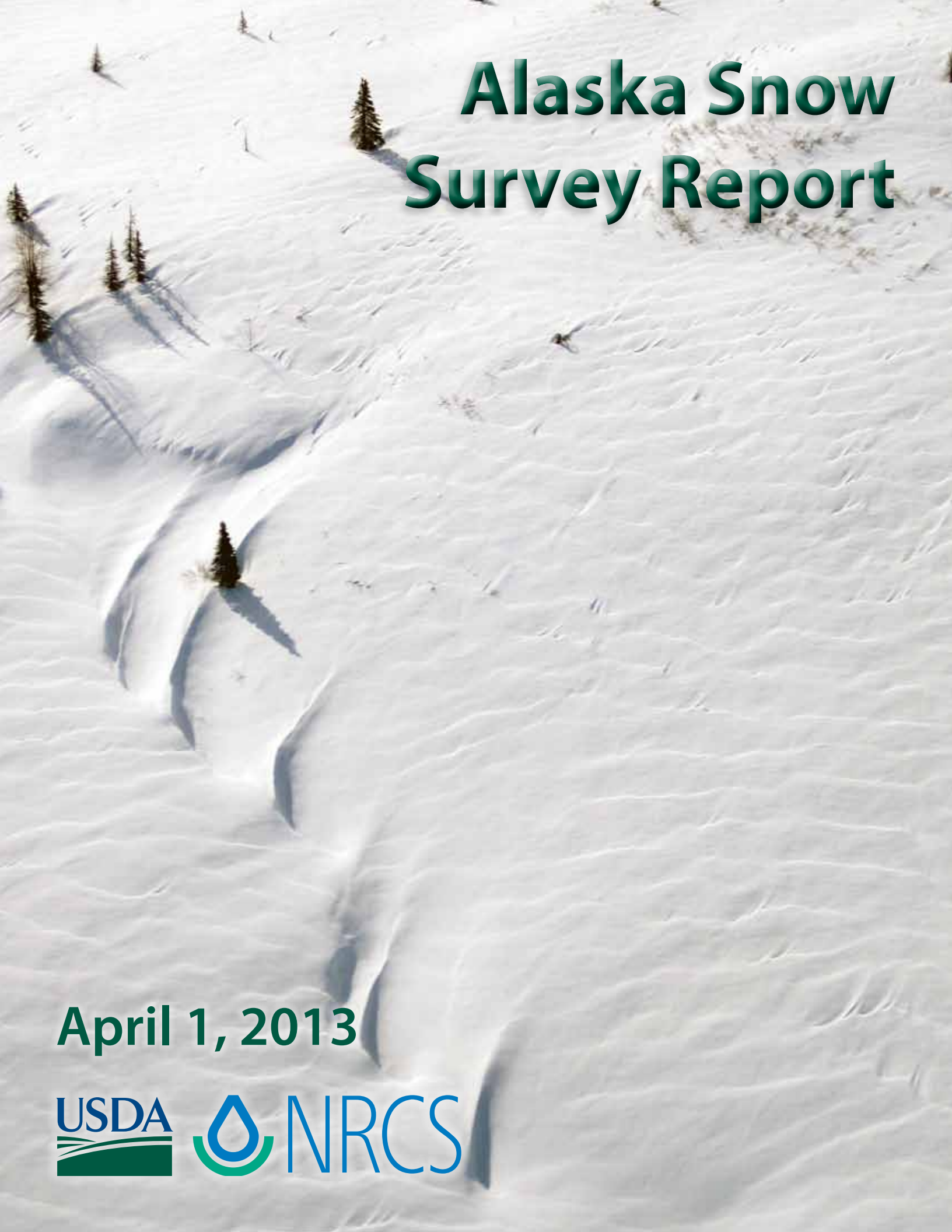

Alaska Snow Survey Report

April 1, 2013

USDA NRCS

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- U.S. Depart of Agriculture - U.S. Forest Service
  - Chugach National Forest
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- U.S. Department of Commerce
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- U.S. Department of Defense
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- Ministry of the Environment
  - British Columbia
- Department of the Environment
  - Government of the Yukon

United States Department of Agriculture
Natural Resources Conservation Service

Alaska Snow Survey
April 1, 2013

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General Overview

Snowpack

The snowpack generally made gains across the state in March. The exceptions were low elevation sites in Southeast Alaska and in the Bristol Bay area where some snow courses melted or rained out.

The Arctic had enough new snowfall to keep the snow pack near normal. Imnaviat Creek SNOTEL, on the Dalton Highway east of Toolik Lake, had five new inches of snow. The Umiat Airstrip snow study area had an average of 21" of snow depth and 4.1" of water content.

The Kotzebue Sound area received a paltry amount of snow during March and is now the region of the state most below normal. Kelly Station SNOTEL on the Noatak River saw three inches of new snow during March. Just to the south, the Norton Sound area remains below normal with spotty accumulation. Nome received six new inches of snow while Rocky Point SNOTEL, sixty miles to the east, saw no new snow during March.

East into the Interior, the Koyukuk basin which had been only 60% of normal last month, benefited from March storms and is now up to 83% of normal. Bonanza Forks snow course which is 83% of normal was measured with 20" of snow with 4.3" of snowpack. Last month, Bonanza Forks had 16" with 3.0" of water content.

Other below normal snowpacks occured in northwestern Cook Inlet and the Copper River Basin, except near the Alaska Range and in the eastern part of the basin.

The southern portion of the Interior continues to have normal to above normal snowpack. This includes the lower and middle Yukon basin, the Kuskokwim basin and the Tanana basin. Fielding Lake snow course, near Isabella Pass in the Alaska Range, reported its deepest snowpack since 1991, though it was barely more than last year. In the Forty-Mile country, Chicken Airstrip snow course has 23" of snow with 4.8" of water content which is 150% of normal and a new record for the site which began in 1965. The Fort Yukon snow course is right at normal with 25" of snow and 3.5" of water content.

The Upper Yukon basins in Canada are above normal. Midnight Dome snow course had 40" of snow with 9.4" of water content or 162%. That barely nudges 1991 out for being the record for the course which began in 1975.

The Kenai Peninsula and Southeast Alaska are other regions of the state with above normal snowpack. Nuka Glacier snow course has 109" of snow with a measured 44.2" of water content, 128% of normal. In Southeast, the Lake Grace Pass snow course has the most snow measured in the state with 169" of snow depth and 64.2" of water content, 155% of normal.

Precipitation

Most of the state received below normal precipitation during the month of March, though parts were above normal.Koyukuk Valley, the Y-K Delta, Prince William Sound and parts of the Mat-Su and Anchorage area received above normal precipitation. While the Koyukuk received above normal precipitation for the month it is still below normal for the water year. This is shown at Bettles Field SNOTEL which received 1.2" of precipitation in March which is 138% of normal, but is only 67% of normal for the water year with 4.5". In the Y-K Delta, Bethel has had above normal precipitation every month since Oct 1st and is currently around 150% of normal for the year.

Southeast Alaska continues to receive below normal precipitation. Long Lake SNOTEL, southeast of Juneau, received just 59% of normal precipitation or 6.9" during March which brought the water year total to 75.5" or 88% of normal.

The Kenai Peninsula also received below normal precipitation. Anchor River Divide SNOTEL, north of Homer, receive 2.5" or precipitation during March which is 44% of normal. Nuka Glacier on the southeast side of Kachemak Bay received 59% of normal precipitation for March, 6.1".

Temperature

The above normal trend for the last two months ended in March. Most of the state was at or below normal. The only parts of the state which were above normal were the Arctic (which has not been below normal this winter) and coastal areas in Southcentral and Southeast Alaska. Cordova and Homer experienced a +7 and +6 F° departure from normal. Juneau had a +6 F° departure for the Month.

The two stations which experienced a zero departure from normal in March were Nome and Fort Yukon. The rest of the Interior was below normal. Areas in Southcentral away from the coast were below normal, too. Both Fairbanks and Whitehorse have a -6F° departure from normal. Gulkana had a -3 F° departure, Bettles a -1 F° departure, Bethel and Anchorage had a -2 F° departure and Talkeetna was -1 F° below normal for the month.

STREAMFLOW

Streamflow forecasts of snowmelt runoff are as follows:

FORECAST POINT*	Percent of Ave. Flow	Period
Yukon River at Eagle	115	April - July
Porcupine River nr Int'l Boundary	96	April - July
Yukon River near Stevens Village	101	April - July
Tanana River at Fairbanks	107	April - July
Tanana River at Nenana	105	April - July
Little Chena River near Fairbanks	105	April - July
Chena River near Two Rivers	102	April - July
Salcha near Salchaket	106	April - July
Sagvanirktok River near Pump Station 3	101	April - July
Kuparuk River near Deadhorse	98	April - July
Kuskokwim River at Crooked Creek	103	April - June
Gulkana River at Sourdough	113	April - July
Little Susitna River near Palmer	107	April - July
Talkeetna River near Talkeetna	103	April - July
Ship Creek near Anchorage	107	April - July
Kenai River at Cooper Landing	103	April - July
Gold Creek near Juneau	118	April - July

SNOWMELT RUNOFF INDEX (SRI)

For streams that no longer have stream gauging stations.

FORECAST POINT	INDEX
Koyukuk River at Hughes	-2.3
MF Koyukuk R near Wiseman	-2.6
Slate Creek at Coldfoot	-2.5
Beaver Creek above Victoria Creek	-0.7
Birch Creek below South Fork	+0.3
Caribou Creek at Chatanika	-1.2
Susitna River near Gold Creek	-0.4
Chulitna River near Talkeetna	-2.3
Deshka River at mouth near Willow	-0.9
Montana Creek at Parks Highway	-0.8
Willow Creek near Willow	-0.4
Skwentna River at Skwentna	-2.1
Chuitna River near Tyonek	-1.0
Campbell Creek near Spenard	-1.7
Indian Creek at Indian	-1.2
Bird Creek at Bird Creek	-1.2
Glacier Creek nr Girdwood	-2.0
Six Mile Creek near Hope	+1.0
Resurrection Creek near Hope	-1.1
Grouse Ck at Grouse Lake Outlet nr Seward	+0.6
Anchor River near Anchor Point	0.0
Deep Creek near Ninilchik	0.0
Ninilchik River near Ninilchik	0.0
Fritz Creek near Homer	+1.2
Skagway River at Skagway	+0.3
Municipal Watershed C nr Petersburg	+0.5

Index	Key:
-2 to -3	much below average snowmelt runoff
-1 to -2	below average snowmelt runoff
-1 to +1	average snowmelt runoff
+1 to +2	above average snowmelt runoff
+2 to +3	much above average snowmelt runoff

* See regional summaries for the forecast period and the actual forecasted flow volumes.

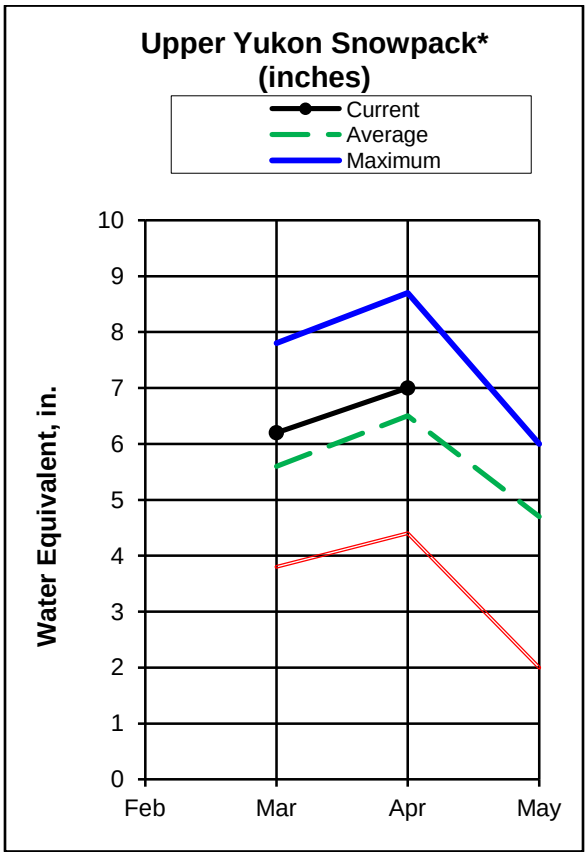
HOW FORECASTS ARE MADE

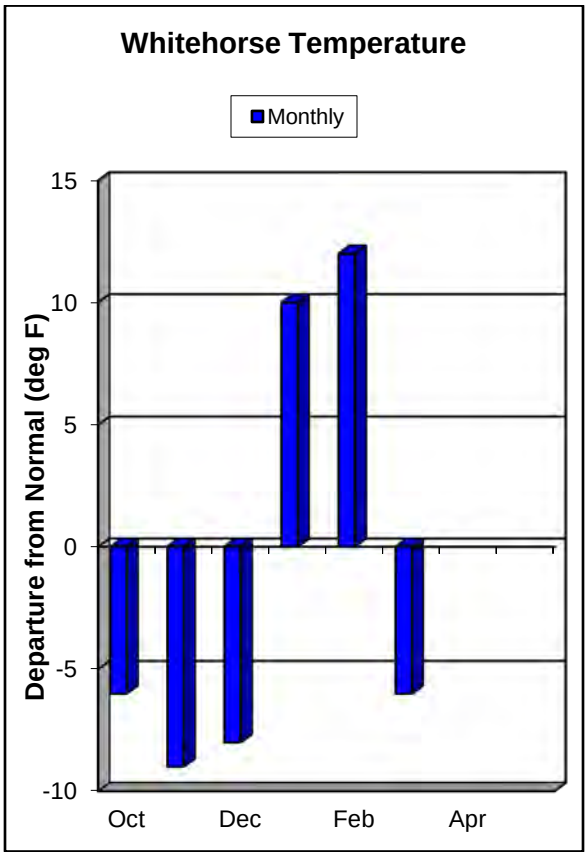
Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual 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 Course:

The Upper Yukon basin snow pack is above normal. The nine basin snow courses above Whitehorse averaged 106% of normal. This ranged from 92% at Morley Lake with 26" of snow with 5.4" of water content to 123% at Williams Creek snow course with 23" and 4.3" of water content.

The Dawson area snow courses average 133% of normal. Midnight Dome snow course had 40" of snow with 9.4" of water content or 162%. That barely nudges 1991 out for being the record for the course which began in 1975. South of Dawson, the eight White River basin sites average 112% of normal ranging from 88% at Casino Creek and Satasha Lake to 137% of normal at Mount Nansen.

The above normal trend continues east into the Pelly and Stewart basins. The 12 snow courses in this area average 107% of normal. These sites ranged from 80% of normal at Rackla Lake to 138% or normal at Hoole River.

* For further information contact the Natural Resources Conservation Service in Anchorage.

Upper Yukon Basin

SNOWPACK DATA

			This Year		Last Year		1981-2010 Normal	
Site Name	Elev.	Date	Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
ATLIN	2395				19	4.4	21	5.2
BEAVER CREEK	2150	3/26/2013	20	4.1	23	4.6	17	3.4
BURNS LAKE	3650	3/27/2013	43	10.6	41	10.2	37	8.5
BURWASH AIRSTRIP	2660	3/26/2013	11	2	11	2.5	10	1.8
CALUMET	4300	3/26/2013	30	7.3	39	7.1	35	7.6
CASINO CREEK	3495	3/26/2013	24	4.3	32	7.2	27	5.1
CHAIR MOUNTAIN	3500	3/27/2013	21	3.8	22	4.2	20	3.8
EAGLE PLAINS	2330	3/28/2013	30	6.5	33	6.2	27	5.3
EAGLE RIVER	1115	3/27/2013	24	4.4	30	5.2	30	6.5
EDWARDS LAKE	2720	3/26/2013	33	6.8	37	8.5	18	4.4
FINLAYSON AIRSTRIP	3240	3/27/2013	28	6	17	4.3	32	7
GRIZZLY CREEK	3200	3/28/2013	32	7.6	36	9.1	25	5.5
HOOLE RIVER	3400	3/27/2013	34	7.2	33	8.2	31	6.4
JORDAN LAKE	3050	3/27/2013	30	5.9	30	6	51	15.9
KING SOLOMON DOME	3540	3/26/2013	34	7.9	37	7.8	21	4
LOG CABIN (B.C.)	2900	3/26/2013	51	15.7	65	24	18	3.9
MACINTOSH	3805	3/26/2013	26	4.7	25	4.9	45	11
MAYO AIRPORT	1770	3/26/2013	20	4.7	23	5.7	28	5.8
MEADOW CREEK	4050	3/26/2013	44	11.6	52	15.4	26	5.8
MIDNIGHT DOME	2805	3/26/2013	40	9.4	35	7.2	26	6.1
MONTANA MTN.	3350	3/26/2013	26	5.9	32	6.9	23	4.5
MORLEY LAKE	2700	3/26/2013	26	5.4	30	6.8	28	6.1
MT. BERDOE	3395	3/26/2013	30	5.6	31	6.5	18	3.2
MT. MCINTYRE B	3600	3/27/2013	28	5.8	37	8.9	25	4.7
MT. NANSEN	3350	3/26/2013	23	4.1	25	4.4	16	3
OLD CROW	980	3/27/2013	26	4.6	26	5.2	33	7.6
PELLY FARM	1550	3/27/2013	18	3.4	24	5.2	36	7.7
PLATA AIRSTRIP	2725	3/27/2013	36	8.4	41	10.3	29	5.7
RACKLA LAKE	3410	3/26/2013	33	6.6	41	9.9	37	8.8
RIFFS RIDGE	2130	3/27/2013	33	6.4	34	6.5	22	4.3
RUSSELL LAKE	3480	3/26/2013	40	8.7	46	11.3	35	9.9
SATASHA LAKE	3630	3/26/2013	20	3.8	28	5.5	26	5.9
SUMMIT	985	3/26/2013	27	5.8	44	13.2	33	7.9
TAGISH	3540	3/26/2013	29	5.8	29	5.9	26	5.9
TWIN CREEKS	2950	3/26/2013	38	9.2	37	9.3	33	7.5
WHITEHORSE AIRPORT	2300	3/27/2013	20	3.6	26	6	20	4.3
WILLIAMS CREEK	3000	3/26/2013	23	4.3	28	5.8	20	3.8
WITHERS LAKE	3200	3/26/2013	35	7.7	47	12.1	39	9.2

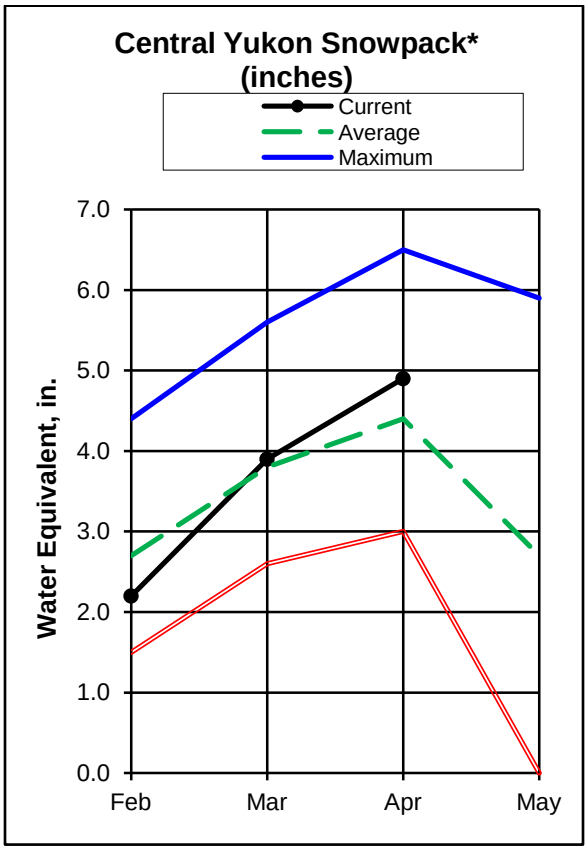
STREAMFLOW FORECASTS

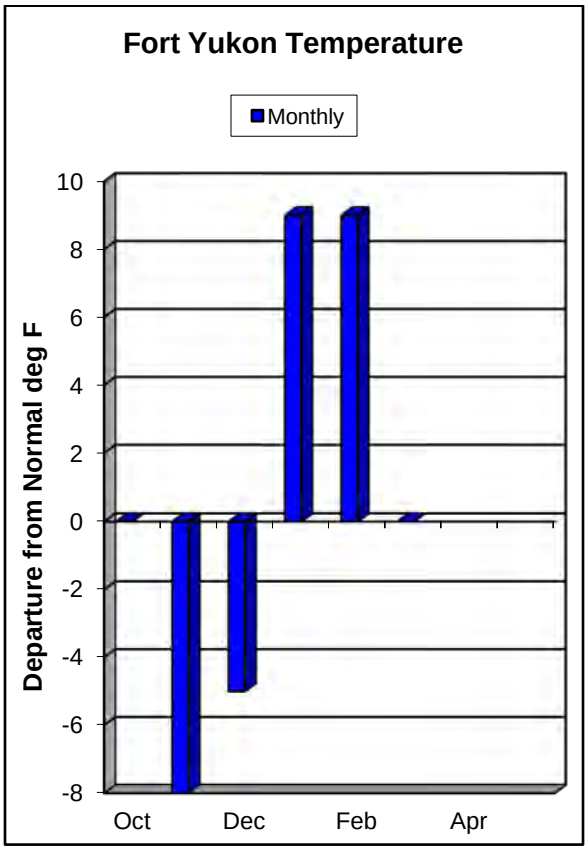
FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%
Yukon River At Eagle	Apr- Jul	33300	38450	115	133	98

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF NORMAL
Above Whitehorse/ Tetlin	8	75	106
Dawson	3	103	133
Stewart/ Pelly	13	85	107
Porcupine River	3	95	96
White River	8	81	112

CENTRAL YUKON BASIN*





Snowcover:

The Central Yukon Basin snowpack is near or above normal. The Yukon Flat snow courses average right at 100% normal. The Fort Yukon snow course is 97% of normal with 25" of snow with 3.5" of water content. The Fort Yukon SNOTEL site has caught 3.6" of precipitation or 100% of normal.

The upper Porcupine River valley in the Yukon Territory is just below normal, ranging from 80% at Eagle River snow course with 24" of snow and 4.4" of water content to 112% of normal at Riffs Ridge with 33" of snow and 6.4" of water content.

On the south side of the basin the White Mountain area snow courses are right at normal ranging from 87% at the Fossil snow course to 126% at Wolf snow course. The Upper Nome SNOTEL site has caught 6.1" of precipitation this water year, 117% of normal.

Forty-Mile country is much above normal. The four snow courses there average 123% of normal. Chicken Airstrip has 23" of snow with 4.8" of water content. This is 150% of normal and a new record for the site which began in 1965. The American Creek SNOTEL site has caught 3.1 inches of precipitation since October 1st.

* For further information contact the Natural Resources Conservation Service in Fairbanks.

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	4/1/2013	19	2.9	19	3.4		
BOREALIS	1330	3/29/2013	25	5.0	27	5.9	25	4.8
BOUNDARY	3500	3/30/2013	24	5.8	20	4.5	26	5.3
CATHEDRAL CREEK	800	3/29/2013	40	6.9	26	5.9	---	---
CHICKEN AIRSTRIP	1650	3/30/2013	23	4.8	13	2.8	16	3.2
CIRCLE HOT SPRINGS	860	4/1/2013	24	4.0	20	4.4	24	4.1
COAL CREEK	1000	3/29/2013	24	3.9	20	3.9	---	---
COPPER CREEK	2000	3/29/2013	23	3.8	15	3.0	---	---
CRESCENT CREEK	600	3/29/2013	28	4.8	22	4.3	---	---
EAGLE PLAINS	2330	3/28/2013	30	6.5	33	6.2	---	---
EAGLE RIVER	1115	3/27/2013	24	4.4	30	5.2	---	---
FORT YUKON	430	3/29/2013	25	3.5	21	3.8	20	3.6
FOSSIL	1400	3/29/2013	21	4.2	22	5.1	24	4.8
GRAPHITE LAKE	600	3/29/2013	16	2.5	---	---	---	---
HESS CREEK	1000	4/1/2013	26	5.1	29	7.0	26	5.0
LOST CHICKEN HILL	2100	3/30/2013	26	5.1	15	3.1	18	4.0
LOWER BEAVER CREEK	400	3/29/2013	36	6.8	35	7.0	---	---
MT. FAIRPLAY	3100	3/30/2013	26	5.3	20	4.4	21	4.6
OLD CROW	980	3/27/2013	26	4.6	26	5.2	---	---
RIFFS RIDGE	2130	3/27/2013	33	6.4	34	6.5	---	---
SEVEN MILE	600	4/1/2013	26	5.0	28	6.1	26	4.9
STACK PUP CREEK	1620	4/1/2013	23	3.5	20	3.8	25	4
STEP MOUNTAIN	850	*No Survey*	---	---	30	7.0	---	---
THIRTY MILE	1350	4/1/2013	29	5.9	30	7.1	34	7.6
THREE FINGERS	350	3/29/2013	42	7.4	28	6.3	---	---
UPPER NOME CREEK	2520	4/1/2013	24	4.6*	25	---	---	---
VUNZIK LAKE	500	3/29/2013	30	4.9	22	4.0	---	---
WINDY GAP	1900	3/29/2013	26	5.6	30	7.0	26	5.7

**Estimate*

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Porcupine River near Intl Boundary	Apr-Jul	5640	5410	96	140	66
Yukon River near Stevens Village	Apr- Jul	48100	48800	101	114	89

PRECIPITATION DATA

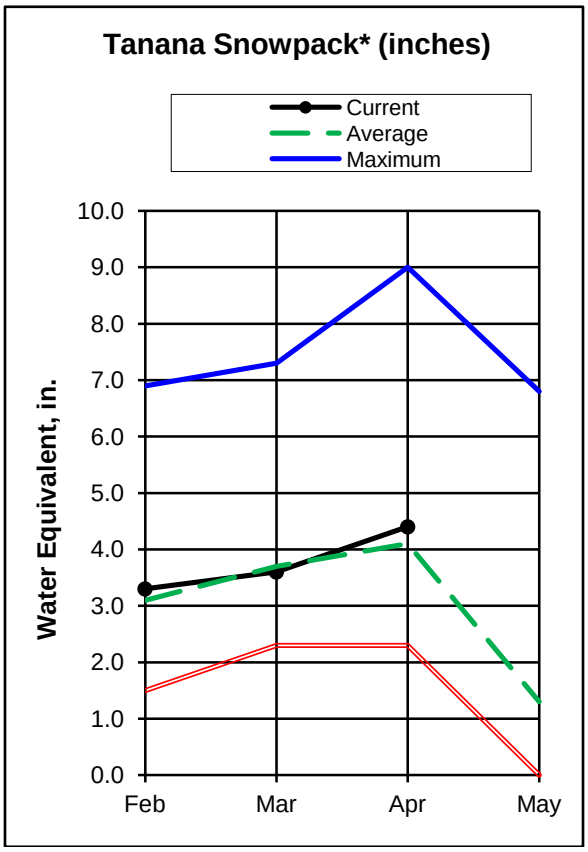
INCHES ACCUMULATED SINCE OCTOBER 1st

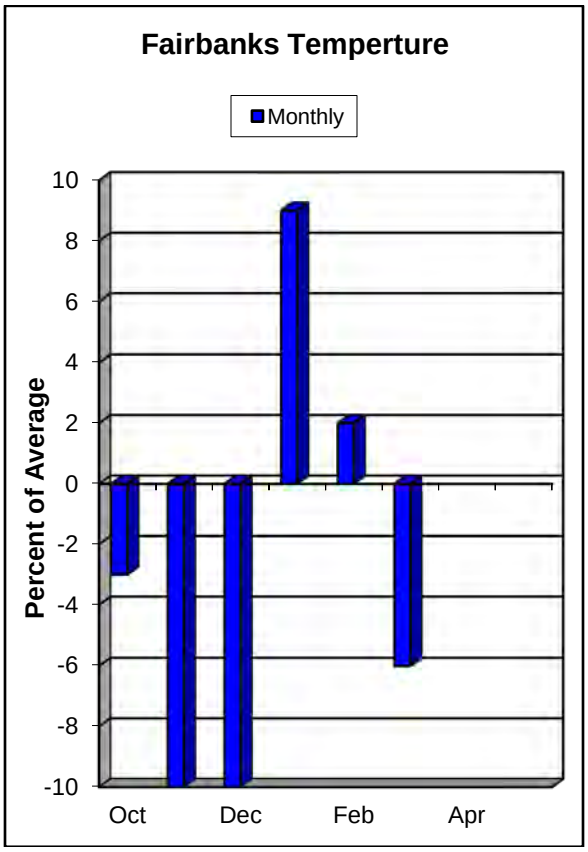
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
AMERICAN CREEK	1050	3.1	3.5	---	---
ATIGUN PASS	4800	4.1	6.7	5.6	73%
CHANDALAR CAMP	3300	3.7	5.0	4.5	87%
EAGLE SUMMIT	3650	4.9	4.2	5.3	92%
FORT YUKON	430	3.6	3.8	3.6	100%
UPPER NOME CREEK	2520	6.1	7.1	5.2	117%

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Forty Mile	4	135	123
Porcupine (Y.T.)	3	95	96
White Mountains	4	84	100
Yukon Flats	9	101	100

TANANA BASIN*





Snowcover:

The upper Tanana Valley snowpack remains above normal with the exception of the foothills of the Wrangell Mountains. Lost Creek and Chisana sites are below normal 67% and 81%, respectively. The rest of the upper basin is near 120% of normal as characterized by Paradise Hill near the Alaska Highway which has 19 inches of snow with 4.4 inches of water content, 122% of normal.

Like last month, the snowpack lightens slightly down valley. The seven Delta area snow courses average 115% of normal and range from 84% at Granite Creek SNOTEL to 137% of normal at the Fielding Lake snow course. Fielding Lake has 51" of snow with 13.6" of water content, the most since 1991, though only slightly above last year.

The snow pack in the lower Tanana Valley remains healthy. The seven snow courses measured in this area average 121% of normal and the Chatanika area snow courses average 115% of normal. Cleary Summit had 31" of snow with 5.9" of water content, 113% of normal. The Chena Basin is more variable ranging from 85% of normal at Upper Chena Pillow to 119% of normal at the Colorado Creek snow course.

* For further information contact the Natural Resources Conservation Service in Fairbanks or Delta Junction.

Tanana Basin

SNOWPACK DATA

			This Year		Last Year		1981-2010 Normal	
Site Name	Elev.	Date	Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
BONANZA CREEK	1150	3/28/2013	28	5.5	28	6.8	21	4.0
CARIBOU CREEK	1250	3/29/2013	25	4.8	22	5.6	20	3.8
CARIBOU MINE	1150	3/29/2013	23	4.4	27	5.7	24	4.7
CARIBOU SNOW PILLOW	900	3/29/2013	25	4.6	24	5.2	20	3.9
CHISANA	3320	4/1/2013	15	3.1	18	3.6	---	4.6
CLEARY SUMMIT	2230	4/1/2013	31	5.9	32	7.3	28	5.2
COLORADO CREEK	700	4/1/2013	24	4.3	26	5.1	20	3.6
EDGAR CREEK	2400	3/26/2013	43	9.4	---	---	30	5.8
FAIRBANKS F.O.	450	4/1/2013	22	4.5	23	4.4	---	3.3
FAITH CREEK	1900	4/1/2013	26	5.0	26	4.9	26	4.8
FIELDING LAKE	3000	3/29/2013	51	13.6	50	13.4	40	9.9
FORT GREELY	1500	3/28/2013	18	3.3	22	4.7	17	3.2
FRENCH CREEK	1800	4/1/2013	26	4.9	30	6.8	24	5.2
GERSTLE RIVER	1200	3/28/2013	17	3.1	18	3.5	17	3.1
GOLD KING	1700	4/1/2013	24	5.0	22	4.8	19	3.6
GRANITE CRK	1240	4/1/2013	16	3.2	24	4.8	---	3.8
JATAHMUND LAKE	2180	3/28/2013	18	3.6	19	3.4	18	3.0
KANTISHNA	155	4/1/2013	26	5.0	23	5.1	26	5.1
LITTLE CHENA BOTTOM	1460	3/29/2013	24	4.3	22	4.4	18	3.2
LITTLE CHENA RIDGE	2000	4/1/2013	18	4.1	20	6.0	---	4.9
LOST CREEK	3030	3/30/2013	15	3.0	18	4.2	18	3.7
MENTASTA PASS	2430	3/29/2013	30	7.3	32	7.8	27	6.2
MONUMENT CREEK	1850	4/1/2013	23	5.3	23	5.2	---	4.6
MT. RYAN	2800	4/1/2013	27	5.3	28	6.0	---	5.1
MUNSON RIDGE	3100	4/1/2013	33	7.6	37	8.6	---	6.8
PARADISE HILL	2200	3/28/2013	19	4.4	17	3.3	17	3.6
PTARMIGAN AIRSTRIP	2400	4/1/2013	25	4.8	24	5.7	16	3.6
PTARMIGAN CREEK	2230	4/1/2013	26	4.4	24	4.7	24	4.4
SHAW CREEK FLATS	980	4/1/2013	18	3.4	15	3.2	14	2.9
TEUCHET CREEK	1640	4/1/2013	22	4.1	20	4.1	---	3.8
TOK JUNCTION	1650	3/29/2013	24	4.5	25	4.8	20	3.5
UPPER CHENA	3000	3/29/2013	26	5.5	28	6.3	31	6.5
UPPER CHENA	2850	4/1/2013	34	6.0	29	7.7	---	6.8
UPPER WOOD RIVER	2990	4/1/2013	29	5.6	30	7.0	22	4.8

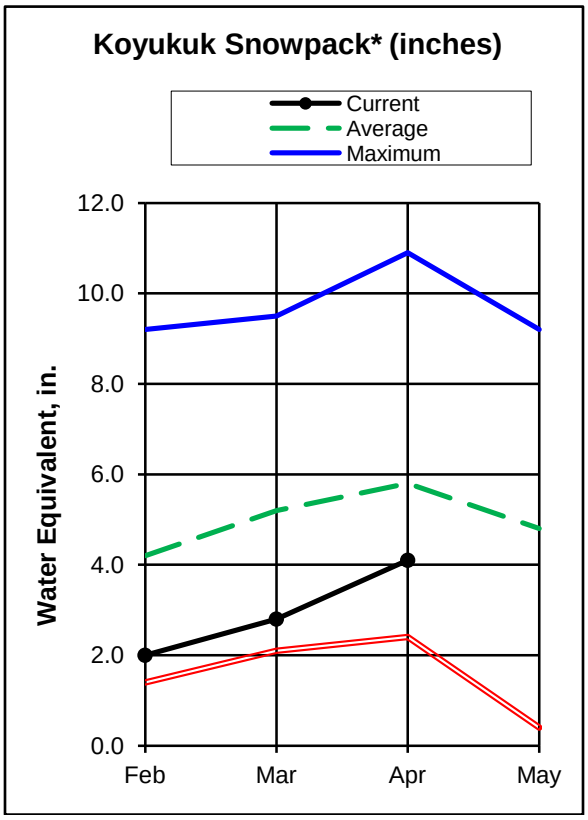
STREAMFLOW FORECASTS

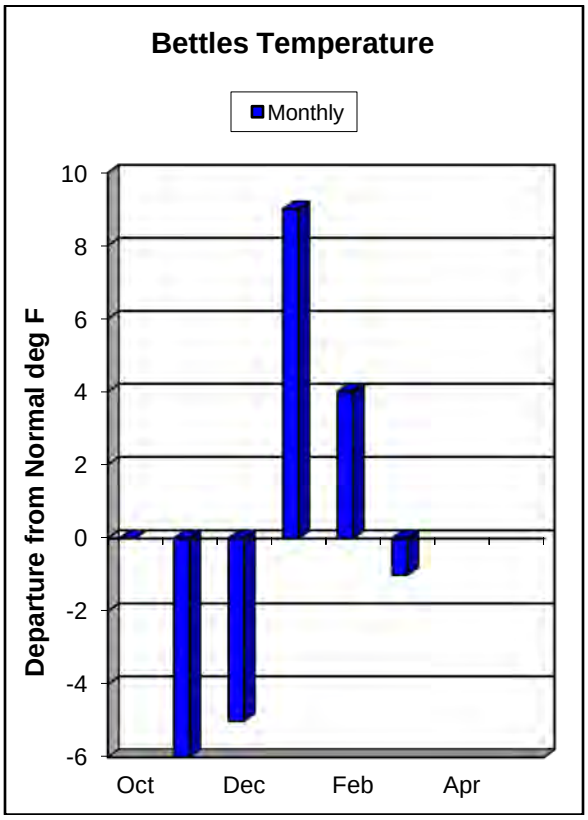
FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Tanana River at Fairbanks	Apr- Jul	7460	8000	107	120	94
Little Chena River near Fairbanks	Apr-Jul	78	82	105	141	69
Chena River near Two Rivers	Apr-Jul	270	275	104	144	59
Salcha River near Salchaket	Apr- Jul	625	660	106	130	60
Tanana River at Nenana	Apr- Jul	9000	9450	105	118	92

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Chatanika	4	88	115
Chena Basin	8	89	103
Lower Tanana Valley	7	84	121
Mid Tanana Valley (Delta Junction)	6	87	115
Upper Tanana Valley (Tok)	7	95	108

WESTERN INTERIOR BASINS*





SNOWCOVER:

Koyukuk

March snow storms helped the Koyukuk Basin snowpack recover. Though still below normal, snow courses for the Basin average 83% of normal, higher than the 64% of normal last month. Bonanza Forks snow course has 20" of snow with 4.3" of water content, last year it had 31" with 7.7" of water content. The wyoming gauge at DOT's Chandalar Camp caught 0.8" of precipitation for the month and 3.7" for the water year, 87% of normal.

Kuskokwim

The snowpack in the Kuskokwim Basin continued to increase during March with the greatest gains being in the northern part of the basin. The North Fork Kuskokwim aerial marker went from 26" of snow last month to 35" with 9.2" of estimated SWE this month. The Lower Aniak aerial marker also had 35" of snow depth after having 21" last month. Telaquana Lake snow course had 17" of snowdepth, 1" less than last month, but gained 0.4" of SWE.

Lower Yukon

The snowpack in the Lower Yukon Basin continues to be above normal. The snow courses measured in this area average 113% of normal. Innoko Inn snow course was measured with 20 inches of snowdepth and 5.0 inches of water content,

* For further information contact the Natural Resources Conservation Service in Anchorage.

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	4/1/2013	22	5.0	36	7.2	---	6.4
BONANZA FORKS	1200	4/1/2013	20	4.3	31	7.7	26	5.2
CLOVERLEAF	170	4/1/2013	19	3.2	33	7.8	---	---
COLDFOOT	1040	4/1/2013	18	3.3	31	7.0		6.4
COLVILLE BEND	170	4/1/2013	19	4.2	33	7.6	---	---
DISASTER CREEK	1550	4/2/2013	14	2.8	26	5.8	22	4.0
HUGGINS CREEK	290	4/1/2013	19	3.7	33	7.8	---	---
JR SLOUGH	160	4/1/2013	24	5.3	36	8.4	---	---
KALDOYEIT	580	3/29/2013	31	6.5	35	7.8	21	4.2
KANUTI CHALATNA	550	3/29/2013	21	4.3	34	7.6	26	5.3
KANUTI KILOLITNA	550	3/29/2013	16	3.2	23	5.5	22	4.0
LAKE TODATONTEN	550	3/28/2013	21	5.1	31	7.6	29	5.4
MINNKOKUT	580	3/29/2013	28	5.7	40	8.7	34	6.6
NOLITNA	560	3/29/2013	21	4.3	30	6.7	25	5.3
TABLE MOUNTAIN	2200	4/2/2013	13	2.5	22	5.5	23	4.0
TAIHOLMAN	540	3/29/2013	4	0.8	3	1.0	4	1.0
Kuskokwim								
HOLOKUK RIVER	367	3/27/2013	23	4.8	9	3.0	---	---
JOHNNY SLU	180	4/1/2013	29	7.9	38	8.5	---	---
KOGRUKLUK RIVER	493	4/3/2013	40	10.5	52	12.5	---	---
LOWER ANIAK	164	3/27/2013	35	7.4	35	8.5	---	---
MCGRATH	340	4/1/2013	28	8.7	---	9.7	27	5.6
MIDDLE KUSKOWIM	297	4/3/2013	20	5.4	38	8.8	---	---
N. FORK KUSKOKWIM	512	4/3/2013	35	9.2	35	8.3	---	---
NIXON FORK KUSKOKWIM	508	4/3/2013	30	8.0	---	---	---	---
TELAQUANA LAKE	1550	4/1/2013	17	4.4	24	5.2	20	4.6
UPPER ANIAK	781	4/3/2013	28	7.4	49	11.5	---	---
UPPER TWIN LAKES	2000	4/2/2013	20	4.5	---	---	25	6.8
Lower Yukon								
DEER CREEK	195	4/1/2013	23	4.3	43	10.3	---	---
GROUCH CREEK	220	3/31/2013	40	8.4	---	---	34	7.6
HOLIKACHUK	100	3/31/2013	45	9.7	---	9.8	37	8.2
HORSEFLY CREEK	180	3/31/2013	33	8.1	---	---	28	6.5
INNOKO INN	200	3/31/2013	22	5.0	---	---	24	4.4
LITTLE MUD RIVER	855	4/1/2013	20	3.9	27	6.1	---	---
LOWER NOWITNA RIVER	205	4/1/2013	20	4.2	24	5.4	---	---
MIDDLE INNOKO	150	3/31/2013	49	10.1	---	---	34	7.7
NINEMILE ISLAND	140	4/1/2013	27	5.2	39	9.3	---	---
PIKE TRAP LAKE	130	4/1/2013	15	3.0	12	2.8	---	---
SQUIRREL CREEK	150	4/1/2013	29	6.3	38	8.8	---	---
TOZIKAKET	600	3/28/2013	18	3.7	---	---	23	4.2
UPPER INNOKO	180	3/31/2013	33	7.3	---	---	32	7.4
WAPOO HILLS	220	3/31/2013	41	9.7	---	---	36	7.7
YANKEE SLOUGH	100	3/31/2013	42	9.2	---	---	41	9.4

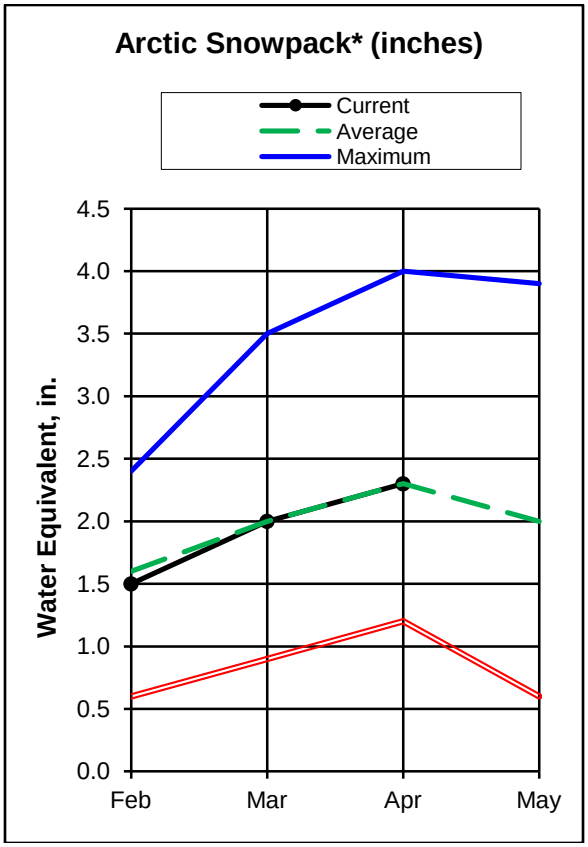
STREAMFLOW FORECASTS

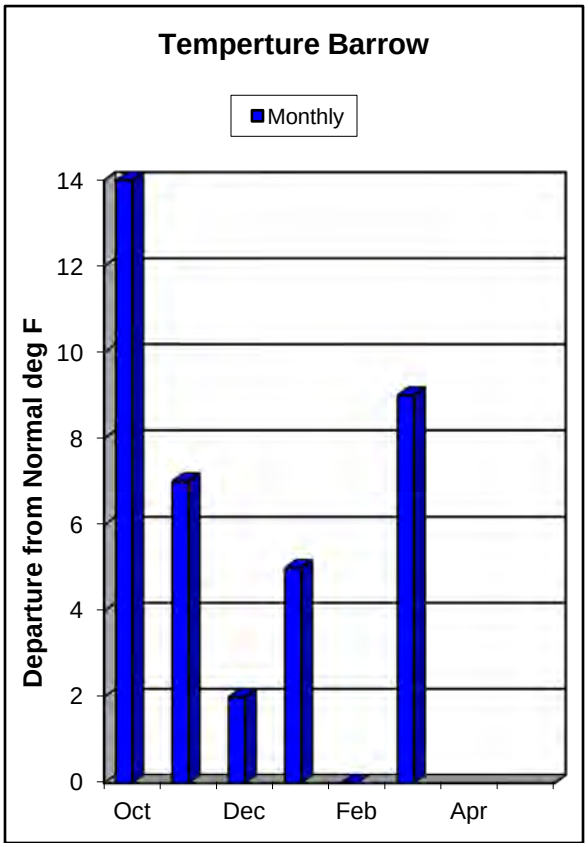
FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Kuskokwim River at Crooked Creek	Apr-Jun	10500	10800	103	127	78

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Koyukuk	14	57	83
Upper Kuskokwim	7	79	100
Lower Yukon	5	70	113

ARCTIC AND KOTZEBUE SOUND*





Snowcover:

Arctic

The Arctic received normal precipitation during the month of March. This helped keep the area's snowpack near normal. The Umiat Airfield snow measurement site averaged 23" of depth and 4.1" of water content, a gain 0.4" of SWE and 3" of depth. The Imnaviat Creek SNOTEL, 110 miles south of Deadhorse, gained 0.2" of precipitation and 2" of snow depth, bringing the total precipitation since October 1st to 2.6" or 90% of normal. Atigun Pass SNOTEL site gained 1" of precipitation while the Atigun Camp site at the base of the pass received 0.4" of precipitation. With 2.5" of total precipitation for the water year, Atigun Camp is right at normal while Atigun Pass is 73% of normal with 4.1" of total precipitation.

Kotzebue

The wyoming gauge at Red Dog Mine measured 0.89" of precipitation during March while the Red Dog Port facilities received 0.25". The Red Dog site has 6.8" of total precipitation for the water year, 156% of normal, however 3.9" of that fell in October. The snowpack at Kelly Station SNOTEL, on the Noatak River, gained 0.3" of SWE during March. It now has 11" of snow depth and 1.6" of water content. Last year it had 17" of snow with 3.5" of water content.

* For further information contact the Natural Resources Conservation Service in Anchorage.

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
Umiat Airfield	267	3/2/2013	23	4.1	---	---	---	---
Kelly Station	310	3/1/2013	11	1.6	17	3.5	---	---

PRECIPITATION DATA

INCHES ACCUMULATED SINCE OCTOBER 1ST

Site Name	Elev.	Inches Accumulated since October 1st			
		This Year	Last Year	1981-2010 Average	% of Average
Arctic					
ATIGUN CAMP	3400	2.5	3.5	2.5	100%
ATIGUN PASS	4800	4.1	6.7	5.6	73%
BARROW	25	1.8	1.7	---	---
IMNAVIAT CREEK	3050	2.6	2.6	2.9	90%
PRUDHOE BAY	30	2.1	3	3.5	60%
SAGWON	1000	3.1	2.7	3	103%
Kotzebue Sound					
Port Red Dog	50	3.6	2.8	3.5	103%
Red Dog Mine	950	6.8	2.9	4.3	156%

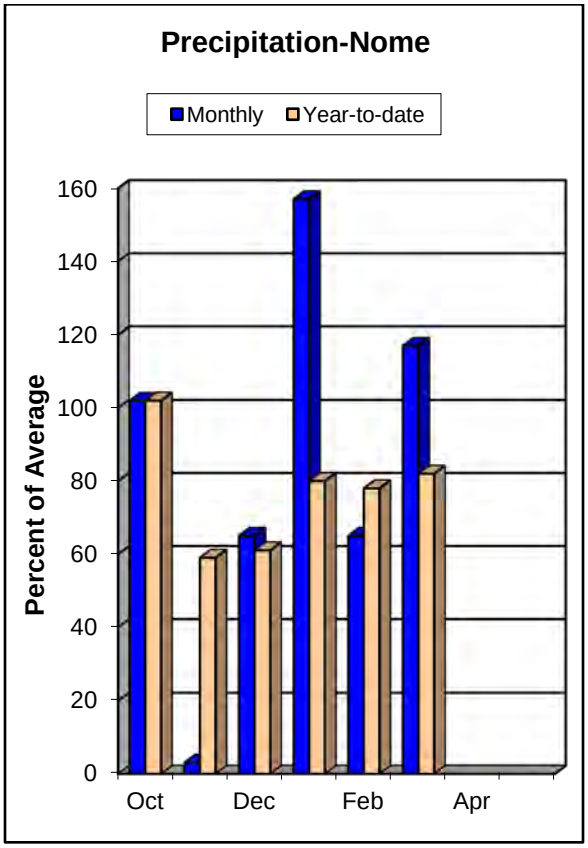
STREAMFLOW FORECASTS

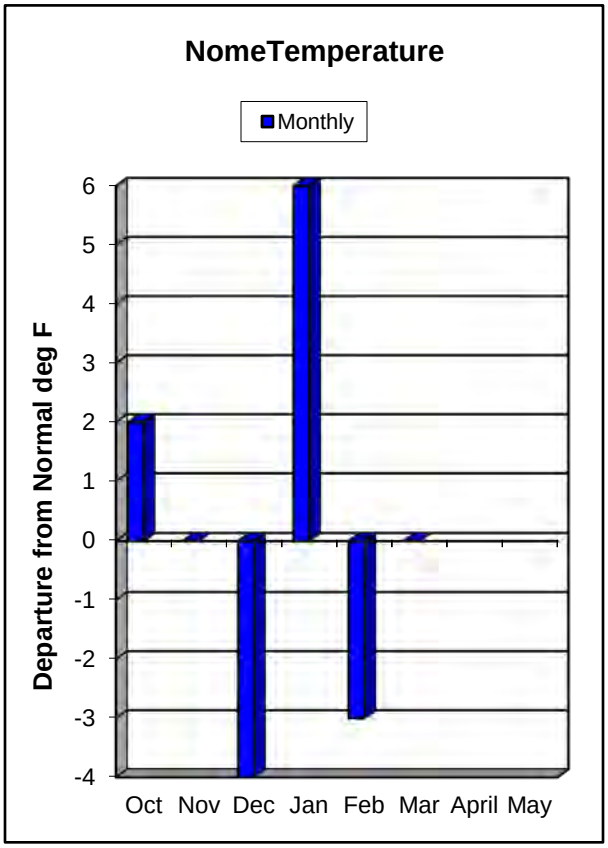
FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Sagvanirktok River near Pump Station 3	Apr-Jul	684	690	101	120	82
Kuparuk River near Deadhorse	Apr-Jul	796	780	99	142	70

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Dalton Highway	2	---	100

NORTON SOUND/SOUTHWEST DELTA/BRISTOL BAY*





Snowcover:

Norton Sound

Nome had above normal precipitation for the month of March. However, total precipitation for the water year is still below normal, around 82%. Johnson's Camp SNOTEL, 30 miles east of Nome jumped from 7" of snow to 18" of snow during the month. Further east, however, Rocky Point SNOTEL site received no additional precipitation during the month.

Southwest Delta

The Y-K Delta received above normal precipitation for the month. The NWS site in Bethel reported 0.78" of precipitation which is 150% of normal. Bethel has had above normal precipitation every month this winter. Further up the Kuskokwim, the Aniak SCAN site received 0.8" of precipitation in March and has 20" of snow depth.

Bristol Bay

Snow remains variable in the Bristol Bay region. Low elevation sites lost snow pack. The Port Alsworth snow course went from 12" last month to being melted out with spotty coverage this month. Brooks Camp aerial marker went from 13" to 6" of snow depth this month. However, higher elevation sites made some gains. Upper Twin Lakes snow course went from 16" snow depth with 3" of SWE last month to 20" depth and 4.5" of SWE. The western side of Bristol Bay continues to see more snow. Weary Lake SNOTEL site, a new SNOTEL site 23 miles west of Dillingham at an elevation of 100 feet, is reporting 69 inches of snow.

Norton Sound / Southwest Delta / Bristol Bay

SNOWPACK DATA

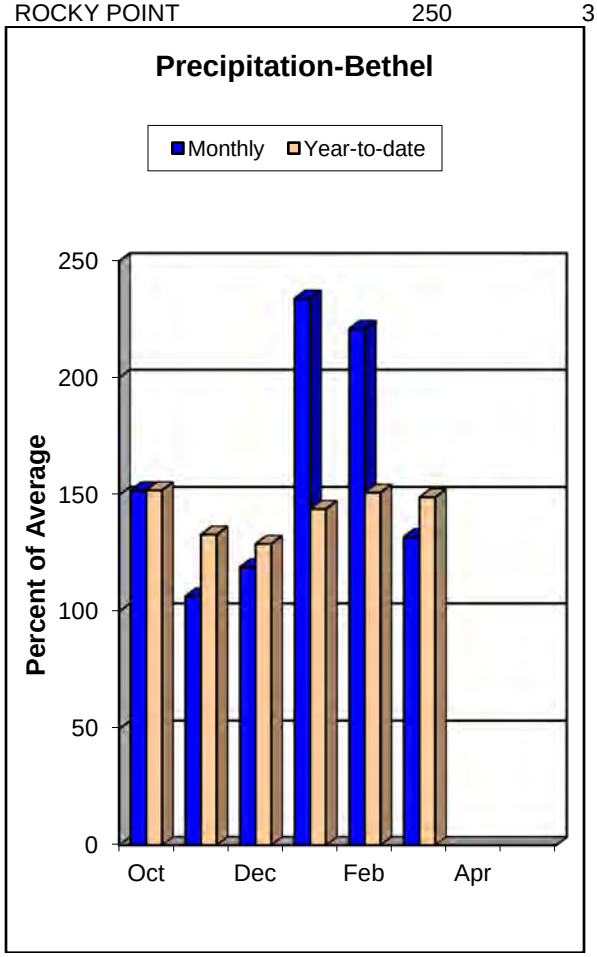
Site Name	Elev.	Date	This Year		Last Year		1981-2010 Normal	
			Snow Depth	Water Content	Snow Depth	Water Content	Snow Depth	Water Content
Bristol Bay								
BROOKS CAMP	150	4/2/2013	6	1.6	18	6.0	---	---
FISHTRAP LAKE	1800	4/2/2013	31	8.6	---	---	37	9.5
LOWER MULCHANTA	320	3/1/2013	0	0.0	New Site		---	---
PORT ALSWORTH	270	4/2/2013	0	0.0	25	6.2	10	3.3
THREE FORKS	900	4/2/2013	11	2.9	26	7.8	---	---
UPPER TWIN LAKES	2000	4/2/2013	20	4.5	---	8.8*	25	6.8
WEARY LAKE	100	3/1/2013	69	20.3*	New Site		---	---
Norton Sound								
JOHNSON'S CAMP	25	3/1/2013	18	3.2*	31	6.2*	---	---
PARGON CREEK	100	3/1/2013	7	1.4*	---	---	---	---
ROCKY POINT	250	3/1/2013	21	4.1*	---	---	---	---

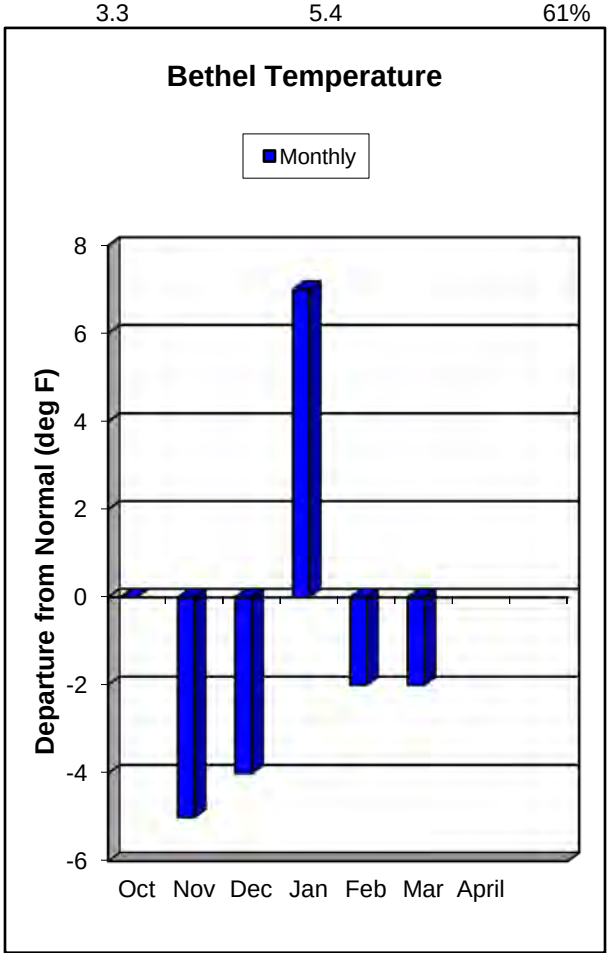
**Estimate*

PRECIPITATION DATA

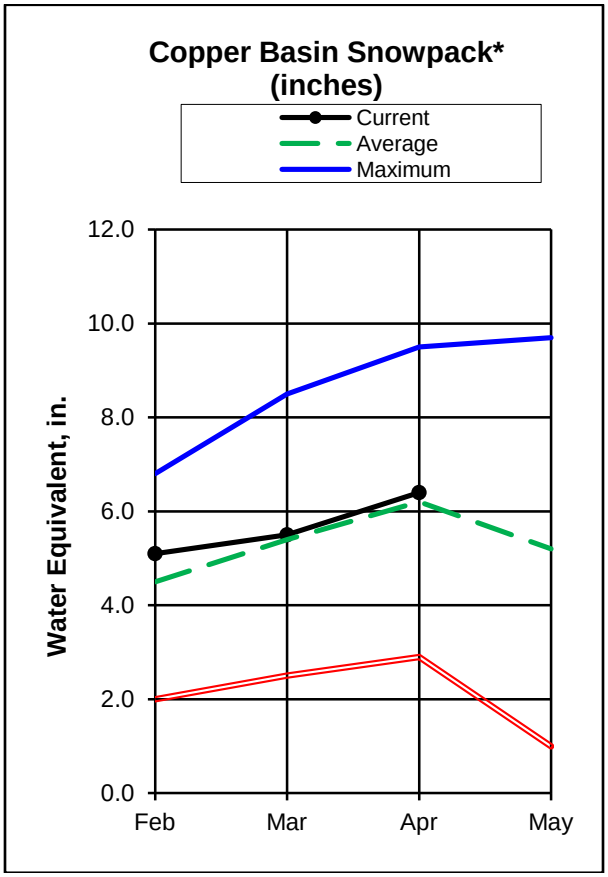
INCHES ACCUMULATED SINCE OCTOBER 1ST

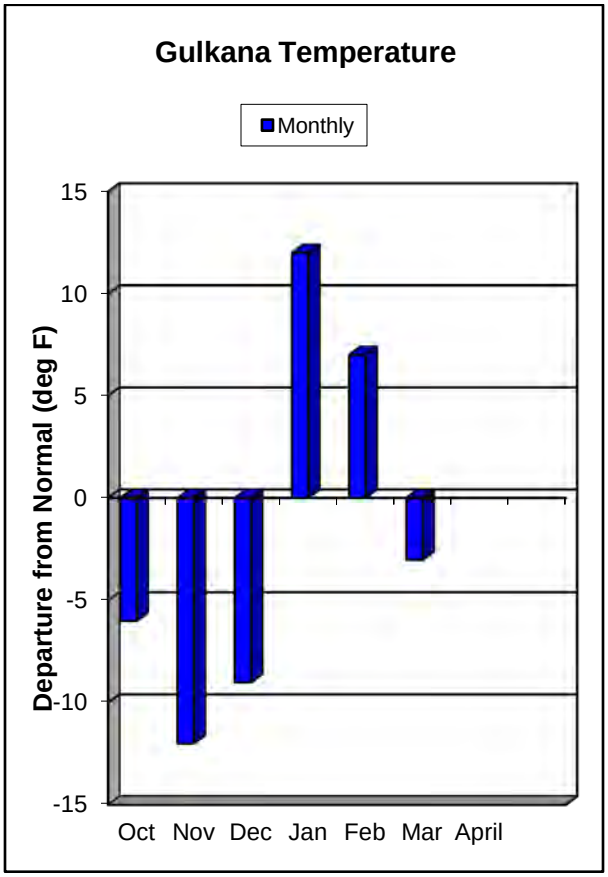
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
PARGON CREEK	100	5.3	5.2	5.9	90%
ROCKY POINT	250	3.3	3.3	5.4	61%





COPPER BASIN*





Snowcover:

Like last month, the snowpack in the Copper River basin changes from north to south. In the northern part of the basin along the Alaska Range, the snowpack is much above normal. The four courses in this area average 126% of normal. Fielding Lake has 51" of snow with 13.6" of water content, the most since 1991, though only slightly above last year. Similarly, Paxson snow course matched last year's measurements, the highest since 1991. The eastern part of the basin is also above normal. Chistochina is 120% of normal and Haggard Creek, north of Sourdough, is 135% or normal.

The western part of the basin floor remains below normal, but higher than last month. The four courses in this area average 86% of normal. This below normal zone extends south to the Chugach range -where the area's seven courses average 72% of normal- and then over to the Wrangells. The Wrangells vary between 62% of normal at Dadina Lake to 89% of normal at Chokosna.

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	3/29/2013	21	4.2	22	5.1	20	3.5
CHOKOSNA	1550	3/29/2013	15	3.4	23	5.2	15	3.8
DADINA LAKE	2160	4/1/2013	20	3.9	33	8.5	28	6.3
FIELDING LAKE	3000	3/29/2013	51	13.6	50	13.4	40	9.9
HAGGARD CREEK	2540	3/29/2013	35	7.4	35	7.5	28	5.5
HORSEPASTURE PASS	4300	4/1/2013	26	5.9	36	9.5	30	6.9
KENNY LAKE SCHOOL	1300	3/29/2013	13	2.7	23	5.2	16	3.6
LAKE LOUISE	2400	3/29/2013	24	4.6	30	6.6	22	4.6
LITTLE NELCHINA	2650	3/29/2013	21	4.1	30	7.9	26	5.2
LONG GLACIER	4820	3/31/2013	36	8.3	33	7.5	---	---
MAY CREEK	1610	4/1/2013	20	4.5	24	4.8	---	5.5
MENTASTA PASS	2430	3/29/2013	30	7.3	32	7.8	27	6.2
MONSOON LAKE	3100	4/1/2013	29	6.7	30	8.5	30	6.4
MT. EYAK	1405	4/1/2013	120	38.8	115	52.0	---	28.4
NOTCH	2643	3/31/2013	15	3.2	21	4.8	---	------
PAXSON	2650	3/29/2013	42	10.0	41	10.0	31	6.9
SANFORD RIVER	2280	4/1/2013	24	4.5	29	6.0	28	6.0
ST. ANNE LAKE	1990	4/1/2013	20	3.8	38	8.9	23	4.8
TAZLINA	1225	3/29/2013	16	3.0	22	4.8	14	3.8
TEBAY LAKE	1930	3/31/2013	57	15.4	93	33.5	---	---
TOLSONA CREEK	200	3/29/2013	19	3.6	29	6.0	22	4.2
TSAINA RIVER	1650	4/1/2013	43	11.2	65	21.6	56	17.0
TWIN LAKES	2400	4/1/2013	20	3.7	36	8.2	26	6.4
UPPER TSAINA RIVER	1750	4/1/2013	52	14.4	75	26.2	---	19.4
WORTHINGTON GLACIER	2100	4/1/2013	64	18.9	98	40.3	75	24.6

PRECIPITATION DATA

INCHES ACCUMULATED SINCE OCTOBER 1ST

Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
MAY CREEK	1610	5.9	5.2	6.1	97%
UPPER TSAINA RIVER	1750	19.9	28.1	27.0	74%

STREAMFLOW FORECASTS

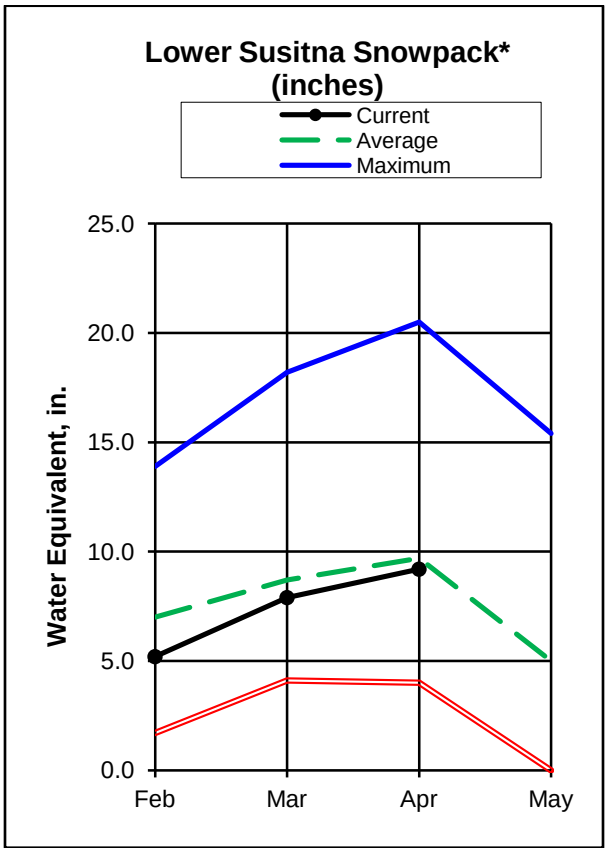
FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Gulkana River at Sourdough	Apr- Jul	440	500	115	148	79

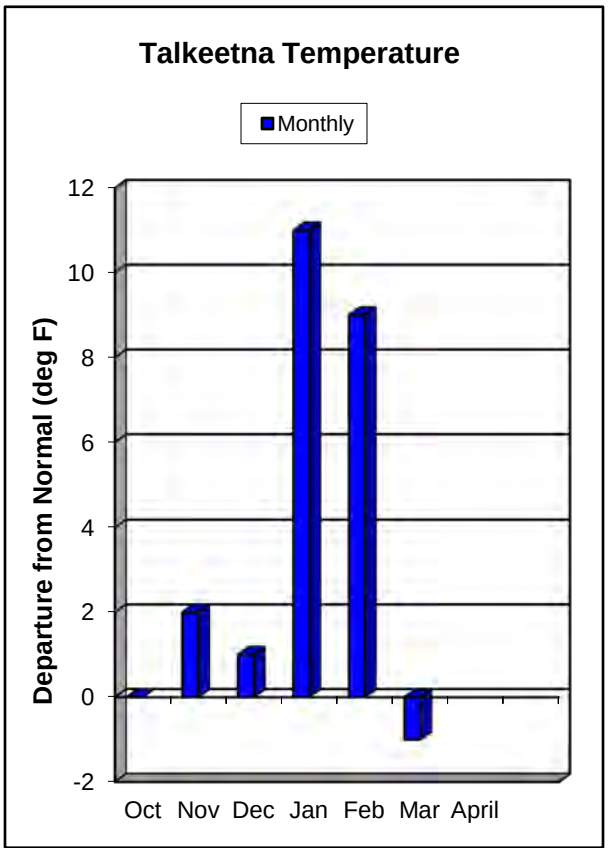
WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Alaska Range**	4	99	134
Basin Floor	6	71	100
Chugach Range	6	49	72
Talkeetna Mountains	3	59	92
Wrangell Mountains	4	76	75

**At the foot of the Alaska Range.

MATANUSKA - SUSITNA BASINS*





Snowcover:

The snowpack in the Susitna Basins saw increases through March. However, like last month the western side of the basin has below normal to normal snowpack and the eastern half has normal to above normal snowpack.

The lower Susitna Basin snow course average 99% of normal. On the western side Skwentna is 77% of normal and Alexander Lake snow course is 89% of normal with 41" of snow and 10.7" of water content. On the eastern side, Talkeetna snow course is 128% of normal and Willow snow course is 126% of normal with 43" of snow and 8.7" of water content. Su Valley High SNOTEL site measured 1.4" of precipitation in March bringing its water year total to 12.0", 101% of normal.

The upper Susitna snow courses range from just below normal to above normal. The upper basin's 11 measured snow courses average 106% of normal. Courses range from 86% of normal at Horsepasture Pass to 150% of normal at Upper Oshetna River. The East Fork Chulitna snow course is 106% of normal with 46" of snow with 12.8" of water content.

In the Matanuska Basin, Sheep Mountain snow course has 23" of snow with 4.9" of water content or 88% of normal and less than half of last year. The Hatcher's Pass area snow courses are all above normal. The Independence Mine snow course is 130% of normal with 76" of snow and 23.2" of water content. The Independence Mine SNOTEL measured 2.9" of precipitation for March, bringing its total precipitation since October 1st to 22.1" which is 144% of normal.

* For more information contact the Natural Resources Conservation Service in Wasilla.

Matanuska - Susitna Basins

SNOWPACK DATA

Site Name	Elev.	Date	This Year Snow Depth	This Year Water Content	Last Year Snow Depth	Last Year Water Content	1981-2010 Normal Snow Depth	1981-2010 Normal Water Content
ALEXANDER LAKE	160	4/1/2013	41	10.7	51	15.2	42	12.0
ARCHANGEL ROAD	230	4/2/2013	56	16.4	57	18.4	44	12.2
BENTALIT LODGE	150	4/1/2013	30	7.9	44	12.1	---	7.4
CHELATNA LAKE	1450	*No Survey*	---	---	50	14.0	45	11.0
CLEARWATER LAKE	2650	4/1/2013	29	5.8	33	7.3	25	5.4
CURTIS LAKE	2850	4/1/2013	22	3.9	29	5.8	25	4.6
DENALI VIEW	700	3/29/2013	44	12.0	46	14.0	40	12.1
DUNKLE HILLS	2700	*No Survey*	---	---	32	8.8	---	---
DUTCH HILLS	3100	*No Survey*	---	---	69	25.0	75	24.8
E. FORK CHULITNA	1800	3/29/2013	46	12.8	51	15.4	47	12.1
FISHHOOK BASIN	3300	4/2/2013	72	21.4	70	24.2	55	17.8
FOG LAKES	2120	4/1/2013	28	6.0	30	5.8	24	5.2
HALFWAY SLOUGH	350	3/29/2013	32	7.7	34	9.3	---	---
INDEPENDENCE MINE	3550	4/2/2013	76	23.2	77	28.2	64	19.8
LAKE LOUISE	2400	3/29/2013	24	4.6	30	6.6	22	4.6
LITTLE SUSITNA	1700	4/2/2013	48	13.1	50	15.1	39	10.1
MONAHAN FLAT	2710	4/1/2013	34	6.8	---	---	34	7.4
NUGGET BENCH	2010	*No Survey*	---	---	45	14.5	50	14.6
RAMSDYKE CREEK	2220	*No Survey*	---	---	68	22.5	64	20.0
SHEEP MOUNTAIN	2900	3/29/2013	23	4.9	37	10.3	26	5.6
SKWENTNA	160	4/1/2013	35	9.2	48	14.5	45	11.9
SQUARE LAKE	2950	4/1/2013	24	4.4	29	5.8	21	4.0
SUSITNA VALLEY HIGH	375	4/1/2013	34	7.8	38	12.1	---	8.6
TALKEETNA	350	3/29/2013	35	8.2	34	9.6	26	6.4
TOKOSITNA VALLEY	850	4/1/2013	54	15.2	59	17.2	---	12.4
UPPER OSHETNA RIVER	3150	4/1/2013	24	6.9	30	7.5	20	4.6
UPPER SANONA CREEK	3100	4/1/2013	31	7.0	37	9.0	28	5.6
WILLOW AIRSTRIP	200	3/29/2013	43	8.7	42	11.6	28	6.9

**Estimate*

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Little Susitna River near Palmer	Arp-Jul	82	88	107	132	80
Talkeetna River near Talkeetna	Apr-Jull	1570	1610	103	119	86

PRECIPITATION DATA

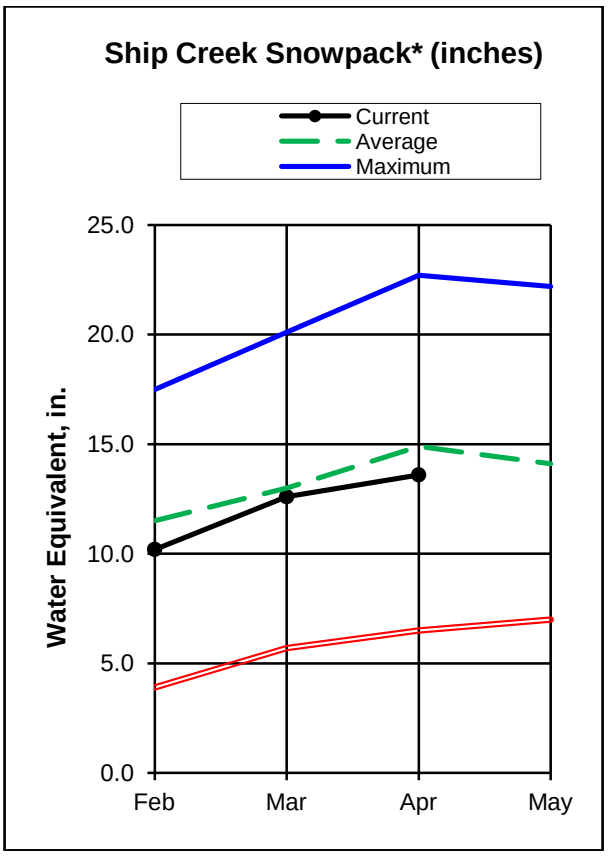
INCHES ACCUMULATED SINCE OCTOBER 1ST

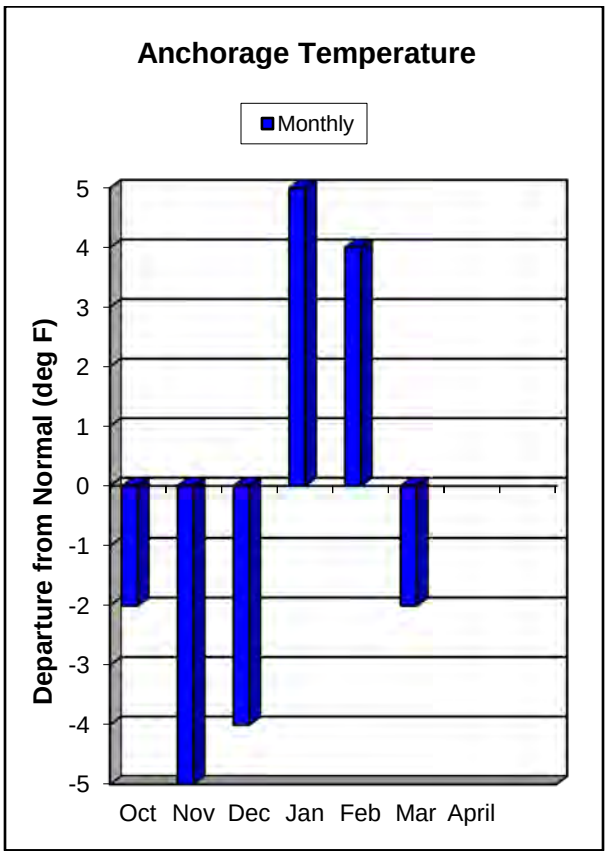
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
INDEPENDENCE MINE	3550	22.1	20.1	15.3	144%
MONAHAN FLAT	2710	8.8	7.7	8.1	109%
SUSITNA VALLEY HIGH	375	12	13.5	11.9	101%
TOKOSITNA VALLEY	850	18.8	22.2	19	99%

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Lower Susitna	8	72	99
Matanuska/Little Susitna	6	81	120
Peters Hills	2	89	111
Upper Susitna	11	80	106

NORTHERN COOK INLET*





Snowcover:

The snowpack in northern Cook Inlet continues to be variable, though not as much as last month. On the west side of the inlet, snowpacks continue to be below normal. Granite Point is 82% of normal with 14" of snow and an estimated 4.1" of water content.

Greater gains have been made on the eastern side of the inlet. The Turnagain Arm area is 110% of normal. Portage Valley snow course has 67" of snow with 18.9" of water content, 129% of normal, but only half of last year's record snowpack.

Snowpack near Anchorage remains below normal, near 80%. South Fork of Campbell snow course had 24" of snow with 4.1" of water content, 59% of normal and its lightest reading in ten years. The Ship Creek drainage is slightly heavier with its 8 snow courses averaging at 88% of normal. Indian Pass SNOTEL had 88" of snow with 23.5" of water content, 107% of normal. Indian Pass SNOTEL also has measured 32.5" of precipitation since October 1st or 128% above normal—the highest in the area. Moraine SNOTEL site, perched 1000 feet above Eklutna Reservoir, has caught 8.5" so far this water year, 73% of normal.

* For more information contact the Natural Resources Conservation Service in Wasilla or Anchorage.

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	4/1/2013	36	9.3	57	20.0	---	10.2
ARCTIC SKI BOWL	3000	4/1/2013	32	8.7	73	29.5	40	12.8
ARCTIC VALLEY #1	500	4/1/2013	15	3.6	30	8.4	14	3.6
ARCTIC VALLEY #2	1000	*4/1/2013*	20	3.8	37	10.5	18	4.8
ARCTIC VALLEY #3	1950	4/1/2013	29	5.8	44	13.4	28	7.2
ARCTIC VALLEY #4	2130	4/1/2013	28	6.9	43	13.6	28	7.2
CHUITNA PLATEAU	1540	4/1/2013	57	22.8	64	21.5	76	27.9
CONGAHBUNA LAKE	500	4/1/2013	39	11.1	49	14.6	38	10.6
GRANITE POINT	250	4/1/2013	14	4.1	35	10.2	16	5.0
INDIAN PASS	2350	4/1/2013	88	23.5	85	31.8	---	22.0
KINKAID PARK	250	4/3/2013	20	4.1	30	8.5	16	4.4
LONE RIDGE	1675	4/1/2013	65	16.5	75	29.0	79	32.3
MORAINE	2100	4/1/2013	25	5.9	41	13.2	---	9.0
MT. ALYESKA	1540	4/1/2013	111	32.8	100	37.6	---	32.5
POINT MACKENZIE	250	4/1/2013	24	6.0	30	9.2	---	5.2
PORTAGE VALLEY	50	3/29/2013	67	18.9	97	37.8	40	14.6
SOUTH CAMPBELL CREEK	1200	3/28/2013	24	4.1	34	9.9	28	6.9

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Ship Creek near Anchorage	Apr- Jul	58	62	107	128	86

PRECIPITATION DATA

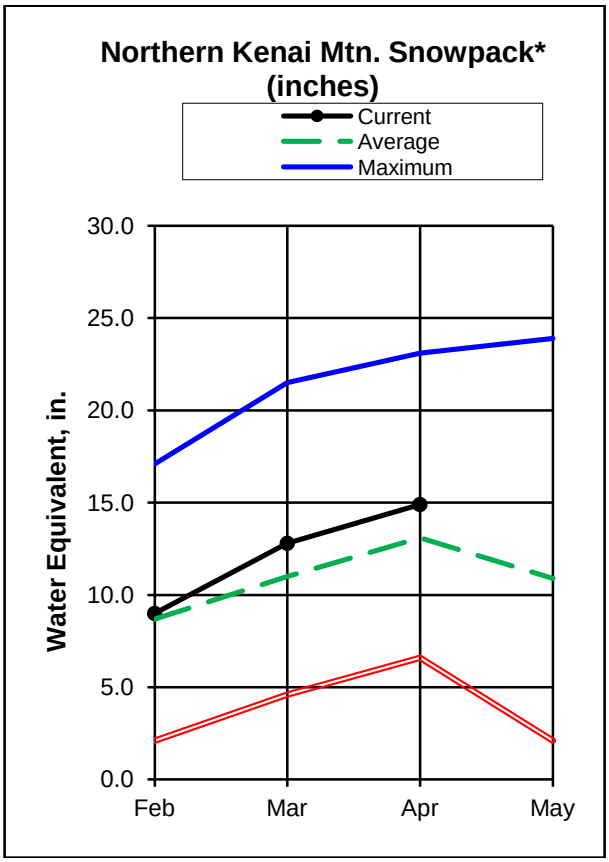
INCHES ACCUMULATED SINCE OCTOBER 1ST

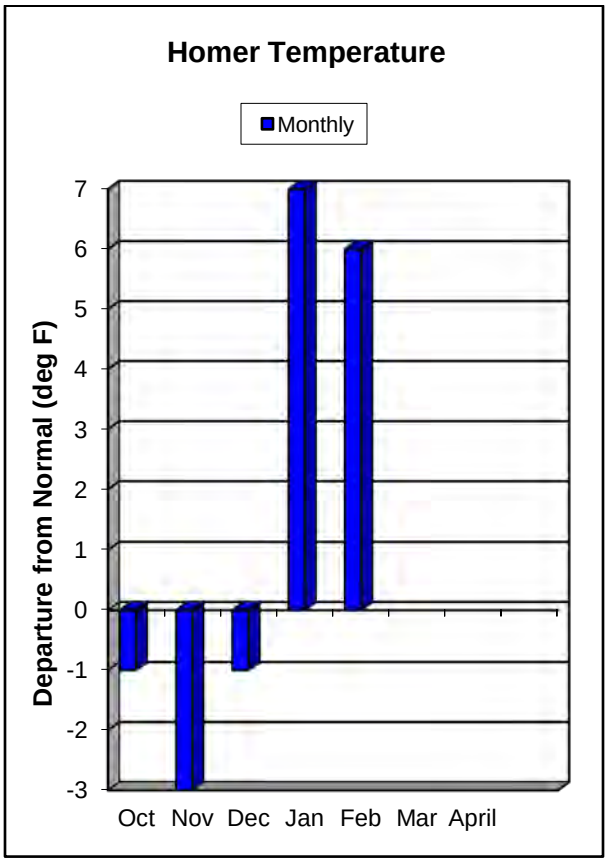
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
ANCHORAGE HILLSIDE	2080	14.4	21.8	13.7	105%
INDIAN PASS	2350	32.5	35.8	25.4	128%
MORAINE	2100	8.5	16.9	11.7	73%
MT. ALYESKA	1540	40	48	46.2	87%
POINT MACKENZIE	250	9.8	10.6	8.2	120%

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Beluga	3	72	72
Campbell Creek	3	48	81
Ship Creek	8	49	88
Turnagain Arm	3	76	110

KENAI PENINSULA*





Snowcover:

The snowpack across the Kenai Peninsula is above normal. The ten snow courses in the northern Kenai Mountains average 114% of normal. They range from 96% at Summit Creek to 133% of normal at Snug Harbor Road snow course and the Jean Lake snow course. Turnagain Pass SNOTEL has 99" of snow with 36.9" of water content which is 110% of normal.

The Ninilchik Dome area north of Homer ranges from 105% of normal at the Bridge Creek snow course to 123% of normal at the Demonstration Forest which is just west of Homer. Anchor River Divide SNOTEL site has 47" of snow with 14.8" of water content. This is 124% of normal. Additionally, the Anchor River Divide SNOTEL site has receive 109% of normal precipitation since October 1, or 18.4 inches.

South, across Kachemak Bay, the snowpack has made gains. Nuka Glacier SNOTEL has 109" of snow with a measured 44.2" of water content, 128% of normal. The Nuka Glacier site has caught 3.5" of precipitation during March, bringing the total precipitation for the Water Year to 37.2" which is only 69% of normal.

* For more information contact the Natural Resources Conservation Service in Homer.

Kenai Peninsula

SNOWPACK DATA

Site Name	Elev.	Date	This Year Snow Depth	This Year Water Content	Last Year Snow Depth	Last Year Water Content	1981-2010 Normal Snow Depth	1981-2010 Normal Water Content
ANCHOR RIVER DIVIDE	1653	4/1/2013	47	14.8	54	16.3	---	11.9
BERTHA CREEK	950	3/29/2013	65	19.2	72	24.5	53	16.6
BRIDGE CREEK	1300	3/29/2013	45	12.6	48	16.0	40	12.0
COOPER LAKE	1200	4/1/2013	57	16.6	62	21.9	---	14.0
DEMONSTRATION FOREST	780	3/29/2013	34	9.6	48	16.3	28	7.8
EAGLE LAKE	1400	3/29/2013	47	13.8	57	17.8	42	11.9
GRANDVIEW	1100	4/1/2013	94	33.8	93	37.3	---	32.0
GROUSE CREEK DIVIDE	700	4/1/2013	59	22.4	78	24.7	---	17.7
JEAN LAKE	620	3/29/2013	20	4.4	32	9.4	15	3.3
KACHEMAK CREEK	1660	4/1/2013	55	20.6	70	38.3	---	
KENAI MOOSE PENS	300	4/1/2013	24	5.3	27	7.4	---	5.0
KENAI SUMMIT	1390	3/29/2013	55	16.0	56	19.6	48	14.8
MCNEIL CANYON	1320	4/1/2013	39	11.3	48	17.6	---	10.6
MOOSE PASS	700	3/29/2013	34	9.4	52	16.5	22	6.6
NUKA GLACIER	1250	4/1/2013	109	44.2	118	52.3	88	34.6
PASS CREEK	1200	4/2/2013	30	7.8	49	15.4	33	9.0
PORT GRAHAM	300	4/1/2013	37	10.9	58	19.9	---	8.7
RESURRECTION PASS	2250	4/3/2013	39	10.3	53	18.0	38	10.4
SNUG HARBOR ROAD	500	3/29/2013	24	6	34	10.1	16	4.5
SUMMIT CREEK	1400	4/1/2013	41	10.7	57	19.4	---	11.1
TURNAGAIN PASS	1880	4/1/2013	99	36.9	113	43.1	---	33.4

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Kenai River at Cooper Landing	Apr-Jul	960	990	103	116	90

PRECIPITATION DATA

INCHES ACCUMULATED SINCE OCTOBER 1ST

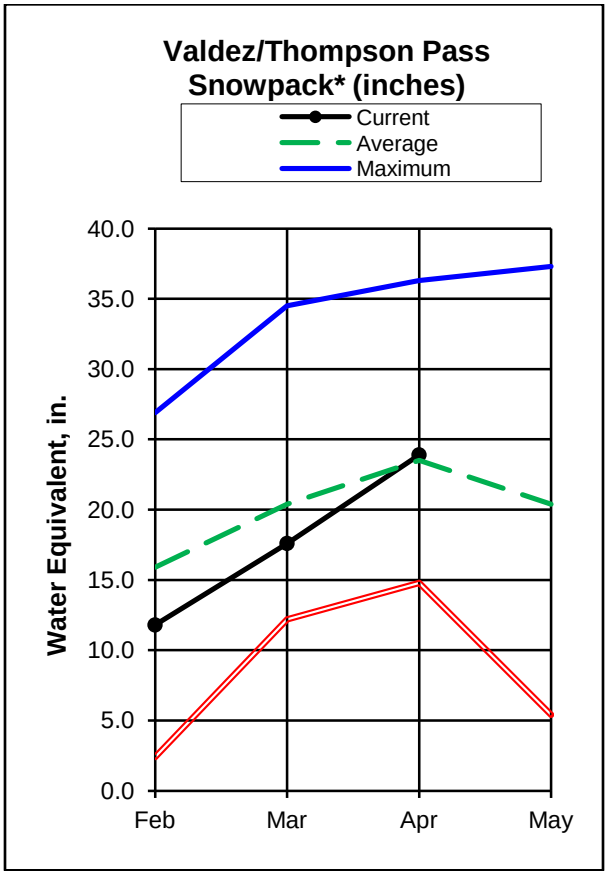
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
ANCHOR RIVER DIVIDE	1653	18.4	19.6	16.9	109%
COOPER LAKE	1200	19.7	27.9	25.2	78%
GRANDVIEW	1100	31.7	47.3	40.3	79%
GROUSE CREEK DIVIDE	700	26.9	40.6	37.5	72%
KACHEMAK CREEK	1660	27.1	43.5	37.7	72%
KENAI MOOSE PENS	300	9.5	9.2	8.2	116%
MCNEIL CANYON	1320	14.6	16.4	16.6	88%
MIDDLE FORK BRADLEY	2300	19.4	37.2	32.5	60%
NUKA GLACIER	1250	37.2	48	54.3	69%
PORT GRAHAM	300	37.6	50.2	48.4	78%
SUMMIT CREEK	1400	15.5	28.6	15.8	98%
TURNAGAIN PASS	1880	32.9	45.4	40.5	81%

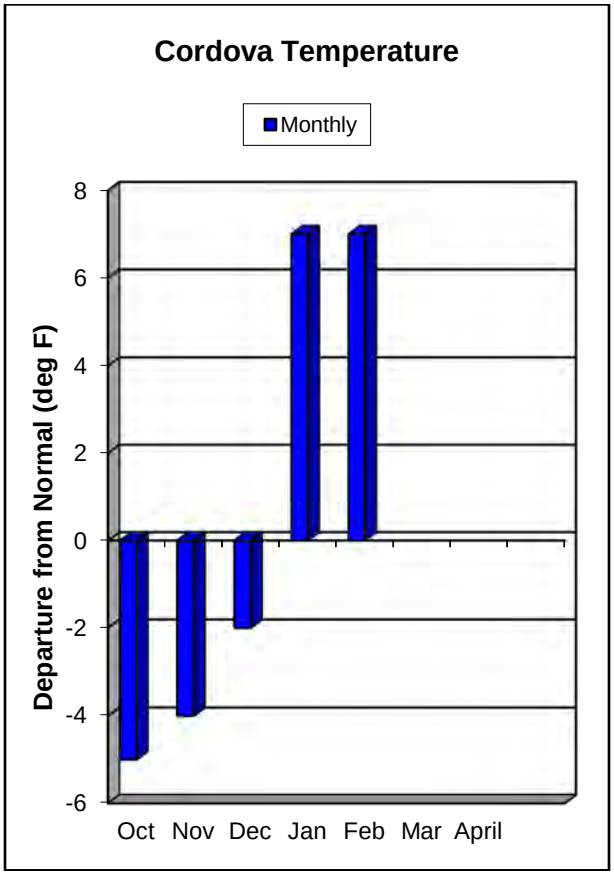
**Estimate*

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Bradley Lake/Southern Kenai	3	69	127
Ninilchik Dome	5	74	115
Northern Kenai Flats	1	66	106
Northern Kenai Mountains	10	79	114

WESTERN GULF*





Snowcover:

The Western Gulf of Alaska and Prince William Sound area snowpack remains above normal. The Valdez snow course, only 50 feet above sea level, has 67 inches of snow and 22.3 inches of water content or 142 of normal. Across the bay from Valdez at 500ft of elevation, Sugarloaf Mountain snow course has 98" of snow with 30.5" of water content, 111% of normal. Sugarloaf SNOTEL site caught 5.7" of precipitation during March bring its total precipitation for the water year, or since October 1st, to 35.8" which is 88% of normal.

To the east above Cordova, Mt. Eyak SNOTEL site has 120" of snow with a reported 38.8" of water content. This is 5" deeper than last year but with 13.2" less water content. Exit Glacier snow course, near Seward on the far west side of the gulf, measured 79" of snow with 21.2" of water content or 114% of normal.

* For more information contact the Natural Resources Conservation Service in Copper Center.

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	4/1/2013	79	21.2	76	27.9	---	18.4
GROUSE CREEK DIVIDE	700	4/1/2013	59	22.4	78	24.7	---	17.7
LOWE RIVER	600	4/1/2013	53	16.6	74	24.8	50	17.0
MT. EYAK	1405	4/1/2013	120	38.8	115	52.0	---	28.4
NUKA GLACIER	1250	4/1/2013	109	44.2	118	52.3	88	34.6
SUGARLOAF MOUNTAIN	525	4/1/2013	98	30.5	108	42.2	78	27.4
TSAINA RIVER	1650	4/1/2013	43	11.2	65	21.6	56	17.0
UPPER TSAINA RIVER	1750	4/1/2013	52	14.4	75	26.2	---	19.4
VALDEZ	50	4/1/2013	67	22.3	77	26.4	51	15.7
WORTHINGTON GLACIER	2100	4/1/2013	64	18.9	98	40.3	75	24.6

**Estimate*

PRECIPITATION DATA

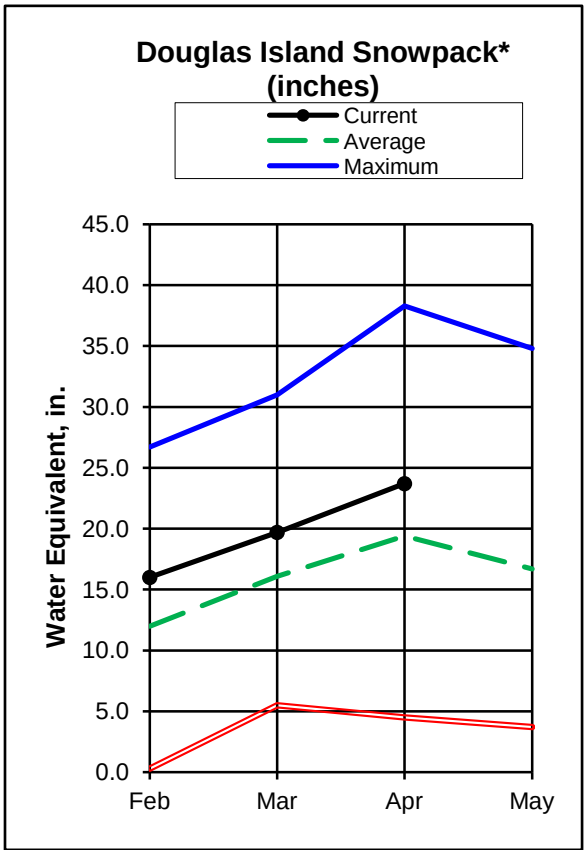
INCHES ACCUMULATED SINCE OCTOBER 1ST

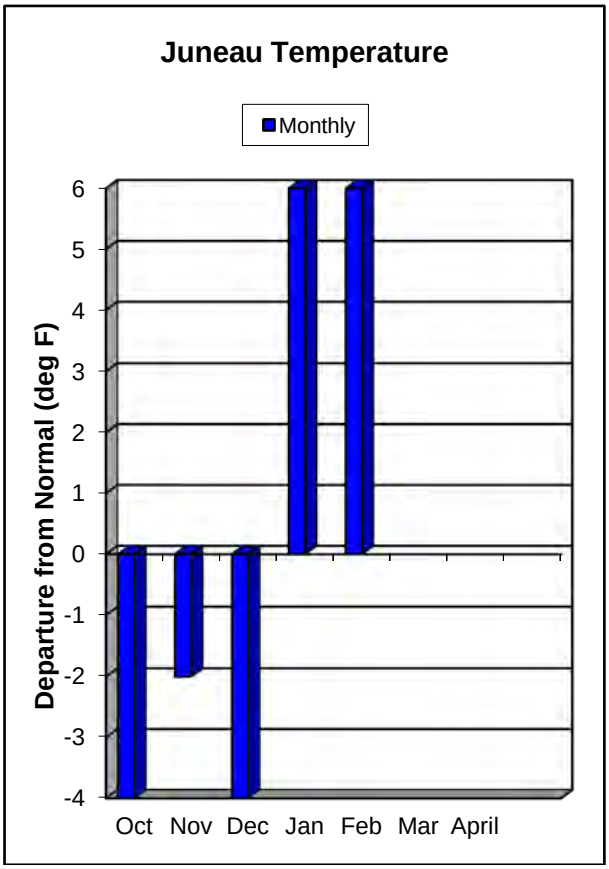
Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
ESTHER ISLAND	50	69	98.2	80.5	86%
GROUSE CREEK DIVIDE	700	26.9	40.6	37.5	72%
MT. EYAK	1405	64.9	80.6	---	---
NUKA GLACIER	1250	37.2	48	54.3	69%
PORT SAN JUAN	50	66.6	81.5	75.7	88%
SEAL ISLAND	20	No Report	No Report	---	---
STRAWBERRY REEF	30	No Report	51.9	---	---
SUGARLOAF MTN	550	35.8	61.1	40.5	88%
TATITLEK	50	43	51.1	40	108%

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Lowe River (Valdez)	5	68	112
Eyak Lake	1	80.1	137

Southeast





Snowcover:

The snowpack in Southeast Alaska continues to be above normal and, in some areas, much above normal. However, the snowpack is still a fraction of last's year record snowpack. The Douglas Island snow courses, across from Juneau, average 138% of normal. Cropley Lake snow course had 108" of snow with 39.4" of water content which is 130% of normal and 67% of last year. While snowpack was above normal, precipitation remained below normal. Long Lake SNOTEL measured 6.9" of precipitation for March, 59% of normal, which brought its water year total to 82.4" or 84% of normal. Long Lake SNOTEL has 121" of snow with 47.9 inches of water content, 123% of normal.

In the Petersburg area, the Petersburg Ridge snow course had 94" of snow with 34.3" of water content and the Petersburg Reservoir snow course had 27" of snow with 8.9 inches of water content. These sites averages 157% of normal and 51% of last year.

Institute Creek snow course near Wrangell, at elevation 1350', had 63" of snow with 22.7" of water content while Rainbow Falls snow course at 500' had no measurable snow. Further South near Ketchikan, the Swan Lake snow courses averaged 157% of normal. Lake Grace Pass measured the heaviest snowpack in Alaska this month with 169" of snow with 64.2" of water content, 155% 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	3/31/2013	108	39.4	148	58.6	83	30.4
EAGLE CREST	1000	3/31/2013	76	28.4	116	43.6	50	18.6
INSTITUTE CREEK	1350	4/2/2013	63	22.7	97	40.6		
LAKE GRACE PASS	1900	3/22/2013	169	64.2			96	41.3
LONG LAKE	850	4/1/2013	121	48.3	131	54.3		39.4
MINT CREEK RIDGE	1900	3/22/2013	154	55.3			106	40.7
MOORE CREEK BRIDGE	2250				63	21.5	65	21.3
PETERSBURG RESERVOIR	550	3/29/2013	27	8.9	60	20.4	1	0.2
PETERSBURG RIDGE, S.	1650	3/28/2013	94	34.3	138	63.7	74	27.4
RAINBOW FALLS	500	4/2/2013	0	0.0	4	1.2		

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	30- YR AVERAGE (1000AF)	50 PERCENTILE	% OF AVERAGE	MAX (%)	MIN (%)
Gold Creek near Juneau	Apr-Jul	34	40	118	141	94

PRECIPITATION DATA

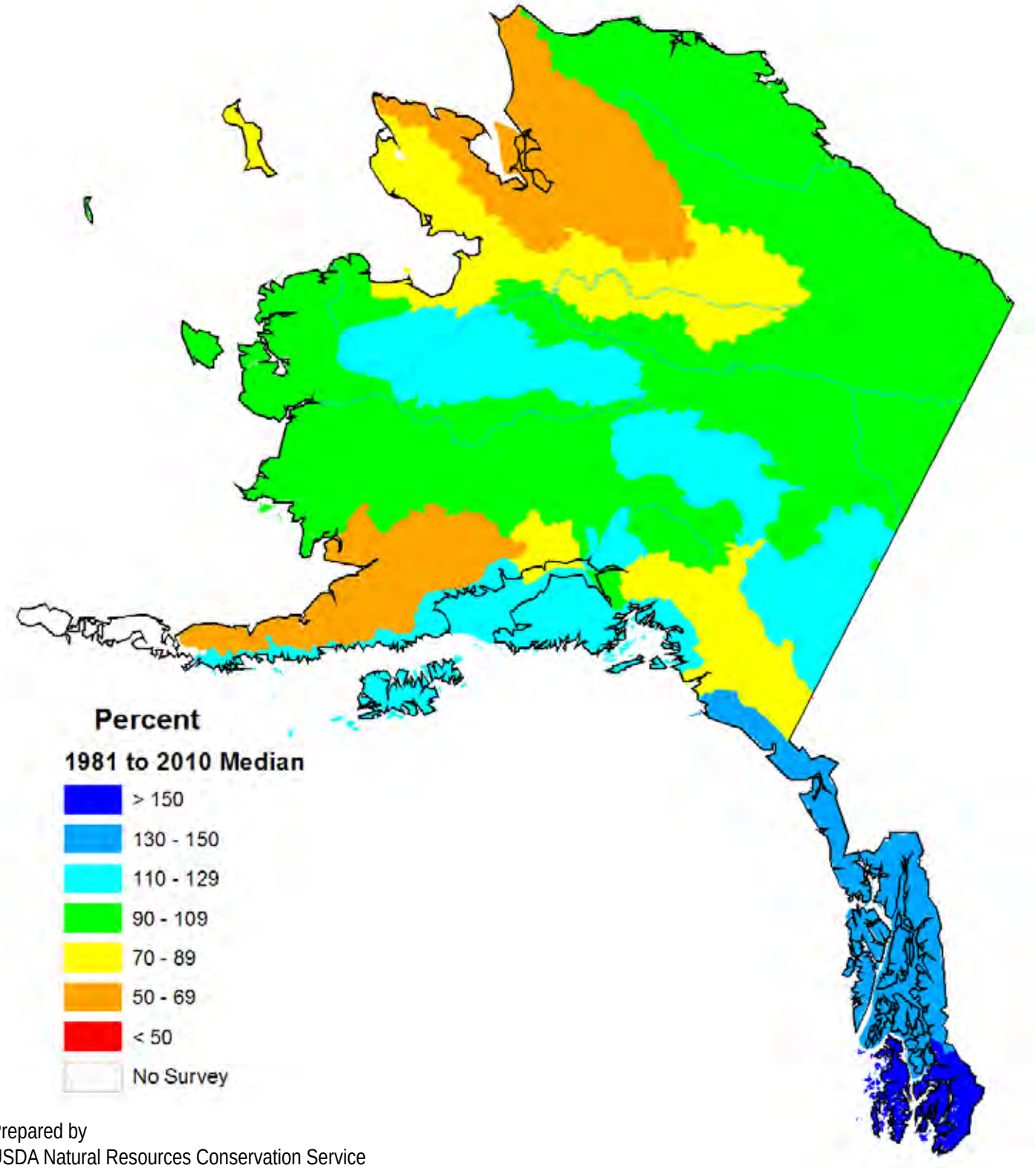
INCHES ACCUMULATED SINCE OCTOBER 1ST

Site Name	Elev.	This Year	Last Year	1981-2010 Average	% of Average
LONG LAKE	850	82.4	104.8	97.7	84%
MOORE CREEK BRIDGE	2250	23.8	31.1	27.4	87%
SNETTISHAM	25	89.9	131.0	104.0	86%

WATERSHED SNOWPACK ANALYSIS

REGION / RIVER BASIN	# COURSES AVERAGED	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Douglas Island	3	67	138
Petersburg	2	44	157
Skagway	--	--	--
Snettisham	2	88	127

Alaska Snowpack
April 1, 2013



Prepared by
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For further information contact:

NRCS Alaska web site: **www.ak.nrcs.usda.gov/snow/**
NRCS Water and Climate Center web site: **http://www.wcc.nrcs.usda.gov/**
Alaska Meteor Burst Communication System (AMBCS) web site: **www.ambcs.org**

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Alaska Snow Survey Report

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United States Department of Agriculture
Natural Resources Conservation Service