

**Building an NWS Climate Services Roadmap: S2S Needs for Building a Climate Ready Nation**

[To be submitted to "Requirements and needs for NOAA's S2S Applications (GEFS, SFS)" session]

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The National Weather Service (NWS) Climate Services Program has been providing national, regional, and local climate services for more than 20 years. To improve services, the NWS climate services program accelerated user engagement through customer surveys, workshops, and collaborations.

The NWS Climate Services Program supports the NOAA and NWS strategic goals and Climate Ready Nation (CRN) initiatives through integrating climate information into Impact-based Decision Support Services (IDSS), the most critical element for implementation of the NWS strategy for a Weather-Ready Nation. This includes application of state-of-the-art climate monitoring and prediction products to the most societally relevant impacts while empowering regional and local climate delivery of enhanced services.

Recently the program conducted several climate services engagement activities with NWS local offices, including survey, two-day meeting, and several focus groups, to assess the current capabilities and gaps of our local offices in providing climate services, especially climate IDSS, to core partners. The results of this engagement when combined with high-level strategic plans present a clear picture of where NWS climate services improvements are needed most. In addition to continued improvements in foundational climate observations, monitoring, and prediction, the following themes emerge: 1) Collaborated Climate Messaging and Decision Support, 2) Application to NWS Service Areas and Societal Challenges, and 3) Incorporating Multi Time Scale Climate Information into Products and Services. These themes lay a foundation on which new requirements for S2S modeling and applications must be built through coordination with the AFS Analysis and Forecast Branch (AFS11), and adjudicated through the NWS governance process.