



**Pacific Northwest Drought Early Warning System
Kickoff Meeting
February 2-3, 2016
Courtyard by Marriott Portland City Center
Portland, OR**

The [Pacific Northwest DEWS Kickoff Meeting will be held February 2-3, 2016 in Portland, OR](#) to formally launch the Drought Early Warning System. This two-day event will bring together federal, tribal, state, academic, and local partners and stakeholders for an in-depth discussion on drought in the Pacific Northwest, with attention to water, climate, land and emergency management. Specifically, the discussions will center on improving the capacity to meet the information needs of decision makers in the region.

Desired outcomes of the Pacific Northwest DEWS Kickoff Meeting include:

1. Increasing the knowledge and awareness of present decision-support tools and processes, including the National Integrated Drought Information System and its partners
2. Identifying knowledge and information gaps.
3. Developing recommendations for improved early warning, which would include better coordination of integrating, displaying, and distributing climate, weather and water data and information.
4. Developing recommendations for future actions, collaborative research, and decision support tools.
5. Identifying baseline evaluation metrics for drought and its associated impacts.

Day 1: Tuesday, Feb. 2, 2016

8:30-9:00am	Registration	
9:00-9:35	Welcome	Robin Webb (NOAA/PSD) Lauri Aunan (Advisor to Oregon Gov. Brown)
9:35-10:05	Drought & Climate Outlook	David Simeral & Kelly Redmond (WRRC/DRI)
10:05-10:20	Goals & Objectives	Veva Deheza (NOAA/NIDIS)
10:20-10:35	BREAK	
10:35-11:05	Bridging Drought Impacts & Resilience (Ice Breaker)	John Stevenson (CIRC)

11:05 -11:45	History of Drought in the Region <ul style="list-style-type: none"> • State/Regional • Ocean conditions 	Kathie Dello (CIRC) & Karin Bumbaco (OWSC) Nick Bond (OWSC)
11:45 – 12:45 pm	WORKING LUNCH	
12:45 - 1:35 pm	How is Drought & Water Managed in the PNW? Federal, Regional & International Perspectives Moderator: Jim Ruff, Northwest Power and Conservation Council	Eve James (Bonneville Power Authority) Mary Mellema (Bureau of Reclamation) Tina Teed (US Army Corps of Engineers)
1:35 – 2:55 pm	State & Tribal Drought Plans & Policies Moderator: Mark Svoboda (NDMC)	David Hoekema (IDWR) Ann Schwend (MT DNR) Alyssa Mucken (OR WRD) Jeff Marti (WA DOE) Rhonda Dasher (Confederated Tribes of the Colville Reservation)
2:55 – 3:10	BREAK	
3:10 - 4:10 pm	Federally Sponsored Drought-Related Resources Snapshot of agency resources to help build information networks Moderator: Timi Vann, NOAA <ul style="list-style-type: none"> ▪ National Weather Service ▪ NOAA Northwest River Forecast Center ▪ NOAA National Marine Fisheries Service ▪ NOAA Office of Oceanic & Atmospheric Research ▪ Natural Resource Conservation Service ▪ U.S. Geological Survey ▪ U.S. Bureau of Indian Affairs ▪ U.S. Bureau of Land Management ▪ National Interagency Fire Center ▪ Environmental Protection Agency ▪ Federal Emergency Management Agency ▪ Northwest Climate Science Center ▪ USDA Climate Hub ▪ Climate Impacts Research Consortium 	Katherine Rowden (NWS) Steve King (RFC) Ritchie Graves (NMFS) Claudia Nierenberg (NOAA/OAR) Deb Harms (NRCS) Greg Furher (USGS) Keith Hatch (BIA) Louisa Evers (BLM) John Saltenberger (NIFC) Yvonne Vallette (EPA) Kristen Meyers (FEMA) Gustavo Bisbal (NWCSC) Beatrice Van Horne (USDA Climate Hub) Phil Mote (CIRC)
4:10– 4:40	Exploring the benefits of having a regional drought early warning system <ul style="list-style-type: none"> • What has been learned to date in the PNW DEWS development process • Preview of Day 2 	Kathie Dello (CIRC) Karin Bumbaco (OWSC) Alicia Marris (NOAA/NIDIS) John Stevenson (CIRC)
4:40 pm	Day 1 Adjourn	Alicia Marris (NOAA/NIDIS)
Evening	Networking Event (no-host)	

Day 2: Wednesday, Feb. 3, 2016

8:30 – 9:00 am	Registration	
9:00 – 9:10	Welcome and Recap of Day 1	Alicia Marrs (NOAA/NIDIS)
9:10 -9:40	Opening Keynote: The U.S. Drought Monitor: How is it developed? How is it used?	Mark Svoboda (NDMC)
9:40 – 10:40 pm	Monitoring and Impacts: Local/Regional/National Tools & Initiatives Moderator: Mike Strobel (NRCS) <ul style="list-style-type: none"> • NW Climate Toolbox: Phil Mote (CIRC) • USGS Low-flow Study: Chris Konrad (USGS) • OLYMPEX field campaign: Lynn McMurdie (NASA/UW) Fallowed Lands Monitoring: Forrest Melton (NASA/CSUMB) • NDMC Decision Support Tools: Mark Svoboda (NDMC) 	
10:40-10:55	BREAK	
10:55 – 12:00	Diving Deeper into the Needs and Gaps in PNW Drought Early Warning (<i>small group break out session</i>) <ul style="list-style-type: none"> • Overview of the initial strategy for enhancing drought early warning capacity in the PNW • Identification of data and information needs, gaps and vulnerabilities in a PNW DEWS 	Facilitators: Karin Bumbaco (OWSC) Kathie Dello (CIRC) Alicia Marrs (NOAA/NIDIS) John Stevenson (CIRC)
12-1:00 pm	WORKING LUNCH	
1:00 – 2:30 pm	Prioritizing Actions to Enhance Drought Early Warning (<i>facilitated small group breakout sessions</i>) <ul style="list-style-type: none"> • Develop metrics to measure the success of a PNW DEWS • Prioritize actions to enhance long term drought resilience 	Facilitators: Karin Bumbaco (OWSC) Kathie Dello (CIRC) Alicia Marrs (NOAA/NIDIS) John Stevenson (CIRC)
2:30 – 2:45	BREAK	
2:45 – 3:30 pm	Incorporating Climate Change into Water Planning Moderator: Nick Bond, OWSC <ul style="list-style-type: none"> • Piloting Utility Management Applications (PUMA) • Big Wood River Basin Alternative Futures Project • Puget Sound State of Knowledge Report 	Kavita Heyn (PWB) John Stevenson (CIRC) Joe Casola (UW/CIG)
3:30– 4:00	Next Steps & Wrap Up <ul style="list-style-type: none"> • Review findings from breakout sessions • Discuss next steps and roadmap for the PNW DEWS 	Facilitators: Karin Bumbaco (OWSC) Kathie Dello (CIRC) Alicia Marrs (NOAA/NIDIS) John Stevenson (CIRC)
4:00 pm	Adjourn	

Relevant Acronyms

Bonneville Power Administration (BPA) California State University at Monterey Bay (CSUMB)
Climate Impacts Group, University of Washington (CIG)
Climate Impacts Research Consortium (CIRC), a NOAA Regional Integrated Sciences & Applications (RISA) Team
Columbia River InterTribal Fish Commission (CRITFC)
Desert Research Institute (DRI)
Federal Emergency Management Administration (FEMA)
Idaho Department of Water Resources (IDWR)
Montana Department of Natural Resources and Conservation (MT DNRC)
National Aeronautics and Space Administration (NASA)
National Drought Mitigation Center (NDCM)
National Interagency Fire Center (NIFC)
National Oceanic & Atmospheric Administration (NOAA)

- Earth System Research Laboratory (ESRL)/Physical Sciences Division (PSD)
- National Integrated Drought Information System (NIDIS)
- National Marine Fisheries Service (NMFS)
- National Weather Service (NWS)
- Office of Oceanic & Atmospheric Research (OAR)
- Northwest River Forecast Center (RFC)
- Western Regional Climate Center (WRCC)

Northwest Power and Conservation Council (NWPPCC)
Office of Washington State Climatologist (OWSC)
Oregon Climate Change Research Institute (OCCRI)
Oregon Climate Service (OCS)
Oregon Water Resources Department (OWRD)
Portland Water Bureau (PWB)
University of Washington (UW)
U.S. Army Corps of Engineers (USACE)
U.S. Department Of Agriculture

- Natural Resource Conservation Service (NRCS)
- U.S. Forest Service (USFS)
- USDA Climate Hub (USDA HUB)

U.S. Department of Interior (DOI)

- Bureau of Indian Affairs (BIA)
- Bureau of Land Management (BLM)
- Bureau of Reclamation (BOR)
- Fish & Wildlife Service (FWS)
- Geological Service (USGS)
- Northwest Climate Science Center (NWCS)

U.S. Environmental Protection Agency (EPA)
Washington State Department of Ecology (ECY WA DOE)