

NOUS41 KWBC 041959
PNSWSH

Public Information Statement 25-54
National Weather Service Headquarters Silver Spring MD
359 PM EDT Mon Aug 4 2025

To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Stephen W. Bieda III, Ph.D., Chief
 Severe, Fire, Public, and Winter Weather Services
 Branch

Subject: Soliciting Comments on Proposed Enhancements to the
Probabilistic Winter Storm Severity Index through September 6, 2025

The National Weather Service (NWS) is soliciting comments on proposed enhancements to the Probabilistic Winter Storm Severity Index (WSSI-P) through September 6, 2025. Those enhancements include:

- Both the Snow Amount and Ice Accumulation algorithms each day will include the preceding 12-hour accumulations.
- The tree type and land cover datasets have been updated.
- The Snow Load algorithms will account for pre-existing snow totals.
- The Blowing Snow algorithm will account for duration-based impacts. In addition, ground blizzard science will be added to the "Blowing Snow" component.
- A wind factor will be included in both the Snow Load and Ice Accumulation algorithms.
- Population density and average traffic count data will be included in the algorithms for Snow Amount and Ice Accumulation.
- The "Snow Rate" component will be removed to match the deterministic Winter Storm Severity Index (WSSI) components.
- The deterministic WSSI will be an additional member of the model ensemble for the first 78 hours of the WSSI-P forecast output.

The purpose of the WSSI-P is to provide NWS forecasters, partners, and the public with probabilities of the severity of winter weather hazards and the potential for related societal impacts. The WSSI-P does not depict official warnings and should always be used in context with official NWS forecasts and warnings.

The WSSI-P is updated at approximately 0200, 0600, 1400 and 1800 UTC. No communication system changes are required to view this web-based information.

Additional information is provided in the Product Description Document (PDD) located at the link below:

https://nsdesk.servicenowservices.com/api/g_noa/nwspc/res2/77ac6f991b87a6900d690f67624bcb74

The WSSI-P website is available here:

<https://www.weather.gov/wssi-p>

Comments, feedback, and questions on these proposed enhancements to the WSSI-P are welcome through September 6, 2025 by sending an email to:

James Nelson
Chief, Development and Training Branch
National Weather Service - Weather Prediction Center
College Park, MD
Email: james.a.nelson@noaa.gov

Eric Guillot
Winter Weather Program Lead
National Weather Service - Analyze, Forecast, and Support Office
Sterling, VA
Email: eric.guillot@noaa.gov

National Service Change Notices are online at:

<https://www.weather.gov/notification/>

NNNN