

NWS Western Region Drought Workshop

June 15-17, 2021

Climate Prediction Applications Science Workshop

Wednesday, May 25, 2022

RECOMMENDATIONS

FROM THE NWS WESTERN STATES DROUGHT WORKSHOP

Presented by Chelsea Peters *Meteorologist*

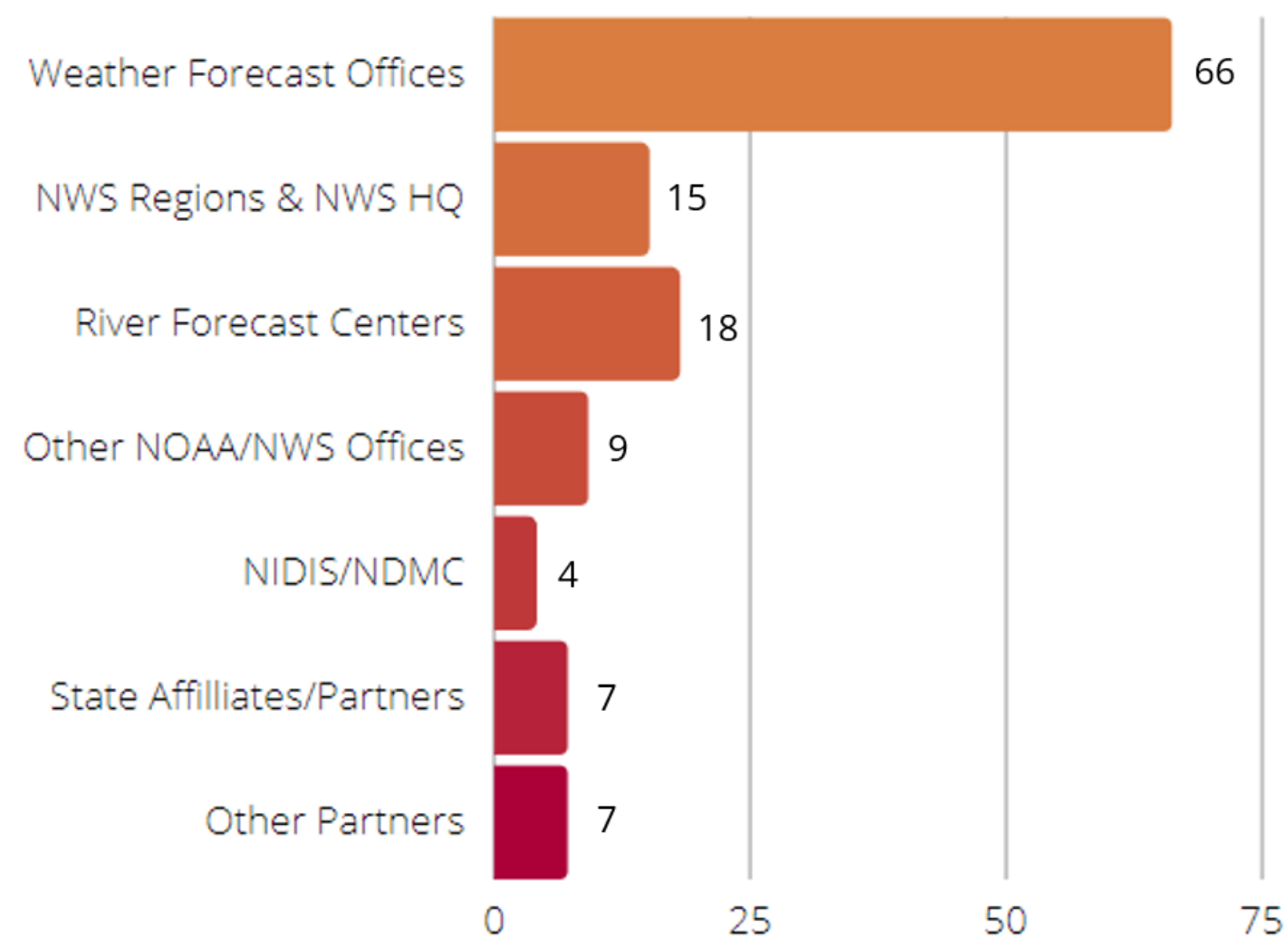
Co-authors: Arin Peters *Senior Service Hydrologist*, Paul Miller *Service Coordination Hydrologist*



Workshop Overview

126 TOTAL PARTICIPANTS

The Participants Broken Down by Office/Sector



- **Workshop featured presentations, panels, and breakout groups**
- *Following the workshop:*
 - Participant feedback survey
 - Post-workshop report

WORKSHOP PLANNING COMMITTEE:

- Paul Miller, SCH Colorado Basin RFC (co-lead)
- Arin Peters, SSH Great Falls (co-lead)
- Andrea Bair, Western Region
- Megan Syner, Western Region
- Maggie Hurwitz, AFS CSB
- Tim Bardsley, SSH Reno
- Robin Fox, SH Spokane
- Katherine Rowden, former SH Spokane
- Greg Barnhart, MIC Elko
- Craig Shoemaker, Met Sacramento
- Andy Bryant, SSH Portland
- Greg Heavener, WCM Pueblo
- Tony Anderson, SH Pueblo
- Chelsea Peters, Met Las Vegas
- Amy Burke, Hydro Northwest RFC



KEY TAKEAWAYS

Day 1 - Partners in Drought Planning and Services



CALIFORNIA DROUGHT

2014 SERVICE ASSESSMENT

- **Revisited 2014 NOAA Drought Service Assessment**
 - Improve seasonal predictions for climate and hydrology
 - **Deeper collaboration** with external partners
- **Drought Machine**
 - Need to have greater collaboration between all local, state, regional, and national partners
 - Leverage NIDIS expertise to help facilitate collaboration to ensure unified messages on drought
- **Actionable Drought DSS**
 - Reinvent the DGT to include graphics, examine automated production, and consider new formats
 - Need more localized monthly and seasonal drought outlooks (forecasts)
 - **Greater unity** among NOAA national and local offices in external messaging of drought hazards and impacts

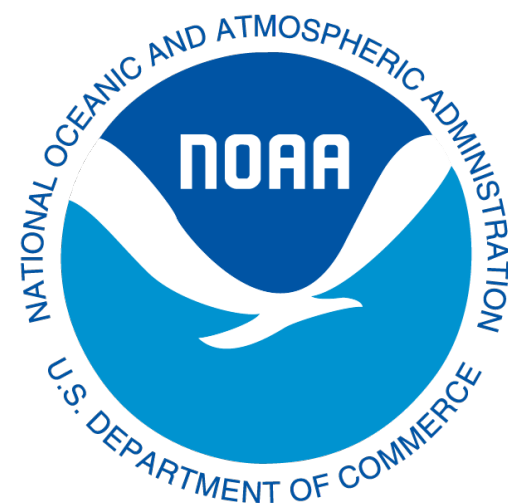


KEY TAKEAWAYS

Day 2 - Impact-based Decision Support Services In Times of Drought



Center for Western Weather and Water Extremes



NOAA
FISHERIES

- **Local, state, and federal partners**
 - Understanding local issues and policies
 - Engagement through meetings and outreach
 - Provide essential data & resources

- **Drought defined**
 - **Policy** varies for state and local jurisdictions
 - utilize impacts from policy decisions related to drought to inform the USDM

 - Drought definitions have **legal implications**
 - develop guidance on how to better define drought and communicate its impacts over arid areas



Western Regional
Climate Center



CLIMAS
Climate Assessment for the Southwest



WWA

● Drought Assessment

- NWS local, regional, and national roles
- **Regional resources** underutilized by NWS
(e.g., *National Integrated Drought Information System - Drought Early Warning Systems*)
- Drought **declarations** vs. drought **conditions**
- **Complex drought indicators** in Western U.S. complicate national drought assessment.

MOMENTUM

- MANY new connections
- Participant feedback survey
- Post-workshop report and proposed actions



Western States Drought Workshop Report

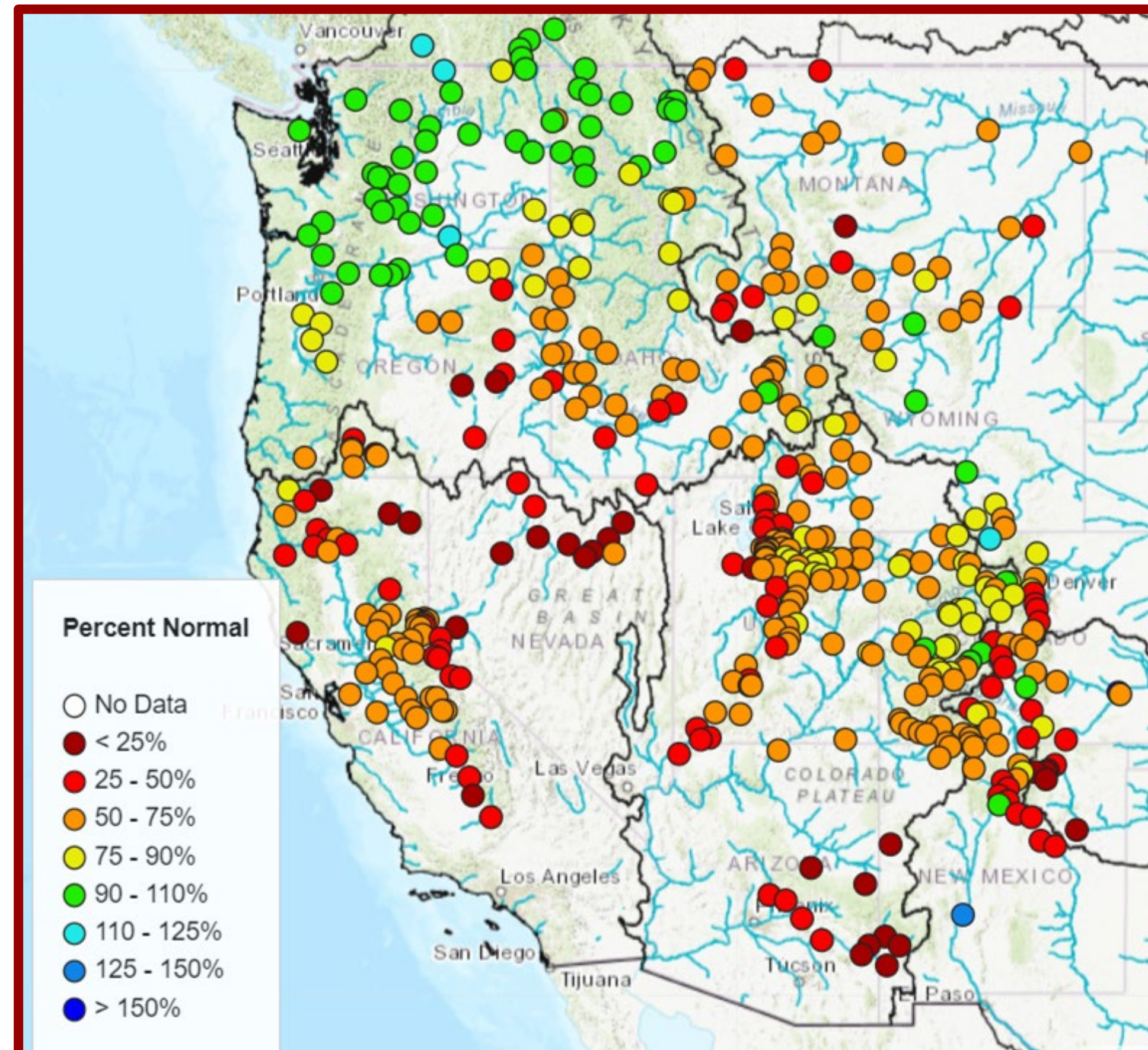


June 15 - 17, 2021 [Virtual]



Examples of Proposed Actions

- **Drought Information Statements**
 - *move beyond text-only products*
- More effective **collaboration** with NIDIS DEWS, USDA Climate Hubs, Climate Prediction Center, etc.
- **Western Water Supply** webpage
 - *increase capabilities*





Future Directions

MONITORING

- **Soil Moisture** data and statistics
- **Groundwater** data and statistics
- Integration of **remotely-sensed** and **ground-based** data

PREDICTION

- Funding and resources to improve:
 - **Drought outlooks**
 - **Precipitation prediction** at monthly and seasonal scales
 - **Seasonal water supply** projections

MESSAGING

- Reinvent **Drought Information Statements**
- NIDIS-facilitated **regional coordination**
- **Communication guidelines** about:
 - drought in arid regions
 - short-term vs. long-term drought

NWS DROUGHT PROGRAM

- Centralize resources and tools
- Formalize drought focal point role
- Clarify **NWS** role in amplifying messages
- Integrate climate outlooks and water supply forecasts



Contact Information

THANK YOU!

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