COLORADO
WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES
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September 1, 2017

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.

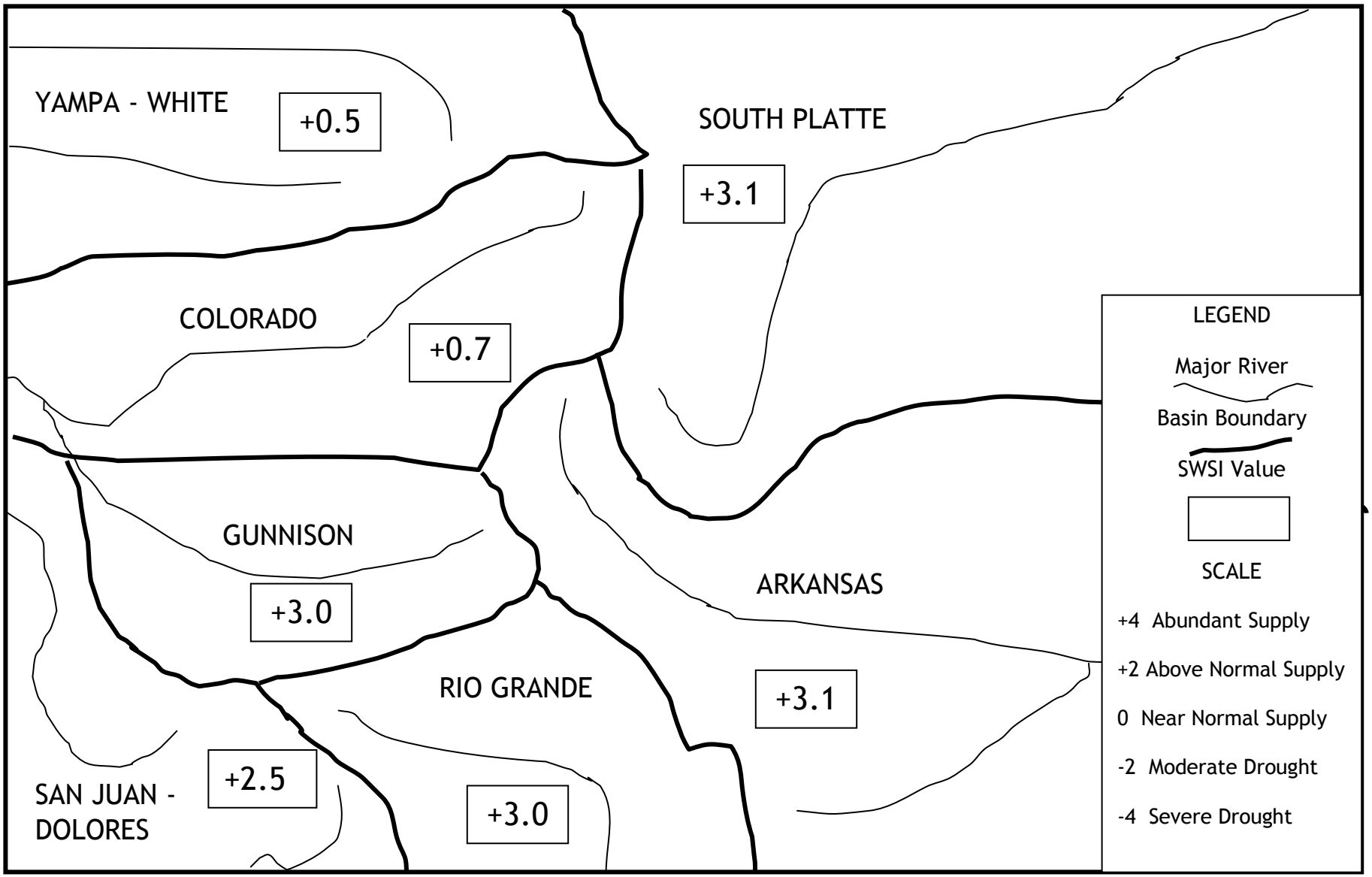
The SWSI calculation for the summer season (July 1 to September 1) is based on the previous month's natural streamflow (the estimate of flow without the impacts of diversions and imports) combined with reservoir storage at the end of last month, in this case August 31. The following SWSI values were computed for each of the seven major basins for September 1, 2017. Water supply conditions are above normal for September 1, 2017 statewide with more supply than last month and September 1, 2016.

Basin	September 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	3.1	0.5	1.1
Colorado	0.7	0.7	1.0
Gunnison	3.0	1.1	2.4
Rio Grande	3.0	1.5	1.7
San Juan-Dolores	2.5	0.1	0.3
South Platte	3.1	0.5	0.9
Yampa-White	0.5	0.9	1.0

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

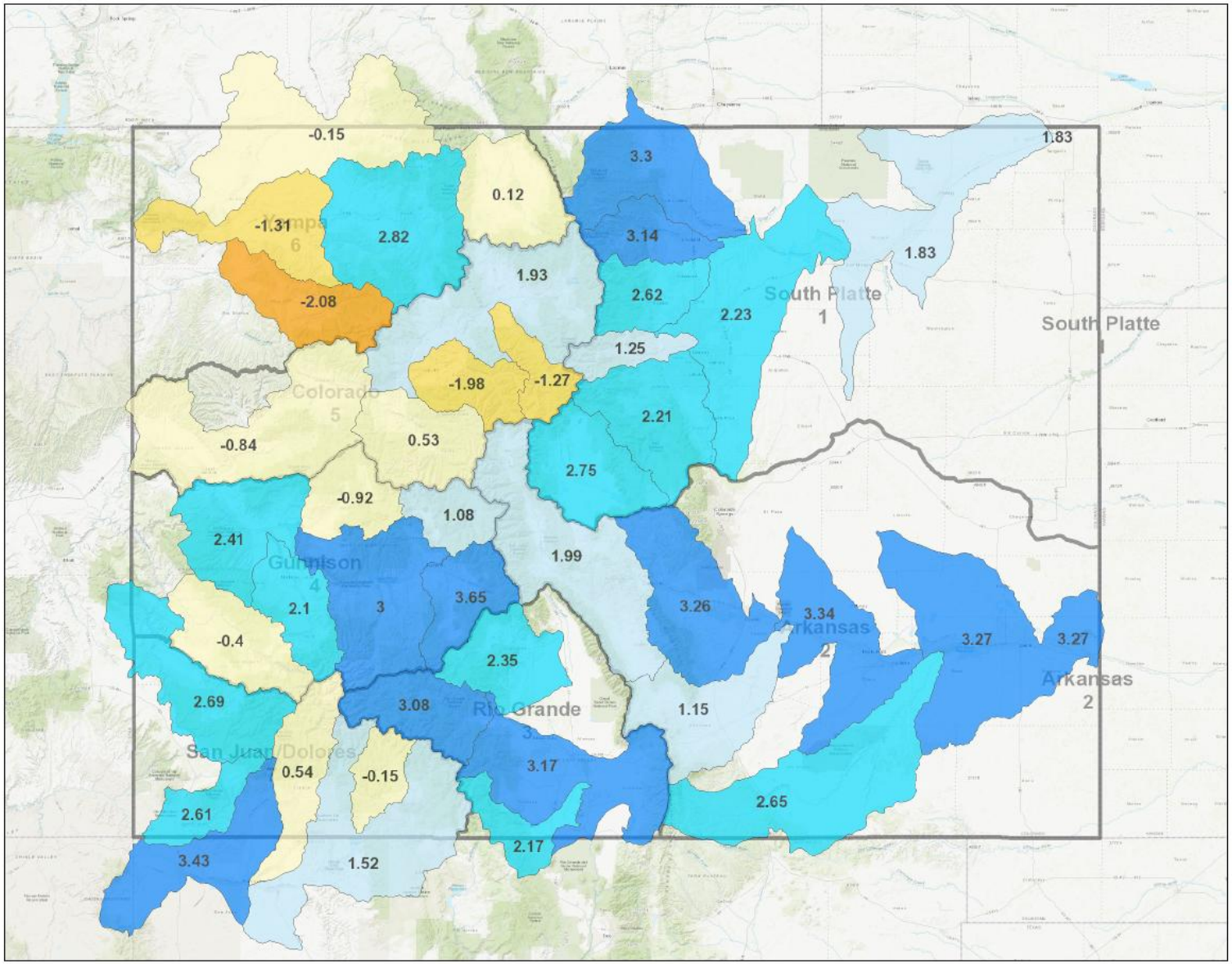


September 1, 2017

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC

CDSS
Colorado's Decision Support Systems

SWSI September 1, 2017



Legend

SWSI - Current Report

- 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
Citations

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: 9/13/2017 10:53:54 PM

September 1, 2017 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

Basin	HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Prev. Month Streamflow NEP	Total Vol (AF)
Arkansas	11020006	Huerfano River	1.2	18	99	5,346
	11020010	Purgatoire River	2.7	80	65	41,808
	11020005	Upper Arkansas-Lake Meredith	3.3	99	87	147,408
	11020001	Arkansas Headwaters	2.0	67	75	259,141
	11020002	Upper Arkansas	3.3	84	87	322,562
	11020009	Upper Arkansas-John Martin Reservoir	3.3	87	87	412,456
Colorado	14010003	Eagle River	-2.0	N/A	26	16,286
	14010004	Roaring Fork	0.5	30	61	149,114
	14010002	Blue River	-1.3	33	39	160,008
	14010005	Colorado Headwaters-Plateau	-0.8	44	38	164,387
	14010001	Colorado Headwaters	1.9	80	44	242,114
Gunnison	14030003	San Miguel	-0.4	N/A	45	11,109
	14020004	North Fork Gunnison	-0.9	40	37	12,999
	14020003	Tomichi Creek	3.7	71	94	19,132
	14020006	Uncompahgre River	2.1	66	62	81,149
	14020001	East-Taylor	1.1	57	71	114,023
	14020005	Lower Gunnison	2.4	N/A	79	138,591
	14020002	Upper Gunnison	3.0	90	80	987,802
Rio Grande	13010004	Saguache Creek	2.4	N/A	78	4,960
	13010002	Alamosa-Trinchera	3.2	99	80	27,467
	13010005	Conejos River	2.2	69	84	48,302
	13010001	Rio Grande Headwaters	3.1	93	62	92,185
San Juan-Dolores	14080105	Middle San Juan	3.4	50	58	2,266
	14080107	Mancos	2.6	86	75	9,040
	14080102	Piedra River	-0.2	N/A	48	11,525
	14080104	Animas River	0.5	74	50	63,473
	14080101	Upper San Juan	1.5	95	49	138,575
	14030002	Upper Dolores	2.7	81	60	353,751
South Platte	10190004	Clear Creek	1.3	N/A	65	14,178
	10190005	St. Vrain River	2.6	86	64	86,242
	10190003	Middle South Platte-Cherry Creek	2.2	92	71	173,684
	10190001	South Platte Headwaters	2.8	74	77	173,990
	10190007	Cache La Poudre	3.3	92	58	176,514
	10190012	Middle South Platte-Sterling	1.8	66	71	187,684
	10190002	Upper South Platte	2.2	85	68	358,072
	10190006	Big Thompson River	3.1	91	58	612,578
Yampa-White	14050003	Little Snake	-0.2	N/A	48	2,309
	14050002	Lower Yampa	-1.3	N/A	34	12,592
	10180001	North Platte Headwaters	0.1	N/A	51	13,401
	14050005	Upper White	-2.1	N/A	25	15,231
	14050001	Upper Yampa	2.8	93	34	54,346

NEP is non exceedance percentage for total reservoir storage in HUC and last month's native streamflow volume in HUC (if there is more than one of each type of component, their volumes are added together). Some HUCs do not have any reservoirs considered in the SWSI. Total Vol is the volume of reservoir storage plus last month's streamflow volume in the 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. The following table lists each component considered in each HUC.

SWSI Color Scale:	-4.0 (Severe Drought)	0 (Normal)	4.0 (Abundant Supply)

September 1, 2017 SWSI Component Information By HUC

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	13,401	51
10190001	South Platte Headwaters	ELEVENMILE CANYON RESV INFLOW	11,090	77
		ANTERO RESERVOIR	19,900	61
		SPINNEY MOUNTAIN RESERVOIR	43,100	68
		ELEVENMILE CANYON RESERVOIR	99,900	59
10190002	Upper South Platte	BEAR CREEK ABV EVERGREEN	2,609	56
		SOUTH PLATTE RIVER AT SOUTH PLATTE	31,863	68
		CHEESMAN LAKE	77,900	74
		DILLON RESERVOIR	245,700	79
10190003	Middle South Platte-Cherry Creek	SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	1,919	37
		BEAR CREEK ABV EVERGREEN	2,609	56
		HORSECREEK RESERVOIR	5,600	71
		BOULDER CREEK NEAR ORODELL	5,793	58
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	11,578	58
		MILTON RESERVOIR	11,900	82
		SAINT VRAIN CREEK AT LYONS	12,430	76
		CLEAR CREEK AT GOLDEN	14,178	65
		CACHE LA POUDRE R AT CANYON MOUTH	14,614	58
		BARR LAKE	21,200	96
		SOUTH PLATTE RIVER AT SOUTH PLATTE	31,863	68
		STANDLEY RESERVOIR	40,000	79
10190004	Clear Creek	CLEAR CREEK AT GOLDEN	14,178	65
10190005	St. Vrain River	SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	1,919	37
		TERRY RESERVOIR	4,500	35
		BOULDER CREEK NEAR ORODELL	5,793	58
		MARSHALL RESERVOIR	6,600	72
		UNION RESERVOIR	11,600	75
		SAINT VRAIN CREEK AT LYONS	12,430	76
		BUTTONROCK (RALPH PRICE) RESERVOIR	16,200	89
		GROSS RESERVOIR	27,200	74
10190006	Big Thompson River	MARIANO RESERVOIR	1,000	41
		LONE TREE RESERVOIR	5,500	94
		LAKE LOVELAND RESERVOIR	7,700	62
		WILLOW CREEK RESERVOIR	8,100	48
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	11,578	58
		BOYD LAKE	34,000	71
		CARTER LAKE	86,700	94
		LAKE GRANBY	458,000	88

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
10190007	Cache La Poudre	BLACK HOLLOW RESERVOIR	900	1
		HALLIGAN RESERVOIR	3,200	29
		CHAMBERS LAKE	6,400	95
		WINDSOR RESERVOIR	7,300	93
		CACHE LA POUDRE	8,700	99
		FOSSIL CREEK RESERVOIR	9,000	99
		CACHE LA POUDRE R AT CANYON MOUTH	14,614	58
		COBB LAKE	19,700	89
		HORSETOOTH RESERVOIR	106,700	89
10190012	Middle South Platte-Sterling	SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	1,919	37
		BEAR CREEK ABV EVERGREEN	2,609	56
		BOULDER CREEK NEAR ORODELL	5,793	58
		JULESBURG RESERVOIR	10,200	73
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	11,578	58
		PREWITT RESERVOIR	12,200	58
		SAINT VRAIN CREEK AT LYONS	12,430	76
		CLEAR CREEK AT GOLDEN	14,178	65
		CACHE LA POUDRE R AT CANYON MOUTH	14,614	58
		EMPIRE RESERVOIR	16,100	91
		POINT OF ROCKS RESERVOIR	17,500	67
		JACKSON LAKE RESERVOIR	17,900	56
		RIVERSIDE RESERVOIR	18,800	70
		SOUTH PLATTE RIVER AT SOUTH PLATTE	31,863	68
11020001	Arkansas Headwaters	CLEAR CREEK RESERVOIR	5,900	50
		ARKANSAS RIVER AT SALIDA	36,341	75
		HOMESTAKE RESERVOIR	42,500	81
		TWIN LAKES RESERVOIR	60,200	63
		TURQUOISE LAKE	114,200	49
11020002	Upper Arkansas	PUEBLO RESERVOIR INFLOW	91,562	87
		PUEBLO RESERVOIR	231,000	84
11020005	Upper Arkansas-Lake Meredith	HUERFANO RIVER NEAR REDWING	2,055	67
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	3,292	99
		LAKE HENRY	9,200	99
		MEREDITH RESERVOIR	41,300	99
		PUEBLO RESERVOIR INFLOW	91,562	87
11020006	Huerfano River	CUCHARAS RESERVOIR	0	18
		HUERFANO RIVER NEAR REDWING	2,055	67
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	3,292	99
11020009	Upper Arkansas-John Martin Reservoir	HUERFANO RIVER NEAR REDWING	2,055	67
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	3,292	99
		PURGATOIRE RIVER AT TRINIDAD	8,108	65
		ADOBE CREEK RESERVOIR	47,640	82
		PUEBLO RESERVOIR INFLOW	91,562	87
		JOHN MARTIN RESERVOIR	259,800	86
11020010	Purgatoire River	PURGATOIRE RIVER AT TRINIDAD	8,108	65
		TRINIDAD LAKE	33,700	80

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
13010001	Rio Grande Headwaters	SANTA MARIA RESERVOIR	9,300	69
		CONTINENTAL RESERVOIR	19,200	99
		RIO GRANDE RESERVOIR	22,800	91
		RIO GRANDE NEAR DEL NORTE	40,885	62
13010002	Alamosa-Trinchera	SANGRE DE CRISTO	849	71
		UTE CREEK	1,114	55
		TRINCHERA CK	1,435	91
		CULEBRA CREEK AT SAN LUIS	1,842	47
		TERRACE RESERVOIR	6,000	75
		ALAMOSA CREEK ABOVE TERRACE RESERVOIR	6,853	93
		MOUNTAIN HOME	9,374	99
13010004	Saguache Creek	SAGUACHE CREEK NEAR SAGUACHE, CO	4,960	78
13010005	Conejos River	CONEJOS RIVER NEAR MOGOTE	15,602	84
		PLATORO RESERVOIR	32,700	69
14010001	Colorado Headwaters	WOLFORD MOUNTAIN RESERVOIR	61,100	91
		WILLIAMS FORK RESERVOIR	86,000	58
		COLORADO RIVER NEAR DOTSERO	95,014	44
14010002	Blue River	BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	25,908	39
		GREEN MOUNTAIN RESERVOIR	134,100	33
14010003	Eagle River	EAGLE RIVER BELOW GYPSUM	16,286	26
14010004	Roaring Fork	ROARING FORK AT GLENWOOD SPRINGS	55,714	61
		RUEDI RESERVOIR	93,400	30
14010005	Colorado Headwaters-Plateau	VEGA RESERVOIR	13,300	44
		COLORADO RIVER NEAR CAMEO	151,087	38
14020001	East-Taylor	TAYLOR R INF TO TAYLOR PARK RESERVOIR	12,109	79
		EAST RIVER AT ALMONT	14,934	66
		TAYLOR PARK RESERVOIR	86,980	57
14020002	Upper Gunnison	FRUITLAND RESERVOIR	800	62
		CRAWFORD RESERVOIR	7,100	53
		SILVER JACK RESERVOIR	7,600	70
		LAKE FORK AT GATEVIEW, CO	16,288	80
		GUNNISON RIVER NEAR GUNNISON, CO	44,061	80
		MORROW POINT RESERVOIR	111,900	17
		BLUE MESA RESERVOIR	800,053	96
14020003	Tomichi Creek	VOUGA RESERVOIR NEAR DOYLEVILLE	430	71
		TOMICHI CREEK AT GUNNISON, CO	18,702	94
14020004	North Fork Gunnison	PAONIA RESERVOIR	5,700	40
		NORTH FORK GUNNISON R NR SOMERSET	7,299	37
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	138,591	79
14020006	Uncompahgre River	UNCOMPAHGRE RIVER AT COLONA	14,389	62
		RIDGEWAY RESERVOIR	66,760	66
14030002	Upper Dolores	DOLORES RIVER BELOW MCPHEE RESERVOIR	15,251	60
		GROUNDHOG RESERVOIR	15,900	65
		MCPHEE RESERVOIR	322,600	81
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	11,109	45

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
14050001	Upper Yampa	ELKHEAD CREEK ABOVE LONG GULCH	199	38
		YAMCOLO RESERVOIR	5,100	72
		YAMPA RIVER AT STEAMBOAT SPRINGS	5,788	25
		ELK RIVER NEAR MILNER, CO	8,760	41
		STAGECOACH RESERVOIR NR OAK CREEK	34,500	99
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	12,592	34
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	2,309	48
14050005	Upper White	WHITE RIVER NEAR MEEKER	15,231	25
14080101	Upper San Juan	LOS PINOS RIVER NEAR BAYFIELD	18,754	56
		SAN JUAN RIVER NEAR CARRACAS	19,421	49
		VALLECITO RESERVOIR	100,400	95
14080102	Piedra River	PIEDRA RIVER NEAR ARBOLES	11,525	48
14080104	Animas River	FLORIDA RIVER INFLOW TO LEMON RESERVOIR	4,060	50
		LEMON RESERVOIR	27,100	74
		ANIMAS RIVER AT DURANGO	32,313	50
14080105	Middle San Juan	LONG HOLLOW RESERVOIR	992	50
		LA PLATA RIVER AT HESPERUS	1,274	58
14080107	Mancos	MANCOS RIVER NEAR MANCOS	1,840	75
		JACKSON GULCH RESERVOIR	7,200	86

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

*Empty, filling restriction

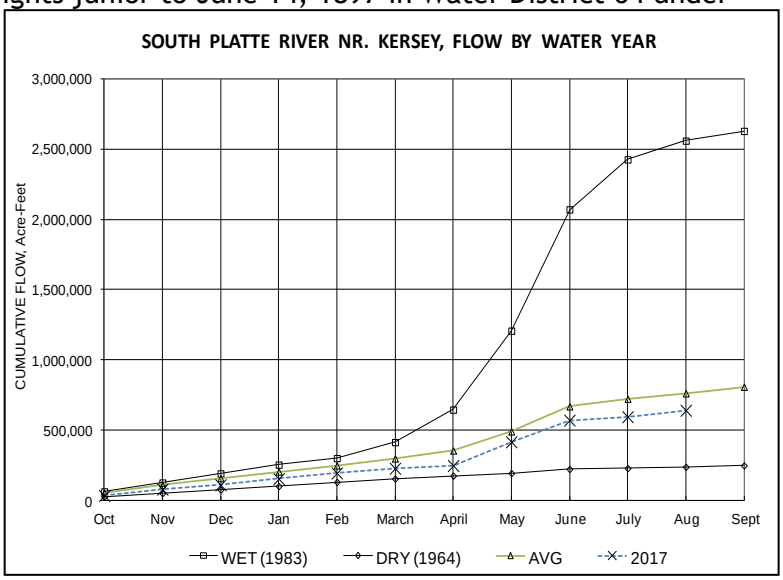
Water Volume NEP Color Scale:	0 (Well Below Normal)	50 (Normal)	100 (Well Above Normal)

Basinwide Conditions Assessment

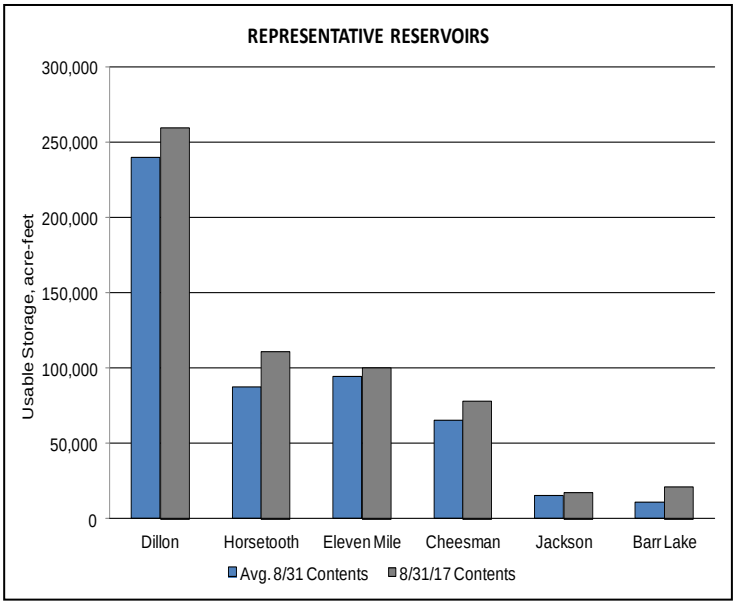
The SWSI value for the month was +3.1. There were two distinct weather patterns during August 2017 over most of northeast Colorado. The first half of the month was cool and wet while the last half of the month was warm and dry. As might be intuitively expected, this pattern resulted in temperatures near, but slightly cooler than normal for the month and precipitation near, but slightly below normal for the month.

Even though the last half of August was dry, the wet beginning of the month was enough to reduce the area covered in a USDA Drought Monitor rating of D0 "Abnormally Dry" in northeast Colorado from the beginning to the end of the month. The northern Front Range and the northeast corner of the state were in a D0 rating to start the month, but by the end of August only a smaller area near the northeast corner was in a D0 rating.

The August flows at the Kersey and Julesburg index gages were on both sides of the long term mean flow. The Kersey gage was well above the mean early in August and near the mean the rest of the month to end up above the mean for the entire month – though this was influenced by a delivery of CBT water through the gage for about the last week of August. The overall August mean flow at the Kersey gage was 748 cfs or 149% of the long term mean flow of 501 cfs. The Julesburg flows for most of the month were below the 120 cfs flow that triggers curtailment of Colorado water rights junior to June 14, 1897 in Water District 64 under the South Platte River Compact. Curtailment of the necessary Colorado water rights was accomplished to conform with the terms of the Compact. The overall July mean flow at the Julesburg gage was 100 cfs. This represents a flow of about 56% of the long term mean flow of 178 cfs.



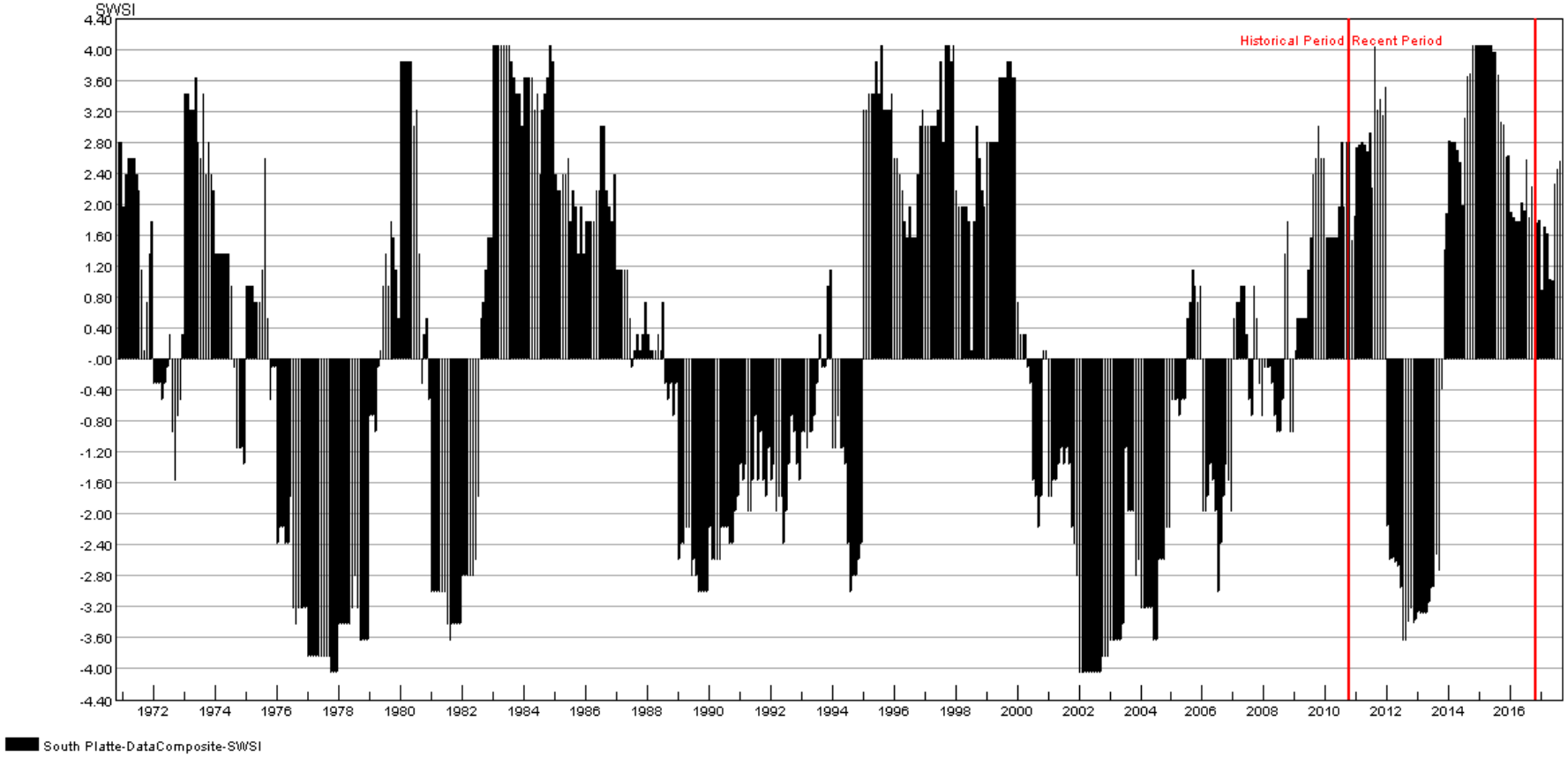
The relatively wet and cool start of August resulted in a reversal of the "normal" call pattern on the South Platte mainstem during August. The calls started out relatively junior and then began to grow progressively more senior later in the month instead of the general pattern of senior calls starting the month and then going more junior later in the month (as demand for water slows down because certain crops begin to be harvested). Calls on the major South Platte tributaries, though starting the month more toward "normal" than the mainstem calls, followed a pattern similar to the mainstem in that they generally grew more senior by the end of August.



The relatively wet and cool start of August also reduced demand for reservoir releases significantly. This means that even if September is dryer than normal, there still should generally be enough water in storage to meet higher demands through the end of September. The overall end of August storage was about 74% of capacity. This compares to than the long term average end of August storage of about 58% of capacity.

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 +3.1.

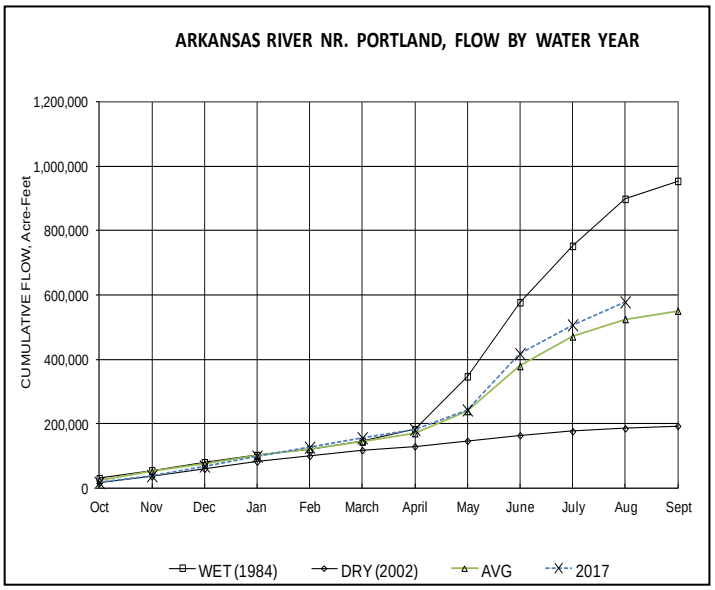
Outlook

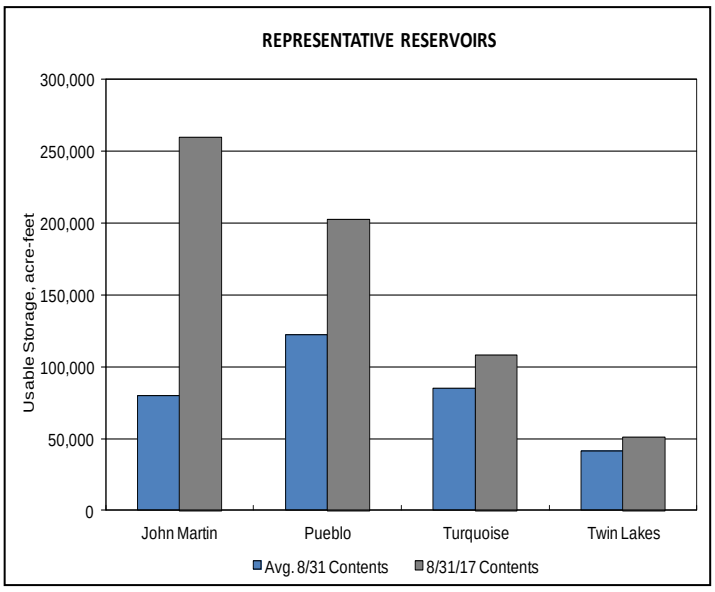
River calls above the Fort Lyon Canal varied from the Adobe Reservoir 1/25/1906 water right at the beginning of the month, however drier conditions through August drove the call to the senior Fort Lyon Canal call (3/1/1887) by the end of the month.

Kansas concluded a release of their Article II and Offset account water from John Martin Reservoir, which began in late June, on August 3, 2017. The total for this release was just over 51,000 acre-feet from John Martin Reservoir.

Administrative/Management Concerns

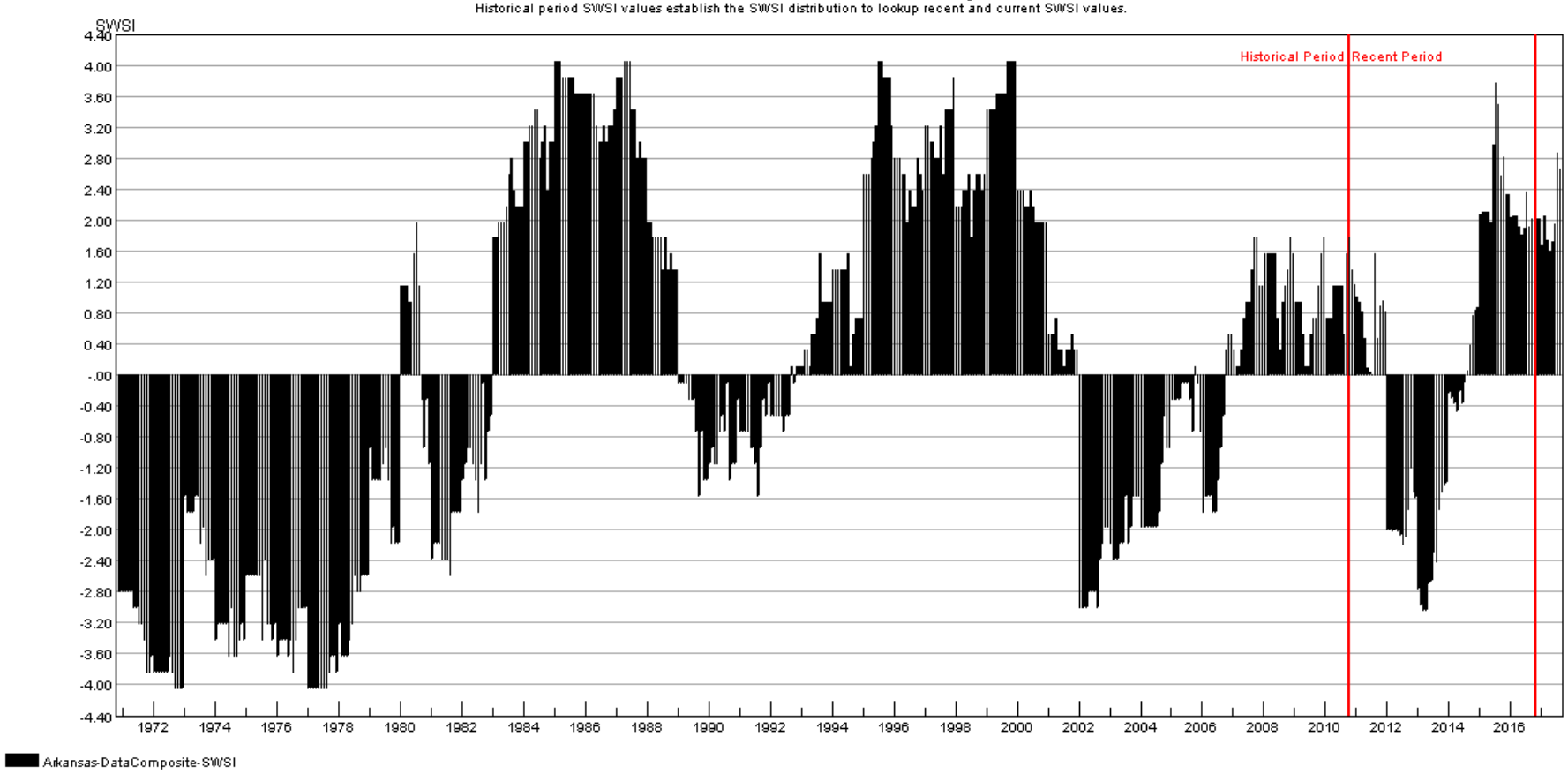
At the beginning of August many of the major reservoirs were high in content due to a good snowmelt runoff and strong monsoon moisture. Demand for stored reservoir supplies for irrigation had been low until August, however falling stream flows caused ditch companies to call for a substantial amount of water in August. If this trend continues in September and October, there should be room for winter storage in the major reservoirs; however, if conditions turn wet again, limited storage could become a concern.





Arkansas Basin SWSI History

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



Basinwide Conditions Assessment

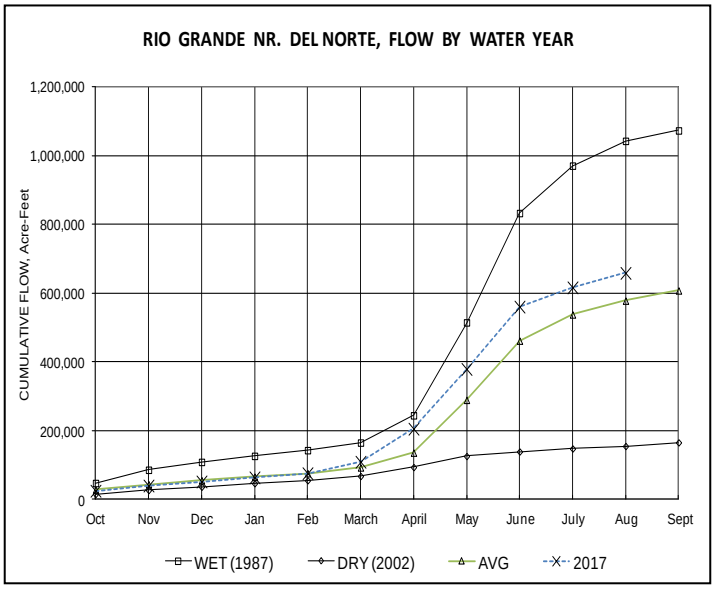
The SWSI value for the month was +3.0. Flow at the gaging station Rio Grande near Del Norte averaged 684 cfs (105% of normal). The Conejos River near Mogote had a mean flow of 307 cfs (143% of normal). Generally, streamflow in the upper Rio Grande basin was above average during August with the exception of tributaries of the Rio Grande. The Conejos River was bolstered by storage releases from Platoro Reservoir for irrigation demand. Basinwide rain events during late July and early August were very important to increasing base streamflow. The heavier precipitation eased at mid month. This led to declining streamflow throughout the basin.

Outlook

NOAA weather forecasts call for near normal precipitation and warmer than normal temperatures through the end of the year.

Administrative/Management Concerns

The mid to late-August decline of streamflow brought reduction of the curtailment on both the Rio Grande and Conejos systems. Therefore, less water was routed directly through to the stateline for Compact delivery obligations and more native flow was available for the irrigators.

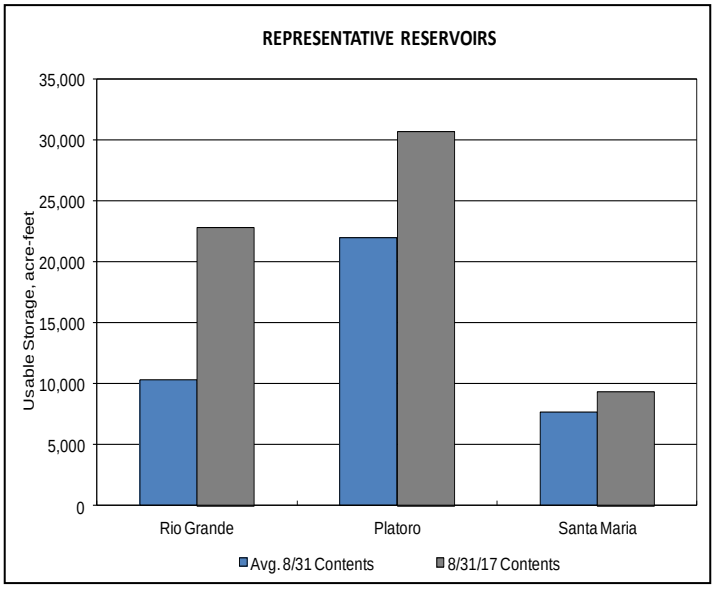


Administrative/Management Concerns

Although the runoff season was better than normal for most streams in the upper Rio Grande, many irrigators felt the pinch of drying conditions and ditches going out of priority. Reservoir releases, if available, and well pumping helped meet the demand for irrigation supplies during August.

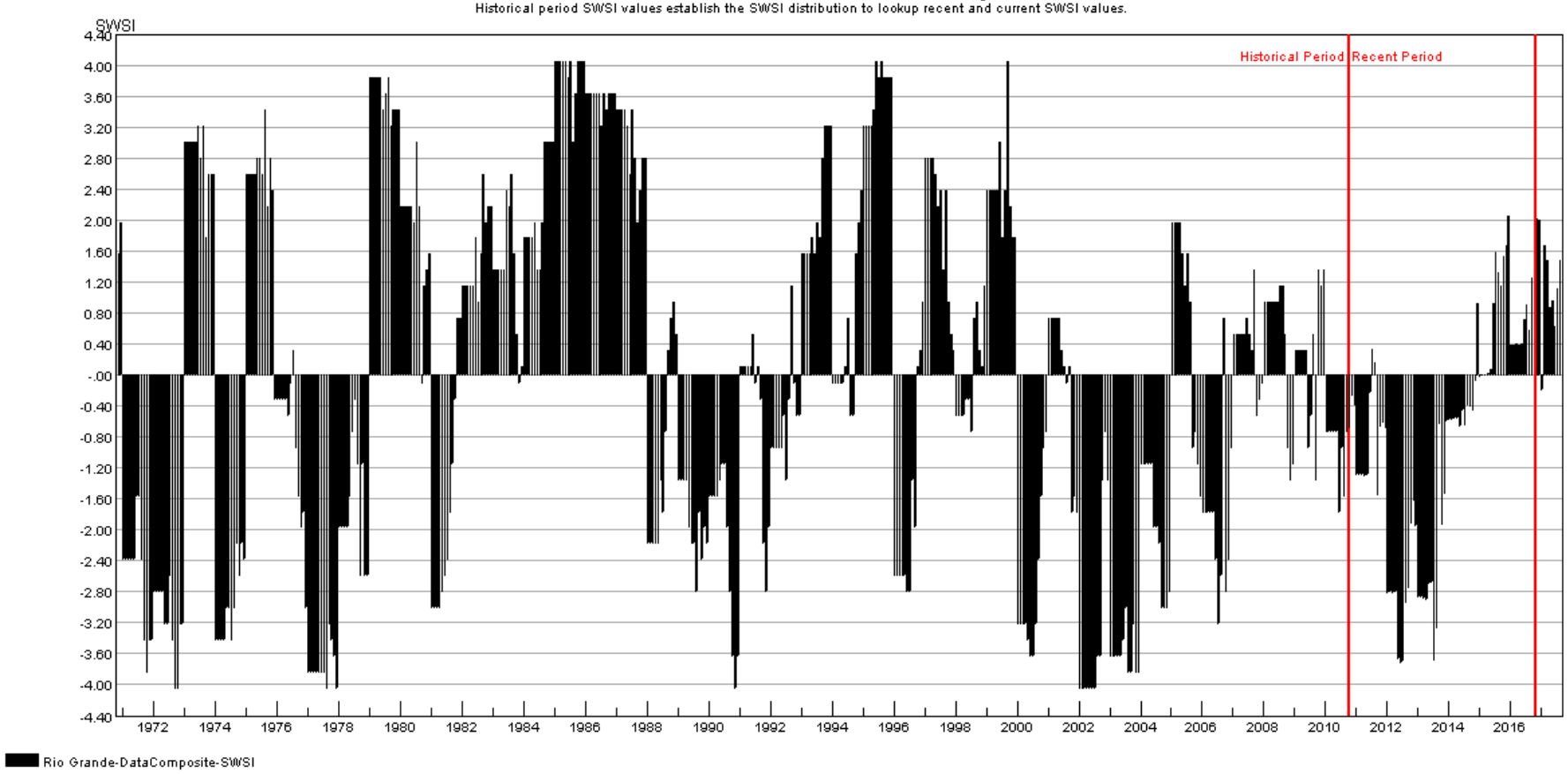
The irrigated land near Fort Garland during 2017: the Trinchera Irrigation Company shareholders have experienced a bountiful year. Mountain Home Reservoir nearly filled. As such, the irrigation supply in that area has been better in 2017 than the past decade.

As September approaches, irrigation demand typically eases as farmers prepare for harvest.



Rio Grande Basin SWSI History

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



Basinwide Conditions Assessment

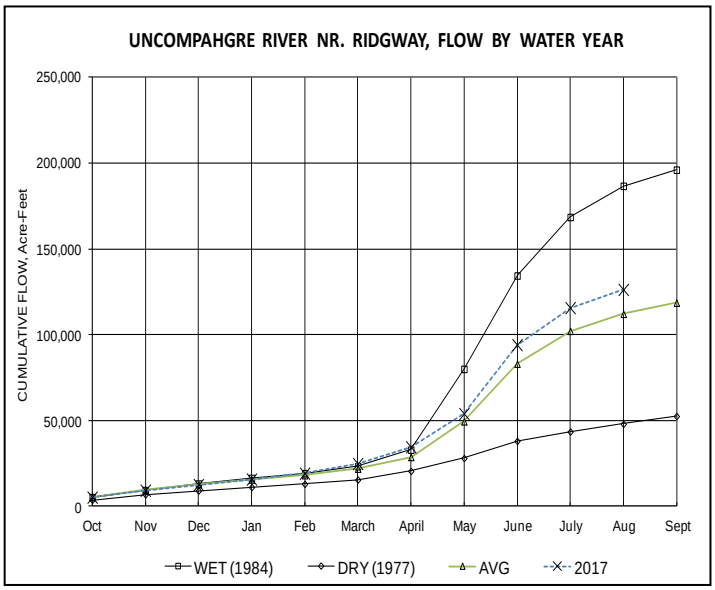
The SWSI value for the month was +3.0. The monsoon flow that provided ample precipitation in July and early August dissipated and as a result, the Gunnison basin experienced drier than average conditions during August. Southern and northern areas received 50-70% and 70-90% of the average, respectively. Basin-wide, temperatures during the period were near the average.

Outlook

The most recent NWS forecast for September through November moved the area expected to receive greater than equal chances of above average precipitation to the east, leaving the Gunnison basin in an area with equal chances of an above average or below average start to the water year. The forecast, however, still includes above average chances for greater than average temperatures in the Gunnison basin.

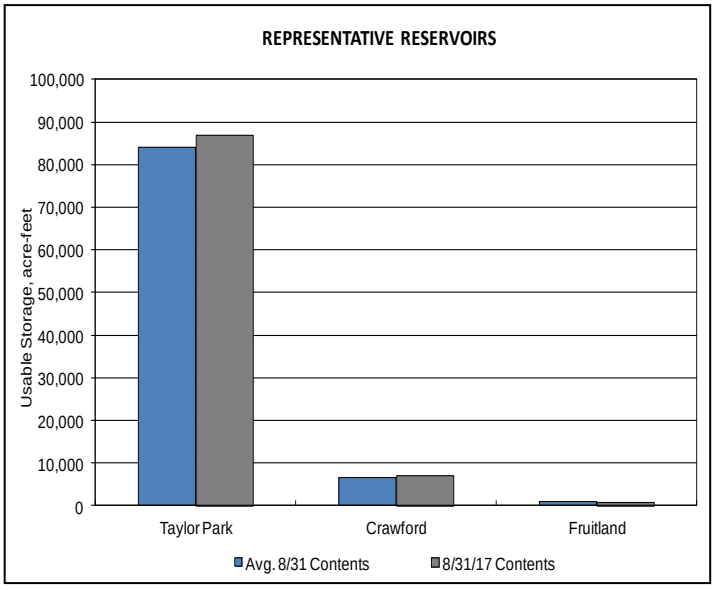
Administrative/Management Concerns

Gunnison Tunnel diversions continued to average 1,000 cfs for the month of August. Until August 27th, calculated inflows to the Aspinall Unit fully satisfied Gunnison Tunnel diversions. Therefore, the Uncompahgre Valley Water Users Association (UVWUA) didn't begin using storage from either of their accounts until that time and only used 603 acre-feet of second fill during the last four days of August to supplement natural inflow. Comparing the first day storage was used to previous years indicates that this is only the second time since 2002 that it has occurred this late in the season. In fact, the only other year it occurred this late was in 2005 when the first date of storage use was also on August 27th.



Blue Mesa Reservoir reached a peak storage of 950,040 acre-feet on August 9th, but has dropped to 926,253 acre-feet on September 1st, which corresponds to a water surface elevation of 7,516.13 feet. This reduction in storage is occurring partly due to the USBR continuing to release over 2,000 cfs from Crystal Dam in order to reach the target water surface elevation in Blue Mesa of 7,490.00 ft that is intended to prevent ice buildup downstream of the City of Gunnison.

As mentioned during last month's update, the USBR and the Fire Mountain Canal and Reservoir Company are releasing excess water from Paonia Reservoir to prepare for an outlet repair project. These excess releases have satisfied demand on the North Fork Gunnison River and resulted in an August with free river conditions, which doesn't occur very often.

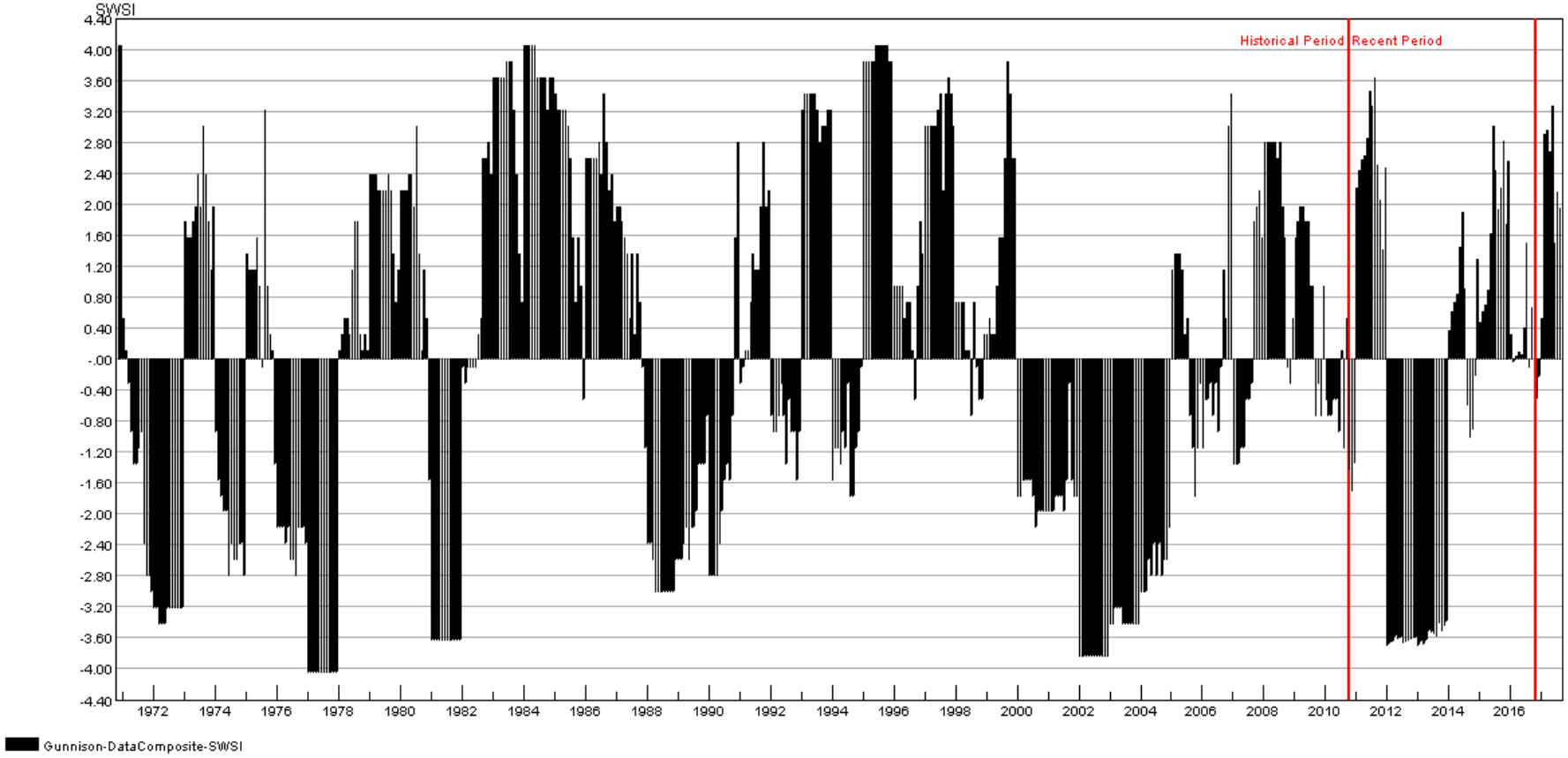


Public Use Impacts

Releases through the Gunnison Gorge remained between 950 and 1000 cfs during August and due to the USBR goal to try and reach the icing target and will likely remain above the average through December. Taylor Park Reservoir releases remained at near 400 cfs during August, but were reduced to 300 cfs at the beginning of September.

Gunnison Basin SWSI History

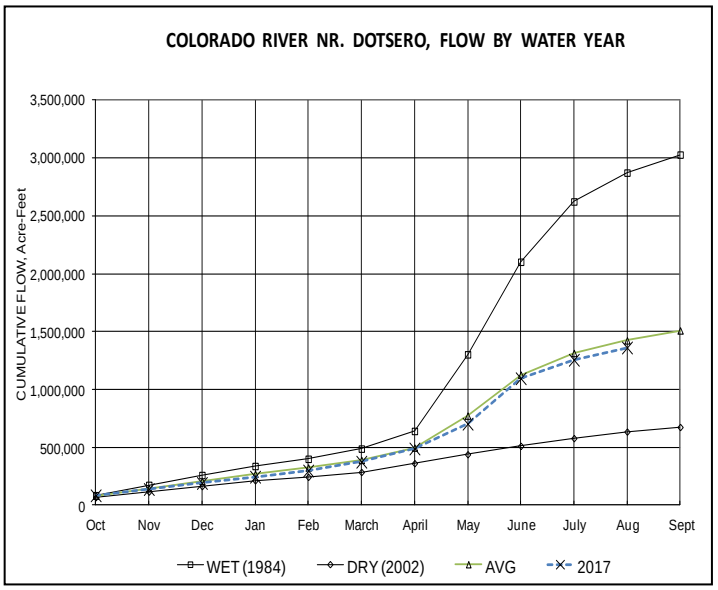
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



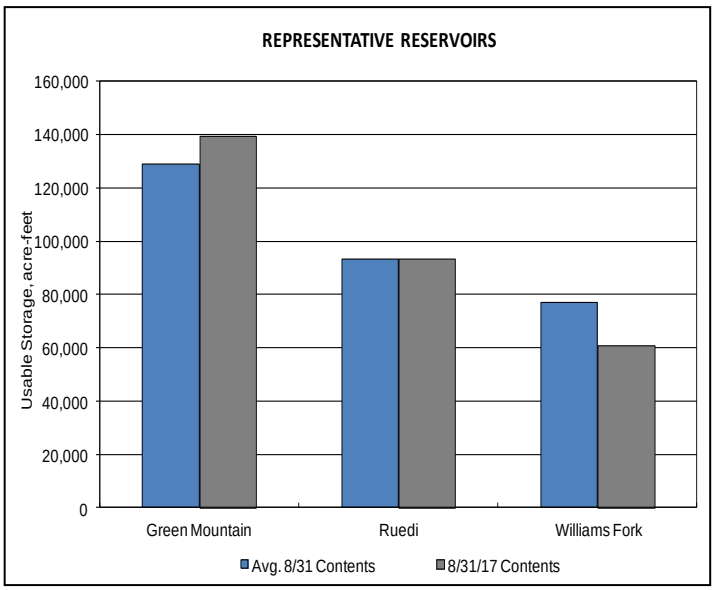
Basinwide Conditions Assessment
The SWSI value for the month was +0.7.

Outlook
Colorado River flows continue to fall to slightly above average to average with tributary flows running average to below average throughout September. Average precipitation with above average temperature is forecast for western Colorado through September.

Administrative/Management Concerns
As of September 6, the call on the Colorado River main stem at Cameo is the Grand Valley Project Power Plant for an amount up to 400 cfs. This water right is being exercised pursuant to Paragraph 3.a.(1) of the "Check Case Settlement" in Case No. 91CW247. As of September 1, there is no longer a call on the Colorado River main stem at Shoshone due to inspections at Shoshone. Grand Valley Irrigation diversions (Government Highline/Orchard Mesa Irrigation, Grand Valley Irrigation canals) continue at or near full capacity. Green Mountain is releasing to pass inflows, release contract water, CB-T water and HUP water. Wolford Mountain Reservoir is releasing contract water and fish water. Wolford's fish releases are expected to be exhausted by September 17. Ruedi Reservoir is also releasing fish water for the fish recovery program.

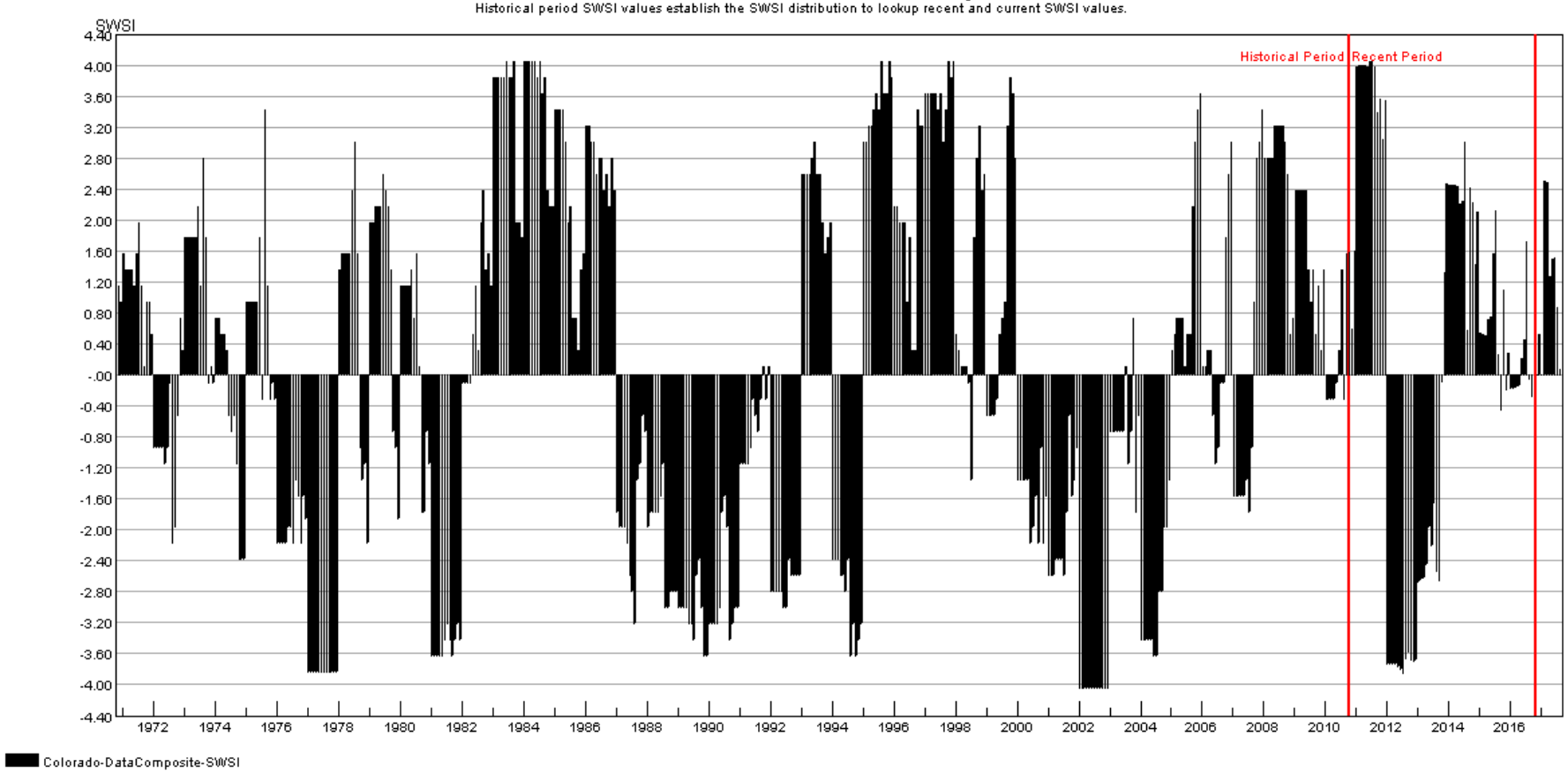


Public Use Impacts
Water is being released from the excess HUP pool to support the Upper Colorado River Endangered Fish Recovery Program. Partners of the program are recovering four species of endangered fish in the Colorado River and its tributaries in Colorado, Utah, and Wyoming while water use and development continues to meet human needs in compliance with interstate compacts and applicable federal and state laws.



Colorado Basin SWSI History

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



Basinwide Conditions Assessment

The SWSI value for the month was +0.5.

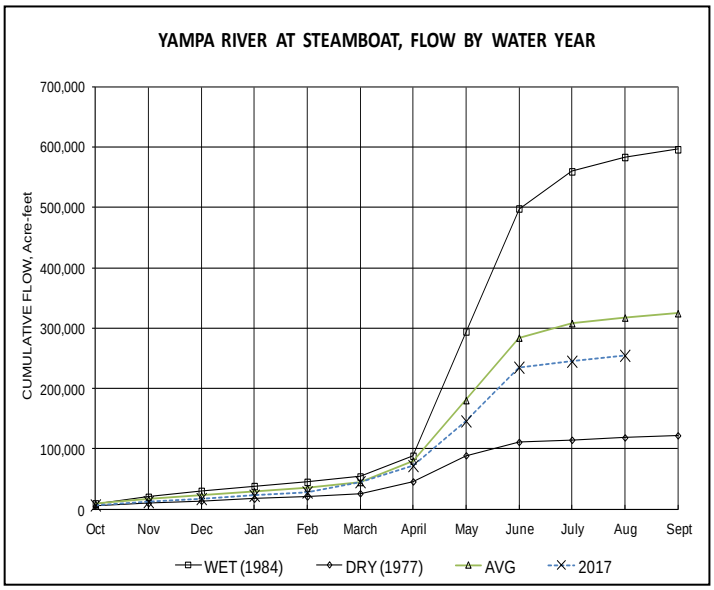
August precipitation was below average in the Yampa, White, and North Platte River basins. Precipitation for the month, as measured at the SNOTEL sites operated by NRCS, was reported at 76% of average for the Yampa, White, and North Platte River basins. Total precipitation for the water year as a percent of average to date in the combined basins at the end of August was 103%.

All Division 6 stream gages are open with the exception of the Willow Creek gage below Steamboat Lake due to maintenance on the dam. All seasonal gages will be closed by the end of October.

Outlook

As of August 31st Fish Creek Reservoir was storing approximately 3,874 AF, 93% of capacity. The capacity of Fish Creek Reservoir is 4,167 AF. Yamcolo Reservoir was storing 5,852 AF at the end of August 2017. The capacity of Yamcolo Reservoir is 8,700 AF. The G3 web server is not functioning currently for Elkhead Creek Reservoir. The capacity of Elkhead Creek Reservoir is 24,778 AF. On August 31, 2017, Stagecoach Reservoir was storing 35,100 AF, 97% 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.

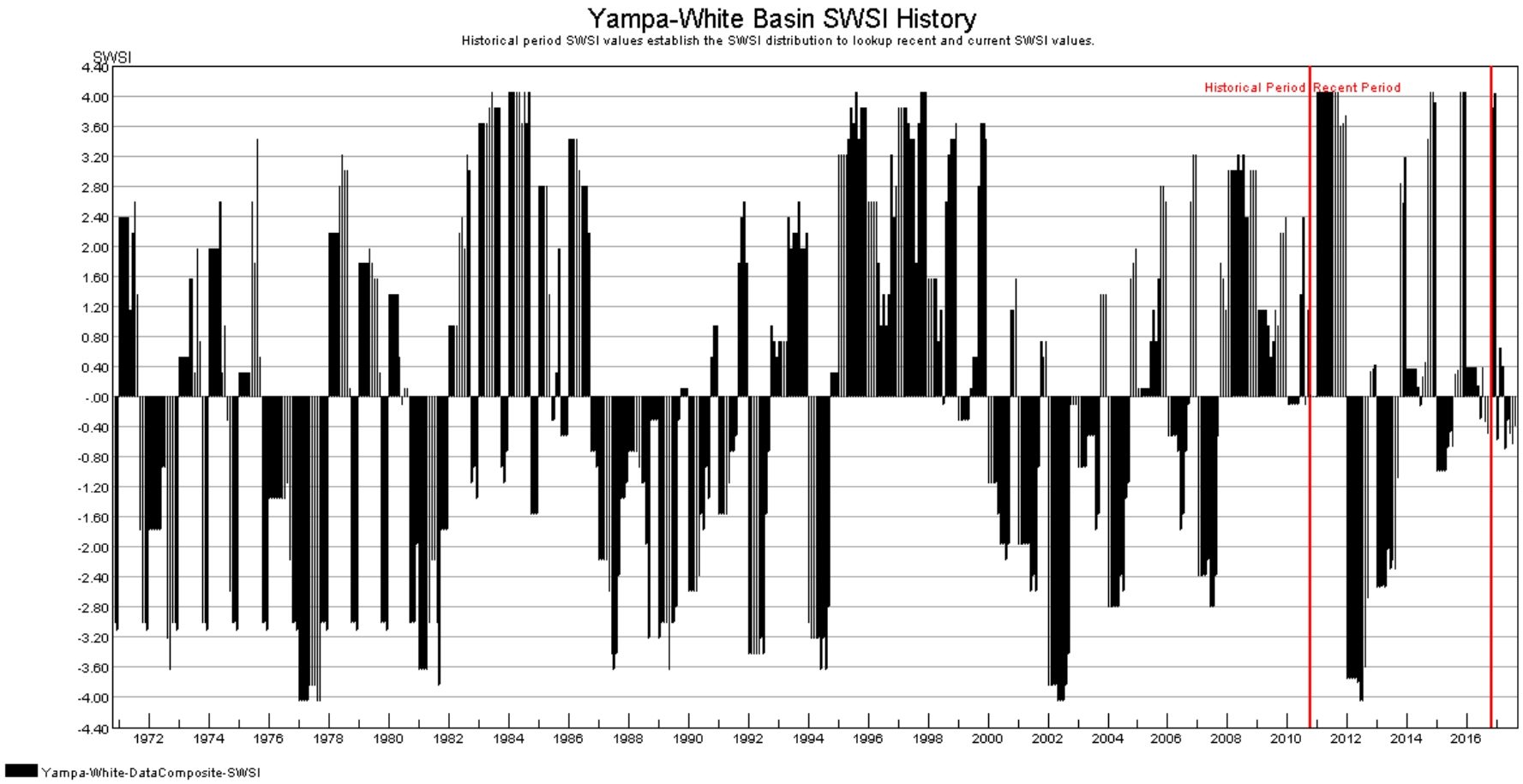


Public Use Impacts

Boat ramps at Stagecoach Reservoir State Park are now open through October 31st. Campgrounds and the swim beach are also open. The swim beach will close September 30th.

The campgrounds will close October 1st. Reservations are encouraged. Please check the Stagecoach Reservoir State Park website for a detailed fishing report or call 970-879-6552 for the latest fishing conditions.

Steamboat Lake has all campgrounds open. Boating and swimming are open for the summer. The Steamboat Lake Dam will be undergoing a year-long project to complete required maintenance and repairs. Sage Flats day use area and all access to the dam will be closed for the year. All other Park facilities and activities will be open and available. Fishing is picking up with these cooler evenings. Power bait has been doing well from shore. Kastmaster has been a hit with boat fishers. Early morning or later evening seems to be better.

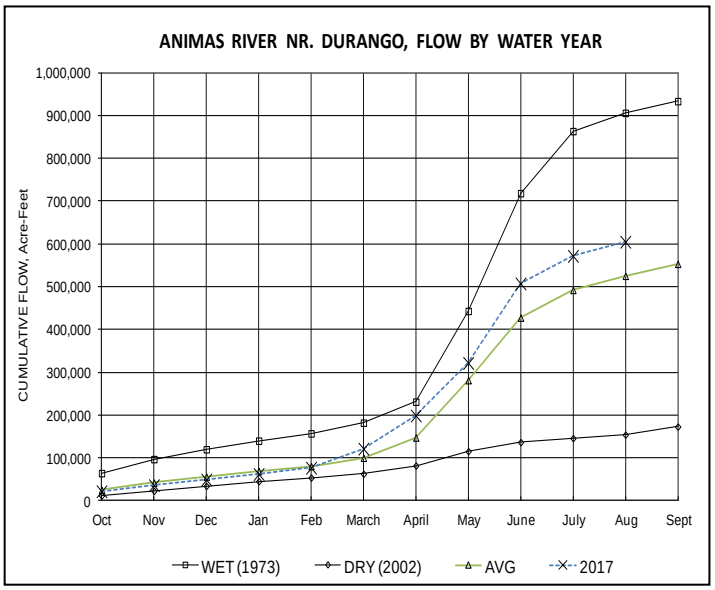

Yampa-White Basin SWSI History
Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.
SWSI
Historical Period
Recent Period
4.40
4.00
3.60
3.20
2.80
2.40
2.00
1.60
1.20
0.80
0.40
-.00
-0.40
-0.80
-1.20
-1.60
-2.00
-2.40
-2.80
-3.20
-3.60
-4.00
-4.40
1972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

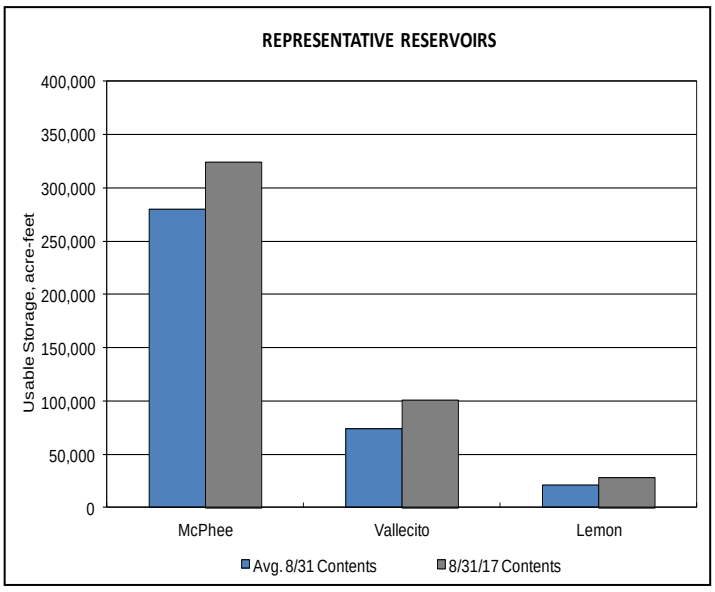
Basinwide Conditions Assessment

The SWSI value for the month was +2.5. Flow at the Animas River at Durango averaged 537 cfs (94% of average). The flow at the Dolores River at Dolores averaged 259 cfs (107% of average). The La Plata River at Hesperus averaged 8 cfs (99% of average). Precipitation in Durango was 0.89 inches for the month, 33% of the 30-year average of 2.68 inches. Precipitation was the 111th highest amount recorded in August, in Durango, out of 123 years of record. Precipitation to date in Durango, for the water year, is 17.97 inches, 103% of the 30-year average of 17.97 inches. End of last month precipitation to date, for the water year was 113% of average. The average high and low temperatures for the month of August in Durango were 84o and 50o. In comparison, the 30-year average high and low for the month is 84o and 52o. At the end of the month Vallecito Reservoir contained 100,477 acre-feet compared to its average content of 70,544 acre-feet (142% of average). McPhee Reservoir was up to 323,953 acre-feet compared to its average content of 285,235 (114% of average), while Lemon Reservoir was up to 27,810 acre-feet as compared to its average content of 21,452 acre-feet (130% of average).

Outlook

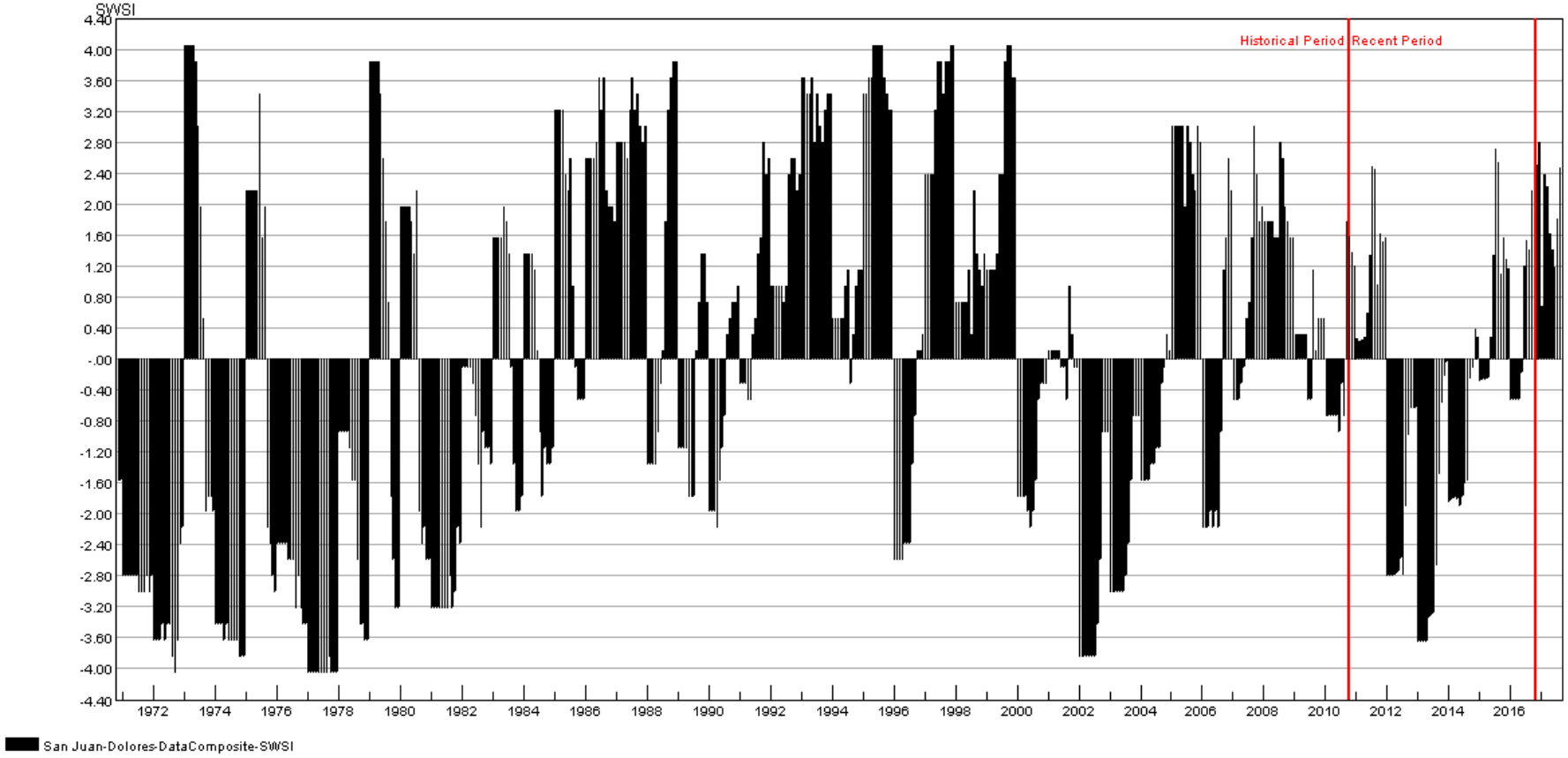
Precipitation (0.89 inches) was well below average for August in Durango. The monsoon rains typically begin in July and continue to the first weeks in October, unfortunately August monsoon rains seemed to miss this year. There were 111 years out of 123 years of record where there was more precipitation than this year. The flows in the rivers within the basin remained near average for this time of year. There was only 49 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 35 out of 107 years of record where the total flow past the Dolores stream gauge was more than this year and 38 out of 100 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year.





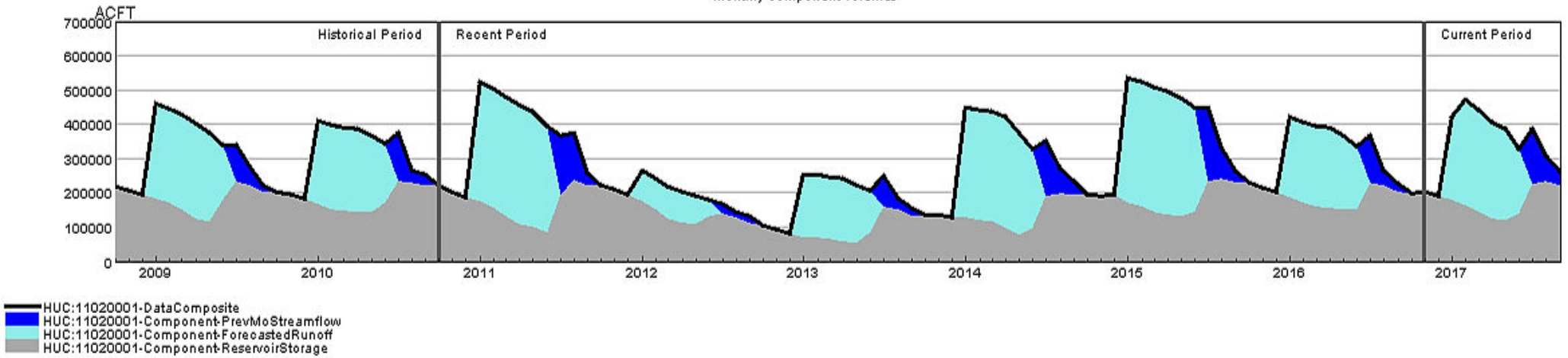
San Juan-Dolores Basin SWSI History

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



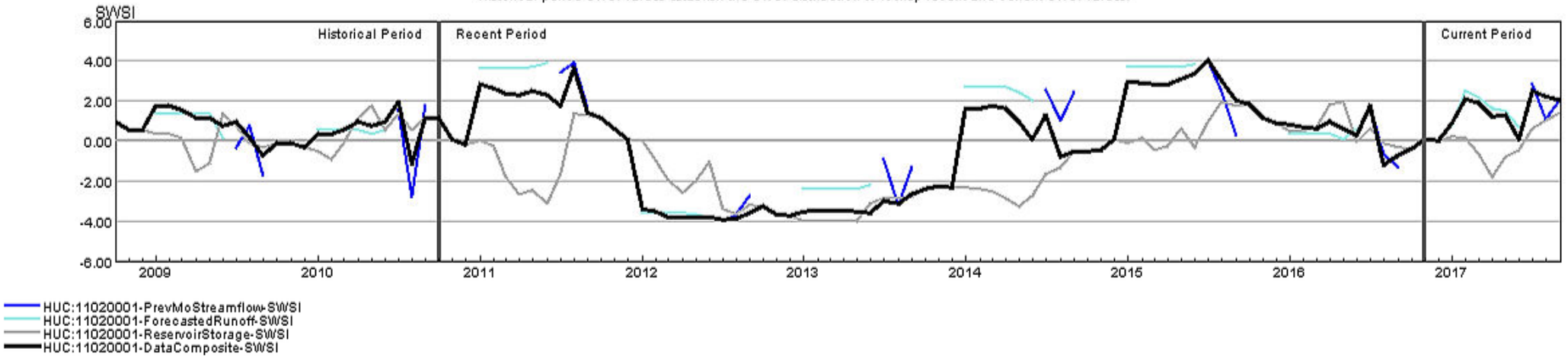
HUC 11020001 (Arkansas Headwaters) Surface Water Supply

Monthly component volumes



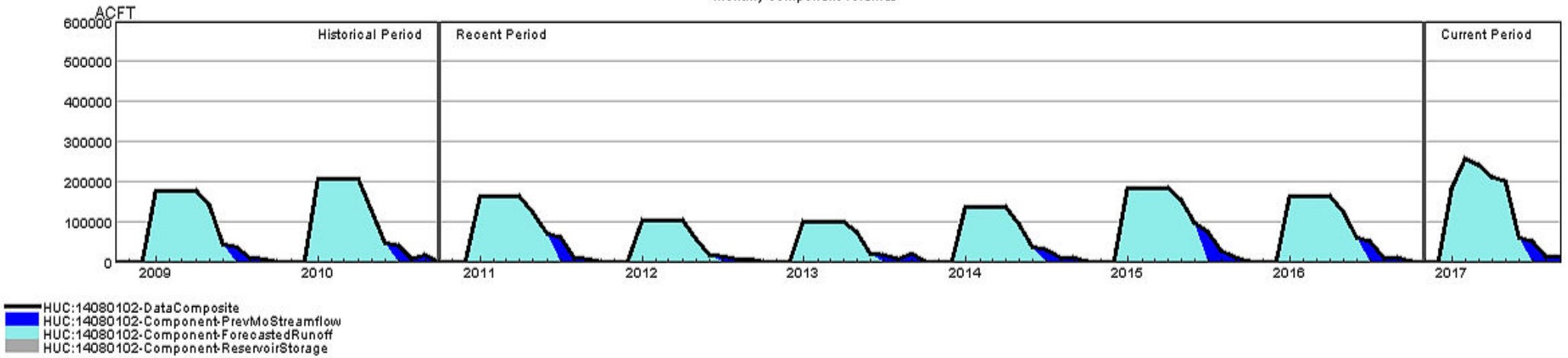
HUC 11020001 (Arkansas Headwaters) SWSI

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



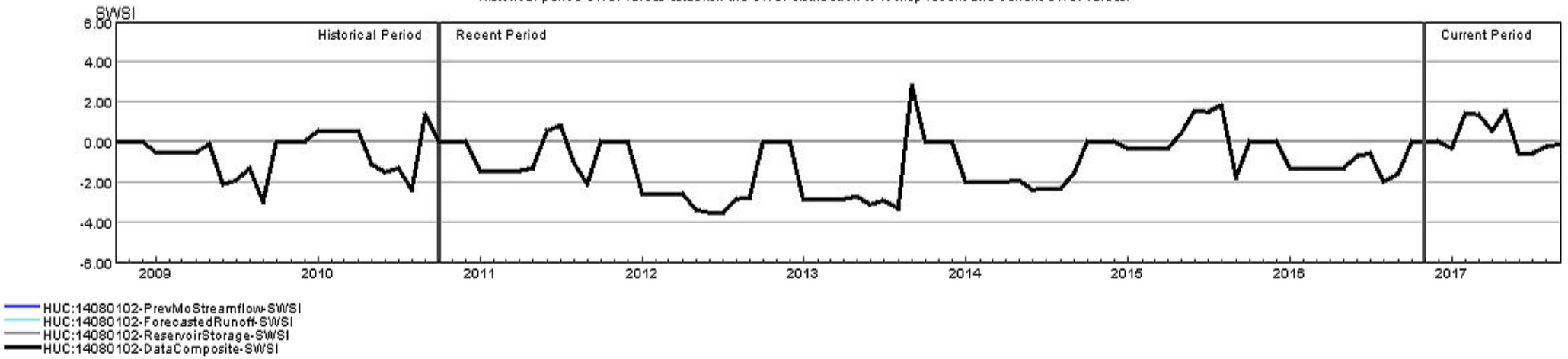
HUC 14080102 (Piedra) Surface Water Supply

Monthly component volumes



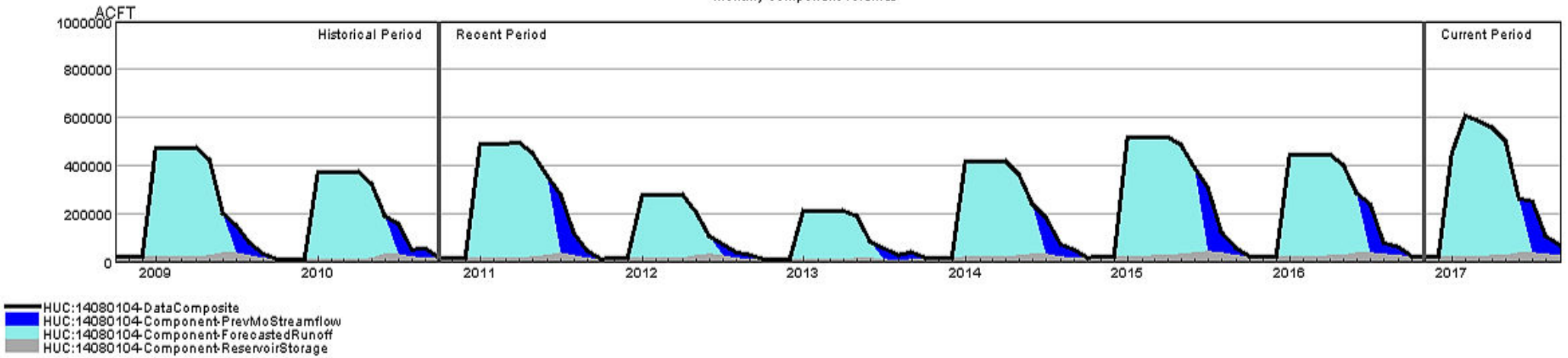
HUC 14080102 (Piedra) SWSI

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



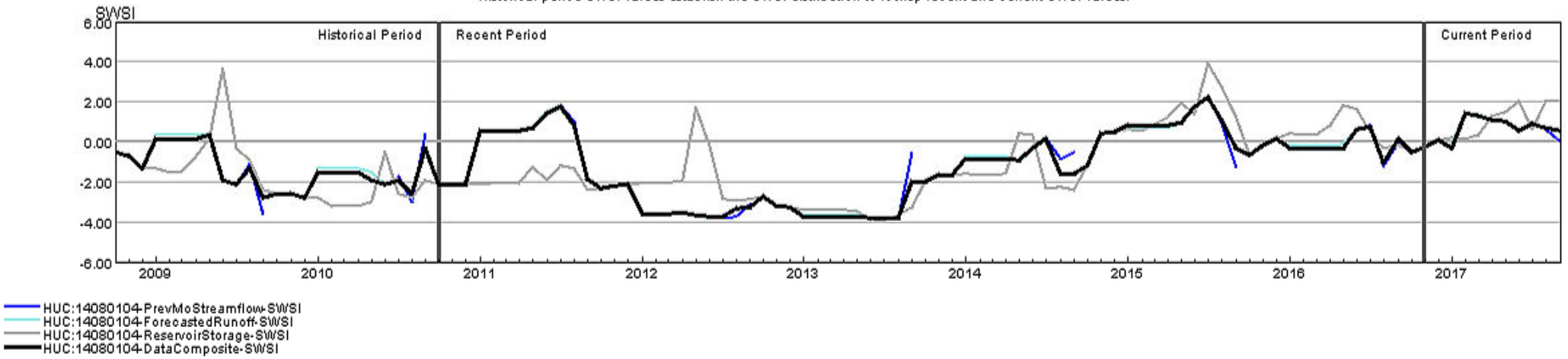
HUC 14080104 (Animas) Surface Water Supply

Monthly component volumes



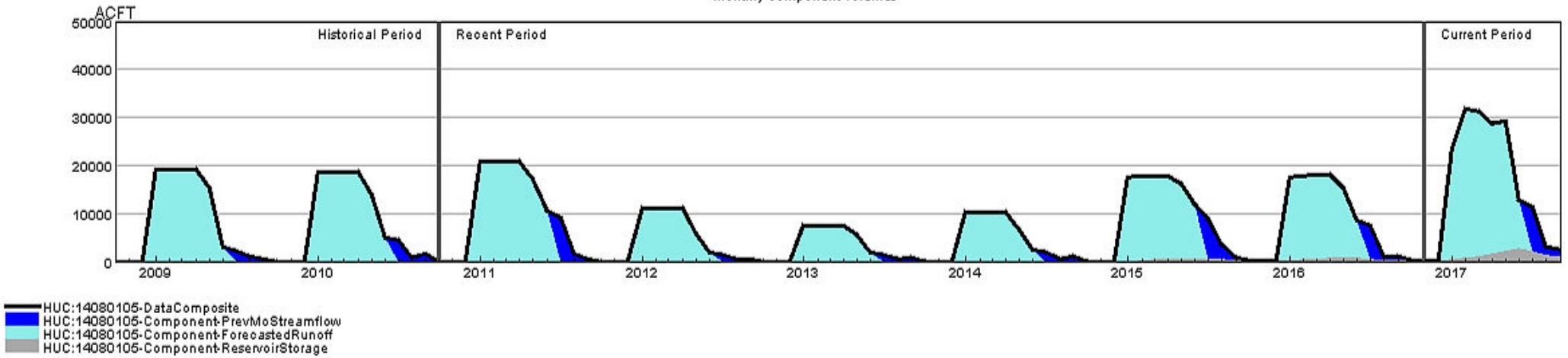
HUC 14080104 (Animas) SWSI

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



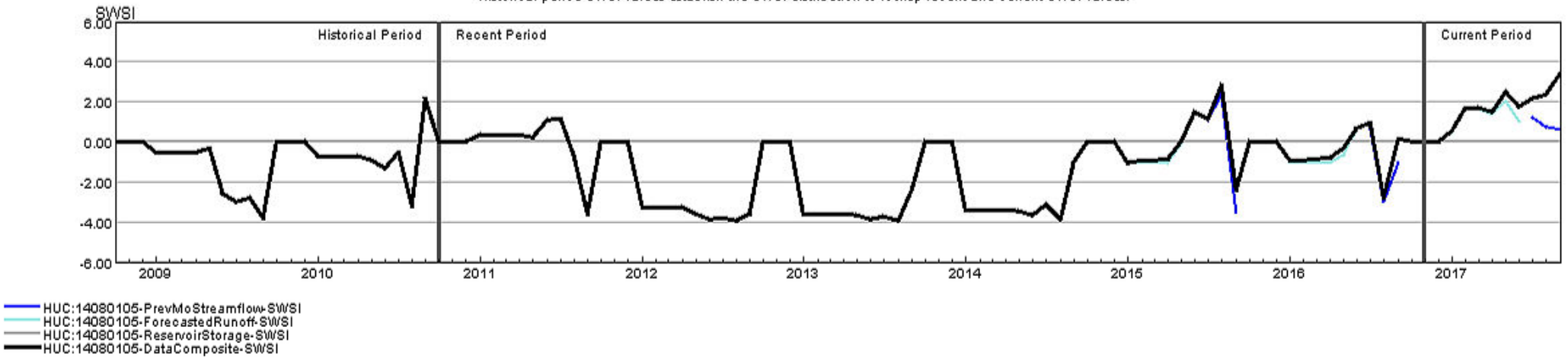
HUC 14080105 (Middle San Juan) Surface Water Supply

Monthly component volumes



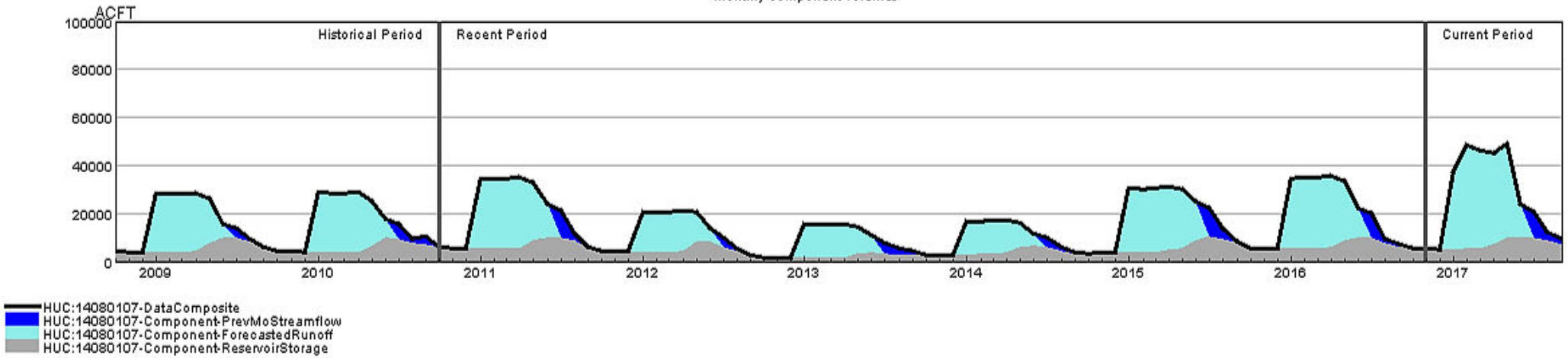
HUC 14080105 (Middle San Juan) SWSI

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



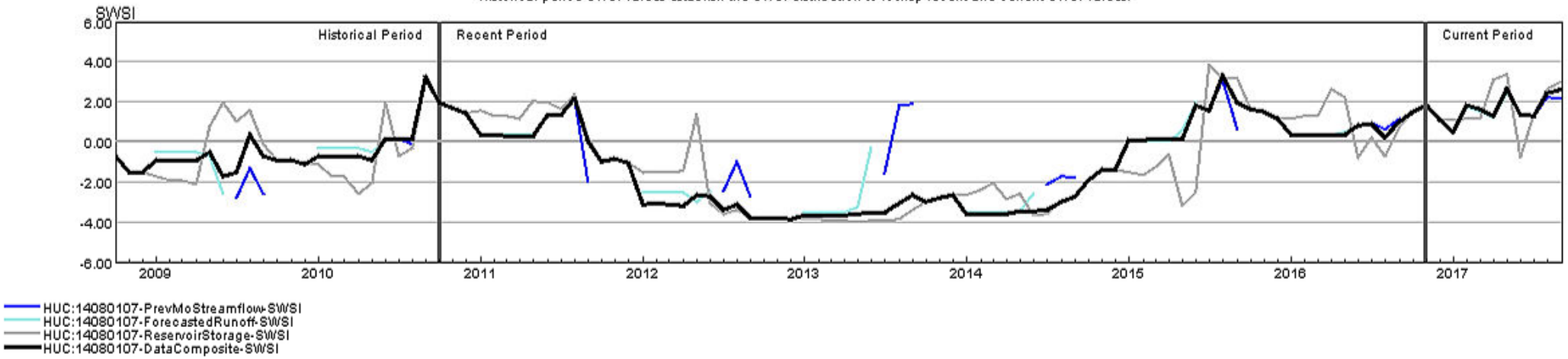
HUC 14080107 (Mancos) Surface Water Supply

Monthly component volumes



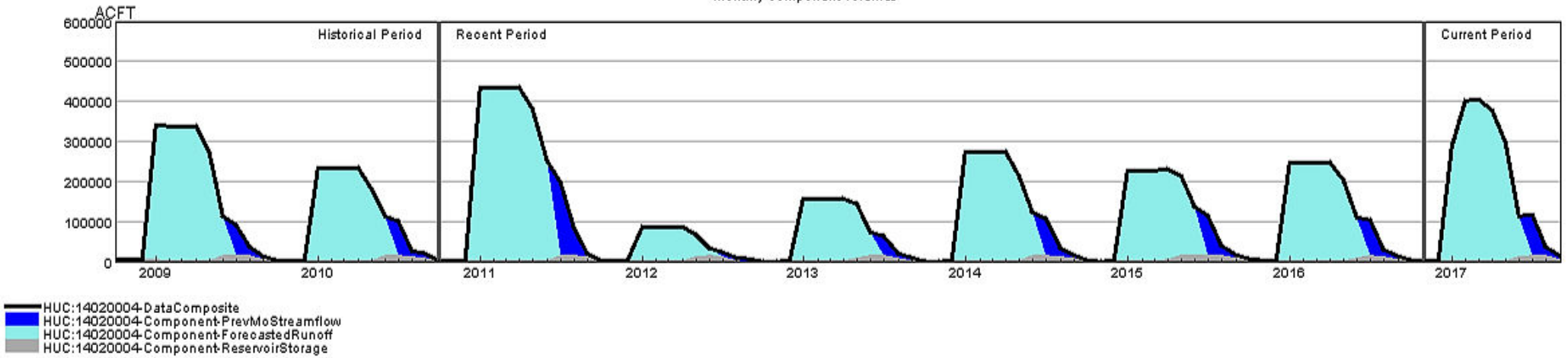
HUC 14080107 (Mancos) SWSI

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



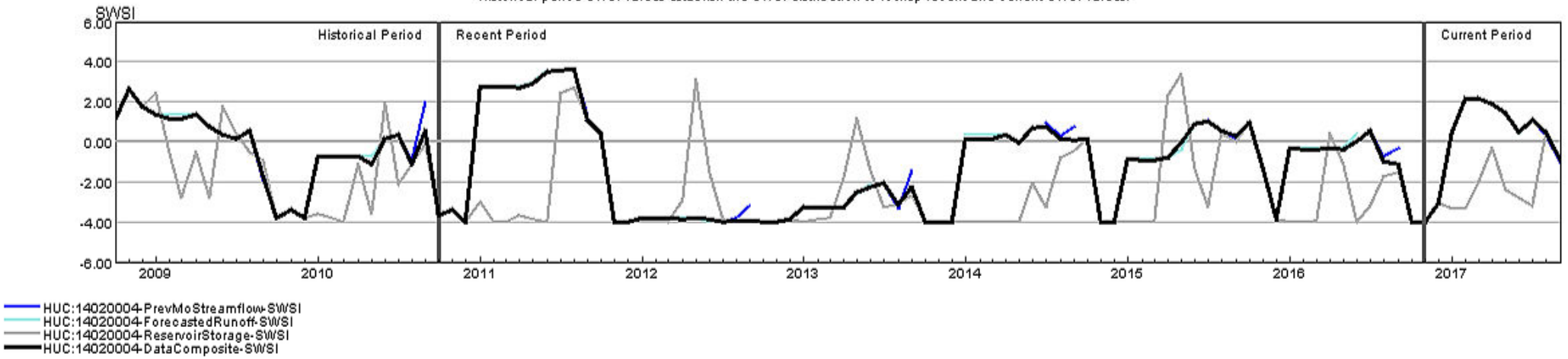
HUC 14020004 (North Fork Gunnison) Surface Water Supply

Monthly component volumes



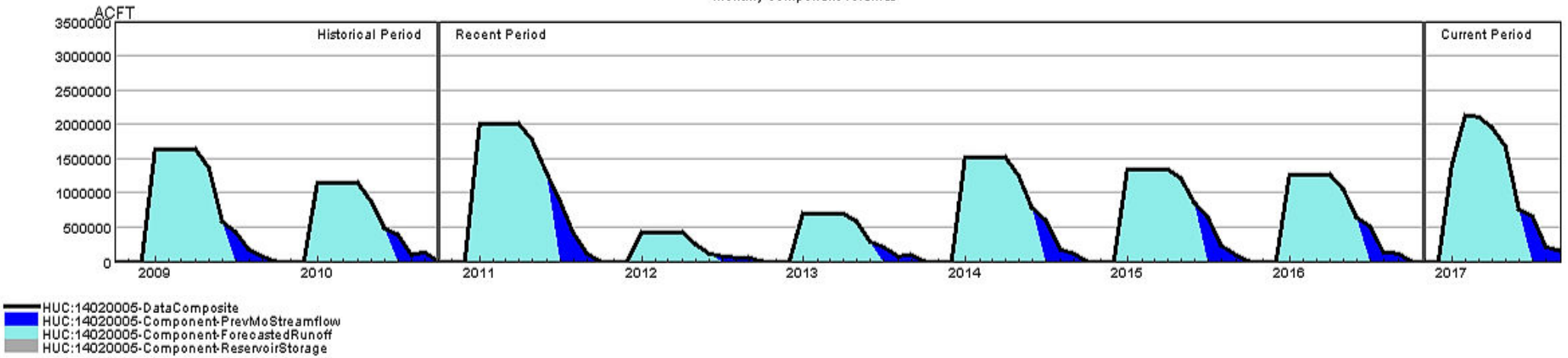
HUC 14020004 (North Fork Gunnison) SWSI

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



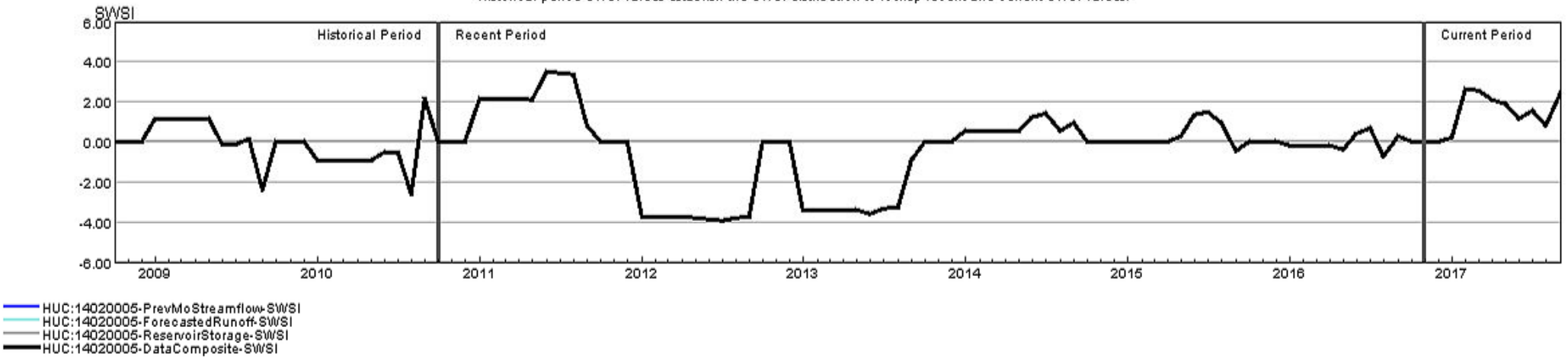
HUC 14020005 (Lower Gunnison) Surface Water Supply

Monthly component volumes



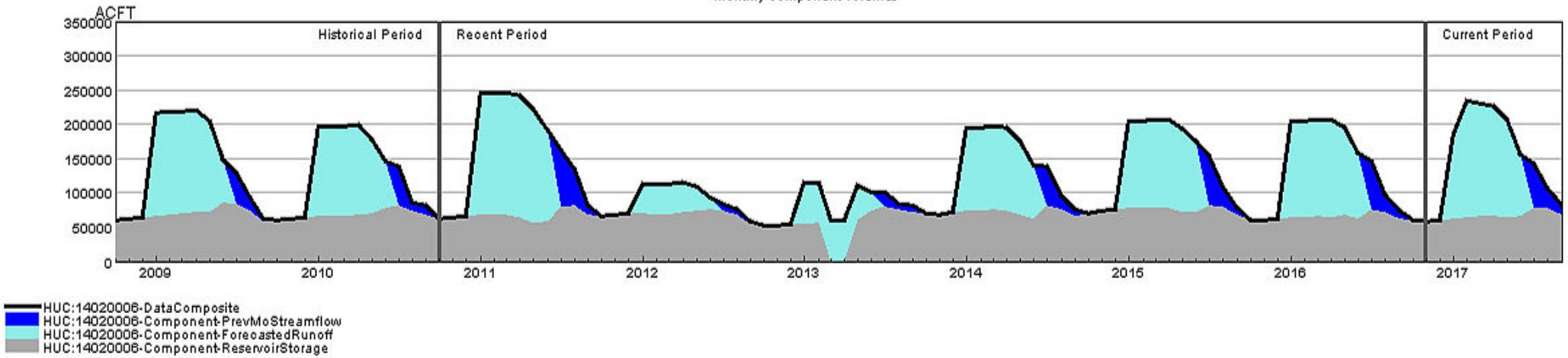
HUC 14020005 (Lower Gunnison) SWSI

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



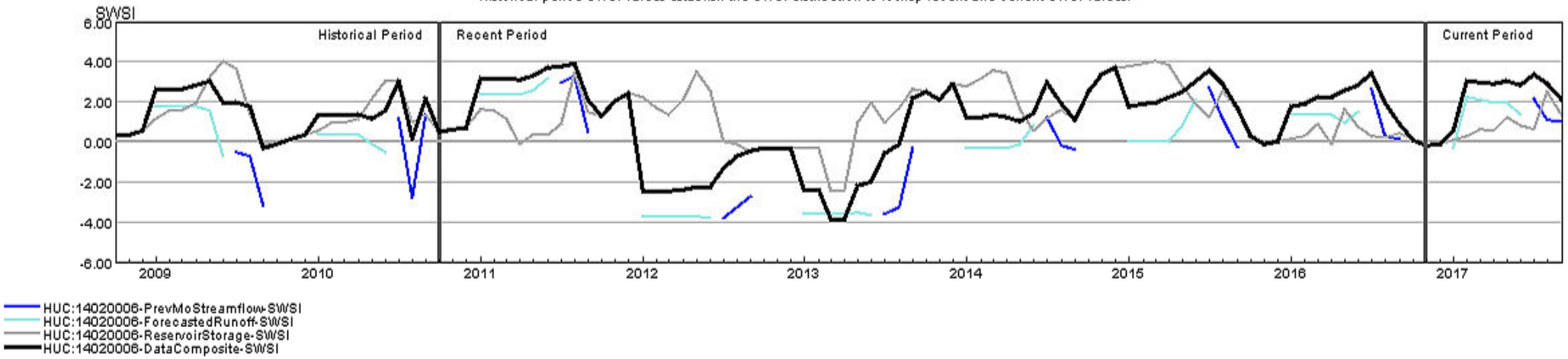
HUC 14020006 (Uncompahgre) Surface Water Supply

Monthly component volumes



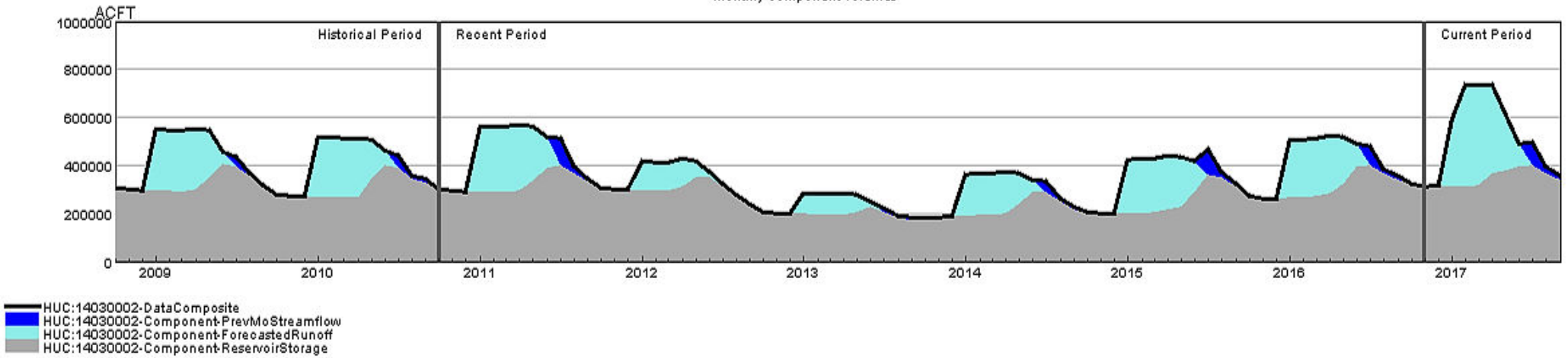
HUC 14020006 (Uncompahgre) SWSI

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



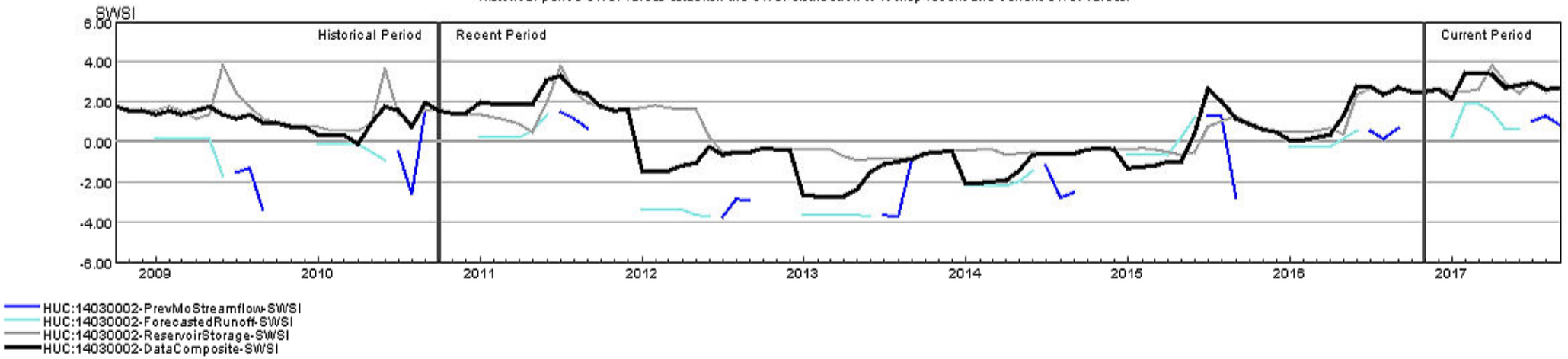
HUC 14030002 (Upper Dolores) Surface Water Supply

Monthly component volumes



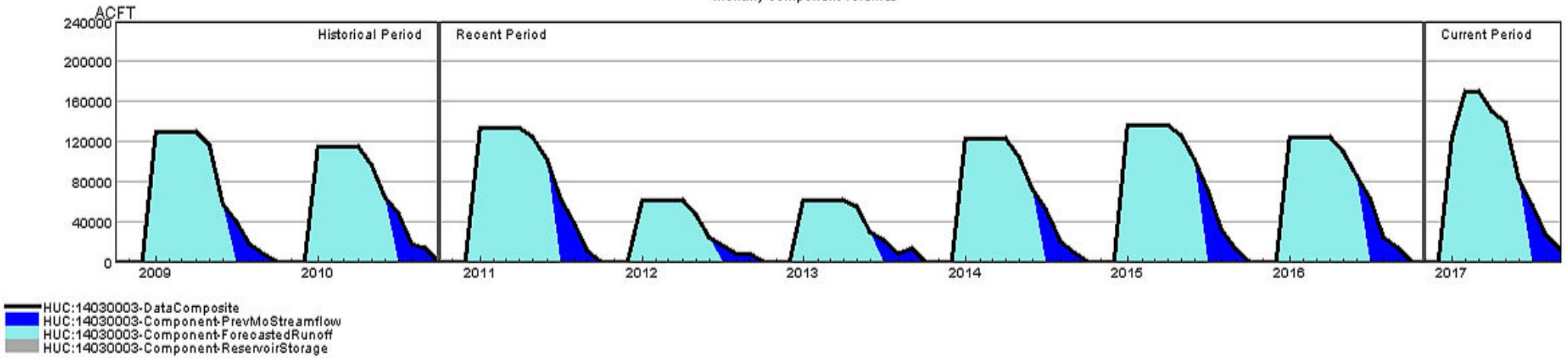
HUC 14030002 (Upper Dolores) SWSI

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



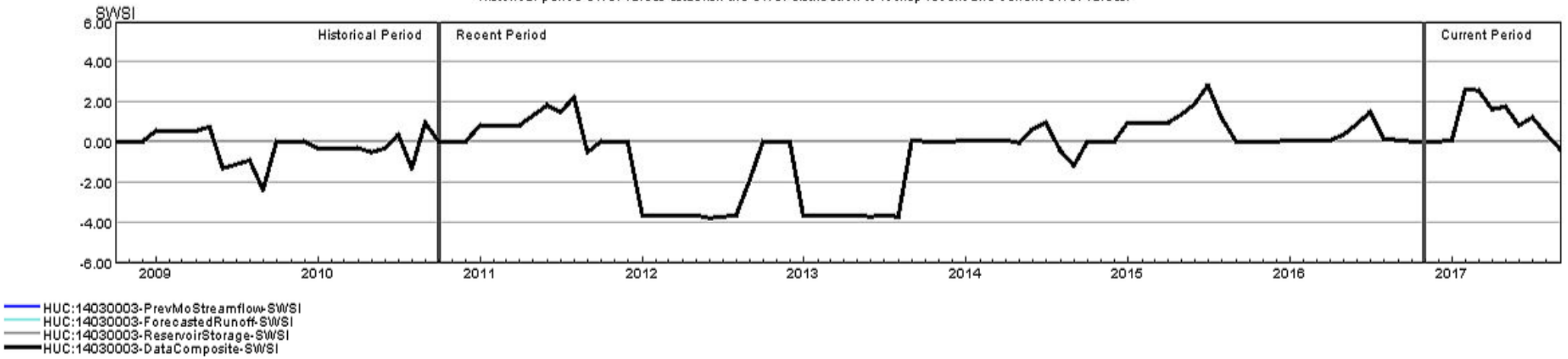
HUC 14030003 (San Miguel) Surface Water Supply

Monthly component volumes



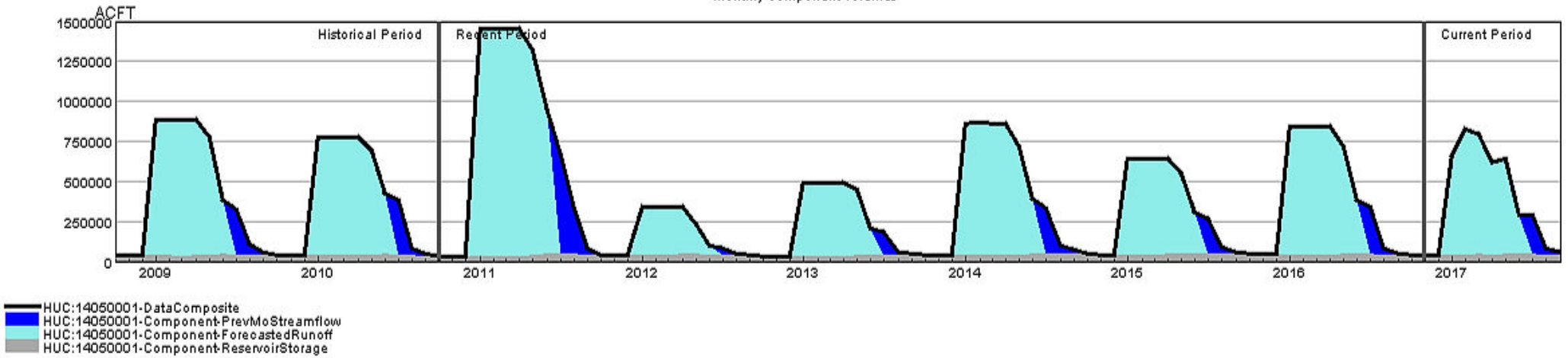
HUC 14030003 (San Miguel) SWSI

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



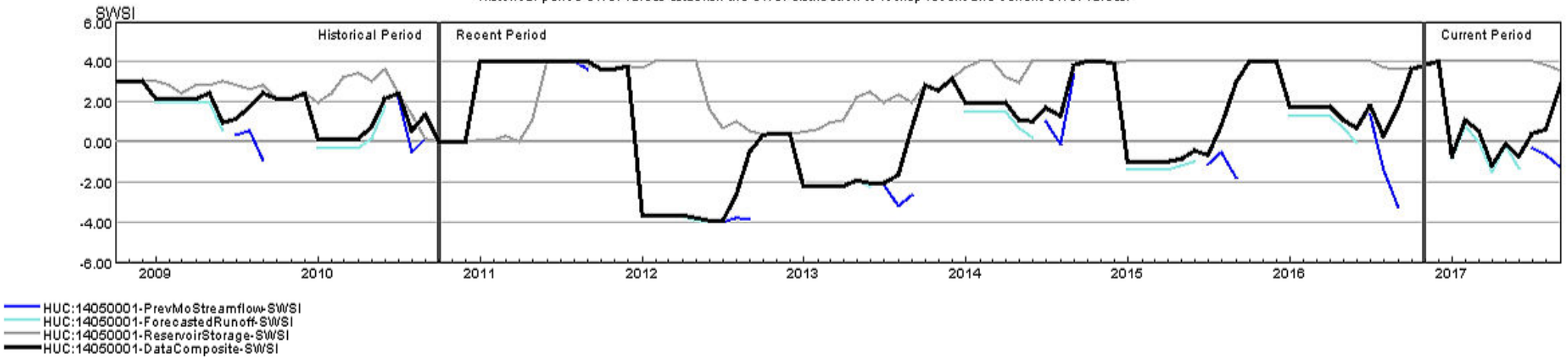
HUC 14050001 (Upper Yampa) Surface Water Supply

Monthly component volumes



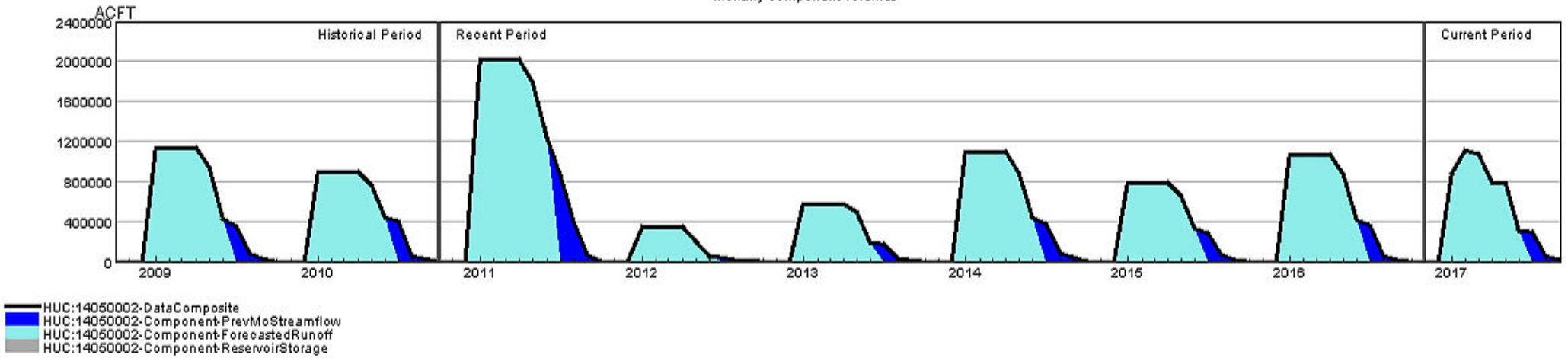
HUC 14050001 (Upper Yampa) SWSI

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



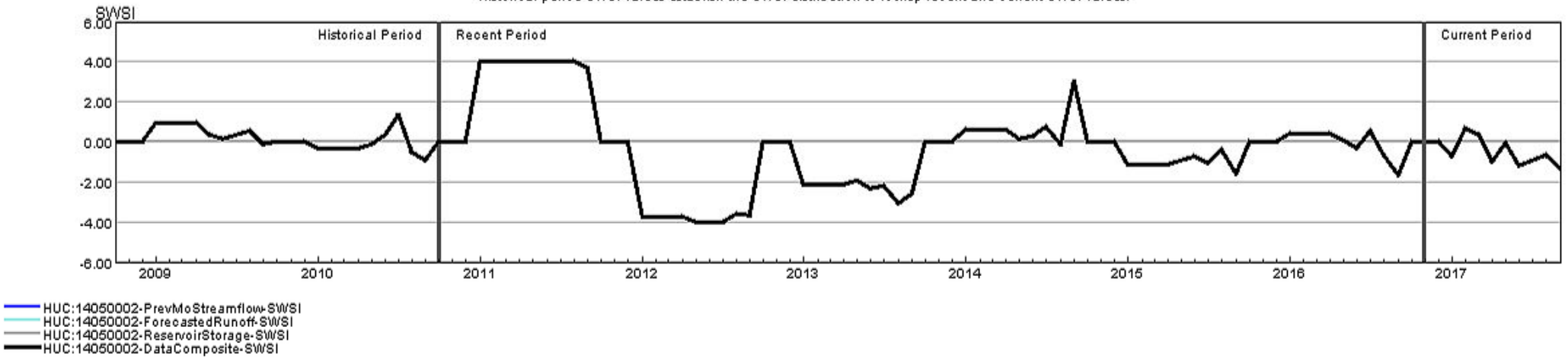
HUC 14050002 (Lower Yampa) Surface Water Supply

Monthly component volumes



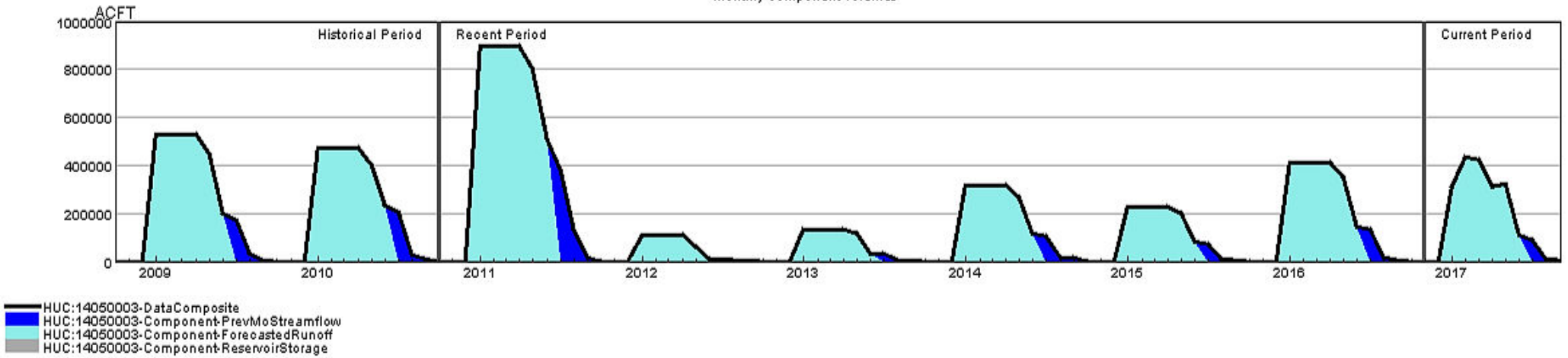
HUC 14050002 (Lower Yampa) SWSI

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



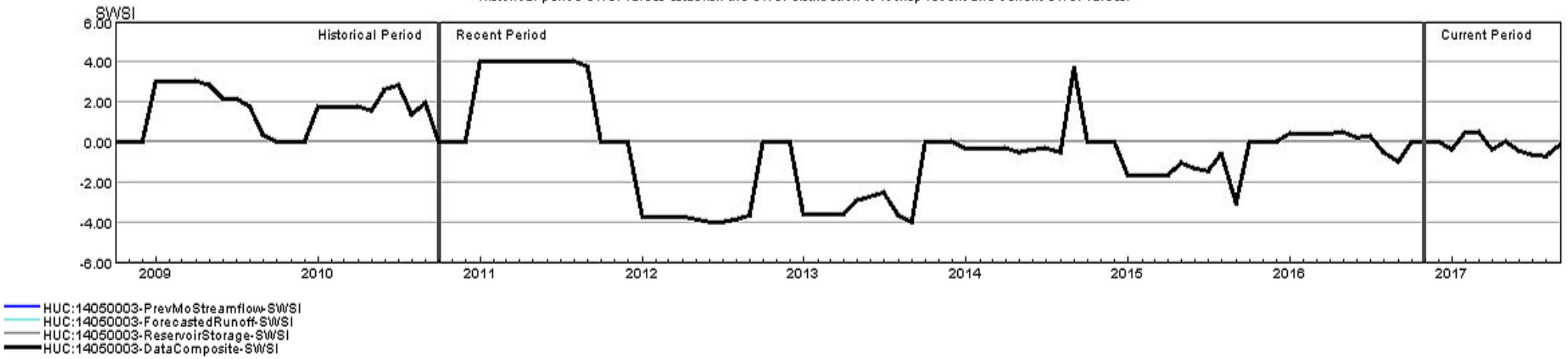
HUC 14050003 (Little Snake) Surface Water Supply

Monthly component volumes



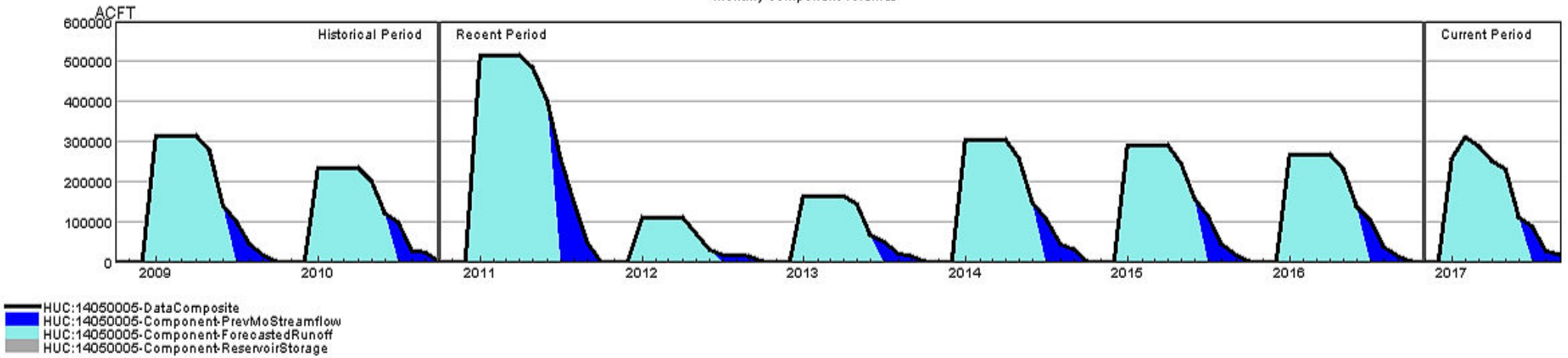
HUC 14050003 (Little Snake) SWSI

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



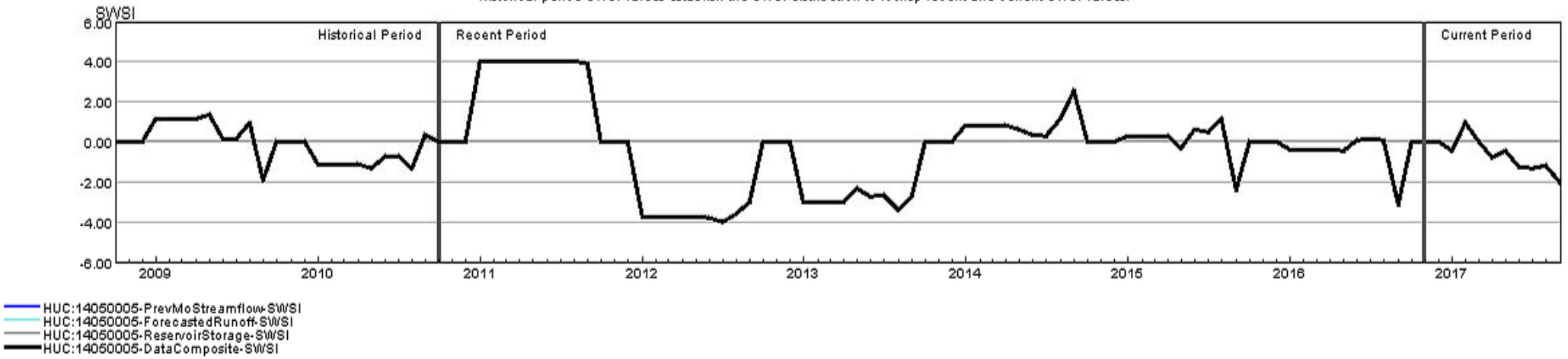
HUC 14050005 (Upper White) Surface Water Supply

Monthly component volumes



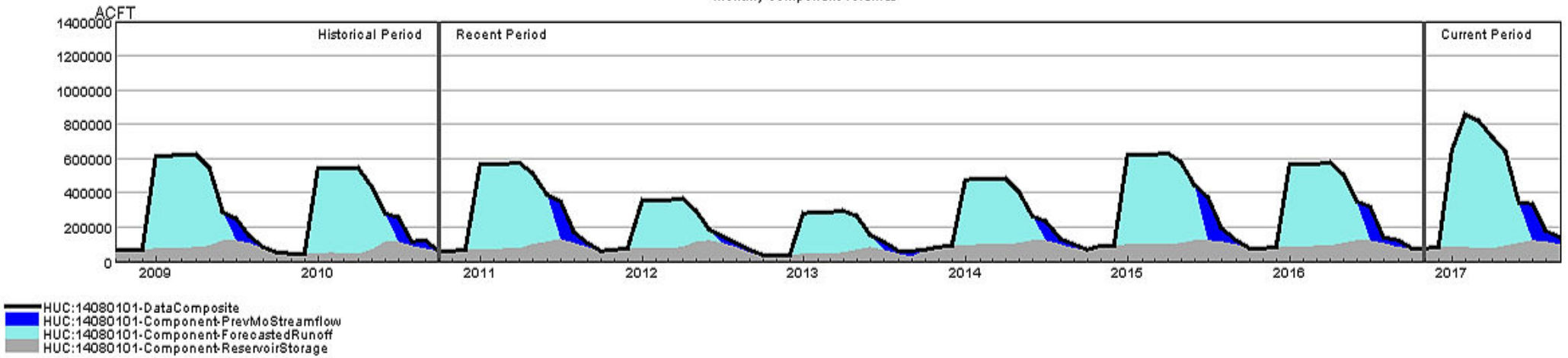
HUC 14050005 (Upper White) SWSI

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



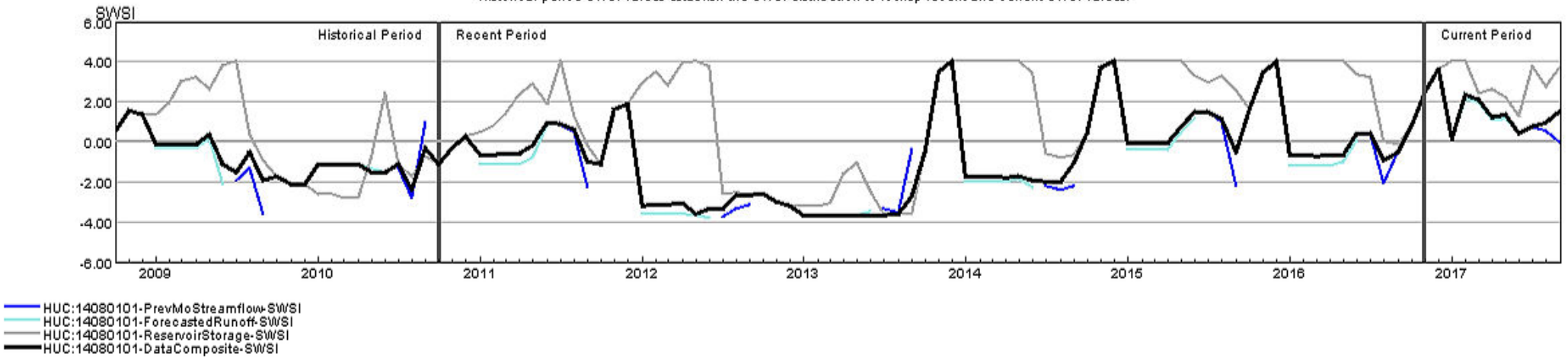
HUC 14080101 (Upper San Juan) Surface Water Supply

Monthly component volumes



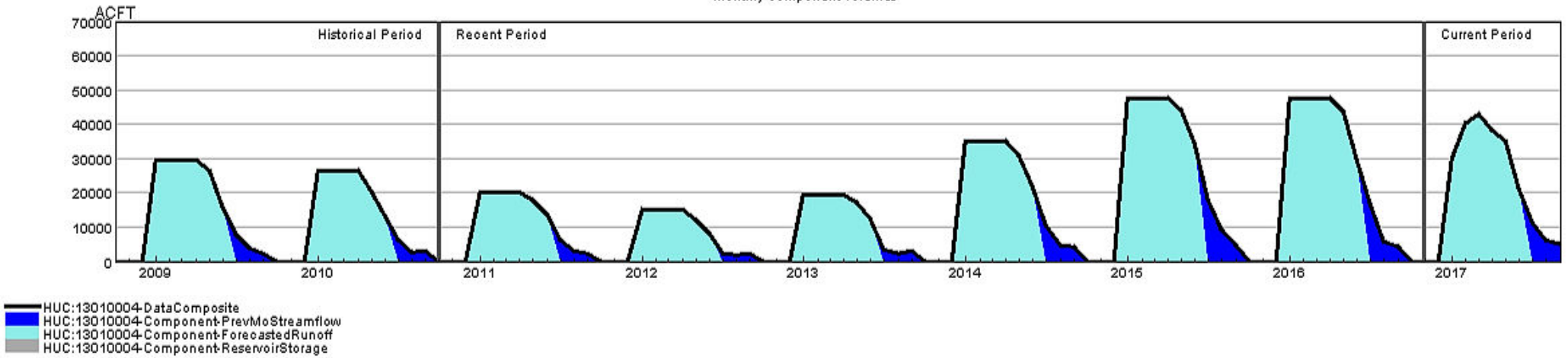
HUC 14080101 (Upper San Juan) SWSI

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



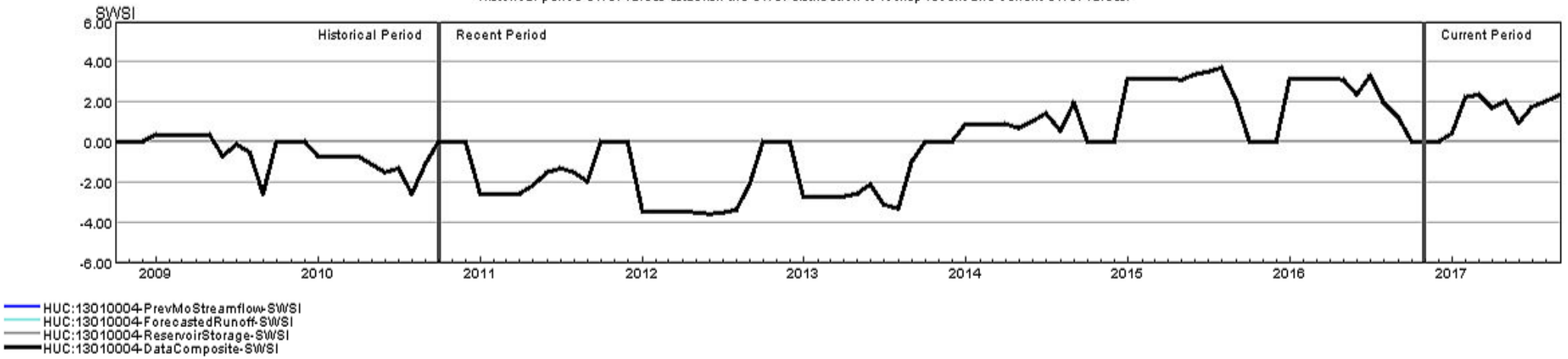
HUC 13010004 (Saguache) Surface Water Supply

Monthly component volumes



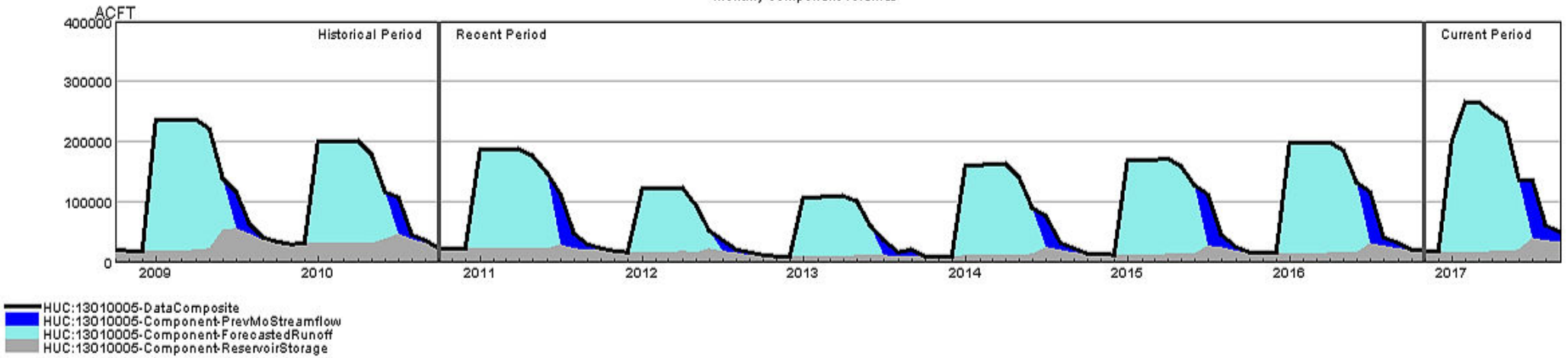
HUC 13010004 (Saguache) SWSI

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



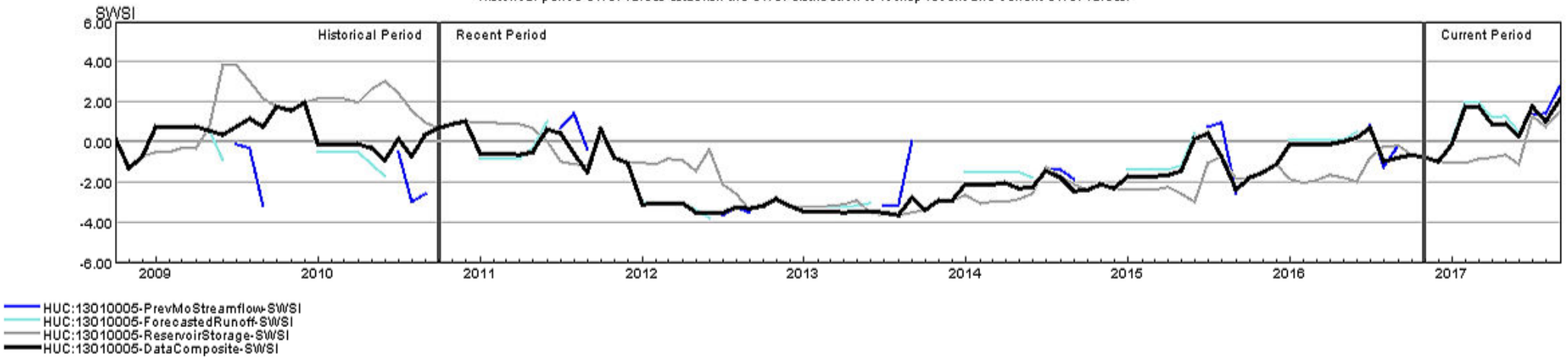
HUC 13010005 (Conejos) Surface Water Supply

Monthly component volumes



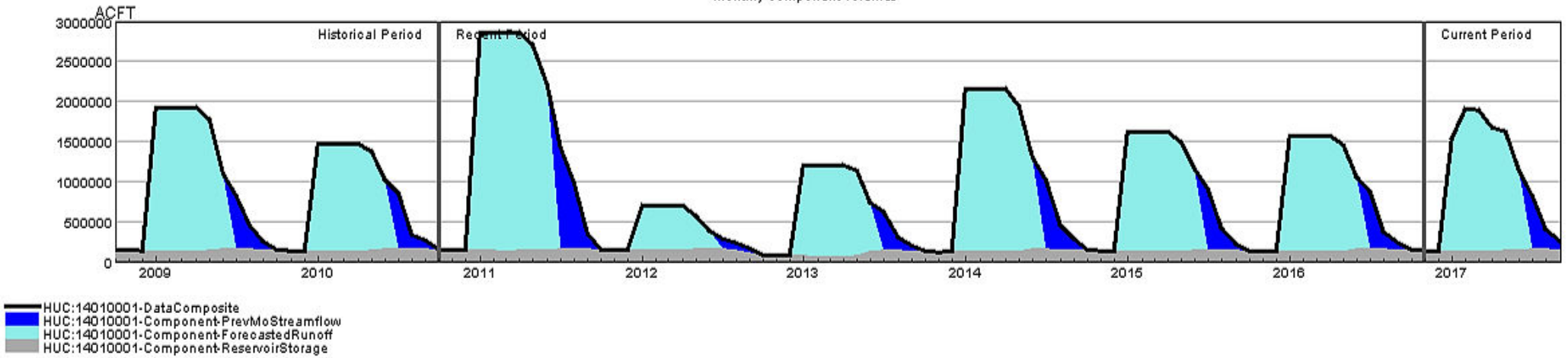
HUC 13010005 (Conejos) SWSI

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



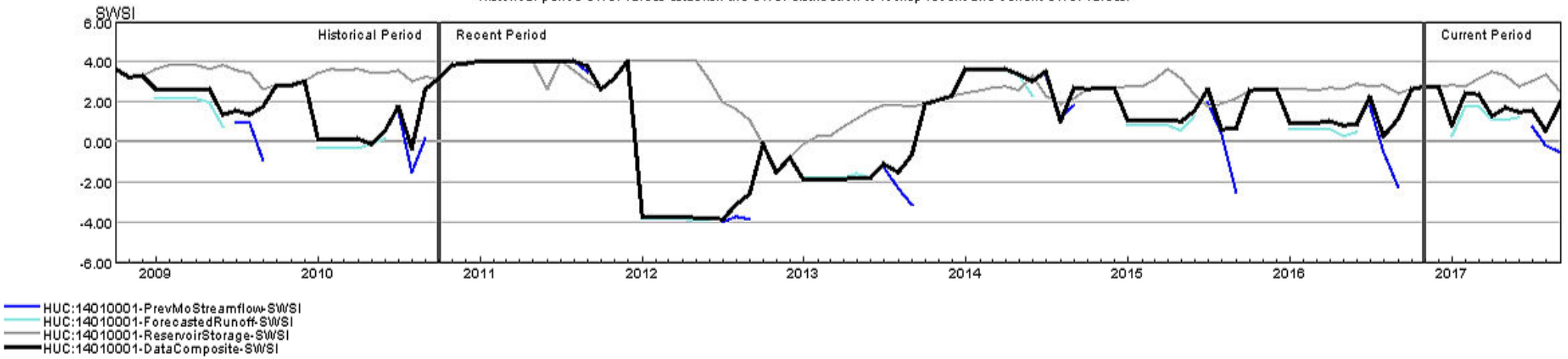
HUC 14010001 (Colorado Headwaters) Surface Water Supply

Monthly component volumes



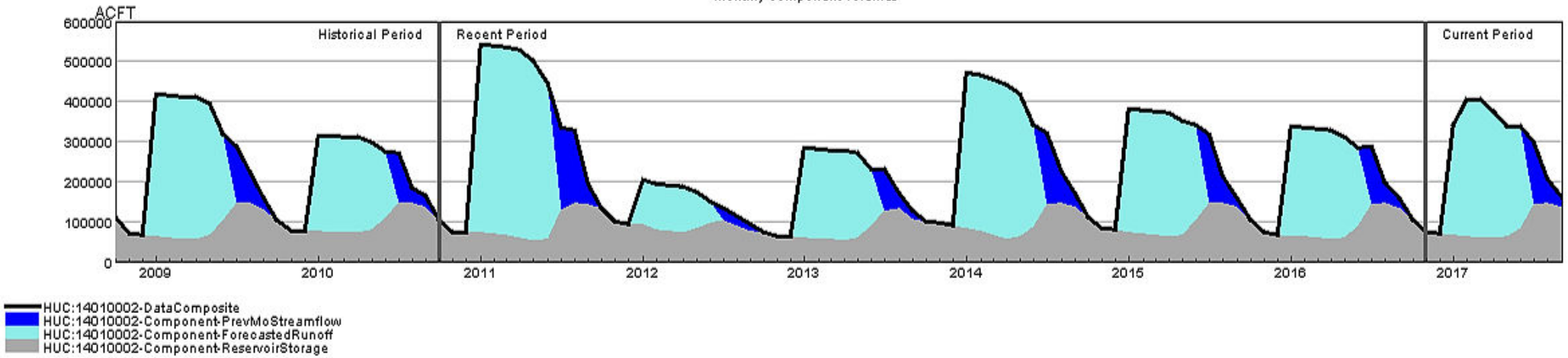
HUC 14010001 (Colorado Headwaters) SWSI

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



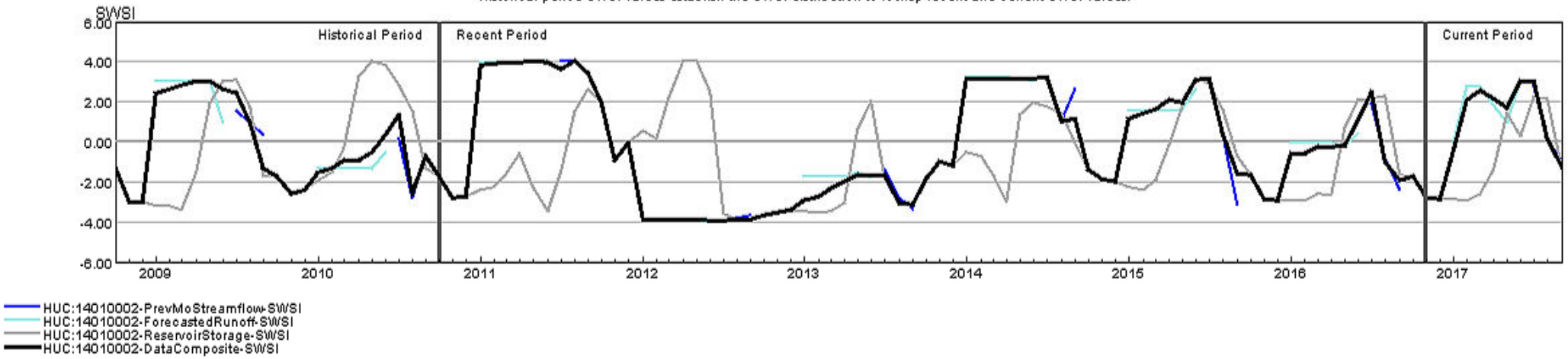
HUC 14010002 (Blue) Surface Water Supply

Monthly component volumes



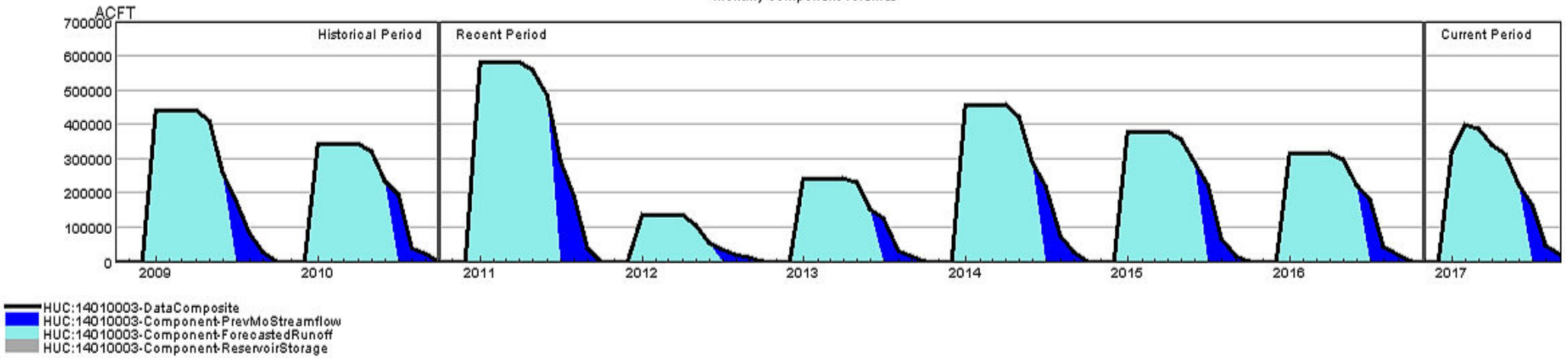
HUC 14010002 (Blue) SWSI

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



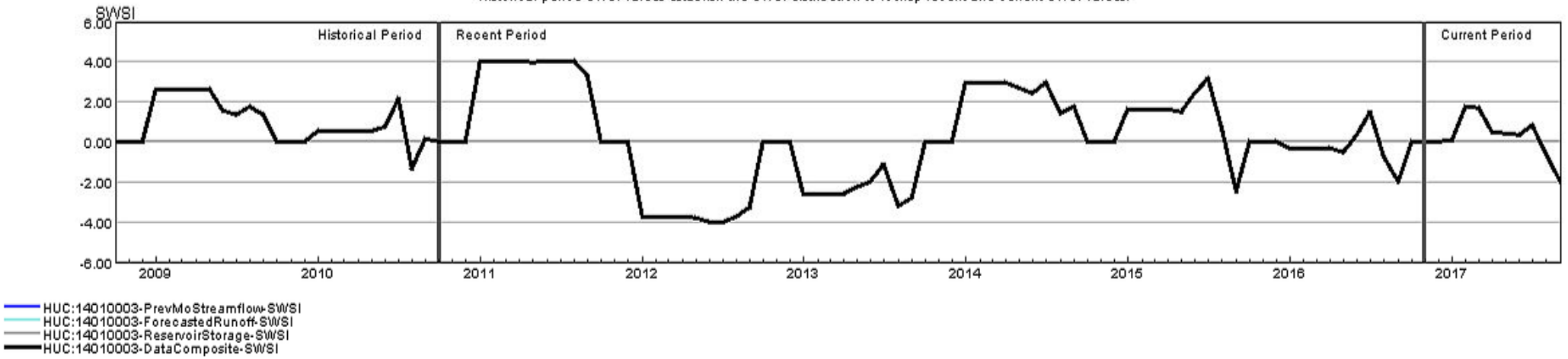
HUC 14010003 (Eagle) Surface Water Supply

Monthly component volumes



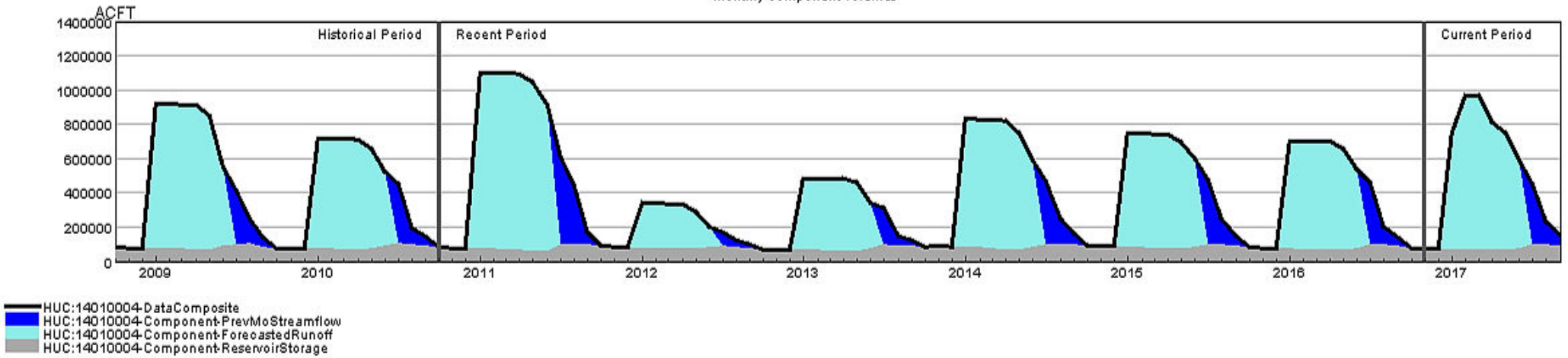
HUC 14010003 (Eagle) SWSI

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



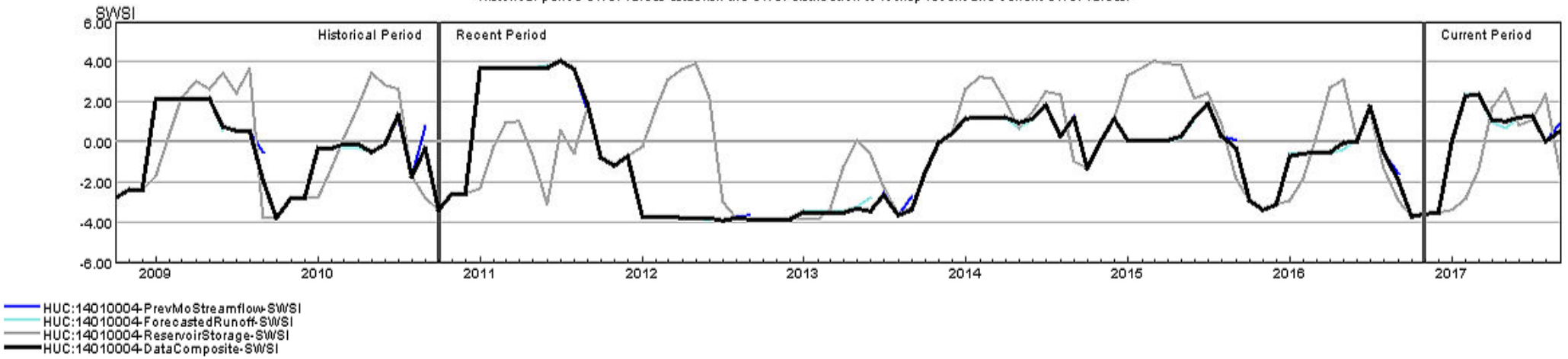
HUC 14010004 (Roaring Fork) Surface Water Supply

Monthly component volumes



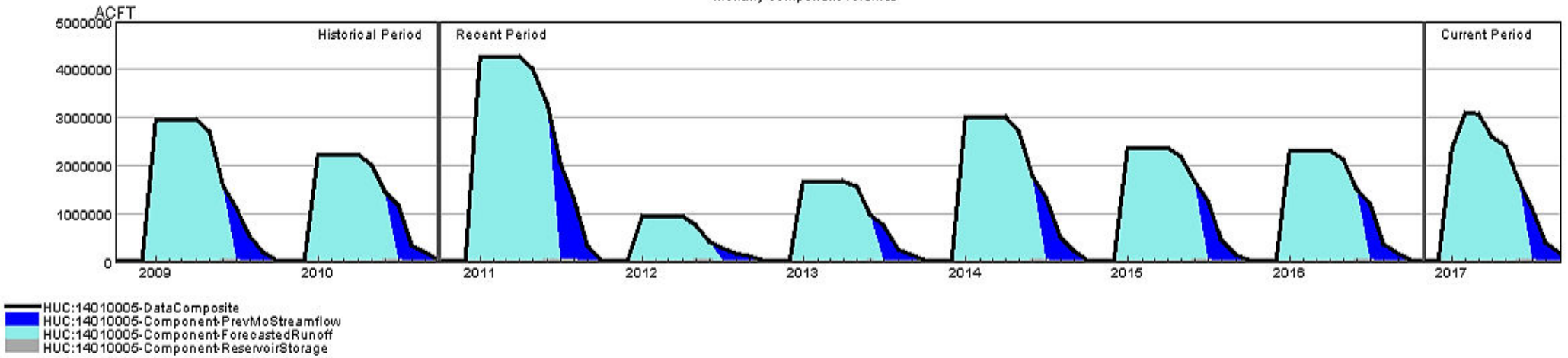
HUC 14010004 (Roaring Fork) SWSI

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



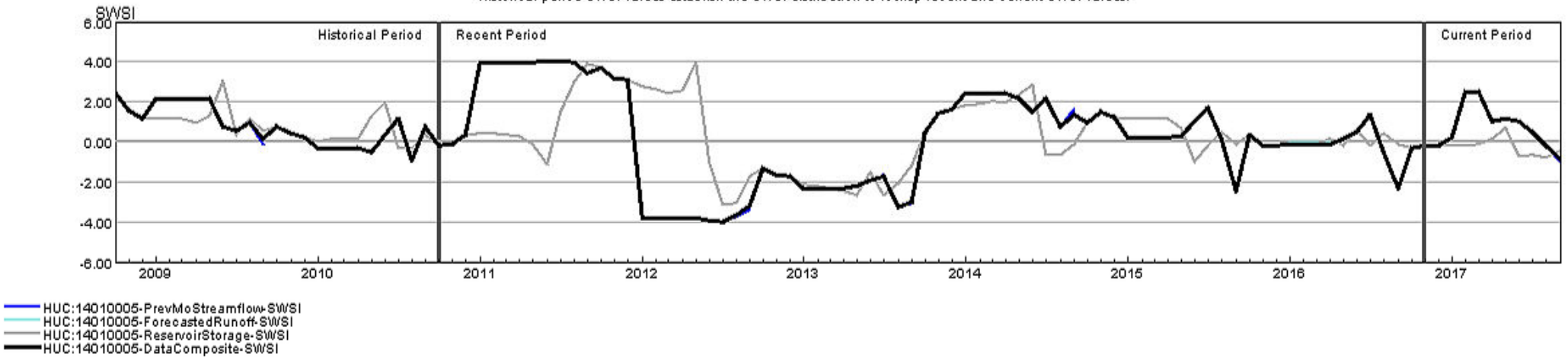
HUC 14010005 (Colorado Headwaters-Plateau) Surface Water Supply

Monthly component volumes



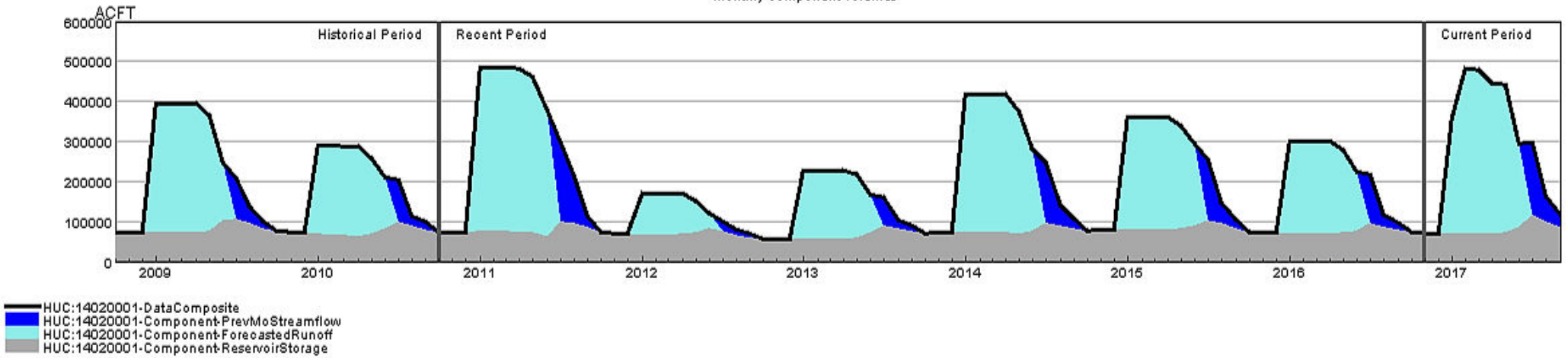
HUC 14010005 (Colorado Headwaters-Plateau) SWSI

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



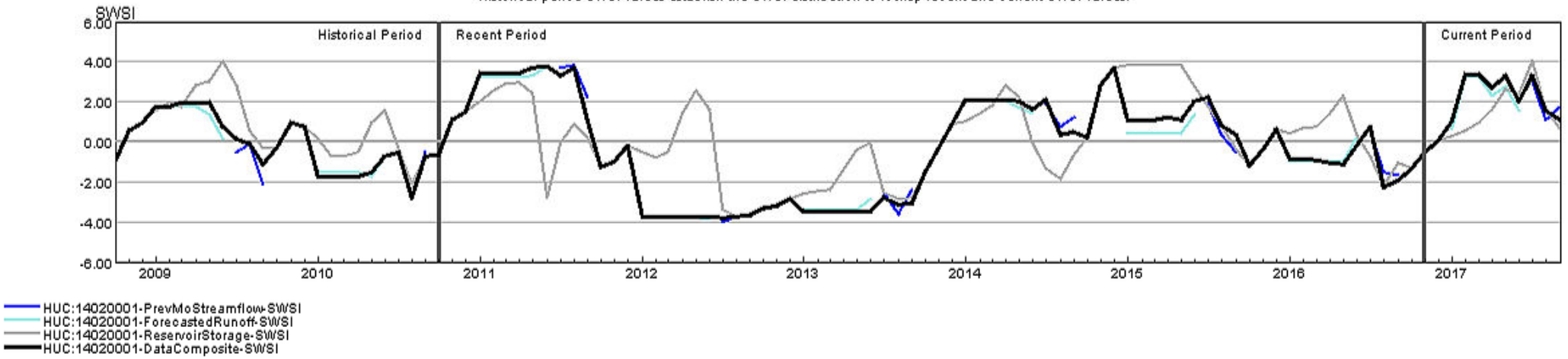
HUC 14020001 (East-Taylor) Surface Water Supply

Monthly component volumes



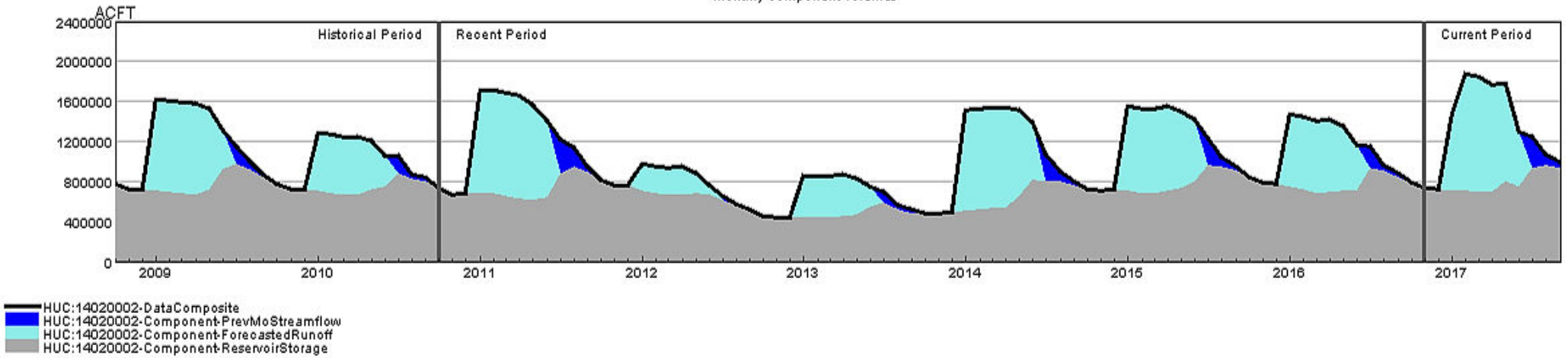
HUC 14020001 (East-Taylor) SWSI

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



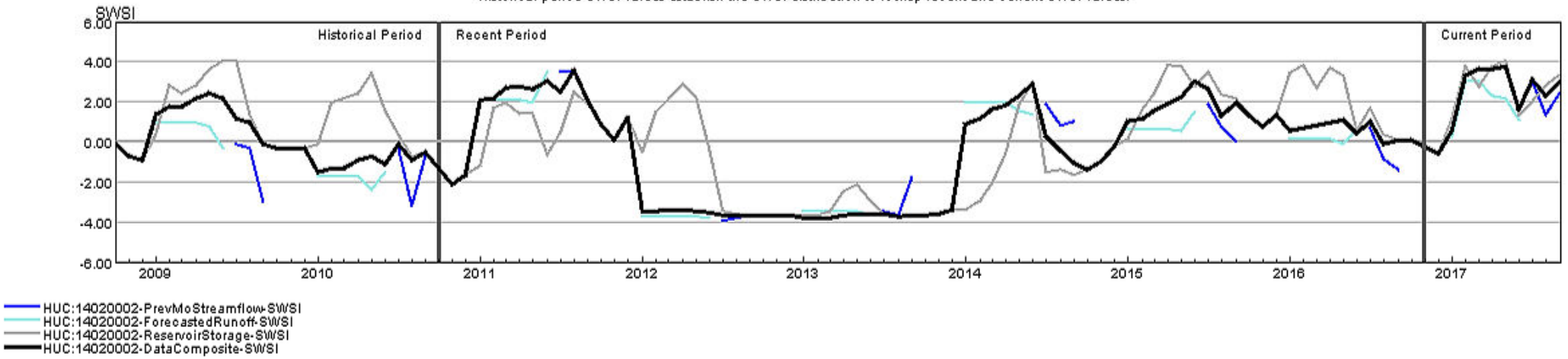
HUC 14020002 (Upper Gunnison) Surface Water Supply

Monthly component volumes



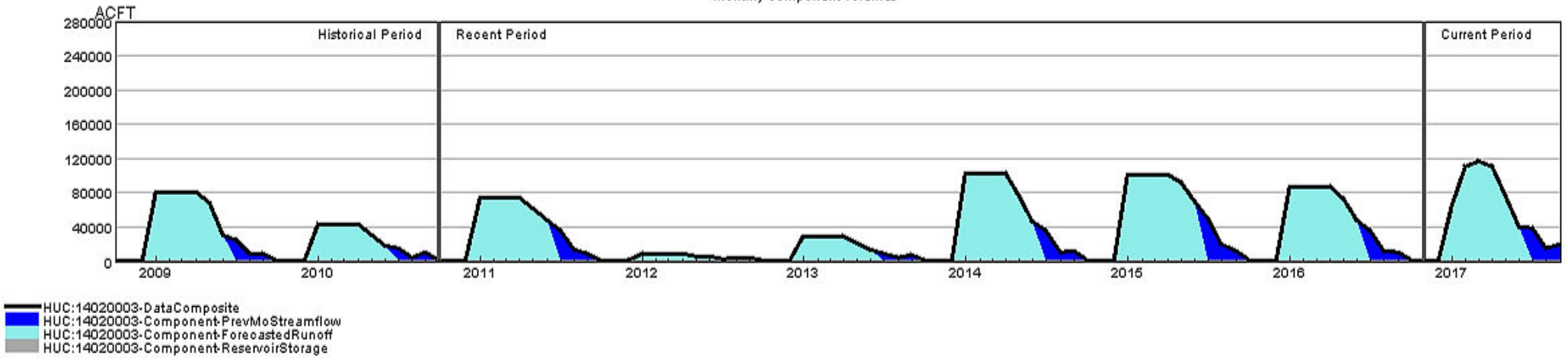
HUC 14020002 (Upper Gunnison) SWSI

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



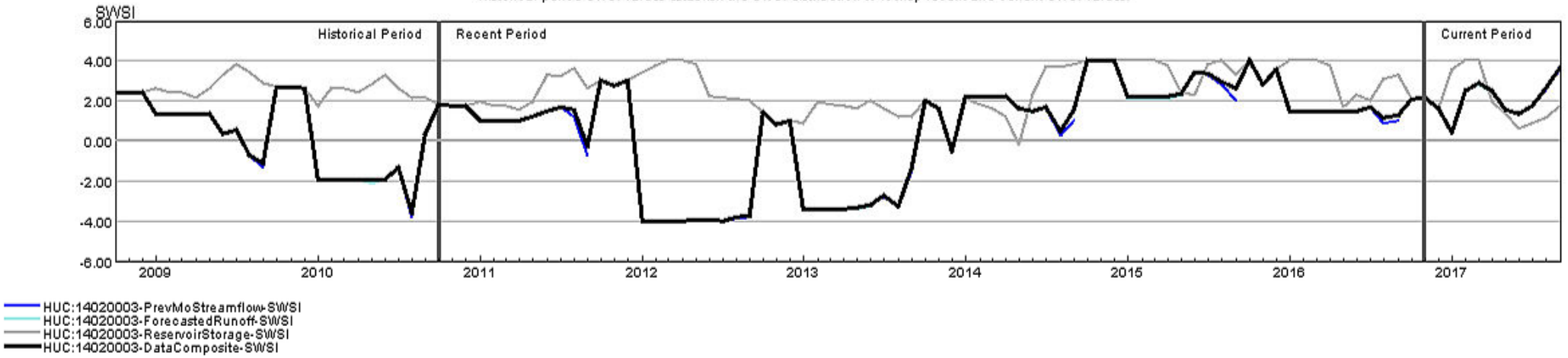
HUC 14020003 (Tomichi) Surface Water Supply

Monthly component volumes



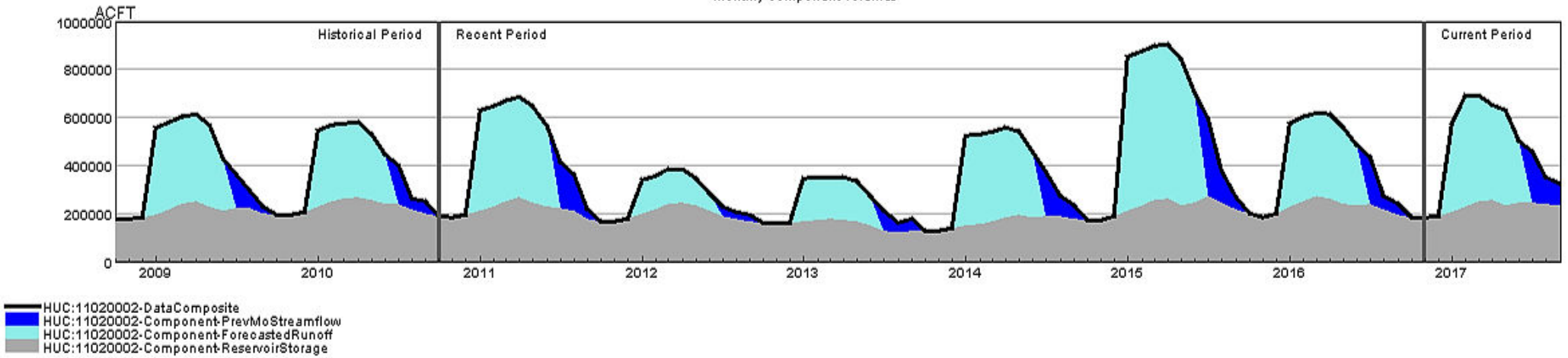
HUC 14020003 (Tomichi) SWSI

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



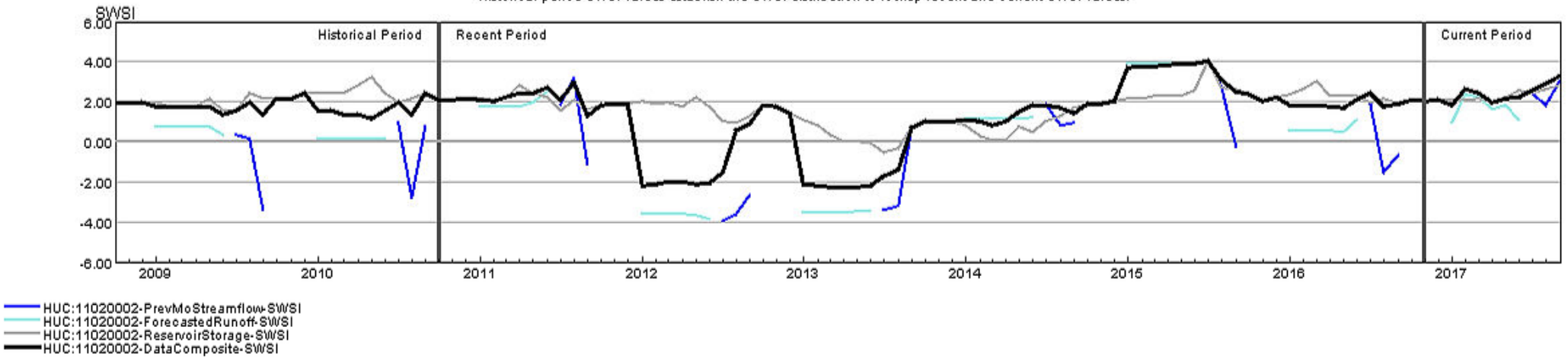
HUC 11020002 (Upper Arkansas) Surface Water Supply

Monthly component volumes



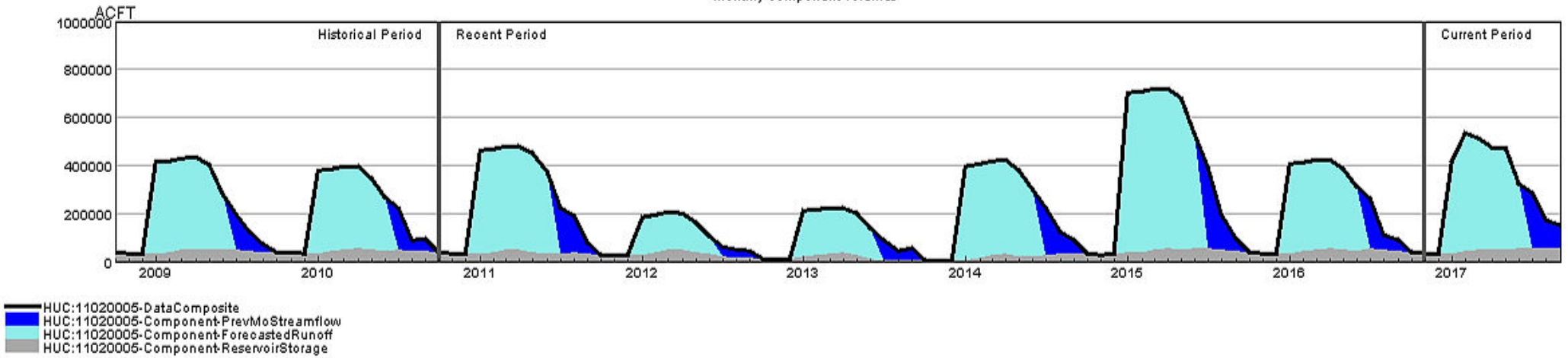
HUC 11020002 (Upper Arkansas) SWSI

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



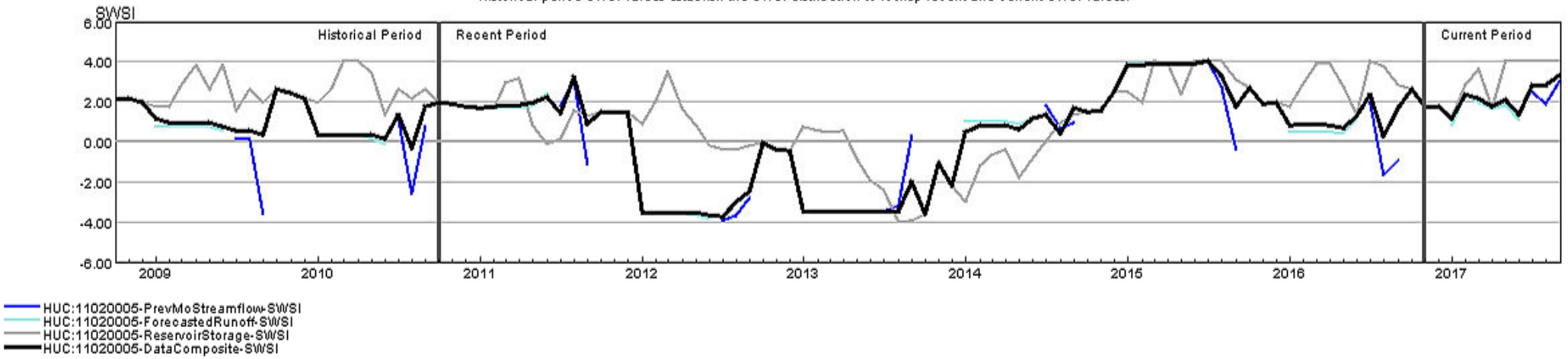
HUC 11020005 (Upper Arkansas-Lake Meredith) Surface Water Supply

Monthly component volumes



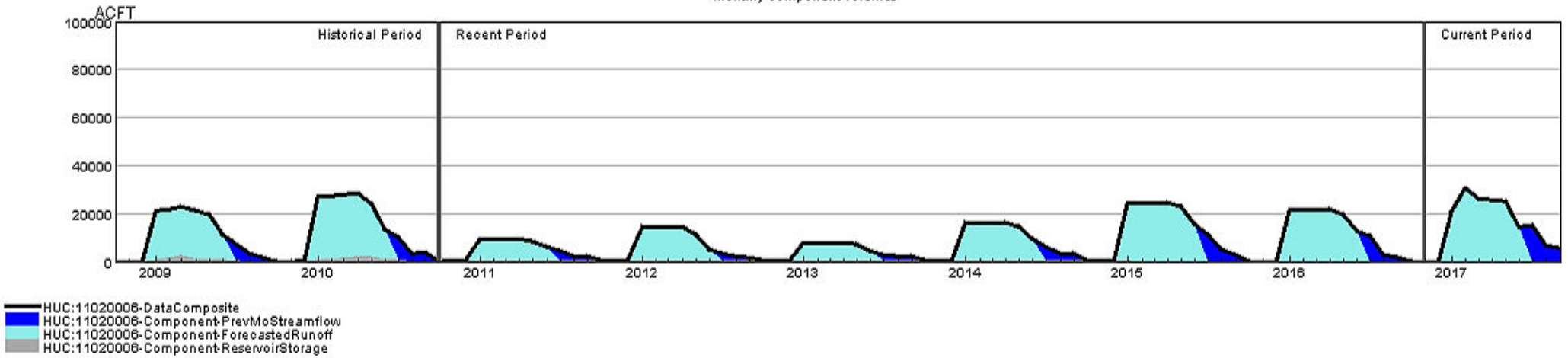
HUC 11020005 (Upper Arkansas-Lake Meredith) SWSI

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



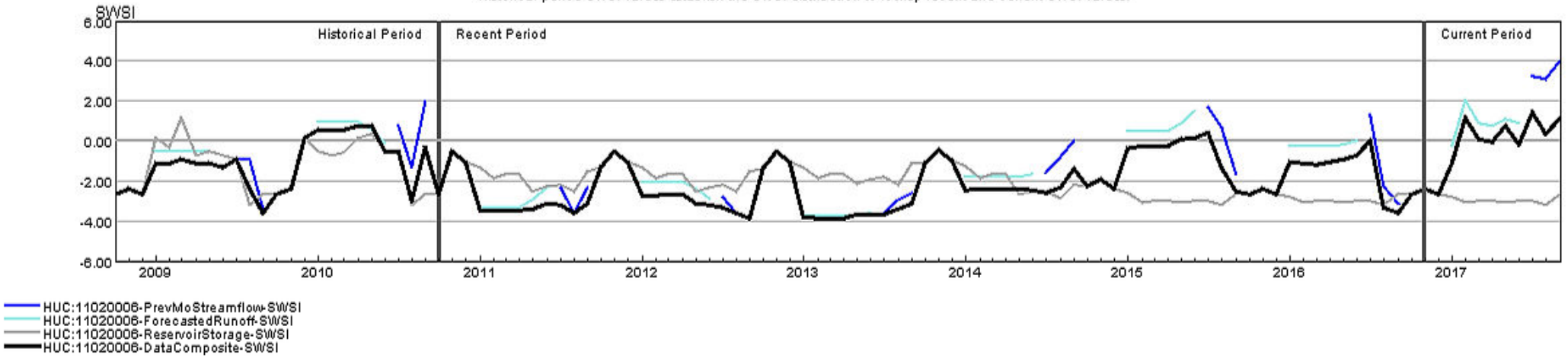
HUC 11020006 (Huerfano) Surface Water Supply

Monthly component volumes



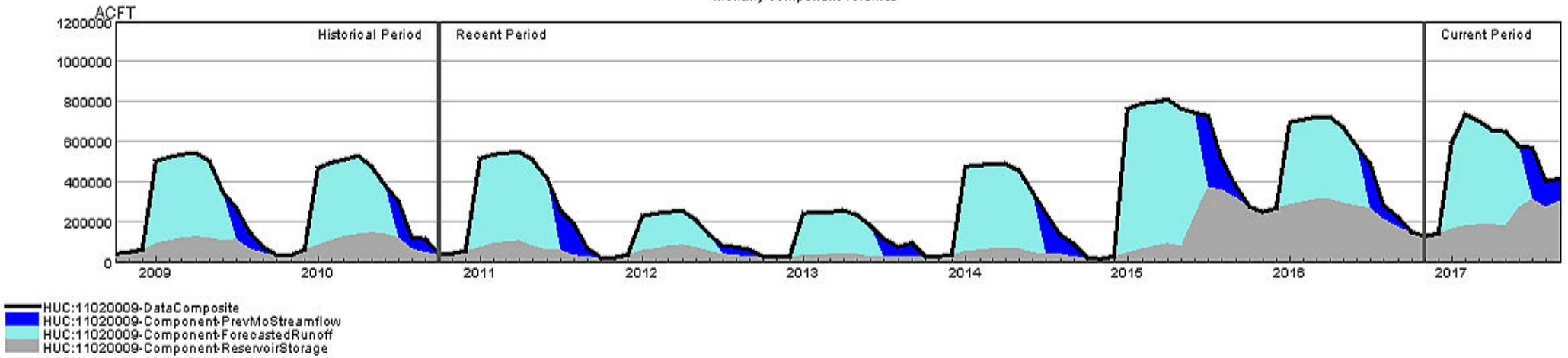
HUC 11020006 (Huerfano) SWSI

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



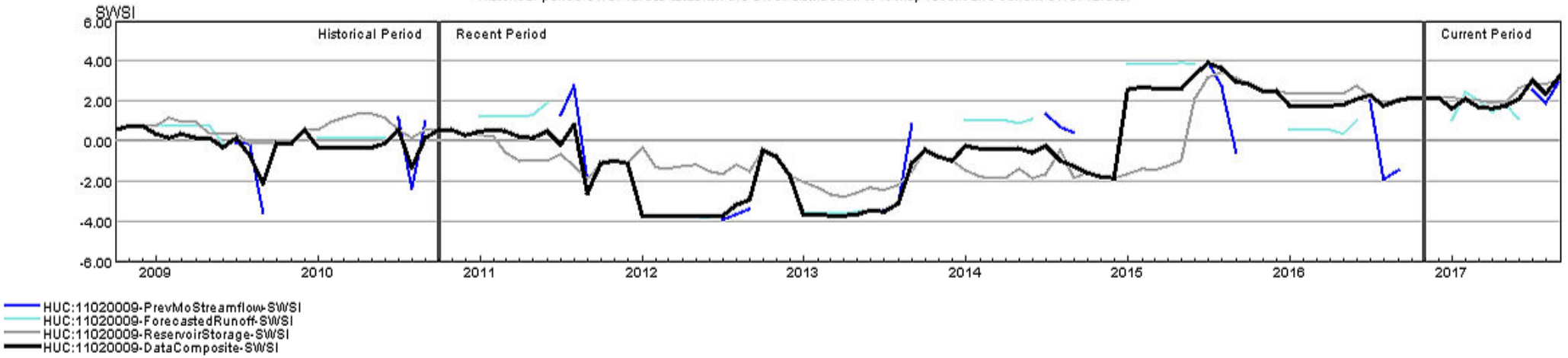
HUC 11020009 (Upper Arkansas-John Martin Reservoir) Surface Water Supply

Monthly component volumes



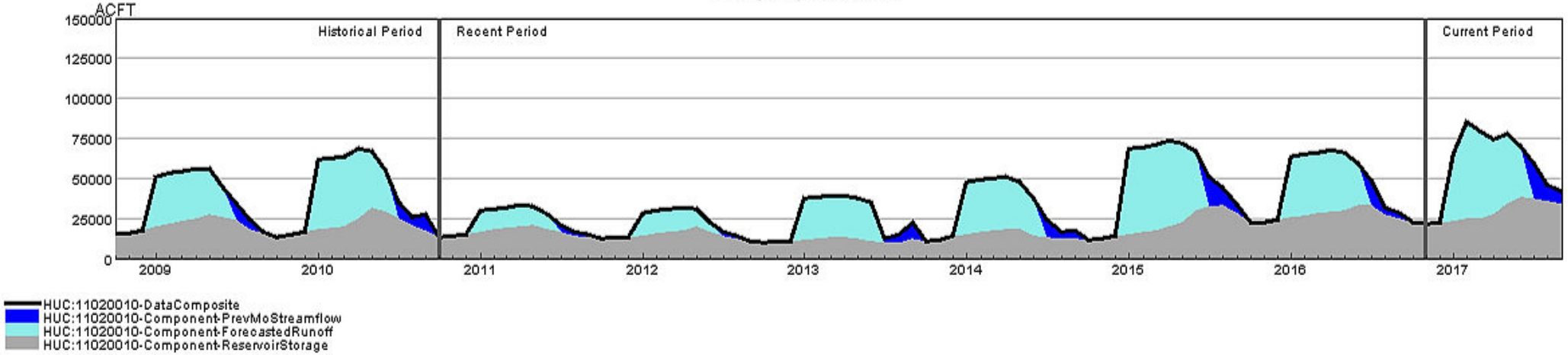
HUC 11020009 (Upper Arkansas-John Martin Reservoir) SWSI

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



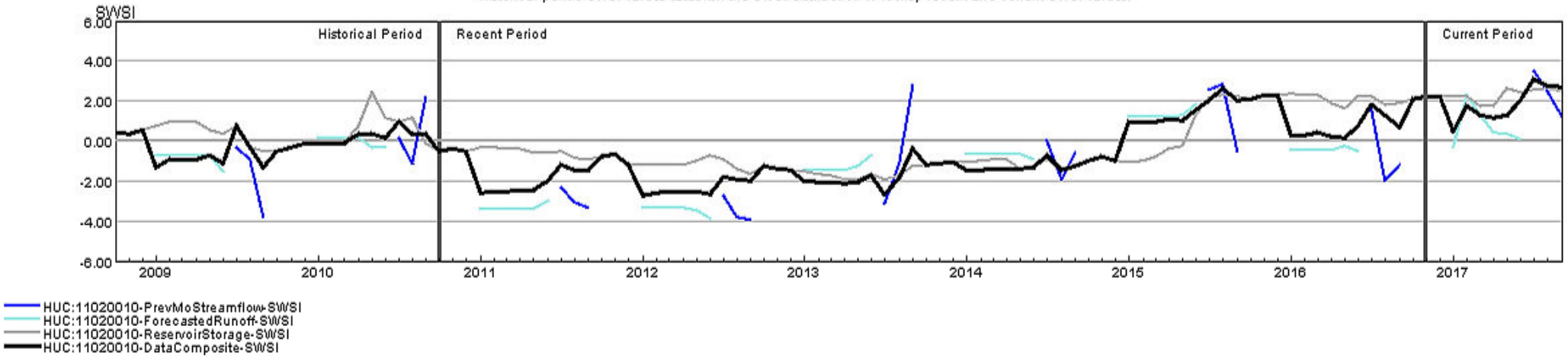
HUC 11020010 (Purgatoire) Surface Water Supply

Monthly component volumes



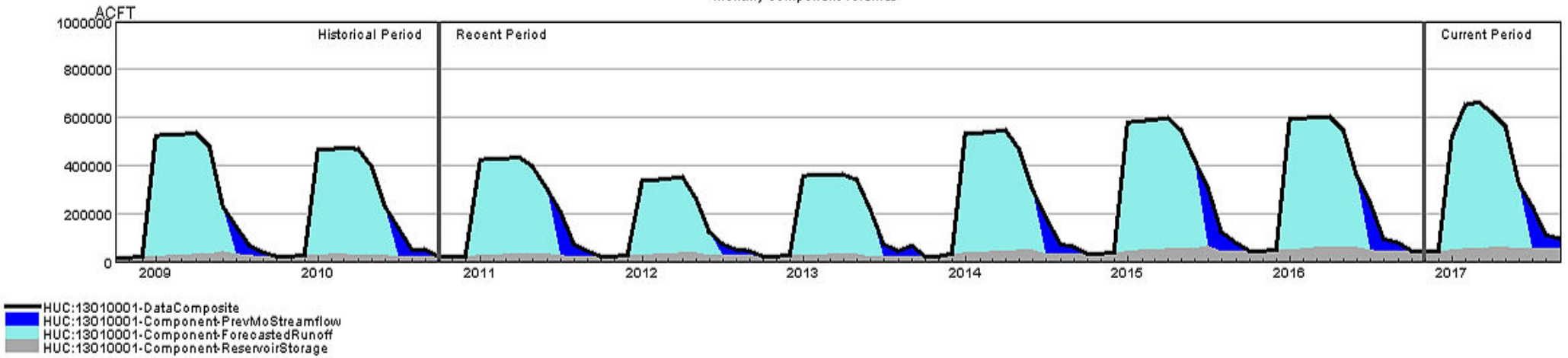
HUC 11020010 (Purgatoire) SWSI

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



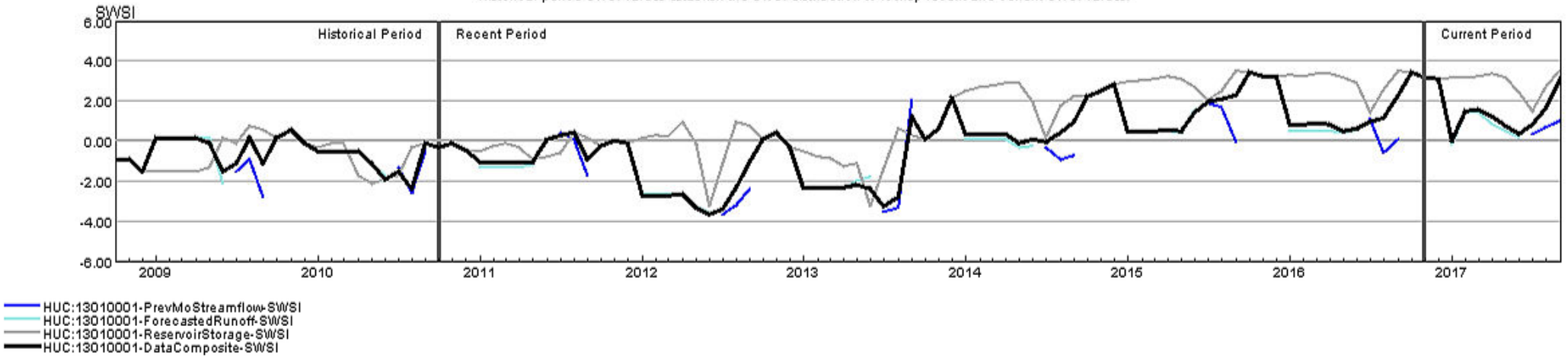
HUC 13010001 (Rio Grande Headwaters) Surface Water Supply

Monthly component volumes



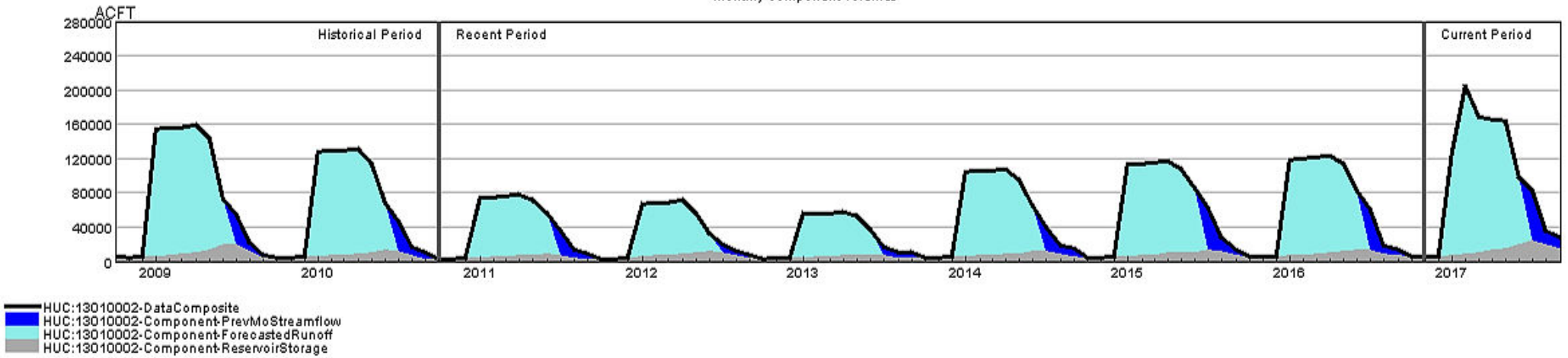
HUC 13010001 (Rio Grande Headwaters) SWSI

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



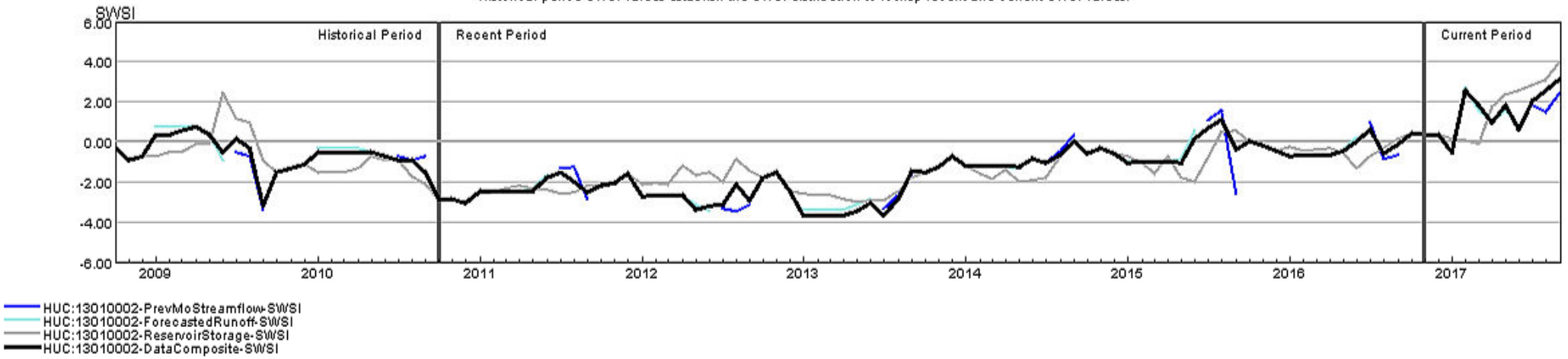
HUC 13010002 (Alamosa-Trinchera) Surface Water Supply

Monthly component volumes



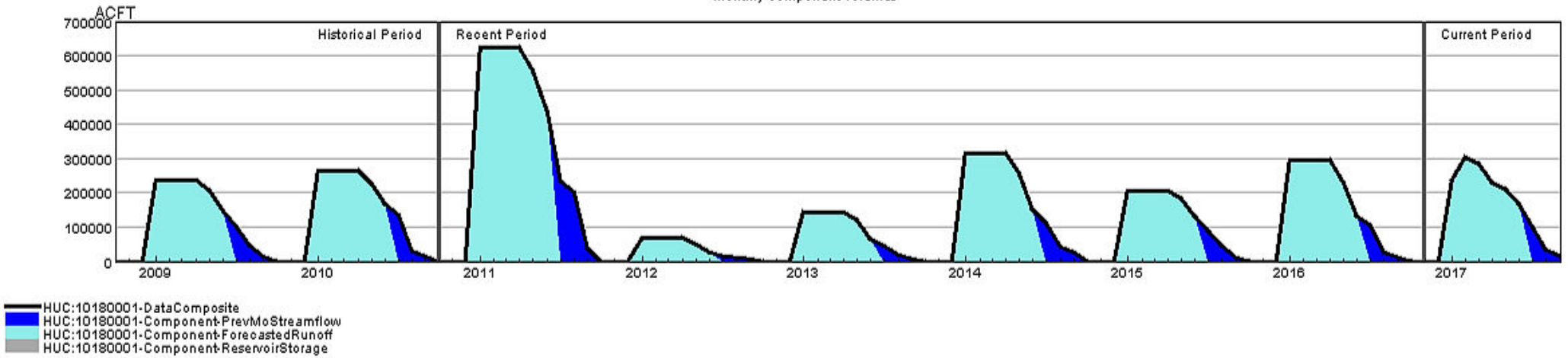
HUC 13010002 (Alamosa-Trinchera) SWSI

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



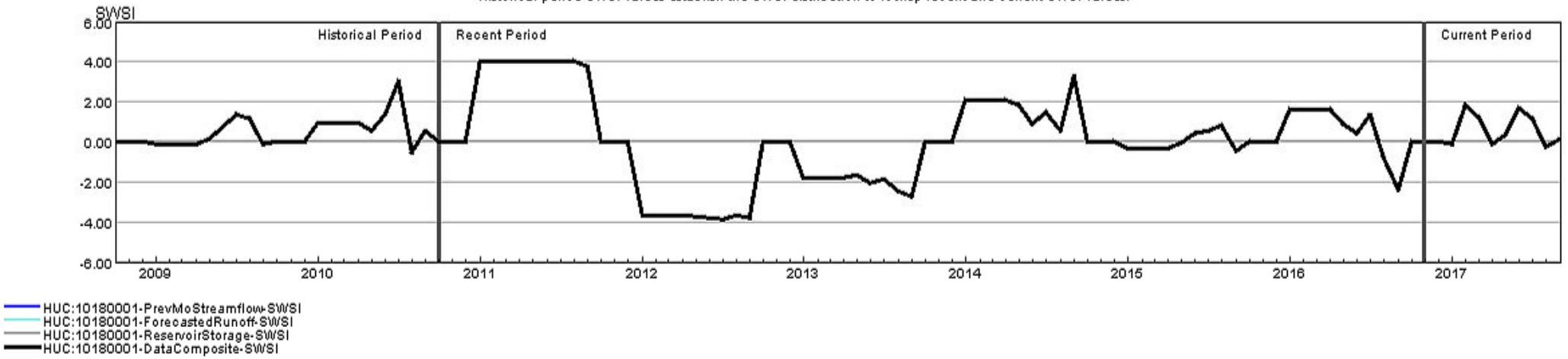
HUC 10180001 (North Platte Headwaters) Surface Water Supply

Monthly component volumes



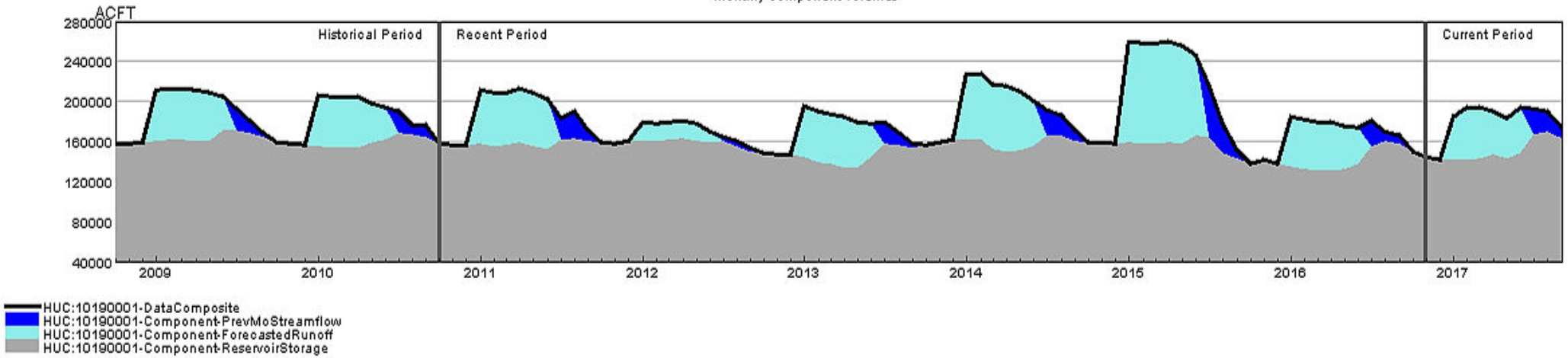
HUC 10180001 (North Platte Headwaters) SWSI

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



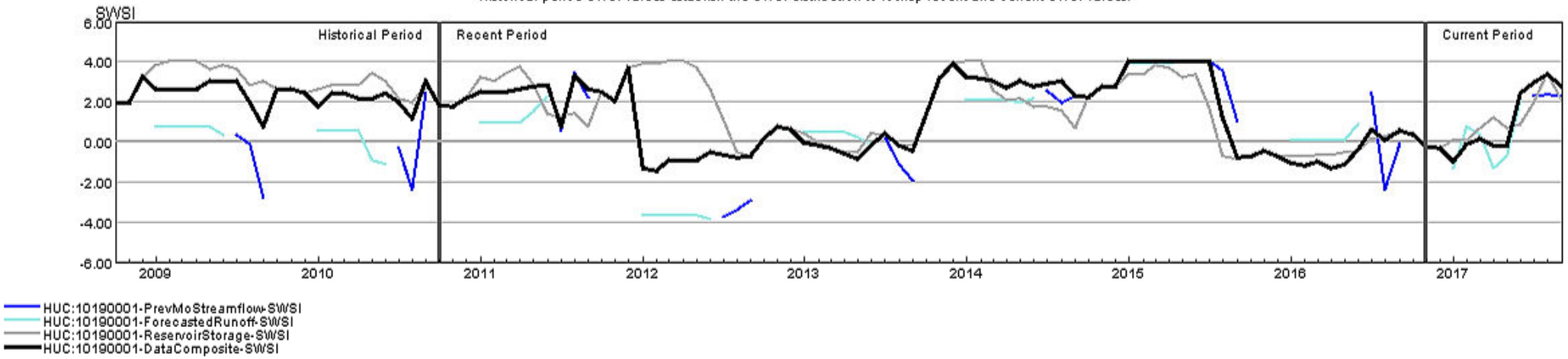
HUC 10190001 (South Platte Headwater) Surface Water Supply

Monthly component volumes



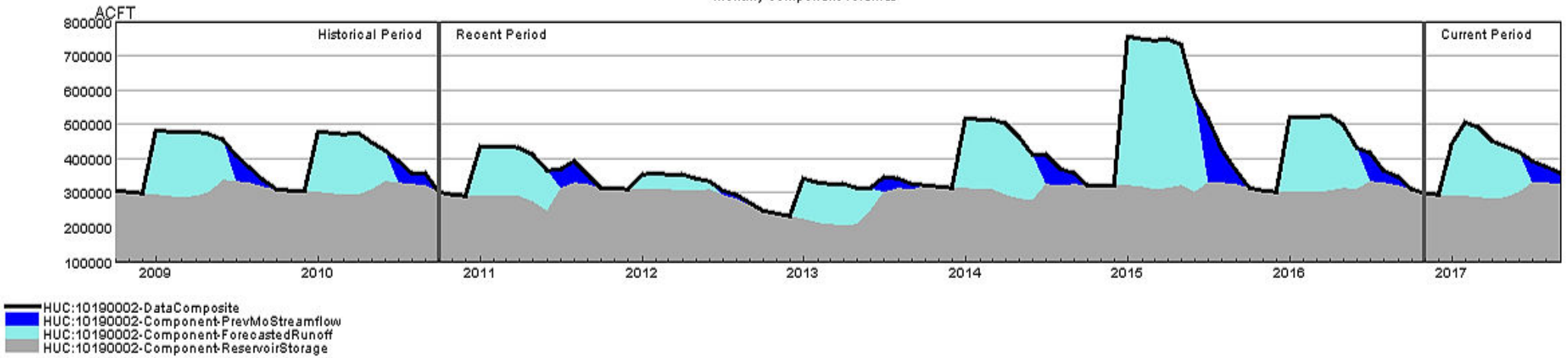
HUC 10190001 (South Platte Headwater) SWSI

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



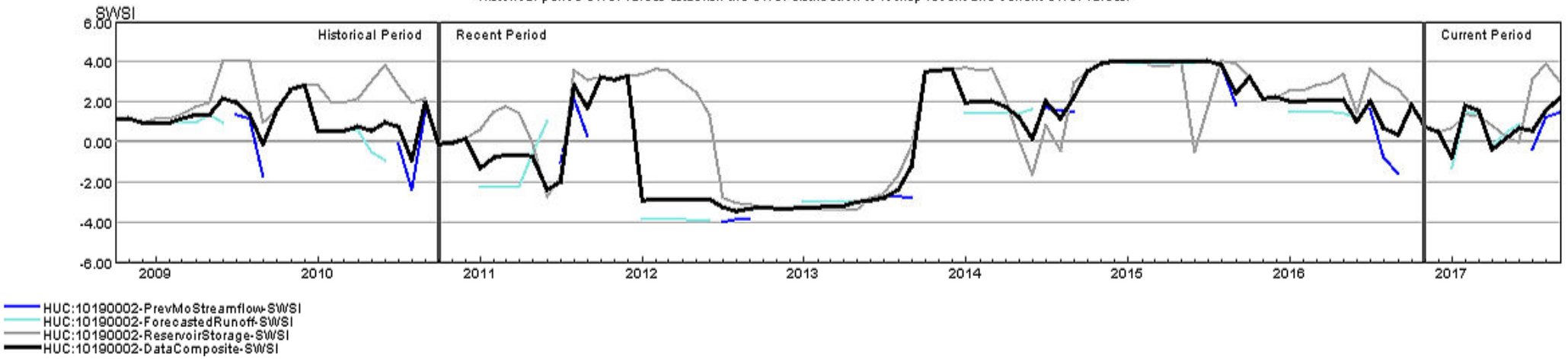
HUC 10190002 (Upper South Platte) Surface Water Supply

Monthly component volumes



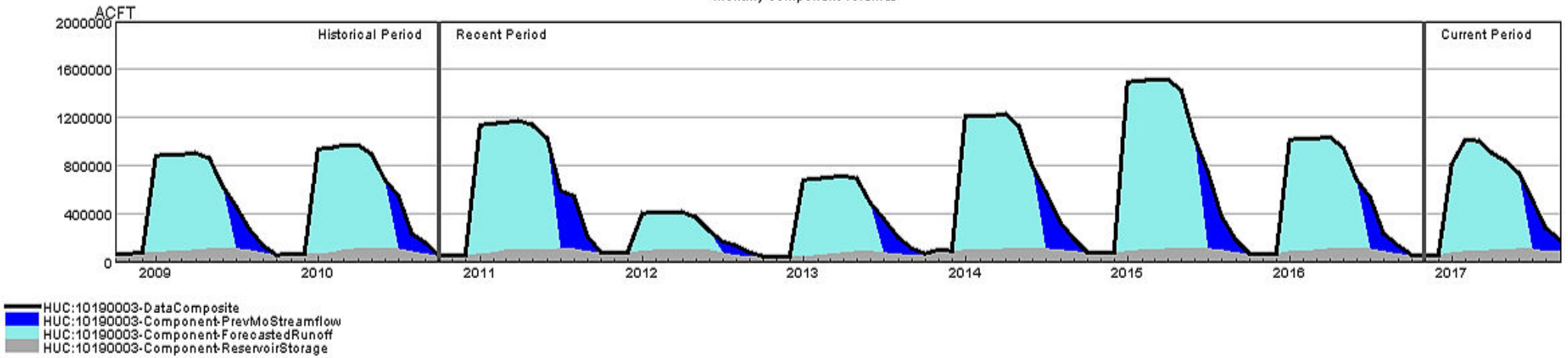
HUC 10190002 (Upper South Platte) SWSI

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



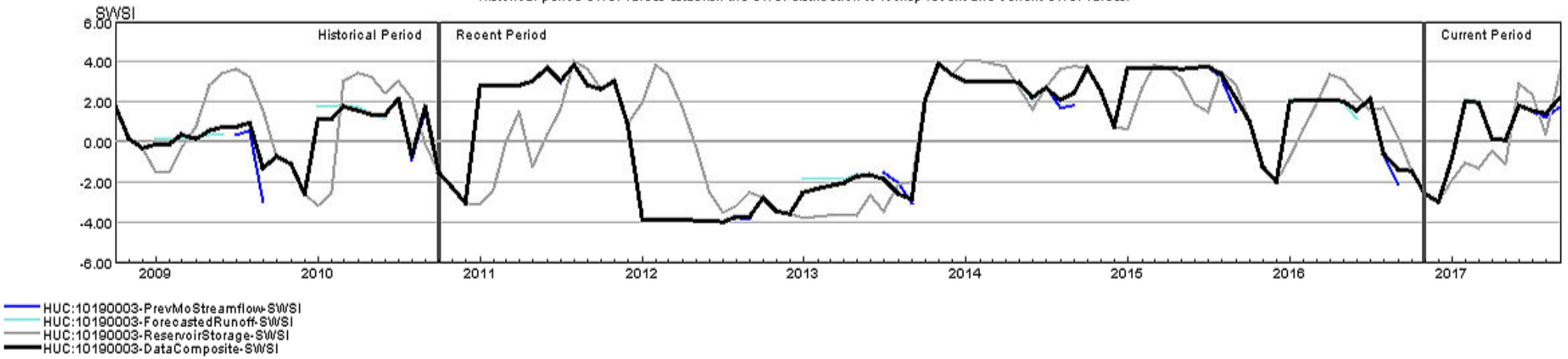
HUC 10190003 (Middle South Platte-Cherry Creek) Surface Water Supply

Monthly component volumes



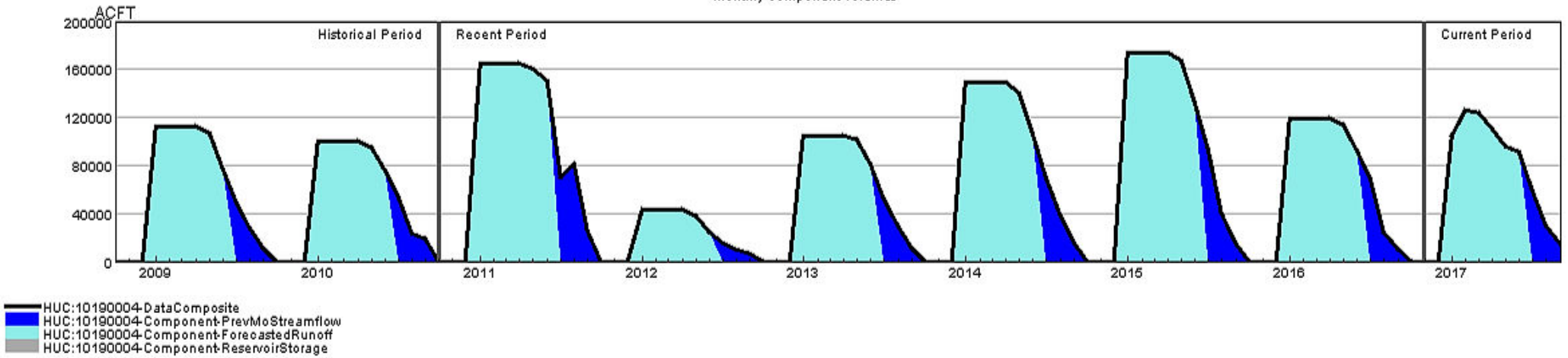
HUC 10190003 (Middle South Platte-Cherry Creek) SWSI

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



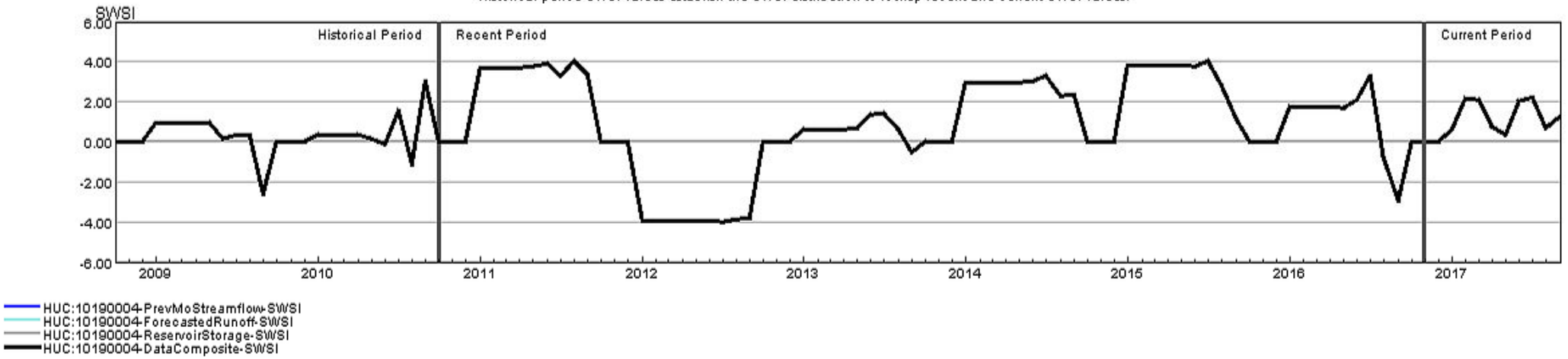
HUC 10190004 (Clear) Surface Water Supply

Monthly component volumes



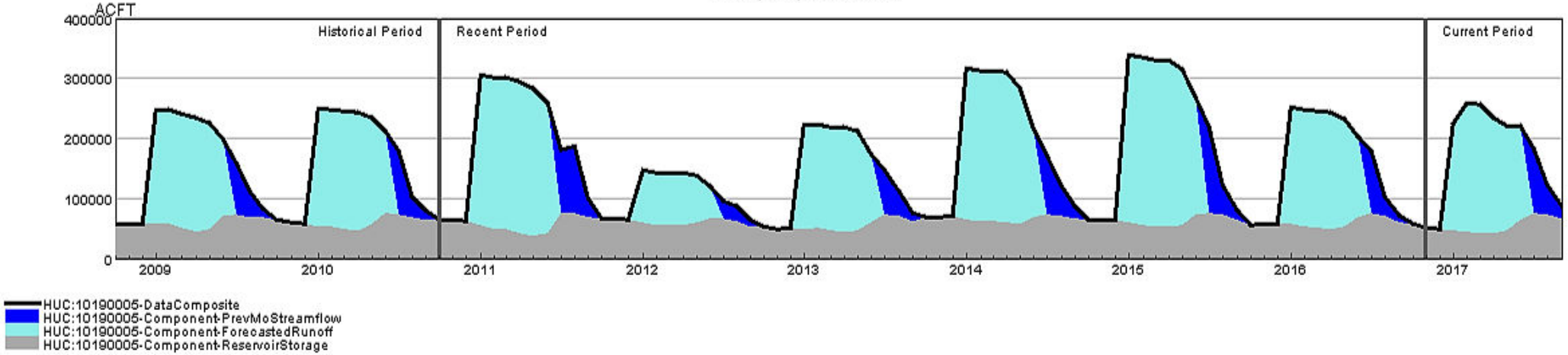
HUC 10190004 (Clear) SWSI

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



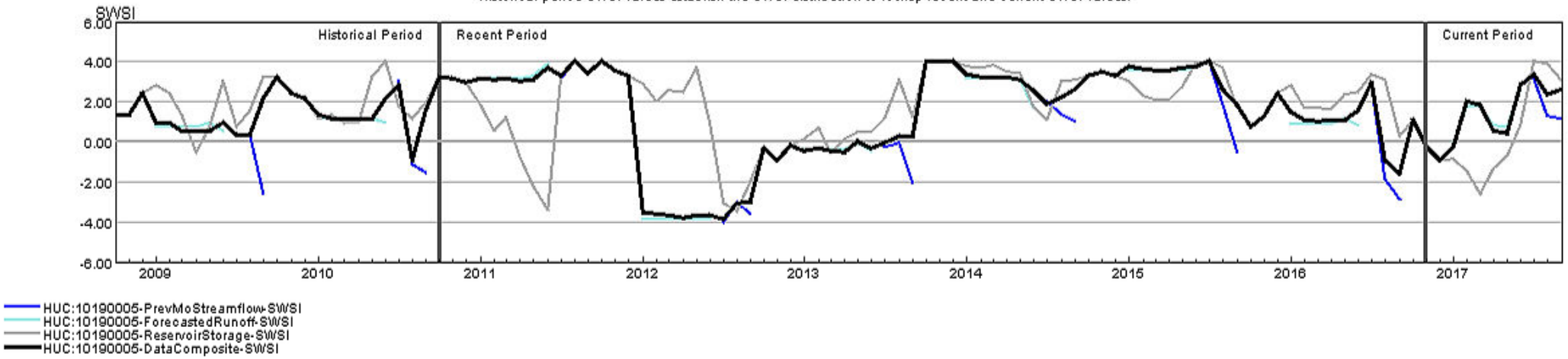
HUC 10190005 (St. Vrain) Surface Water Supply

Monthly component volumes



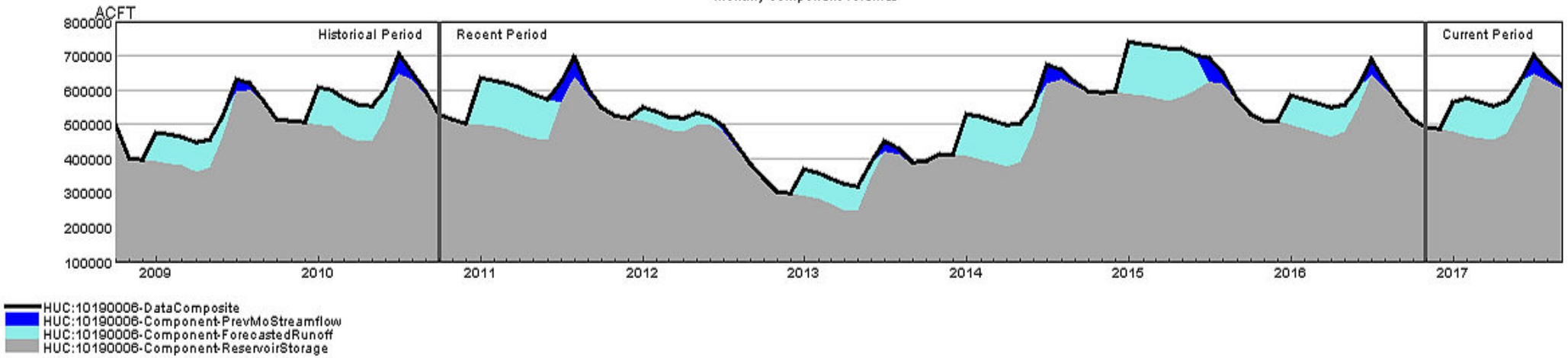
HUC 10190005 (St. Vrain) SWSI

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



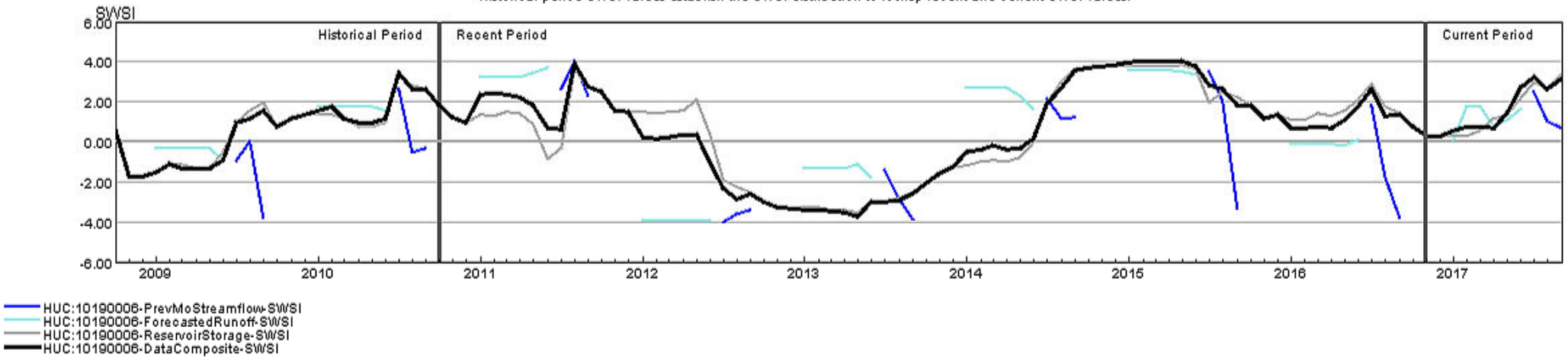
HUC 10190006 (Big Thompson) Surface Water Supply

Monthly component volumes



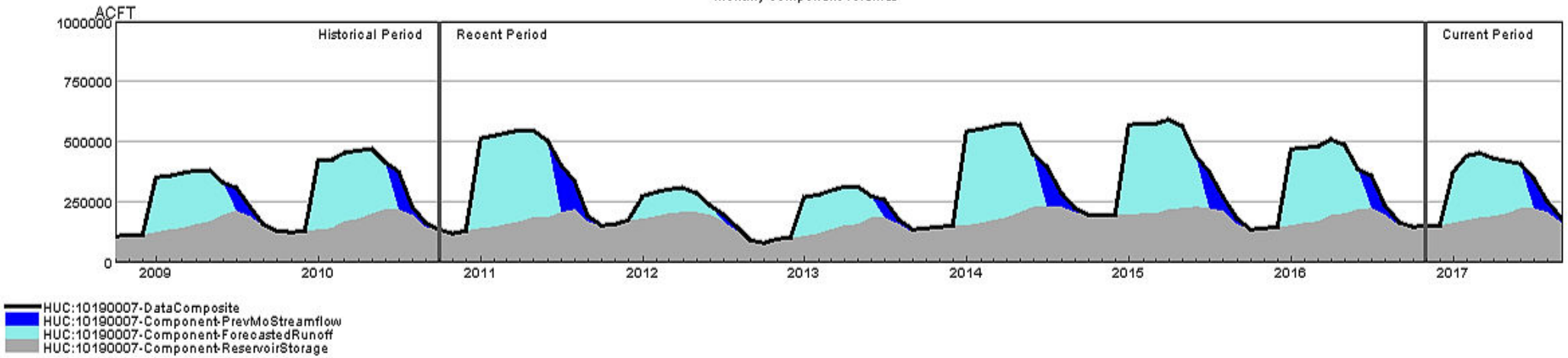
HUC 10190006 (Big Thompson) SWSI

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



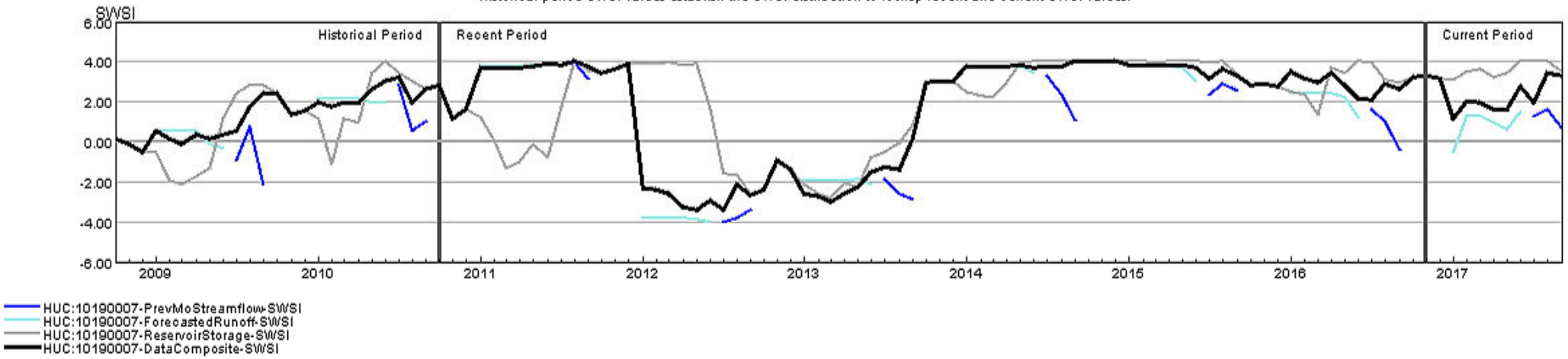
HUC 10190007 (Cache La Poudre) Surface Water Supply

Monthly component volumes



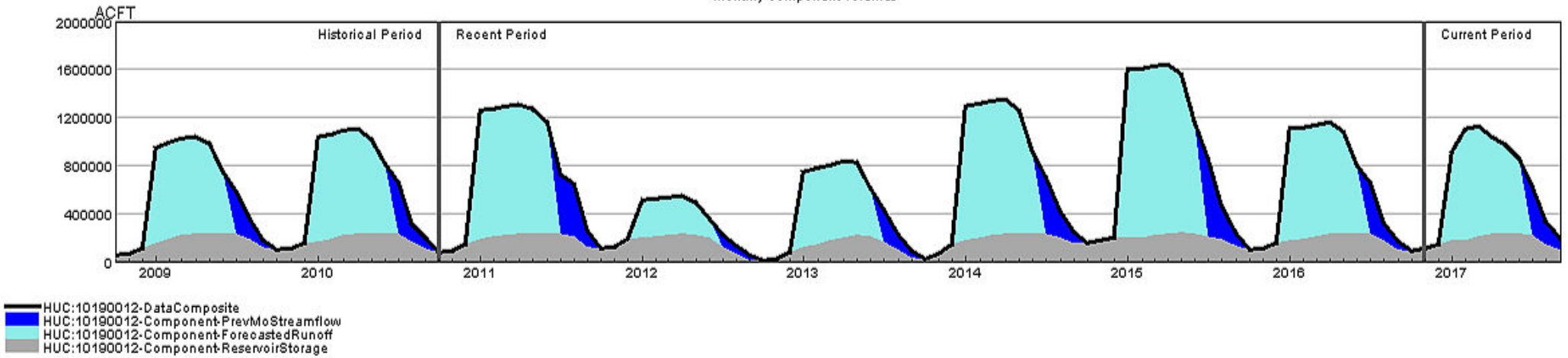
HUC 10190007 (Cache La Poudre) SWSI

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



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

Monthly component volumes



HUC 10190012 (Middle South Platte-Sterling) SWSI

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