

DRAFT IDSS Service Description Document V2.0 - Key Concepts

<u>Background - NWS</u> service evolution in the area of Impact-based Decision Support Services (IDSS) is based on the recognition of the expanding demands of our core partners to prepare and respond to extreme events. At the same time NWS recognizes the growing capacity of the private sector component of the Weather, Water, and Climate Enterprise (Enterprise) to provide tailored support for an increasing range of customers, including NWS core partners, driving the need to describe the respective roles for the greater good of the Enterprise.

IDSS Definition - The provision of relevant information and interpretative services to enable Core Partners' decisions when weather, water, or climate has a direct impact on the protection of lives and livelihoods.

IDSS interpretive services encompass the clear, consistent and plain language translation of NWS-generated weather and hydrologic forecasts information through the additional service element of two-way communication. IDSS may be characterized as being either episodic or routine in nature:

<u>Episodic IDSS</u> - Provision of information and interpretative services to directly support a hazardous situation where weather, water, or climate has a direct impact on the protection of lives/livelihoods, or to support a scheduled event where weather and water related variables are critical to the planning and execution of the event from a public safety standpoint. Examples include: supporting Core Partners decisions related to an impending hurricane or winter storm, as well as providing support to a Core Partner for a scheduled event such as a festival or fair.

<u>Routine IDSS</u> – Provision of ongoing support to a subset of Core Partners throughout the year to improve partner mitigation, preparation, response, and recovery efforts related to events/incidents where weather, water, or climate has a direct impact on the protection of lives/livelihoods; or to support routine-high value decisions. Examples include joint training, Integrated Warning Team interactions, pre-event/scenario planning, water use/contingency forecasts and planning, table-top exercises used to plan actions, and procedures addressing these events or incidents, after-action reviews, and daily coordination regarding routine high-value decisions such as aviation operations or reservoir releases.

Guiding Principles:

- NWS's primary focus is on supporting government partners who share similar mission objectives to ensure the safety of the public and particularly vulnerable populations.
- NWS will support disaster management efforts of federal, state, local, tribal and territorial governments.
- NWS will interact with its partners at the highest level (e.g. State vs local), therefore reaching as many as possible who are potentially in harm's way.
- NWS will be flexible in how we provide IDSS to our partners, keeping in mind that they may also be receiving support from others in the Weather, Water and Climate Enterprise.

Core Partners

Core Partner Definition: Government and non-government entities which are directly involved in the preparation, dissemination, and discussions involving weather, water, or climate related National Weather Service information, that supports decision making for routine or episodic, high impact events. These entities have a unique need for increased interaction with NWS personnel for provision of IDSS or to facilitate their role in supporting the NWS mission.

General Criteria for core partners:

- Directly involved in the preparation, dissemination, or discussion involving hazardous weather, water, climate, or other emergency information
- Possess a unique need for increased interaction with NWS for IDSS
- Have an operational nexus necessitating mutual exchange of data/information to support each other's operations



NWS Core Partners consist of the following four categories:

Members of the emergency management (EM) community

 Public safety officials at the federal, state, local, tribal, or territorial level charged with protecting the public

Members of the water resources management (WRM) community.

 Public officials at the federal, state, local, tribal, or territorial level and are charged with managing the nation's water resources for the public good, including infrastructure (e.g., dams, levees, reservoirs, etc.)

Government partners.

 Federal, state, local, tribal, or territorial government partners who have missions that require close coordination with the NWS to support the operational linkages of an allied mission of public safety or critical interdependency on each other's data/actions

Members of the real-time media.

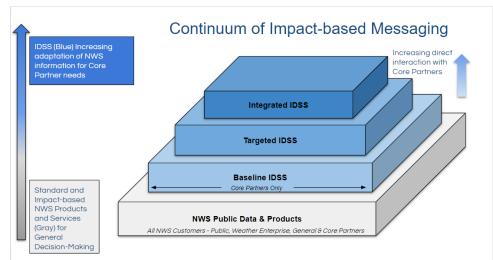
 Entities that operate systems that routinely and rapidly relay weather and water watches, advisories, warnings and forecast information to a significant part of the population served by an NWS office

Considerations in Prioritizing the Provision of Higher Levels of IDSS Services:

- 1. There is a legal mandate to support the Core Partner (e.g., Executive Order, statute) or support is a matter of national security;
- 2. The Core Partner exercises a large degree of authority or influence relative to other core partners, on public safety or management of the nation's water resources for the public good;
- 3. The Core Partner serves a population or entity particularly vulnerable to impacts of weather , water, or climate hazards;
- 4. The Core Partner acts as a force multiplier to help amplify NWS messages to other partners.

Tiers of Services

The Continuum of Impact-based Messaging Tiers of Products and Services include:



Integrated IDSS: Provision of specialized information requiring dedicated support to an individual Core Partner. Includes virtual and in-person deployments.

<u>Targeted IDSS</u>: Messaging that focuses on a group of Core Partners that have similar operational concerns and specific but common decision thresholds

<u>Baseline IDSS</u>: Includes products and services that are common or universal to all Core Partners

<u>Public Data and Products</u>: Foundational data and standard NWS products the public uses to make decisions. Serves as the starting point of IDSS.



Prioritizing the Provision of Higher Levels of IDSS Services:

- 1. There is a legal mandate to support the Core Partner (e.g., Executive Order, statute) or support is a matter of national security;
- 2. The Core Partner exercises a large degree of authority or influence relative to other core partners, on public safety or management of the nation's water resources for the public good;
- 3. The Core Partner serves a population or entity particularly vulnerable to impacts of weather , water, or climate hazards:
- 4. The Core Partner acts as a force multiplier to help amplify NWS messages to other partners.

IDSS Operating Cycle:

Providing IDSS follows an integrated process, an IDSS Operating Cycle, that addresses four primary phases of IDSS readiness and delivery, as pictured below:

Relationship **Evaluation** Readiness **Delivery Building Activities to prepare** Gather feedback and Tactical execution of and ensure NWS office IDSS products and refine our services. Begins well in advance Continuous readiness to effectively services to Core of an event through and appropriately Partners. Includes post-event routine, continuous Engagement respond to the unique performance reviews interactions with Core with Core needs of their Core Includes support via and Core Partner Partners. Partners. Action Plans for a surveys. **Partners** specific weather, Includes building trust Includes water or climate through engagement needs/resources event, routine high and documenting needs assessment, IDSS value IDSS, emergency in Core Partner Profiles. Planning Guides, and incident-driven event. office IDSS training and/or scheduled activities. special event.

Best Practices for Provision of IDSS

- Flexibility When multiple support providers are present, NWS will be flexible in the level and/or type of IDSS provided, seeking input from core partners as to what support is needed and what level of coordination is required.
- Coordination Upon request of core partner authorities in charge of the response activities, NWS will work with
 core partners in charge to identify weather support providers involved (i.e., NWS and any in-house or contracted
 provider of weather services to core partners or other entities involved in the response effort) and will provide an
 opportunity for coordination to ensure consistency of messaging and that weather-related roles in the support
 effort are well understood.
- 3. Support to non-Core Partners in National Incident Management System (NIMS) Context When NWS provides IDSS within these coordinating structures to support the aggregate life- safety preparation and response, NWS recognizes that information of value and use in operational efforts is indirectly provided to all response participants. NWS will not, however, provide tailored advice to non-core partner entities on impacts of weather in areas such as how to expedite restoration activities or how to mitigate hazardous weather in the future. In responding to requests for specific weather guidance and information beyond that provided to core partners, NWS personnel will inform the requester that tailored support, including customized and highly localized forecasts and warnings, may be provided by our Enterprise partners.



- 4. Support to non-Core Partners Outside the National Incident Management System (NIMS) Context Outside the context of a core partner-managed coordination structure (e.g., Incident Command Post, Emergency Operations Center, Joint Field Office, etc.), requests to NWS for direct IDSS services to individuals or organizations which fall outside the core partner definition must be addressed at the request of a core partner for purposes that are critical to public safety. Otherwise, the requestor will be referred to our Enterprise partners (e.g., weather.gov/enterprise) for decision support.
- 5. <u>Decision-Specific Information</u> If a new or enhanced product/service is required to effectively support IDSS for core partners for a particular event, NWS will determine, after the event, whether the product/service is temporary (only relevant to that particular incident/event) or if it may be applied more broadly across NWS to support core partners on an ongoing basis or to support similar events in the future. If the latter, the new/enhanced product/service will be identified as an "experimental" product/service and made available for public comment/review before a decision is made to continue use of the product/service on an operational basis.
 - a. Any new information/products provided as part of the IDSS support described in this SDD will also, as resources allow and if safety and security considerations do not prohibit, be made available in a timely manner for broader distribution, e.g., via NWSChat, NWS webpages and/or social media.

<u>Core Partner Approval Process</u> - Procedures are identified for how NWS will evaluate requests to be considered a Core Partner (for IDSS) and how appeals to the decision may be made.

<u>Capacity to Provide Support</u> - NWS aims to provide an equitable level of support to all core partners given a similar level of need for a given event or incident. However, local office management will continue to have the discretion to determine how to most effectively support multiple requests for IDSS, especially during large-scale events with wide-spread impacts. This isn't a change – NWS resources available to support all operations are subject to the limitations of budget appropriations and decisions on how best to apply those resources continue to be the responsibility of government managers.

Emergency Circumstances - In rare cases, if NWS staff are concerned that lives and property are at imminent risk, IDSS may be provided to individuals/organizations without a previous request/approval being in place. For example, in the event of an immediate threat, direct notification by NWS about the threat may be initiated. The purpose of this type of notification, which is expected to occur infrequently, is to ensure awareness of the threat and that precautionary actions are underway.

<u>Need for Review</u> - This is intended to be a living document. NWS will continue to refine the details of how IDSS is provided based on input from our partners. NWS is committed to incorporating lessons learned from review, both informally, and in the context of post-event evaluations of IDSS services. These lessons learned will drive improvements, both in services to our core partners, and in better recognizing and addressing any impacts to our Enterprise partners and their role in providing complementary or exclusive services to customers.

<u>Descriptive Example Scenarios of IDSS for NWS Core Partners</u> - An appendix presents scenarios that are meant to provide descriptive examples of how Impact-Based Decision Support Services (IDSS) may be provided to NWS core partners.