COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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March 1, 2016

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 new SWSI analysis based on the components shown below, which vary depending on the time of year. The new 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. 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 new DNR SWSI was published. The results are summarized within this monthly report and additional information, maps & data are available at: http://water.state.co.us/DWRDocs/Reports/Pages/SWSIReport.aspx. This document also contains reports about regional conditions prepared by each DWR Division Office.

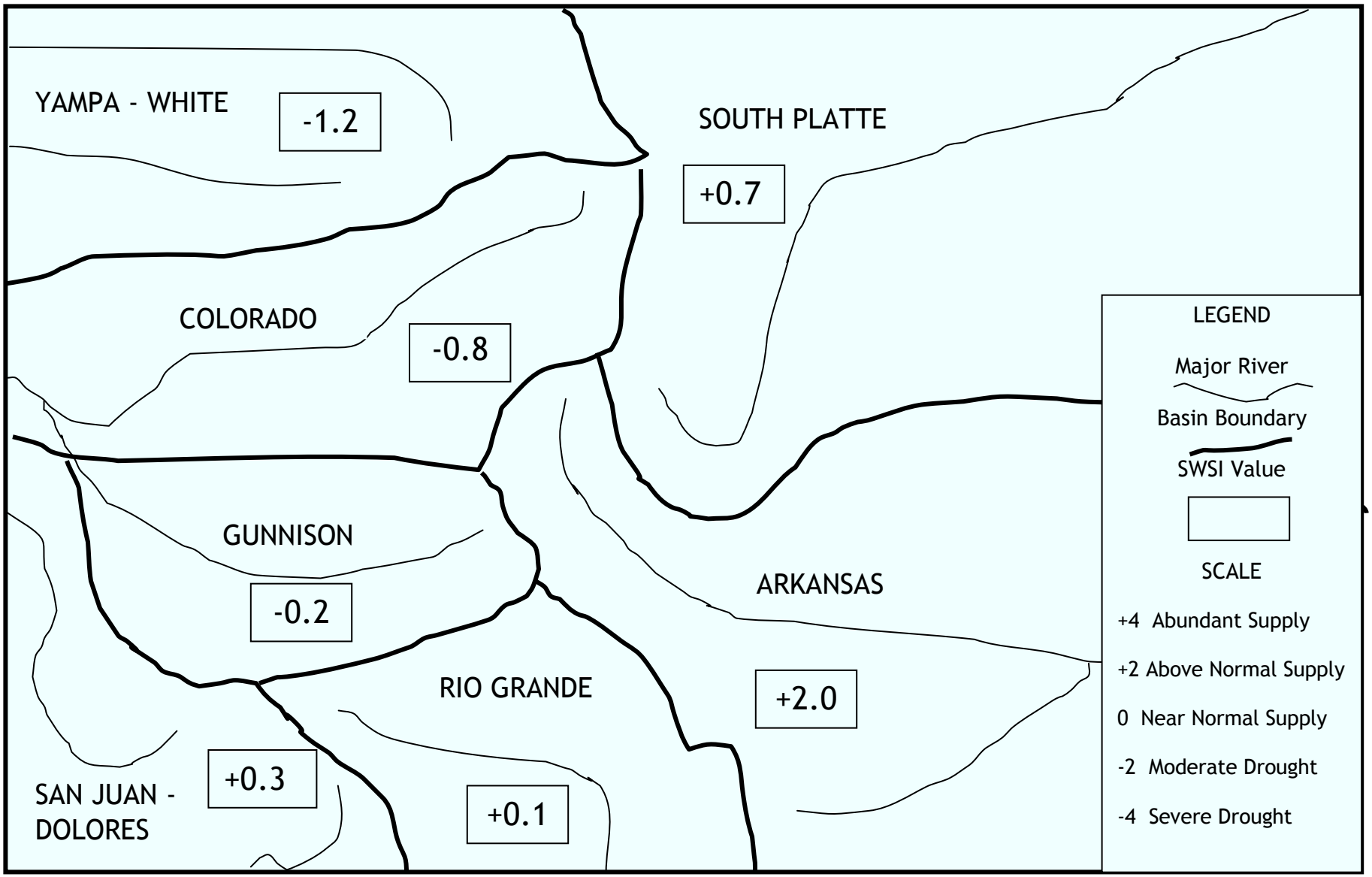
The SWSI calculation for the winter season is based on forecasted runoff as well as reservoir storage. The statewide SWSI values for February (March 1) range from a low of -1.2 in the Yamp-White River Basin to a high of 2.0 in the Arkansas River Basin. Statewide, there has been a decrease in water supply available compared to last months. The largest decreases occurred in southwestern Colorado where with both the Gunnison and San Juan-Dolores basins had SWSI decreases of at least 1.0 point. The following SWSI values were computed for each of the seven major basins for March 1, 2016.

Basin	March 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	2.0	-0.1	-0.1
Colorado	-0.8	-0.7	-1.6
Gunnison	-0.2	-1.7	-0.8
Rio Grande	0.1	-0.6	0.0
San Juan-Dolores	0.3	-1.0	0.5
South Platte	0.7	-0.3	-3.4
Yampa-White	-1.2	-0.6	-0.2

SWSI Scale

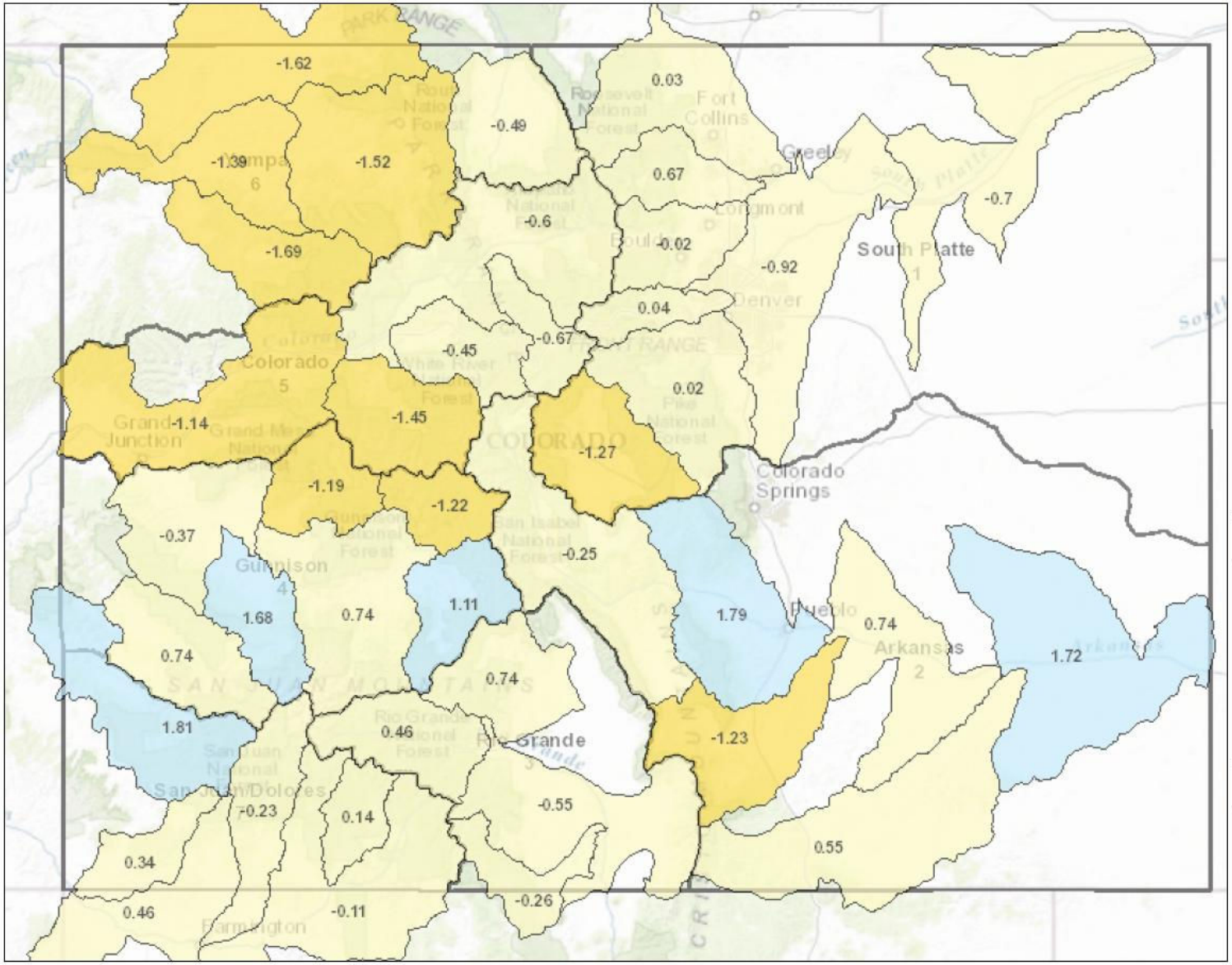
-4	-3	-2	-1	0	1	2	3	4
Severe Drought		Moderate Drought		Near Normal Supply		Above Normal Supply		Abundant Supply

SURFACE WATER SUPPLY INDEX FOR COLORADO BY MAJOR RIVER BASIN



March 1, 2016

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC



Legend

SWSI - Current (March 2016)

- SWSI Not Applicable (-99.99)
- Extremely Dry (-3.0 - -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)
- Division

Location

Notes

95.67 0 47.84 95.67 Miles

1: 3,030,869

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: 3/17/2016 10:46:49 AM

March 1, 2016

March 1, 2016 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

Basin	HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Forecasted Runoff NEP	Total Vol (AF)
Arkansas	11020001	Arkansas Headwaters	-0.3	58	45	373,504
	11020002	Upper Arkansas	1.8	86	55	608,600
	11020005	Upper Arkansas-Lake Meredith	0.7	97	55	408,500
	11020006	Huerfano	-1.2	14	44	20,300
	11020009	Upper Arkansas-John Martin Reservoir	1.7	78	55	712,800
	11020010	Purgatoire	0.6	77	45	67,800
Colorado	14010001	Colorado Headwaters	-0.6	81	42	1,388,800
	14010002	Blue	-0.7	19	46	324,000
	14010003	Eagle	-0.5	None	44	310,000
	14010004	Roaring Fork	-1.5	53	32	633,600
	14010005	Colorado Headwaters-Plateau	-1.1	48	36	2,022,000
Gunnison	14020001	East-Taylor	-1.2	59	36	296,400
	14020002	Upper Gunnison	0.7	82	48	1,380,700
	14020003	Tomichi	1.1	99	63	75,900
	14020004	North Fork Gunnison	-1.2	3	37	221,200
	14020005	Lower Gunnison	-0.4	None	46	1,210,000
	14020006	Uncompahgre	1.7	60	59	200,400
	14030003	San Miguel	0.7	None	59	131,000
Rio Grande	13010001	Rio Grande Headwaters	0.5	90	54	577,100
	13010002	Alamosa-Trinchera	-0.6	45	43	127,501
	13010004	Saguache	0.7	None	59	34,000
	13010005	Conejos	-0.3	27	50	193,100
San Juan-Dolores	14030002	Upper Dolores	1.8	57	53	554,000
	14080101	Upper San Juan	-0.1	99	45	616,400
	14080102	Piedra	0.1	None	52	200,000
	14080104	Animas	-0.2	54	49	451,500
	14080105	Middle San Juan	0.5	50	55	22,533
	14080107	Mancos	0.3	65	55	35,200
South Platte	10190001	South Platte Headwaters	-1.3	42	43	176,100
	10190002	Upper South Platte	0.0	79	46	470,500
	10190003	Middle South Platte-Cherry Creek	-0.9	72	36	811,600
	10190004	Clear Creek	0.0	None	51	99,000
	10190005	St. Vrain	0.0	42	52	238,500
	10190006	Big Thompson	0.7	67	44	556,400
	10190007	Cache La Poudre	0.0	82	33	365,467
	10190012	Middle South Platte-Sterling	-0.7	79	36	920,500
Yampa-White	10180001	North Platte Headwaters	-0.5	None	44	200,000
	14050001	Upper Yampa	-1.5	99	29	574,300
	14050002	Lower Yampa	-1.4	None	33	730,000
	14050003	Little Snake	-1.6	None	31	230,000
	14050005	Upper White	-1.7	None	30	225,000

NEP is non exceedance percentage for total reservoir storage in HUC and total streamflow forecast volume in HUC (if there is more than one of each type of component, their volumes are added together). Total Vol is the volume of reservoir storage plus streamflow forecast volume in HUC combined. NEP is calculated compared to the volume of actual natural flow and active storage historically occurring this month during the period 1970-2010.

March 1, 2016 SWSI Component Information By HUC

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
11020001	Arkansas Headwaters	ARKANSAS RIVER AT SALIDA	215,000	45
		TURQUOISE LAKE	60,600	33
		TWIN LAKES RESERVOIR	48,504	64
		HOMESTAKE RESERVOIR	41,200	76
		CLEAR CREEK RESERVOIR	8,200	61
11020002	Upper Arkansas	PUEBLO RESERVOIR INFLOW	340,000	55
		PUEBLO RESERVOIR	268,600	86
11020005	Upper Arkansas-Lake Meredith	PUEBLO RESERVOIR INFLOW	340,000	55
		MEREDITH RESERVOIR	40,900	95
		HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	9,400	44
		LAKE HENRY	7,300	69
11020006	Huerfano	HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	9,400	44
		CUCHARAS RESERVOIR	0	14
11020009	Upper Arkansas-John Martin Reservoir	PUEBLO RESERVOIR INFLOW	340,000	55
		JOHN MARTIN RESERVOIR	238,900	78
		ADOBE CREEK RESERVOIR	73,600	99
		PURGATOIRE RIVER AT TRINIDAD	40,000	45
		HUERFANO RIVER NEAR REDWING	10,900	41
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	9,400	44
11020010	Purgatoire	PURGATOIRE RIVER AT TRINIDAD	40,000	45
		TRINIDAD LAKE	27,800	77
14010001	Colorado Headwaters	COLORADO RIVER NEAR DOTSERO	1,270,000	42
		WILLIAMS FORK RESERVOIR	76,700	94
		WOLFORD MOUNTAIN RESERVOIR	42,100	75
14010002	Blue	BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	265,000	46
		GREEN MOUNTAIN RESERVOIR	59,000	19
14010003	Eagle	EAGLE RIVER BELOW GYPSUM	310,000	44
14010004	Roaring Fork	ROARING FORK AT GLENWOOD SPRINGS	565,000	32
		RUEDI RESERVOIR	68,600	53
14010005	Colorado Headwaters-Plateau	COLORADO RIVER NEAR CAMEO	2,010,000	36
		VEGA RESERVOIR	12,000	48
14020001	East-Taylor	EAST RIVER AT ALMONT	143,000	32
		TAYLOR R INF TO TAYLOR PARK RESERVOIR	85,000	47
		TAYLOR PARK RESERVOIR	68,400	59
14020002	Upper Gunnison	GUNNISON R INF TO BLUE MESA RESERVOIR	575,000	47
		BLUE MESA RESERVOIR	558,500	83
		LAKE FORK AT GATEVIEW, CO	125,000	54
		MORROW POINT RESERVOIR	108,100	17
		CRAWFORD RESERVOIR	7,700	36
		SILVER JACK RESERVOIR	4,500	35
		FRUITLAND RESERVOIR	1,900	62

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
14020003	Tomichi	TOMICHI CREEK AT GUNNISON, CO	75,000	63
		VOUGA RESERVOIR NEAR DOYLEVILLE	900	99
14020004	North Fork Gunnison	NORTH FORK GUNNISON R NR SOMERSET	220,000	37
		PAONIA RESERVOIR	1,200	3
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	1,210,000	46
14020006	Uncompahgre	UNCOMPAHGRE RIVER AT COLONA	135,000	59
		RIDGEWAY RESERVOIR	65,400	60
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	131,000	59
13010001	Rio Grande Headwaters	RIO GRANDE NEAR DEL NORTE	520,000	54
		RIO GRANDE RESERVOIR	33,100	91
		SANTA MARIA RESERVOIR	19,600	90
		CONTINENTAL RESERVOIR	4,400	48
13010002	Alamosa-Trinchera	ALAMOSA CREEK ABOVE TERRACE RESERVOIR	62,000	44
		CULEBRA CREEK AT SAN LUIS	20,000	49
		SANGRE DE CRISTO	13,600	48
		UTE CREEK	12,100	52
		TRINCHERA CK	11,100	46
		TERRACE RESERVOIR	5,600	35
		MOUNTAIN HOME	3,101	57
13010004	Saguache	SAGUACHE CREEK NEAR SAGUACHE, CO	34,000	59
13010005	Conejos	CONEJOS RIVER NEAR MOGOTE	180,000	50
		PLATORO RESERVOIR	13,100	27
14030002	Upper Dolores	DOLORES RIVER BELOW MCPHEE RESERVOIR	285,000	53
		MCPHEE RESERVOIR	249,500	55
		GROUNDHOG RESERVOIR	19,500	99
14080101	Upper San Juan	SAN JUAN RIVER NEAR CARRACAS	345,000	44
		LOS PINOS RIVER NEAR BAYFIELD	185,000	57
		VALLECITO RESERVOIR	86,400	99
14080102	Piedra	PIEDRA RIVER NEAR ARBOLES	200,000	52
14080104	Animas	ANIMAS RIVER AT DURANGO	380,000	49
		FLORIDA RIVER INFLOW TO LEMON RESERVOIR	50,000	55
		LEMON RESERVOIR	21,500	54
14080105	Middle San Juan	LA PLATA RIVER AT HESPERUS	22,000	55
		LONG HOLLOW RESERVOIR	533	50
14080107	Mancos	MANCOS RIVER NEAR MANCOS	30,000	55
		JACKSON GULCH RESERVOIR	5,200	65
10190001	South Platte Headwaters	ELEVENMILE CANYON RESERVOIR	99,500	84
		ELEVENMILE CANYON RESV INFLOW	46,000	43
		SPINNEY MOUNTAIN RESERVOIR	30,600	70
		ANTERO RESERVOIR	0	4
10190002	Upper South Platte	DILLON RESERVOIR	236,600	75
		SOUTH PLATTE RIVER AT SOUTH PLATTE	149,000	47
		CHEESMAN LAKE	69,900	70
		BEAR CREEK ABV EVERGREEN	15,000	53

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190003	Middle South Platte-Cherry Creek	CACHE LA POUDRE R AT CANYON MOUTH	190,000	33
		SOUTH PLATTE RIVER AT SOUTH PLATTE	149,000	47
		CLEAR CREEK AT GOLDEN	99,000	51
		SAINT VRAIN CREEK AT LYONS	89,000	50
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	82,000	44
		BOULDER CREEK NEAR ORODELL	56,000	53
		STANDLEY RESERVOIR	38,800	82
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
		BARR LAKE	26,900	66
		MILTON RESERVOIR	19,400	90
		BEAR CREEK ABV EVERGREEN	15,000	53
		HORSECREEK RESERVOIR	9,500	11
10190004	Clear Creek	CLEAR CREEK AT GOLDEN	99,000	51
10190005	St. Vrain	SAINT VRAIN CREEK AT LYONS	89,000	50
		BOULDER CREEK NEAR ORODELL	56,000	53
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
		GROSS RESERVOIR	24,800	61
		UNION RESERVOIR	12,100	75
		MARSHALL RESERVOIR	7,500	85
		BUTTONROCK (RALPH PRICE) RESERVOIR	6,400	1
		TERRY RESERVOIR	5,700	81
10190006	Big Thompson	LAKE GRANBY	333,700	66
		CARTER LAKE	88,500	34
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	82,000	44
		BOYD LAKE	35,300	59
		WILLOW CREEK RESERVOIR	7,200	56
		LONE TREE RESERVOIR	7,000	50
		MARIANO RESERVOIR	2,200	17
		LAKE LOVELAND RESERVOIR	500	6
10190007	Cache La Poudre	CACHE LA POUDRE R AT CANYON MOUTH	190,000	33
		HORSETOOTH RESERVOIR	114,000	59
		COBB LAKE	18,600	75
		WINDSOR RESERVOIR	11,567	91
		FOSSIL CREEK RESERVOIR	9,100	74
		CACHE LA POUDRE	8,900	82
		HALLIGAN RESERVOIR	6,400	94
		CHAMBERS LAKE	3,900	67
		BLACK HOLLOW RESERVOIR	3,000	47

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190012	Middle South Platte-Sterling	CACHE LA POUDRE R AT CANYON MOUTH	190,000	33
		SOUTH PLATTE RIVER AT SOUTH PLATTE	149,000	47
		CLEAR CREEK AT GOLDEN	99,000	51
		SAINT VRAIN CREEK AT LYONS	89,000	50
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	82,000	44
		POINT OF ROCKS RESERVOIR	65,300	62
		BOULDER CREEK NEAR ORODELL	56,000	53
		RIVERSIDE RESERVOIR	51,700	93
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
		EMPIRE RESERVOIR	30,600	79
		JACKSON LAKE RESERVOIR	24,000	39
		PREWITT RESERVOIR	16,200	29
		JULESBURG RESERVOIR	15,700	11
		BEAR CREEK ABV EVERGREEN	15,000	53
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	200,000	44
14050001	Upper Yampa	ELK RIVER NEAR MILNER, CO	265,000	30
		YAMPA RIVER AT STEAMBOAT SPRINGS	215,000	28
		ELKHEAD CREEK ABOVE LONG GULCH	54,000	35
		STAGECOACH RESERVOIR NR OAK CREEK	33,300	99
		YAMCOLO RESERVOIR	7,000	72
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	730,000	33
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	230,000	31
14050005	Upper White	WHITE RIVER NEAR MEEKER	225,000	30

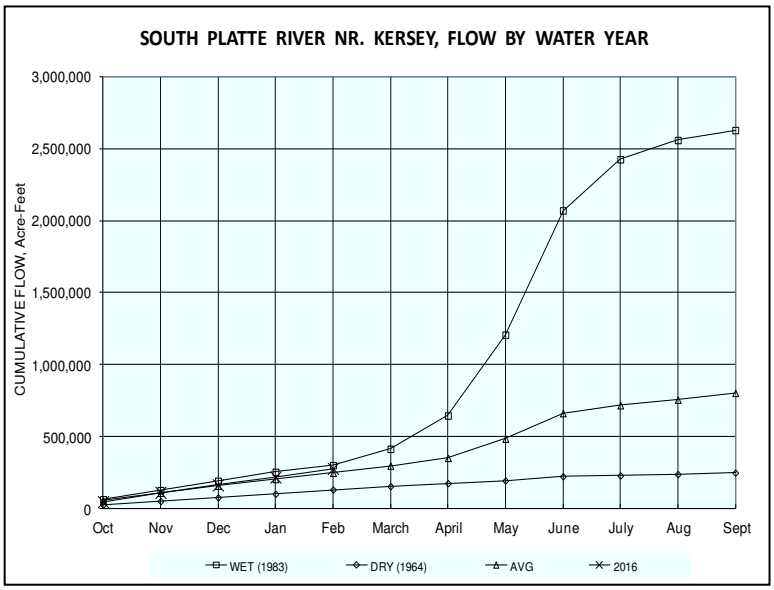
NEP is non exceedance percentage (percentile) for volume of the component compared to this month during the historical period 1970-2010.

Basinwide Conditions Assessment

The SWSI value for the month was 0.7. The month of February 2016 had two distinct personalities in northeast Colorado. The first week of February was cold and snowy, but the next three weeks were so warm and dry red flag warnings and grass fires on the plains were too common. These two personalities skewed the monthly temperature and precipitation numbers in opposite directions. Average February temperatures were well above normal and, while February is not typically one of the wetter months in northeast Colorado, because of the snow the first week of the month, the precipitation average was also well above normal.

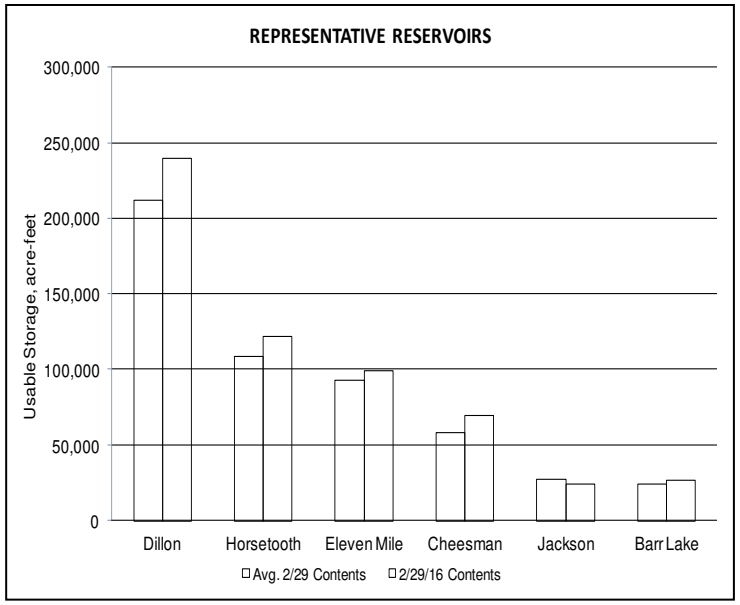
Snowpack, unlike the departure from normal for overall precipitation, went in the wrong direction in the South Platte Basin in February. The February 1, 2016 Snotel snow water equivalent was 112% of normal, but by March 1 it had fallen to 101% of normal.

In contrast to the declining snowpack numbers, the South Platte River flows at both the Julesburg and Kersey index gages remained very strong. The overall flow at the Julesburg gage was approximately 222% of the long term February mean flow of 578 cfs. The actual February 2016 mean flow was 1283 cfs. The overall flow at the Kersey gage was approximately 150% of the long term February mean flow of 671 cfs. The actual February 2016 mean flow was 1008 cfs.



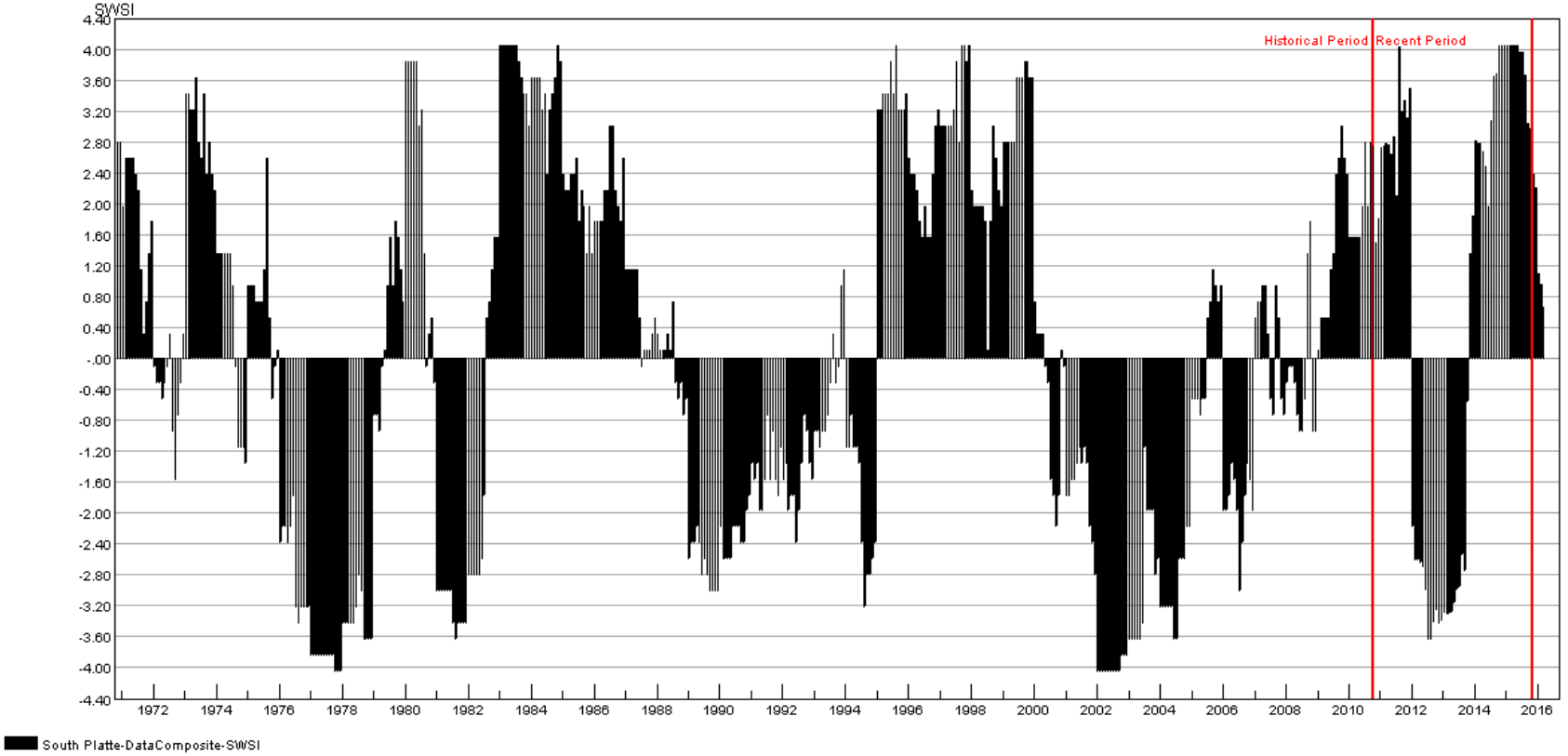
River calls in February continued the pattern that has been in place for many months now of being more to much more junior than normal. The South Platte mainstem was under free river conditions the entire month. There were calls the whole month of February on the Big Thompson River, Boulder Creek, and Clear Creek.

Also continuing a pattern that has been in place for months was overall reservoir storage in the South Platte basin. Storage at the end of February was at about 78% of capacity. This compares with an average storage of about 74% of capacity for the end of February.



South Platte Basin SWSI History

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



Basinwide Conditions Assessment

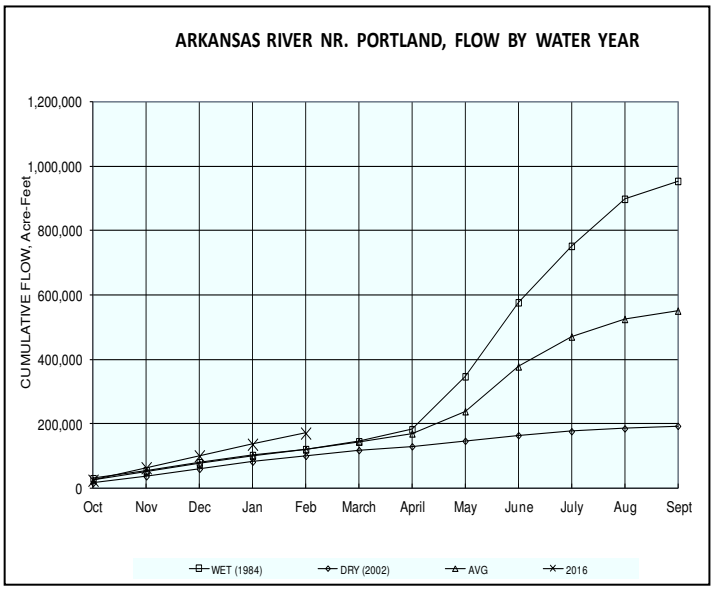
The SWSI value for the month was 2.0.

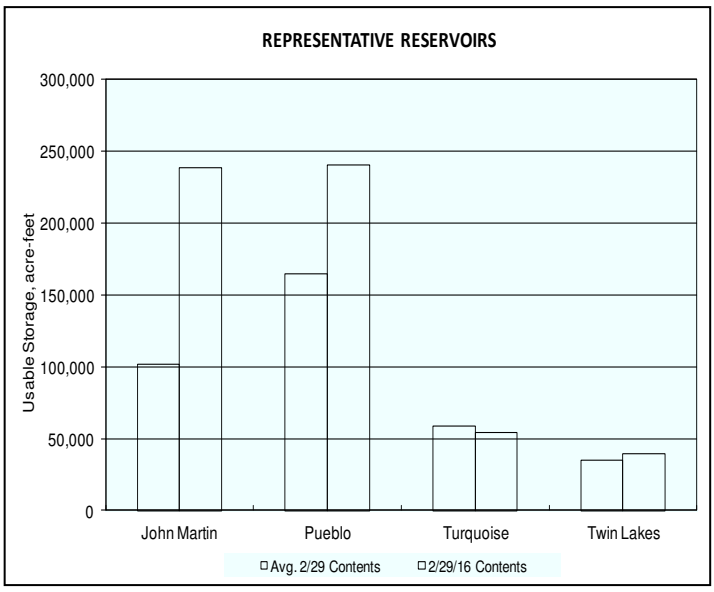
Outlook

Reservoir storage in the Pueblo Winter Water Program totaled 139,454 acre-feet as of the end of February. This storage amount is higher than last year's storage to date (118% of last year) and represents 141% of the past five-year average. Conservation storage in John Martin Reservoir has accumulated 28,829 acre-feet representing a significant increase from last year.

Administrative/Management Concerns

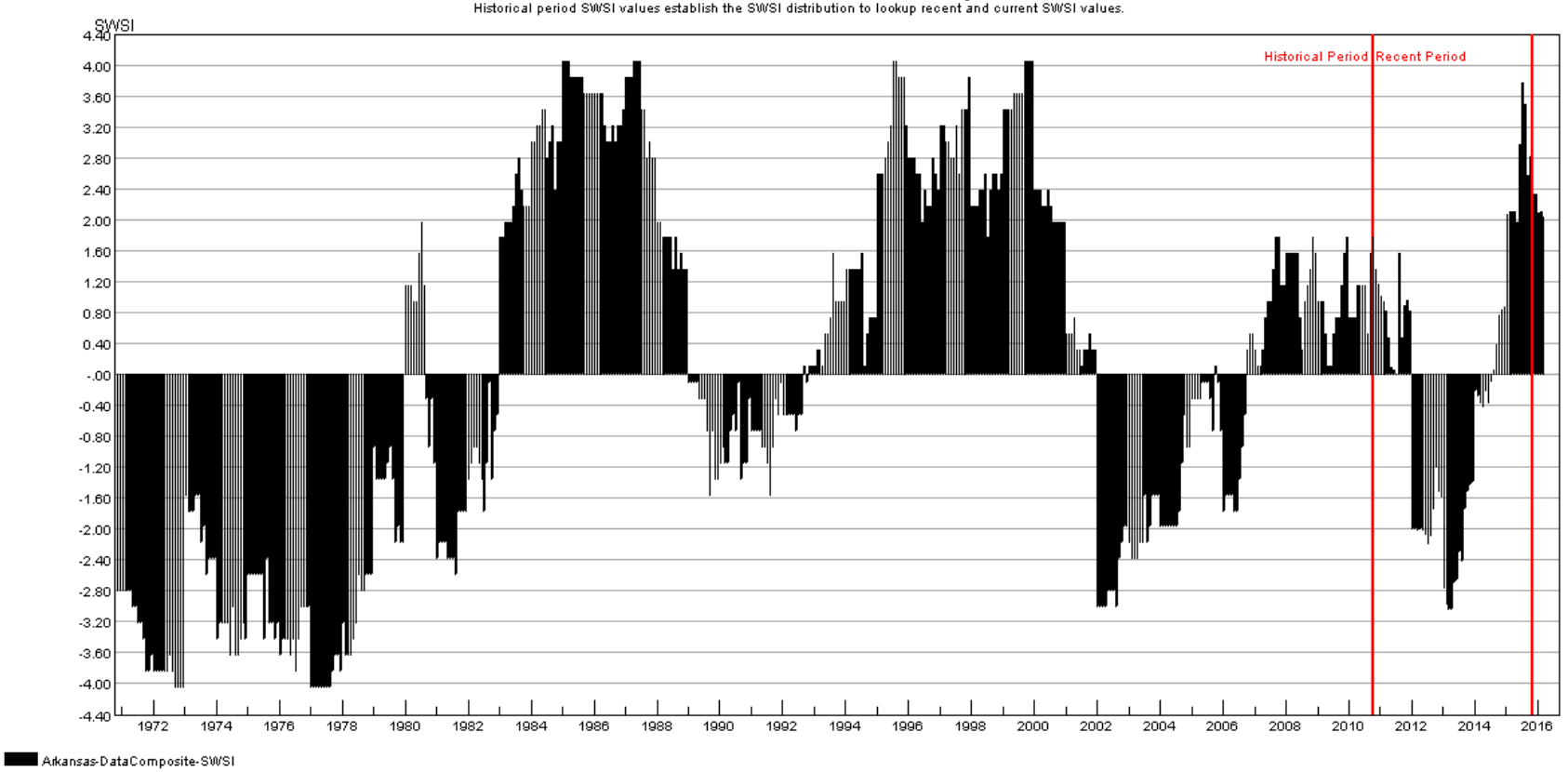
Storage activities in Pueblo Reservoir have caused water to rise into the flood control space during the Winter Water Storage Program. Deliveries by the Bureau of Reclamation of Fryingpan-Arkansas Project water from upper basin reservoirs have also contributed to this storage increase, but are necessary to make space available for 2016 imports. Although water is allowed to exceed the conservation pool during the period prior to April 15th, water must be evacuated from the reservoir or spilled to remove all water from the flood pool in time for runoff activity. The spill order puts water owned by various well associations and other interests at the greatest risk of potential spill from the reservoir. Unfortunately other storage options are not available due to the great water year in 2015 and good storage over the past winter. Creative solutions to salvage water as much as possible to avoid loss through spill are being explored.





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 0.1. Flow at the gaging station Rio Grande near Del Norte averaged 258 cfs (143% of normal). The Conejos River near Mogote had a mean flow of 70 cfs (128% of normal). The warm weather melted ice from many stream channels and boosted streamflow throughout lower stream reaches.

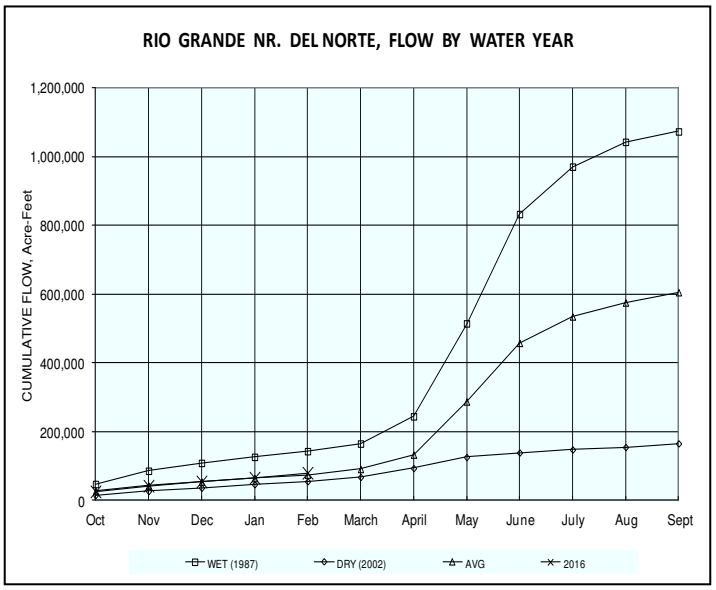
February, 2016 was a very warm month for the San Luis Valley. The average temperature was nearly six degrees above average in Alamosa, where several daily high temperature records were set.

There was very limited snowfall in the San Juans and Sangre de Cristos during February, 2016 after the good snowstorm of February 1 - 2. That isolated storm along with another minor event on February 23 put down a modest layer of snow in the mountains and the Valley floor.

Outlook

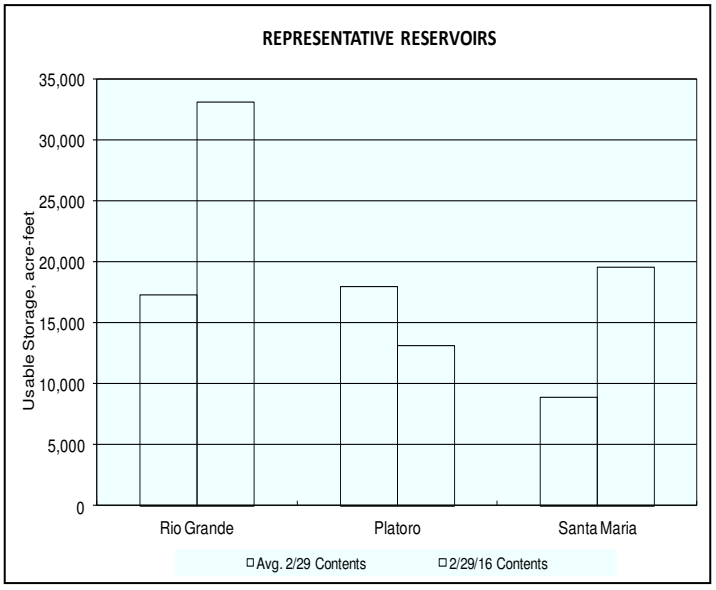
The most recent Natural Resources Conservation Service stream flow forecasts are predicting runoff in area streams to be in the range of 83% (Rio San Antonio and Sangre de Cristo Creek) and 84% (LaJara Creek) to 106% (Saguache Creek) of average during the 2016 irrigation season. All drainages in the San Luis Valley suffered reduction of projected forecasts in the past two months.

Current National Weather Service forecasts for April through June, 2016 are still calling for above average precipitation and temperatures in this area of the state. But March snowpack accumulation looks bleak.



Administrative/Management Concerns

The 77th annual meeting of the Rio Grande Compact Commission will be held in Alamosa, Colorado at the conference room of the Rio Grande Water Conservation District on Thursday, March 31, 2016. The public is invited to attend. The meeting is scheduled to start at 9:00 a.m. The District office is located at 8805 Independence Way in the southern part of Alamosa. The meeting should provide interesting updates on 2015 water operations, the forecast for 2016, and endangered species within the Rio Grande corridor.

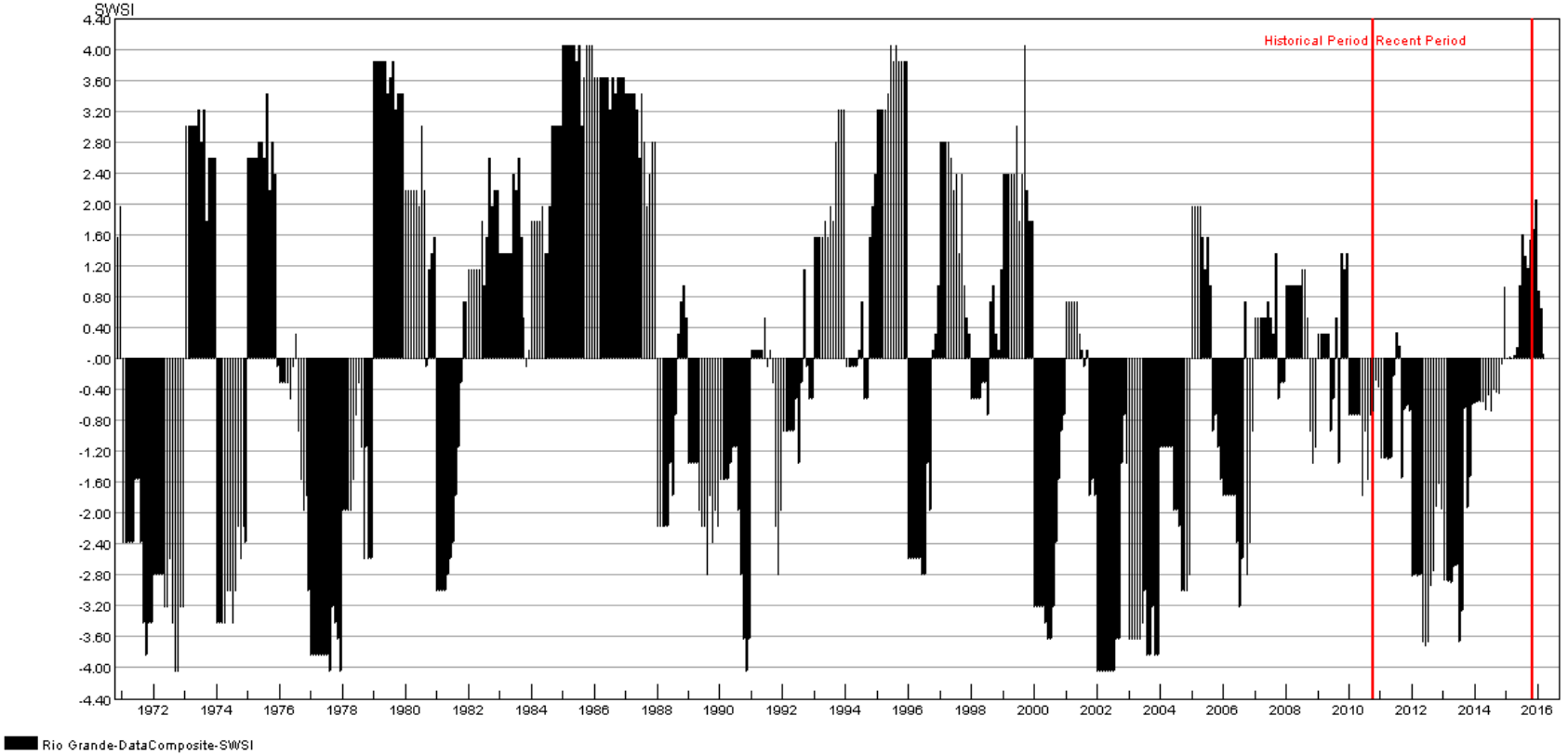


Public Use Impact

The lack of snow cover at the lower elevations was beneficial to livestock and their owners but made area farmers nervous about cropland damage. Some were ready to start up the irrigation season, but that is still set for April 1st.

Rio Grande Basin SWSI History

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



Basinwide Conditions Assessment

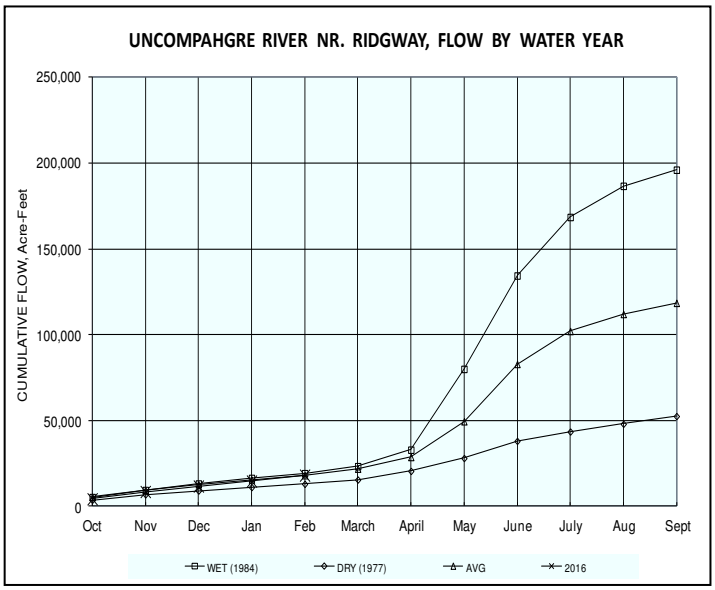
The SWSI value for the month was -0.2. The weather pattern changed significantly in the Gunnison basin in February and many areas received record low amounts of precipitation as recorded by Snotel stations. In fact, precipitation was generally between 30% and 50% of the average basin-wide, with below 30% of average recorded in the San Miguel basin. Understandably, snow water equivalent (SWE) values for the basin, calculated from an average of Gunnison basin Snotel sites, declined from 119% to 97% of the 30 year median on March 1st. Declines as a percent of the median for the date have been so significant in southern areas of the basin, such as Red Mountain Pass, that they now contain less than 90% of the median. This is now lower than areas in the north, such as the Grand Mesa, which still contain around 100% of the median.

Outlook

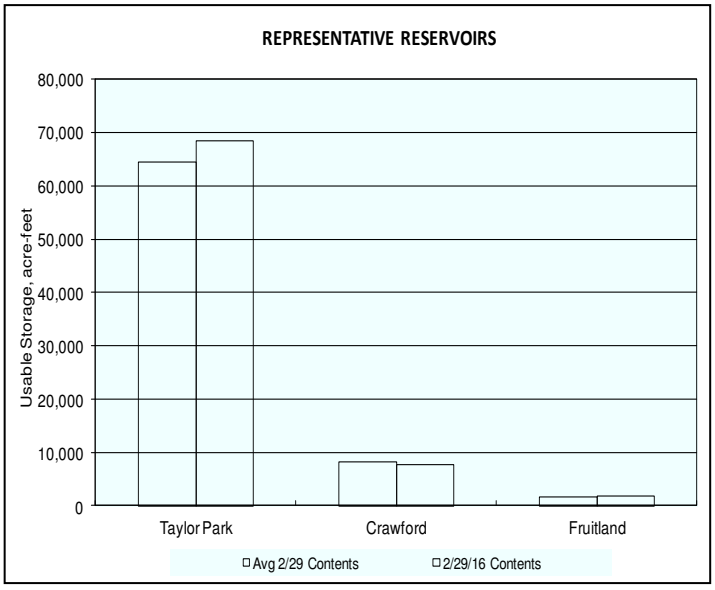
The March, April and May outlook from the National Weather Service places the Gunnison basin within an area expected to receive above average precipitation and average temperatures. The March 9th snowpack forecast from the NRCS predicts that with average snow the rest of the season we would end up at 95% of the median peak SWE. Colorado Basin River Forecast Center (CBRFC) April to July runoff forecasts predict streamflows greater than 100% of the median for all streams in the Gunnison basin except the East River where 81% is forecast and the Uncompahgre, which is forecast to run at 97% of the median.

Administrative/Management Concerns

The Uncompahgre Valley Water Users Association (UVWUA) received notice in February that their grant application, which was put together with assistance from the Colorado River Water Conservation District (CRWCD) and the Division of Water Resources (DWR), to fund the addition of satellite telemetry on six of the UVWUA's main delivery canals was approved. DWR is currently planning to install these systems in late March, prior to the irrigation season. Having these additional sites remotely monitored will greatly assist the UVWUA in managing their system more efficiently and more quickly identify and correct issues such as overtopping. It will also greatly reduce the number of miles that both the UVWUA ditch riders and DWR water commissioners drive to check those gages.



Taylor Park continues to accrue second fill water and contains over 20,000 acre-feet on March 1st. Blue Mesa Reservoir sits approximately 3-feet below the icing target on March 1st and as a result, Crystal Dam releases were reduced to 800 cfs at the beginning of March to preserve storage. Forecasted inflows to Blue Mesa dropped to 86% of average on March 1st, which corresponds to 580,000 acre-feet of inflow. Should this forecast remain the same through May 1st it would result in a Black Canyon NP reserve water right one-day peak flow target of 4,188 cfs, and an Aspinall Unit ROD flow target of 8,070 cfs for 10 days.

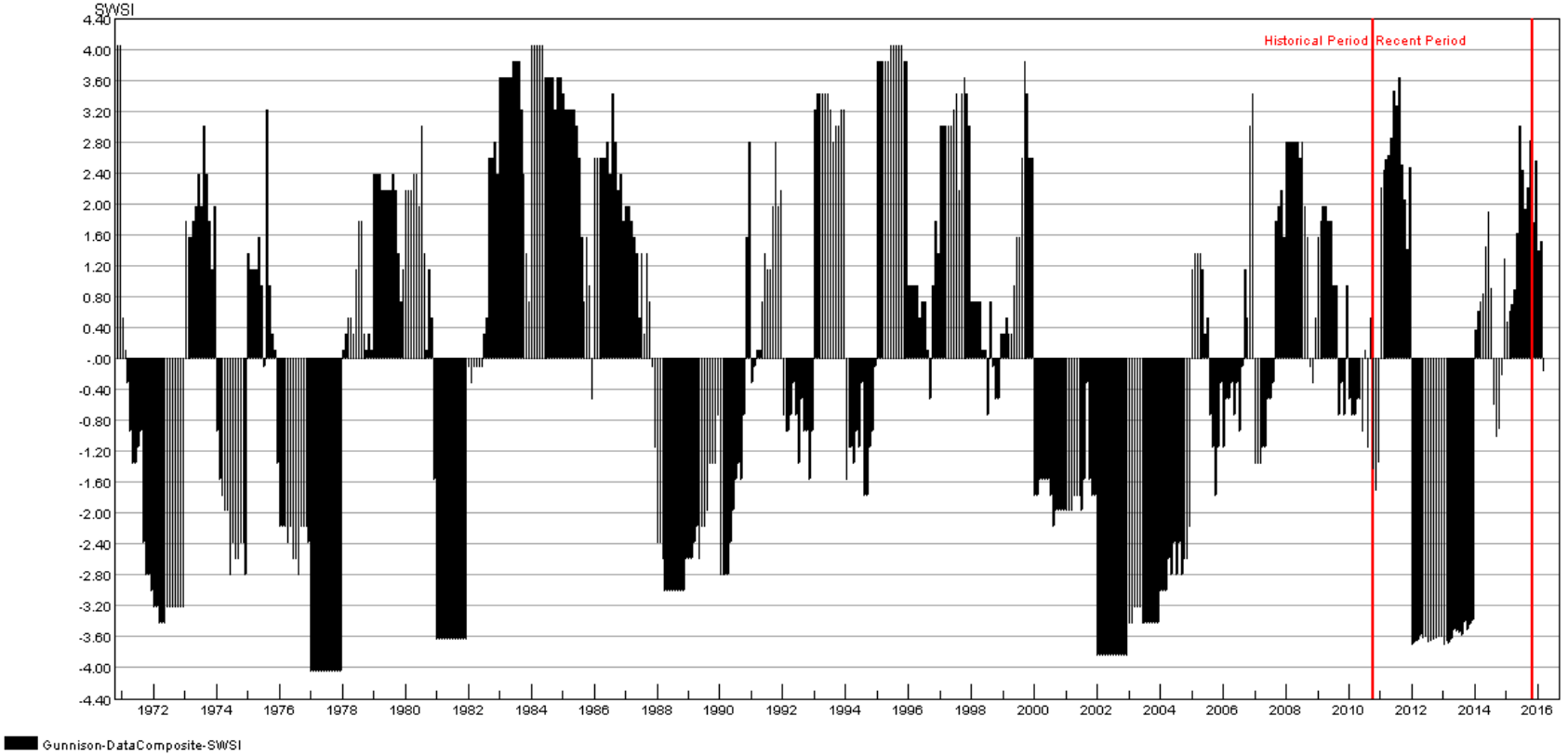


Public Use Impacts

Skiing conditions at Gunnison basin resorts in February declined due to above average temperatures and a lack of new snow. As mentioned previously, flows through the Black Canyon NP and Gunnison Gorge were reduced due to a 300 cfs reduction in releases from Crystal Dam on March 1st.

Gunnison Basin SWSI History

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

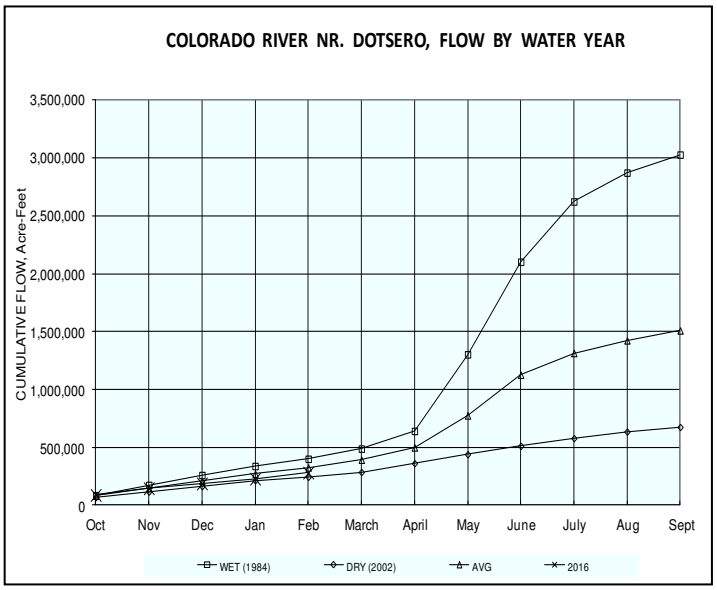


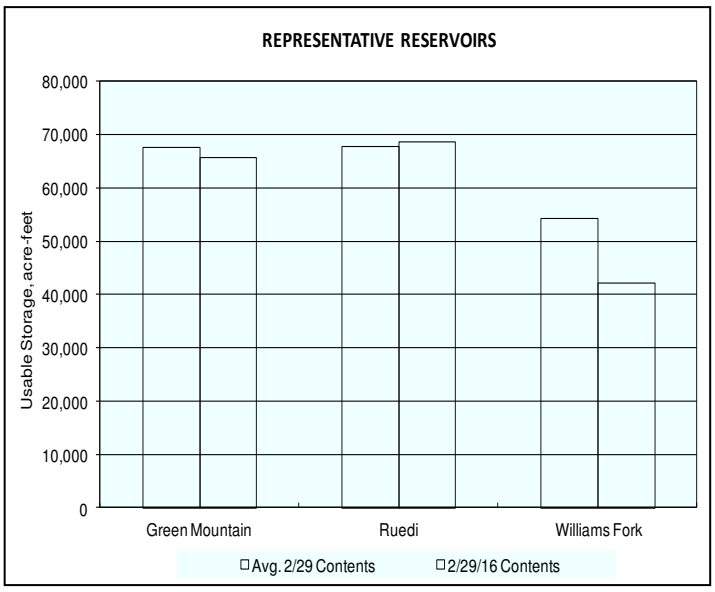
Basinwide Conditions Assessment
The SWSI value for the month was -0.8.

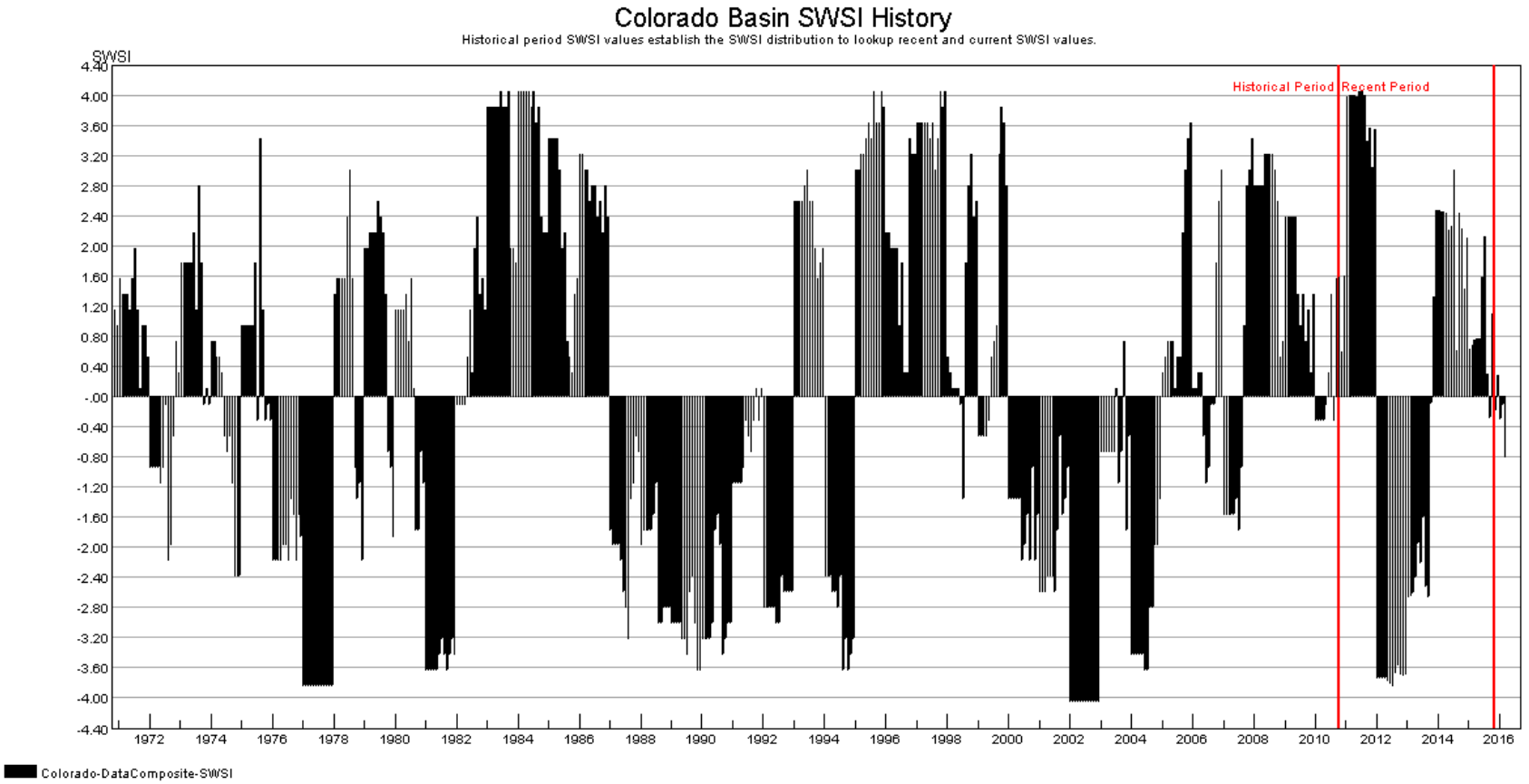
Outlook
Colorado River flows continue near average or slightly below average with tributary flows running about average throughout March. As of March 15, the Upper Colorado River Basin snowpack was down to 97 percent from 112 percent of median snow water equivalent last month and 93 percent from 105 percent of average precipitation. Forecasts call for below average precipitation with above normal temperatures for western Colorado through March.

Administrative/Management Concerns
The Shoshone Senior administrative call is in effect on the Colorado mainstem. Green Mountain Reservoir releases are increasing in accordance with corresponding higher inflows, an increase in the Colorado Collection System and contract releases. Wolford Mountain releases increased slightly to accommodate increased inflows.

Public Use Impacts
The Colorado Water Conservation Board is poised to approve a second round of water releases from Ruedi Reservoir in the 15-mile reach for the benefit of endangered fish such as pike minnow, razorback sucker, ponytail, and humpback chub.






Colorado 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 Period
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Colorado-DataComposite-SWSI

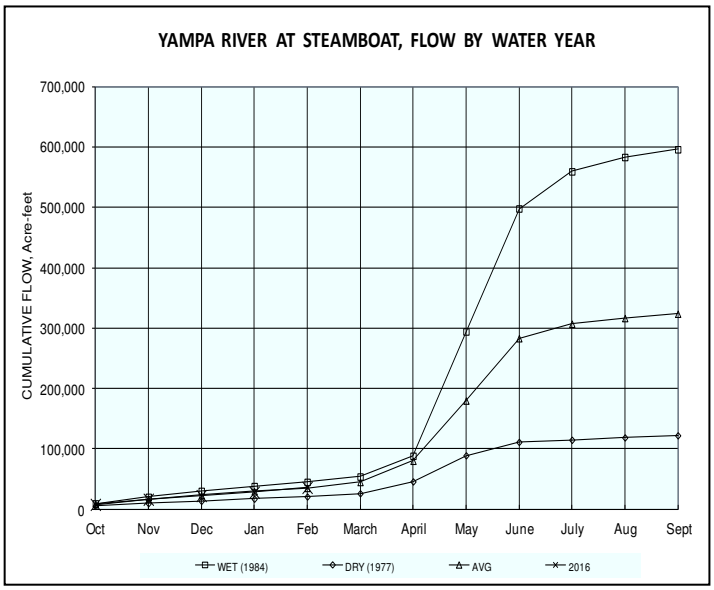
Basinwide Conditions Assessment

The SWSI value for the month was -1.2. February 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 57% of average for the combined 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 February was 91%.

Snowpack for the combined basins stands at 93%. The snow water equivalent (SWE) as of February 29, 2016 was 91% of average for the North Platte River basin and 91% of average for the Yampa River basin and White River basin.

NRCS predicts below average spring and summer streamflows in the Yampa, White, and North Platte River basins. The latest runoff forecasts from the NRCS for the April through July period are 89% of average for the North Platte River near Northgate, 78% of average for the Yampa River near Maybell, 67% of average for the Little Snake River near Lily, and 80% of average for the White River near Meeker

Due to cold temperatures and snow depth on ice, all Division 6 stream gages except the Yampa River and White River gages are either closed for the winter season or currently ice/snow-affected.



Outlook

Yamcolo Reservoir was storing 7,000 AF at the end of February 2016. The capacity of Yamcolo Reservoir is 8,700 AF. On February 29th, 2016, Stagecoach Reservoir was storing 33,300 AF which is 100% of capacity. On February 29th, Elkhead Creek Reservoir was 64% full and storing 15,881 AF.

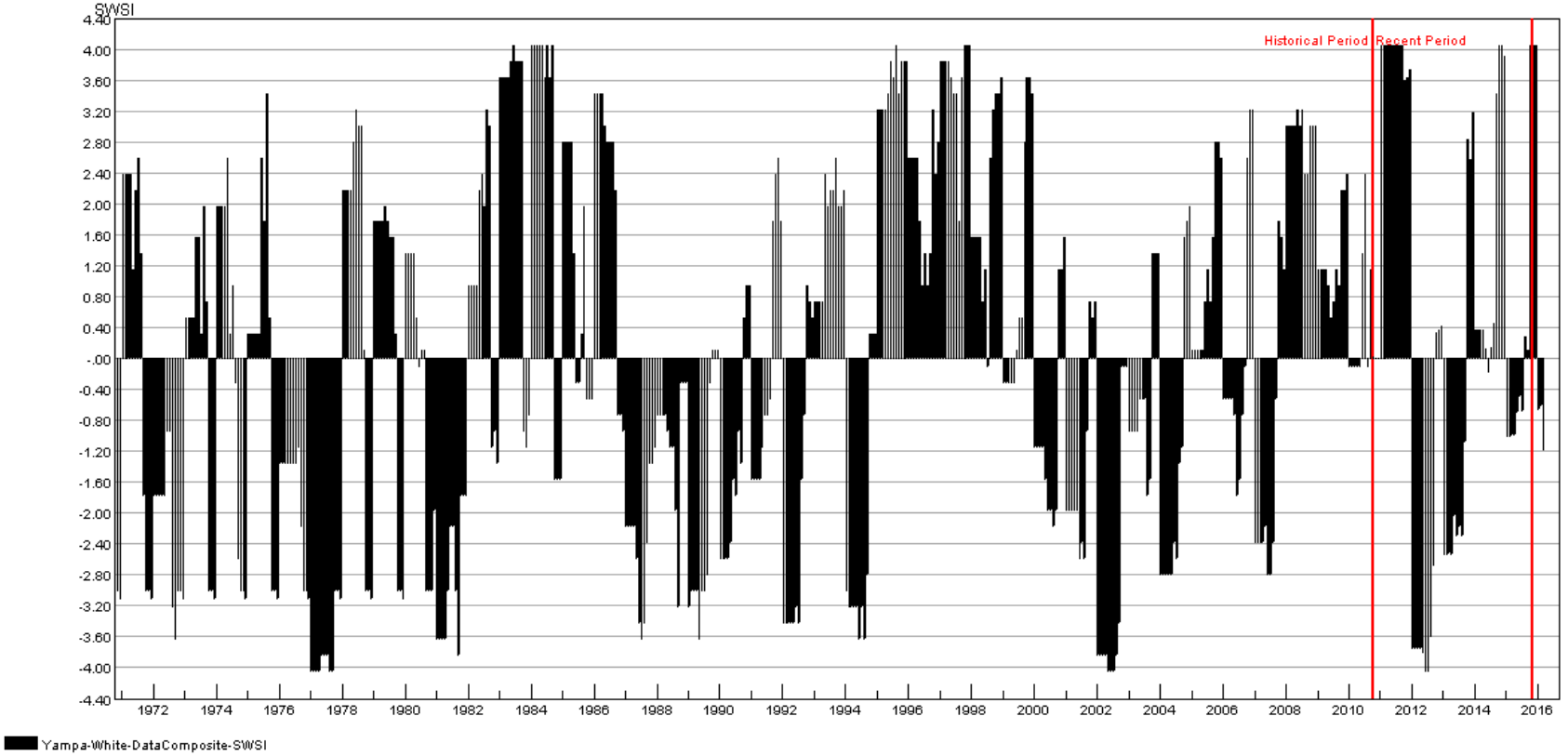
Water stored in Yamcolo Reservoir is used for irrigation purposes and Elkhead Creek Reservoir is used for municipal, industrial, recreational, and fish recovery releases. Stagecoach Reservoir is primarily used for recreation though a significant amount of stored water is allocated for municipal, industrial,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

Public Use Impacts

Steamboat Ski Resort has recorded 284 inches of snow as of February 29, 2016.

Yampa-White Basin SWSI History

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

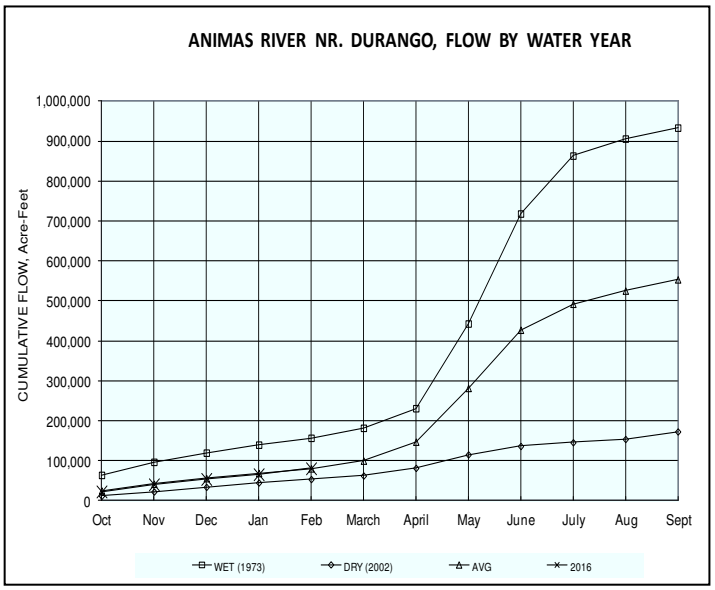


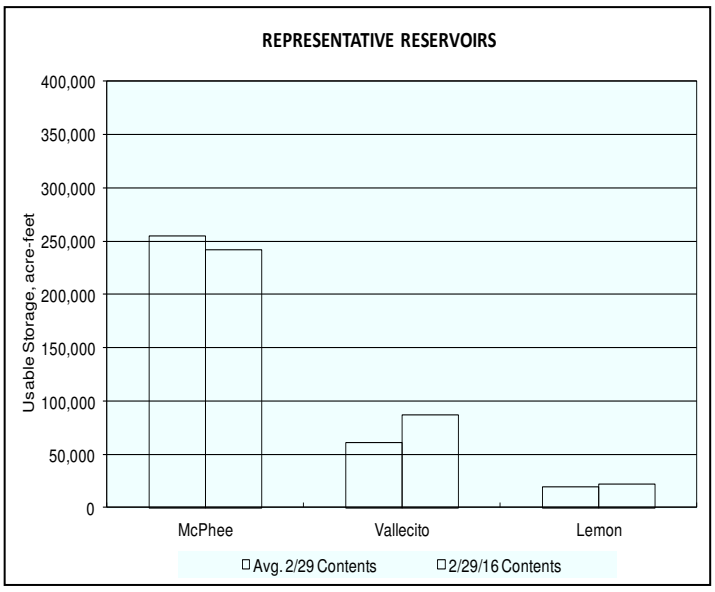
Basinwide Conditions Assessment

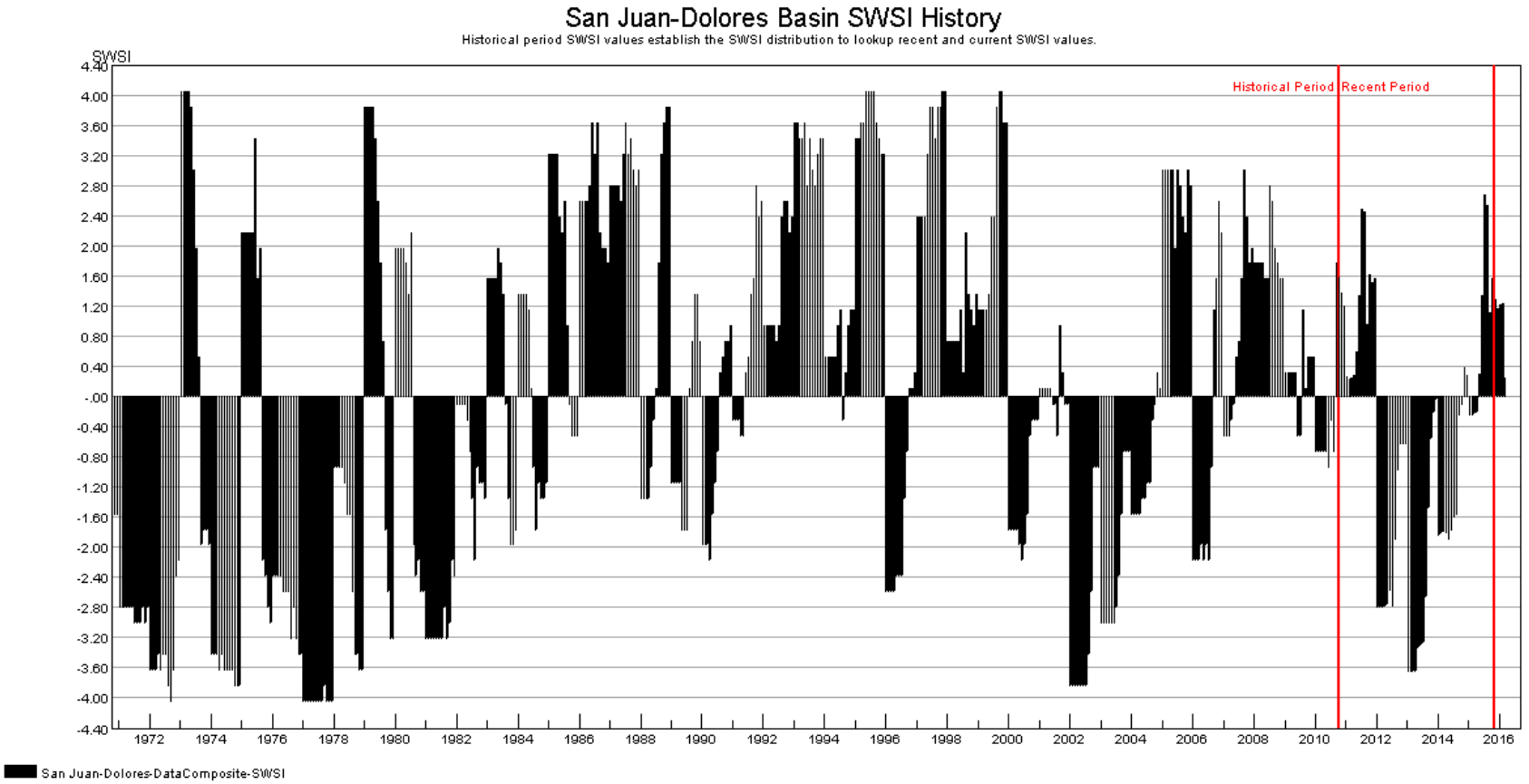
The SWSI value for the month was 0.3. Flow at the Animas River at Durango was estimated to average 259 cfs (126% of average). The flow at the Dolores River at was estimated to average 68 cfs (123% of average). The La Plata River at Hesperus was estimated to average 13.9 cfs (188% of average). Precipitation in Durango was 0.87 inches for the month, 52% of the 30-year average of 1.66 inches. Precipitation was the 81st highest amount recorded in February, in Durango, out of 122 years of record. Precipitation to date in Durango, for the water year, is 10.43 inches, 126% of the 30-year average of 8.28 inches. End of last month precipitation to date, for the water year was 142% of average. The average high and low temperatures for the month of February in Durango were 51o and 19o. In comparison, the 30-year average high and low for the month is 46o and 19o. At the end of the month Vallecito Reservoir contained 87,245 acre-feet compared to its average content of 56,352 acre-feet (155% of average). McPhee Reservoir was up to 242,245 acre-feet compared to its average content of 260,695 (93% of average), while Lemon Reservoir was up to 21,890 acre-feet as compared to its average content of 19,879 acre-feet (110% of average).

Outlook

Precipitation (0.87 inches) was below average for February in Durango. There were 81 years out of 122 years of record where there was more precipitation than this year. Rivers within the basin were flowing well above average for the month. There were only 14 out of 106 years of record where the total flow past the Animas River at Durango stream gauge was more than this year. There were 23 out of 105 years of record where the total flow past the Dolores stream gauge was more than this year and 3 out of 99 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year. On February 29, the NRCS SNOTEL sites reported an average snow-water equivalent within the basin at 98%. End of last month the snow-water-equivalent was 123%.

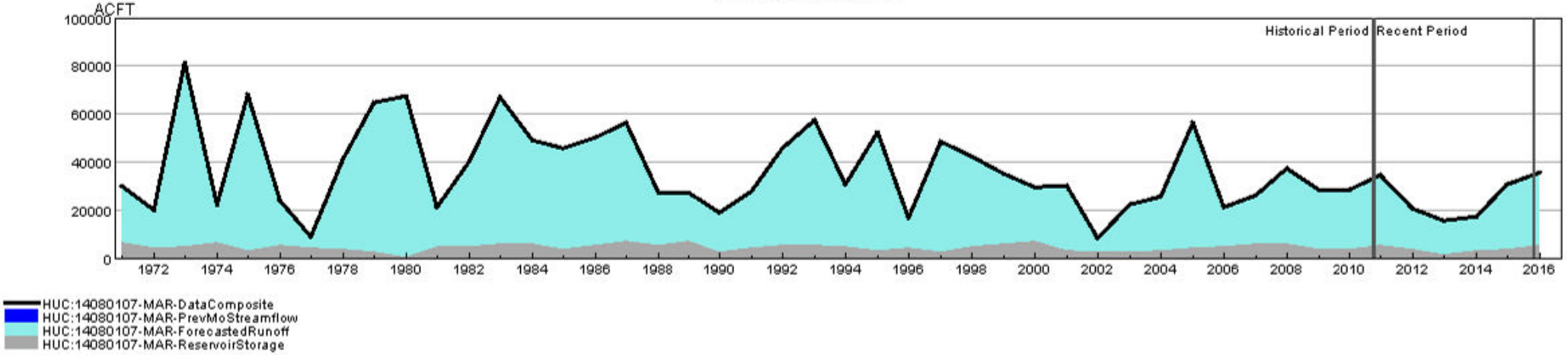





San Juan-Dolores Basin SWSI History
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
SWSI
4.40
4.00
3.60
3.20
2.80
2.40
2.00
1.60
1.20
0.80
0.40
-.00
-0.40
-0.80
-1.20
-1.60
-2.00
-2.40
-2.80
-3.20
-3.60
-4.00
-4.40
Historical Period
Recent Period
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
San Juan-Dolores-DataComposite-SWSI

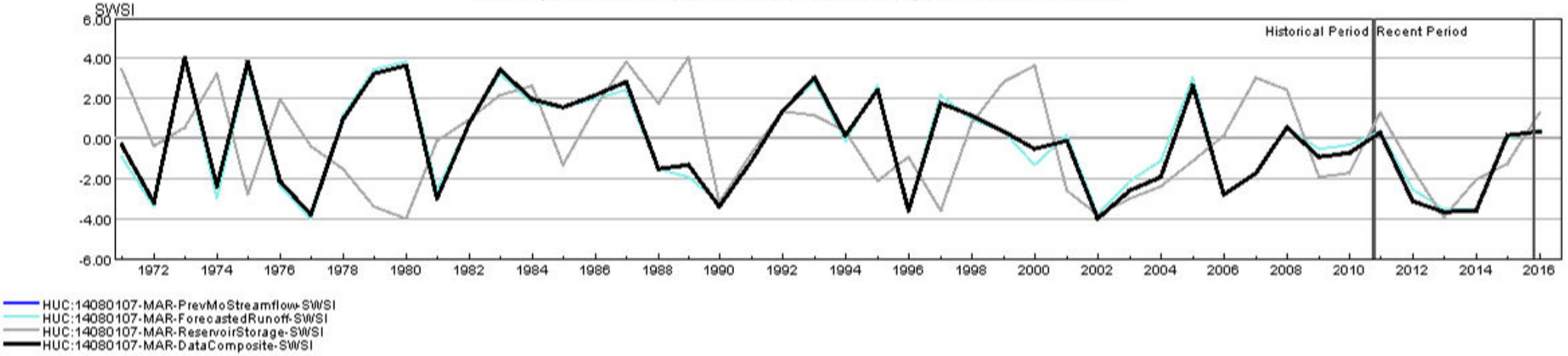
HUC 14080107 (Mancos) Surface Water Supply - MAR

Monthly component volumes



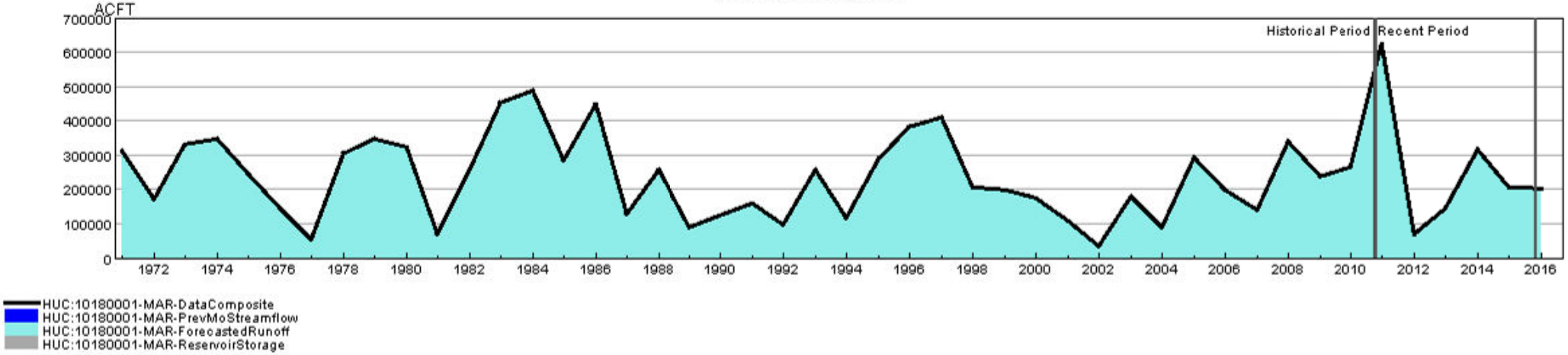
HUC 14080107 (Mancos) SWSI Values - MAR

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



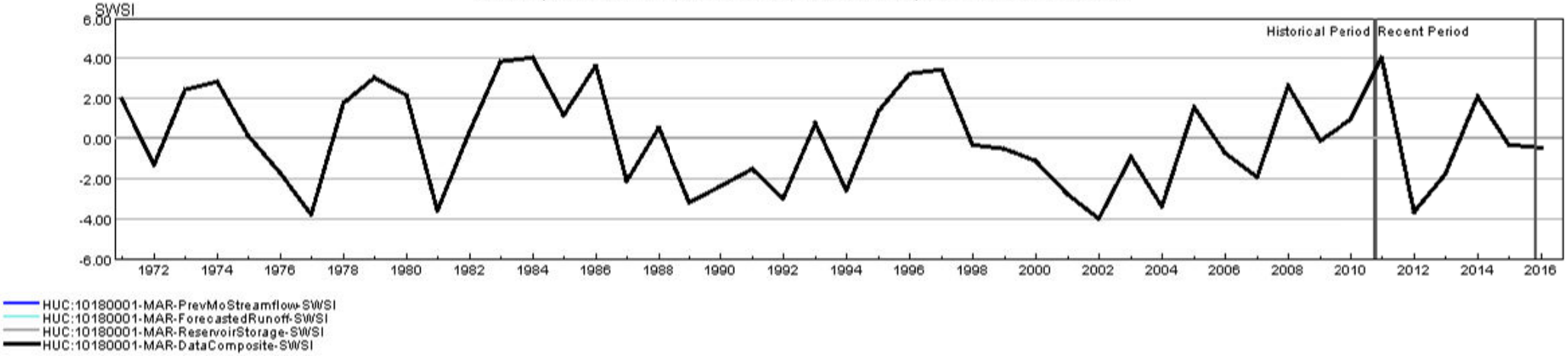
HUC 10180001 (North Platte Headwaters) Surface Water Supply - MAR

Monthly component volumes



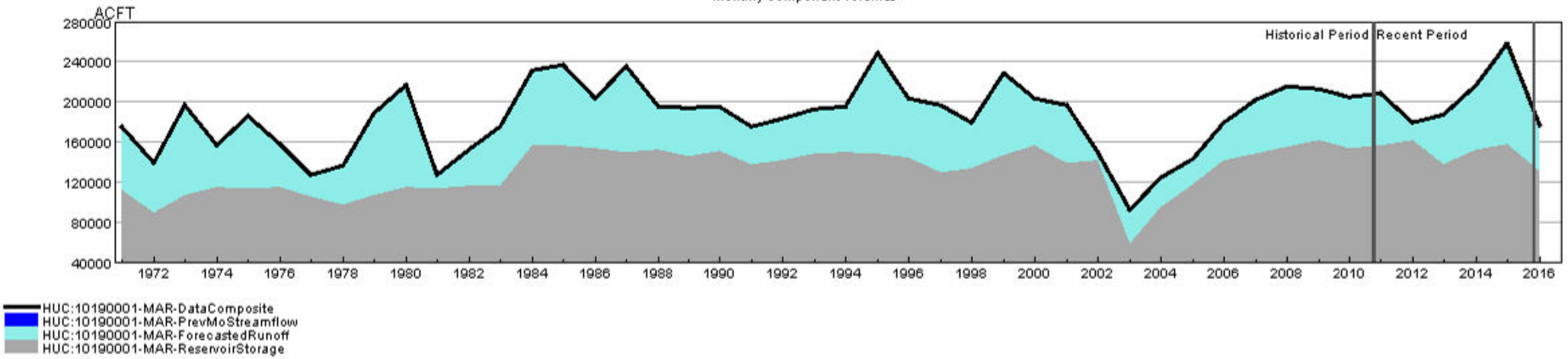
HUC 10180001 (North Platte Headwaters) SWSI Values - MAR

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



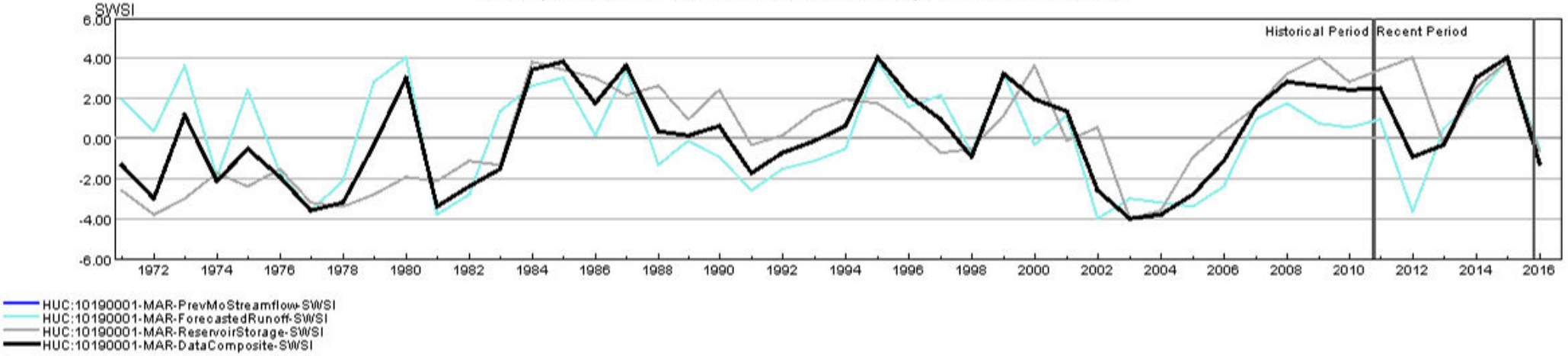
HUC 10190001 (South Platte Headwater) Surface Water Supply - MAR

Monthly component volumes



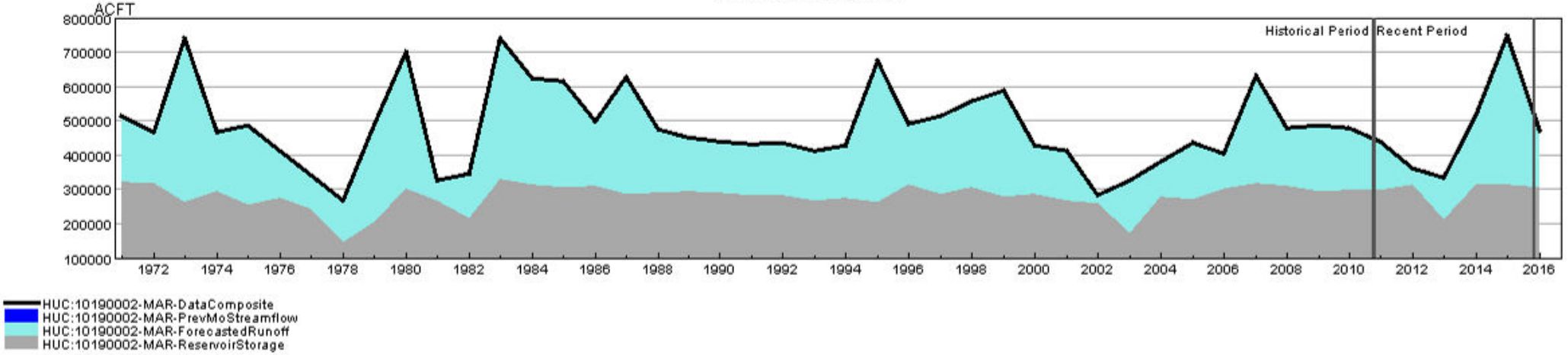
HUC 10190001 (South Platte Headwater) SWSI Values - MAR

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



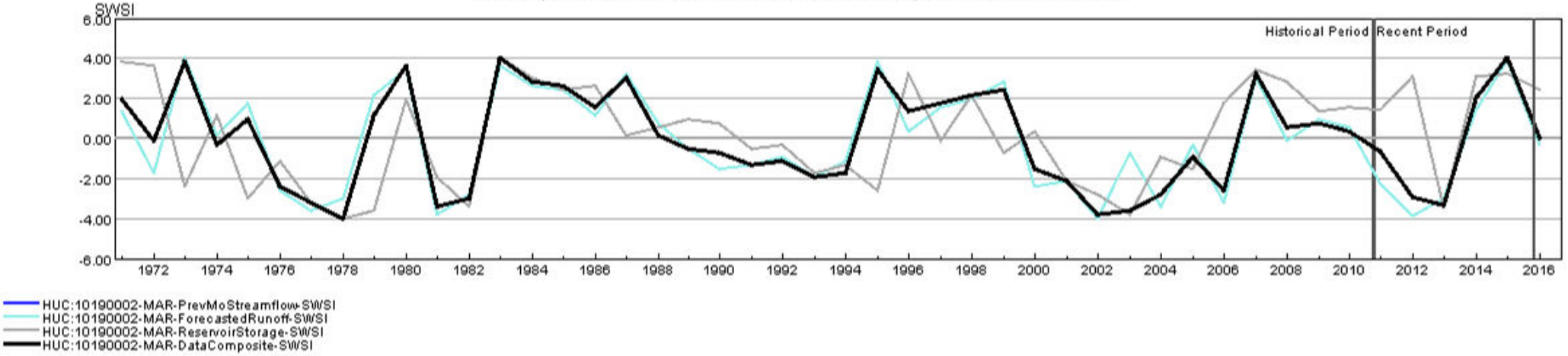
HUC 10190002 (Upper South Platte) Surface Water Supply - MAR

Monthly component volumes



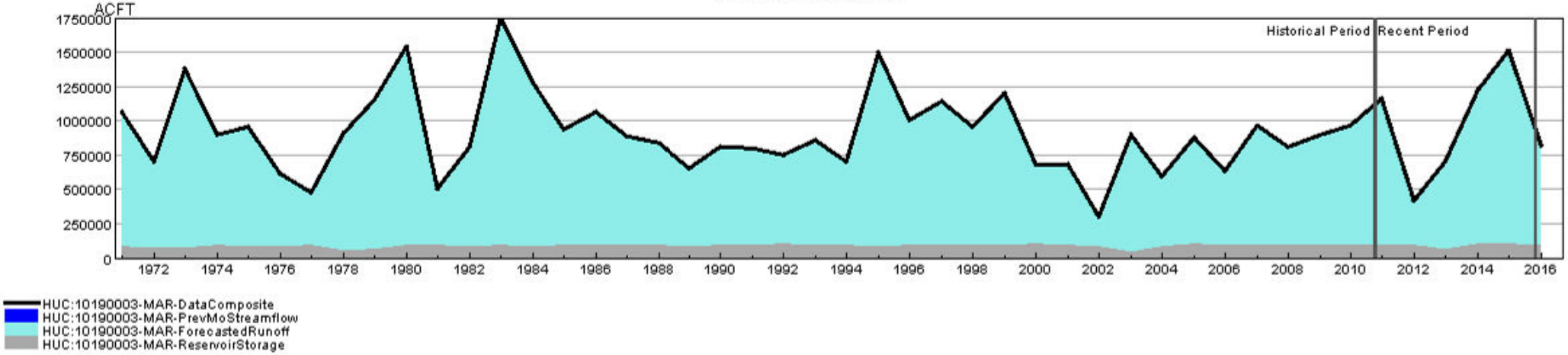
HUC 10190002 (Upper South Platte) SWSI Values - MAR

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



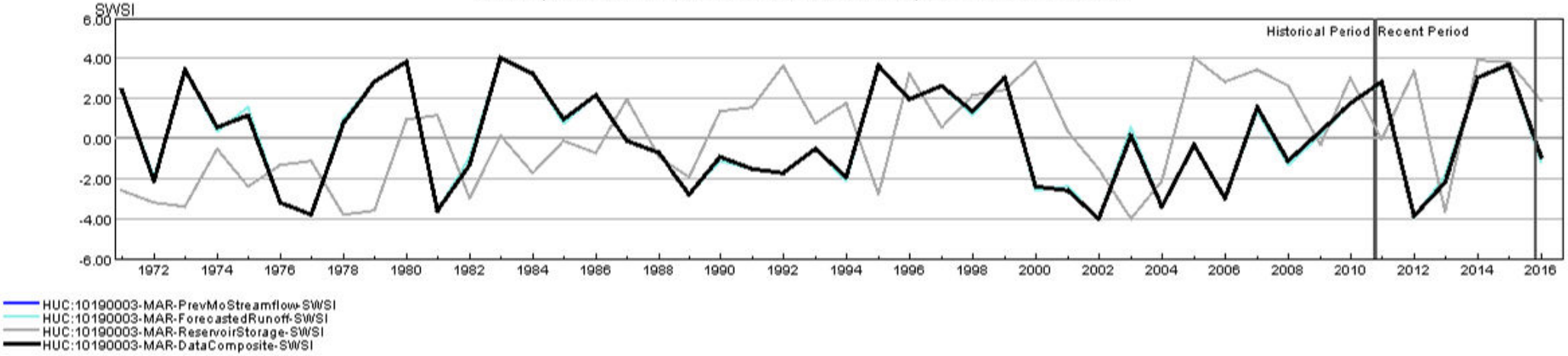
HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply - MAR

Monthly component volumes



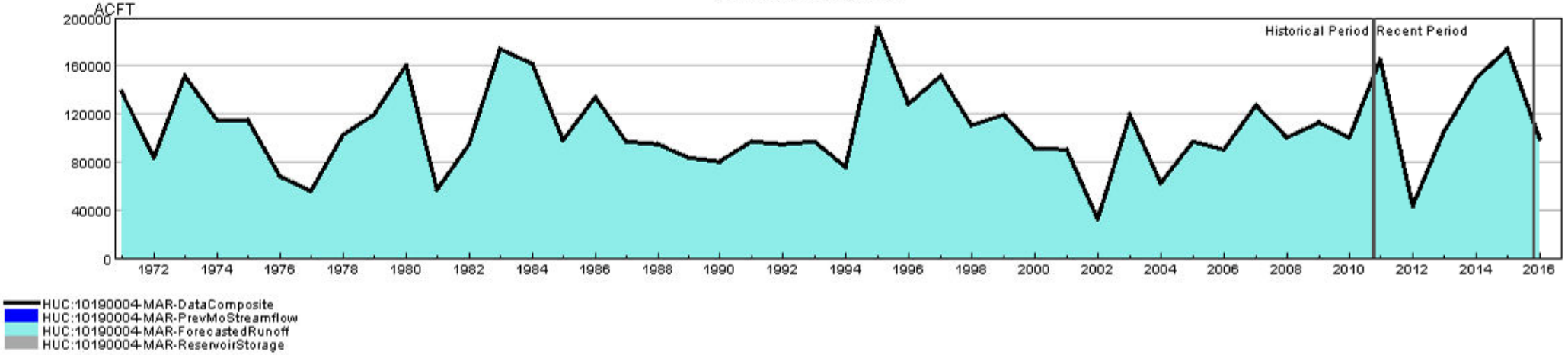
HUC 10190003 (Middle South Platte-Cherry Creek) SWSI Values - MAR

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



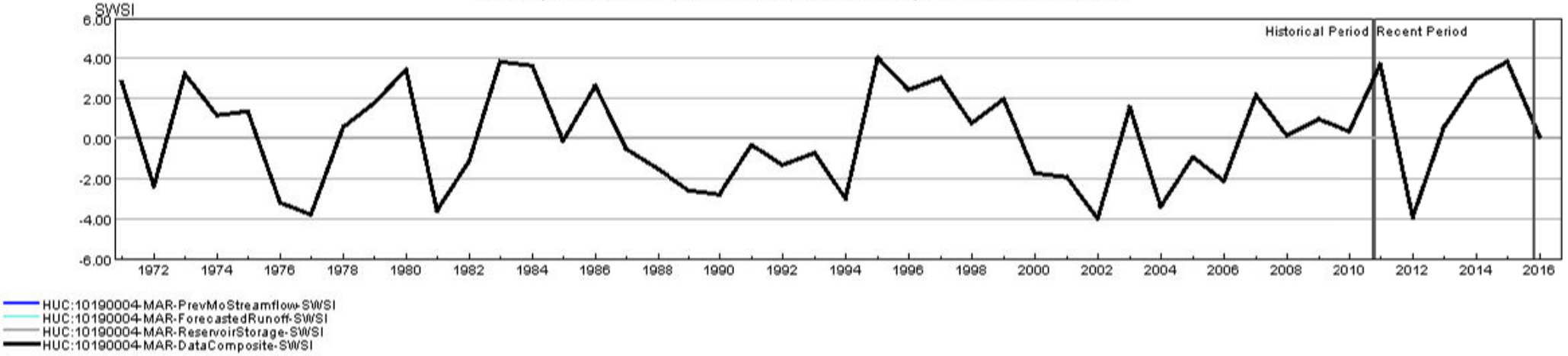
HUC 10190004 (Clear) Surface Water Supply - MAR

Monthly component volumes



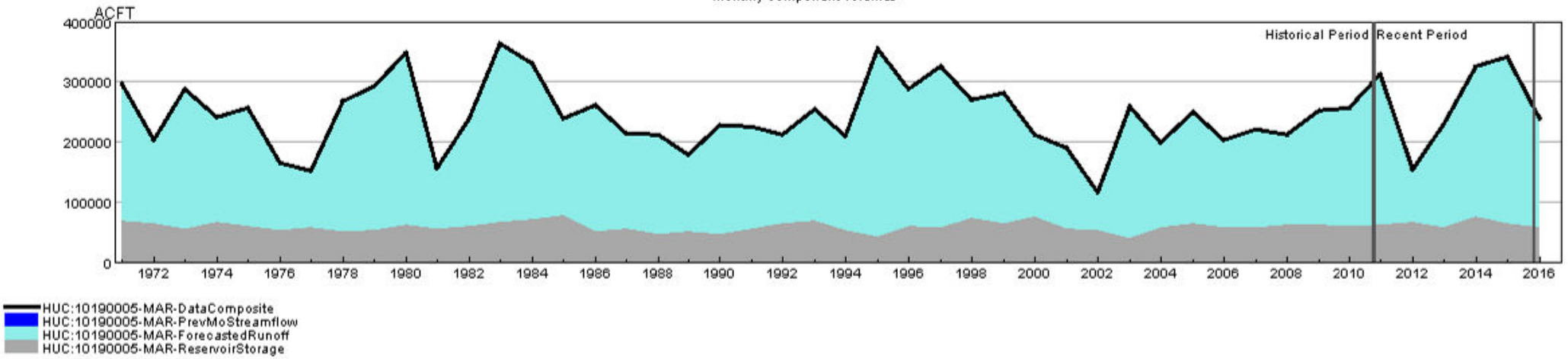
HUC 10190004 (Clear) SWSI Values - MAR

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



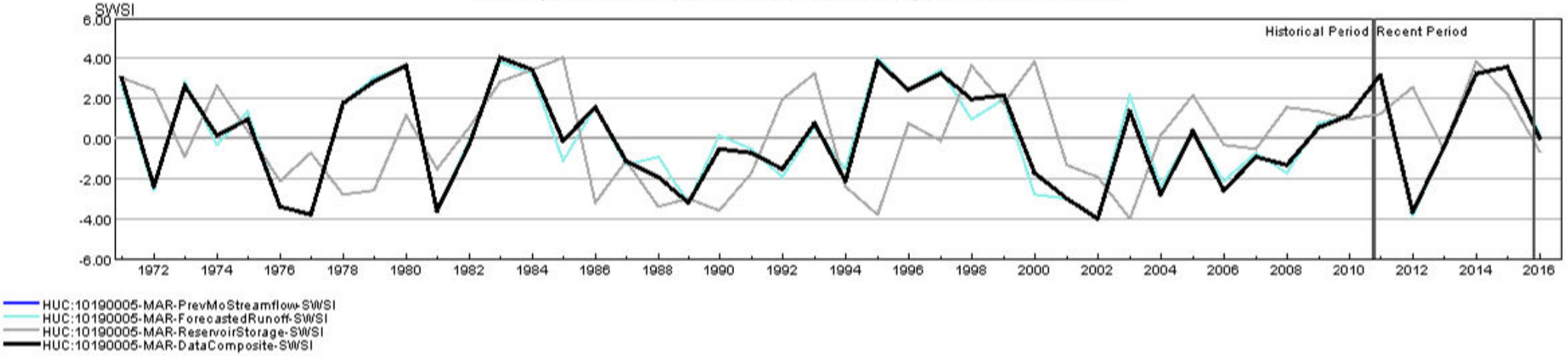
HUC 10190005 (St. Vrain) Surface Water Supply - MAR

Monthly component volumes



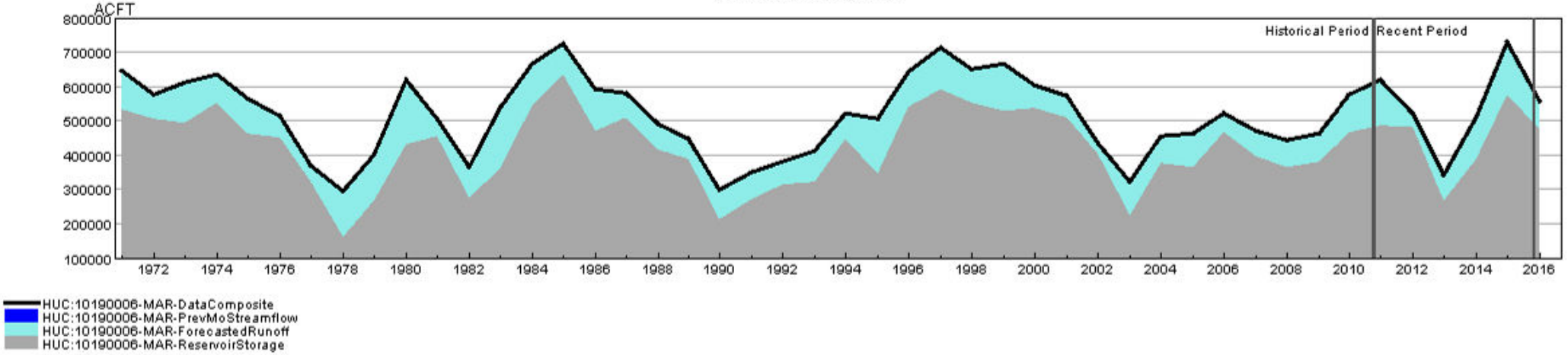
HUC 10190005 (St. Vrain) SWSI Values - MAR

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



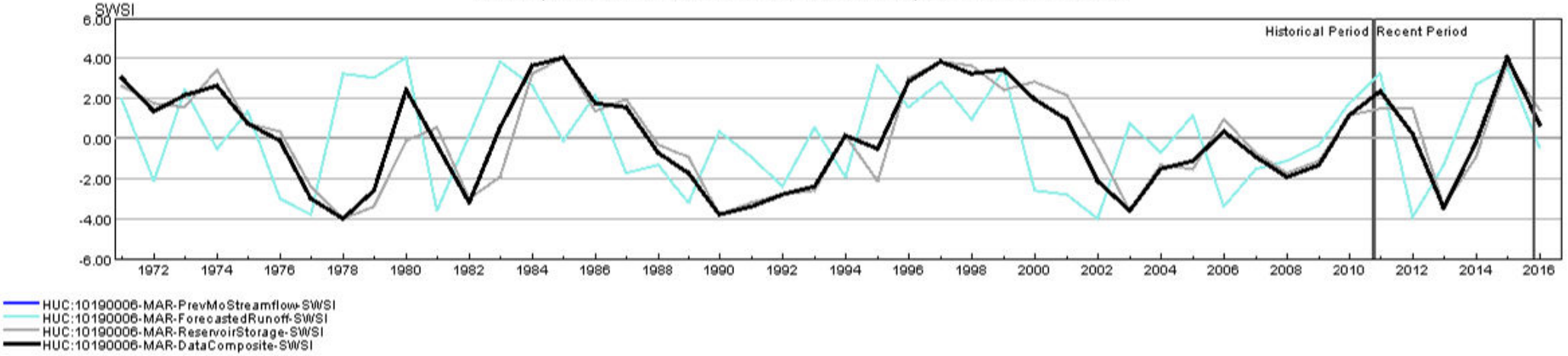
HUC 10190006 (Big Thompson) Surface Water Supply - MAR

Monthly component volumes



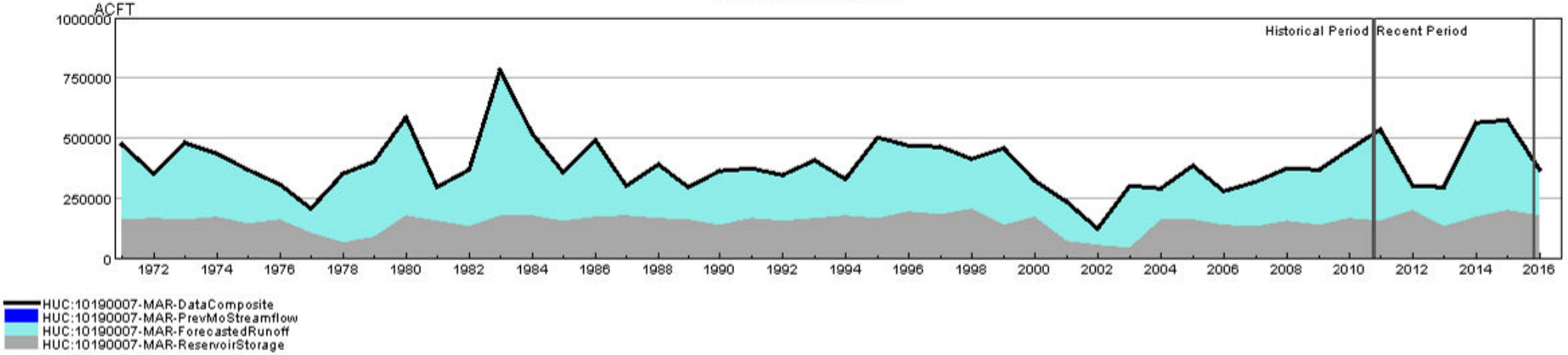
HUC 10190006 (Big Thompson) SWSI Values - MAR

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



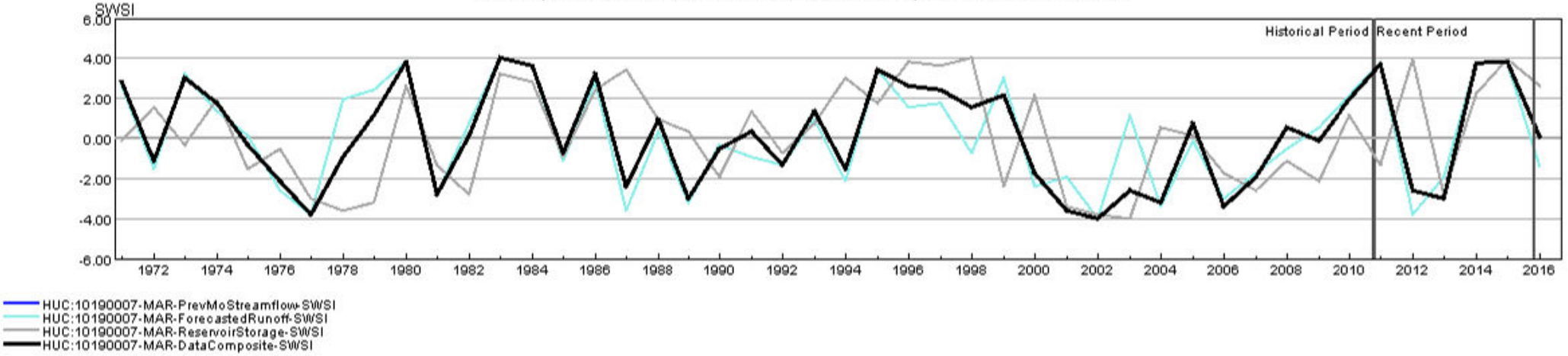
HUC 10190007 (Cache La Poudre) Surface Water Supply - MAR

Monthly component volumes



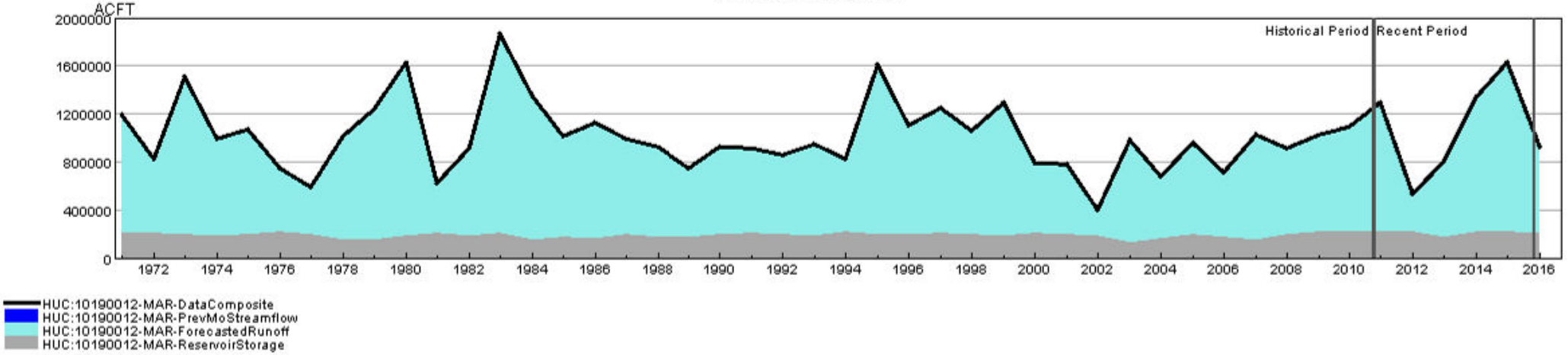
HUC 10190007 (Cache La Poudre) SWSI Values - MAR

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



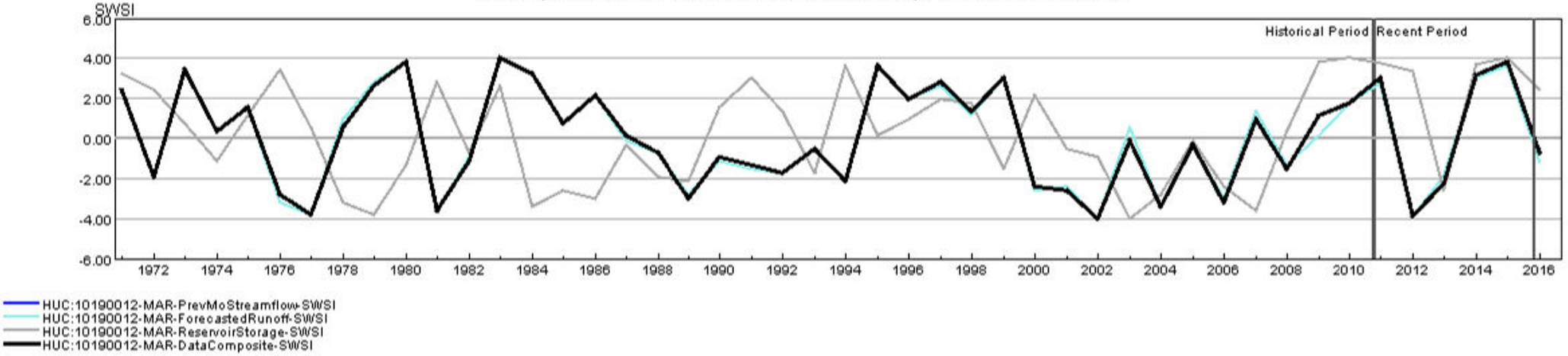
HUC 10190012 (Middle South Platte-Sterling) Surface Water Supply - MAR

Monthly component volumes



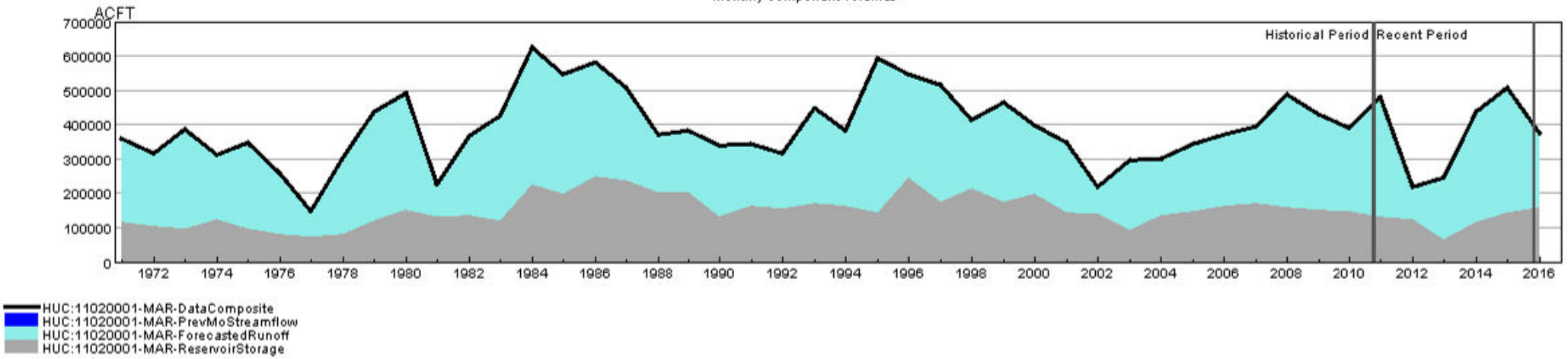
HUC 10190012 (Middle South Platte-Sterling) SWSI Values - MAR

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



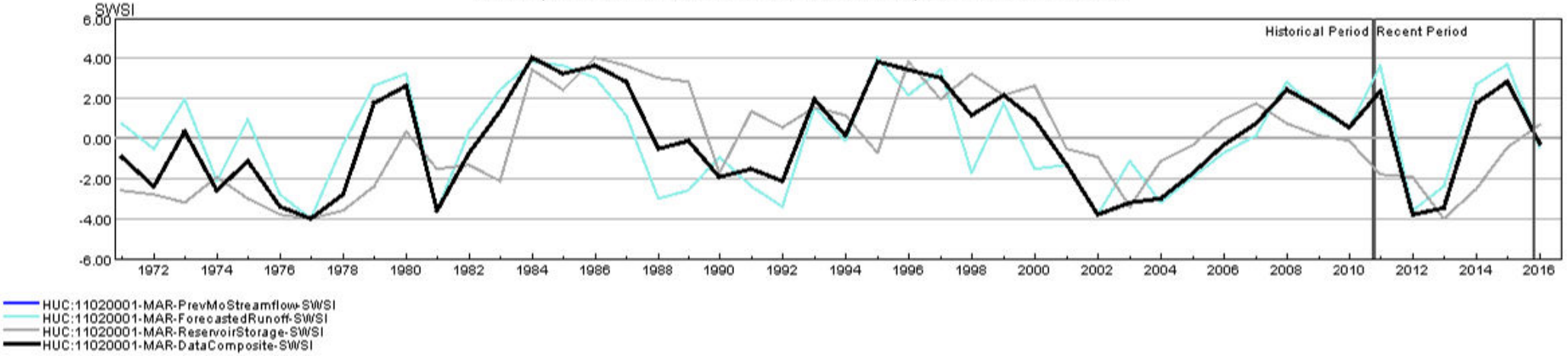
HUC 11020001 (Arkansas Headwaters) Surface Water Supply - MAR

Monthly component volumes



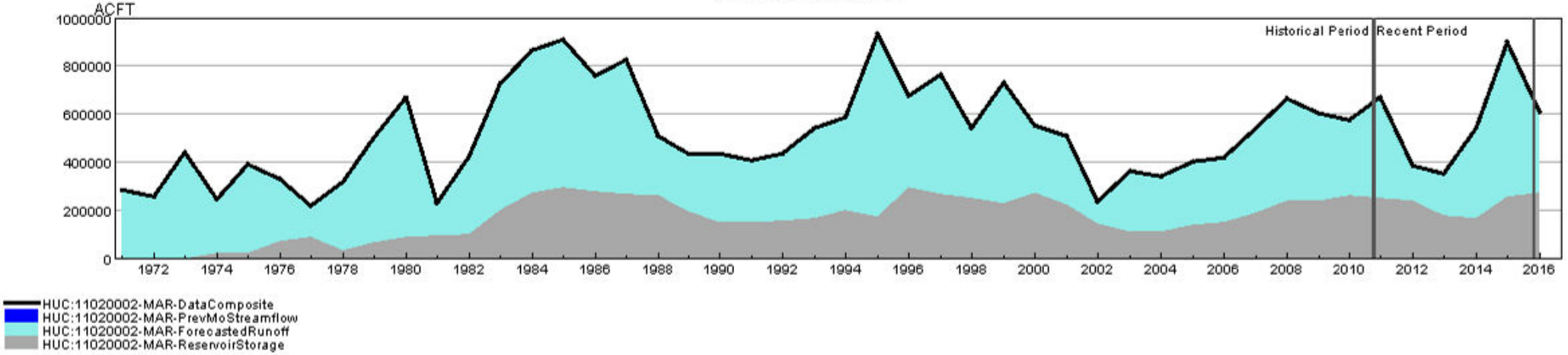
HUC 11020001 (Arkansas Headwaters) SWSI Values - MAR

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



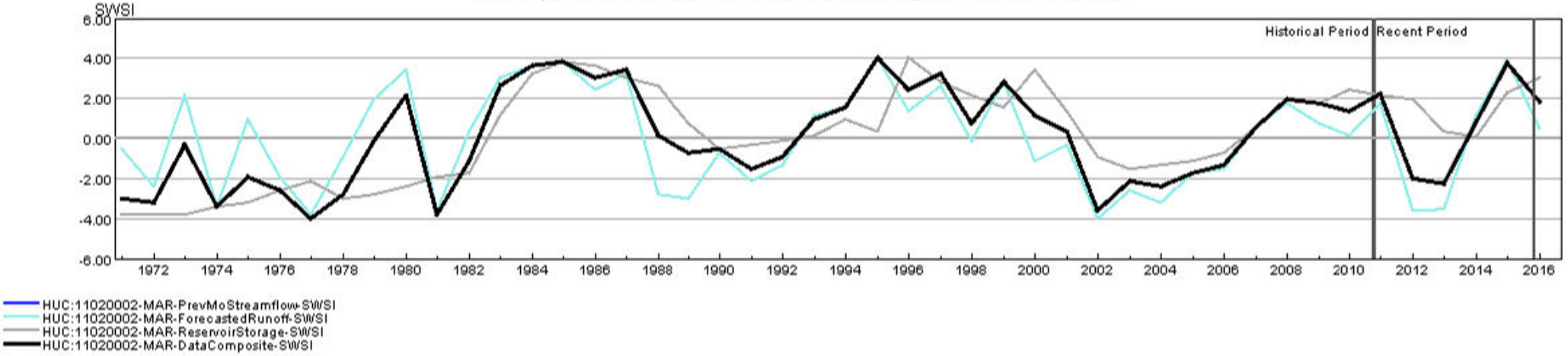
HUC 11020002 (Upper Arkansas) Surface Water Supply - MAR

Monthly component volumes



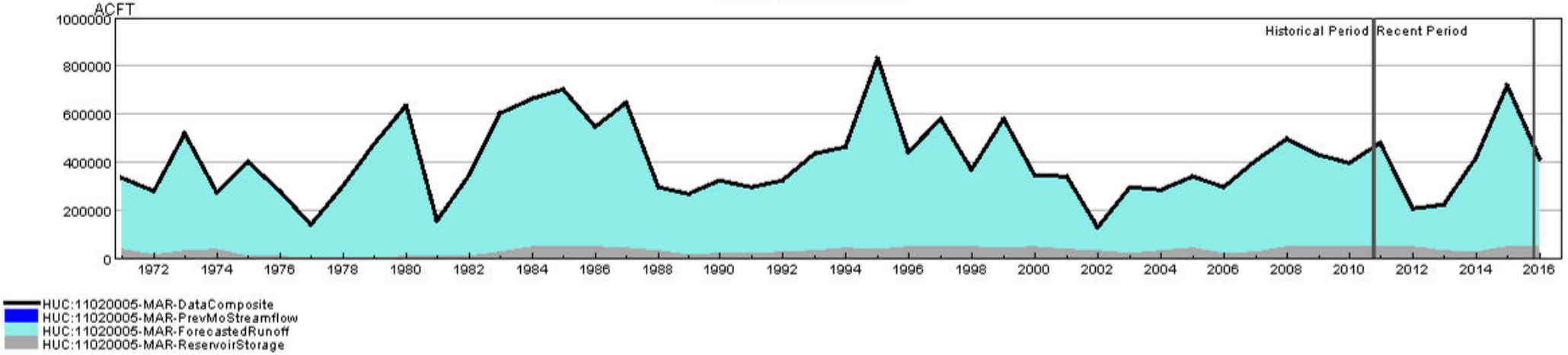
HUC 11020002 (Upper Arkansas) SWSI Values - MAR

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



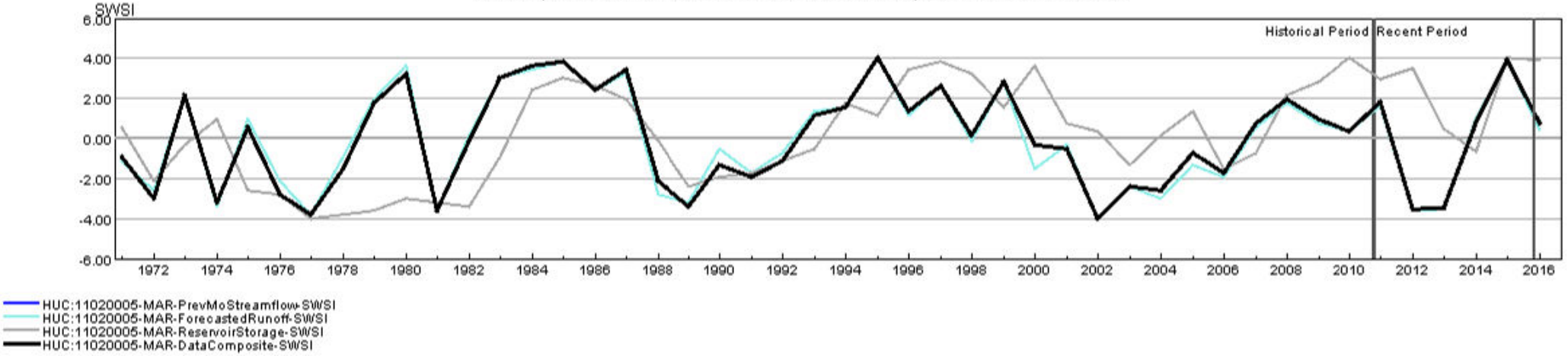
HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply - MAR

Monthly component volumes



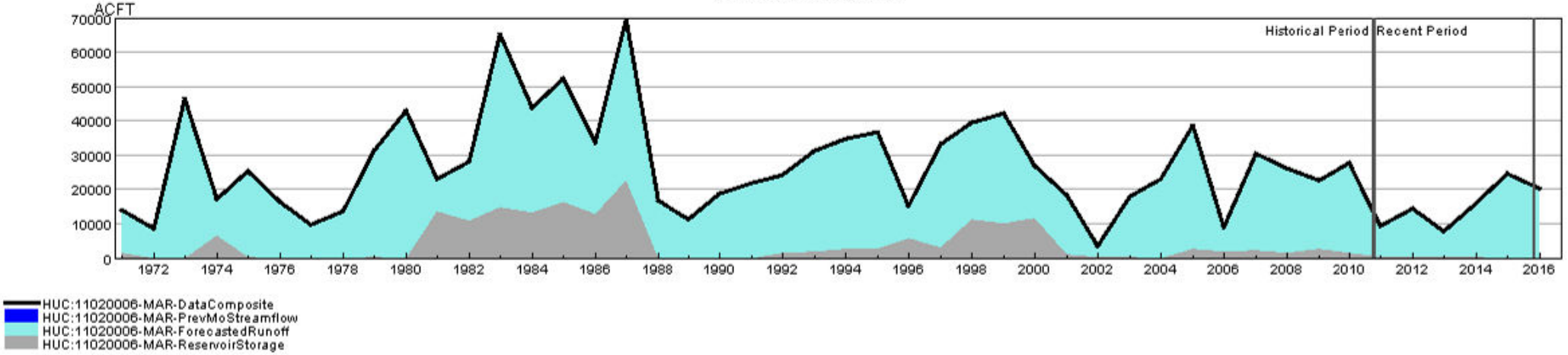
HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI Values - MAR

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



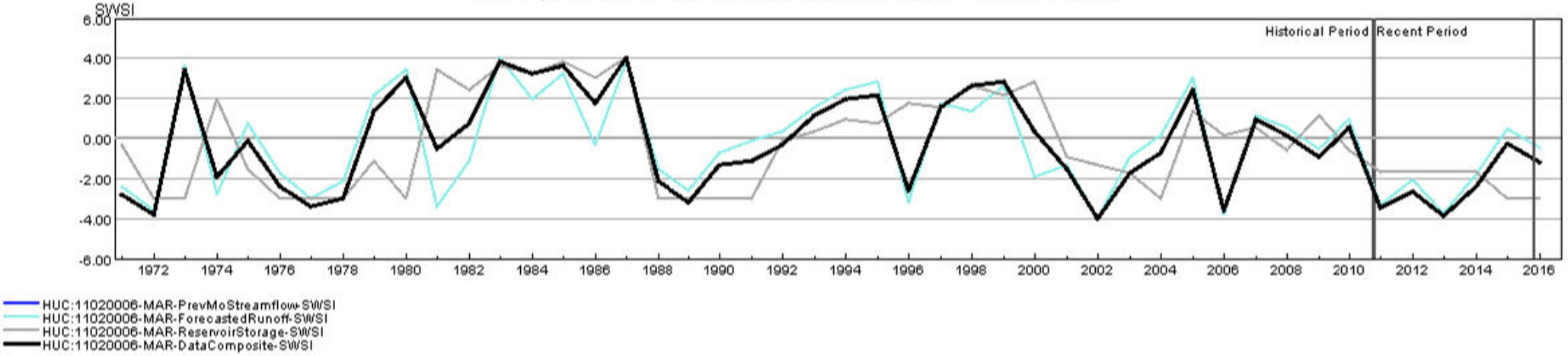
HUC 11020006 (Huerfano) Surface Water Supply - MAR

Monthly component volumes



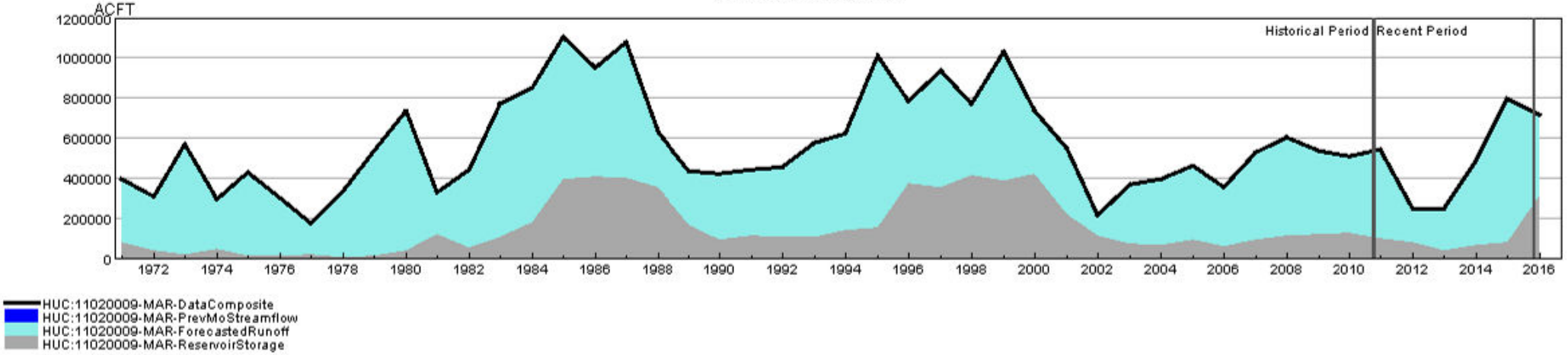
HUC 11020006 (Huerfano) SWSI Values - MAR

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



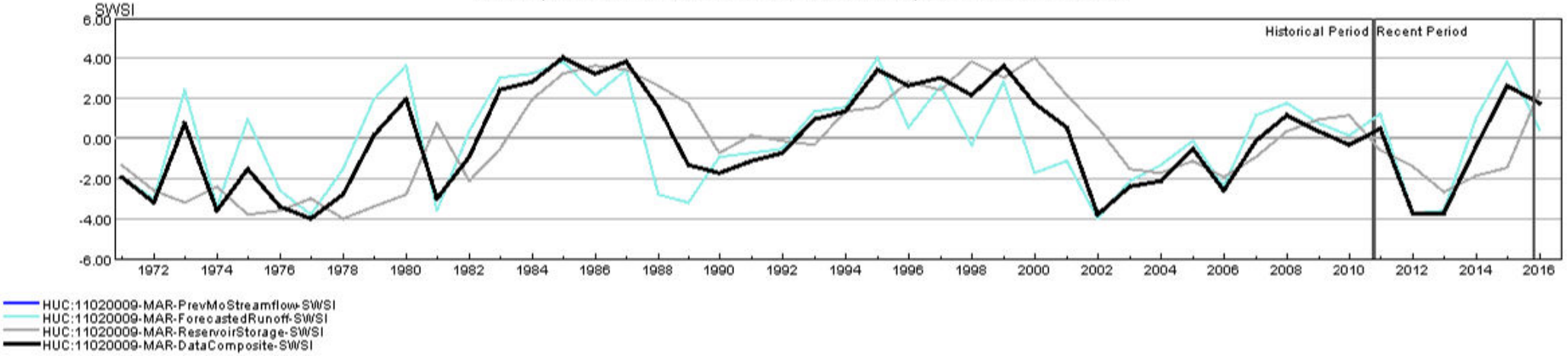
HUC 11020009 (Upper Arkansas-John Martin Reservoir) Surface Water Supply - MAR

Monthly component volumes



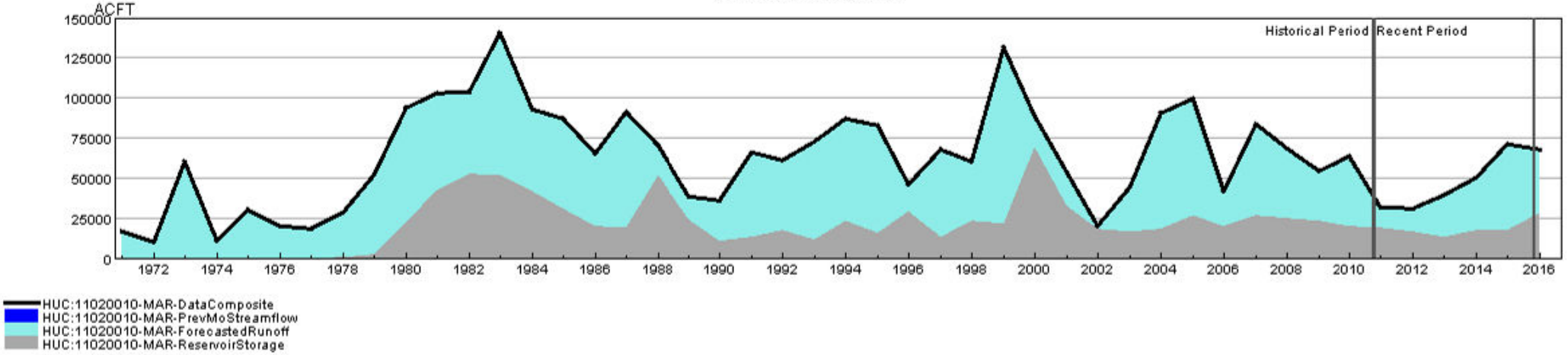
HUC 11020009 (Upper Arkansas-John Martin Reservoir) SWSI Values - MAR

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



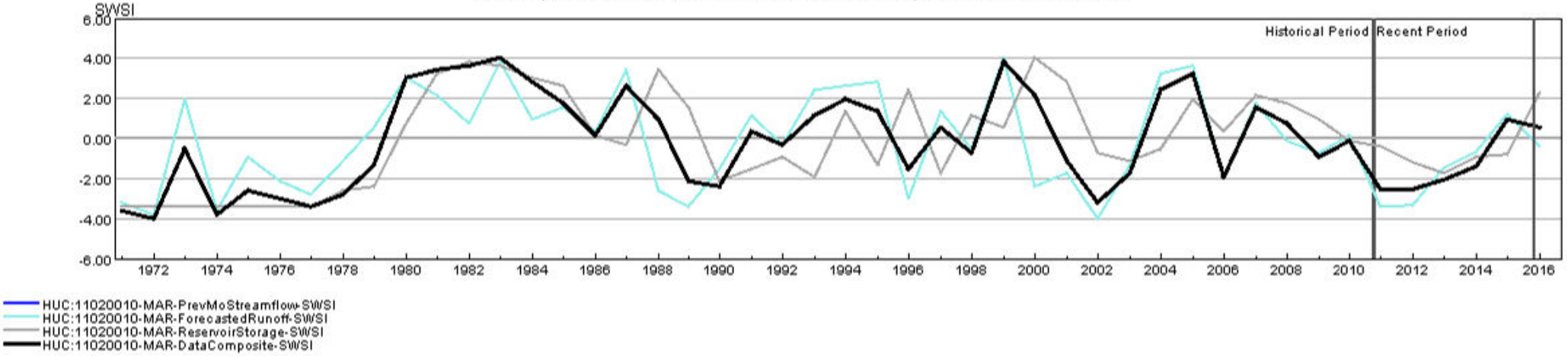
HUC 11020010 (Purgatoire) Surface Water Supply - MAR

Monthly component volumes



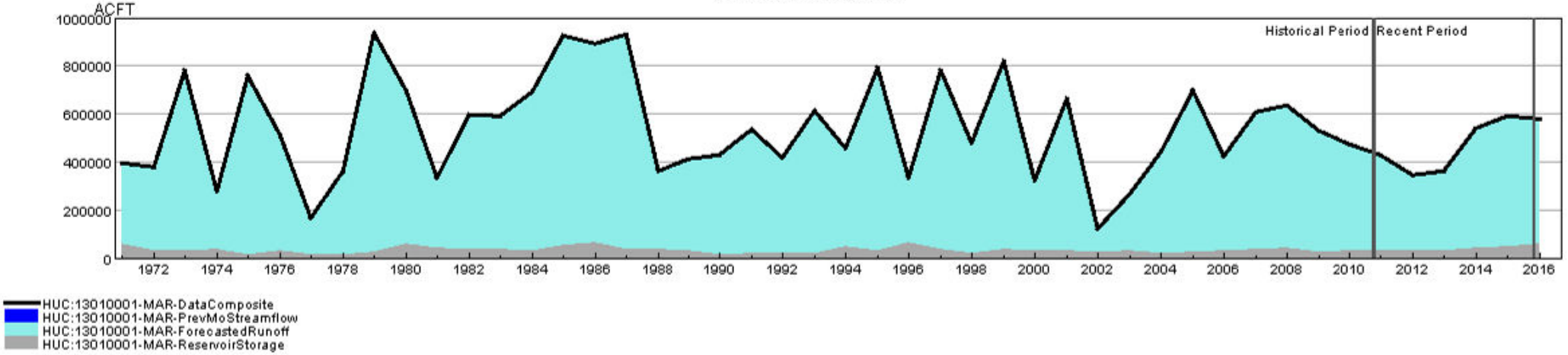
HUC 11020010 (Purgatoire) SWSI Values - MAR

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



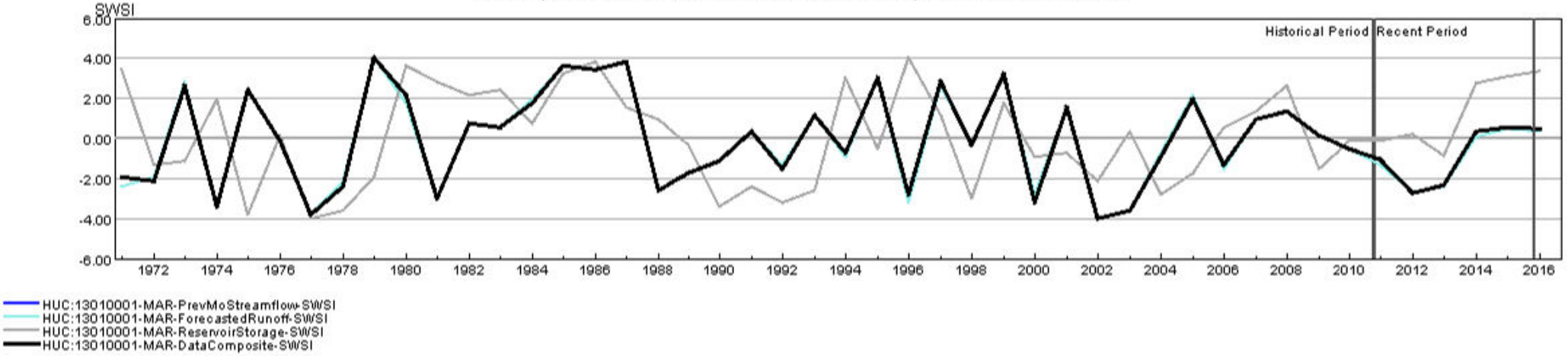
HUC 13010001 (Rio Grande Headwaters) Surface Water Supply - MAR

Monthly component volumes



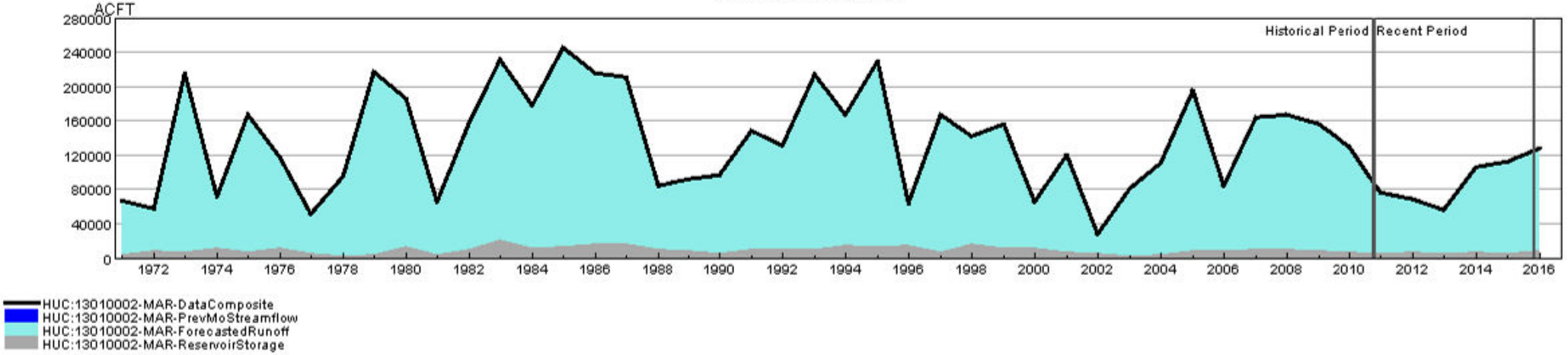
HUC 13010001 (Rio Grande Headwaters) SWSI Values - MAR

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



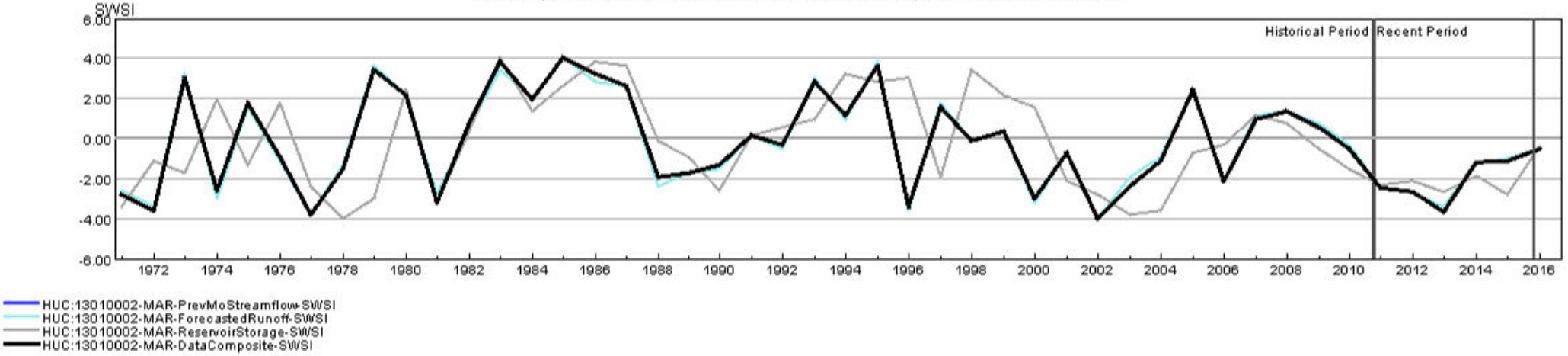
HUC 13010002 (Alamosa-Trinchera) Surface Water Supply - MAR

Monthly component volumes



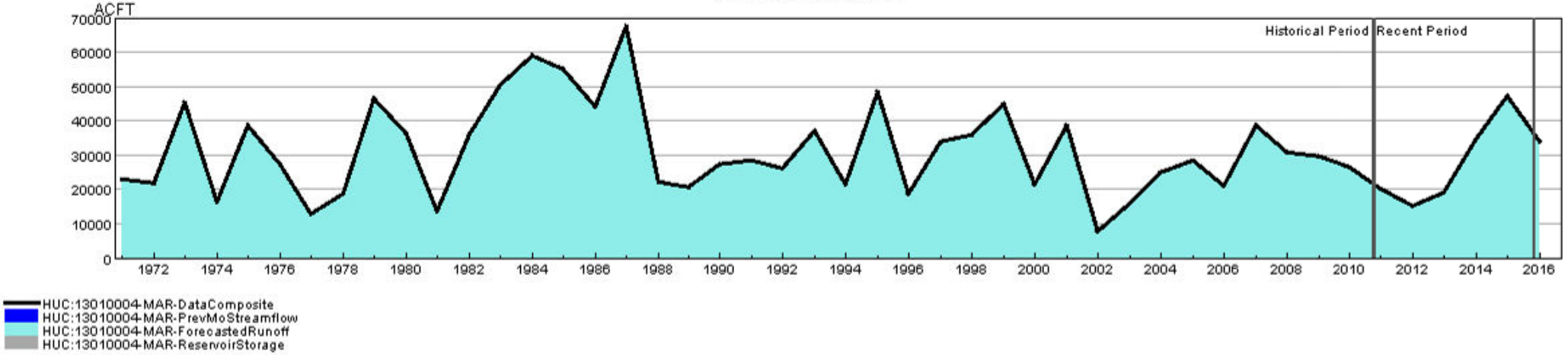
HUC 13010002 (Alamosa-Trinchera) SWSI Values - MAR

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



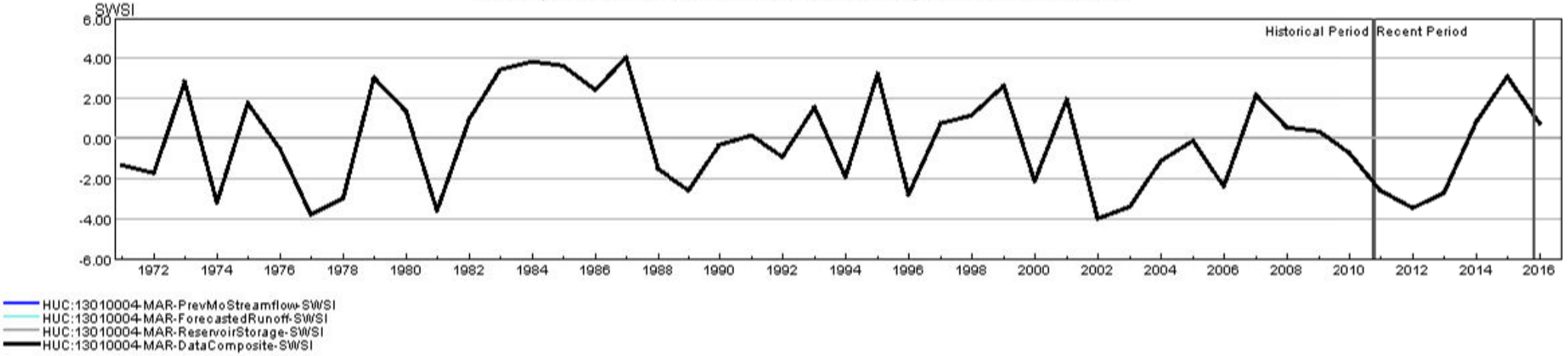
HUC 13010004 (Saguache) Surface Water Supply - MAR

Monthly component volumes



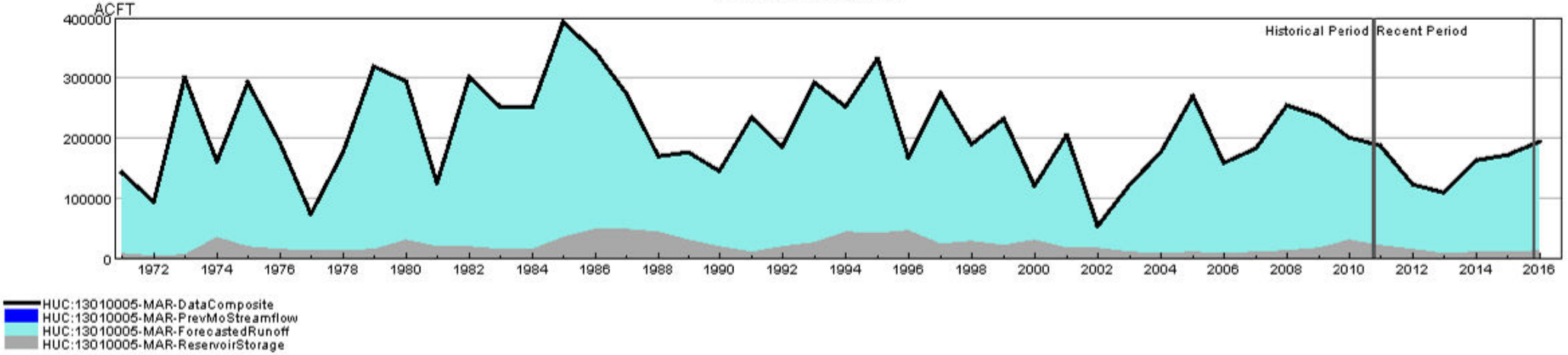
HUC 13010004 (Saguache) SWSI Values - MAR

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



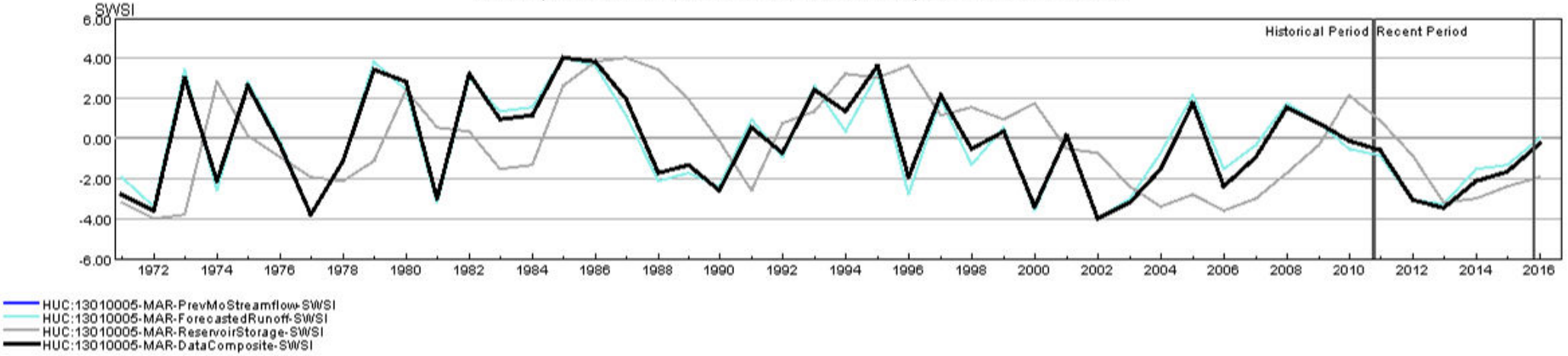
HUC 13010005 (Conejos) Surface Water Supply - MAR

Monthly component volumes



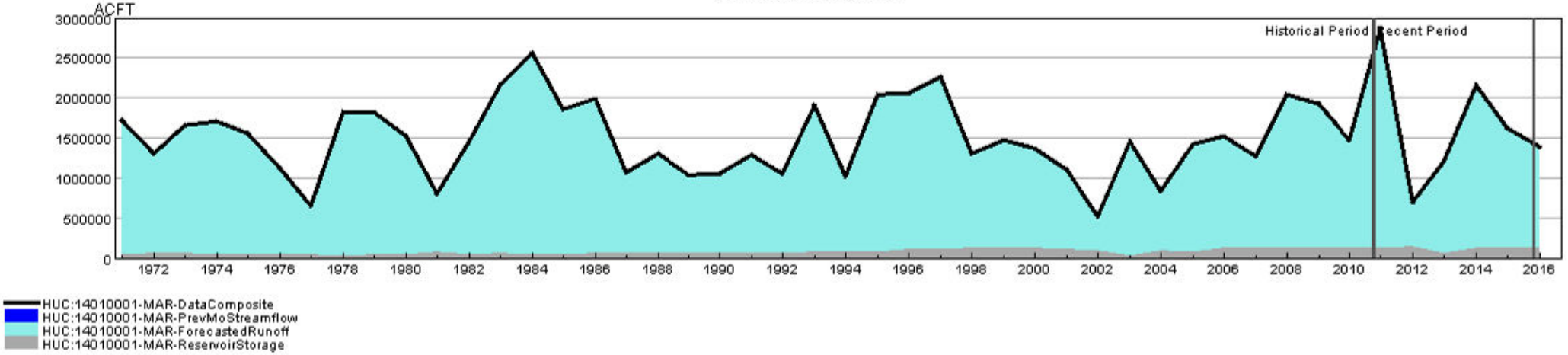
HUC 13010005 (Conejos) SWSI Values - MAR

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



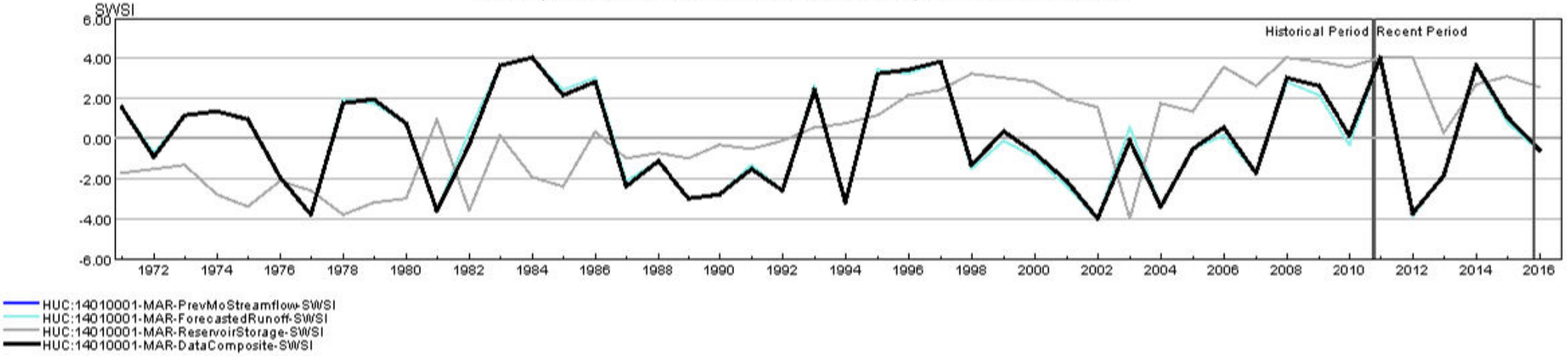
HUC 14010001 (Colorado Headwaters) Surface Water Supply - MAR

Monthly component volumes



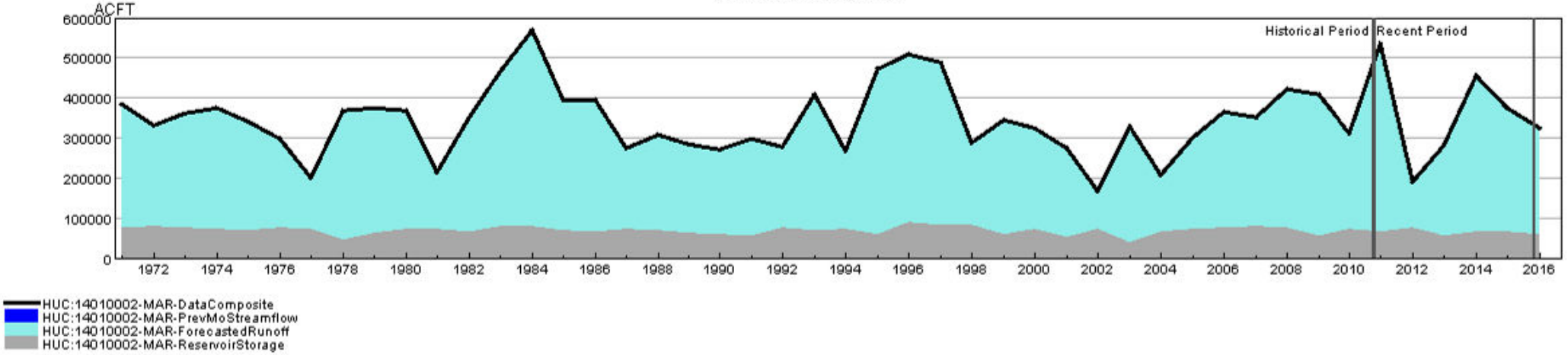
HUC 14010001 (Colorado Headwaters) SWSI Values - MAR

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



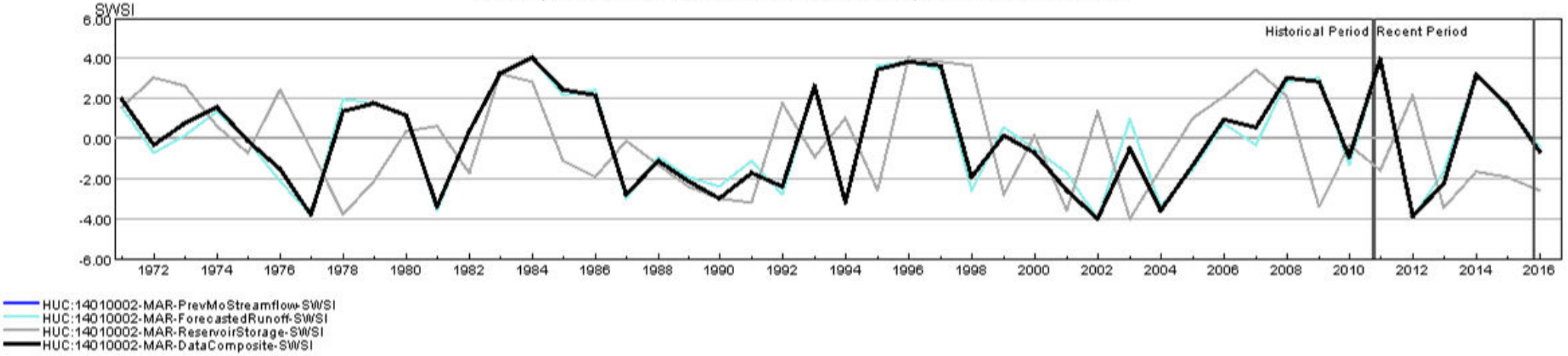
HUC 14010002 (Blue) Surface Water Supply - MAR

Monthly component volumes



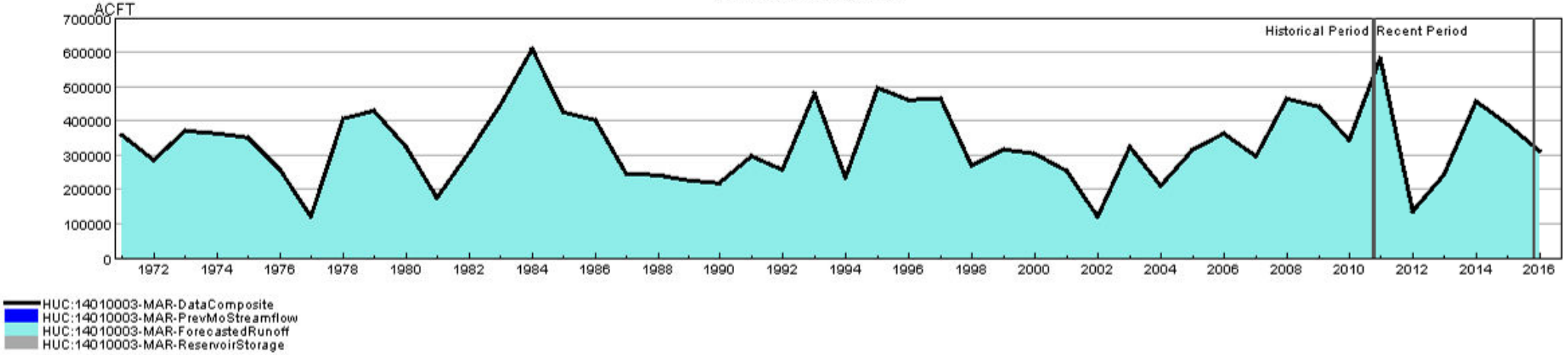
HUC 14010002 (Blue) SWSI Values - MAR

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



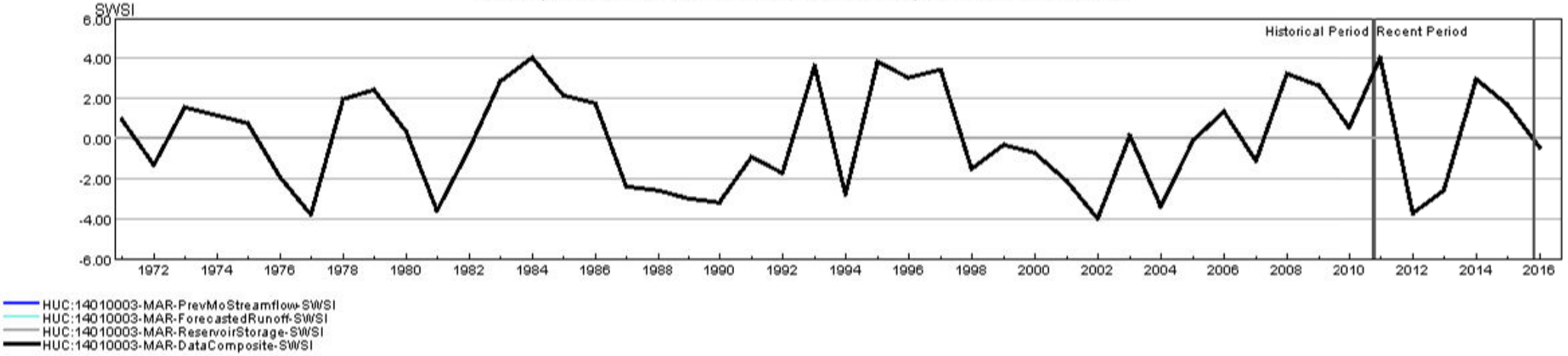
HUC 14010003 (Eagle) Surface Water Supply - MAR

Monthly component volumes



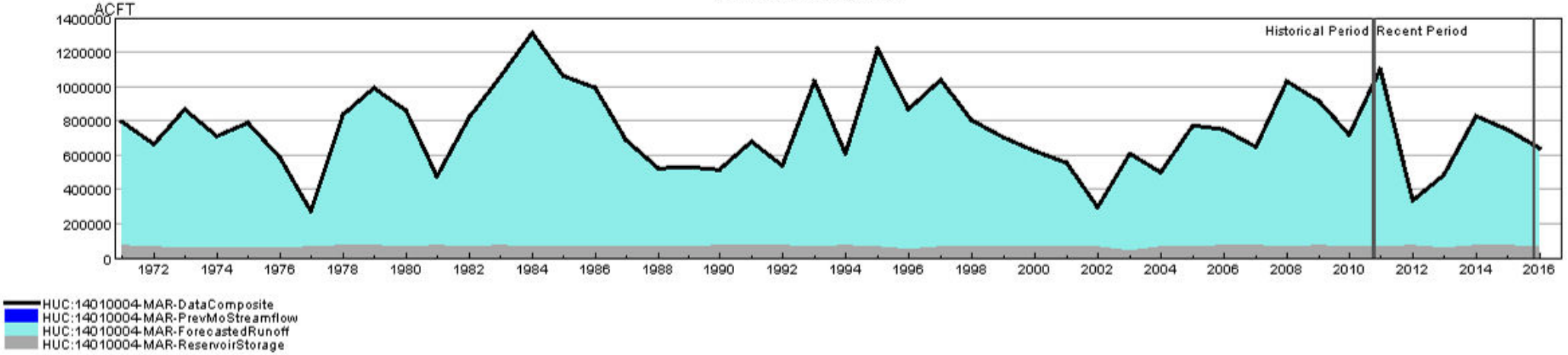
HUC 14010003 (Eagle) SWSI Values - MAR

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



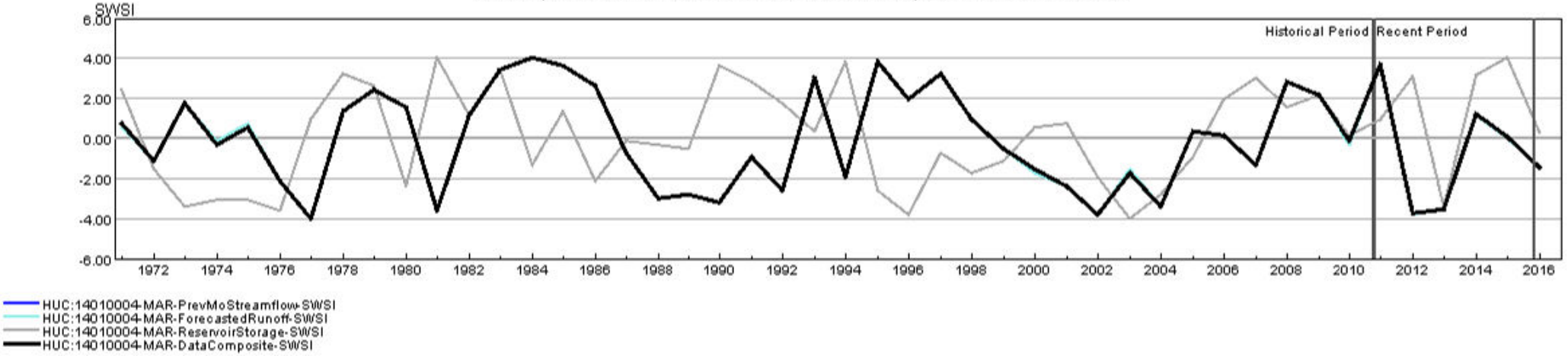
HUC 14010004 (Roaring Fork) Surface Water Supply - MAR

Monthly component volumes



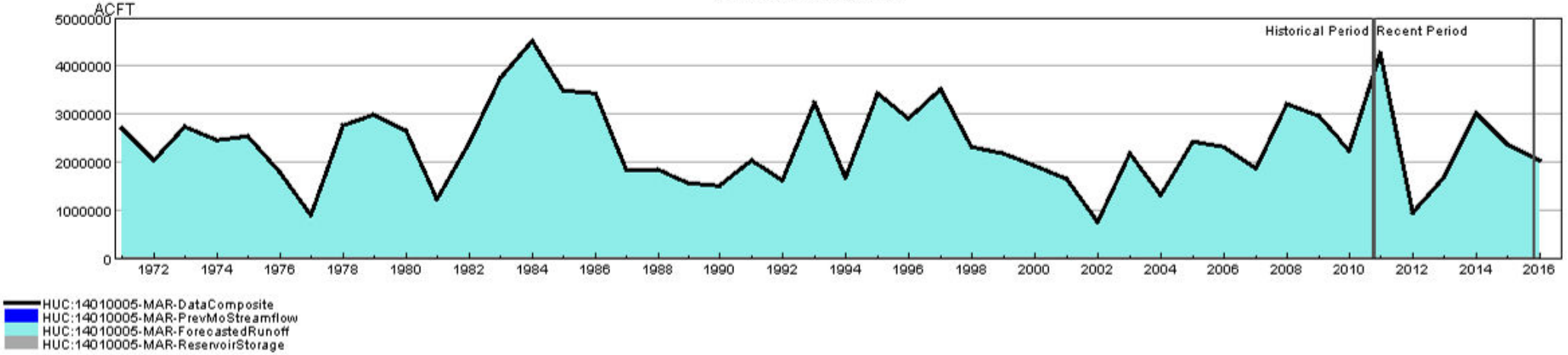
HUC 14010004 (Roaring Fork) SWSI Values - MAR

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



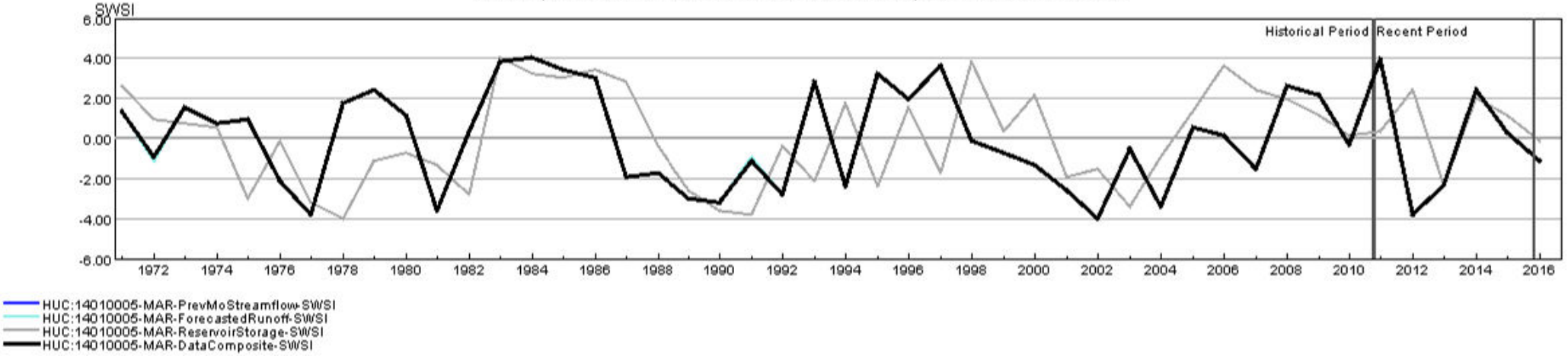
HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply - MAR

Monthly component volumes



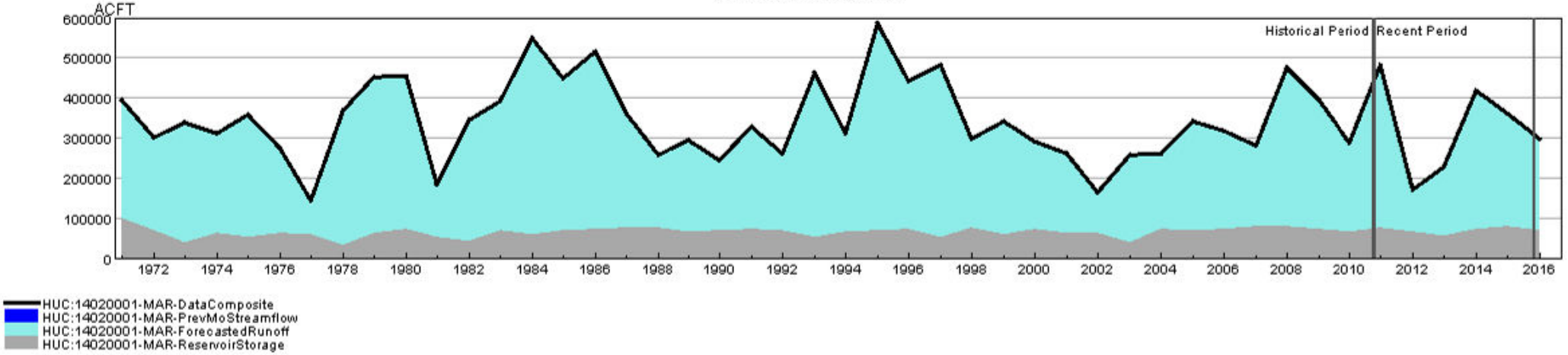
HUC 14010005 (Colorado Headwaters-Plateau) SWSI Values - MAR

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



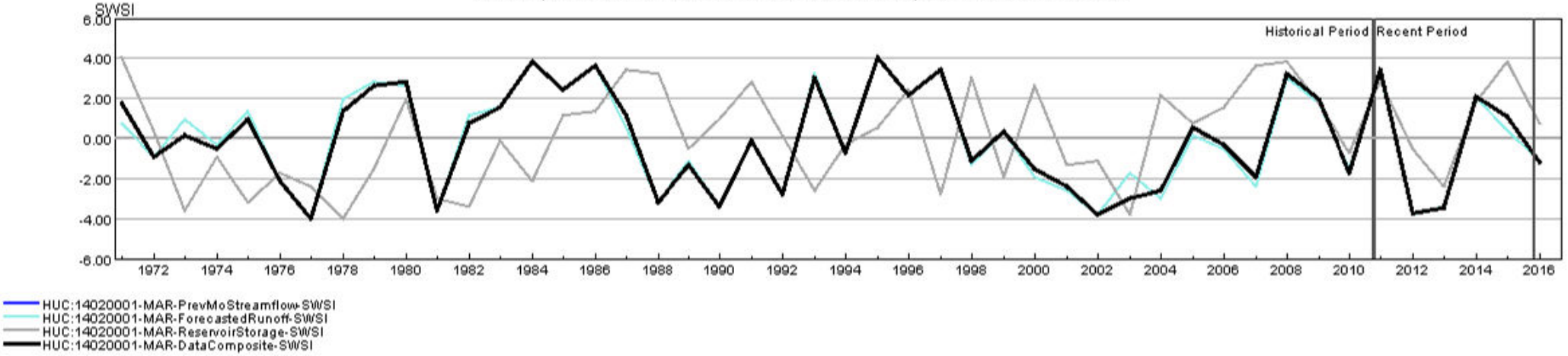
HUC 14020001 (East-Taylor) Surface Water Supply - MAR

Monthly component volumes



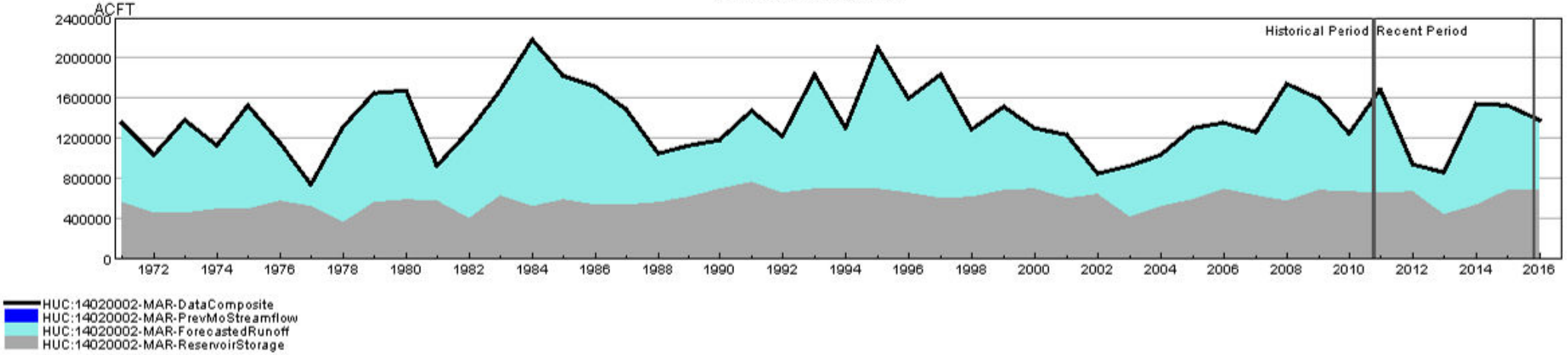
HUC 14020001 (East-Taylor) SWSI Values - MAR

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



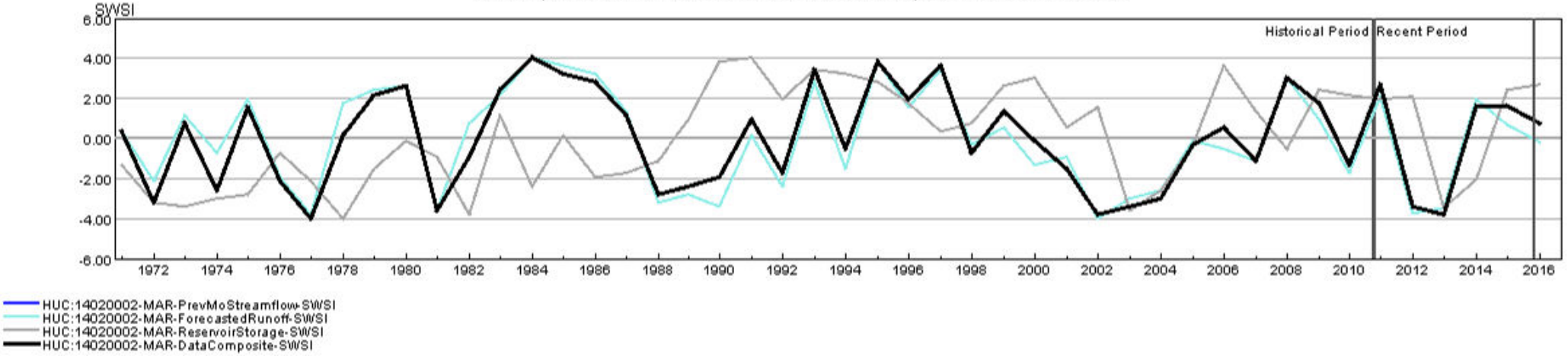
HUC 14020002 (Upper Gunnison) Surface Water Supply - MAR

Monthly component volumes



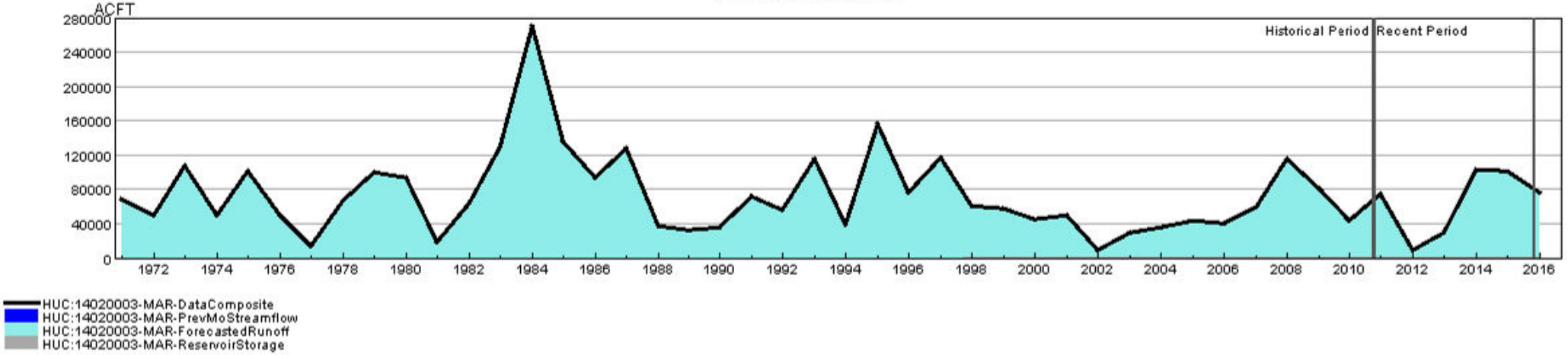
HUC 14020002 (Upper Gunnison) SWSI Values - MAR

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



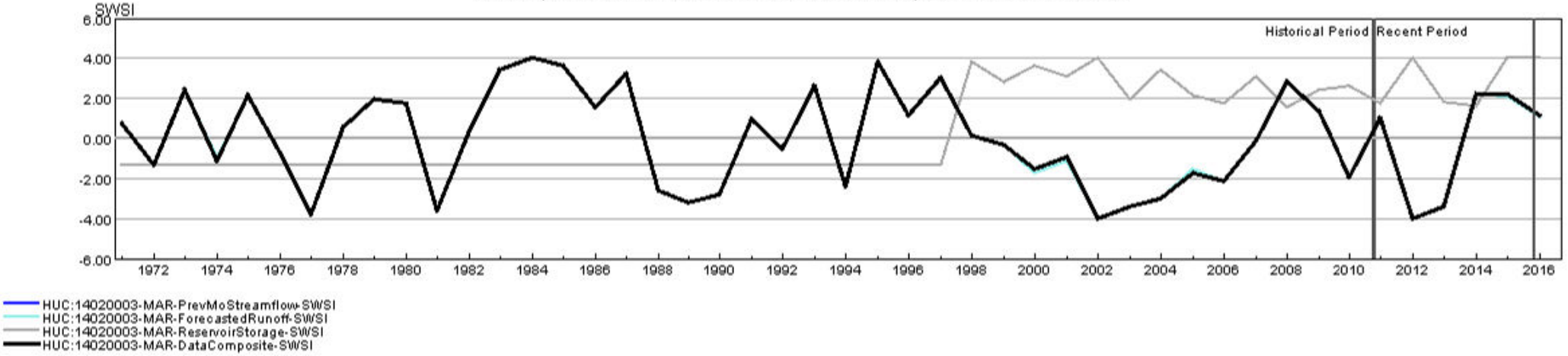
HUC 14020003 (Tomichi) Surface Water Supply - MAR

Monthly component volumes



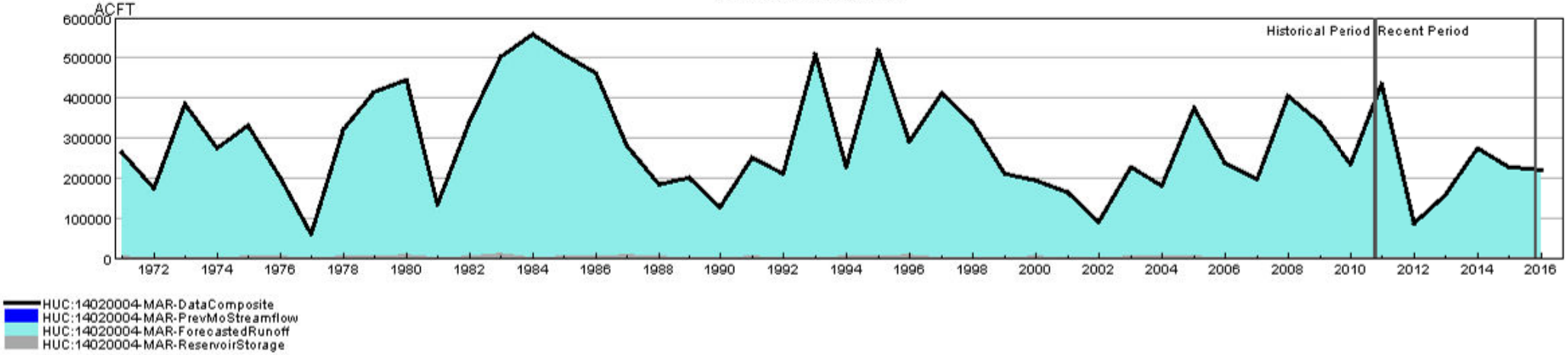
HUC 14020003 (Tomichi) SWSI Values - MAR

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



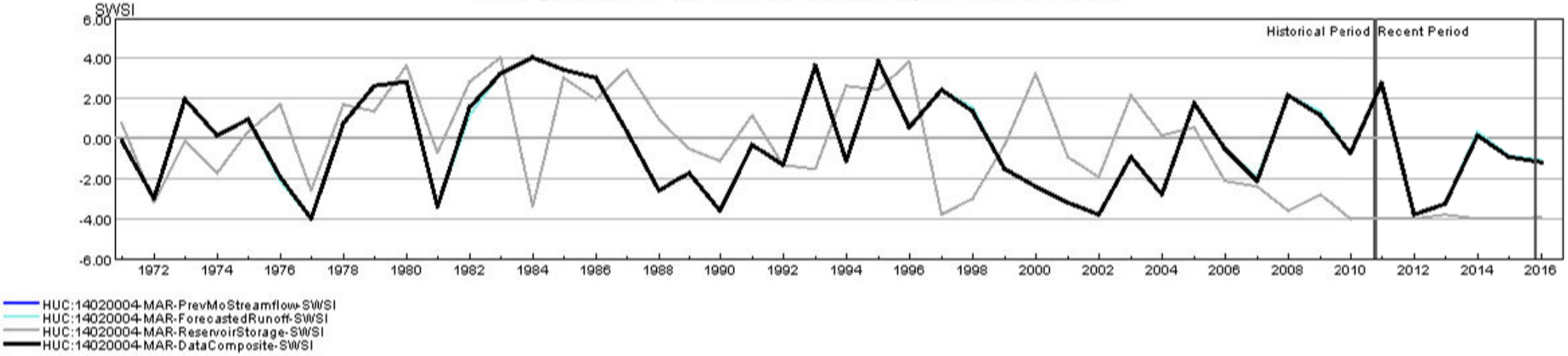
HUC 14020004 (North Fork Gunnison) Surface Water Supply - MAR

Monthly component volumes



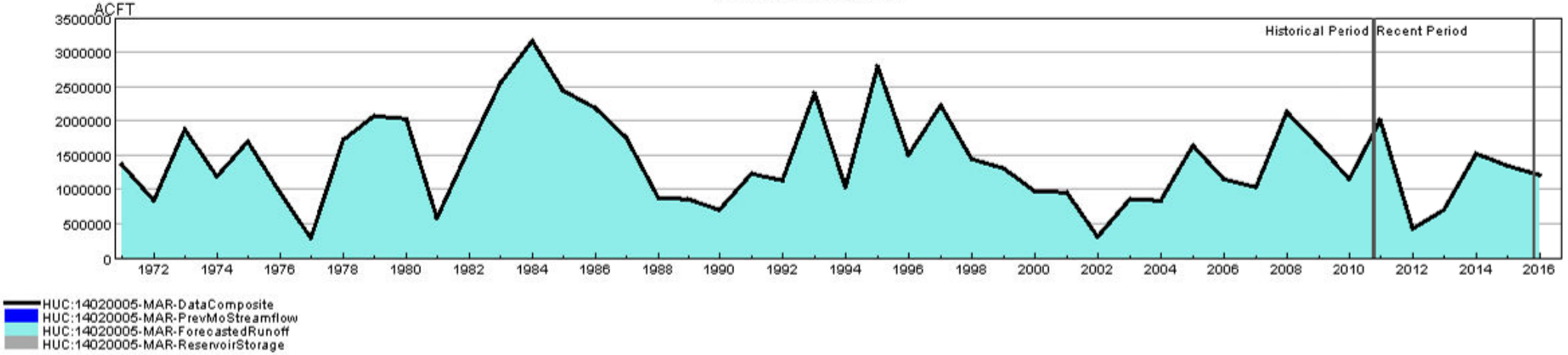
HUC 14020004 (North Fork Gunnison) SWSI Values - MAR

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



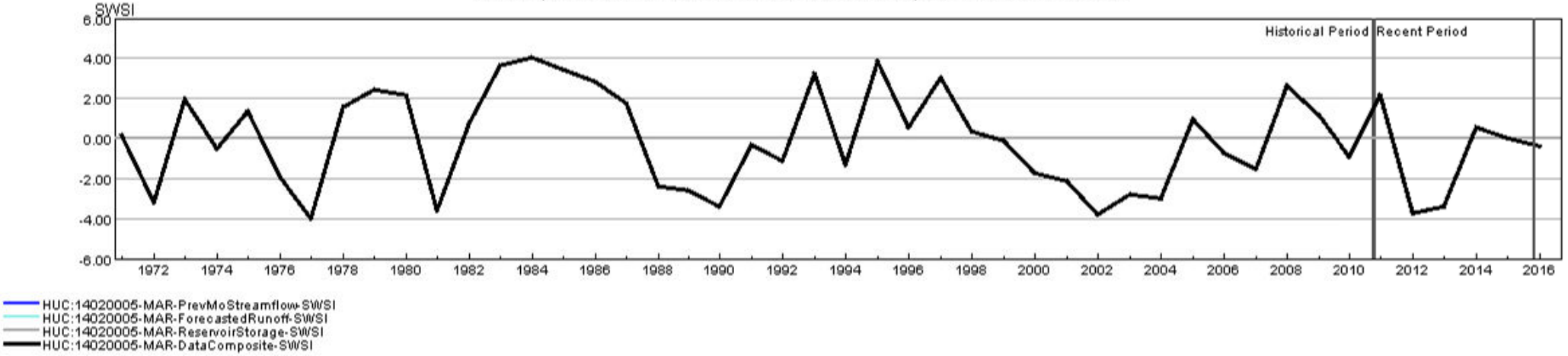
HUC 14020005 (Lower Gunnison) Surface Water Supply - MAR

Monthly component volumes



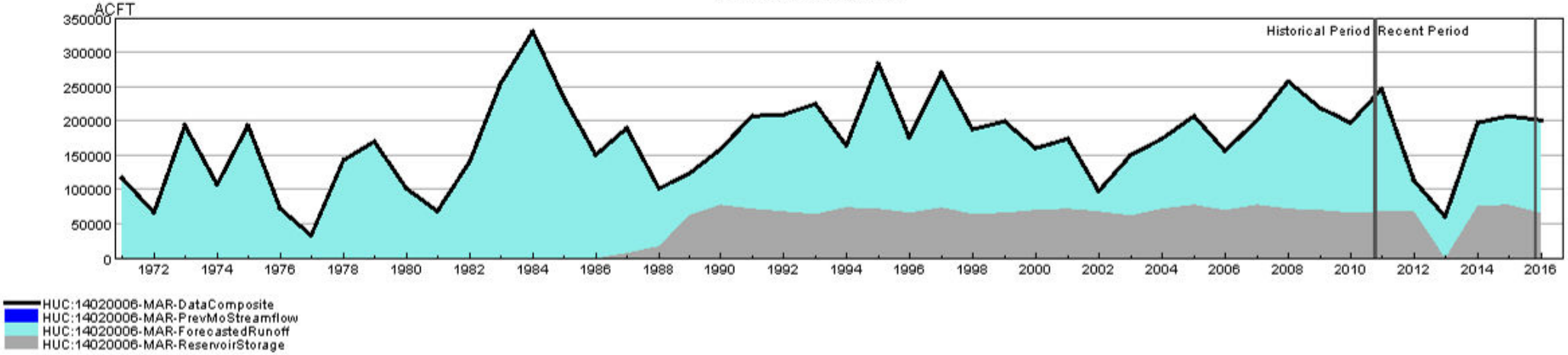
HUC 14020005 (Lower Gunnison) SWSI Values - MAR

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



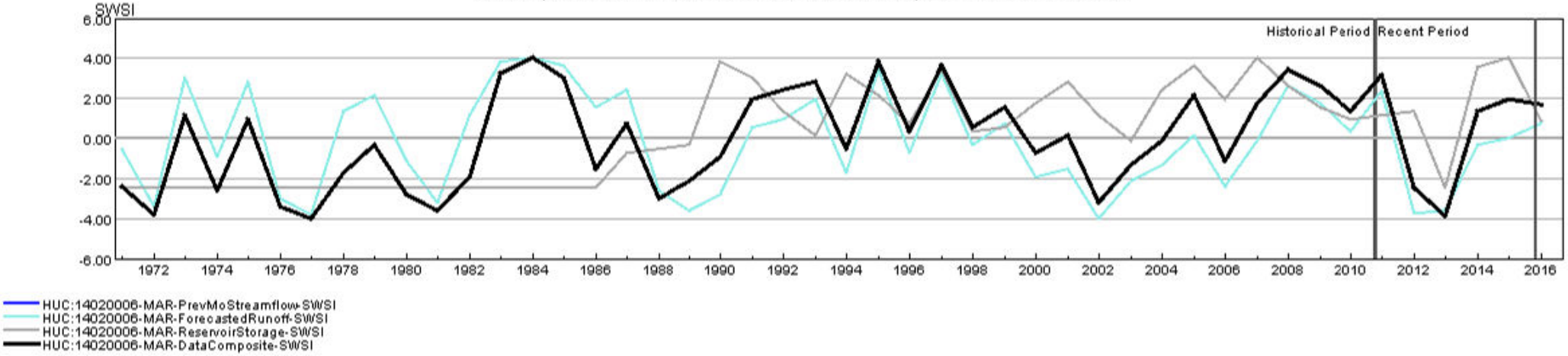
HUC 14020006 (Uncompahgre) Surface Water Supply - MAR

Monthly component volumes



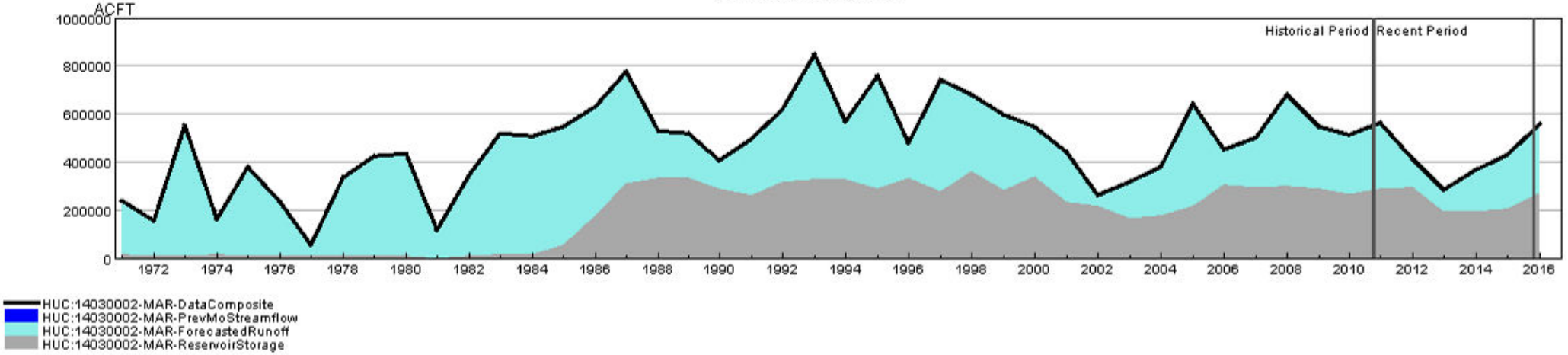
HUC 14020006 (Uncompahgre) SWSI Values - MAR

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



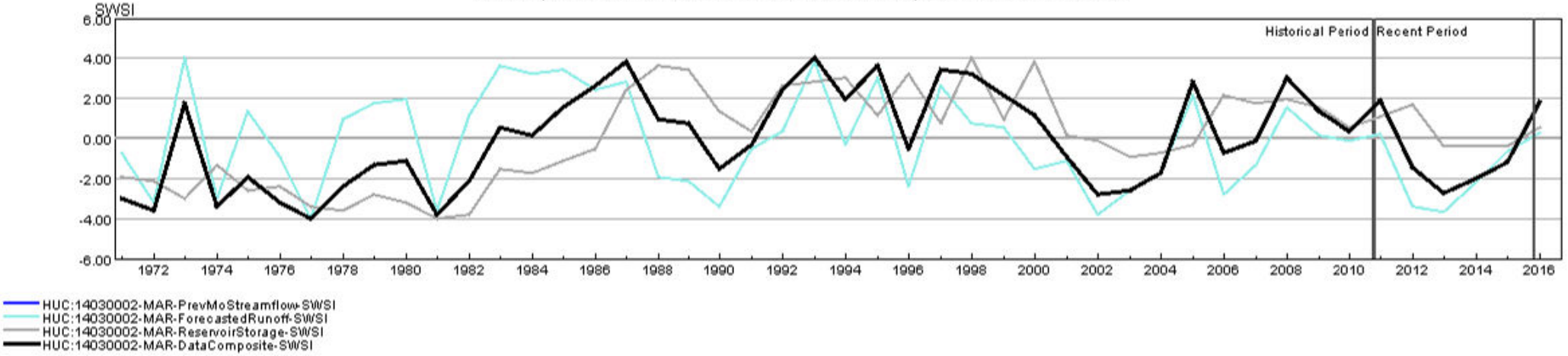
HUC 14030002 (Upper Dolores) Surface Water Supply - MAR

Monthly component volumes



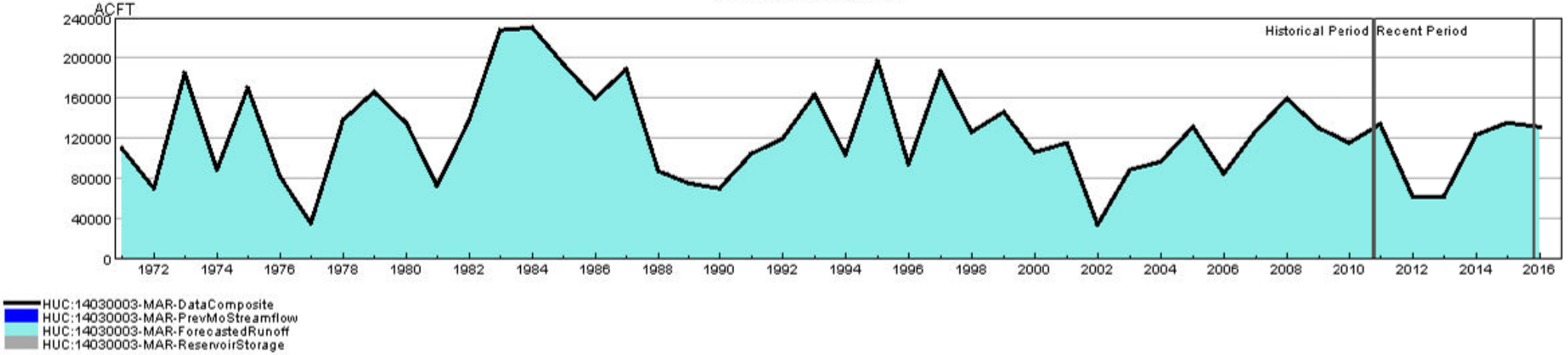
HUC 14030002 (Upper Dolores) SWSI Values - MAR

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



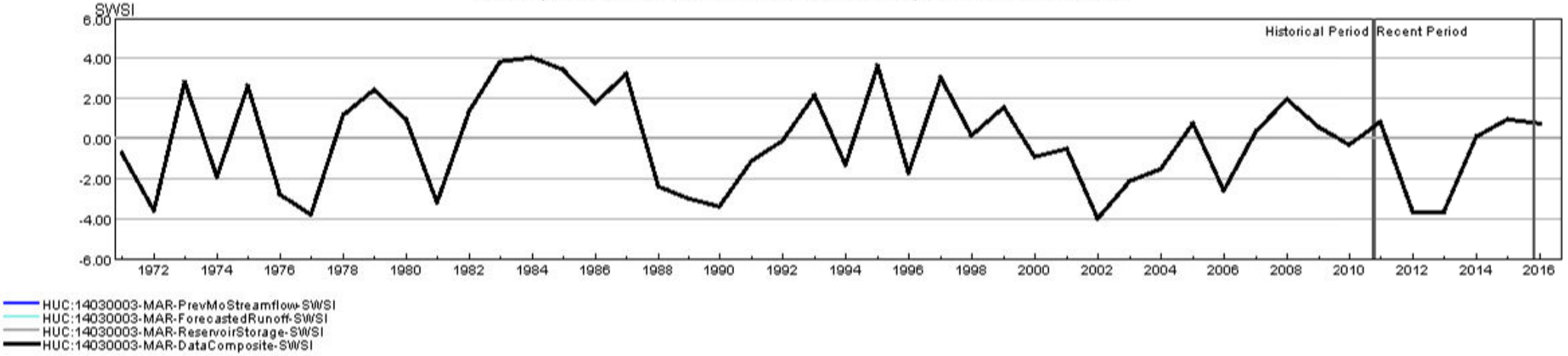
HUC 14030003 (San Miguel) Surface Water Supply - MAR

Monthly component volumes



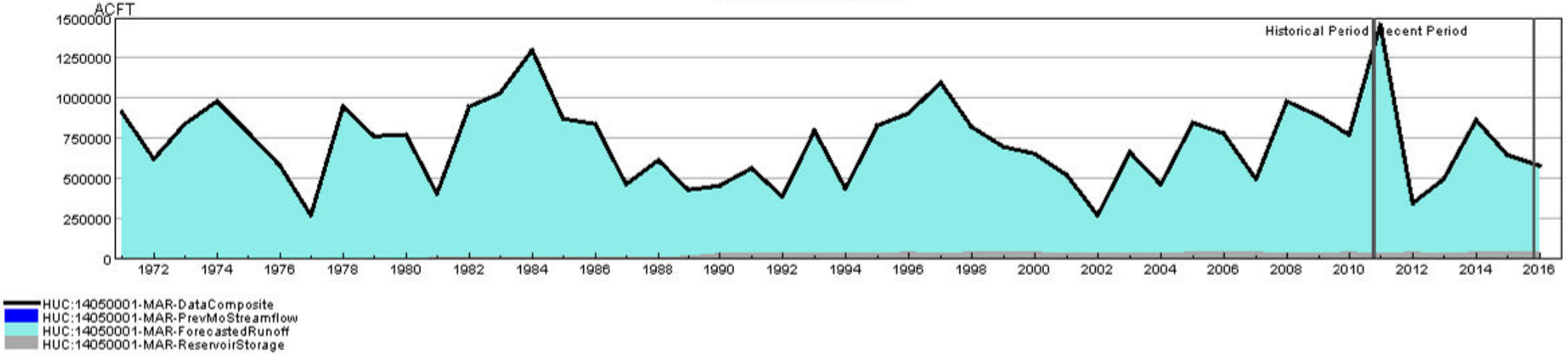
HUC 14030003 (San Miguel) SWSI Values - MAR

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



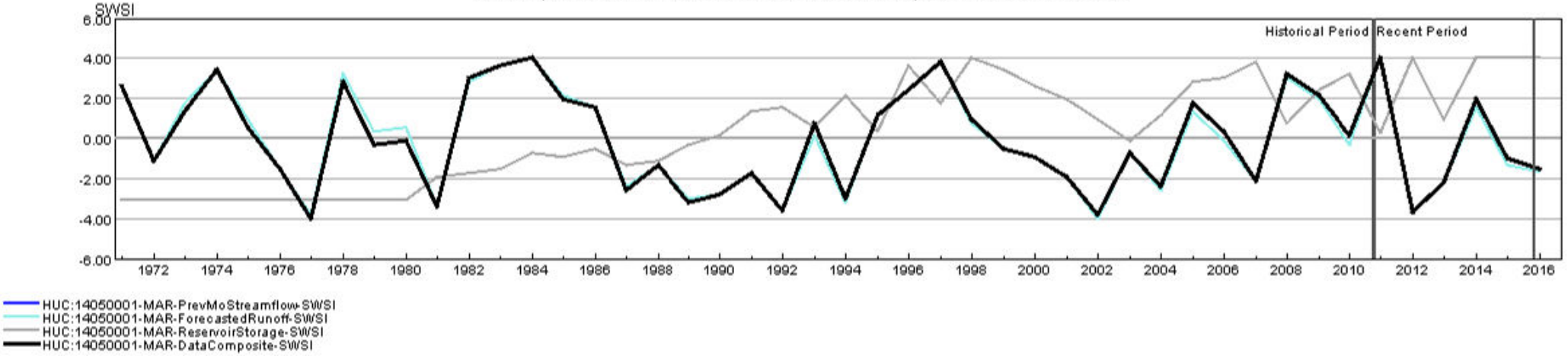
HUC 14050001 (Upper Yampa) Surface Water Supply - MAR

Monthly component volumes



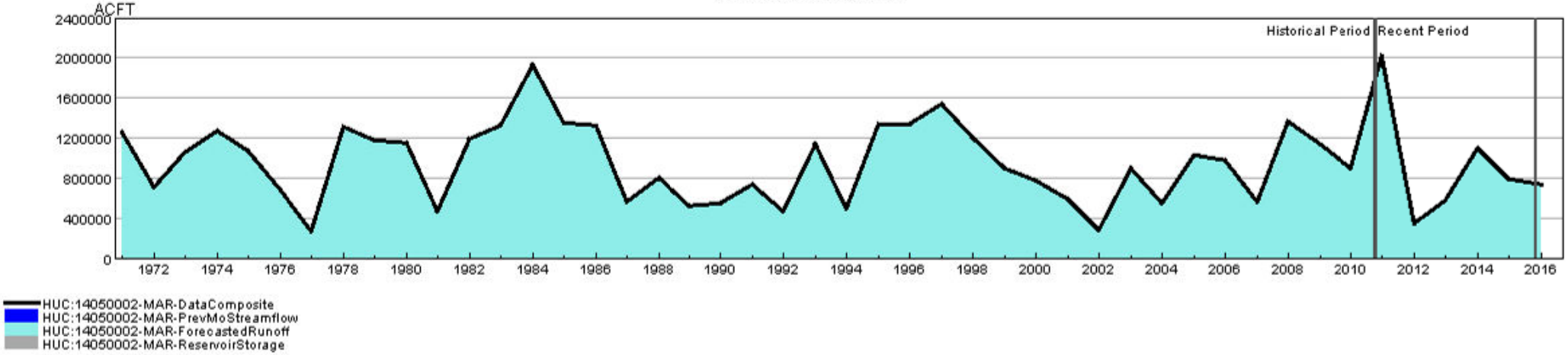
HUC 14050001 (Upper Yampa) SWSI Values - MAR

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



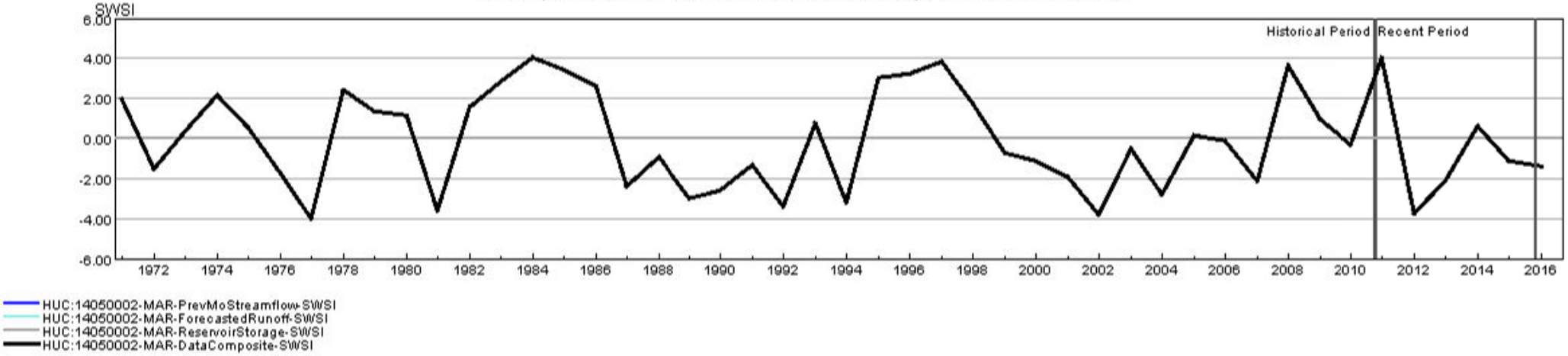
HUC 14050002 (Lower Yampa) Surface Water Supply - MAR

Monthly component volumes



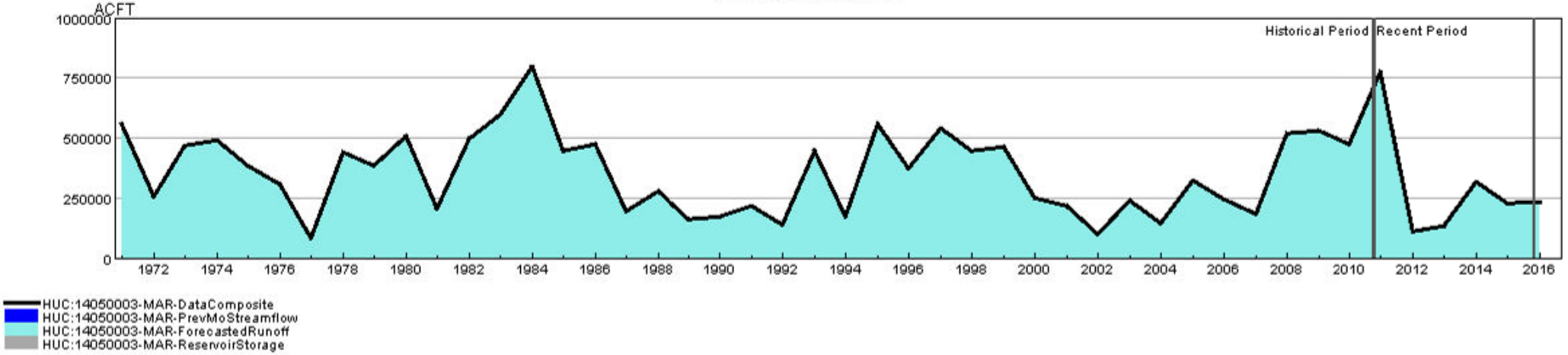
HUC 14050002 (Lower Yampa) SWSI Values - MAR

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



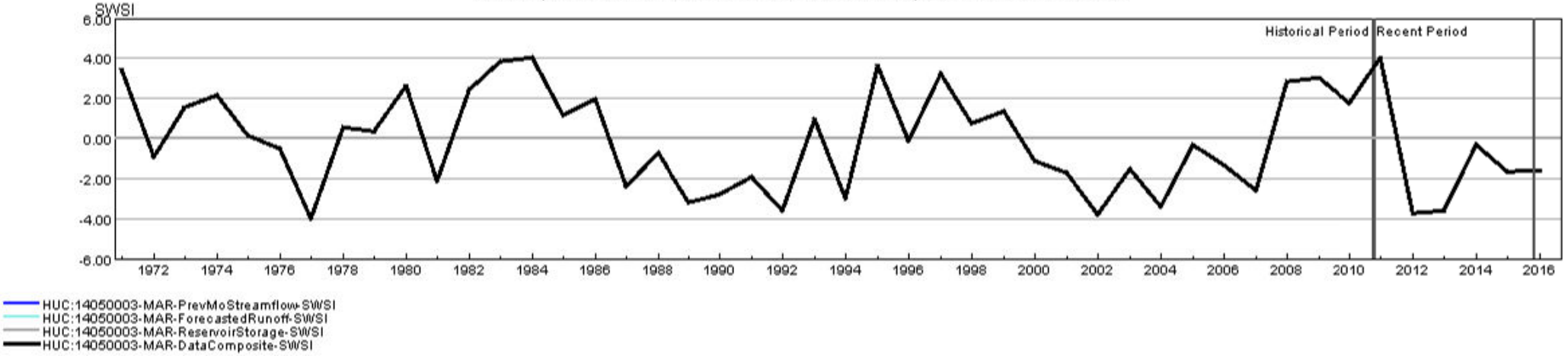
HUC 14050003 (Little Snake) Surface Water Supply - MAR

Monthly component volumes



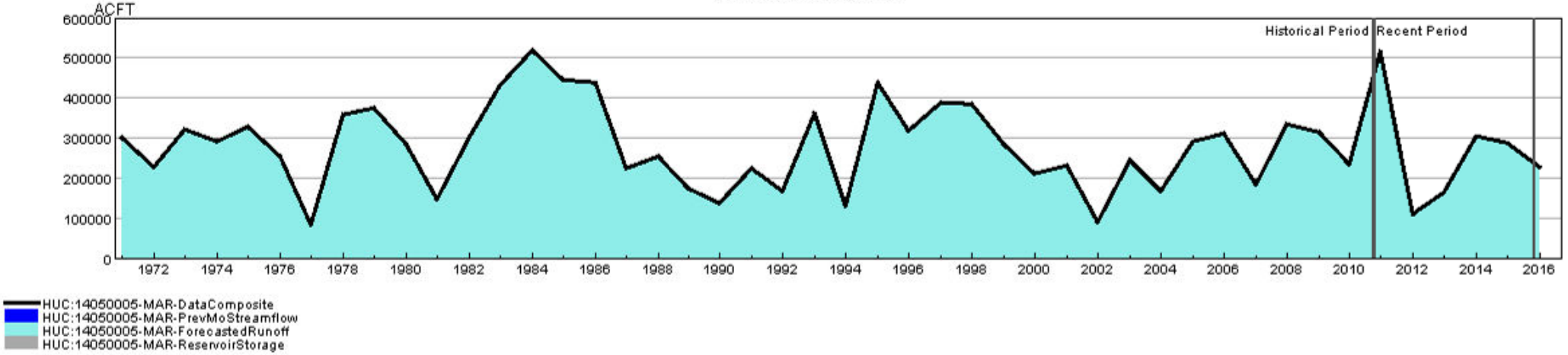
HUC 14050003 (Little Snake) SWSI Values - MAR

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



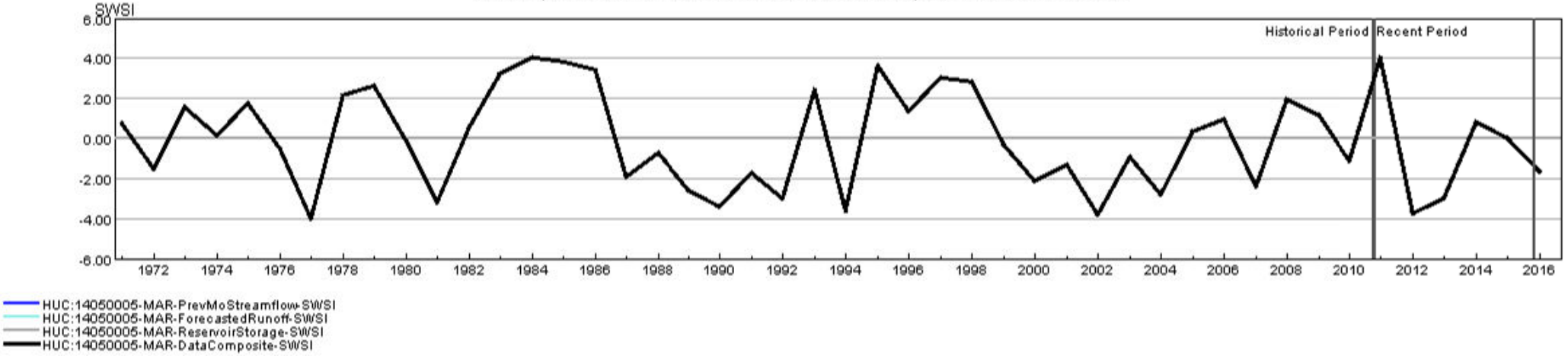
HUC 14050005 (Upper White) Surface Water Supply - MAR

Monthly component volumes



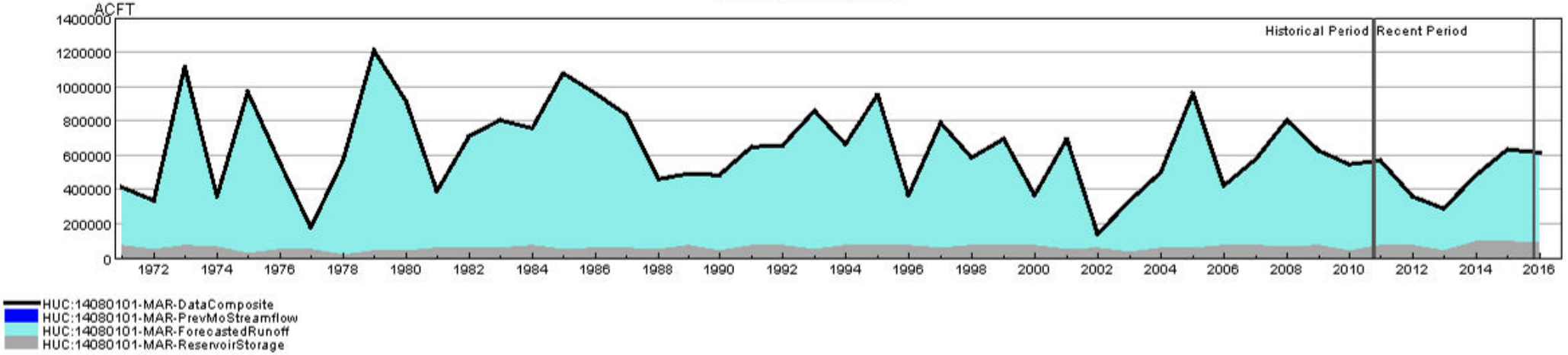
HUC 14050005 (Upper White) SWSI Values - MAR

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



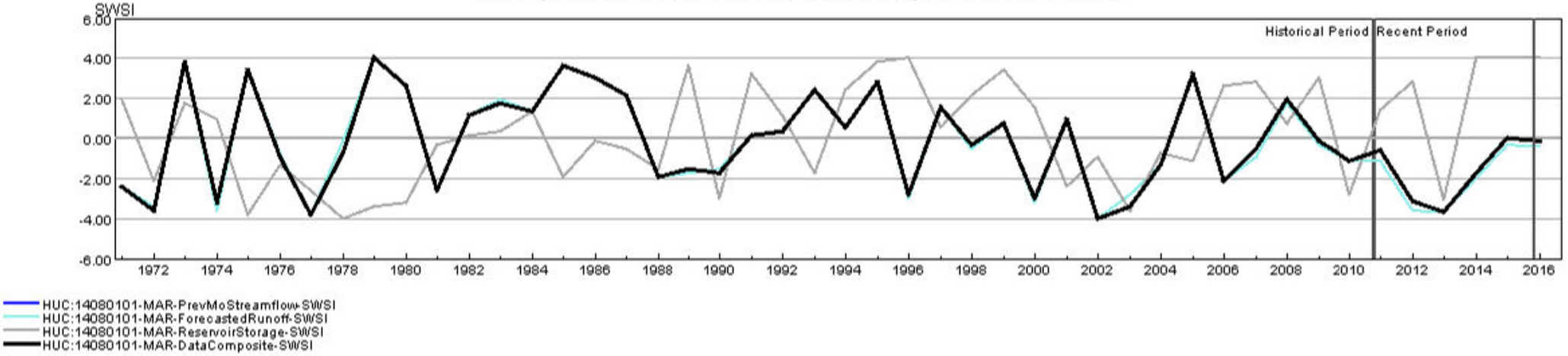
HUC 14080101 (Upper San Juan) Surface Water Supply - MAR

Monthly component volumes



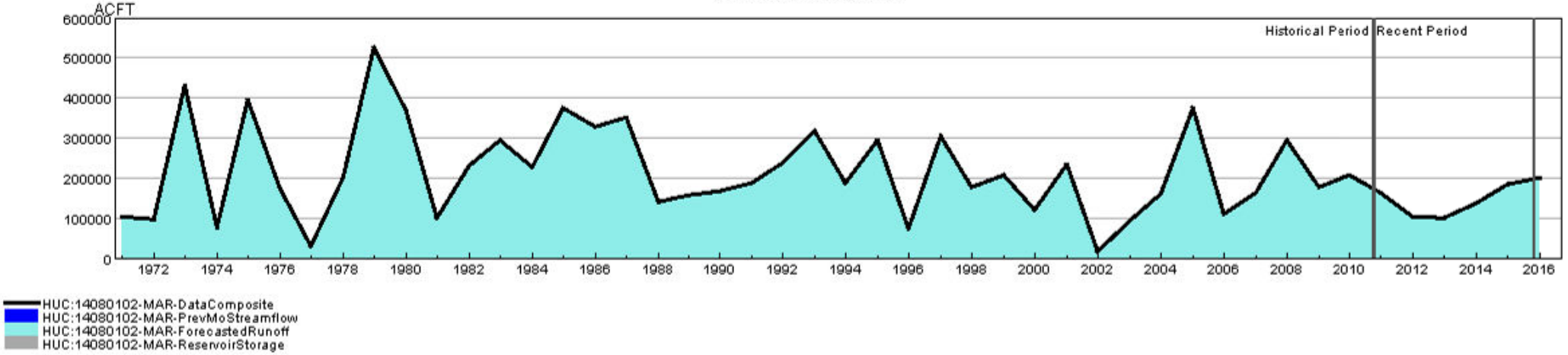
HUC 14080101 (Upper San Juan) SWSI Values - MAR

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



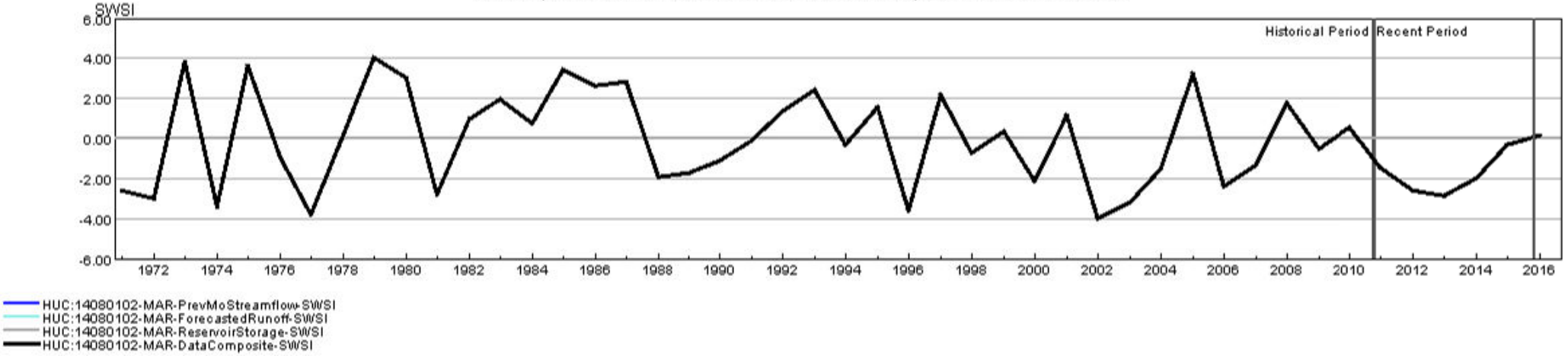
HUC 14080102 (Piedra) Surface Water Supply - MAR

Monthly component volumes



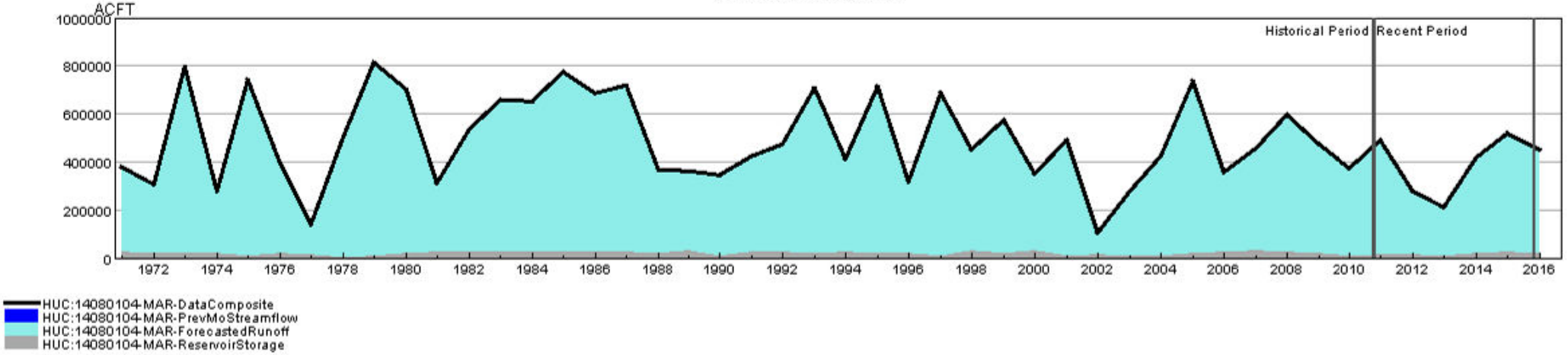
HUC 14080102 (Piedra) SWSI Values - MAR

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



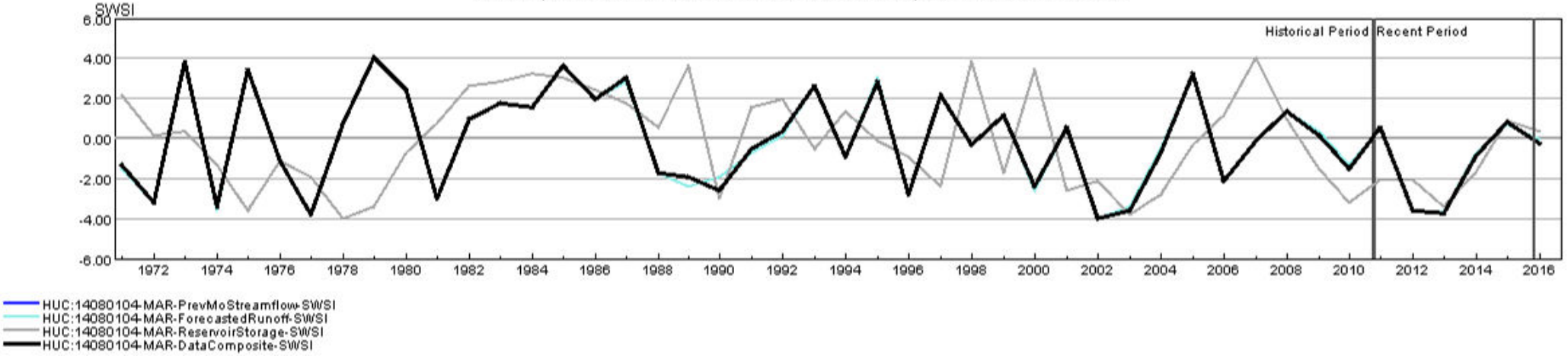
HUC 14080104 (Animas) Surface Water Supply - MAR

Monthly component volumes



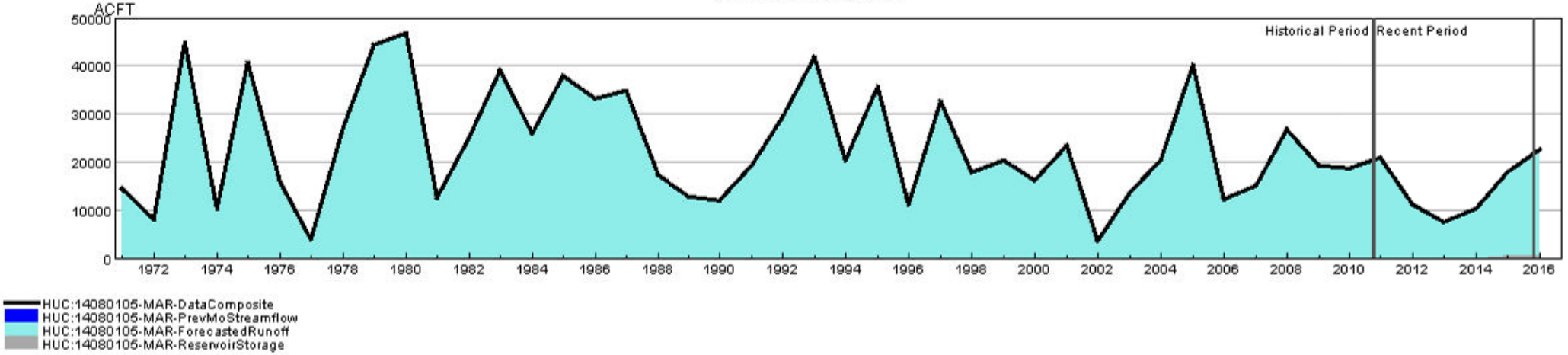
HUC 14080104 (Animas) SWSI Values - MAR

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



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

Monthly component volumes



HUC 14080105 (Middle San Juan) SWSI Values - MAR

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