OWP at AMS 2025



AGENCY UPDATE

January 15, 2025 12:15–1:15 pm CT NOAA Office of Water Prediction - Update on Next Generation Water Prediction Capabilities (NextGen)

OWP Panel - Tom Graziano, Ed Clark, Fred Ogden, David Vallee, Trey Flowers, Sandra Pavlovic **Box lunch provided!**

TUESDAY, JANUARY 7 (VIRTUAL)

Virtual Poster Slam Session #3

[39HYDRO] Variability of Rainfall-Driven Stormflow Events in the National Water Model Multi-Decadal Continental-Scale Retrospective Simulation

Jason Regina | 1:00-2:00pm CT | Poster #V41

[15R20] Evaluating the Effect of Regridding Methods in Conversion from Grid to Catchment Representation Using the NextGen Forcings Engine

Jason Ducker | 1:00-2:00pm CT | Poster #V49

MONDAY, JANUARY 13

3A.2 Comparing the Conceptual Functional Equivalent to the National Water Model (CFE) versions 1.0 and 2.0, and the CAtchment Model for Arid and Semiarid regions (CAMAS) Against the National Water Model 3.0 Retrospective Simulation: The Value of Appropriate Conceptualizations Fred Ogden | 2:00-2:15pm CT | Rm 209

Poster Session 1 Evaluation of Hydrological Models in Low Runoff Ratio Regions: Next Generation Water Resources Modeling Framework vs National Water Model v3.0 Ahmad Jan Khattak | 3:00-4:30pm CT | Poster #11

TUESDAY, JANUARY 14

5.2 Evaluation of Alaska's Coastal Zone Total Water Level Modeling System Developed for the Next Generation Water Resources Modeling Framework (NextGen)

Hassan Mashriqui | 8:45–9:00 am CT | Rm 218

5.3 Advancing Coastal Hydrodynamic Modeling: Integrating D-Flow FM into the NextGen Framework for Lake Champlain's Water Level Predictions

Soroush Sorourian | 9:00-9:15am CT | Rm 218

7A.1 A 40+ Year Retrospective of the Airborne Snow Survey Program. Where We Started, Where We Are, and Where We Are Going

Carrie Olheiser | 1:45–2:00pm CT | Rm 209



Website: https://water.noaa.gov **Email:** nws.nwc@noaa.gov **Locations:** Tuscaloosa, AL - Silver Spring, MD - Chanhassen, MN

WEDNESDAY, JANUARY 15

9B.2 R2O Successes and Challenges from a CIROH Private Partner Perspective

Katie van Werkhoven | 8:45-9:00am CT | Rm 341

9B.5 Successes and Future Opportunities in Research to Operations Toward the Advancement of our Nation's Resiliency Against Water Hazards and the Growing Pressures on our Critical Water Resources

Ed Clark | 9:30-9:45am CT | Rm 341

10B.1 NOAA Atlas 14 Volume 12: Precipitation Frequency Estimates for Idaho, Montana and Wyoming

Austin Jordan | 10:45-11:00am CT | Rm 341

10B.2 Spatial Analysis of Mean Annual Maxima for Precipitation Frequency Estimation in Atlas 14/15 Greg Fall | 11:00-11:15am CT | Rm 341

10B.3 Updated Present-Day Estimates of Heavy Rainfall Values in NOAA Atlas 15

Debbie Martin | 11:15-11:30am CT | Rm 341

10B.4 Future Projections of Heavy Rainfall Values in NOAA Atlas 15

Ken Kunkel | 11:30-11:45am CT | Rm 341

10B.5 Atlas **15** Pilot Service Delivery and Stakeholder Engagement

Sandra Pavlovic | 11:45am-12:00pm CT | Rm 341

11B.1 Implementation of Forecast Flood Inundation Mapping Services for the Nation

David Vallee | 1:45-2:00pm CT | Rm 341

11B.2 Using the National Water Prediction Service Website to Leverage Flood Inundation Mapping Services Charles Ross (WRSB) | 2:00–2:15pm CT | Rm 341

11B.3 Improvements in Continental-scale Flood Inundation Mapping at NOAA's Office of Water Prediction Carson Pruitt| 2:15-2:30pm CT | Rm 341

11B.4 Mapping Out the Future: Development Initiatives for the National Weather Service Flood Inundation Mapping Program

Derek Giardino | 2:30-2:45pm CT | Rm 341

AGENCY UPDATE NOAA Office of Water Prediction - Update on Next Generation Water Prediction Capabilities (NextGen)
OWP Panel | 12:15-1:15pm CT | Rm 222

Poster Session 3 | 3:30-4:30pm CT | Hall C

Harnessing the Power of Scalable Cloud Infrastructure for Hydrologic Data and Service Dissemination Through NWPS Sudhir Shrestha | Poster #658

Enhancing Total Water Level Forecasting for the Great Lakes and Lake Champlain using the Next Generation Water Resources Modeling Framework (NextGen)

Dina Sang | Poster #755

Improving Near Real-Time Operational Flood Inundation
Mapping Capabilities through the use of Replace and Route
Tadd Bindas | Poster #801

NWS Flood Inundation Mapping: Roles and Experiences at River Forecast Centers

John Kirk (MARFC) | Poster #802

Ensemble River Forecasts and Flood Inundation Mapping - Maximizing Available IDSS Tools

Emily Stephan (ERH) | Poster #803

Examples of Flood Inundation Mapping (FIM) Related Impact-Based Decision Support Services (IDSS), Collaboration, and Training Initiatives

Mike Jurewicz (WFO CTP) | Poster #804

Evaluating Flood Inundation Maps Using Innovative ToolsD. Charlie Smith | Poster #806

12B.2 National Weather Service Southeast River Forecast Center and Office of Water Prediction's Support of the Implementation of Flood Inundation Mapping in Puerto Rico Nicole Rockwell (SERFC) | 4:45-5:00pm CT | Rm 341

12B.3 Flood Inundation Mapping: A New Paradigm of Hydrologic Impact-Based Decision Support Services Katie Landry-Guyton (WFO HGX) | 5:00–5:15pm CT | Rm 341

12B.4 From Floods to FIM: How NWS Flood Inundation Mapping (FIM) Performed During the April 2024 Ohio Valley Floods

Alicia Miller (WFO PBZ) | 5:15–5:30pm CT | Rm 341

12B.5 Application of National Weather Service Flood Inundation Maps: Case Study Examples from North Central Texas

Amanda Schroeder (WFO FWD)| 5:15-5:30pm CT | Rm 341

12B.6 Assessment of National Weather Service Categorical Flood Inundation Mapping (CatFIMs) in Preparation for their Public Release

Bill Saunders (NERFC) | 5:15-5:30pm CT | Rm 341



THURSDAY, JANUARY 16

J13C.1 NOAA's National Water Model Version 4.0: Leveraging the NextGen Framework to Improve Hydrologic Operations

Brian Cosgrove | 8:30-8:45am CT | Rm 341

J13C.2 Designing the NextGen Framework to Support Community Engagement

Donald Johnson | 8:45-9:00am CT | Rm 341

J13C.3 TopoFlow-Glacier: Modeling combined snow and ice melt in glaciated catchments in Alaska for the NextGen Framework

Lauren Bolotin | 9:00-9:15am CT | Rm 341

J13C.4 Recent Advances in Channel Routing for River Networks for the Next Generation National Water Model Sean Horvath | 9:15-9:30am CT | Rm 341

J13C.5 Integrating River Basins in the Multi-Agency HARBOR Collection with the NextGen Hydrofabric

Scott Peckham | 9:30-9:45am CT | Rm 341

J13C.6 Leveraging the Distributed Model on Demand Platform to Work With Community Models in the Next Generation Water Resources Modeling Framework Robert Bartel | 9:45-10:00am CT | Rm 341 J14C.1 Data and Compute Architecture for Effective Use of Cloud Computing to Perform Benchmark Applications of the NextGen Framework

Nels Frazier | 10:45-11:00am CT | Rm 341

J14C.2 Exploring calibration of NextGen formulations using various objective functions and optimization algorithms

Nels Frazier | 10:45-11:00am CT | Rm 341

J14C.3 Enabling community contributions in formulation and hydrologic signature regionalization for continental hydrologic modeling

Guy Litt | 11:15-11:30am CT | Rm 341





