COLORADO WATER SUPPLY CONDITIONS UPDATE

FROM THE OFFICE OF THE STATE ENGINEER: COLORADO DIVISION OF WATER RESOURCES ROOM 818, 1313 SHERMAN ST., DENVER, CO 80203 303-866-3581; <u>www.water.state.co.us</u>

February 1, 2019

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
February 1 - June 1	Forecasted Runoff + Reservoir Storage
July 1 - September 1	Previous Month's Streamflow + Reservoir Storage
October 1 - January 1	Reservoir Storage

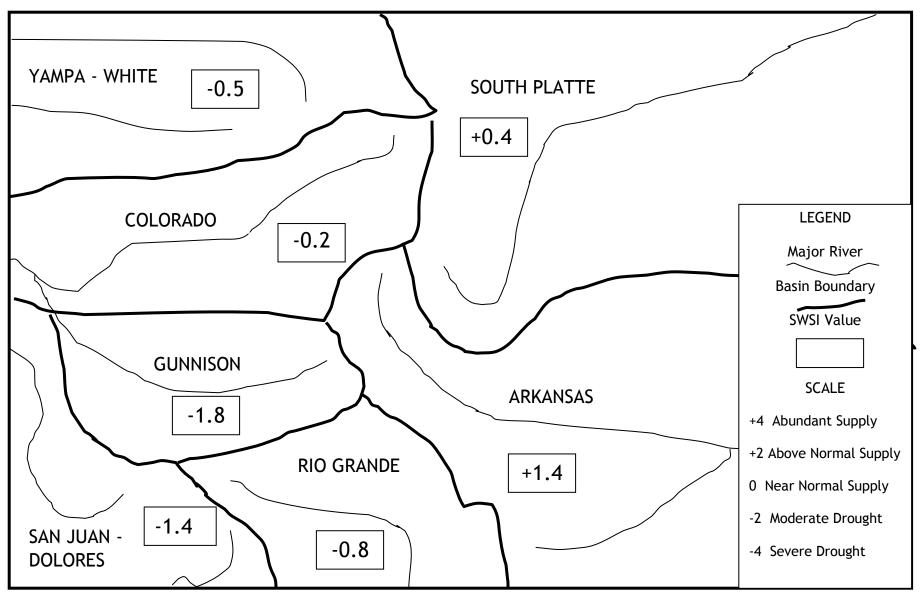
In 2015, CWCB and the Division of Water Resources (DWR) (both Divisions of the Colorado Department of Natural Resources) completed a software project to implement an automated calculation of the SWSI and to document the underlying hydrologic data. July 1, 2015 was the first month that the automated DNR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

The SWSI calculation for the winter season (February 1 to June 1) is based on forecasted runoff (total volume for runoff season) combined with reservoir storage at the end of last month, in this case January 31. The statewide SWSI values for February 1 are generally close to average, but are below normal in the Gunnison, Rio Grande and San Juan-Dolores Basins. The SWSI values range from a low of -1.8 in the Gunnison Basin and a high of +1.4 in the Arkansas Basin, forecasted runoff is predicated to be near average, however many reservoir levels are below normal.

Basin	February 1 SWSI	Change from Previous Month	Change from Previous Year
Arkansas	1.4	-0.5	-0.6
Colorado	-0.2	2.3	2.2
Gunnison	-1.8	2.1	1.4
Rio Grande	-0.8	-2.2	2.4
San Juan-Dolores	-1.4	-0.6	1.5
South Platte	0.4	0.7	-0.8
Yampa-White	-0.5	-1.2	1.7

*Last month's SWSI was based only on reservoir storage volumes, this month is based on forecasted streamflow plus reservoir storage volumes. Therefore, the change from previous month is not a comparison of two "like" indices.

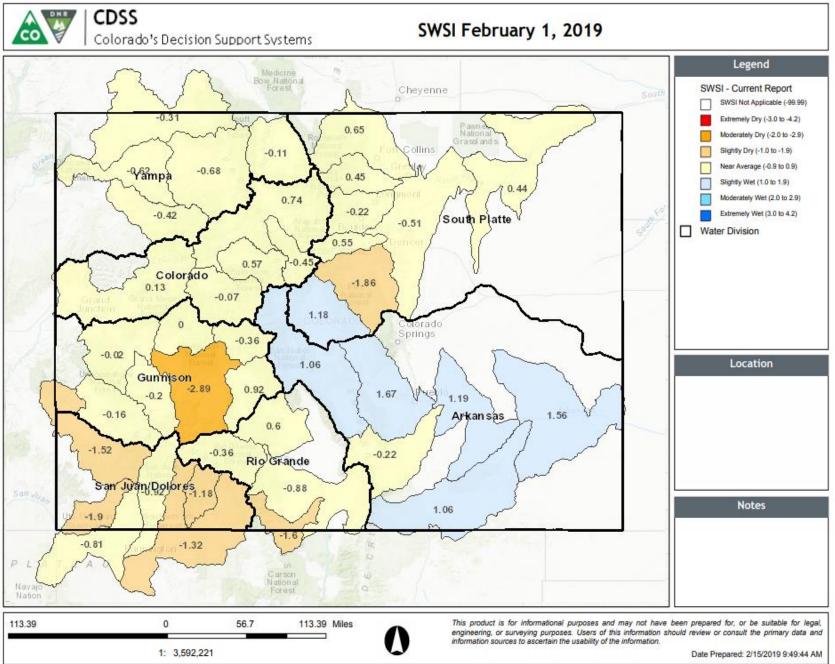
				SWSI Scale				
-4	-3	-2	-1	0	1	2	3	4
Severe		Moderate		Near Normal		Above Normal	A	bundant
Drought		Drought		Supply		Supply		Supply



SURFACE WATER SUPPLY INDEX FOR COLORADO BY MAJOR RIVER BASIN

February 1, 2019

SURFACE WATER SUPPLY INDEX FOR COLORADO BY HUC



Basin	HUC ID	HUC Name	SWSI	Reservoir Storage NEP	Forecast Flow NEP	Total Vol (AF)
	11020006	Huerfano	-0.23	47	56	24,500
Ŧ	11020010	Purgatoire	1.06	67	56	70,930
Arka	11020001	Arkansas Headwaters	1.07	61	62	406,671
Arkansas	11020005	Upper Arkansas-Lake Meredith	1.19	13	64	427,180
St	11020002	Upper Arkansas	1.68	74	62	574,800
	11020009	Upper Arkansas-John Martin Reservoir	1.57	57	64	608,580
	14010002	Blue	-0.45	73	55	333,208
Co	14010003	Eagle	0.58	5	57	345,000
Colorado	14010004	Roaring Fork	-0.07	N/A	50	723,129
obi	14010001	Colorado Headwaters	0.75	3	54	1,521,390
	14010005	Colorado Headwaters-Plateau	0.13	11	52	2,325,596
	14020003	Tomichi	0.93	22	61	71,200
	14030003	San Miguel	-0.17	1	48	118,000
Gu	14020006	Uncompahgre	-0.21	53	48	170,381
Gunnison	14020004	North Fork Gunnison	-0.01	50	50	268,323
son	14020001	East-Taylor	-0.36	N/A	49	316,220
	14020002	Upper Gunnison	-2.89	45	51	1,086,377
	14020005	Lower Gunnison	-0.02	N/A	50	1,320,000
Rio	13010004	Saguache	0.60	83	57	32,000
o G	13010002	Alamosa-Trinchera	-0.88	14	41	116,523
Grande	13010005	Conejos	-1.61	N/A	32	173,100
de	13010001	Rio Grande Headwaters	-0.36	50	43	474,028
Sa	14080105	Middle San Juan	-0.82	40	40	18,196
n J	14080107	Mancos	-1.91	8	42	25,715
San Juan-Dolores	14080102	Piedra	-1.19	N/A	36	166,000
-Do	14030002	Upper Dolores	-1.53	8	47	408,754
olor	14080104	Animas	-0.93	50	43	412,938
es	14080101	Upper San Juan	-1.32	4	35	502,188
	10190004	Clear	0.55	63	57	104,000
	10190001	South Platte Headwater	1.18	11	59	199,300
Sou	10190005	St. Vrain	-0.23	17	49	226,500
South Platte	10190007	Cache La Poudre	0.66	N/A	54	367,080
Pla	10190002	Upper South Platte	-1.86	50	61	406,900
tte	10190006	Big Thompson	0.45	54	51	530,604
	10190003	Middle South Platte-Cherry Creek	-0.52	44	49	841,700
	10190012	Middle South Platte-Sterling	0.45	93	49	960,500
Ya	10180001	North Platte Headwaters	-0.12	N/A	49	235,000
mp	14050005	Upper White	-0.43	71	45	265,000
ıa-∨	14050003	Little Snake	-0.31	N/A	46	320,000
Yampa-White	14050001	Upper Yampa	-0.68	N/A	41	668,790
ťe	14050002	Lower Yampa	-0.63	N/A	42	890,000

February 1, 2019 SWSI Values by HUC and Non Exceedance Probabilities (NEP)

NEP is non exceedance percentage for total reservoir storage and streamflow forecast in HUC. Some HUCs do not have any reservoirs considered in the SWSI and are shown as "N/A". Total Vol is the volume of reservoir storage in the HUC plus the streamflow forecast. NEP is calculated compared to the volume historically occurring this month during the period 1970-2010. The following table lists each component considered in each HUC.

SWSI Color Scale:	-4.0 (Severe Drought)	0.0 (Normal)	4.0 (Abundant Supply)

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
		CLEAR CREEK RESERVOIR	7,000	52
		TWIN LAKES RESERVOIR	40,365	57
11020001	Arkansas Headwaters	HOMESTAKE RESERVOIR	41,300	77
		TURQUOISE LAKE	58,006	21
		ARKANSAS RIVER AT SALIDA	260,000	62
		CUCHARAS RESERVOIR*	0	13
11020006	Huerfano	HUERFANO RIVER NEAR REDWING	10,600	39
		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	13,900	71
11020010	Durgatoiro	TRINIDAD LAKE	20,930	57
11020010	Purgatoire	PURGATOIRE RIVER AT TRINIDAD	50,000	56
11020002	Upper Arkansas	PUEBLO RESERVOIR	204,800	67
11020002	opper Arkansas	PUEBLO RESERVOIR INFLOW	370,000	62
		ADOBE CREEK RESERVOIR	9,080	18
		HUERFANO RIVER NEAR REDWING	10,600	39
11020009	Upper Arkansas-John	CUCHARAS RIVER AT BOYD RANCH NR LA VETA	13,900	71
11020009	Martin Reservoir	PURGATOIRE RIVER AT TRINIDAD	50,000	56
		JOHN MARTIN RESERVOIR	155,000	76
		PUEBLO RESERVOIR INFLOW	370,000	62
	Upper Arkansas-Lake Meredith	LAKE HENRY	7,090	95
		HUERFANO RIVER NEAR REDWING	10,600	39
11020005		CUCHARAS RIVER AT BOYD RANCH NR LA VETA	13,900	71
		MEREDITH RESERVOIR	25,590	58
		PUEBLO RESERVOIR INFLOW	370,000	62
14010002	Blue	GREEN MOUNTAIN RESERVOIR	48,208	5
14010002		BLUE RIVER INFLOW TO GREEN MOUNTAIN RES	285,000	55
		WOLFORD MOUNTAIN RESERVOIR	34,090	70
14010001	Colorado Headwaters	WILLIAMS FORK RESERVOIR	67,300	66
		COLORADO RIVER NEAR DOTSERO	1,420,000	54
14010005	Colorado Headwaters-	VEGA RESERVOIR	5,596	11
11010005	Plateau	COLORADO RIVER NEAR CAMEO	2,320,000	52
14010003	Eagle	EAGLE RIVER BELOW GYPSUM	345,000	57
14010004	Roaring Fork	RUEDI RESERVOIR	58,129	3
11010001	Rouring Fork	ROARING FORK AT GLENWOOD SPRINGS	665,000	50
		TAYLOR PARK RESERVOIR	59,220	22
14020001	East-Taylor	TAYLOR R INF TO TAYLOR PARK RESERVOIR	92,000	52
		EAST RIVER AT ALMONT	165,000	45
14020005	Lower Gunnison	GUNNISON RIVER NR GRAND JUNCTION	1,320,000	50
14020004	North Fork Gunnison	PAONIA RESERVOIR	3,323	50
		NORTH FORK GUNNISON R NR SOMERSET	265,000	50
14030003	San Miguel	SAN MIGUEL RIVER NEAR PLACERVILLE	118,000	48
14020003	Tomichi	VOUGA RESERVOIR NEAR DOYLEVILLE	200	53
14020003	ronnen	TOMICHI CREEK AT GUNNISON, CO	71,000	61

February 1, 2019 SWSI Component Information - Streamflow Forecast & Reservoir Storage - By HUC

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
14020006	Uncompahgre	RIDGEWAY RESERVOIR	46,381	45
14020006	Uncompangre	UNCOMPAHGRE RIVER AT COLONA	124,000	48
		FRUITLAND RESERVOIR	400	16
		SILVER JACK RESERVOIR	1,095	3
		CRAWFORD RESERVOIR	1,468	1
14020002	Upper Gunnison	MORROW POINT RESERVOIR	106,763	6
		LAKE FORK AT GATEVIEW, CO	120,000	49
		BLUE MESA RESERVOIR	251,651	2
		GUNNISON R INF TO BLUE MESA RESERVOIR	605,000	51
		MOUNTAIN HOME**	0	1
		TERRACE RESERVOIR	4,023	23
		TRINCHERA CK	11,800	54
13010002	Alamosa-Trinchera	UTE CREEK	12,800	56
		SANGRE DE CRISTO	14,900	53
		CULEBRA CREEK AT SAN LUIS	21,000	54
		ALAMOSA CREEK ABOVE TERRACE RESERVOIR	52,000	31
		PLATORO RESERVOIR	19,100	50
13010005	Conejos	CONEJOS RIVER NEAR MOGOTE	154,000	32
	Rio Grande Headwaters	RIO GRANDE RESERVOIR**	44	2
		CONTINENTAL RESERVOIR	15,165	99
13010001		SANTA MARIA RESERVOIR	23,819	93
		RIO GRANDE NEAR DEL NORTE	435,000	43
13010004	Saguache	SAGUACHE CREEK NEAR SAGUACHE, CO	32,000	57
13010001	buguuene	LEMON RESERVOIR	6,938	8
14080104	Animas	FLORIDA RIVER INFLOW TO LEMON RESERVOIR	46,000	47
14000104	7.1111.03	ANIMAS RIVER AT DURANGO	360,000	43
		JACKSON GULCH RESERVOIR	1,715	43
14080107	Mancos	MANCOS RIVER NEAR MANCOS		
		LONG HOLLOW RESERVOIR	24,000	42 50
14080105	Middle San Juan			
14080102	Piedra	LA PLATA RIVER AT HESPERUS	18,000	40
14060102	Fieura		166,000	36
14030002	Upper Deleres	GROUNDHOG RESERVOIR	200	4
14050002	Upper Dolores		168,554	43
			240,000	47
1 4000101	Upper Cap Juan		37,188	8
14080101	Upper San Juan	LOS PINOS RIVER NEAR BAYFIELD	165,000	38
		SAN JUAN RIVER NEAR CARRACAS	300,000	35
			0	6
		MARIANO RESERVOIR	1,000	11
			6,746	60
10190006	Big Thompson		7,200	62
		BOYD LAKE	31,500	52
		CARTER LAKE	80,250	37
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	87,000	51
		LAKE GRANBY	316,908	57

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
		CHAMBERS LAKE	2,800	52
		BLACK HOLLOW RESERVOIR	4,100	99
		HALLIGAN RESERVOIR	5,100	69
		CACHE LA POUDRE	7,200	57
10190007	Cache La Poudre	WINDSOR RESERVOIR	8,500	19
		FOSSIL CREEK RESERVOIR	9,400	91
		COBB LAKE	15,100	56
		HORSETOOTH RESERVOIR	89,880	39
		CACHE LA POUDRE R AT CANYON MOUTH	225,000	54
10190004	Clear Creek	CLEAR CREEK AT GOLDEN	104,000	57
		HORSECREEK RESERVOIR	0	1
		MILTON RESERVOIR	21,800	97
		BARR LAKE	24,900	57
		STANDLEY RESERVOIR	29,000	23
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
10190003	Middle South Platte- Cherry Creek	BOULDER CREEK NEAR ORODELL	54,000	48
	Cherry Creek	BIG THOMPSON R AT MOUTH, NR DRAKE, CO	87,000	51
		SAINT VRAIN CREEK AT LYONS	88,000	49
		CLEAR CREEK AT GOLDEN	104,000	57
		SOUTH PLATTE RIVER AT SOUTH PLATTE	171,000	61
		CACHE LA POUDRE R AT CANYON MOUTH	225,000	54
		JULESBURG RESERVOIR	16,000	21
		PREWITT RESERVOIR	21,500	77
		JACKSON LAKE RESERVOIR	23,700	44
		EMPIRE RESERVOIR	28,400	88
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
		RIVERSIDE RESERVOIR	42,500	65
10190012	Middle South Platte-	BOULDER CREEK NEAR ORODELL	54,000	48
	Sterling	POINT OF ROCKS RESERVOIR	62,400	74
		BIG THOMPSON R AT MOUTH, NR DRAKE, CO	87,000	51
		SAINT VRAIN CREEK AT LYONS	88,000	49
		CLEAR CREEK AT GOLDEN	104,000	57
		SOUTH PLATTE RIVER AT SOUTH PLATTE	171,000	61
		CACHE LA POUDRE R AT CANYON MOUTH	225,000	54
		ANTERO RESERVOIR	19,100	62
	South Platte	SPINNEY MOUNTAIN RESERVOIR	28,600	55
10190001	Headwater	ELEVENMILE CANYON RESV INFLOW	52,000	59
		ELEVENMILE CANYON RESERVOIR	99,600	82
		MARSHALL RESERVOIR	5,400	48
		TERRY RESERVOIR	5,400	60
		UNION RESERVOIR	9,400	29
		BUTTONROCK (RALPH PRICE) RESERVOIR	11,900	21
10190005	St. Vrain	GROSS RESERVOIR	15,400	57
		SOUTH BOULDER CK NR ELDORADO SPRINGS, CO	37,000	49
		BOULDER CREEK NEAR ORODELL	54,000	48
		SAINT VRAIN CREEK AT LYONS	88,000	48

HUC ID	HUC Name	Component Name	Component Volume (AF)	Component NEP for Month
		CHEESMAN LAKE	60,100	43
10190002	Upper South Platte	SOUTH PLATTE RIVER AT SOUTH PLATTE	171,000	61
		DILLON RESERVOIR	175,800	10
14050003	Little Snake	LITTLE SNAKE RIVER NEAR LILY	320,000	46
14050002	Lower Yampa	YAMPA RIVER NEAR MAYBELL	890,000	42
10180001	North Platte Headwaters	NORTH PLATTE R NR NORTHGATE	235,000	49
14050005	Upper White	WHITE RIVER NEAR MEEKER	265,000	45
		YAMCOLO RESERVOIR	3,590	29
		STAGECOACH RESERVOIR NR OAK CREEK	31,200	99
14050001	Upper Yampa	ELKHEAD CREEK ABOVE LONG GULCH	69,000	47
		YAMPA RIVER AT STEAMBOAT SPRINGS	240,000	39
		ELK RIVER NEAR MILNER, CO	325,000	40

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

*Empty, filling restriction **Empty for repairs

Water Volume NEP Color Scale:

0 (Well Below Normal)

50 (Normal) 100 (Well Above Normal) Basinwide Conditions Assessment

The SWSI value for the month was +0.4.

Northeast Colorado experienced periods of slightly below and slightly above average temperatures in much of the basin the month of January. Snow and precipitation followed the same trend, with periods of slightly above average and periods of slightly below average. Overall the mountainous and foothills received near average to slightly above average precipitation, mostly in the form of snow, while the eastern plains received below average precipitation for the month of January. As a result, the South Platte Basin Snowpack, percent of average, remained near the monthly average ending the month of January at 115% of the historical average.

The USDA Drought Monitor rating for northeast Colorado ended the month of January with a rating of DO (abnormally dry) extending into all of Weld, Boulder and Larimer counties. The rest of the Northeastern portion of the South Platte River Basin remained fairly constant throughout the month of January, with a rating of DO (abnormally dry) encompassing all of Gilpin, Jefferson, Douglas, Adams, Morgan and Arapahoe Counties; a rating of portions of Lincoln, El Paso, Teller, Elbert, Clear Creek and Park Counties rated as D1-D2 (moderate to severe). The remainder of the eastern plains in the South Platte and Republican River basins are not currently in a drought condition.

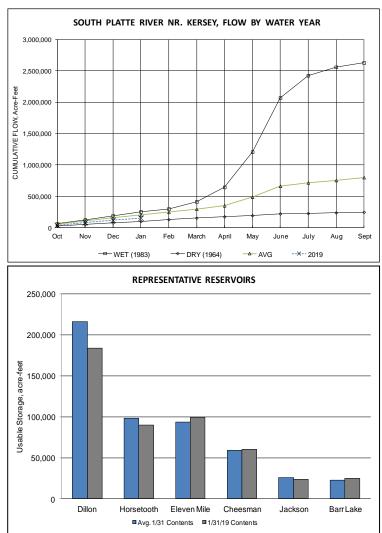
The overall basin near average temperatures, average precipitation and diversions to reservoir storage during the month of January resulted in just below average flows at the Kersey gage near the City of

Greeley, with the average daily flows for the month of January approximately 575 cfs, 87% of the historic mean value of 661 cfs. The average daily flows at the Julesburg gage for the month of January was 282 cfs, 52% of the historic mean value of 536 cfs, partly due to diversions to recharge, reservoir storage and below average precipitation.

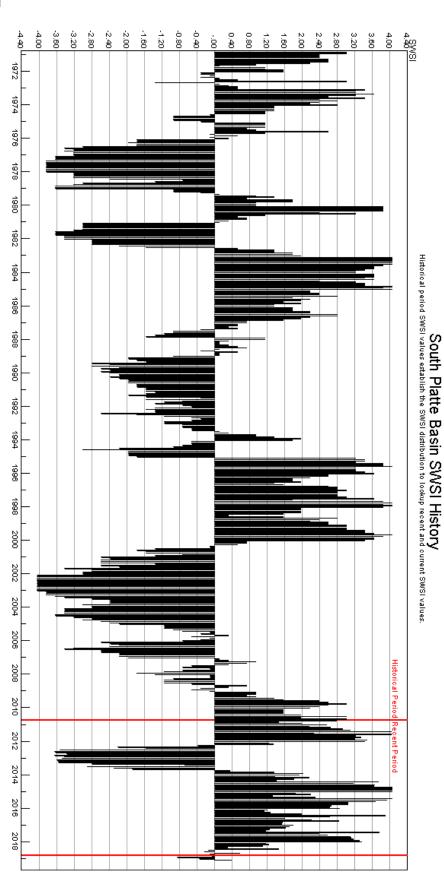
The reservoir fill season began November 1st, with reservoir storage throughout the South Platte River Basin continuing through the month of January. Reservoirs storage levels throughout the basin increased from approximately 70% capacity at the end of December to approximately 85% at the end of January. Reservoir calls from December into

early January have been controlled by a Riverside 1909 call on the lower portion of the South Platte River, however icing resulted in the call being removed. The Burlington Canal Bar Lake 1909 call controlled the upper portion of the mainstem for all of January into February, with no call on the lower portion of the river.

The temperature and precipitation outlook into February and March, prepared by the National Weather Service, in northeastern Colorado indicates a slight chance of above average temperatures and slightly above or below average precipitation in the South Platte River Basin.



South Platte-DataComposite-SWSI



Basinwide Conditions Assessment

The SWSI value for the month was +1.4.

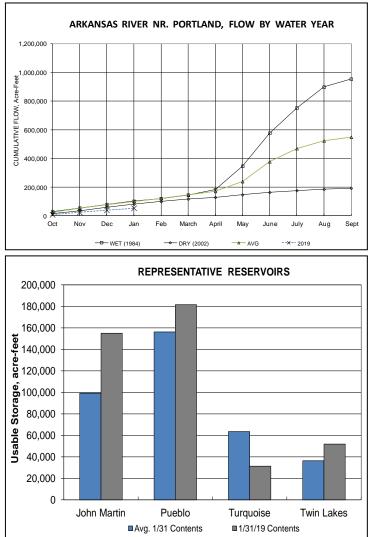
<u>Outlook</u>

Reservoir storage in the Pueblo Winter Water Program totaled 64,329 acre-feet as of the end of January. This storage amount is lower than last year's storage to date of 99,654 acre-feet, and represents 72% of the last twenty-year average. Conservation storage in John Martin Reservoir has accumulated 18,017 acre-feet versus 34,861 acre-feet as of the end of January last year.

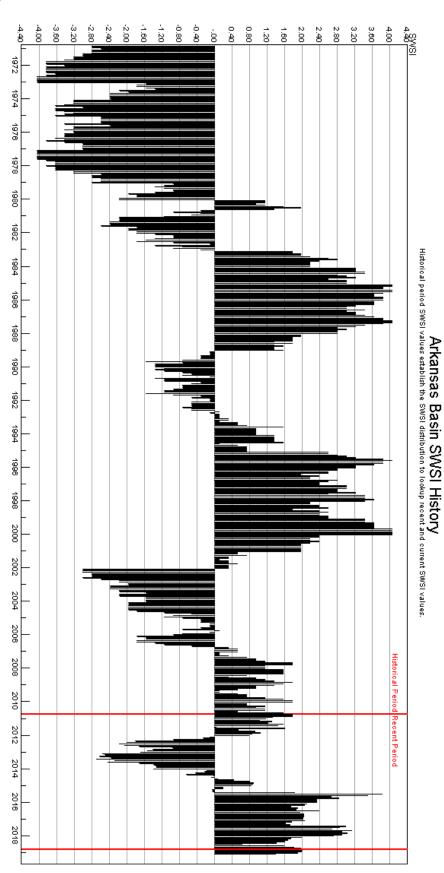
Administrative/Management Concerns

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

reservoir storage. However, this is balanced by the continuing above average snowpack in the Arkansas Basin water shed this winter.



Arkansas-DataComposite-SWSI



Basinwide Conditions Assessment

The SWSI value for the month was -0.8.

Flow at the gaging station Rio Grande near Del Norte averaged 130 cfs (75% of normal). The Conejos River near Mogote had a mean flow of 42 cfs (86% of normal). Streams in the upper Rio Grande basin are still recovering from the poor 2018 runoff and precipitation. Cold conditions in the mountains and the Valley have prevented any early melt.

<u>Outlook</u>

February 1, 2019 Natural Resources Conservation Service stream flow forecasts are predicting runoff in area streams to be in the range of 65% (Rio San Antonio) to 103% (inflow to Costilla Reservoir of average during the 2019 irrigation season. Most of the basin streams are forecasted to yield 80 to 90% of average runoff during 2019.

Current National Weather Service forecasts for February through June, 2019 are calling for near normal temperatures and above normal precipitation in this area of the state. This is a very welcome relief from the poor spring precipitation pattern of last year.

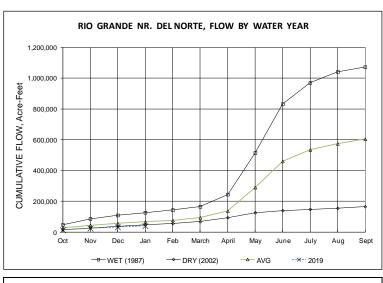
Administrative/Management Concerns

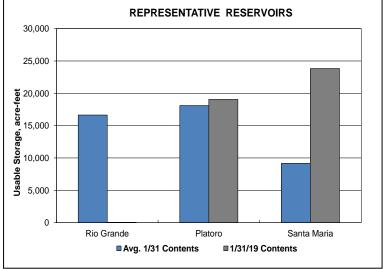
The very poor water supply conditions of 2018 resulted in a large draw on area reservoirs and aquifers. Diversion into ditches last year was severely limited by a runoff that resembled the droughts of 2002 for eastern side of the San Luis Valley and 2003 for the rest of the Valley. Use of the aquifers and releases from local reservoirs was needed to bridge the gap for some irrigators. Others were left to endure parched fields and reduced yields.

Current reservoir storage is only 79% of the long term average. Two reservoirs are empty for repair work: Rio Grande and Mountain Home. Sanchez Reservoir is under a 21,000 acre-feet storage restriction but currently contains only 7500 acre-feet in this 100,000 acre-feet reservoir.

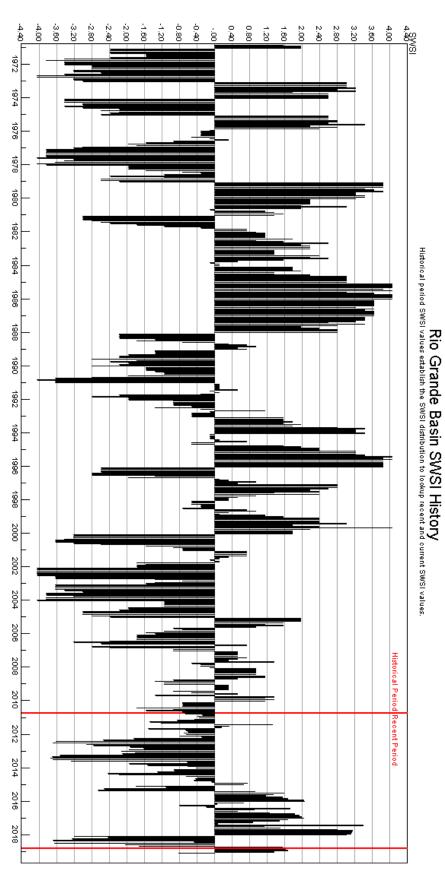
Public Use Impact

Considerable snowfall on the Valley floor during early January dropped temperatures in the lower elevations of the basin. The higher elevations don't have a banner amount of snowpack, yet, but the snowpack seems to have a nice balance within the basin.





Rio Grande-DataComposite-SWSI



Basinwide Conditions Assessment The SWSI value for the month was -1.8.

The entire Gunnison basin received 110-150% of average precipitation during January. Temperatures during January were 1 to 3 degrees below average basin-wide, which continued the trend of near or below average temperatures during the past few months. These lower temperatures have kept low elevation snowpack on the ground, which will help to wet the ground near the start of the irrigation season in March. Snow water equivalent (SWE) values around the basin continued to rise and are now near or above the 30 year median in all areas. A comparison of current conditions with 2018 continues to reveal the depth of last years drought as SWE in the basins above Blue Mesa, Ridgway and Paonia Reservoirs are 149%, 200% and 292% of last years values on February 1st. In fact, the Park Reservoir Snotel gauge, one of the worst hit during the 2018 drought, contains 20.7 inches of SWE, which has surpassed the peak of last year (12.8") by almost 8 inches.

<u>Outlook</u>

April to July runoff forecasts prepared by the CBRFC on February 1st have risen slightly from their first forecast on January 1st. For instance, the forecast increased to 550,000 ac-ft of runoff into Blue Mesa (81% of average, 96% of median), 81,000 ac-ft of runoff into Ridgway (80% of average, 81% of median) and 71,000 ac-ft of runoff into Paonia (74% of average, 97% of median). Runoff forecasts basin wide continue to be for a lower amount than would be expected when reviewing the SWE because a significant amount of snowmelt is expected to infiltrate into the parched soils from 2018. Last, NRCS non-exceedance projections for snowpack in the Gunnison basin indicate that if we receive average snow during the remaining accumulation season we would end with 106% of the 30-year median peak SWE.

Administrative/Management Concerns

Blue Mesa Reservoir levels have stayed around 250,000 ac-ft, and likely won't change significantly until spring runoff. Current projections are that Blue Mesa will end the year at 7,450 ft, which equates to a content of only 312,000 ac-ft. While higher than last year, it would be 40 ft below the target of 7,490, which equates to 580,000 ac-ft. Releases from Crystal Dam were

increased after the USGS measured the gauge at Whitewater on the Lower Gunnison and shifted the value down significantly. The Whitewater gauge is used to determine whether EIS targets are met and the shift in the rating resulted in the flow reported being over 100 cfs below the target. The additional releases reversed the trend in late January where Blue Mesa Reservoir had began to add water to storage, albeit slowly, at 50 ac-ft per day.

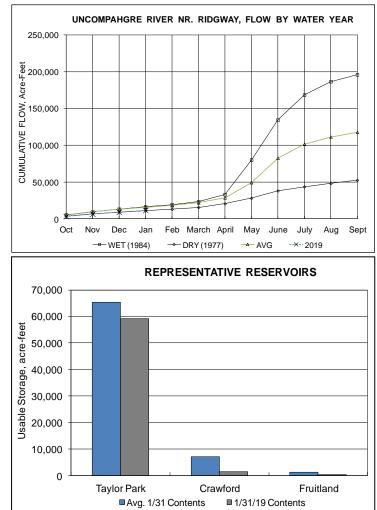
Taylor Park Reservoir physical content also remains stable at around 59,000 ac-ft. Storage in each account, however, continues to change as the Aspinall Unit water exchanged into Taylor Park continues to be paid back at a rate of approximately 100 ac-ft per day and the first fill account gains a similar amount each day. Total first fill account storage on February 1st stands at 42,602 acre-feet with 16,631 ac-ft of Aspinall Unit water left in Taylor Park to be

repaid.

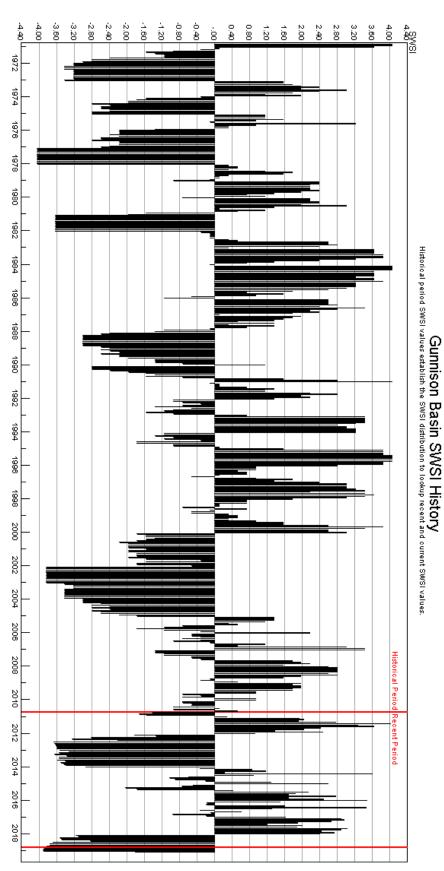
Thankfully during the first week of February the Grand Mesa continued to receive moisture and the Park Reservoir Snotel gauge now reports over 110% of the median snowpack, which will help to refill the 108 reservoirs this spring. In addition, we are cautiously optimistic that the low snow will keep early flows high enough to meet demand, which could prevent a call from being placed in April.

Public Use Impacts

Cold temperatures this season have allowed for a much longer ice-fishing season on basin reservoirs such as Blue Mesa. However, reports have indicated that due to the unusually low reservoir levels fisherman have had trouble locating the fish and have been catching less than normal.



Gunnison-DataComposite-SWSI



<u>Basinwide Conditions Assessment</u> The SWSI value for the month was -0.2.

<u>Outlook</u>

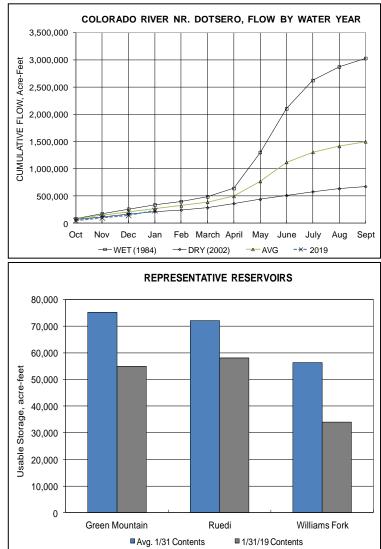
Colorado River flows are running below average with tributary flows also running below average throughout February. As of February 14, the Upper Colorado River Basin snowpack was 110 percent of median snow water equivalent and 108 percent of average precipitation. Forecasts call for above average precipitation and below average temperatures for western Colorado through February.

Administrative/Management Concerns

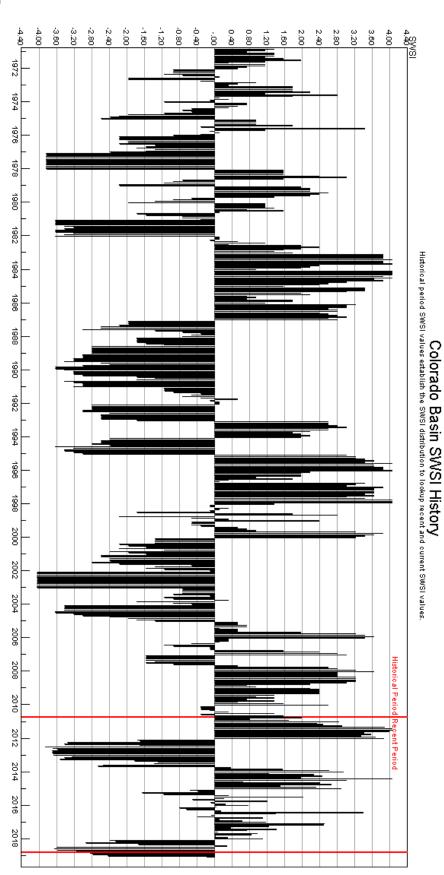
The call on the Colorado River main stem remains the Shoshone Hydro Power right for 1250 cfs. Accordingly, Green Mountain Reservoir is releasing to pass inflows, provide contract and HUP obligations and make C-BT replacements.

Public Use Impacts

With the temperature fluctuations, there have been numerous ice jams, surges of water, ice blocks, logs and debris, through the Roaring Fork River. In some places, huge pieces of ice were found more than 10 feet up the stream bank.



Colorado-DataComposite-SWSI



Basinwide Conditions Assessment

The SWSI value for the month was -0.5.

January precipitation was above 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 118% 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 January was 106%.

Snowpack for the combined basins as of February 1st, 2019 was at 107% of average. The snow water equivalent (SWE) as of January 31, 2019 was 105% of average for the North Platte River basin and 109% of average for the Yampa River basin and White River basin.

NRCS predicts 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 104% of average for the North Platte River at Northgate, 95% of average for the Yampa River near Maybell, 93% of average for the Little Snake River near Lily, and 95% of average for the White River near Meeker.

All Division 6 stream gages were either closed for the winter season or ice/snow-affected as of February 7th, 2019. Gages will be opened during April.

Reservoir Outlook

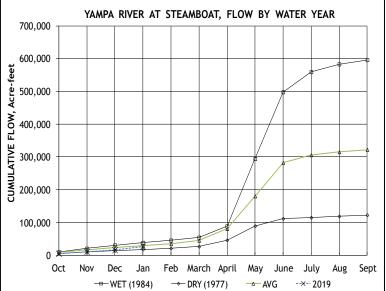
As of January 31st Fish Creek Reservoir was storing approximately 2,079 AF, 50% of capacity. The capacity of Fish Creek Reservoir is 4,167 AF. Yamcolo Reservoir was storing 3,600 AF at the end of January 2019. The capacity of Yamcolo Reservoir is 8,700 AF. The G3 web server is not functioning currently for Elkhead Creek Reservoir. The capacity of Elkhead Creek Reservoir is 24,778 AF. On January 31, 2019, Stagecoach Reservoir was storing 31,200 AF, 85% 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.

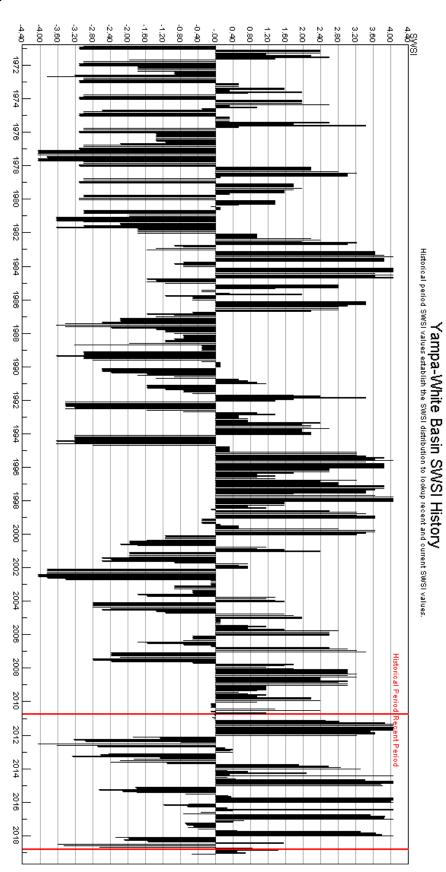
Public Use Impacts

Steamboat Ski Resort has received 181 inches of snowfall since early November. That is above average snowfall to date.

Stagecoach Reservoir is closed to motorized boating. Only non-motorized, ANS-Exempt watercraft may be used. Please see website for current fishing conditions. Limited campsites are available during the winter (October 1 through May 15) in the Pinnacle campground on a first-come/first-serve basis and include 30 amp electrical hookups. Water is not available and the dump station is closed. Winter trails are groomed and open for use. Ice thickness across the reservoir varies with a minimum thickness of 6 - 8 inches. Always use caution when traveling across the ice and refer to the CPW lce Safety web page.



Yampa-White-DataComposite-SWSI



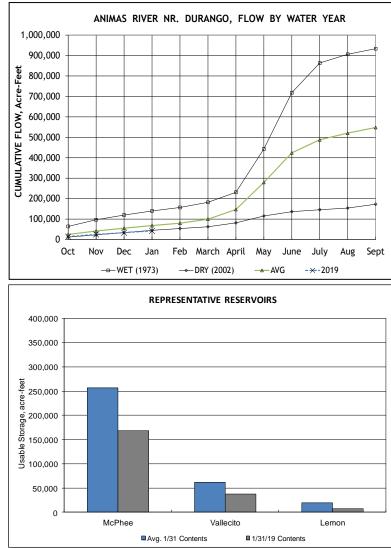
Basinwide Conditions Assessment

The SWSI value for the month was -1.4.

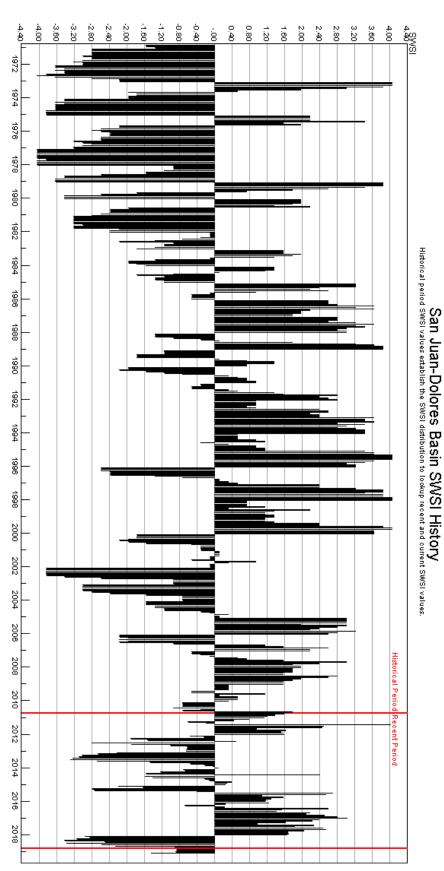
Flow at the Animas River at Durango averaged 127 cfs (63% of average). The flow at the Dolores River at Dolores estimated average is 32 cfs (62% of average). The La Plata River at Hesperus averaged 4.3 cfs (62% of average). Precipitation in Durango was 3.25 inches for the month, 162% of the 30-year average of 2.01 inches. Precipitation to date in Durango, for the water year is 8.10 inches, 120% of the 30-year average of 6.75 inches. End of last month precipitation to date, for the water year was 96% of average. The average high and low temperatures for the month of January in Durango were 40° and 13° . In comparison, the 30-year average high and low for the month is 41° and 14° . At the end of the month Vallecito Reservoir contained 38,078 acre-feet compared to its average content of 56,686 acre-feet (67% of average). McPhee Reservoir was up to 168,555 acre-feet compared to its average content of 260,805 (65% of average), while Lemon Reservoir was up to 7,293 acre-feet as compared to its average content of 19,797 acre-feet (37% of average).

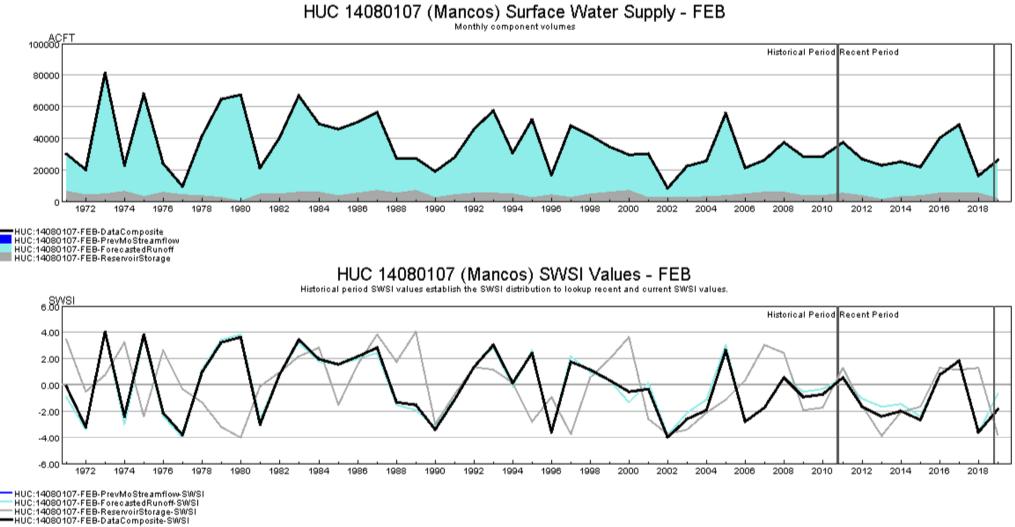
<u>Outlook</u>

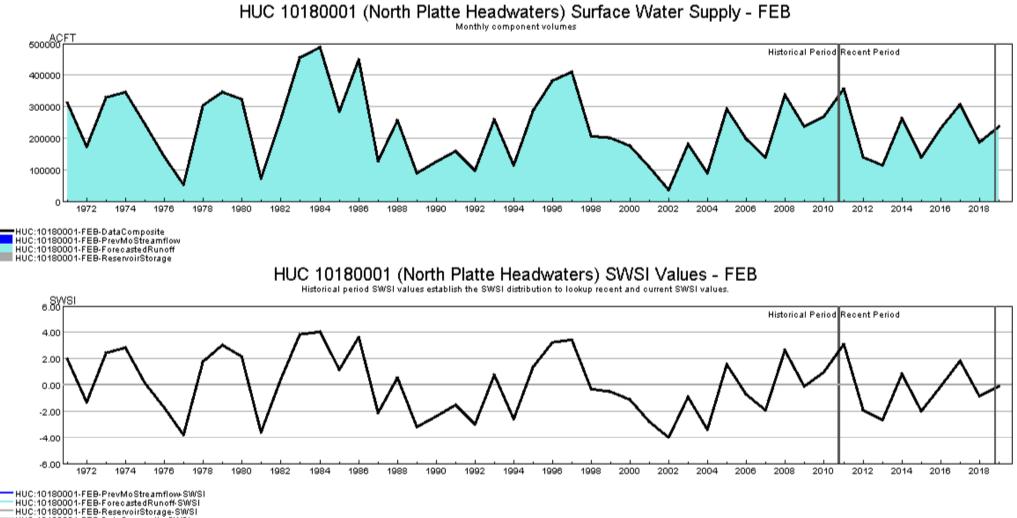
Precipitation (3.25 inches) was above average for January in Durango. There were 19 years out of 125 years of record where there was more precipitation than this year. The flows in the rivers within the basin remained well below average for this time of There are 106 out of 109 years of vear. record where the total flow past the Animas River at Durango stream gauge was more than this year. There were 96 out of 108 years of record where the total flow past the Dolores stream gauge was more than this year and 89 out of 102 years of record where the total flow past the La Plata River at Hesperus gauge was more than this year. On January 31, the NRCS SNOTEL sites reported an average snow-water-equivalent within the basin at 89%. Last month the average snowwater-equivalent at the end of the month was 62%.



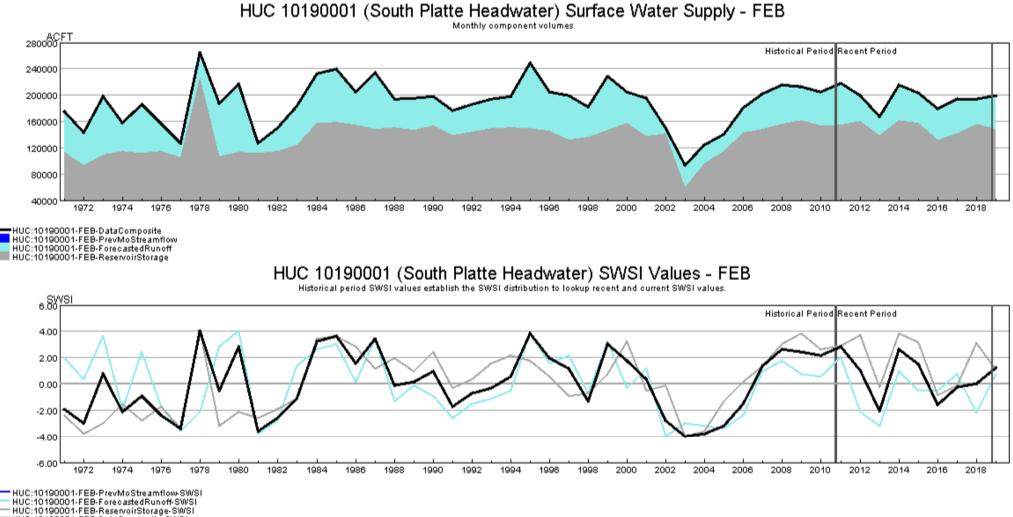




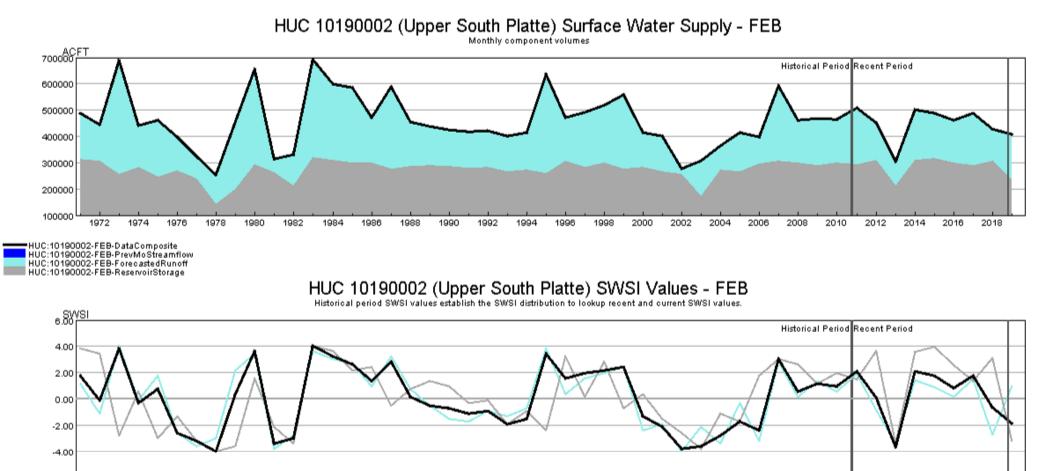




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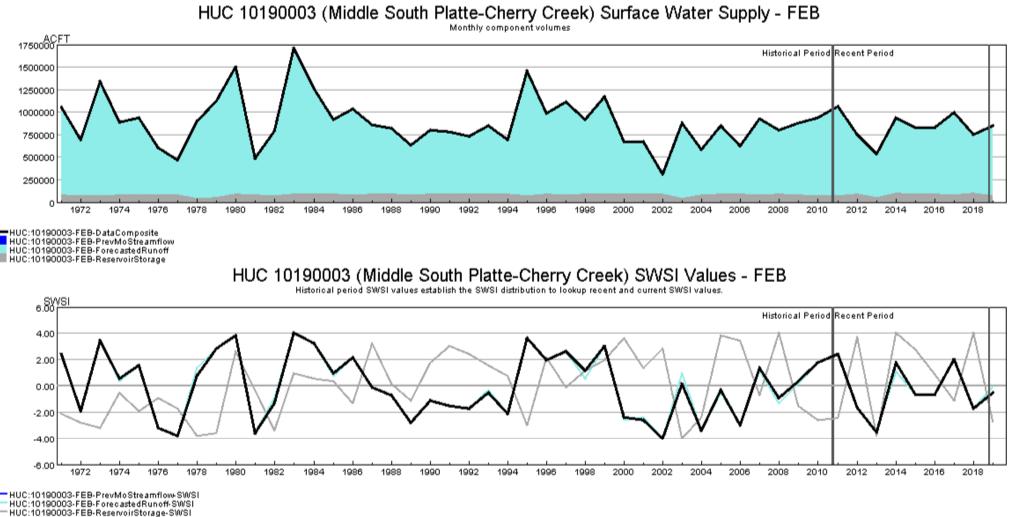


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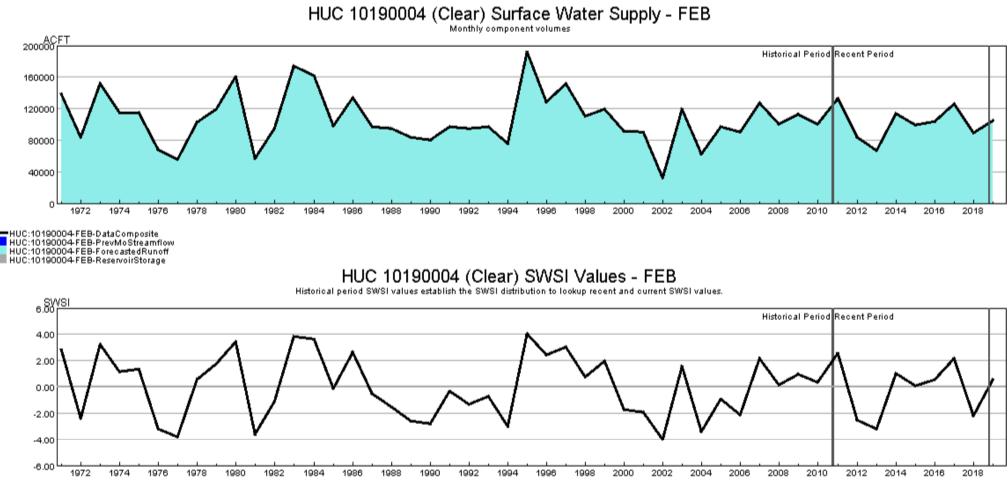


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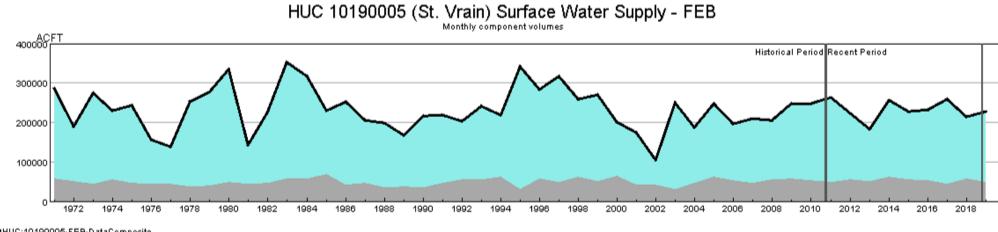
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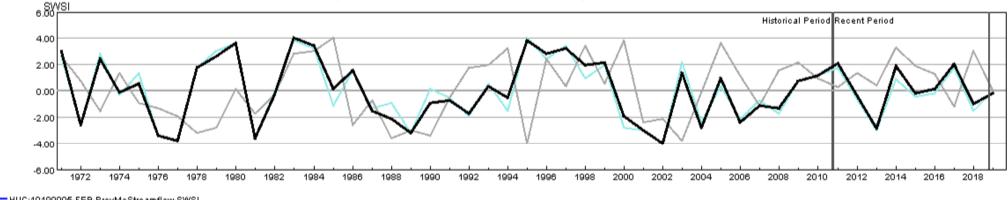
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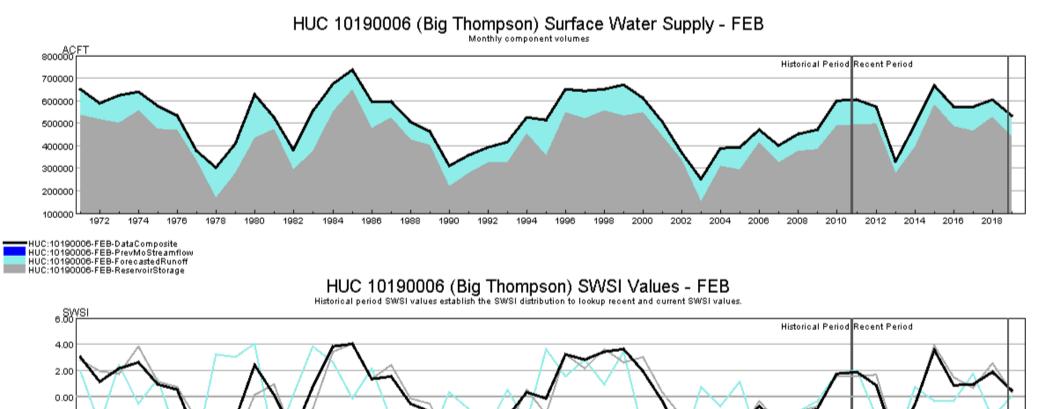
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HUC 10190005 (St. Vrain) SWSI Values - FEB





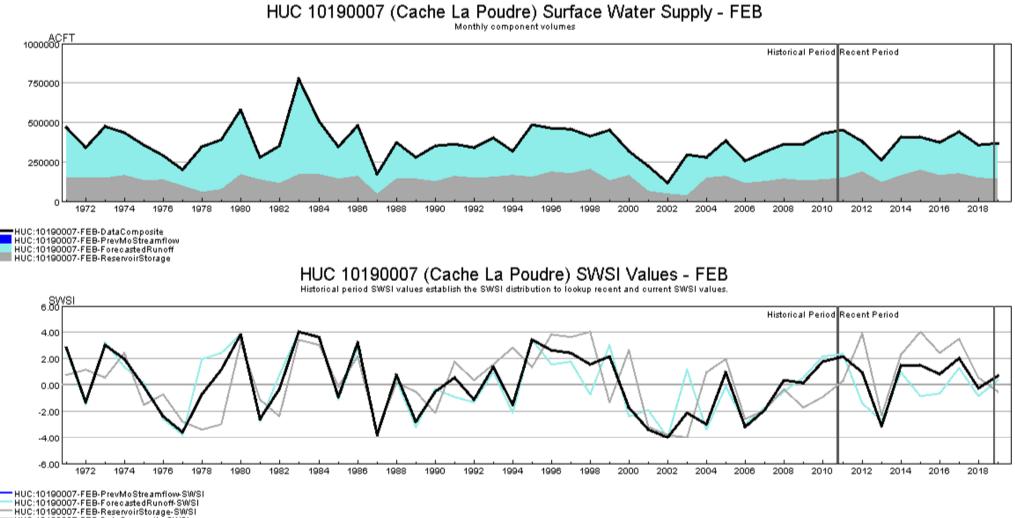
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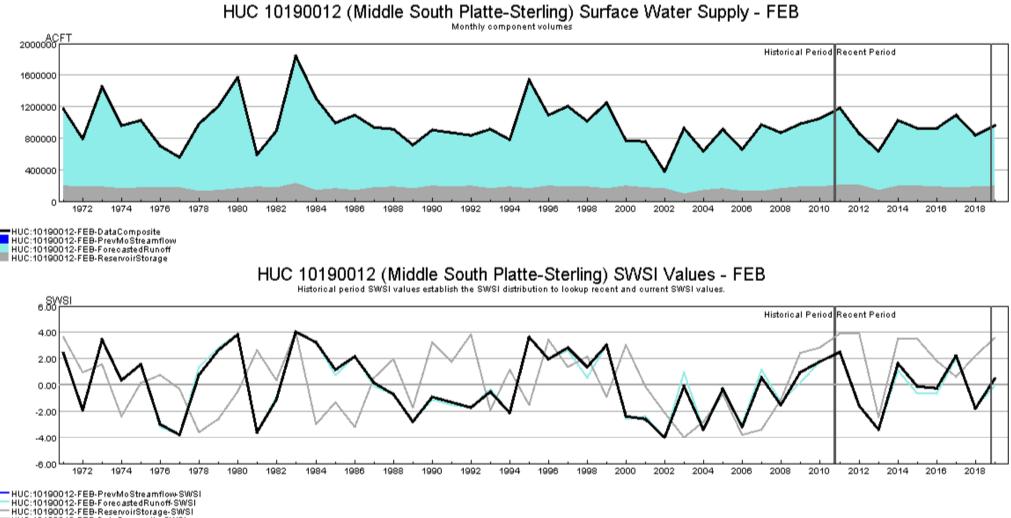


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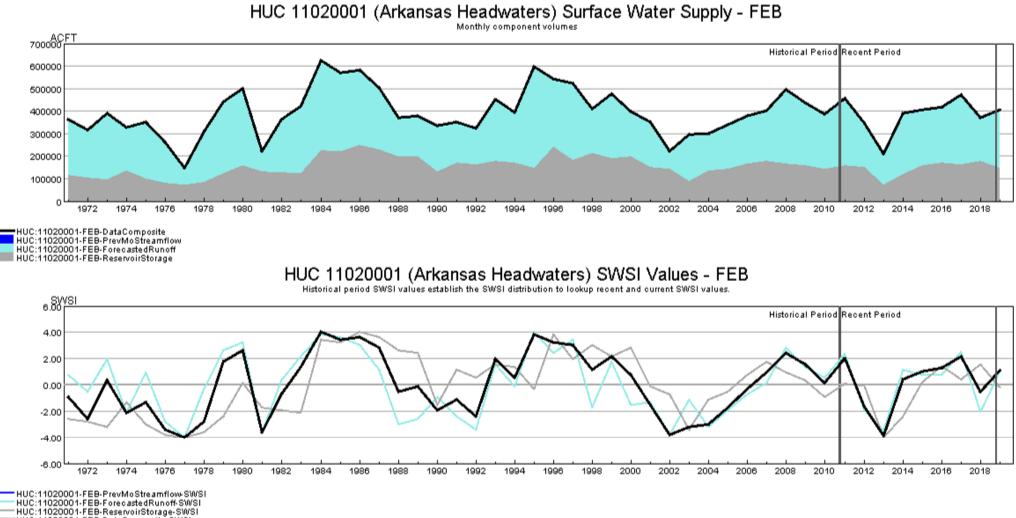
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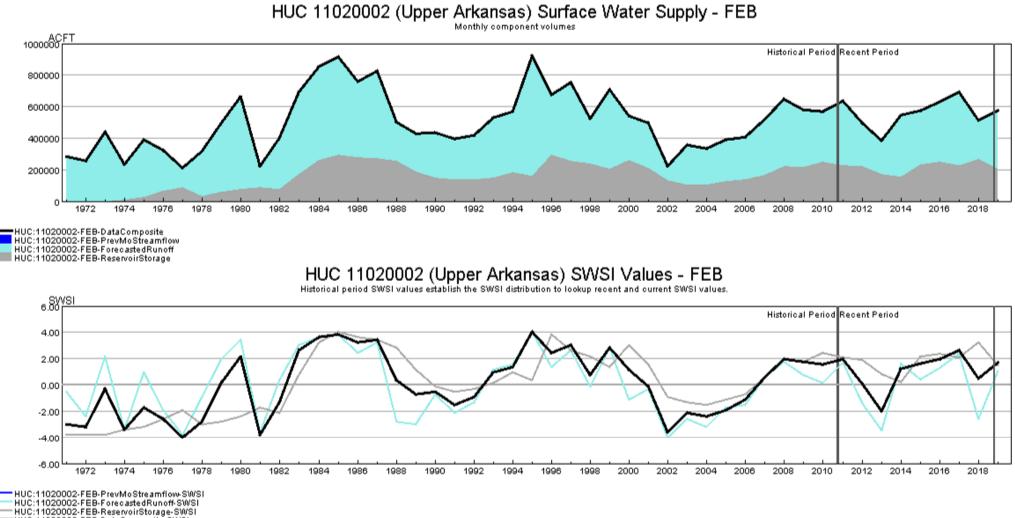
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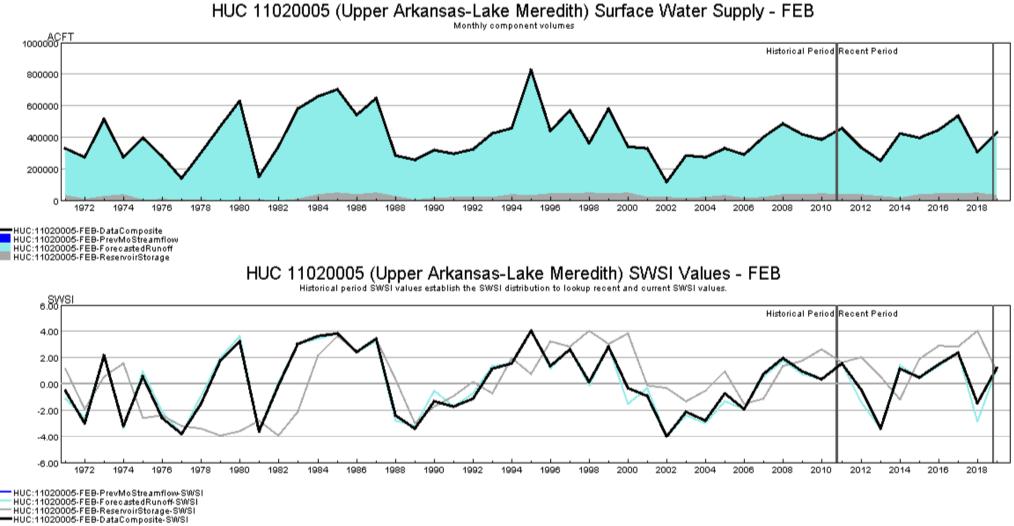
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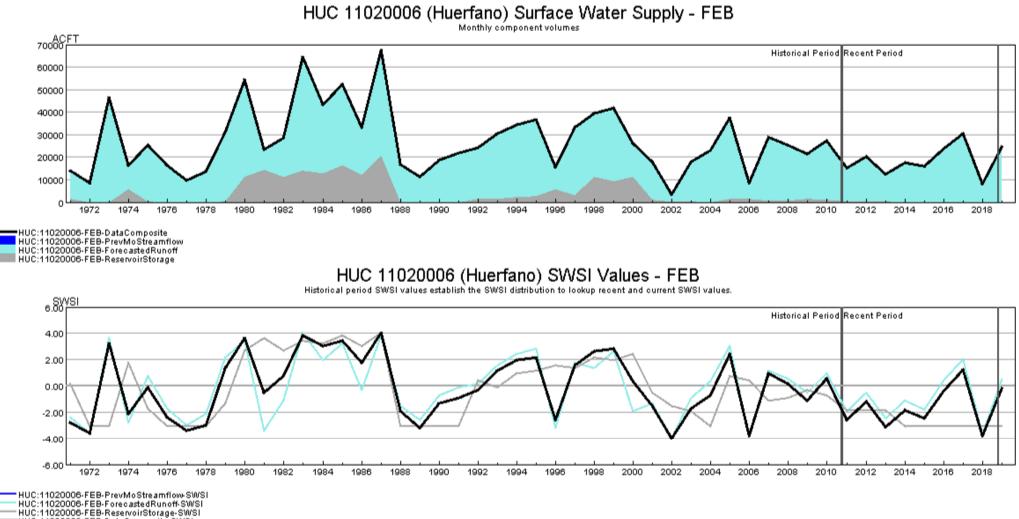


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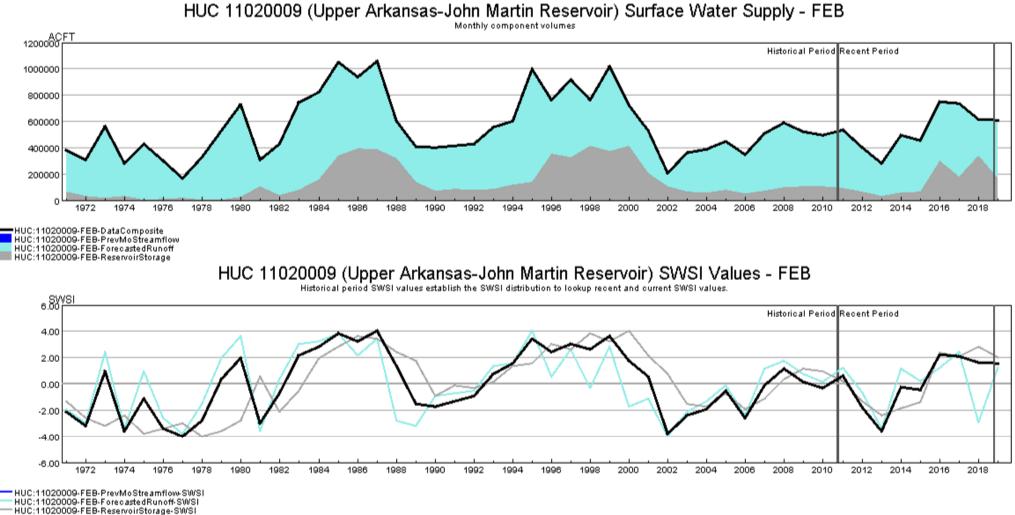


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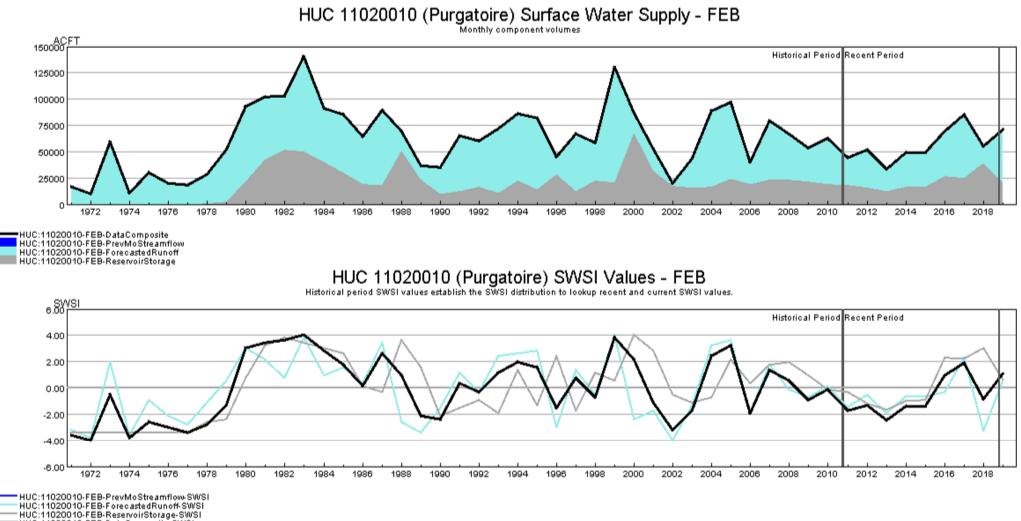




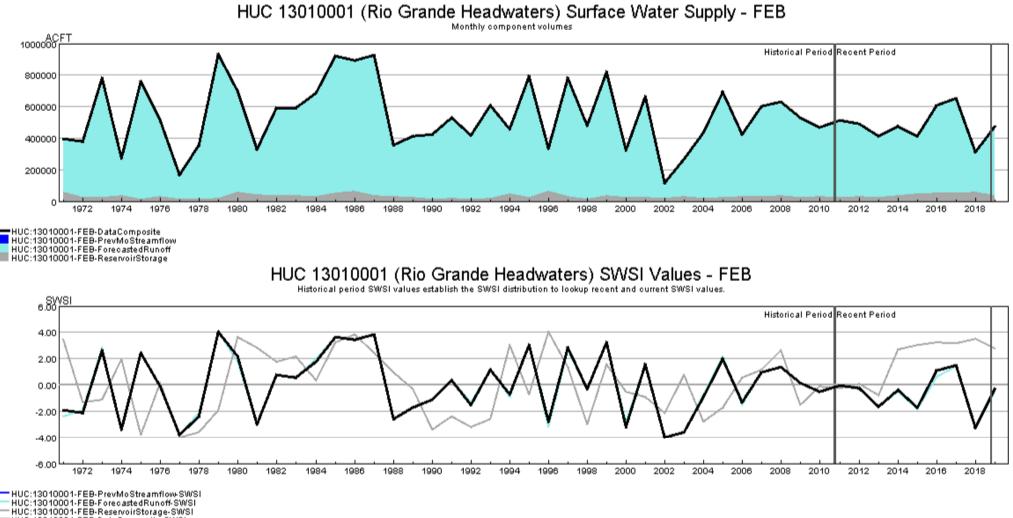
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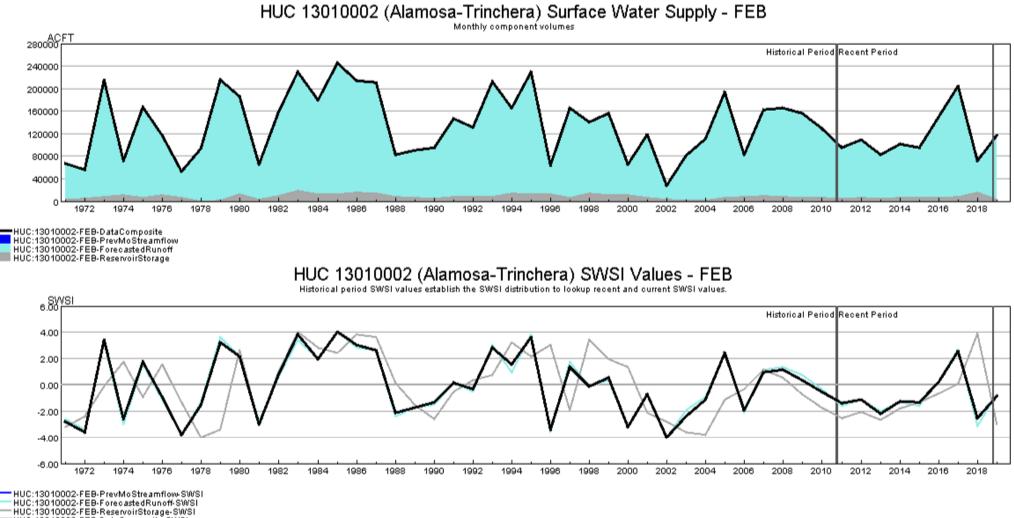
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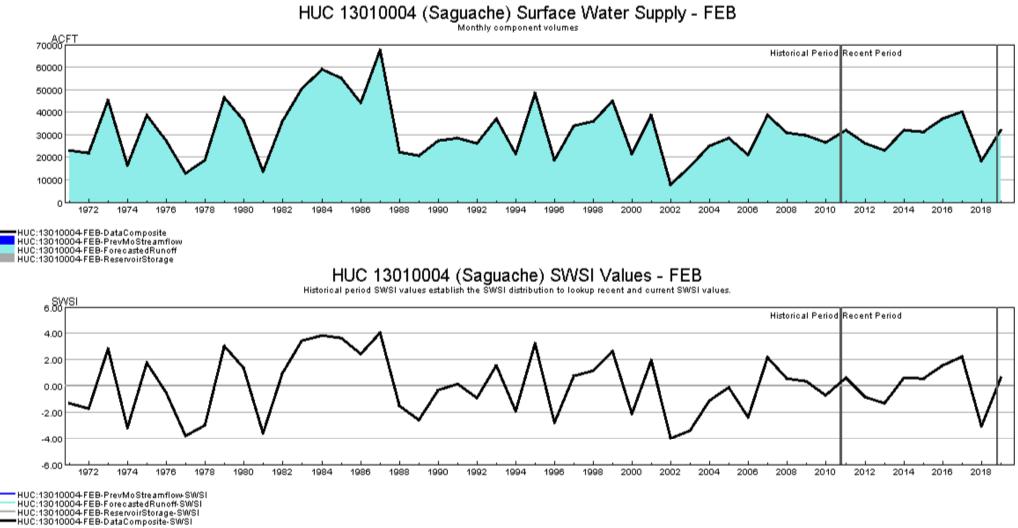
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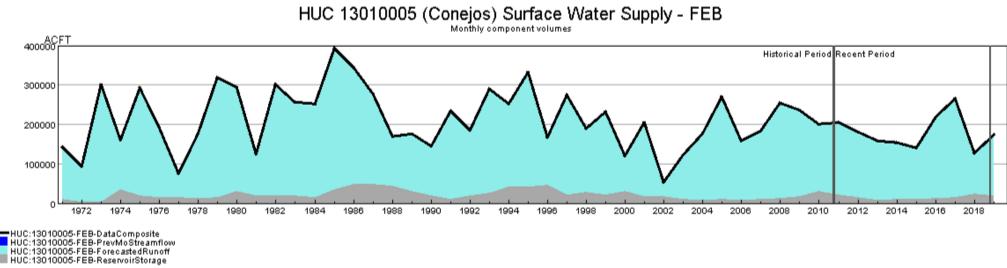


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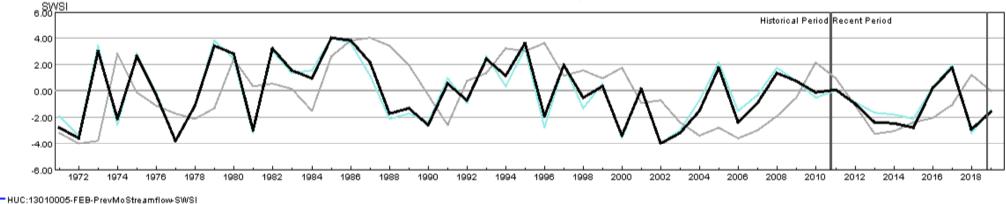


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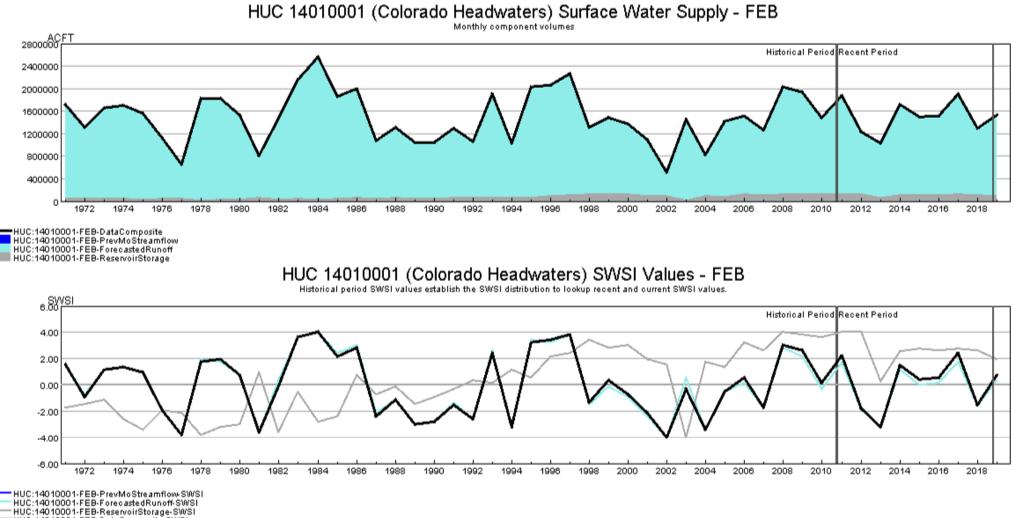




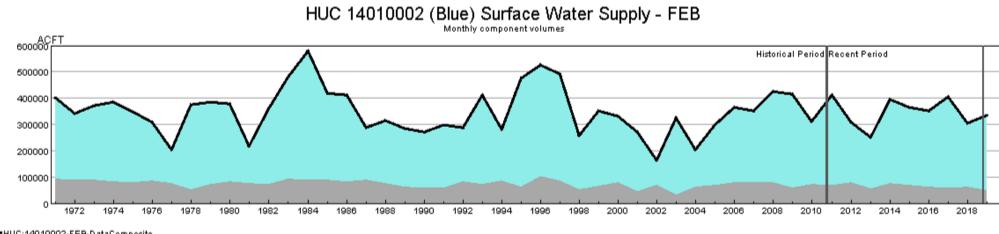
HUC 13010005 (Conejos) SWSI Values - FEB Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



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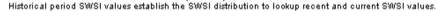


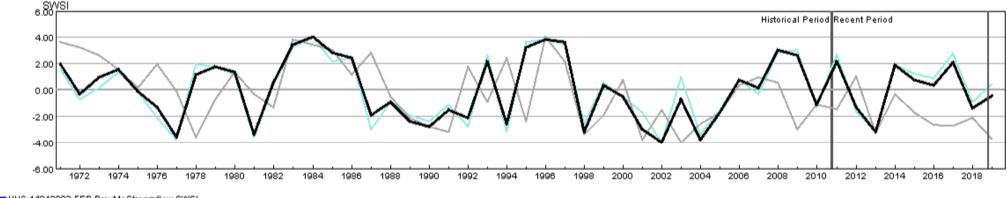
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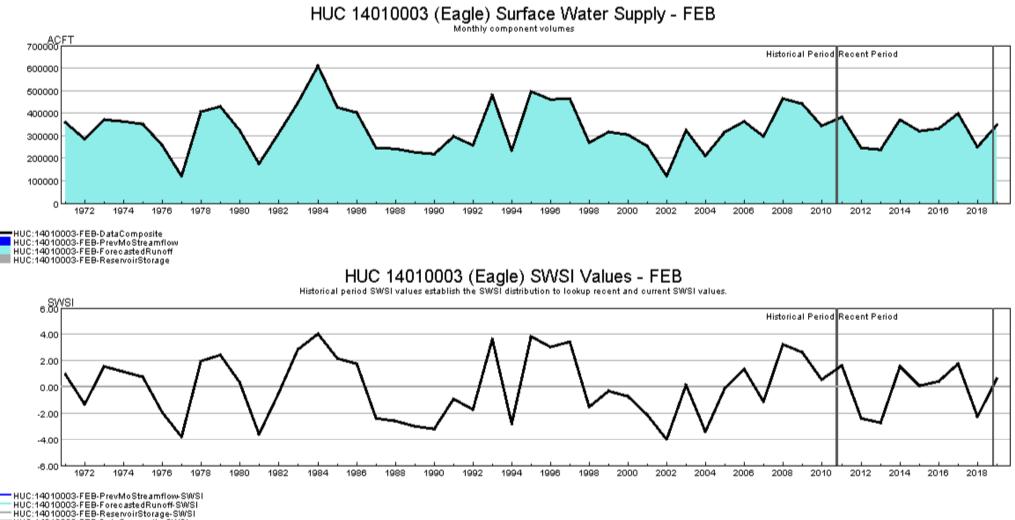
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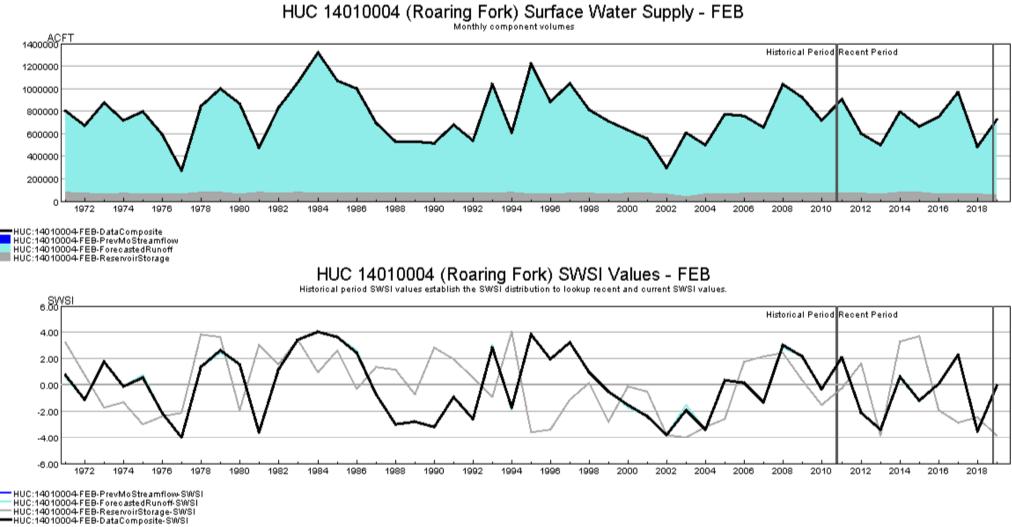


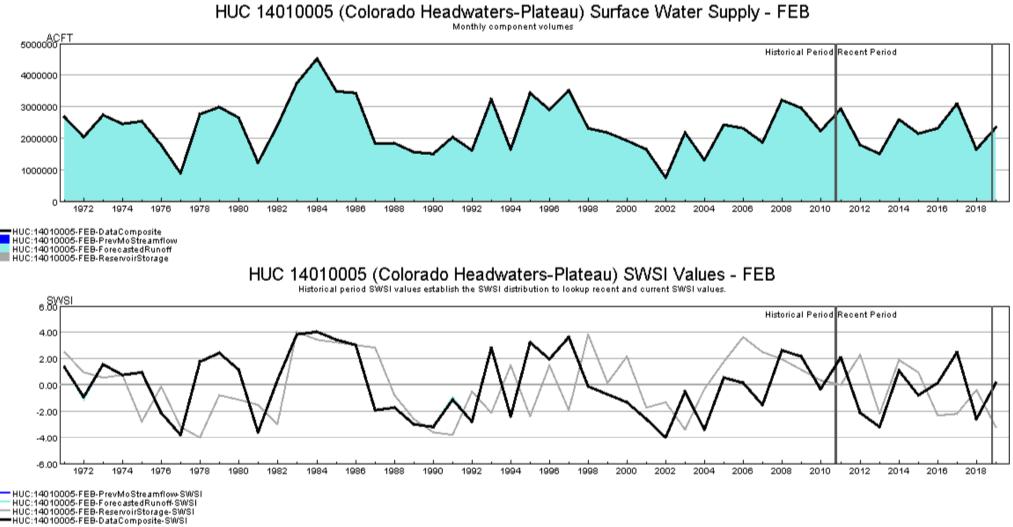


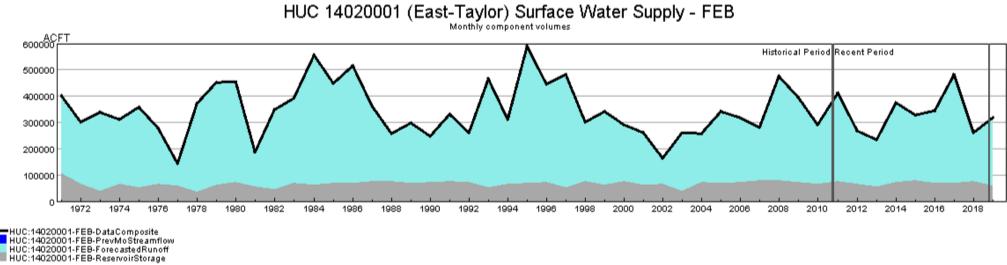
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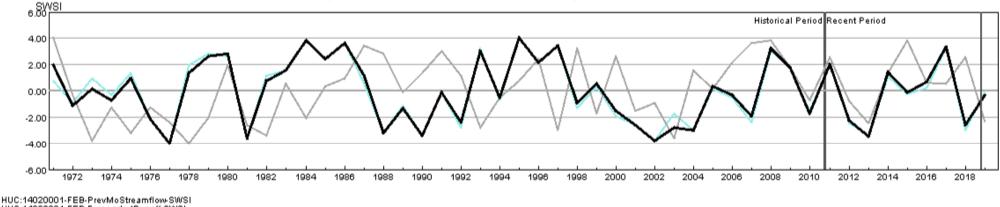
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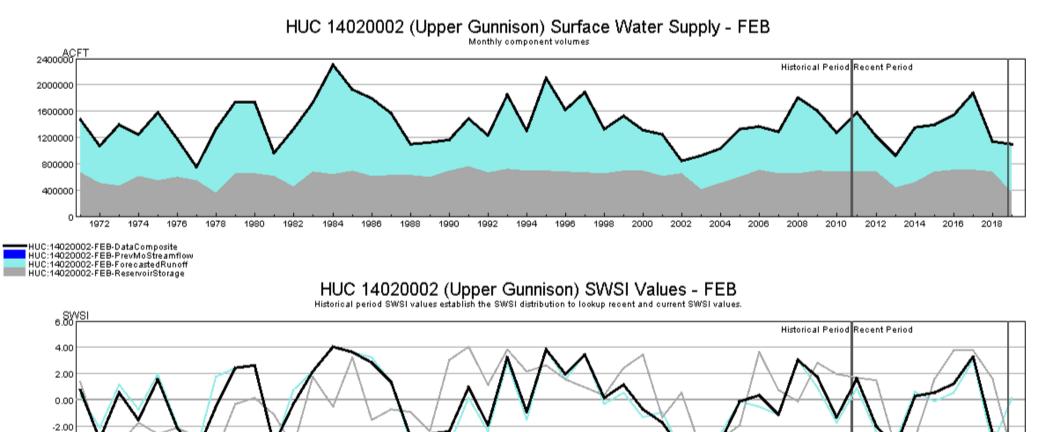


HUC 14020001 (East-Taylor) SWSI Values - FEB Historical period SWSI values establish the SWSI distribution to lookup recent and current SWSI values.



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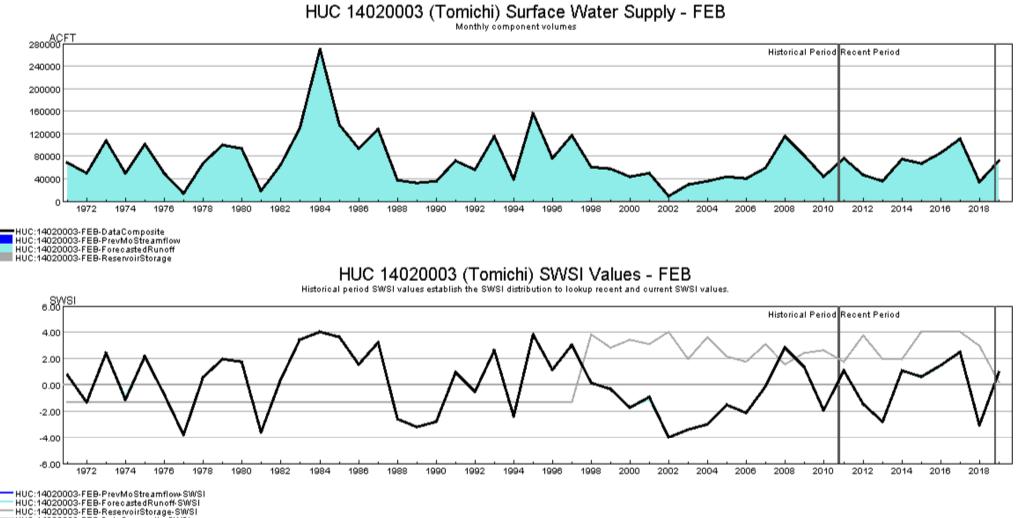
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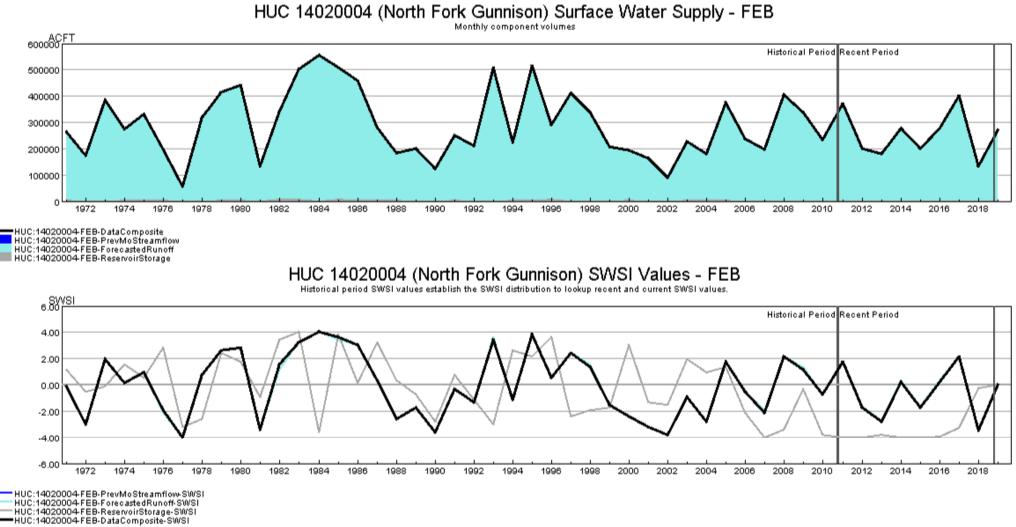
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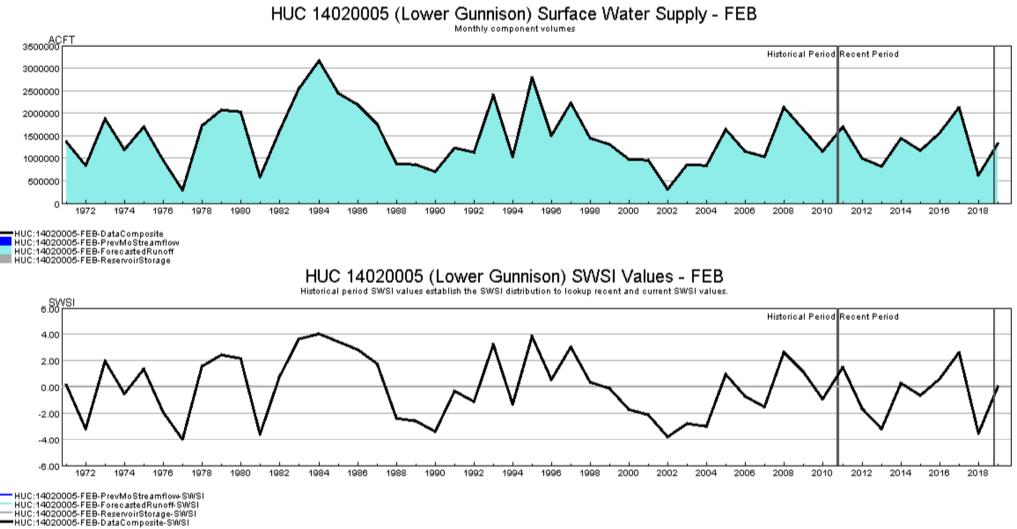
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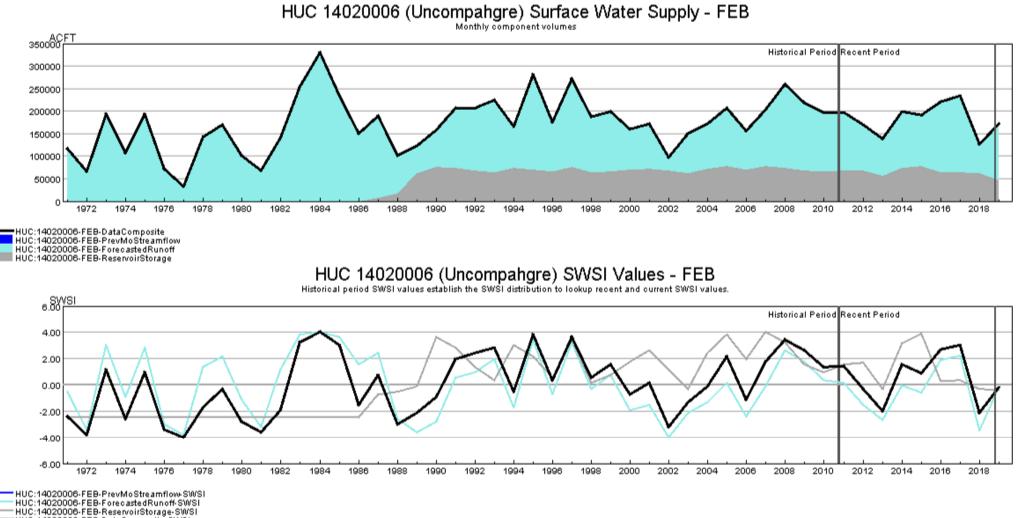
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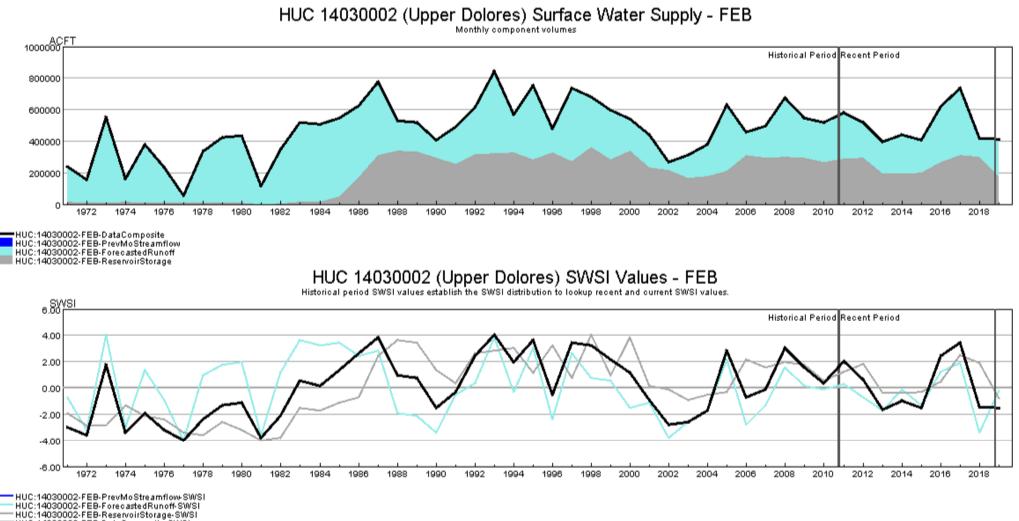
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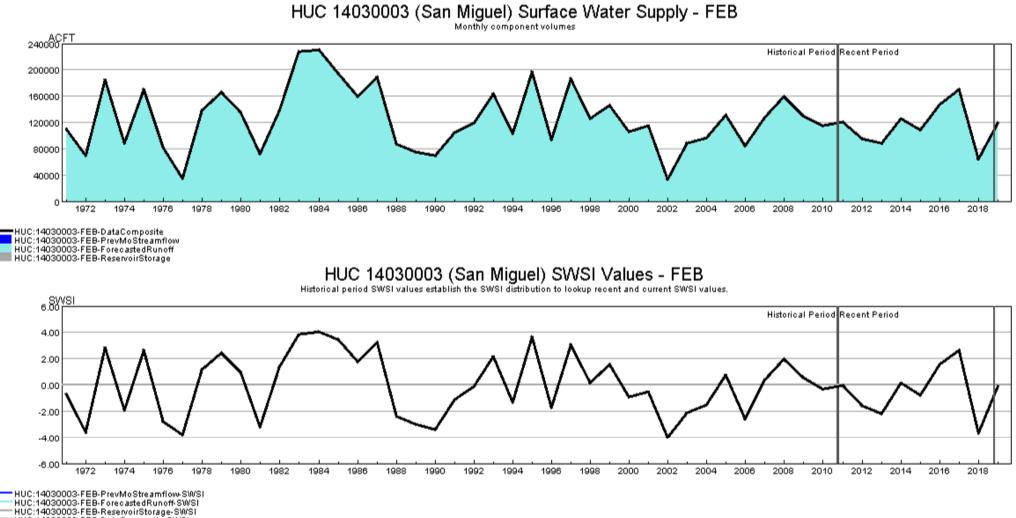




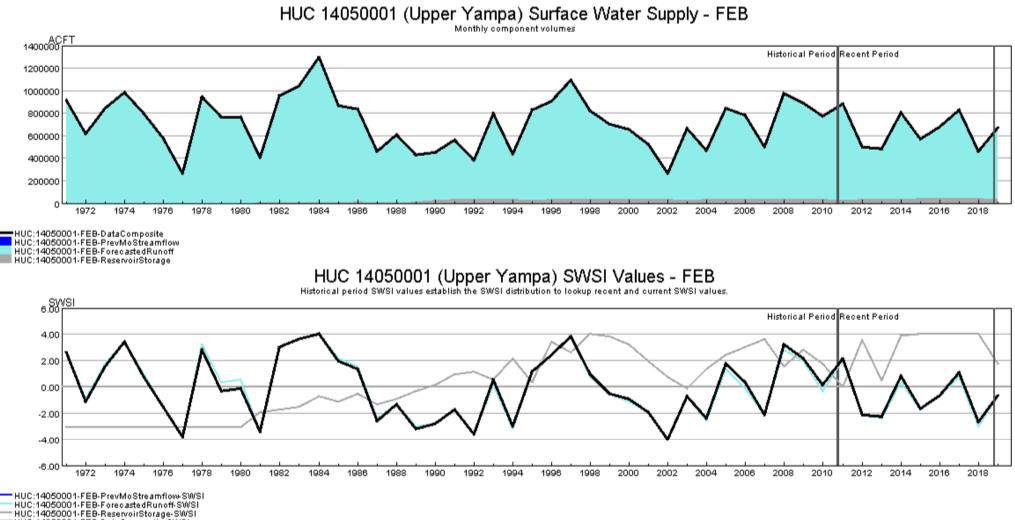
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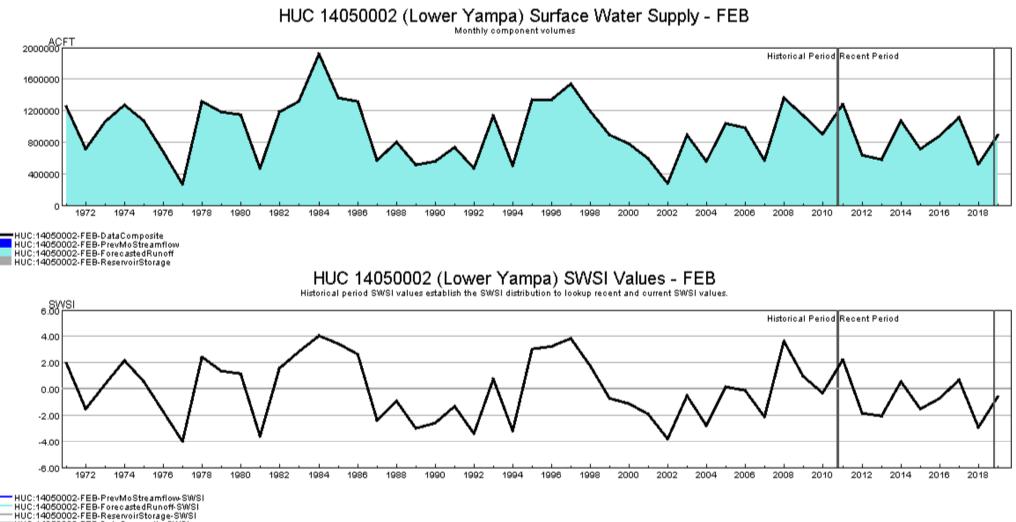
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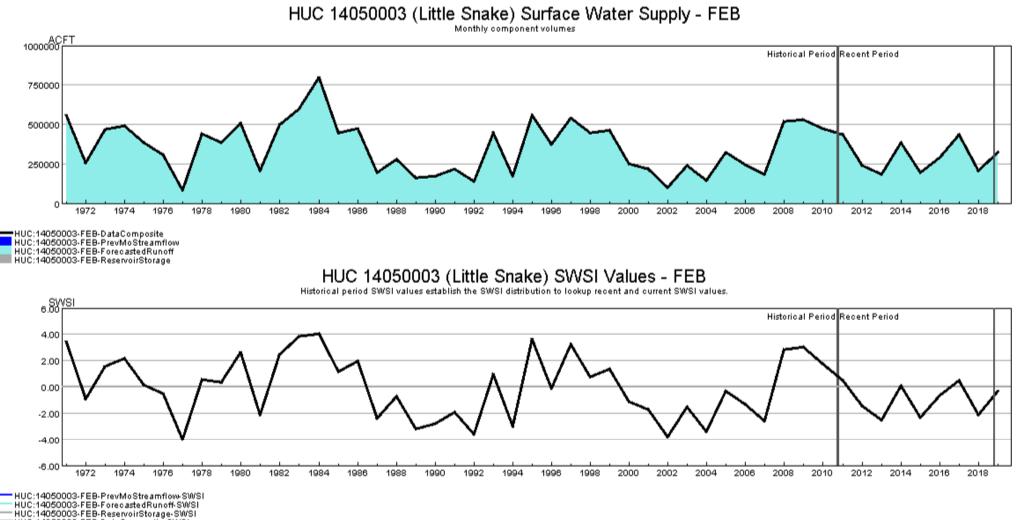
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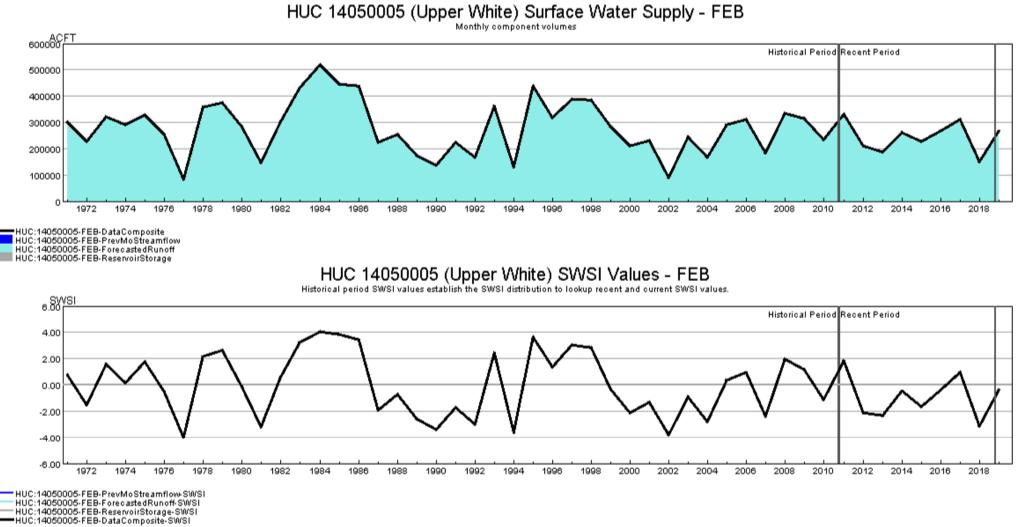
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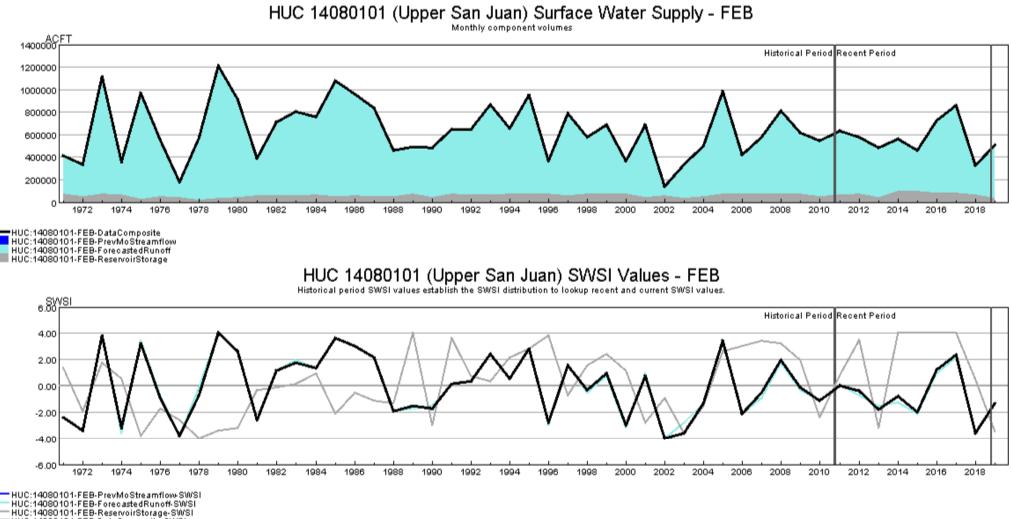


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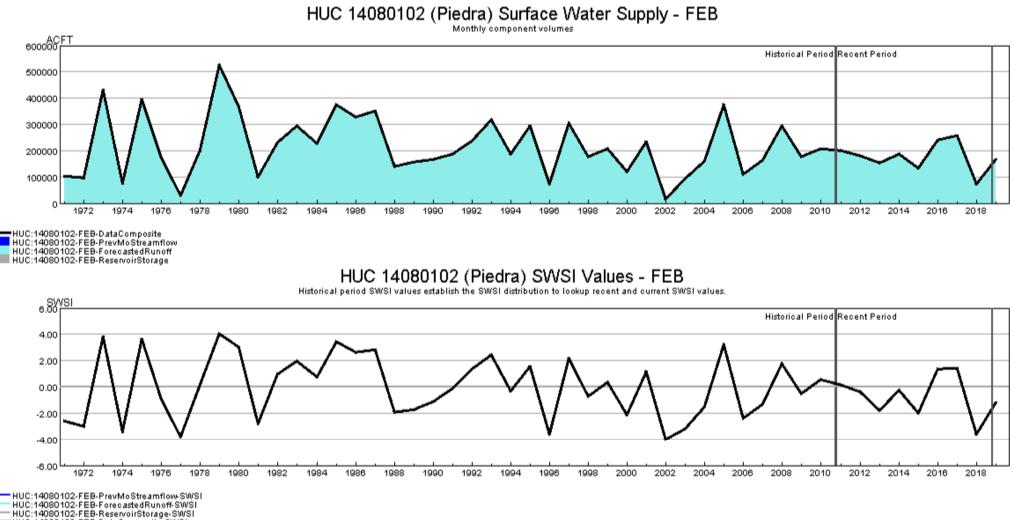


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- HUC:14080101-FEB-DataComposite-SWSI



- HUC:14080102-FEB-DataComposite-SWSI

