



March 2018 Water Supply Briefing

National Weather Service / Northwest River Forecast Center

Telephone Conference : 1-914-614-3221

Pass Code : 619-465-763

Audio PIN provided when logging into the webinar and will be required if you wish to ask questions at the end of presentation

2018 Briefing Dates:

March 1 - 10am Pacific Time

April 5 - 10am Daylight Savings Time

May 3 - 10am Daylight Savings Time

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Water Supply Forecast Briefing Outline



- **Observed Conditions WY2018:**

- Precipitation
- Temperature
- Snowpack
- Runoff

Hydrologic
model states

- **Future Conditions:**

- 10 days of quantitative forecast precipitation (QPF)
- 10 days of quantitative forecast temperature (QTF)
- Historical climate forcings appended thereafter
- Climate Outlook (NOAA/NWS/CPC)

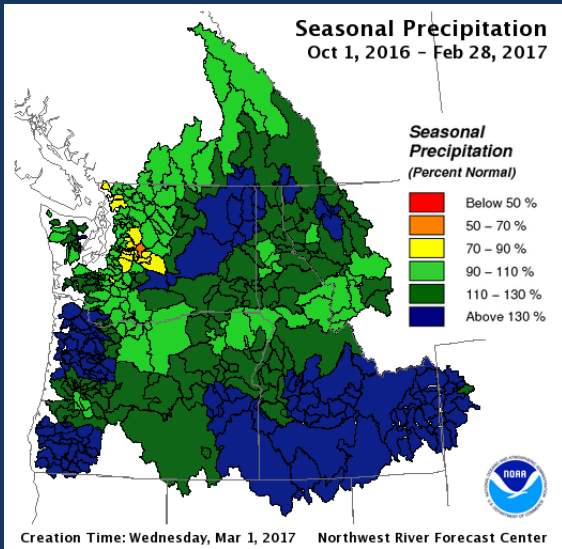
- **Summary**

Climate
Forcings



Observed Seasonal Precipitation

Water Year 2017 / 2018 Comparison



DIVISION NAME

**WY2017
% Norm**

**WY2018
% Norm**

Columbia R abv
Grand Coulee

115

109

Snake R abv
Ice Harbor

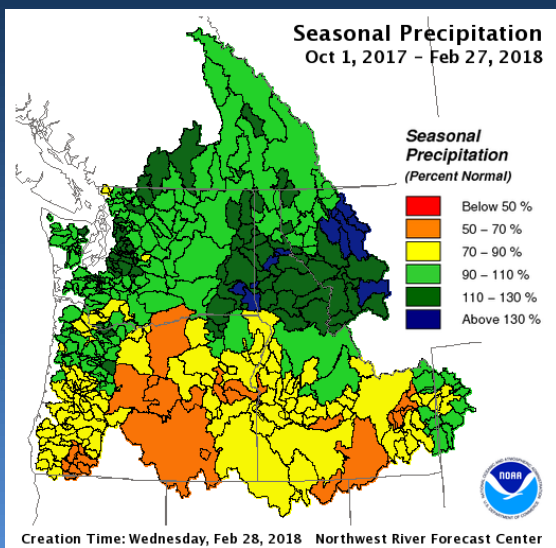
136

91

Columbia R abv
The Dalles

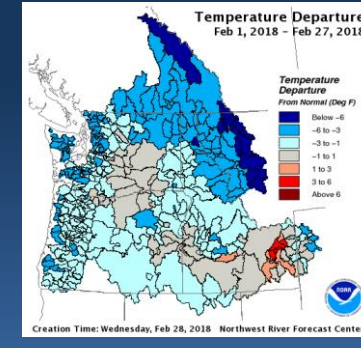
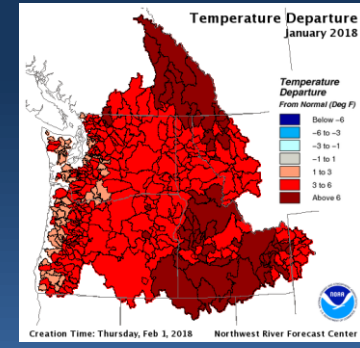
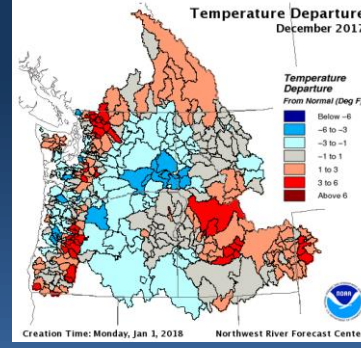
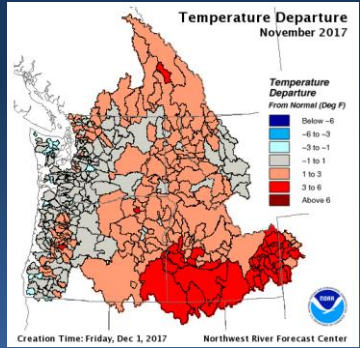
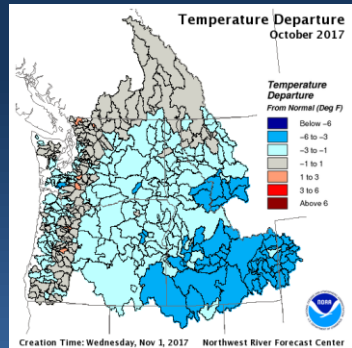
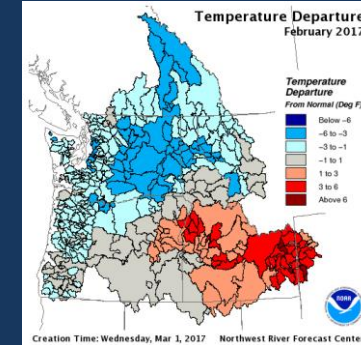
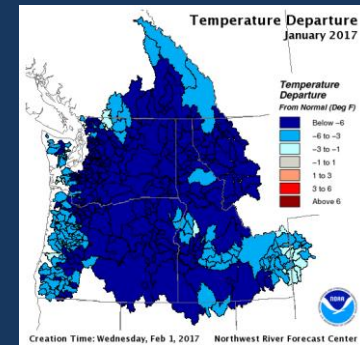
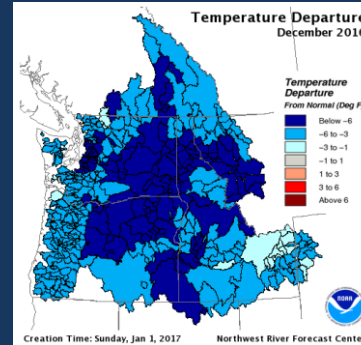
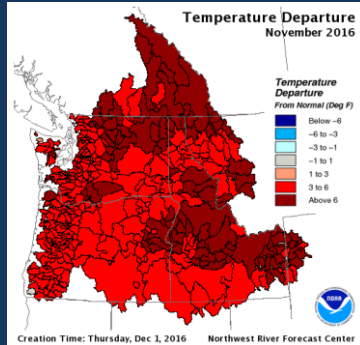
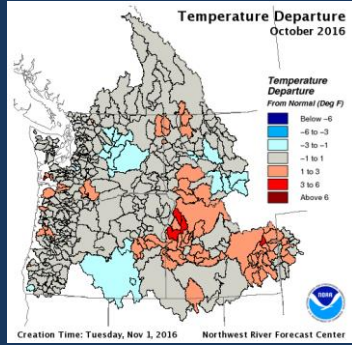
119

100





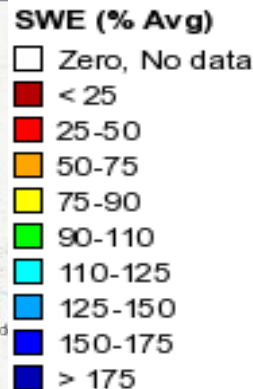
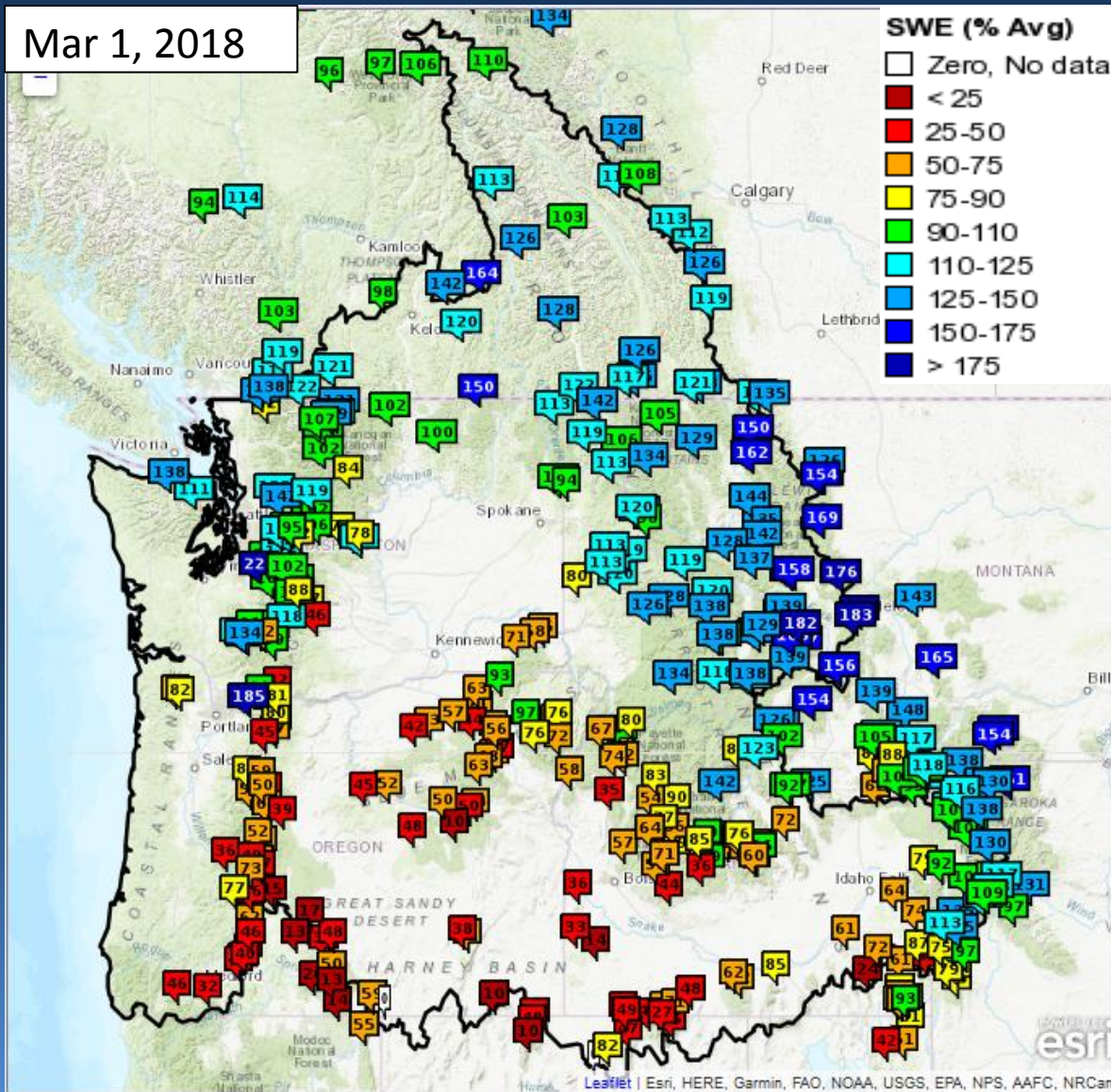
Monthly Temperature Departure from Normal Water Year 2017 / 2018 Comparison



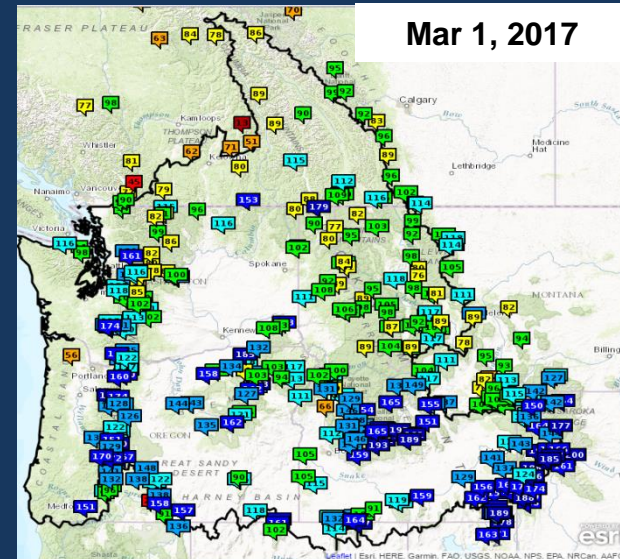
Snowpack Summary

Water Year 2017 / 2018 Comparison - % of Normal

Mar 1, 2018



Mar 1, 2017

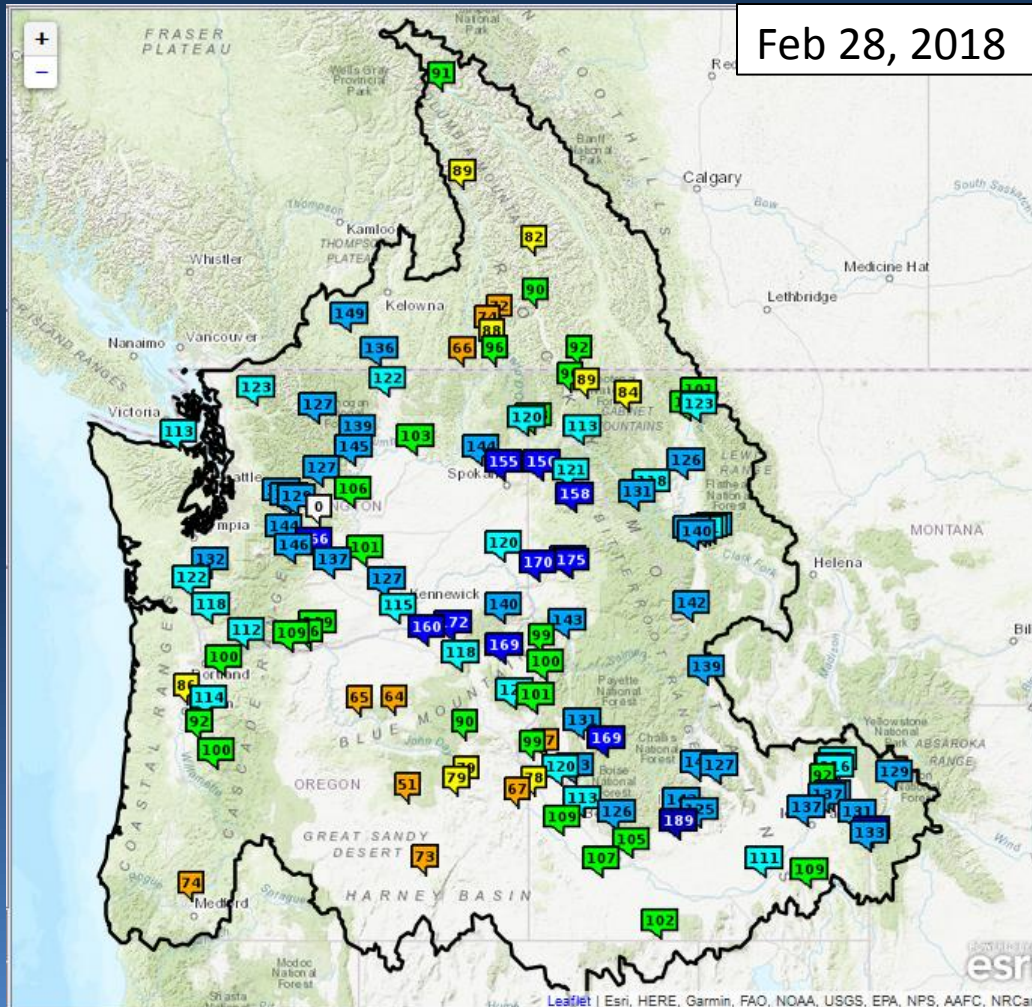


Basin %SWE 2018	Feb1	Feb28
Flathead	123	141
Upr Clark Fk	137	158
Bitterroot	114	132
<hr/>		
Snake abv Palisades	112	119
Big/Little Wood	74	72
Big/Little Lost	87	84
Weiser, Payette, Boise	78	77
Clearwater, Salmon	105	114
Owyhee, Malheur	43	41
Grand Ronde, Powder		
Burnt, Imnaha	66	69
<hr/>		
Willamette	49	61



Current Adjusted Runoff Conditions

Water Year 2018



Percent of Normal
Oct 1– Feb 27

UPPER COLUMBIA BASIN

MICA	+91
DUNCAN	+81
QUEENS BAY	+90
LIBBY	+90
HUNGRY HORSE	+124
GRAND COULEE	+104

SNAKE RIVER BASIN

JACKSON LAKE	-129
PALISADES	-131
DWORSHAK	+149
LOWER GRANITE	+120

LOWER COLUMBIA BASIN

THE DALLES	+109
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Water Supply Forecast Briefing Outline

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Hydrologic
model states

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- Historical climate forcings appended thereafter
- Climate Outlook

Climate
Forcings

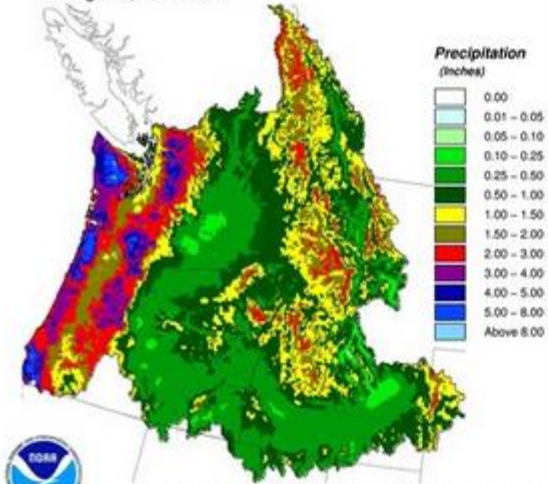
- Summary**

Cumulative 10 Day Precipitation Forecast

02/27/2018 – 03/09/2018

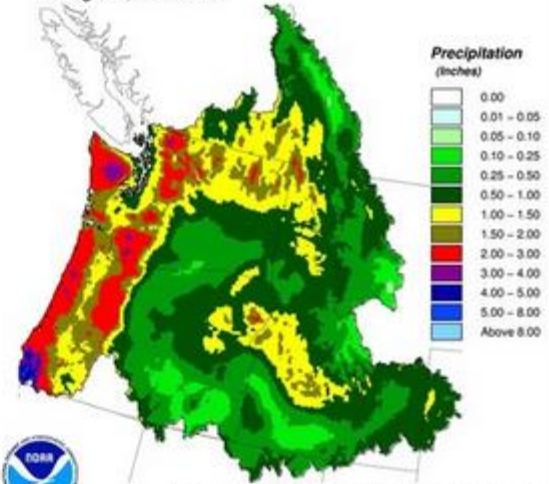
10 Day Forecast Precipitation: Volume Analysis

10 Day Precipitation Climatology
Ending 12Z, 03/09/2018



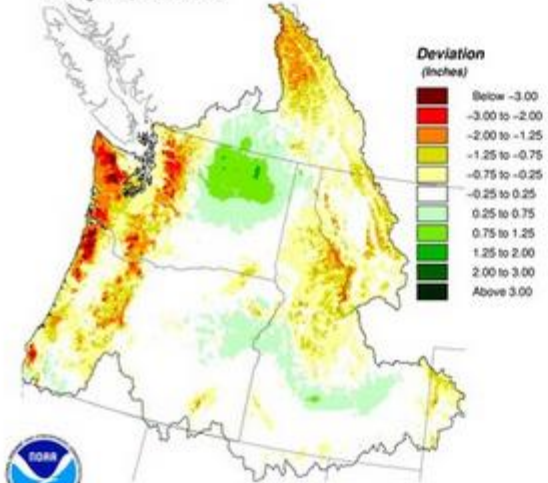
Creation Time: Tue Feb 27 15:40:18 UTC 2018

10 Day QPF
Ending 12Z, 03/09/2018



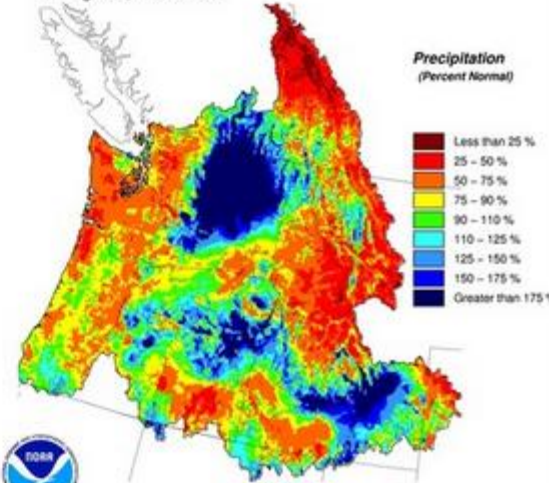
Creation Time: Tue Feb 27 15:40:13 UTC 2018

10 Day QPF (Deviation from Climatology)
Ending 12Z, 03/09/2018



Creation Time: Tue Feb 27 15:40:30 UTC 2018

10 Day QPF (Percent of Climatology)
Ending 12Z, 03/09/2018



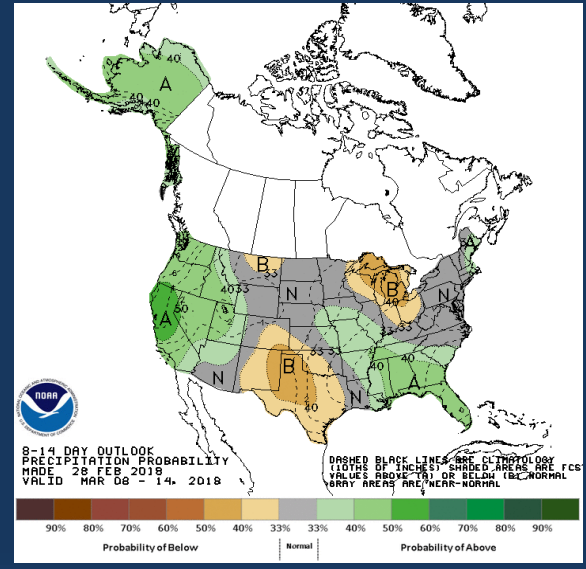
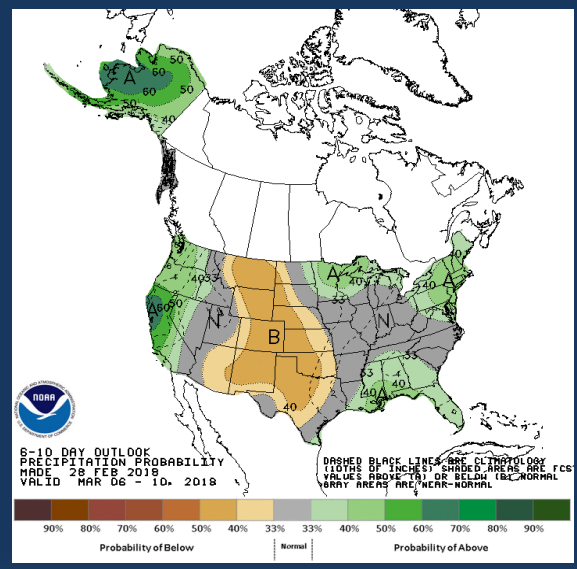
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CPC Climate Outlook

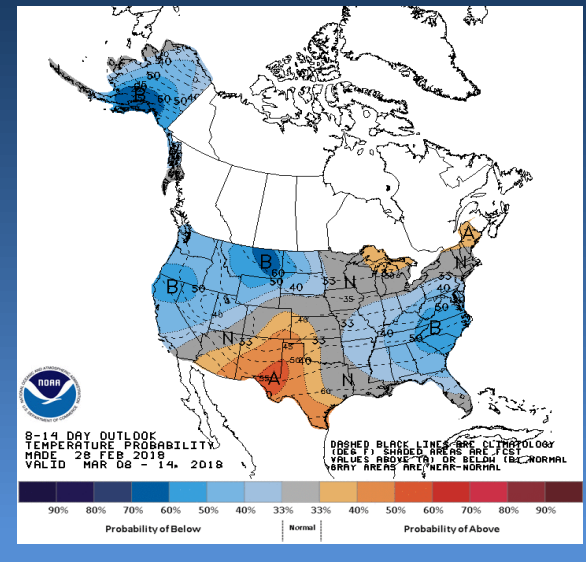
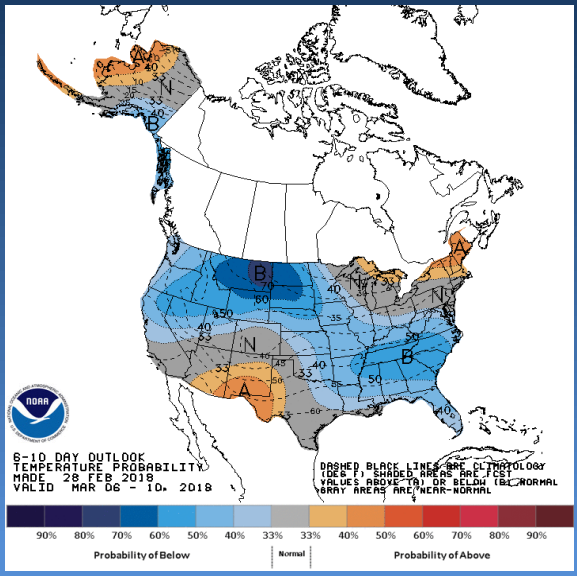
6 – 10 Day Outlook

8 – 14 Day Outlook

Precipitation



Temperature





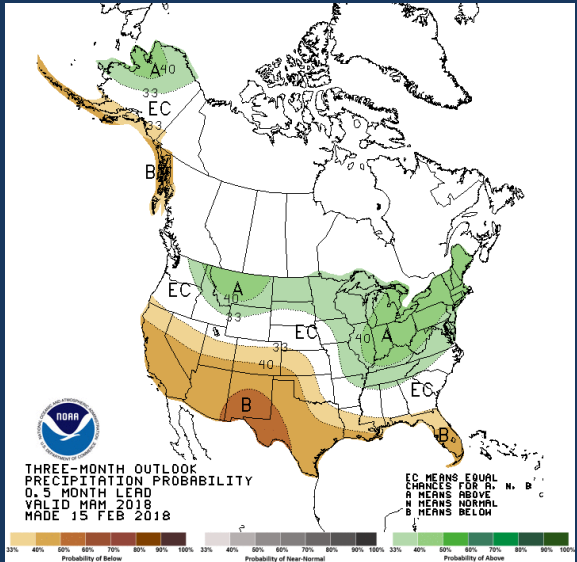
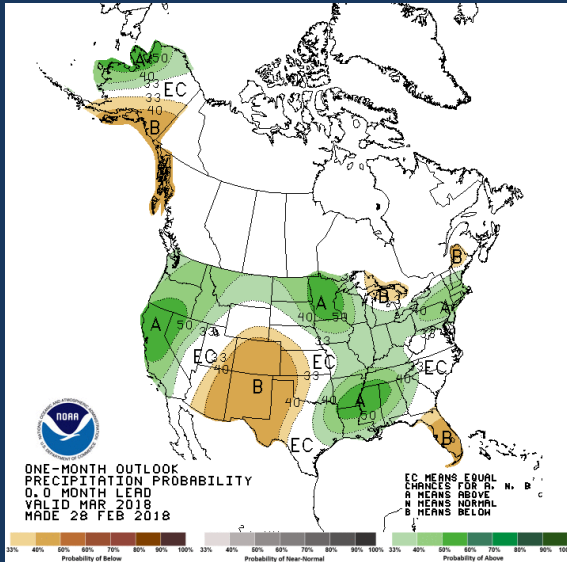
CPC Climate Outlook



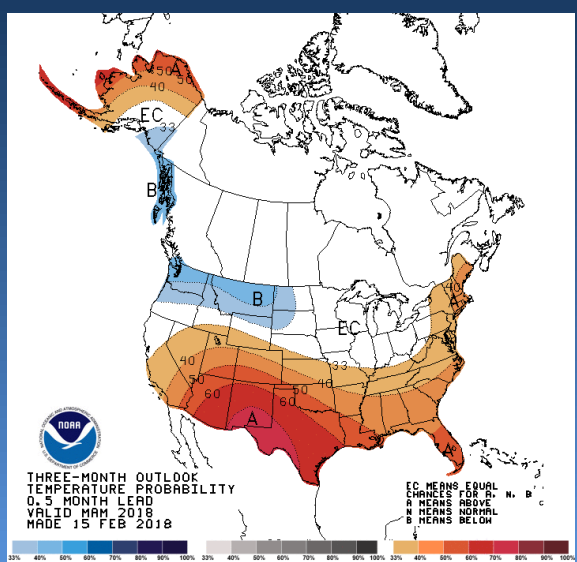
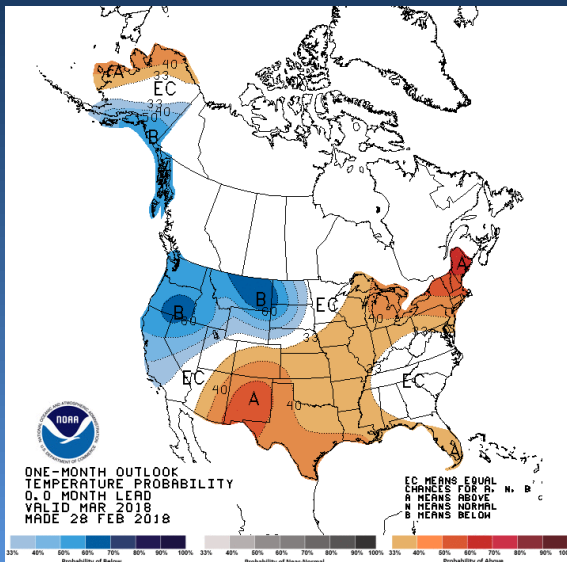
Current Month Outlook

Three Month Outlook - MAM

Precipitation



Temperature



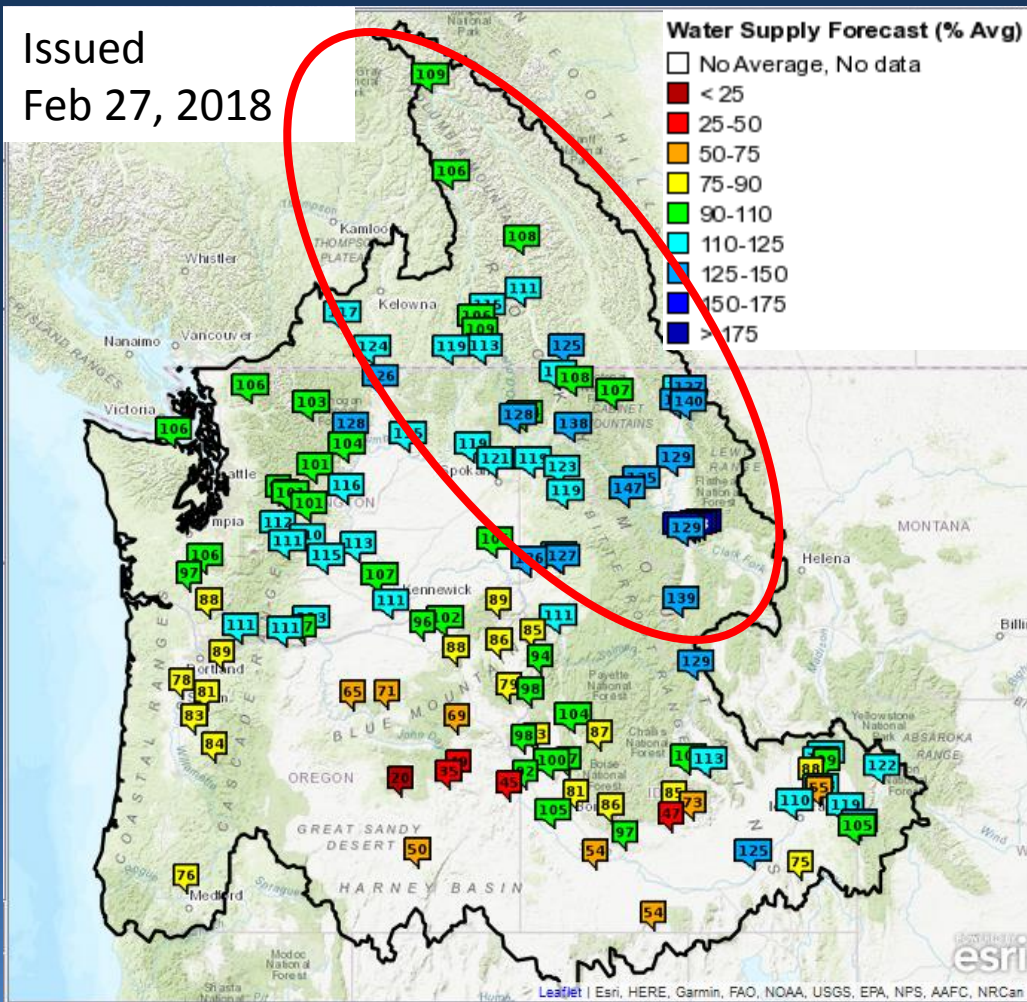


ESP10 Apr-Sep Water Supply Forecasts

Upper Columbia Basin – abv Grand Coulee



Issued
Feb 27, 2018



<u>Basin</u>	<u>% 30 yr Normal</u>
Columbia River - Mica Dam	109%
Kootenai River - Libby Dam	107%
Coeur d'Alene River - Coeur d'Alene Lake	119%
SF Flathead River - Hungry Horse Dam	140%
Clark Fork River - Above Missoula	178%
Bitterroot River - Above Missoula	132%
Pend Oreille River Albeni Falls Dam	128%
Columbia River - Grand Coulee Dam	115%

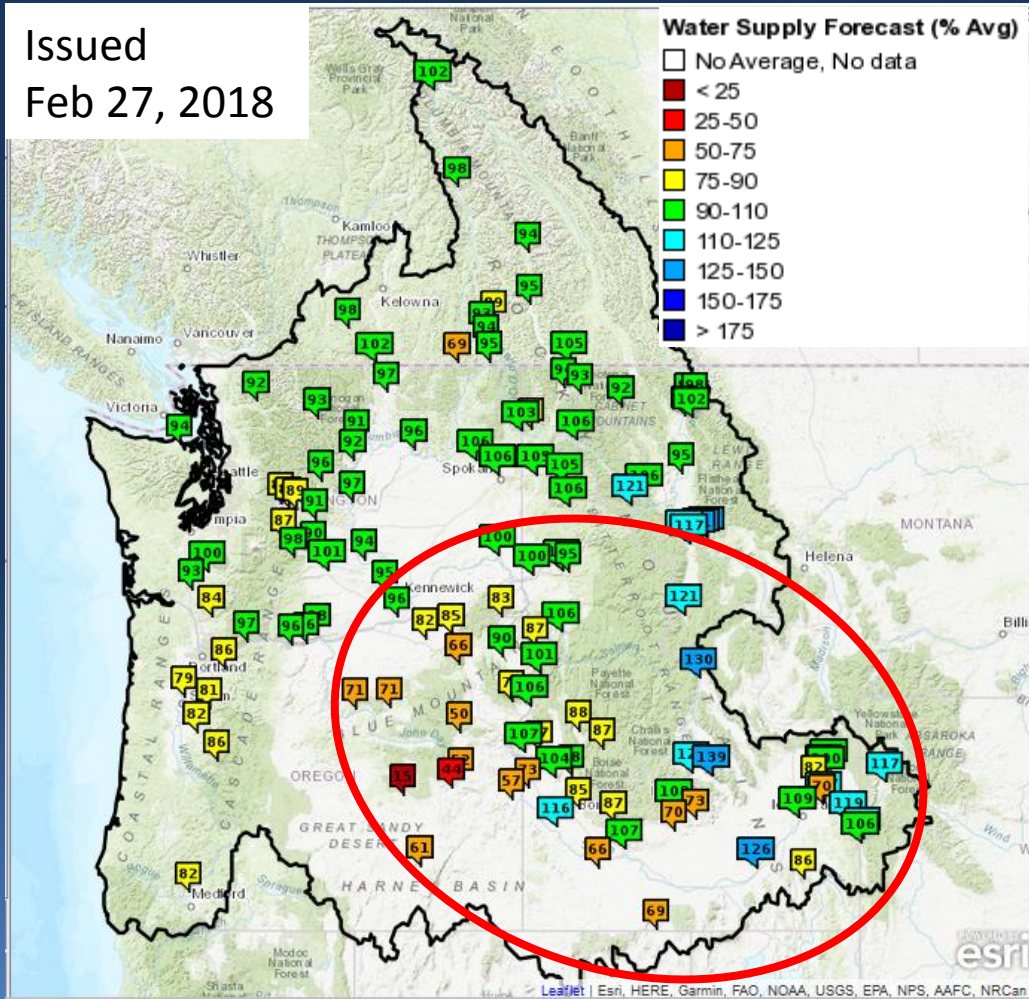


ESP10 Apr-Sep Water Supply Forecasts

Snake River Basin and Columbia Mainstem



Issued
Feb 27, 2018



<u>Basin</u>	<u>% 30 yr Normal</u>
Upper Snake River	
- Jackson Lake Dam	122%
- Palisades Dam	119%
- at Heise	118%
Middle Snake Tribs	
- Lucky Peak Dam	81%
- Owyhee Dam	45%
- Bruneau R nr Hot Springs	53%
NF Clearwater River	
- Dworshak Dam	119%
Lower Snake River	
- Lower Granite Dam	106%
Lower Columbia	
- The Dalles Dam	111%



ESP10 Apr-Sep Water Supply Forecasts

ESP Natural - Western Oregon and Washington



Feb 27, 2018



<u>Basin</u>	<u>% 30 yr Normal</u>
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Skagit River	
- near Concrete	108%

Green River	
- Howard Hanson Res	95%

Cowlitz River	
- Mossyrock Reservoir	104%
- Mayfield Reservoir	104%

North Santiam	
- At Mehama	83%

Willamette River	
- At Salem	75%

Rogue River	
- Applegate Reservoir	66%



Summary



Water Year 2018 Summary

- Generally above normal precipitation in the Upper Columbia, well below normal in Oregon and Southern Idaho
- Well above normal temperatures in Jan – mid Feb across the region
- Snowpack well above normal in the Upper Columbia, very deficient in Oregon and Southern Idaho
- Observed runoff volume so far, below normal in Canada, above normal south of the border
 - Well above normal in the Snake
- ESP water supply forecast
 - Upper Columbia above normal
 - Forecast locations in Clark Fork, Bitterroot, Flathead ranked in the top 10 for the 1971 – 2017 period of record
 - Upper Snake and mainstem above normal
 - Mid and Lower Snake tributaries well below normal
 - WA Cascades near normal
 - OR Cascades well below normal



NWRFC 2018 Water Supply Briefing Schedule



2018 Schedule for Live Water Supply Briefings						
Jan	Feb	Mar	Apr	May	June	
4	1	1	5	3	TBD	
<i>All presentations held at 10:00am PDT/PSI, unless noted otherwise</i>						
Click here for Registration Information						

Telephone Conference Call Number (same for each month's brief):
(914) 614-3221
Pass Code:
619-465-763

<https://register.gotowebinar.com/rt/7651951505041247747>



Northwest River Forecast Center

Water Supply Forecasts

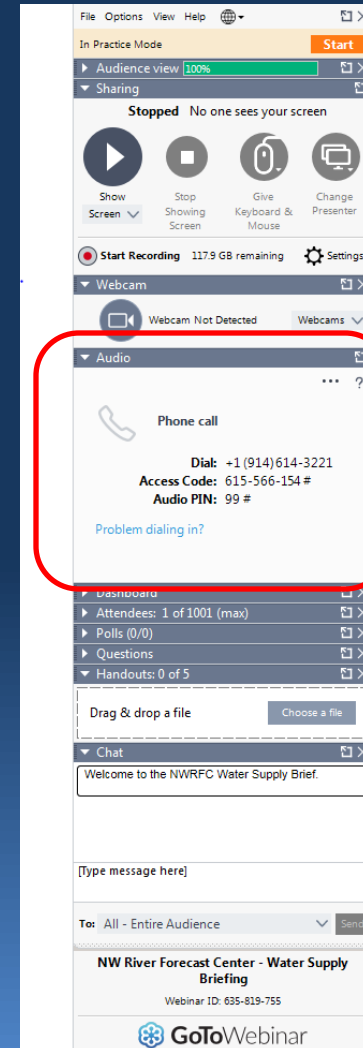


River and Hydrology	Water Supply	Observations	Weather Forecasts	Climate	NWRFC
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Questions?

In order to ask questions using your phone, you will need to enter the **AUDIO PIN** followed by the # sign using your phone keypad. The **AUDIO PIN** was provided when you logged into the webinar. If you need to enter the **PIN** after you are connected, try **#PIN#**

You will be muted until the presenter unmutes you. If you have a question, use the 'Raise Hand' function to let us know to unmute your phone.



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