

**Product Description Document
Flood Hazard Outlook Product
October 2025**

Part 1 – Mission Connection

a) Product Description:

The Flood Hazard Outlook (FHO) is provided by the NWS Office of Water Prediction (OWP) National Water Center (NWC) to portray the potential inland flash flood and riverine impacts by categorical severity level (catastrophic, considerable, and limited) for the next seven days. This comprehensive product depicts the threat of various flood hazards (such as flash, urban, small stream and riverine flooding) based on modeled, forecast, and observed hydrologic information from Weather Forecast Offices (WFOs), River Forecast Centers (RFCs), Weather Prediction Center (WPC), and the NWC.

b) Purpose/Intended Use:

This product is intended for use in state, regional, and national Impact-based Decision Support Services (IDSS) briefings which support broad messaging of the flood threats to NWS stakeholders and Federal water partners, such as the Federal Emergency Management Agency (FEMA), the United States Army Corps of Engineers (USACE), and the United States Geological Survey (USGS). This product is routinely issued twice daily, typically around 1200 Coordinated Universal Time (UTC) during Daylight Saving Time / 1300 UTC during Standard Time and typically around 2100 UTC. Unscheduled updates and special issuances may also occur if conditions warrant a categorical upgrade between issuances.

c) Audience/Users:

The users of this product are NWS stakeholders and Federal, State, and Regional water partners. Partners have expressed a strong desire for nationally consistent flood hazards information and coordinated hydrologic flood graphics.

d) Presentation Format:

This FHO, which is a graphical depiction of the flood threat with key messages, is available both as an interactive Geographic Information System (GIS) service and a static graphic linked below the interactive map on the National Water Prediction Service (NWPS): <https://water.noaa.gov>

e) Feedback Method:

If you have additional questions or comments, please contact:

National Water Center Water Feedback

Email: water.feedback@noaa.gov

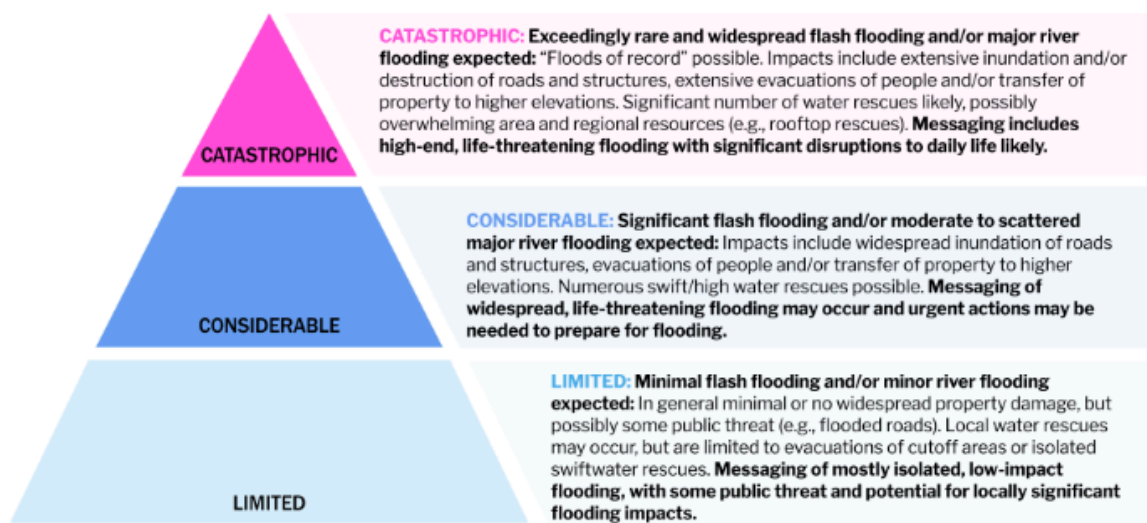
Part 2 – Technical Description

a) Format and Science Basis:

OWP leads the effort to develop the impact-based FHO by leveraging new techniques to integrate various sources of deterministic and probabilistic forecasts/guidance and feedback from social scientists and stakeholders to effectively communicate flood hazards.

This highly collaborative product benefits from the input of meteorologists and hydrologists among the WFOs, RFCs, and WPC, in addition to NWC forecasters. Currently, over 30 considerations are reviewed by forecasters when populating this product. Some of these include: NWS water resources forecast information including NWM guidance, official RFC deterministic and probabilistic forecasts, and WPC's probabilistic excessive rainfall outlooks.

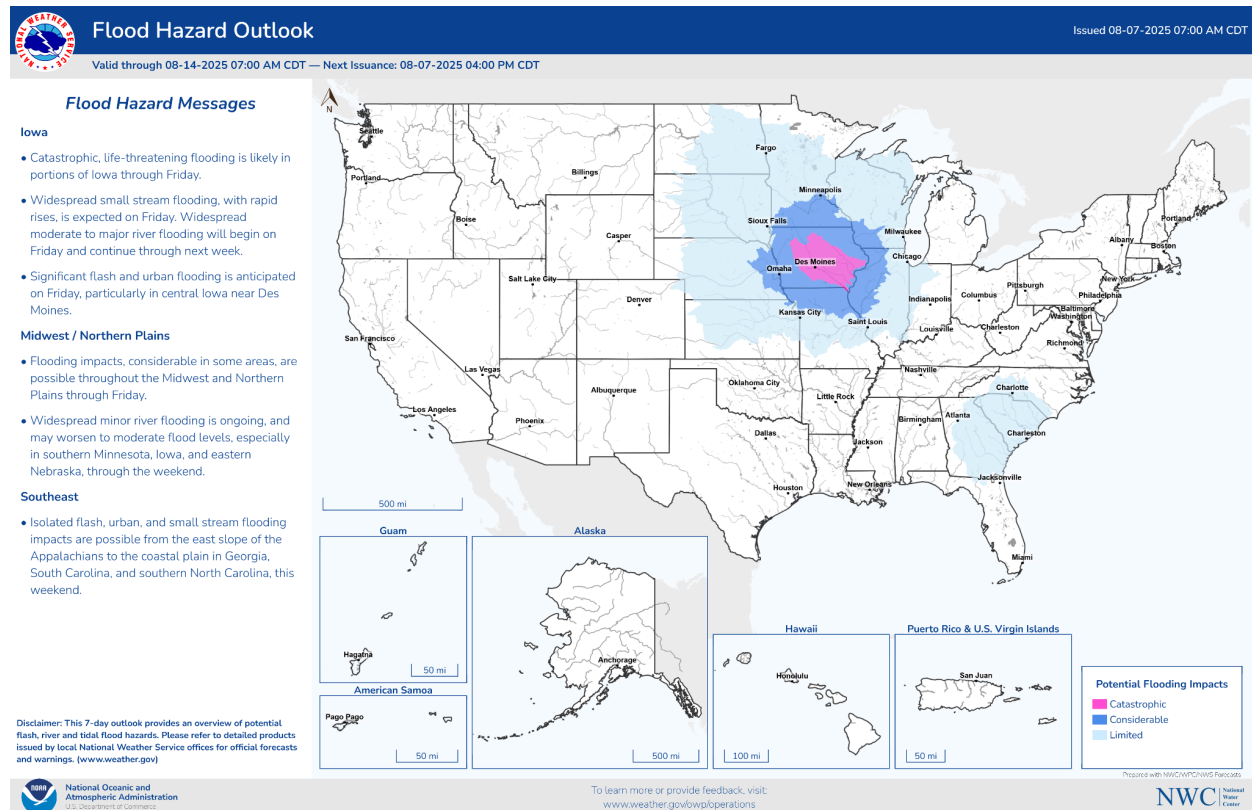
The graphic depicts potential flooding impacts in the following categories:



In the event that there are no areas highlighted in any of the three categories, a text label will appear on the National graphic stating "No Areas Highlighted" and the Flood Hazard Messages will contain a text statement of "No New or Renewed Flood Impacts Expected."

Coastal flooding and storm surge are not depicted in the Flood Hazard Outlook; however, when significant coastal/storm surge flooding is expected, from any cause, a Flood Hazard Message will be provided, directing users to sources of detailed information for the flood threat.

Sample of the 7-Day FHO:



b) Availability:

The product is routinely issued twice daily. The primary issuance is typically around 2100 Coordinated Universal Time (UTC), with a valid time starting immediately (Day 0) and extending to 1200 UTC eight days later (the end of Day 7). An update is issued, typically around 1200 UTC during Daylight Saving Time / 1300 UTC during Standard Time, with the same valid period (and Day 0 having fully passed). Unscheduled updates and special issuances may also occur if conditions warrant a categorical upgrade between issuances.

This graphical depiction of the flood threat is available as a static graphic encompassing the full period through Day 7, and an interactive GIS service for the individual timing bins ('through Day 3', 'Days 4-7', and 'through Day 7'). In both cases, Flood Hazard Messages are included to provide detail on areas highlighted in the outlook. The static map and interactive GIS service are both available from the National Water Prediction Service below the primary interactive map, or at the following direct link:

<https://water.noaa.gov/operations/fho>

When the cause of potential flood impacts is from a tropical cyclone affecting the Continental United States, Puerto Rico/US Virgin Islands, or Hawaii in the next 7 days, a specific Tropical-focused FHO visualization, zoomed to the impact area, will be created. This includes both potential tropical cyclones and post tropical cyclones.

Additionally, static zoomed maps of the outlook graphics are available for each of the individual timing bins at FEMA Region, RFC, and State scales.

c) Additional Information:

Future product enhancements which would integrate new and additional sources of water modeling and forecast information from WFOs, RFCs, WPC, and NWC to characterize the flood threat are expected and will be delivered after appropriate testing, evaluation, and feedback adjudication is performed.