NWS Connect: A Growing Toolset for Partner Support, Community Engagement, and Service Equity
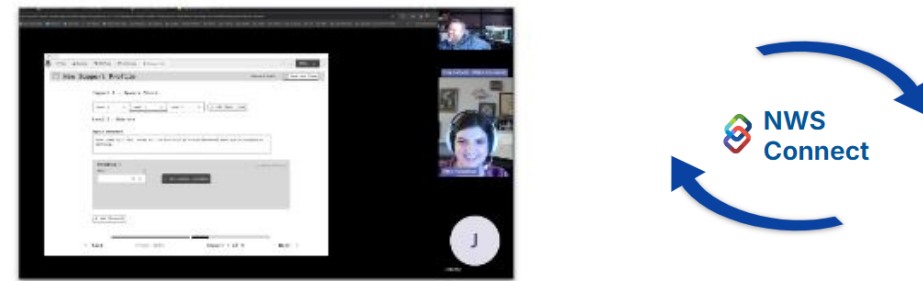
A KEN'S 10 PROB IDSS INITIATIVE SUPPORTED BY THE BIPARTISAN INFRASTRUCTURE LAW

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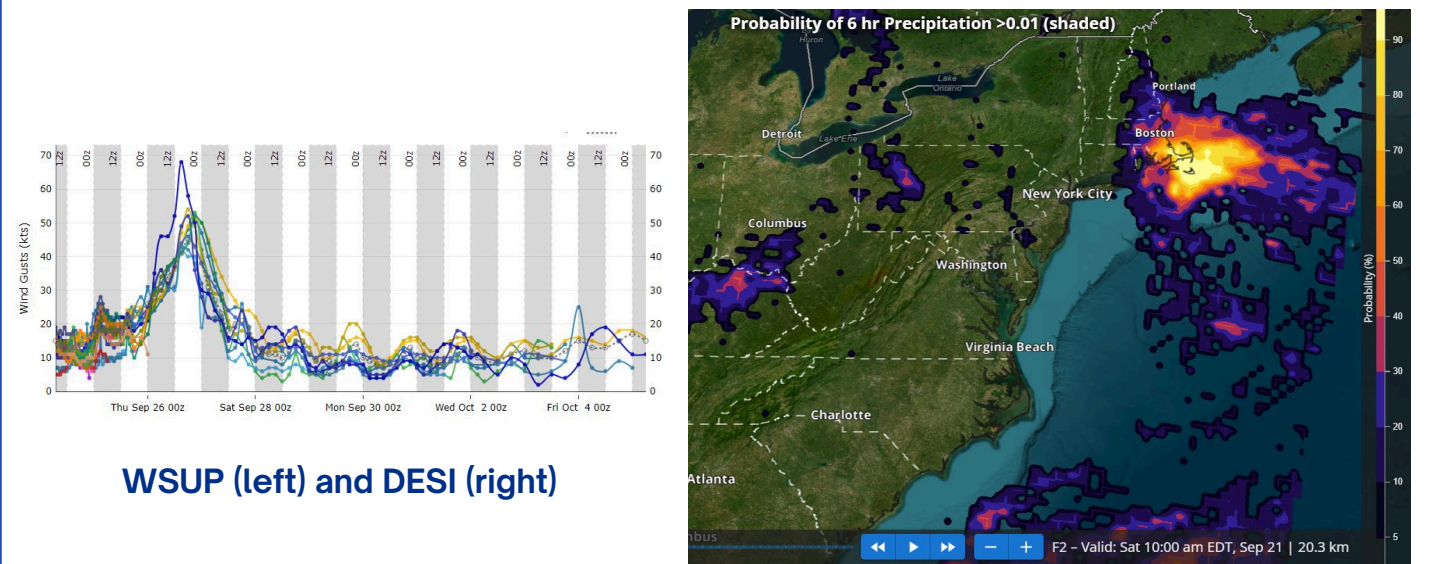
Introduction

NWS Connect is the National Weather Service's new operational system designed to enable consistent, modern, and secure Impact Based Decision Support Services (IDSS) and Community Engagement. It is a key NWS Ken's 10 Probabilistic IDSS initiative supported by the Bipartisan Infrastructure Law Provision 3 and a variety of NWS stakeholders and portfolios. It's aim is to provide internal and external partners with simple, effective tools to carry out their missions.

First Operational Release
June 2024

A universal database which allows for the NWS to store, display, filter and organize partner contact and role information.

NWS Connect IOC will contains the first operational capability for IDSS Support Profiles focused on Event Support. This will allow us to identify partner IDSS concerns and environmental thresholds.

NWS Connect implements a way to send email messages to individuals and groups of core and general partners, while avoiding Gmail limitations.

IDSS Engine

The IDSS Engine is being codeveloped with the NOAA Global Systems Laboratory to seamlessly integrate with NWS Connect and provide custom visualizations for specific partner profiles. It matches partner thresholds to probabilistic weather information, allowing the forecaster to communicate weather impacts to their partners. The vision is to incorporate IDSS Engine graphics into our Partner accessible portal. (Target: 2026)

UX Design at the Core

A user-first mentality has been employed with NWS Connect design and development. Our UX design process consists of extensive user research, prototyping, usability testing, and feedback driven iteration before code development occurs. We continuously launch MVPs and iterate in an agile fashion to ensure long term success.
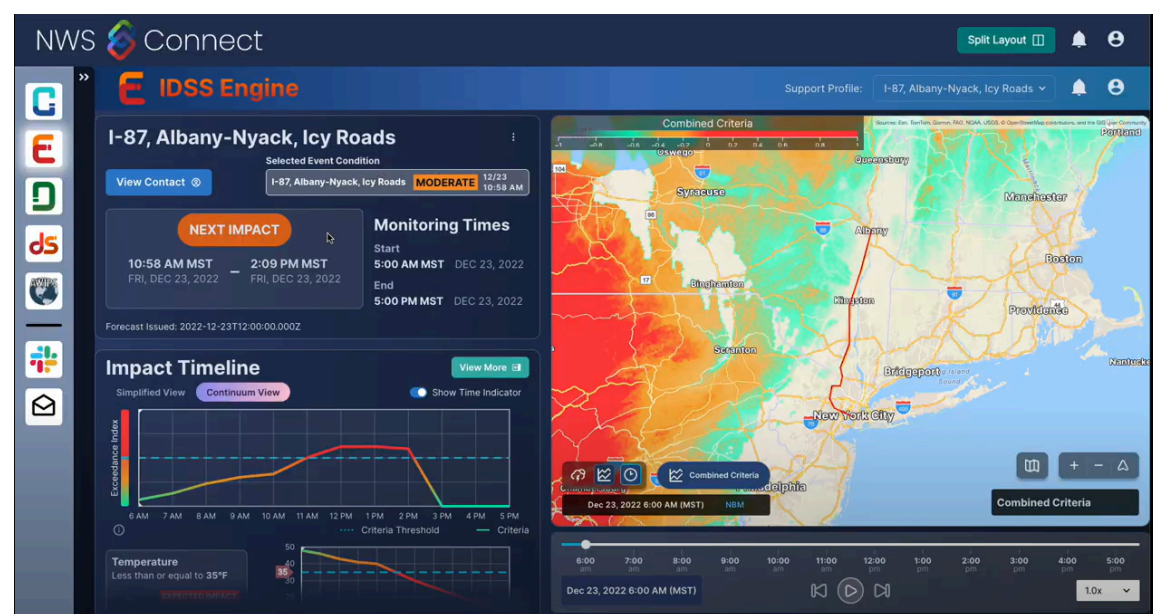
Partner Portal

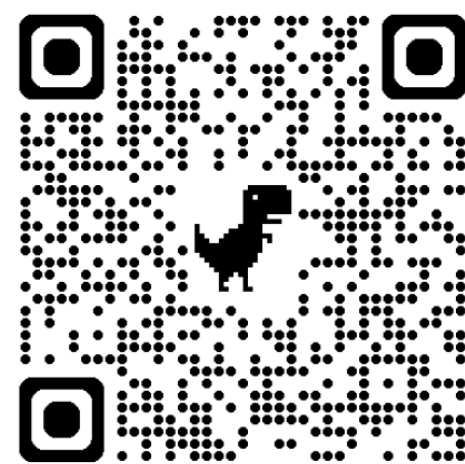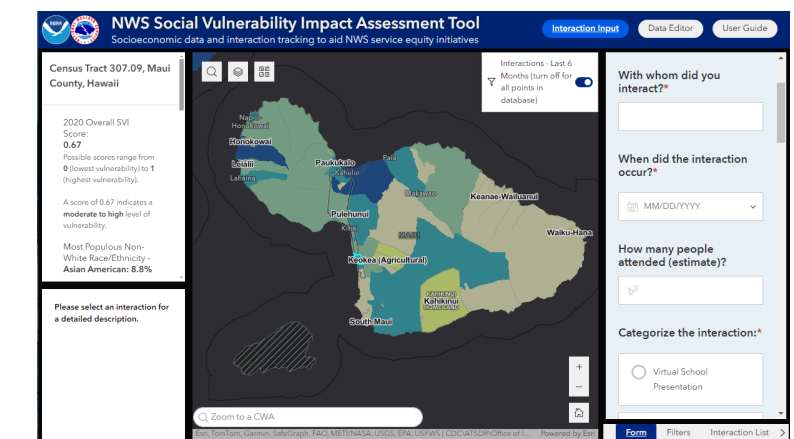**NWS Partners**
- Self Manage Their Information -
- Subscriptions To Product Alerts -
- Request Support For Event -
- View Latest Briefings -
- Set Communication Preferences -

NWS Personnel
- Create & Deliver IDSS -
- Partner Info Management -
- Manage Partner Support Levels -
- Consistent Customer Service -
- Visualize Partner Insights -

A key focus for the NWS Connect team in 2025 is the development of a Partner Portal. This portal will allow core partners to manage their basic contact information and communication preferences, submit requests for support, subscribe to alerts, and ultimately receive custom, probabilistic visualizations of unique thresholds and concerns. The NWS Connect Partner Portal will be the gateway for a modern alerting system that will ultimately replace iNWS. (Target: 2025-26)

We want your Feedback to help build the NWS Connect Partner Portal!

Probabilistic Visualization

WSUP (left) and DESI (right)

The widely used Dynamic Ensemble-based Scenarios for IDSS (DESI) and Whole Story Uncertainty & Probabilities Viewer (WSUP) will be merged into a single solution to allow NWS meteorologists to interrogate and measure uncertainty in relation to partner needs. The unified solution will be merged into NWS Connect for seamless use in briefings and other content. (Target: 2026-27)

Equitable Community Engagement

Tools to document and map community engagement as it relates to social vulnerability and DEIA will also be incorporated. (Target: 2026)

Additional Capabilities

Widely used tools such as the DSS Builder (shown above) along with additional IDSS and community engagement tools will also be incorporated into NWS Connect. DSS Builder will aid NWS staff in providing consistent and effective communication with decision makers.