

2019 Idaho Snowpack and Water Supply Outlook

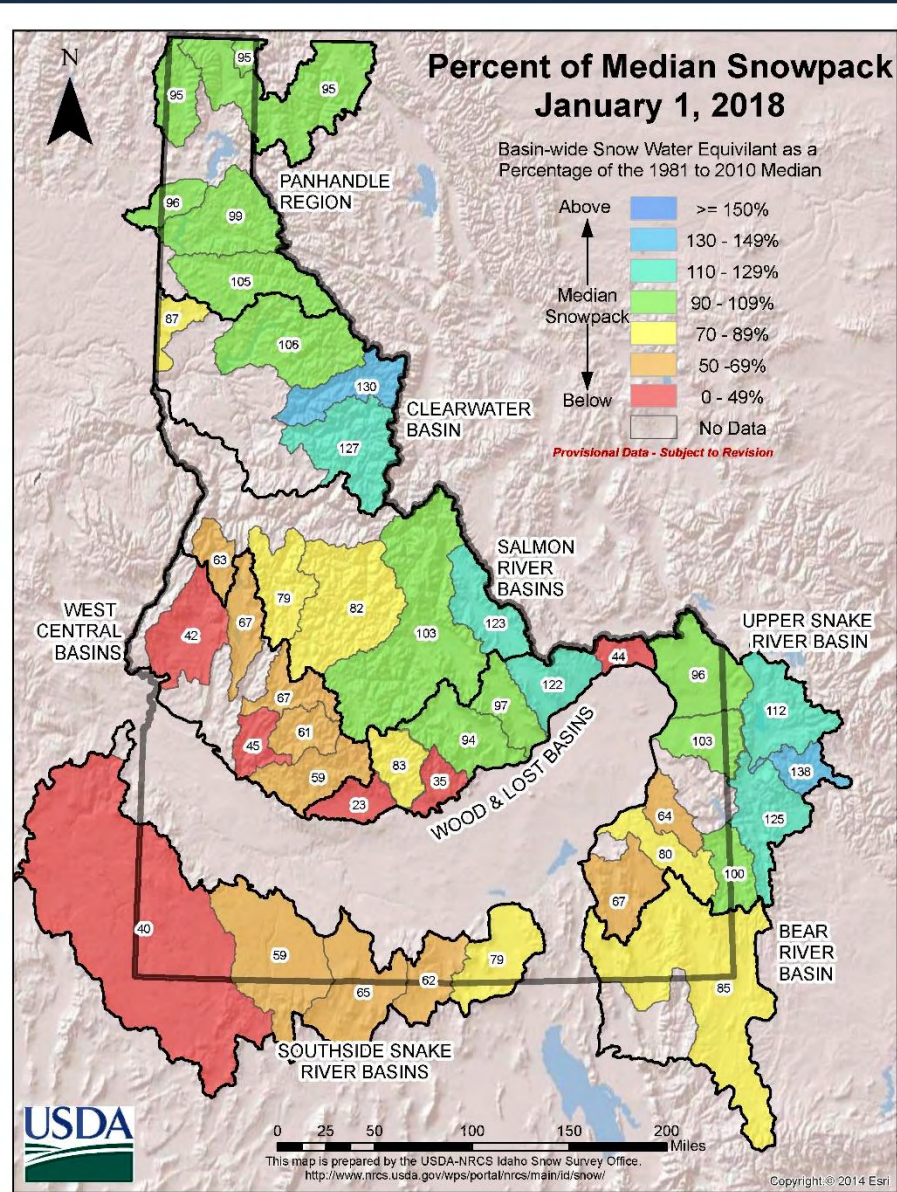
January 11, 2019

NRCS - Idaho Snow Survey

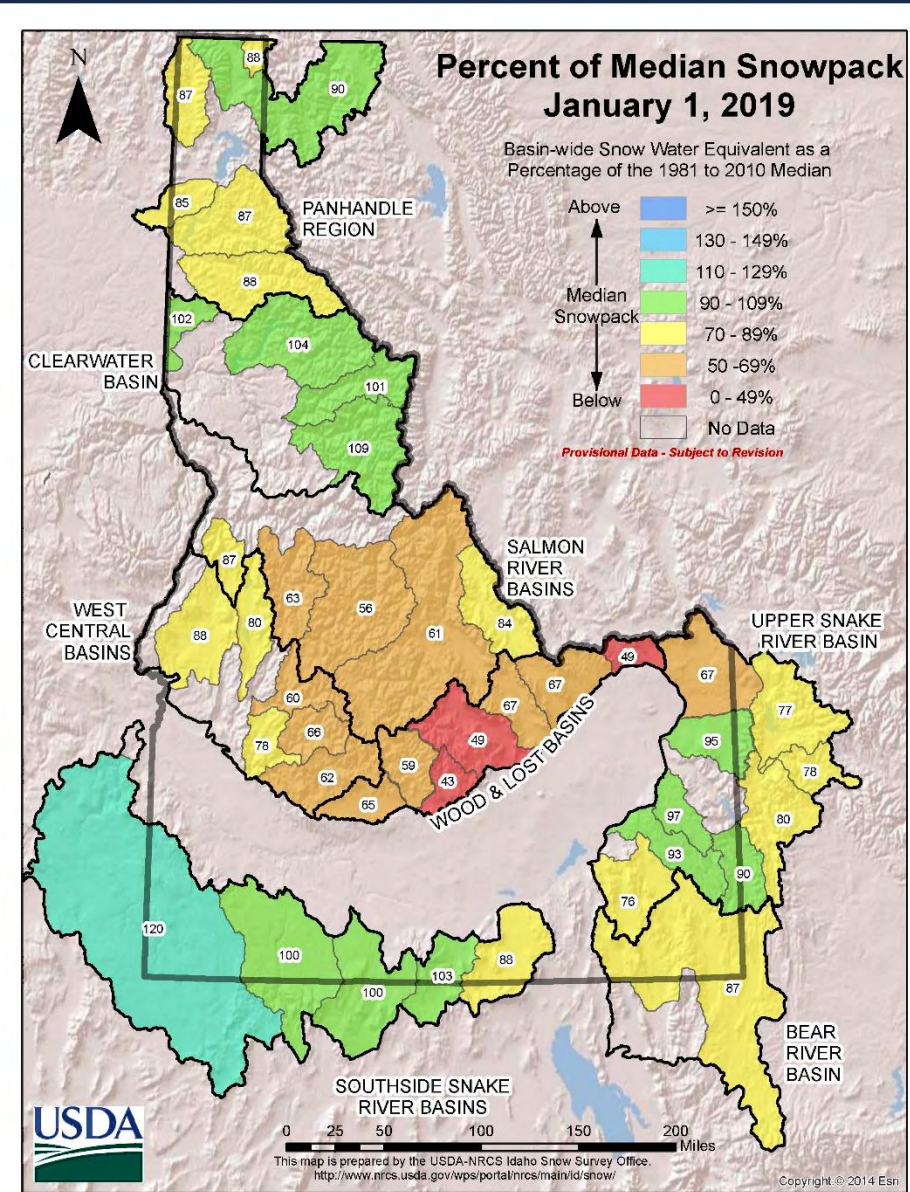
Danny Tappa & Ron Abramovich



2018



2019



Updates & New Products

- Interactive Map (iMAP)
- Basin Comparison & Projection Graphs
- Site Comparison & Projection Graphs

Search: "Idaho Snow Survey"

<https://www.nrcs.usda.gov/wps/portal/nrcs/main/id/snow/>

Network Status

Offline:

1) Shanghi Summit (NF Clearwater)

*Network-wide intermittent data
transmission issues past 2 weeks*



IDAHO RESERVOIR STORAGE Usable Contents		
Reservoir (s)	Percent of Capacity December 31, 2018	Percent of Capacity December 31, 2017
Magic	42	78
Salmon Falls	20	51
Owyhee	36	65
Boise System	49	71
Oakley	23	44
American Falls	66	86
Bear Lake	62	80
Coeur d' Alene	23	40
Payette System	60	77
Palisades & Jackson	75	89
Little Wood	61	71
Mackay	67	76
Blackfoot	74	78
Dworshak	65	65
Ririe	56	54

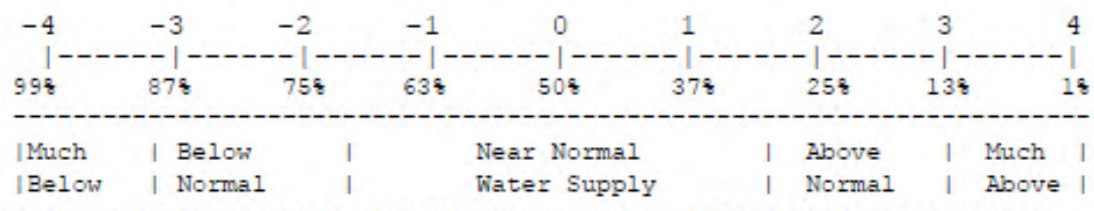
Sorted by change
from 2018 to 2017

January 1, 2019 Streamflow Forecasts	
Forecast Point	Percent of Average
Apr - Jul Period	
Boise nr Boise	73
Boise River near Twin Springs	76
Mores Creek Near Arrowrock	77
SF Boise at Anderson Ranch Dam	64
Camas Creek at Blaine	38
Big Wood River at Hailey	68
Big Wood blw Magic Dam	46
Little Wood River near Carey	49
Big Lost blw Mackay Resv.	60
Little Lost blw Wet Creek	79
Snake River abv Reservoir nr Alpine	80
Salt River	85
Snake River near Irwin	81
Snake River near Heise	81
Snake River nr Heise	81
Mar - Jul Period	
Oakley Reservoir Inflow	89
Salmon Falls Creek	84
Feb - Jul Period	
Owyhee River near Gold Creek	71
Owyhee River Near Rome	72
Owyhee River below Owyhee Dam	74

IDAHO SURFACE WATER SUPPLY INDEX (SWSI) January 1, 2019

<i>BASIN or REGION</i>	<i>SWSI Value</i>	<i>Most Recent Year With Similar SWSI Value</i>	<i>Agricultural Water Supply Shortage May Occur When SWSI is Less Than</i>
Spokane	---	----	NA
Clearwater	---	----	NA
Salmon	---	----	NA
Weiser	---	----	NA
Payette	---	----	NA
Boise	- 1.5	2002	- 1.6
Big Wood above Hailey	- 1.3	2014	- 2.9
Big Wood	- 0.9	2008	0.5
Little Wood	- 1.3	2008	- 1.4
Big Lost	- 0.6	1987	0.5
Little Lost	- 1.5	1987	1.2
Teton	---	----	- 3.9
Henrys Fork	---	----	- 1.5
Snake (Heise)	- 0.4	2010	- 1.8
Oakley	0.0	2008	0.7
Salmon Falls above Jackpot	0.0	2010	NA
Salmon Falls	- 0.9	1989	- 0.7
Bruneau	---	----	NA
Owyhee	0.2	2012	- 2.0
Bear River	---	----	- 3.9

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION



SNOTEL Snowpack & Precipitation Summary

for January 10, 2019

Region or Basin	January 10 SWE as % of Median	Percent of Seasonal Peak	January 1-10 Precipitation Compared to Normal for Month
NORTHERN PANHANDLE REGION	94	49	37
SPOKANE BASIN	85	48	26
CLEARWATER BASIN	95	49	19
SALMON BASIN	75	38	26
WEISER BASIN	83	44	28
PAYETTE BASIN	74	38	28
BOISE BASIN	70	36	30
BIG WOOD BASIN	69	36	35
LITTLE WOOD BASIN	59	30	42
BIG LOST BASIN	60	30	40
LITTLE LOST, BIRCH BASINS	70	36	26
MEDICINE LODGE, BEAVER, CAMAS	59	28	34
HENRYS FORK, TETON BASINS	79	39	25
SNAKE BASIN ABOVE PALISADES	81	39	22
WILLOW, BLACKFOOT, PORTNEUF	88	40	31
SNAKE BASIN ABOVE AMERICAN FALLS	82	39	25
OAKLEY BASIN	99	46	16
SALMON FALLS BASIN	96	45	16
BRUNEAU BASIN	96	44	16
OWYHEE BASIN	102	46	15
BEAR RIVER BASIN	90	39	33

SWE = Snow Water Equivalent

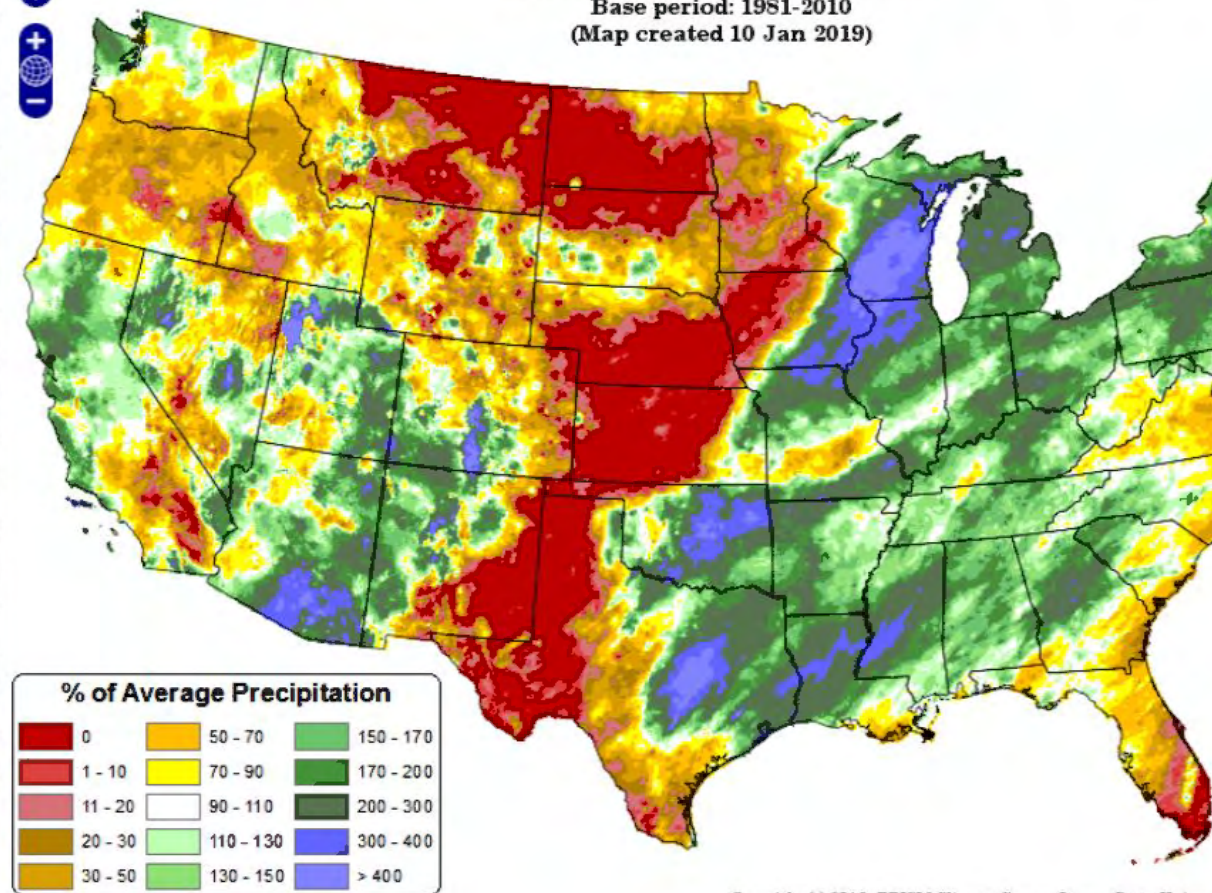


Total Precipitation Anomaly: 01 Jan 2019 - 09 Jan 2019

Period ending 7 AM EST 09 Jan 2019

Base period: 1981-2010

(Map created 10 Jan 2019)

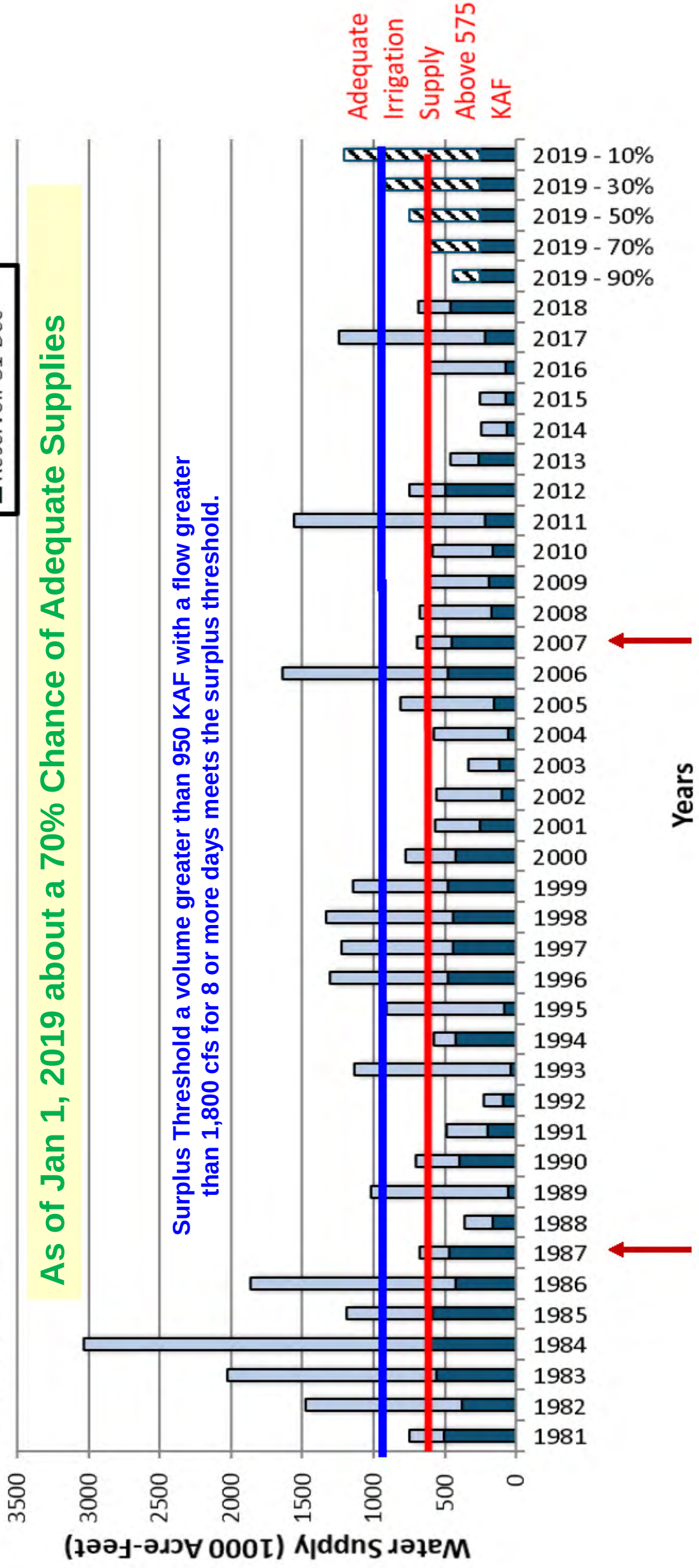


Jan 1 Historic and Forecasted Surface Water Supply
Owyhee Basin

StreamFlow Feb-Sep
Reservoir 31-Dec

As of Jan 1, 2019 about a 70% Chance of Adequate Supplies

Surplus Threshold a volume greater than 950 KAF with a flow greater than 1,800 cfs for 8 or more days meets the surplus threshold.



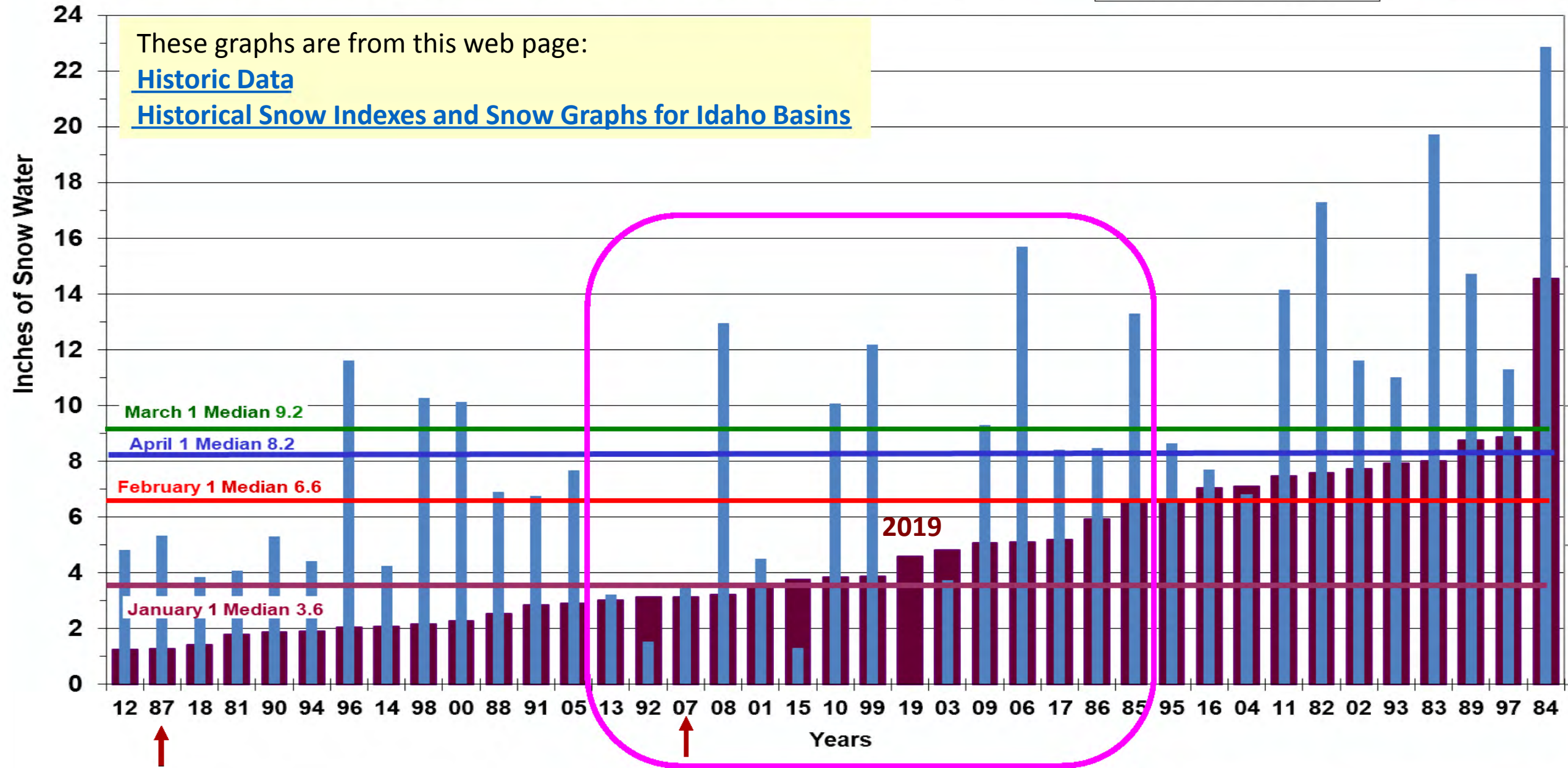
January Owyhee Basin 6 Station Snow Index for Years 1981 - 2018 Big Bend, Jack Creek Upper, Laurel Draw, Mud Flat, South Mtn., Taylor Canyon

■ January 1 Snow Water
■ April 1 Snow Water

These graphs are from this web page:

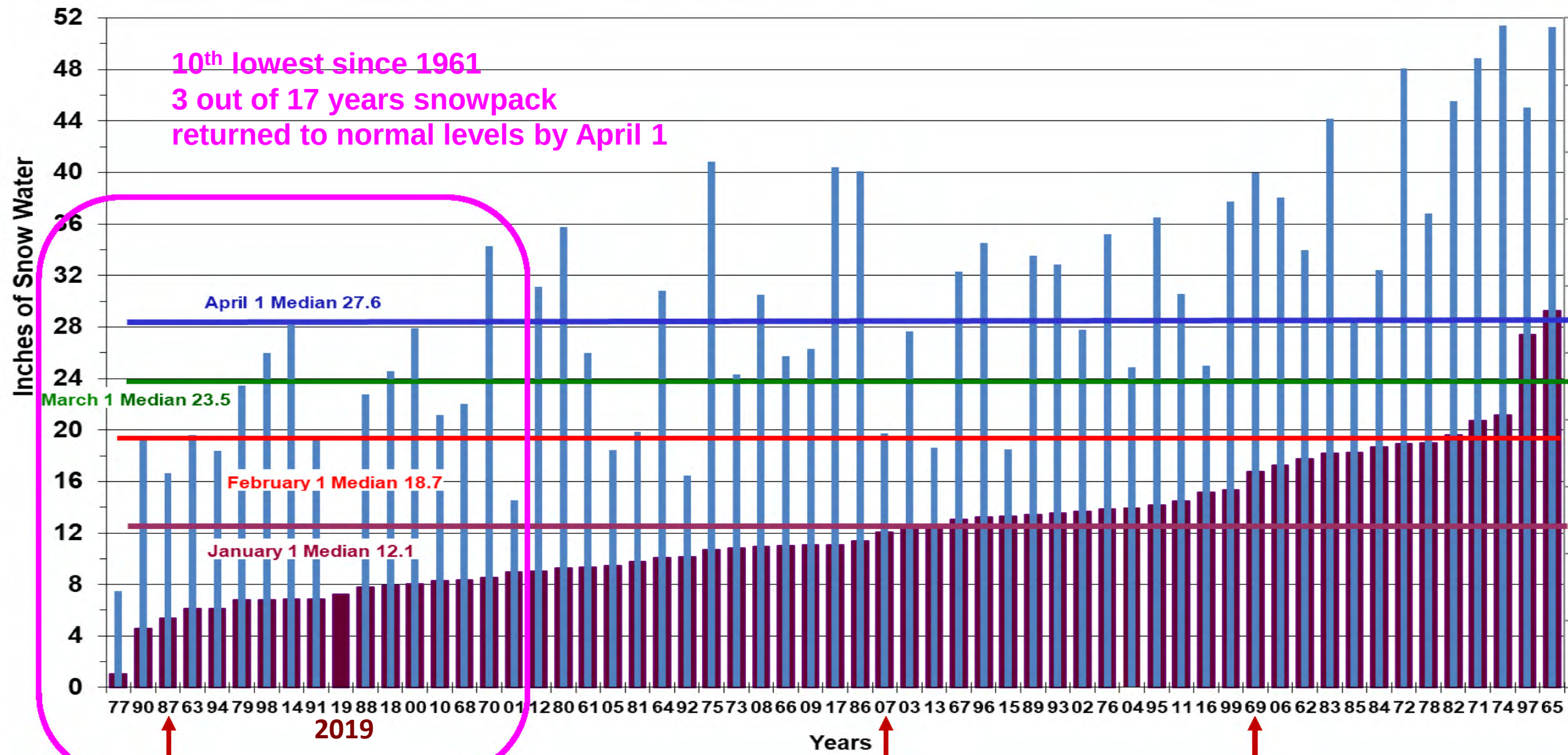
[Historic Data](#)

[Historical Snow Indexes and Snow Graphs for Idaho Basins](#)

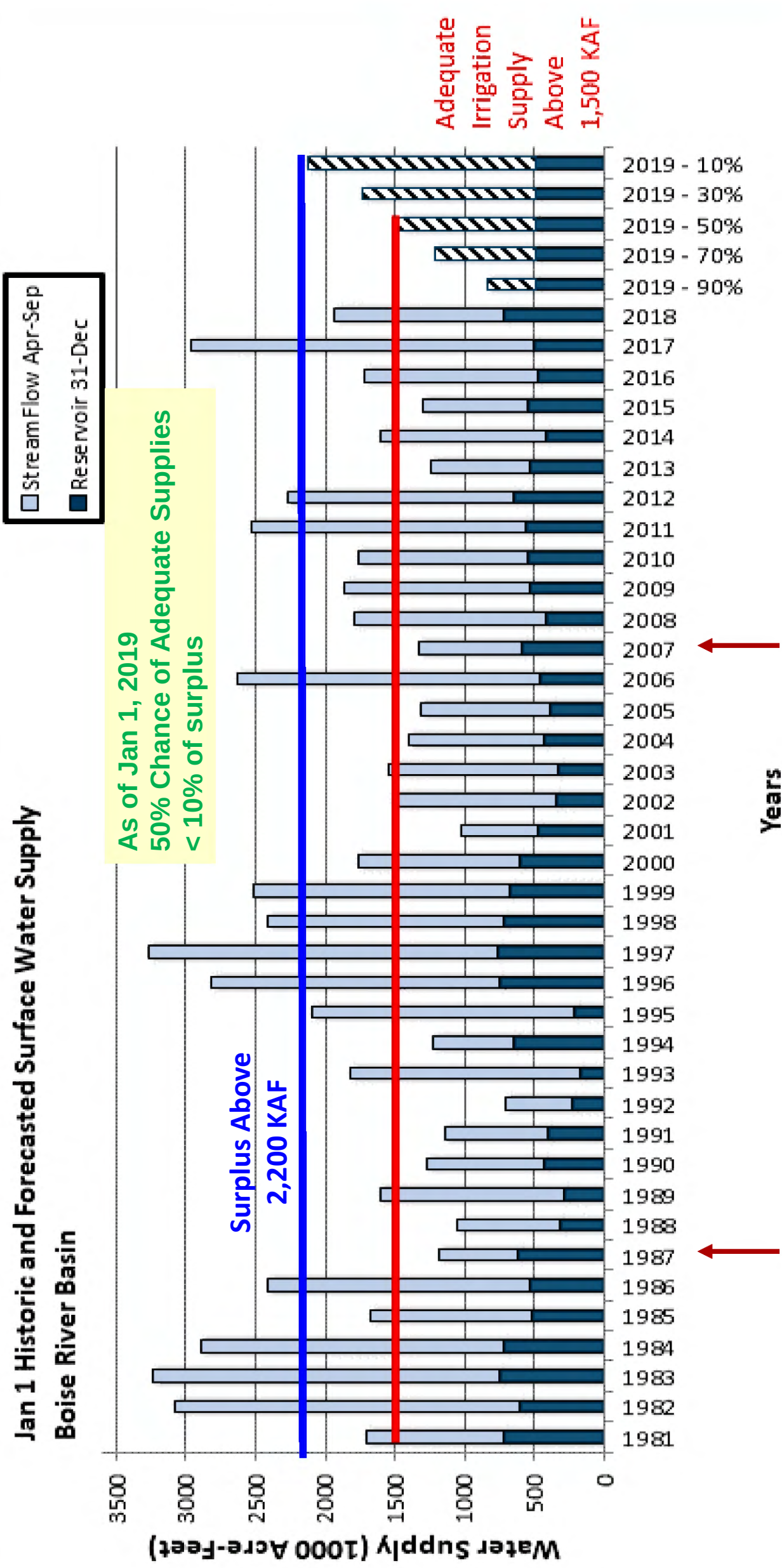


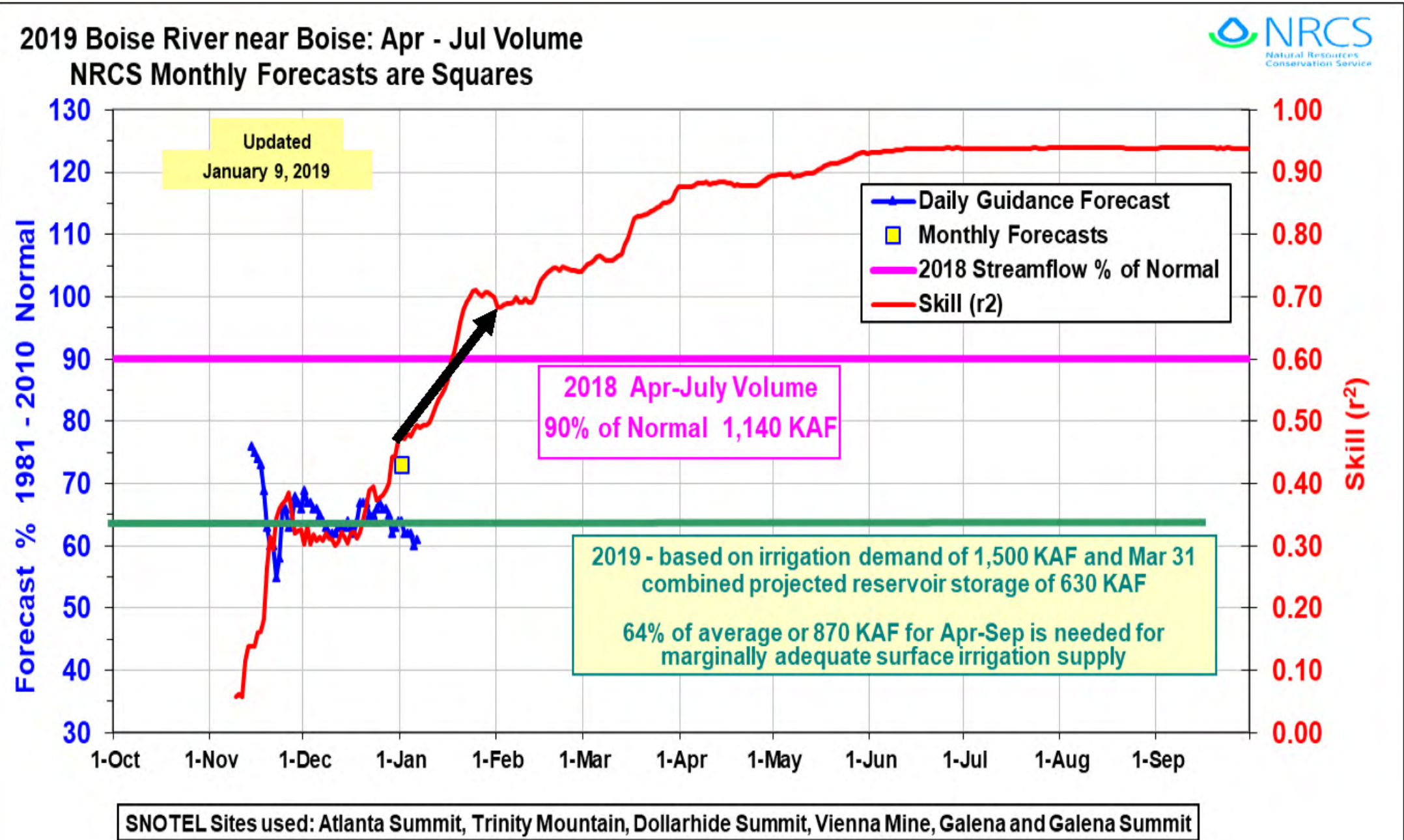
January Boise Basin 7 Station Snow Index for Years 1961 - 2018
Atlanta, Dollarhide, Graham, Jackson, Moers Creek, Trinity Mountain, Vienna Mine

■ January 1 Snow Water
■ April 1 Snow Water

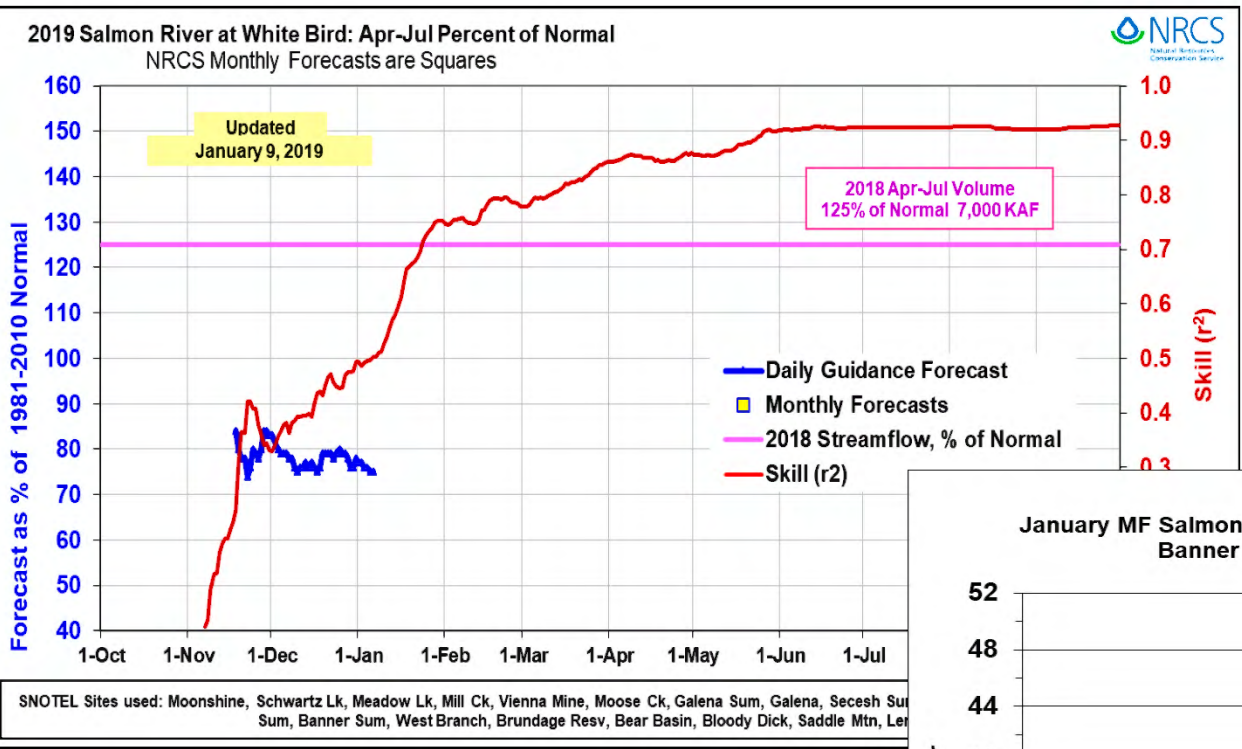


Jan 1 Historic and Forecasted Surface Water Supply
Boise River Basin



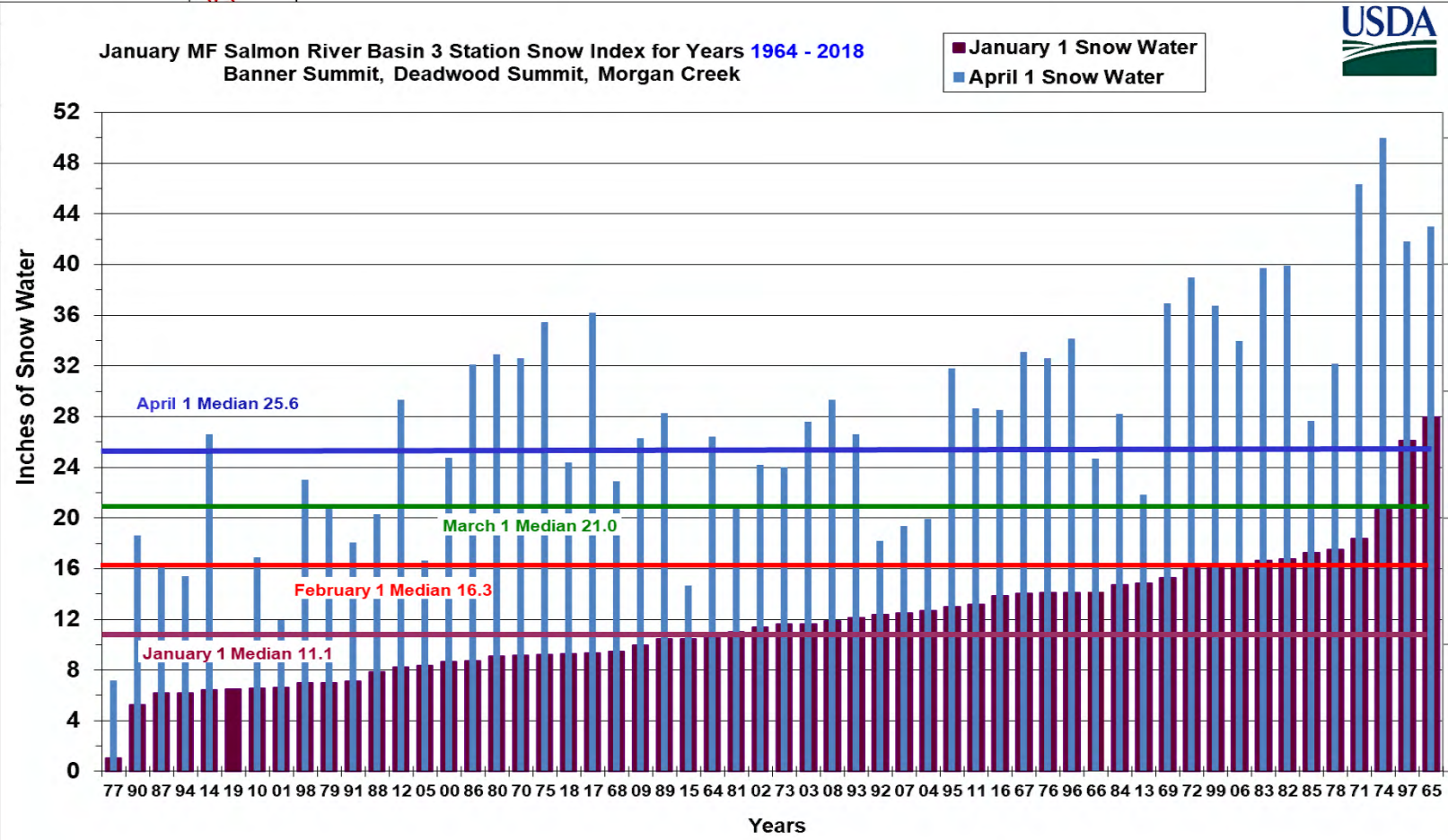


Note increase in forecast skill level during January as we progress from being 40% of the way thru winter on Jan 1 to 60% on Feb 1.



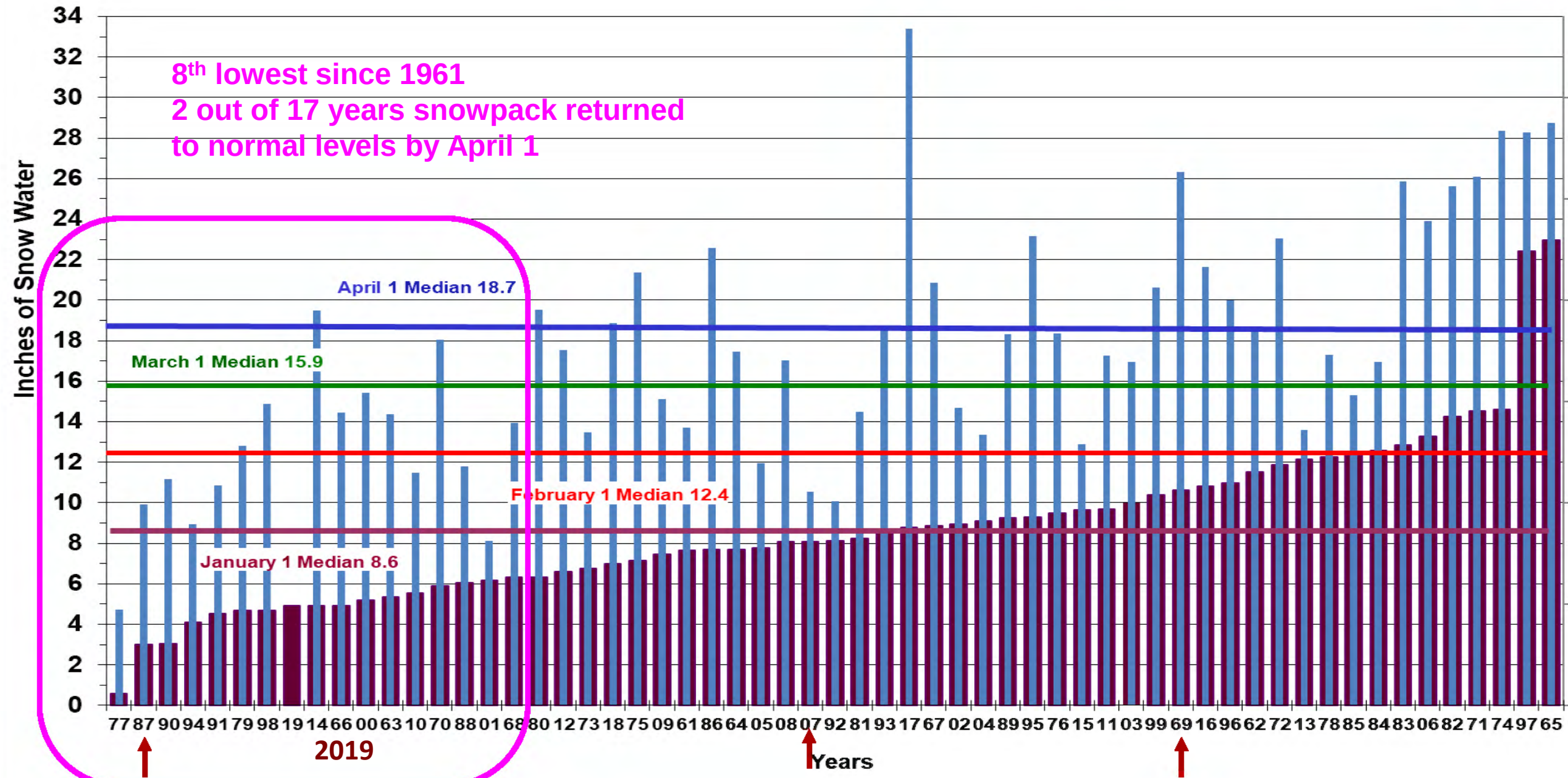
**Recreation Information:
 Salmon River Basin**

- MF Salmon Snowpack 6th lowest since 1964
- Salmon River at White Bird ~75% of average

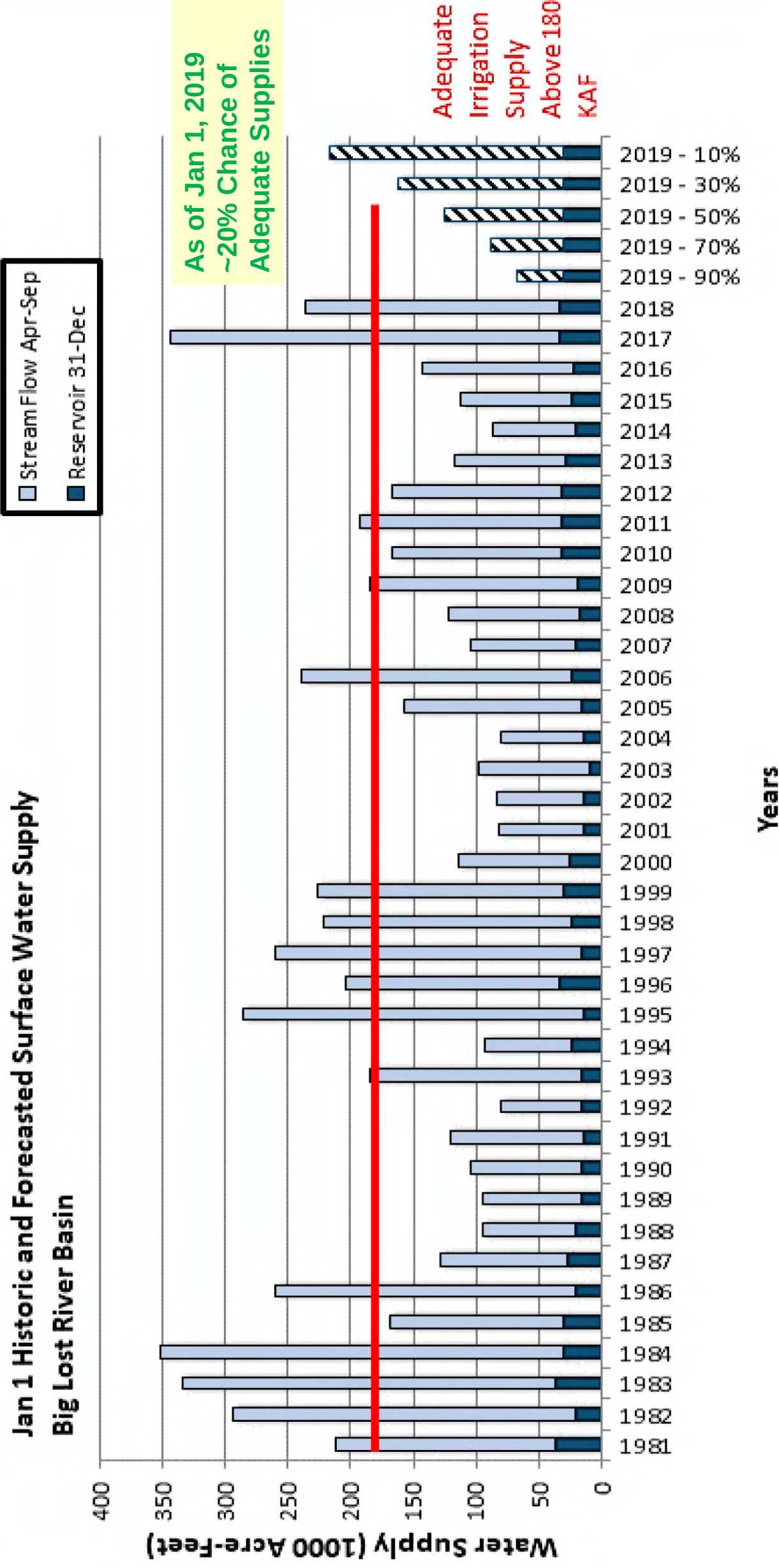


January Big Wood Basin above Hailey 7 Station Snow Index for Years 1961 - 2018
Chocolate Gulch, Dollarhide, Galena, Galena Summit, Hyndman, Lost-Wood Divide, Vienna Mine

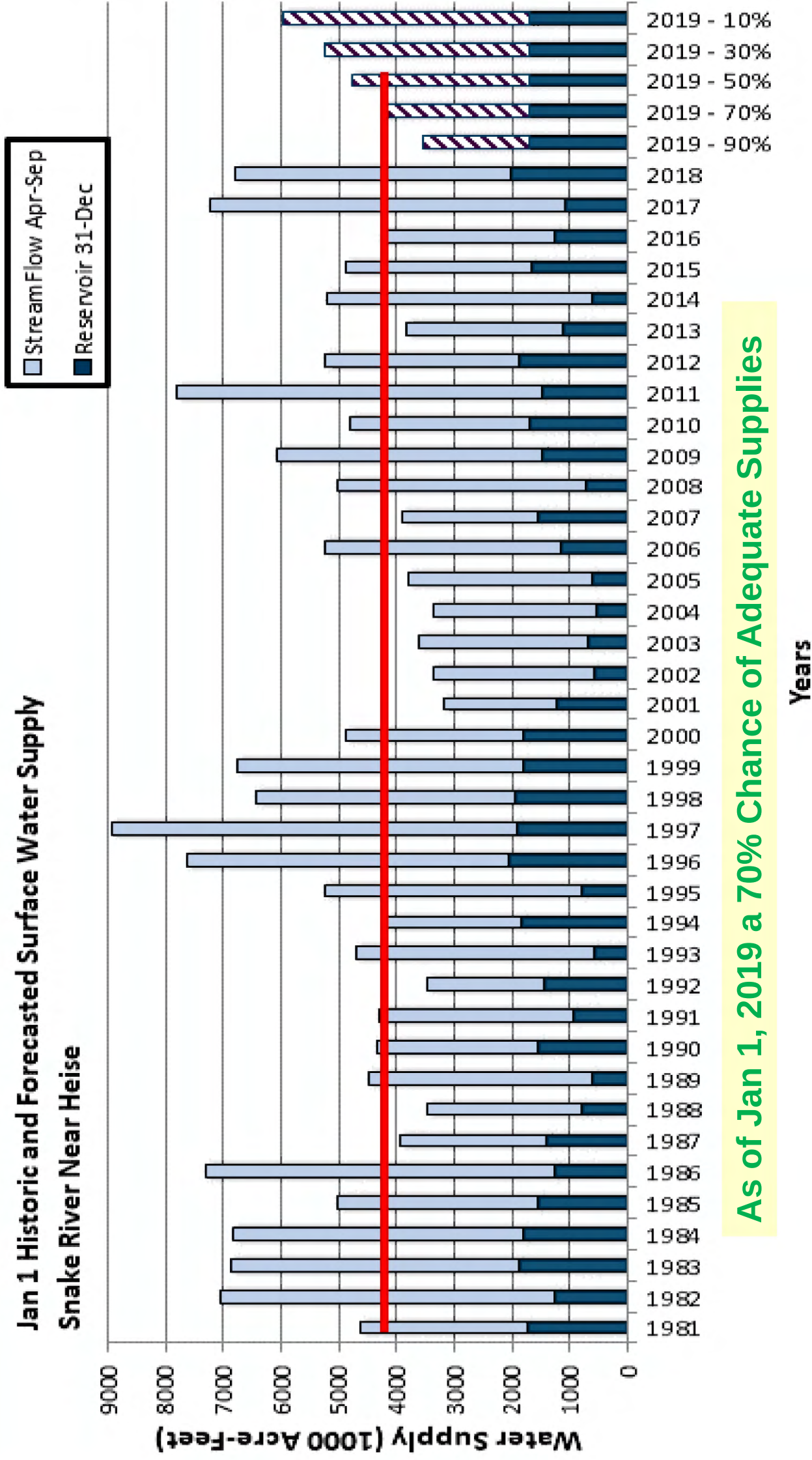
■ January 1 Snow Water
■ April 1 Snow Water



Jan 1 Historic and Forecasted Surface Water Supply
Big Lost River Basin



Jan 1 Historic and Forecasted Surface Water Supply
Snake River Near Heise



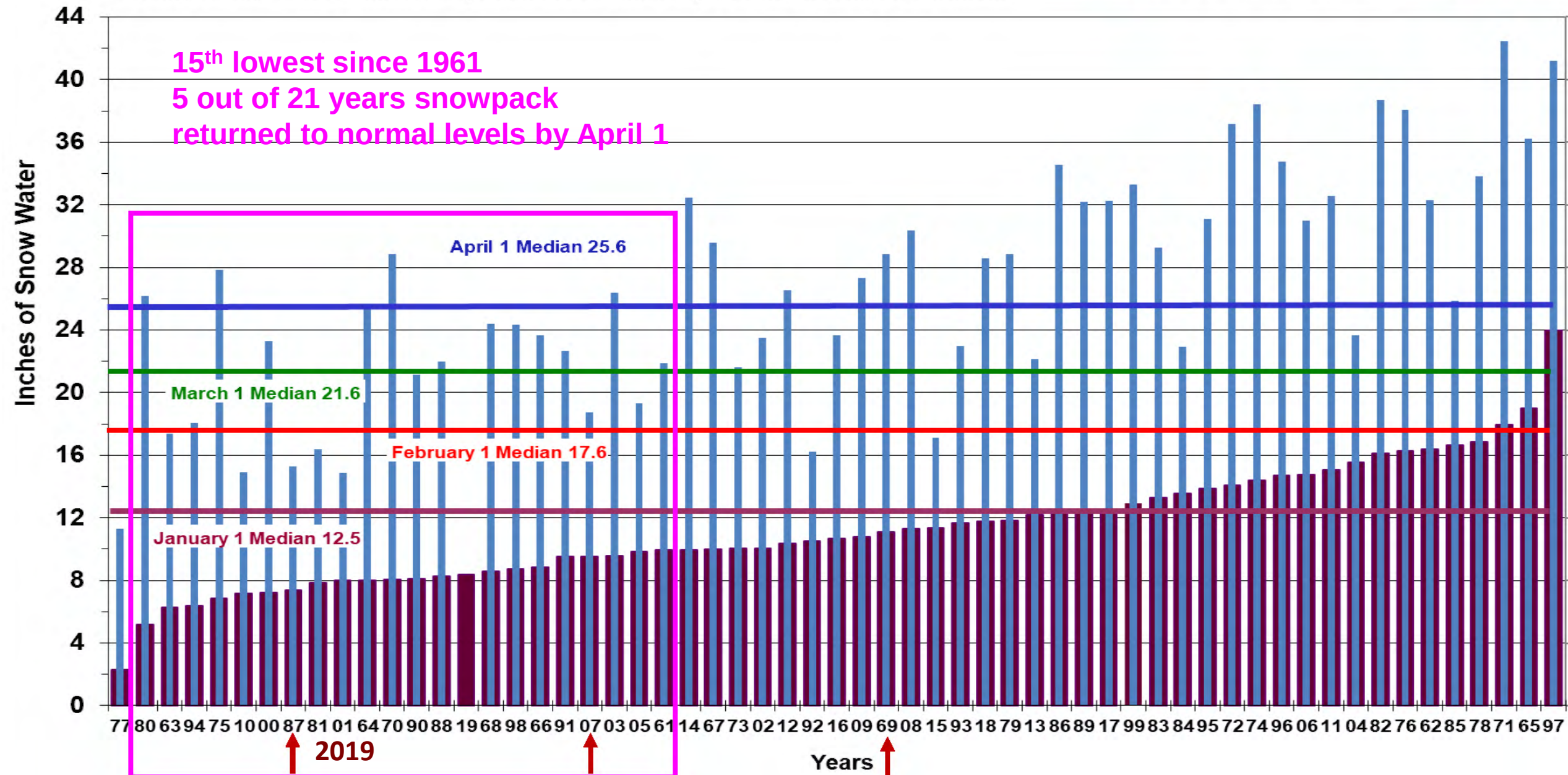
As of Jan 1, 2019 a 70% Chance of Adequate Supplies

Years

January Snake River Basin above Jackson Lake 5 Station Snow Index for Years 1961 - 2018

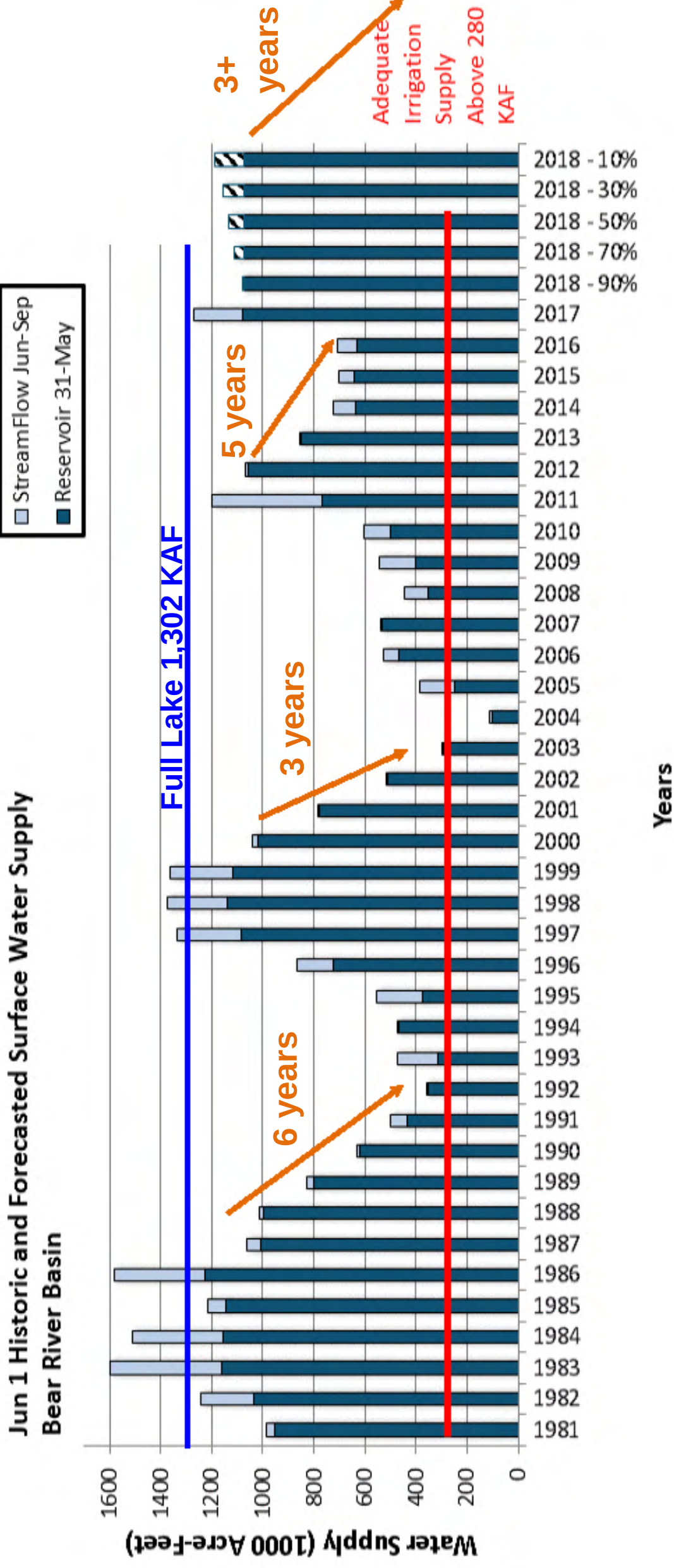
Grassy Lake, Lewis Lake Divide, Snake River Station, Thumb Divide, Two Oceans

■ January 1 Snow Water
■ April 1 Snow Water



Bear River Basin - Surface Water Supply Index

- Bear Lake Storage & April – September Runoff
- After lake fills, it provides adequate supplies for 3+ years





Think Snow!!

Slide 1