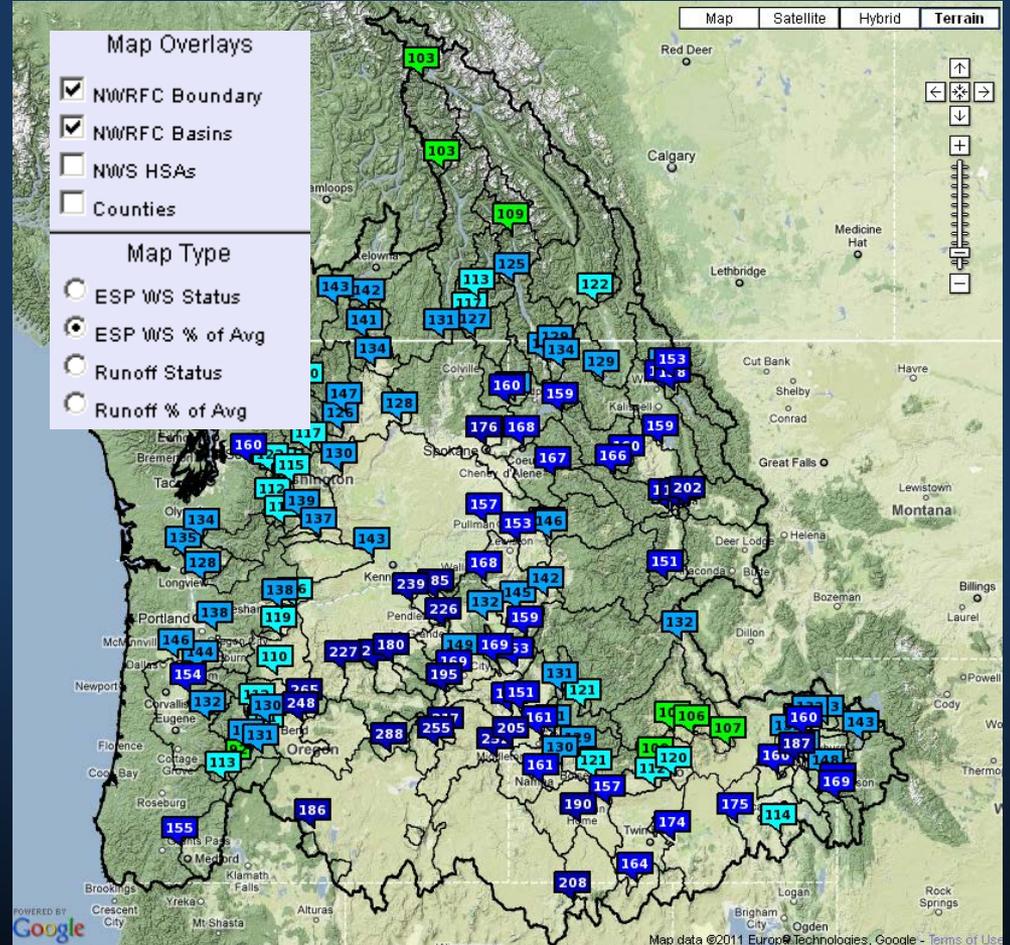
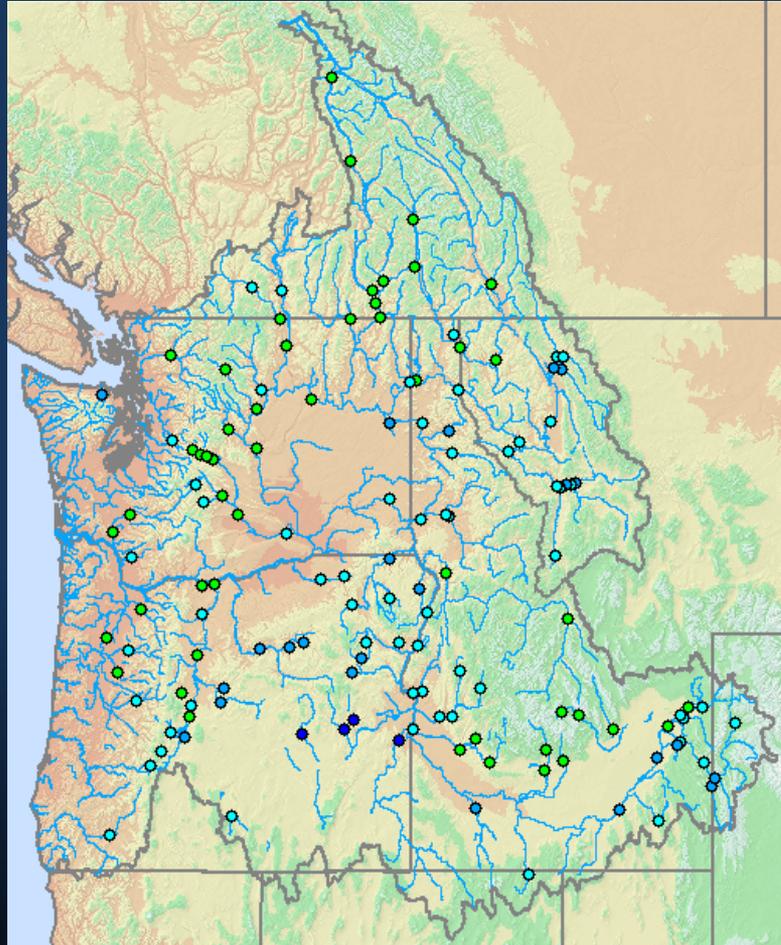




# NWRFC Water Supply Directions for 2012+



Northwest River Forecast Center  
Steve King



# 2011 Water Supply Web Product



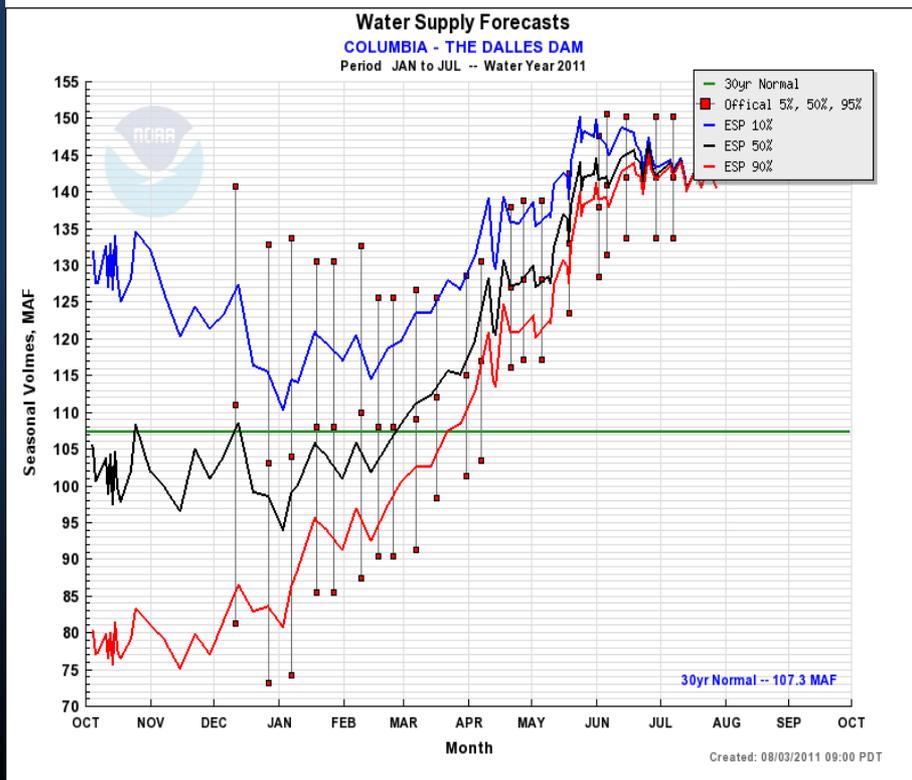
## COLUMBIA - THE DALLES DAM (TDA03)

Forecasts for Water Year 2011

**Official Water Supply Forecast** *Issued: 2011-07-28* **ESP Water Supply Forecast** *Issued: 2011-07-28*

Forecast Period	Forecasts Are in KAF				Forecasts Are in KAF				30 Year Normal
	95 %	50 %	% Normal	05 %	90 %	50 %	% Normal	10 %	
APR-SEP	127730	136000	138	144270	135018	135837	138	138576	98650
APR-JUL	108730	117000	138	125270	115278	115278	136	115278	84650
APR-AUG	119730	128000	138	136270	128081	128502	138	129573	93090
<b>JAN-JUL</b>	<b>133730</b>	<b>142000</b>	<b>132</b>	<b>150270</b>	<b>140530</b>	<b>140530</b>	<b>131</b>	<b>140530</b>	<b>107300</b>

Move the mouse over the desired "Forecast Period" to display a graph.



## LEGACY

Official Water Supply Forecast

Legacy Regression + Coordination

## SWS

New Statistical Water Supply

Batch Run

Unpublished

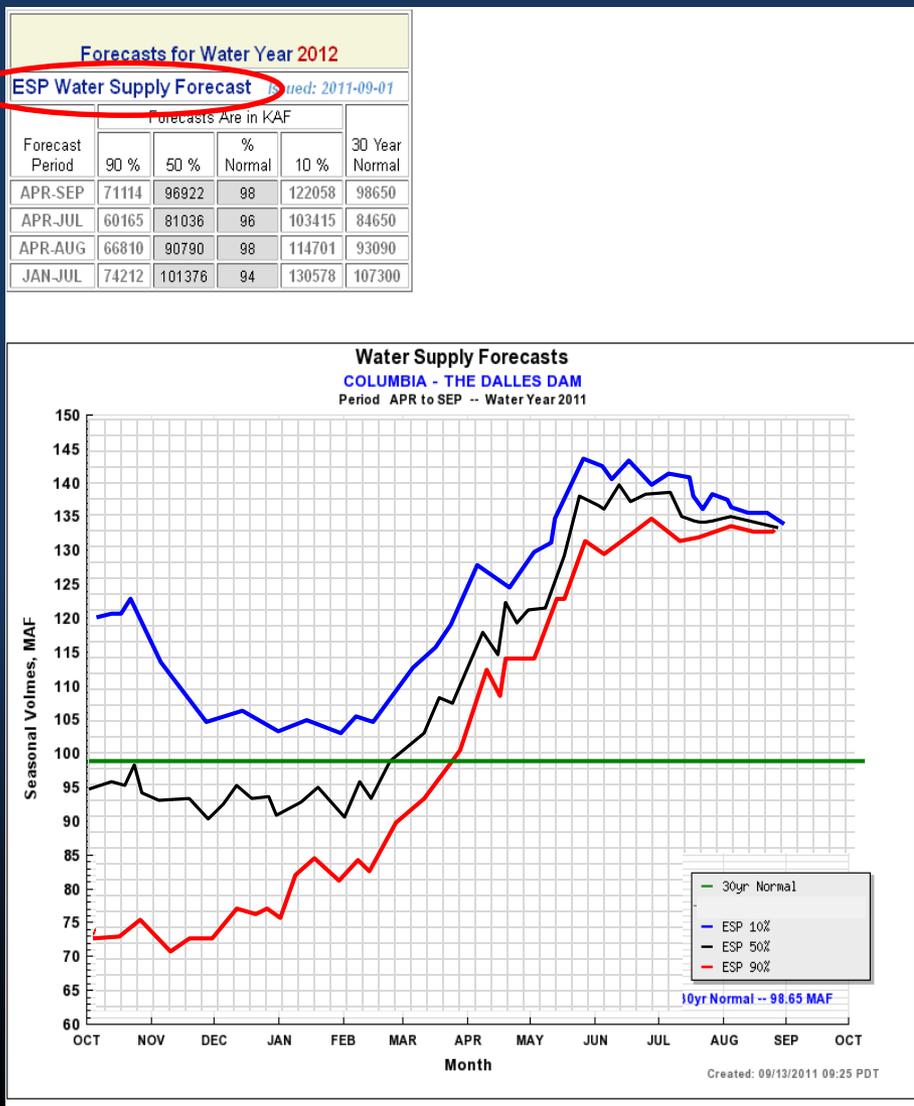
## ESP

Ensemble Streamflow Procedure

Hydrologic Model Approach



# 2012 Water Supply Web Product



## ESP - OFFICIAL

- Published weekly, throughout year (at a minimum)
- *Not formally coordinated*

## LEGACY

- Run in raw/batch mode
- *Unpublished*
- Serves as internal guidance and as backup, if needed

## SWS

- Run in raw/batch mode
- *Unpublished*
- Likely to replace LEGACY role in 2013



# Motivation for Change



**NWS has huge investment in CHPS (Community Hydrologic Prediction System) and its techniques (ESP).**

- NWRFC future is in advancing CHPS/ESP where we see huge potential to improve our overall forecasting skill (including water supply).

**Other federal agencies have mature regression models; There is no need to duplicate that effort.**

- Multiple models are useful for user community.
- NWRFC is funding research to investigate multi-model approach to forecasting.

**From a resource point of view, maintaining multiple models is a challenge.**

- NWRFC wants to focus efforts on making primary technology the best it can be.



# Implications for Customers

**ESP numbers are not formally coordinated.**

- Forecasts will reflect model output

**The release schedule and definitions will change.**

- The NWRFC will discontinue the Final/Early Bird/Mid Month
- ESP Published weekly throughout year (usually Tuesdays)
- NWRFC reserves the right to update at any time
- Daily ESP releases are a consideration

**LEGACY Text products (summary and contingency) will be discontinued and possibly replaced with ESP equivalents.**

**Network of water supply locations maybe reduced or changed (should have little impact on major points).**

**Likely changes to NWS/NRCS Westwide publication.**



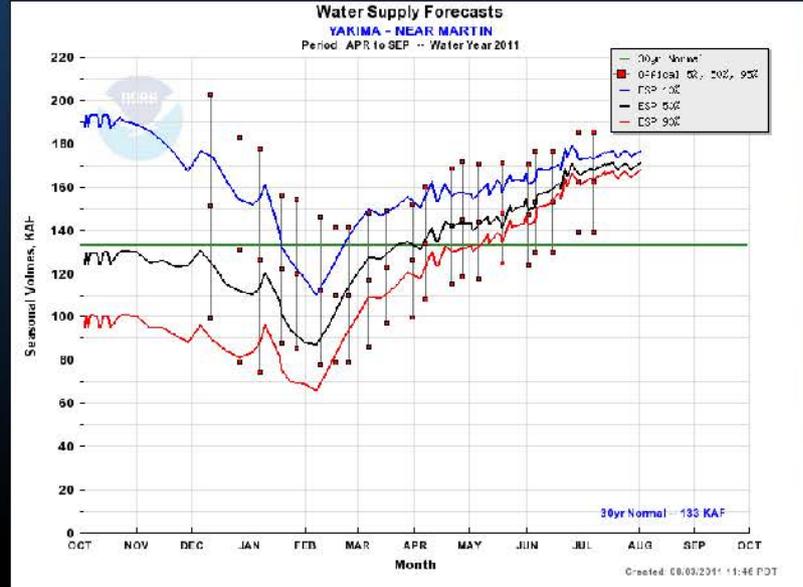
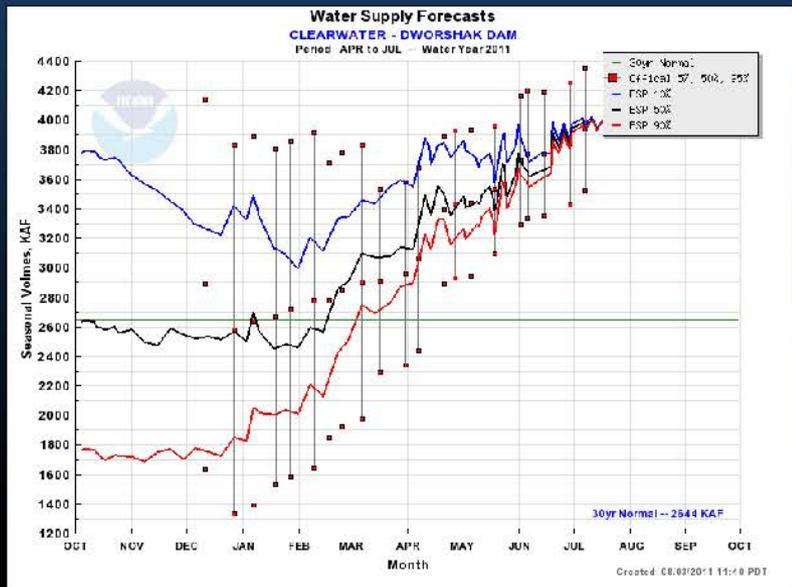
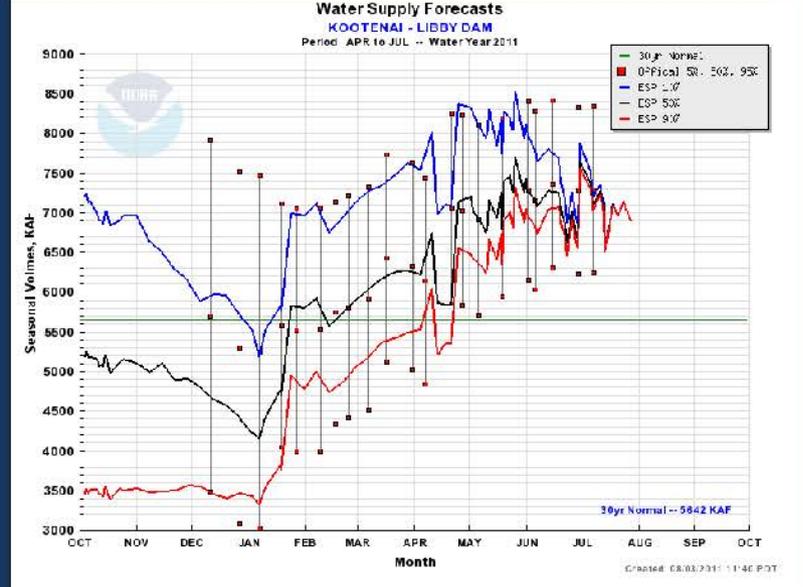
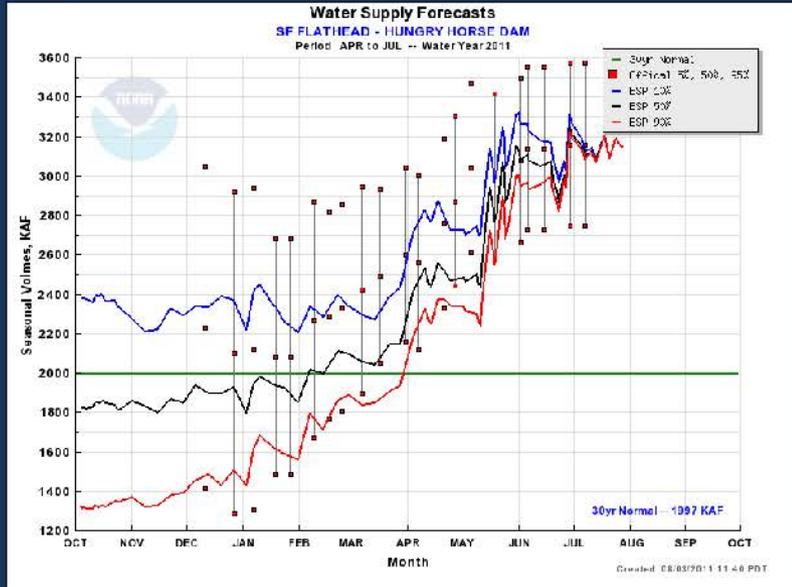
# Potential Enhancements



- 0, 3, and 10 day QPF
- Incorporation of climate signals
- Research into doing a better job accounting for model uncertainty
- Research into developing tools to help select best multi-model forecast.

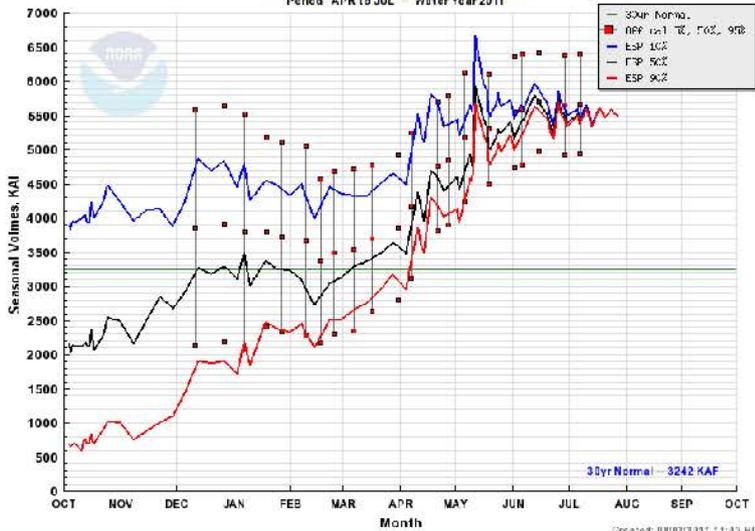


Questions?

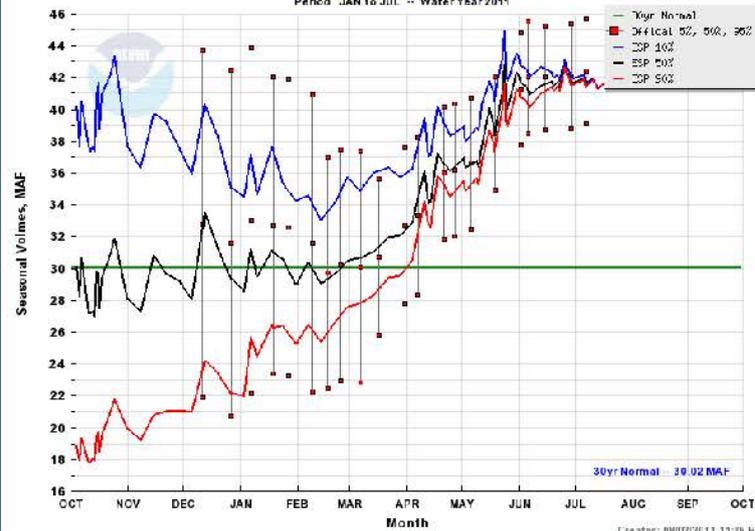




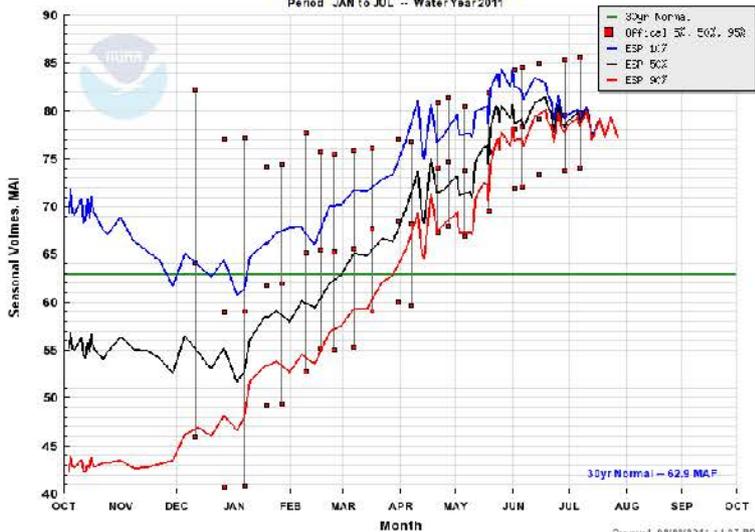
**Water Supply Forecasts**  
**Snake - AT AMERICAN FALLS DAM**  
 Period: APR to JUL -- Water Year 2011



**Water Supply Forecasts**  
**Snake - LOWER GRANITE DAM**  
 Period: JAN to JUL -- Water Year 2011



**Water Supply Forecasts**  
**Columbia - GRAND COULEE DAM**  
 Period: JAN to JUL -- Water Year 2011



**Water Supply Forecasts**  
**Columbia - THE DALLES DAM**  
 Period: JAN to JUL -- Water Year 2011

