

Wyoming Department of Environmental Quality

Annual Report

FY2021

Agency Information

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- Other Locations: Casper, Lander, Rock Springs, Sheridan and Pinedale

Statutory References

- The Environmental Quality Act and the Industrial Development Information and Siting Act.

Basic Information

- Number of Employees: 255 + 1 AWEC
- Clients Served: The people of Wyoming, Wyoming businesses, Federal, State, local government, non-government organizations and others.

Budget Information

- The FY2021/2022 operating budget for the Wyoming Department of Environmental Quality was \$175.9 million.

Primary Functions

The Department of Environmental Quality (DEQ) was established by the Wyoming Environmental Quality Act and Industrial Development Information and Siting Act pursuant to W.S. § 35-11-101 through 2101 and W.S. § 35-12-101 through 119, respectively. As Wyoming's environmental regulatory agency, DEQ is responsible for the implementation and enforcement of delegated federal programs under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act and Surface Mining Control and Reclamation Act, Nuclear Atomic Energy ACT, as well as other state environmental regulatory programs.

DEQ consists of seven divisions: Air Quality (AQD), Water Quality (WQD), Solid and Hazardous Waste (SHWD), Land Quality (LQD), Industrial Siting (ISD), Abandoned Mine Lands (AML) and Administration (ADM). DEQ has employees located in Sheridan, Lander, Casper, Rock Springs, Pinedale and headquartered in Cheyenne. Together we ensure that Wyoming's natural resources are managed to maximize the economic, environmental and social prosperity of current and future generations. DEQ does this through a combination of monitoring, permitting, enforcement, remediation and restoration activities which protect, conserve and enhance the environment while supporting responsible stewardship of Wyoming's resources. Other important DEQ functions include human resources, accounting and emergency response. Together, DEQ's programs serve over 5,000 businesses operating thousands of facilities across the state.

Over the past decade, the overall workload of DEQ has changed. To effectively deal with that changed and the on-going environmental management requirements associated with expanding regulatory oversight from federal agencies, DEQ continually works to identify efficiency opportunities in programs. DEQ has implemented a paperless office initiative and worked with outside consultants to improve performance in targeted areas. DEQ continually looks for opportunities to re-structure programs in a manner that brings added focus to priority areas and make concerted efforts to collaborate with stakeholder groups to make the agency more efficient.

- DEQ's Mission: To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.
- DEQ's Values: The success of this mission requires our shared commitment to values that define and guide who we are, what we do and how we do it. These values are:
 - We are proactive by anticipating future impacts on Wyoming's environment and taking actions to minimize those impacts.
 - We are innovative by encouraging people from both inside and outside the agency to consider new approaches to protecting, preserving and enhancing a healthy environment.
 - We are consistent by fairly applying and implementing regulatory requirements.
 - We are responsive through timely and open communications with the public, the regulated community and other stakeholders who are affected by our work.
 - We are committed to a culture and work environment where everyone is treated respectfully, professionally developed and continuously challenged.
 - We are decisive and make decisions in a rigorous and timely manner supported by thorough analysis, quality data and sound rationale.

- DEQ's Vision Statement: The Wyoming Department of Environmental Quality envisions a future where vibrant economic development and prosperity is achieved while providing sound and sensible environmental protection for the benefit of Wyoming and its citizens.

Performance Highlights: DEQ developed goals that describe the broad environmental responsibilities with which the various Divisions are tasked. Below, these goals have been incorporated into the department performance highlights for FY2021.

Goal 1 – To investigate, remediate and restore contaminated and disturbed sites

DEQ investigates, remediates and restores contaminated and disturbed sites in order to protect the health, welfare and safety of Wyoming's citizens and to preserve, reclaim and enhance air, land and water resources of the state.

Abandoned Mine Lands

- During FY2021, AML remediated 69 acres of subsidence, of which 38 acres were mitigated by the injection of 104,206 cubic yards of cement grout. The grouting operations protected infrastructure, residences, and commercial properties from mine subsidence damage. The remaining 31 acres of subsidence abatement addressed open subsidence in public use areas, reclaiming disturbed habitat, and protecting the public from accident or injury that might be caused by driving or falling into sinkholes.

Additional AML projects in FY2021 reduced 2,204 linear feet of dangerous highwalls, and closed 31 open mine shafts and 14 mine portals.

The Subsidence Insurance Program currently holds 479 active policies that provide nearly \$54 million in insurance coverage. The largest numbers of policies are in Rock Springs, Glenrock, and Hanna where extensive areas of undermined developed properties exist.

Industrial Siting

- In FY2021, the spill program of ISD responded to 249 spills and 73 complaints. A total volume of 930,585 gallons of product (produced water, oil, gasoline, etc.) was spilled. Detailed tracking and information regarding these spills and complaints are being developed.

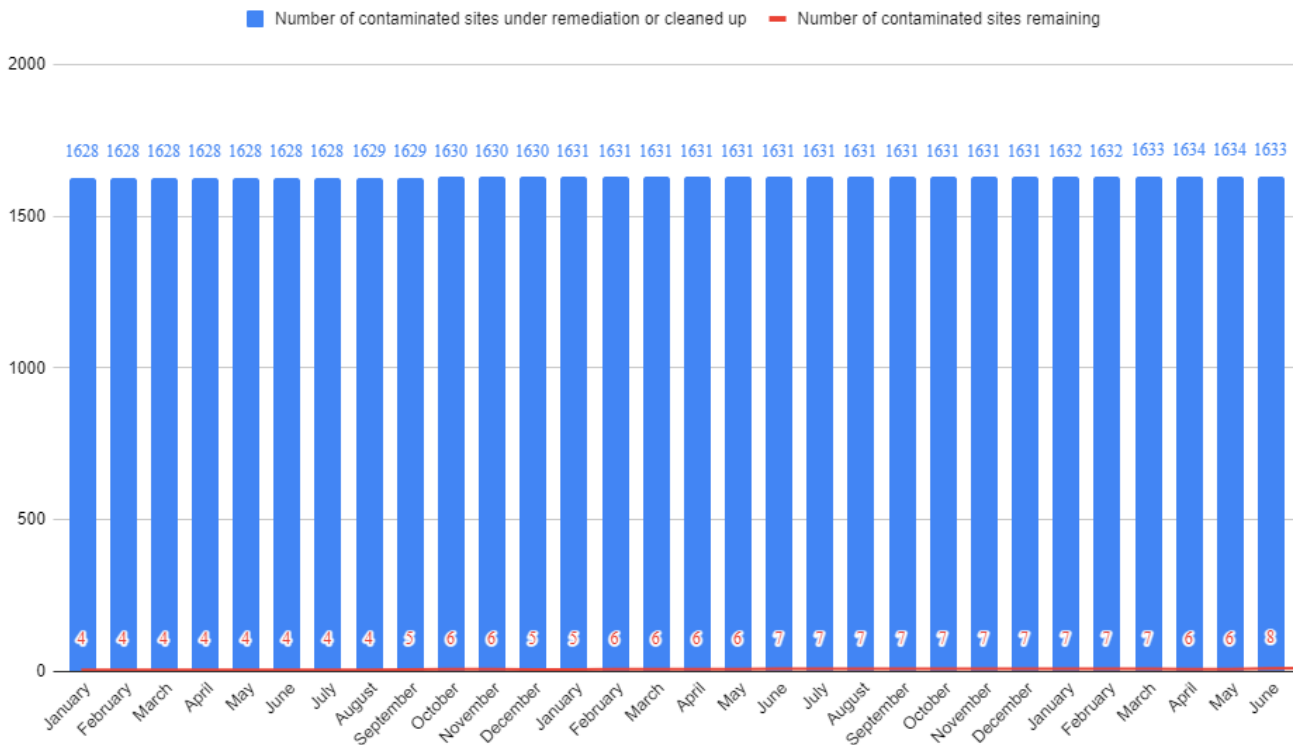
Land Quality

- LQD continues to monitor, track and remediate sites across the state. Recent Legislation passed to amend 35-11-401 will aid the LQD in identifying and reducing sites eligible for final reclamation and termination. The LQD completed 22 acres of forfeiture reclamation during the evaluation year.

Solid and Hazardous Waste

- The Orphan Sites Remediation Program (OSRP) continues to make significant progress remediating sites. Legislation passed in the 2018 Legislative Session provided a source of future funding for ORSP activities. Several investigation and cleanup projects were initiated or continued in 2021 as a result of that funding. Summary of 2021 OSRP accomplishments are listed below:
 - An underground heating oil tank release in Powell was addressed by tank and associated impacted soil removal..
 - An innovative and green remedial technology to remediate groundwater at a site in Lincoln County continues operation.
 - A Remedial Alternatives Evaluation to address elemental and dispersed sulfur from a former sulfur plant near Worland was completed. Next steps at the site include evaluation of beneficial reuse of the elemental sulfur.
 - Remedies were implemented and in the monitoring phase at five orphan sites located throughout the state.
- The Brownfields Assistance Program (BFAP) had a number of successes in FY2021. There are five open brownfield sites in the Voluntary Remediation Program, three of which are led by BFAP. BFAP also made significant contributions in supporting communities, non-profits, economic development organizations and conservation districts to provide assistance in understanding and applying for Targeted Brownfields Assistance from EPA. In addition, the BFAP continues outreach and education to Wyoming communities, facilities, and private developers to highlight the availability of an \$800,000 Wyoming Brownfields Revolving Loan Fund (RLF). The RLF makes available loans and sub-grant funds to governmental and eligible private entities to clean-up of contaminated property and make it ready for redevelopment. The RLF is in the process of completing the first sub-grant under the RLF, issued to the Town of Dubois for asbestos abatement. Many outreach conversations were conducted in FY2021 with interested entities regarding potential loans and subgrants through the RLF.
- The Storage Tank Program continued its work cleaning up contamination from petroleum storage tank leaks around the state. There have been 1,641 known contaminated sites in Wyoming and 1,351 have been remediated to date. The remaining sites are either in the process of being cleaned up or scheduled for remediation.

STP Remediation 2019-2021



- In FY2021, the SHWD Landfill Remediation Program (LRP) continued to make significant progress. The remediation process is underway at seven of the eleven high priority sites (the City of Casper, City of Sheridan (2), Campbell County (2), Town of Guernsey, and Uinta County).

The Department has completed the installation of new point of compliance wells at the Casper and Campbell County landfills for the purpose of monitoring the selected remedies. Data collected from a number of recently installed gas probes at the historic Casper landfill confirmed ongoing methane gas issues. The Department is in discussions with the City of Casper for a possible gas venting trench at that site to address any offsite gas migration.

Investigative work at the Sheridan and the Campbell County #2 landfills continued efforts to determine the nature and extent of contamination and to assess potential remedial actions. Installation of a flexible membrane cap and an active gas collection and control system was completed at Campbell County #1 landfill in Fall 2020.

During the past year, the Town of Guernsey and Uinta County have signed written agreements to formally enter the LRP. Consultant selection has been completed and a notice to proceed with site investigation(s) has been issued for those projects.

In addition, the Department continued evaluation at three other high priority sites (Newcastle, Buffalo, and Riverton) to refine cost estimates in preparation for bringing those sites into the program. Riverton has begun a pilot study for phytoremediation at their facility with the intent to enter into a written agreement with the Department in the coming year. An additional groundwater monitoring well has been added at the Buffalo Landfill to further understand groundwater flow directions and to determine if remediation is necessary at the site.

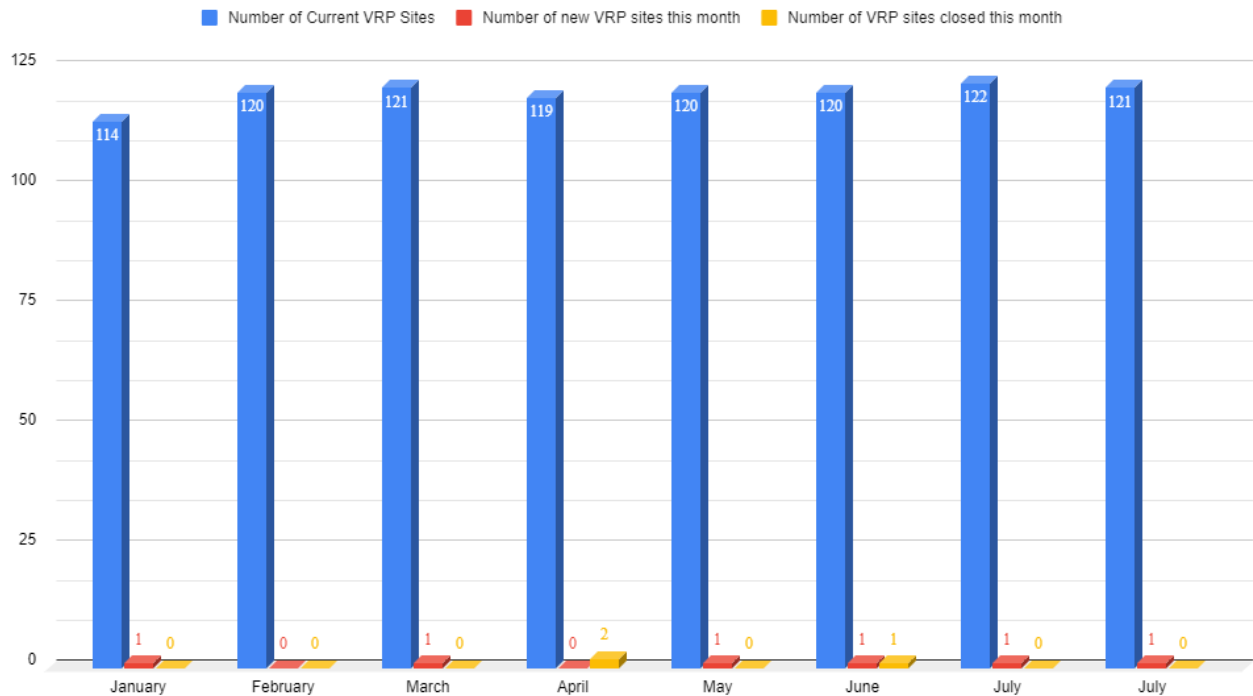
Lastly, the Department is working at eight other sites (Big Piney, Daniel Junction, Emblem-Burlington, Glenrock, Kemmerer, Pine Bluffs, Rock River, and Shoshone) to collect and evaluate information needed to further refine the priority for remediation, if needed, at those facilities. Through ongoing evaluation work, the Department has removed 12 facilities from the LRP priority list(s) and continues to evaluate the remaining landfills on the Remediation priority list for entry into the program or removal if appropriate.

- The Hazardous Waste Permitting/Corrective Action Program (HWPCA) made significant accomplishments in permitting by collaborating with a large, complex facility to develop a ten-year renewal permit application that resulted in a determination that the application was complete, and a draft permit was issued in 2020. The final permit for this facility was issued in January 2021.

There are eight HWPCA facilities undergoing corrective action. In FY2021, HWPCA selected remedies for six areas at one facility, an additional 6 area remedies selected at a second facility, and constructed remedies for 14 areas at three facilities. Ready for Anticipated Re-Use determinations were made at two facilities and Performance Standards were attained at one facility. These activities exceeded HWPCA's federal FY2021 work commitments to USEPA. There are also four sites in investigation and/or remediation being conducted under administrative orders.

- The Voluntary Remediation Program added eight new sites, selected remedies at three sites, and completed remediation at seven sites. There are 122 sites actively undergoing investigation and/or remediation; ten of which are complex sites that cover a significant number of acres and have soil, groundwater, surface water, sediments, soil vapor, indoor air, and or regulated building materials impacted by a number of contaminants.

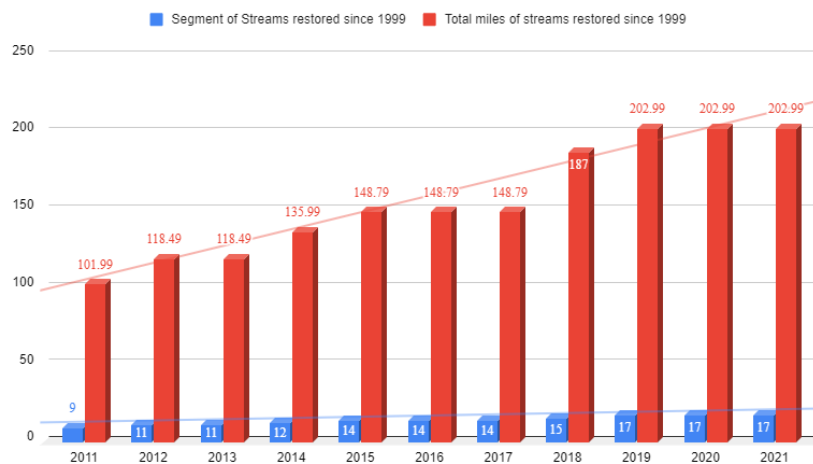
VRP Sites (Current, New, Closed) 2021



Water Quality

- The WQD continues to support locally-led, voluntary water quality restoration and protection projects for waters of the state through effective grant funds administration and strong partnerships with local stakeholders and partnering agencies. The 2020 Nonpoint Source Program Annual Report provides a summary of program accomplishments and updates, and it was released on March 25, 2021. The NPS Annual Report can be obtained at: <https://arcg.is/1rKLiP>.

NPS Streams Restored since 1999



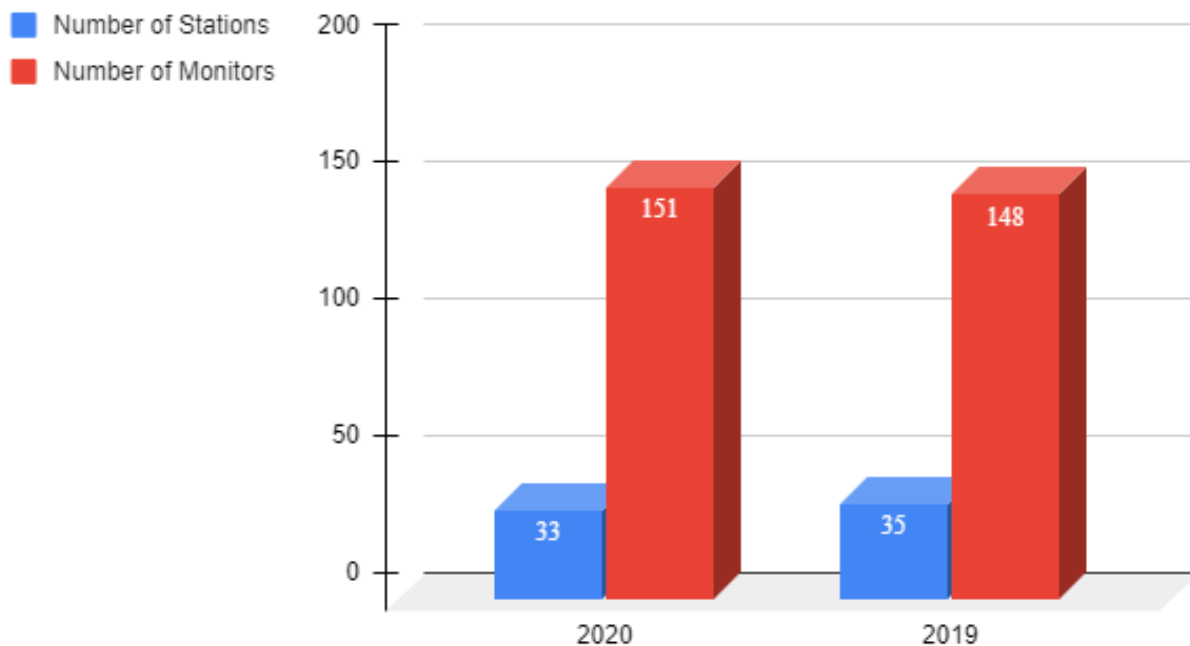
- The 2020 Integrated Report was completed before the April 1, 2020 deadline in a new public-facing format with a description of waters that are prioritized for TMDLs or alternative watershed plans. Waters prioritized for the 2022 Long-Term Vision Strategy are still being evaluated and will include opportunities for public input. Additional information can be obtained at: <http://deq.wyoming.gov/wqd/water-quality-assessment/resources/reports/> or http://deq.wyoming.gov/media/attachments/Water%20Quality/Water%20Quality%20Assessment/Reports/2020_Integrated-305b-and-303d-Report.pdf for the 2020 IR.
- WQD conducted an inventory of bonded CBM reservoirs that have not received discharge for one or more years. This included approximately 200 bonded CBM reservoirs. WQD notified the associated CBM companies in April 2021 that they must submit reclamation plans for these, or turn them over to landowners in 2021 with documentation. Responses were received in July 2021, and WQD is working with those companies now to resolve status of the reservoirs. So far, 38 of the above 200 idle CBM reservoirs appear to have adequate SEO/landowner documentation for disposition to landowners.
- Reclamation planning and dirt work for CBM reservoirs during this annual reporting period include the following: reclamation plans received for 14 reservoirs; pre-site visits by WYPDES field staff conducted for 10 reservoirs; dirt work underway for 9 reservoirs; and dirt work, seeding and vegetation re-establishment complete for 3 reservoirs.
- WQD has been in contact with the Wyoming Oil and Gas Conservation Commission regarding abandonment of CBM facilities by Bearcat Energy. WQD will be proceeding with bond forfeiture in 2021 for the full Bearcat bond amount of \$549,000 on their two remaining CBM reservoirs.

Goal 2 - To collect, manage and monitor the environmental data needed to accomplish agency responsibilities

DEQ continues to strive for excellence in developing and maintaining scientifically based and quality-controlled data to support the DEQ's diverse programs, activities and regulatory responsibilities.

Air Quality

Air Quality Stations and Monitors by Calendar Year



- Throughout FY2021, the AQD Monitoring Section focused on operating and maintaining an effective and efficient network of ambient air quality monitors. To do so, the Monitoring Section continually employed efficient use of available staff and fiscal resources in conjunction with identifying monitoring priorities.
- The Monitoring Section continues to operate the www.WyVisNet.com website to communicate near real-time monitoring data throughout Wyoming as well as historical monitoring data to the public.
- Ambient monitoring data for AQD ambient monitors was quality assured and submitted to the United States Environmental Protection Agency (USEPA) in a timely fashion in accordance with the Code of Federal Regulations and the DEQ-EPA Performance Partnership Agreement (PPA). In addition, the 2020 AQD Data Certification and the 2021 AQD Network Plan were completed.

- The ambient monitoring reflects compliance with all ambient air quality standards. Ozone monitoring within the Upper Green River Basin Ozone Nonattainment area shows attainment with the 2008 and 2015 national ambient air quality ozone standards for the 2018-2020 calendar year period.
- For FY2021, the AQD Emissions Inventory Section completed quality assurance and emissions inventory entry for all inventory formats (major, sulfur dioxide (SO₂), minor, oil and gas, smoke management, and greenhouse gases) into the respective databases to meet USEPA and State reporting requirements and the DEQ-EPA Performance Partnership Agreement.
- The AQD Emissions Inventory Section continually identifies, develops, and implements improvements to emissions inventory request, data collection, and processes including refinements of IMPACT specific to emissions inventory data quality. For FY2021, improvements continued to facilitate oil and gas production site facility inventory and emissions inventory development within IMPACT.
- DEQ is familiar with the lengthy request for redesignation process and continues to evaluate potential pathways forward in order to submit a request for redesignation for the Upper Green River Basin (UGRB) ozone nonattainment area.
- DEQ remains committed to diligently working with the public, industry, and other governmental entities to tackle this complex issue and reduce ozone levels in the Upper Green River Basin. For example, the AQD continued an Engine Maintenance Assurance program to assist industry in best practices for engine maintenance. During the 2021 Winter Ozone Season in the UGRB (January through March), ozone levels did not elevate above the 2015 standard.
- The AQD continues to collaborate with the Bureau of Land Management, United States Forest Service, the USEPA, and industry representatives to implement the federally required General Conformity Rule for areas in nonattainment of the NAAQS.
- Ozone precursor emissions of Nitrogen Oxide (NO_x) and Volatile Organic Compounds (VOC) in the UGRB remain significantly reduced. From July 1, 2008 June 30, 2021, NO_x has been reduced by 1652 tons and VOCs reduced by 7373 tons through New Source Review permitting.

Industrial Siting

- The Governor's office coordinates Renewable Energy Coordinating Committee meetings. ISD provides information it has collected regarding upcoming jurisdictional projects, status of projects under construction and other relevant information.

Land Quality

- LQD continues to move to a digital based platform. LQD has digitized approximately 12,000 pounds of paper permit documents into the Mine Information Database System (MIDAS) records center. LQD has scanned and proofed 500 coal permit volumes and 14 of the 22 active coal permits are now digital. Annual reports received since 2016 are digital, all inspection reports since 2014 are, all general correspondence and new TFN filings have been digital since 2016. LQD also continues to move the non-coal permits to a digital format. The LQD received 92 records requests during the evaluation year. The MIDAS program completed a needed upgrade in this evaluation year. LQD has identified and is currently working on several enhancements to improve internal and external access to the updated MIDAS system.

Solid and Hazardous Waste Division

- During FY21, the Solid Waste Permitting Program completed a study that evaluated the management of Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) wastes in Wyoming. As part of the study, the third-party consultant provided recommendations on exemption limits, exempted wastes, dose limits, disposal limits, and landfill criteria for the management of TENORM waste in Wyoming. These recommendations were based on an evaluation of other states TENORM regulations, research completed by national and international laboratories and institutions, and data obtained through sampling.

Water Quality

- WQD reviewed internal and third-party data Sampling and Analysis Plans (SAPs) to ensure that data collection provided the necessary information for the project and that the methods used were reproducible and acceptable for data submissions. WQD reviewed all available data submitted to establish data quality and consistency. WQD staff conducted annual technical audits, which consist of site visits to evaluate whether sample collection methods are performed properly and data collection efforts are scientifically defensible. On-going policy document updates were made to ensure guidance measures are current and up to date. The QAQC Annual Report can be obtained at:
<http://deq.wyoming.gov/wqd/qaqc/resources/reports-2/>.
- WQD is currently modifying its Unified Groundwater Data Management System (RBDMS) to address issues identified during testing. Previous developers had left some issues unresolved and WQD is working with the Groundwater Protection Council to bring a different developer onboard to address remaining issues. We anticipate outreach and education to sister agencies to occur in late 2022.
- WQD will begin training and outreach to permittees and others after the above issues with the RBDMS are addressed and outreach to sister agencies is completed. The WQD anticipates this will occur in late 2023.

Goal 3 - To develop a clear, concise and consistent regulatory framework

The development of a regulatory framework that regulated entities and the public can easily understand with certainty is key to efficient program implementation.

Abandoned Mine Lands

- Per direction from Office of Surface Mining Reclamation and Enforcement (OSMRE), in early 2020 AML initiated a revision and update of the Wyoming Reclamation Plan. The final version of the revised plan was submitted to OSMRE in FY2021 for approval.

Air Quality

- During FY2021, the division submitted one State Implementation Plan (SIP) update to USEPA. The update included changes to the Regional Haze SIP for the PacifiCorp Jim Bridger facility.
- The AQD continues to participate and comment on federal revisions or development opportunities. During FY2021, the AQD prepared and submitted comment on four (4) federal actions, including: Increasing Consistency and Transparency in the Clean Air Act Rulemaking Process; Information Collection Request for the Implementation of the 8-hour Ozone National Ambient Air Quality Standards; Proposed Settlement Agreement, Challenge to the Clean Air Act (Wyodak Settlement); and Rescinding the Rule on Increasing Consistency and Transparency in Considering Benefits and Cost in the Clean Air Act Rulemaking Process.
- AQD's SIP and Rule Development Section continues to review air quality regulations for reduction and/or streamlining opportunities.

Industrial Siting

- In FY2019, the legislature modified the Industrial Siting Act to include solar farms over 30 MW as jurisdictional under ISD. In FY2021, ISD began rulemaking efforts to incorporate this legislative change into its regulations. This is expected to be completed in FY2022.
- During FY2020 and FY2021, the department worked on rule changes to Chapter 3 Rules of Practice and Procedures after the legislature passed House Enrolled Act 33. These changes clarify the role of the Advisory Boards during Rule Making.

Land Quality

- LQD continues to update its rules and regulations. Statutory changes to sections 35-11-401 and 35-11-406 of the Environmental Quality Act resulted in rule package development to coal and non-coal rules

regulations. LQD has one rule revision packages in process with the Land Quality Advisory Board. LQD has submitted two OSMRE program amendment packages and is preparing to submit two new program amendment packages in the fall of 2022.

- LQD is working on an assigned trust reclamation bonding instrument for consideration by the Joint Mineral Committee during this evaluation year.

Solid and Hazardous Waste

- On December 16, 2016 the Water Infrastructure Improvements for the Nation Act was signed by the President. The law (Title II, Subtitle C, Section 2301) amends RCRA Subtitle D to give states the authority to establish permit programs for the EPA Coal Combustion Residuals from Electric Utilities (CCR) rule. In order for EPA to delegate authority to DEQ for the CCR program, DEQ will need to develop regulations that are at least as protective as the 40 C.F.R. 257 CCR rules. These regulations must be in place before EPA will consider delegating authority to DEQ. DEQ drafted regulations that incorporate by reference the standards found in 40 C.F.R. 257. DEQ originally presented this rule to the Water & Waste Advisory Board in June 2019 and October 2019. Since October 2019, EPA proposed multiple revisions to the CCR rule. DEQ anticipates to continue the rulemaking process in FY2022.
- During FY2021, the Solid Waste Permitting and Corrective Action Program (SWPCA) initiated the rulemaking process to revise Solid Waste Rules Chapter 1: General Provisions and Chapter 7: Financial Assurance Requirements. It is anticipated that the proposed rules will be finalized in FY2022.
- HWPCA's 2015 Incorporation by Reference of the federal RCRA rules and regulations were updated to be current with the June 30, 2018 federal regulations. The rule package was approved by the Environmental Quality Council and was signed by Governor Gordon on May 3, 2019. In FY2021, the HWPCA began the rule making process to update the rules to be current with EPA's rules and regulations as of June 30, 2020. Development of the authorization package for the updated rules began in FY2021 and will likely be completed in FY2022.

Water Quality

- Due to significant public interest in the Triennial Review for Chapter 1 of the Wyoming Water Quality Rules (Surface Water Quality Standards), the WQD worked with the Ruckelshaus Institute at the University of Wyoming to convene a Triennial Review Stakeholder Group. The stakeholder group met seven times between March and June 2021. The process provided an opportunity for stakeholders to learn more about surface water quality standards and the topics DEQ is considering as part of the triennial review, to understand stakeholder interests in surface water quality rules, and to provide input on potential revisions. The feedback received from the group will be memorialized in a stakeholder process report. The

report will be used by WDEQ to inform proposed revisions. Details on the stakeholder process can be obtained at: <https://wyotriennialreview.org/>. The proposed rule revision will receive broad public input before going to the Water and Waste Advisory Board and for additional public input before going to the Environmental Quality Council for consideration and promulgation.

- The WQD sections hold routine staff meetings to review policies and guidance documents to determine if modifications to those policies are necessary and to determine if additional policies or guidance documents are needed. From those meetings, additional policies/guidance are developed and provided to section staff for review and comment before finalizing. Staff meetings are also used to review assignments, plan activities, ensure efficiencies, and receive training to ensure consistency and understanding of current methods and standard operating procedures.
- Primacy of the Class VI Underground Injection Control (UIC) Program was received in August 2020.

Goal 4 - To apply environmental standards and requirements that protect the environment while allowing for responsible economic development

DEQ strives to make the application of environmental standards easier for stakeholders to understand and for the regulated community to comply.

Abandoned Mine Lands

- AML received and responded to 18 public information requests through WDEQ NextRequest during the report year. AML also reviewed and provided comment on five Industrial Siting permit reviews, sometimes providing detailed follow-up data for the project proponents consideration.

Air Quality

- AQD staff working in conjunction with USEPA and industry completed the first stage of a combustor study to determine if an outlet only testing method would be feasible. Results from the initial study have been published by the USEPA. Round two of the combustor study was completed and results are being compiled. AQD expects USEPA will release results Early 2022.
- 1,118 AQD permit actions were completed in FY2021, including 1098 New Source Review (NSR) and 20 Title V. Of that, the NSR program averaged 154 days to issue permits and authorization letters, which is greater than the 120 regulatory timeframe. This was due to clearing out a backlog of applications as a result of industry self-audits.
- AQD's IMPACT enhancement and implementation continued on schedule and within budget during FY2021, including coordination and partnership with Maricopa County Air Quality Department on a related information management system project. The IMPACT Team and IMPACT Technical Committee provide targeted communication to support internal users.
- During FY2021, AQD continued to enhance industry use of the IMPACT system with the total number of portal submissions increasing by 27 percent since FY2020. IMPACT industry portal user accounts now total 898, encompassing 360 different companies. Overall, electronic submissions allow AQD to receive higher quality data, which reduces processing times. The IMPACT Team provided targeted training and documentation to support implementation of external and internal users including webinars, emails, phone calls, and in-person meetings.
- In FY2021, the Planning Section participated monthly in State agency pre-meetings and cooperator National Environmental Policy Act (NEPA) meetings. In addition, the Planning Section participated in individual NEPA project and resource management plan meetings and teleconferences and prepared timely

comments on NEPA documents. Maintaining good communication within DEQ as well as with the Governor's staff is a priority on an ongoing basis.

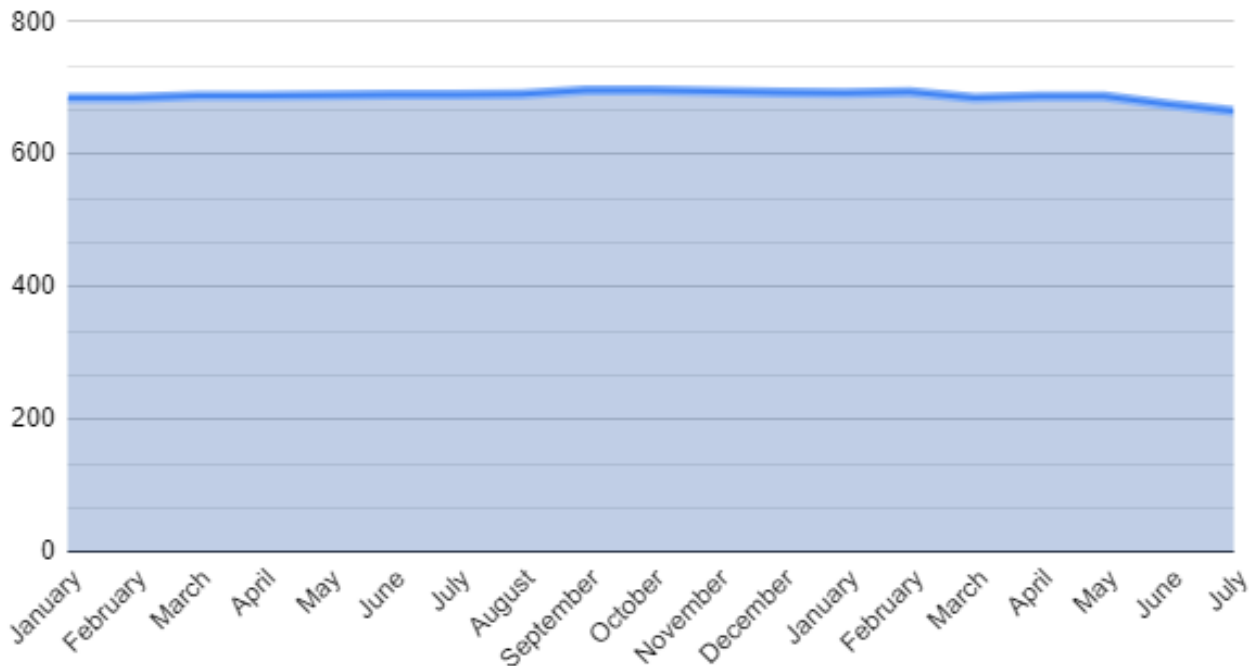
Industrial Siting

- In FY2021, the ISC issued two permits: Ciner Unit #8 expansion and the Gateway South Transmission Project
- WDEQ Outreach Program developed the Sustainability and Innovative Practices (S.I.P. Wyo) Program, which focuses on providing technical assistance to breweries and distilleries in the State. Ten facilities have already undertaken comprehensive technical assistance audits of their facilities and have expressed interest in implementing the findings into their business operations. Energy, waste and water reduction practices have been developed and distributed to several facilities through a partnership with the Wyoming Brewers Guild.
- The Diesel Emissions Reduction Act program has distributed \$817,425 to replace 25 school buses in 15 school districts. Additionally, the Outreach Program has formed collaborative with the Governor's office, WYDOT, and Wyoming Energy Authority to plan and install Electric Vehicle charging infrastructure. The Interstates 80 and 25 corridors along with a route to Yellowstone are the highest priority.

Land Quality

- LQD continues to implement the lean program through its steering committee and internal working groups. Work productivity has increased from 17.25 permits per FTE in 2013 to 17.74 permits per FTE in 2021. The ability of the division to function at this level is the result of the implementation of lean standardization protocols and the transition to a digital based records center and permitting system (MIDAS). Permitting times continue to be reduced through the implementation of standardization protocols and recent system upgrades to the MIDAS system. LQD has implemented in field mapping technology that will also reduce field inspection time frames. The upgrades and future enhancements to the MIDAS system will assist the LQD in continuing to improve workflow productivity and control costs moving forward.

All Active Permits 2020-2021



Solid and Hazardous Waste

- During FY2021, SHWD's Cease and Transfer Program, in conjunction with Office of State Lands and Investment, evaluated and recommended funding for the Town of Hulett's landfill closure. The estimated construction cost for this project exceeds \$1.5 million. FY2021 saw the completion of eight projects: 2 transfer stations and 6 landfill closures. DEQ will continue to work with local communities to assist them in evaluating options for waste disposal.
- The Solid Waste Permitting Program reviewed, evaluated and completed 51 significant permit actions.
- One ten-year renewal permit for a Hazardous Waste Site was reviewed, a complete application determination made and a draft permit issued. The final permit was issued in FY2021. These activities are within the regulatory time frame.
- There are eight HWPCA facilities undergoing corrective action. In FY2021, HWPCA selected remedies for 6 areas at one facility, an additional 6 area remedies selected at a second facility, and constructed remedies for 14 areas at three facilities. Ready for Anticipated Re-Use determinations were made for two facilities and Performance Standards were attained at one facility.

- The Voluntary Remediation Program added eight new sites, selected remedies at three sites and completed remediation at seven sites.

Water Quality

- An inventory of commercial oilfield wastewater disposal facilities (COWDFs) and associated monitoring requirements was completed in FY2020. The Groundwater Section works collaboratively with the Wastewater Section to review groundwater reports submitted by the facilities, evaluate compliance issues and work with operators to complete groundwater monitoring reports in a timely manner.
- In FY2021, the Underground Injection Control (UIC) program issued 15 individual permits.
- In FY2021, Wyoming Pollution Discharge Elimination System (WYPDES) program issued 73 individual permits and 476 general permit authorizations.
- In FY2021, the Water and Wastewater program issued 395 permits and general permit authorizations.

Goal 5 - To ensure adherence with environmental standards and other requirements

In administering compliance programs, DEQ will promote a culture that engages both the regulated community and public to achieve attainment of environmental standards and laws.

Air Quality

- In FY2021, alternative methods for inspections were introduced including off-site inspections. The total number of inspections conducted was 348 (229 in FY2020) with over 80 of those being completed off-site. Additionally, the Division completed 899 site visits (1614 in FY2020).
- Time to complete inspection reports has been significantly improved with the IMPACT System. It now takes 21 days to create and complete an inspection report..
- There are 25,426 facilities operating in Wyoming. 22,699 stack tests, compliance reports and correspondence were reviewed by compliance staff. 21 NOV's/LOV's were issued based upon all actions which correlated to a greater than 99% substantial compliance within the state.
 - 88 virtual inspections were completed with 0 NOV's/LOV's being issued, resulting in a 100% compliance rate with virtual inspections.
 - 1257 Site visits and Inspections were completed in the statewide region. 20 LOVs and NOV's were issued resulting in a 98.5% compliance rate.
 - Additionally, 13 NOV's covering 24 facilities were closed out as companies completed requirements established by stipulated settlements.
- Throughout FY2021, the AQD's Monitoring Section and Compliance Program completed oversight of continuous monitoring systems (CMS) required at facilities throughout Wyoming to document compliance with State and Federal regulations and permits. This included review of quality assurance plans, design and installation requirements, performance testing, ongoing compliance, reporting, corrective actions, alternative monitoring plans, and alternative testing methods. Through these efforts, the AQD ensured use of high-quality data to determine pollutant concentrations or emission rates for comparison to the applicable emission limitations or standards at stationary sources.
- In FY2021, 5 companies conducted Environmental audits on 267 facilities. Each company spent approximately \$247,000 completing these audits.

Industrial Siting

- ISD had nine active permits during FY2021. Each permittee is required to submit a quarterly report, which is reviewed by ISD. If there are any inconsistencies between the annual report and conditions approved by the ISC, ISD requires the permittee to provide additional or corrected information. This process ensures the permittee is adhering to permit conditions. Additionally, ISD provides updates to the Industrial Siting Council at its quarterly meetings on the status of all active permits.

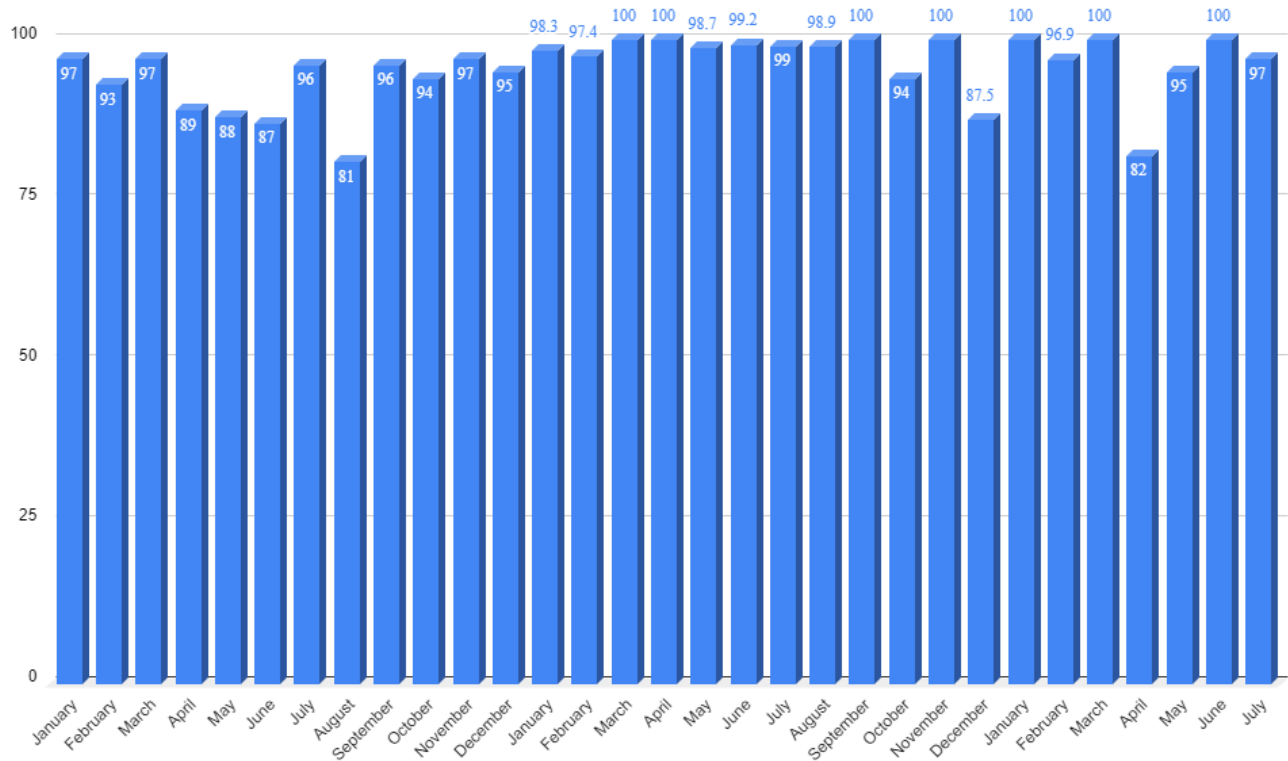
Land Quality

- LQD tracks the annual number of inspections for both coal and non-coal. LQD completed 99% of the required coal inspections during the report year. Additionally, the division completed 98% of the non-coal inspections for FY2021. Completing these inspections during COVID provided some challenges. Coal and Non-coal operations that were not able to be inspected were the result of unresolved trespass issues, environmental conditions (weather), and COVID restrictions that preclude access to sites.

Solid and Hazardous Waste

- During FY2021, with a recorded 3,423 facilities, SHWD Inspection & Compliance (I&C) group performed 175 inspections. These inspections evaluated compliance with the hazardous waste generator, hazardous waste treatment, storage and disposal facility and used oil management standards and the state solid waste landfill and transfer, treatment, and storage requirements. The following business sectors were inspected during this time period: vehicle service, oilfield service, petroleum refineries, contractors, mines, dry cleaners, power plants, oil and gas pipelines, landfills and various other oil and gas and business facility sectors. The program responded and followed up on approximately 225 complaints related to open waste dumping, illegal hazardous waste disposal, abandoned tire dumps, etc. In FY2021, I&C issued seven Notices of Violation.
- The Storage Tank Program (STP) ensures that tank owners and operators properly operate regulated tanks throughout the State. There are 671 active facilities within Wyoming. STP issued 11 enforcement actions during the fiscal year. The STP compliance rate was 96 percent in FY2021.

STP Compliance Percentage 2019-2021



Water Quality

- The Underground Injection Control Program completed inspections at 80% of the constructed Class I facilities.
- The WYPDES program has met all inspection targets. WDEQ has inspected 100% of major facilities in the performance period as planned (national annual average is 45%). WYPDES surpassed inspection commitments for several sectors of minor facilities: committed to inspect 38 oil treater facilities, inspected 88; committed to inspecting 24 municipal facilities, inspected 33; committed to inspecting 4 coal mines, inspected 5; and committed to inspecting 4 industrial facilities, inspected 5.

Goal 6 – To develop and maintain an outcome oriented workforce and culture

DEQ is committed to developing and maintaining an outcome oriented workforce and culture.

Administration

- DEQ leadership continues to stress the importance of Safety and Defensive Driving and ensures compliance with the program and safety of its workforce. All employees that were required to take the course in FY2020, have completed it.
- DEQ completed 100% of the Performance Management Initiative by the established deadlines.

Abandoned Mine Lands

- AML is undergoing a division-wide evaluation of its information tracking systems with the goal of increasing real-time data sharing between project managers, consultants and contractors. These improvements will drastically enhance project managers ability to efficiently coordinate their daily activities both in the field and office.
- The Wyoming Subsidence Insurance Program is undergoing a complete refit on data acquisition via a new GIS platform. Going paperless will: reduce transcription errors, reduce consultant time collecting and reporting of pre- and post-subsidence inspection reports; and provide speedier homeowner insurance signup. This will also provide field staff with real-time, up to date insurance coverage. This new GIS platform will provide these data, combined with historical subsurface investigations and grouting reports, on a handheld, portable tablet.
- Due to the COVID-19 pandemic, weekly remote staff meetings were held to keep teleworking staff updated.
- Due to the COVID-19 pandemic, AML was not able to hold its annual fall Federal Partners and Staff Meeting in 2020.

Air Quality

- AQD is one of the more than 48 state and local air agency members of the Association of Air Pollution Control Agencies (AAPCA) and one of 15 state members in the Western States Air Resources Council (WESTAR) that discusses western regional air quality issues and share resources. AQD staff participate in monthly calls, hold committee and organizational leadership roles, and attend semi-annual meetings of

these and other organizations. Information is distributed via emails, weekly newsletters, calls, and through various Division meetings.

- AQD Staff represented Wyoming's interests through participation in a leadership role in the USEPA's National Facility Team and Combined Air Emissions Reporting projects designed to improve facility information and streamline emissions reporting processes. Those projects are expected to reduce the cost to industry and government for providing and maintaining environmental data and improve decision-making capacity through more accurate and timely data availability.
- AQD staff also represent Wyoming's interests through their appointment on to USEPA's Board of Scientific Counselors' Air, Climate, and Energy Subcommittee.

Industrial Siting

- The division had complete staff turnover in FY2021. ISD will be looking for appropriate training to ensure staff have sufficient resources to complete it's mission.

Land Quality

- LQD evaluates every open staff position. The division moved one FTE from the Sheridan office to the Lander office in 2020 to balance workload and improve efficiency. This position move resulted from evaluation of the Lean program metrics related to workload and workflow. The LQD will continue to evaluate position vacancies as they occur.

Solid and Hazardous Waste

- SHWD programs maintained contact throughout the year to discuss workload distributions, emerging issues and unique program needs. Staff members took advantage of SHWD membership in national organizations, participated remotely in workgroups and attended virtual trainings when possible. SHWD staff also participated and completed performance evaluations to identify areas of improvement for staff and acknowledge high achievement.

Water Quality

- WQD staff continued to participate in statewide, regional, and national conferences and associations to represent Wyoming on water quality issues and to obtain professional training. National associations that WQD actively participates in include, but are not limited to, the Association of Clean Water Administrators, the Association of State Drinking Water Administrators, the Groundwater Protection Council, and the Interstate Technology and Regulatory Council.

- The WQD continued to develop digital tools to track and manage workload distributions and ensure staff could access necessary resources and information while working remotely.
- The WQD began development of an improved employee on-boarding process to ensure new employees are provided with a comprehensive orientation to the division to promote consistency and a positive workforce culture.
- The WQD continued to strategically determine performance goals to emphasize accountability and consistency across the division.

Goal 7 - To administer and manage the resources of the agency in a responsible manner

DEQ is committed to managing its resources in the most efficient and effective manner.

Abandoned Mine Lands

- FY2021, AML initiated 61 individual projects. These represented 11 large bid contracts and 50 smaller Task Order project actions. Nine of the large projects were related to proactive subsidence abatement. In FY2021, there were 10 Public Facilities grant projects underway, comprising \$20.6 mil, sponsored by local Wyoming public entities. These projects are in various phases of design or construction in 2021.

Air Quality

- AQD utilized IMPACT's project management module and worked closely with the Department's accounting staff to assure that grants and contracts were timely formulated and completed.
- To help implement the paperless office initiative, AQD continued to expand industrial source familiarity and use of IMPACT through education and training outreach efforts to specific sources and industry groups.
- To ensure all permit fees and emission inventory invoices are promptly processed, the NSR and Emissions Inventory program continue to implement modified billing and invoice procedures with an added emphasis on timely collection which leads to a reduction in pending accounts receivable.

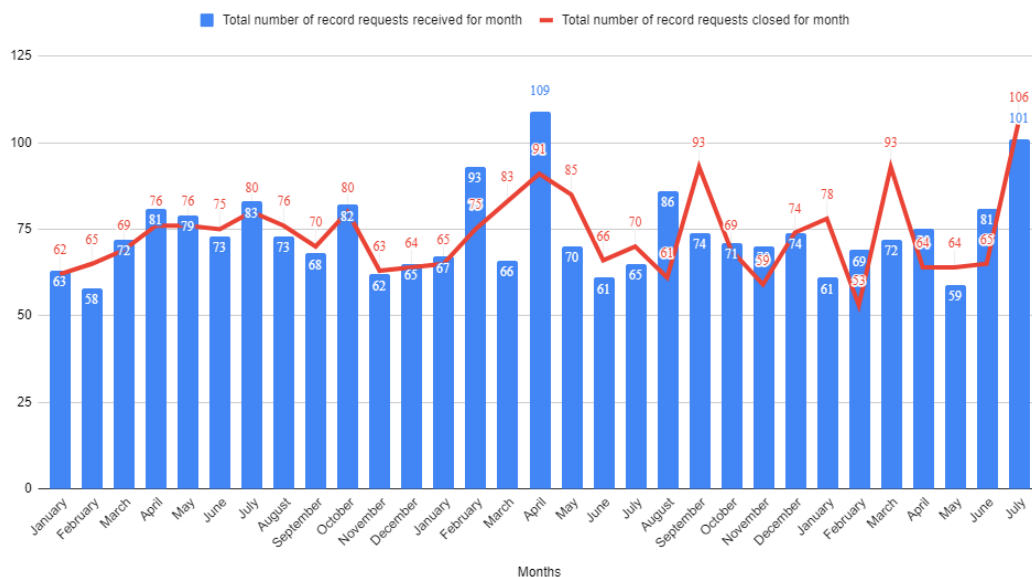
Administration

- The nationwide COVID-19 pandemic outbreak occurred in March 2020. DEQ temporarily expanded the teleworking options for staff to keep the continuity of operations during the outbreak. Only essential staff remained in the office for the remainder of 2020. This was an irregular year for budgets as travel was heavily restricted and only the essential compliance oversight actions were taken to limit face-to-face interactions as much as possible. The same limited face-to-face interaction was occurring with private industry as well.
- The State of Wyoming has centralized all agency human resource functions under the direction of the Department of Administration & Information Human Resources Division (HRD). Centralization addressed a recommendation from the Alvarez and Marsal efficiency study. Due to the HRD consolidation, DEQ had two full time employees dedicated to HR positions that transferred to A&I.

Number of Approved Employees Total Scientists Total Engineers

Month	Number of Approved Employees	Total Scientists	Total Engineers
January	265	156	43
February	265	156	43
March	265	155	43
April	265	156	43
May	265	156	43
June	265	156	43
July	265	156	43
August	265	157	43
September	265	157	43
October	265	157	43
November	265	157	43
December	265	157	43
January	265	158	43
February	265	159	43
March	265	159	43
April	266	160	43
May	266	160	43
June	265	160	43
July	266	160	43
August	260	156	43
September	260	156	43
October	260	156	43
November	260	157	41
December	260	157	41
January	260	157	41
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April	258	157	41
May	258	157	41
June	256	156	41
July	256	156	41
August	256	156	41

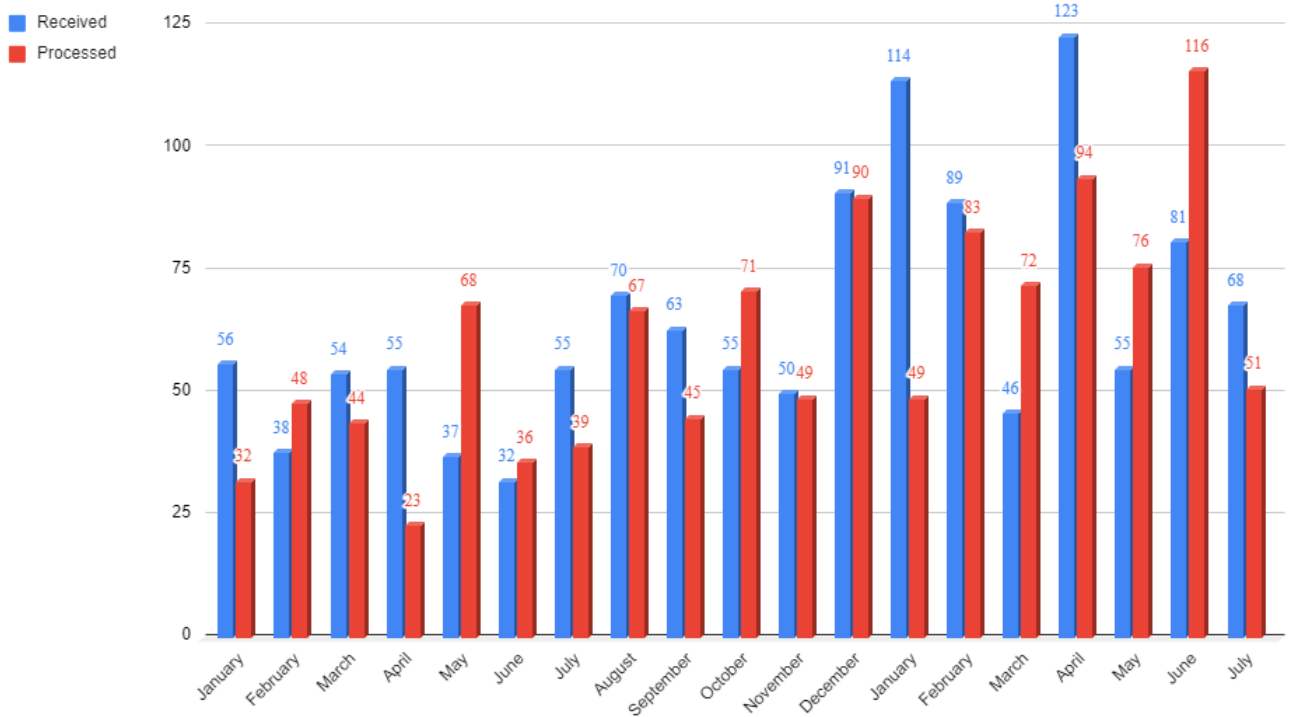
- ### Record Requests Received and Closed 2019-2021



- Information Technology Efforts:
 - DEQ successfully migrated all libraries from SharePoint 2010 to Microsoft 365 online. The remaining migration efforts include ENVITE and WYPDES over the next 2 years.
 - DEQ successfully migrated Land Quality Division MIDAS permitting and inspections from SharePoint 2010 to a .netCore App and Microsoft 365 libraries
 - DEQ successfully upgraded WyWaste to 2021.1 from 2019.3 for the latest fixes and enhancements outlined by Solid Waste Division
 - DEQ kicked off the water consolidation development program that will merge the Water database with Solid Waste, WyWaste.
 - DEQ has completed phase 1 of the RBDMS system for water analytical data.
 - DEQ has successfully scanned all paper files to electronic for Air Quality and Solid Waste and implemented a paperless guidance for incoming paper to electronic format.
 - GIS has converted all Flex Viewer (phased out) to Javascript for all map services
 - GIS brought in 80 licensed ArcGIS users for the new ArcGIS Pro.
- The bond database that tracks the current bonds for each Division is in operation and it is still being further enhanced. Monthly bond summary reports are completed as requested by the Director and as requested by the public in records requests.

In addition, a bond status sheet database has also been developed. The purpose of the database is to track each bond upon receipt and through the process of a decision of acceptance and denial of the instrument. The bond status sheet documents the time taken from receipt of a bond to the final communication of the decision of a bond instrument.

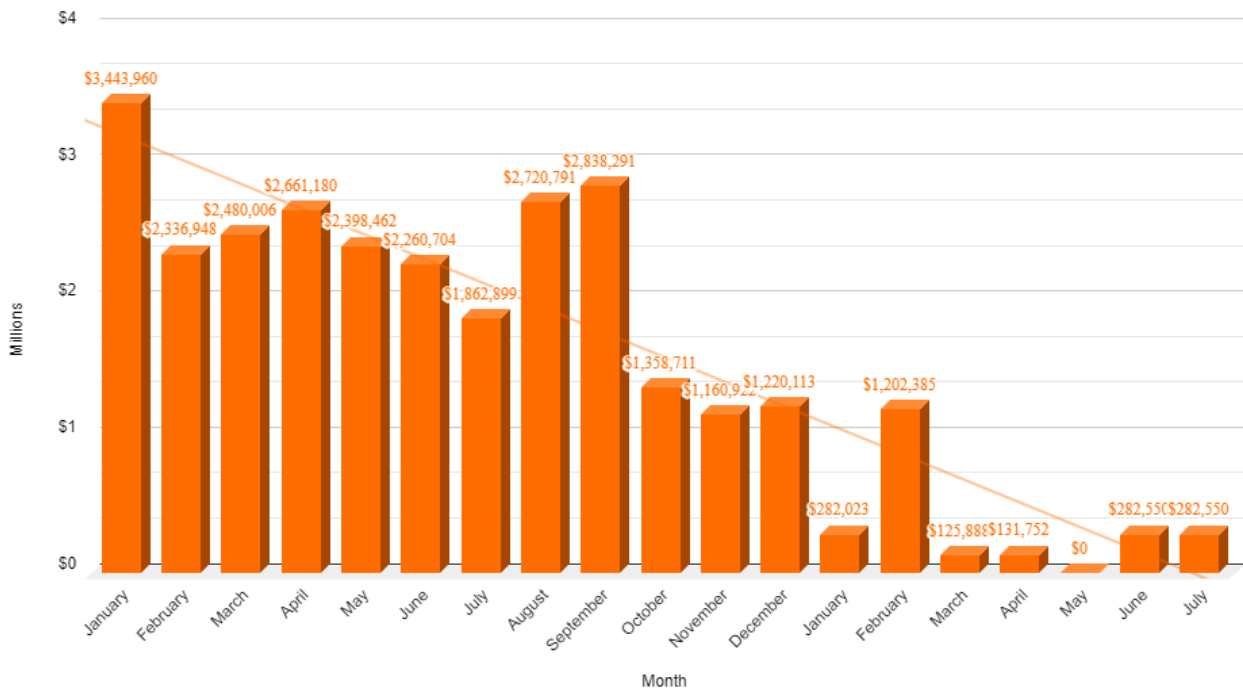
2020-2021 Bonds Received vs Bonds Processed



Industrial Siting

- ISD ensures the application fees received from various proponents are assigned a budget code and actively tracked when staff are working on compliance actions with various projects. These budget codes are connected to timesheets and invoices, as well as, to special coding for copies and assigned codes for mailing items. ISD reviews the various budget accounts it oversees to ensure the tracking is accurate and functioning throughout the compliance process and ensure funds are adequate to cover the remainder of the compliance period for the project. In addition, the ISD staff works closely with local governments to provide technical assistance and information on impact assistance. ISD staff also work closely with the ISC members on hearings that establish schedules for impact assistance payments. In addition, ISD staff communicates the ISC decision of the schedule of impact assistance payments to the Department of Revenue. Impact assistance payments are tracked by the ISD and provided to the ISC in quarterly reports.

Impact assistance \$ paid to local governments in 2020-2021



Land Quality

- LQD continues to operate within its budget. The division is cost shared funded with a federal Title V Coal grant from the Office of Surface Mining Reclamation and Enforcement. It is important to note that the state must maintain its Title V coal program in order to keep its Title IV AML program.

Solid and Hazardous Waste

- The Brownfields Assistance Program (BFAP) made significant contributions in supporting communities, economic development organizations and conservation districts to provide assistance in understanding and applying for Targeted Brownfields Assistance through EPA. In addition, the BFAP continues outreach and education to Wyoming communities and facilities to highlight the availability of an \$800,000 Revolving Loan Fund. The RLF makes available loans and sub-grant funds to governmental and eligible private entities to clean-up contaminated property to help make sites ready and environmentally safe for redevelopment.
- In FY2021, SHWD continued to develop and complete SharePoint libraries or records centers to facilitate information sharing, collaborative document editing, improved records management, and reduced physical space needed to house hard copy records.

- Work continued on developing and populating the records centers for the Solid Waste Permitting and Corrective Action Program, Hazardous Waste Program, Brownfields Assistance Program, and the Voluntary Remediation Program, with much of the scanning for these programs being done internally.

Water Quality

- In FY2021, WQD programs modified and implemented work flow processes which improved efficiencies, and educated and trained staff on the new processes.
 - The Groundwater Section continues to follow the Kaizen process and look for ways to continue to streamline the permitting process in order to perform completeness reviews within the regulatory 60-day timeframe and to issue permits in a more timely manner.
 - The Watershed Protection Section has updated quality assurance/quality control (QA/QC) processes; methods for determining whether surface waters are meeting designated uses; and guidance documents and standard operating procedures (SOPs). The Watershed Protection Section has also continued to improve collaboration with programs affected by Section determinations.
 - Modified processes for the Water and Wastewater Section focused on implementing a new Smartsheet Permit Tracking system to centralize and streamline permit tracking from application to issuance and to calculate and display metrics. The new system was deployed in spring 2021.
 - Modified processes for the WYPDES Section have included beginning planning and implementation steps for Phase 1 of the WQD consolidated database, which will move the WYPDES permit database to an nViro platform. During this annual reporting period, WYPDES staff met with the nViro contractor to complete the database gap analysis and process design workshops. The WYPDES Section also began transitioning to netDMR to streamline and digitize discharge monitoring report data entry to reduce errors. The WQD continued to implement numerous digital processes developed during the time when the majority of staff were teleworking. These processes included switching to a digital incoming mail system and a digital correspondence system that includes electronic routing and approvals.
- In 2020, WQD completed migration of its SharePoint libraries and records centers from an on-premise hosted environment to SharePoint Online, a cloud-based environment. This migration will improve accessibility and efficiency in using SharePoint as the division's primary records repository. The migration also provided an opportunity to improve the organization of the WQD's SharePoint records

centers and libraries. Three new records centers were created during this time period for National Environmental Policy Act, Subdivision Review, and Capacity Development records. Ongoing maintenance and records population occurred for existing libraries, and significant improvements were made to the Groundwater records centers and libraries after further discussions with program staff on records organization. The WQD converted approximately 120 boxes of hard copy records (60,000 pages) to an electronic format during this reporting period.

