

Appendix N: Project Questions, Issues, and Risks

Updated June 2025

Open questions log

These questions originated from the OWDP 2023 Project Concept with some additional questions that have been added over the life of the project thus far. Below are the open questions and an assessment of the status of resolving them as of June 2025.

Question	Status
What data should be available to whom? (e.g., Are some data available only to agency-level partners? On what criteria do we base such determinations?)	Further analysis is needed. We have learned that there is a need for some data to have limited access based on source and need. (No change since 2023 report) Note that the Pilot Portal does not have the ability to permission or restrict data access.
What tribal, special service district, county and municipal, etc. data should be available on the platform, and what is the best way for us to engage potential data-providing entities?	The project has a list with consideration that different data providers have different capacities and concerns with how their data are shared. The project suggests engaging with the University system to connect with the non-state, non-federal government data.
Are there other water data organizations with whom we should potentially engage?	Yes, however a determination on how to evaluate data when coming from private or citizen scientists is pending. (No change since 2023 report)
What federal agency data are key to this project, and are they available to us?	We know there are federal data available but have not yet evaluated which data sets will be most useful. Many major federal data sources, such as stream gage data from the U.S. Geological Survey, are already available via data services, and we assume that all major necessary federal data sources will be accessible.
How shall we handle potentially duplicative data sets from different agencies?	The project will need to provide analysis and identify which data sets are in this category. For any such data sets, a primary source will need to be identified, as well as a process for incorporating any novel or conflicting data from duplicate sources.
What are the rough setup and maintenance costs for each of the features?	The costs for the Pilot portal are minimal, using state owned Hub Site and IoW hosted database/API. However, the permanent portal will very likely use different technologies and require a team to provide care and feeding to the site for maintenance and improvements.
How shall the OWDP be maintained and staffed, and	See the Recommended Draft Governance Plan in Appendix A of
how shall it be governed?	the OWDP Phase 2 Final Report.
What level of data processing and integrating should	There is further analysis needed to answer these questions in
the platform be capable of doing at various stages,	detail, but it is clear that supporting some critical water
and what level of investment is justified to produce	decisions will require data processing and integration. The

Question	Status
each? What data analysis and processing tools are necessary to make the data most useful to water decision makers?	project has engaged with water data users and decision makers to start to better understand their needs. The project Technical Team will assist with this as the selected platform makes an impact on the capabilities of the OWDP.
How do we manage current expectations of agencies' data which may take large amounts of resources and many years to develop? Are there needs for which Oregon state agencies do not have the data or possibly even the authority to answer? Does Oregon have the legal ability to share data?	Managing expectations is an ongoing process. To start, the OWDP team held listening sessions with water users and associations with a focus on what the OWDP can be capable doing in the short and long terms. Yes, there are Oregon agencies that do not have data or authority to collect them. Most data held by Oregon Agencies are public record, though there are restrictions to sharing due to considerations of privacy, security, or other privileged information associated with regulatory actions.
How do we interoperate the data to allow for integration of data across data sources?	Once the state's data framework is developed, there is expected to be a translation as data is brought into the portal. The Technical team is also developing data standards that will inform and support agencies in sharing their data in ways that support interoperability. A start to these standards can be found in the OWDP Phase 2 Final Report Appendices D, E and F.
How is return on investment determined and shared? State agency ROI is often providing information and customer service instead of profits as in private industry.	Further analysis is needed, especially in terms of "what is the value of data?"
What are the questions that water decision makers are trying to answer? What data are needed to support those needs and how do we get it?	Further analysis is needed. The project started identifying questions during Tribal and Stakeholder listening sessions in October 2022, and during Spring 2023 we compiled and developed use cases that support agency staff. These combined lists will be compared with the current data inventories to identify data gaps.
How do we get data that we don't have electronically such as data on paper or not collected?	Processes will need to be developed and will likely be pursued through future agency-specific Policy Option Packages. For some draft examples of long-term projects to assist with this effort, see OWDP Phase 2 Final Report, Appendix L.
Should the OWDP integrate data from open data platforms, such as Open ET or Google Earth Engine?	Further analysis is needed. The project team is aware of the need to balance availability of remotely sensed water use data with potential privacy concerns. There will be on-going discussions across agencies and stakeholders to identify an appropriate approach to provide detail suitable for planning but respecting appropriate limitations.

Issues log

Included here is a list of issues being tracked in this project.

- 1. There is no centralized document management and access across agencies and contractors
- 2. The project needs to incorporate Diversity, Equity and Inclusion (DEI) as well as Environmental Justice practices.
- 3. Data gaps/needs analysis has started but a crosswalk and deeper dive needs to be completed.
- 4. The project needs to incorporate agency staff as a stakeholder in subsequent planning efforts
- 5. Personas and Use Cases need additional development
- 6. We need to determine how to best apply the prioritization work completed with OWDP contractor Internet of Water
- 7. We are concerned we have neglected built water infrastructure (e.g., dams, pipes) in the data collected, due to insufficient expertise in the core project teams
- 8. We need to develop an MOU between agencies for project support (OWDP Recommended Governance Plan)
- 9. We need to determine any potential application or infrastructure redundancies the OWDP may create (Oregon Explorer, GeoHub, Open Data, etc.)
- 10. Determine the relationship (as needed) between the OWDP project team, the Water Core Team and the Regional Water Planning and Management Workgroup
- 11. Determine Legal Framework to approach local governments and special service districts
- 12. While the Pilot Portal provided a wealth of learning, it is not likely to be the final technology stack to use for the full portal. A thorough evaluation of business needs must be performed to assist in permanent technology selection and planning.

Risks log

The list below does not incorporate all project risks but identifies some major ones.

Risk	Description	Probability	Impact	Mitigation or Avoidance Plans	Update – June 2023	Update - June 2025
Lack of support from Legislature, Agencies and/or Users	Without support, this project will not be funded and will be shelved for at least a biennium, if not longer. This directly impacts the ability to provide water data to decision makers in an increasingly complex environment.	Medium	Very High	Continue to work with State Representatives, agencies, tribes, water decision makers and other stakeholders to inform the project activities. Provide opportunities for feedback and input for all levels.	OWDP Project has been funded for the 2023-2025 biennium. The funding delivered is below the level requested. The team will reduce the scope a bit to accommodate and will be looking at utilizing grants for some additional project work.	At the time of the Phase 2 Final Report drafting, the future plans for the OWDP are unknown. HB 3106 A-5 would provide significant support, if passed.
Political Impact	There are some sensitive topics around water data that may derail the project, including negative press or halting the work.	Medium	High	Continue to work with agencies and State Representatives to provide the needed level of care around these topics.		
Consistent project resources not provided	If this project is funded in the 2023-2025 biennium but not subsequent biennium progress will be stalled.	Medium	High	Continue to advocate for the project's needs with the OWDP Steering Committee.		
Agencies being the working level of the project, but the	If agencies are unable or unwilling to provide services to help the project be successful, the project may be in jeopardy.	Low	Medium	Work closely with agencies on what projects need to be achieved to participate in the	Agencies continue to be collaborative. With the project being funded the team should review the MOU and/or governance structures to help	This project has continued to be a good example of cross- agency collaboration. Strides have been made in

Risk	Description	Probability	Impact	Mitigation or Avoidance Plans	Update – June 2023	Update - June 2025
project is responsible				OWDP. Secure MOU between agencies. This project is also working to provide resources (grants and/or staff) to assist agencies and others in their engagement.	ensure the support by the various agencies.	integrating data between DEQ, OWRD and others.
State licenses for Socrata and/or ESRI tools are insufficient	Currently the project recommendation is to use Socrata and ESRI tools for the OWDP. If the licensing is unavailable for project staff or cannot support the project needs, another tool may need to be selected. After the start of implementation, the project would be delayed for redesign.	Medium	Medium	Work with Oregon State Department of Administrative Services (DAS) to ensure the proper licensing is available. Outreach early and assist agencies that may need help with the stage gate project process and their data governance plans to ensure they are able to receive licenses.	Since the February 2023 report, the OWDP Tech Team has been working on solidifying the options. It does appear the Tyler Technologies Data & Insights tool (previously Socrata) has licensing support for the pilot project needs. The OWDP Tech Team has been engaging DAS to work on available options and support. This does not mean re-design may not be needed, but that is the nature of a pilot. The OWDP will try a technology route and adjust if needed.	During Phase 2, the project team determined that the full portal technology stack needed further evaluation and development. The team came up with a Pilot Portal phase which allowed for the team to provide a place for data to be centralized and learning of what works and what does not. The Pilot Portal uses an Esri Hub Site and a Sensor Things Database/API hosted by the Internet of Water Consortium. While this provided a starting platform, the limitations of this setup prevented the full goals of the OWDP to be realized.

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities. Visit DEQ's <u>Civil Rights and Environmental Justice page</u>.