

“Getting Ready For Flood Season”

Chehalis River Basin Flood Warning System

Update 9/21/2021

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WEST CONSULTANTS

Routine Activities

- ▶ Weekly remote monitoring of Flood Authority gauges operated by WEST.
 - ▶ Rain, Temperature, Stream, Webcams
- ▶ Quarterly visits to gauge sites.
- ▶ Emergency responses as needed.
 - ▶ Low battery
 - ▶ Communication failure
 - ▶ Vandalism



Riverside rain gauge

New and Renewed Permits

- ▶ Cedar Creek (DNR) permit has been secured through 2026
- ▶ Haywire (Green Diamond) permit has been secured through 2025.
- ▶ Weyerhaeuser permit for multiple gauges secured until 8/3/2023



Gauge Relocations

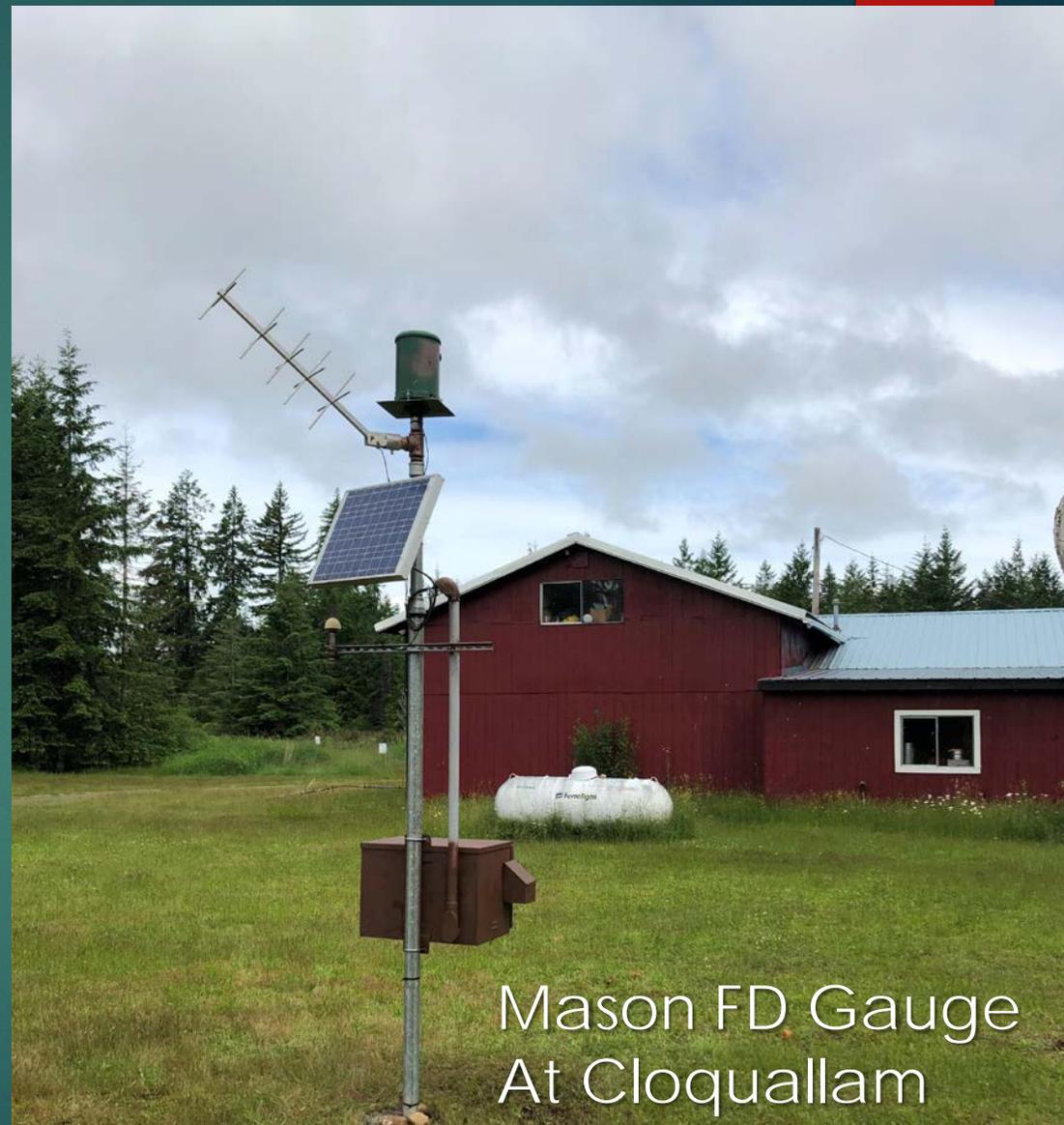
- ▶ ROCK-WEYCO rain gauge removed
 - ▶ Replaced with MASON FD13 AT CLOQUALLAM
- ▶ Haywire Ridge rain gauge moved
- ▶ Next up – Fire conditions permitting
 - ▶ Brooklyn rain gauge
 - ▶ Skookumchuck rain gauge
 - ▶ Chehalis River below Thrash Creek



Gauge Relocations



Haywire Gauge



Mason FD Gauge
At Cloquallam

Webcams

- Webcam at Monte Elma Rd bridge has been removed due to vandalism. 5/4/2021
- A new webcam location on the Lower Satsop has been investigated and is ready for deployment when landowner permission is secured.
- Time lapse video at Mellon Street.

Looking upriver at Mellon Street bridge

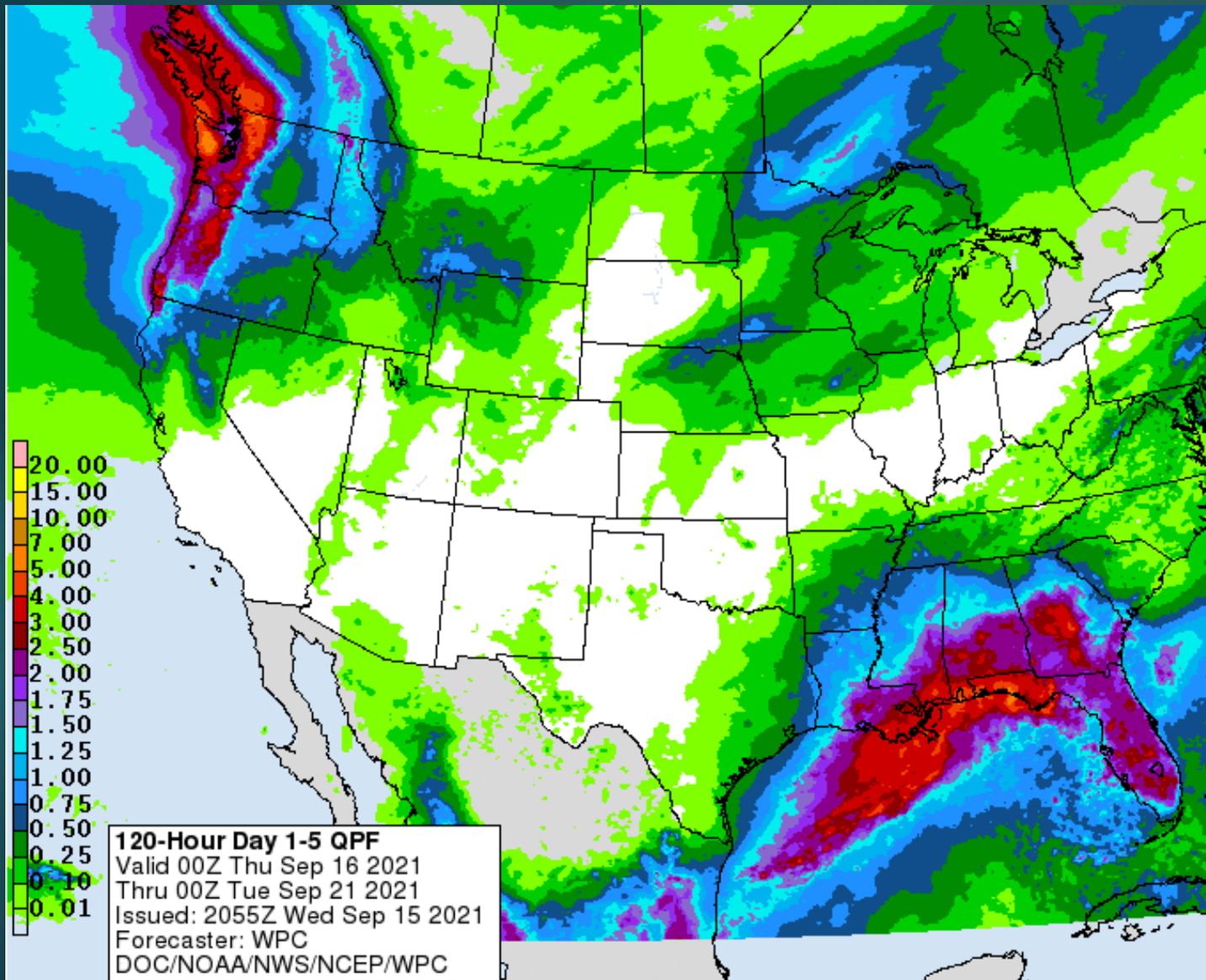


Chehalis River at Montesano Gauge



Rainfall Outlook



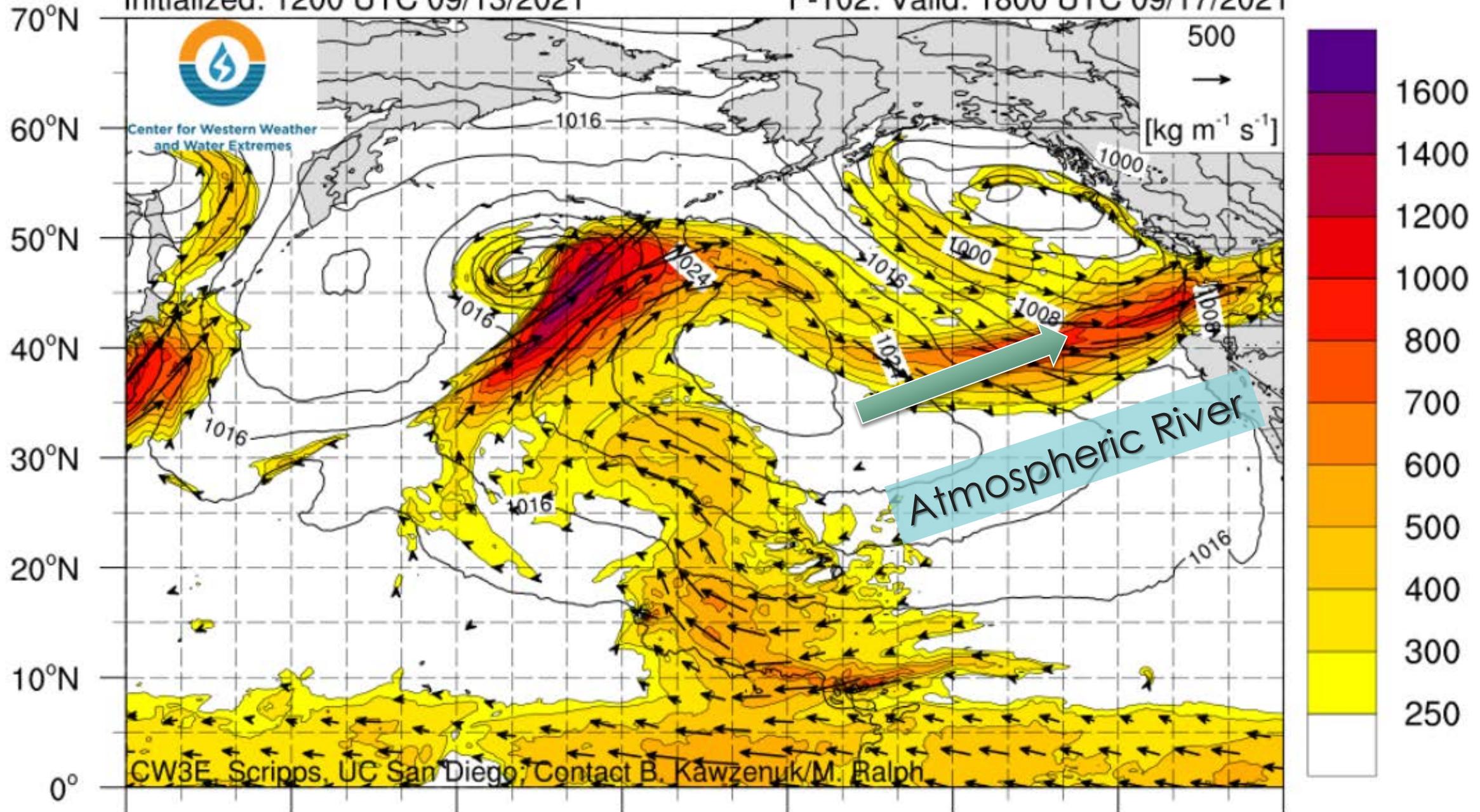


Rainfall
this
weekend.
Atmospheric River!!

NCEP GFS IVT ($\text{kg m}^{-1} \text{s}^{-1}$; shaded), IVT Vector, and SLP (hPa; contours)

Initialized: 1200 UTC 09/13/2021

F-102: Valid: 1800 UTC 09/17/2021



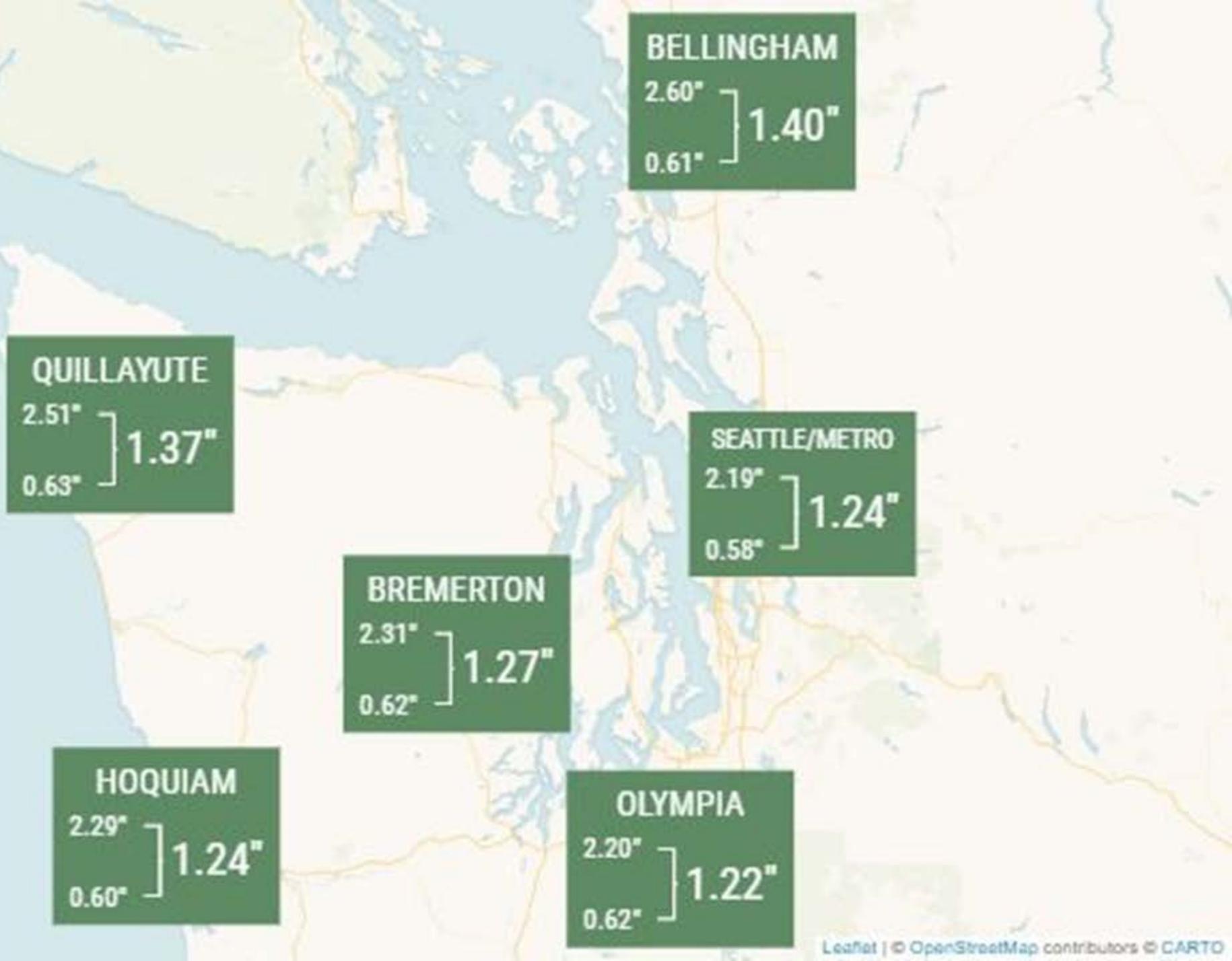
Fri, Sep 17, 2021, 11:00 AM to
Sat, Sep 18, 2021, 11:00 AM

Amount of Rainfall

80% of the time the amount of rainfall at the displayed location will fall between the given range. A wider range represents less certainty in the forecast.

Location

Range Forecast } Best Forecast



DJF Temperature

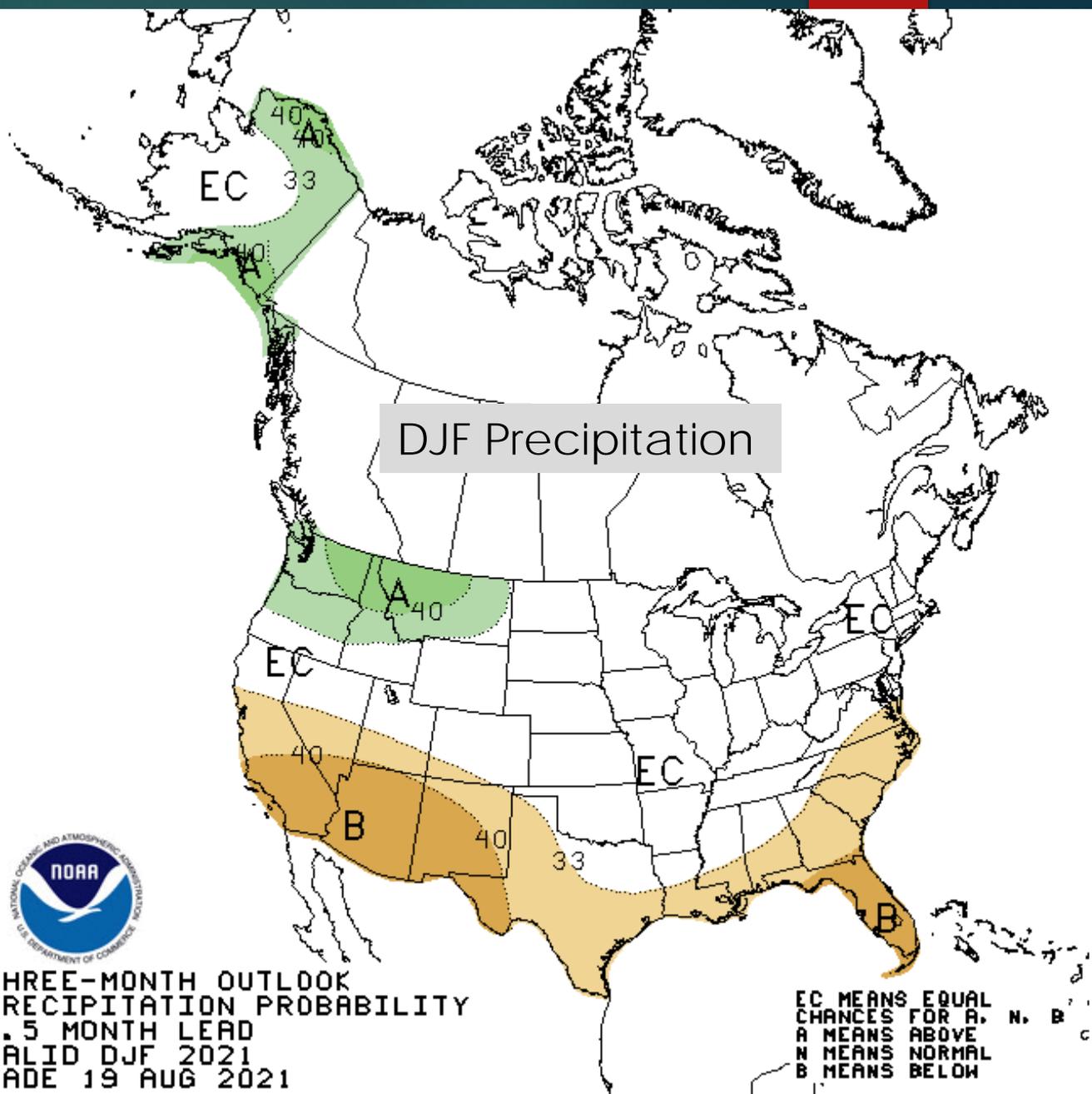
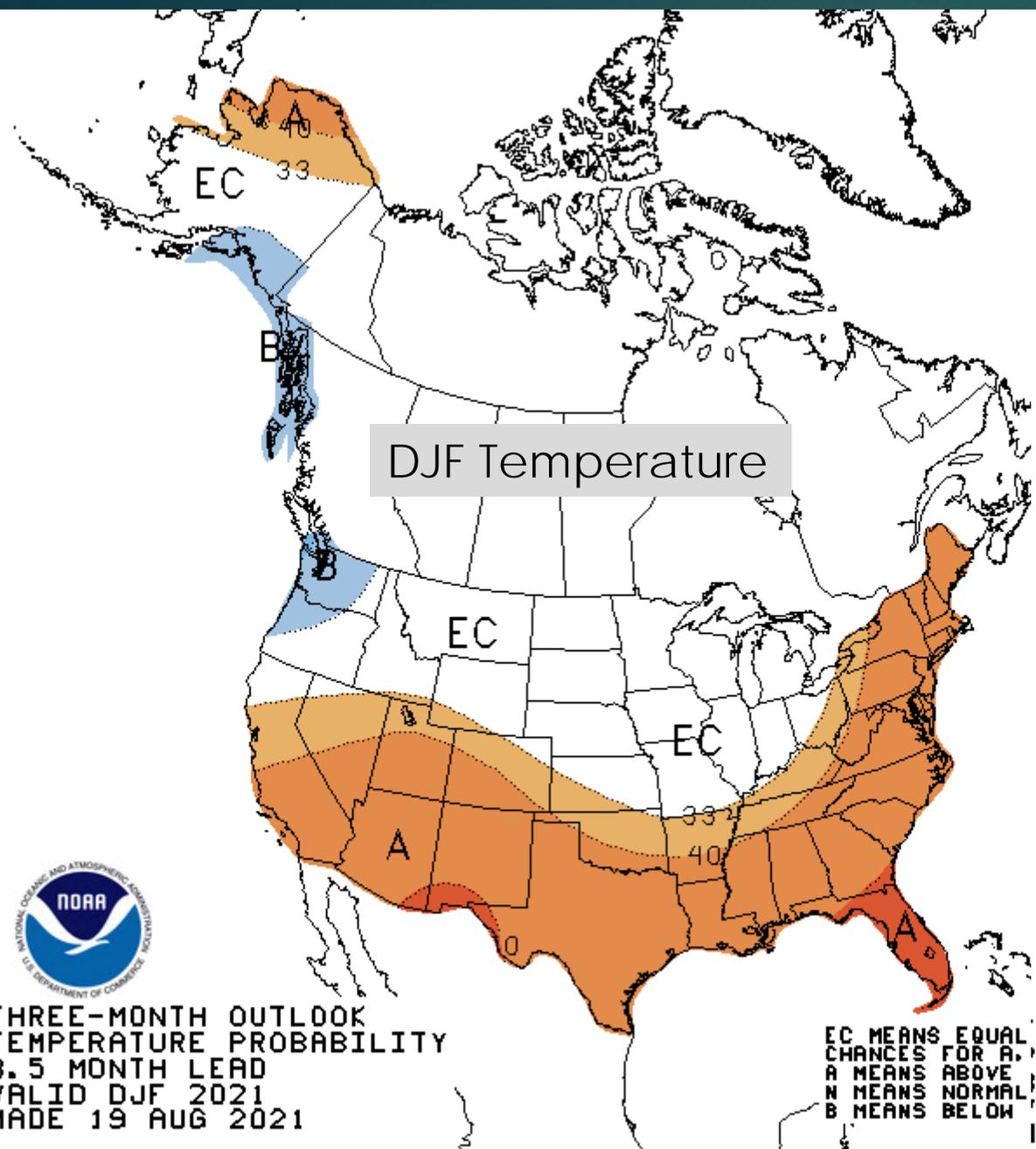
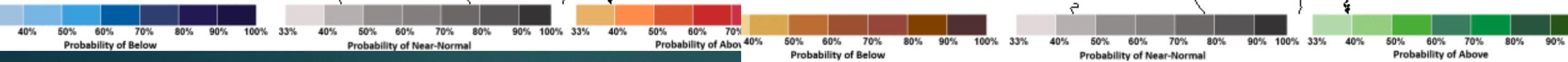
DJF Precipitation



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
3.5 MONTH LEAD
VALID DJF 2021
MADE 19 AUG 2021

THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
3.5 MONTH LEAD
VALID DJF 2021
MADE 19 AUG 2021

EC MEANS EQUAL
CHANCES FOR A, N, B

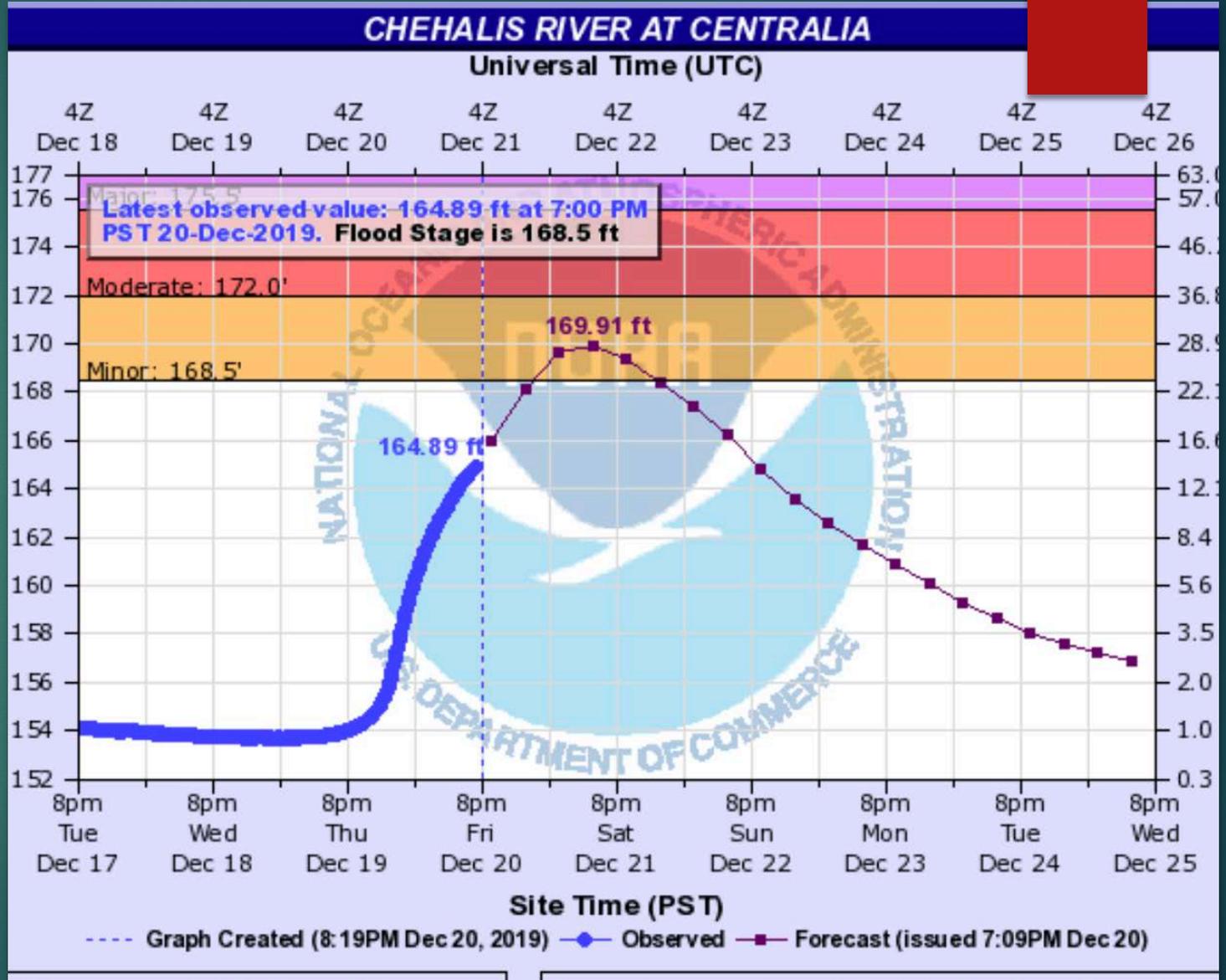


Forecast Highwater Alerts

▶ Example:

The Chehalis River at Centralia is expected to exceed flood stage in 11 hours.

▶ Pilot project volunteers?



Virtual Training

CHEHALIS RIVER BASIN FLOOD AUTHORITY

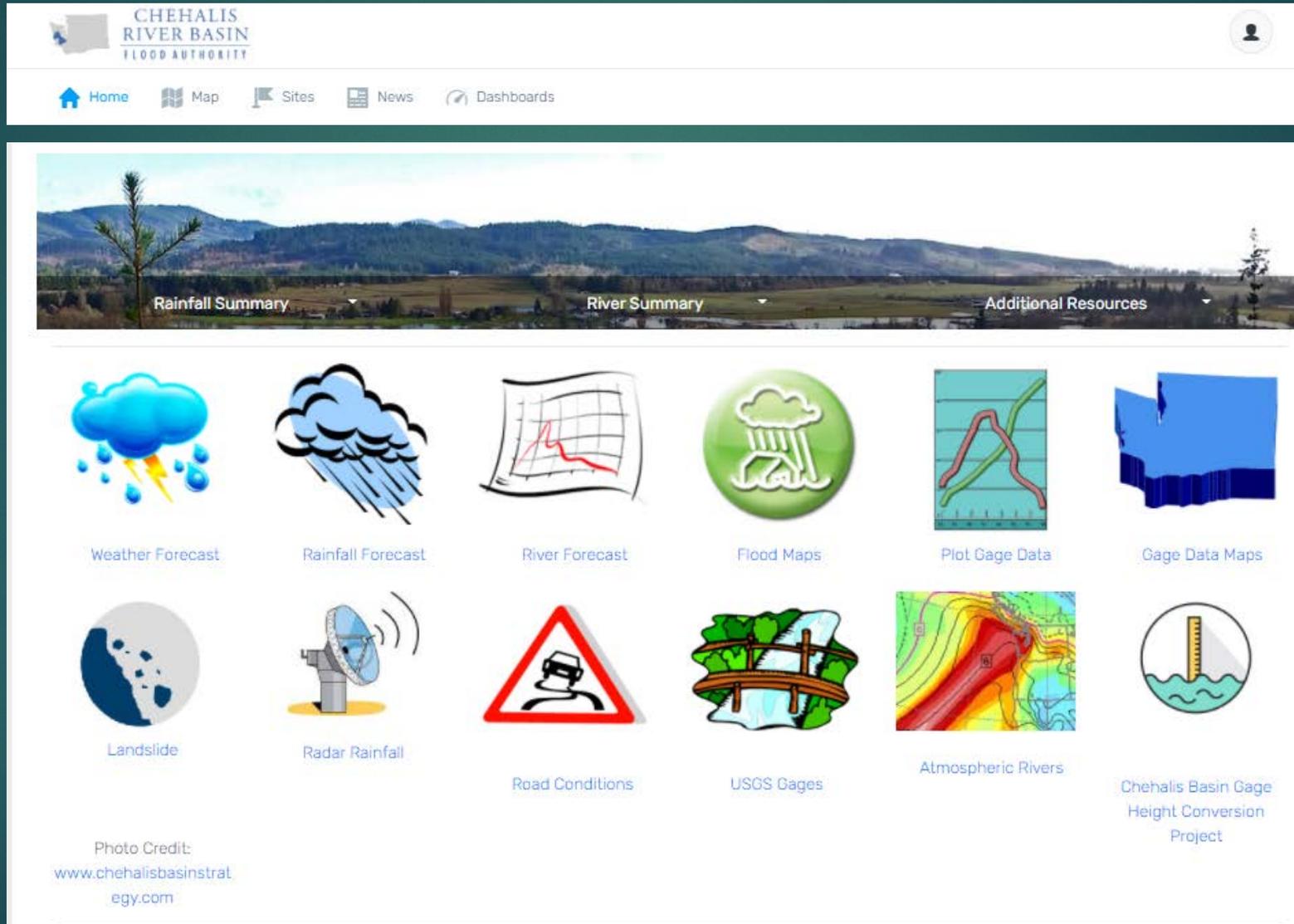
Home Map Sites News Dashboards

Rainfall Summary River Summary Additional Resources

Weather Forecast Rainfall Forecast River Forecast Flood Maps Plot Gage Data Gage Data Maps

Landslide Radar Rainfall Road Conditions USGS Gages Atmospheric Rivers Chehalis Basin Gage Height Conversion Project

Photo Credit:
www.chehalisbasinstrategy.com

The image is a screenshot of the Chehalis River Basin Flood Authority website. At the top left is the organization's logo, which includes a map of the basin and the text "CHEHALIS RIVER BASIN FLOOD AUTHORITY". To the right of the logo is a user profile icon. Below the logo is a horizontal navigation menu with icons and labels for "Home", "Map", "Sites", "News", and "Dashboards". The main content area features a large banner image of a river valley with mountains in the background. Overlaid on this banner are three menu items: "Rainfall Summary", "River Summary", and "Additional Resources". Below the banner is a grid of twelve circular icons, each representing a different resource: a blue cloud with rain for "Weather Forecast", a blue cloud with rain for "Rainfall Forecast", a line graph for "River Forecast", a green circle with a white cloud and rain for "Flood Maps", a line graph for "Plot Gage Data", a blue map of the basin for "Gage Data Maps", a grey circle with a blue landslide for "Landslide", a satellite dish for "Radar Rainfall", a red triangular warning sign for "Road Conditions", a green bridge for "USGS Gages", a colorful topographic map for "Atmospheric Rivers", and a circular icon with a gage for "Chehalis Basin Gage Height Conversion Project". At the bottom left of the page, there is a "Photo Credit" section with the URL "www.chehalisbasinstrategy.com".



Mark your calendar:

21st Annual Pre-Winter Flood Meeting.
Monday, October 25th from 1-5pm
Jester Auto Museum

Questions?