



## Western Governors' Association Invasive Species Data Management Workshop Findings and Recommendations May 15, 2018

On March 14-15, 2018, the Western Governors' Association (WGA) held a workshop in Denver, CO focusing on the interagency management and exchange of invasive species occurrence data in the West. The WGA Invasive Species Data Management Workshop (workshop) convened 27 representatives from state and federal agencies, non-governmental organizations, industry, and other groups. The goal of the workshop was to develop a set of agreements to improve the reporting, exchange and utilization of invasive species occurrence data by state and federal agencies, invasive species data aggregators, private landowners, industry, and other stakeholders. This paper reports on the recommendations and agreements developed by the participants. The workshop included representatives from four major national invasive species data aggregators with significant data for the West.

- [Early Detection & Distribution Mapping System \(EDDMapS\)](#)
- [iMapInvasives](#)
- [USGS Biodiversity Information Serving Our Nation \(BISON\)](#)
- [USGS Nonindigenous Aquatic Species Database \(NAS\)](#)

### *Findings*

The participants have agreed to the six following recommendations:

- 1. Have the major invasive species data aggregators adopt the same standards for information system management and accessibility, as well as improve and regularize the exchange of invasive species occurrence data, with the goal of improving and promoting the exchange of occurrence data for stakeholders in the West.**

The four major data aggregators have agreed to implement the following practices. Several of these recommendations are in alignment with a recent document, [Enabling Decisions that Make a Difference: Guidance for Improving Access to and Analysis of Invasive Species Information](#), published by the National Invasive Species Council Secretariat.

The four major invasive species data aggregators have agreed to the following:

#### *General Agreements*

- Establish an agreement for sharing data among the primary information systems for non-native/invasive species occurrence data in the United States.
- Ensure data attribution, accuracy, authority, and timeliness, as well as enable interoperability with emerging technology platforms for data acquisition and analysis.

#### *Data Standards*



- Use the Integrated Taxonomic Information System (ITIS) Taxonomic Serial Number to identify the species or taxon.
- Enhance the Integrated Taxonomic Information System (ITIS) to fully cover taxonomic groups not yet complete.
- Ensure that invasive species occurrence data are exportable and highly compatible with the Darwin Core and NAISMA standards.
- Assign a universally unique identifier (UUID) to species records and register/maintain information with a Digital Object Identifier (DOI) (or equivalent) by the resource originator.
- Create and routinely update a list of data aggregators/clearinghouses through which relevant data can be openly shared.

#### *Data Exchange*

- Determine a practical regular interval and method for invasive species data exchange between the four major data aggregators and commit to exchange all relevant invasive species occurrence data at the established interval.
- Acknowledge the importance of data verification for invasive species data management systems.
- Acknowledge and address the challenge of uploading data with non-disclosure legal requirements (such as private property and Tribal land).
- Work to identify methods and data resolutions to address data privacy issues on private property and Tribal land.

### **2. Encourage State and Federal invasive species managers to utilize the four major data aggregators using Darwin Core and NAISMA mapping standards.**

- When practical, state and federal land managers are encouraged to add invasive species occurrence data to one of the four major data aggregators (EDDMapS, iMapInvasives, BISON, and NAS) using the Darwin Core and NAISMA mapping standards.
- Invasive species data management systems other than the four major data aggregators play an important role in invasive species management. The four major data aggregators are intended to enhance, and not replace, State-, local-, and Agency-specific invasive species data management systems, with BISON serving as the universal pointer back to all local or specific providers.
- Participants support the creation and implementation of a national campaign to mobilize invasive species occurrence data into publicly available information systems, including the four major data aggregators.

### **3. Recognize human elements are critical for communication and information exchange in Early Detection Rapid Response (EDRR).**

The communication of invasive species information outside of digital data management systems, such as through local management networks like the Western Weed Coordinating Committee, the Western Regional Panel on Aquatic Nuisance Species, and cooperative weed



management areas, are a crucial component of EDRR and timely responses to emerging threats. Federal, State, and local land managers are encouraged to actively participate in these groups, as they are often the most effective method for communicating emerging invasive species threats.

**4. Share best practices among federal and state partners.**

Federal and State invasive species managers are encouraged to share best practices to improve invasive species management in the West. Possible topics include: best practices for data collection and standardization by local groups; data mobilization; and making a compelling case for funding (e.g., examining impacts to recreation, economies, etc.).

**5. Endorse the NISC Management Plan Deliverable on Data Management.**

The participants support the recommendations contained within the NISC Secretariat Document [Enabling Decisions that Make a Difference: Guidance for Improving Access to and Analysis of Invasive Species Information.](#)

**6. Acknowledge that sustainable funding and resources are needed to make progress.**

Financial and operational capacity restraints are one of the greatest challenges to invasive species management in the West. Programs that help pool funding for invasive species control projects, such as the National Fish and Wildlife Foundation Pulling Together Initiative, should be reinvigorated and reinstated.