



Water at the Research and Education Complex

August 2024

Changing the World's Energy Future

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**Prepared for the
U.S. Department of Energy
Under DOE Idaho Operations Office
Contract DE-AC07-05ID14517**

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Purpose:

- To identify the management methods for stormwater, sanitary sewer, and potable water throughout the facilities at the Research and Education Complex (REC) using drawings and written documents.
- To confirm the locations and status of wells located throughout the REC.
- To compile appropriate documentation that relates to water for each facility at the REC, verify that documentation is accurate, and create any new documentation that is necessary through field verification.

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Environmental Support and Services

Applications:

This database will be beneficial to facility managers, and the Environmental Support and Services organization for determining where drains lead, where water comes from, and what documents may pertain to each facilities water.

Methods:

- Electronic Document Management System (EDMS)
- Environmental Data Warehouse (EDW)
- City of Idaho Falls Utility Maps
- Field Verification
- Contacting Facility Managers and Engineers
- Confined Spaces Inventory
- iMaps



Figure 1. A Utility Composite Map and its legend provided by the City of Idaho Falls GIS Department for the Utilities at Willow Creek Building (WCB).



Figure 2. A map of shallow injection wells (SIW) for two INL Research Center (IRC) buildings.

Results:

- Many of the leased facilities did not have appropriate documentation and required field verification. This led to findings that were unexpected and required additional documentation to be created.
- The older, leased facilities were the most difficult to find appropriate documentation on.
- A file folder was compiled containing water infrastructure information for each REC facility.
- Established working relationships with facility managers, engineers, and the City of Idaho Falls.



Figure 3. A storm sewer drain outside of the Energy Systems Laboratory (ESL).

Future Work:

- This project can be expanded to the INL Site Facilities and can be used to create a similar database for their water infrastructure.
- As new construction and renovations occur throughout the REC, this will need to be updated to ensure accuracy in records.
- Additional field verification will need to be completed.