

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION



GREG GIANFORTE, GOVERNOR

1539 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

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Legislative Audit Committee
State Capital Building Rm 160
PO Box 201705
Helena, MT 59620-1705

President Ellsworth and Members of the Legislative Audit Committee:

The Department of Natural Resources and Conservation (DNRC) appreciates the opportunity to update the Legislative Audit Committee on the Performance Audit of the Data Quality in the Water Rights Information System (21P-01). Below is a summary of the Legislative Audit Committee's recommendations to the Water Resources Division, and the actions the DNRC's Water Resources Division has taken in response to these recommendations.

First, we would like to clarify some commonly used terms in the Audit that need further explanation as the Water Right Information System (WRIS) was used throughout the document when identifying specific parts of the system may have been more appropriate. We have edited these in the recommendations and responses based on our interpretation.

WRIS (Water Right Information System): The system the department uses for recording water rights. This includes the database, project trident (interface), scanned documents (FileNet), Water Rights Query System (WRQS), and paper files when present (Iron Mountain).

Project Trident (Trident): The internal interface that staff and Water Court use to interact with the database.

WRQS (Water Rights Query System) – the publicly accessible tool to query data from the database. It does not provide access to upload data to or change data in the database.

Water Rights Database (Database) - A searchable, centralized water rights database that contains basic information about the state water rights. The oracle database used to house DNRC's water right information.

FileNet (Scanned Documents) - Digital storage of all scanned documents held by the department and made available through WRQS and Trident for water rights.

RECOMMENDATION #1

The Department of Natural Resources and Conservation (DNRC) establish and implement a data quality strategy for the database that defines desired levels for data quality that are regularly evaluated.

Status: Being Implemented

Actions completed as of March 2024:

- DNRC has implemented a two-person review for all data entry in Trident and the database currently has built-in quality control checks.
- DNRC has and continues to work with their contractor to identify areas where data entry using Trident can be more streamlined, clear, and free of errors. This is ongoing work as it is prioritized and built out when identified.
- DNRC is evaluating additional areas where data quality is lacking and where improvements can be made, while creating a Data Quality Strategy Plan for the database. The plan will include:
 - Description of the water rights data- including water rights data model, data validation constraints for data entry and processing (database and Trident).
 - Description of how the different requirements (e.g., standards, policies, legislation, administrative rules) affect the ability to verify quality during data entry and processing.
 - Identification of tasks to verify and ensure quality water rights data entry using Trident.
 - Identification of data analyses to document the data quality before, during, and after the data quality plan is fully implemented.
 - Identification of the data elements (i.e., called data fields) that will require changes to, or new, legislation to implement the data quality plan.

Future actions:

- DNRC will have a data quality strategy established in April 2024.
- DNRC will begin to implement the Data Quality Strategy in 2024 and continue implementation over time.
- Enhancement to the database and Trident identified in the data quality strategy are being assessed and considered as part of the Executive Planning Process for the 2025 Legislative Session.

RECOMMENDATION #2

The Department of Natural Resources and Conservation establish an ongoing process for outreach and education including A) Developing professional relationships with title companies and realtors to facilitate greater understanding of water right processes and information; and B) Developing a system for owners to sign up for regular reminders regarding their water right information.

Status: Being Implemented

Actions completed as of March 2024:

- DNRC has taken the existing model of training provided to title companies and realtors by the Kalispell Regional Office and implemented this training throughout the State on an annual basis (2022-ongoing).
- DNRC has redesigned its website to be better organized, provide clearer information, and identify resources for water users.
- DNRC created a water listserv for water rights owners and stakeholders to increase outreach and allow users to sign up to receive notification when important meetings or changes are coming out

related to water rights.

- DNRC created a Water Planning, Implementation, and Communications Bureau, which will improve and ensure continued stakeholder communication and education.

Future actions:

- DNRC will create an online form for water right owners to update their address more easily and efficiently.
 - DNRC cannot meet the previously identified deadline of July 2024 for this action. The State Information Technology Services Division (SITSD) is working on an enterprise agreement for authenticating/verifying identification. This process is necessary before the automated process for water right owners to update their address is implemented. The enterprise agreement is still under development and no deadline is yet set for its completion.
 - In the meantime, an online form for water right owners to submit a request to update their address is already active.
- DNRC will work with the Department of Revenue (DOR) to compare DOR and DNRC water right database addresses to identify any inaccuracies. DNRC will then contact water right owners to request they update their address (previously target 2024).
 - DNRC has commenced work, but challenges associated with the DOR database for correcting database addresses and goal of compliance with U.S. Postal Service (USPS) standards has delayed implementation.
 - DNRC is independently researching ways of evaluating addresses to see if they are out of date and developing a process for updating addresses per USPS standards. DNRC met with the State Print & Mail in late 2023 to develop ideas for this process.
- DNRC will work with water user groups to encourage water rights owners to check the information on their water rights, including mailing address, to ensure that water rights are up to date (2024).
 - DNRC is currently implementing this action. DNRC informally integrates this topic into interactions with water user groups, such as through inclusion in presentations to water user groups.
 - DNRC will be sending out periodic mailings to all water right owners to increase quality assurance and engagement with water rights process and targeted mailings to water right owners with upcoming deadlines, such as for temporary change renewals (2025).
- DNRC will develop a customer portal to collect all DNRC customer contact information and build targeted mailing lists based on customer interests (2026).
 - DNRC is on track to complete this task within the specified timeline. DNRC will evaluate the customer portal prototype that SITSD and Montana Department of Transportation (MDT) are developing to determine if the prototype will work for DNRC needs (i.e., enable identification of a customer to facilitate customer payment and digital signatures through the portal).
- Enhancement to the customer portal will be assessed and considered as part of the Executive Planning Process for the 2025 Legislative Session.

RECOMMENDATION #3

The Department of Natural Resources and Conservation establish the Water Rights Information System (WRIS) as the official record and transition to electronic processes by A) Ensuring historical documents are scanned at acceptable quality; B) Creating online forms for all applications and updates; C) Tracking owner contact information electronically such as e-mail address, phone number, etc.

Status: Being Implemented

Actions completed as of March 2024:

- The DNRC has clarified with all staff that Water Rights Information System is the official record, this includes the database, Trident, scanned documents, WRQS, and paper files when present.
- The DNRC confirmed that each workstation is set to scan historical documents at 300 dpi (an acceptable quality as determined by the National Archives and Records Association).
- The DNRC deployed a new internal interface called Trident in April of 2022. Entry of owner electronic contact information was made a priority and staff enter this information whenever it is available.
- DNRC has taken an inventory of all current forms and determined priority for digital conversion.
- Historic scanned documents are rescanned when maps are found of poor quality by DNRC, Water Court, or public (ongoing and on a case-by-case basis).

Future actions:

- DNRC will develop processes to integrate priority online forms into the database with built in data quality assurance checks (Spring 2026).
- DNRC will integrate its digital form submission into the DNRC customer portal (Spring 2026).
- Systematic scanning of old historic documents will require additional staff and resources. DNRC is in discussions with stakeholders if this is a priority ask to advance as part of the Executive Planning Process for the 2025 Legislative Session.

RECOMMENDATION #4

The Department of Natural Resources and Conservation make scanned documents and their processes more functional by A) Establishing an electronic means to transfer documents for upload, both internally and from the Water Court; and B) Attaching additional labelling and identifying information to uploaded documents.

Status: Being Implemented

Actions completed as of March 2024:

- DNRC records unit and regional offices have been trained in scanning documentation and are implementing a new system for digital file transfers.
 - Established a new protocol for scanning and transferring documents digitally.
 - Established a process to transfer files electronically internally and from the Water Court.
 - Ensured all facilities have the technology necessary to scan to acceptable quality.
 - Ensured all facilities have been trained to scan and upload documents using the new protocol.
- DNRC has established a list of scanned label options to better identify uploaded documents, increasing the labelling (indexes) for all scanned docs from two to twelve. As staff enter scanned documents, more labels are available to efficiently locate and identify sought after documents.
- DNRC established a records retention policy approved by the Permanent State Records Committee.
 - DNRC was informed in November of 2021 that the committee removed the data migration approval process (i.e., no additional steps to deem the digitalized records the “official record” and disposing of hard copies as non-record duplicates).
 - All newly received forms are scanned and stored digitally, the paper copy is retained for 30 days.
 - DNRC has no plans to remove historic water right documents currently stored off-site.
 - In November of 2023, DNRC updated the records management schedule for water right forms.

Future actions:

- DNRC will work with SITSD to evaluate existing and needed technology and software and develop a plan to increase the use of metadata, labeling, and additional identifying information (December 2024).
 - DNRC currently has many scanned documents already stored in FileNet. We are exploring options for existing scanned documents to mine through our collection and build metadata tags using SITSD-approved Artificial Intelligence (AI) describing the number of pages, a quick description of contents, etc. for existing documents/images.
- Access to Water Court case files via FullCourt and additional stakeholder requested documents through the DNRC WRQS will require a 2025 Legislative funding request.
- Systematic labeling of scanned documents will require additional staff and resources and would require a 2025 Legislative funding request.

RECOMMENDATION #5

The Department of Natural Resources and Conservation integrate GIS functionality for stakeholders by A) Introducing a map interface for electronic applications and queries; and B) Using additional identifiers for the place of use and point of diversion.

Status: Being Implemented

Actions completed as of March 2024:

- DNRC developed a water right application status and signup tool (Water Rights Notification Tool – WRNT), that provides an efficient means of communication between DNRC and the public for all water right applications in a given area of interest. As of February 8, 2024, there are 1720 subscribers.
- DNRC developed a new, highly functional Water Rights Query System (WRQS) which provides map-based functionalities, improving the user experience and accessibility.
 - To facilitate continuous improvement of the WRQS, DNRC created an email address to enable users to submit questions, comments, and suggestions for enhancements.
 - Of the 44 stakeholder enhancements requested, 35 were implemented, four remain in progress (increasing abstract speed, mobile access, definitions page, and bulk download options), and five non-essential requests may be fulfilled as funding allows (historic basemaps, additional compact information, and simple query options).

Future actions:

- DNRC is in the process of developing simple water right map-making application for application submission (December 2024).
- Additional funding for future enhancements and future, necessary general maintenance is being assessed and considered as part of the Executive Planning Process for the 2025 Legislative Session.

We want to thank you for this comprehensive audit as well as the opportunity to provide you with an update regarding the continued improvement of our processes and services for stakeholders and Montanans.

Sincerely,



Amanda Kaster
DNRC Director