Frequently Asked Questions: RWIS and Next Steps (RISE)

What do RWIS and RISE stand for?	RWIS is the Reclamation Water Information System RISE is the Reclamation Information Sharing Environment
What is RWIS?	RWIS is a web portal that makes Reclamation's water-related daily time series data available in human and machine-readable open formats. The site launched in April 2017 at https://water.usbr.gov Use RWIS to access data via a map interface, data query, and a web service.
What are the next steps?	The RWIS team is improving the pilot version of the RWIS portal: adding data portal features, improving portal functionality and performance, and adding new water data types, parameters, and sites. RWIS is evolving into RISE, which will share data from other topic areas beyond water and other types of data beyond time-series data. RISE's vision is to share a broad range of Reclamation's data in consistent, open, machine- readable formats via a centralized, sustainable public and internal data portal. Anticipated data domains and types include: infrastructure, hydropower, and environmental data stored as spatial data sets, modeling and analytic results, and reports.
What is RISE?	RISE will be a system for sharing Reclamation's data in machine-readable, interoperable formats for use by internal and external users. It is currently under development through work funded by two Reclamation Science & Technology Program projects (1627 and 7127).
What did the RWIS Pilot Project do?	The RWIS Pilot project created a unifying data standard that allows data to be harvested from regional sources, copied to a central database, and served to the public via the launch of the RWIS web portal. This project serves as a foundation to serve more open data to the public and within Reclamation. See the video about RWIS at http://tinyurl.com/SeeRWIS. Reclamation's Research and Development Office's Science and Technology Program funded the project and many other partner offices supported and participated in the project.
What is open data?	"*Open data is data that can be freely used, shared, and built-on by anyone, anywhere, for any purpose.*" Common characteristics of open data: • Machine-readable • Interoperable • Sharable • Discoverable and searchable • Documented with metadata • Available at no cost via web services
What are the advantages to making Reclamation's data open?	Opening Reclamation's data makes them available for a broad ranges of uses by stakeholders, partners, researchers, water and power users, Reclamation staff, staff at Federal, State, and local agencies, nonprofits, members of the general public, and others. This open data will: ● Provide more transparency and accountability ● Make it easier to share information ● Inform Reclamation's analyses and operations ● Encourage civic engagement in resource issues ● Enable innovation and development of apps, tools, and products ● Support economic development and entrepreneurship ● Simplify integration and comparison with other datasets ● Analyze and display links between different types of information

Isn't Reclamation's data open now?	Reclamation's mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. We develop and use data to serve this mission. However, programs and projects have used different tools and developed unique database applications to meet their specific needs. While Reclamation shares much of its data via public websites, data users must be familiar with Reclamation's organizational structure to find some datasets, many area available only as PDF documents or other non-machine-readable formats, and many other datasets are not readily available or discoverable.
How will Reclamation add new data domains?	RISE efforts are focusing on data standardization to increase the types and parameters that can be included in the central database and portal. The portal will then be populated with new domain datasets to that meet these standards. Steps for adding datasets into RISE include: • Build data communities • Establish data standards for crosswalking between databases • Create data acquisition systems and builds tools to make data accessible to internal and public stakeholders • Formulate a common metadata schema and compiles metadata • Screen and protect data from improper release • Comply with appropriate security requirements • Build visualization and analysis tools
What are some benefits for external users?	As a one-stop shop, users can easily download and use Reclamation's wealth of data. Expanding the datasets available will save Reclamation staff, partners, and stakeholders even more time and money. Searches can be done in seconds rather than spending days finding who owns what data and in developing work-arounds to compare non-standardized datasets.
What are some benefits for Reclamation regions and programs?	RWIS and RISE will encourage public support and participation in Reclamation's work, support research and development, and spur economic development and entrepreneurship through better access to Reclamation's data products. RWIS will also enhance Reclamation's efficiency in sharing data and communicating with internal and external stakeholders, partners, and the public, saving time and money.
What are the benefits for Reclamation staff?	RWIS and RISE can help Reclamation staff be more effective and efficient. Historical data can provide an easy way to fulfill data calls. Real-time data coupled with analytics and visualizations can provide enhanced situational awareness (e.g., project operators could get alerts when facility conditions exceed design capacity). Reclamation planners, scientists, engineers, and others can get access to datasets from outside of their subject area or office to find patterns and interactions, show the bigger picture, and help understand complex interrelationships). Automated web services can provide data for dynamic visualizations for management briefings, stakeholder presentations, and other enhanced communications.
Who is involved in RISE?	RISE is a collaborative effort involving Reclamation data stewards, regional and Denver IT staff, and regional and Denver technical experts and support staff. A Reclamation-wide team is identifying data needs and datasets and developing processes to address security and privacy risks. The RISE Team currently has members from the following offices and regions: • Denver Office: Technical Service Center, Research & Development Office, Policy & Administration Office, Information Resources Office, and Power Resources Office • Great Plains Region • Mid Pacific Region • Lower Colorado Region • Pacific Northwest Region • Upper Colorado Region

Who are we working with?	The project team is coordinating with other Reclamation offices as well as our partners, stakeholders, and other agencies to identify areas of collaboration and partnership to expand ways to use Reclamation's data. The team is always open to new participants. If you'd like to join, please email us at rwis@usbr.gov.
What other open data efforts is Reclamation participating in?	RISE is building upon and coordinating with other Reclamation efforts for open data, including: • Open Data Team • Reclamation Data Council • Open Water Data Initiative and CRB Drought Visualization • CRB Open Data Tool S&T Project • Other S&T Open Data projects • Other Reclamation efforts to improve data management or sharing The RISE team is also reaching out to partners in other agencies and organizations such as • Western States Water Council • USGS Community for Data Integration • Data.gov • Data.doi.gov • Subcommittee on Spatial Water Data, sponsored by the Advisory Committee on Water Information and the Federal Geographic Data Committee
How Is RISE different from the Reclamation Data Council?	The primary focus of RISE is on data publication, while the RDC focuses on data management. The Reclamation Data Council is a Reclamation-wide group focused on data management, with members representing all regions and major program areas. The RDC focuses on best practices of data resource management to develop policy and promote data stewardship through coordination with data subject matter experts. RISE is a new system that is being developed for sharing Reclamation's data in machine-readable, interoperable formats for use by internal and external users. RISE is separate from the Data Council, but the goals of the RISE project depend on the concepts of data management pursued by the Data Council.

How can I be a part of this?	**We welcome your suggestions and involvement!**
	If you are:
	• *Reclamation staff:* Join our team. What you are interested in getting involved in?
	• *Agency or stakeholder group:* Let us know how you'd like to work together.
	• If you know of potential datasets or dataset owners that we should work with, let us know
	• Tell us how you use or want to use Reclamation's data and how RISE can help you by emailing the team:
	  o What data do you use and what data would be useful for you?
	  o What data collection processes and analyses do you follow and how could RISE improve those processes?

How can I find out more?	Visit water.usbr.gov or contact us for more information. RWIS and RISE: rwis@usbr.gov Reclamation Data Council: Katharine Dahm, kdahm@usbr.gov