COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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June 1, 2018

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

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

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

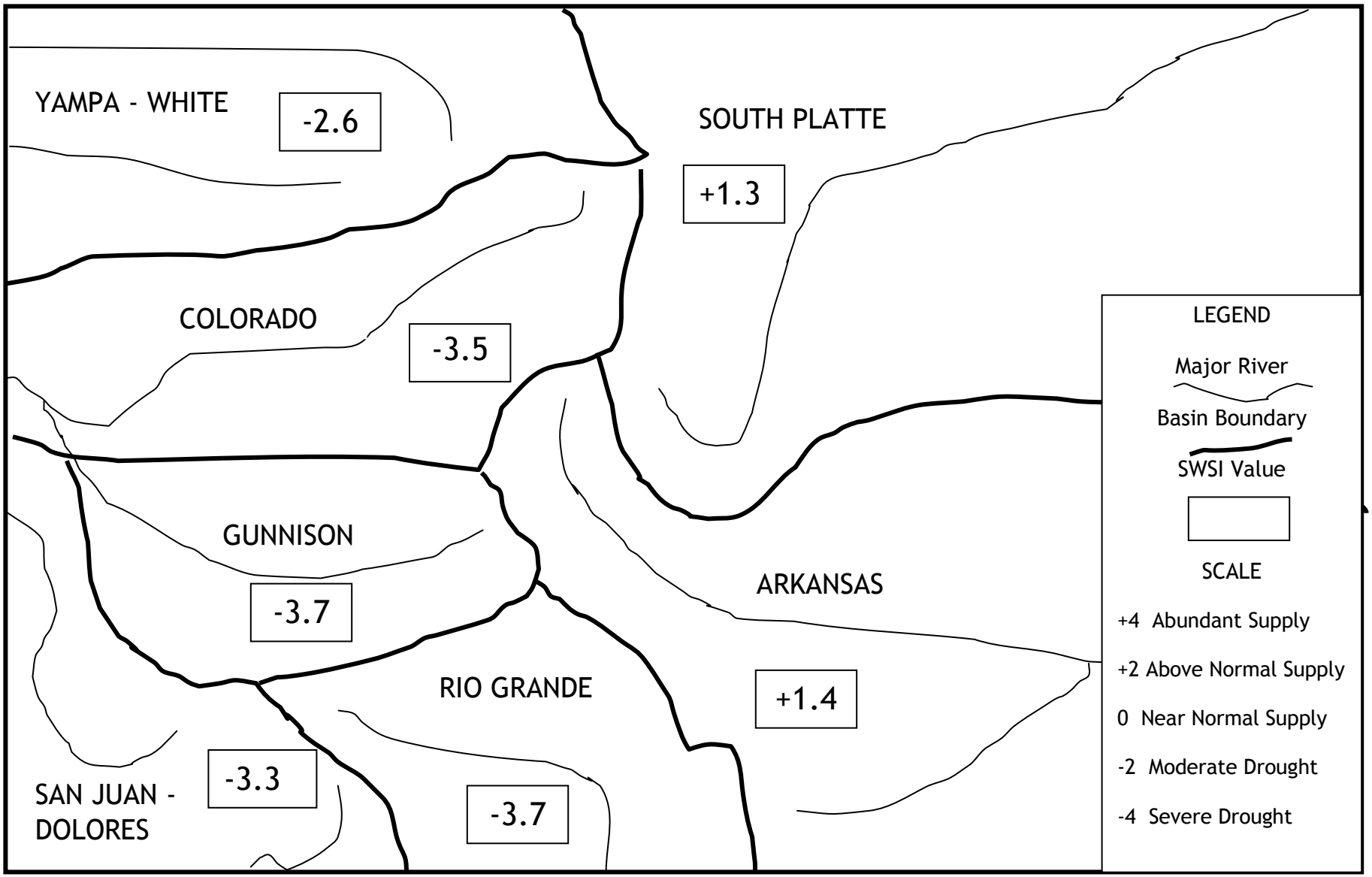
The SWSI calculation for the winter/spring season (January 1 to June 1) is based on reservoir storage at the end of last month, in this case May 31, plus the forecasted streamflow runoff volume for the runoff season (April through September in most basins). The following SWSI values were computed for each of the seven major basins for June 1, 2018. Water supply conditions are well below normal in all but the South Platte and Arkansas River basins. Those two basins have streamflow forecasts well below normal, but the SWSI is moderated by strong reservoir storage volumes. Reservoir storage is near normal to below normal statewide. Each basin, except for Rio Grande and South Platte has declined since May 1.

Basin	June 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	1.4	-0.2	-1.3
Colorado	-3.5	-1.8	-3.6
Gunnison	-3.7	-0.2	-5.5
Rio Grande	-3.7	0.1	-4.6
San Juan-Dolores	-3.3	0.0	-4.6
South Platte	1.3	1.0	-0.7
Yampa-White	-2.6	-1.1	-2.1

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

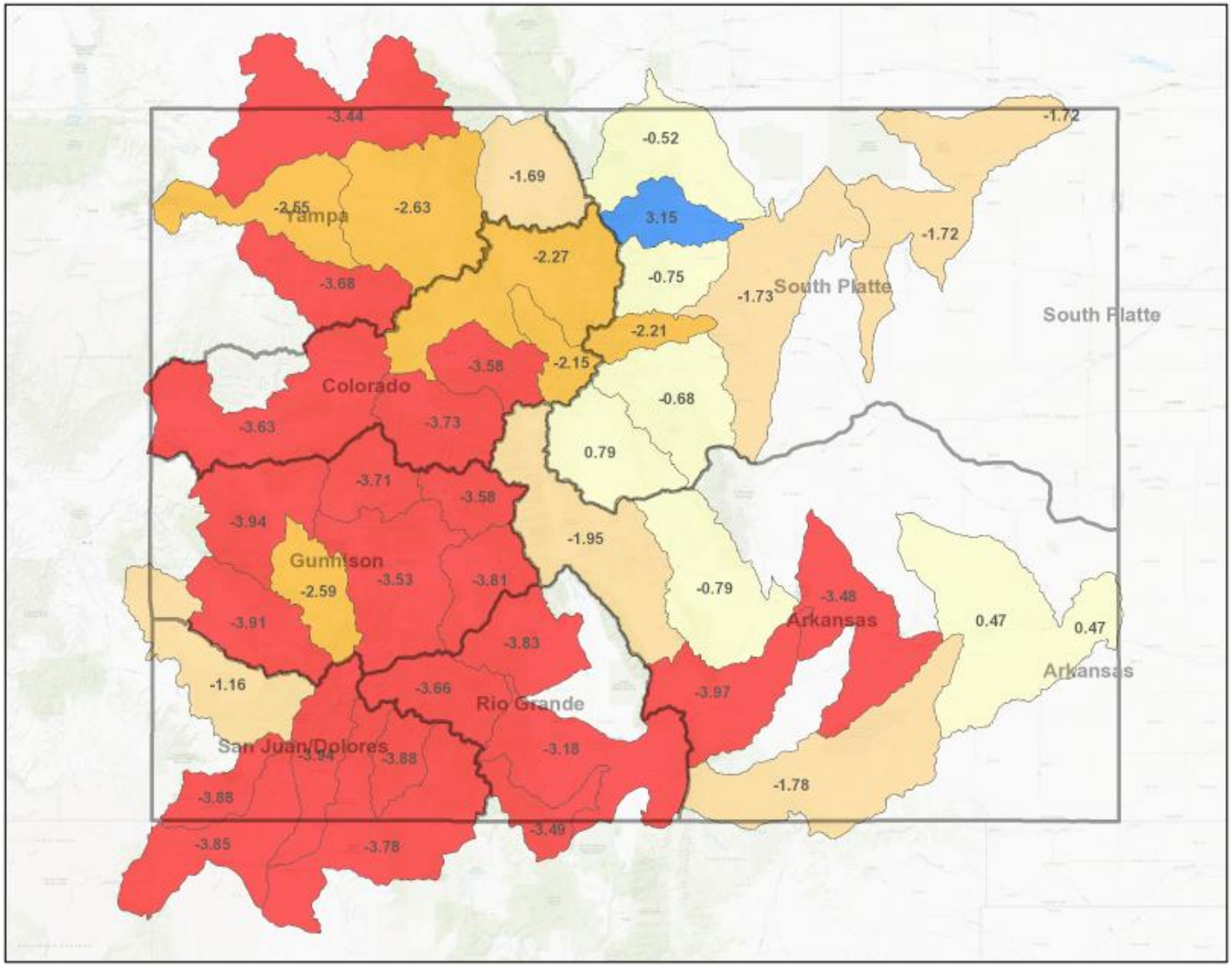


June 1, 2018

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC

CDSS
Colorado's Decision Support Systems

SWSI June 1, 2018



Legend

SWSI - Current

- 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: 6/12/2018 10:10:28 AM

June 1, 2018 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Forecast Flow NEP	Total Vol (AF)
11020006	Huerfano	-3.98	14	2	1,930
11020010	Purgatoire	-1.79	67	2	34,100
11020005	Upper Arkansas-Lake Meredith	-3.48	59	7	141,211
11020001	Arkansas Headwaters	-1.96	82	8	272,635
11020002	Upper Arkansas	-0.80	78	7	337,100
11020009	Upper Arkansas-John Martin Reservoir	0.48	86	5	414,155
14010003	Eagle	-3.59	N/A	7	110,000
14010002	Blue	-2.15	79	19	217,046
14010004	Roaring Fork	-3.74	68	5	256,121
14010001	Colorado Headwaters	-2.28	85	21	654,730
14010005	Colorado Headwaters-Plateau	-3.64	17	6	684,047
14020003	Tomichi	-3.81	66	4	6,789
14030003	San Miguel	-3.92	N/A	3	17,000
14020004	North Fork Gunnison	-3.71	39	5	45,470
14020006	Uncompahgre	-2.59	60	4	82,390
14020005	Lower Gunnison	-3.94	N/A	3	100,000
14020001	East-Taylor	-3.58	77	6	150,936
14020002	Upper Gunnison	-3.54	44	4	768,539
13010004	Saguache	-3.84	N/A	4	6,200
13010002	Alamosa-Trinchera	-3.18	67	6	33,209
13010005	Conejos	-3.49	57	6	55,855
13010001	Rio Grande Headwaters	-3.66	74	4	127,142
14080105	Middle San Juan	-3.85	50	2	1,851
14080107	Mancos	-3.88	4	3	6,190
14080102	Piedra	-3.88	N/A	3	10,000
14080104	Animas	-3.94	10	2	62,528
14080101	Upper San Juan	-3.78	29	2	115,568
14030002	Upper Dolores	-1.17	43	1	281,557
10190004	Clear	-2.22	N/A	23	60,000
10190005	St. Vrain	-0.75	96	32	167,243
10190001	South Platte Headwater	0.79	79	14	183,100
10190007	Cache La Poudre	-0.53	92	32	314,100
10190002	Upper South Platte	-0.69	90	10	383,800
10190003	Middle South Platte-Cherry Creek	-1.73	80	29	471,000
10190012	Middle South Platte-Sterling	-1.72	86	29	596,700
10190006	Big Thompson	3.15	96	29	651,782
14050003	Little Snake	-3.44	N/A	9	25,000
14050005	Upper White	-3.68	N/A	6	40,000
10180001	North Platte Headwaters	-1.70	N/A	30	74,000
14050002	Lower Yampa	-2.55	N/A	19	156,000
14050001	Upper Yampa	-2.64	99	15	170,728

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)

June 1, 2018 SWSI Component Information - Streamflow Forecast & Reservoir Storage - By HUC

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
11020001	Arkansas Headwaters	CLEAR CREEK RESERVOIR	8,034	66
		HOMESTAKE RESERVOIR	35,323	92
		TWIN LAKES RESERVOIR	52,875	71
		ARKANSAS RIVER AT SALIDA	80,000	8
		TURQUOISE LAKE	96,403	84
11020006	Huerfano	CUCHARAS RESERVOIR*	0	14
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	630	2
		HUERFANO RIVER NEAR REDWING	1,300	2
11020010	Purgatoire	PURGATOIRE RIVER AT TRINIDAD	3,800	2
		TRINIDAD LAKE	30,300	67
11020002	Upper Arkansas	PUEBLO RESERVOIR INFLOW	101,000	7
		PUEBLO RESERVOIR	236,100	78
11020009	Upper Arkansas-John Martin Reservoir	CUCHARAS RIVER AT BOYD RANCH NR LA VETA	630	2
		HUERFANO RIVER NEAR REDWING	1,300	2
		PURGATOIRE RIVER AT TRINIDAD	3,800	2
		ADOBE CREEK RESERVOIR	39,328	60
		PUEBLO RESERVOIR INFLOW	101,000	7
		JOHN MARTIN RESERVOIR	268,097	87
11020005	Upper Arkansas-Lake Meredith	CUCHARAS RIVER AT BOYD RANCH NR LA VETA	630	2
		HUERFANO RIVER NEAR REDWING	1,300	2
		LAKE HENRY	8,010	79
		MEREDITH RESERVOIR	30,271	56
		PUEBLO RESERVOIR INFLOW	101,000	7
14010002	Blue	GREEN MOUNTAIN RESERVOIR	89,046	79
		BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	128,000	19
14010001	Colorado Headwaters	WOLFORD MOUNTAIN RESERVOIR	66,630	80
		WILLIAMS FORK RESERVOIR	88,100	85
		COLORADO RIVER NEAR DOTSERO	500,000	21
14010005	Colorado Headwaters-Plateau	VEGA RESERVOIR	24,047	17
		COLORADO RIVER NEAR CAMEO	660,000	6
14010003	Eagle	EAGLE RIVER BELOW GYPSUM	110,000	7
14010004	Roaring Fork	RUEDI RESERVOIR	81,121	68
		ROARING FORK AT GLENWOOD SPRINGS	175,000	5
14020001	East-Taylor	TAYLOR R INF TO TAYLOR PARK RESERVOIR	25,000	6
		EAST RIVER AT ALMONT	42,000	6
		TAYLOR PARK RESERVOIR	83,936	77
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	100,000	3
14020004	North Fork Gunnison	PAONIA RESERVOIR	15,470	39
		NORTH FORK GUNNISON R NR SOMERSET	30,000	5
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	17,000	3
14020003	Tomichi	VOUGA RESERVOIR NEAR DOYLEVILLE	689	66
		TOMICHI CREEK AT GUNNISON, CO	6,100	4

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
14020006	Uncompahgre	UNCOMPAHGRE RIVER AT COLONA	18,000	4
		RIDGEWAY RESERVOIR	64,390	60
14020002	Upper Gunnison	FRUITLAND RESERVOIR	2,468	13
		CRAWFORD RESERVOIR	7,100	8
		SILVER JACK RESERVOIR	12,370	50
		LAKE FORK AT GATEVIEW, CO	24,000	4
		GUNNISON R INF TO BLUE MESA RESERVOIR	98,000	5
		MORROW POINT RESERVOIR	112,025	20
		BLUE MESA RESERVOIR	512,576	45
13010002	Alamosa-Trinchera	SANGRE DE CRISTO	420	5
		TRINCHERA CK	1,940	4
		UTE CREEK	1,940	7
		CULEBRA CREEK AT SAN LUIS	4,000	10
		MOUNTAIN HOME	6,609	66
		ALAMOSA CREEK ABOVE TERRACE RESERVOIR	8,700	5
		TERRACE RESERVOIR	9,600	63
13010005	Conejos	PLATORO RESERVOIR	24,855	57
		CONEJOS RIVER NEAR MOGOTE	31,000	6
13010001	Rio Grande Headwaters	RIO GRANDE RESERVOIR	11,986	18
		CONTINENTAL RESERVOIR	15,793	99
		SANTA MARIA RESERVOIR	21,363	92
		RIO GRANDE NEAR DEL NORTE	78,000	4
13010004	Saguache	SAGUACHE CREEK NEAR SAGUACHE, CO	6,200	4
14080104	Animas	FLORIDA RIVER INFLOW TO LEMON RESERVOIR	4,000	3
		LEMON RESERVOIR	18,528	10
		ANIMAS RIVER AT DURANGO	40,000	2
14080107	Mancos	MANCOS RIVER NEAR MANCOS	1,000	3
		JACKSON GULCH RESERVOIR	5,190	4
14080105	Middle San Juan	LONG HOLLOW RESERVOIR	851	50
		LA PLATA RIVER AT HESPERUS	1,000	2
14080102	Piedra	PIEDRA RIVER NEAR ARBOLES	10,000	3
14030002	Upper Dolores	DOLORES RIVER BELOW MCPHEE RESERVOIR	11,000	1
		GROUNDHOG RESERVOIR	13,400	13
		MCPHEE RESERVOIR	257,157	43
14080101	Upper San Juan	LOS PINOS RIVER NEAR BAYFIELD	14,000	2
		SAN JUAN RIVER NEAR CARRACAS	17,200	3
		VALLECITO RESERVOIR	84,368	29
10190006	Big Thompson	MARIANO RESERVOIR	5,100	53
		WILLOW CREEK RESERVOIR	8,023	69
		LONE TREE RESERVOIR	8,600	95
		LAKE LOVELAND RESERVOIR	10,600	92
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	47,000	29
		BOYD LAKE	47,900	83
		CARTER LAKE	108,800	99
		LAKE GRANBY	415,759	91

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190007	Cache La Poudre	BLACK HOLLOW RESERVOIR	4,200	87
		HALLIGAN RESERVOIR	6,400	61
		CHAMBERS LAKE	8,400	97
		FOSSIL CREEK RESERVOIR	10,100	76
		CACHE LA POUDRE	10,200	94
		WINDSOR RESERVOIR	14,200	39
		COBB LAKE	20,100	74
		CACHE LA POUDRE R AT CANYON MOUTH	106,000	32
		HORSETOOTH RESERVOIR	134,500	80
10190004	Clear	CLEAR CREEK AT GOLDEN	60,000	23
10190003	Middle South Platte-Cherry Creek	HORSECREEK RESERVOIR	12,100	11
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	18,100	31
		MILTON RESERVOIR	22,900	99
		BARR LAKE	29,900	75
		BOULDER CREEK NEAR ORODELL	31,000	33
		STANDLEY RESERVOIR	42,000	84
		SAINT VRAIN CREEK AT LYONS	44,000	28
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	47,000	29
		SOUTH PLATTE RIVER AT SOUTH PLATTE	58,000	10
		CLEAR CREEK AT GOLDEN	60,000	23
		CACHE LA POUDRE R AT CANYON MOUTH	106,000	32
10190012	Middle South Platte-Sterling	SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	18,100	31
		JULESBURG RESERVOIR	20,600	65
		PREWITT RESERVOIR	24,600	79
		JACKSON LAKE RESERVOIR	26,100	41
		BOULDER CREEK NEAR ORODELL	31,000	33
		EMPIRE RESERVOIR	36,500	99
		SAINT VRAIN CREEK AT LYONS	44,000	28
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	47,000	29
		RIVERSIDE RESERVOIR	55,200	80
		SOUTH PLATTE RIVER AT SOUTH PLATTE	58,000	10
		CLEAR CREEK AT GOLDEN	60,000	23
		POINT OF ROCKS RESERVOIR	69,600	84
		CACHE LA POUDRE R AT CANYON MOUTH	106,000	32
10190001	South Platte Headwater	ANTERO RESERVOIR	20,100	89
		ELEVENMILE CANYON RESV INFLOW	24,000	14
		SPINNEY MOUNTAIN RESERVOIR	39,500	81
		ELEVENMILE CANYON RESERVOIR	99,500	64
10190005	St. Vrain	TERRY RESERVOIR	7,600	87
		MARSHALL RESERVOIR	9,600	66
		UNION RESERVOIR	12,600	69
		BUTTONROCK (RALPH PRICE) RESERVOIR	16,200	87
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	18,100	31
		GROSS RESERVOIR	28,143	87
		BOULDER CREEK NEAR ORODELL	31,000	33
		SAINT VRAIN CREEK AT LYONS	44,000	28

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190002	Upper South Platte	SOUTH PLATTE RIVER AT SOUTH PLATTE	58,000	10
		CHEESMAN LAKE	73,700	58
		DILLON RESERVOIR	252,100	94
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	25,000	9
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	156,000	19
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	74,000	30
14050005	Upper White	WHITE RIVER NEAR MEEKER	40,000	6
14050001	Upper Yampa	ELKHEAD CREEK ABOVE LONG GULCH	2,200	18
		YAMCOLO RESERVOIR	9,128	75
		STAGECOACH RESERVOIR NR OAK CREEK	36,400	99
		YAMPA RIVER AT STEAMBOAT SPRINGS	44,000	16
		ELK RIVER NEAR MILNER, CO	79,000	14

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

*Empty, filling restriction

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

Basinwide Conditions Assessment

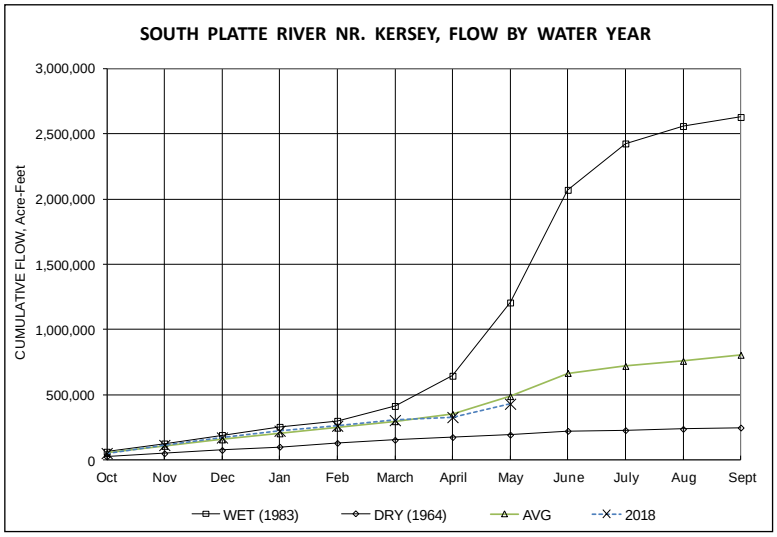
The SWSI value for the month was +1.3.

May in northeast Colorado was a bit of an odd month, but in a good way. Like the rest of Colorado, May temperatures in northeast Colorado were above normal. However, unlike the rest of Colorado, May precipitation in northeast Colorado was generally near to above normal. Most of Park County and the extreme southern and western edges of the area were the exceptions in that precipitation in those areas was below normal.

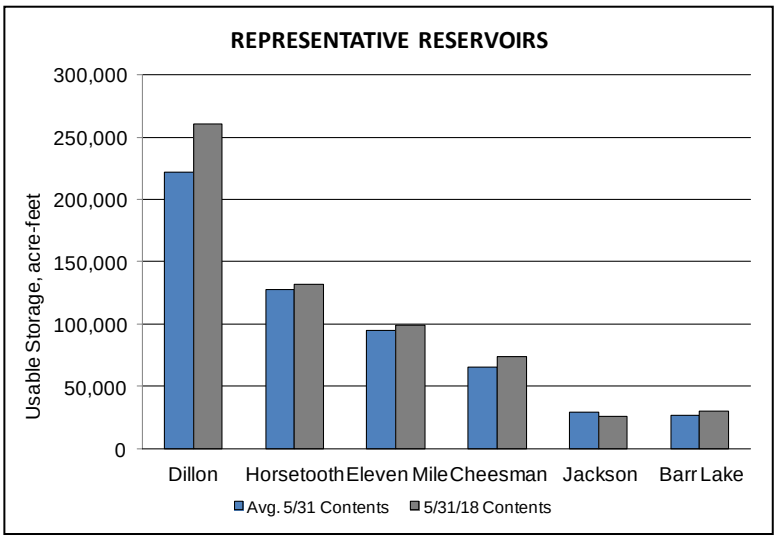
The May precipitation also contributed to slowing down the snowmelt runoff in the northern Front Range basins. However, by the end of May runoff in those basins appears to have peaked (about two weeks earlier than normal), meaning that folks will probably start hitting reservoirs earlier in the irrigation season than normal.

The USDA Drought Monitor rating for northeast Colorado improved in some areas during the month of May. The "bulge" of Drought Rating D0 "Abnormally Dry" and D1 "Moderate Drought" ratings in the central part of the basin shrank back to the southern edge of the area during May. Sadly, there was very little improvement in the area including Park, Clear Creek, Douglas, Elbert and southern Jefferson Counties.

The May precipitation resulted in a marked increase in flows over April at the Kersey and Julesburg index stream flow gages. However, with the dry conditions in April the flows did not increase as much as might have been expected. The overall May mean flow at the Kersey gage was approximately 1688 cfs or about 98% of the long term mean flow of 1728 cfs. The overall May mean flow at the Julesburg gage was approximately 412 cfs. This represents a flow of only about 41% of the long term mean flow of 994 cfs.



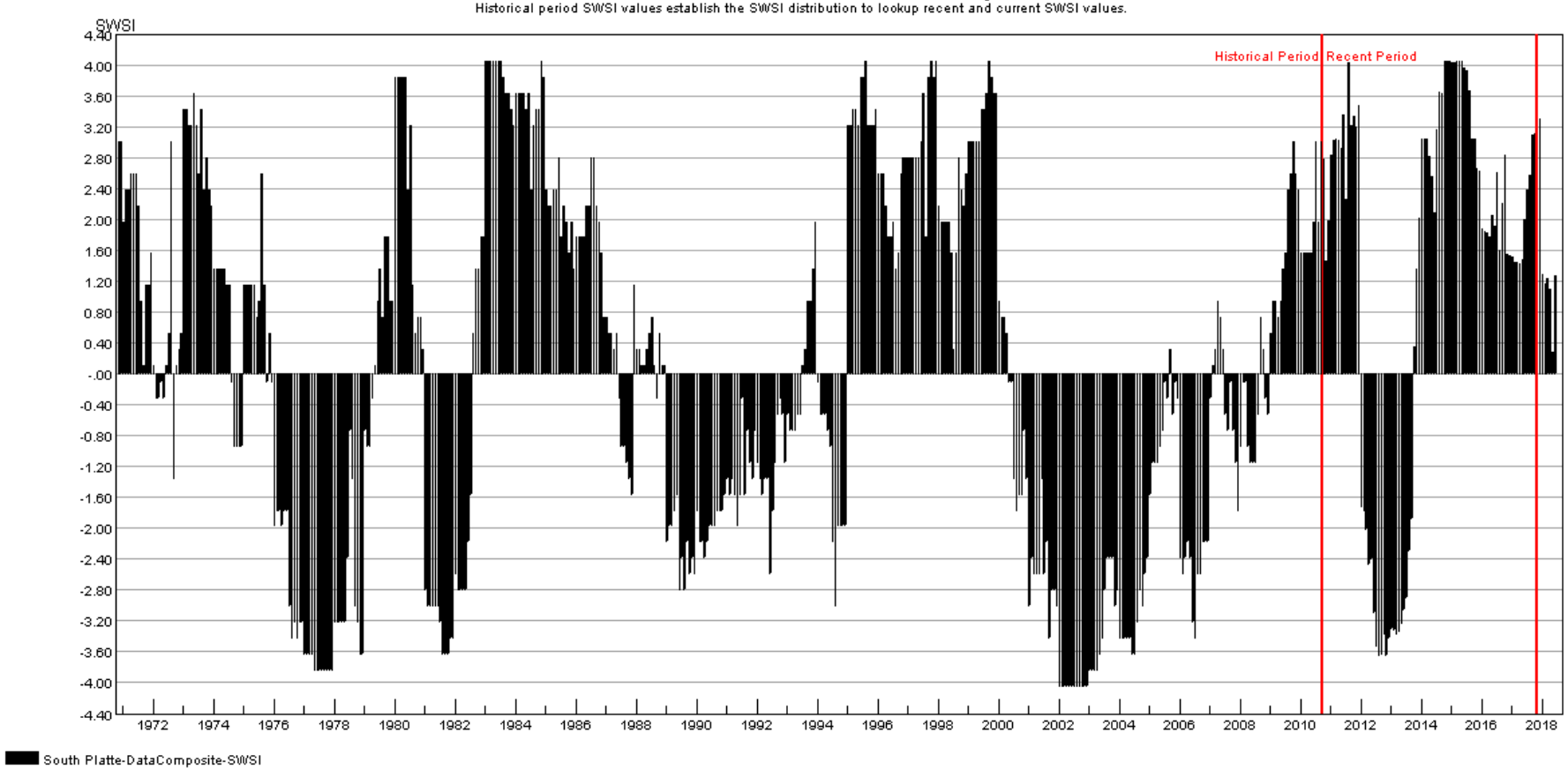
During May, the overall seniority of calls on the South Platte mainstem followed a relatively normal pattern below metro Denver by moving from fairly normal calls to free river by the middle of the month. The calls above metro Denver did move from senior to less senior and then back to more senior during May, but never went to free river. With the precipitation and runoff, the calls on the northern major South Platte tributaries also moved from near normal to very junior or free river for much of May. The exceptions were the more southern tributaries which generally stayed under more senior calls throughout May.



One of the bright spots for May was the South Platte basin reservoir storage. The May precipitation discussed above helped push the overall end of May storage in the group of selected representative reservoirs to 96% of capacity. This compares to a long term average end of May storage of 83% of capacity. The caveat here is that reservoir storage generally increases in June, but it is likely to decrease in June this year.

South Platte 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 +1.4.

Outlook

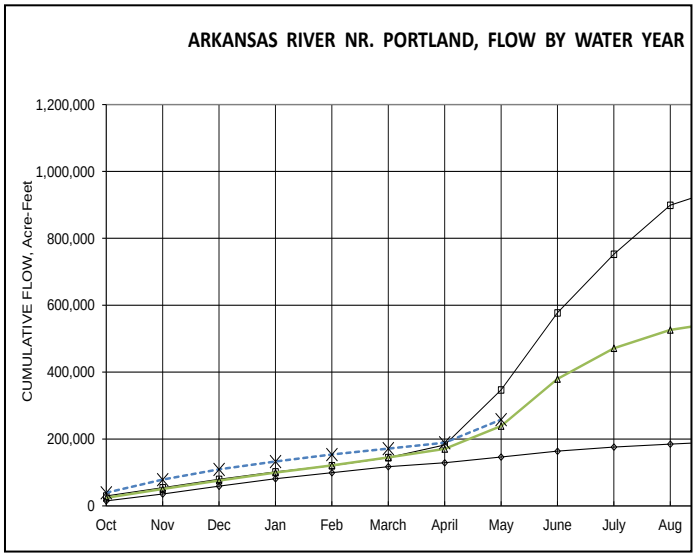
May temperatures were the warmest in recorded history in Pueblo exceeding the prior record set in 1934. Runoff began and peaked during the month of May on the Arkansas River. The majority of the snowmelt runoff occurred from the headwater areas in the northwest part of the basin with very little snowmelt runoff occurring on any of the tributaries in the southern portions of the basin.

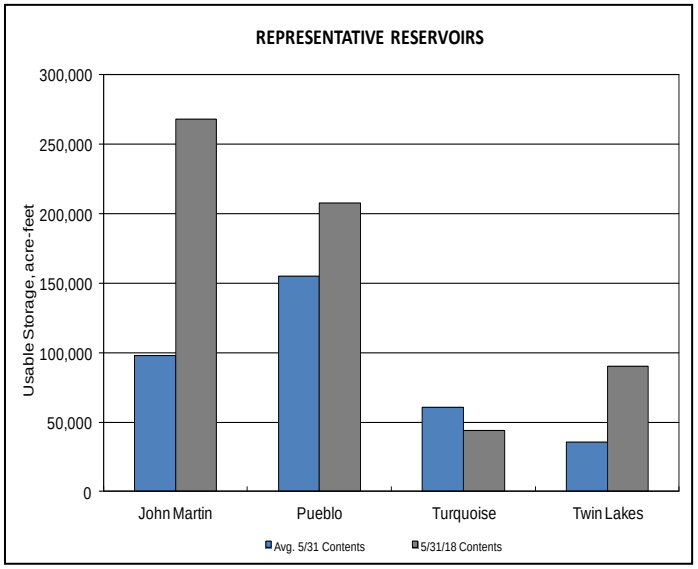
River calls began fairly senior (Catlin Canal – 12/3/1884) and remained much that way through May with a few brief periods where the call went slightly more junior.

Administrative/Management Concerns

River flows are fairly dire on all of the tributary streams south of Highway 50. Impacts to key municipal supplies for some of the southern towns may be significant absent some rainfall precipitation.

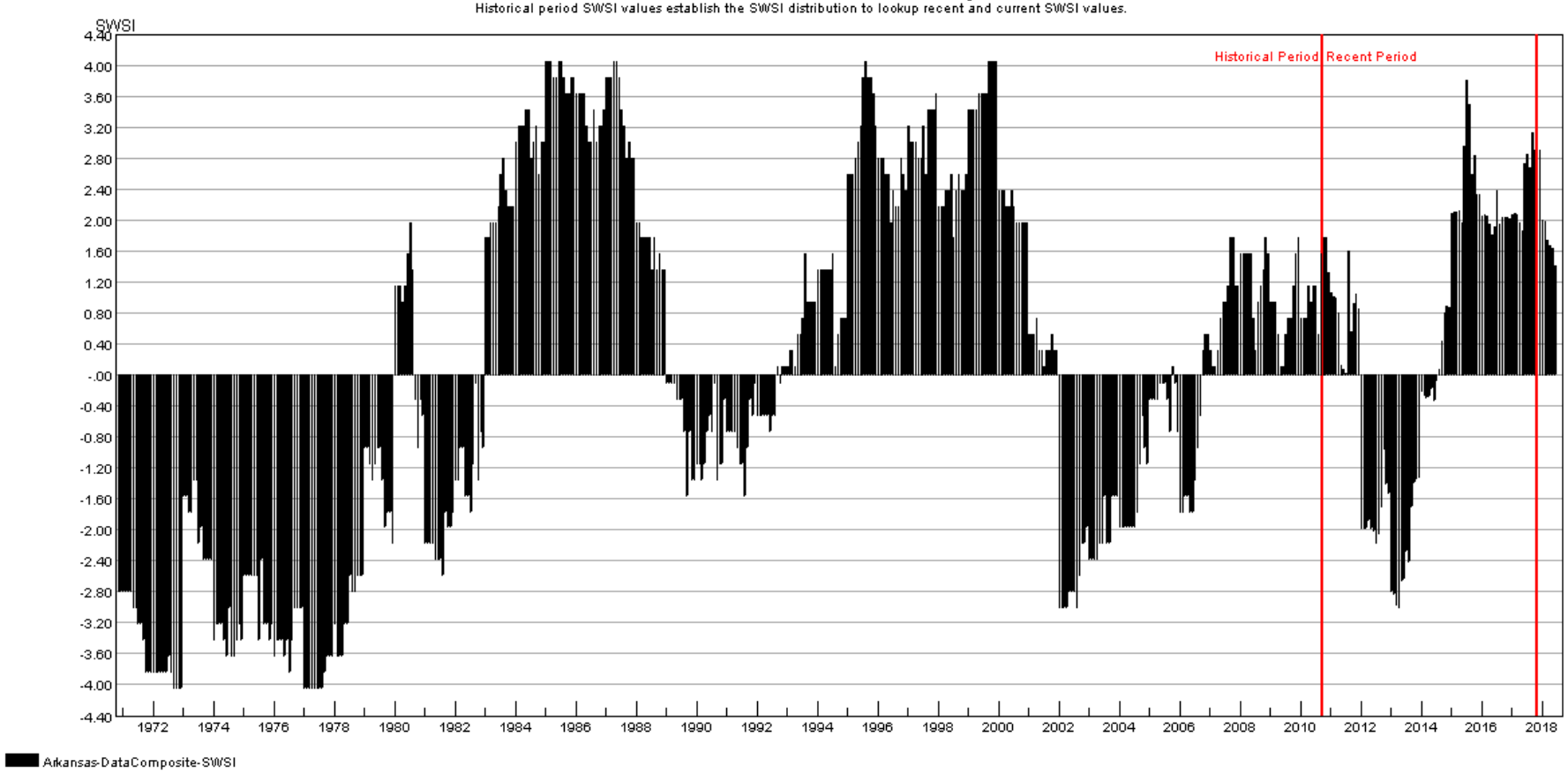
Projected imports of Fryinpan-Arkansas transmountain water are lower than projected and have caused a lower amount of allocation of this key supplemental supply.





Arkansas 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 -3.7.

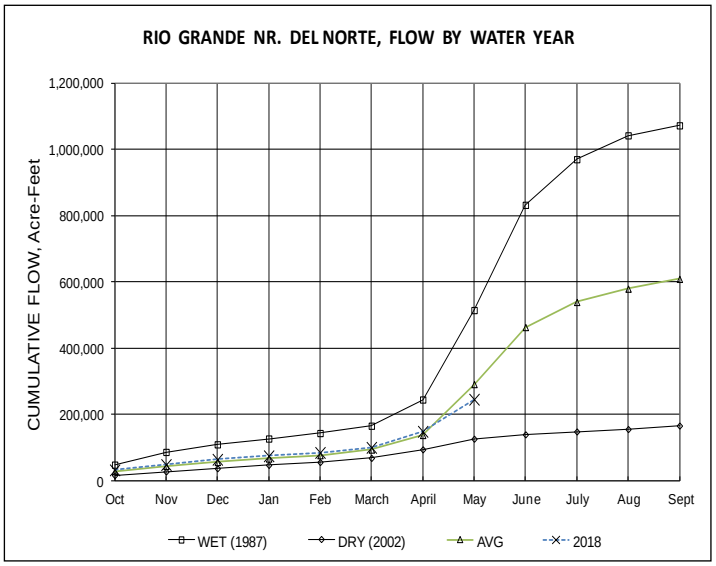
Flow at the gaging station Rio Grande near Del Norte averaged 1580 cfs (63% of average). The Conejos River near Mogote had a mean flow of 850 cfs (89% of average). Flow to the state line was only 13% of normal as upstream diversions for irrigation needs continued and the low need for delivery to the downstream states.

Alamosa received precipitation totaling only 0.14 inches during April, 0.44 inches below normal, and now the eighth consecutive month of below average precipitation. Temperatures in the San Luis Valley were above normal for the ninth month in a row!

A decent snowstorm at the beginning of May slowed the decline of the basin's snowpack. But the snow on all the SNOTEL's and courses was essentially gone by mid-month. Several of the larger streams in the basin peaked on May 11. All streams peaked before May 15. This basin will most often have late May and early June peak runoff days.

Outlook

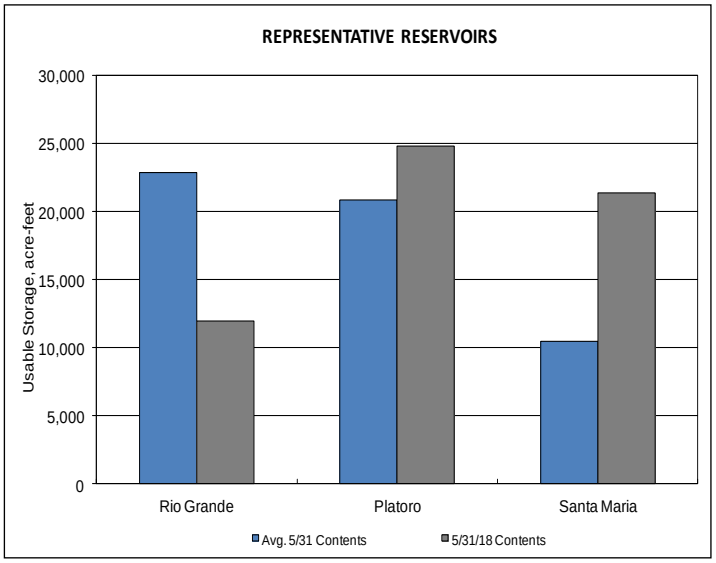
NRCS forecasts are still predicting April through September runoff to be only 10% to 45% of average in the upper Rio Grande basin of Colorado. The best forecasts are for those rivers with long drainages and high elevations: the Rio Grande and the Conejos. Low elevation and short drainages should have extremely low streamflow the remainder of this irrigation season. Based on these forecasts, water users in the basin who are reliant on stream flow for irrigation and stock watering needs should expect extremely limited availability.



The National Weather Service is predicting a good chance for better than average precipitation during the latter part of the summer.

Administrative/Management Concerns

Water rights were able divert all available flow during May from the Rio Grande and the Conejos as no curtailment will be necessary on these drainages to make water available for required Rio Grande Compact deliveries in 2018. This is a common practice for poor runoff years.



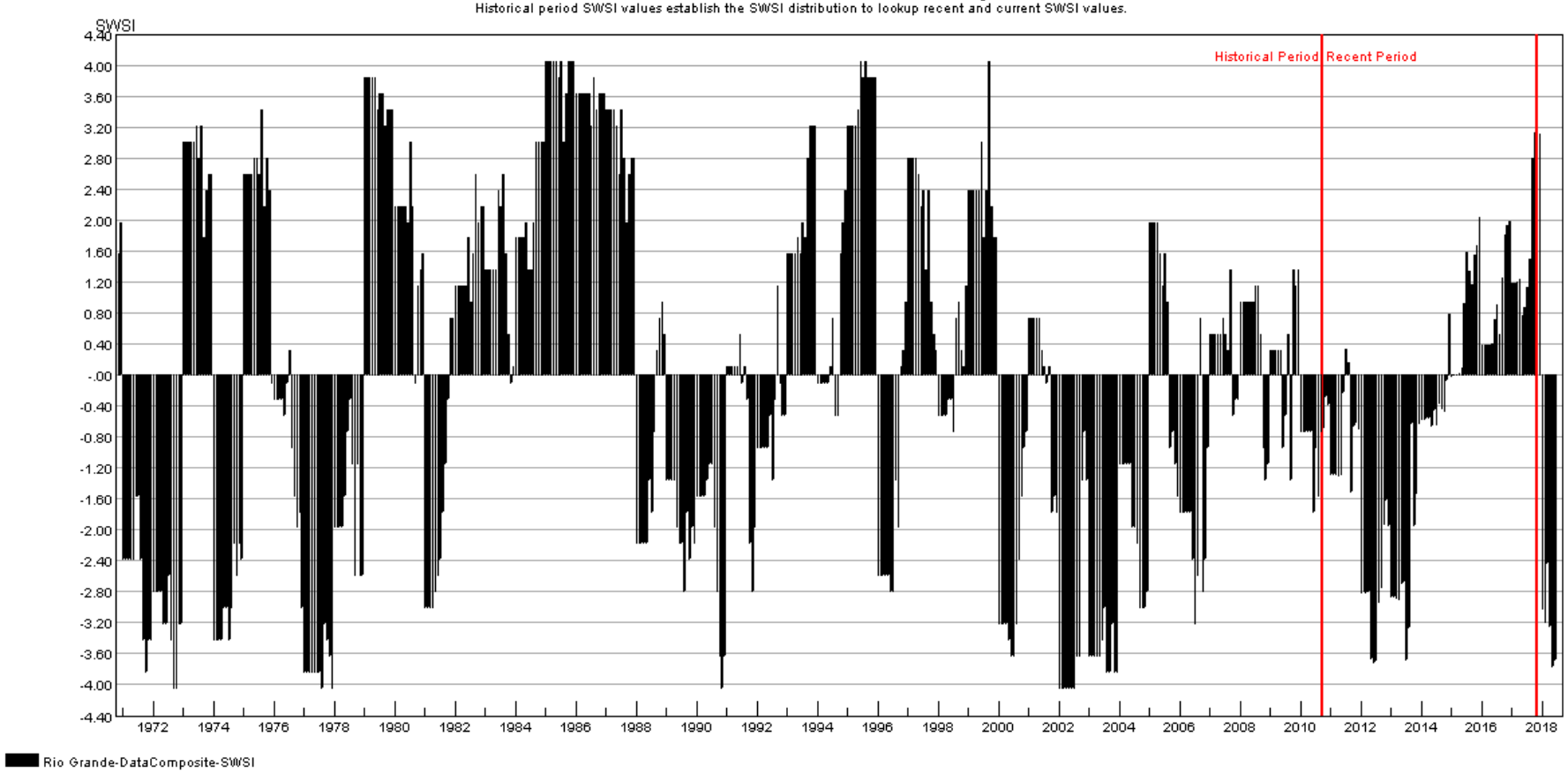
The drought of 2018 will hit hardest on streams on the east side of the San Luis Valley. Dry years are not easy for water administrators. The priority system requires regular inspection of headgates. Massive pumping from the valley's aquifers will be necessary to meet irrigated crop demand for those farmers lucky enough to have an irrigation well.

Public Use Impact

The anticipated poor stream flow will adversely affect the farming, ranching, and recreational industries in the basin. Reservoir storage in this basin began at a good level this year, but have already seen substantial drawdown. Two reservoirs will be completely drained this year for repair work – Rio Grande and Trujillo Meadows.

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 -3.7.

Unfortunately, May brought continued dry conditions to the Gunnison basin and no areas received greater than 50% of average precipitation with many receiving less than 30% of average. Gunnison basin snowpack, as measured using an average of Snotel sites in the basin, reached the effective "snow-all-gone" level on May 28th, which is approximately two weeks early. Streamflows during runoff were significantly below the 25th percentile at all gauge sites in the Basin with many gauges nearing or breaking record lows set in 2012, 2002, 1977 or even 1934 in the San Miguel River.

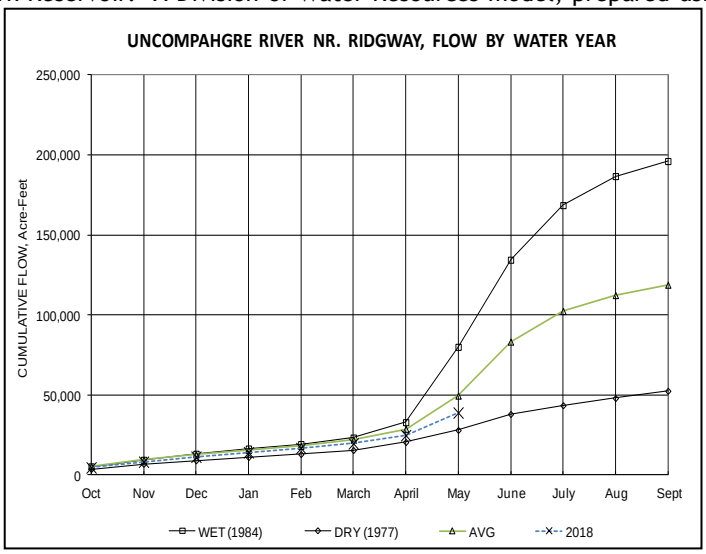
Outlook

Runoff volumes in May for all streams significantly underperformed the Colorado Basin River Forecast Center (CBRFC) forecast from May 1st. This has caused precipitous drops in April to July forecasts on June 1st. For example, the runoff forecast for the Gunnison River at Blue Mesa declined from 350,000 acre-feet on May 1st to 270,000 acre-feet on June 1st, which is a 22% decline during a period when forecasts typically are more accurate. Water users are hoping that the NOAA Climate Forecast is accurate, which now predicts an early and wet monsoon with above average precipitation during the June through August period.

Administrative/Management Concerns

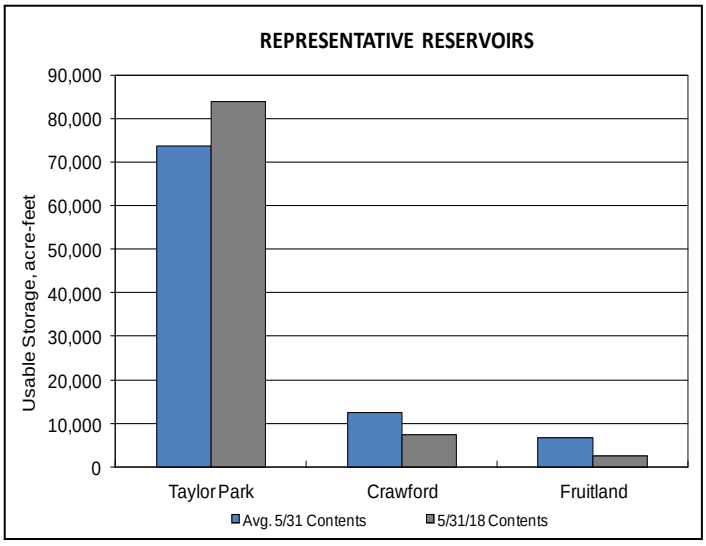
The 270,000 acre-feet forecast inflow into Blue Mesa Reservoir places 2018 in the dry year category for determining both the EIS Record of Decision and Black Canyon Water Right flows. Releases from Crystal Dam peaked at 1,909 cfs on May 14th in an attempt to meet those targets, which included only a 890 cfs baseflow in Whitewater and a one-day peak less than 1,000 cfs in the Black Canyon.

Inflow to the Aspinall Unit was greater than the 1,050 cfs taken at the Gunnison Tunnel (GT) for all but one day in May, resulting in the use of only 147 acre-feet of first fill storage from Taylor Park Reservoir. A Division of Water Resources model, prepared using the accounting spreadsheet for the Gunnison River, predicts that the GT will begin using storage from Taylor Park again in mid June, that over 70,000 acre-feet of first fill will be used in 2018 and that the first fill account may carryover less than 80,000 acre-feet on November 1, 2019.



The UVWUA placed a call with the Montrose & Delta Canal on May 28th, but removed the call on June 1st because hot weather produced additional runoff and users began to cut hay, which resulted in their system not fully utilizing the water produced by the call. Removal of the call allowed Ridgway Reservoir to store additional water, which is beneficial to the UVWUA as they own Ridgway storage as well. Unfortunately, however, the call will likely go on again within two weeks.

As mentioned last month, calls on Surface Creek tributaries placed most of the 92 reservoirs on the Grand Mesa out of priority for much of April and May. On May 22nd, conditions allowed Water Commissioners to begin insuring that inflows pass through the reservoirs and to release the volume of water stored out-of-priority. The amount of flow in each drainage captured by reservoirs was calculated by dividing the amount of storage accrued by how many days runoff was likely occurring based on records from weather and streamflow gauge sites. This amount of flow is being released from the reservoirs and will be delivered in priority to water rights on each creek for the same length of time it was accruing. Many irrigators in the Surface Creek Valley are already using storage as streamflow has not been enough to irrigate their crops. Most Grand Mesa reservoirs will be completely drained at the end of the irrigation season this year making getting above average precipitation next year necessary.

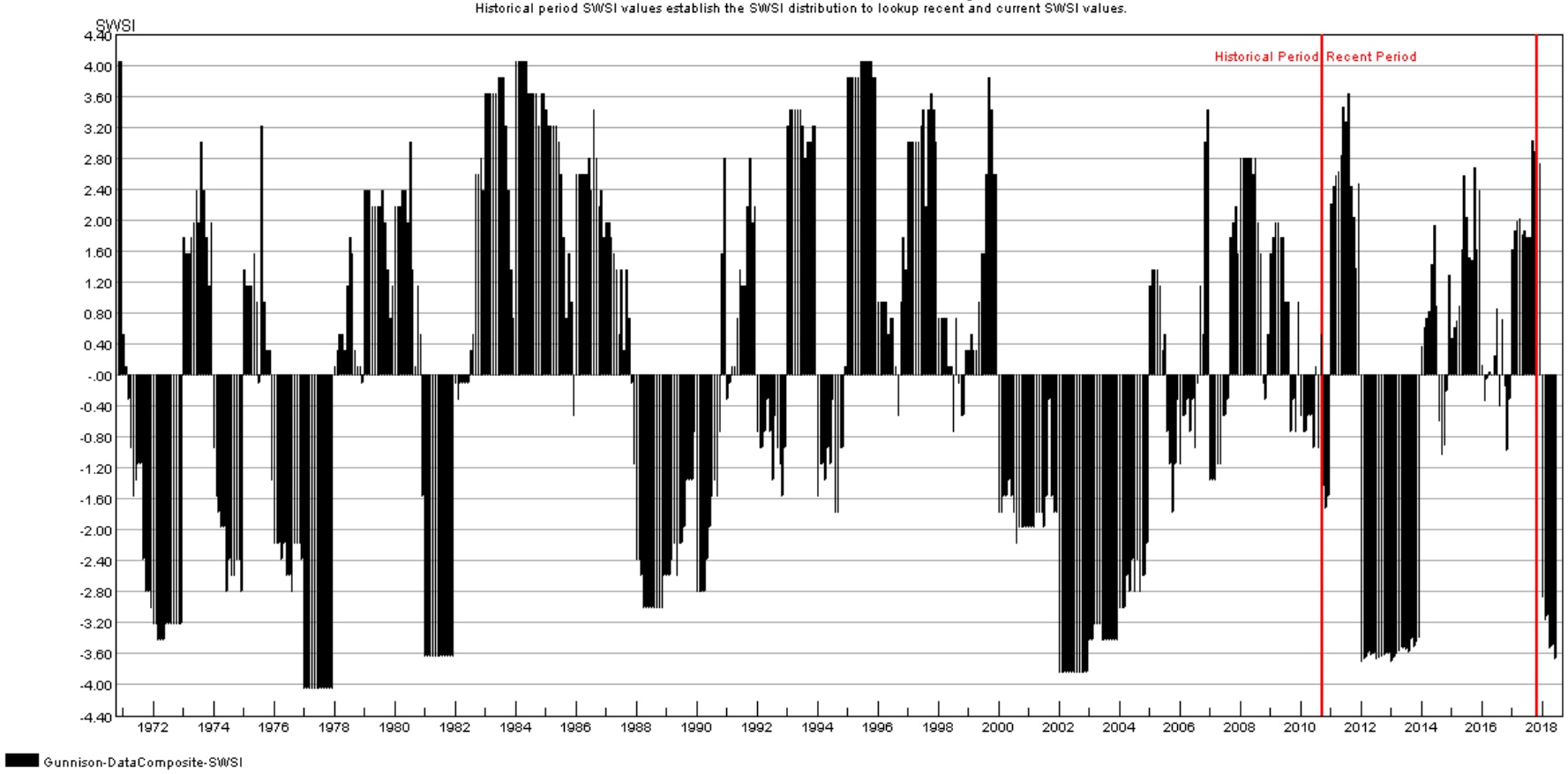


Public Use Impacts

The Taylor Park Local Users Group (TLUG) met to discuss potential reductions in releases from Taylor Park that would impact rafting and fishing. The TLUG decided to request that flows remain as planned until July 1st.

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 -3.5.

Outlook

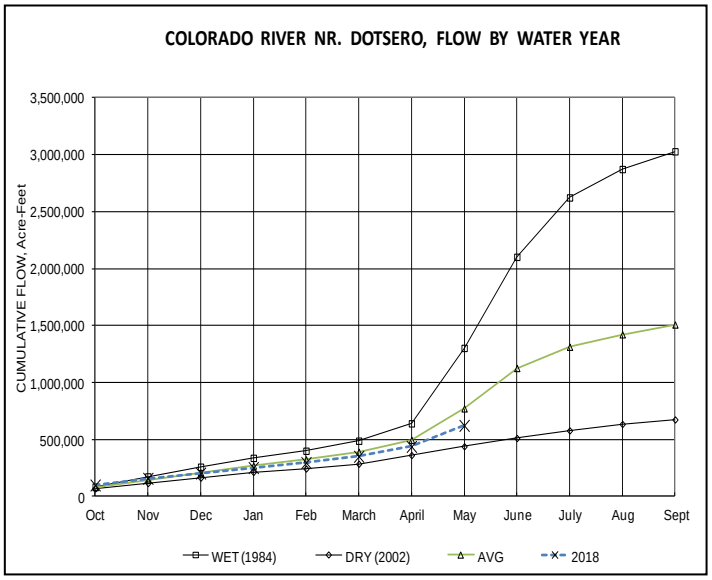
Colorado River flows and tributary flows are running below average. River flows are forecasted to continue below average. Normal to below average temperatures and above average precipitation are forecasted for the month of June.

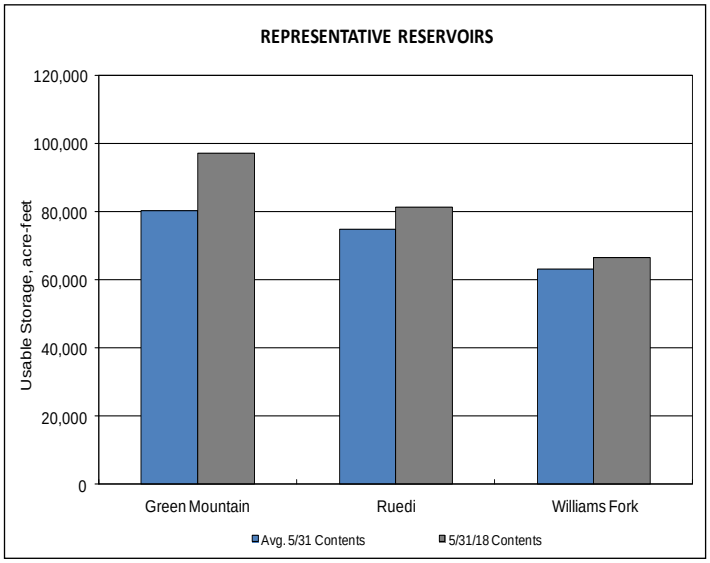
Administrative/Management Concerns

There is currently no call on the Colorado River. Grand Valley Irrigation diversions (Government Highline/Orchard Mesa Irrigation, Grand Valley Irrigation canals) continue at or near full capacity. There is a call on the Blue River pursuant to paragraph II.b. of the Green Mountain Protocol.

Public Use Impacts

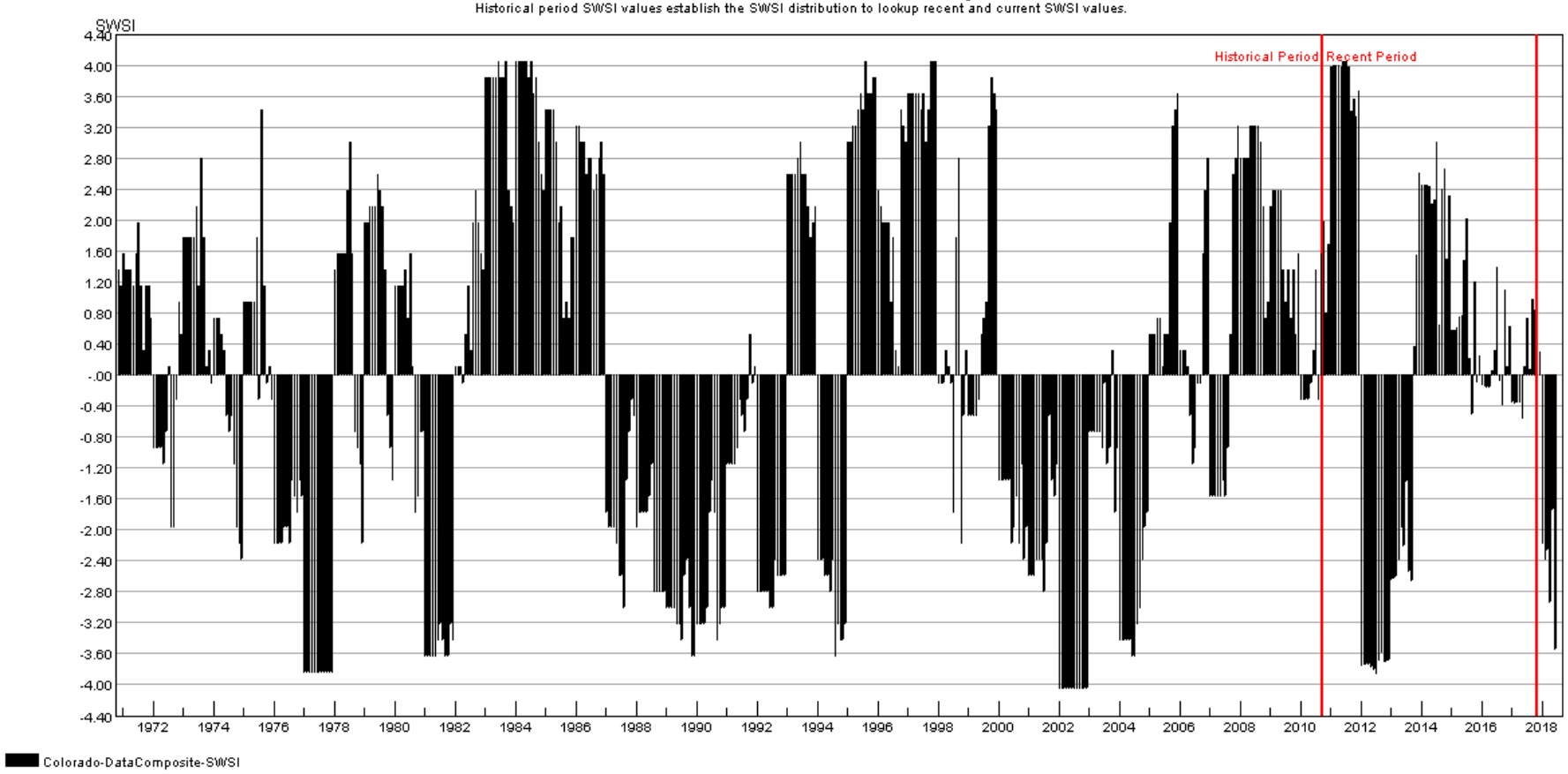
Based on stipulations with five opposing entities in a diligence case for reservoirs on Castle and Maroon Creeks, the City of Aspen will not build those reservoirs in those wilderness areas. Instead, Aspen is proposing to move its conditional water rights to a yet to be determined location. Five remaining opposers remain in the case, although there is hope that the outstanding issues are close to resolution.





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 -2.6.

May precipitation was well below average in the Yampa, White, and North Platte River basins. Precipitation for the month, as measured at the SNOTEL sites operated by NRCS, was reported at 49% of average for the Yampa, White, and North Platte River basins. Total precipitation for the water year as a percent of average to date in the combined basins at the end of May was 83%.

Snowpack for the combined basins as of May 31st, 2018 was at 33% of average. The snow water equivalent (SWE) as of June 1, 2018 was 47% of average for the North Platte River basin and 32% of average for the Yampa River basin and White River basin.

NRCS predicts well below average spring and summer streamflows in the Yampa, White, and North Platte River basins. The latest runoff forecasts from the NRCS are 62% of average for the North Platte River at Northgate (June – September), 40% of average for the Yampa River near Maybell (June – July), 19% of average for the Little Snake River near Lily (June – July), and 52% of average (April – July) for the White River near Meeker.

All Division 6 stream gages are now open.

Outlook

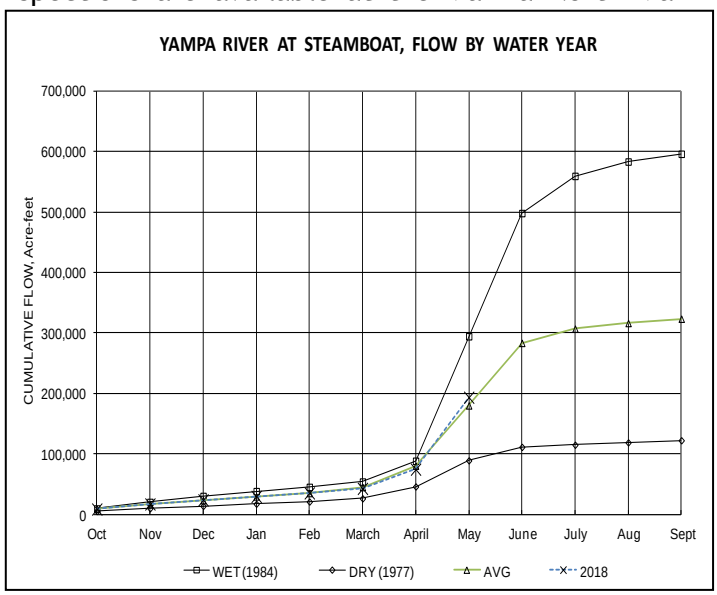
As of May 31st Fish Creek Reservoir was storing approximately 4,213 AF, 101% of capacity. The capacity of Fish Creek Reservoir is 4,167 AF. Yamcolo Reservoir was storing 9,100 AF at the end of May 2018. The capacity of Yamcolo Reservoir is 8,700 AF. The storage at Elkhead Creek Reservoir is 24,851 AF. The capacity of Elkhead Creek Reservoir is 24,778 AF. On May 30, 2018, Stagecoach Reservoir was storing 36,400 AF, 100% of capacity.

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

Public Use Impacts

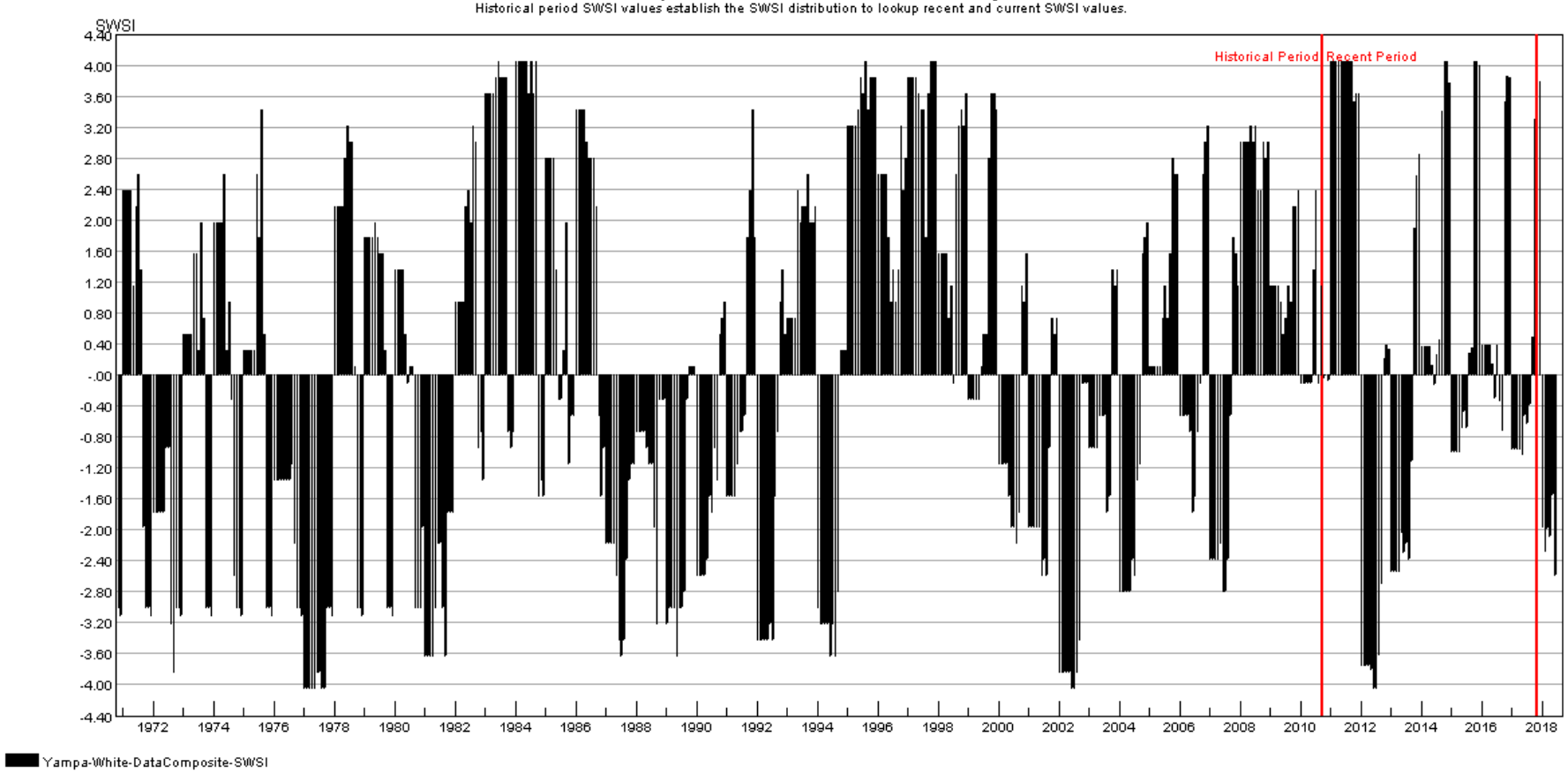
Please check the Stagecoach Reservoir State Park website for the fishing report. Motorized boating is now allowed on the reservoir (May 1 – October 31). ANS inspections are available at the Marina/North/Main Boatramp. A pre-inspection is required prior to launching any vessel in to the reservoir. The swim beach is now open.

Steamboat Lake is now open for boating and you can stop by the visitor center for a mandatory boat inspection. Call 800-244-5613 for camping reservations. Reservations are recommended at all times. The swim beach is now open. Dam construction is currently underway. There is no public day use or access to the Sage Flats day use area.



Yampa-White Basin SWSI History

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



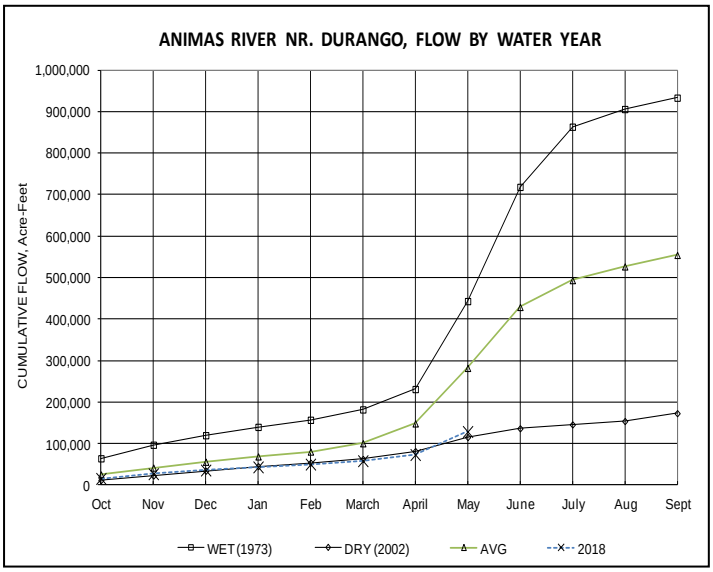
Basinwide Conditions Assessment

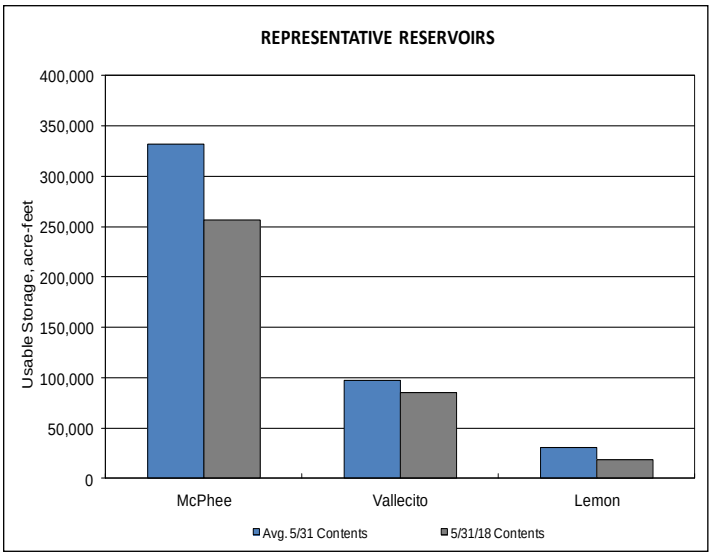
The SWSI value for the month was -3.3.

Flow at the Animas River at Durango averaged 905 cfs (40% of average). The flow at the Dolores River at Dolores average is 347 cfs (20% of average). The La Plata River at Hesperus averaged 18.6 cfs (18% of average). Precipitation in Durango was 1.15 inches for the month, 96% of the 30-year average of 1.20 inches. Precipitation to date in Durango, for the water year, is 4.13 inches, 33% of the 30-year average of 12.43 inches. End of last month precipitation to date, for the water year was 26% of average. The average high and low temperatures for the month of May in Durango were 76o and 38o. In comparison, the 30-year average high and low for the month is 72o and 38o. At the end of the month Vallecito Reservoir contained 85,218 acre-feet compared to its average content of 91,513 acre-feet (93% of average). McPhee Reservoir was up to 256,597 acre-feet compared to its average content of 337,399 (76% of average), while Lemon Reservoir was up to 18,870 acre-feet as compared to its average content of 30,620 acre-feet (62% of average).

Outlook

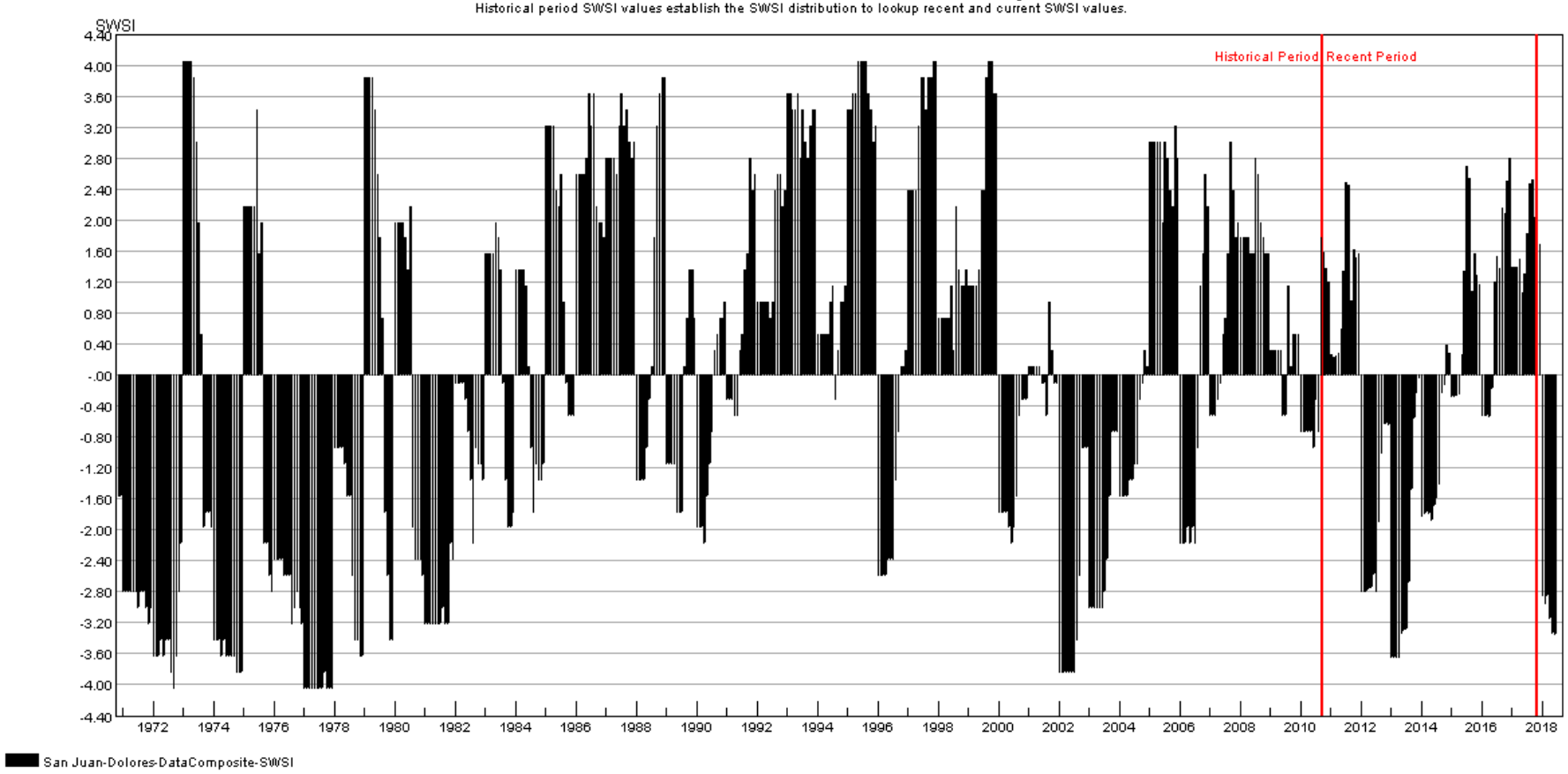
Precipitation (1.15 inches) was near average for May in Durango. There were 56 years out of 124 years of record where there was more precipitation than this year. The flows in the rivers within the basin remained well below average for this time of year. There are 106 out of 108 years of record where the total flow past the Animas River at Durango stream gauge was more than this year. There were 105 out of 107 years of record where the total flow past the Dolores stream gauge was more than this year and 99 out of 101 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year.





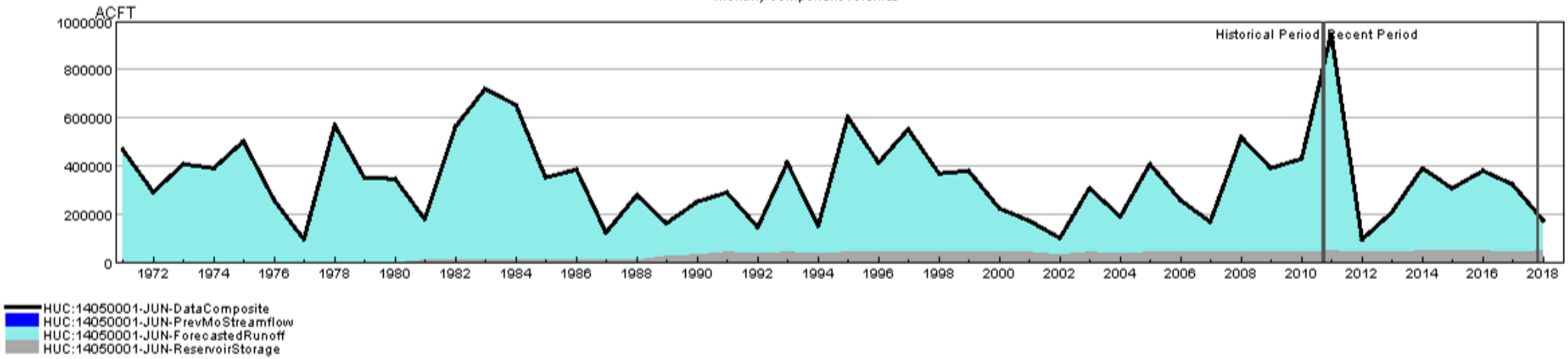
San Juan-Dolores Basin SWSI History

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



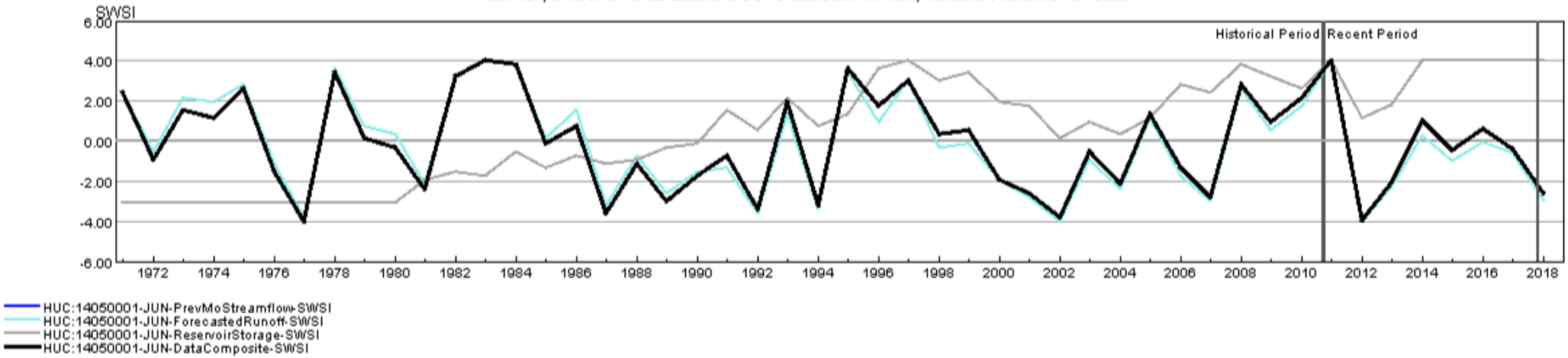
HUC 14050001 (Upper Yampa) Surface Water Supply - JUN

Monthly component volumes



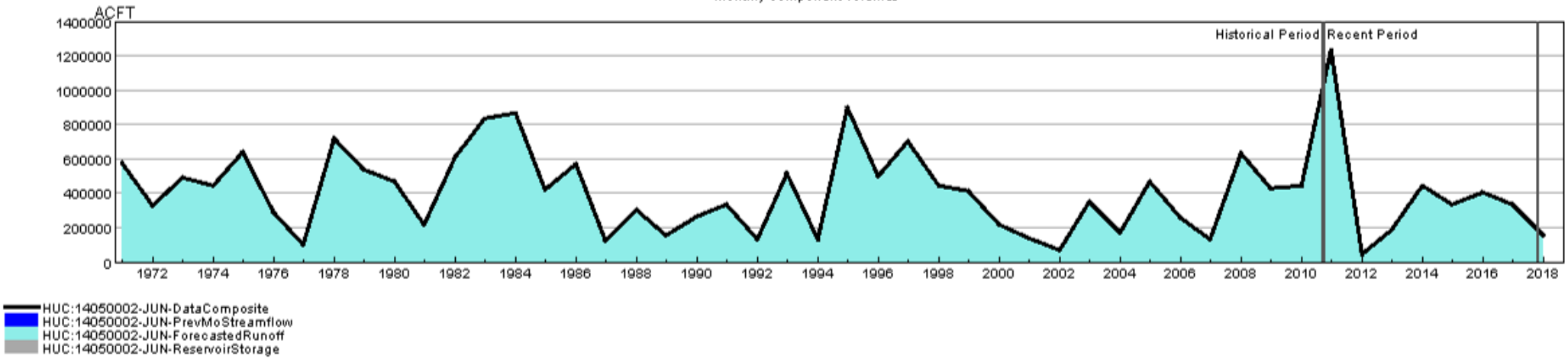
HUC 14050001 (Upper Yampa) SWSI Values - JUN

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



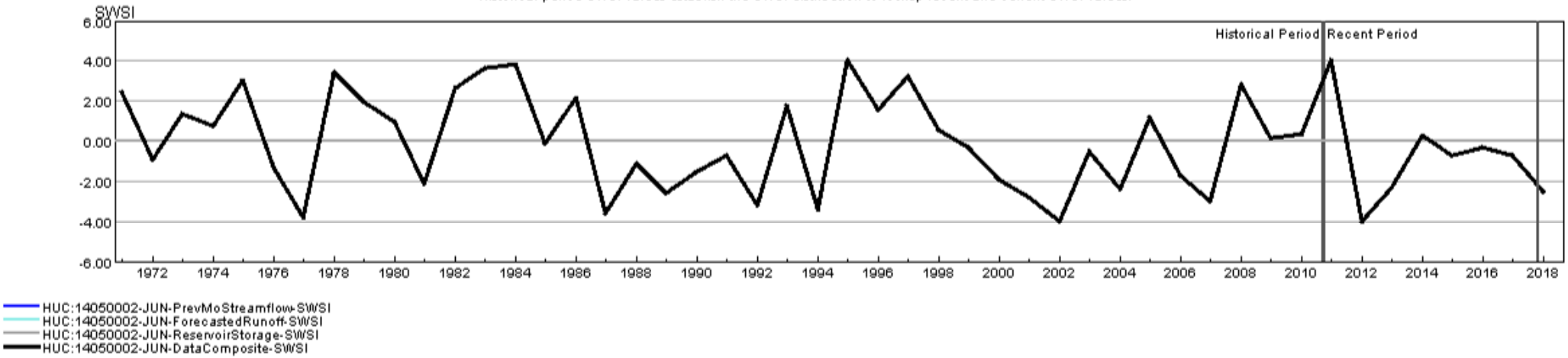
HUC 14050002 (Lower Yampa) Surface Water Supply - JUN

Monthly component volumes



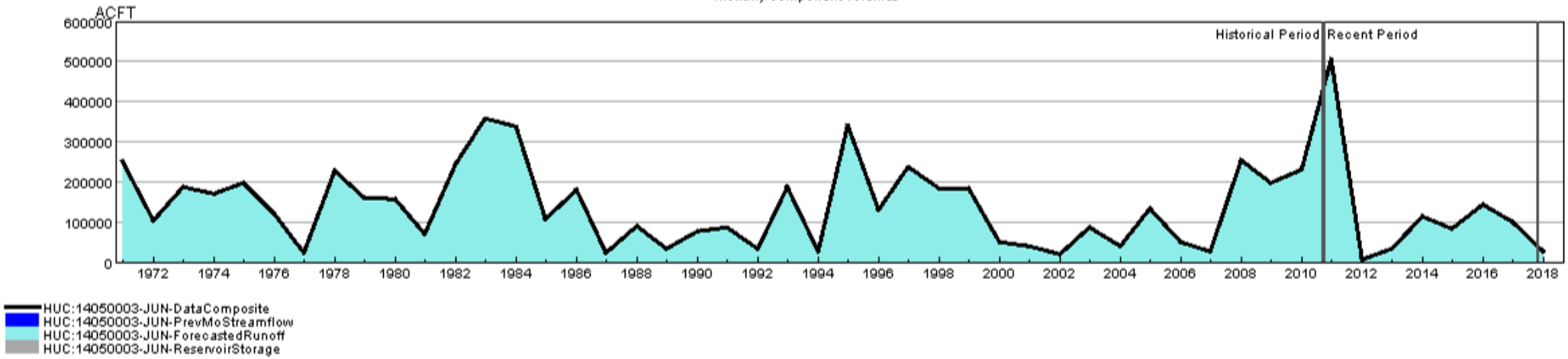
HUC 14050002 (Lower Yampa) SWSI Values - JUN

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



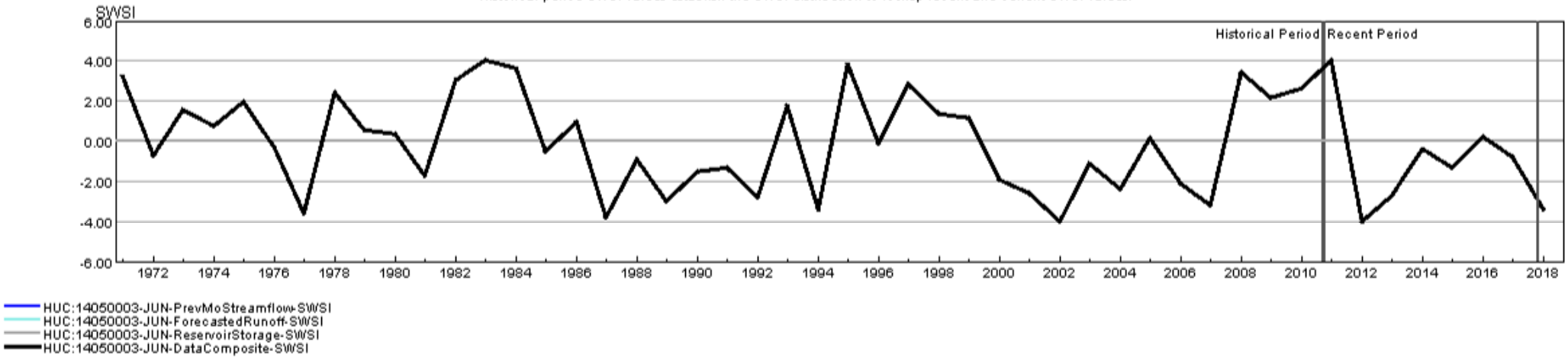
HUC 14050003 (Little Snake) Surface Water Supply - JUN

Monthly component volumes



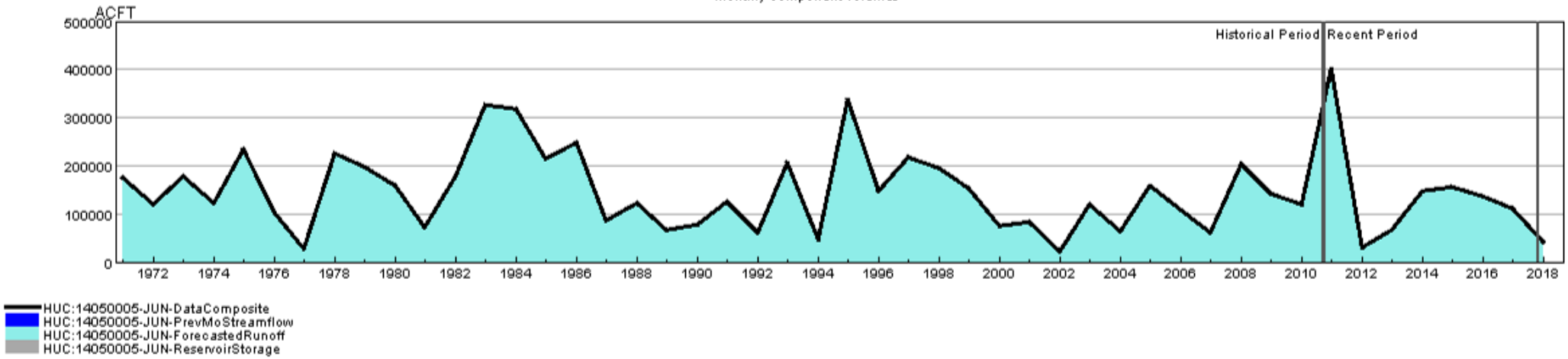
HUC 14050003 (Little Snake) SWSI Values - JUN

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



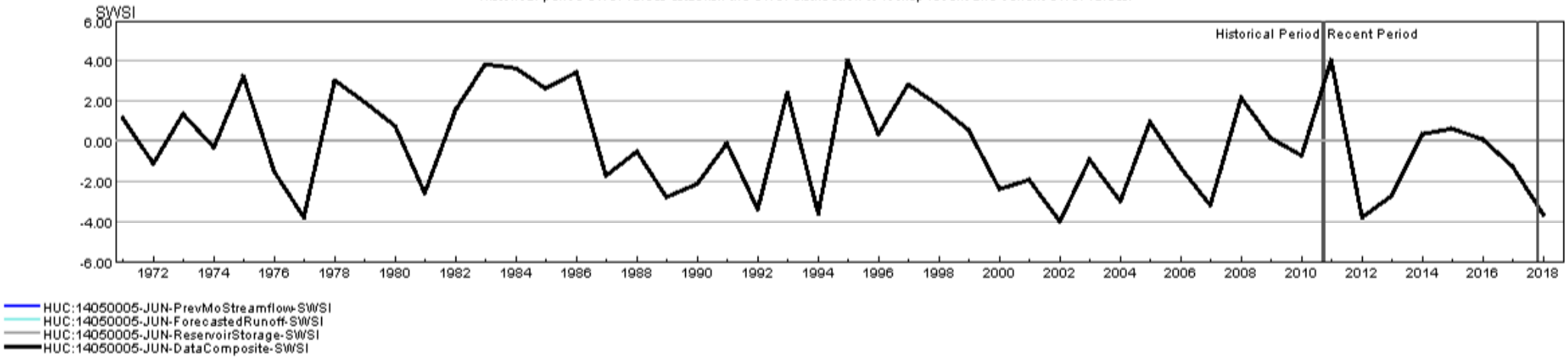
HUC 14050005 (Upper White) Surface Water Supply - JUN

Monthly component volumes



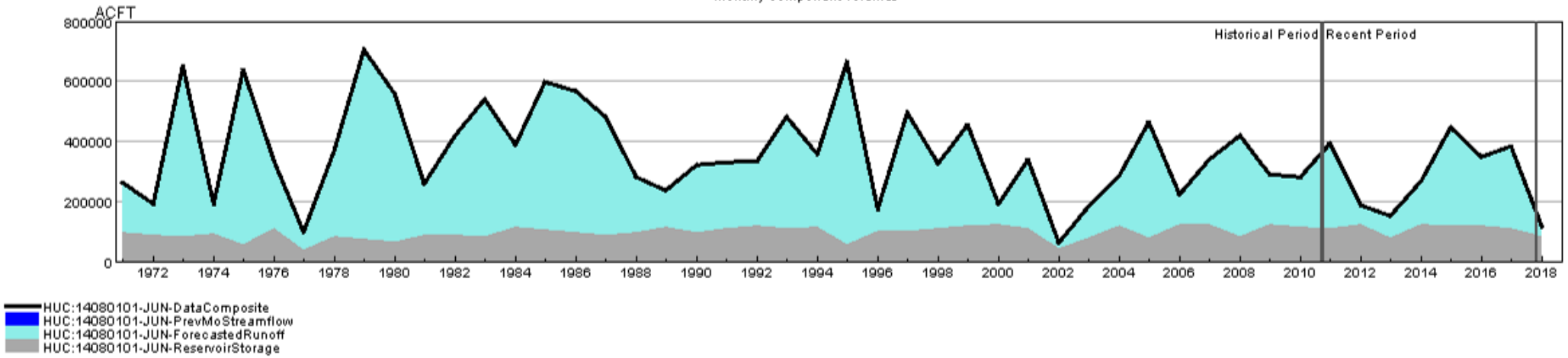
HUC 14050005 (Upper White) SWSI Values - JUN

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



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

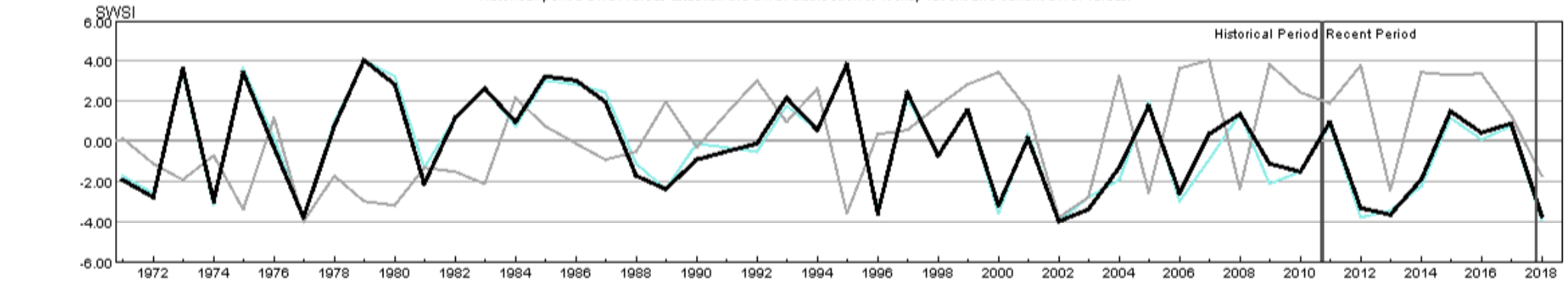
Monthly component volumes



HUC:14080101-JUN-DataComposite
HUC:14080101-JUN-PrevMoStreamflow
HUC:14080101-JUN-ForecastedRunoff
HUC:14080101-JUN-ReservoirStorage

HUC 14080101 (Upper San Juan) SWSI Values - JUN

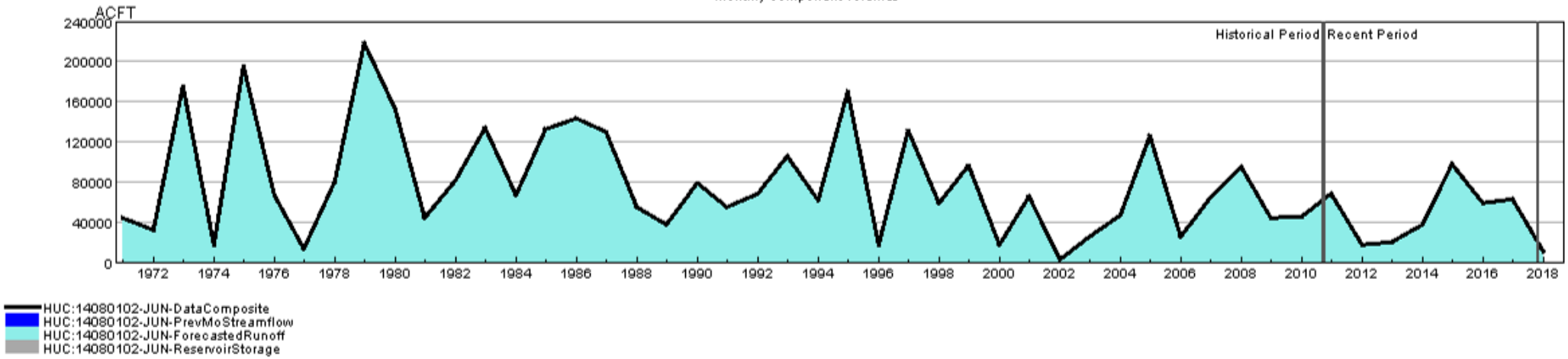
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



HUC:14080101-JUN-PrevMoStreamflow-SWSI
HUC:14080101-JUN-ForecastedRunoff-SWSI
HUC:14080101-JUN-ReservoirStorage-SWSI
HUC:14080101-JUN-DataComposite-SWSI

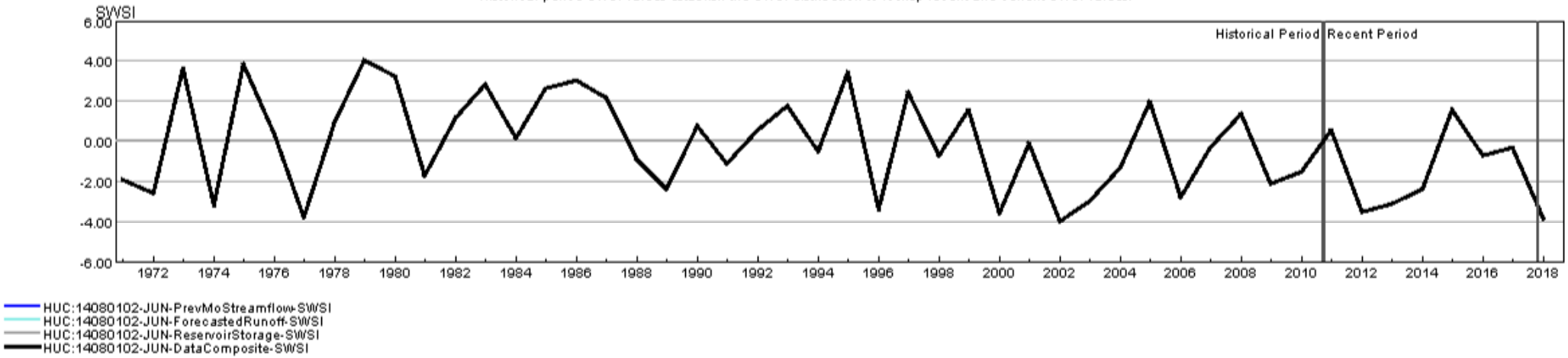
HUC 14080102 (Piedra) Surface Water Supply - JUN

Monthly component volumes



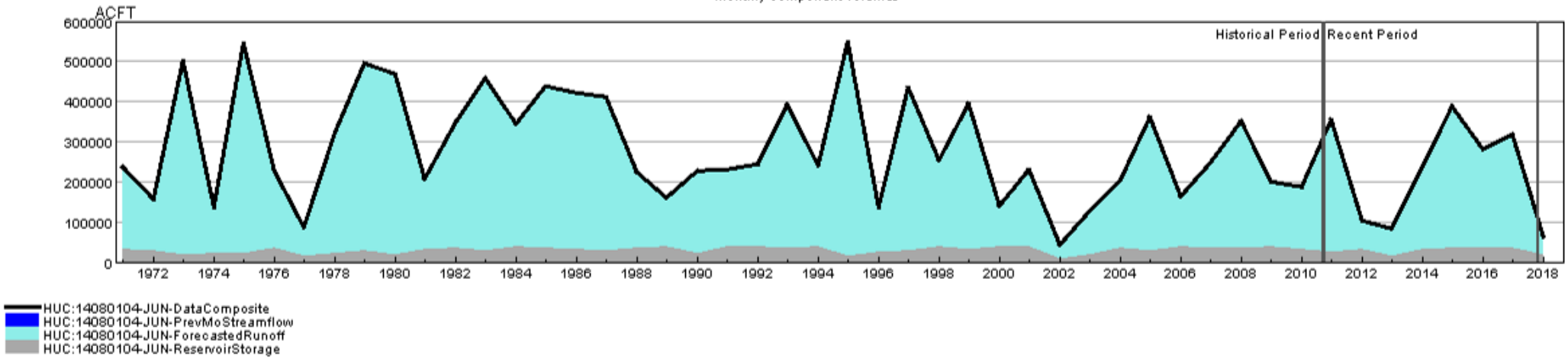
HUC 14080102 (Piedra) SWSI Values - JUN

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



HUC 14080104 (Animas) Surface Water Supply - JUN

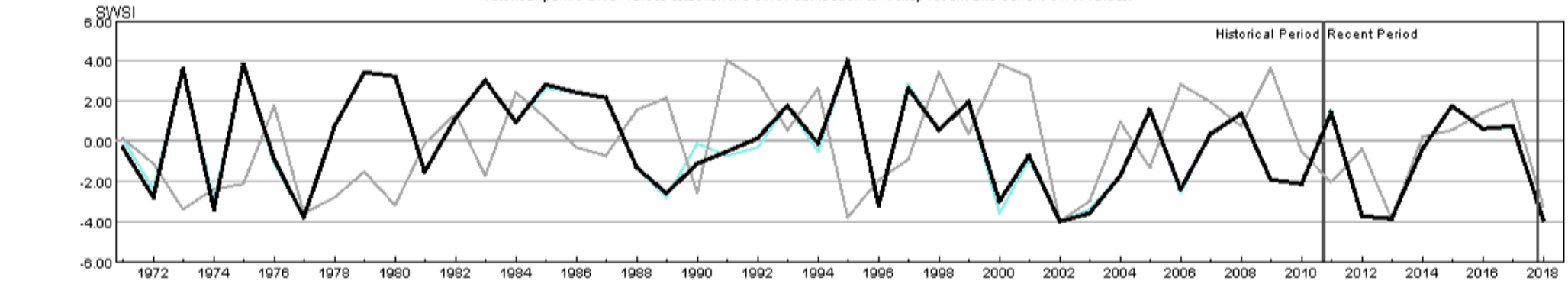
Monthly component volumes



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

HUC 14080104 (Animas) SWSI Values - JUN

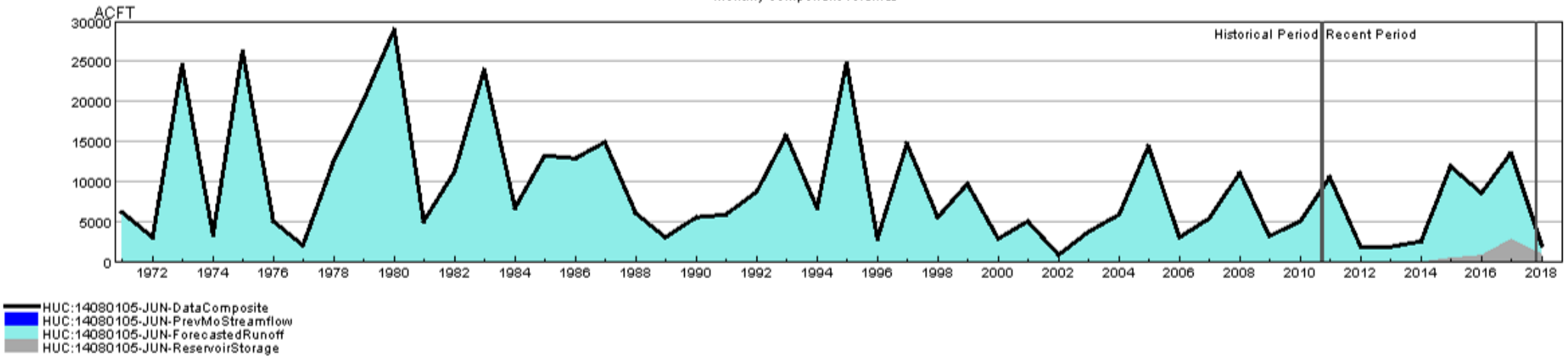
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



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

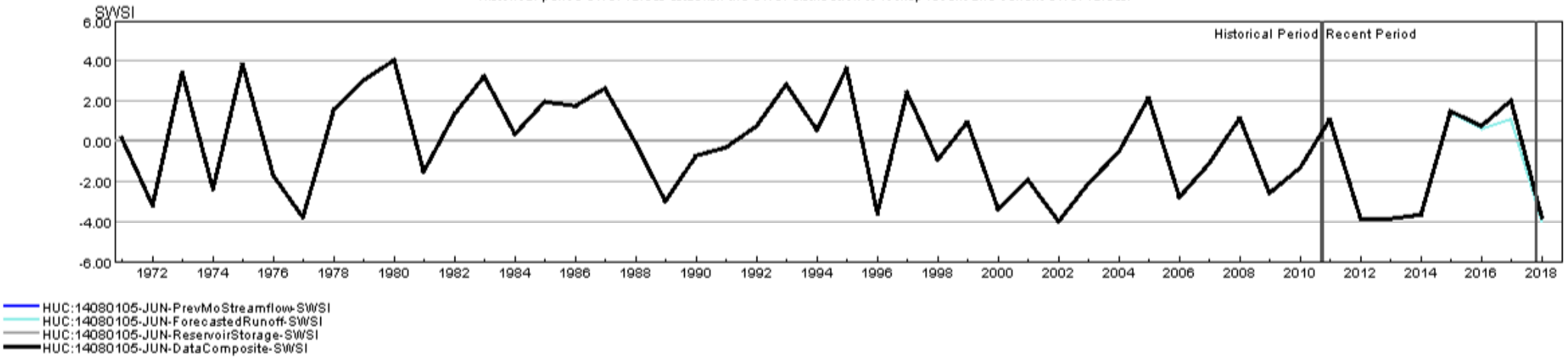
HUC 14080105 (Middle San Juan) Surface Water Supply - JUN

Monthly component volumes



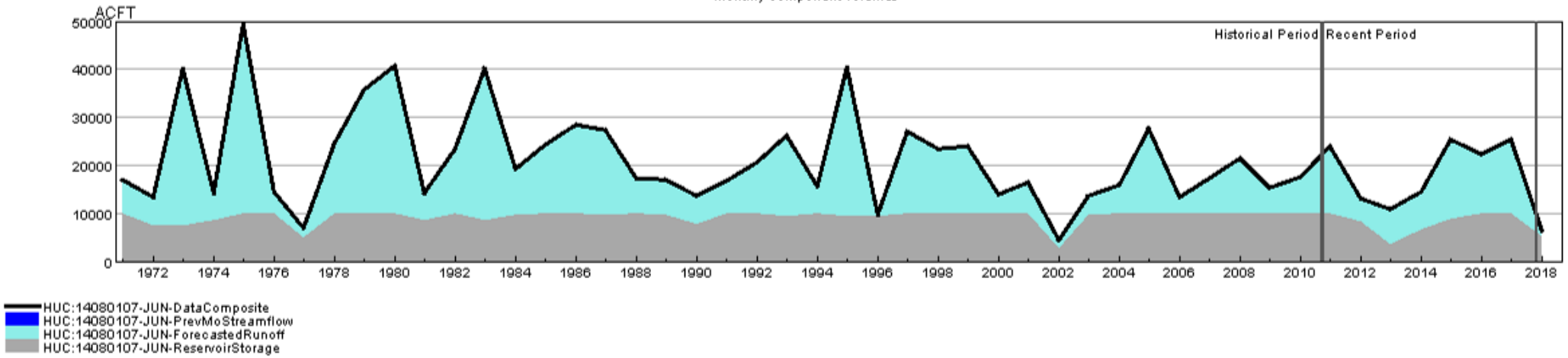
HUC 14080105 (Middle San Juan) SWSI Values - JUN

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



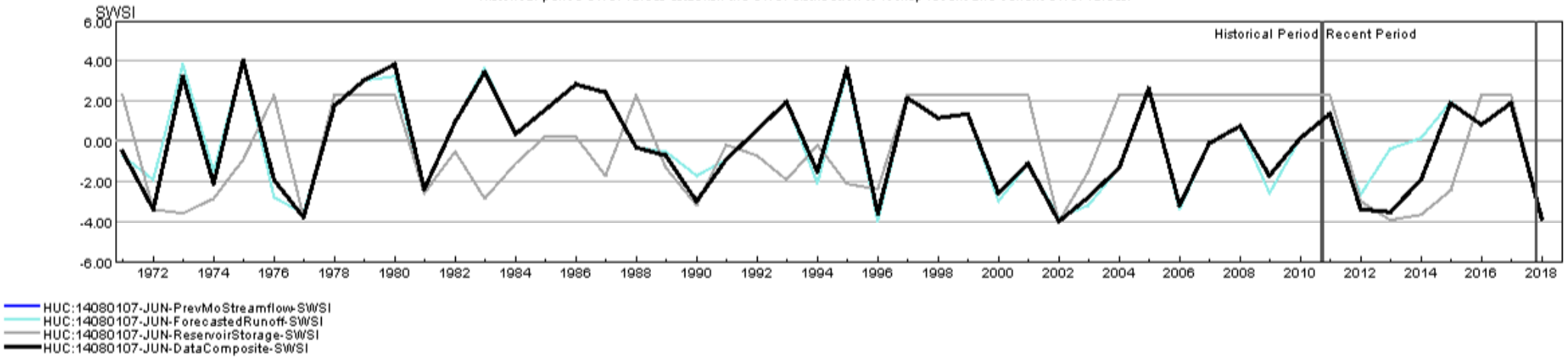
HUC 14080107 (Mancos) Surface Water Supply - JUN

Monthly component volumes



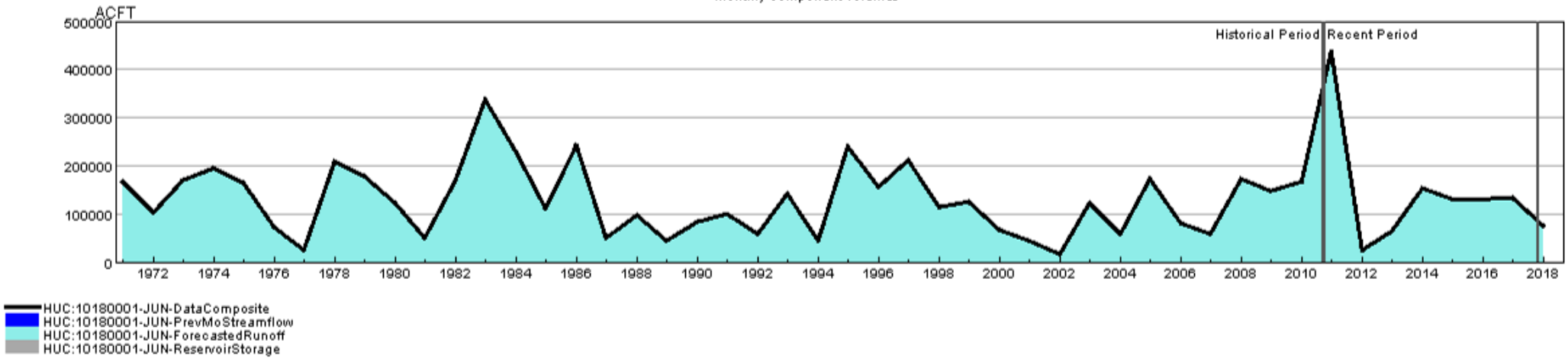
HUC 14080107 (Mancos) SWSI Values - JUN

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



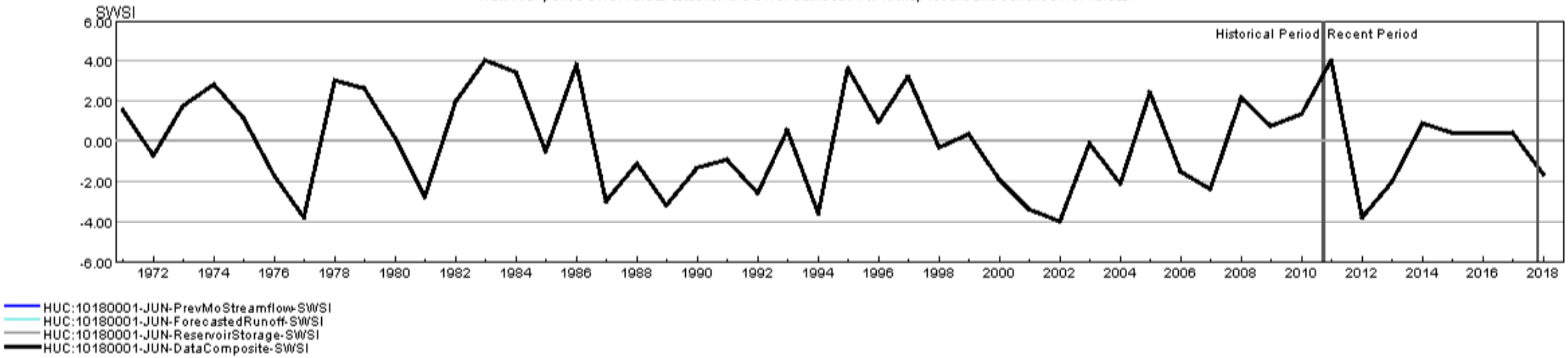
HUC 10180001 (North Platte Headwaters) Surface Water Supply - JUN

Monthly component volumes



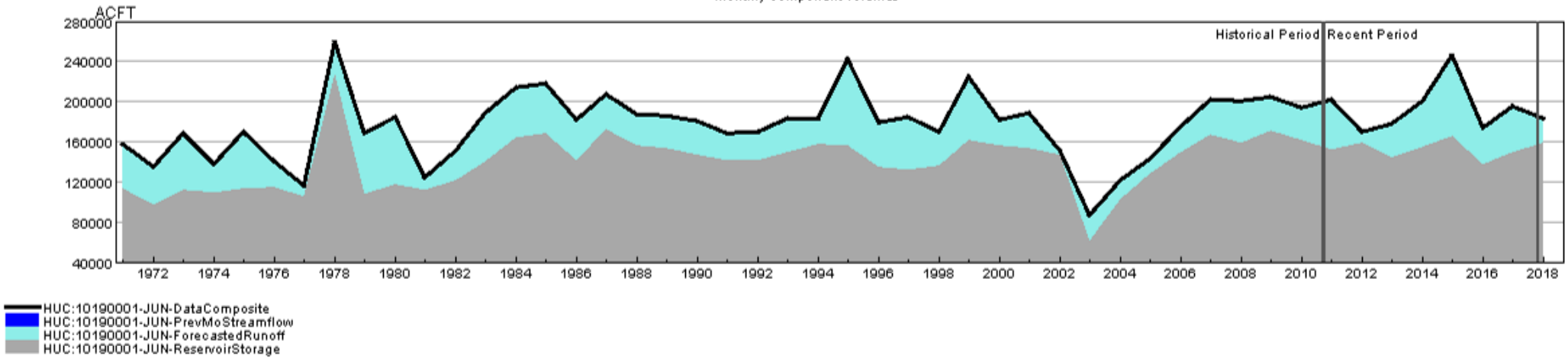
HUC 10180001 (North Platte Headwaters) SWSI Values - JUN

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



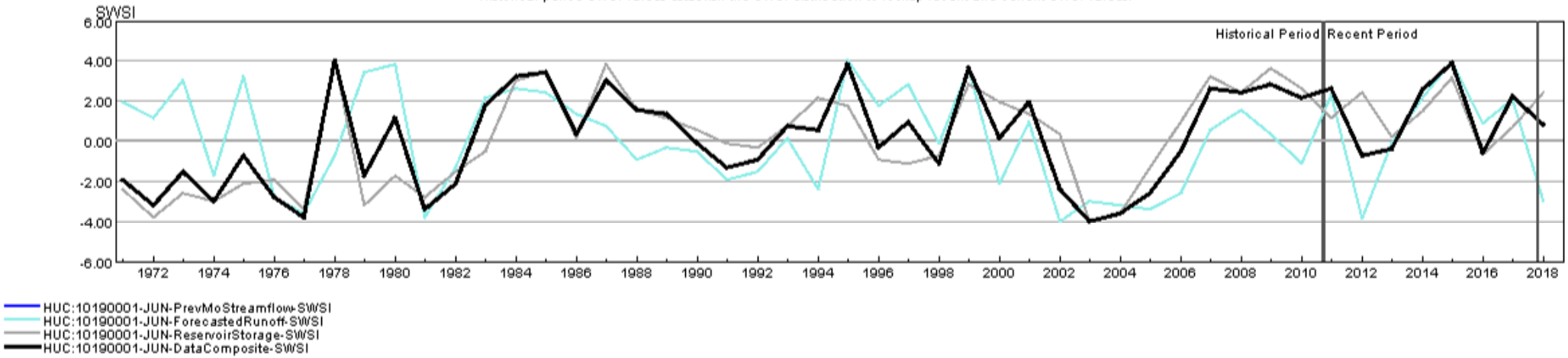
HUC 10190001 (South Platte Headwater) Surface Water Supply - JUN

Monthly component volumes



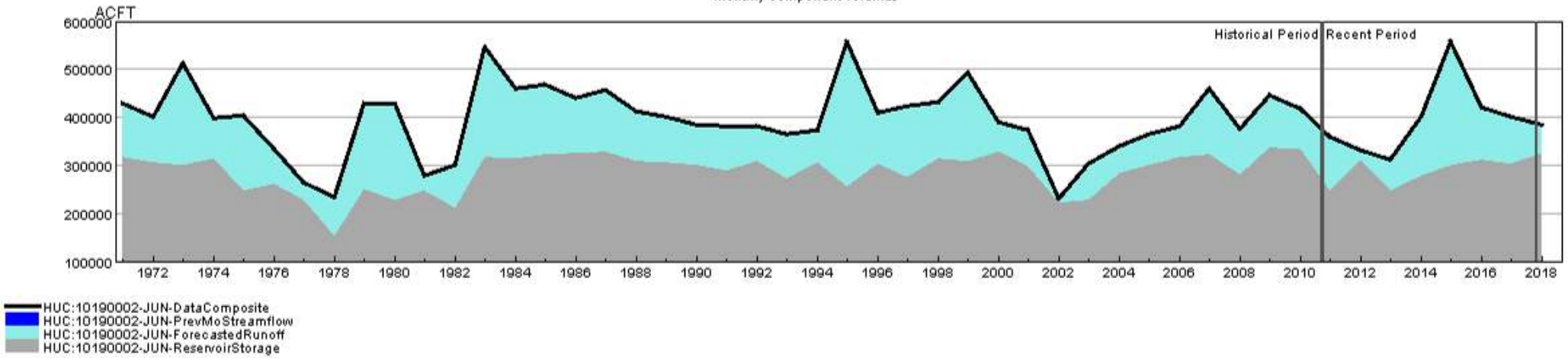
HUC 10190001 (South Platte Headwater) SWSI Values - JUN

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



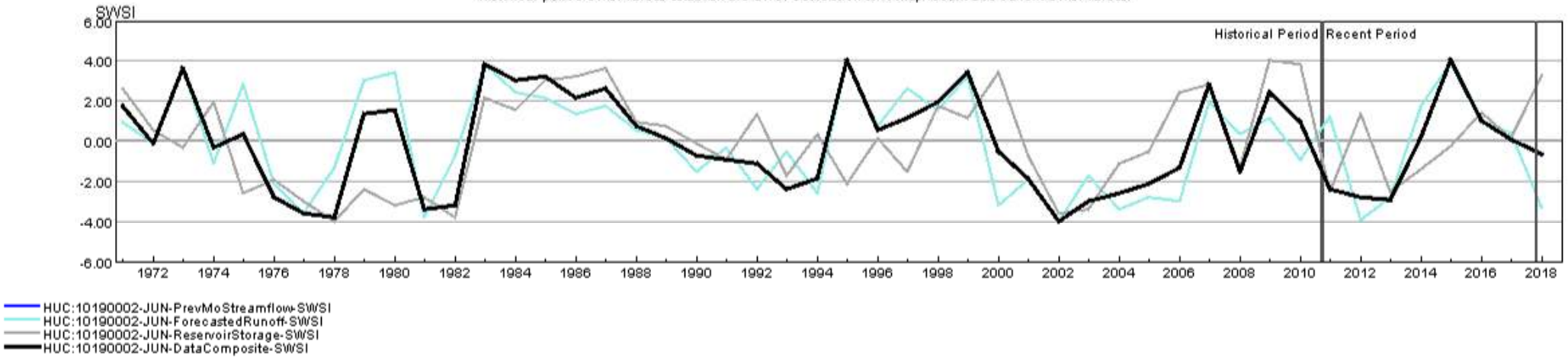
HUC 10190002 (Upper South Platte) Surface Water Supply - JUN

Monthly component volumes



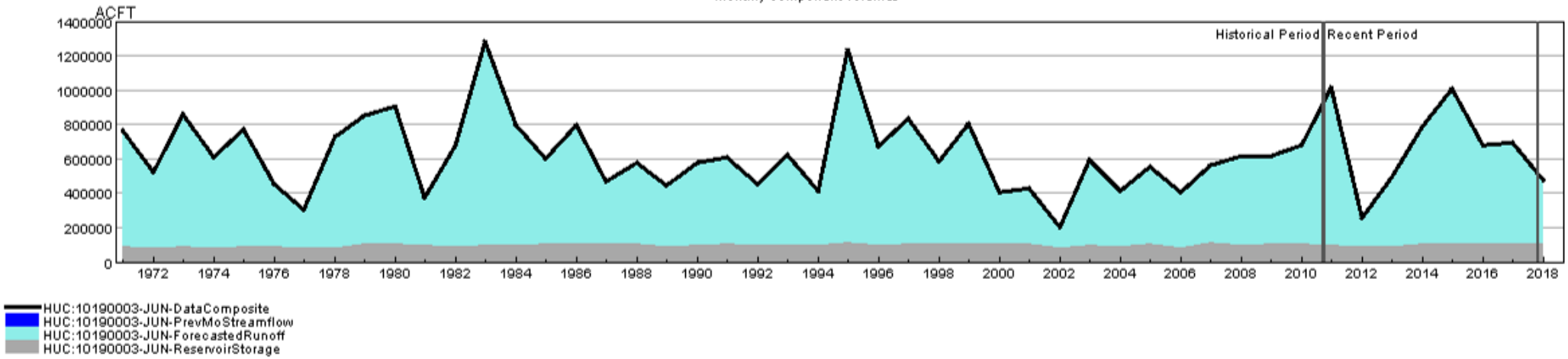
HUC 10190002 (Upper South Platte) SWSI Values - JUN

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



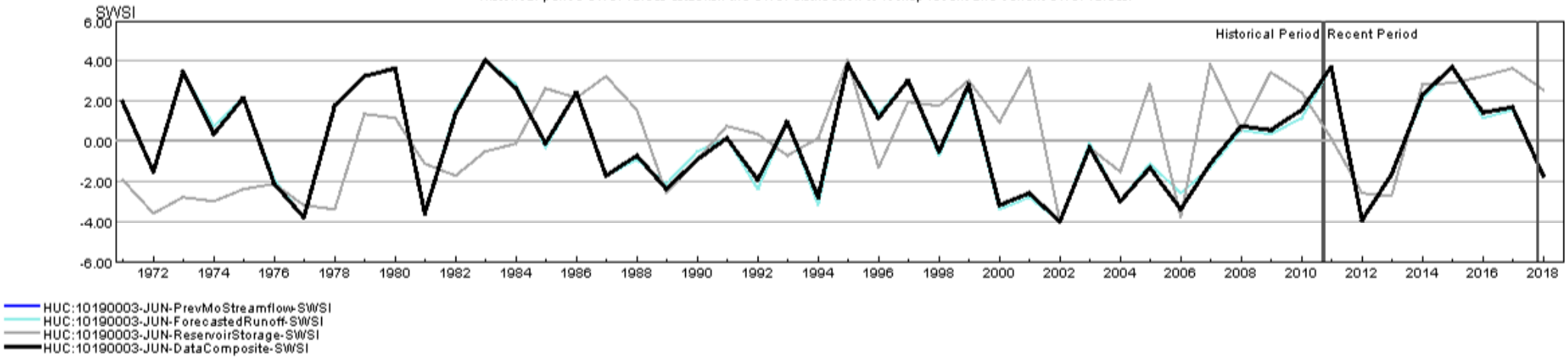
HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply - JUN

Monthly component volumes



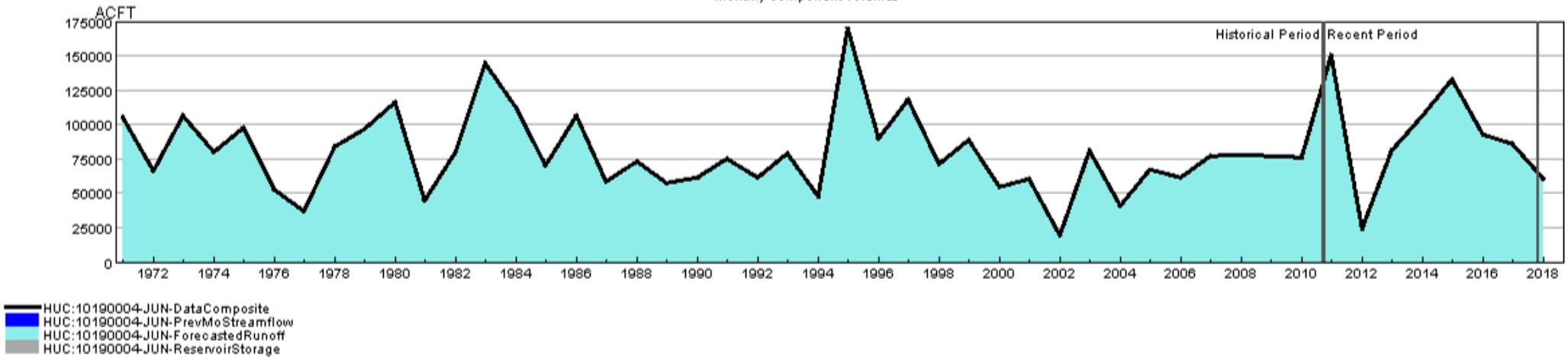
HUC 10190003 (Middle South Platte-Cherry Creek) SWSI Values - JUN

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



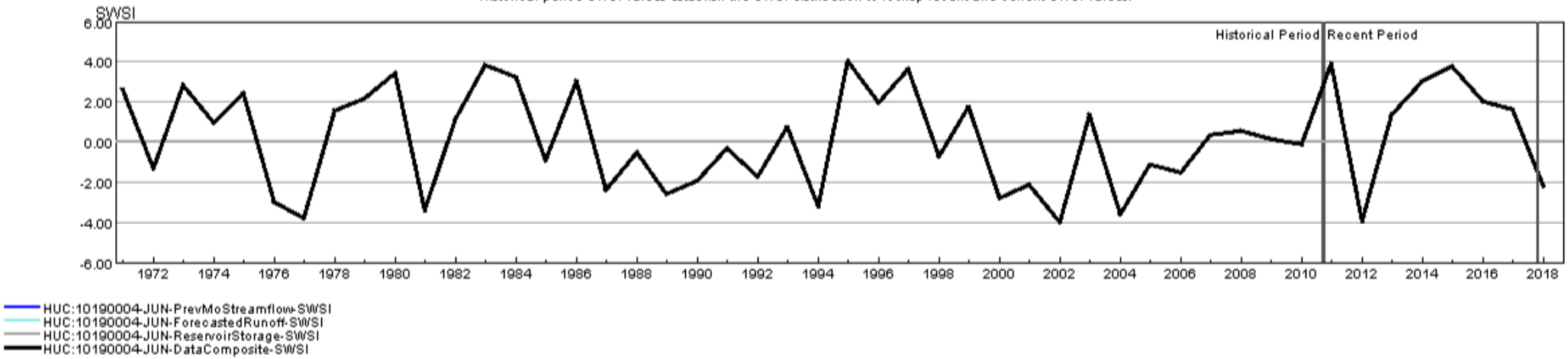
HUC 10190004 (Clear) Surface Water Supply - JUN

Monthly component volumes



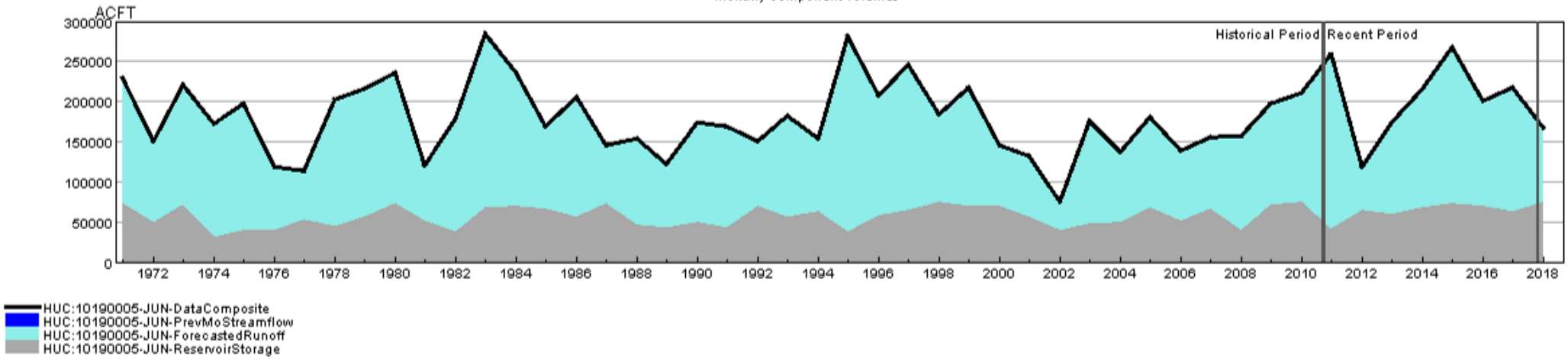
HUC 10190004 (Clear) SWSI Values - JUN

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



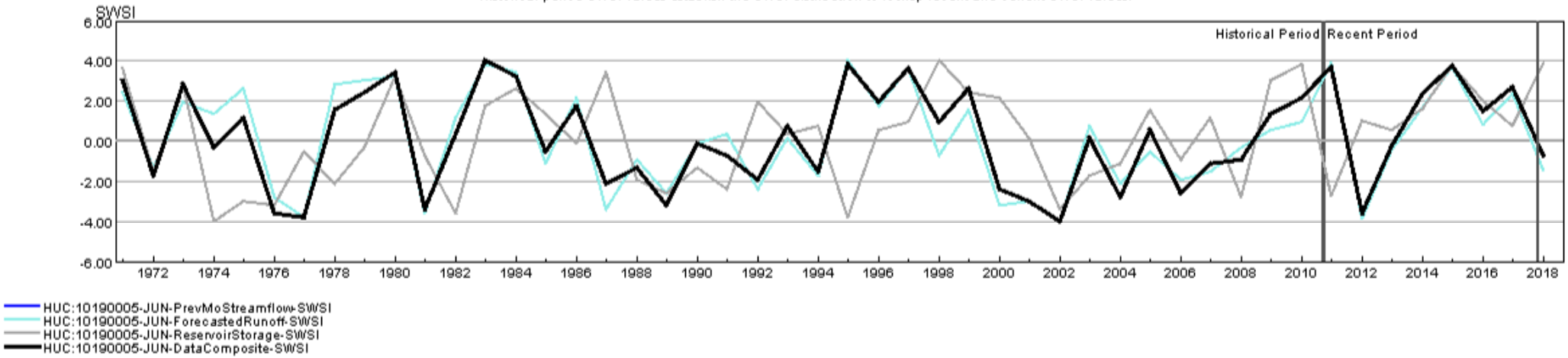
HUC 10190005 (St. Vrain) Surface Water Supply - JUN

Monthly component volumes



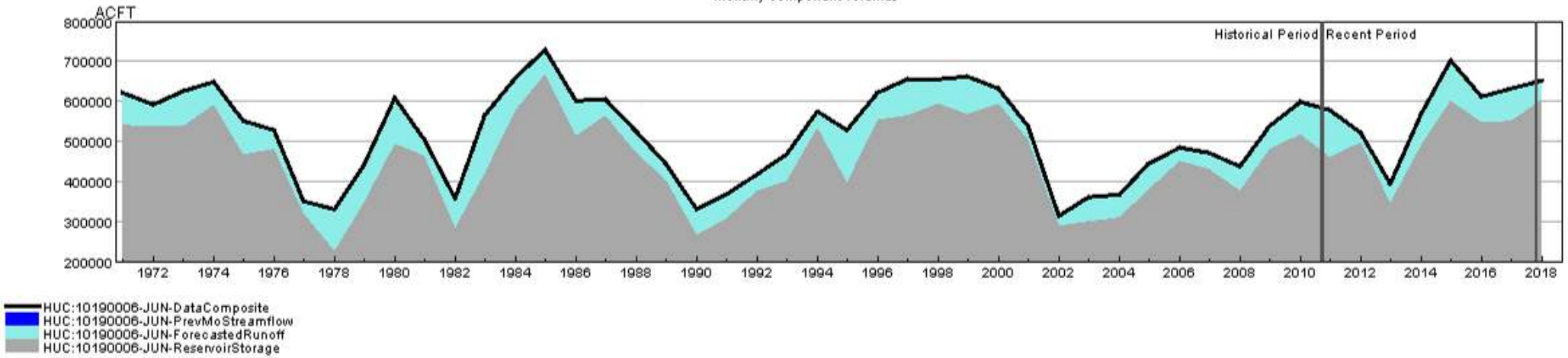
HUC 10190005 (St. Vrain) SWSI Values - JUN

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



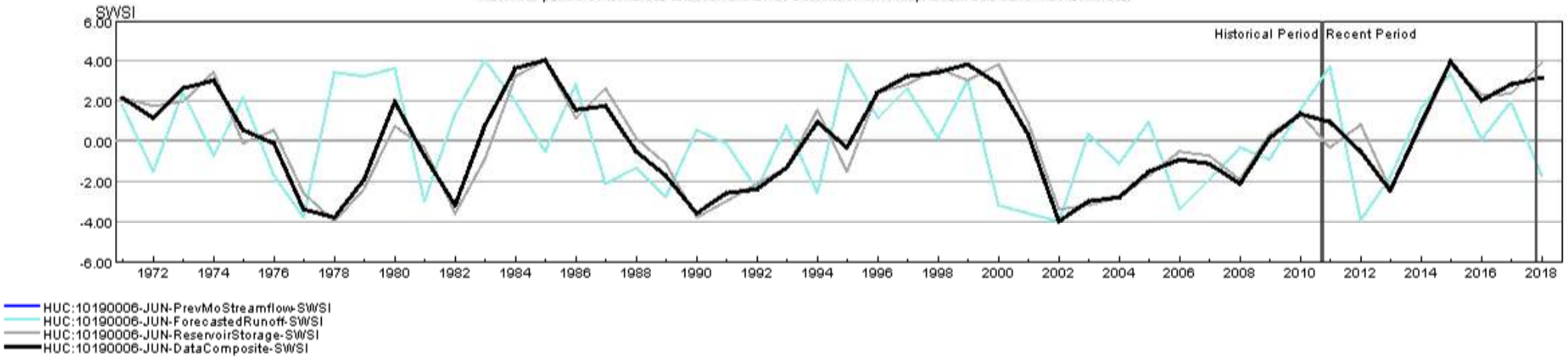
HUC 10190006 (Big Thompson) Surface Water Supply - JUN

Monthly component volumes



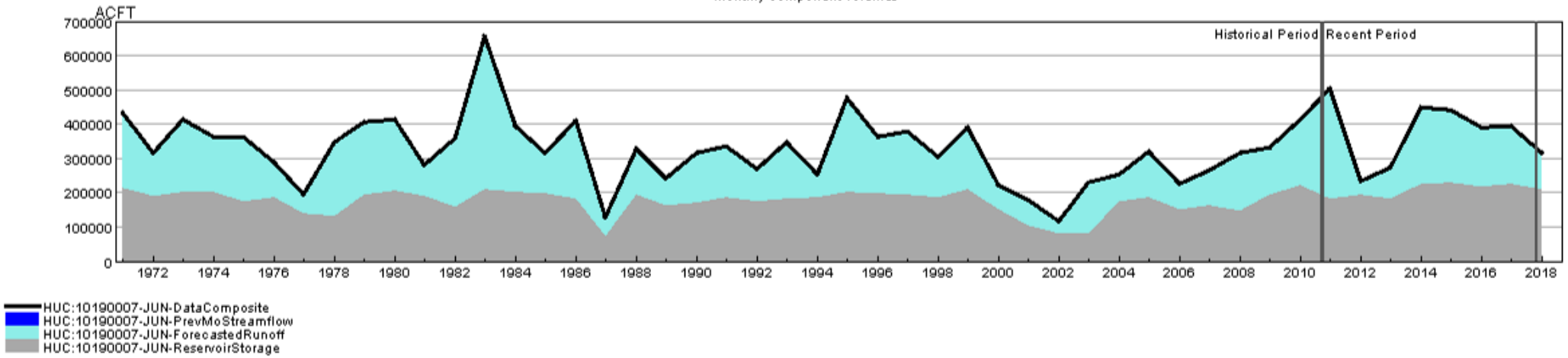
HUC 10190006 (Big Thompson) SWSI Values - JUN

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



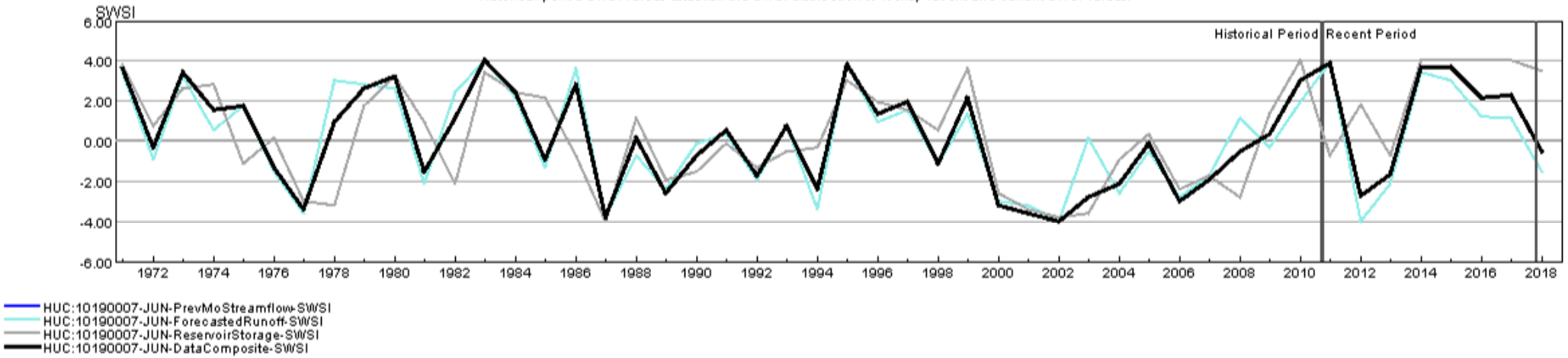
HUC 10190007 (Cache La Poudre) Surface Water Supply - JUN

Monthly component volumes



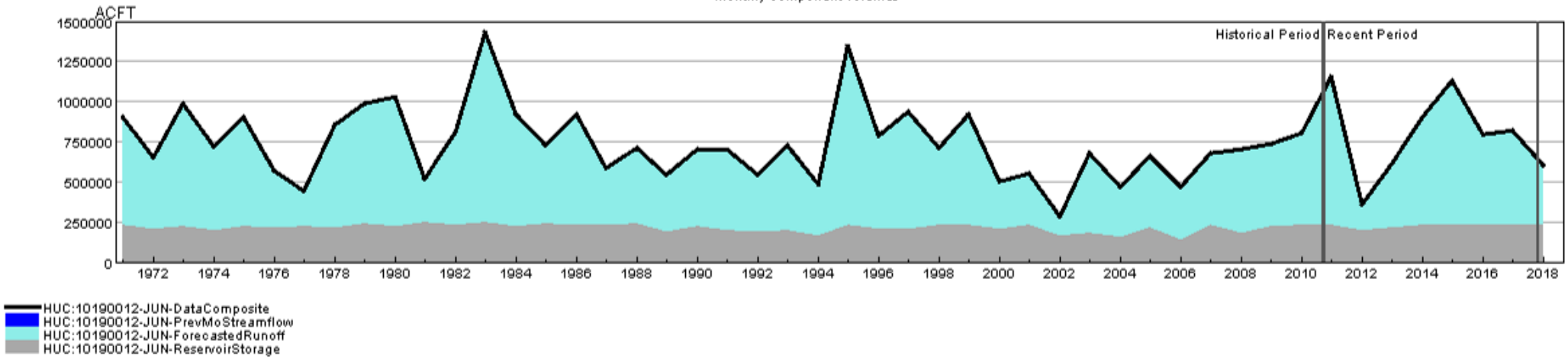
HUC 10190007 (Cache La Poudre) SWSI Values - JUN

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



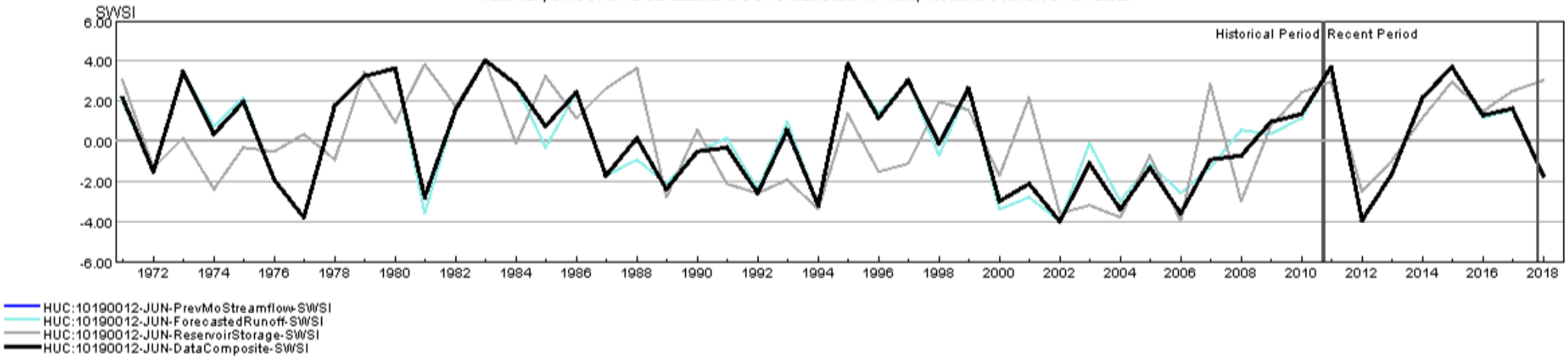
HUC 10190012 (Middle South Platte-Sterling) Surface Water Supply - JUN

Monthly component volumes



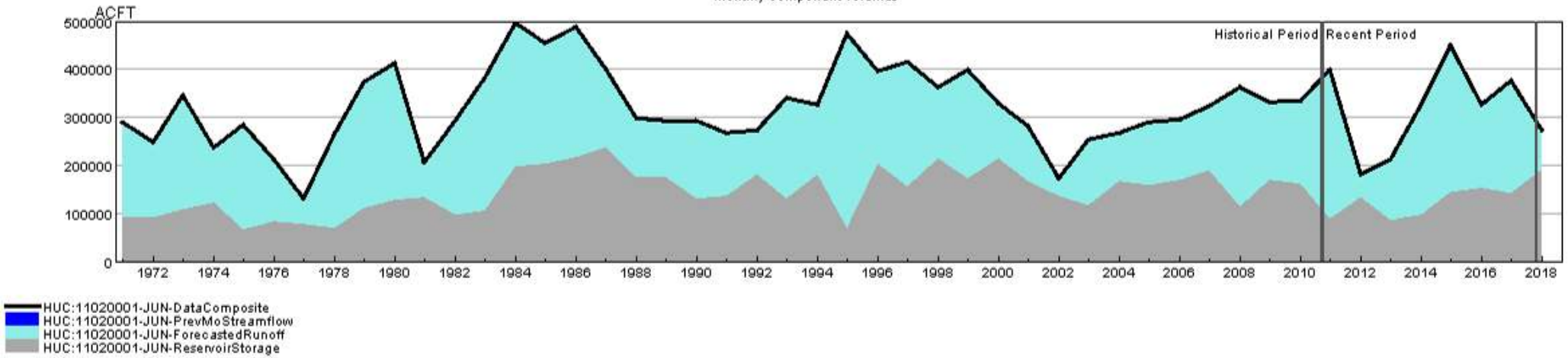
HUC 10190012 (Middle South Platte-Sterling) SWSI Values - JUN

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



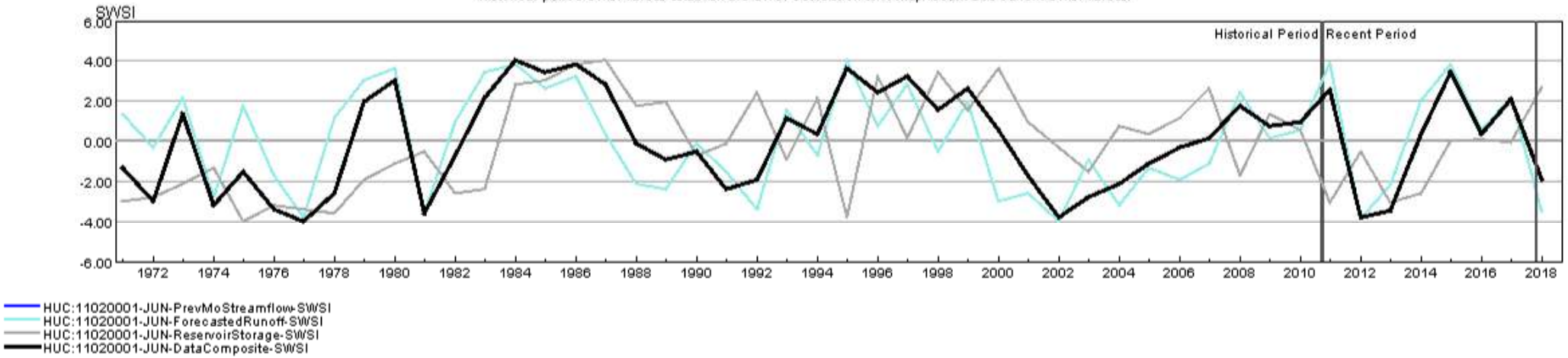
HUC 11020001 (Arkansas Headwaters) Surface Water Supply - JUN

Monthly component volumes



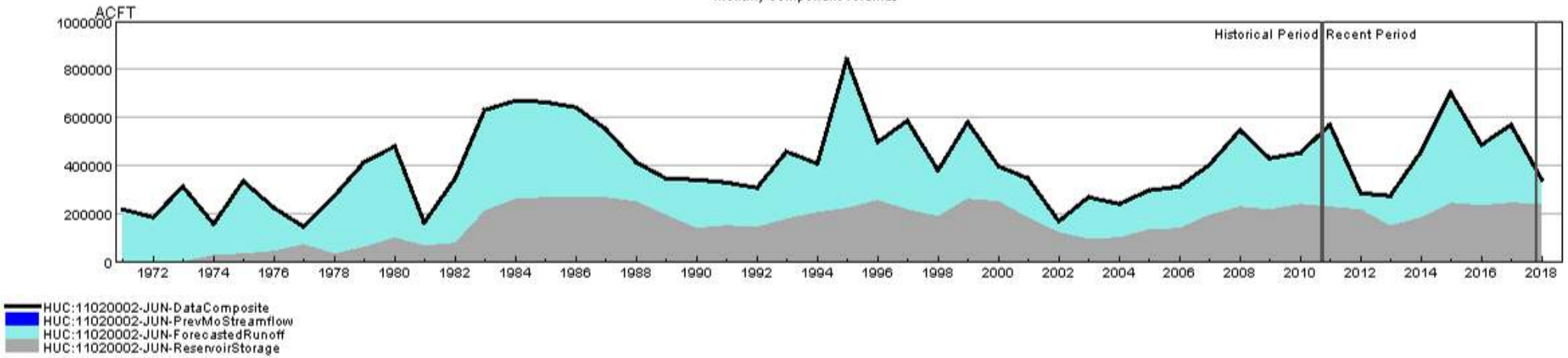
HUC 11020001 (Arkansas Headwaters) SWSI Values - JUN

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



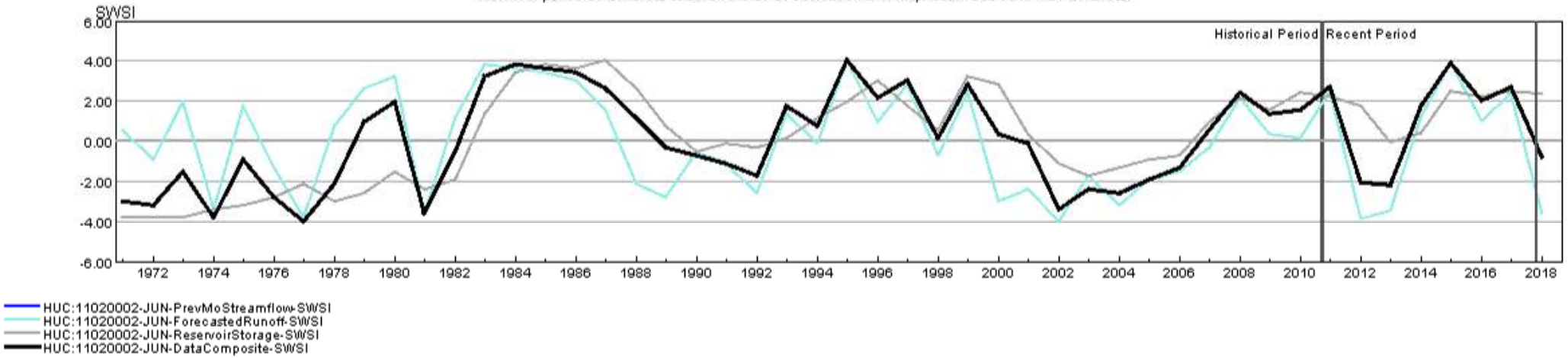
HUC 11020002 (Upper Arkansas) Surface Water Supply - JUN

Monthly component volumes



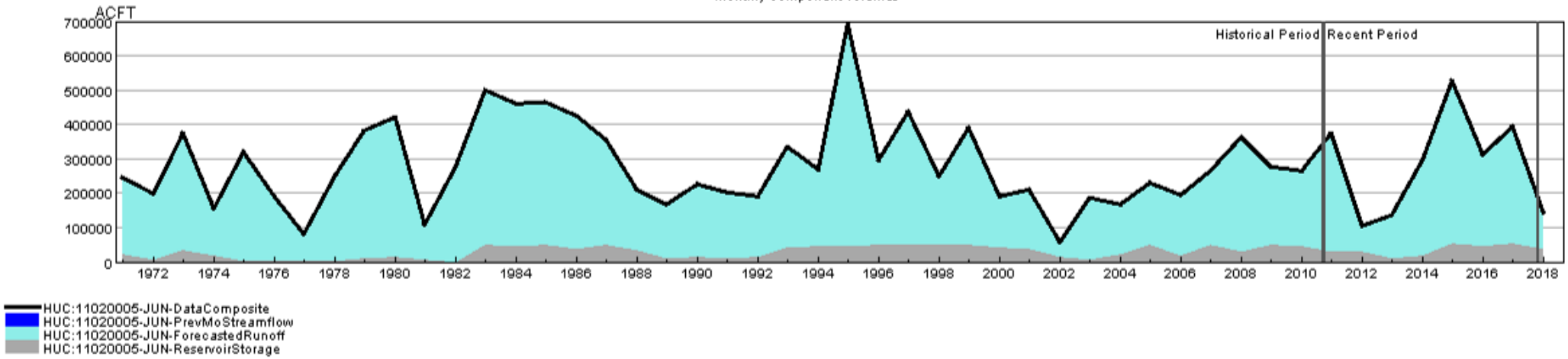
HUC 11020002 (Upper Arkansas) SWSI Values - JUN

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



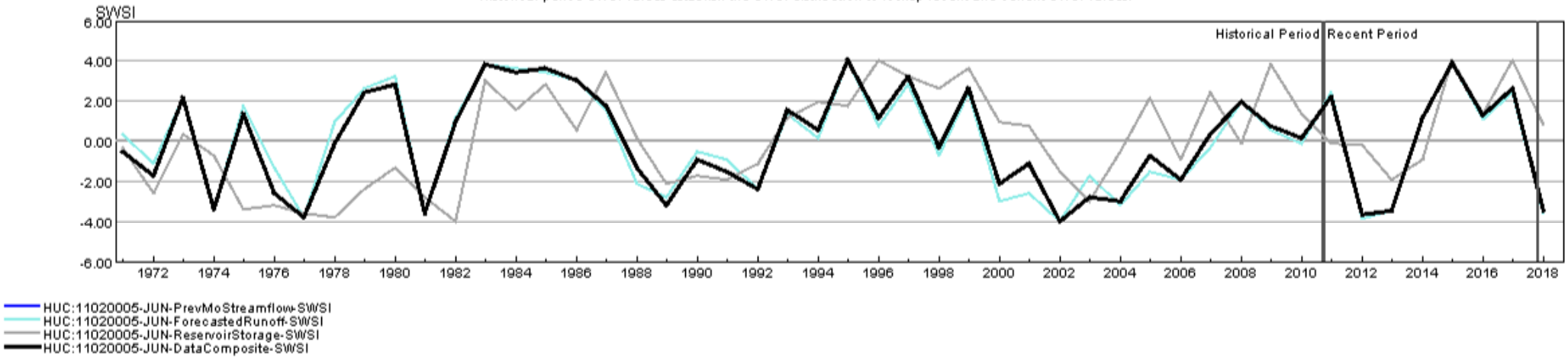
HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply - JUN

Monthly component volumes



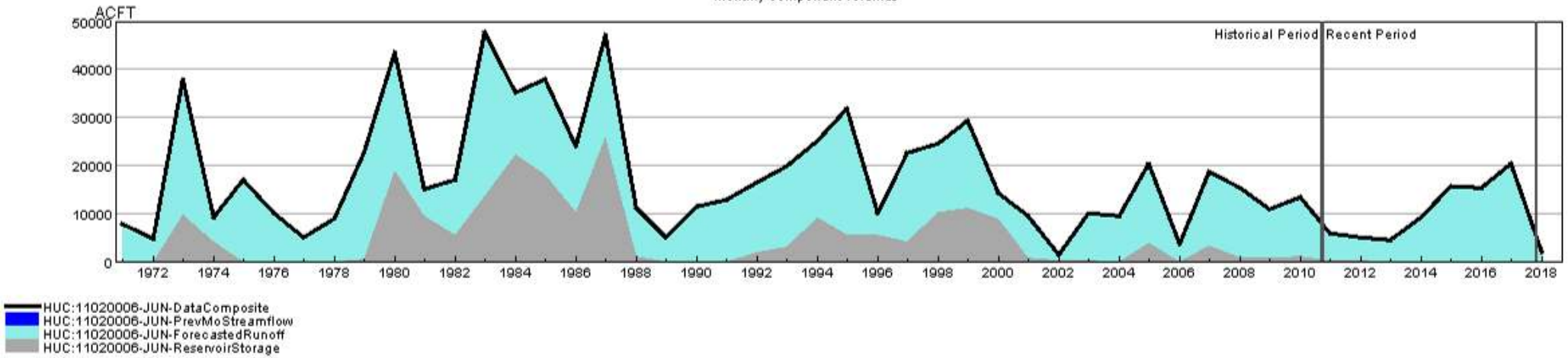
HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI Values - JUN

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



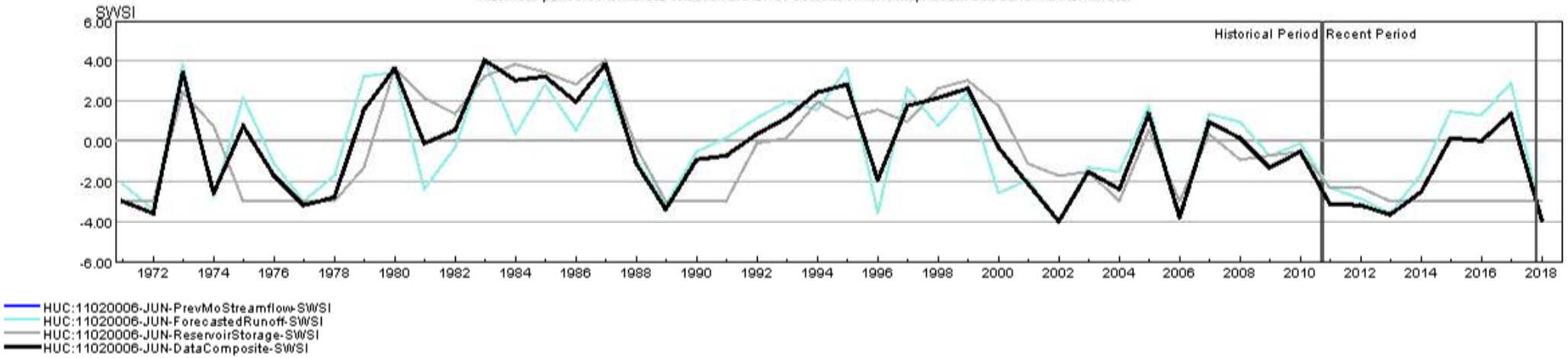
HUC 11020006 (Huerfano) Surface Water Supply - JUN

Monthly component volumes



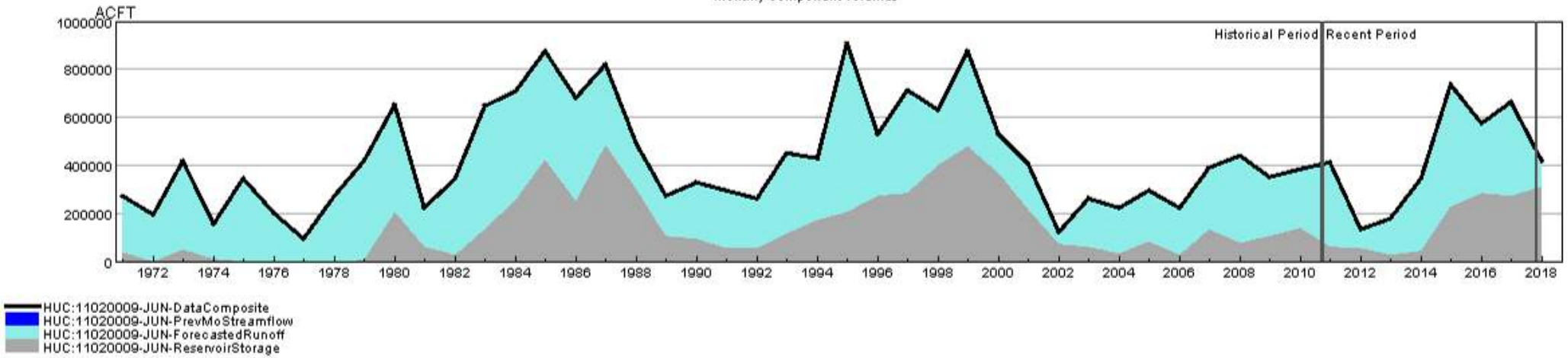
HUC 11020006 (Huerfano) SWSI Values - JUN

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



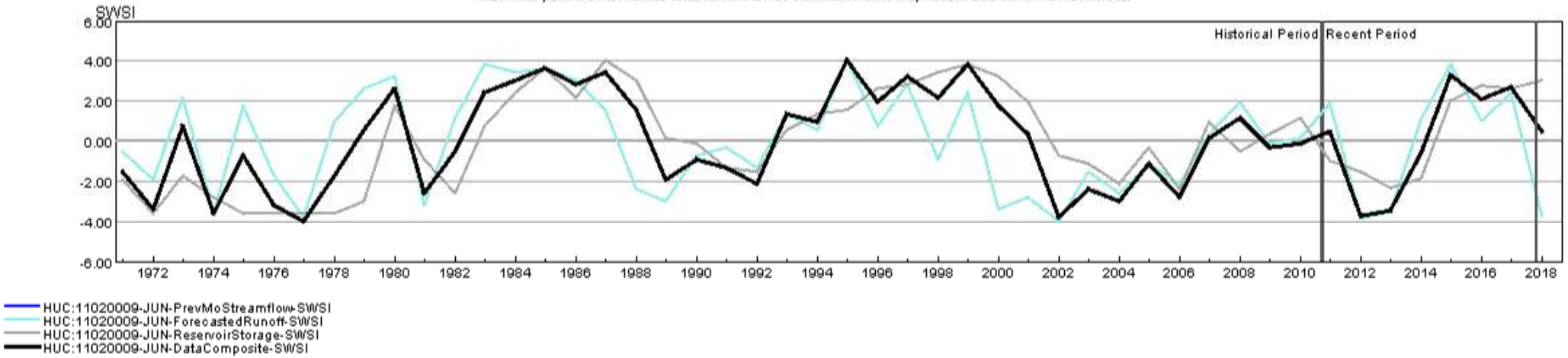
HUC 11020009 (Upper Arkansas-John Martin Reservoir) Surface Water Supply - JUN

Monthly component volumes



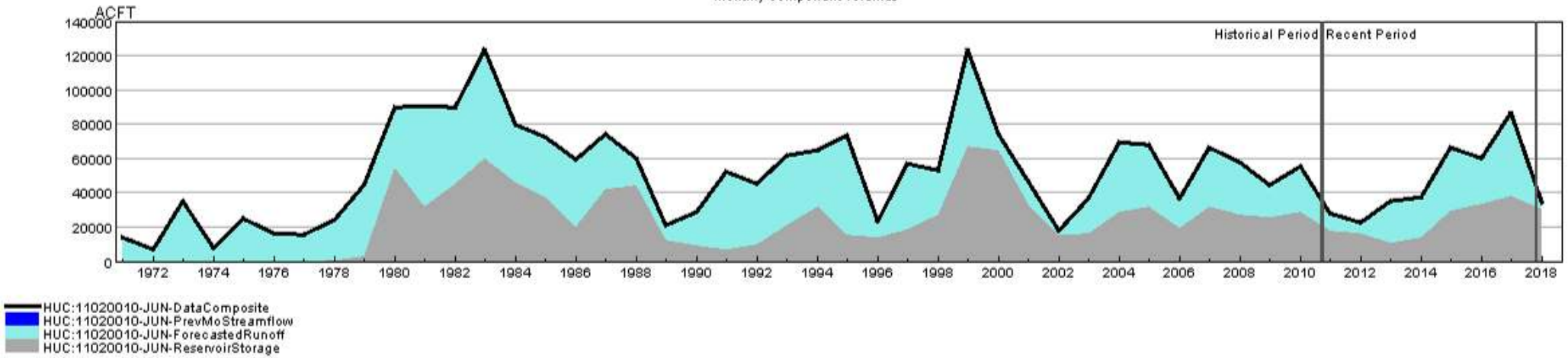
HUC 11020009 (Upper Arkansas-John Martin Reservoir) SWSI Values - JUN

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



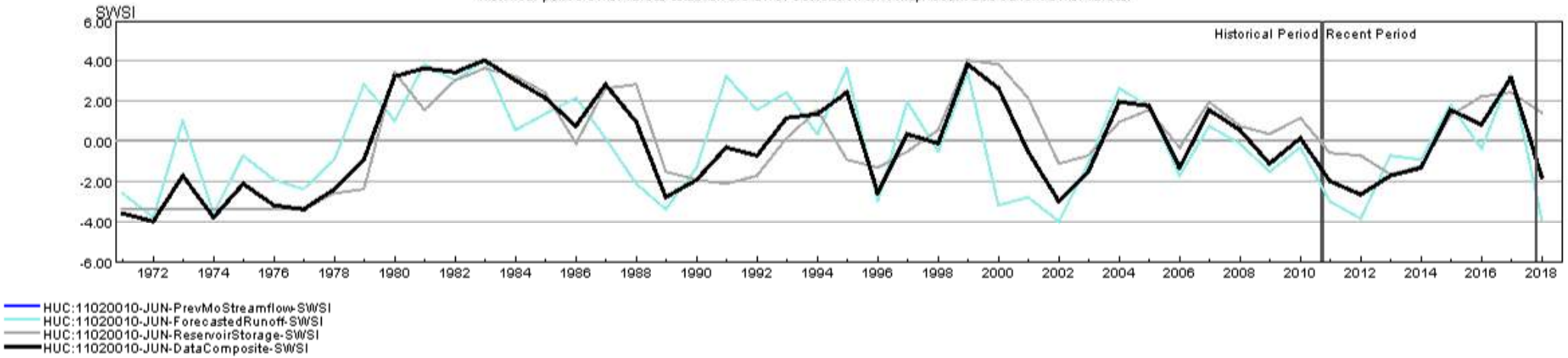
HUC 11020010 (Purgatoire) Surface Water Supply - JUN

Monthly component volumes



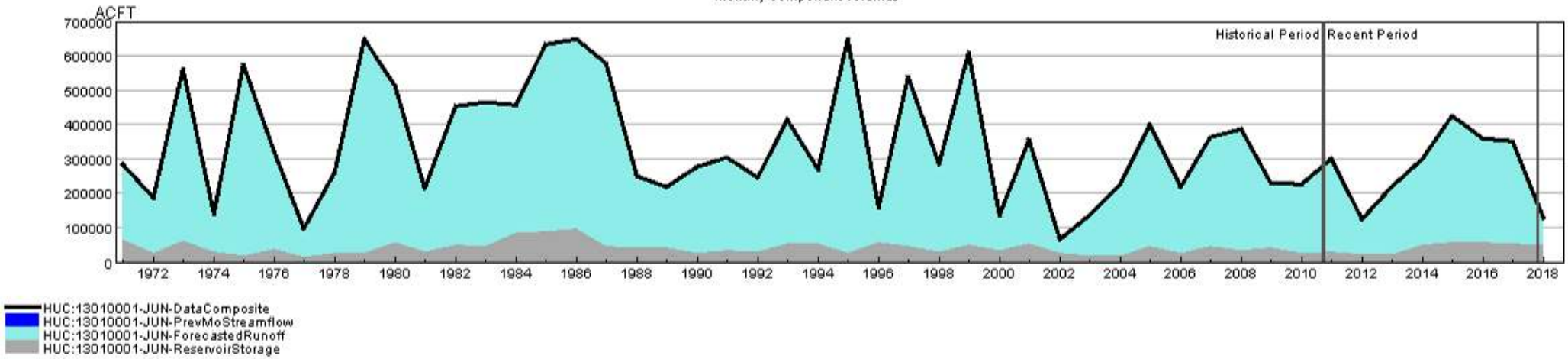
HUC 11020010 (Purgatoire) SWSI Values - JUN

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



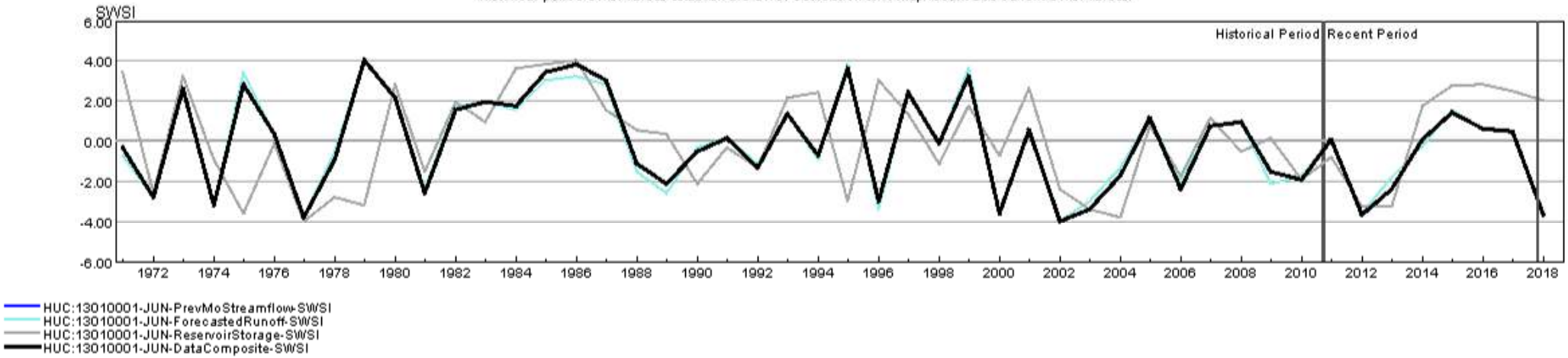
HUC 13010001 (Rio Grande Headwaters) Surface Water Supply - JUN

Monthly component volumes



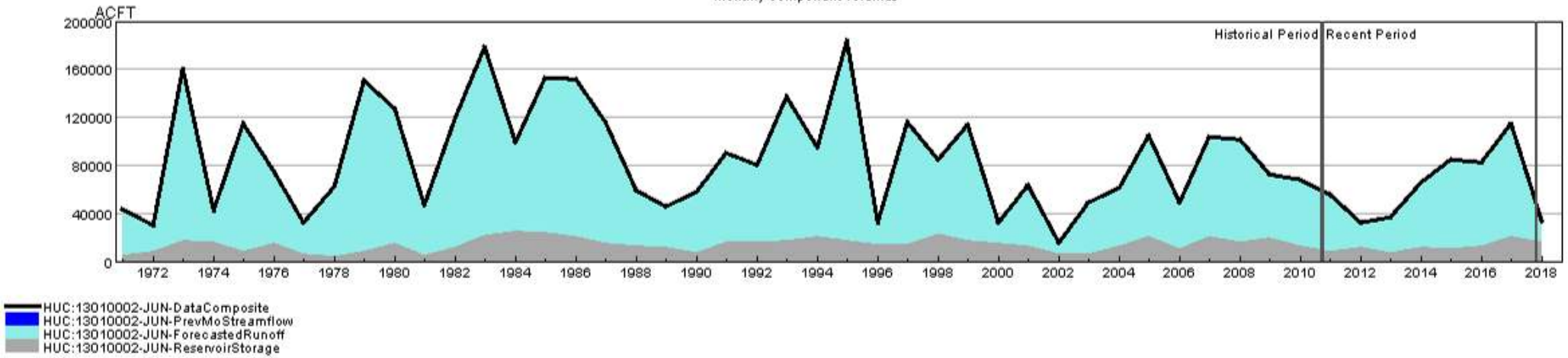
HUC 13010001 (Rio Grande Headwaters) SWSI Values - JUN

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



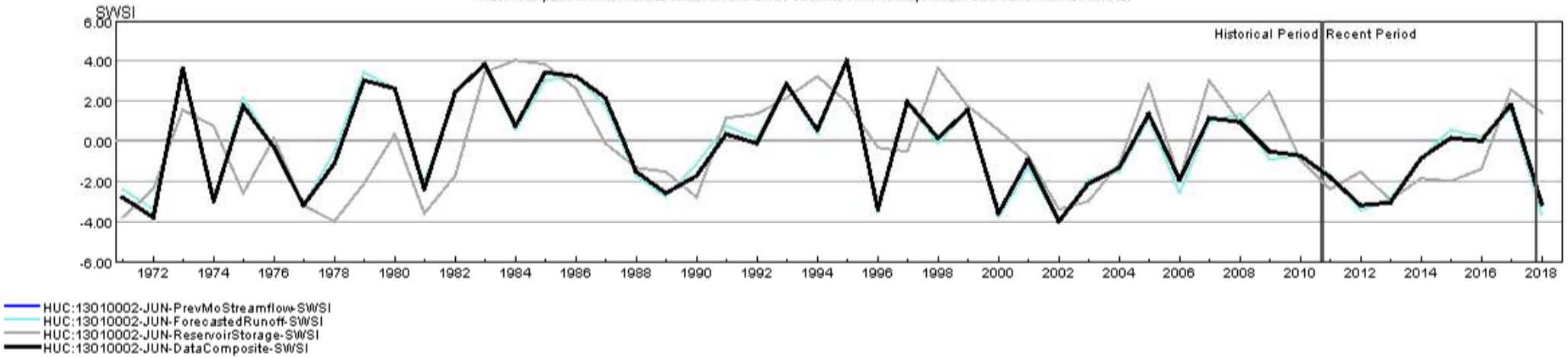
HUC 13010002 (Alamosa-Trinchera) Surface Water Supply - JUN

Monthly component volumes



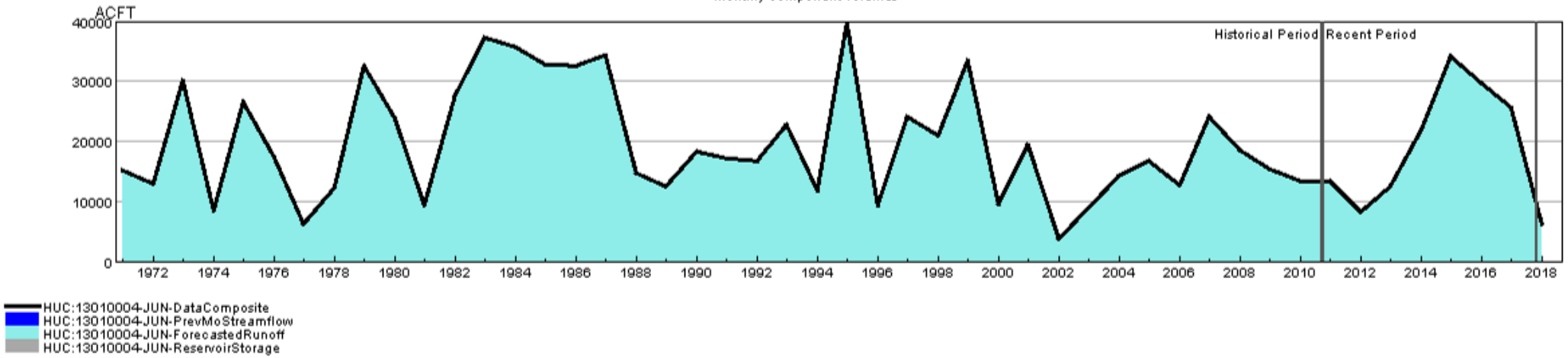
HUC 13010002 (Alamosa-Trinchera) SWSI Values - JUN

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



HUC 13010004 (Saguache) Surface Water Supply - JUN

Monthly component volumes



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

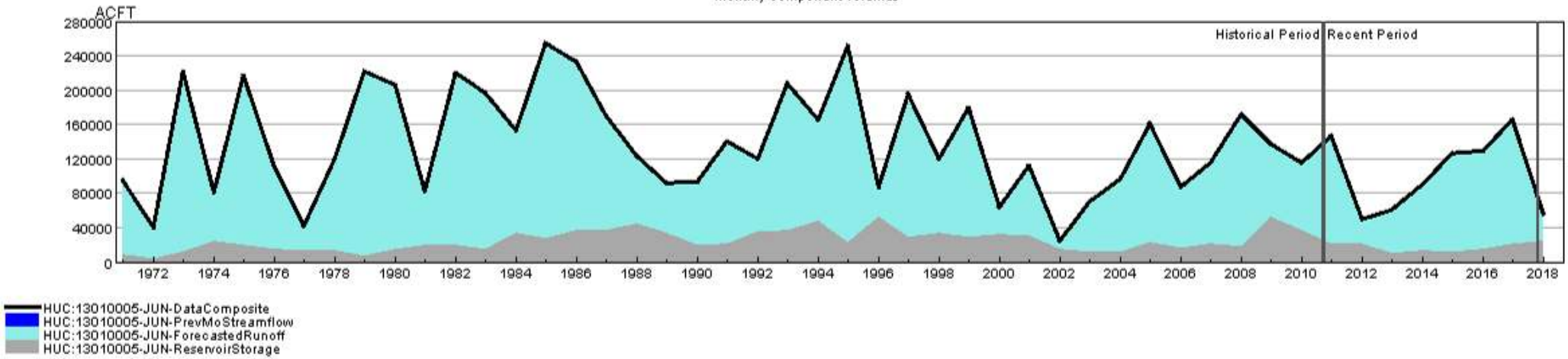
HUC 13010004 (Saguache) SWSI Values - JUN

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

HUC:13010004-JUN-PrevMoStreamflow-SWSI
HUC:13010004-JUN-ForecastedRunoff-SWSI
HUC:13010004-JUN-ReservoirStorage-SWSI
HUC:13010004-JUN-DataComposite-SWSI

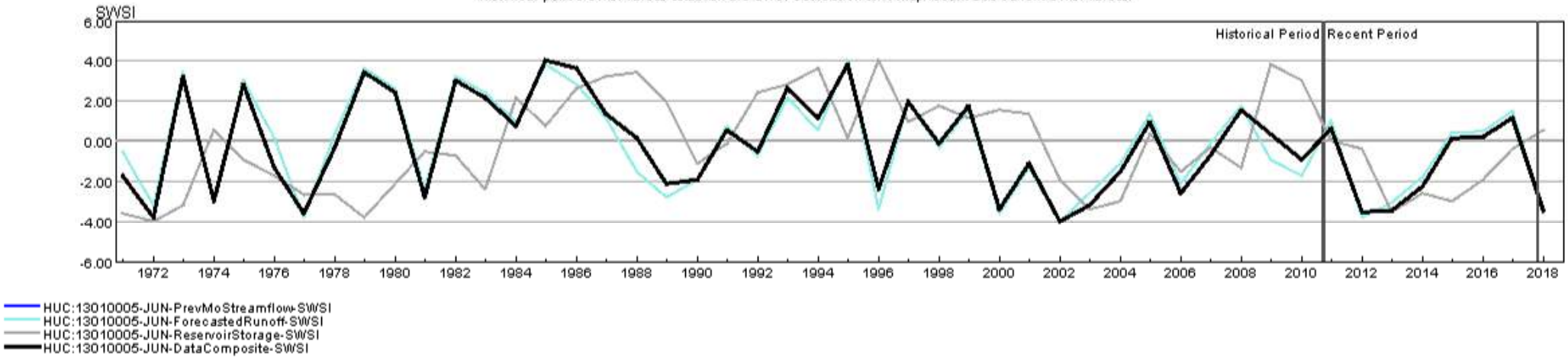
HUC 13010005 (Conejos) Surface Water Supply - JUN

Monthly component volumes



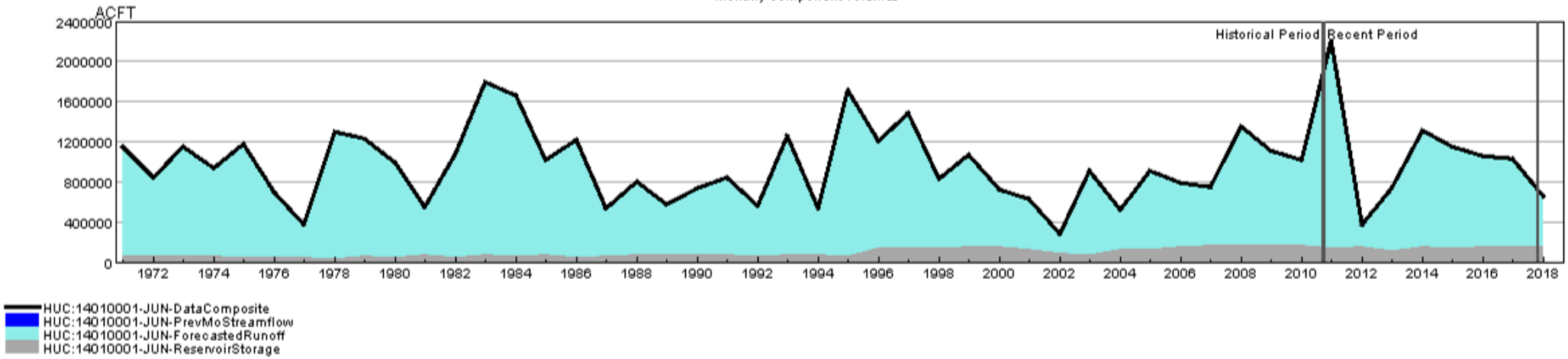
HUC 13010005 (Conejos) SWSI Values - JUN

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



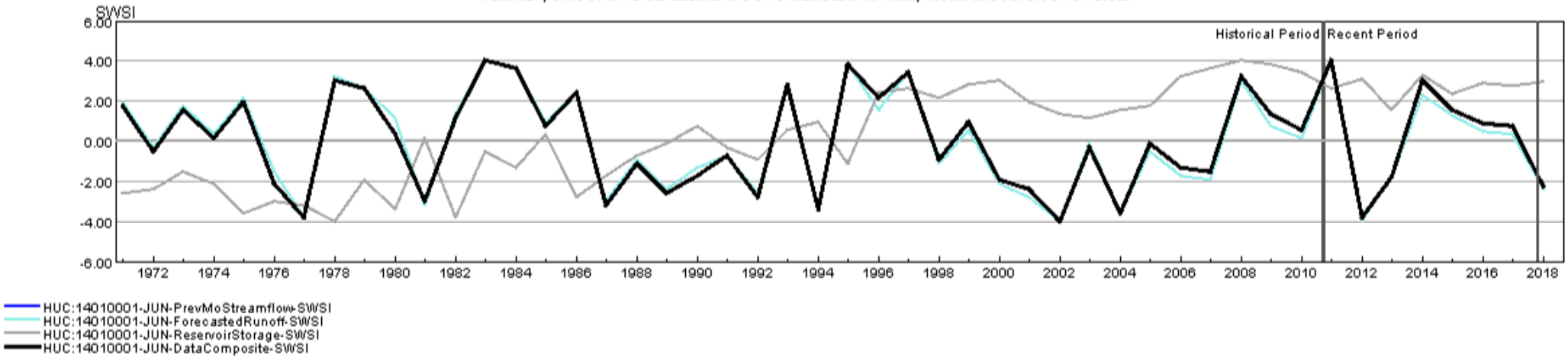
HUC 14010001 (Colorado Headwaters) Surface Water Supply - JUN

Monthly component volumes



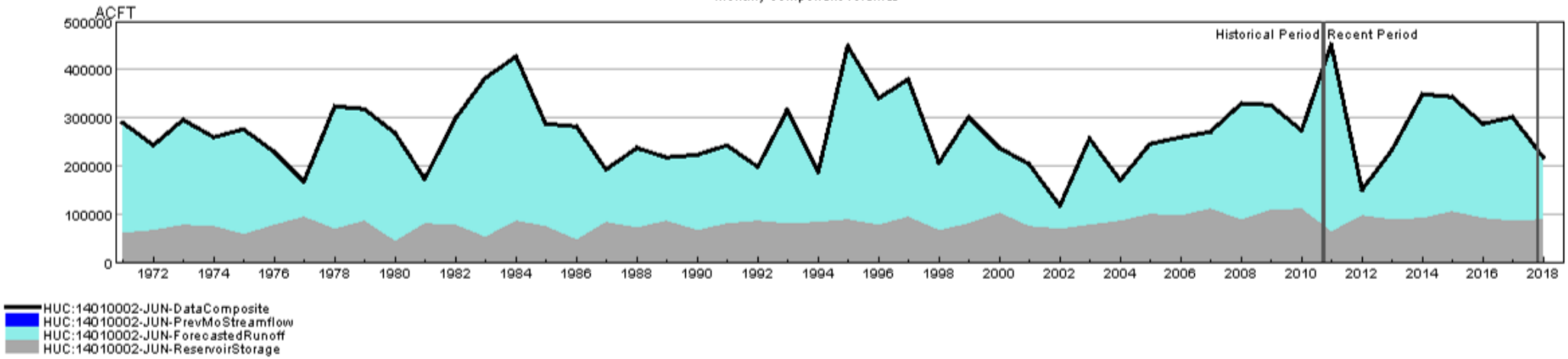
HUC 14010001 (Colorado Headwaters) SWSI Values - JUN

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



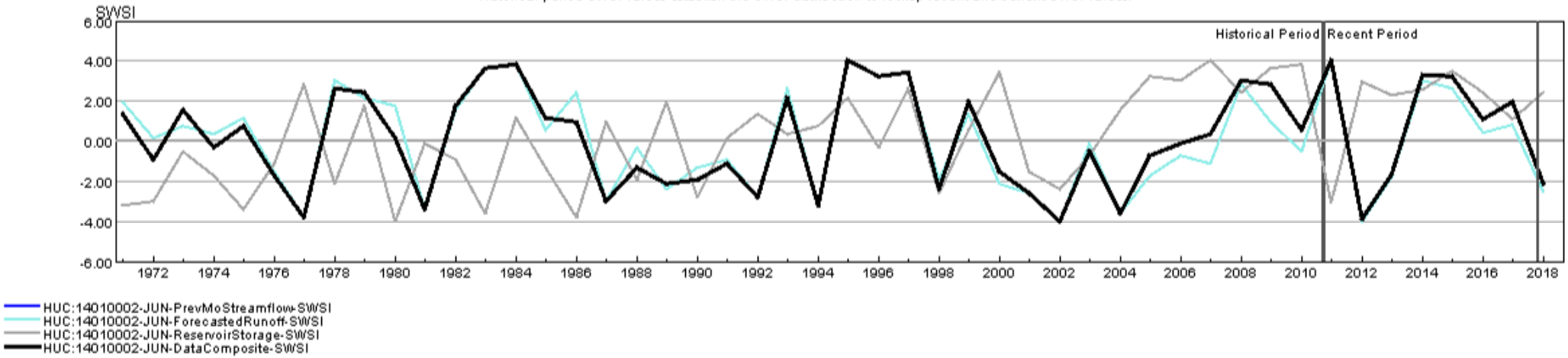
HUC 14010002 (Blue) Surface Water Supply - JUN

Monthly component volumes



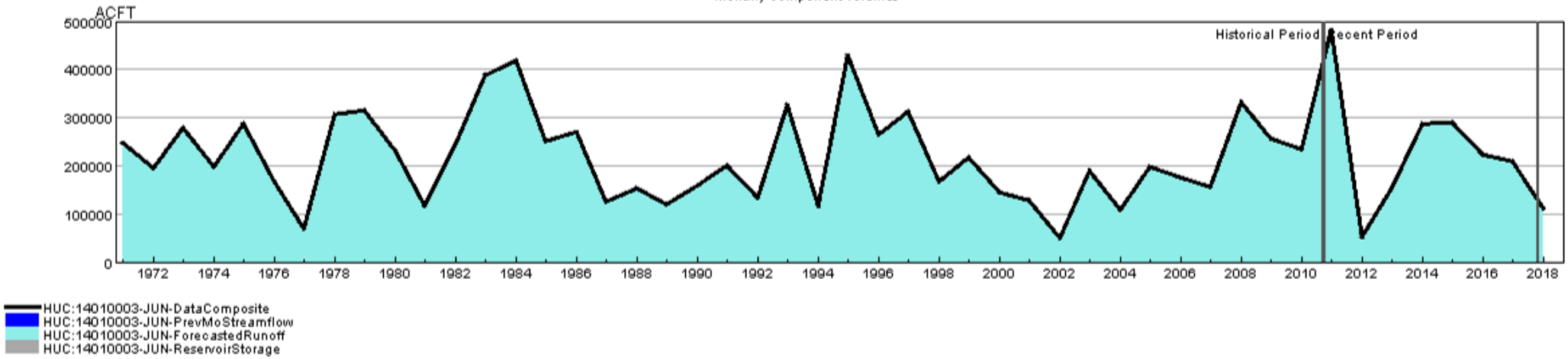
HUC 14010002 (Blue) SWSI Values - JUN

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



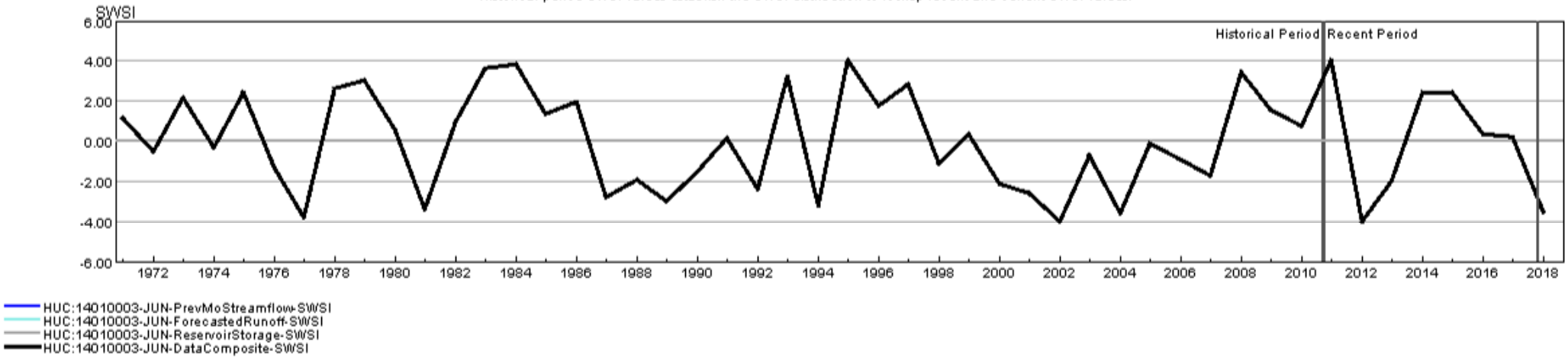
HUC 14010003 (Eagle) Surface Water Supply - JUN

Monthly component volumes



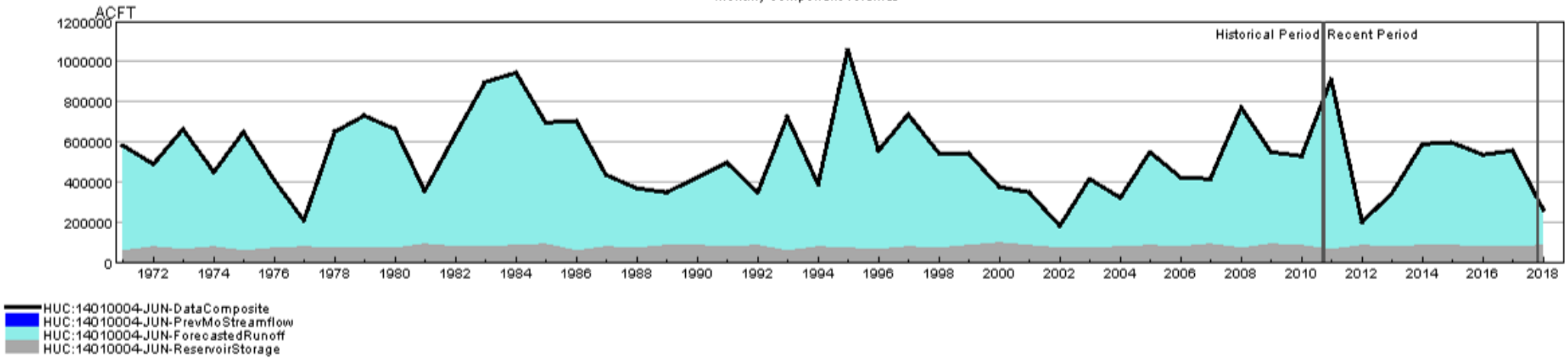
HUC 14010003 (Eagle) SWSI Values - JUN

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



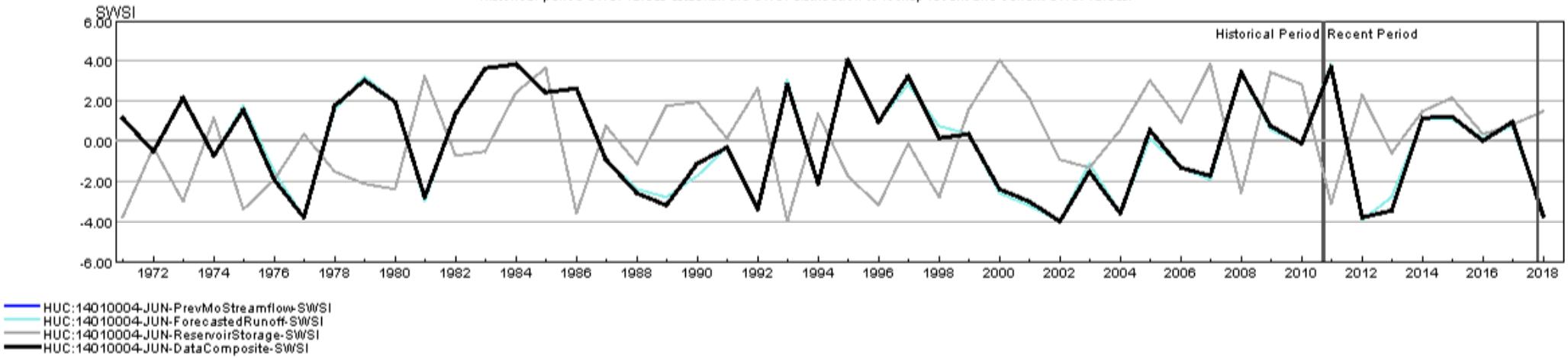
HUC 14010004 (Roaring Fork) Surface Water Supply - JUN

Monthly component volumes



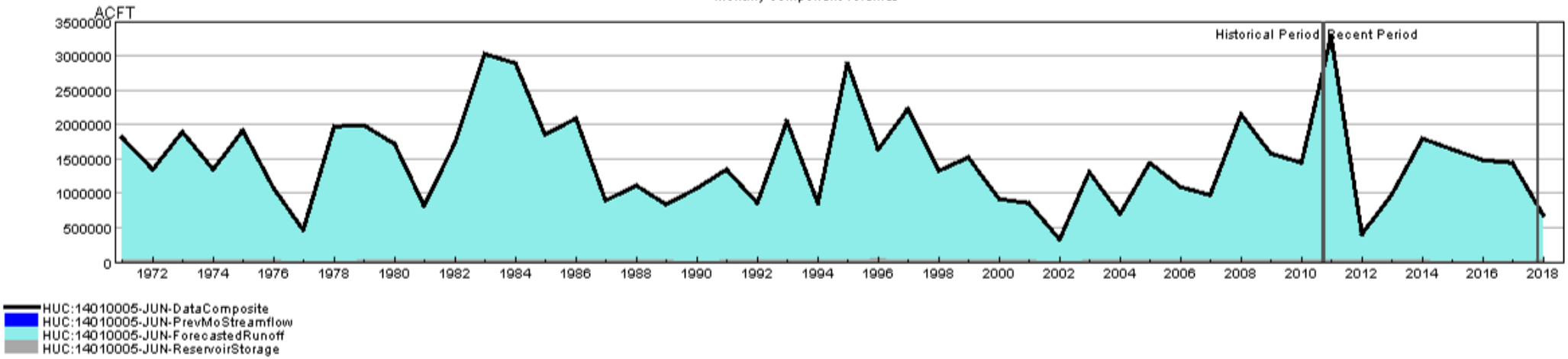
HUC 14010004 (Roaring Fork) SWSI Values - JUN

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



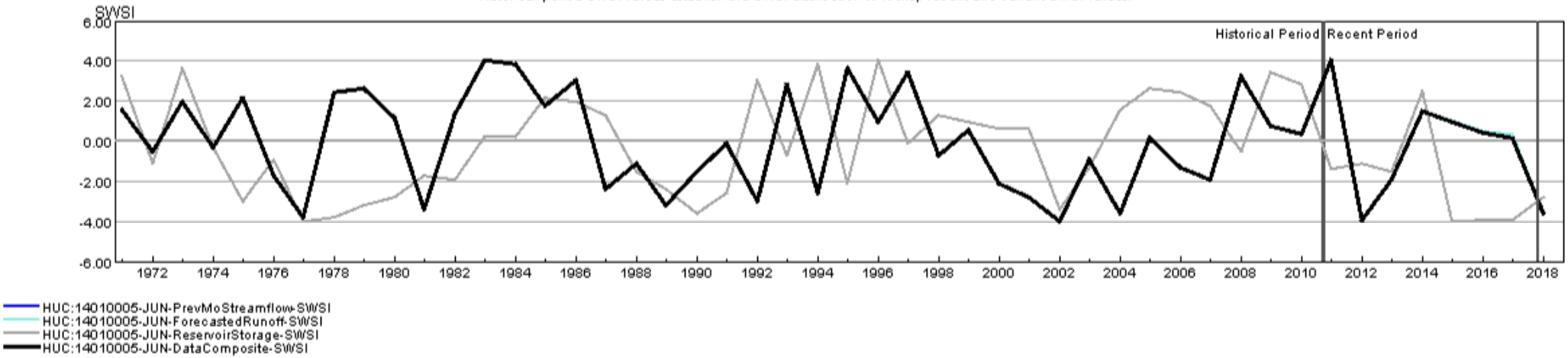
HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply - JUN

Monthly component volumes



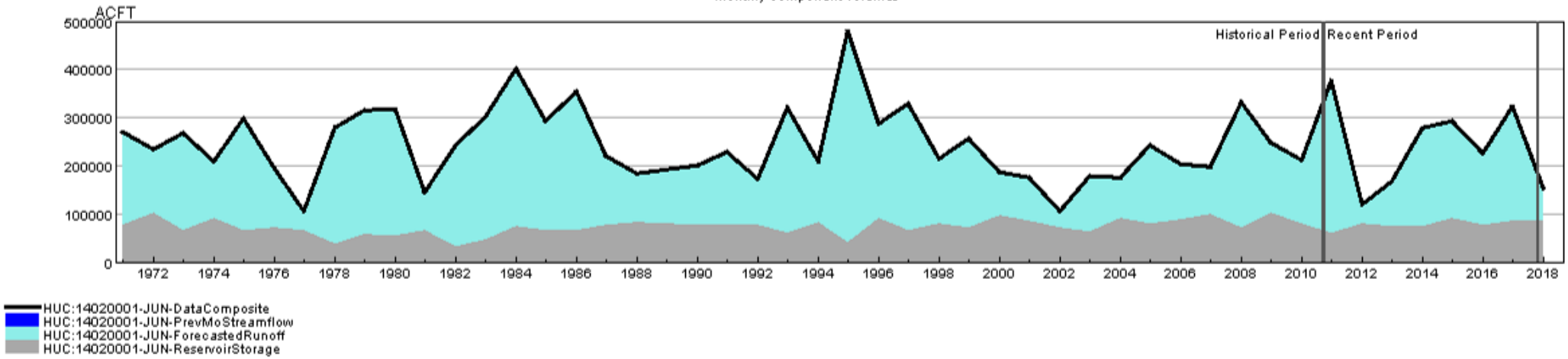
HUC 14010005 (Colorado Headwaters-Plateau) SWSI Values - JUN

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



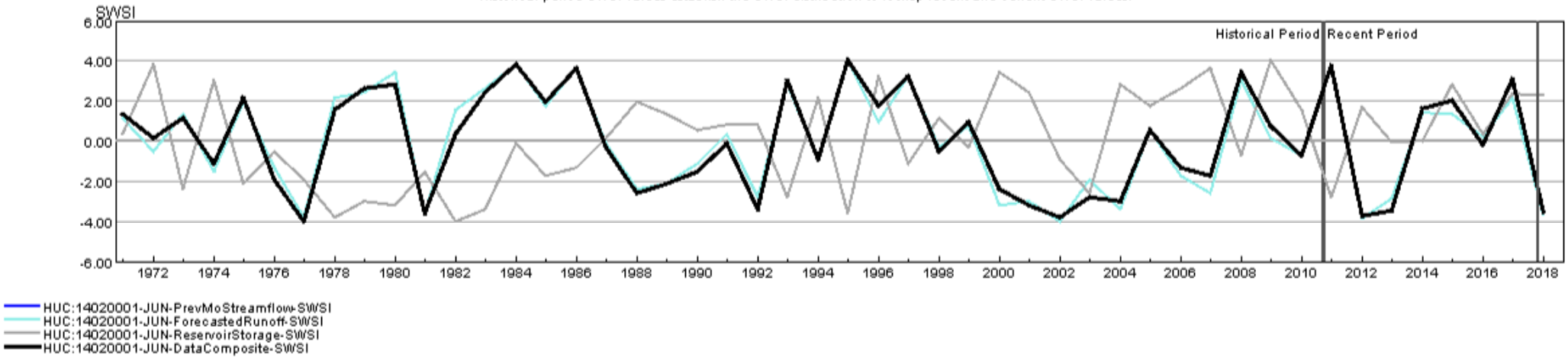
HUC 14020001 (East-Taylor) Surface Water Supply - JUN

Monthly component volumes



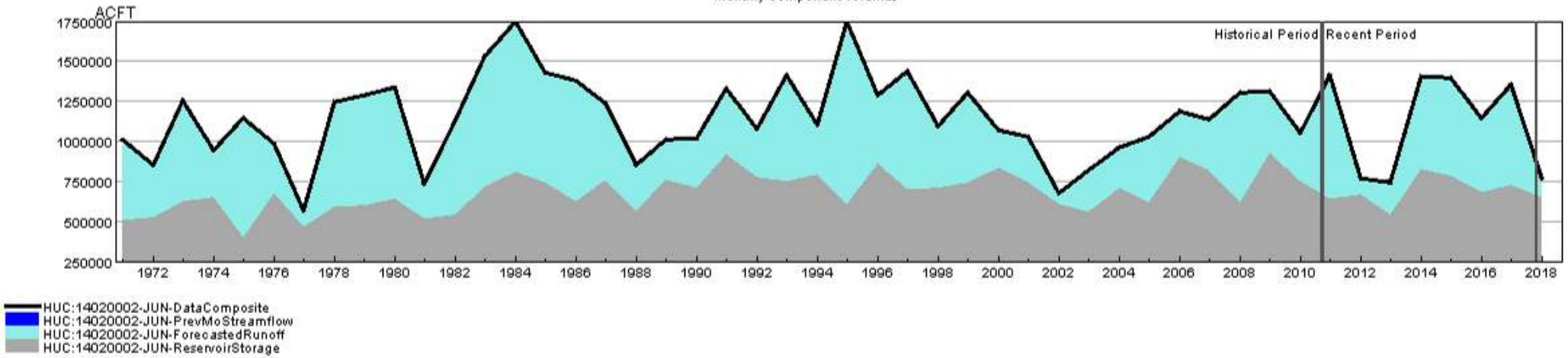
HUC 14020001 (East-Taylor) SWSI Values - JUN

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



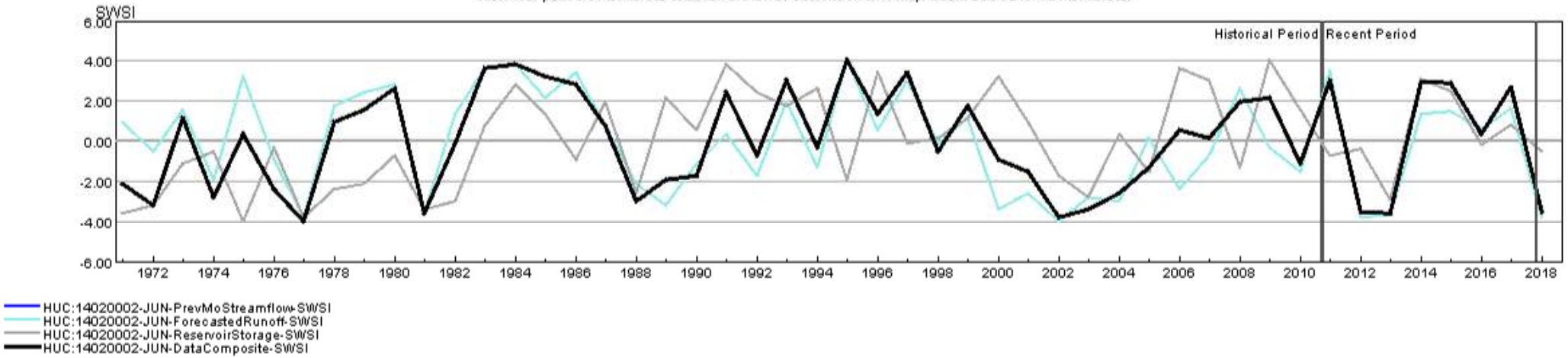
HUC 14020002 (Upper Gunnison) Surface Water Supply - JUN

Monthly component volumes



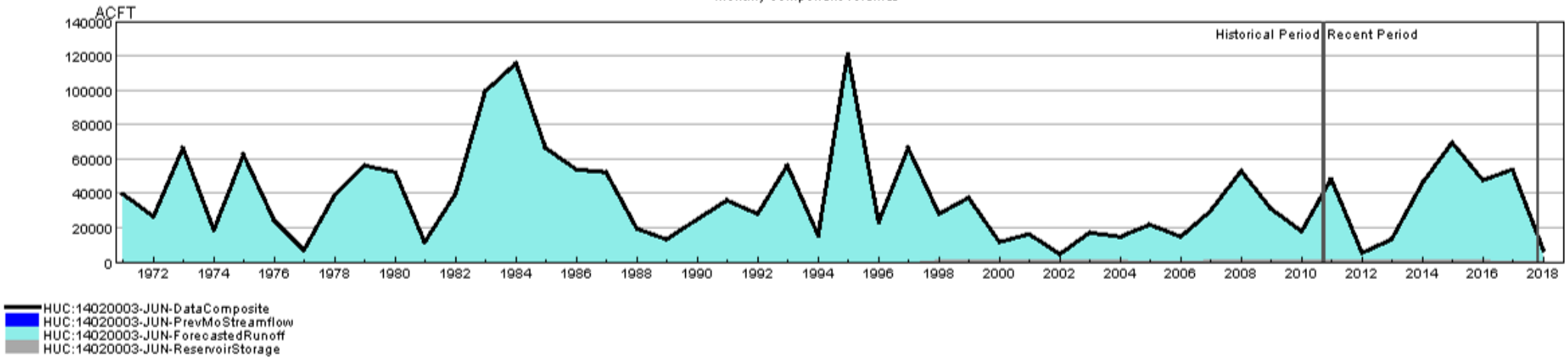
HUC 14020002 (Upper Gunnison) SWSI Values - JUN

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



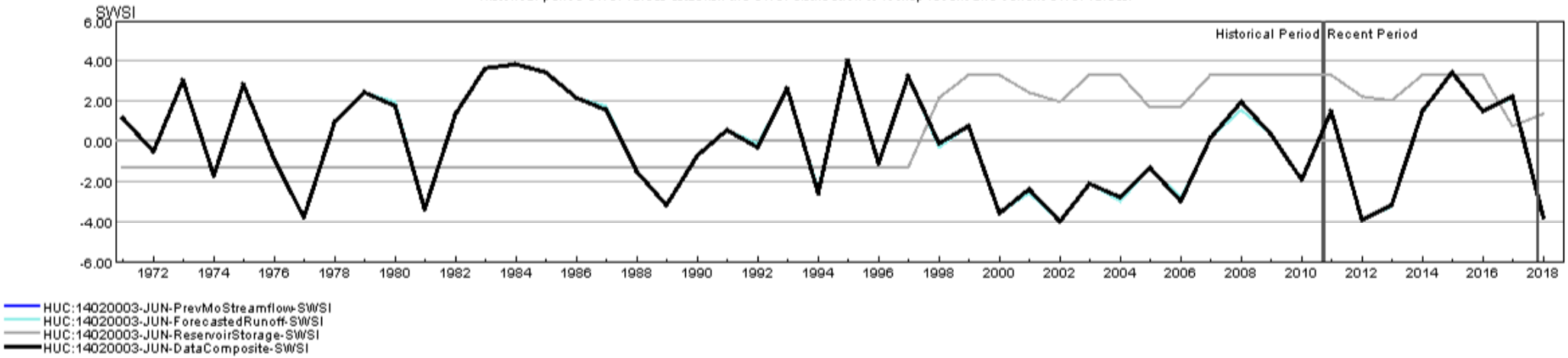
HUC 14020003 (Tomichi) Surface Water Supply - JUN

Monthly component volumes



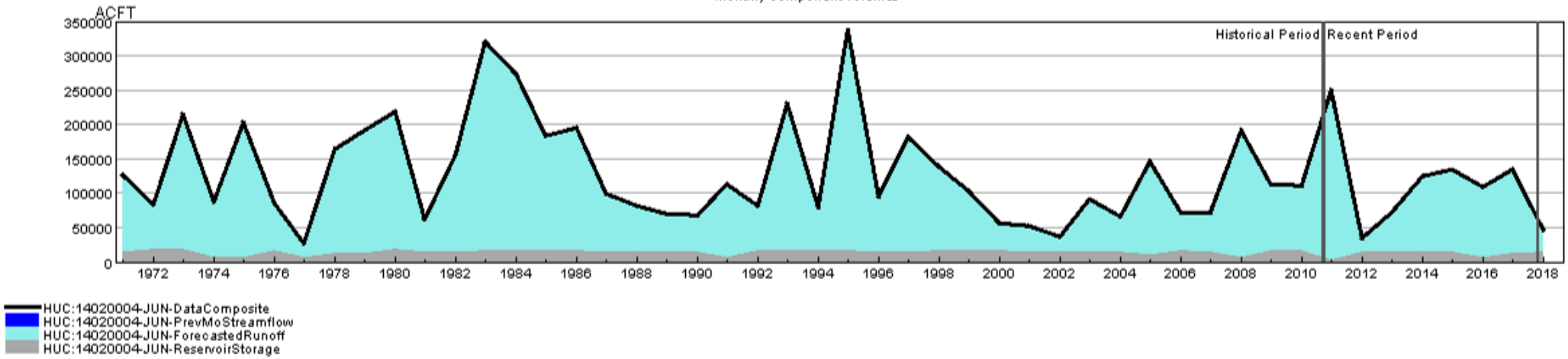
HUC 14020003 (Tomichi) SWSI Values - JUN

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



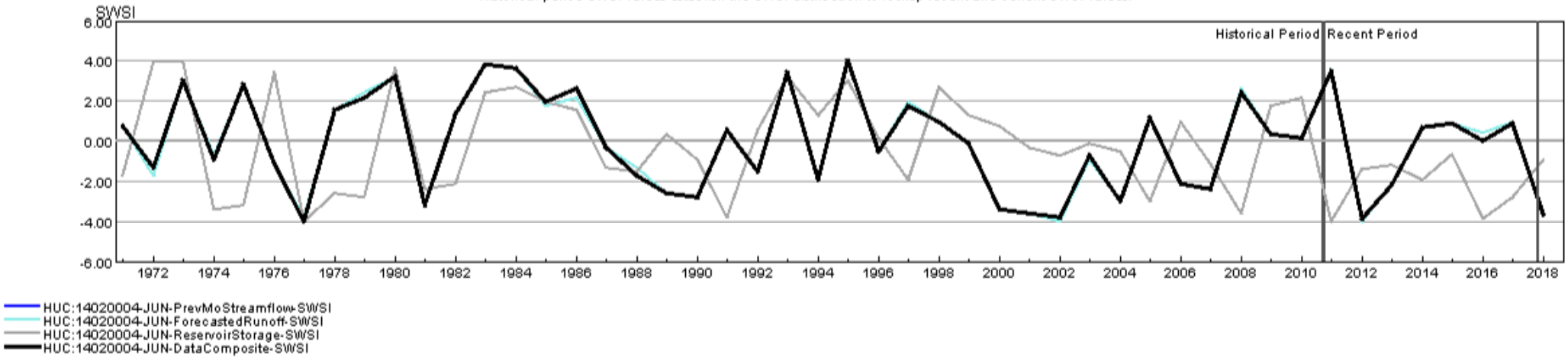
HUC 14020004 (North Fork Gunnison) Surface Water Supply - JUN

Monthly component volumes



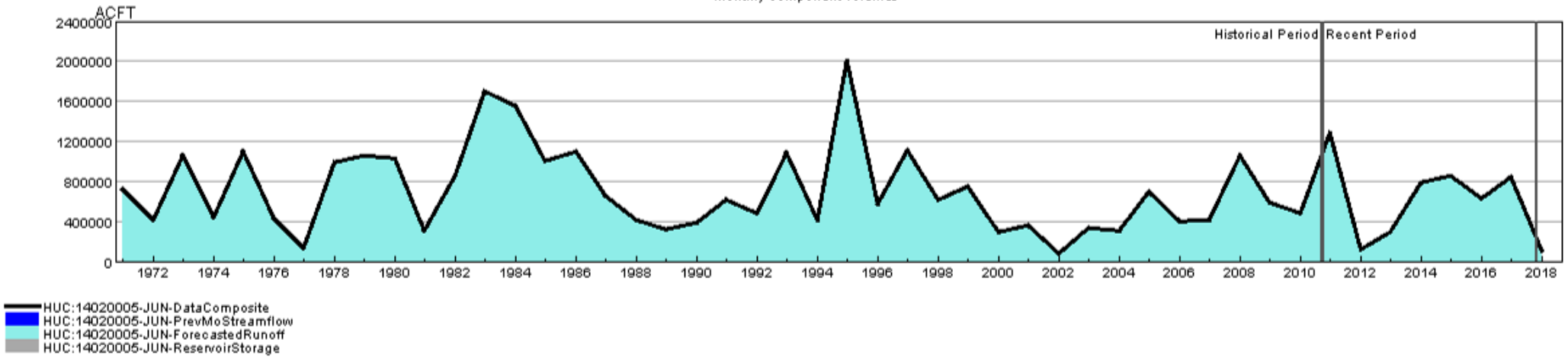
HUC 14020004 (North Fork Gunnison) SWSI Values - JUN

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



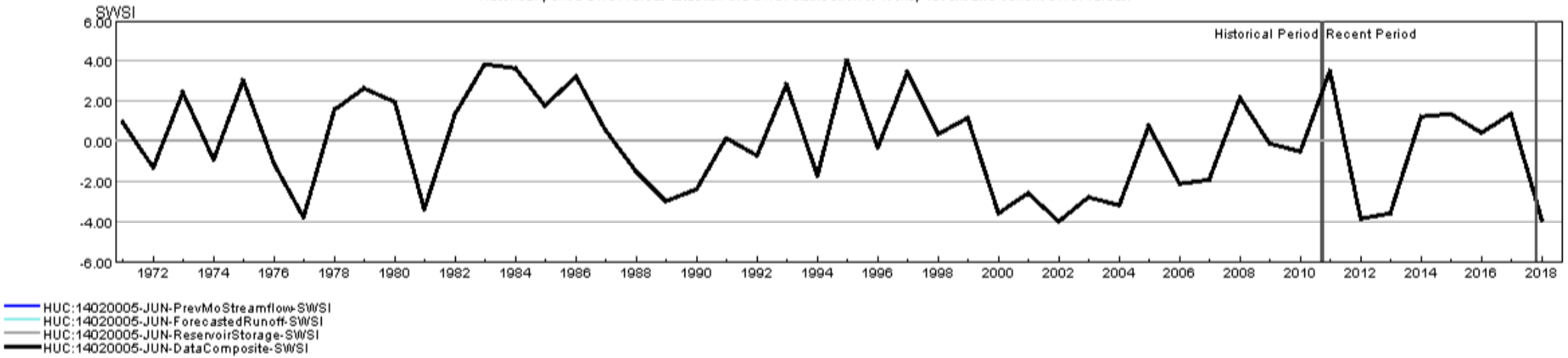
HUC 14020005 (Lower Gunnison) Surface Water Supply - JUN

Monthly component volumes



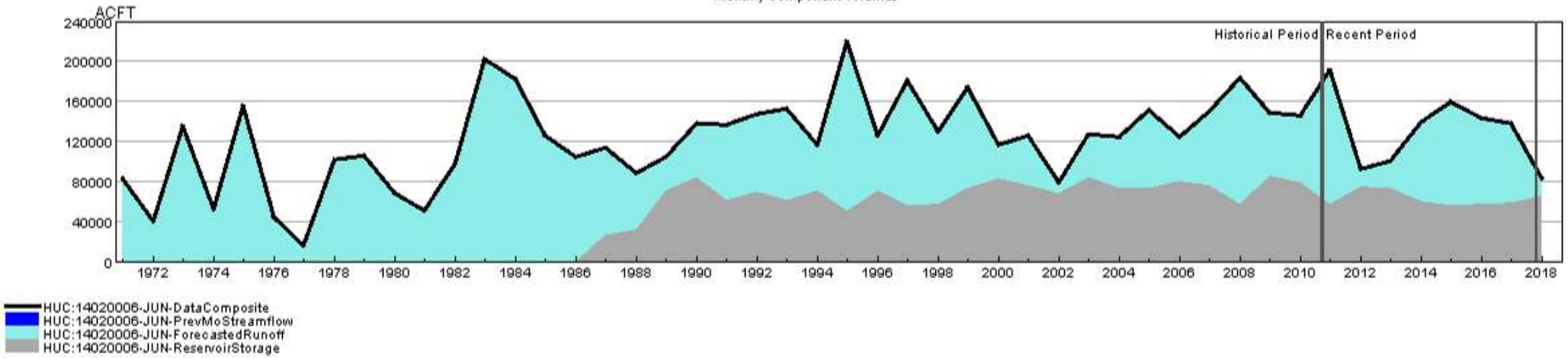
HUC 14020005 (Lower Gunnison) SWSI Values - JUN

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



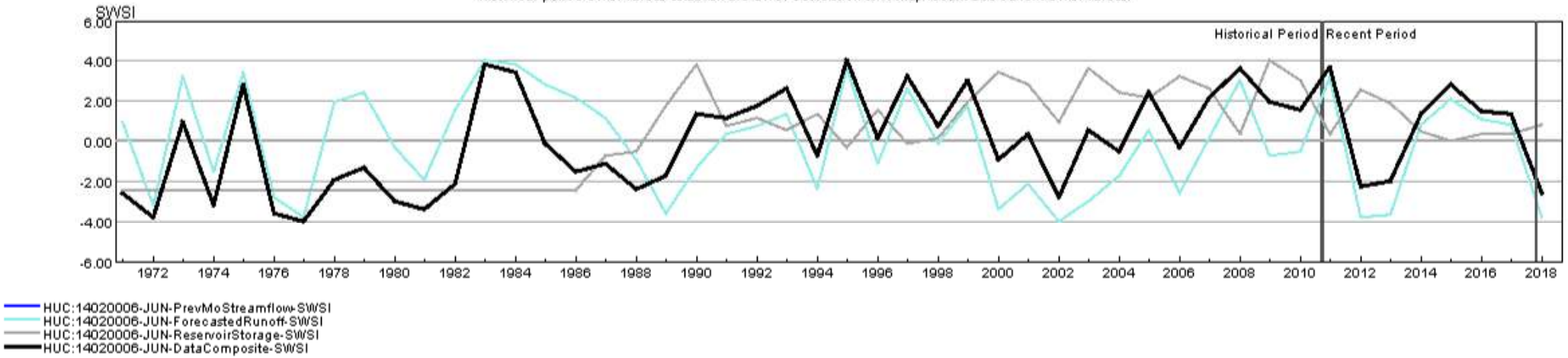
HUC 14020006 (Uncompahgre) Surface Water Supply - JUN

Monthly component volumes



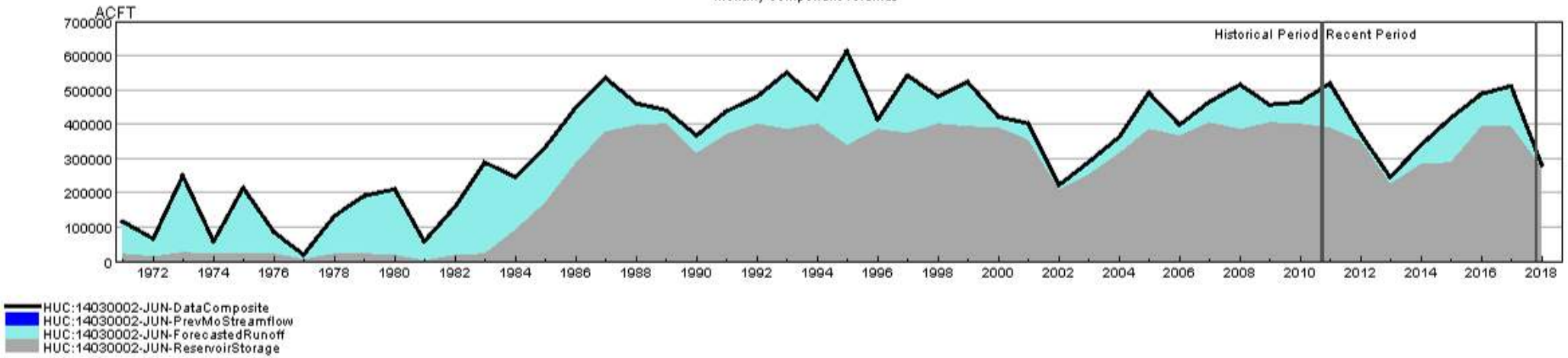
HUC 14020006 (Uncompahgre) SWSI Values - JUN

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



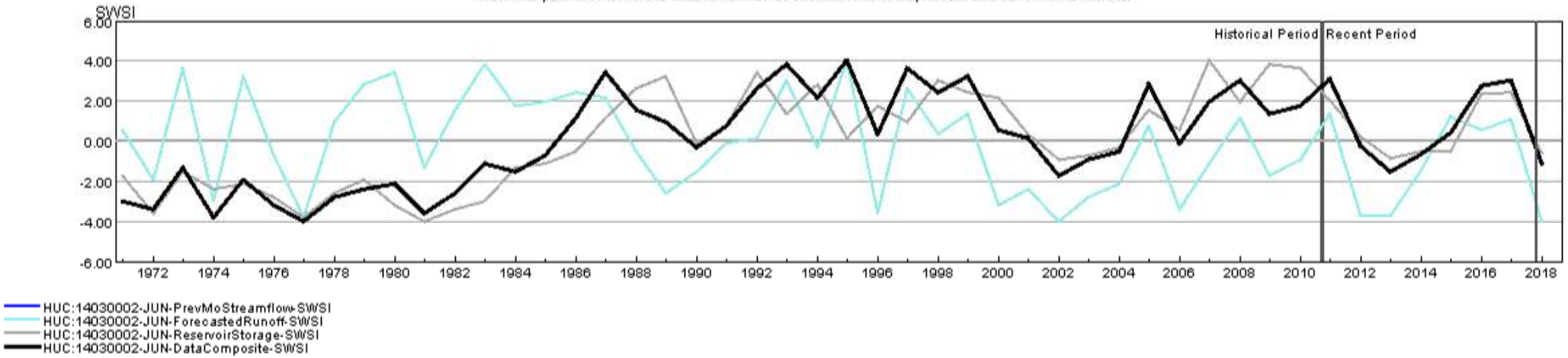
HUC 14030002 (Upper Dolores) Surface Water Supply - JUN

Monthly component volumes



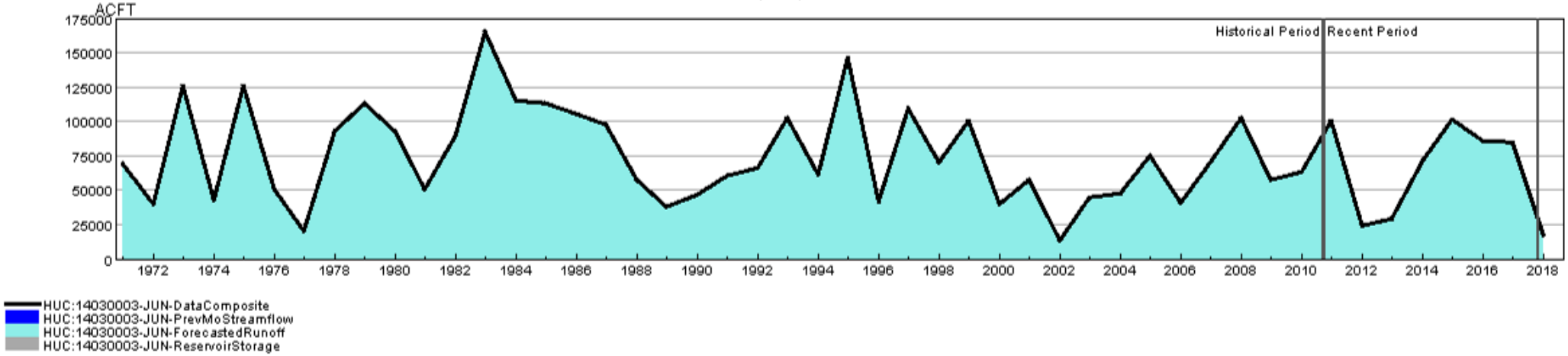
HUC 14030002 (Upper Dolores) SWSI Values - JUN

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



HUC 14030003 (San Miguel) Surface Water Supply - JUN

Monthly component volumes



HUC 14030003 (San Miguel) SWSI Values - JUN

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