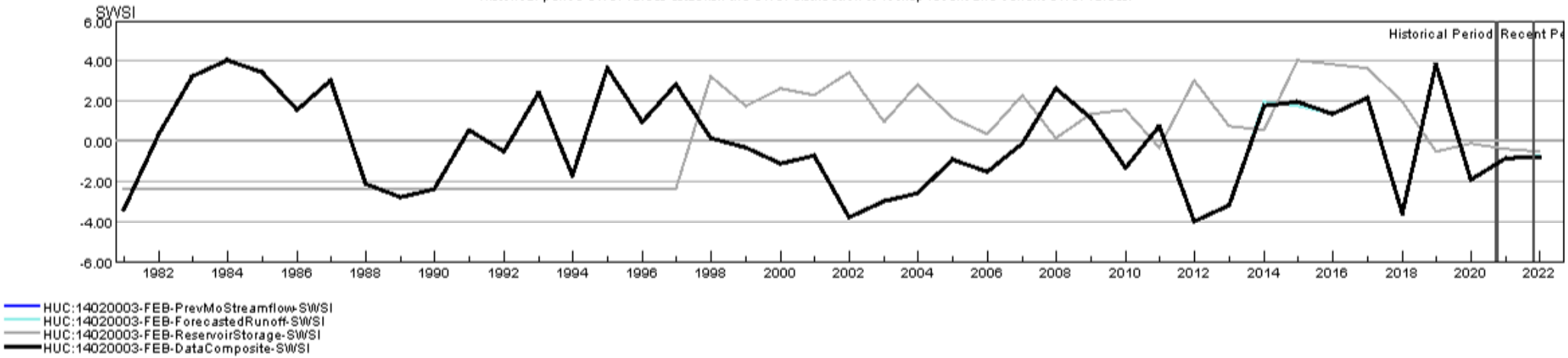
HUC 14020003 (Tomichi) Surface Water Supply - FEB

Monthly component volumes



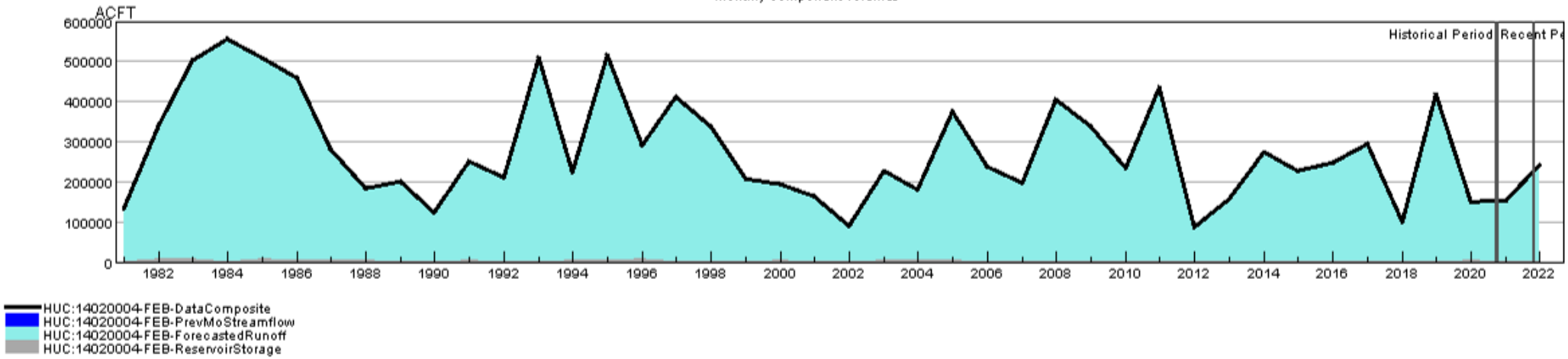
HUC 14020003 (Tomichi) SWSI Values - FEB

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



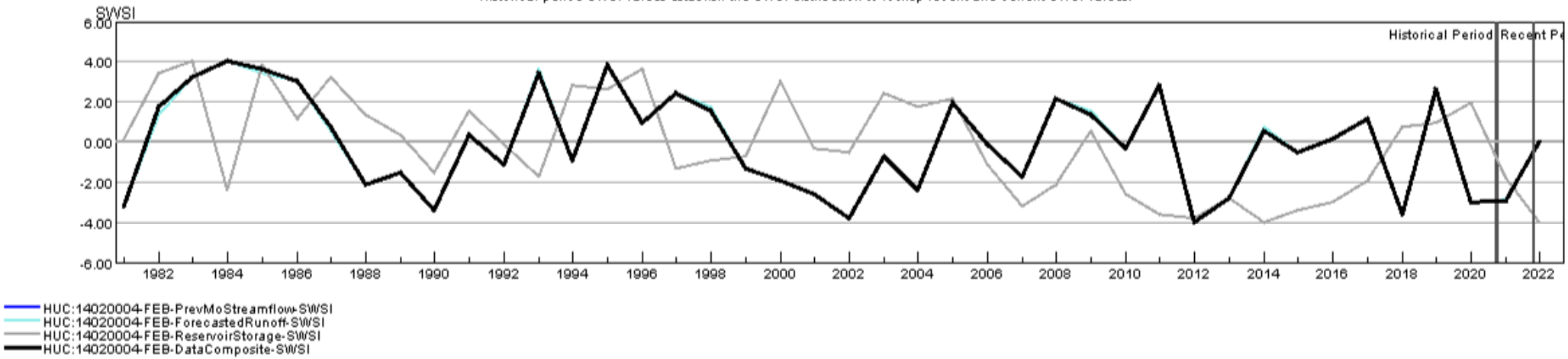
HUC 14020004 (North Fork Gunnison) Surface Water Supply - FEB

Monthly component volumes



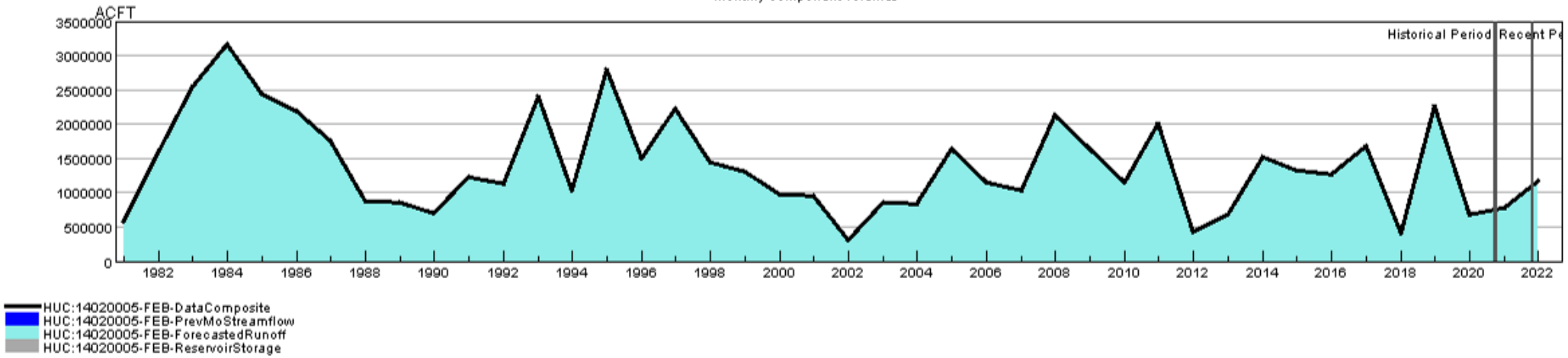
HUC 14020004 (North Fork Gunnison) SWSI Values - FEB

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



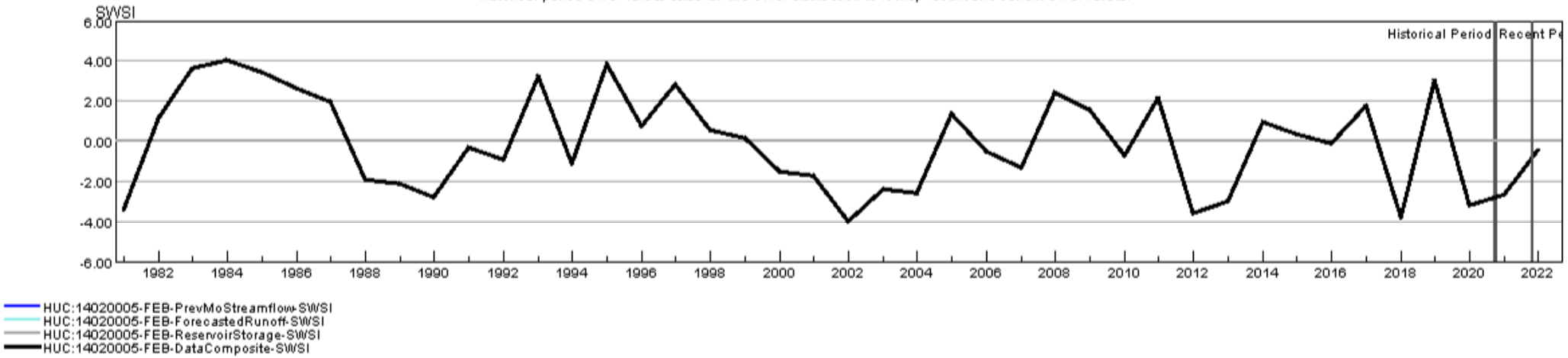
HUC 14020005 (Lower Gunnison) Surface Water Supply - FEB

Monthly component volumes



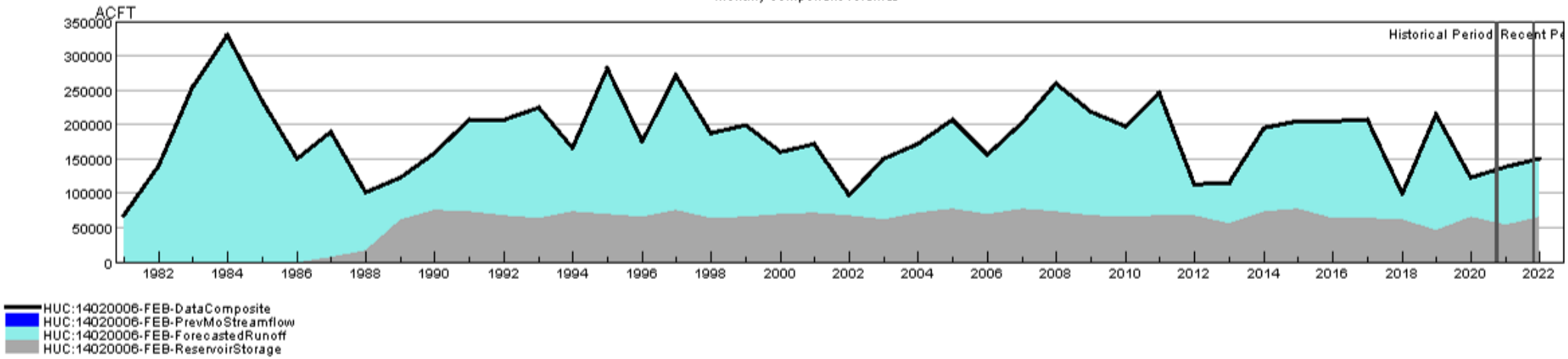
HUC 14020005 (Lower Gunnison) SWSI Values - FEB

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



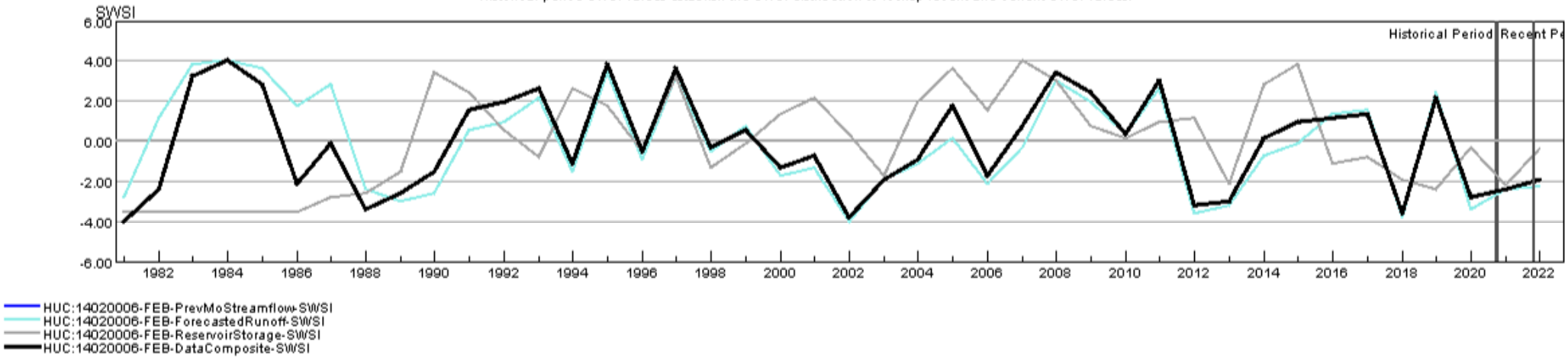
HUC 14020006 (Uncompahgre) Surface Water Supply - FEB

Monthly component volumes



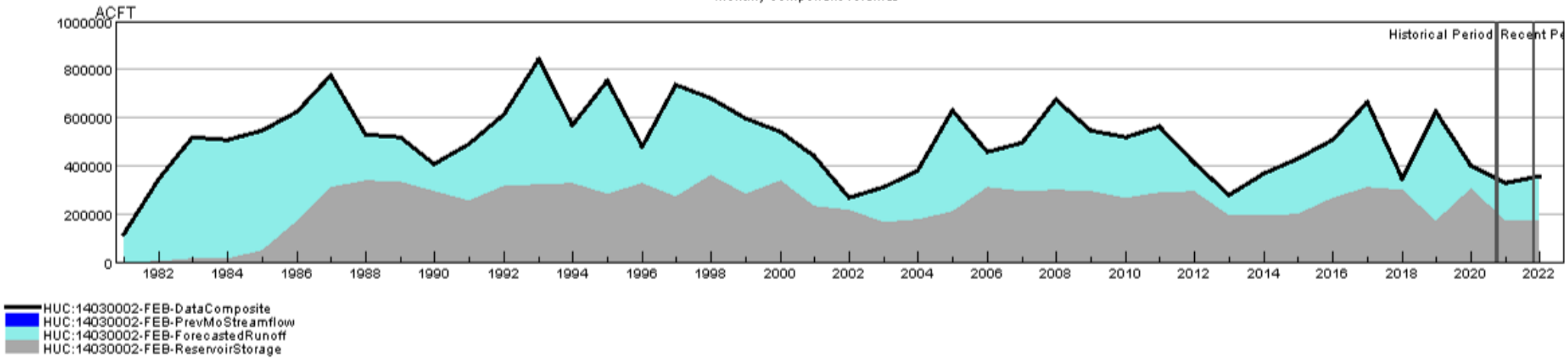
HUC 14020006 (Uncompahgre) SWSI Values - FEB

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



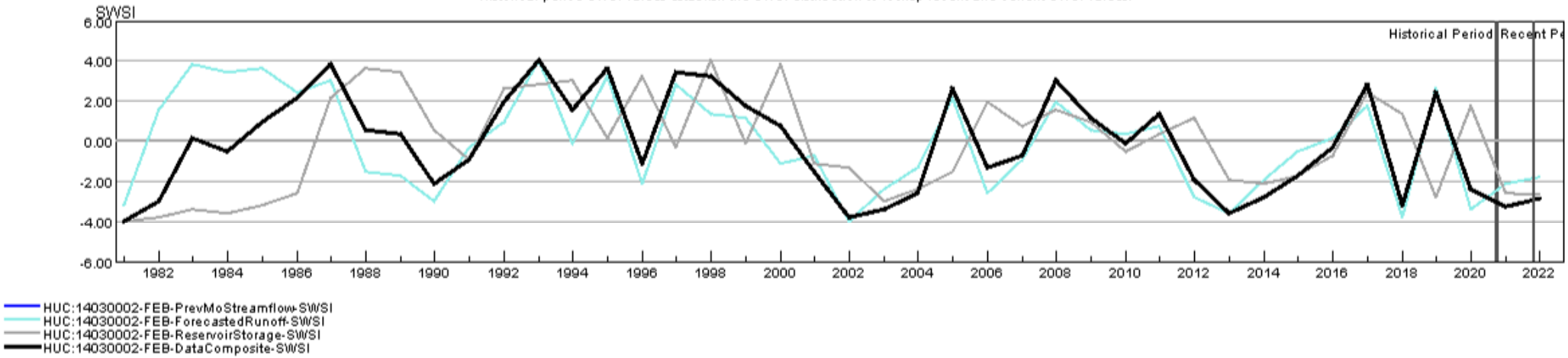
HUC 14030002 (Upper Dolores) Surface Water Supply - FEB

Monthly component volumes



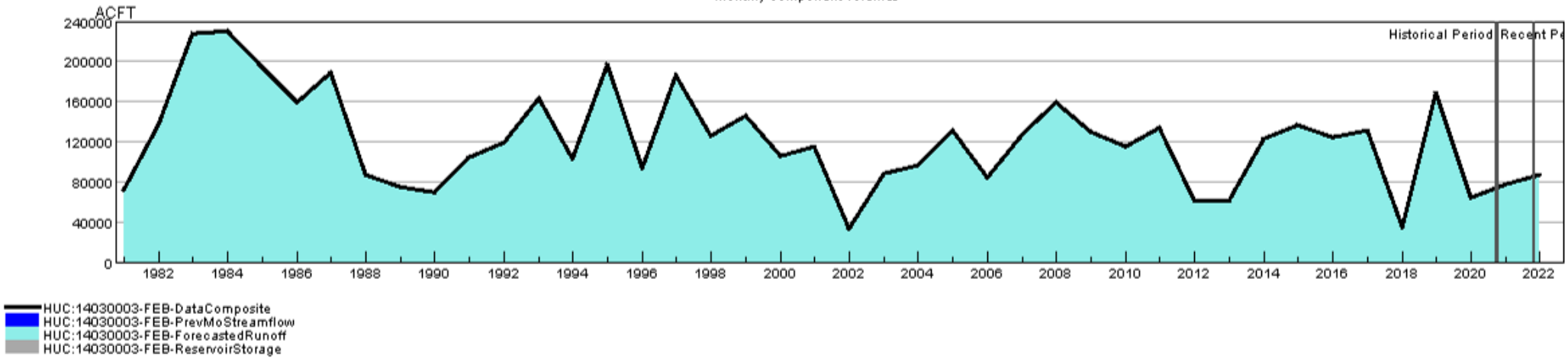
HUC 14030002 (Upper Dolores) SWSI Values - FEB

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



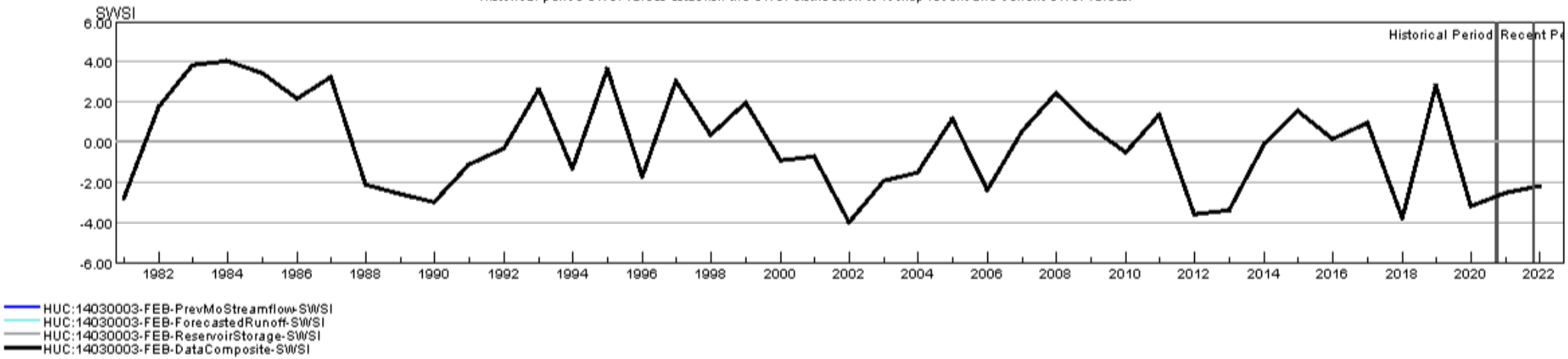
HUC 14030003 (San Miguel) Surface Water Supply - FEB

Monthly component volumes



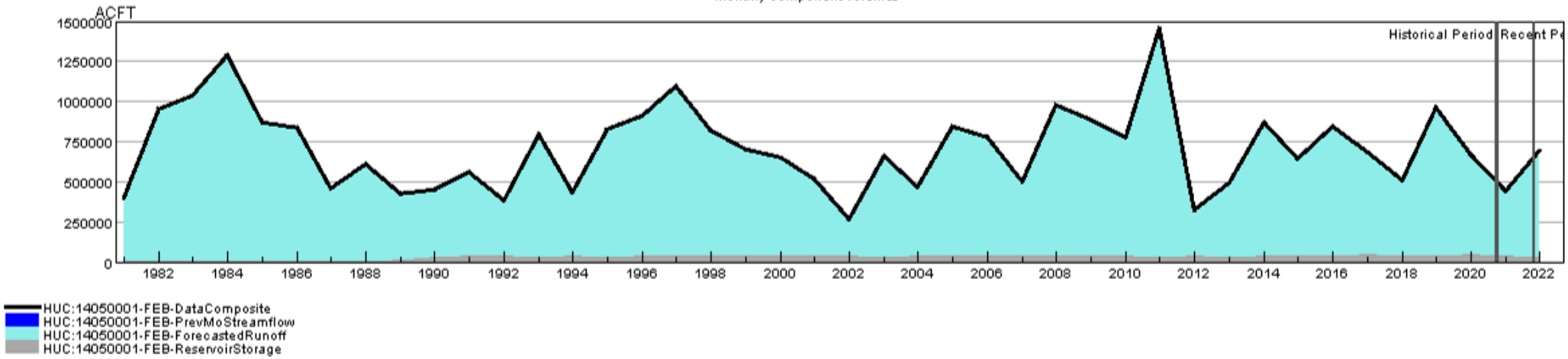
HUC 14030003 (San Miguel) SWSI Values - FEB

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



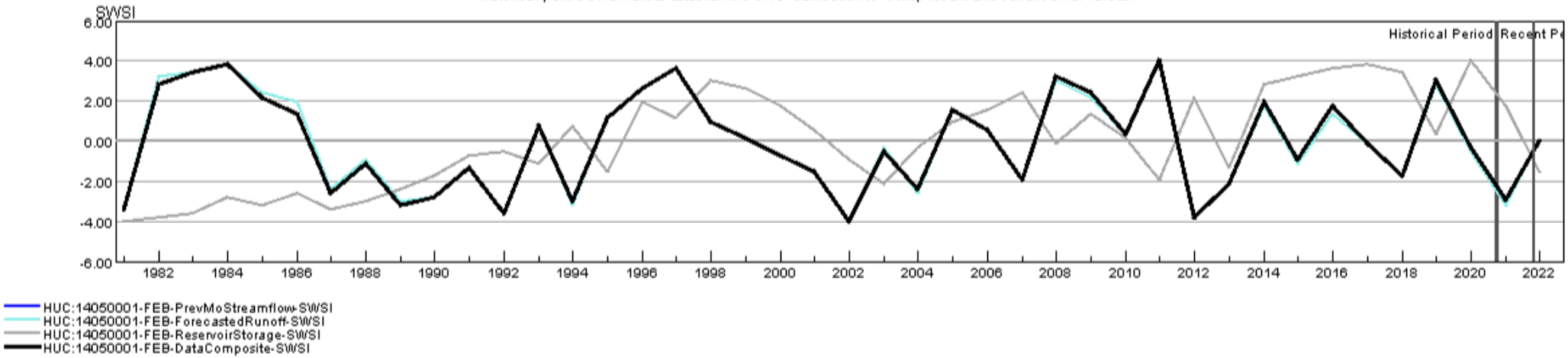
HUC 14050001 (Upper Yampa) Surface Water Supply - FEB

Monthly component volumes



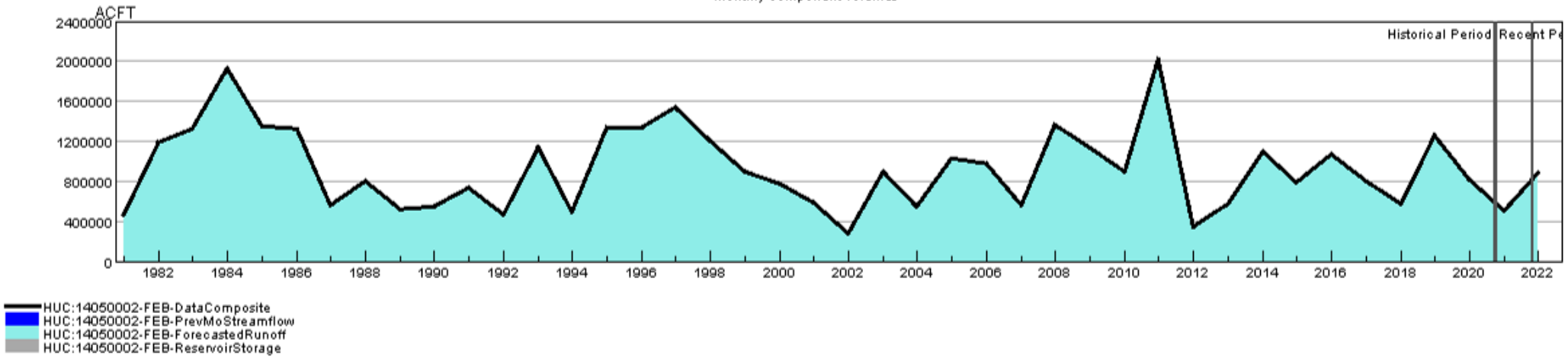
HUC 14050001 (Upper Yampa) SWSI Values - FEB

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



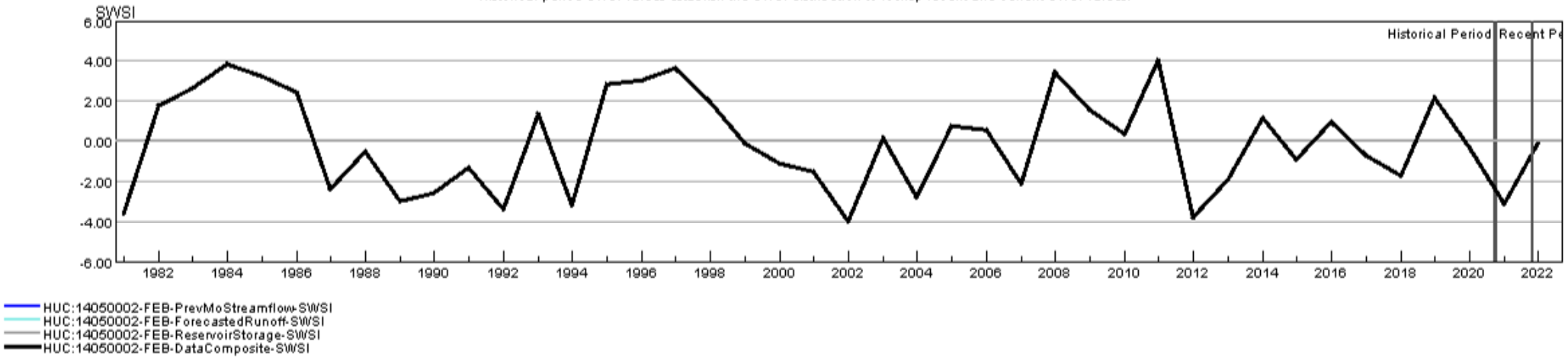
HUC 14050002 (Lower Yampa) Surface Water Supply - FEB

Monthly component volumes



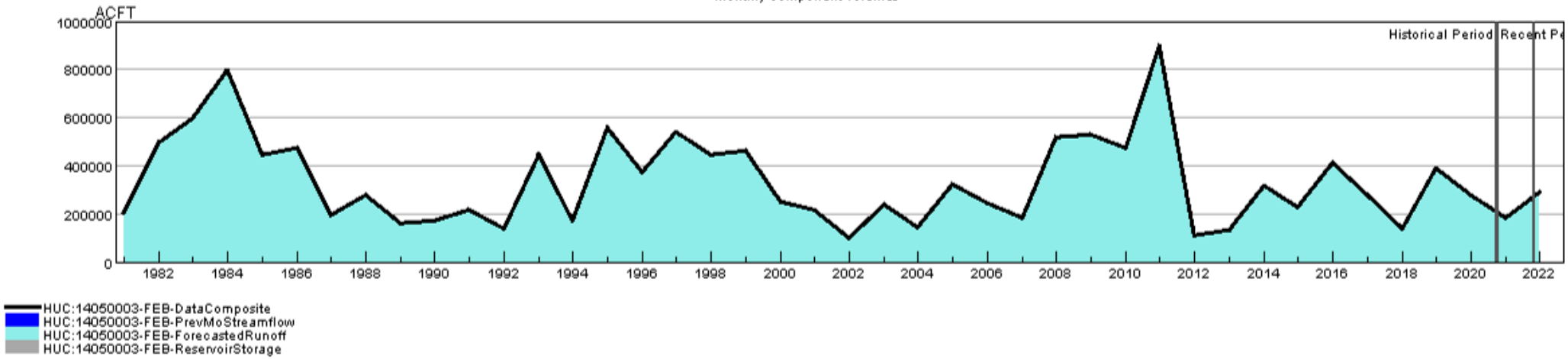
HUC 14050002 (Lower Yampa) SWSI Values - FEB

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



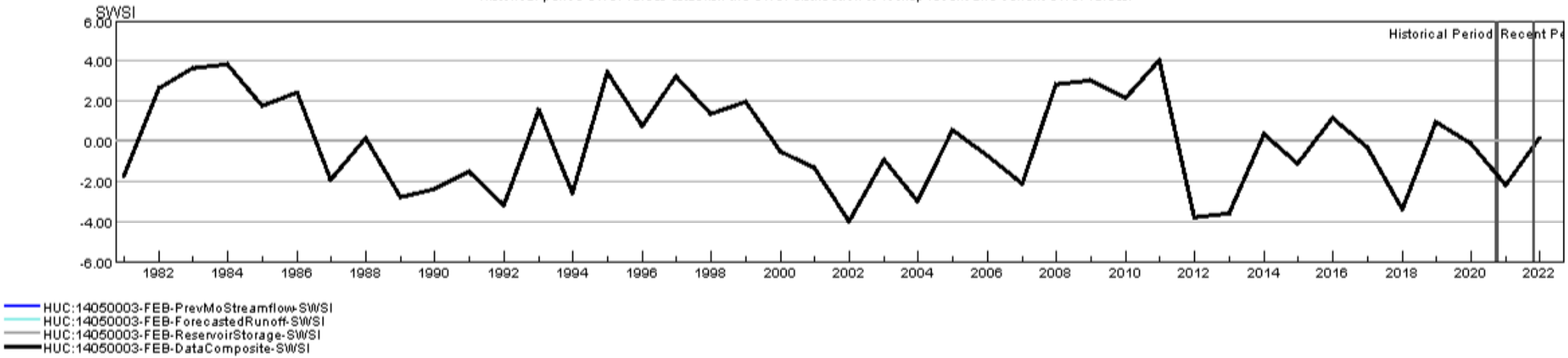
HUC 14050003 (Little Snake) Surface Water Supply - FEB

Monthly component volumes



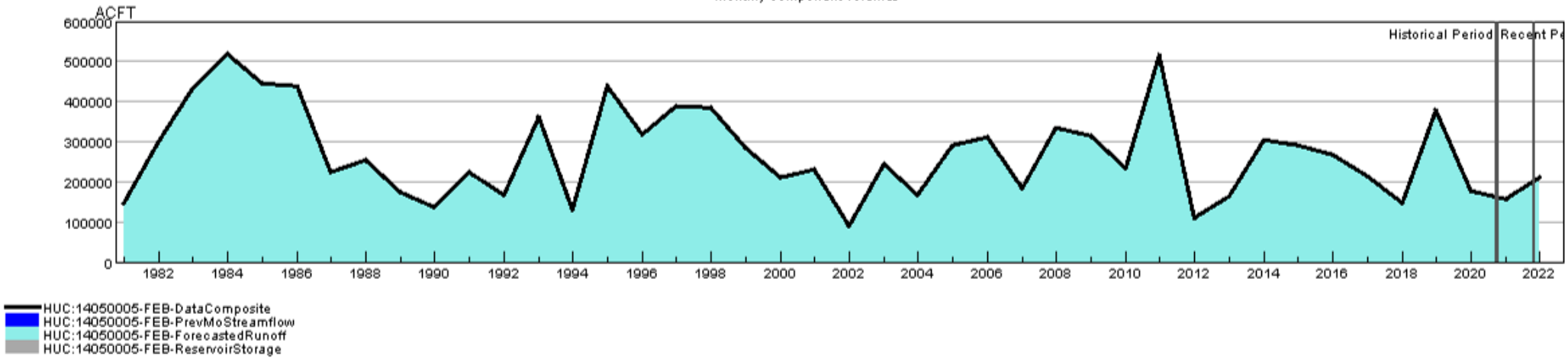
HUC 14050003 (Little Snake) SWSI Values - FEB

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



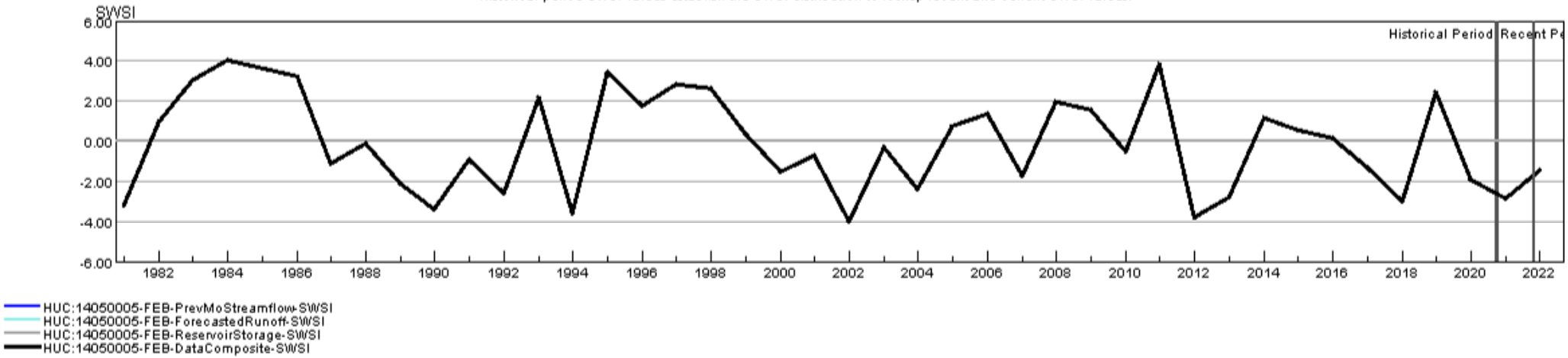
HUC 14050005 (Upper White) Surface Water Supply - FEB

Monthly component volumes



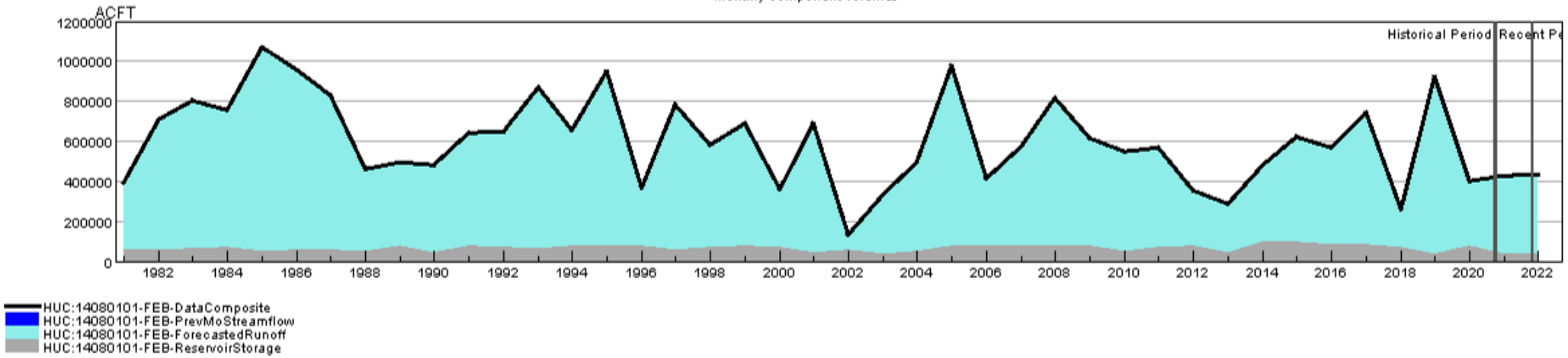
HUC 14050005 (Upper White) SWSI Values - FEB

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



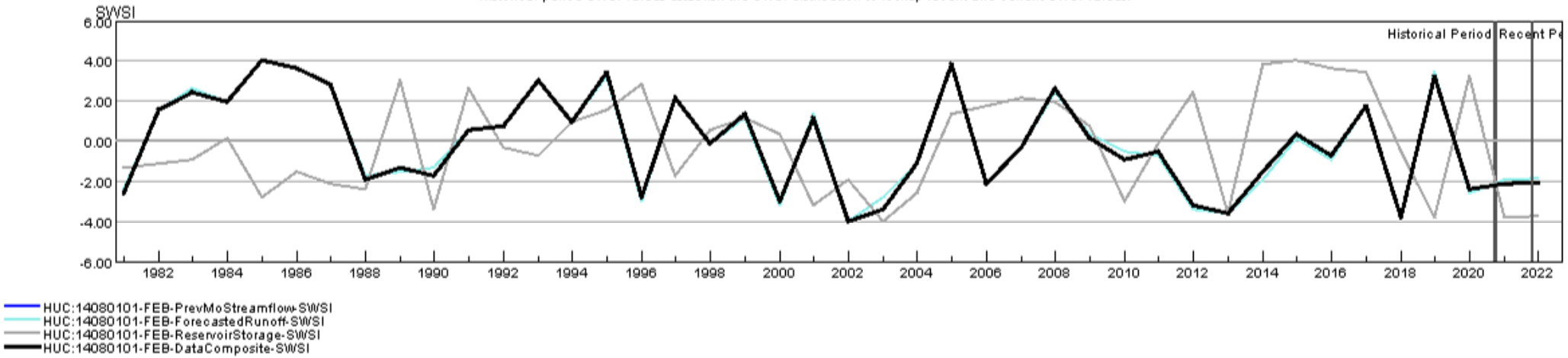
HUC 14080101 (Upper San Juan) Surface Water Supply - FEB

Monthly component volumes



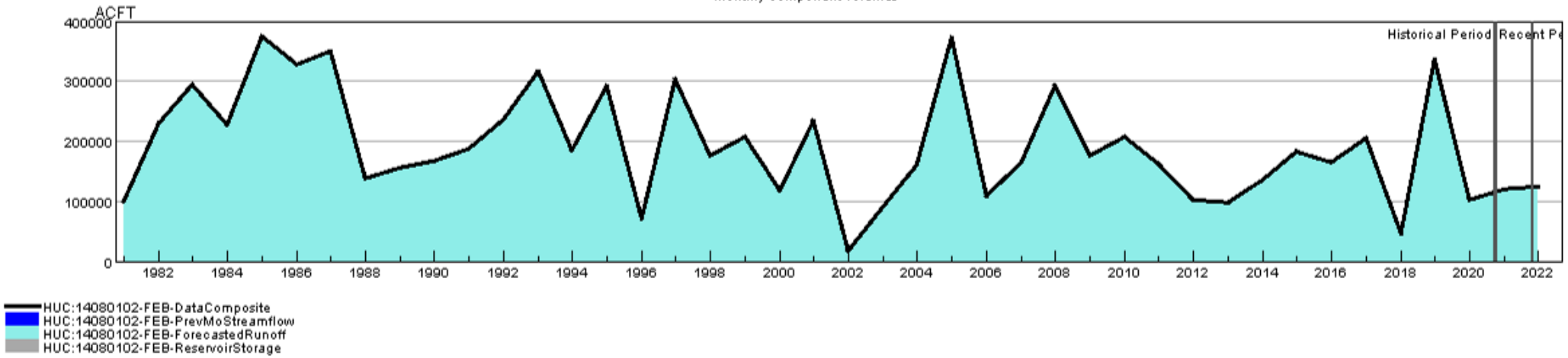
HUC 14080101 (Upper San Juan) SWSI Values - FEB

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



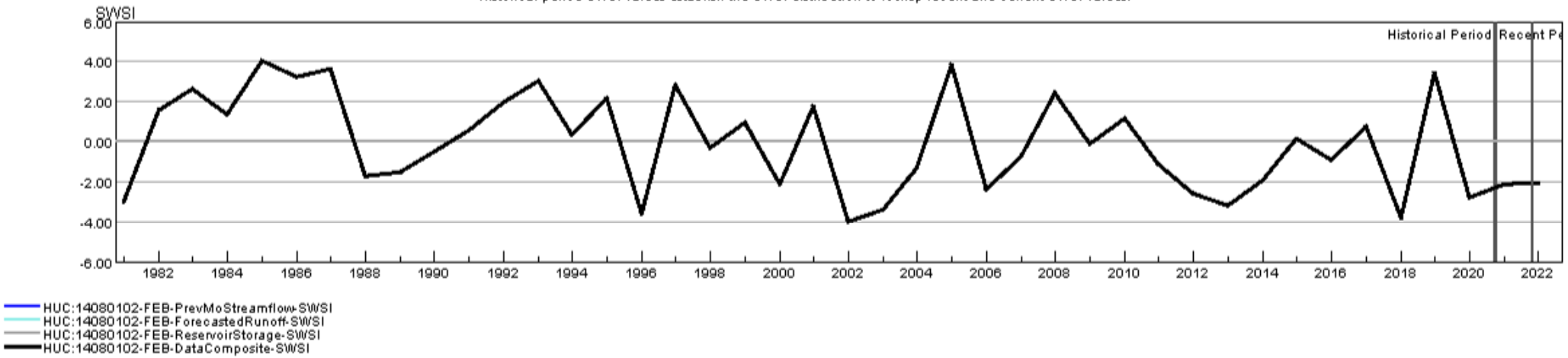
HUC 14080102 (Piedra) Surface Water Supply - FEB

Monthly component volumes



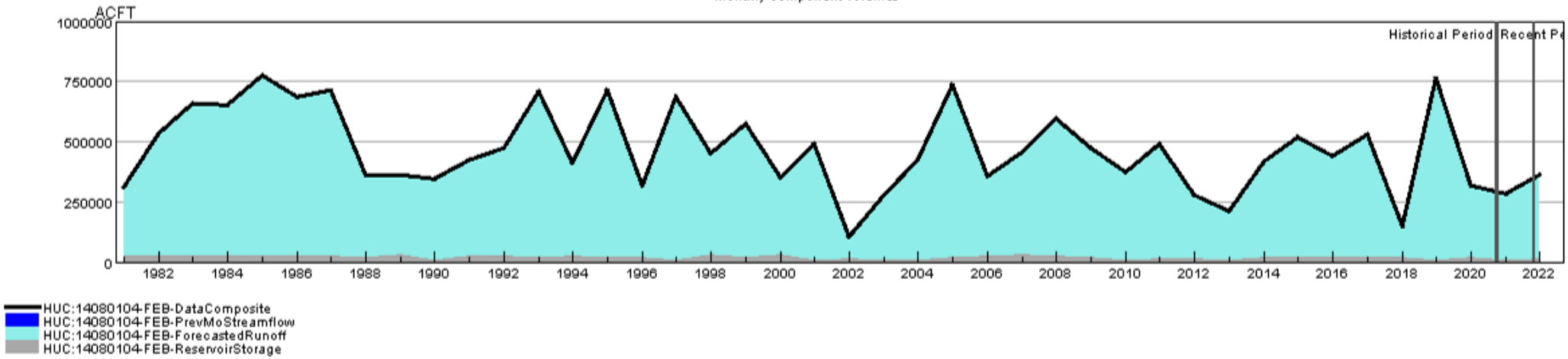
HUC 14080102 (Piedra) SWSI Values - FEB

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



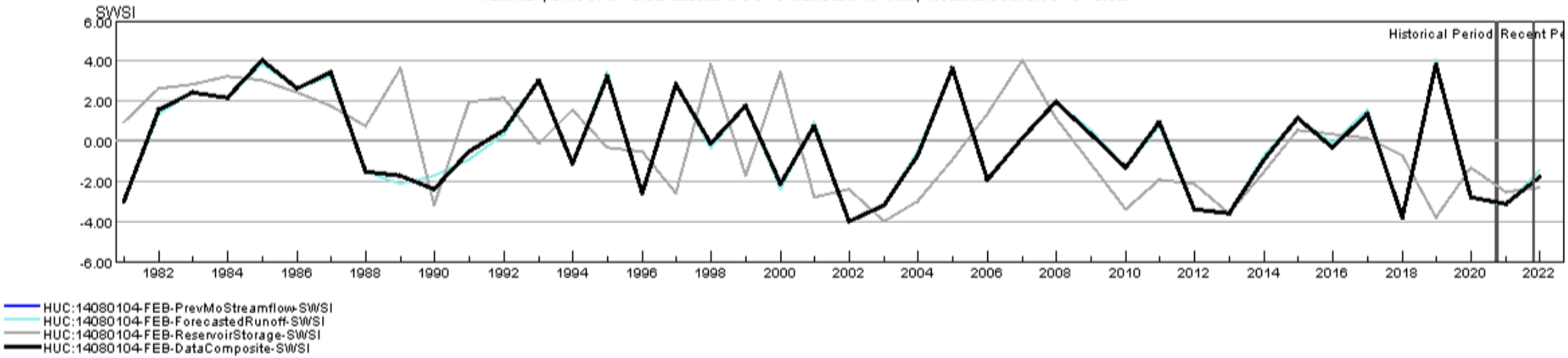
HUC 14080104 (Animas) Surface Water Supply - FEB

Monthly component volumes



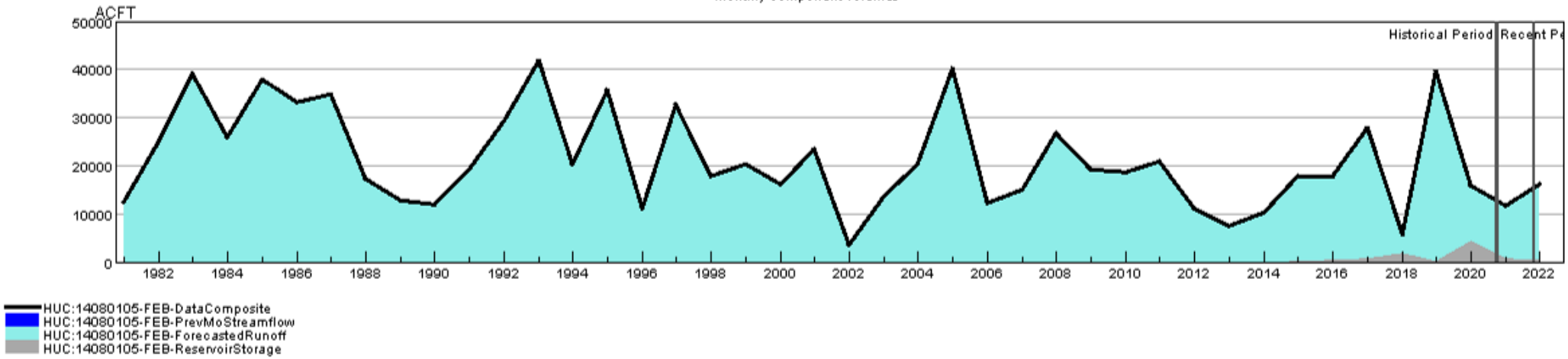
HUC 14080104 (Animas) SWSI Values - FEB

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.