



2021 Drought: Background and Conditions

Joint Legislative Committee on Water Supply during Drought

Jeff Marti

August 16, 2021



Washington State Drought Declaration

1

How is drought defined in Washington State?

Definition of drought

2

What factors does the State consider?

Factors considered

3

What is the process behind a drought declaration?

Steps to a drought declaration

4

What are drought conditions now?

Current conditions

5

Impacts to agriculture

How this drought is affecting dryland farming

Statute and Regulations

Recognition of Drought

- Emergency Water Withdrawal Facilities
RCW 43.83B
- Emergency Drought Relief
WAC 173-166
- Emergency Drought Funding
WAC 173-167
 - Effective July 28, Expires November 25



Amendments to Drought Statute

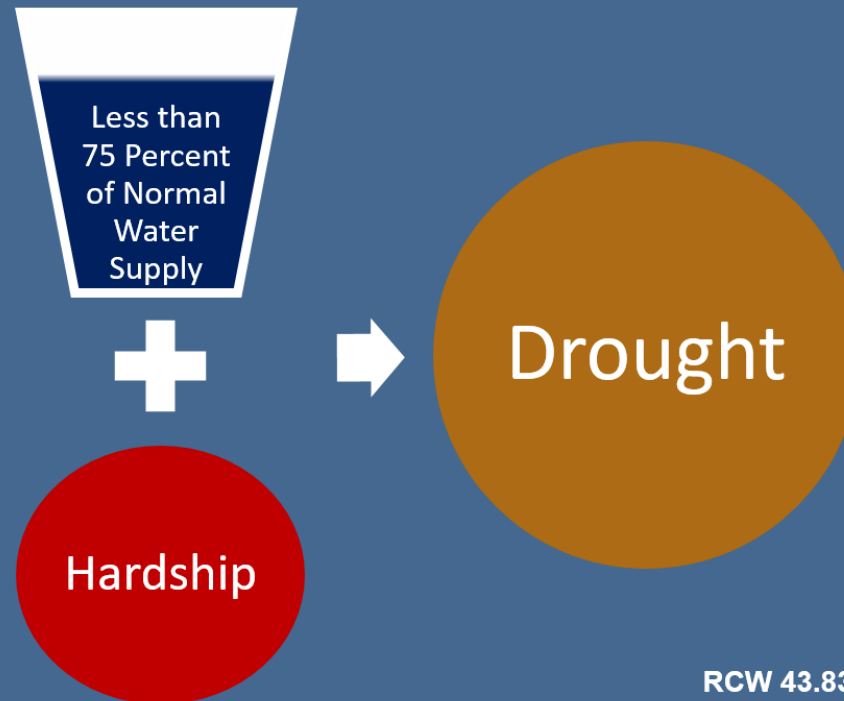
(ESHB 1622
Effective June 11, 2020)

Shifted emphasis from emergency response
to **preparedness**

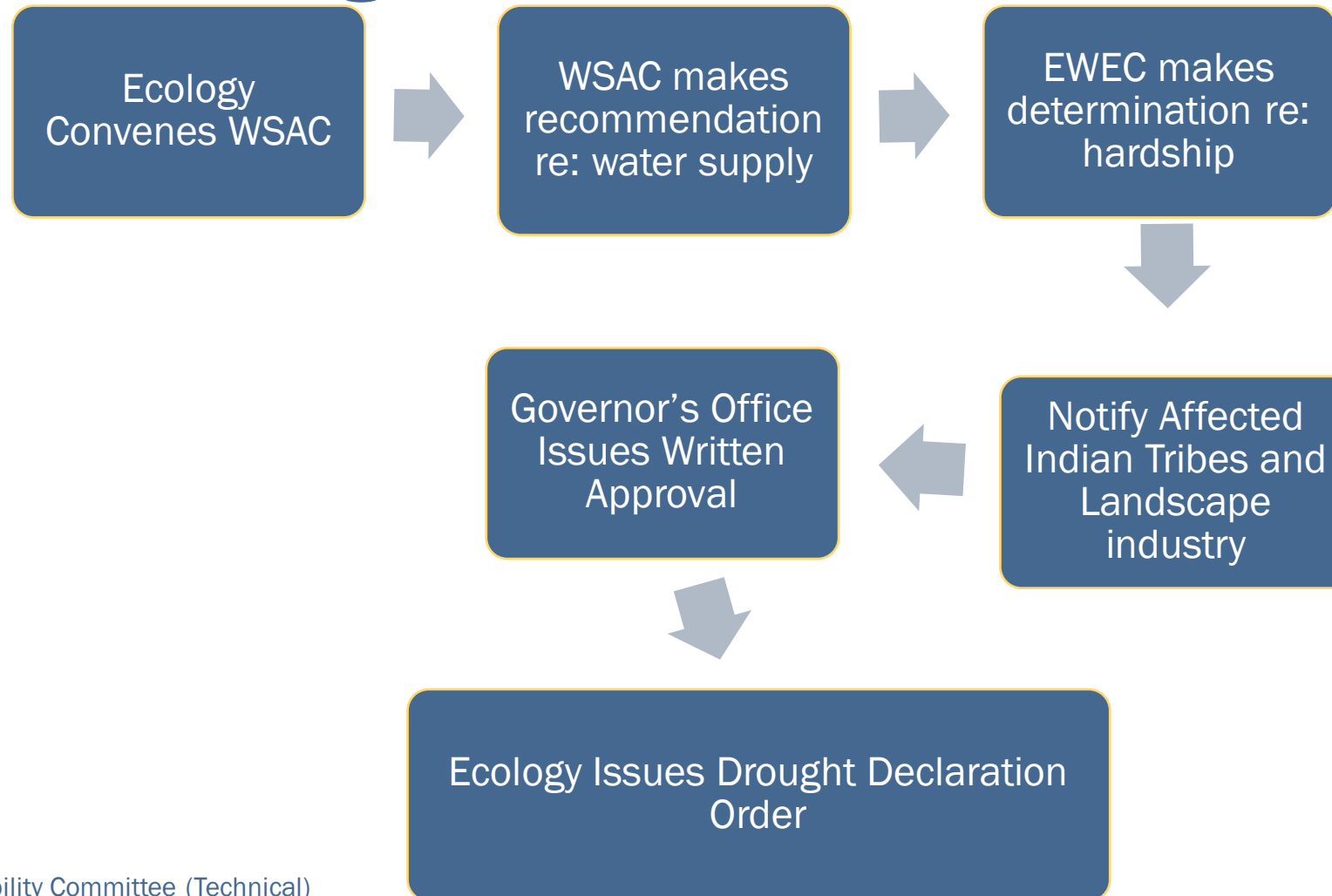
- Added Drought Advisory phase
- Permits expenditures for drought preparedness and response activities, including grants
- Requires initiating a pilot program to explore the cost, feasibility, and benefits of long-term water right lease agreements
- Permits a person to petition the department to declare a drought emergency for the state or portions of the state



Washington State's Drought Trigger



Steps to a drought declaration



WSAC = Water Supply Availability Committee (Technical)
EWEC = Executive Water Emergency Committee (Policy)

Powers granted to Ecology

RCW 43.83B.410

Authorize emergency withdrawal of public surface and ground waters, including dead storage...

Approve a temporary change in purpose, place of use, point of diversion, or point of withdrawal.

Employ additional persons for specified terms of time, consistent with the term of a drought condition, as are necessary.

Acquire needed emergency drought-related equipment.

Enter into agreements with applicants receiving emergency withdrawal authorizations...to recover the costs...of mitigation for emergency withdrawal authorizations.

Enter into interagency agreements...to partner in emergency drought response.

Emergency withdrawals

RCW 43.83B.410(1)(c)

The waters proposed for withdrawal are to be used for a beneficial use involving a previously established activity or purpose.

The previously established activity or purpose was furnished water through rights applicable to the use of a public body of water that cannot be exercised due to the lack of water arising from natural drought conditions.

The proposed withdrawal will not reduce flows or levels below essential minimums necessary to ensure the maintenance of fisheries requirements and to protect federal and state interests including, among others, power generation, navigation, and existing water rights.

State vs Federal Drought Determinations

State

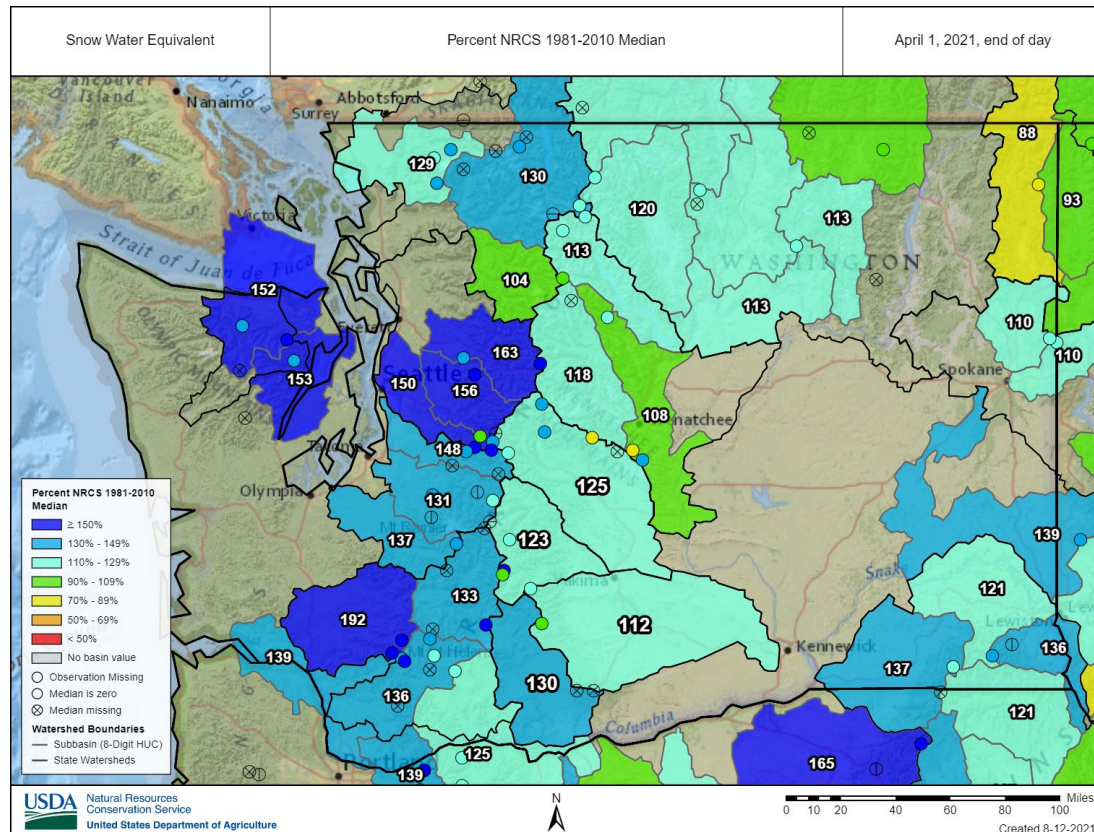
- Includes consideration of forecasts
- The region is receiving, or is projected to receive, less than 75% of its normal water supply
- Water users in the region will likely incur undue hardships as a result of the shortage
- Response actions center around emergency water withdrawals

Federal

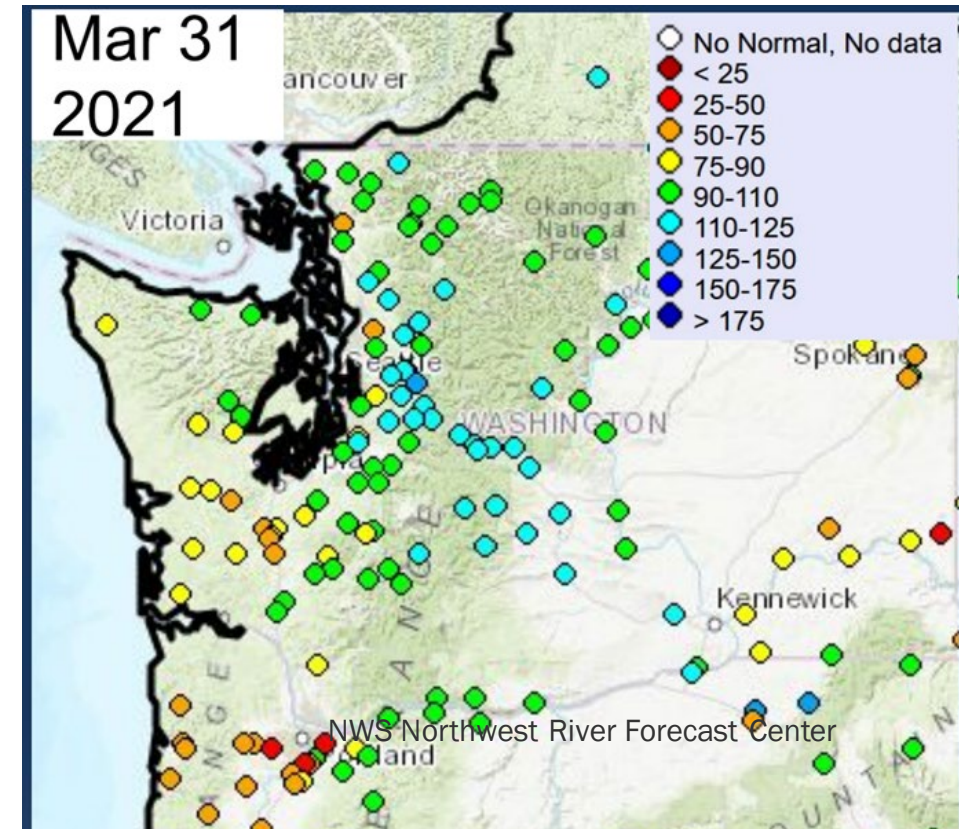
- Does not include forecasted conditions
- Disaster Determinations are automatically triggered by the federal Drought Monitor or by request of Governor
- Drought Monitor considers precipitation and other conditions, impacts and expert input
- Makes available various forms of financial assistance and other measures
- Federal disaster determinations and federal crop insurance eligibility are not contingent on State declaration

April Snowpack and Forecasted Seasonal Runoff

Snowpack

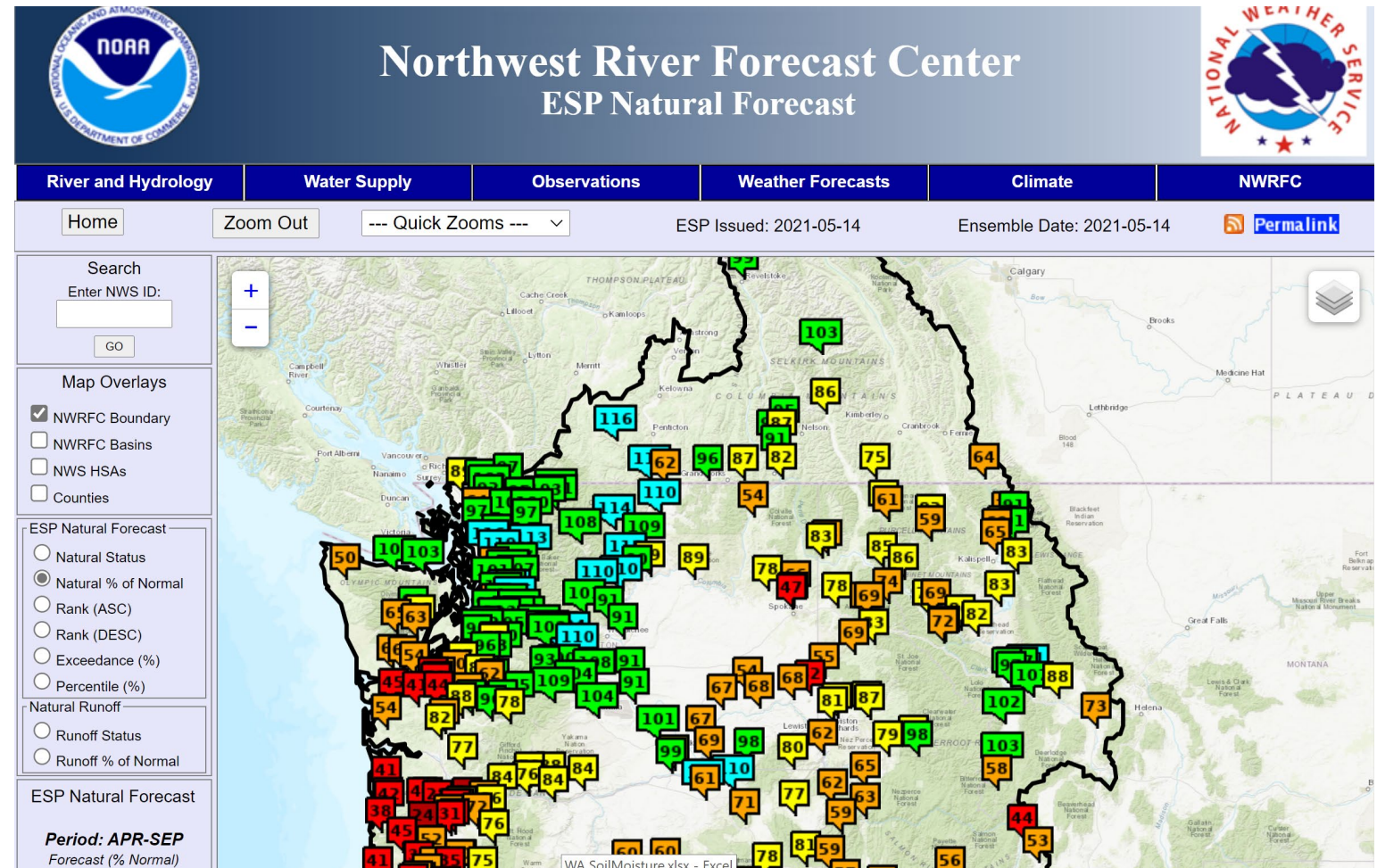


Forecasted April – September Runoff (percent of normal)



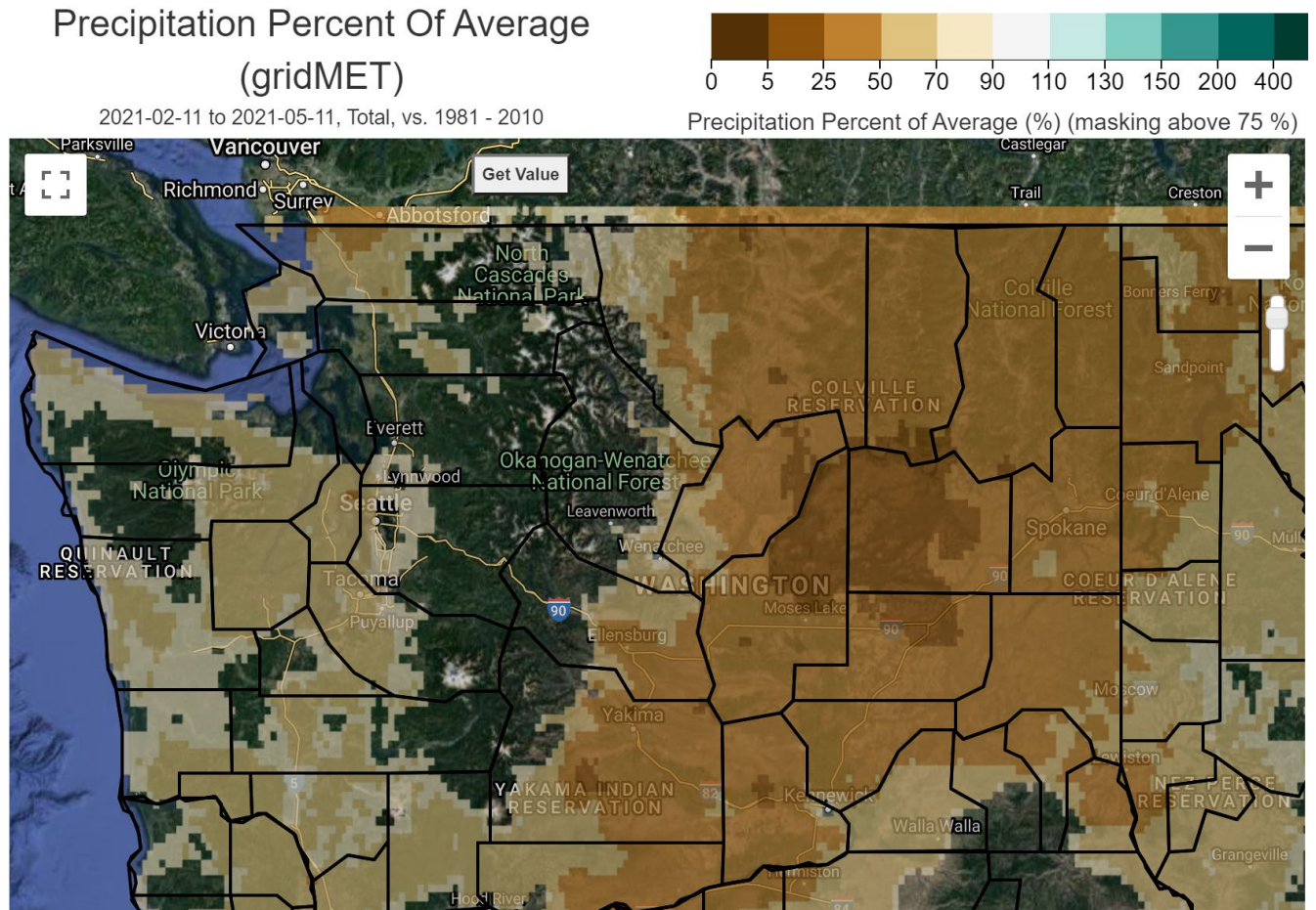
Mid-May Water Supply Forecast for April - September

- Mid-May water supply forecasts were normal to above-normal for rivers in snow-dominated watersheds
- Below-normal runoff forecasted for lower-elevation, rain-dominated watersheds.



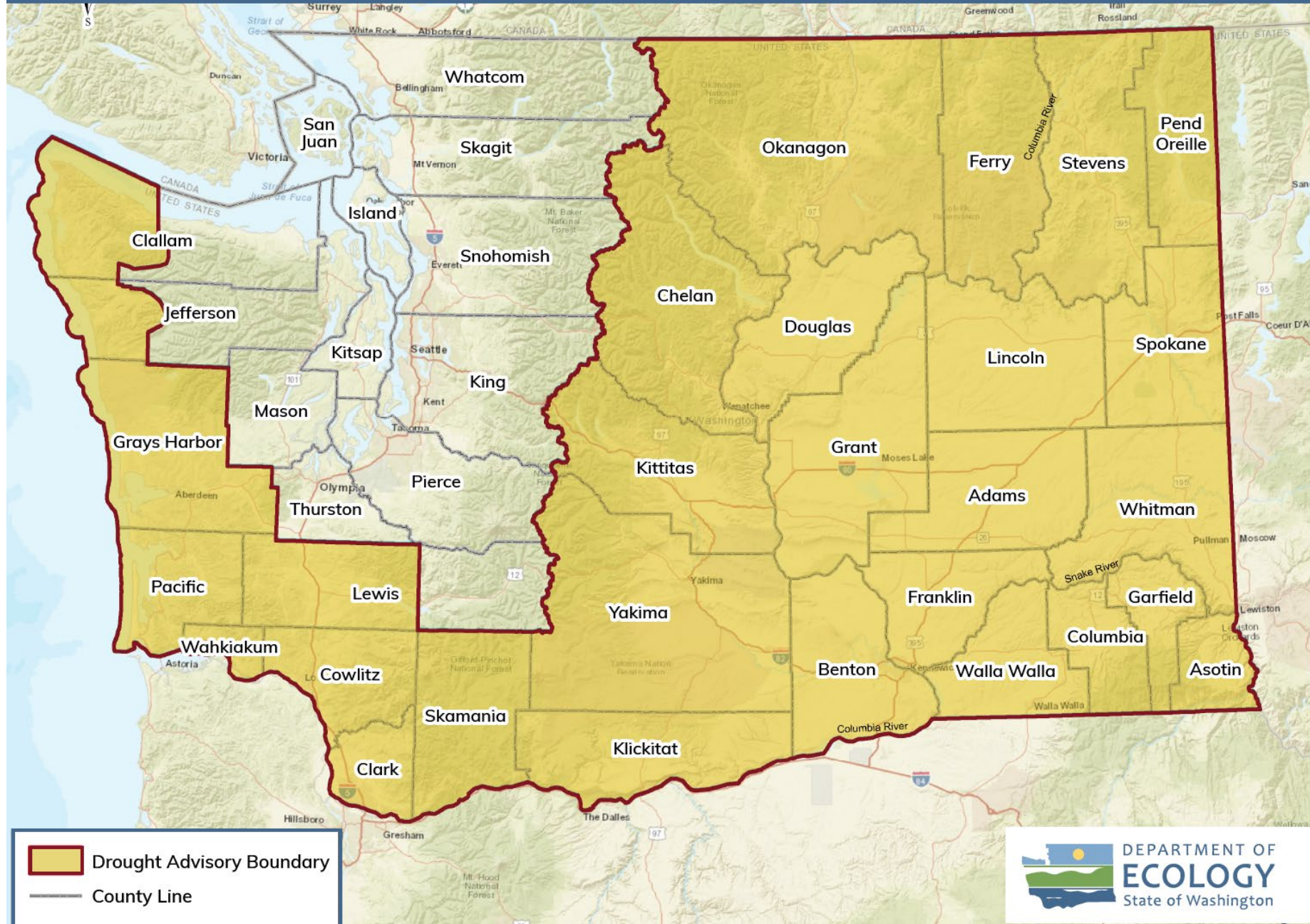
Mid-May Precipitation Status

Area where 90-day
precipitation was
less than 75
percent of normal



2021 Drought Advisory by County

DEPARTMENT OF
ECOLOGY
State of Washington

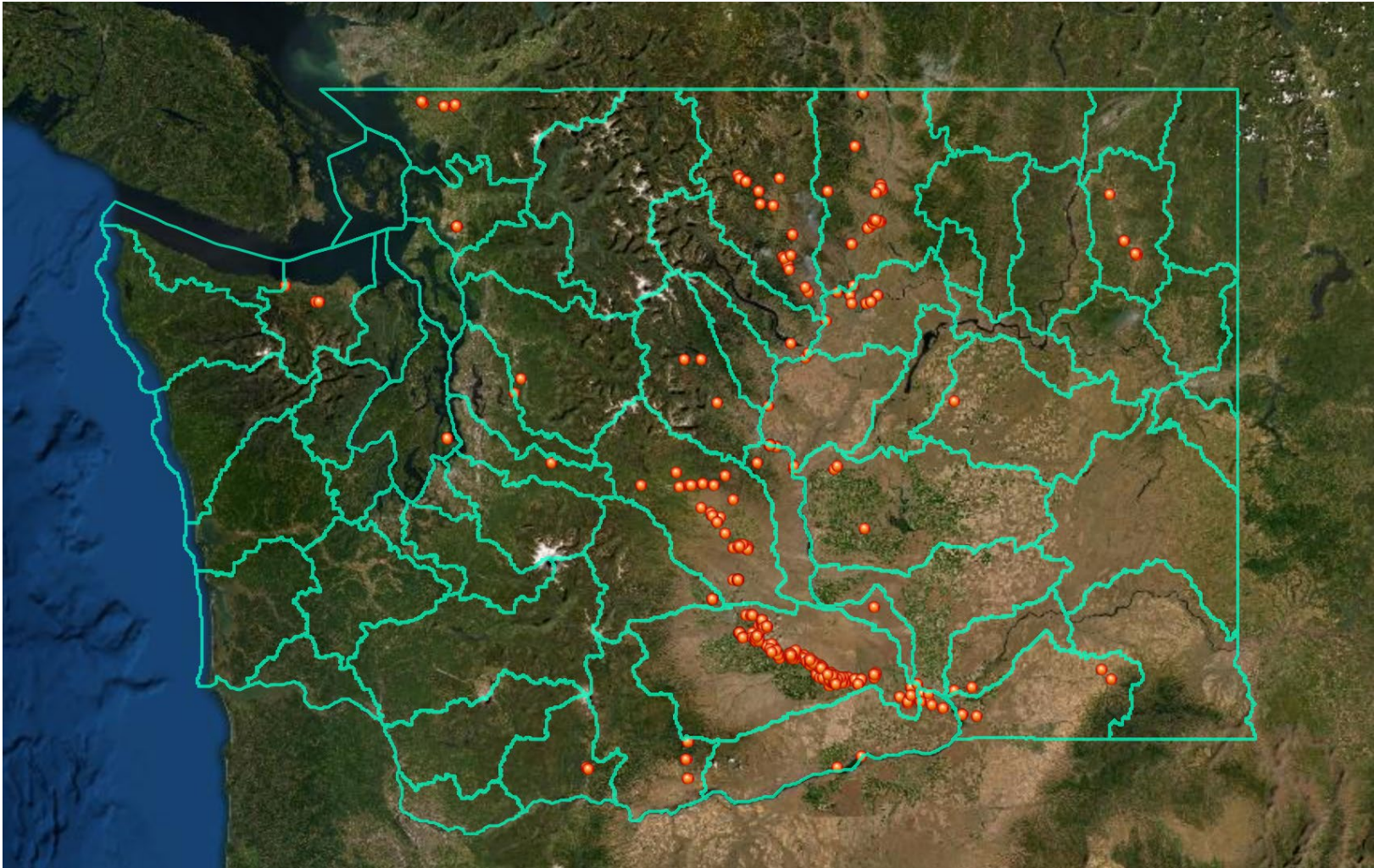


May 24, 2021

Potential for hardships to water users and the environment

- Declining water levels in wells, streams and impoundments used to supply public drinking water for small to mid-sized water systems.
- Fish mortality associated with both declining streamflow and lethal water temperatures.
- Lower water availability for crop and livestock production, including water necessary to help crops and animals cope with heat stress.
- Very low moisture content causing wildfire fuels to be easily combustible.

Location of Drought Permits (1994-2019)



Washington Drought Declaration Areas

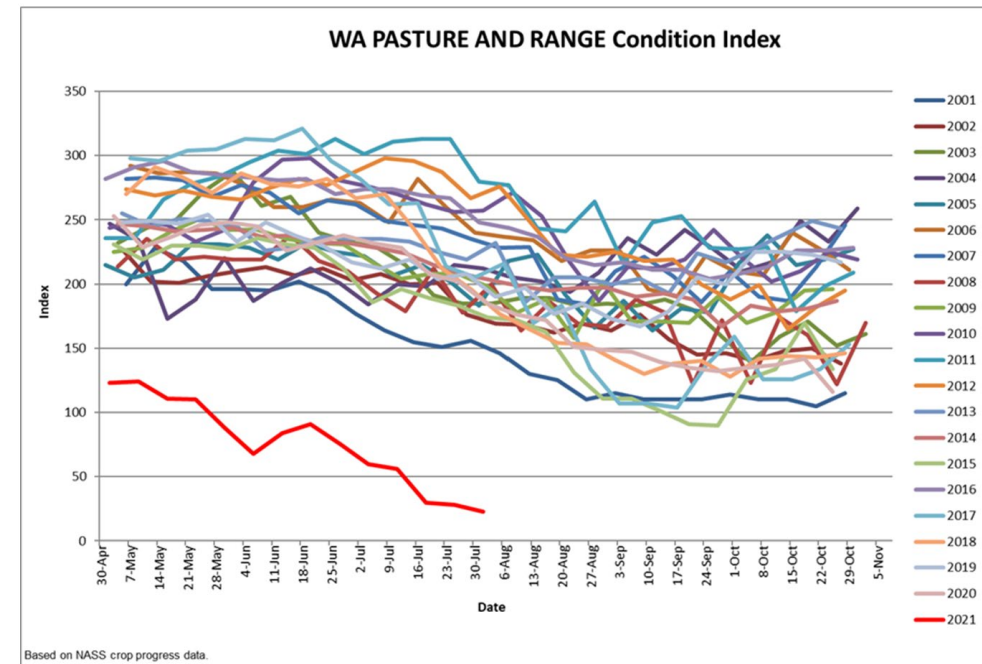
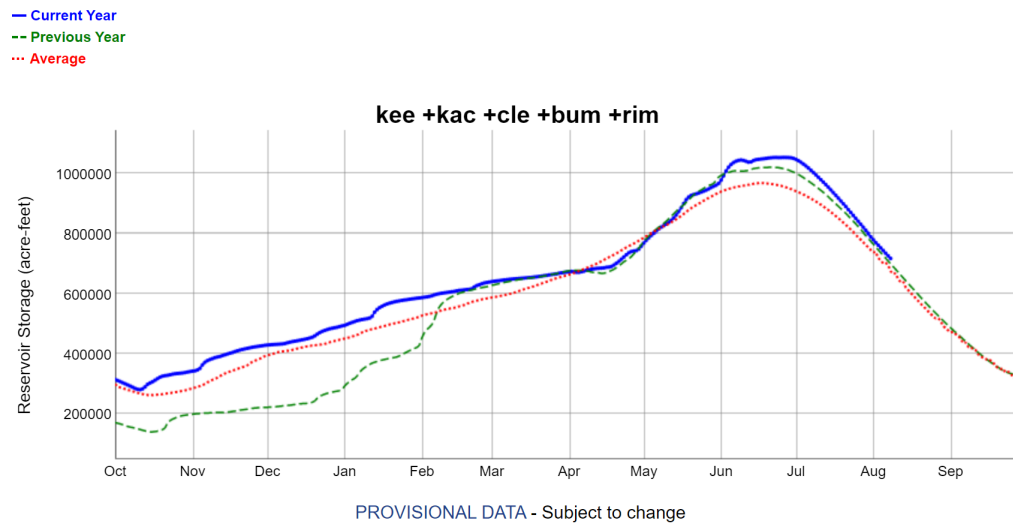


Contrast in Water Supply Vulnerability

Yakima Project: 100 percent of total water supply

Pasture and Range: Poorest conditions since 2001

Water Year Graph





Questions?

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