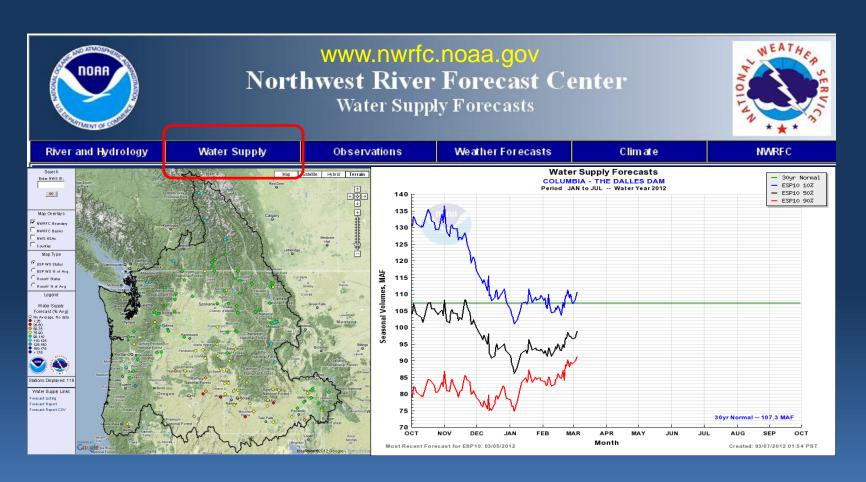
### March 2012 Water Supply Briefing

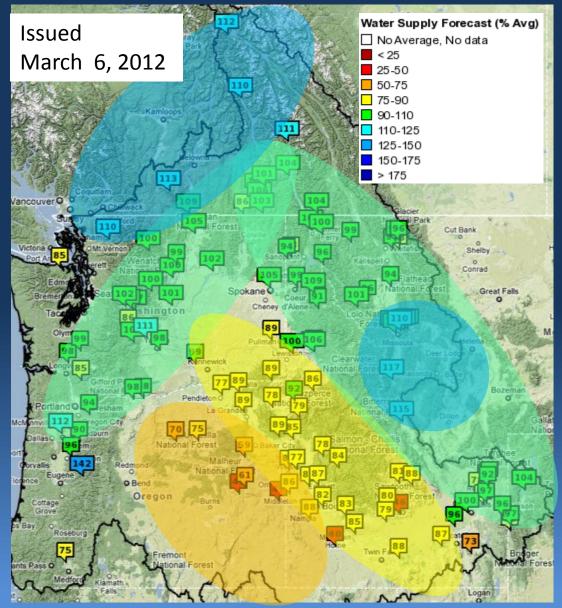


Steve King, NWRFC Stephen.King@noaa.gov (503)326-7291



## Water Supply Summary





Most Apr-Sep forecasts are near or below normal

Most forecasts are slightly larger than those issued on Feb 7<sup>th</sup>.

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 and Clark Fork in western Montana



### **Observed Conditions**



Precipitation

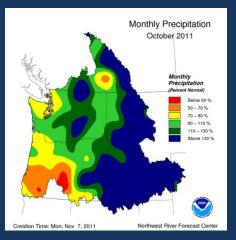
Snowpack

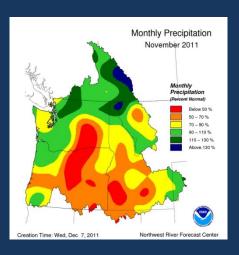
Runoff

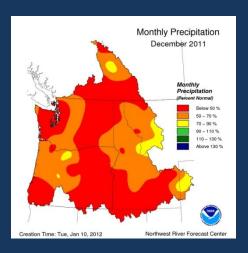


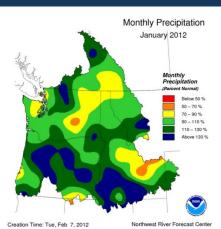
### **Observed Monthly Precipitation**

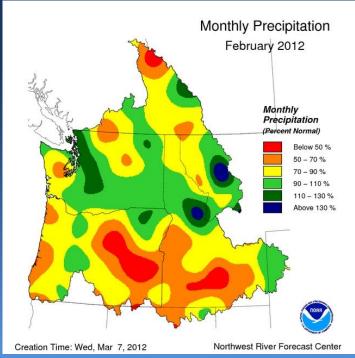










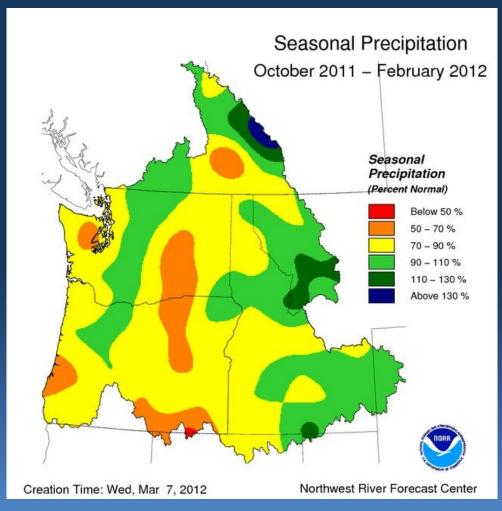


Observed
February Precipitation
above Grand Coulee = 85%
above Ice Harbor = 83%
above The Dalles = 86%



### **Observed Seasonal Precipitation**





Observed Oct 1-February 29 Precipitation

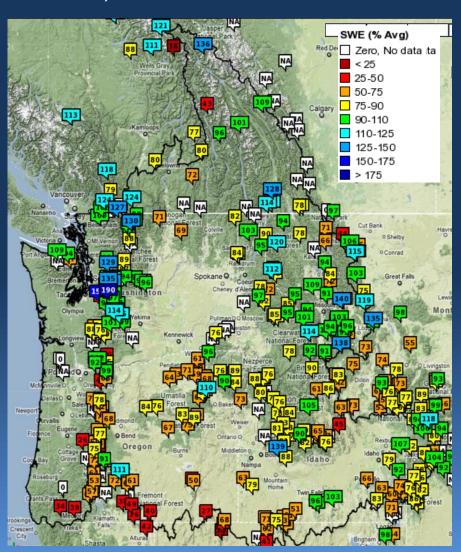
above Grand Coulee = 92% above Ice Harbor = 93% above The Dalles = 94%



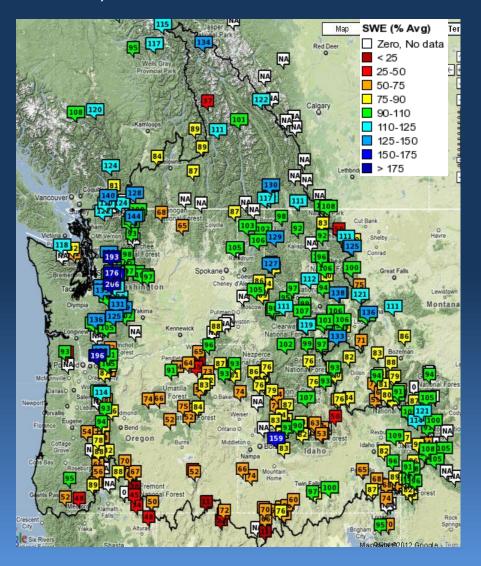
## **Current Snow Conditions**



Feb 7, 2012



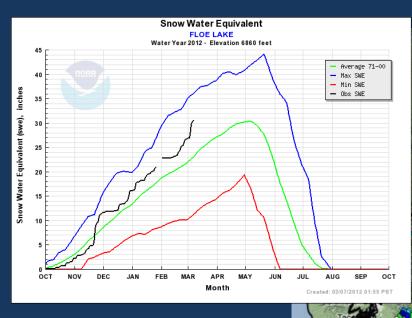
Mar 7, 2012

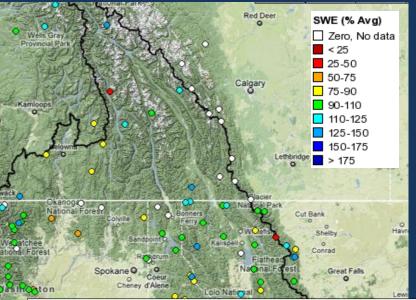


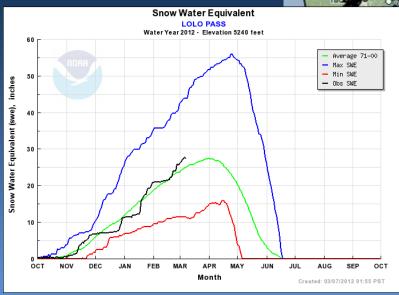


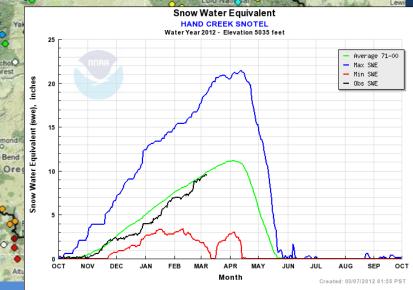
### **Upper Columbia Snow Conditions**







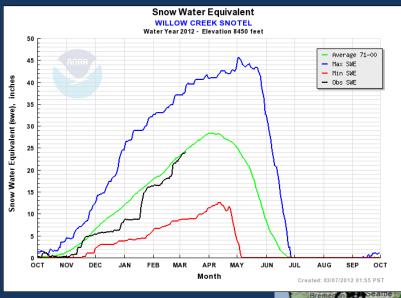


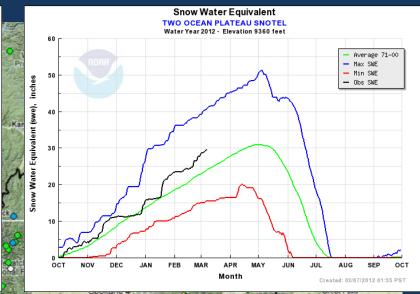


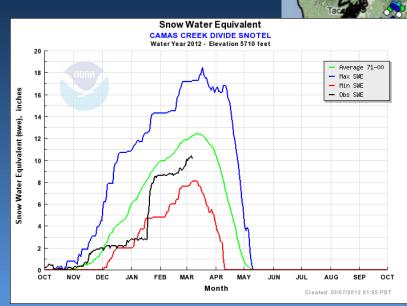


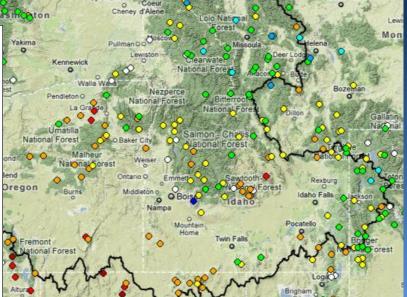
### **Snake River Snow Conditions**



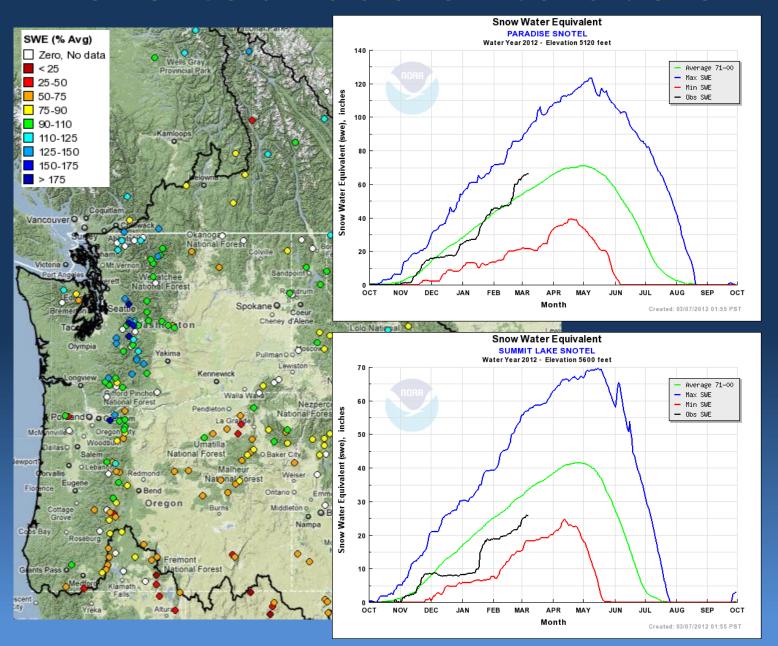








### **Lower Columbia Snow Conditions**





### **Future Conditions**



**Climate Outlooks** 

10 Day Precipitation Forecast

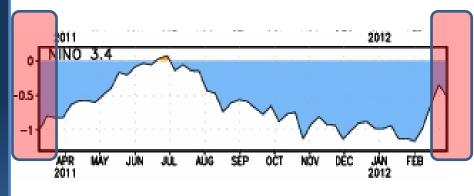
Water Supply Forecasts

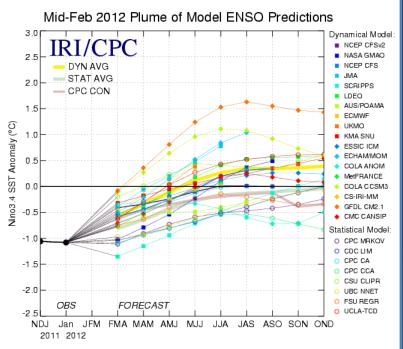


## Enso: Observed and Forecast SST Anomaly (Deg C)



Latest observed: SST 3.4 ~ -0.5 Deg C





CPC Synopsis: La Niña expected to transition to neutral conditions this Mar-May

Source: Climate Prediction Center Weekly ENSO Update

http://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/lanina/enso\_evolution-status-fcsts-web.pdf



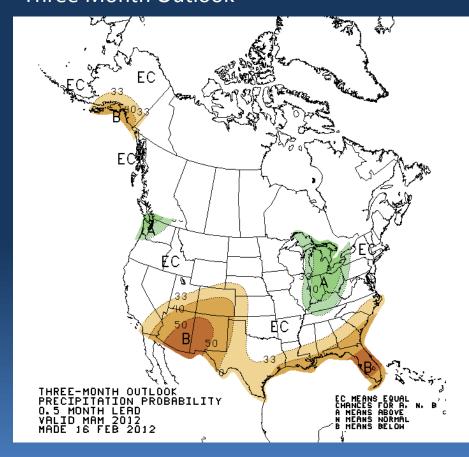
### Climate Outlook: Precipitation



### **Current Month Outlook**

# ONE-MONTH OUTLOOK PRECIPITATION PROBABILITY O.O MONTH LEAD VALID MAR 2012 MADE 29 FEB 2012

### Three Month Outlook





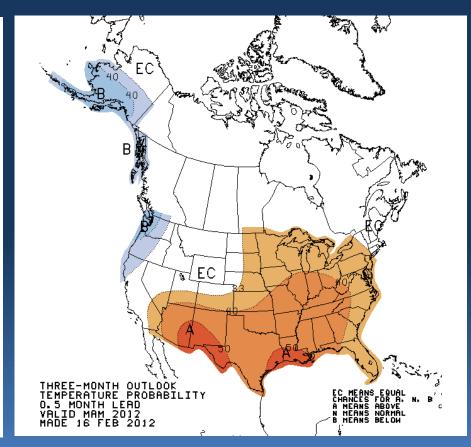
### Climate Outlook: Temperature



### **Current Month Outlook**

## ONE-MONTH OUTLOOK TEMPERATURE PROBABILITY O.O MONTH LEAD VALID MAR 2012 MADE 29 FEB 2012

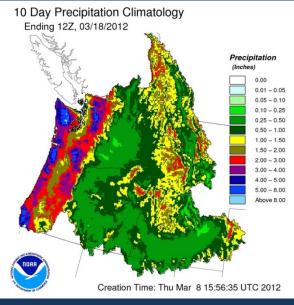
### Three Month Outlook

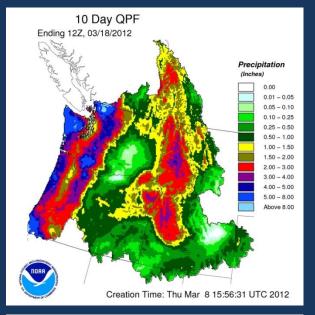




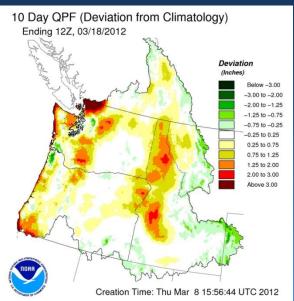
### **ESP 10 Day Precipitation Forecast**

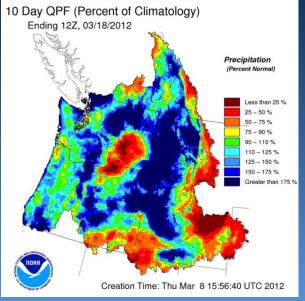






Today's Forecast (applies to Mar 8<sup>th</sup> ESP ensemble date)



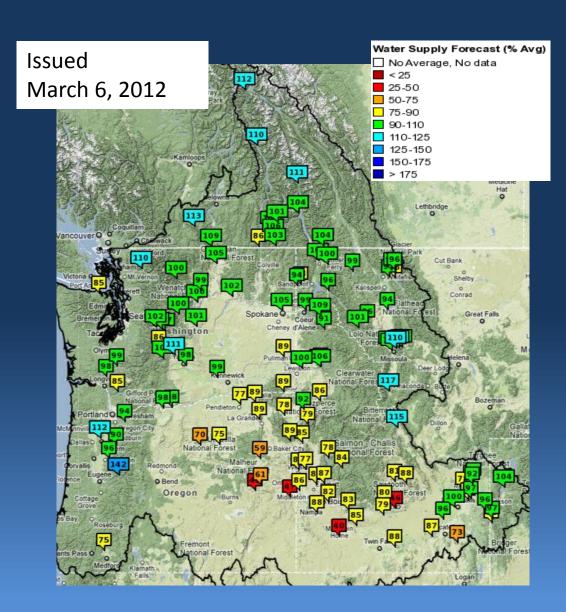


Work in progress to make these plots available on web



## Water Supply Forecasts





Ensemble Streamflow Procedure

Mar 6<sup>th</sup> Issuance Date

Mar 5<sup>th</sup> Ensemble Date

Forecasts updated weekly/daily All forecasts are 'official'

NWRFC Forecasts
Agency Collaborated

Forecasts include 10 days of forecast precipitation

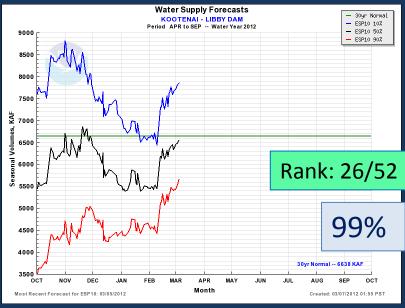
Model States/Snow/Runoff updated continuously through month

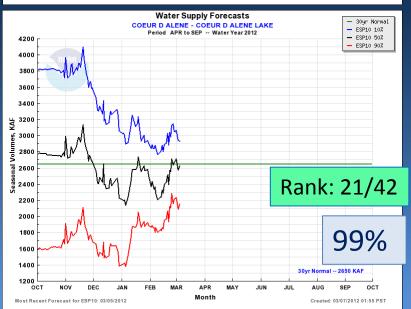
Compared to 30 yr Runoff Normal (1971-2000)

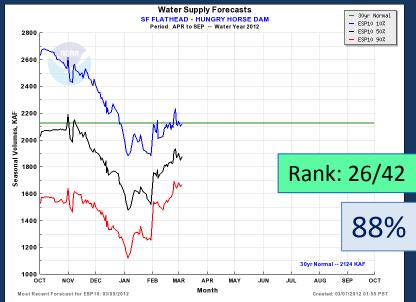


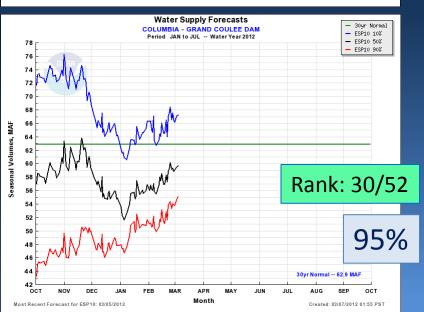
### Water Supply Forecast: Upper Columbia









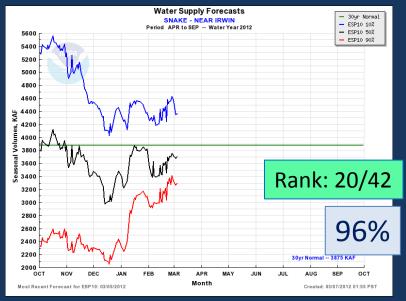


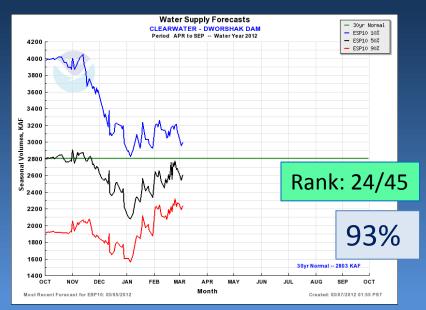


### Water Supply Forecast: Snake







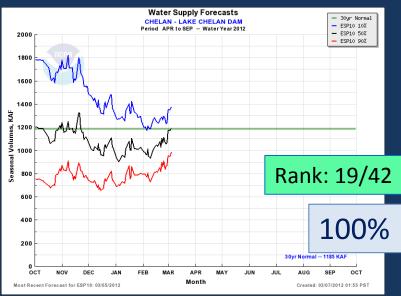


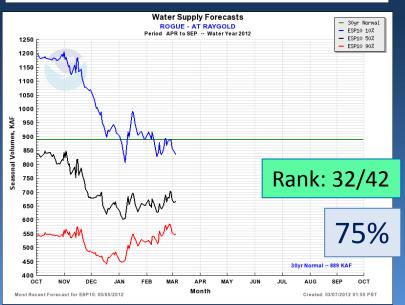


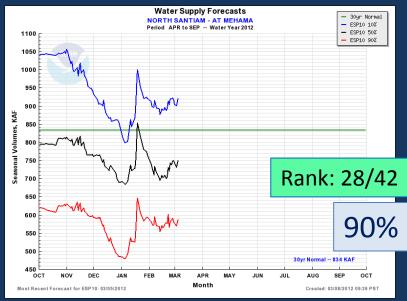


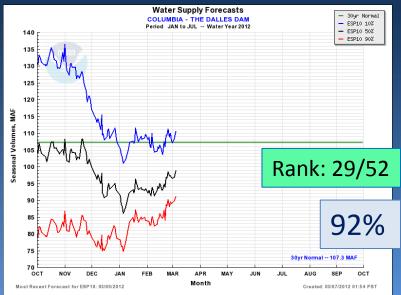
### Water Supply Forecast: Lower Columbia













### **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

April webinar date subject to change...please check webpage for update!!