

Alaska Snow Survey Report



Natural
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April 1, 2014

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Cover photo: Bird Creek Valley in the Peters Hills is back-dropped by Mount Foraker (17,400') in the Alaska Range. The Peters Hills have about 83% of normal snowpack.

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General Overview

SnowPack

Due to the lack of significant precipitation across most of the state, most of Alaska's snowpacks remain similar to last month's snowpack.

Regions of the state with higher than normal snowpack include the Arctic, the eastern half of the Interior and the Copper Basin. Most of these snowpacks dropped made only minimal gains during March and therefore dropped as a percent of normal during the month.

Below normal snowpack regions of the state are Southcentral Alaska and especially western Alaska. Both the Kenai Peninsula and the western half of Bristol Bay saw significant storms which greatly increased the existing snowpack, but did not lift the regions' snowpacks to normal. Bridge Creek, near Homer, went from 7 inches of snow with 2.2 inches of water content last month to 21 inches of snow and 6.4 inches of water content this month, but that still is only 53% of normal. Southeast Alaska snowpack generally moderated during the month of March, but continues to have regions of both normal and below normal snowpack.

Precipitation

Most of Alaska received below normal precipitation for the month of March. This is the second month in a row of below normal precipitation for the state.

Most sites in the Interior of Alaska received between one to two thirds normal precipitation. Only Bettles, which caught 0.8", recorded near normal precipitation. More typical is Upper Nome Creek which caught 0.3" or 33% normal.

The Kenai Peninsula was the only part of the state which received near or above normal precipitation. The eleven SNOTEL sites on the peninsula caught an average of 99% of normal precipitation for March. Grouse Creek Divide, eighteen miles north of Seward, was the big winner for the month with 6.9" of precipitation or 164% of normal.

Temperature

Temperatures during March were generally above normal. However, most of Alaska was moderated and didn't see extreme departures either above or below normal. The only exception to this was the Arctic, where Barrow was 11°F above normal for the month. Barrow has been significantly above normal each month this winter.

Other Sites which were above normal are Bettles (6°F above normal), Talkeetna (5°F above normal), Nome (4°F above normal), Homer and Fort Yukon (3°F above normal).

Streamflow Forecasts

FORECAST POINT*	Percent of Ave. Flow	Period
Yukon River at Eagle	101	April - July
Porcupine River nr Int'l Boundary.....	93	April - July
Yukon River near Stevens Village	99	April - July
Tanana River at Fairbanks	104	April - July
Tanana River at Nenana	100	April - July
Little Chena River near Fairbanks	113	April - July
Chena River near Two Rivers	114	April - July
Salcha near Salchaket	100	April - July
Sagvanirktok River near Pump Station 3	113	April - July
Kuparuk River near Deadhorse	109	April - July
Kuskokwim River at Crooked Creek	48	April - June
Gulkana River at Sourdough	113	April - July
Little Susitna River near Palmer	102	April - July
Talkeetna River near Talkeetna	98	April - July
Ship Creek near Anchorage	60	April - July
Kenai River at Cooper Landing	69	April - July
Gold Creek near Juneau	97	April - July

Snowmelt Runoff Index (SRI): for streams which no longer have stream gauging stations

FORECAST POINT	INDEX	Index	Key:
Koyukuk River at Hughes.....	0.0		
MF Koyukuk R near Wiseman	+0.6		
Slate Creek at Coldfoot.....	+0.6		
Beaver Creek above Victoria Creek.....	+0.6		
Birch Creek below South Fork.....	-1.5		
Caribou Creek at Chatanika.....	0.0		
Susitna River near Gold Creek.....	-1.2	-2 to -3	much below average snow-melt runoff
Chulitna River near Talkeetna.....	-2.5		
Deshka River at mouth near Willow.....	-2.3		
Montana Creek at Parks Highway.....	-1.8		
Willow Creek near Willow.....	-0.8	-1 to -2	below average snowmelt runoff
Skwentna River at Skwentna.....	-2.5		
Chuitna River near Tyonek.....	-2.8		
Campbell Creek near Spenard.....	-2.3		
Indian Creek at Indian.....	-3.0	-1 to +1	average snow-melt runoff
Bird Creek at Bird Creek	-3.0		
Glacier Creek nr Girdwood	-2.5		
Six Mile Creek near Hope.....	-2.8		
Resurrection Creek near Hope.....	-2.8	+1 to +2	above average snowmelt runoff
Grouse Ck at Grouse Lake Outlet nr Seward	-2.6		
Anchor River near Anchor Point	-3.0		
Deep Creek near Ninilchik.....	-3.0		
Ninilchik River near Ninilchik.....	-3.0	+2 to +3	much above average snow-melt runoff
Fritz Creek near Homer.....	-2.4		
Skagway River at Skagway.....	+0.6		
Municipal Watershed C nr Petersburg	-1.2		

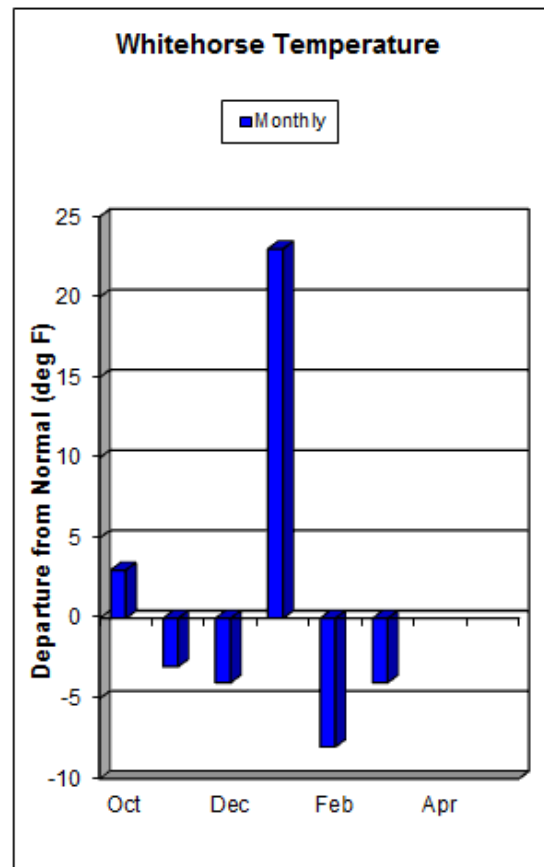
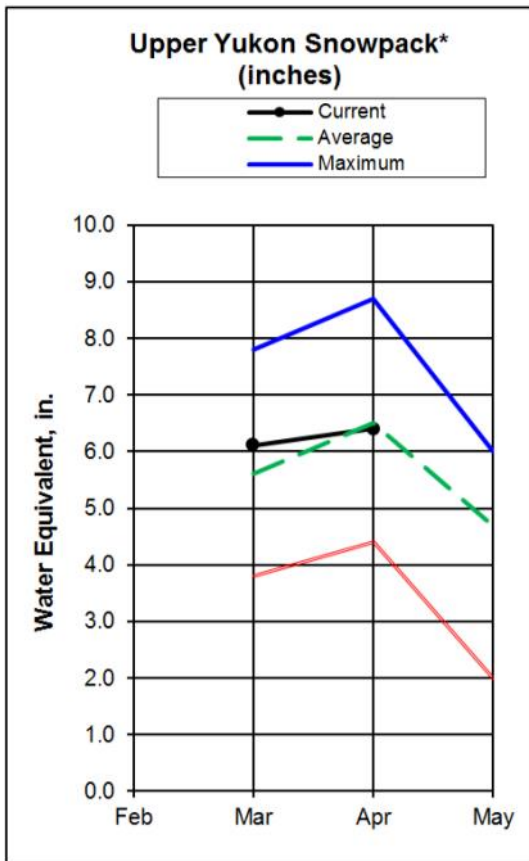
HOW FORECASTS ARE MADE

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Upper Yukon Basin



Snow pack

The Upper Yukon basin has near normal snowpacks. The snowpack ranges from 96% of normal in the Stewart-Pelly Drainages to 111% of Normal for the Yukon Basin above Whitehorse.

The Dawson area snow courses average 108% of normal, ranging from 96% at Grizzly Creek to 120% at King Solomon Dome. These courses averaged 129% of normal last year at this time.

The White River Drainage, south of Dawson, is near normal at 102% of normal, slightly less than last year.

Upper Yukon Basin

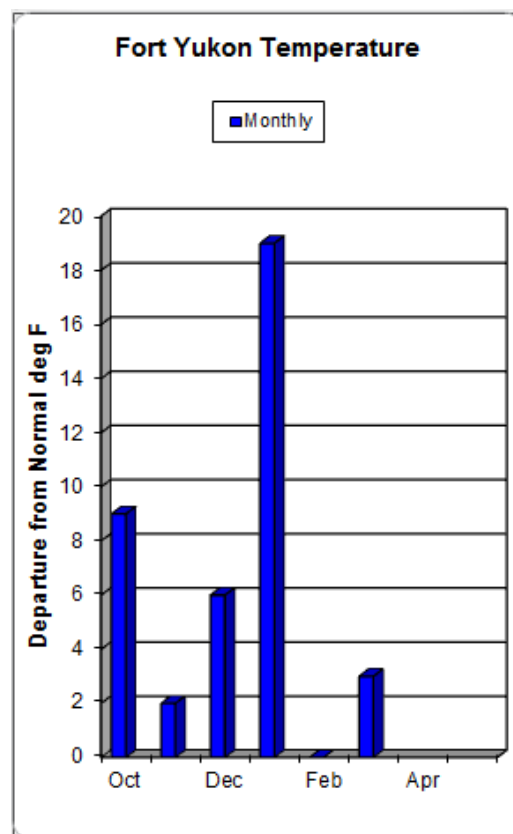
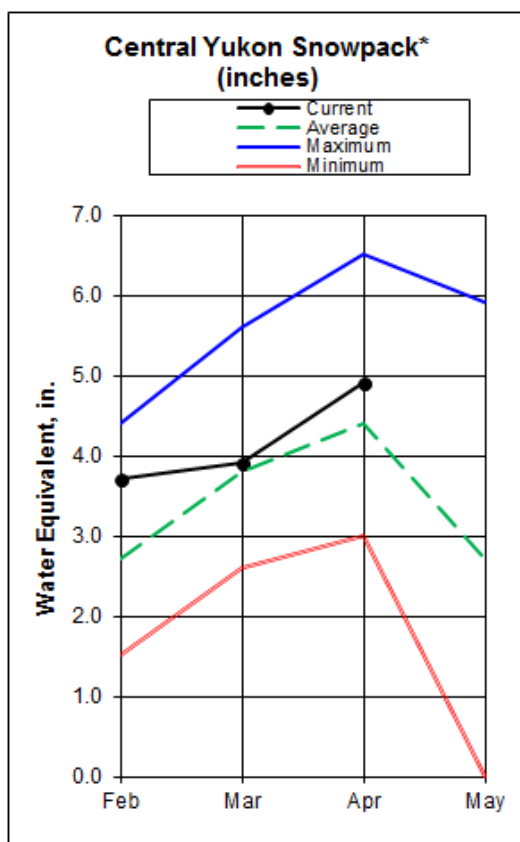
Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
ARROWHEAD LAKE	3675	No Survey	---	---	---	---	---	7.7
ATLIN	2395	No Survey	20	4.9	---	---	---	5.2
BEAVER CREEK	2150	3/26/2014	20	3.2	20	4.1	---	3.4
BURNS LAKE	3650	3/28/2014	44	10.3	43	10.6	---	8.5
BURWASH AIRSTRIP	2660	No Survey	---	---	11	2.0	---	1.8
CALUMET	4300	3/31/2014	31	8.1	30	7.3	---	7.6
CASINO CREEK	3495	3/26/2014	26	5.8	24	4.3	---	5.1
CHAIR MOUNTAIN	3500	3/26/2014	22	4.8	21	3.8	---	3.8
DUKE RIVER	4300	No Survey	---	---	---	---	---	4.3
EAGLE PLAINS	2330	3/26/2014	25	5.2	30	6.5	---	6.7
EAGLE RIVER	1115	3/26/2014	25	5.2	24	4.4	---	5.3
EDWARDS LAKE	2720	3/27/2014	24	4.2	33	6.8	---	6.5
FINLAYSON AIRSTRIP	3240	3/28/2014	23	4.1	28	6.0	---	4.6
FULLER LAKE	3695	3/27/2014	37	7.9	---	---	---	7.8
GRIZZLY CREEK	3200	3/27/2014	28	6.7	32	7.6	---	7.0
HOOLE RIVER	3400	3/28/2014	32	6.7	34	7.2	---	5.4
JORDAN LAKE	3050	3/28/2014	32	7.2	30	5.9	---	5.5
KING SOLOMON DOME	3540	3/28/2014	31	7.7	34	7.9	---	6.4
LOG CABIN (B.C.)	2900	3/25/2014	43	14.7	51	15.7	---	15.9
MACINTOSH	3805	3/26/2014	16	2.7	26	4.7	---	4.0
MAYO AIRPORT	1770	4/3/2014	20	4.8	20	4.7	---	3.9
MEADOW CREEK	4050	3/25/2014	52	13.8	44	11.6	---	11.0
MIDNIGHT DOME	2805	3/28/2014	28	6.4	40	9.4	---	5.9
MONTANA MTN.	3350	3/26/2014	21	5.5	26	5.9	---	5.8
MORLEY LAKE	2700	3/25/2014	31	8.1	26	5.4	---	6.1
MT. BERDOE	3395	3/26/2014	22	4.9	30	5.6	---	4.5
MT. MCINTYRE B	3600	3/28/2014	27	6.9	28	5.8	---	6.1
MT. NANSEN	3350	3/26/2014	19	4.2	23	4.1	---	3.2
OLD CROW	980	4/1/2014	26	5.2	26	4.6	---	4.7
PELLY FARM	1550	3/25/2014	16	3.8	18	3.4	---	3.0
PLATA AIRSTRIP	2725	3/27/2014	33	7.1	36	8.4	---	7.6
RACKLA LAKE	3410	3/27/2014	28	4.8	33	6.6	---	7.7
RIFFS RIDGE	2130	3/26/2014	26	5.1	33	6.4	---	5.7
RUSSELL LAKE	3480	3/27/2014	37	8.1	40	8.7	---	8.8
SATASHA LAKE	3630	3/26/2014	17	3.3	20	3.8	---	4.3
SUMMIT	985	3/26/2014	22	4.7	27	5.8	---	9.9
TAGISH	3540	3/26/2014	22	5.7	29	5.8	---	5.9
TWIN CREEKS	2950	3/27/2014	35	7.4	38	9.2	---	7.5
WHITEHORSE AIRPORT	2300	3/28/2014	22	5.1	20	3.6	---	4.3
WILLIAMS CREEK	3000	3/26/2014	20	4.7	23	4.3	---	3.8
WITHERS LAKE	3200	3/27/2014	33	7.4	35	7.7	---	9.2

Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yukon R at Eagle	Apr-Jul	33600	101	39500	36000	31300	27800	33300

Central Yukon Basin



Snow pack

The Central Yukon Basin snowpack, despite below normal precipitation for the month, continues to be normal to above normal across most of the basin.

All SNOTEL sites in the Central Yukon Basin reported below normal precipitation. Fort Yukon SNOTEL measured no precipitation during March, while American Creek, near Eagle, had 0.1" and Upper Nome Creek SNOTEL, in the White Mountains, received 0.3" which is 33% normal. Because of gains earlier in the year, these sites still continue to have above normal precipitation for the water year.

The only reason the snowpack remains above normal in this region is because it was much above normal last month. The six measured snow courses on the north side of the White Mountains average 114% of normal, down from 140% of normal last month. These range from 88% of normal at Stack Pup and Fossil snow courses to 131% of normal at Wolf snow course.

Central Yukon Basin

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
AMERICAN CREEK	1050	4/1/2014	16	3.5	19	2.9	---	---
ATIGUN PASS	4800	4/1/2014	37	---	34	---	---	---
BOREALIS	1330	4/4/2014	24	5.7	25	5.0	25	4.8
BOUNDARY	3500	4/2/2014	29	7.1	24	5.8	26	5.3
CATHEDRAL CREEK	1800	3/29/2014	45	8.8	40	6.9	---	---
CHICKEN AIRSTRIP	1650	4/2/2014	23	4.3	23	4.8	16	3.2
CIRCLE CITY	600	<i>No Survey</i>	---	---	---	---	25	4.3
CIRCLE HOT SPRINGS	860	3/31/2014	18	3.3	24	4.0	24	4.1
COAL CREEK	1000	3/29/2014	22	5.1	24	3.9	---	---
COPPER CREEK	2000	3/29/2014	20	6.0	23	3.8	---	---
CRESCENT CREEK	2600	3/29/2014	14	4.2	28	4.8	---	---
EAGLE SUMMIT	3650	4/1/2014	10	---	8	---	---	---
FORT YUKON SNOTEL	430	4/1/2014	20	---	21	---	---	---
FORT YUKON	430	4/1/2014	22	4.2	25	3.5	20	3.6
FOSSIL	1400	4/4/2014	24	5.8	21	4.2	24	4.8
GRAPHITE LAKE	600	4/2/2014	24	4.8	16	2.5	---	---
HESS CREEK	1000	3/31/2014	25	5.4	26	5.1	26	5.0
LOST CHICKEN HILL	2150	4/1/2014	23	4.2	26	5.1	18	4.0
LOWER BEAVER CREEK	400	4/2/2014	29	6.8	36	6.8	---	---
MISSION CREEK	900	3/26/2014	10	2.2	15	2.7	18	3.8
MT. FAIRPLAY	3100	4/1/2014	25	5.5	26	5.3	21	4.6
OLD CROW	980	4/1/2014	26	5.2	26	4.6	---	4.7
PTARMIGAN CREEK	2270	3/31/2014	25	5.2	26	4.4	24	4.4
SEVEN MILE	600	3/31/2014	27	5.4	26	5.0	26	4.9
STACK PUP CREEK	1620	3/31/2014	20	3.6	23	3.5	25	4.0
STEP MOUNTAIN	2850	3/29/2014	24	6.3	---	---	---	---
THIRTY MILE	1350	3/27/2014	33	8.0	29	5.9	34	7.6
THREE FINGERS	3350	3/29/2014	34	7.9	42	7.4	---	---
UPPER NOME CREEK	2520	4/1/2014	25	---	24	---	---	---
VUNZIK LAKE	500	4/2/2014	23	5.0	30	4.9	---	---
WINDY GAP	1900	4/3/2014	25	6.0	26	5.6	26	5.7
WOLF	1200	4/4/2014	23	5.5	26	5.3	23	4.2

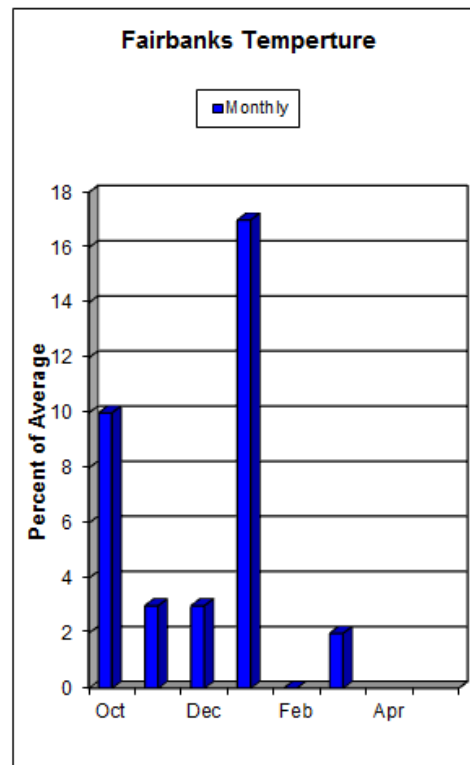
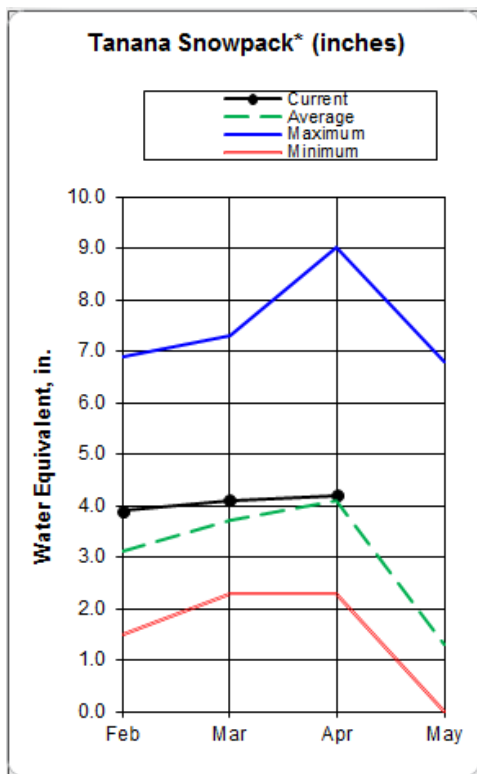
Streamflow Forecasts

Forecast Points	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Porcupine R nr Intl Boundary	APR-JUL	3880	4840	5240	93%	6560	8210	5640
Yukon R nr Stevens Village	APR-JUL	41500	45100	47500	99%	49900	53400	48100

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
AMERICAN CREEK	1050'	0.1	---	---	4.0	---	---	3.1
ATIGUN PASS	4800'	0.6	0.78	77%	4.9	5.56	88%	4.0
Chandalar Camp	3300'	0.3	---	---	3.7	5.2	71%	3.9
EAGLE SUMMIT	3650'	0.2	0.57	35%	5.5	5.28	104%	4.9
FORT YUKON	430'	0	0.5	0%	4.9	3.56	138%	4.0
UPPER NOME CREEK	2520'	0.3	0.91	33%	8.9	5.24	170%	5.8

Tanana Basin



Snow pack

March was a dry month in the Tanana Basin. Despite this the basin continues to have above normal snow-packs.

The Tanana Valley above Tok continues to have above normal snowpacks and the six snow courses measured averaged 106% of normal. The courses varied from 78% of normal at Paradise Hill snow course to 146% of normal at the Tok Junction snow course.

This above normal snowpack continues down valley to Delta Junction area. The six Delta area snow courses average 111% of normal, ranging from 87% at Granite Creek to 123% at the Gerstle River snow course.

The lower Tanana Valley maintains a normal snowpack with an above normal snowpack on the north side of the valley. On the south side of the valley the Rock Creek Bottom snow course has 17 inches of snow and gained 0.1 inch of water content during the month to make a total water content of 3.9 inches, 100% of normal. On the north side of the valley the Chatanika and Chena Basin both averaged 127% of normal. Several sites in the Chena Basin recorded snowpacks over 140% of normal including Munson Ridge SNOTEL and Little Chena Bottom and Colorado Creek snow courses. The six Chena Basin SNOTEL sites averaged 34% of normal precipitation for the month of March.

Tanana Basin

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
BONANZA CREEK	1150	3/28/2014	21	4.8	28	5.5	21	4.0
CARIBOU CREEK	1250	3/27/2014	23	5.7	25	4.8	20	3.8
CARIBOU SNOW PILLOW	900	3/27/2014	23	5.3	25	4.6	20	3.9
CHISANA	3320	4/1/2014	18	4.1	15	3.1	---	4.6
EDGAR CREEK	2400	No Survey	---	---	43	9.4	30	5.8
FIELDING LAKE	3000	4/1/2014	42	11.4	51	13.6	40	9.9
FORT GREELY	1500	4/2/2014	17	3.4	18	3.3	17	3.2
FRENCH CREEK	1800	4/1/2014	23	5.0	26	4.9	24	5.2
GERSTLE RIVER	1200	4/2/2014	19	3.8	17	3.1	17	3.1
GOLD KING	1700	No Survey	---	---	24	5	19	3.6
JATAHMUND LAKE	2180	3/26/2014	14	3.1	18	3.6	18	3.0
KANTISHNA	1550	3/31/2014	22	4.8	26	5.0	26	5.1
LAKE MINCHUMINA	730	3/31/2014	14	2.8	20	4.0	20	3.8
LITTLE CHENA BOTTOM	1100	3/31/2014	21	4.6	24	4.3	18	3.2
LITTLE CHENA RIDGE	2000	4/1/2014	17	4.6	18	4.1	---	4.9
LOST CREEK	3030	3/31/2014	17	3.9	15	3.0	18	3.7
MENTASTA PASS	2430	4/1/2014	29	7.6	30	7.3	27	6.2
MONUMENT CREEK	1850	4/1/2014	20	5.9	23	5.3	---	4.6
MT. RYAN	2800	4/1/2014	25	5.7	27	5.3	---	5.1
MUNSON RIDGE	3100	4/1/2014	40	9.9	33	7.6	---	6.8
PARADISE HILL	2200	3/26/2014	13	2.8	19	4.4	17	3.6
PTARMIGAN AIRSTRIP	2400	No Survey	---	---	25	4.8	16	3.6
ROCK CREEK BOTTOM	2250	3/31/2014	17	3.9	---	---	18	3.9
ROCK CREEK RIDGE	2600	No Survey	---	---	---	---	19	4.0
SHAW CREEK FLATS	980	4/1/2014	18	3.4	18	3.4	14	2.9
TEUCHET CREEK	1640	4/1/2014	18	4.4	22	4.1	---	3.8
TOK JUNCTION	1650	4/1/2014	25	5.1	24	4.5	20	3.5
UPPER CHENA	3000	3/31/2014	35	8.5	26	5.5	31	6.5
UPPER WOOD RIVER	2990	No Survey	---	---	29	5.6	22	4.8

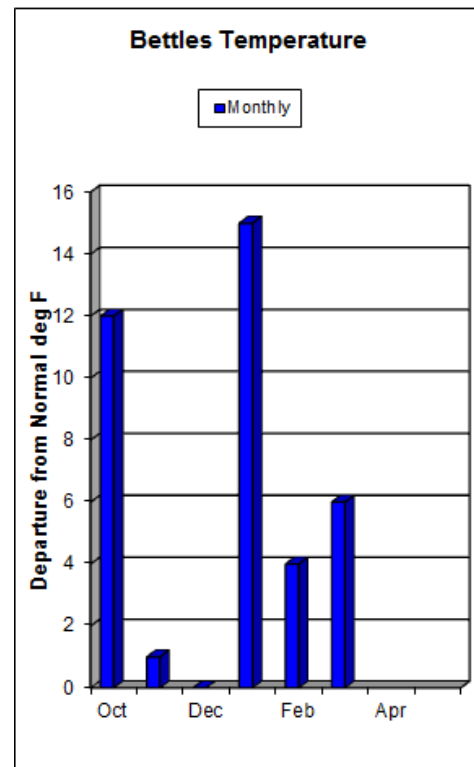
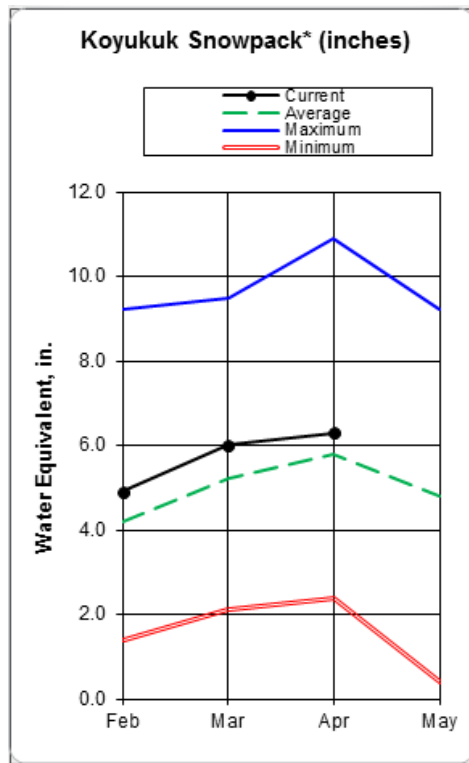
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Chena R nr Two Rivers	APR-JUL	193	261	308	114%	355	423	270
Little Chena R nr Fairbanks	APR-JUL	60	77	88	113%	99	116	78
Salcha R nr Salchaket	APR-JUL	427	540	625	100%	716	861	625
Tanana R at Fairbanks	APR-JUL	6801	7371	7758	104%	8145	8715	7460
Tanana R at Nenana	APR-JUL	7810	8520	9000	100%	9480	10200	9000

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
CHISANA	3320'	0.3	---	---	5.0	---	---	3.3
FAIRBANKS F.O.	450'	0.3	0.5	60%	5.0	4.53	110%	4.3
GRANITE CRK	1240'	0.3	0.46	65%	4.0	4.11	97%	3.7
KANTISHNA	1550'	0.4	0.77	52%	6.6	4.56	145%	5.5
LITTLE CHENA RIDGE	2000'	0.3	0.68	44%	4.8	5.44	88%	3.8
MONUMENT CREEK	1850'	0.3	0.62	48%	7.6	5.38	141%	5.8
MT. RYAN	2800'	0.1	0.75	13%	7.0	5.69	123%	5.3
MUNSON RIDGE	3100'	0.5	0.95	53%	10.2	7.57	135%	8.3
NENANA	415'	0.2	---	---	4.0	---	---	5.3
RHOADS CREEK	1225'	0	0.43	0%	3.5	3.57	98%	2.7
TEUCHET CREEK	1640'	0.1	0.57	18%	4.6	4.34	106%	4.7
TOK	1630'	0.0	---	---	4.8	---	---	3.3
UPPER CHENA	2850'	0.2	0.81	25%	10.4	6.67	156%	7.5

Western Interior Basins



Snow pack

Koyukuk

The upper Koyukuk Basin remains much above normal with the sites closer to the Brooks Range being the highest. Coldfoot SNOTEL site reports 29" of snow and 7.3" of water content or 138% of normal.

This above normal snowpack lightens down basin which is displayed at Bettles which has 96% of normal snowpack with 28" of snow with 5.4" of SWE. This trend continues further down basin until the snowpack is below normal. Though, though the lower basin still has more snow than it did last year.

Kuskokwim

The lower elevation sites and the southern Kuskokwim drainages have little to no snow. Telaquana Lake snow course had no recordable snow for the second straight month. Similarly, the Aniak SCAN site reported only 1 inch of snow at the site.

The northern basin had a better snowpack, though still below normal. Lake Minichumina, at the headwaters had 13" of snow with 2.4" of water content which is 71% of normal. The NWS site at McGrath reported 16" of snow with an estimated water content of 3.2" or 60% of normal.

Lower Yukon

The Aerial Markers in the Nowitna National Wildlife Refuge showed little change in snowpack since last month

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
ATIGUN PASS	4800'	0.6	0.78	77%	4.9	5.56	88%	4.0
BETTLES FIELD	640'	0.8	0.87	92%	9.0	6.71	134%	4.2
COLDFOOT	1040'	0.2	0.62	32%	8.8	6.33	139%	3.8
GOBBLERS KNOB	2030'	0.1	0.66	15%	9.4	6.76	139%	4.2
ANIAK	80'	0.9	---	---	13.3	---	---	9.2

Western Interior Basins

Snowpack Data

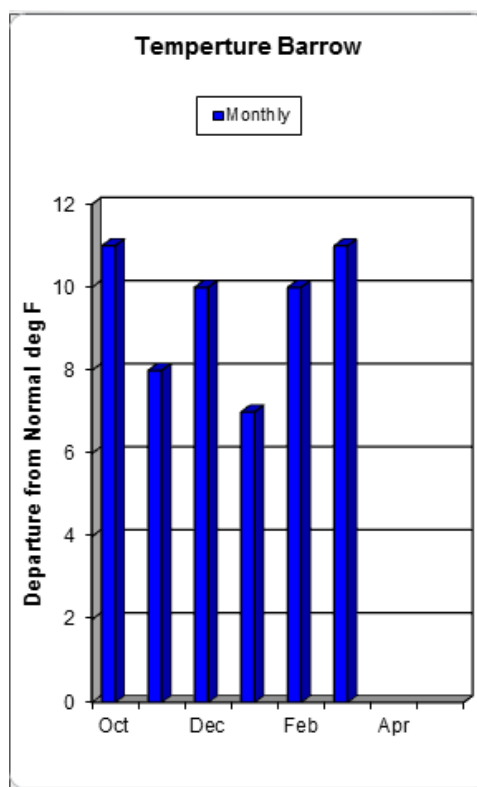
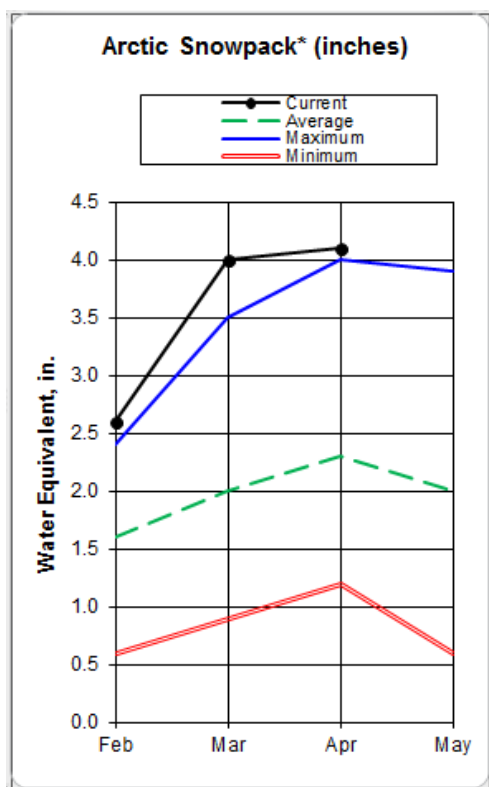
Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
Koyukuk								
BETTLES FIELD	640	4/1/2014	28	5.7	22	4.4	---	6.4
BONANZA FORKS	1200	3/27/2014	22	5.8	20	4.3	26	5.2
CLOVERLEAF	170	3/30/2014	20	5.1	19	3.2	---	---
COLDFOOT	1040	4/1/2014	30	7.5	18	3.3	---	6.4
COLVILLE BEND	170	3/31/2014	25	5.5	19	4.2	---	---
DISASTER CREEK	1550	3/27/2014	22	4.4	14	2.8	22	4.0
GOBBLERS KNOB	2030	4/1/2014	9	---	3	---	---	---
HUGGINS CREEK	290	No Survey	---	---	19	3.7	---	---
JR SLOUGH	160	3/31/2014	27	6.0	24	5.3	---	---
KALDOYEIT	750	3/27/2014	39	9.6	31	6.5	21	4.2
KANUTI CHALATNA	670	3/27/2014	30	7.6	21	4.3	26	5.3
KANUTI KILOLITNA	550	3/27/2014	20	5.1	16	3.2	22	4.0
LAKE TODATONTEN	550	4/1/2014	26	6.8	21	5.1	29	5.4
MINNKOKUT	580	3/27/2014	36	8.3	28	5.7	34	6.6
NOLITNA	560	3/27/2014	33	8.6	21	4.3	25	5.3
TABLE MOUNTAIN	2200	3/27/2014	24	4.9	13	2.5	23	4.0
TAIHOLMAN	540	3/27/2014	9	2.3	4	0.8	4	1.0
TREAT ISLAND	190	No Survey	---	---	15	2.8	---	---
Kuskokwim								
ANIAK	80	4/1/2014	6*	1.5*	20	---	---	---
HOLOKUK RIVER	367	No Survey	---	---	23	4.8	---	---
JOHNNY SLU	180	No Survey	---	---	29	7.9	---	---
KOGRUKLUK RIVER	493	No Survey	---	---	40	10.5	---	---
LOWER ANIAK	164	No Survey	---	---	35	7.4	---	---
MCGRATH	340	4/1/2014	13*	3.2*	28	8.7	27	5.6
MIDDLE KUSKOWIM	297	4/3/2014	9	2.3	20	5.4	---	---
N. FORK KUSKOKWIM	512	4/3/2014	24	6.8	35	9.2	---	---
NIXON FORK KUSKOKWIM	508	4/3/2014	22	6.2	30	8.0	---	---
PURKEYPILE MINE	2025	3/31/2014	27	5.2	---	---	26	5.4
TELAQUANA LAKE	1550	4/1/2014	2	0.5	17	4.4	20	4.6
UPPER ANIAK	781	No Survey	---	---	28	7.4	---	---
Lower Yukon								
DEER CREEK	195	No Survey	---	---	23	4.3	---	---
GROUCH CREEK	220	No Survey	---	---	40	8.4	34	7.6
HORSEFLY CREEK	180	No Survey	---	---	33	8.1	28	6.5
INNOKO INN	200	No Survey	---	---	22	5.0	24	4.4
LITTLE MUD RIVER	855	No Survey	---	---	20	3.9	---	---
LOWER NOWITNA RIVER	205	No Survey	---	---	20	4.2	---	---
MENOTL CREEK	380	No Survey	---	---	---	---	40	9.0
MIDDLE INNOKO	150	No Survey	---	---	49	10.1	34	7.7
NINEMILE ISLAND	140	3/31/2014	30	7.0	27	5.2	---	---
PIKE TRAP LAKE	130	3/31/2014	11	2.7	15	3.0	---	---
SQUIRREL CREEK	150	3/31/2014	30	8.4	29	6.3	---	---
TOZIKAKET	600	4/1/2014	19	4.8	18	3.7	23	4.2
UPPER INNOKO	180	No Survey	---	---	33	7.3	32	7.4
WAPOO HILLS	220	No Survey	---	---	41	9.7	36	7.7
YANKEE SLOUGH	100	No Survey	---	---	42	9.2	41	9.4

*Estimate

Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Kuskokwim R at Crooked Creek	APR-JUN	2510	4040	5090	48%	6130	7660	10500

Arctic and Kotzebue Sound



Snow pack

Arctic

Though little precipitation fell during March, the Arctic snowpack remains above normal this month. The Umiat Airfield snow measurement site had 17" of snow with a water content of 4.2", only an inch deeper than last month.

Kotzebue

Kotzebue Sound continues to have low snowpacks. The Kelly Station SNOTEL site, near the Noatak River, gained 2" in snowdepth over the month and 0.5" of water content.

Arctic and Kotzebue Sound

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
IMNAVIAT CREEK	3050	4/1/2014	25	---	27	---	---	---
KELLY STATION	310	4/1/2014	21	4.0	11	1.6	---	---
PRUDHOE BAY	30	4/1/2014	22	---	8	---	---	---
SAGWON	1000	4/1/2014	20	---	19	---	---	---
UMIAT RAWS	660	4/1/2014	18	4.2	---	---	---	---

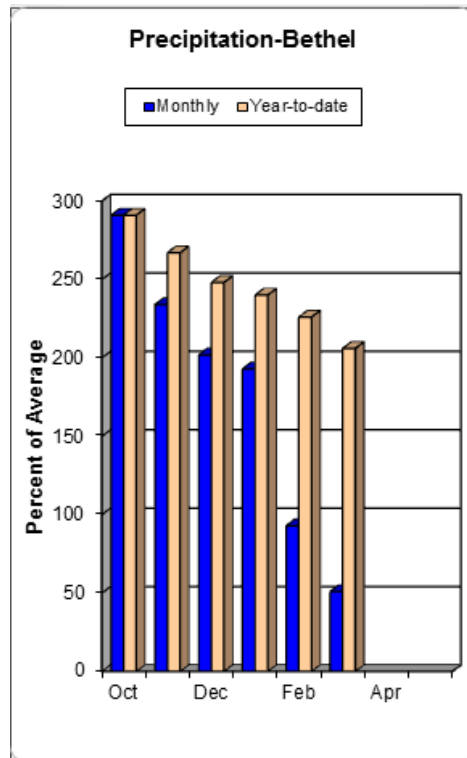
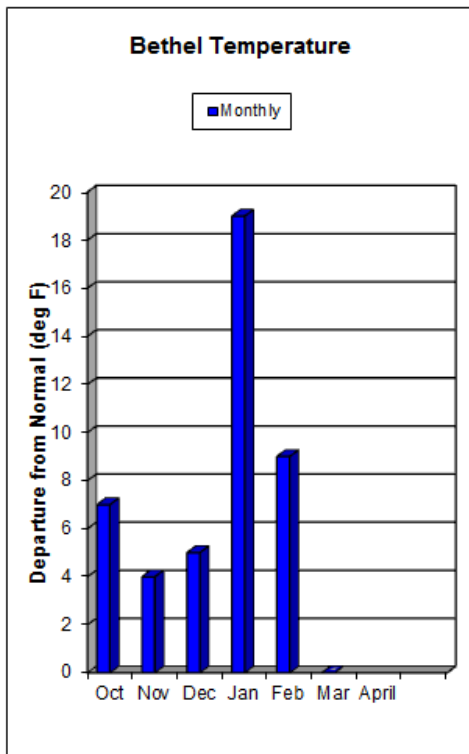
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Kuparuk R nr Deadhorse	APR-JUL	620	765	870	109%	970	1120	796
	MAY-JUL	625	770	885	111%	1020	1260	795
Sagavanirktok R nr Pump Station 3	APR-JUL	635	715	775	113%	815	895	684
	MAY-JUL	540	685	800	117%	935	1180	683

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
Arctic								
ATIGUN PASS	4800'	0.6	0.78	77%	4.9	5.56	88%	4.0
ATIGUN CAMP	3800'	---	---	---	2.8	3	93%	3.5
IMNAVIAT CREEK	3050'	0.2	0.3	67%	3.2	2.89	111%	2.6
PRUDHOE BAY	30'	1	0.89	112%	3.1	3.46	90%	2.0
SAGWON	1000'	0.3	0.41	73%	3.1	3.01	103%	2.9
Koztebue Sound								
KELLY STATION	310'	0.3	---	---	10.7	---	---	2.6

Norton Sound/Y-K Delta/Bristol Bay



Snow pack

Norton Sound

Like last month, the Norton Sound area received mixed precipitation this month, but the sites with above normal precipitation switched. Nome received above normal precipitation last month but only 72% percent of normal precipitation this month. Further to the east, Rocky Point SNOTEL was below normal last month, but had 151% of normal precipitation for this month. Despite additional snow during March, snowpack remains below normal. Rocky Point gained 5 inches of snow during the month for a total of 9 inches.

Yukon Kuskokwim Delta

Snowpack remains low in the Y-K Delta. The NWS site at Bethel is reporting one inch of snow on the ground, down from 6" at midmonth. Likewise, the new Kanaryagak SCAN site, 17 miles southeast of Chevak, continues to report 6" of snow on the ground. This is the same amount at the beginning of the month, with no additional precipitation recorded.

Bristol Bay

Bristol Bay did receive a snowstorm, midmonth, which increased snowpack levels in the western half of the basin. The eastern half of the basin did receive some snow at higher elevations, but any snow which fell at low elevation quickly melted. Weary Lake SCAN site, 20 miles west of Dillingham at 100ft above sea level, gained 16" of snowdepth to 21" by midmonth which compressed to 19" of depth by April 1st. Weary Lake SCAN had 69" of snowdepth last April 1st.

Norton Sound/Y-K Delta/Bristol Bay

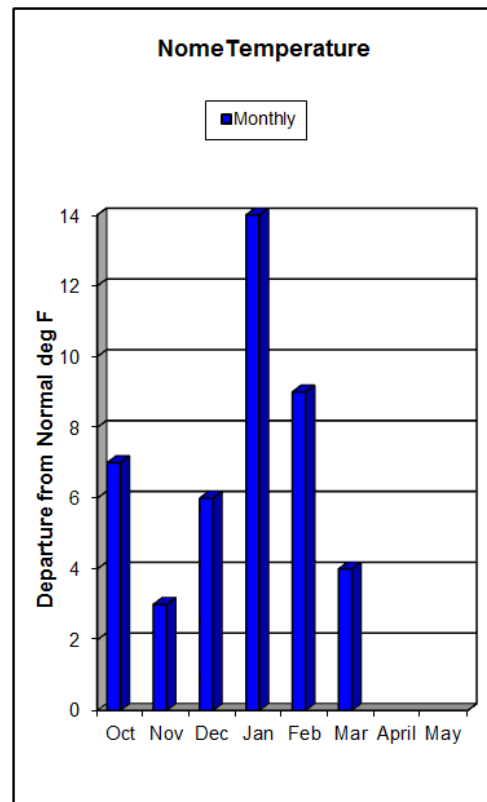
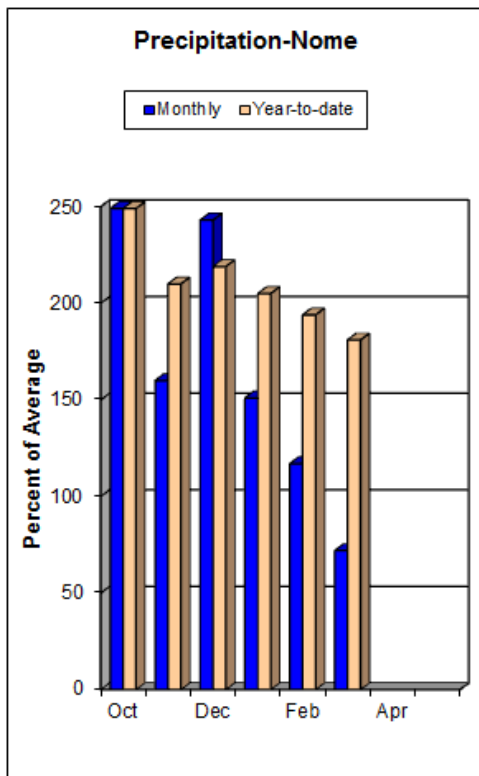
Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
Bristol Bay								
BROOKS CAMP	150	3/30/2014	0	0.0	6	1.6	---	---
COPPER CENTER	1264	4/2/2014	21	5.2	---	---	---	---
FISHTRAP LAKE	1800	3/28/2014	23	6.1	31	8.6	37	9.5
PORT ALSWORTH	270	3/31/2014	0	0.0	0	0.0	10	3.3
THREE FORKS	1300	3/30/2014	0	0.0	11	2.9	---	---
UPPER TWIN LAKES	2000	3/28/2014	6	0.6	20	4.5	25	6.8
Norton Sound								
PARGON CREEK	100	4/1/2014	7	1.4*	7	---	---	---
ROCKY POINT	250	4/1/2014	9	2.4*	22	---	---	---
*Estimate								

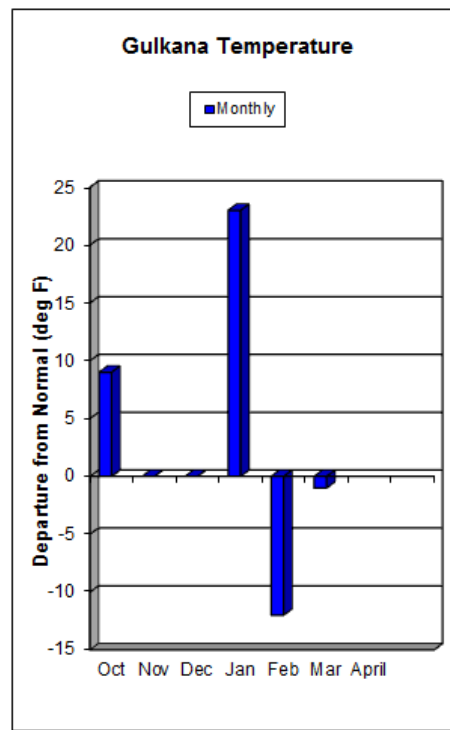
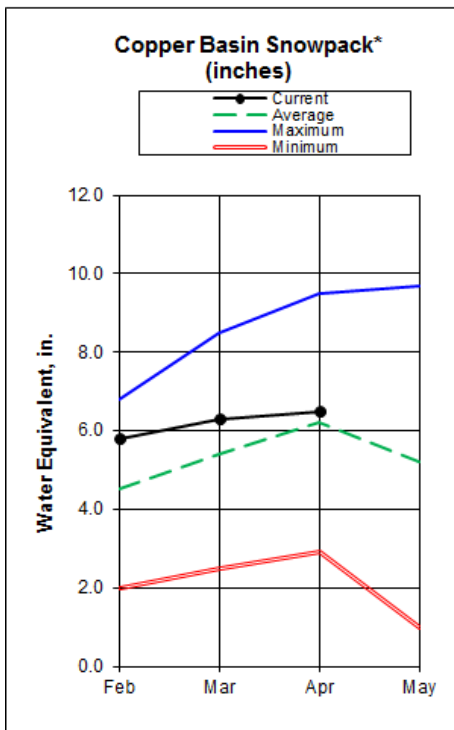
*Estimate

Precipitation

Site Name	Elev.	This Year	Last Year	1981-2010 Normal	% of Normal
Bristol Bay					
LOWER MULCHATNA	320	11.9	New Site	---	---
NAKNEK RIVER	100	13.7	New Site	---	---
WEARY LAKE	100	42.1	New Site	---	---
Norton Sound					
PARGON CREEK	100	8.4	4.0	5.1	165%
ROCKY POINT	250	8.1	2.8	4.8	169%
Yukon - Kuskokwim Delta					
KANARYAGAK CAMP	13	8.9	New Site	---	---



Copper Basin



Snow pack

The snowpack in the Copper River Basin ranges from above normal in the Alaska Range to slightly below normal in the Chugach Range.

The Chugach snow courses made gains during March, but still remain below normal. The 5 sites in this area average 94% of normal, with only Saint Anne Lake above normal. Upper Tsaina River SNOTEL site caught 2.4" of precipitation which is 84% of normal for the month.

The basin floor sites averaged 114% of normal, ranging from 142% at Kenney Lake to 81% at Little Nelchina, the only below normal site in the group. Like last month, the snowpack tapers off further west, where in the Talkeetna Range, Sheep Mountain and Horsepasture Pass both were slightly above 90% of normal.

The snow courses near the Alaska Range averaged 122% of normal. Mentasta Pass had 29" of snow and 7.6" of water content or 123% of normal. This is the third year in a row that the Alaska Range sites have been above normal.

Copper Basin

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
CHISTOCHINA	1950	4/1/2014	18	4.5	21	4.2	20	3.5
CHOKOSNA	1550	4/2/2014	18	5.1	15	3.4	15	3.8
DADINA LAKE	2160	4/1/2014	28	6.5	20	3.9	28	6.3
FIELDING LAKE	3000	4/1/2014	42	11.4	51	13.6	40	9.9
HAGGARD CREEK	2540	4/1/2014	24	6.1	35	7.4	28	5.5
KENNY LAKE SCHOOL	1300	4/1/2014	20	5.1	13	2.7	16	3.6
LITTLE NELCHINA	2650	4/1/2014	22	4.2	21	4.1	26	5.2
LONG GLACIER	4820	3/29/2014	40	10.2	36	8.3	---	---
MAY CREEK	1610	4/1/2014	22	6.2	20	4.5	---	5.5
MENTASTA PASS	2430	4/1/2014	29	7.6	30	7.3	27	6.2
MONSOON LAKE	3100	4/1/2014	21	8.4	29	6.7	30	6.4
NOTCH	2643	3/29/2014	12	3.5	15	3.2	---	---
PAXSON	2650	4/1/2014	32	8.4	42	10.0	31	6.9
SANFORD RIVER	2280	4/1/2014	24	5.5	24	4.5	28	6.0
ST. ANNE LAKE	1990	4/1/2014	26	5.5	20	3.8	23	4.8
TAZLINA	1250	4/1/2014	18	4.8	16	3.0	14	3.8
TEBAY LAKE	1930	3/29/2014	63	18.1	57	15.4	---	---
TOLSONA CREEK	2000	4/1/2014	23	5.4	19	3.6	22	4.2
TSAINA RIVER	1650	4/1/2014	51	15.0	43	11.2	56	17.0
TWIN LAKES	2400	4/1/2014	26	5.1	20	3.7	26	6.4
UPPER TSAINA RIVER	1750	4/1/2014	58	18.5	52	14.4	---	19.4
WORTHINGTON GLACIER	2100	4/1/2014	66	24.0	64	18.9	75	24.6

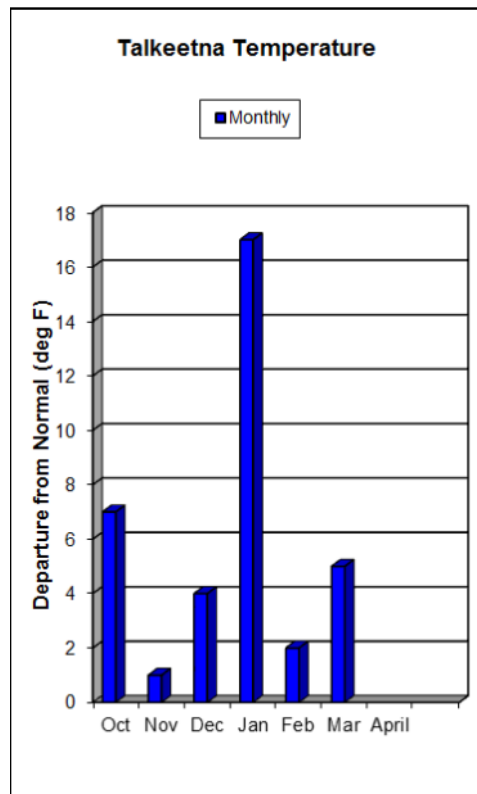
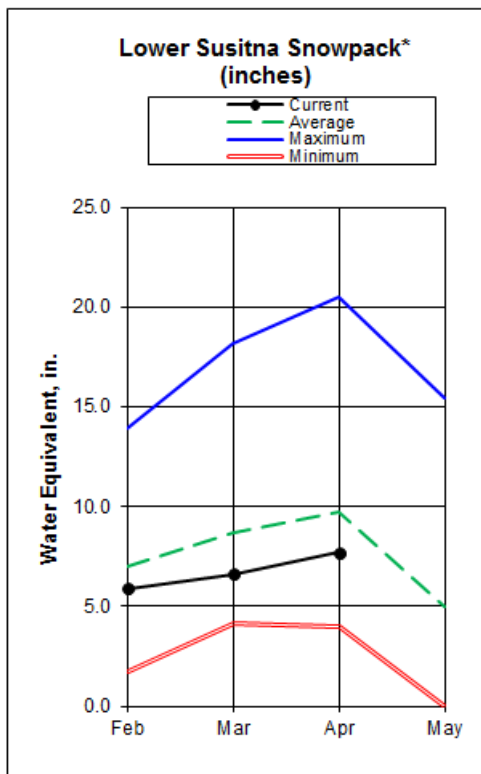
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gulkana R at Sourdough	APR-JUL	345	435	495	113%	555	645	440

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			Last Year
		Current	Average	% Average	Current	Average	% Average	
MAY CREEK	1610'	0.2	0.6	33%	8.9	6.1	146%	5.9
UPPER TSAINA RIVER	1750'	2.4	2.88	83%	33.8	26.99	125%	21.9
Basin Index				75%			129%	

Matanuska—Susitna Basin



Snow pack

The Susitna Basin remains slightly below normal. The only part of the basin above normal is the southern Talkeetna Range and parts of the eastern basin.

The lower Susitna Basin snow courses average 80% of normal. Snow courses on the western half of this area have less snow as characterized by Skwentna snow course which has 30" of snow and 8.5" of water content which is 71% of normal. This below normal snowpack continues north into the Peters Hills where the 5 snow courses there are 83% of normal. Snow courses on the east side of the basin are closer to normal ranging from 88% at Talkeetna to 104% at the Willow.

The Upper Susitna Basin is slightly below normal. The eleven sites in the upper basin average 94% of normal. Sites on both sides of the Talkeetna Mountains measured similarly. Monohan Flat SNOTEL site, north of the Alaska Highway, gained 0.8" of precipitation during March, 79% of normal.

The Independence Mine SNOTEL site received 0.9" of precipitation during February, 46% of normal, but the site remains 156% or normal for the water year. There is 56" and 17.4" of water content at the site.

Matanuska—Susitna Basin

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
ALEXANDER LAKE	160	4/1/2014	31	9.4	41	10.7	42	12.0
ARCHANGEL ROAD	2200	4/2/2014	38	11.0	56	16.4	44	12.2
BLUEBERRY HILL	1200	3/31/2014	41	11.5	51	14.0	48	13.5
CHELATNA LAKE	1450	3/31/2014	19	6.1	47	12.9	45	11.0
CLEARWATER LAKE	2650	4/1/2014	25	4.8	29	5.8	25	5.4
CURTIS LAKE	2850	4/1/2014	21	4.1	22	3.9	25	4.6
DENALI VIEW	700	3/31/2014	31	9.1	44	12.0	40	12.1
DUNKLE HILLS	2700	3/31/2014	52	17.7	---	---	---	---
DUTCH HILLS	3100	3/31/2014	84	27.2	---	---	75	24.8
E. FORK CHULITNA	1770	<i>No Survey</i>	45	12.7	46	12.8	47	12.1
FISHHOOK BASIN	3300	4/2/2014	60	19.8	72	21.4	55	17.8
FOG LAKES	2120	4/1/2014	24	4.7	28	6.0	24	5.2
HALFWAY SLOUGH	350	3/31/2014	16	4.5	32	7.7	---	---
HORSEPASTURE PASS	4300	4/1/2014	26	6.2	26	5.9	30	6.9
INDEPENDENCE MINE	3550	4/1/2014	66	22.1	76	23.2	64	19.8
INDEPENDENCE MINE SNOTEL	3550	4/1/2014	56	17.4	62	15.9	---	11.3
LAKE LOUISE	2400	4/1/2014	24	4.7	24	4.6	22	4.6
LITTLE SUSITNA	1700	4/2/2014	35	9.9	48	13.1	39	10.1
MONAHAN FLAT	2710	4/1/2014	29	---	---	---	---	---
NUGGET BENCH	2010	3/31/2014	35	10.9	---	---	50	14.6
POINT MACKENZIE	200	<i>No Survey</i>	---	---	---	---	21	5.2
POINT MACKENZIE SNOTEL	250	4/1/2014	18	4.9	24	6.0	---	5.2
RAMSDYKE CREEK	2220	3/31/2014	51	16.3	---	---	64	20.0
SKWENTNA	160	4/1/2014	30	8.5	35	9.2	45	11.9
SQUARE LAKE	2950	4/1/2014	21	5.0	24	4.4	21	4.0
SUSITNA VALLEY HIGH	375	4/1/2014	24	8.8	34	7.8	---	8.6
TALKEETNA	350	3/31/2014	20	5.6	35	8.2	26	6.4
TOKOSITNA VALLEY	850	4/1/2014	36	9.6	54	15.2	---	12.4
TYONE RIVER	2400	<i>No Survey</i>	---	---	---	---	21	5.0
UPPER OSHETNA RIVER	3150	4/1/2014	23	4.5	24	6.9	20	4.6
UPPER SANONA CREEK	3100	4/1/2014	29	5.9	31	7.0	28	5.6
WARD LAKE	2700	<i>No Survey</i>	---	---	---	---	30	5.3
WILLOW AIRSTRIP	200	4/1/2014	25	7.2	43	8.7	28	6.9

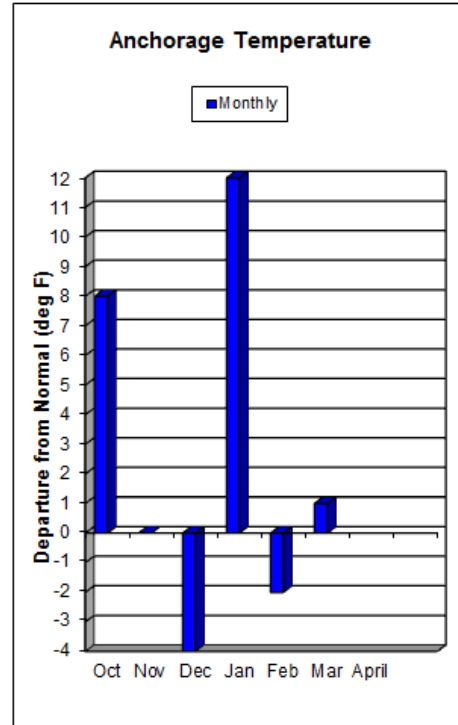
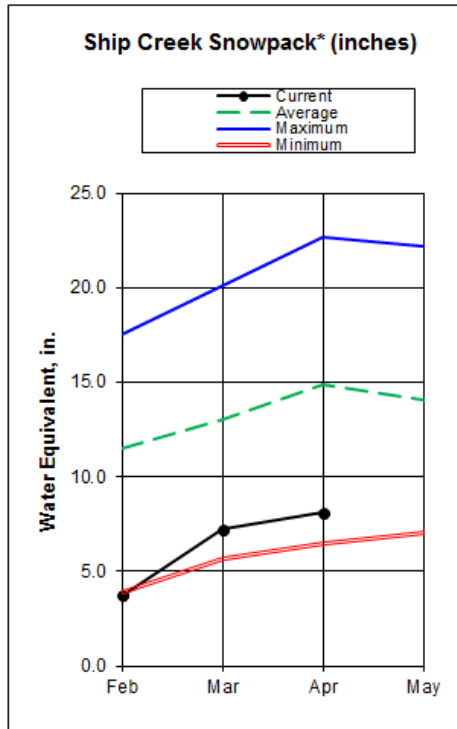
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Little Susitna R nr Palmer	APR-JUL	63	75	84	102%	93	105	82
Talkeetna R nr Talkeetna	APR-JUL	1277	1430	1534	98%	1638	1790	1570

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			Last Year
		Current	Average	% Average	Current	Average	% Average	
INDEPENDENCE MINE	3550'	0.9	1.96	46%	23.8	15.26	156%	22.1
MONAHAN FLAT	2710'	0.8	1.01	79%	7.3	8.06	91%	8.8
SUSITNA VALLEY HIGH	375'	0.7	1.36	51%	19.4	11.9	163%	12.5
TOKOSITNA VALLEY	850'	1.7	1.93	88%	28.8	19.03	151%	18.9
Basin Index				65%			146%	

Northern Cook Inlet



Snow pack

Snow Conditions in Northern Cook Inlet remain much below normal. From the east side of the basin to the west side, snowpack remains consistently near half of normal.

The Anchorage Hillside SNOTEL site was the SNOTEL site to receive normal precipitation. It received 1.8" of precipitation for the month of March or 102% of normal. The snowpack at the site is 23" deep with 5.4" of water content, 53% of normal. Across the Knik Arm, Point Mackenzie SNOTEL received 0.2 inches, 22% of normal. The snowpack there has 18 inches of snow depth and 4.9" of water content, 94% of normal.

Northern Cook Inlet

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
ANCHORAGE HILLSIDE	2080	4/1/2014	23	5.8	36	9.3	---	10.2
ARCTIC SKI BOWL	3000	3/31/2014	19	6.2	32	8.7	40	12.8
ARCTIC VALLEY #1	500	3/31/2014	9	3.3	15	3.6	14	3.6
ARCTIC VALLEY #2	1000	3/31/2014	18	3.9	20	3.8	18	4.8
ARCTIC VALLEY #3	1450	3/31/2014	20	4.8	29	5.8	28	7.2
ARCTIC VALLEY #4	2030	3/31/2014	16	4.0	28	6.9	28	7.2
CHUITNA PLATEAU	1540	4/1/2014	42	13.1	57	22.8	76	27.9
CONGAHBUNA LAKE	550	4/1/2014	22	6.9	39	11.1	38	10.6
GRANITE POINT	250	4/1/2014	0	0.0	14	4.1	16	5.0
INDIAN PASS	2350	4/1/2014	48	12.1	88	23.5	---	22.0
KINKAID PARK	250	4/2/2014	11	2.9	20	4.1	16	4.4
LONE RIDGE	1675	4/1/2014	60	18.8	65	16.5	79	32.3
MORAINE	2100	4/1/2014	11	3.0	25	5.9	---	9.0
MT. ALYESKA	1540	4/1/2014	42	13.2	111	32.8	---	32.5
POINT MACKENZIE	250	4/1/2014	18	4.9	24	6.0	---	5.2
PORTAGE VALLEY	50	3/31/2014	23	9.5	67	18.9	40	14.6
SOUTH CAMPBELL CREEK	1200	4/2/2014	15	3.8	24	4.1	28	6.9

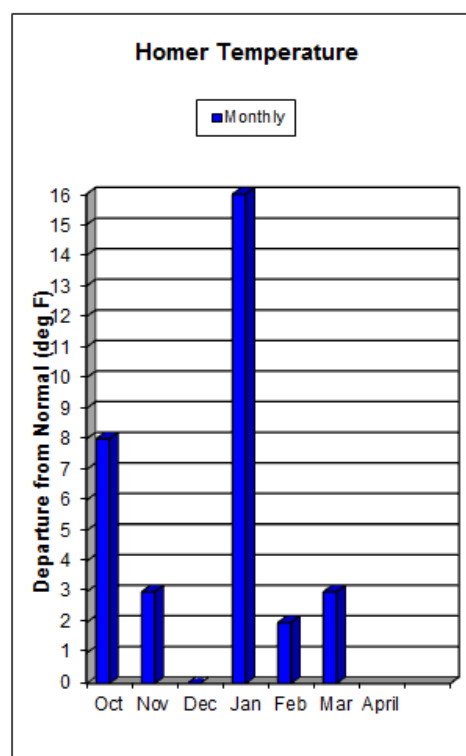
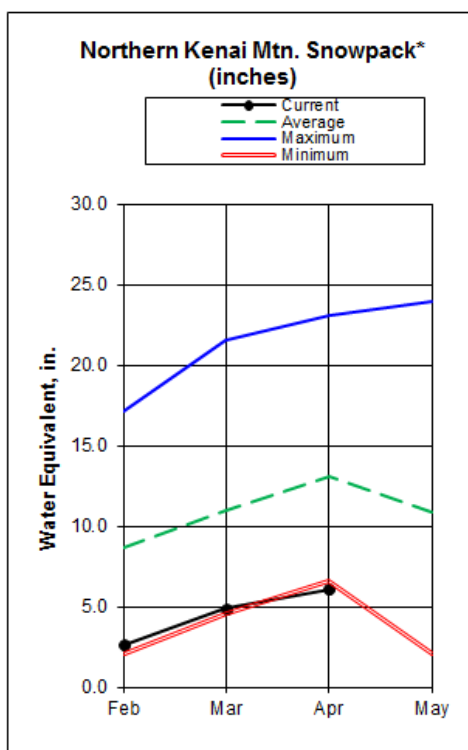
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Ship Ck nr Anchorage	APR-JUL	23	30	35	60%	40	47	58

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			Last Year
		Current	Average	% Average	Current	Average	% Average	
ANCHORAGE HILLSIDE	2080'	1.8	1.77	102%	15	13.71	109%	14.5
INDIAN PASS	2350'	2.4	3.39	71%	25.7	25.42	101%	34.5
MORAINE	2100'	0.9	1.64	55%	8.9	11.73	76%	9.1
MT. ALYESKA	1540'	3.9	6.35	61%	39.9	46.25	86%	41.1
POINT MACKENZIE	250'	0.7	0.92	76%	12.6	8.15	155%	9.8
Basin Index		69%			97%			

Kenai Peninsula



Snow pack

Even with a solid March snow storm, the whole Kenai Peninsula snowpack continues to remain below to much below normal. The snow courses in the area average 55% of normal, up from 41% last month. These ranged from 72% of normal at Anchor River Divide SNOTEL with 27 inches of snow and 8.6" of water content to Snug Harbor road, which has 4 inches of snow with 1.3 inches of water content. Anchor River Divide received 2.3" of precipitation during March, 92% of normal.

The eastern peninsula was the only region of the state which saw above normal precipitation. Cooper Lake SNOTEL was 145% of normal with 3.4" of precipitation during March and Grouse Creek Divide, north of Seward had 164% of normal with 6.9" of precipitation.

The snow courses near Homer made the biggest gains during March, with some sites doubling their amount of snow. These snow courses increased from an average 36% of normal last month to 63% of normal this month. Bridge Creek snow course went from 7 inches of snow with 2.2 inches of water content last month to 21 inches of snow and 6.4 inches of water content this month.

South, across Kachemak Bay, the snowpack also made gains, but remains well below normal. Nuka Glacier went from 7 inches of depth last month to 25 inches this month with 9.0 inches of water content which is 26% of normal. Port Graham SNOTEL doubled in depth and is 18 inches deep and has 6.2 inches of water content, 71% of normal.

Kenai Peninsula

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
ANCHOR RIVER DIVIDE	1653	4/1/2014	27	8.6	47	14.8	---	11.9
BERTHA CREEK	950	3/29/2014	32	8.4	65	19.2	53	16.6
BRIDGE CREEK	1300	3/31/2014	21	6.4	45	12.6	40	12.0
COOPER LAKE	1200	4/1/2014	29	9.4	57	17.6	---	14.0
DEMONSTRATION FOREST	780	3/31/2014	17	5.7	34	9.6	28	7.8
EAGLE LAKE	1400	3/31/2014	25	7.3	47	13.8	42	11.9
EXIT GLACIER	400	3/26/2014	27	9.2	79	21.2	51	18.2
EXIT GLACIER SNOTEL	400	4/1/2014	26	11.0	66	18.0	---	18.4
GRANDVIEW	1100	4/1/2014	39	11.7	94	33.8	---	32.0
GROUSE CREEK DIVIDE	700	4/1/2014	33	10.8	59	22.1	---	17.7
JEAN LAKE	620	3/31/2014	0	0.0	20	4.4	15	3.3
KACHEMAK CREEK	1660	3/28/2014	11	2.6	55	20.6	---	---
KENAI MOOSE PENS	300	4/1/2014	9	2.9	24	5.3	---	5.0
KENAI SUMMIT	1390	3/29/2014	29	8.0	55	16.0	48	14.8
MCNEIL CANYON	1320	4/1/2014	20	5.8	39	11.3	---	10.6
MIDDLE FORK BRADLEY	2300	<i>No Survey</i>	23	---	56	---	---	---
MOOSE PASS	700	3/29/2014	12	2.0	34	9.4	22	6.6
MT. ALYESKA	1540	4/1/2014	42	13.2	111	32.8	---	32.5
NUKA GLACIER	1250	3/28/2014	25	9.0	109	44.2	88	34.6
PASS CREEK	1200	<i>No Survey</i>	---	---	30	7.8	33	9.0
PORT GRAHAM	300	4/1/2014	18	6.2	37	10.9	---	8.7
PORTAGE VALLEY	50	3/31/2014	23	9.5	67	18.9	40	14.6
RESURRECTION PASS	2250	<i>No Survey</i>	---	---	39	10.3	38	10.4
SNUG HARBOR ROAD	500	3/31/2014	4	1.3	24	6.0	16	4.5
SUMMIT CREEK	1400	4/1/2014	26	6.3	41	10.7	---	11.1
TURNAGAIN PASS	1880	4/1/2014	66	19.9	99	36.9	---	33.4

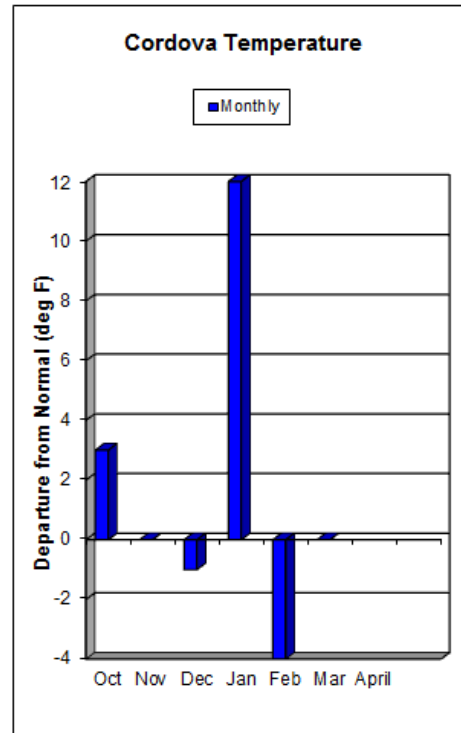
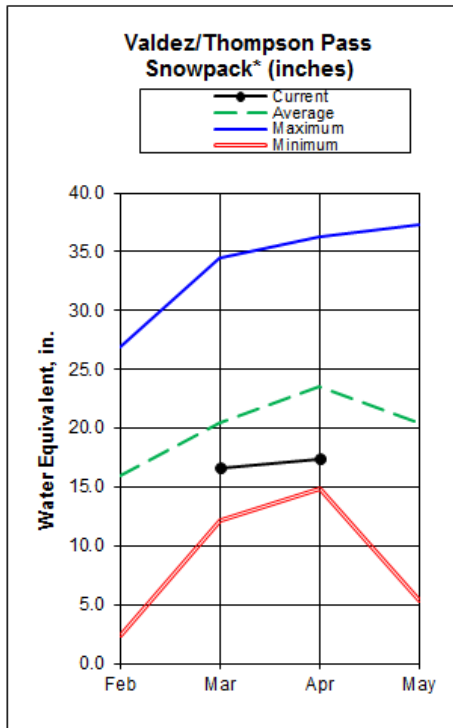
Streamflow Forecasts

Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Kenai R at Cooper Landing	APR-JUL	540	610	660	69%	710	785	960

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
ANCHOR RIVER DIVIDE	1653'	2.3	2.5	92%	17.8	16.91	105%	20.2
COOPER LAKE	1200'	3.4	2.34	145%	26.5	25.2	105%	21.4
EXIT GLACIER	400'	5.7			49.2			42
GRANDVIEW	1100'	4	5.54	72%	33.7	40.3	84%	31.7
GROUSE CREEK DIVIDE	700'	6.9	4.2	164%	38.1	37.46	102%	28
KACHEMAK CREEK	1660'	3.8	3.04	125%	46.8	37.74	124%	30.3
KENAI MOOSE PENS	300'	0.4	0.82	49%	9.4	8.16	115%	9.9
MCNEIL CANYON	1320'	2.1	1.74	121%	13.9	16.62	84%	15.3
MIDDLE FORK BRADLEY	2300'	5.4	3.48	155%	35.8	32.52	110%	19.1
NUKA GLACIER	1250'	3.8	6.14	62%	55.2	54.31	102%	41.4
PORT GRAHAM	300'	4.7	4.88	96%	48.8	48.41	101%	37.6
SUMMIT CREEK	1400'	1.7	1.86	91%	18.7	15.83	118%	16.3
TURNAGAIN PASS	1880'	5.8	6.17	94%	35.5	40.46	88%	34.1
Basin Index				104%			102%	

Western Gulf



Snow pack

The Western Gulf of Alaska area continues to have normal to much below normal snowpack conditions. Mt Eyak SNOTEL, above Cordova, which had 29% of normal snowpack last month now is at 38% of normal with 30 inches of snow with 10.8" of water content.

Valdez snow course has 38 inches of snow with 13.8 inches of water content which is 88% of normal. Up at Thompson Pass, the Worthington Glacier snow course has 66" of snow with 24 inches of water content, 98% of normal.

On the western side of Prince William Sound, the Exit Glacier snow course has 27 inches of snow with 9.2 inches of water content which is 51% of normal.

Western Gulf

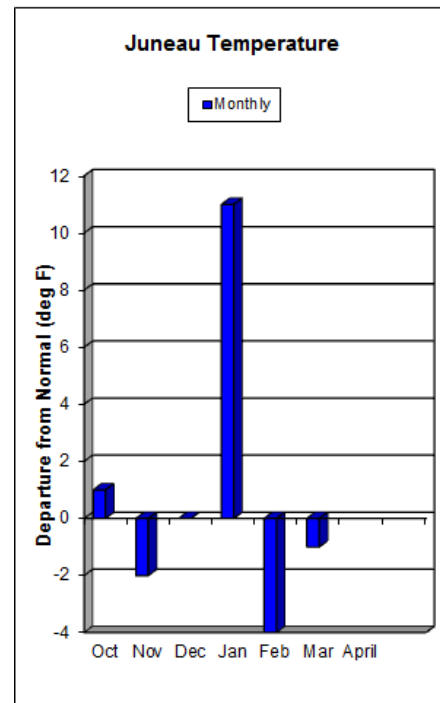
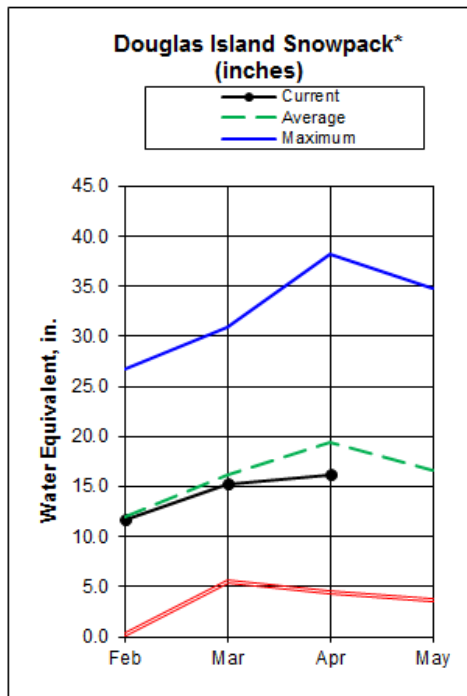
Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
EXIT GLACIER	400	2/28/2014	20	7.4	59	17.1	48	15.9
GROUSE CREEK DIVIDE	700	3/1/2014	17	6.8	54	17.3	---	14.6
LOWE RIVER	600	3/3/2014	40	14.8	52	14.9	50	14.8
MT. EYAK	1405	3/1/2014	19	6.3	93	31.1	---	22.1
NUKA GLACIER	1250	3/1/2014	5	2.1	98	26.8	74	28.8
SUGARLOAF MOUNTAIN	550	3/4/2014	51	19.4	76	21.2	70	21.1
TSAINA RIVER	1650	3/3/2014	45	14.2	43	9.5	53	14.1
UPPER TSAINA RIVER	1750	3/1/2014	48	15.9	50	11.9	---	16.3
VALDEZ	50	3/4/2014	38	13.2	56	16.5	46	14
WORTHINGTON GLACIER	2100	3/3/2014	43	18.8	63	16.3	69	21.6

Precipitation

Site name	Elevation	March Precipitation (inches)			Precipitation since Oct. 1st (inches)			
		Current	Average	% Average	Current	Average	% Average	Last Year
ESTHER ISLAND	50'	7.8	8.61	91%	93.9	80.48	117%	68.9
EXIT GLACIER	400'	5.7	---	---	49.2	---	---	42
GROUSE CREEK DIVIDE	700'	6.9	4.2	164%	38.1	37.46	102%	28
MT. EYAK	1405'	5.4	---	---	82.2	---	---	64.9
NUKA GLACIER	1250'	3.8	6.14	62%	55.2	54.31	102%	41.4
PORT SAN JUAN	50'	4.9	9.67	51%	73.9	75.72	98%	66.5
SUGARLOAF MTN	550'	4.2	6.02	70%	56.6	40.52	140%	35.7
UPPER TSAINA RIVER	1750'	2.4	2.88	83%	33.8	26.99	125%	21.9
Basin Index		80%			111%			

Southeast



Snow pack

Southeast Alaska snowpack has moderated some, but continues to have a variable snowpack based on both region and elevation.

The Petersburg area snowpacks made gains during March. Petersburg Ridge is 76% of normal with 60" of snow and 20.7 inches on water content up from 71% last month. The Petersburg Reservoir snow course has 9" of snow with 3.2" of water content which is above normal.

The snowpack on Douglas Island, near Juneau is highly variable. Fish Creek snow course, at 500' elevation, continued to lose depth and water content for the second straight month, while Cropley Lake at 1650' elevation remained 82 inches deep and gained 2.2 inches of water content. It now has 28.7 inches of water content which is 94% of normal.

Long Lake SNOTEL gained 10.0 inches of precipitation which is 85% of normal for March. Long Lake's snowpack also dropped to below normal with 102" of snow and 35.0" of water content or 89% of normal. However Speel River snow course measurements remains above normal with 76" of snow with 31.8" of water content or 120% of normal.

Further north, near Skagway, Moore Creek Bridge SNOTEL site received half of its normal March precipitation. It's estimated to have a snow water content of 19.2 inches of water content, or 90% of normal.

Southeast

Snowpack Data

Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
CROPLEY LAKE	1650	3/31/2014	86	28.7	108	39.4	83	30.4
EAGLE CREST	1200	3/31/2014	59	19.7	76	28.4	50	18.6
FISH CREEK	500	3/31/2014	1	0.4*	8	3.3	11	2.7
INSTITUTE CREEK	1350	4/1/2014	30	11.1	63	22.7	---	---
LAKE GRACE PASS	1900	No Survey	---	---	169	64.2	96	41.3
LONG LAKE	850	4/1/2014	102	35.0	121	48.3	---	39.4
LOST LAKE	425	No Survey	---	---	49	18.3	33	13.6
MINT CREEK RIDGE	1900	No Survey	---	---	154	55.3	106	40.7
MOORE CREEK BRIDGE	2250	4/1/2014	49*	19.2*	67	20.0	65	21.3
PETERSBURG RESERVOIR	550	3/31/2014	9	3.2	27	8.9	1	0.2
PETERSBURG RIDGE, S.	1650	3/31/2014	61	20.7	94	34.3	74	27.4
RAINBOW FALLS	500	4/1/2014	0	0.0	0	0.0	---	---
SPEEL RIVER	280	3/31/2014	76	31.8	89	35.6	66	26.5
UPPER SWAN LAKE	1700	No Survey	---	---	79	27.7	38	9.8
WEST CREEK	475	No Survey	---	---	35	11.0	---	---

*Estimate

Streamflow Forecasts

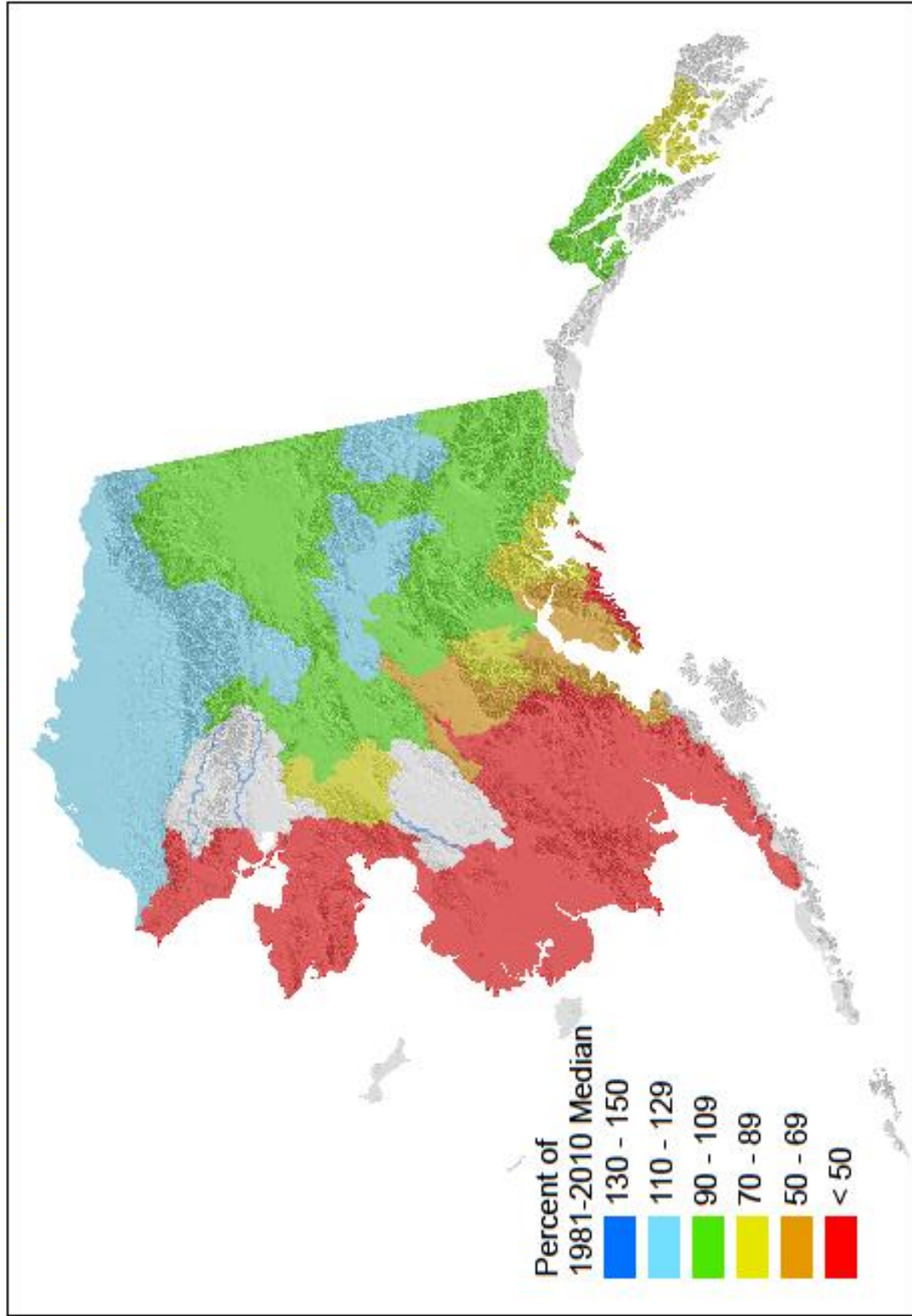
Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gold Ck nr Juneau	APR-JUL	25	30	33	97%	36	41	34

Precipitation Data

Site name	Elevation	Current	Average	% Average	Current	Average	% Average	Last Year
LONG LAKE	850'	10	11.77	85%	95.1	97.67	97%	82.4
MOORE CREEK BRIDGE	2250'	1.9	3.7	51%	23.7	27.37	87%	25.6
Basin Index				77%	95%			

Alaska Snowpack as of April 1, 2014

Based on Snow Water Content



For further information contact:

NRCS Alaska web site: www.nrcs.usda.gov/wps/portal/nrcs/main/ak/snow/

NRCS Water and Climate Center web site: www.nrcs.usda.gov/wps/portal/nrcs/main/national/nwcc/

Alaska Meteor Burst Communication System (AMBCS) web site: www.ambcs.org

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