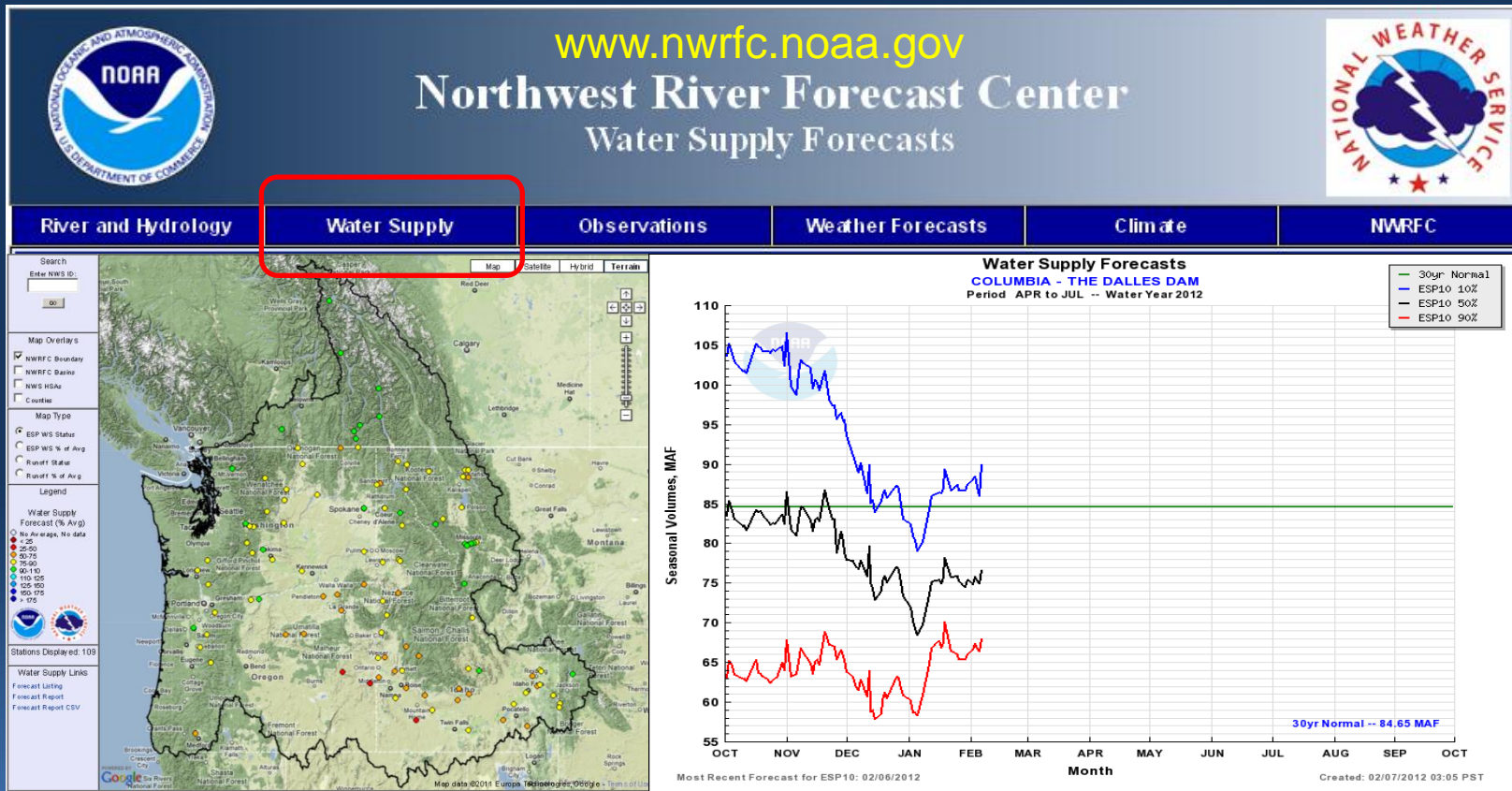


February 2012 Water Supply Briefing



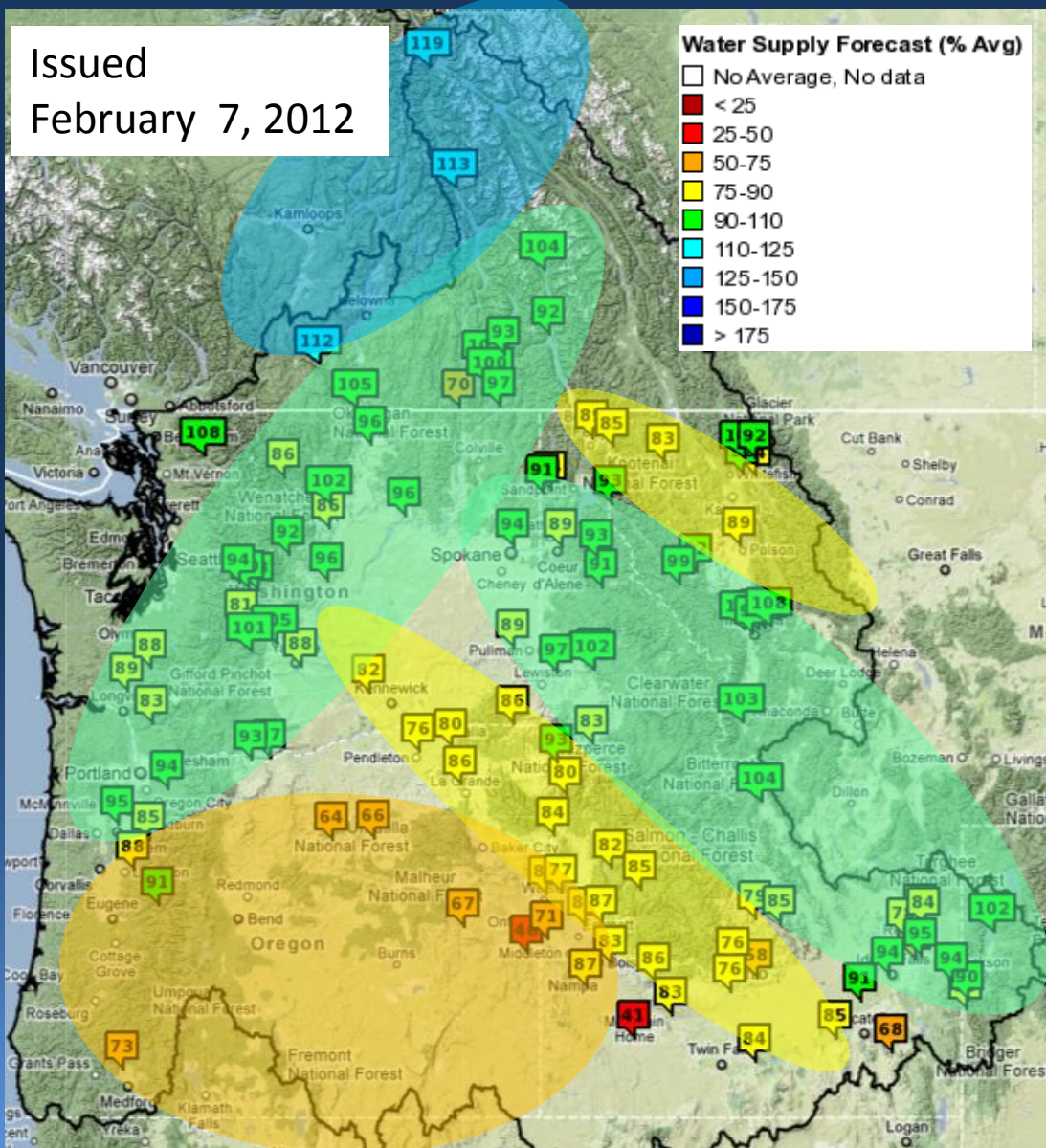
Steve King, NWRFC
Stephen.King@noaa.gov
(503)326-7291



Water Supply Summary



Issued
February 7, 2012



Most Apr-Sep forecasts are near or below normal

Conditions are generally wetter in the northern basins

Conditions are generally drier in the southern basins

Wettest forecasts (above 110%) in the upper Columbia headwaters



Observed Conditions



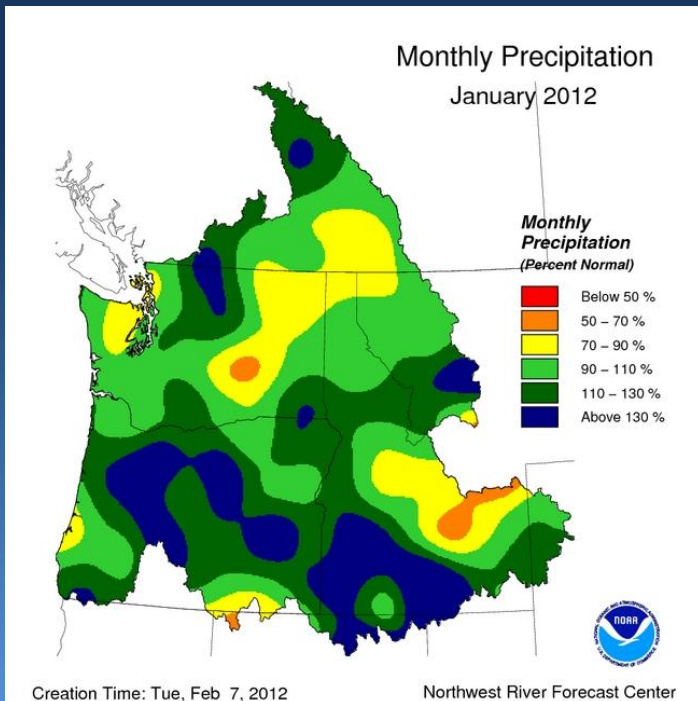
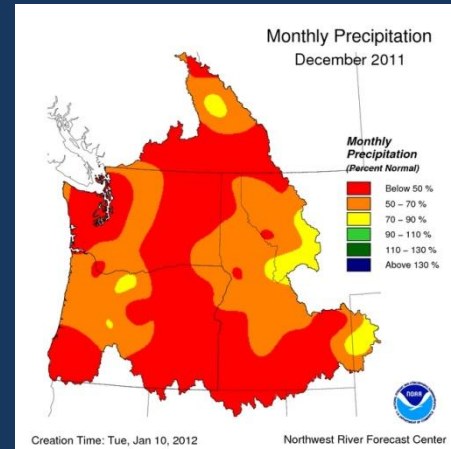
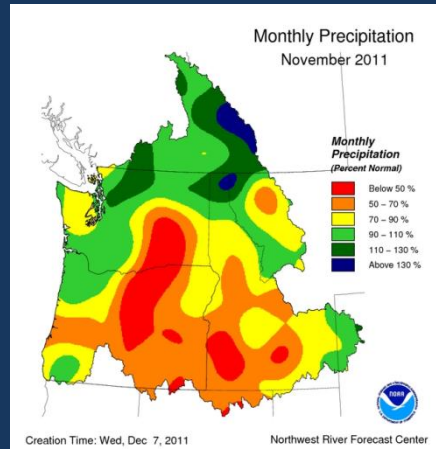
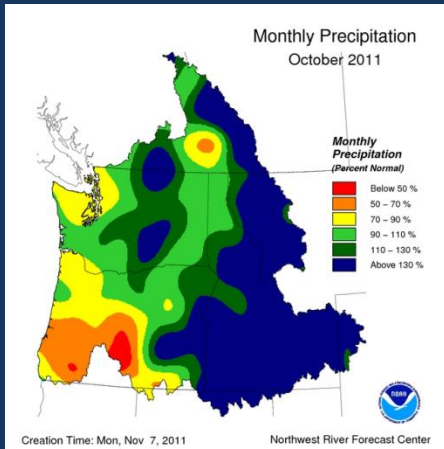
Precipitation

Snowpack

Runoff



Observed Monthly Precipitation



Observed January Precipitation

above Grand Coulee = 117%

above Ice Harbor = 119%

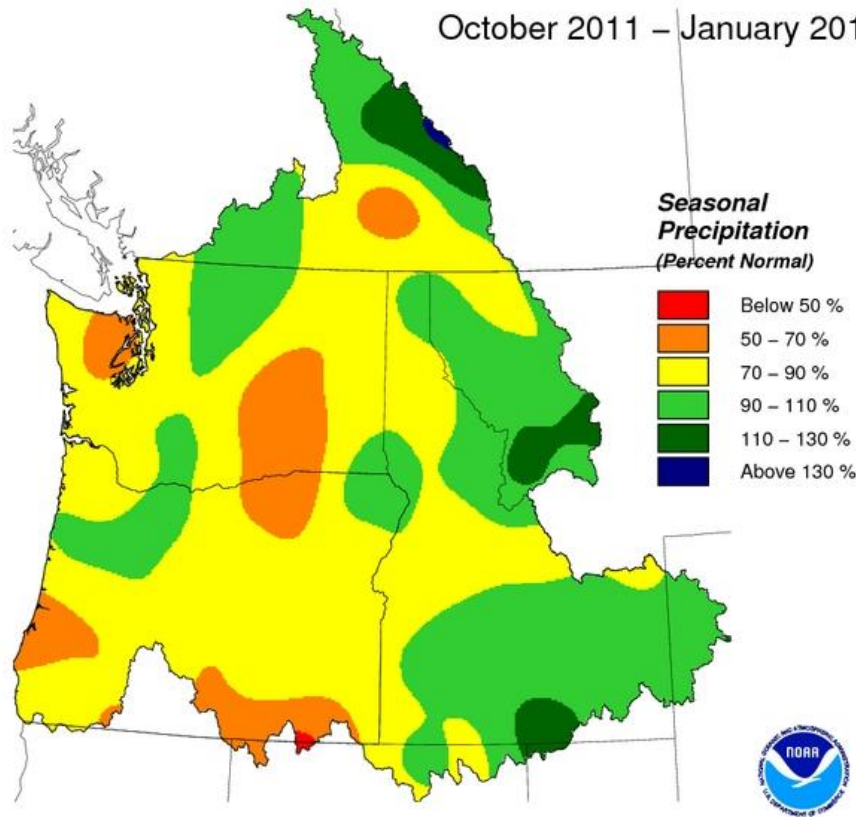
above The Dalles = 122%



Observed Seasonal Precipitation



Seasonal Precipitation
October 2011 – January 2012



Observed Oct 1-January 31
Precipitation

above Grand Coulee = 93%
above Ice Harbor = 95%
above The Dalles = 95%



Creation Time: Tue, Feb 7, 2012

Northwest River Forecast Center

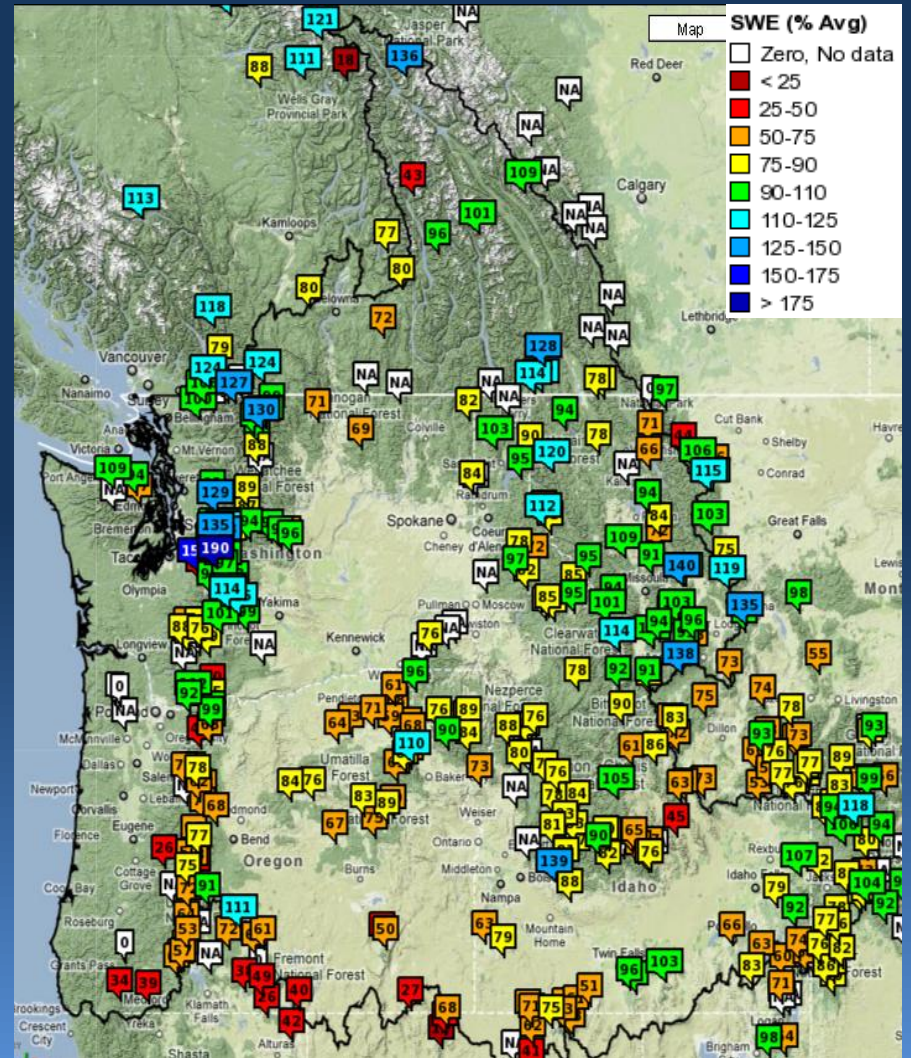
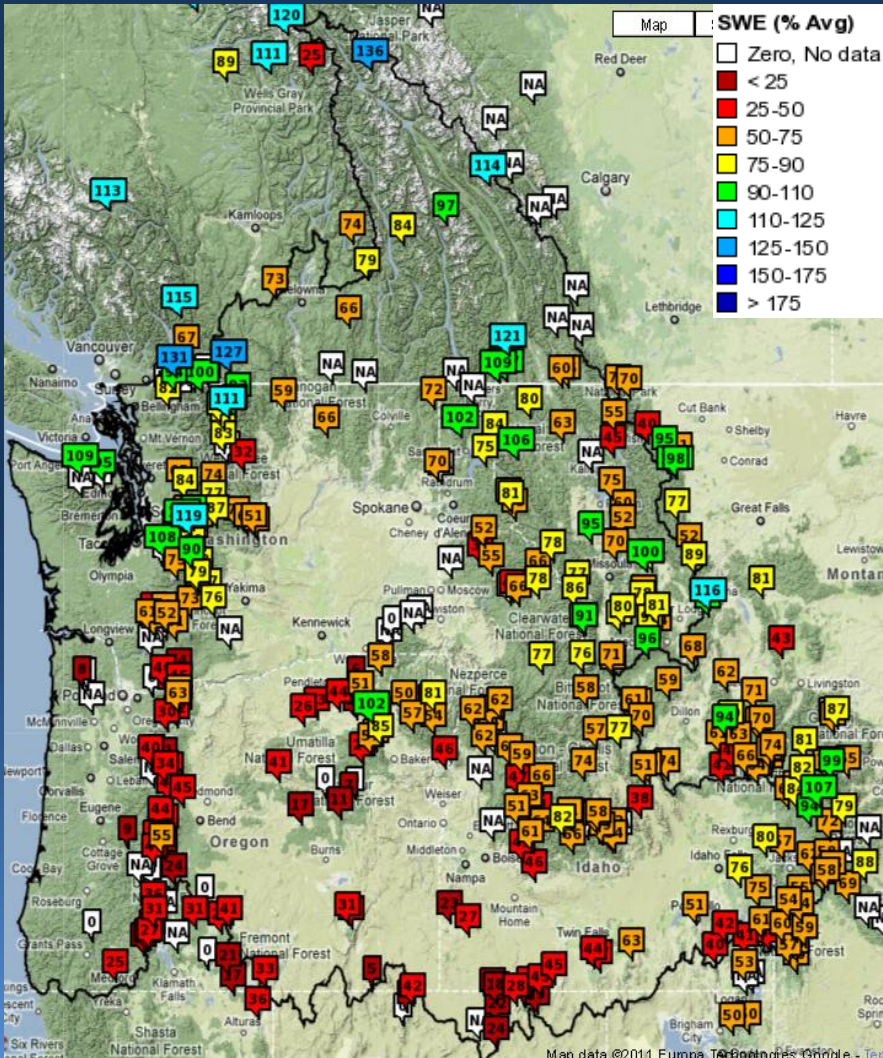


Current Snow Conditions



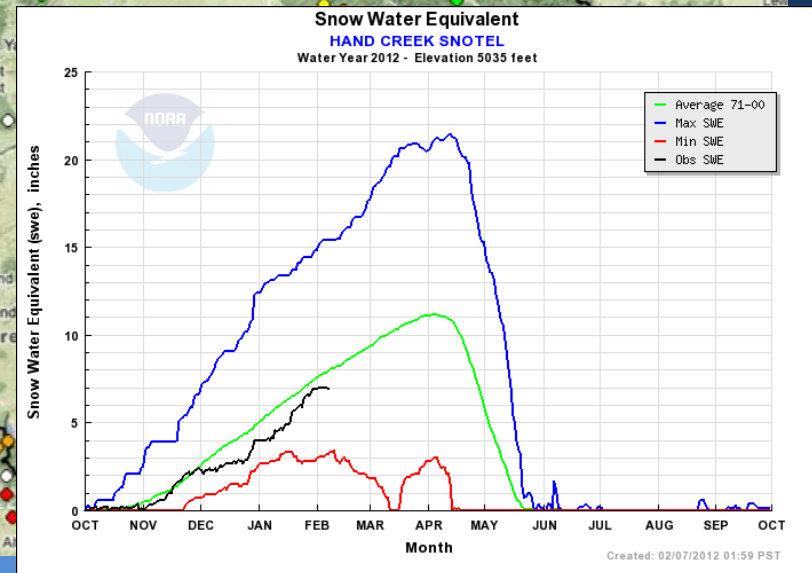
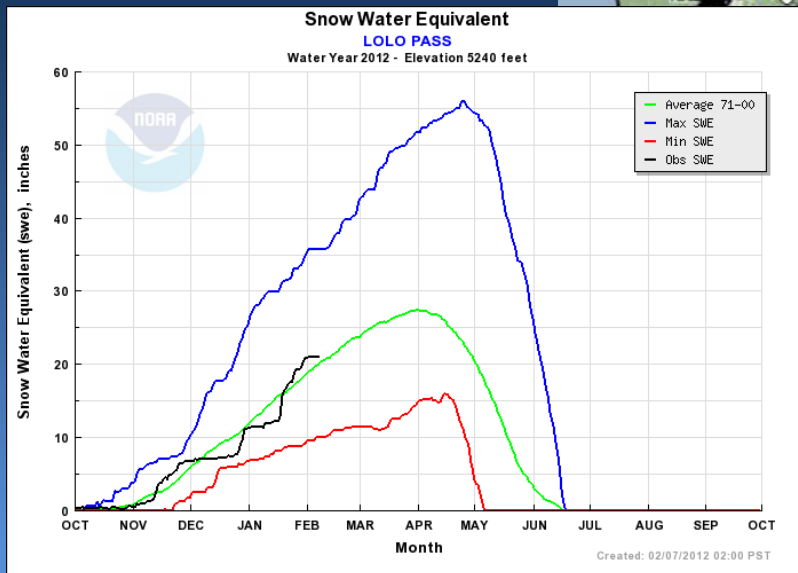
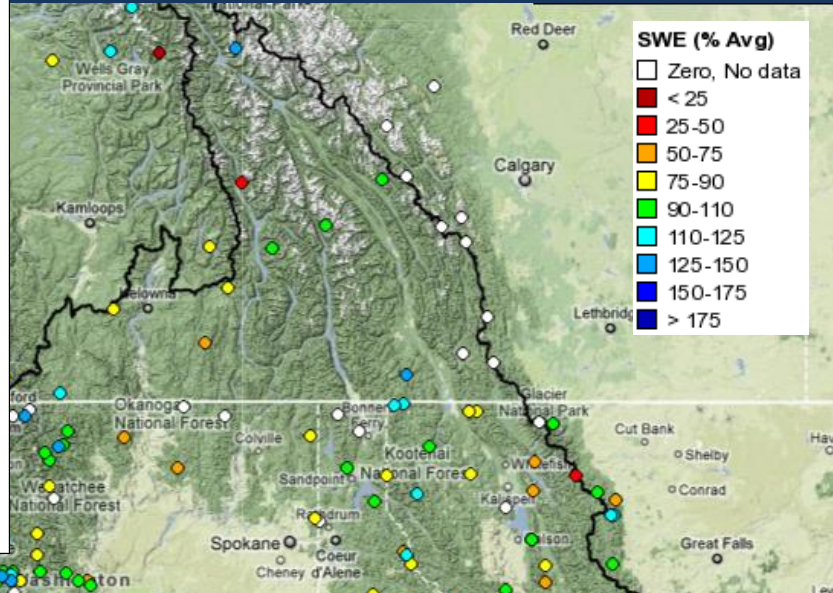
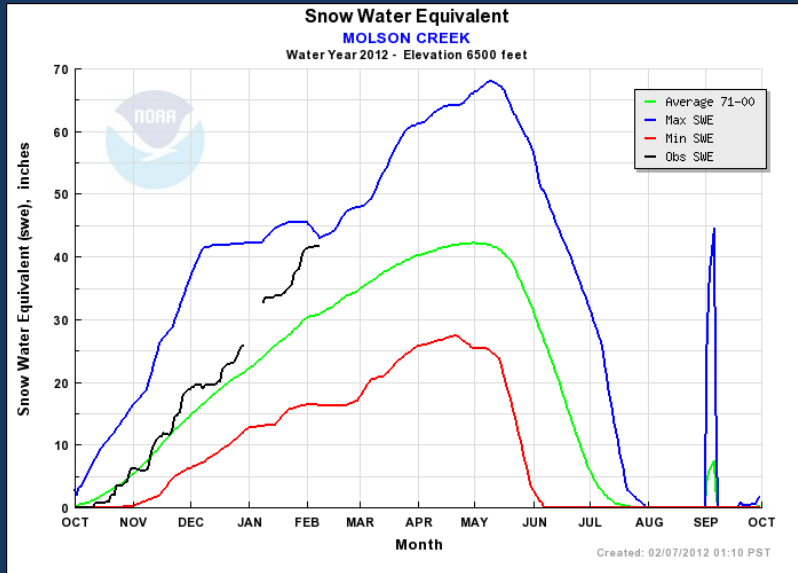
Jan 9, 2012

Feb 7, 2012

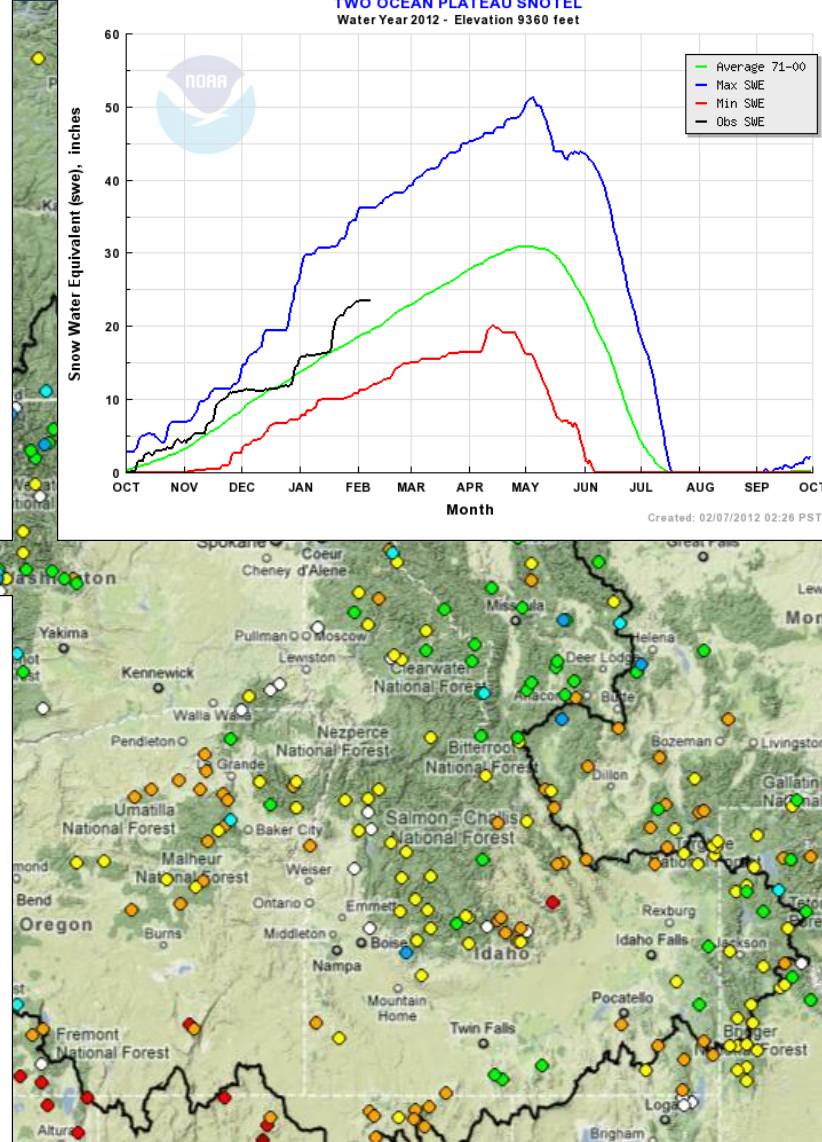
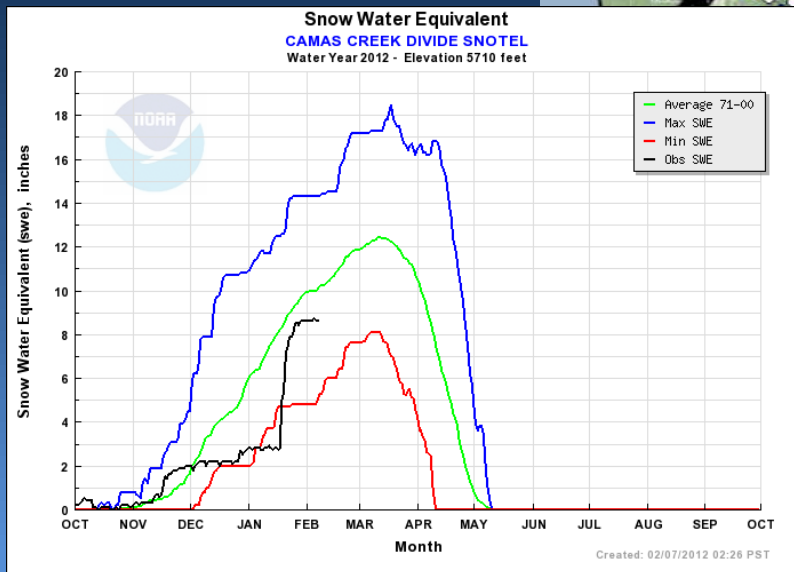
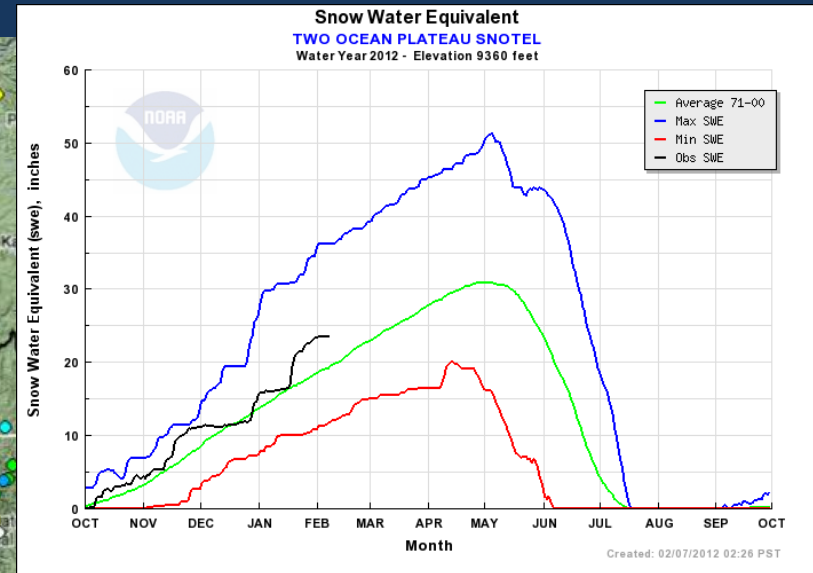
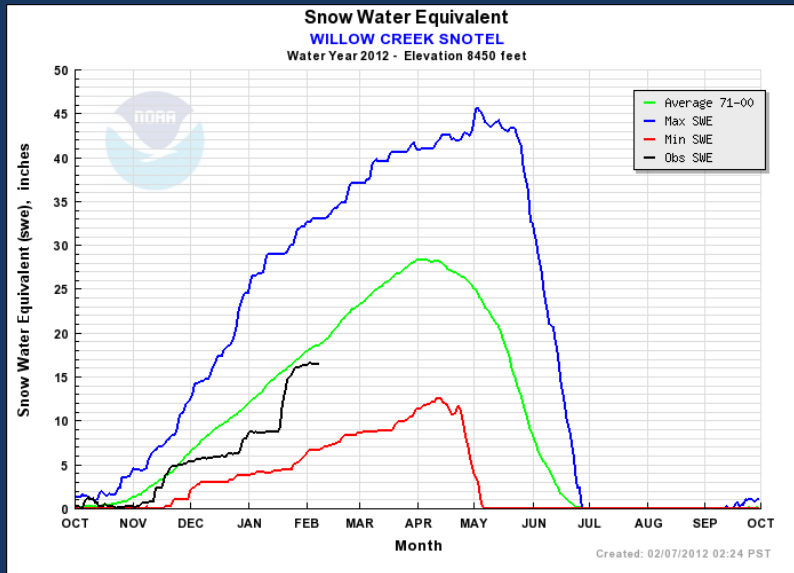




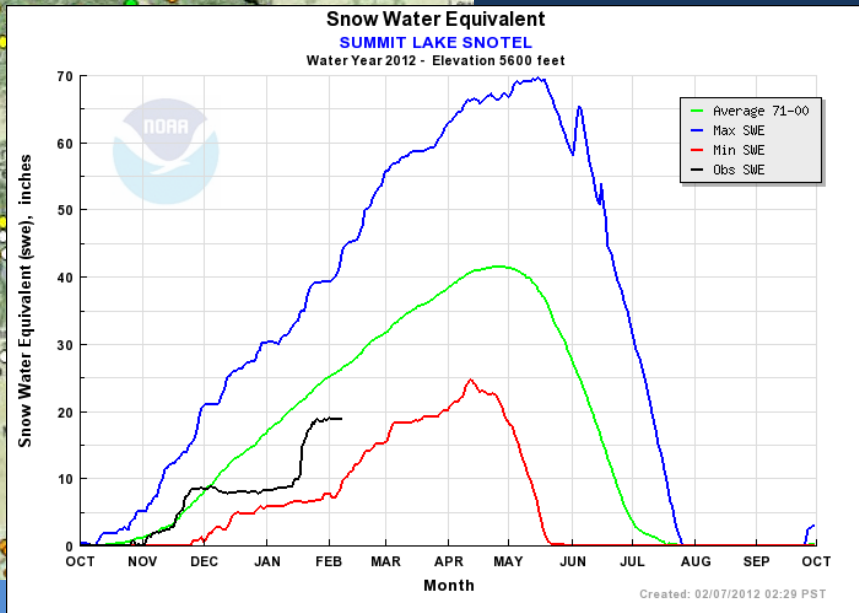
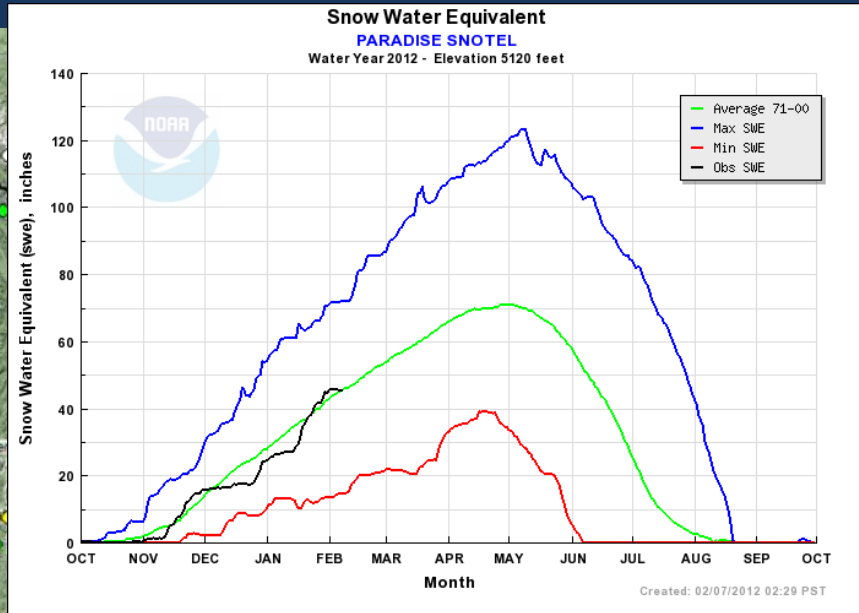
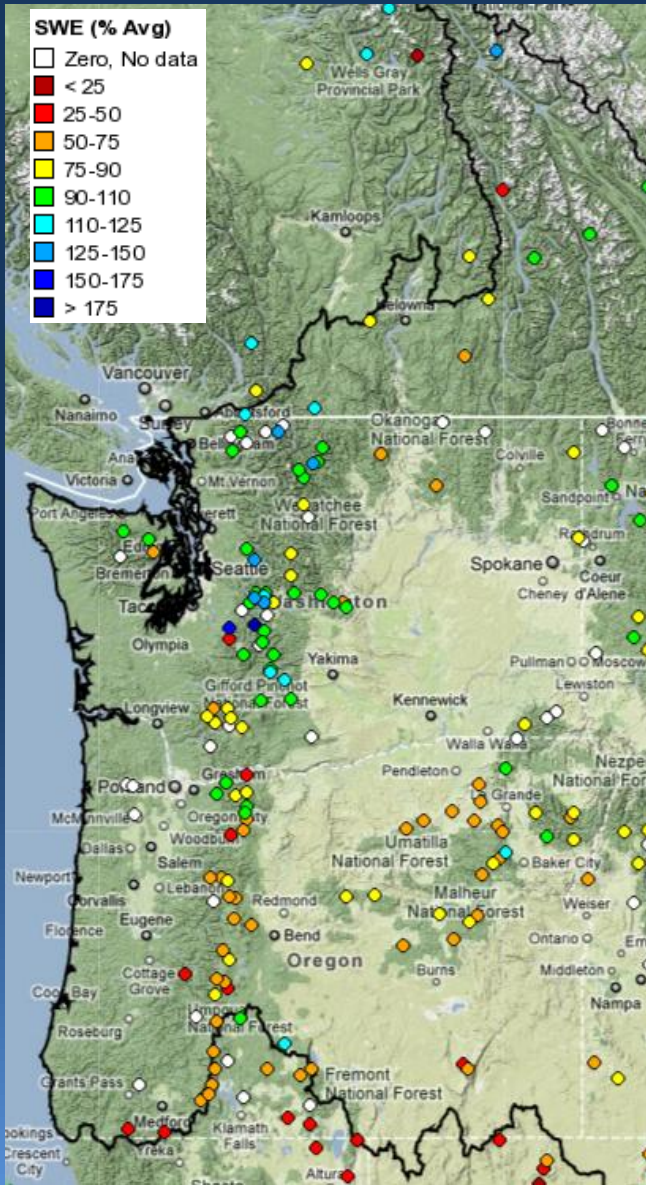
Upper Columbia Snow Conditions



Snake River Snow Conditions



Lower Columbia Snow Conditions





Future Conditions



Climate Outlooks

10 Day Precipitation Forecast

Water Supply Forecasts

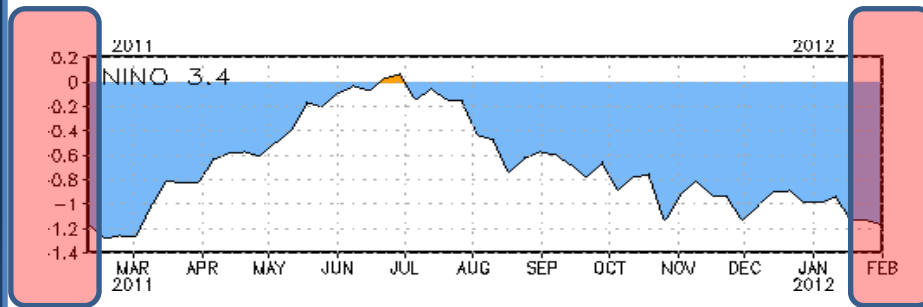


Enso: Observed and Forecast

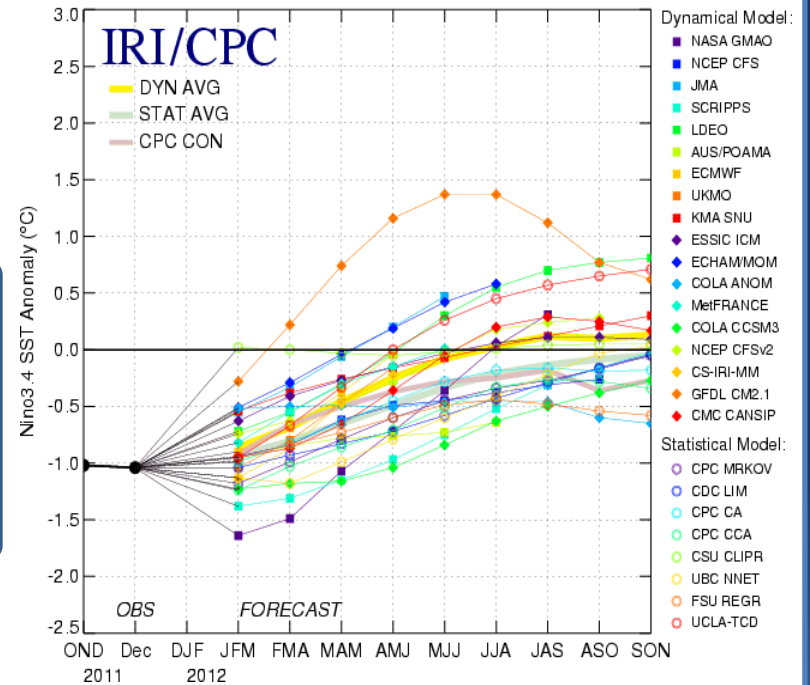
SST Anomaly (Deg C)



Latest observed: SST 3.4 ~ -1.2 Deg C



Mid-Month Plume of Model ENSO Predictions from Jan 2012



CPC Synopsis: moderate La Niña is present and continues through spring 2012

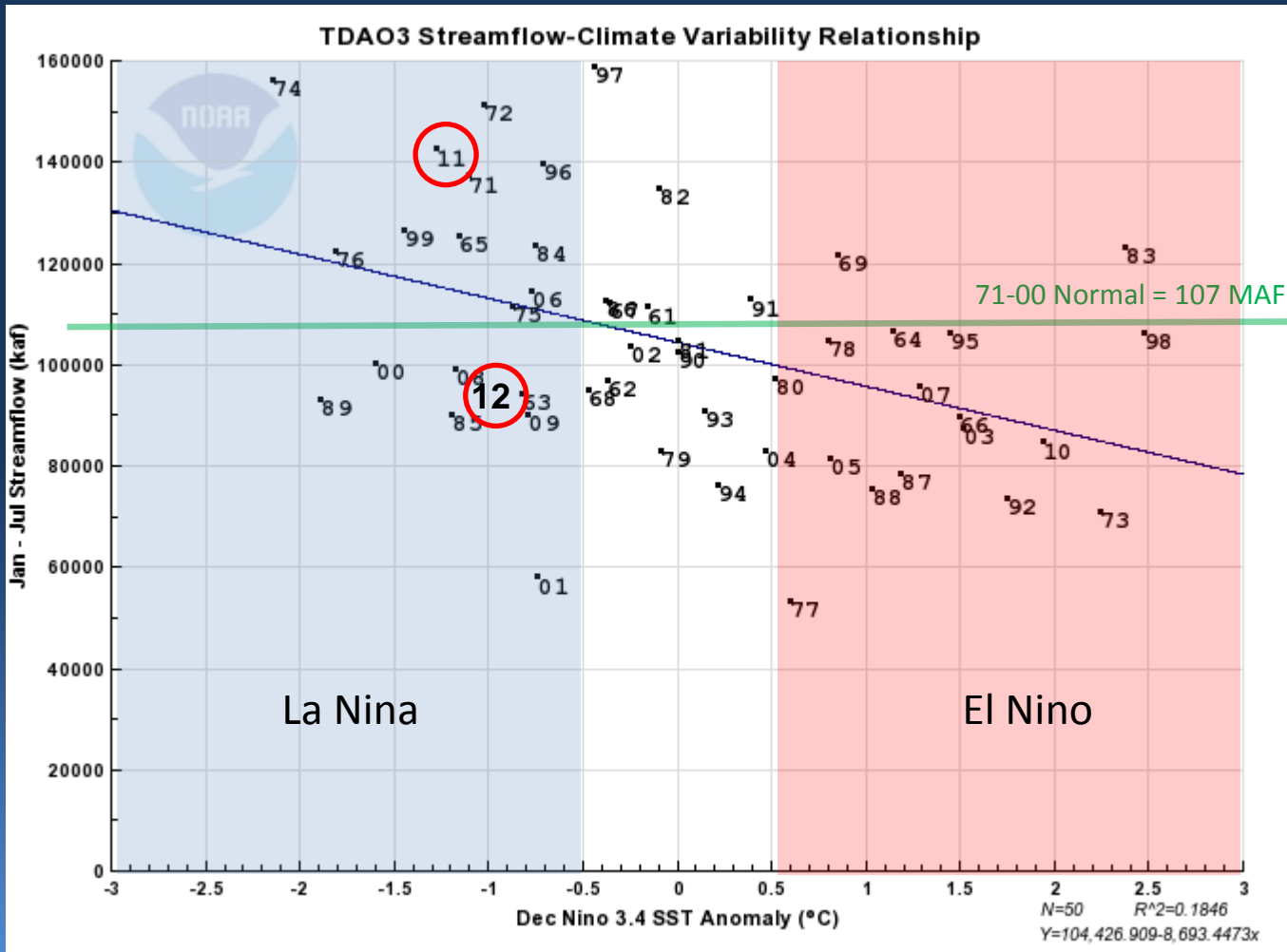
Source: Climate Prediction Center Weekly ENSO Update

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.pdf



SST Anomaly vs Streamflow

Columbia River near The Dalles

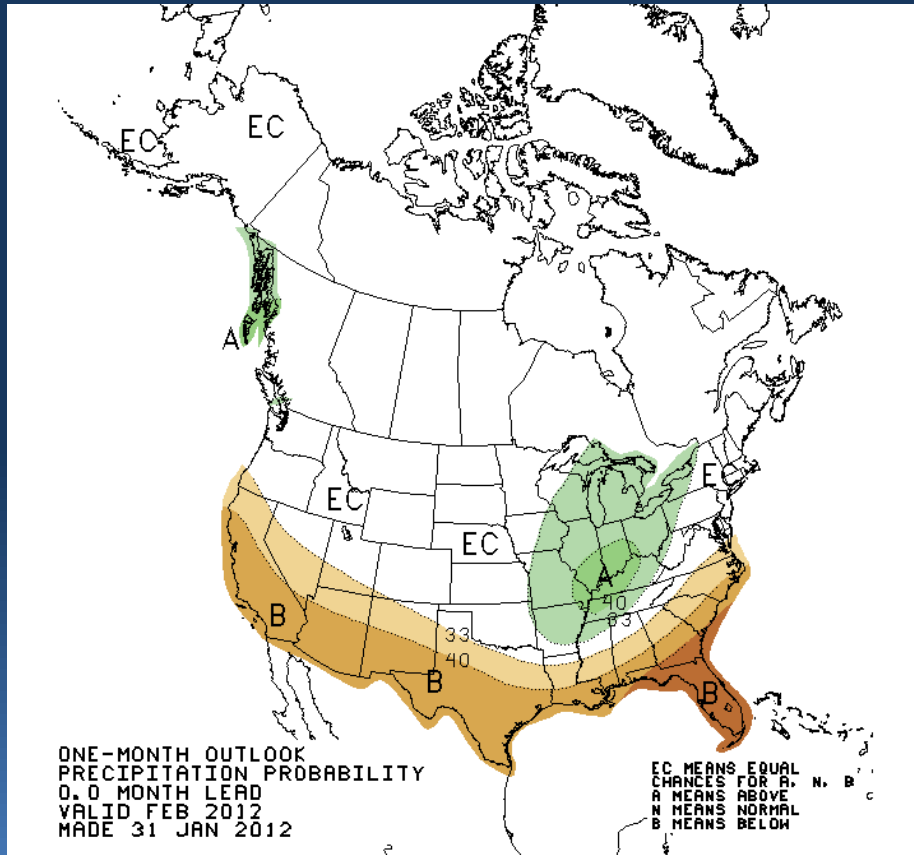




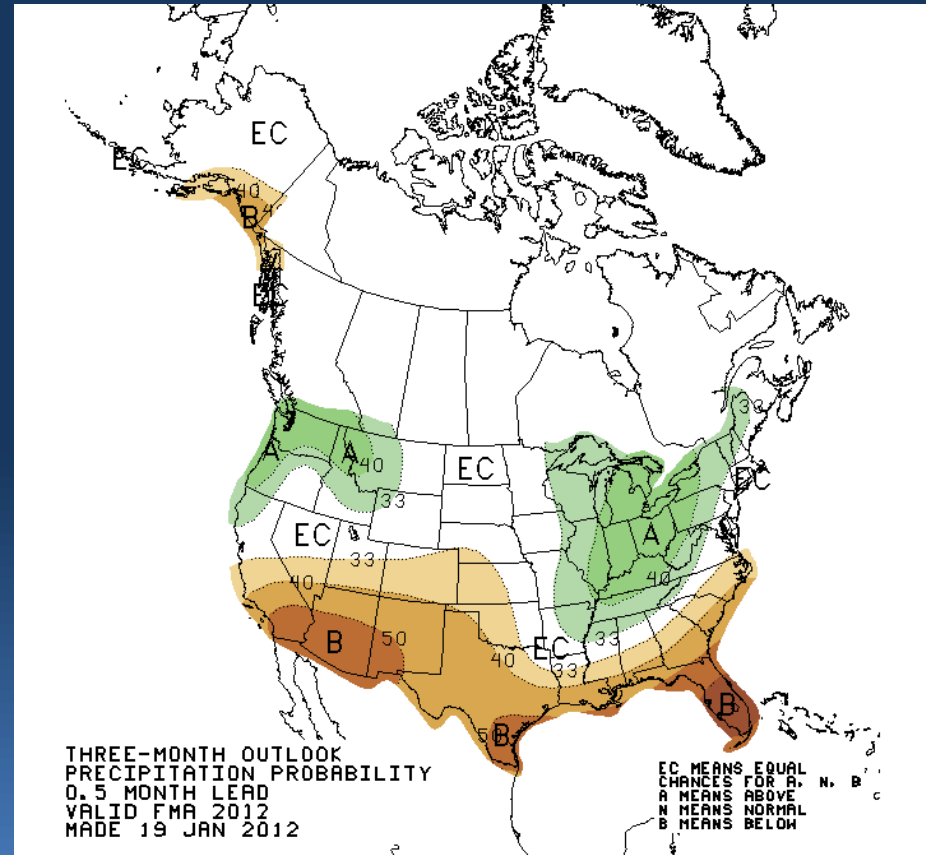
Climate Outlook: Precipitation



Current Month Outlook



Three Month Outlook

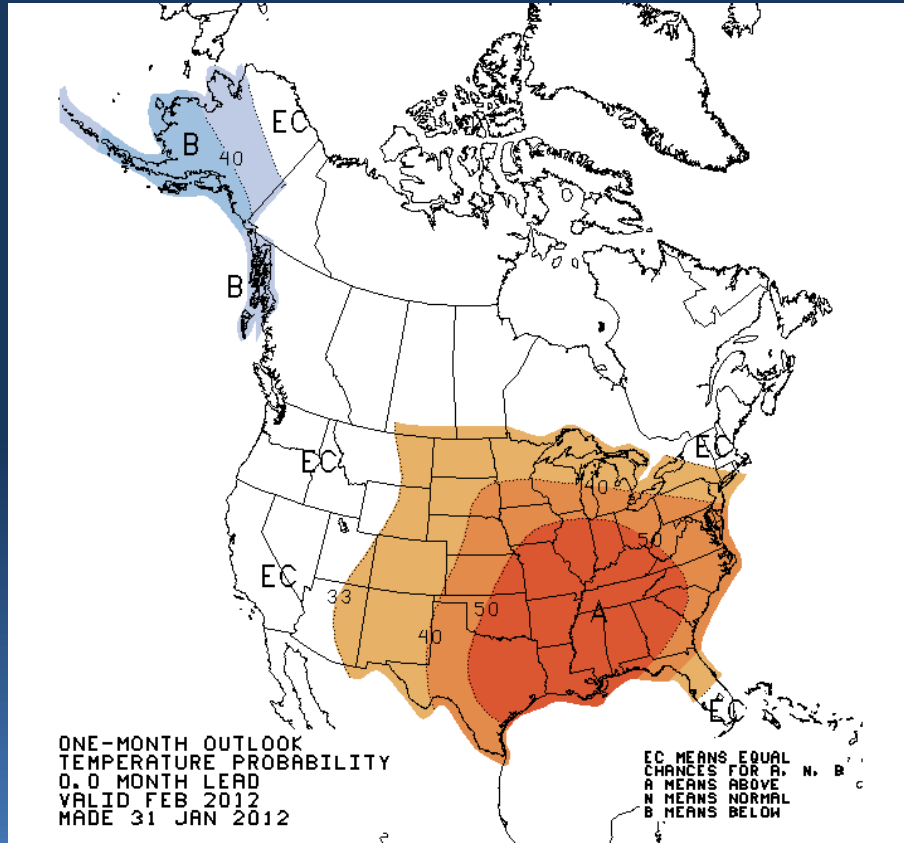




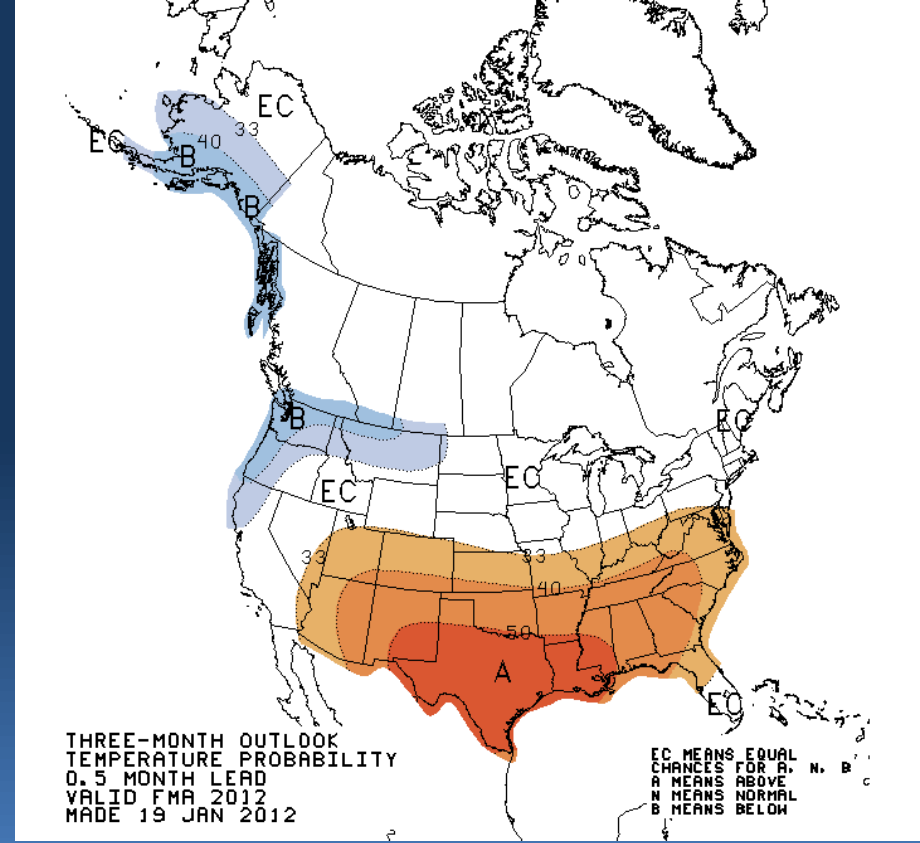
Climate Outlook: Temperature



Current Month Outlook



Three Month Outlook

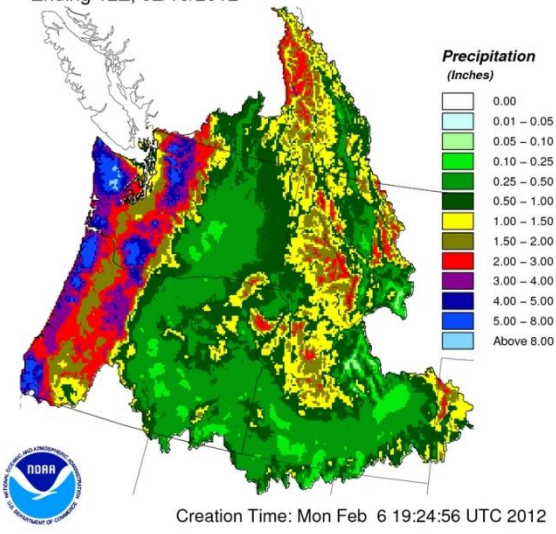




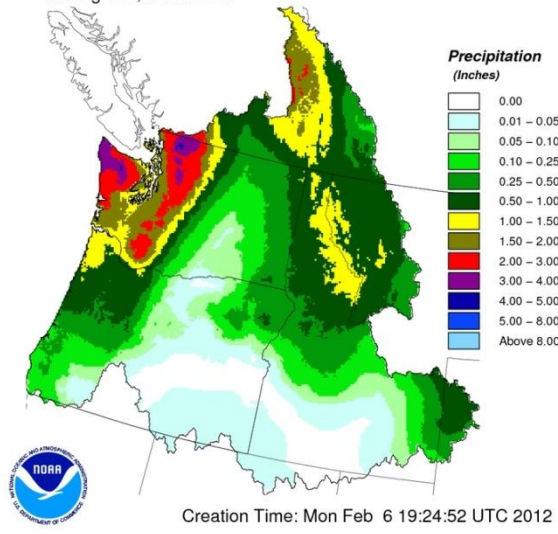
ESP 10 Day Precipitation Forecast



10 Day Precipitation Climatology
Ending 12Z, 02/16/2012

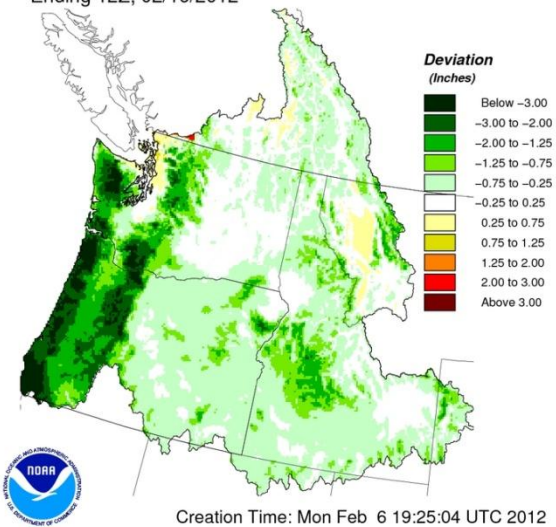


10 Day QPF
Ending 12Z, 02/16/2012

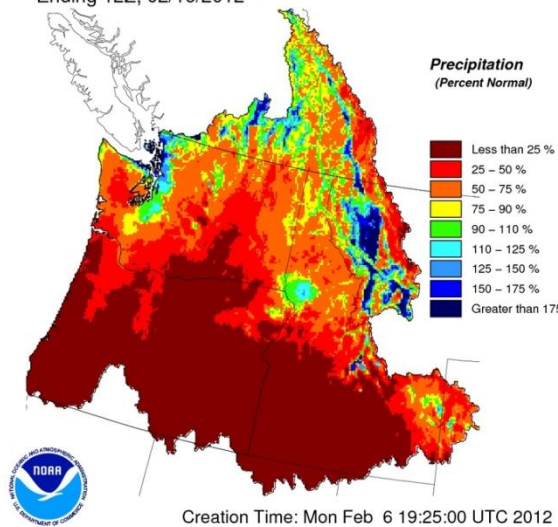


Work in progress to make these plots available on web

10 Day QPF (Deviation from Climatology)
Ending 12Z, 02/16/2012



10 Day QPF (Percent of Climatology)
Ending 12Z, 02/16/2012





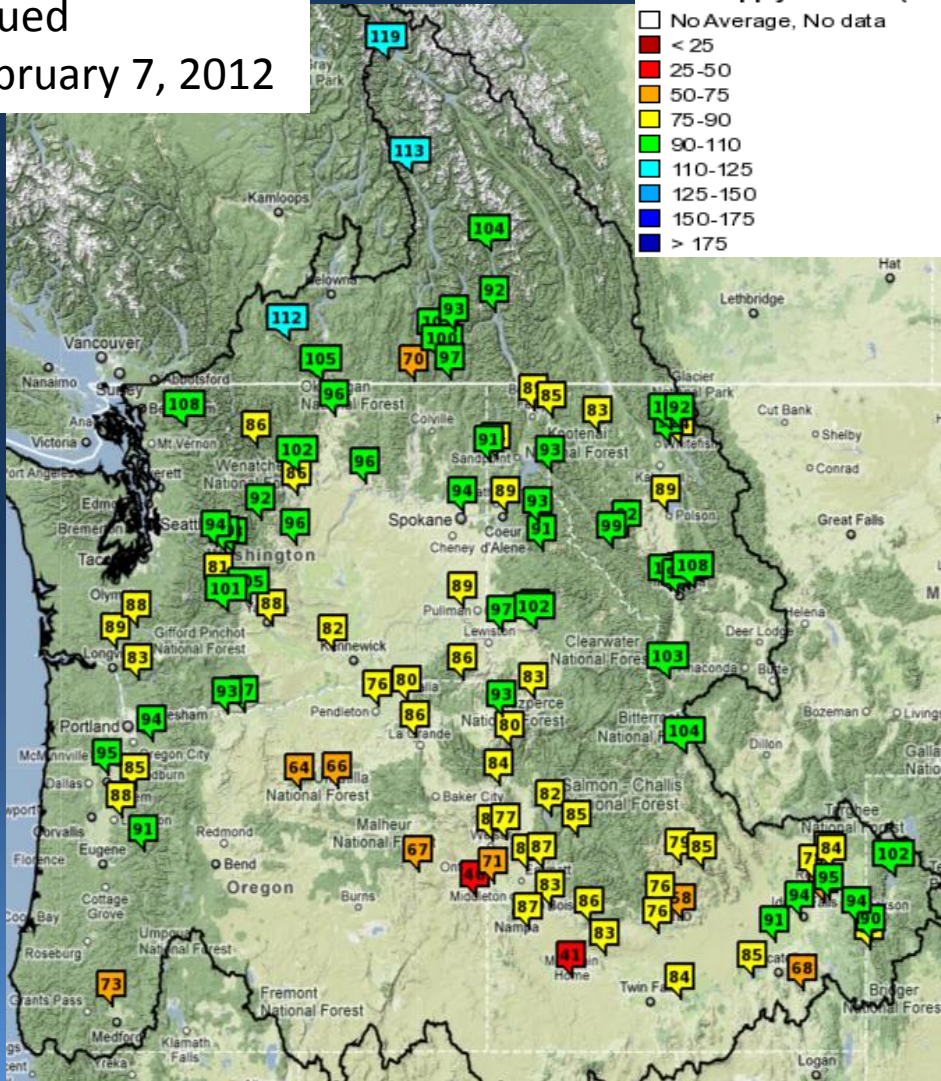
Water Supply Forecasts



Issued
February 7, 2012

Water Supply Forecast (% Avg)

- No Average, No data
- < 25
- 25-50
- 50-75
- 75-90
- 90-110
- 110-125
- 125-150
- 150-175
- > 175



Ensemble Streamflow Procedure
Feb 7th Issuance Date
Feb 6th Ensemble Date

Forecasts updated weekly/daily
All forecasts are 'official'

NWRFC Forecasts
Agency Collaborated

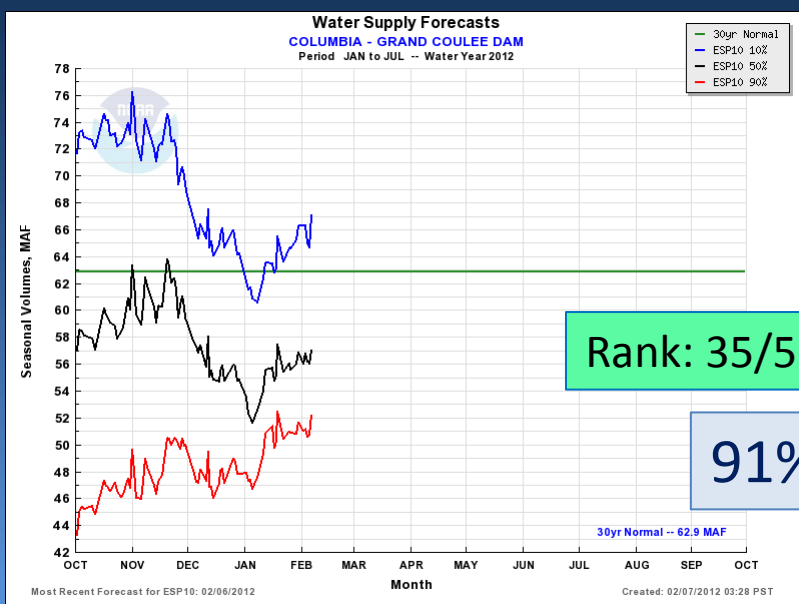
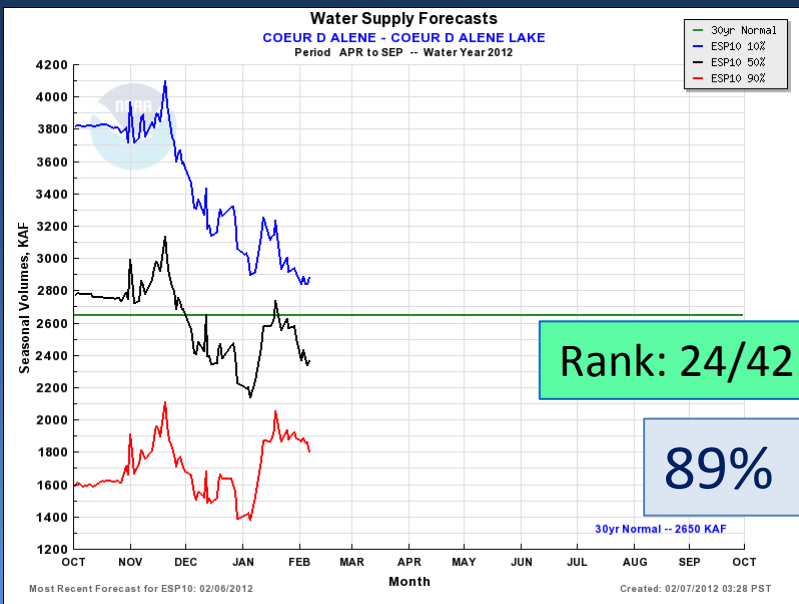
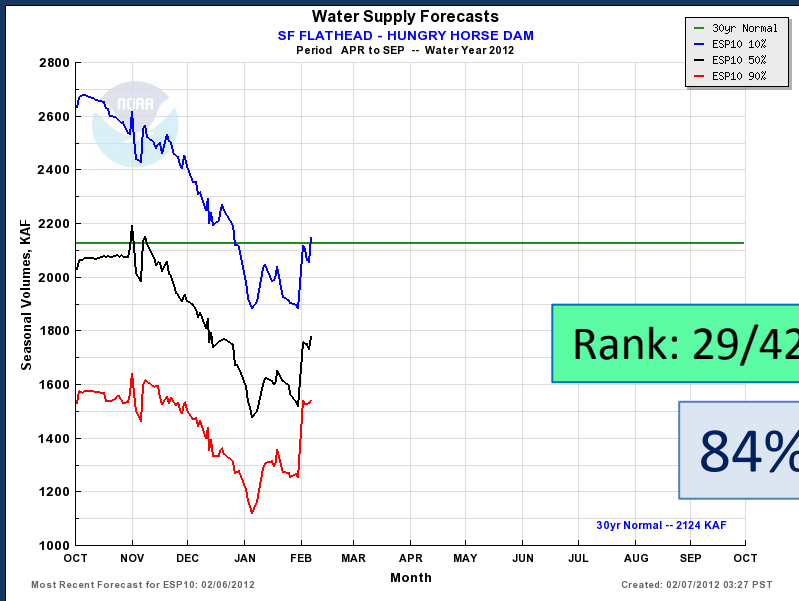
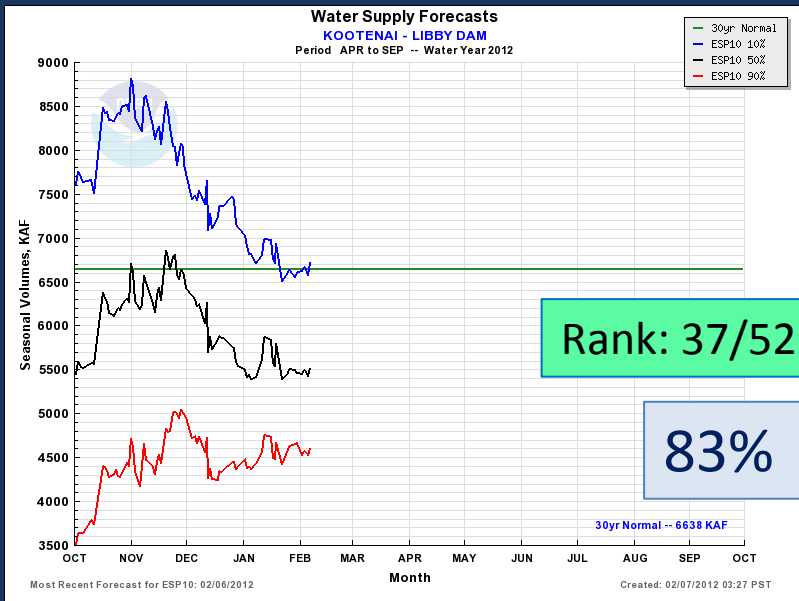
Forecasts include 10 days of
forecast precipitation

Model States/Snow/Runoff
updated continuously through
month

Compared to 30 yr Runoff Normal
(1971-2000)

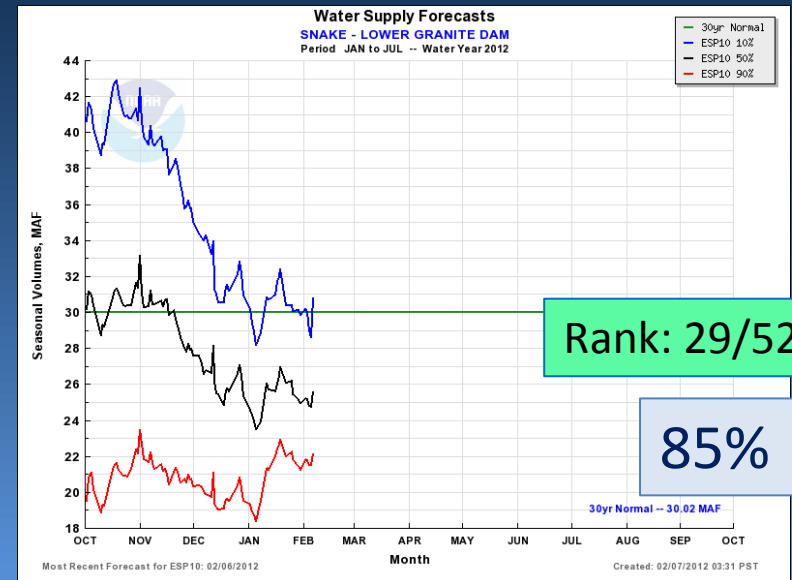
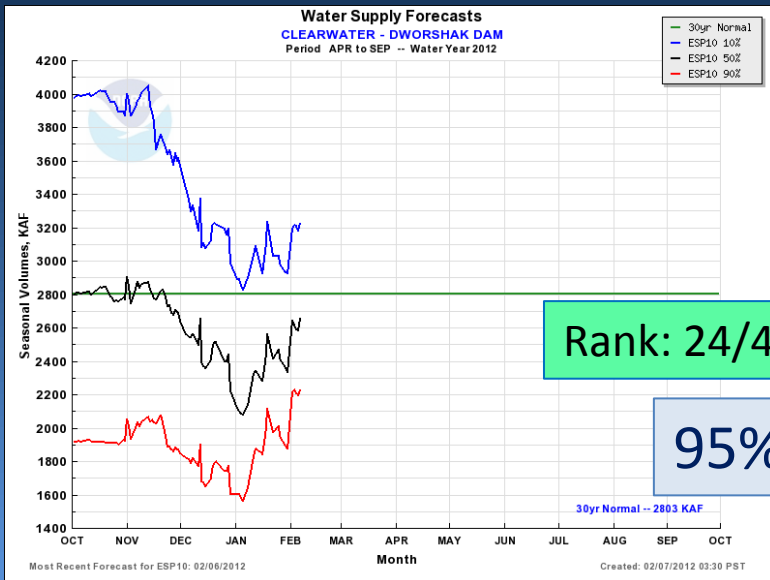
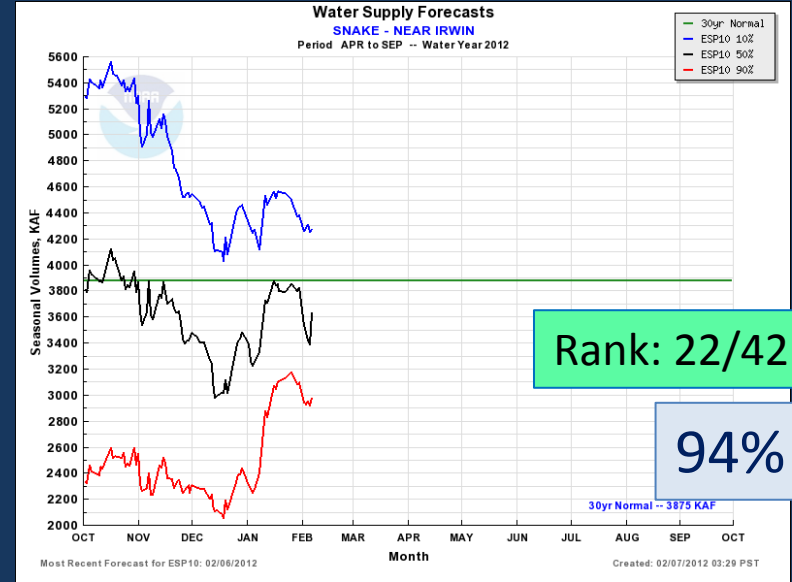
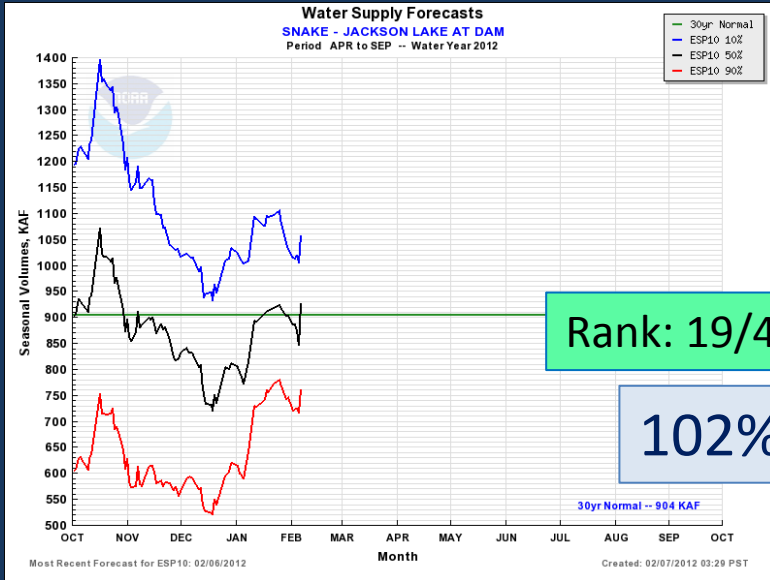


Water Supply Forecast: Upper Columbia



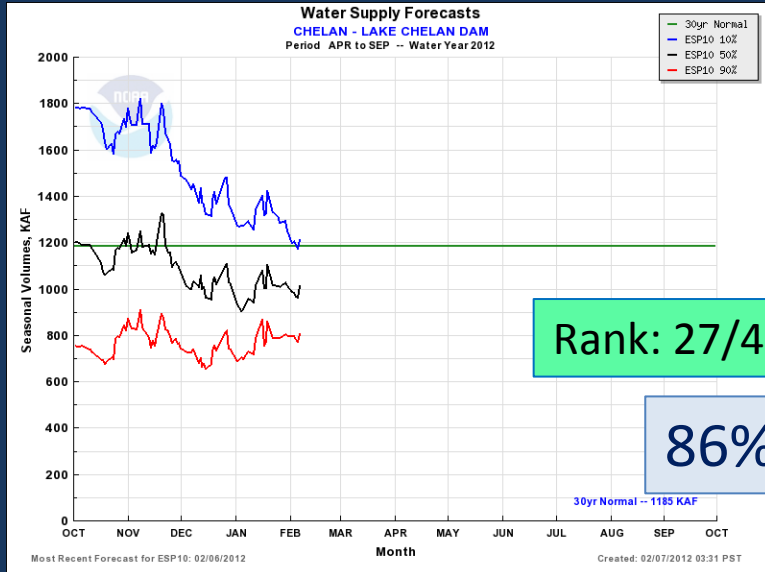


Water Supply Forecast: Snake



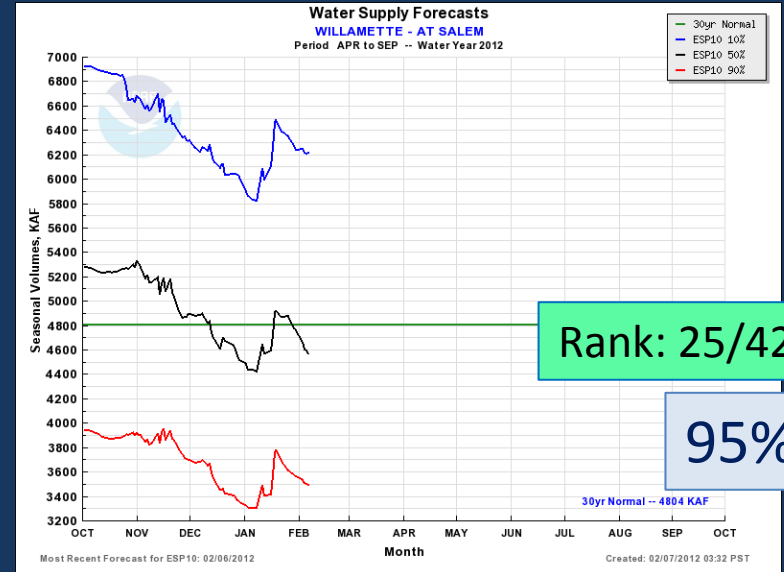


Water Supply Forecast: Lower Columbia



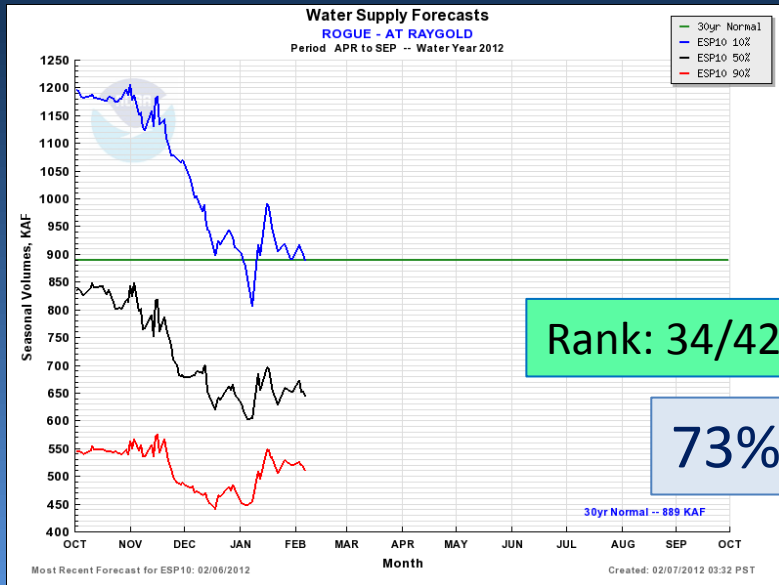
Rank: 27/42

86%



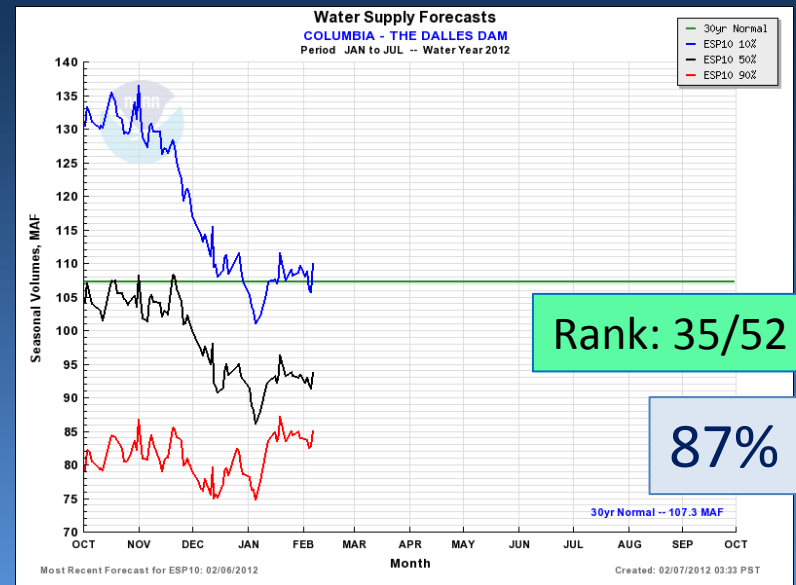
Rank: 25/42

95%



Rank: 34/42

73%



Rank: 35/52

87%



NWRFC Water Supply Webpage

http://www.nwrfc.noaa.gov/water_supply/ws_schd.cgi



Schedule for *Live Water Discussion*

Jan	Feb	Mar	Apr	May	Jun
10	8	8	9	8	8