



Opening Access to Oregon’s Water Information – A Data Integration Platform

The Need

Based on feedback from over 1,000 community water leaders in communities across Oregon, it is clear that water managers need better, more cohesive, and more usable data and information about water to forecast their community’s water needs and prioritize water investments. Specific needs include:

- Water budgeting—Forecasting and tracking water availability, demand, and use;
- Natural and built infrastructure condition and improvement needs/plans/costs; and
- Ecosystem status and trends.

Communities have clearly identified that they want water information to be current, high quality, transparent, accessible, and usable. Extensive resources and data exist for water quality, quantity, and habitat. However this information is dispersed, unintegrated, and sometimes inaccessible, making it difficult for state and local governments to easily consider, compare, or fully capture the value of these resources. Oregon needs to invest in integrating water data, making it accessible at a regional level to help Oregonians make smart water decisions that keep our communities thriving. With funding from the 2020 Legislative Session, the state will start that process by:

- Developing specifications and agreements for a “Data Integration Platform” that improves agency and community access to high quality water data via a web-based portal (*funding from DEQ budget request*); and
- Testing a platform by collecting and integrating data on anticipated natural and built water infrastructure and ecosystem needs, in ways that can directly inform decision-making (*funding from Business Oregon and OWEB investments with existing budgets*).

The End Goal

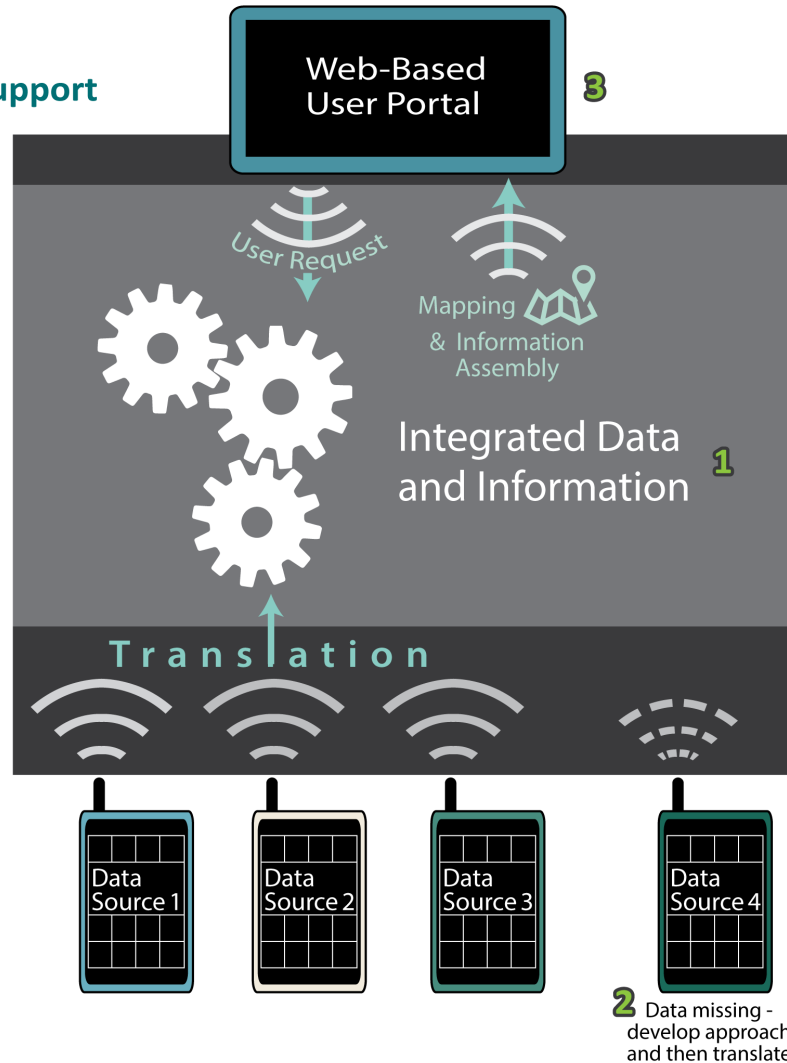
The internet has made real a vision of bits of data being connected together and made accessible the world over—enabling school kids to access information about the world’s cultures, supporting scientific discovery, and helping water managers incorporate the real complexity of the environment into their decisions. If we could wave a magic wand, Oregon could help create and support an integrated water data and information platform that puts our water management capabilities ahead of many places in the world. This system will support Oregonians as we make smart water decisions in the coming century. The components of a Water Data Integration Platform are described in the graphic below include:

- A. High-quality and current data—Data that are regularly collected in a structured, consistent, and reliable way across the state, and formatted and made available consistent with the Framework agreements; and
- B. Integrated data and information platform—The “connections”, agreements, and privacy protections that allow water managers to access data from multiple sources to help them answer an array of management questions.

Access and Decision-Support Tools for Users

Water Data Integration Platform

Water Data Inputs



2020 Budget Request:

- 1** Developing specifications and requirements for a water data platform that integrates data to enable agencies and communities to make strategic water decisions;
- 2** Identifying key water data gaps; and
- 3** Identifying initial user needs for web-based user portal.

2 Data missing - develop approach and then translate

Key terms for the purpose of this document

Data, Data Sources, Data Inputs: Data are the characteristics of water (e.g., water quality, quantity, stream location, groundwater basin boundaries, or water use) that are collected. Those data are stored (Data Sources) and made available (Data Inputs).

Information: Data that have been organized, synthesized, presented, or analyzed in a way that begins to attach meaning to the individual bits of data. Information is needed to support decisions, but you cannot have information without data.

Platform (data and information): The data standards, inter-agency agreements, technological connections, and other aspects of data and information systems that allow water data to be accessed, organized into information, and used to support decision-making.

Access and Decision-support tools: The web-based portals, interfaces, and tools that allow local and other users to access the data and information they need in a forms usable for good decisions.