

Idaho Water Supply Outlook Report January 1, 2011

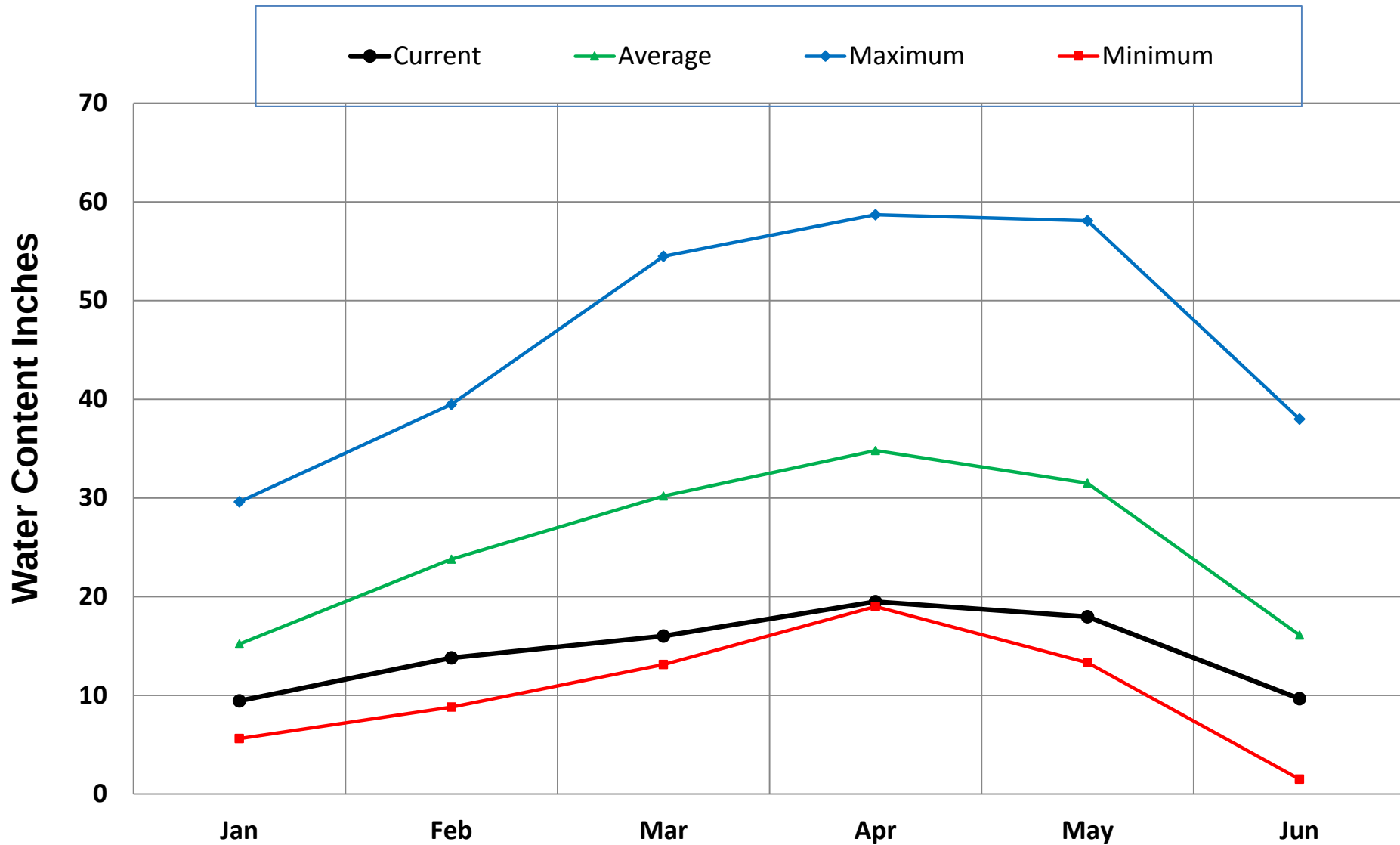
**Idaho Water Supply
NRCS Snow Survey
Julie Koeberle
January 13, 2011**

- *Recap of last year**
- *Off to a good start!**
- *Fall precipitation**
- *Current snowpack**
- *Streamflow forecasts**



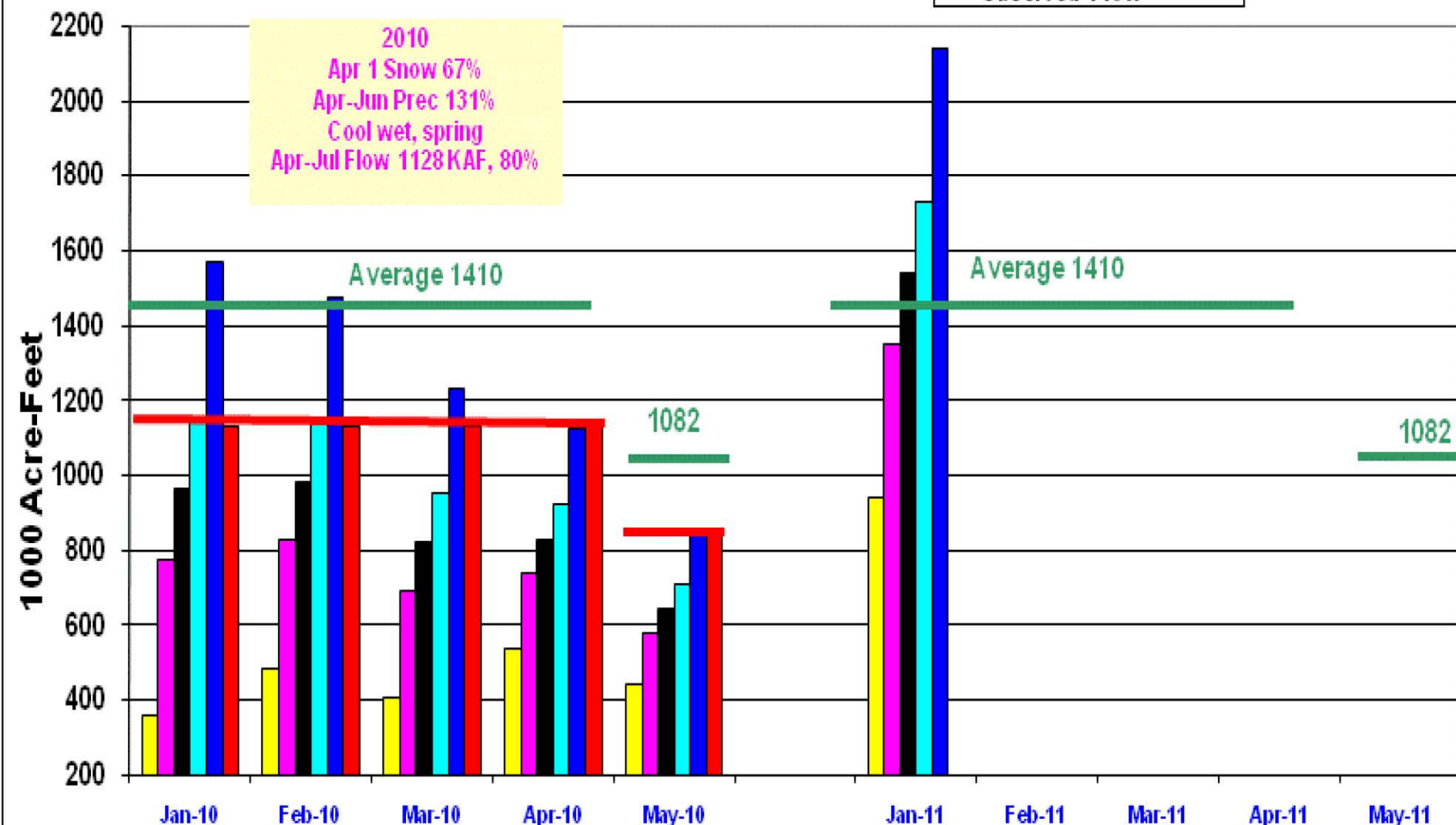
**Snow draped trees against azure skies near Mores Creek Summit
in the Boise Basin, December 21, 2010**

2010 Mountain Snowpack (inches) CLEARWATER RIVER BASIN



Boise River near Boise 2010-2011 Streamflow Forecasts and **Observed Flows**

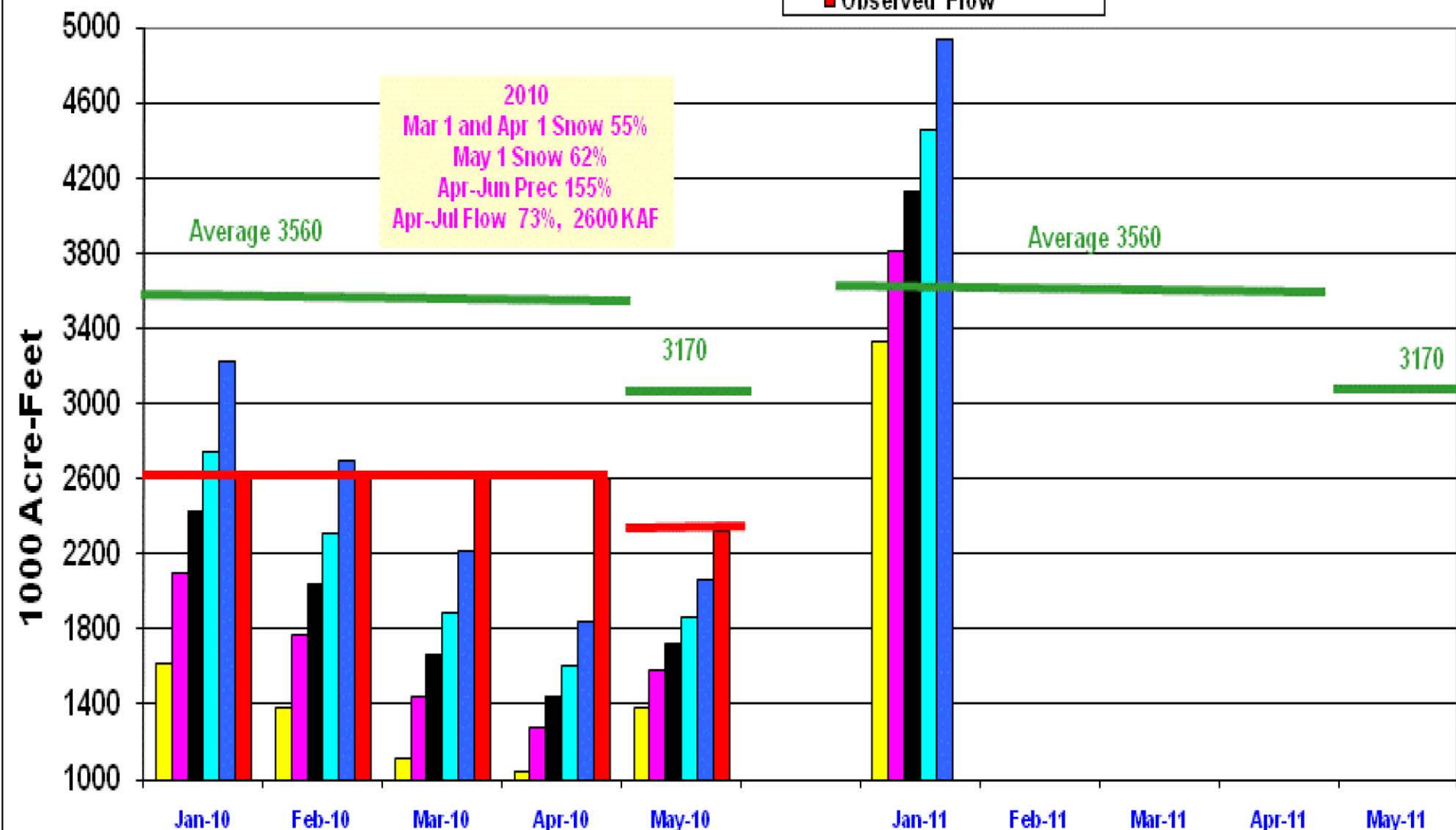
- 90% Exceedance Fcst
- 70% Exceedance Fcst
- 50% Exceedance Fcst
- 30% Exceedance Fcst
- 10% Exceedance Fcst
- Observed Flow



Forecast Month and Period: Jan, Feb, Mar and Apr forecast Apr-Jul, May forecast May-Jul

Snake River near Heise 2010-2011 Streamflow Forecasts and **Observed Flows**

- 90% Exceedance Fcst
- 70% Exceedance Fcst
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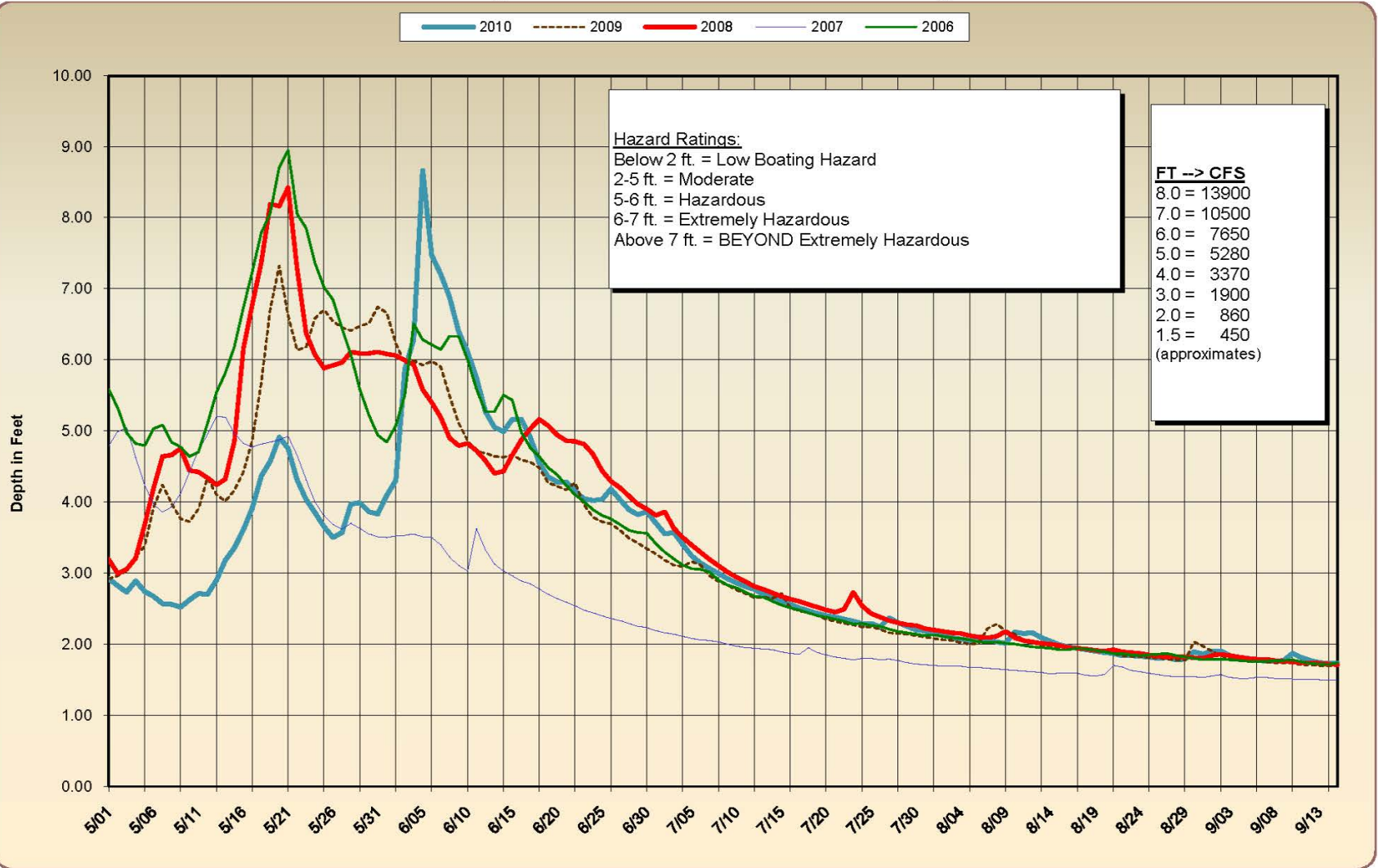


Forecast Month and Period: Jan, Feb, Mar and Apr forecast Apr-Jul, May forecast May-Jul

Middle Fork of the Salmon River Hydrograph

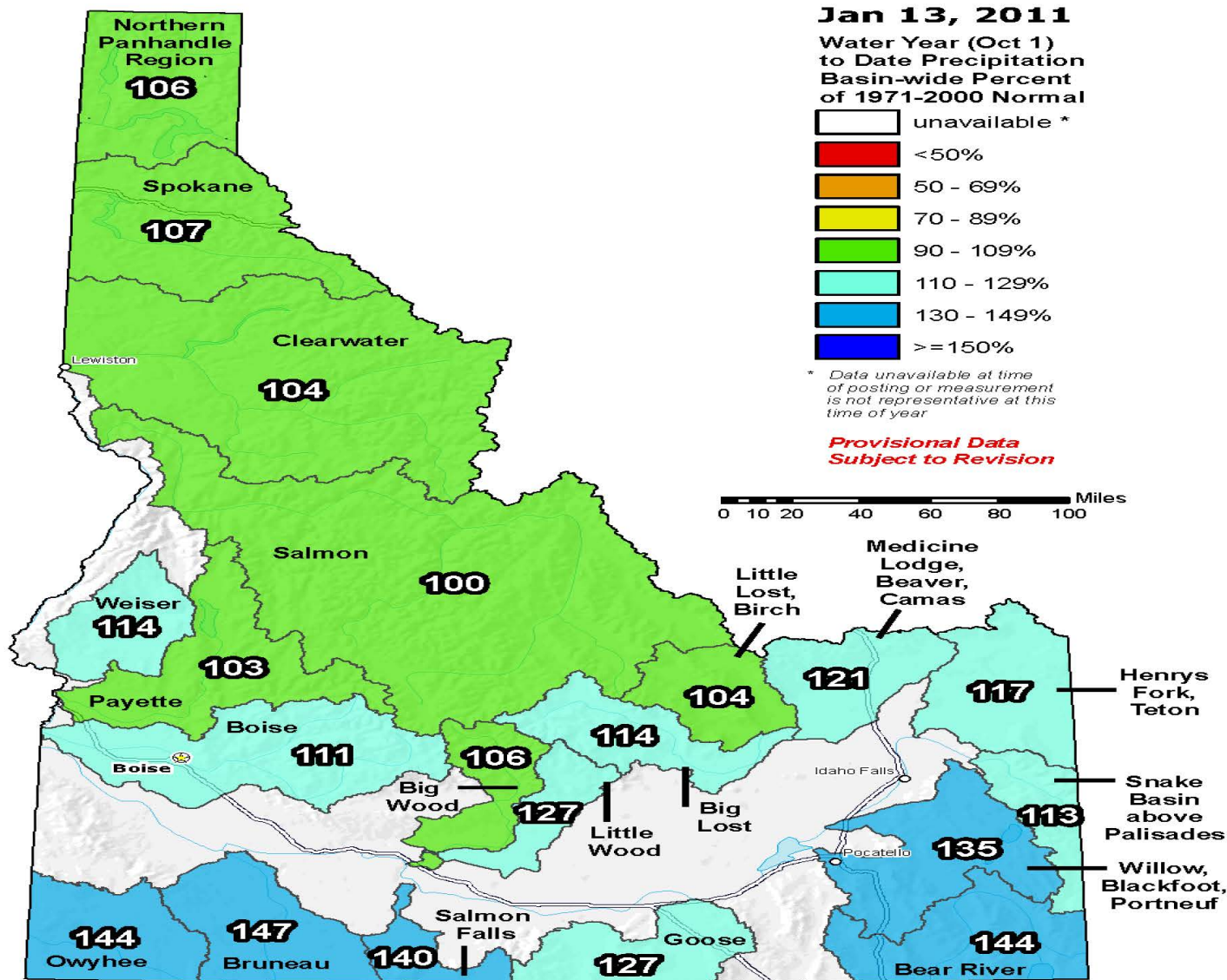
Salmon-Challis National Forest

Readings are taken near Middle Fork Lodge



Note: This hydrograph is a very general guide for predicting flows. The lines merely connect daily flow readings. Considerable fluctuation can occur daily, especially on very warm days and after high-intensity rain storms.

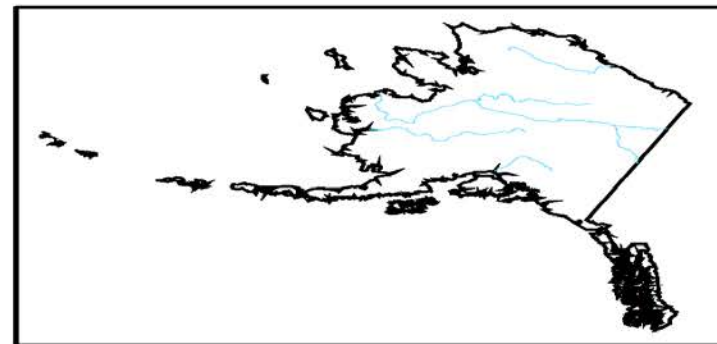
Idaho SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal



The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

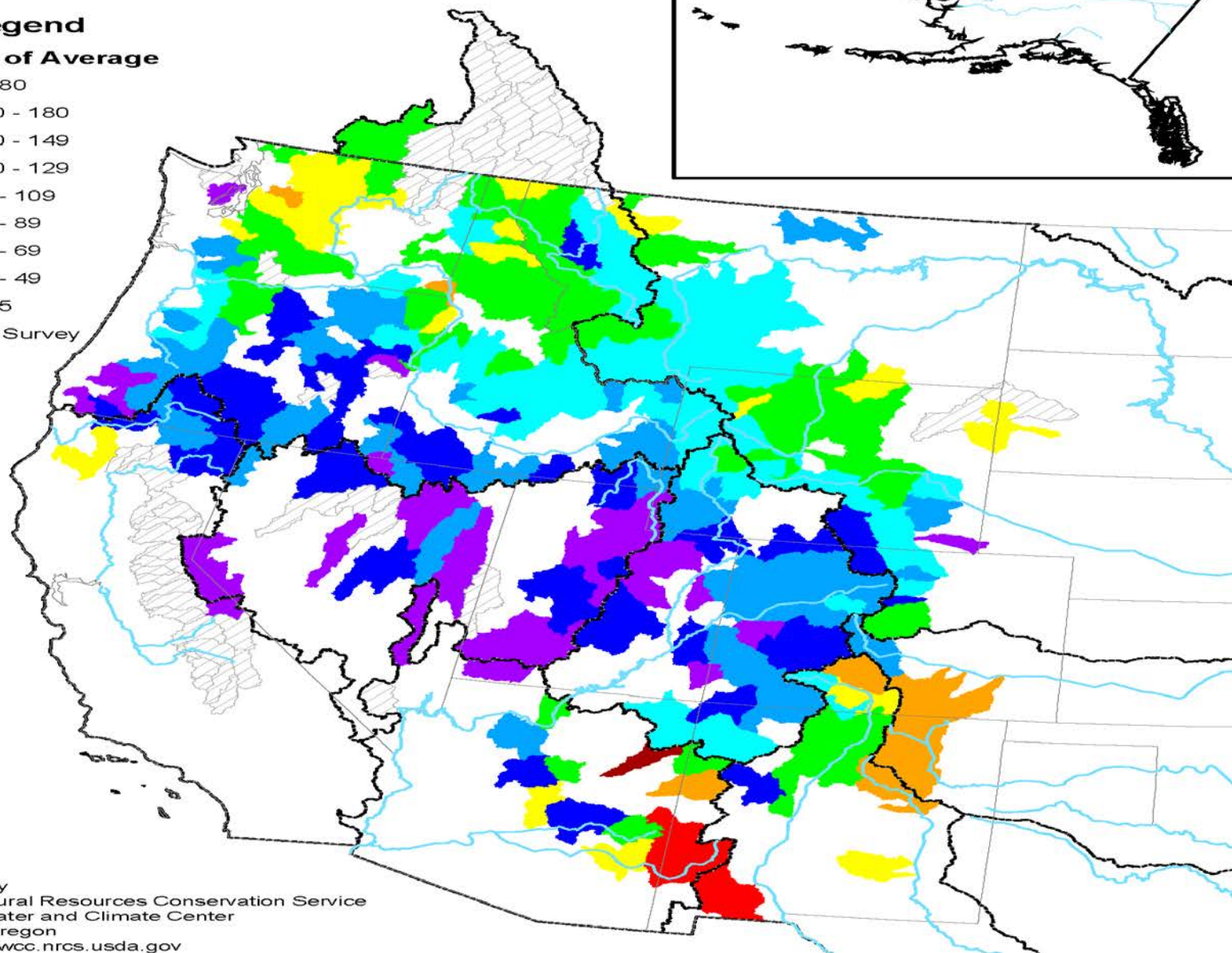
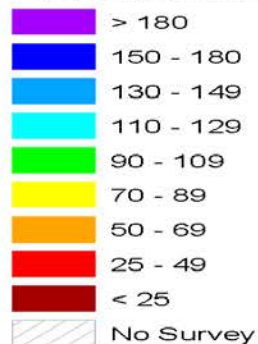
Prepared by the USDA/NRCS National Water and Climate Center
 Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
 Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
 Science contact: Jim.Marron@por.usda.gov 503 414 3047

Mountain Snowpack as of January 1, 2011



Legend

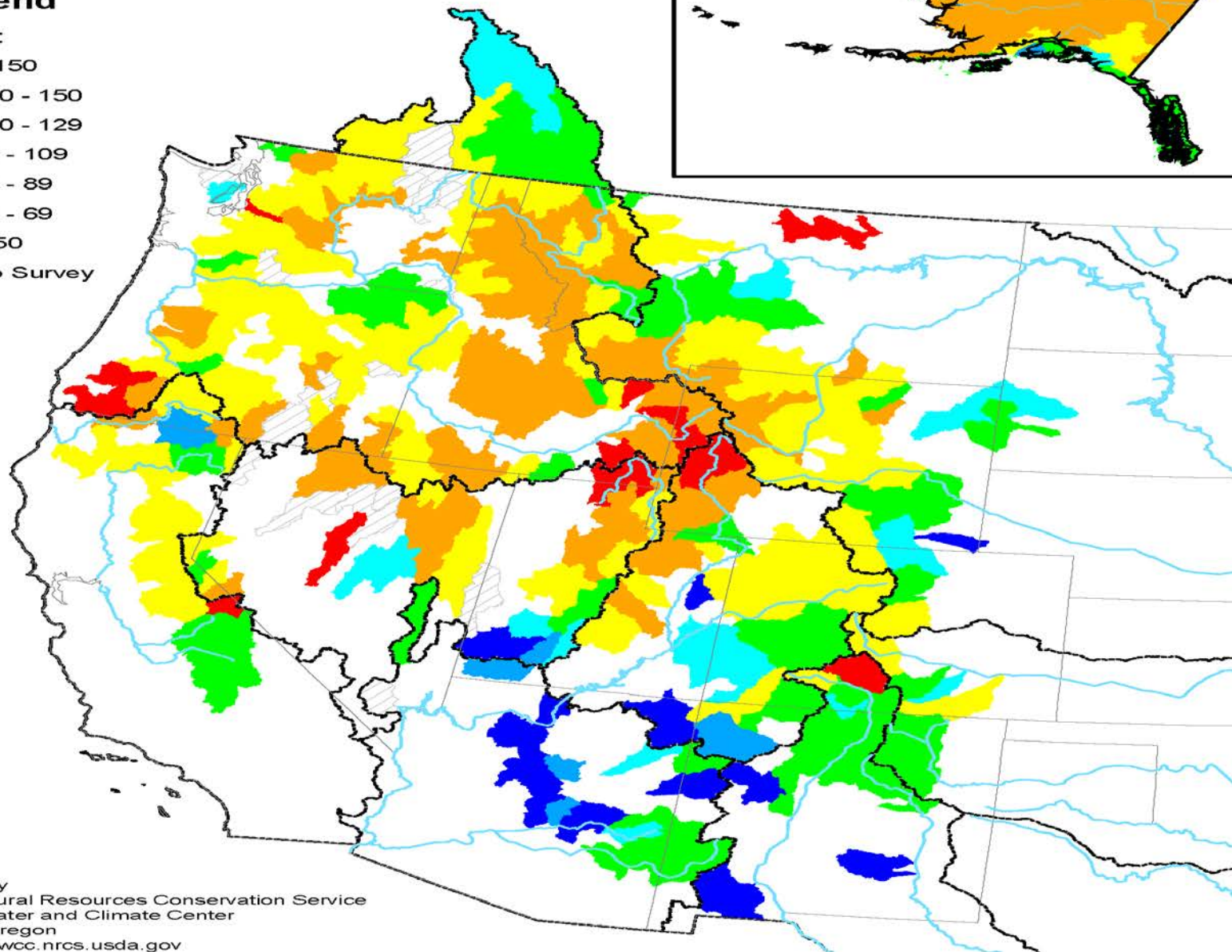
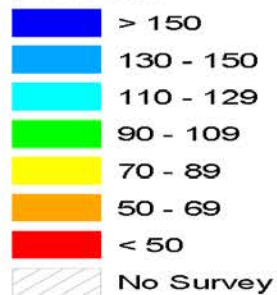
Percent of Average



Mountain Snowpack as of January 1, 2010

Legend

percent



Prepared by
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

SNOTEL Current Snow Water Equivalent (SWE) Records

Jan 01, 2011

Current Snow Water (SWE) Equivalent Records

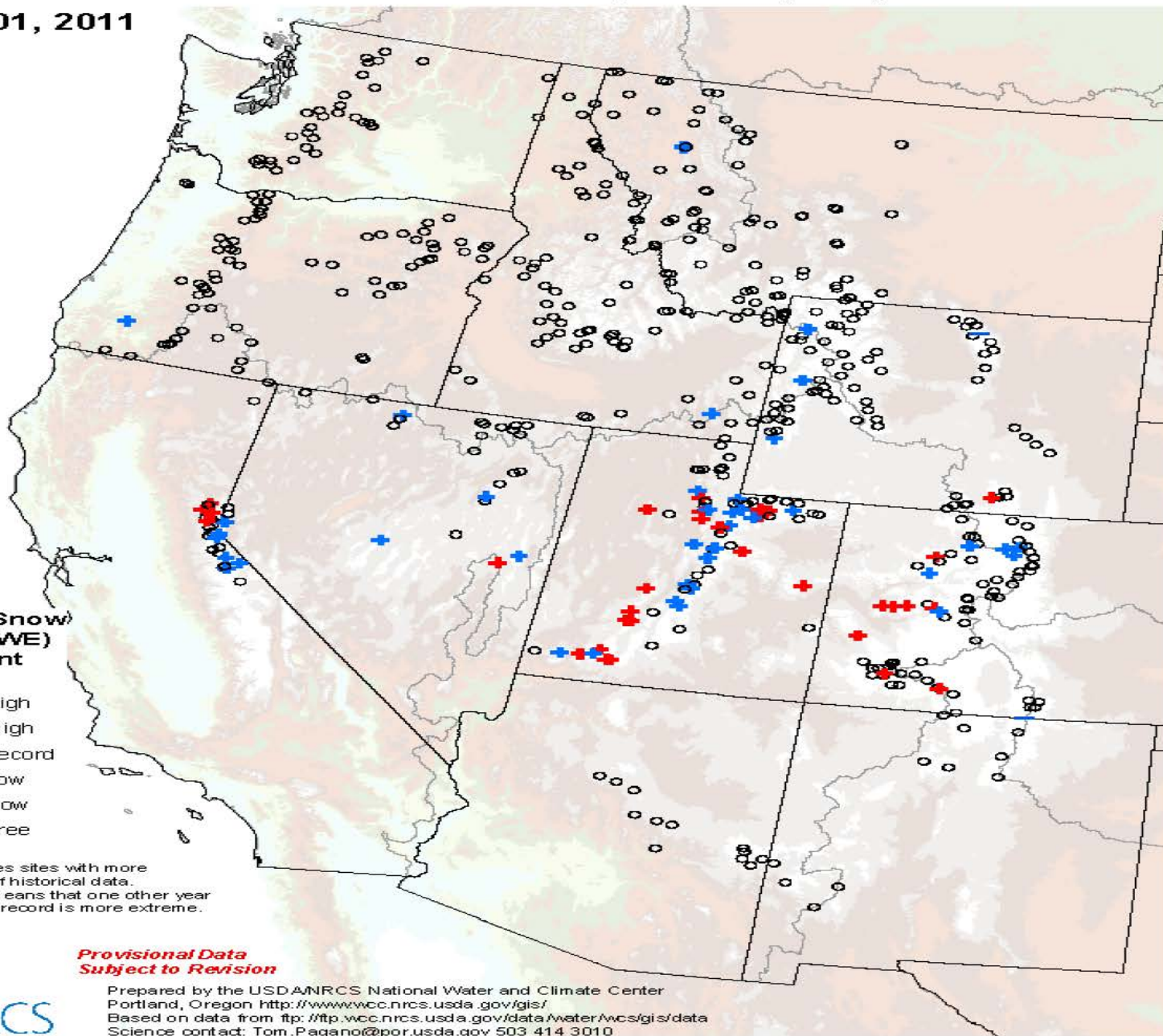
- + New High
- + Near High
- o Non-Record
- New Low
- Near Low
- snow free

Analysis includes sites with more than 20 years of historical data.
"Near" record means that one other year of the period of record is more extreme.

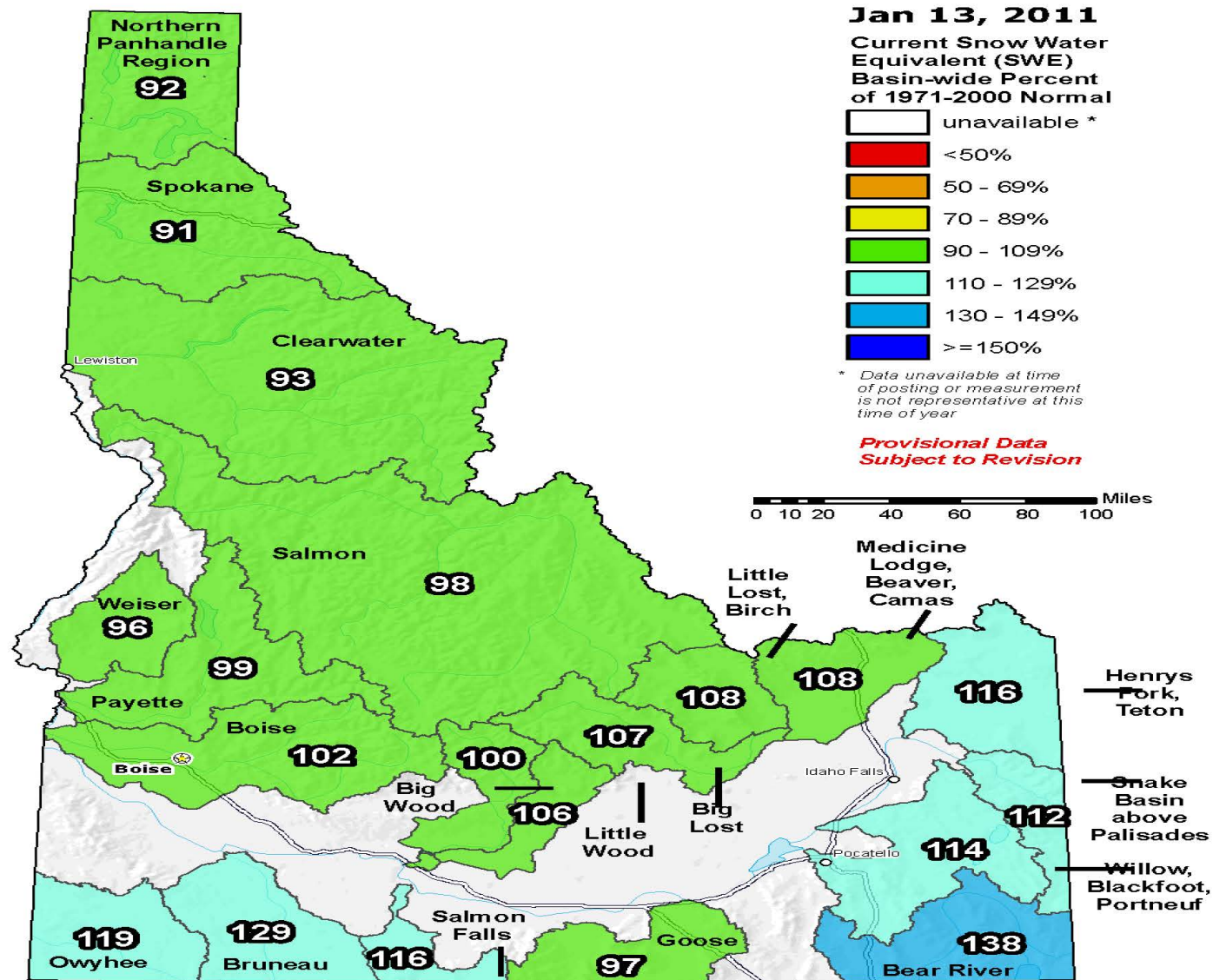


**Provisional Data
Subject to Revision**

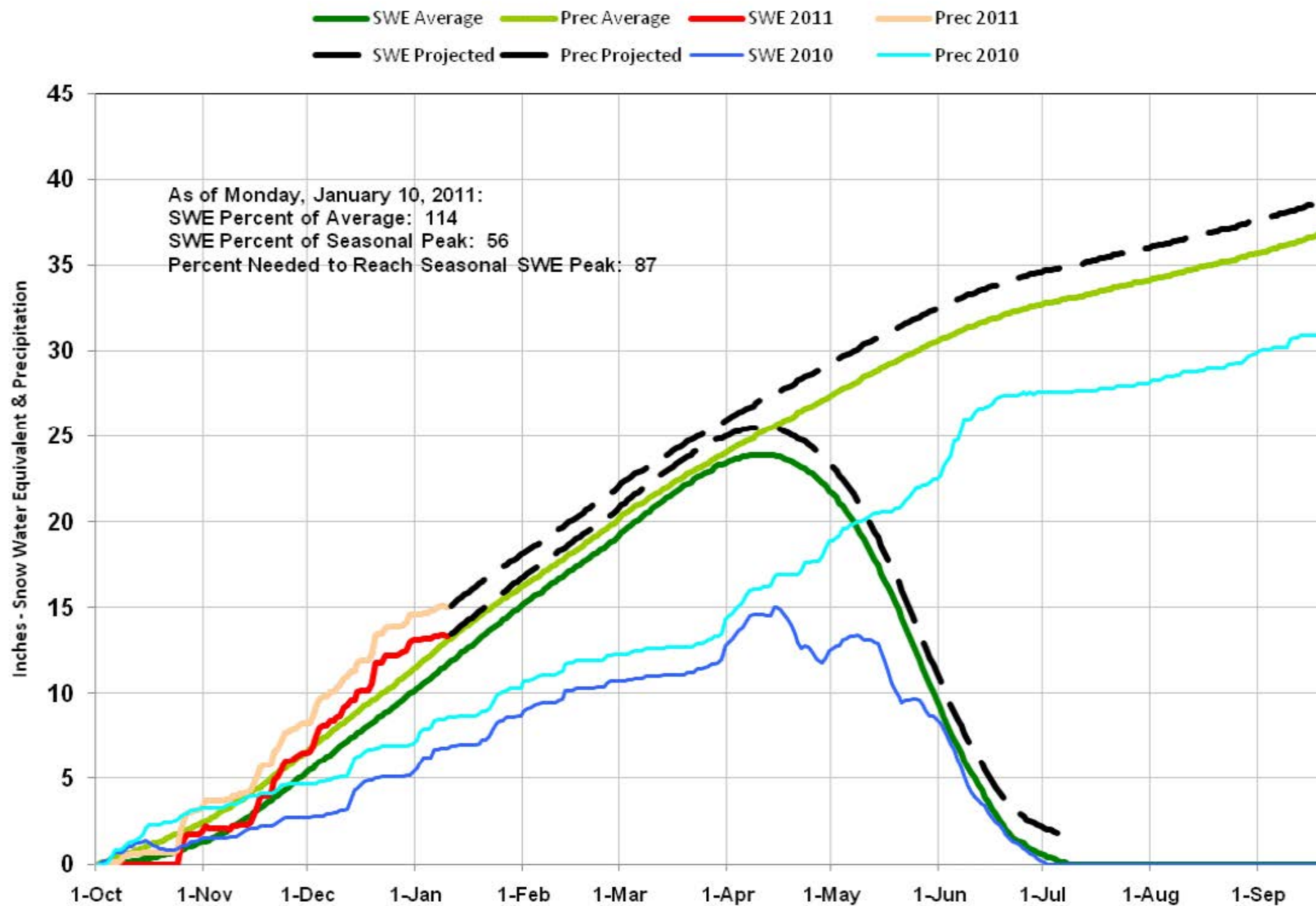
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <ftp://ftp.wcc.nrcs.usda.gov/data/water/wccs/gis/data>
Science contact: Tom.Pagano@por.usda.gov 503 414 3010



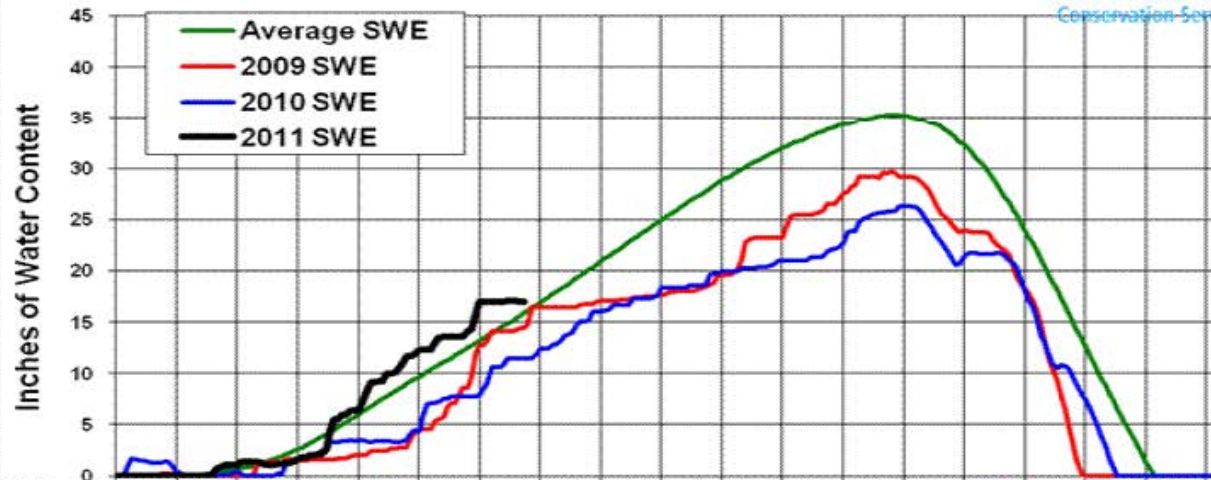
Idaho SNOTEL Current Snow Water Equivalent (SWE) % of Normal



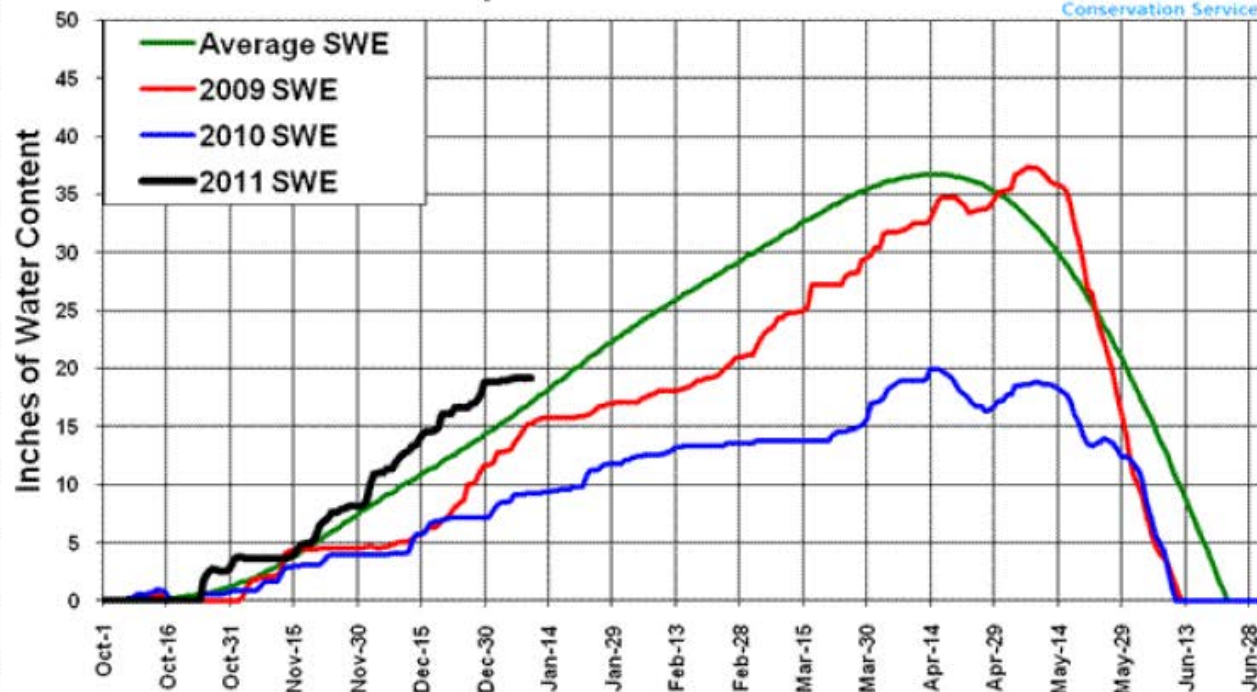
Snake Basin above Palisades 2011 Snowpack Graph (17 Sites)



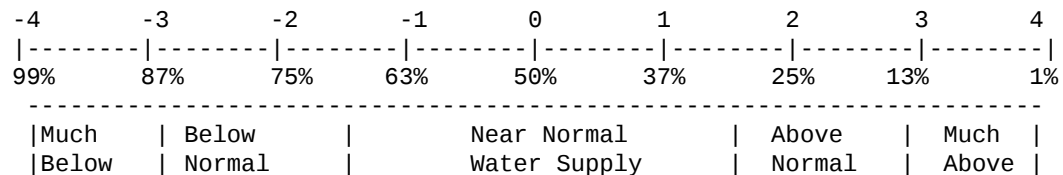
Mores Creek Summit SNOTEL El. 6100 **Snow Water Equivalent**



Lewis Lake Divide SNOTEL El. 7850 **Snow Water Equivalent**



<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>
CLEARWATER	0.3	2006	NA
SALMON	-0.1	2010	NA
WEISER	0.2	2010	NA
PAYETTE	0.2	2008	NA
BOISE	1.2	2008	-1.8
BIG WOOD	1.2	1996	0.1
LITTLE WOOD	1.0	2005	-1.9
BIG LOST	0.6	2009	0.0
LITTLE LOST	0.2	2010	0.6
HENRYS FORK	1.6	2006	-3.4
TETON	1.6	2008	NA
SNAKE (HEISE)	1.4	2009	-1.8
OWYHEE	2.2	1998	-3.5
OAKLEY	0.4	2000	-0.5
SALMON FALLS	2.4	2006	-1.2
BRUNEAU	3.3	2006	NA
BEAR RIVER	-0.6	2001	-2.8



IDAHO RESERVOIR STORAGE
NRCS Usable Contents December 31, 2010

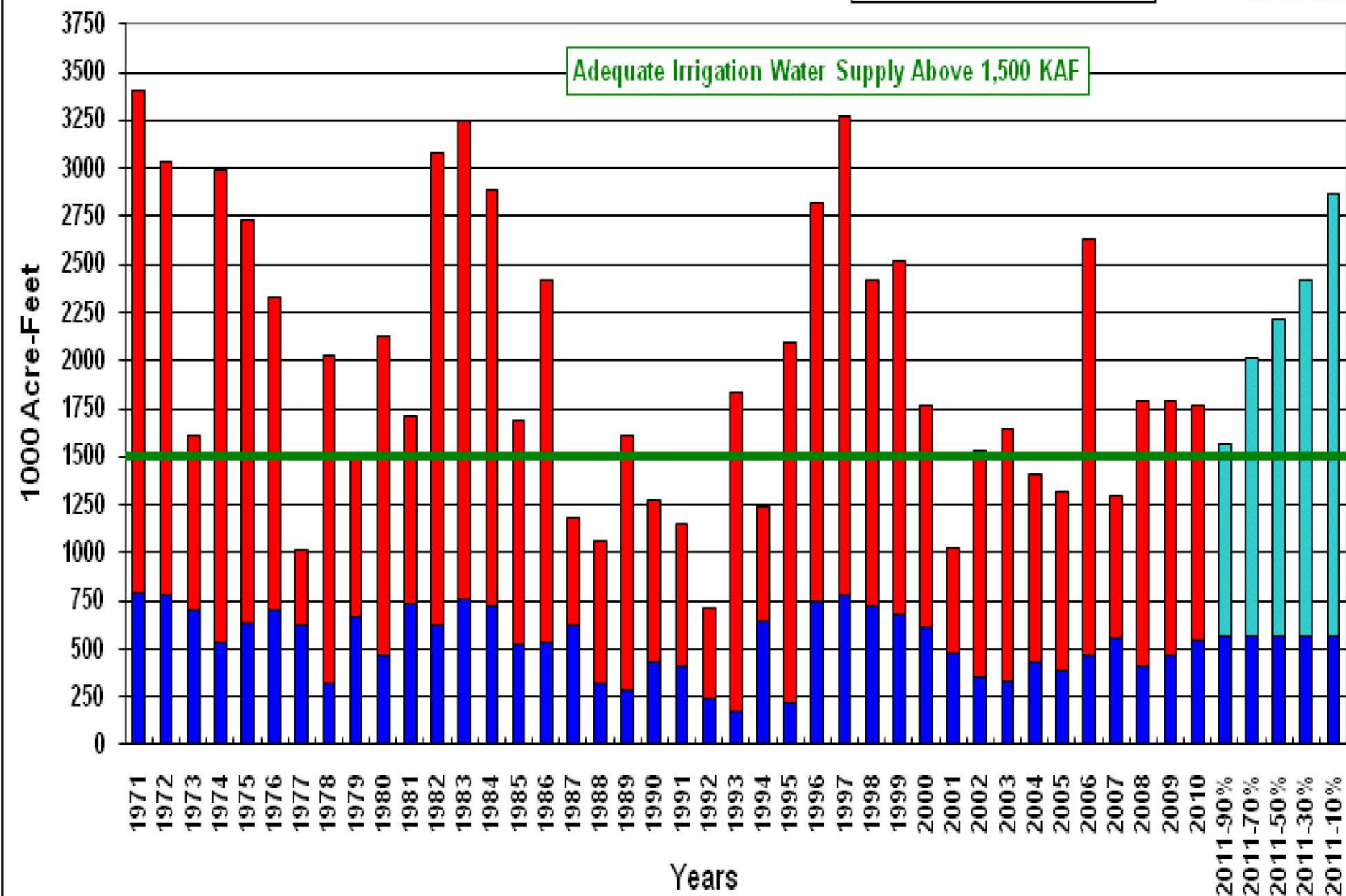
Reservoir or Basin	Percent of Capacity December 31, 2010	Percent of Average December 31, 2010	Percent of Average December 31, 2009
Coeur d'Alene	56	122	38
Dworshak	67	94	96
Payette (2)	63	100	97
Boise (3)	56	100	97
Magic	42	101	94
Little Wood	54	116	133
Mackay	72	135	135
Henrys Fork (3)	79	100	108
Jackson & Palisades (2)	65	97	112
Blackfoot	57	92	89
American Falls	63	107	122
Oakley	21	60	86
Salmon Falls	20	70	80
Owyhee	30	54	40
Bear Lake	36	57	58

January 1 Boise Basin Surface Water Supply Index (SWSI) Boise River near Boise & Anderson, Arrowrock, Lucky Peak

■ Streamflow Apr-Sep

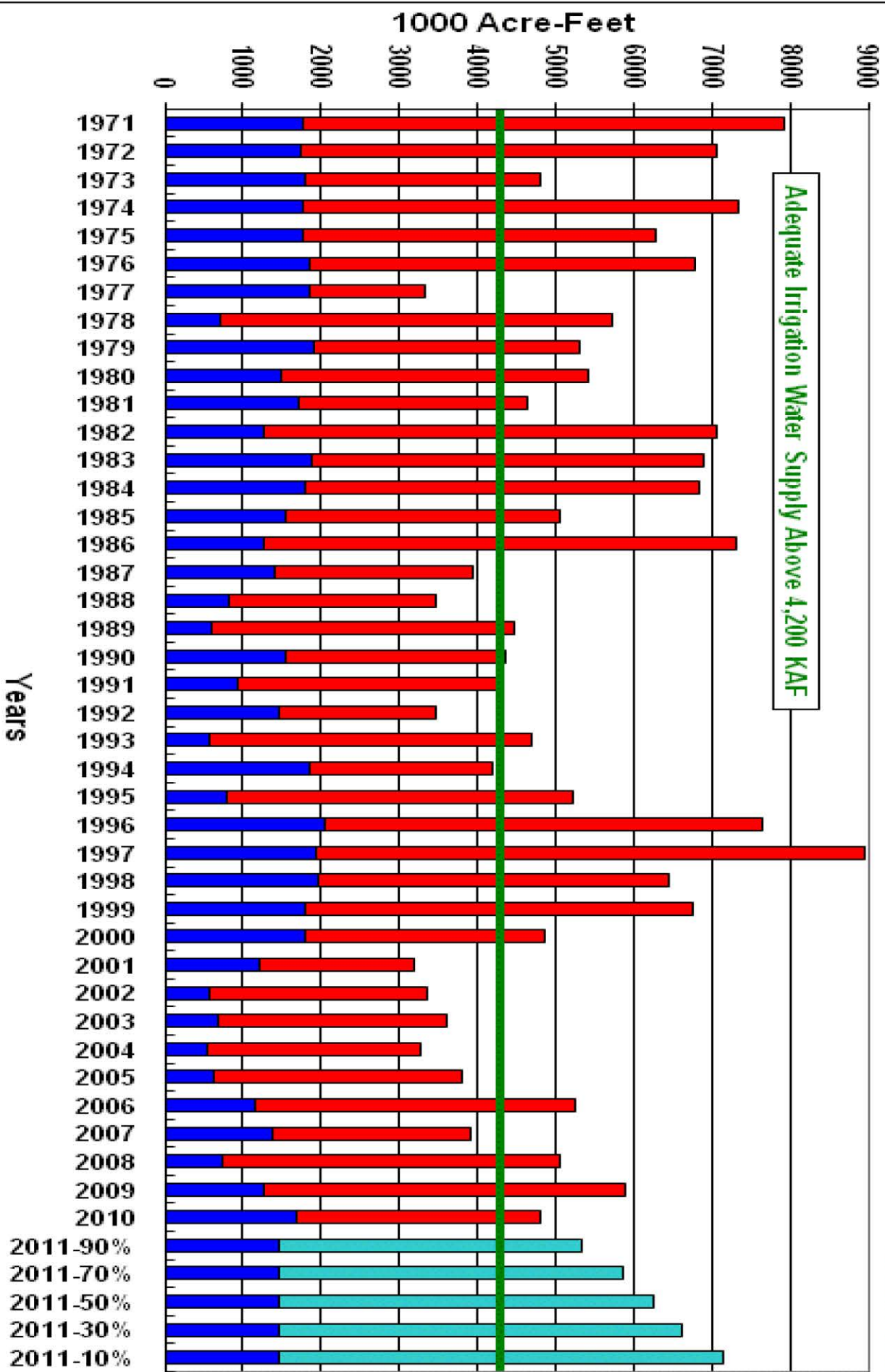
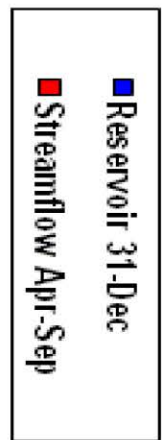
■ Reservoir 31-Dec

Adequate Irrigation Water Supply Above 1,500 KAF



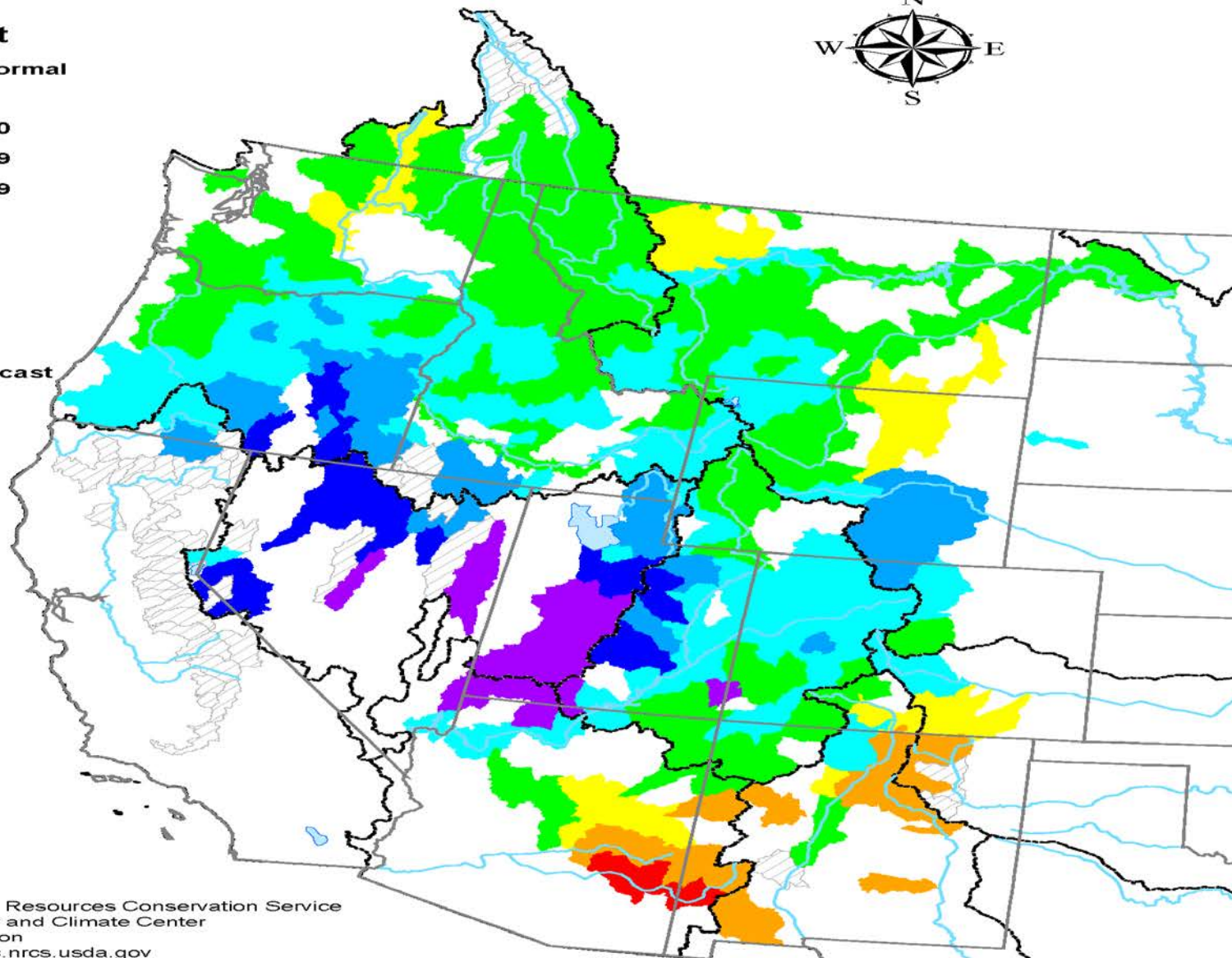
January 1 Surface Water Supply Index (SWSI)

Snake River near Heise & Jackson and Palisades Reservoirs



Spring and Summer Streamflow Forecasts as of January 1, 2011

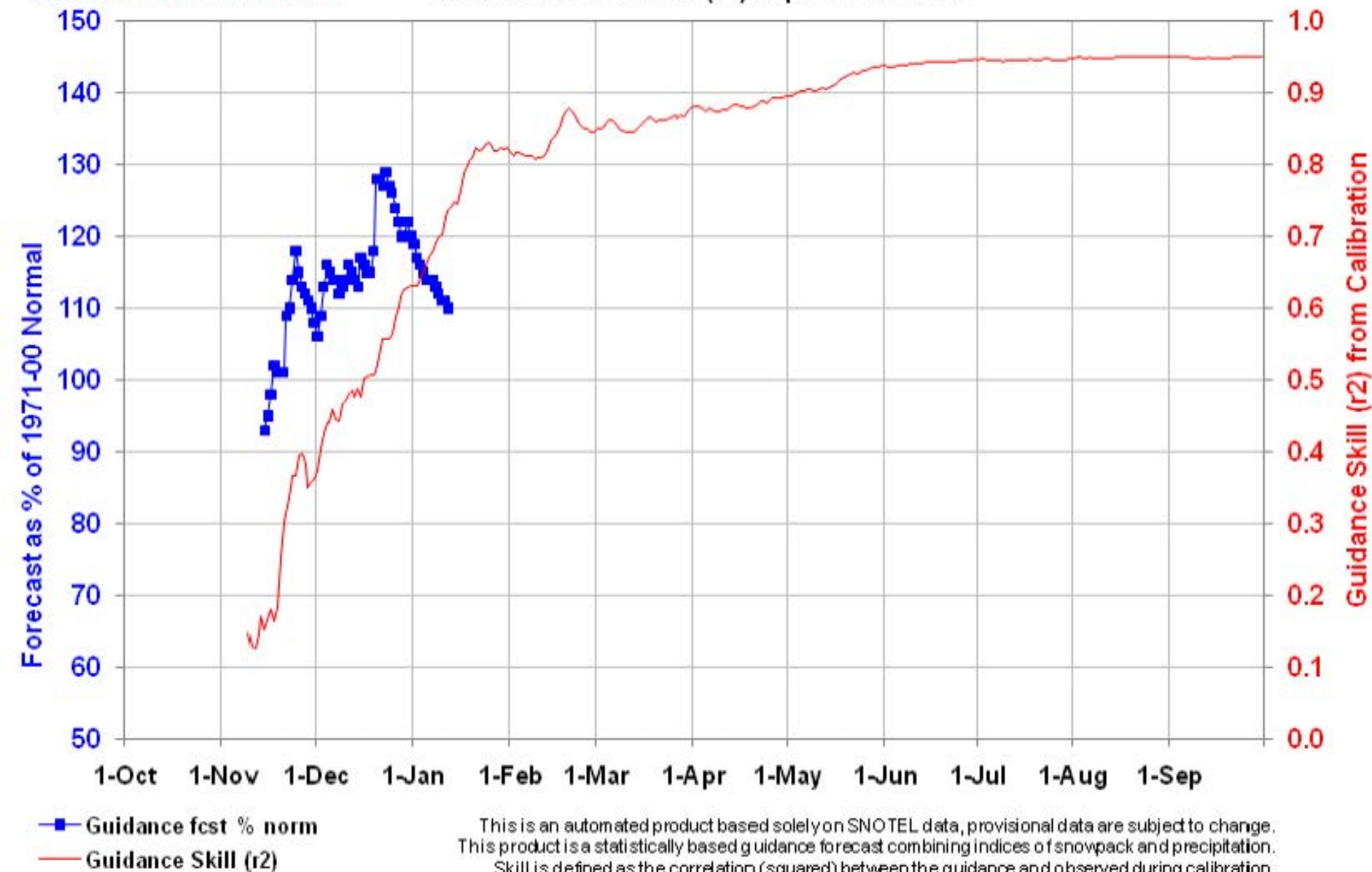
Percent
1971 to 2000 Normal



Prepared by
USDA, Natural Resources Conservation Service
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Created 12:03 Jan 12 2011

Snake River ne Heise (ID): Apr-Jul Volume



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. Skill is defined as the correlation (squared) between the guidance and observed during calibration. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Jim.Marron@por.usda.gov www.wcc.nrcs.usda.gov/wsf/daily_forecasts.html



Questions?

