

WATER QUALITY CONTROL DIVISION
ANNUAL REPORT
2021



Submitted to the Water Quality Control Commission - 2022



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Nicole Rowan

Director, Water Quality Control Division

Foreword

I am excited to share the Water Quality Control Division's annual report. It summarizes our accomplishments between October 1, 2020 and September 30, 2021.

The report summarizes data about permitting, inspections, compliance, and funding efforts from our Clean Water and Safe Drinking Water Programs. It also covers some key projects such as health equity and environmental justice, wildfire response, and reducing PFAS in Colorado's waters.

Our staff, stakeholders, and partners work together to provide clean and safe water for all.

Our mission is:

"To protect and restore water quality for public health and the environment."

Statutory requirements

The division submits this report to the commission as required by Colorado Statute every year. The report discusses the effectiveness of the division's efforts under the state Water Quality Control Act. In particular, the division will:

"Include in such report such recommendations as it may have with respect to any regulatory or legislative changes that may be needed or desired. Such report shall include the then-current information that has been obtained pursuant to Section 25-8-303 (monitoring) and information concerning the status of the division's implementation of the discharge permit program established in Part 5 of this article."

As required by Section 25-8-305 of the Colorado Water Quality Control Act, this report will also go to:

- House Agriculture, Livestock, and Water Committee
- Senate Agriculture and Natural Resources Committee

Major projects

Health equity and environmental justice: Commerce City-North Denver Neighborhood walk

Last fall, the department visited a neighborhood near Suncor refinery. Residents of disproportionately impacted communities like Elyria-Swansea often believe government planners skip their input on problems. The department hopes to reverse that outlook with a respectful, hands-on attitude.

Neighborhood leaders chose the route and conducted the tour in Spanish. Translation into English focused visitor attention on concerns about water safety, poor air quality and lack of access to fresh food. In the meantime, everyone experienced the noise and disruption of interstate road construction as they talked. All in all, this street-level view presents a fresh way of looking at environmental impacts.

Water tasting on the menu

In 2021, the Latinx organization Cultivando coordinated with the division to hold a Commerce City drinking water forum and water tasting event. The activities grew out of the belief that foul tasting water means it's unsafe to drink. Drinking water program staff attended the event along with residents and representatives of the South Adams County Water and Sanitation District.

Presentations covered the following topics in Spanish and English:

- How the division and public water systems operate to ensure safe tap water.
- What causes taste and odor in drinking water and how that may be different from unsafe chemicals.
- Which low-cost options can improve the taste of tap water.
- How drinking tap water provides benefits such as added fluoride to keep teeth healthy.

Volunteers tasted tap water samples from around Commerce City as well as bottled water. Results from the taste testing showed relatively small differences in taste between bottled water and tap water samples collected in Commerce City.

The division continues working with the nonprofit organizers to talk about future educational approaches. Community members started to get to know staff from the division and their water system. Plus, division staff created a Frequently Asked Questions handout about [Water Taste and Odor in English](#) and [Spanish](#). We count this event as a win for North Denver residents and hope to continue the discussion.

Suncor permit renewal

One major division effort to achieve health equity and environmental justice is the renewal of Suncor's water quality permit. The plant rests on the banks of Sand Creek, close to the South Platte River. Its water quality permit limits the amount of chemicals from water used to process fuel, treated groundwater, and stormwater that can enter Sand Creek as a result of the manufacturing process.

In the fall of 2021, the division released a new draft permit for public comment. This permit resulted from two large informational meetings and many small group discussions with residents living near Suncor. These talks helped the division draft a renewal permit that addressed community concerns.



Major projects

Wildfire recovery

In 2021, the division continued to support communities affected by historic wildfires. The 2020 fires burned over 625,000 acres across the Colorado and South Platte River basins. The damage affected over 140 public drinking water systems and 30 wastewater systems.

This year, the division promoted recovery in many ways including data coordination and task force meeting support. We gave local communities technical help and issued grants totalling \$915,500 for projects to address water quality and flooding. We also helped notify downstream locations about clean-up during the Glenwood Canyon mudslides.

As an important tool to combat fire danger, the division helped publish a [Post-Fire Recovery Playbook](#) with steps for cities and water systems to take before, during, and after a fire. Since its release, many local towns and recovery groups are putting the playbook to good use.

Our partnerships with external groups, like the [Watershed Wildfire Protection Group](#), will improve our response to future wildfires. Together, we will work with communities to identify fire risks, reduce erosion in burn areas, and decrease risk of flooding.

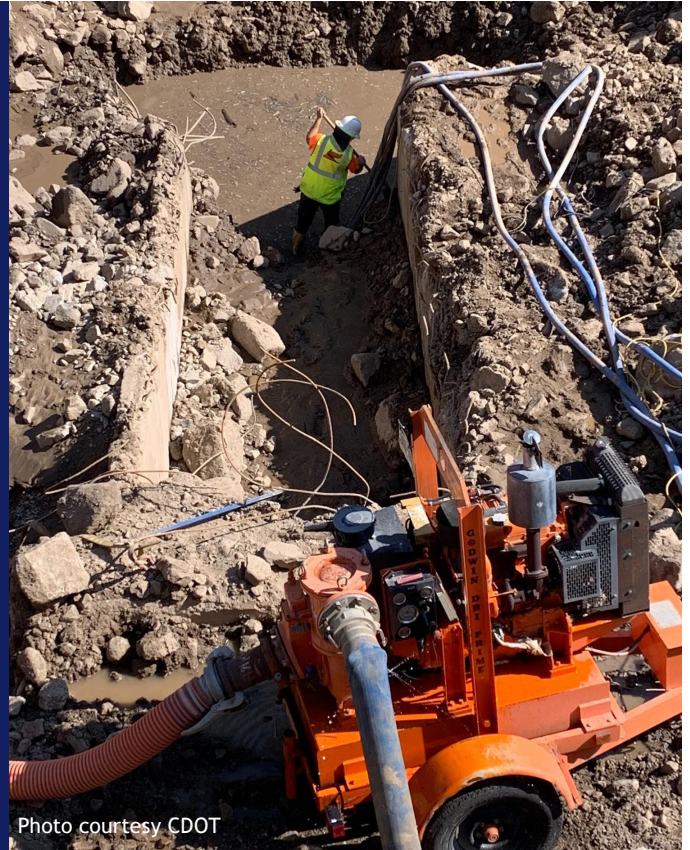


Photo courtesy CDOT

PFAS

Chemicals from firefighting foam, personal products, and other sources can get into water, especially groundwater, and contaminate drinking water supplies. Scientists call these chemicals per- and polyfluoroalkyl substances or PFAS. These chemicals contribute to an emerging, urgent public health challenge and require action to avoid future contamination and ensure safe drinking water for all Coloradans.

Takeback Program: Launched in 2021, this program pays Colorado fire departments to remove firefighting foam with PFAS from use. The program pays \$40 per gallon for unused firefighting foam containing PFAS. This payment helps fire departments buy safe replacement foam. It also helps them store the foam with PFAS until it's safe to get rid of it. The program is off to a strong start with 10 fire departments removing over 5,000 gallons of toxic firefighting foams.

Certificate of Registration Program: The division supported the development and implementation of a PFAS registration program. Anyone using or storing foam containing PFAS must register. So far, 142 facilities have registered 140,000 gallons of firefighting foam containing PFAS.

Private well sampling: The division joined local public health agencies and EPA Region 8 to test at-risk private wells in Adams, Boulder, and Summit counties and coordinated communication and response activities. All test results, except for two wells in Boulder County, showed PFAS levels below the EPA's health advisory for PFAS in drinking water. Homeowners with elevated levels of PFAS were educated on the results and potential health risks associated with PFAS.

PFAS Narrative Policy: In 2020, the commission adopted the division's proposed PFAS Narrative Policy. This policy provides guidance to the division on how to regulate these chemicals in permits. Because of the policy, some permits now require monitoring or include limits for PFAS. For example, the division wrote PFAS limits into the 2021 draft permit for the Suncor oil refinery due to high levels of PFAS in their discharges.

Clean Water Program

Program projects

The Clean Water Program works to maintain and improve water quality in Colorado's rivers, lakes, and streams. The program sets standards and pollutant limits, issues permits to ensure limits are met to support stream standards, and takes action to maintain and regain compliance.

In a change to this year's annual report structure, we have included an appendix with the division's 2021 fee bill report. This addition will provide specific information on permit processes and backlogged permits.

10-year water quality roadmap



Stakeholders have been actively involved in implementation of the division's 10-year water quality roadmap. This effort will develop or revise water quality standards for temperature, nutrients and chemicals by 2027.

- Up to **200 attendees** attend each quarterly meeting.
- Approximately **400 facilities** monitor nutrients and submit data each year.
- Over **125 stakeholders** have signed-up for a voluntary incentive program for early nutrient reduction.



Health equity and environmental justice

Everyone deserves to live in a clean environment with clean water. Yet, we acknowledge some of our communities are disproportionately impacted by pollution and other environmental injustices. We promise to make information available, gather and consider community input, and look through a health equity and environmental justice lens when making decisions.

We count one of our successes as the new Suncor draft water quality permit now posted for public comment. Prior to drafting the permit, the division met with residents who live near the plant, community organizations, and other stakeholders, and we considered their feedback as we drafted the permit. The division proposed new limits on metals, PFAS, and other harmful chemicals, more frequent testing and inspections, and communication requirements to the nearby community.

Wastewater surveillance program

During 2020, the department supported utilities and local universities in [monitoring wastewater for COVID-19](#). These pilot efforts led to additional funding from the Center for Disease Control to expand COVID-19 wastewater monitoring across the state. The department has hired a dedicated team to oversee this effort. The monitoring information was used to track the arrival and rise of the COVID-19 delta and omicron variants. Twenty-one utilities sampled twice a week last year. More utilities plan to come on board in 2022 and may collect data on other illnesses.

Clean Water Program

Permitting

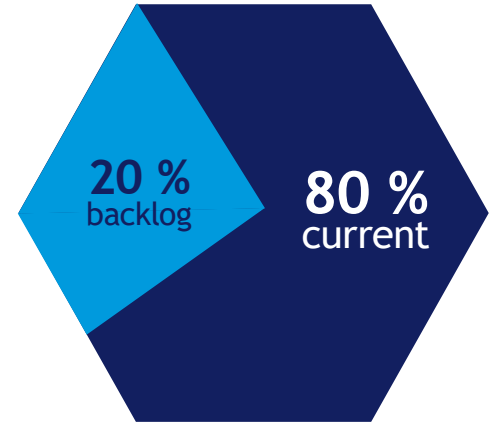
The division writes permits to limit discharges of pollution to waters of the state, including groundwater. Permits try to protect water for safe drinking, aquatic life, agriculture and recreation. The division has 9,151 permits in effect: 80% current and 20% backlogged.

9,151 ACTIVE PERMITS

We define a backlogged permit as follows:

- A permit with a renewal application that is not issued before its end date.
- A new individual permit that is not issued within 180 days of the application's receipt.

The division is working to address its backlog by increasing on-time renewal of general permits that cover a large number of permit holders. It also tries to move those with individual permits to general permits when possible. Up-to-date permits include the most recent standards adopted by the commission and better protect our waters.

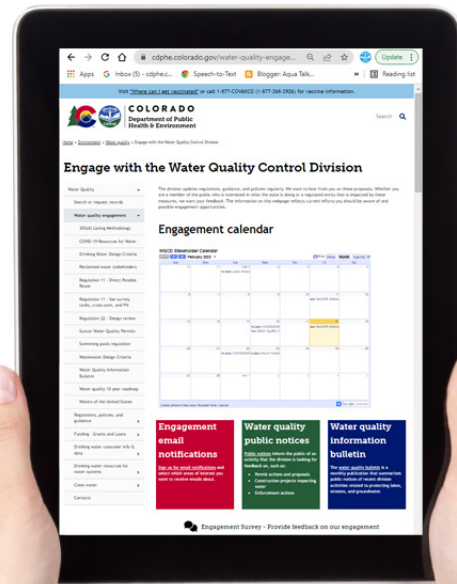


Permit type	Backlogged	Current	Total	Backlog %
Commerce and Industry	1,214	633	1,847	66 %
Construction	121	6,353	6,474	2 %
MS4	59	64	123	48 %
Pesticides	0	78	78	0 %
Public and Private Utilities	451	178	629	72 %
Total	1,845	7,306	9,151	20 %

Stakeholder outreach

The division worked hard in 2021 to involve the public in its permitting decisions. Our efforts to include disproportionately impacted communities resulted in the creation of a [water quality engagement webpage](#) that shows events where website visitors can find information and provide feedback. The site also shows how to be notified about proposed permit revisions and ongoing enforcement actions.

Our permit process asks for public comments on a variety of topics. During the past year, these included the Suncor water quality permit, PFAS permitting decisions, the industrial general permit renewal, and Municipal Separate Storm Sewer System permit renewals. We lead webinars four times a year for participants to discuss various permits and for staff to answer questions.



Clean Water Program

Watershed restoration and protection

The division operates two groups dedicated to restoring and protecting watersheds: the Nonpoint Source (NPS) and Watershed Analysis and Implementation Support (WAIS) programs. These programs identify and address point and nonpoint sources of pollution.

Together, these programs provide technical advice and funding to local communities to improve nearby water. These partnerships help residents develop plans to meet water quality standards and provide funding for resources. In 2021, the division oversaw more than 35 projects and awarded over \$9.5 million in total funding to help local communities improve water quality.

MANAGED
35
WATER QUALITY
IMPROVEMENT
PROJECTS
PROVIDED
\$9.5
MILLION
IN FUNDING
ASSISTANCE

Sampling and monitoring data

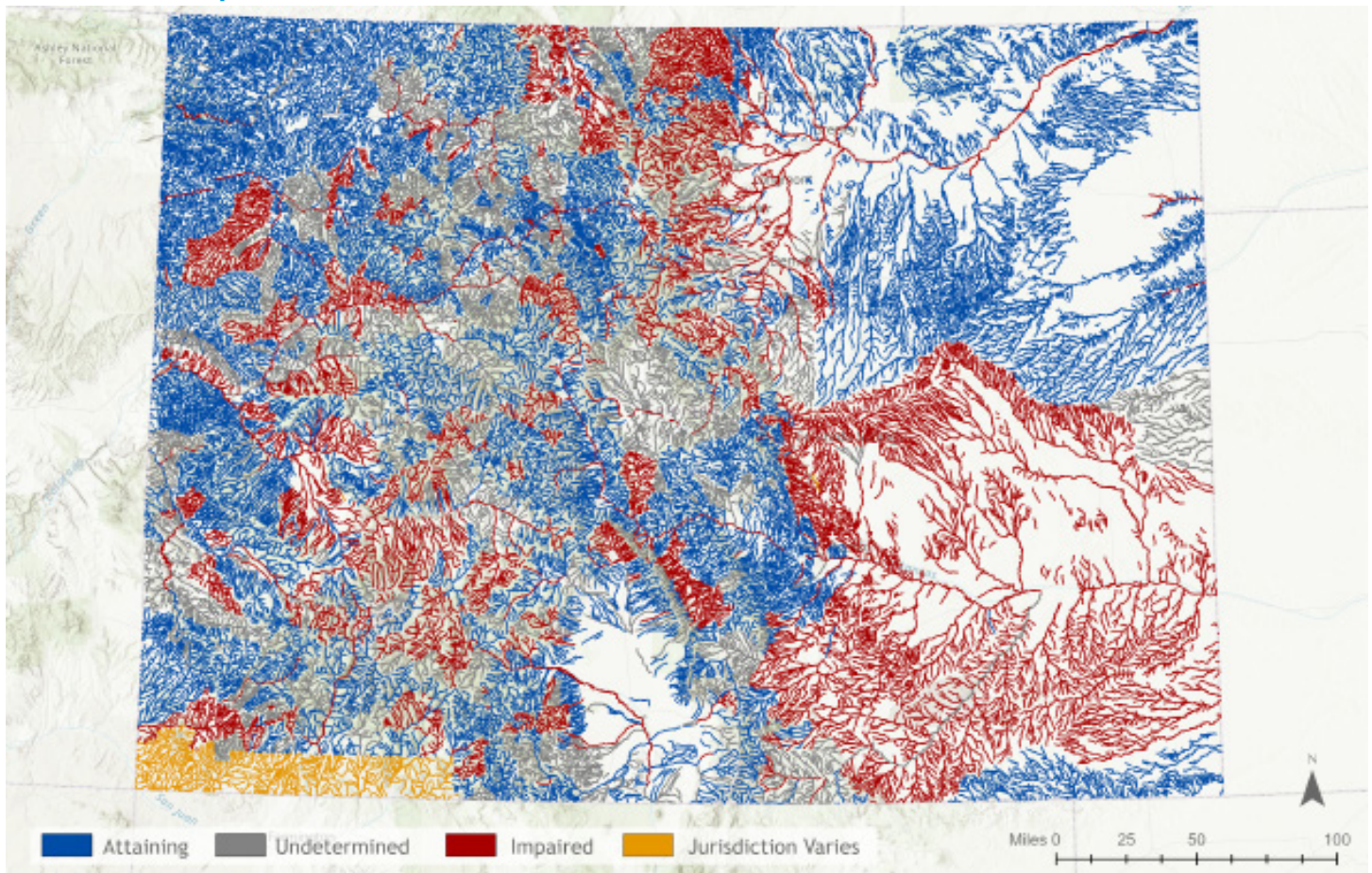
Colorado's borders contain over 105,344 stream miles and 249,787 lake acres. The division uses a rotating basin approach for stream monitoring and samples the entire state over a five-year period. Water samples were mostly collected from the Arkansas, Rio Grande, and Colorado River basins in the winter and spring of 2021 and the South Platte River basin in the summer.

Staff travel to targeted sites year-round for routine sampling. At these times, staff also perform biological and physical sampling and special studies. Monitoring benthic macroinvertebrates, periphyton, phytoplankton, and sediment provide indicators to the health of our water.

1,136
samples
over **250**
locations

388
reported spills
317 required
staff triage

Streams impairment status



Clean Water Program

Toxic algae

Toxic algae presents an emerging contaminant that can affect many kinds of water use. This algae puts drinking water and outdoor activities at risk.

The division's dedicated toxic algae program started three years ago. While still in its infancy, we've achieved several goals during the past year.

- Tested 81 water samples for toxic algae.
- Worked with federal and state government agencies and several towns to advise citizens of danger and to close affected water bodies for public use.
- Helped water managers develop a recovery plan during closures for toxic algae.

Special study: Bear Creek nutrient models

We continue to support our partnership with the Bear Creek Watershed Association by improving and expanding watershed and reservoir water quality models. The division will use these models to develop Total Maximum Daily Loads (TMDLs) for nutrients and then apply those TMDLs to improve water quality.

Models that replicate responses of the watershed and reservoir system to different pollutants are important tools. The results allow the division to focus resources on water quality improvement projects that will address the most harmful pollutant sources.



Safe Drinking Water Program

The Safe Drinking Water Program works to ensure that Colorado visitors and residents always have clean, safe drinking water. The program aims to prevent waterborne diseases and reduce chronic public health risk. There have been no waterborne disease outbreaks in over 10 years and a drastic reduction in E. coli violations.

RESOLVED:
835 DEFICIENCIES
& VIOLATIONS
AT WATER
SYSTEMS SERVING:

2,811,128
Coloradans

336
system
inspections
*for conditions that could lead
to public health threats*

718 field based
violations or
significant
deficiencies
identified

Disciplinary actions by the Water and Wastewater Facility Operators Certification Board

Each public drinking water system operates under the supervision of a certified operator in responsible charge. Facility owners appoint these operators who must demonstrate their experience and knowledge qualifications. Operators are held accountable if they fail in their duties or engage in misconduct. Last year, complaints about one operator involved a serious health risk, and the division suspended the operator's certificates on an emergency basis. Such action had never before been taken. Following two public hearings, the operator certification board confirmed the division's action and revoked the operator's certificates.

Following various disciplinary actions last year, compliance staff helped 17 public water systems with 1,492 customers hire new operators or buy finished water. These actions contribute to customer confidence in drinking water safety.

2,065 public water systems

# Systems	Population served
1,569	25 - 500
316	501 - 3,300
91	3,301 - 10,000
77	10,001 - 100,000
12	> 100,000

Priority list of contaminants

The division reviewed the drinking water priority list of contaminants for which a minimum general sanitary standard may be appropriate. It was determined that the list established in 2019 is sufficient at this time.

The list is as follows:

- PFOA: Chemical Abstract Service Number (CAS No.) 334-67-1
- PFOS: CAS No. 1763-23-1
- PFHxS: CAS No. 355-46-4
- PFNA: CAS No. 375-95-1

Safe Drinking Water Program

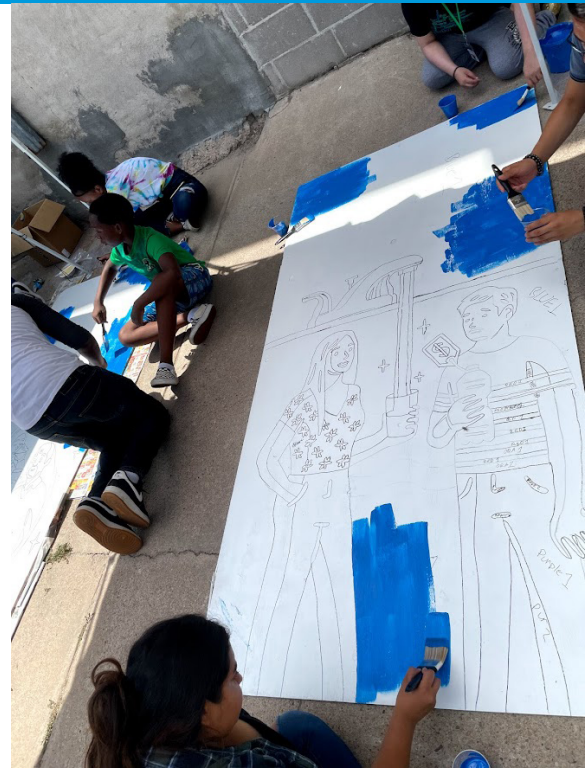


Health equity and environmental justice

Safe tap water for all

Making information available to everyone is critical for health equity and environmental justice. In pursuit of these goals, staff worked to educate refugee and immigrant communities on the benefits of drinking tap water. Drinking tap water on a regular basis is better than consuming bottled water in terms of oral health, cost, the environment, and safety.

We focused on Morgan County because of the large number of immigrants, a preference for bottled water, and the county's high-quality tap water. Innovation Grant funding allowed us to hire an artist to create posters showing the benefits of tap water. A mobile pantry offered the posters with its food, and we shared information at community events, leadership groups, parenting groups, and cooking classes. Trained health partners also provided information to residents. Finally, with support from a local nonprofit agency, immigrant and refugee students painted a colorful mural as a reminder to drink tap water. Going forward, the project will continue as health care providers and local schools reach out to target communities.



Elephant Rock Mobile Home Park

This public water system in Palmer Lake, Colorado provides drinking water to mobile homes with about 60 residents. Last fall, the division became concerned when the park's new owner locked the water system's operator out of the treatment plant. With no response from the owner, our drinking water compliance team issued a bottled water advisory for residents. In situations where tap water presents an immediate health risk from pollutants like bacteria, we want the public to drink bottled water. Water systems should fix the situation so people can drink tap water again to get long-term health benefits. The immediate health risk required public notice to be posted at each resident's home within 24 hours. With only a few hours left on the clock, several local and state agencies cleared the way for the division to personally notify the public. One of our field inspectors and a local deputy sheriff walked door to door to provide notice and received many thanks from grateful residents for the extra effort.

28

Additional efforts for health equity and environmental justice included:

- Helping disproportionately impacted residents understand drinking water safety as opposed to taste.
- Continuing to help water systems conduct drinking water public notice in Spanish.
- Reminding mobile home park owners of their responsibility to provide alternative water to residents as part of the public notice process.
- Fielding drinking water complaints in Spanish with in-house staff.
- Providing sampling instructions and public health information in Spanish on our [Lead and Copper website](#).

Stakeholder Outreach

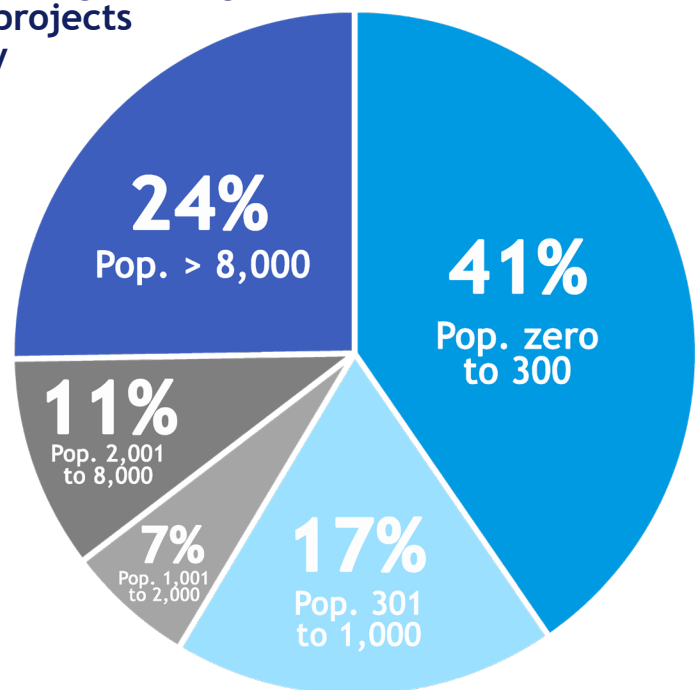
Last year, the division asked for stakeholder input as it completed policy updates on storage tanks and back-flow prevention. The project now requires revision of many guidance documents and templates. We will again ask for stakeholder feedback as we start revising the Backflow Prevention and Cross-Connection Control Annual Report.

Another stakeholder effort began in March 2021 to develop a direct potable reuse (DPR) rule. The division held five virtual stakeholder meetings averaging more than 100 participants each. An estimated 2,500 expert hours supported these meetings as well as additional technical groups. DPR regulations are needed to protect public health as communities continue to diversify their water supply portfolios. Meetings will continue with stakeholders in 2022 as the division prepares for a commission rulemaking slated for October.

Infrastructure projects

The division connects communities to grants and loans to help them repair or improve their drinking water and wastewater infrastructure. We supported 130 projects involving federal grants or loans this year. We ensured compliance with federal requirements such as environmental reviews by coordinating with communities, local agencies, project consultants and internal partners. The division performs engineering reviews of all important, publicly-owned water/wastewater construction projects in the state.

Over 450 engineering review projects annually



Projects broken down by population served

Assistance grants

The assistance grants program offers up to \$25,000 to drinking water systems that need help solving a compliance or water quality problem. This program built in health equity and environmental justice principles from the beginning.

For instance, the program asks for division staff referrals in addition to traditional applications. Referrals connect this funding opportunity with systems that may not have the resources to research and apply for funding. The division also uses disproportionately impacted communities criteria when ranking applicants.

Brighton Village Mobile Home Park - Under various enforcement orders since 2003, this park overcame its struggle with nitrates. Assistance grant funding helped Brighton Village connect to the City of Brighton and provide residents with clean, safe drinking water. The division closed the park's enforcement order in 2021.

Roggen Motel - The grant helped the motel install a treatment system that removes nitrate. Program staff also helped the system dispose of the nitrate brine. The system's enforcement order will likely be closed in 2022.

Town of Hartman - The town's system received an enforcement order in March 2020 due to several boil water advisories and storage tank rule violations. The assistance grant allowed an engineering firm to help them correct shortcomings last year and close the enforcement order.

Improvement projects

Success stories

Englewood boil water advisory

In August 2021, the division issued the City of Englewood a boil water advisory when a section of its distribution system showed E. coli contamination in the drinking water. This advisory affected the largest number of state consumers since 2013. The advisory told residents what steps should be taken to protect their health.

Multiple department programs worked together with Englewood to eliminate this health threat. Residents quickly regained access to healthy drinking water as a result of the following steps.

- Provided the city with a boil water message to distribute to both impacted and non-impacted customers.
- Worked with the city to translate the public notice in Spanish.
- Activated a telephone helpline.
- Assisted with communications to hospitals and other health care facilities.
- Responded to media requests with accurate information about the event and possible health risks.
- Evaluated water samples to determine the next steps in the recovery.
- Coordinated with the local health department to identify and notify impacted businesses right away.
- Shared community-specific healthcare guidance and resources.

Since the advisory, the division continues to provide guidance to the City of Englewood and other public water systems about how to respond to emergencies of this kind.



4,692

lead service
lines
replaced

Lead reduction

The division oversaw the second year of Denver Water's Lead Reduction Program. The effort continues to focus on lead service line replacement in disproportionately impacted communities. The water system works with a network of community leaders to share information about the program and encourage filter use. Despite COVID-19, Denver Water replaced 4,692 lead service lines in 2021 and met or surpassed all reporting requirements.

Horse Creek and West Creek restoration

Horse Creek and West Creek form part of the Upper South Platte River basin, a major source of drinking water for Colorado's Front Range. In 2002, the Hayman fire burned over 137,000 acres within the Upper South Platte River watershed. Post-fire flooding and erosion from the burn area affected the water habitat resulting in impairment of the aquatic life use for macroinvertebrates. Sediment loading also affected transportation infrastructure, closing state highway 87 for three months.

To remove Horse and West creeks from the impaired waters list, the division took these actions.

- Provided technical help for six nonpoint source projects across the subwatersheds.
- Provided \$1.25 million in support of best management practices to improve water quality and reverse infrastructure damage from burn area runoff.
- Increased available funding by creating a public/private partnership, the Hayman Restoration Partnership, to maximize rehabilitation.
- Shared monitoring efforts with external partners to track water quality improvement.

These creeks are no longer impaired, and the EPA recognized this project in its [NPS Success Story database](#). The division's Nonpoint Source Program has applied lessons learned from this large-scale watershed restoration to other state areas harmed by wildfire.



Looking ahead



Direct potable reuse

The division expects interest in direct potable reuse (DPR) to remain keen in 2022 with great support for its regulation. Communities considering DPR will need a framework to guide the large capital investments required for water treatment. The DPR regulation will ensure the safety of public health and the environment.

Stakeholder meetings in 2021 ended with the publication of draft regulatory documents. These remain available for stakeholder comment and will be further refined in 2022.

Federal Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act was signed into law on Nov. 15, 2021. As a result of the new law, Colorado may receive as much as \$680 million over the next five years. The division anticipates the additional funding will be available in the summer of 2022.

The division is coordinating with the Colorado Water Resources and Power Development Authority and Department of Local Affairs as we determine match requirements so we can maximize the amount of funding available to Colorado. The division also plans to request that the Water Quality Control Commission hold an administrative action hearing to amend this year's spending plan to address requirements of the new law.

PFAS

State lawmakers enacted legislation that provides resources to support communities and water systems affected by PFAS. The division launched the PFAS Grant Program in late fall and will market and expand the program in 2022. The money will fund groundwater and surface water testing, improved water treatment, and emergency help.

Water quality public perceptions

In 2021, the division worked with Corona Insights to survey the public about water quality. The project collected 2,034 online surveys and conducted 54 in-depth interviews. The findings showed:

- Water pollution continues to be an important environmental issue, but its significance declined compared to previous survey results.
- The public identifies its current top concern as climate change.
- Water quality continues to be less important to people than water quantity.
- Participants tend to equate general water quality with drinking water safety.
- People in Colorado rarely take action to preserve water quality for its own sake but protect it in pursuit of other goals such as pet health or attractive lawns.

The Nonpoint Source Program will post final survey results and short informational videos about the findings on its website when the analysis has been completed.

Legislative recommendations

At this time, the division has no legislative requests or recommendations.

Division online resources

Water Quality Control Division

cdphe.colorado.gov/water-quality

Water Quality Control Commission

cdphe.colorado.gov/wqcc



COLORADO
Department of Public
Health & Environment

HB17-1285

REFINANCE WATER POLLUTION CONTROL PROGRAM ACT

ANNUAL REPORT

TO THE LEGISLATURE

2021

SUBMITTED
MARCH 2022



Foreword

I am pleased to submit the HB17-1285 - Refinance Water Pollution Control Program Act for the reporting period coinciding with federal fiscal year 20-21 (10/2020-9/2021). The legislation has specific requirements for the annual report:

- The number of permits processed.
- The number of applications pending for new and amended permits.
- The length of time the permits remain in the system prior to issuance.
- The number of inspections conducted.
- The number of site application and design reviews completed.
- The number of enforcement actions taken.
- The costs associated with each sector.
- The number of full-time equivalents assigned to and actively processing permits.
- The number of full-time equivalents assigned to and actively conducting inspections.
- The number of full-time equivalents assigned to and actively conducting site application and design reviews.
- The number of full-time equivalents assigned to and actively conducting enforcement actions.
- The number of full-time equivalents assigned to and actively developing rules and standards.
- The department shall inform the committees regarding all new standards and rules to be proposed within the subsequent year.

The department is required to submit an annual report on or before March 31st of each year. In 2017, the department developed baseline information for reporting. For this report and subsequent reports, the department is required to provide information on improvements that have been made in comparison to the baseline and to discuss barriers to making improvements. While not required, the division is committed to furthering environmental justice and health equity priorities through the thoughtful administration of its programs and effective community engagement. Outreach regarding this year's report is planned for May 2022.

The annual report is provided to the following committees:

- Senate [Agriculture & Natural Resources Committee](#).
- House of Representatives [Energy & Environment Committee](#).
- House of Representatives [Agriculture, Livestock, & Water Committee](#).



Nicole Rowan, Director
Water Quality Control Division
Colorado Department of Public Health and Environment
March 31, 2022

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Executive Summary

The Colorado Department of Public Health and Environment's (department) Water Quality Control Division (division) implements the federal Clean Water Act and the Colorado Water Quality Control Act. These acts focus on water quality protection and the restoration of Colorado's streams, rivers, lakes, reservoirs, and groundwater. During the 2017 legislative session, the department secured funding for the Clean Water Program (program) through 2022 via HB17-1285. This bill established new fee increases (effective July 2018) as well as the mix between general and cash funds that each clean water sector (established in 2015) will receive in the future.

The following table summarizes how HB17-1285 reporting requirements compare to the baseline year. Following is an overview of notable improvements to service, production, and processes that the division has implemented since the baseline year:

- HB17-1285 provided the commerce and industry sector, MS4 sectors, and public and private utilities sectors funding to maintain program services. The funding allowed the division to backfill positions that were held vacant for budget-balancing purposes. Staff levels have fluctuated during the reporting periods due to attrition that is commensurate with historic rates at the division. However, the division maintained an increase in staff in comparison to the baseline year. In comparison to the baseline year, the division has increased staffing levels by 4.0 full-time equivalents or a 15 percent increase in staff.
- Production levels for engineering reviews and standards development were similar to the baseline year production levels as anticipated.
- The number of inspections completed annually has consistently exceeded the baseline year. Although the total number of inspections conducted in 10/2020-9/2021 increased from the previous year, that change was primarily due to increased reconnaissance inspections in the construction sector that utilize less staff time to conduct and document.
- Enforcement actions continued to be increased from the baseline year due to process improvements and a strategy of issuing actions earlier before the severity has had a chance to escalate.
- The number of permit actions completed has consistently exceeded the baseline year but varies significantly from year to year for specific sectors and types of actions. Vacancies in the Permits Section, training of new staff, and a focus on general permit certification renewals contributed to a reduction in individual permit output for 10/2019-9/2020 and 10/2020-9/2021, but the total number of permits issued still exceeded the baseline year.
- Permit timeliness has increased over the baseline year as the division has reduced the total number of permits backlogged in comparison to the baseline year and has seen a consistent downward trend over the last three years. However, the division anticipates that current backlog levels are expected to increase in future years based on current staffing levels.

Comparison of HB17-1285 requirements for all reporting years compared to the baseline year

Reporting Category	10/2017-9/2018 compared to baseline year	10/2018-9/2019 compared to baseline year	10/2019-9/2020 compared to baseline year	10/2020-9/2021 compared to baseline year
Program staffing levels	↑	↑	↔	↑
Standards development	↔	↔	↔	↔
Permit production	↑	↑	↑	↑
Permit timeliness	↔	↑	↑	↑
Engineering reviews production	↔	↔	↔	↔
Inspection production	↑	↑	↑	↑
Enforcement actions	↔	↔	↑	↑

Program staffing levels: The program has completed hiring related to HB17-1285, consistent with the legislative intent of HB17-1285, which states that "the department's use of funding provided in this act should be limited to processing permits, providing technical and compliance assistance, processing site application and design reviews, and maintaining stakeholder involvement for all aspects of the clean water program." For the 10/2020-9/2021 reporting year, vacancies were due to normal attrition. The pace of hiring replacements has reduced significantly since 2020, and if this slower pace continues, it may result in future decreases in staffing levels as vacancies remain unfilled for longer periods of time. In addition, there is competition in the job market for certain skill sets such as engineering.

Standards: The program is responsible for developing the science used by the Water Quality Control Commission (commission) to help establish water quality goals or "standards." The commission sets statewide water quality standards to protect Colorado's water for uses such as drinking water, agricultural uses, recreational uses like swimming and boating, and for aquatic life. The federal Clean Water Act and the Colorado Water Quality Control Act allow statewide standards to be modified based on site-specific factors. Program staff support the commission for all standards hearings. The level of standards development has been consistent throughout reporting years.

Permits: The federal Clean Water Act and the Colorado Water Quality Control Act prohibit the discharge of pollutants to state waters unless certain conditions are met. The program works to issue and manage permits for entities requesting to discharge pollutants to state waters. For this reporting year, there was a slight increase in permit production and timeliness compared to the baseline year. Production levels and timeliness were impacted by the COVID-19 pandemic and vacancies in the Permits Section.

Engineering: The program provides engineering review, compliance assistance, and technical assistance for domestic wastewater treatment facilities. This is achieved through area-wide wastewater facility planning, facility site approval, engineering plan review, compliance assistance, and comprehensive performance evaluation and construction inspections for facilities funded through the State Revolving Fund Program. The amount of site approvals and design reviews completed is consistent across reporting years.

Inspections: Field inspections are a key component of the program's compliance assurance efforts. The program is responsible for conducting inspections of facilities subject to the federal Clean Water Act and Colorado Water Quality Control Act requirements. The number of inspections increased when compared to the baseline year and has been consistent in subsequent reporting years. Due to funding constraints, the number of inspections completed for the program sectors for commerce and industry and municipal separate storm sewers did not meet U.S. Environmental Protection Agency (EPA) national targets. In addition, there was a decrease in the number of inspections due to the COVID-19 pandemic's impact on the program's ability to conduct inspections safely. Also, as discussed previously, the pace of hiring vacant positions also decreased during 10/2019-9/2020 due to the COVID-19 pandemic.

Enforcement: The program is responsible for ensuring that the regulated community complies with the requirements of the Colorado Water Quality Control Act and its implementing regulations. Enforcement efforts can be placed into three broad categories: compliance assistance, informal compliance assurance, and formal enforcement activities. The number of enforcement actions has been similar throughout all reporting years.

Program finances: The Colorado General Assembly Joint Budget Committee requires the program to report costs associated with the clean water sectors on a quarterly basis. This cost information includes the total costs of the program including personnel services, administrative services, benefits, and indirect costs. This reporting was the basis for HB17-1285 and should provide the basis for future fee bills. Appendix A provides this financial information for state fiscal year 2020-21 and for the first two quarters of state fiscal year 2021-22. Program finances are on track with the spending plan that was established with the passage of HB17-1285.

As discussed above, the program has made process improvements. Yet, the efficiencies gained are not enough to improve and increase:

- **Compliance oversight:** EPA establishes inspection targets in accordance with EPA's 2014 Clean Water National Pollutant Discharge Elimination Compliance Monitoring Strategy. This strategy covers all of the division's compliance work except for the reclaimed water and biosolids. Targets for those activities are established by the division consistent with the national strategy. The division is not able to meet oversight targets for any of the sectors. Since 2016, there has been a 50 percent increase in construction stormwater permits without a corresponding increase in spending authority that would cover compliance oversight activities. The most substantial gaps between the oversight targets and the level of oversight provided are for the MS4 sector and the commerce and industry sector.
- **Compliance assistance and coaching:** In-person inspections and coaching is the main tool for providing compliance assistance. As described above, the division does meet current inspection goals and cannot redirect resources to provide assistance. Examples of compliance assistance that would be helpful to regulated entities:
 - guidance on practice-based permit conditions for the MS4 sector.
 - technical support for monitoring and limiting contaminants of emerging concern.
 - proactive compliance coaching for disadvantaged or low population domestic wastewater systems.
- **Permit timeliness:** The EPA requires that Colorado's permit backlog be maintained at less than 25 percent, and if the backlog exceeds 35 percent EPA will require the department to develop and implement a backlog reduction plan. For reporting year 10/2020-9/2021, the division met EPA's backlog goal. But, as of January 1, 2022, the backlog is at 26 percent. With existing resources levels, the permit backlog will exceed the 35 percent target by March 31, 2024. If EPA requires a permit backlog reduction plan, the division will likely have to reduce current services to focus on reducing the backlog.
- **Support for environmental justice efforts:** The division anticipates that support for environmental justice efforts will increase in the future and that while some of these activities will be included in current work processes additional resources will likely be needed to increase engagement with disproportionately impacted communities in the future.

The department's budget amendment request for the state fiscal year 2022-23 Long Bill recommends increasing spending authority without raising fees for the construction and public and private utilities sectors. This amendment was approved as part of the department's figure setting, but at the time of report publication, the 2022-23 Long Bill was not finalized. The increased spending authority would allow the division to meet our commitment to EPA for maintaining permit backlog below 35 percent. If the division's permit backlog exceeds 35 percent at any time, EPA will require the department to develop and implement a backlog reduction plan. The department's commitment to EPA specifies that the department will strive for maintaining permit backlog below 25 percent. The increased spending authority will help the department meet that goal. If the division's permit backlog cannot be maintained below 25 percent with the increased spending authority, the department will identify what additional resources will be needed to address this commitment to EPA. In addition, the increased spending authority should let the division set annual inspection goals that would meet EPA's expectations for construction sector inspections and increase inspections for the public and private utilities sector. If the funding is included in the 2022-23 Long Bill, in subsequent HB17-1285 annual reports the division will document the impact of the proposed increased spending authority. In addition, we will continue to identify barriers to making improvements.

Section 1 Overview of Clean Water Program

The Colorado Department of Public Health and Environment's (department) Water Quality Control Division (division) and Clean Water Program (program) implement the federal Clean Water Act and the Colorado Water Quality Control Act. These acts focus on water quality protection and the restoration of Colorado's streams, rivers, lakes, reservoirs, and groundwater. In addition, the Colorado Water Quality Control Act focuses on the protection of human health associated with the use of reclaimed domestic wastewater and graywater. The program regulates more than 9,000 permitted facilities under discharge permits and more than 1500 additional facilities and activities under control regulations for reclaimed water and biosolids. Examples of regulated entities include commercial and industrial facilities, mines, construction sites, municipal areas, and domestic wastewater treatment facilities. In addition to regulating these "point sources" of pollution, the program works with stakeholders across the state to address pollution sources that are not regulated, such as water runoff from agricultural areas, abandoned mines, and forested areas. These sources of pollution are called "nonpoint sources." The program manages the water quality of these point and nonpoint sources using a continuing planning process.

Water quality management in Colorado

There are five pillars to the continuing planning approach for water quality management: information gathering, goal setting, protection and restoration, assurance, and assistance.

Information gathering: The program gathers scientific data and information that is used to determine the health of Colorado waters. This information is used for all parts of the continuing planning process and to ensure that water quality is protected for use by people, agriculture, and aquatic life. The program also develops information on the status of Colorado's streams and lakes and about the compliance status of permittees. This information is available through U.S. Environmental Protection Agency (EPA) databases.

Goal setting: The program develops and presents scientific evidence to the Water Quality Control Commission (commission) so it can establish water quality goals to protect Colorado's water for drinking water, agricultural uses, recreational uses such as swimming and boating, and for aquatic life.

Protection and restoration: The program issues permits to entities that discharge pollution to Colorado waters. Permits issued to discharge pollutants are set to be protective of water quality goals and control regulations set by the commission. The program also identifies areas across the state that are not achieving the commission's water quality goals and develops restoration plans for these waters. The program reviews site location and design for wastewater infrastructure across the state. Program staff also respond to spills and other environmental releases to Colorado waters. Finally, the program certifies that federal permits and licenses are protective of Colorado's water quality goals.

Assurance: The program conducts oversight on the permits it issues. Oversight consists of onsite facility inspections and the evaluation of self-reported data required by the permit. Based on this oversight and the severity of non-compliance with regulations, the program can issue compliance advisories, notices of violation, cease and desist orders, and/or penalties.

Assistance: The program provides assistance for all four pillars described above. Domestic and stormwater facilities that are required to make infrastructure improvements to protect streams and lakes are eligible for

Information gathering

Goal setting

Protection and restoration

Assurance

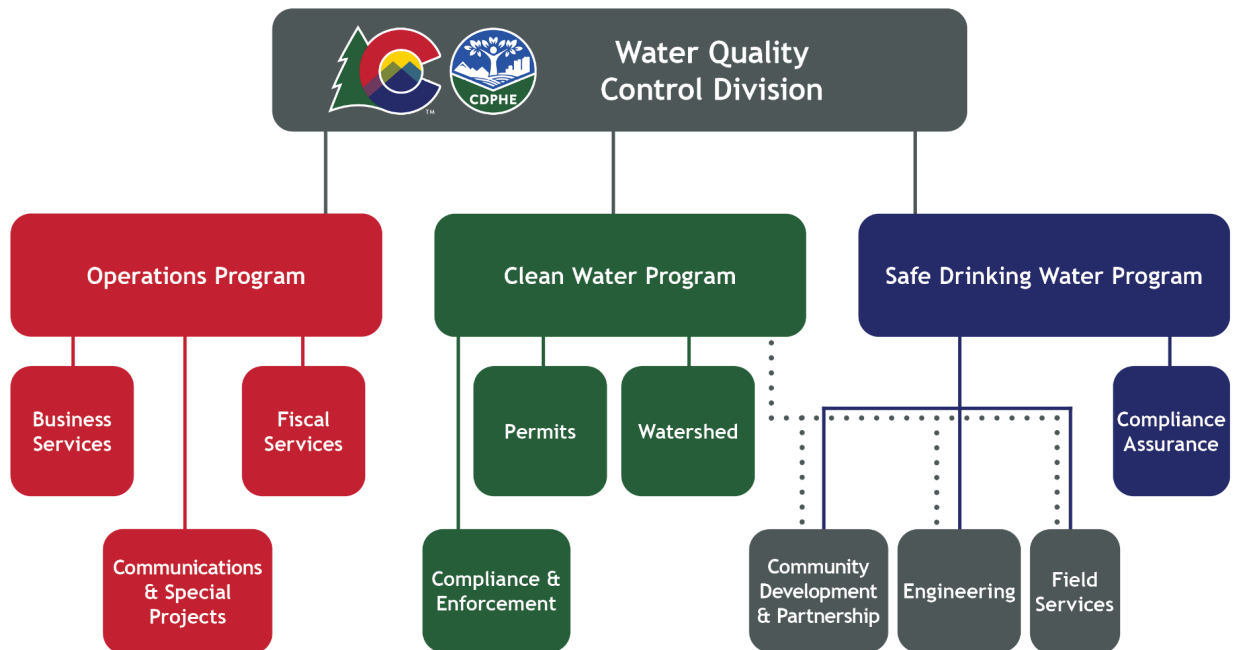
Assistance

subsidized financing and possibly grants. The program issues federal grants for regional water quality planning and when nonpoint sources contribute to a water body not meeting its water quality goals. To help people and entities understand and comply with regulatory requirements, the program provides compliance assistance via telephone, email, guidance documents, and training. In addition, the program provides technical assistance to point source and nonpoint source dischargers. This technical assistance includes information on the technical and economic feasibility of treatment options and guidance on technical aspects of the commission's water quality goal-setting process.

Work areas and organization

The work to support water quality management processes is divided across multiple groups in the division, including several sections that are shared between the Clean Water and Safe Drinking Water Programs (gray in the figure below). The only shared work area without a standalone summary section in this report is the Community Development and Partnership Section. This section works with regulated entities to provide funding to implement water pollution control infrastructure projects to meet the goals of the federal Clean Water Act and the Colorado Water Quality Control Act.

Figure 1 Organization chart for the Water Quality Control Division highlighting Clean Water Program work areas



Section 2 Baseline year and reporting period

The established baseline will be important for measuring the program's success moving forward. Thus, a baseline year of October 1, 2016, through September 30, 2017, was established during the first HB17-1285 report, submitted in March 2018. This baseline was selected because the program develops work plans based on the federal fiscal year, which runs from October through September. In addition, this timeframe was indicative of the program's resources as it began to restore staffing levels based on funding provided by HB17-1285, which is important for comparing results from this reporting year and future years' results.

Section 3 Staffing summary

HB17-1285 requires that the program summarize:

- The number of full-time equivalents assigned to and actively processing permits.
- The number of full-time equivalents assigned to and actively conducting inspections.
- The number of full-time equivalents assigned to and actively conducting site application and design reviews.
- The number of full-time equivalents assigned to and actively conducting enforcement actions.
- The number of full-time equivalents assigned to and actively developing rules and standards.

Table 1 below summarizes these reporting requirements by permitting sector. The permitting sectors include commerce and industry, construction, municipal separate storm sewer systems (MS4), pesticides, and public and private utilities. Staffing levels were fairly consistent between the sectors when comparing the baseline year and the 10/2017-9/2018 reporting except for the commerce and industry sector, MS4 sector, and public and private utilities sector. These sectors received funding as part of HB17-1285 to maintain program services. The program held vacancies prior to the passage of HB17-1285 but began to fill these vacancies prior to the 10/2017-9/2018 reporting year. Staffing levels for the reporting years after 10/2018 have included vacancies due to attrition that is commensurate with historic rates at the division. The pace of hiring replacements has reduced significantly since 2020, and if this slower pace continues, it may result in future decreases in staffing levels as vacancies remain unfilled for longer periods of time. In addition, there is competition in the job market for certain skill sets such as engineering. Finally, HB17-1285's legislative declaration stated that "the department's use of funding provided in this act should be limited to processing permits, providing technical and compliance assistance, processing site application and design reviews, and maintaining stakeholder involvement for all aspects of the clean water program." Table 1 shows that the increase in staffing levels is consistent with the legislative declaration.

Table 1 Summary of full-time equivalents for HB17-1285 reporting requirements and permitting sector

Reporting year	Enforcement	Engineering	Inspections	Permits	Standards	Total
Commerce and Industry						
10/2016-9/2017	1.5	0.1	2	5.3	2.4	11.3
10/2017-9/2018	1.8	0.0	1.7	5.7	3.0	12.2
10/2018-9/2019	1.4	0.0	1.5	4.0	3.5	10.4
10/2019-9/2020	1.9	0.1	1.5	4.3	2.2	10.0
10/2020-9/2021	1.9	0.1	1.5	5.0	2.0	10.5
Construction						
10/2016-9/2017	1.9	0.0	8.8	2.3	0.0	13.0
10/2017-9/2018	1.3	0.0	8.6	2.5	0.0	12.4
10/2018-9/2019	2.2	0.0	8.1	2.2	0.0	12.5
10/2019-9/2020	1.5	0.0	7.4	2.9	0.1	11.9
10/2020-9/2021	1.3	0.0	7.9	2.2	0.1	11.5

Reporting year	Enforcement	Engineering	Inspections	Permits	Standards	Total
Municipal Separate Storm Sewer Systems						
10/2016-9/2017	0.0	0.0	0.2	0.3	0.0	0.5
10/2017-9/2018	0.0	0.0	0.1	0.8	0.0	0.9
10/2018-9/2019	0.0	0.0	0.1	1.0	0.0	1.1
10/2019-9/2020	0.0	0.0	0.1	1.0	0.0	1.1
10/2020-9/2021	0.0	0.0	0.1	1.0	0.0	1.1
Pesticides						
10/2016-9/2017	0.0	0.0	0.7	0.0	0.0	0.7
10/2017-9/2018	0.0	0.0	1.0	0.0	0.0	1.0
10/2018-9/2019	0.0	0.0	1.0	0.0	0.0	1.0
10/2019-9/2020	0.0	0.0	1.0	0.0	0.0	1.0
10/2020-9/2021	0.0	0.0	1.0	0.0	0.0	1.0
Public and Private Utilities						
10/2016-9/2017	2.6	3.8	2.9	3.1	3.6	16.0
10/2017-9/2018	2.9	3.9	3.2	6.0	3.0	19.0
10/2018-9/2019	2.4	3.9	3.9	6.8	2.5	19.5
10/2019-9/2020	2.3	3.7	2.8	6.0	3.7	18.6
10/2020-9/2021	1.8	4.2	3.5	6.2	3.6	19.3
Total						
10/2016-9/2017	6.0	3.9	14.6	11.0	6.0	41.5
10/2017-9/2018	6.0	3.9	14.6	15.0	6.0	45.5
10/2018-9/2019	6.0	3.9	14.6	14.0	6.0	44.5
10/2019-9/2020	5.7	3.8	12.8	14.2	6.0	42.6
10/2020-9/2021	5.0	4.3	14.0	14.4	5.7	43.4

Section 4 Clean Water Program finances

The Colorado General Assembly Joint Budget Committee requires the program to report costs associated with the clean water sectors on an annual basis. This cost information includes the total costs of the program including personnel services, administrative services, benefits, and indirect costs. This reporting was the basis for HB17-1285 and should provide the basis for future fee bills. Appendix A provides this financial information for state fiscal year 2020-21 and for the first two quarters of state fiscal year 2021-22. For state fiscal year 2019-20, the program spent less than its budget. For the state fiscal year 2020-2021, the program spent approximately 10 percent less than its budget. For 2021-22, the program is also on target for expenditures to be within budget.

Section 5 Goal setting: Standards

The Watershed Section works with partners to develop scientific and technological information to help improve, restore, and protect the quality of surface water and groundwater throughout the state. This is achieved through monitoring and assessment that identifies impaired waters that require restoration. The Watershed Section is responsible for developing the science utilized by the commission to help establish water quality goals, or "standards." The commission sets water quality standards to protect Colorado's water for uses such as drinking water, agricultural uses, recreational uses like swimming and boating, and aquatic life. In addition, the section provides planning, technical, and financial support focused on restoration and protection. The section also certifies that federal permits and licenses (i.e. water supply projects) comply with state water quality requirements.

5.1 Comparison of Colorado and EPA water quality criteria

Water quality standards typically are expressed numerically. The commission establishes numeric water quality criteria to protect classified uses:

- Aquatic life – fish, aquatic invertebrates (e.g., insects, snails), and amphibians.
- Recreation – swimming, boating, wading, and water play.
- Agriculture – irrigation and livestock watering.
- Domestic water supply – drinking water supplies.

To establish Colorado criteria, the commission typically examines EPA criteria to determine if they should be modified to reflect conditions in Colorado. Table 2 compares Colorado's and EPA's criteria. For reporting years ending 9/2017 through 9/2019, there were no changes between reporting years. There were slight changes in the 10/2019-9/2020 reporting year due to the commission's December 2019 adoption of EPA's cadmium criteria for aquatic life, April 2020 adoption of a new hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) water supply criterion (less stringent than EPA), and April 2020 update of the chrysene aquatic life and domestic water supply combination criterion (less stringent than EPA). There were slight changes in the 10/2020-9/2021 reporting year due to the commission's June 2021 adoption of EPA's carbaryl and acrolein criteria for aquatic life.

Table 2 Comparison of Colorado's and EPA's water quality criteria

Classified Use	Number of Colorado criteria that are the <u>same</u> as EPA criteria	Number of Colorado criteria that are <u>more stringent</u> than EPA criteria	Number of Colorado criteria that are <u>less stringent</u> than EPA criteria	Total
Aquatic Life				
As of 9/30/2017	35 (74%)	4 (9%)	8 (17%)	47
As of 9/30/2018	35 (74%)	4 (9%)	8 (17%)	47

As of 9/30/2019	35 (74%)	4 (9%)	8 (17%)	47
As of 9/30/2020	36 (77%)	3 (6%)	8 (17%)	47
As of 9/30/2021	38 (79%)	3 (6%)	7 (15%)	48
Recreation				
As of 9/30/2017	0 (0%)	0 (0%)	1 (100%)	1
As of 9/30/2018	0 (0%)	0 (0%)	1 (100%)	1
As of 9/30/2019	0 (0%)	0 (0%)	1 (100%)	1
As of 9/30/2020	0 (0%)	0 (0%)	1 (100%)	1
As of 9/30/2021	0 (0%)	0 (0%)	1 (100%)	1
Agriculture				
As of 9/30/2017	21 (91%)	1 (4%)	1 (4%)	23
As of 9/30/2018	21 (91%)	1 (4%)	1 (4%)	23
As of 9/30/2019	21 (91%)	1 (4%)	1 (4%)	23
As of 9/30/2020	21 (91%)	1 (4%)	1 (4%)	23
As of 9/30/2021	21 (91%)	1 (4%)	1 (4%)	23
Domestic Water Supply				
As of 9/30/2017	79 (91%)	6 (7%)	1 (2%)	86
As of 9/30/2018	79 (91%)	6 (7%)	1 (2%)	86
As of 9/30/2019	79 (91%)	6 (7%)	1 (2%)	86
As of 9/30/2020	79 (91%)	6 (7%)	2 (2%)	87
As of 9/30/2021	79 (91%)	6 (7%)	2 (2%)	87
Aquatic Life and Domestic Water Supply Combination				
As of 9/30/2017	13 (13%)	31 (32%)	54 (55%)	98
As of 9/30/2018	13 (13%)	31 (32%)	54 (55%)	98
As of 9/30/2019	13 (13%)	31 (32%)	54 (55%)	98
As of 9/30/2020	13 (13%)	30 (31%)	55 (56%)	98
As of 9/30/2021	13 (13%)	30 (31%)	55 (56%)	98

Aquatic life

For aquatic life, table 2 shows that Colorado has three criteria more stringent than EPA criteria. For these criteria (cyanide, silver, and aldrin) the commission does not plan to revise the criteria to match EPA's. The Colorado criteria are close to the same magnitude as EPA's criteria, and regulated entities are not facing compliance issues with these criteria. The commission adopted cadmium aquatic life criteria consistent with EPA's criteria in December 2019.

Table 2 shows that Colorado has eight aquatic life criteria less stringent than EPA criteria. For five of these criteria (nitrogen, phosphorus, chlorophyll 'a', ammonia, and selenium), the program has developed a 10-year plan for coordinating with stakeholders on new criteria. EPA has published revised federal criteria for ammonia (2013) and selenium (2016) that reflect the latest science regarding these constituents and aquatic life protection. Colorado has not yet adopted these federal criteria. Colorado updated its aquatic life criteria for acrolein during the June 2021 Regulation No. 31 rulemaking hearing and the criteria are now the same as EPA's criteria. Colorado did adopt criteria for nitrogen, phosphorus, and chlorophyll 'a'. However, EPA did not approve them and recommended suggestions for improvement that will take additional effort. The program does not have plans to recommend criteria revisions to the commission for aluminum or zinc.

Recreation

EPA's E. coli criteria are generally more stringent and complex than Colorado's criteria. However, the criterion applied to most Colorado water bodies (which have existing primary contact recreation) is the same as EPA's criterion, as shown in table 2.

Agriculture

Colorado's criteria are mostly the same as EPA's. Colorado has one criterion that is more stringent than EPA's (pH) and one criterion that is less stringent (molybdenum), as shown in table 2. The program does not have plans to recommend revised criteria to the commission for pH. At this time, an external party is gathering scientific information on the molybdenum standard that may be used to suggest revisions to the criteria in the future.

Domestic water supply

Colorado has six criteria more stringent than EPA's (barium, copper, fluoride, picloram, silver, total coliforms). The program does not recommend the commission focus on revising these criteria as the Colorado criteria are similar in magnitude to EPA's, and regulated entities are not facing compliance issues with these criteria. In April 2020, Colorado adopted a new hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) water supply criterion that is less stringent than EPA's.

Aquatic life and domestic water supply combination

The commission adopted a number of criteria that apply to both domestic water supply and aquatic life consumed by humans (i.e., water + fish and fish ingestion). These are considered together because they use similar toxicological information based on human consumption of pollutants. EPA updated these criteria in 2015 to reflect that Americans, on average, drink more water and weigh more than when the criteria were originally developed. The program plans to present evidence to the commission in 2021 to revise the criteria to be consistent with EPA's criteria. Additionally, in April 2020, Colorado updated its chrysene aquatic life and domestic water supply combination criterion and it is now less stringent than EPA.

5.2 Standards modified based on site-specific factors

The federal Clean Water Act and the Colorado Water Quality Control Act allow statewide standards to be modified based on site-specific factors. Standards that are modified on a site-specific basis are summarized in the commission's Regulations 32 through 38 (5 CCR 1002-32 through 5 CCR 1002-38). Standards modified on a site-specific basis are typically less stringent than the statewide standards. When these standards are used in permits, they provide regulatory flexibility. Modifying standards on a site-specific basis generally helps resolve an existing or predicted compliance issue.

There are multiple site-specific tools that can be used to modify a statewide standard. All of these tools require staff time to evaluate site-specific information, examine the condition of the classified use the standard is meant to protect, and work with stakeholders to formulate recommendations to the commission. Colorado is a national leader in developing site-specific standards that are still protective of classified uses.

In Colorado, there are three major site-specific tools used to modify a statewide standard: site-specific standards, temporary modifications, and variances. Site-specific numeric standards are modifications of statewide standards, based on consideration of site-specific factors such as water chemistry or aquatic life. Temporary modifications are adopted by the commission when there is uncertainty about the statewide standard and what the long-term solution or goal for a given site may be moving forward. Variances recognize specific solutions for point sources where it is not feasible to achieve the statewide standard. Table 3 shows the relative breakout of standards tools that have been adopted in segments for the major river basins across the state. Arsenic temporary modifications are shown separately in table 3 due to the adoption of a statewide temporary modification for arsenic in 2013. Temperature site-specific standards are included by themselves in table 3 because site-specific temperature standards have been a review element of focus for the commission in recent rulemaking hearings. Except for non-arsenic temporary modifications, the number of temporary modifications, variances, and site-specific standards has been consistent throughout the reporting years. The commission and division have been working to decrease the number of non-arsenic temporary modifications and this effort is reflected in the table 3 results.

Table 3 Number of temporary modifications, variances and site-specific standards across the state

Basin	Temporary Modifications		Variances	Site-Specific Standards	
	Non-Arsenic Temporary Modifications	Arsenic Temporary Modifications	Variances	Temperature Site-Specific Standards	Non-Temperature Site-Specific Standards
Arkansas					
As of 9/30/2017	35	53	1	10	77
As of 9/30/2018	33	53	3	10	85
As of 9/30/2019	4	52	3	10	85
As of 9/30/2020	1	52	3	10	77
As of 9/30/2021	0	53	3	10	77
Colorado					
As of 9/30/2017	3	64	0	14	44
As of 9/30/2018	2	67	0	15	43
As of 9/30/2019	2	64	0	17	55
As of 9/30/2020	2	64	0	17	38
As of 9/30/2021	3	64	0	17	38
Gunnison					
As of 9/30/2017	5	52	1	4	81
As of 9/30/2018	5	52	1	9	81

As of 9/30/2019	5	52	1	9	81
As of 9/30/2020	5	52	1	9	33
As of 9/30/2021	4	52	1	9	33
Rio Grande					
As of 9/30/2017	10	28	0	4	60
As of 9/30/2018	2	31	0	6	68
As of 9/30/2019	0	31	0	6	68
As of 9/30/2020	0	31	0	6	52
As of 9/30/2021	0	31	0	6	52
San Juan					
As of 9/30/2017	4	60	1	11	46
As of 9/30/2018	4	60	1	13	46
As of 9/30/2019	4	60	1	13	46
As of 9/30/2020	4	60	1	13	33
As of 9/30/2021	2	60	3	13	33
South Platte					
As of 9/30/2017	55	93	1	19	89
As of 9/30/2018	53	99	1	19	94
As of 9/30/2019	42	97	1	19	94
As of 9/30/2020	7	118	1	15	88
As of 9/30/2021	5	117	1	15	88
Yampa/White					
As of 9/30/2017	7	34	0	7	14
As of 9/30/2018	9	35	0	7	12
As of 9/30/2019	10	37	0	7	10
As of 9/30/2020	10	37	0	7	10
As of 9/30/2021	7	37	1	7	10
Statewide					
As of 9/30/2017	119	384	4	69	411

As of 9/30/2018	108	397	6	79	429
As of 9/30/2019	67	393	6	81	439
As of 9/30/2020	29	414	6	77	331
As of 9/30/2021	21	414	9	77	331

The commission has established river segments across the state, and each segment has standards applied to it based on each segment's classified uses. Table 4 summarizes the number of segments with temporary modifications, variances, and site-specific standards by major river basin. The number of these actions has been fairly consistent for all reporting years. Across the state and for the 10/2020-9/2021 reporting year, 40 percent of segments have temporary modifications, less than one percent have variances, and 20 percent of stream segments have site-specific standards.

Table 4 Number of segments with temporary modifications, variances, and site-specific standards across the state

Basin	No. of Segments	Temporary Modifications	Variances	Site-Specific Standards
Arkansas				
As of 9/30/2017	150	56	1	37
As of 9/30/2018	156	56	2	42
As of 9/30/2019	156	53	3	42
As of 9/30/2020	156	52	2	37
As of 9/30/2021	156	53	2	37
Colorado				
As of 9/30/2017	131	65	0	24
As of 9/30/2018	131	68	0	23
As of 9/30/2019	129	65	0	35
As of 9/30/2020	129	65	0	27
As of 9/30/2021	129	66	0	27
Gunnison				
As of 9/30/2017	152	52	1	44
As of 9/30/2018	152	52	1	48
As of 9/30/2019	152	52	1	48
As of 9/30/2020	152	52	1	37
As of 9/30/2021	152	52	1	37

Basin	No. of Segments	Temporary Modifications	Variations	Site-Specific Standards
Rio Grande				
As of 9/30/2017	104	29	0	20
As of 9/30/2018	107	32	0	24
As of 9/30/2019	107	31	0	24
As of 9/30/2020	107	31	0	18
As of 9/30/2021	107	31	0	18
San Juan				
As of 9/30/2017	169	64	1	34
As of 9/30/2018	169	64	1	35
As of 9/30/2019	169	64	1	35
As of 9/30/2020	169	64	1	32
As of 9/30/2021	169	62	1	32
South Platte				
As of 9/30/2017	228	105	2	46
As of 9/30/2018	233	112	2	49
As of 9/30/2019	233	106	1	49
As of 9/30/2020	230	122	2	50
As of 9/30/2021	230	121	2	50
Yampa/White				
As of 9/30/2017	134	39	0	14
As of 9/30/2018	134	42	0	12
As of 9/30/2019	135	44	0	14
As of 9/30/2020	135	44	0	14
As of 9/30/2021	135	44	1	14
Statewide				
As of 9/30/2017	1,068	410	5	219
As of 9/30/2018	1,082	426	6	233
As of 9/30/2019	1,081	415	6	247

Basin	No. of Segments	Temporary Modifications	Variations	Site-Specific Standards
As of 9/30/2020	1,078	430	6	215
As of 9/30/2021	1,078	429	9	215

5.3 Upcoming standards rulemakings

For the upcoming year, the Watershed Section will be working on the following standards development actions and rulemaking hearing proceedings:

Classifications and Numeric Standards for the San Juan River and Dolores River Basins (Regulation No. 34 and 35). The focus of this hearing will be the use classifications and standards for these basins, and revisions to water supply use classifications for various segments. Site-specific standards will be reviewed and revised as appropriate.

- Issues formulation hearing - **November 2021.**
- Rulemaking hearing - **June 2022.**

June 2022 - Discharger specific variances rulemaking hearing. This is a biennial rulemaking hearing to consider new discharger specific variances and to review existing variances nearing expiration. The division is also working with disadvantaged communities to pursue variances where appropriate.

June 2022 - Temporary modifications rulemaking hearing. This is a biennial rulemaking hearing to review all existing temporary modifications.

September 2022 - Classifications and Numeric Standards for the South Platte River Basin (Regulation No. 38). The focus of this hearing will be the antidegradation determination of three segments in the South Platte Basin.

November 2022 - A statewide rulemaking hearing. This hearing will focus on the adoption of total phosphorus and total nitrogen standards for lakes and reservoirs in the Basic Standards and Methodologies for Surface Water (Regulation No. 31). New nutrient criteria will be applied to all basin regulations to specific lakes.

Section 6 Protection and restoration: permits

The federal Clean Water Act and the Colorado Water Quality Control Act prohibit the discharge of pollutants to state waters unless those discharges will not compromise the uses of those waters. The Permits Section works to issue and manage permits for entities requesting to discharge pollutants to waters of the state. For discharges to surface water, the section processes permits as part of EPA's National Pollution Discharge Elimination System as EPA has delegated that Colorado issue these permits. For discharges to groundwater, permits are issued as part of the Colorado Discharge Permit System. Additionally, the Permits Section develops preliminary effluent limitations for planning purposes and issues reuse authorizations, authorizations for biosolids application, and authorizations for pretreatment discharges to domestic wastewater systems from industrial facilities. The section also manages data collection and storage to ensure that collected data meets internal data standards and EPA requirements.

HB17-1285 requires that the program provide information regarding permit production and timeliness. Figures 2 through 7 summarize the number of permits that were issued/reissued, modified, or administratively continued for all the reporting years. Permits have five-year terms. Issued permits are permits that are new and issued for the first time. A reissued permit has expired after its five-year term, but the permittee filed a renewal application to continue their discharge and the program has processed the renewal. A permit modification is a change to an existing permit during its term. Administratively continued permits are permits that have expired, but the program has received a renewal application at least 180 days prior to the expiration date of the permit. If the program receives a complete application but does not renew the permit prior to the expiration date, the permit is

automatically administratively continued, and the permittee is still authorized to discharge under the terms and conditions of its expired permit. Administratively extended permits cannot be modified.

Figures 2 and 3 display the number of individual permits and general permit certifications that were issued/reissued for all of the reporting years by permitting sector the program regulates. Again, the permitting sectors include commerce and industry, construction, MS4, pesticides, and public and private utilities. An individual permit is written to reflect site-specific conditions of a single discharger based on information submitted by that discharger in a permit application and is unique to that discharger. A general permit is written to cover multiple dischargers with similar operations and types of discharges based on the permit writer's professional knowledge of those types of activities and discharges. Figure 2 shows that, on average, the number of individual permits that were issued/reissued has increased over the baseline year. Vacancies in the Permits Section, training of new staff, and a focus on general permit certification renewals contributed to a reduction in individual permit output for 10/2019-9/2020 and 10/2020-9/2021. Figure 3 shows the total number of general permit certifications that were issued/reissued. The number of issued/reissued commerce and industry certifications in 10/2016-9/2017 and construction certifications in 10/2018-9/2019 significantly increased because those certifications were renewed following the renewals of the overarching general permits. There was also an increase in new construction certifications issued in 10/2020-9/2021 associated with an increase in overall construction activities occurring in the state.

Figure 2 Number of individual permits issued/reissued by sector

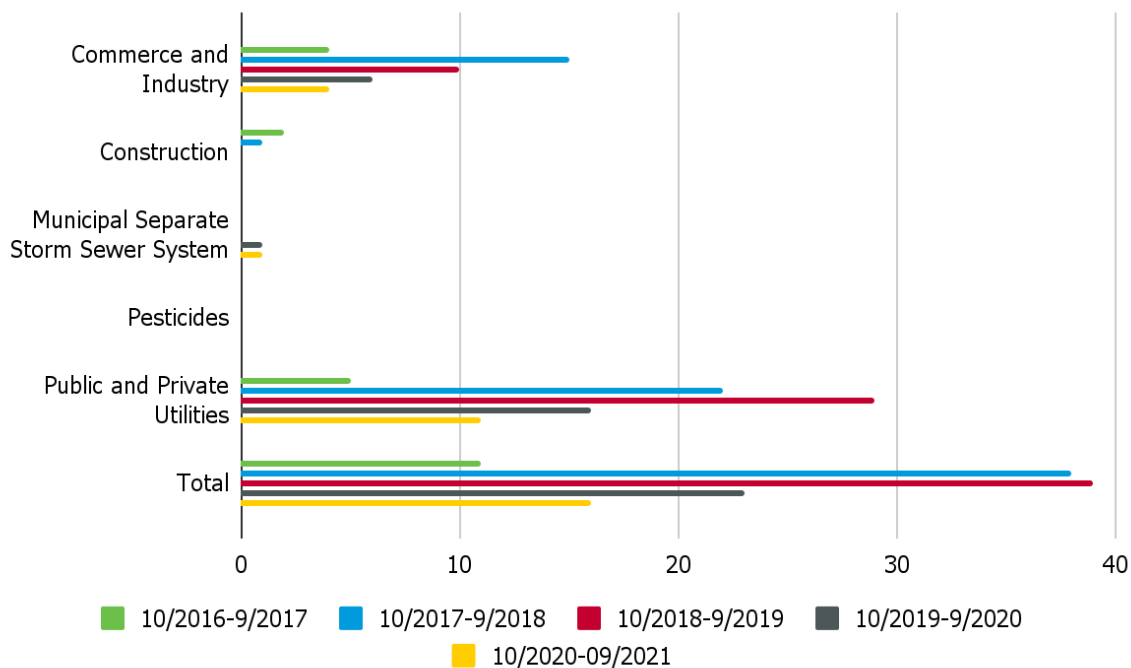
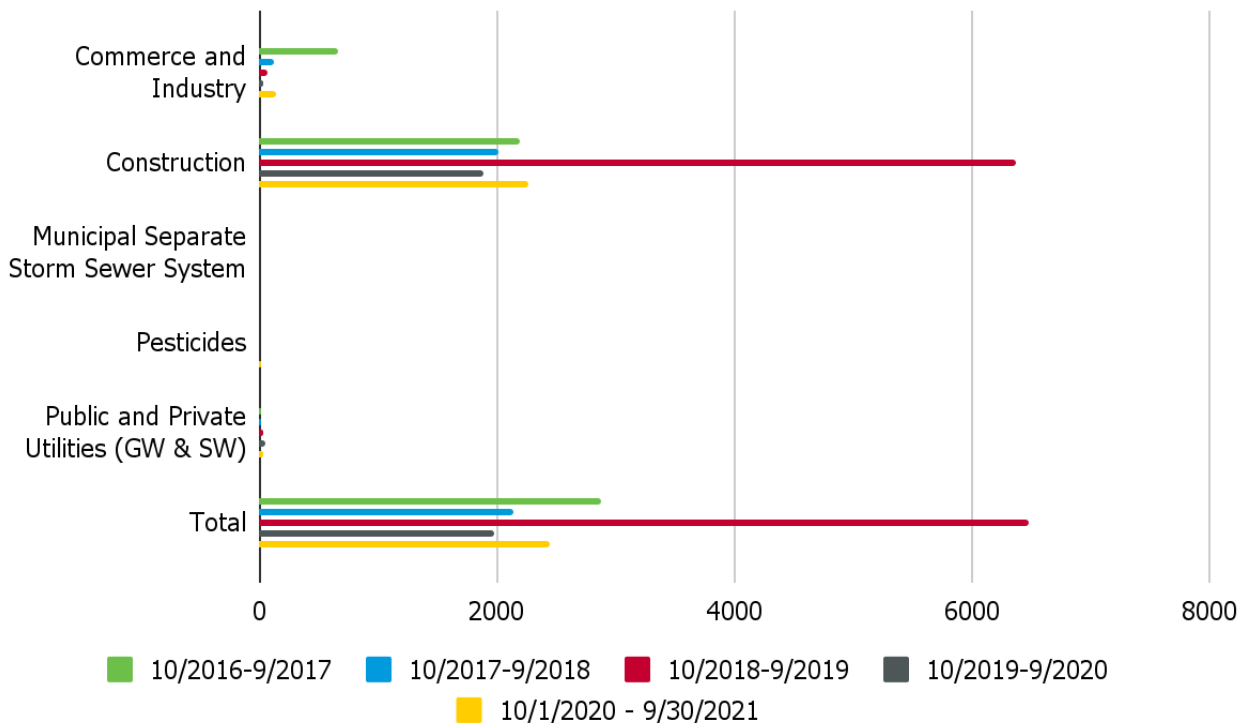


Figure 3 Number of issued/reissued general permit certifications by sector



Figures 4 and 5 show the number of individual permits and general permit certifications that were modified by sector for all of the reporting years. As previously mentioned, a permit modification is a change to an existing permit during its term. The number of modifications requested varies by year so fluctuations are expected. The program prioritizes processing permit modifications so these changes are not a reflection of a change in program practices. Figure 5 demonstrates that the number of general permit certification modifications has been similar across reporting years for all sectors except the construction sector. Prior to 2020, the number of general permit certification modifications did not include modifications of construction stormwater general permit certifications, which are typically modified to reflect changes of acreage covered by the certification and were not accessible from EPA databases used to generate information for this report. This information became available for the construction stormwater general permit partway through the 10/2019-9/2020 reporting year so that year does not include a full twelve months of data. There has been a steady increase in the number of these modifications and the division attributes this to the construction industry increased use of the online modification form. Appendix B provides a list of permits and certifications that were modified for the 10/2020-9/2021 reporting year. Note that some permits and certifications had multiple modifications during the reporting year.

Figure 4 Number of individual permit modifications by sector

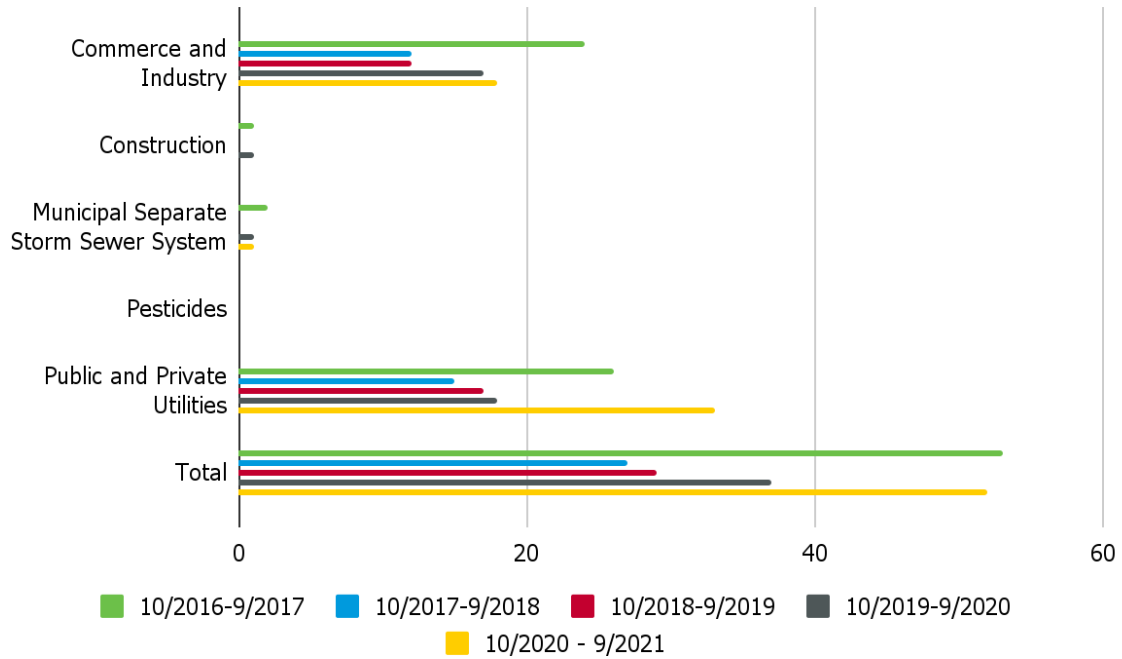
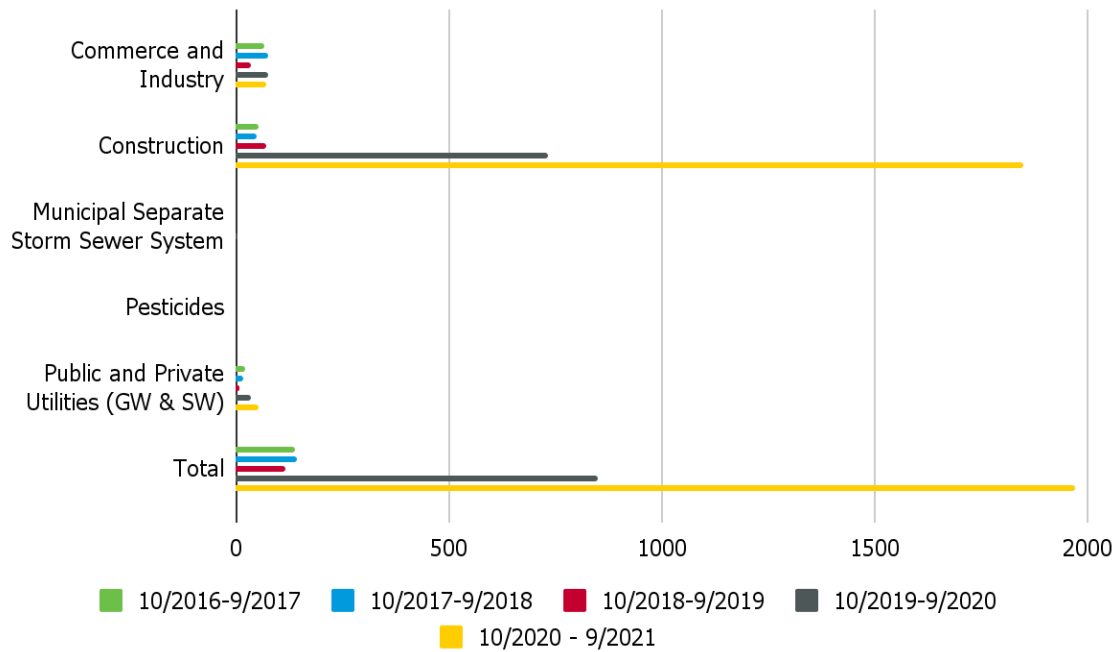


Figure 5 Number of general permit certification modifications by sector



Figures 6 and 7 show the number of individual and general permit certifications that were continued for all reporting years. Again, administratively continued permits are permits that have expired but the program has received a renewal application at least 180 days prior to the expiration date of the permit. If the program receives a complete application but does not renew the permit prior to the expiration date, the permit is automatically administratively continued and the permittee is still authorized to discharge under its expired permit's terms and conditions. The program administratively continues both individual and general permits. Figure 6 indicates that there is not a notable trend for the number of individual permits continued for the commerce and industry sector and the public and private utilities sector have generally increased over the past five years. Figure 7 shows that the number of general permit certifications continued for the public and private utilities sectors have no notable trend and the commerce and industry and construction sector has decreased over the past five years.

Figure 6 Number of individual permits administratively continued by sector

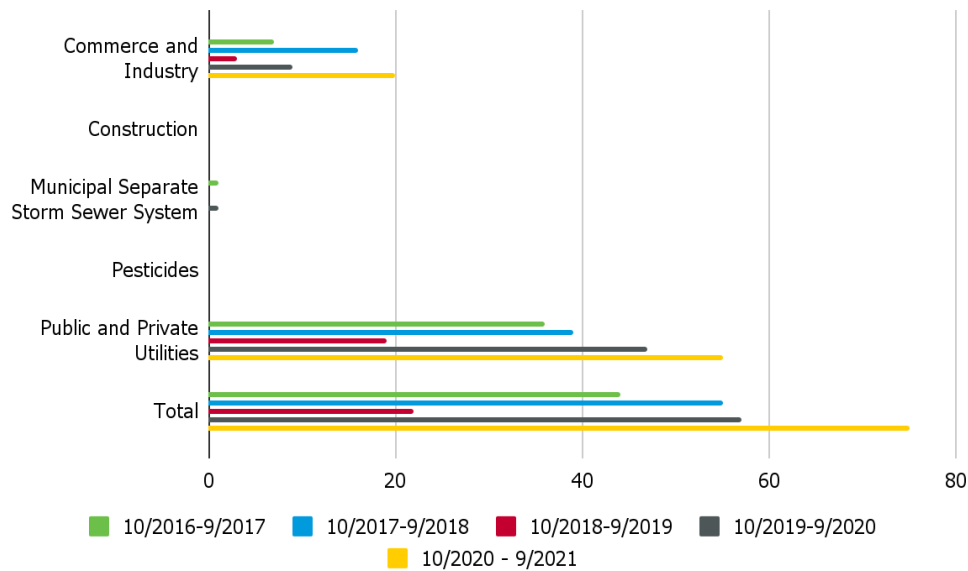
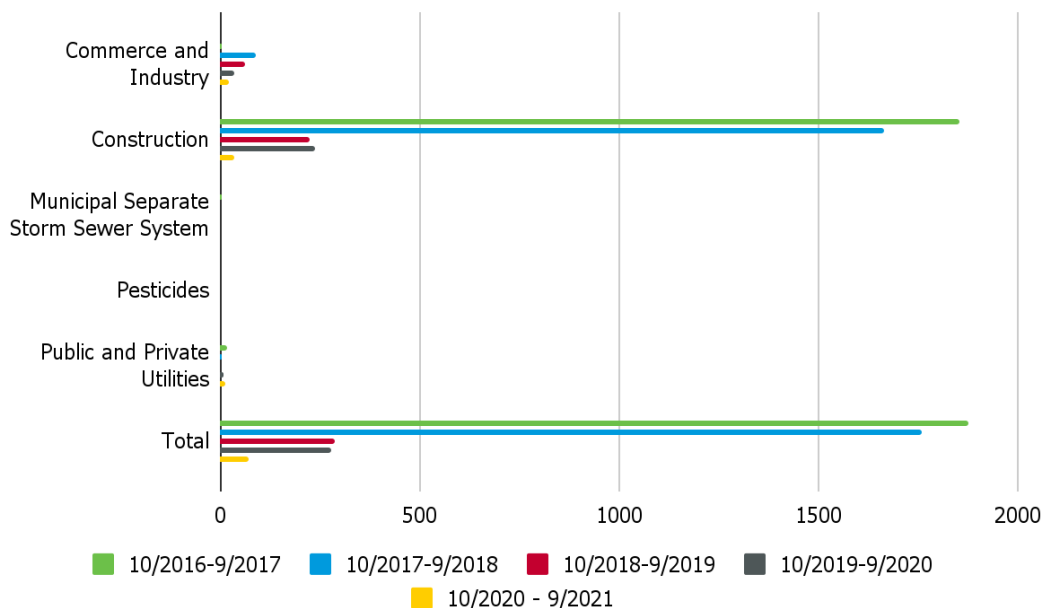


Figure 7 Number of general permit certifications administratively continued by sector



In addition to the production measures presented above, the program tracks the timeliness of permit issuance. One way to measure permit timeliness is to examine permit backlog. The federal Clean Water Act specifies that discharge permits may not be issued for a term longer than five years. Permittees who wish to continue discharging beyond the five-year term must submit a completed application for permit renewal at least 180 days prior to the expiration date of their permit. If the permitting authority receives a complete application but does not reissue the permit prior to the expiration date, the permit may be administratively continued. Permits that have been administratively continued for 180 days or more beyond their expiration date are considered to be backlogged. The department's October 1, 2022 Performance Partnership Agreement (PPA) with EPA includes a backlog target. The PPA requires that permit backlog be maintained at less than 25 percent, and if the backlog exceeds 35 percent the EPA will require the division to develop additional measures and to develop and implement a backlog reduction plan. The implementation of a backlog reduction plan would require the diversion of resources from other important work that could include compliance assistance and general permit certification issuance. The backlog target is measured across all permits. The division was meeting the target at the end of the 10/2020-9/2021 reporting year. However, as of January 1, 2022, the backlog is at 26 percent, exceeding the backlog target by one percent. With existing resources levels, the permit backlog is projected to exceed the 35 percent target by March 31, 2024.

Figure 8 summarizes the percentage of backlogged permits by permit type. Process water permits regulate discharges from domestic wastewater facilities or industrial process water from breweries or mining operations. Stormwater permits regulate discharges from rain and snowmelt events that flow over land or impervious surfaces, such as paved streets, parking lots, building rooftops, construction sites, and industrial areas, and does not soak into the ground. The program's pesticide permit regulates the application of pesticides to or near state waters. Figure 8 shows that groundwater individual permit backlog has increased, however, the general permit backlog has decreased as the division focused on updating these general permits covering a large number of facilities and converting old individual groundwater permits to certifications under general permits when possible. There has been an increase in the individual process water permit backlog over the past five years. There was a significant decrease in the backlog for surface water stormwater general permits in 2019 resulting from the renewal of the stormwater construction permit and since then the backlog for this category has been consistently lower. The surface water process water general permit backlog has fluctuated but dropped in 10/2020-9/2021 as the division renewed several certifications under dewatering general permits. The stormwater individual permit category, which includes only seven permits for large municipal separate storm sewer systems and two industrial facilities, has maintained a consistently high backlog. The division has kept the pesticide general permit up to date since issuance so there has not been a backlog for that category and sector. In total, there was a significant decrease in permit backlog for the 10/2018-9/2019 reporting year. Detailed accounting used to calculate the percentages in Figures 8 can be reviewed in Appendix C.

Figure 8 Percentage of permits backlogged by permit type

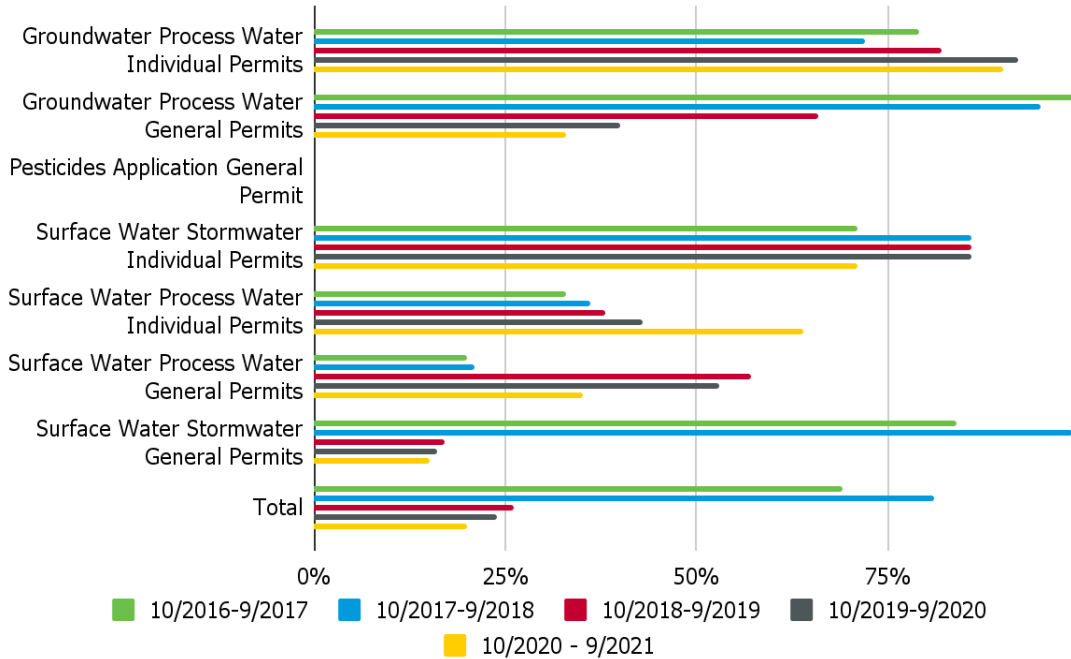
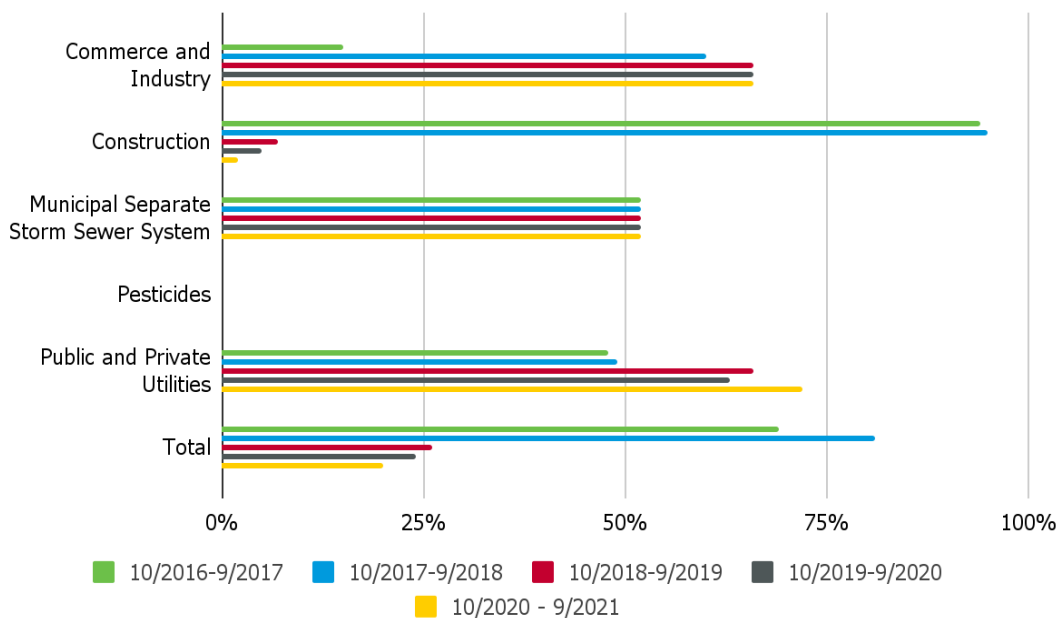


Figure 9 shows the percentage of permits backlogged by sector. Figure 9 indicates an increasing permit backlog trend for the public and private utilities. The commerce and Industry sector saw a significant backlog increase in 2018 when a general permit with a large number of facilities expired but has been relatively constant since then. In contrast, the construction sector backlog dropped significantly in 2020 with the stormwater general permit renewal and has continued to generally trend down over the last two years. The MS4 sector backlog has remained relatively constant. The division has kept the pesticide general permit up to date since issuance so there has not been a backlog for that category and sector. Detailed accounting used to calculate the percentages in Figure 9 can be reviewed in Appendix C.

Figure 9 Percentage of permits backlogged by sector



Tables 5 and 6 show the range of time permits have been backlogged. Table 5 focuses on the range of time permits have been backlogged by permit type, and table 6 shows the range of time by sector. The information presented in both tables suggests a slight increase in the range of time permits have been backlogged throughout the reporting years except for surface water process water individual permits. To address the backlog, the Permits Section continues to prioritize the least protective permits, which are typically the oldest permits. In addition, the Permits Section focuses on renewing general permits that cover a large number of permittees and works with permittees to transition them from individual to general permits when appropriate. In reporting years ending 9/30/2017 and 9/30/2018 a surface water process water individual permit was incorrectly categorized as a groundwater process water individual permit.

Table 5 Range of time permits have been backlogged by permit type

Permit Type	Range of time backlogged as of 9/30/2017 (years)	Range of time backlogged as of 9/30/2018 (years)	Range of time backlogged as of 9/30/2019 (years)	Range of time backlogged as of 9/30/2020 (years)	Range of time backlogged as of 9/30/2021 (years)
Groundwater Process Water Individual Permits	0 to 22	0 to 23	0 to 22	0 to 23	0 to 12
Groundwater Process Water General Permits	0.5 to 11	0 to 12	0 to 13	0 to 14	0 to 15
Pesticide Application General Permit	0	0	0	0	0
Surface Water Stormwater Individual Permits	0 to 3	0 to 4	0 to 4	0 to 6	0 to 7
Surface Water Process Water Individual Permits	0 to 10	0 to 11	0 to 24	0 to 25	0 to 26
Surface Water Process Water General Permits	0 to 6	0 to 7	0 to 8	0 to 9	0 to 10
Surface Water Stormwater General Permits	0 to 6	0 to 7	0 to 8	0 to 9	0 to 10

Table 6 Range of time permits have been backlogged by permit sector

Sector	Range of time backlogged as of 9/30/2017 (years)	Range of time backlogged as of 9/20/2018 (years)	Range of time backlogged as of 9/20/2019 (years)	Range of time backlogged as of 9/30/2020 (years)	Range of time backlogged as of 9/30/2021 (years)
Commerce and Industry	0 to 10	0 to 11	0 to 13	0 to 14	0 to 15
Construction	0 to 5	0 to 6	0 to 3	0 to 4	0 to 5
Municipal Separate Storm Sewer System	0 to 4	0 to 5	0 to 6	0 to 7	0 to 8
Pesticides	0	0	0	0	0
Public and Private Utilities	0 to 22	0 to 23	0 to 24	0 to 25	0 to 26

Table 7 and 8 summarize the average amount of time that permits have been backlogged by permit type and permit sector. This represents the average amount of time it takes to reissue an administratively extended permit. The program prioritizes processing permit modifications, issuing new permits, and processing general permit certifications over reissuing individual permits and general permits. Table 7 indicates that there has been a decrease in the average amount of time that groundwater process water individual permits are backlogged. For the remaining permit types, table 7 shows that the time of backlog has been variable but in general has either held reasonably steady or had a slight increase. The increase in backlog time for the surface water process water general permits for 10/2020-9/2021 is a result of renewing other general permits which has resulted in a small number of older general permits having a statistical influence on the result. The Permits Section continues to prioritize the oldest and least protective permits for renewal, focus on renewing general permits that cover a large number of permittees, and work with permittees to transition them from individual to general permits when appropriate. Table 8 shows that for the construction sector average backlog time has decreased. Table 8 shows that the municipal separate storm sewer System sector has had a steady increase in the time of backlog, which will be reduced for the next reporting year as a result of renewing an older general permit for that sector at the end of 2021. For all other sectors, table 8 shows that the time of backlog has been variable but in general held reasonably steady.

Table 7 Average amount of time permits have been backlogged by permit type

Permit Type	Average time backlogged as of 9/30/2017 (years)	Average time backlogged as of 9/20/2018 (years)	Average time backlogged as of 9/20/2019 (years)	Average time backlogged as of 9/30/2020 (years)	Average time backlogged as of 9/30/2021 (years)
Groundwater Process Water Individual Permits	10	10	9	8	6
Groundwater Process Water General Permits	5	6	7	8	9
Pesticide Application General Permit	0	0	0	0	0
Surface Water Stormwater Individual Permits	2	3	4	5	6
Surface Water Process Water Individual Permits	2	2	3	3	3
Surface Water Process Water General Permits	4	5	2	4	7
Surface Water Stormwater General Permits	5	5	2	3	4

Table 8 Average of time permits have been backlogged by permit sector

Sector	Average time backlogged as of 9/30/2017 (years)	Average time backlogged as of 9/30/2018 (years)	Average time backlogged as of 9/30/2019 (years)	Average time backlogged as of 9/30/2020 (years)	Average time backlogged as of 9/30/2021 (years)
Commerce and Industry	4	2	2	4	4
Construction	5	6	1	2	1
Municipal Separate Storm Sewer System	4	5	6	7	8
Pesticides	0	0	0	0	0
Public and Private Utilities	5	5	4	5	5

Table 9 shows the average time in days it takes to process modifications and issue new permits or certifications by sector. Process time reflects the amount of time between when a permit application is received to when it is finalized. There were no new individual permits issued during the baseline year. For the construction sector, processing times have significantly decreased. For the remaining sectors, processing times have remained fairly consistent or increased.

Table 9 Average processing time (days) for modifications and issued certifications and permits

Action type	Commerce and Industry	Construction	MS4	Pesticides	Public and Private Utilities
General Permit Certification Modifications					
10/2016-9/2017	15	27	n/a	n/a	66
10/2017-9/2018	45	9	99	2.5	40
10/2018-9/2019	25	5	n/a	n/a	51
10/2019-9/2020	29	2	n/a	n/a	42
10/2020-9/2021	29	3	n/a	n/a	33
Individual Permit Modifications					
10/2016-9/2017	77	n/a	n/a	n/a	83
10/2017-9/2018	97	n/a	n/a	n/a	107
10/2018-9/2019	58	n/a	n/a	n/a	79
10/2019-9/2020	52	n/a	n/a	n/a	90
10/2020-9/2021	92	n/a	n/a	n/a	86
General Permit Certifications Issued					
10/2016-9/2017	47	7	13	10	97
10/2017-9/2018	50	10	10	3	112
10/2018-9/2019	35	2	n/a	n/a	139
10/2019-9/2020	30	0	134	n/a	105
10/2020-9/2021	41	5	46	n/a	99
Individual Permits Issued					
10/2016-9/2017	n/a	n/a	n/a	n/a	n/a
10/2017-9/2018	284	n/a	n/a	n/a	395
10/2018-9/2019	152	n/a	n/a	n/a	149
10/2019-9/2020	86	n/a	287	n/a	68
10/2020-9/2021	402	n/a	877	n/a	685

Over the past four years, the Permits Section has implemented quality improvement recommendations for the construction sector through implementing an online permit processing system. These improvements have decreased the amount of time needed to process dewatering and stormwater permits for the construction sector. Other process improvements include a streamlined preliminary effluent limitation process for domestic permits, the temporary acceptance of digital signatures on permit applications for the duration of the COVID-19 pandemic, and clearer communications to permittees.

Based on backlog information collected for the Permits Section over the past years, the division anticipates that current backlog levels are expected to increase with existing staffing levels. The division projects that with current resources the construction stormwater general permit will not be renewed prior to it becoming backlogged. This permit has over 6000 permitted facilities and renewal is expected to take significant resources that the division does not currently have to allocate within the time frame needed to be confident we can prevent this permit from being backlogged. The division has taken steps to decrease the backlog for other sectors and individual permits. In 2021 and 2022 the division is prioritizing the renewal of two general permits for 100+ small domestic surface water facilities (the COG588000/590, renewed in 2021, and the COG589000/591, to be renewed in 2022). Renewing these permits is diverting some resources from individual permit renewals but will have long-term backlog reduction benefits. These renewals will result in current permits for over a hundred small facilities currently covered under expired general permits. In addition, when these renewals are complete the Permits Section will work with an additional large number of small facilities that have backlogged individual permits and provide them the opportunity to receive similar permit terms under one of these general permits, which is expected to further reduce the permit backlog. The Permits Section also is target to significantly reduce the MS4 backlog in 2021/2022 with the renewal of at least one general permit covering 60 permittees and one individual MS4. In addition, the Permits section will reduce the commerce and industry sector permit backlog with the upcoming renewal of the COR900000 industrial stormwater general permit that covers over 900 permittees.

In general, a focus on reducing the backlog, particularly when targeted at old permits, is important because permits that are more current reflect the latest actions adopted by the Water Quality Control Commission or EPA and thus better protect water quality. In addition, the division is continually focused on ways to make permits more clear and to fix any mistakes made in previous permits. These efforts are reflected in permits as they are renewed.

Additional division resources are needed for all sectors to draft renewal permits to more significantly reduce the backlog to ensure that permits are maintained current and reflective of current water quality standards and anti-degradation classifications, and so that the division can meet the needs of public utilities and regulated industries to make changes in their facilities and operations.

Section 7 Protection and restoration: Engineering

The Engineering Section provides engineering review, compliance assistance, and technical assistance for domestic wastewater treatment facilities. The section achieves these efforts through area-wide wastewater facility planning, facility site approval, engineering plan review, compliance assistance, comprehensive performance evaluation, and construction inspections for facilities funded through the State Revolving Fund Program. In addition, the section provides onsite wastewater treatment system coordination, alternative technology reviews, and regulatory and technical assistance to industrial facilities.

Site location and design review efforts are a primary duty of the Engineering Section for the public and private utilities sector, and represent a majority of the clean water work performed by the Engineering Section. These values vary depending on the complexity of reviews received and are also impacted by other competing priorities. As table 10 shows, each review engineer completes an average of 44 reviews per year. For the 10/2020-9/2021 reporting period, there were 182 reviews completed. While the number of design review engineers may vary per year, overall output remains relatively constant on a per engineer basis. Based on the information collected by the

Engineering Section over the past nine years, the level of production per review engineer is likely to be consistent in the future.

Table 10 Annual output related to site location and design review applications

Reporting Year	Number of Review Engineers	Site Location Applications	Plans and Specifications	Total Reviews	Reviews per Engineer
10/2012-9/2013	4	82	74	156	39
10/2013-9/2014	4	100	85	185	46
10/2014-9/2015	4.5	111	95	206	45
10/2015-9/2016	3.3	109	66	175	53
10/2016-9/2017	3.8	91	83	174	46
10/2017-9/2018	3.8	101	64	165	43
10/2018-9/2019	3.8	97	72	169	43
10/2019-9/2020	3.8	90	62	152	40
10/2020-9/2021	4.25	87	95	182	43
Average	3.9	96	77	173	44

Section 8 Assurance: Inspections

Field inspections are a key component of the program's compliance assurance efforts. The Field Services Section and the Compliance and Enforcement Section are responsible for conducting inspections of permitted facilities subject to discharge permit and control regulation requirements. The type and frequency of inspections are identified in the program's annual facility inspection plan that is submitted to EPA. A compliance evaluation inspection is an on-site review of a permitted facility and its records for the purpose of evaluating the adequacy of the facility's ability to meet the requirements of the National Pollutant Discharge Elimination System and the Colorado Discharge Permit System. Depending on specific field findings, inspection staff typically provide preliminary compliance assistance or compliance advisories to facilities following an inspection.

The program is also responsible for responding to environmental releases (e.g. spills) that are reported to the department. Table 11 summarizes the number of environmental releases by sector. Responding to an environmental release creates a significant unplanned workload because the timing and magnitude of response are unpredictable. The program responded to slightly fewer spills during the 10/2020-9/2021 reporting year than the previous reporting period.

Table 11 Number of environmental releases by sector

Reporting Year	Commerce and Industry	Public and Private Utilities	Total
10/2016-9/2017	209	158	367
10/2017-9/2018	194	160	354
10/2018-9/2019	257	161	418
10/2019-9/2020	263	142	405
10/2020-9/2021	193	124	317
Average	223	149	372

The program classifies inspections in two categories: compliance evaluation inspections and reconnaissance inspections. Compliance evaluation inspections include an on-site inspection of the wastewater treatment facilities and/or control measures, an assessment of their condition, a review of the permit conditions and compliance with those conditions, and an inspection report. Reconnaissance inspections can include an on-site inspection or a review of permit conditions and compliance, but usually not both. Reconnaissance inspections can also include site visits as a response to complaints and to provide compliance assistance. Compliance evaluation inspections are further divided into two categories: major facility compliance evaluation inspections and minor and non-classified facility compliance evaluation inspections. The permits that the program issues are classified as major or minor based on the rate of flow discharged, the population covered by the permit, and the magnitude and character of the discharge. In addition, the program inspects facilities that are regulated under commission control regulations including reclaimed water and biosolids facilities.

Table 12 summarizes the number of inspections by sector for the categories described above. In addition to the number of inspections completed for all reporting years, the inspection targets or goals are included. Inspection targets for the major and minor facilities are established based on EPA's 2014 Clean Water National Pollutant Discharge Elimination Compliance Monitoring Strategy. This strategy covers all of the sectors listed in Table 12 except for the public and private utilities reclaimed water and biosolids sectors, whose targets were established to be consistent with the national strategy. The pesticides sector is covered by the national strategy. However, the strategy allows states to decide the best inspection strategy for these permits, and the program uses reconnaissance techniques for inspecting these permittees. For the MS4 sector, the program lacks resources to conduct effective oversight for the 116 cities, counties, and special districts with permits for stormwater runoff within urban areas. The limited resources for the MS4 sector are instead devoted primarily to drafting permits, compliance assistance, and enforcement resulting from previously identified violation(s). The lack of resources for oversight of the municipal separate storm sewer sector has been long-standing. HB17-1285 was focused on maintaining existing services, so funding from this bill was not intended for oversight of this sector. The amount of inspections has been consistent throughout all reporting years except for 10/2019-9/2020 and 10/2020-9/2021. There was a decrease in the number of inspections across most sectors in 2019-2020 due to the COVID-19 pandemic's impact on the program's ability to conduct inspections safely and as discussed previously the pace of hiring vacant positions also decreased during the 10/2019-9/2020 due to the COVID-19 pandemic. This impact only occurred in a few sectors in 2020-2021. Biosolids inspections rely heavily on inspections contracted with Local Health Departments, which reduced inspections this year. Reclaimed Water inspections were reduced both due to concerns with in-person inspections during the pandemic and also due to significant stakeholder processes to evaluate and propose changes to the reclaimed water regulation for a May 2022 rulemaking. For the construction sector, the division continued to shift inspection reconnaissance inspections during the year, but this shift was not a reduction in oversight, and a very high number of reconnaissance inspections were completed.

Table 12 Number of compliance oversight inspections completed by sector

Year	Commerce and Industry	Public and Private Utilities Domestic Water and Wastewater	Public & Private Utilities Reclaimed Water	Construction	Pesticides	Biosolids	MS4
Major Facility Compliance Evaluation Inspections							
10/2016-9/2017	10	34	n/a	n/a	n/a	n/a	0
10/2017-9/2018	8	30	n/a	n/a	n/a	n/a	0
10/2018-9/2019	5	26	n/a	n/a	n/a	n/a	0
10/2019-9/2020	0	29	n/a	n/a	n/a	n/a	0
10/2020-9/2021	6	10	n/a	n/a	n/a	n/a	0
10/2020-9/2021 Targets	9	11	n/a	n/a	n/a	n/a	1
Minor Facility and Unclassified Facility Compliance Evaluation Inspections							
10/2016-9/2017	42	71	27	309	n/a	57	0
10/2017-9/2018	40	123	14	432	n/a	71	0
10/2018-9/2019	56	61	14	357	n/a	69	0
10/2019-9/2020	29	44	1	172	0	75	0
10/2020-9/2021	54	59	1	55	0	39	0
10/2020-9/2021 Targets	290	108	64	542	0	68	25
Reconnaissance Inspections							
10/2016-9/2017	9	7	0	75	15	0	0
10/2017-9/2018	17	2	3	97	13	1	0
10/2018-9/2019	25	2	1	86	0	0	0

Year	Commerce and Industry	Public and Private Utilities Domestic Water and Wastewater	Public & Private Utilities Reclaimed Water	Construction	Pesticides	Biosolids	MS4
10/2019-9/2020	5	0	0	414	0	0	0
10/2020-9/2021	n/a	n/a	n/a	728	4	0	3
10/2020-9/2021 Targets	n/a	n/a	n/a	80	5	0	3
Total							
10/2016-9/2017	61	112	27	384	15	57	0
10/2017-9/2018	65	155	17	529	13	72	0
10/2018-9/2019	86	89	15	443	0	69	0
10/2019-9/2020	34	73	1	586	0	75	0
10/2020-9/2021	60	69	1	783	4	39	3

Section 9 Assurance: Enforcement

The Compliance and Enforcement section is responsible for ensuring the regulated community complies with the requirements of the Colorado Water Quality Control Act and its implementing regulations. Work can be placed into three broad categories: compliance assistance, informal compliance assurance, and formal enforcement activities. Enforcement staff follows established formal and informal enforcement response criteria outlined in the program's enforcement management system.

Compliance assistance - Compliance assistance helps people and entities understand and comply with regulatory requirements and provides general technical assistance to the regulated community. Compliance assistance tools and methods include telephone and email assistance, guidance documents, and training for the regulated community.

Informal compliance assurance - The objective of informal compliance assurance is to facilitate the resolution of noncompliance problems without the more rigorous and resource-intensive administrative or judicial enforcement process. This includes a review of self-reported and field-generated data, comparison of the information to established enforcement criteria, issuance of compliance advisories, and any associated follow-up activities. Informal compliance assurance does not include the assessment of monetary penalties.

Formal enforcement - Formal enforcement actions are authorized under §25-8-601 C.R.S. through §25-8-612 C.R.S. and §25-9-110 C.R.S. Enforcement may happen when compliance is not achieved through informal

compliance assurance or in cases of serious violations that pose a threat to public health or the environment. This category includes administrative remedies and civil judicial actions. Formal enforcement actions can be used to require compliance with permits, regulations, and statutes and are subject to the appeal rights of the violator.

The vast majority of discharge permits require an entity to monitor their discharge for compliance. This data is reported to the program via discharge monitoring reports (DMR). Given that there are over 9,000 permitted discharges across the state and limited program resources, staff members are only able to complete onsite evaluations for around 10 percent of permitted facilities per year. Therefore, timely submission of complete and accurate self-reported data is essential to determining an entity's permit compliance and provides a summary of the quality of the water discharged from the facility. Table 13 shows the total number of delinquent or deficient DMR violations by sector. This data is reviewed quarterly. There had been a downward trend in the total number of DMR violations as the program has made a concerted effort over the past several years to improve the amount and quality of DMR submissions, with a specific focus on the construction sector. However, in 10/2019-9/2020 and 10/2020-9/2021 there has been an increase in DMR violations from previous years. There is a potential that these will be short-term increases associated with new reporting requirements in some permits and with difficulties associated with the pandemic. The vast majority of these violations are being corrected and have not led to an increase in significant violations that require an escalation to enforcement. However, the division will continue to review the data and other available information to determine if additional measures may be needed to obtain a return to the higher rates of compliance.

Table 13 Total occurrences of delinquent or deficient DMR violations

Sector	10/2016-9/2017	10/2017-9/2018	10/2018-9/2019	10/2019-9/2020*	10/2020-9/2021
Commerce and Industry	432	321	423	529	634
Construction	485	390	350	662	589
Public and Private Utilities	241	144	198	331	275
MS4, Pesticides, and Biosolids	DMR Reporting not required for these sectors				

*There was an error in the data processing for the 19-20 reporting year that has been corrected for this report.

Table 14 shows the number of facilities with effluent violations by sector. As with the DMR violation identified in table 13, there was an increase in the effluent violations for 10/2019-9/2020 and 10/2020-9/2021. Again, this is potentially a short term-increase associated with new effluent limits and the pandemic. The vast majority of these violations are being corrected and have not led to an increase in significant violations that require an escalation to enforcement. However, the division will continue to review the data and other available information to determine if additional measures may be needed to obtain a return to the higher rates of compliance.

Table 14 Number of facilities with effluent violations by sector

Sector	10/2016-9/2017	10/2017-9/2018	10/2018-9/2019	10/2019-9/2020*	10/2020-9/2021
Commerce and Industry	74	82	94	107	125
Construction	108	122	119	229	218
Public and Private Utilities	236	237	260	476	520
MS4, Pesticides, and Biosolids	DMR Reporting not required for these sectors				

*There was an error in the data processing for the 19-20 reporting year that has been corrected for this report.

Table 15 summarizes the number of compliance advisories that were issued by sector. The number of compliance advisories can vary by year depending on specific compliance initiatives as well as the compliance for DMRs and effluent violations reported above in tables 13 and 14. During the 10/2017-9/2018, 10/2018-9/2019, and 10/2020-9/2021 reporting years, the commerce and industry sector saw an increased number of compliance advisories due to the issuance of compliance advisories for industrial stormwater permittees that were focused on improving the DMR compliance rate for these permittees. During the 10/2020-9/2021 reporting year, the division conducted a significant increase in reconnaissance inspections for the construction sector that resulted in a higher number of permits being evaluated and additional field violations being identified and addressed.

Table 15 Number of facilities that had compliance advisories issued

Sector	10/2016-9/2017	10/2017-9/2018	10/2018-9/2019	10/2019-9/2020	10/2020-9/2021
Commerce and Industry	422	1,404	942	451	907
Construction	1,029	1,384	1,163	956	1783
Public and Private Utilities	785	763	656	623	645
MS4	0	7	0	0	41
Pesticides	0	0	0	0	0
Biosolids	0	2	2	0	0
Total	2,236	3,560	2,763	2,030	3293

Table 16 summarizes the number of enforcement actions issued by sector for the reporting year. There has been a slight increase in actions over the last two reporting years as the division has improved processes and also issued actions against violations earlier than previously in an effort to drive corrective actions before the severity of violations escalates. Note that the number of formal enforcement actions is significantly fewer than the number of facilities with violations, as reported in table 14 above. The enforcement actions summarized in table 16 include:

Notice of Violation (NOV), Cease and Desist Order (CDO), Clean-up Order (CUO) – These are a formal notifications that a person or entity has violated the law. These actions outline corrective actions required to resolve the violations. The program imposes civil penalties when an NOV, CDO, or CUO has been issued.

Compliance Order on Consent and Expedited Settlement Agreement – These are settlement agreements that resolve violations and penalties and in some cases include corrective action requirements.

Order for Civil Penalty (OCP) - The program imposes civil penalties through the issuance of OCPs. Penalties for violations of the Colorado Water Quality Control Act are assessed consistent with §25-8-608 C.R.S. and the program's penalty policies. Penalties consider the following factors:

- The potential damage of the violation(s).
- The violator's compliance history.
- Whether the violation(s) was intentional, reckless, or negligent.
- The impact or threat to public health and the environment.
- The duration of the violation(s).
- The economic benefit realized as a result of the violation.

The maximum civil penalty for violations of the Colorado Water Quality Control Act was set at \$54,833 by House Bill 20-1143, effective July 2, 2020. Previously the maximum penalty had been \$10,000 per day of violation. House Bill 20-1143 also directed the Water Quality Control Commission to annually increase the maximum amount for inflation. In 2021, the commission adopted the new Regulation 101 to apply the required inflation adjustment, and the first adjustment will go into effect on January 1, 2022, to bring the maximum penalty to \$56,759. Penalties for violations of the Water and Wastewater Treatment Facility Operators Statute are assessed consistent with §25-9-110 C.R.S. and consider the facility type, treatment complexity, and duration of the violation. The maximum penalty for violations of the Water and Wastewater Treatment Facility Operators Statute and its implementing regulation is \$300 per day of violation.

Judicial Actions - Civil enforcement actions are judicial actions taken against a violator when violations are determined to be serious enough to warrant seeking restraining orders, injunctions, and/or court-ordered civil penalties or remedies.

Table 16 Number of enforcement actions issued including amendments to existing orders

Year	Notice of Violation/ Cease and Desist Orders or Clean-up Orders	Compliance Orders on Consent	Expedited Settlement Agreements	Order for Civil Penalty	Judicial Actions	Total
10/2016-9/2017	25	11	6	8	2	52
10/2017-9/2018	26	11	0	12	2	51
10/2018-9/2019	28	19	0	17	0	64
10/2019-9/2020	42	21	2	41	0	106
10/2020-9/2021	24	22	3	33	1	83

Section 10 Conclusions

HB17-1285 requires the division to “...develop baseline information for reporting. Commencing in 2018, the department shall provide information on improvements that have been made in comparison to the baseline information and information on the barriers to making improvements.” Below is a summary of the comparison to the baseline year and barriers to making program improvements.

10.1 Comparisons to baseline information

Table 17 summarizes how HB17-1285 reporting requirements compare to the baseline year. Following is an overview of notable improvements to service, production, and processes that the division has implemented since the baseline year:

Program staffing levels: HB17-1285 provided the commerce and industry sector, MS4 sectors, and public and private utilities sectors funding to maintain program services. The funding allowed the division to backfill positions that were held vacant for budget-balancing purposes. Staff levels have fluctuated during the reporting periods due to attrition that is commensurate with historic rates at the division. However, the division maintained an increase in staff in comparison to the baseline year. In comparison to the baseline year, the division has increased staffing levels by 4.0 full-time equivalents or a 15 percent increase in staff.

Standards: Production levels for standards development were similar to the baseline year. The division anticipated that this would be the case as staffing levels for these efforts have remained consistent and the quantity and complexity of the work have not varied significantly.

Permits: Permit production has consistently exceeded the baseline year, but varies significantly from year to year for specific sectors and types of actions. Permit timeliness has also increased over the baseline year as the division has reduced the total number of permits backlogged. There has been a consistent downward trend in permit backlog over the last three years. HB17-1285 allowed for several vacancies to be filled in the Permits Section that had hindered permit production in the baseline year. The division continues to seek process improvements and efficiencies that could result in improved outcomes and process efficiencies:

- The division seeks opportunities to permit additional facilities under general permits when the regulatory and permittee needs can be met without the need for more resource-intensive individual permits.
- The division is focusing on process improvements for the individual permit renewal process. The division is focusing on identifying opportunities to optimize and improve workflows to better serve the public, write permits, and complete other necessary permitting work. In addition, the project improvement process seeks to understand what technological improvements are necessary to streamline the permit process. While not finished, the process improvement work has already driven important discussions about changes to application processes and the development of tools for permit drafting.
- The division has implemented an online system for construction sector permit actions and has expanded the system to allow permittees to request modifications to general permit certifications. The division noted a significant increase in the issuance of modifications in 2021. The ability for permittees to request actions online streamlines the division processes and has allowed the division to keep up with the 50 percent increase in construction sector permits since 2016.

Engineering: Production levels for engineering reviews were similar to the baseline year. The division anticipated that this would be the case as staffing levels for these efforts have remained consistent and the quantity and complexity of the work have not varied significantly.

Inspections: The total number of inspections conducted has consistently exceeded the baseline year. This increase is a result of HB15-1249, which provided new resources that allowed for additional inspections beginning in 2017.

The division has also increased its use of reconnaissance inspections that allow for the identification of indicators of noncompliance without a full facility compliance assessment. This process has benefits because it allows more facilities to be assessed and resulted in a significant increase in the total number of inspections in 2021. A limitation of this process is the lack of compliance assistance that can be provided with an in-person inspection. Moving forward, the division will continue to use reconnaissance inspections as a tool to complement the standard full compliance inspection process. Reconnaissance inspections have primarily been used for stormwater permits due to the nature of the control measures being in open fields.

Enforcement: The division continued to increase the enforcement productivity from the baseline year due to process improvements and a strategy of issuing actions earlier before the severity has had a chance to escalate. By increasing productivity for enforcement, the division is better able to address violations earlier in the process. This prevents compliance issues from escalating to more chronic and significant problems that could result in environmental harm and threats to public health and increased costs to regulated facilities from penalties and corrective actions.

Table 17 Comparison of HB17-1285 requirements for all reporting years compared to the baseline year

Reporting Category	10/2017-9/2018 compared to baseline year	10/2018-9/2019 compared to baseline year	10/2019-9/2020 compared to baseline year	10/2020-9/2021 compared to baseline year
Program staffing levels	↑	↑	↔	↑
Standards development	↔	↔	↔	↔
Permit production	↑	↑	↑	↑
Permit timeliness	↔	↑	↑	↑
Engineering reviews production	↔	↔	↔	↔
Inspection production	↑	↑	↑	↑
Enforcement actions	↔	↔	↑	↑

10.2 Barriers to program improvements

As discussed above, the program has made process improvements. Yet, the efficiencies gained are not enough to improve and increase:

- Compliance oversight:** The EPA establishes inspection targets in accordance with EPA's 2014 Clean Water National Pollutant Discharge Elimination Compliance Monitoring Strategy. This strategy covers all of the division's compliance work except for the reclaimed water and biosolids. Targets for those activities are established by the division consistent with the national strategy. The division is not able to meet oversight targets for any of the sectors. Since 2016, there has been a 50 percent increase in construction stormwater permits without a corresponding increase in spending authority. The most substantial gaps between the oversight targets and the level of oversight provided are for the MS4 sector and the commerce and industry sector.

- **Compliance assistance and coaching:** In-person inspections and coaching is the main tool for providing compliance assistance. As described above, the division does meet current inspection goals and cannot redirect resources to provide assistance. Examples of compliance assistance that would be helpful to regulated entities:
 - guidance on practice-based permit conditions for the MS4 sector.
 - technical support for monitoring and limiting contaminants of emerging concern.
 - proactive compliance coaching for disadvantaged or low population domestic wastewater systems.
- **Permit timeliness:** The EPA requires that Colorado’s permit backlog be maintained at less than 25 percent, and if the backlog exceeds 35 percent EPA will require the division to develop and implement a backlog reduction plan. For reporting year 10/2020-9/2021, the division met EPA’s backlog goal. But, as of January 1, 2022, the backlog is at 26 percent. With existing resources levels, the permit backlog will exceed the 35 percent target by March 31, 2024. If EPA requires a permit backlog reduction plan, the division will likely have to reduce current services to focus on reducing the backlog.
- **Support for environmental justice efforts:** The division anticipates that support for environmental justice efforts will increase in the future and that while some of these activities will be included in current work processes additional resources will likely be needed to increase engagement with disproportionately impacted communities in the future.

The department’s budget amendment request for the state fiscal year 2022-23 Long Bill recommends increasing spending authority without raising fees for the construction and public and private utilities sectors. This amendment was approved as part of the department’s figure setting, but at the time of report publication, the 2022-23 Long Bill was not finalized. The increased spending authority would allow the division to meet our commitment to EPA for maintaining permit backlog below 35 percent. If the division’s permit backlog exceeds 35 percent at any time, EPA will require the department to develop and implement a backlog reduction plan. The department’s commitment to EPA specifies that the department will strive for maintaining permit backlog below 25 percent. The increased spending authority will help the department meet that goal. If the division’s permit backlog cannot be maintained below 25 percent with the increased spending authority, the department will identify what additional resources will be needed to address this commitment to EPA. In addition, the increased spending authority should let the division set annual inspection goals that would meet EPA’s expectations for construction sector inspections and increase inspections for the public and private utilities sector. If the funding is included in the 2022-23 Long Bill, in subsequent HB17-1285 annual reports the division will document the impact of the proposed increased spending authority. In addition, we will continue to identify barriers to making improvements.

Appendix A Program finances

Revenue and expenditures provided to the Colorado General Assembly Joint Budget Committee on February 18, 2021 for SFY20-21 and first half of SFY21-22.

Fiscal Year 2020-21 Financial Results

SFY20-21 Year End Results

Sector Budget:	TOTAL LB Spending Auth*	Collected Revenue**	Sector Expenses	Admin Expenses***	POTS Expenses	Indirect Expenses***	Total Expenses
Commerce and Industry	\$ 2,982,874	\$ 1,419,942	\$ 2,012,07	\$ 112,697	\$ 360,265	\$ 259,836	\$ 2,744,870
General Fund	\$ 1,229,568		\$ 950,393	\$18,356	\$ 176,773		\$ 1,145,522
Cash Funds - 2019	\$ 1,322,202	\$1,419,942	\$ 825,525	\$90,662	\$ 183,492	\$213,338	\$ 1,313,017
Federal Funds	\$ 431,104		\$ 236,154	\$3,679		\$46,498	\$ 286,331
Construction	\$ 2,711,483	\$ 2,804,864	\$ 1,718,58	\$ 103,375	\$ 356,029	\$ 360,743	\$ 2,538,729
General Fund	\$ 364,046		\$ 277,245	\$5,435	\$ 54,367		\$ 337,047
Cash Funds - 2021	\$ 2,035,326	\$2,804,864	\$ 1,267,119	\$95,277	\$ 301,662	\$326,074	\$ 1,990,132
Federal Funds	\$ 312,111		\$ 174,218	\$2,663		\$34,669	\$ 211,550
MS4	\$ 404,763	\$ 214,280	\$241,312	\$ 2,760	\$ 19,854	\$ 57,746	\$ 321,672
General Fund	\$ 140,939		\$ 109,074	\$2,104	\$ 19,854		\$ 131,032
Cash Funds - 2023	\$ 186,892	\$214,280	\$ 118,912	\$0		\$55,005	\$ 173,917
Federal Funds	\$ 76,932		\$ 13,326	\$656		\$2,741	\$ 16,723
Pesticides	\$ 264,922	\$ 25,390	\$201,154	\$ 3,698	\$ 24,519	\$ 2,529	\$ 231,900
General Fund	\$ 234,290		\$ 188,577	\$3,498	\$ 24,392		\$ 216,467
Cash Funds - 2022	\$ 7,251	\$25,390	\$ 421	\$0	\$ 127	\$107	\$ 655
Federal Funds	\$ 23,381		\$ 12,156	\$200		\$2,422	\$ 14,778
Public/Private Utilities	\$ 5,066,350	\$ 2,527,887	\$ 3,280,38	\$ 185,331	\$ 630,299	\$ 468,031	\$ 4,564,044
General Fund	\$ 1,797,532		\$ 1,381,463	\$29,640	\$ 261,187		\$ 1,672,290
Cash Funds - 2024	\$ 2,498,847	\$2,527,887	\$ 1,564,708	\$149,121	\$ 369,112	\$402,485	\$ 2,485,426
Federal Funds	\$ 769,971		\$ 334,212	\$6,570		\$65,546	\$ 406,328
WQ Certifications	\$ 249,528	\$ 107,701	\$111,388	\$ 385	\$ 6,858	\$ 20,100	\$ 138,731
General Fund	\$ 10,617		\$ 6,746	\$159	\$ 1,626		\$ 8,531
Cash Funds - 2018	\$ 238,911	\$107,701	\$ 90,816	\$0	\$ 5,232	\$17,346	\$ 113,394
Federal Funds	\$ 26,476		\$ 13,826	\$226		\$2,754	\$ 16,806
Total	\$ 11,706,396	\$ 7,100,064	\$ 7,564,89	\$ 408,246	\$ 1,397,82	\$ 1,168,985	\$ 10,539,946
General Fund	\$ 3,776,992	\$0	\$ 2,913,498	\$59,192	\$ 538,199	\$0	\$ 3,510,889
Cash Funds	\$ 6,289,429	\$7,100,064	\$ 3,867,501	\$335,060	\$ 859,625	\$1,014,355	\$ 6,076,541
Federal Funds	\$ 1,639,975	\$0	\$ 783,892	\$13,994	\$ -	\$154,630	\$ 952,516

*The LB spending authority amount represents the clean water sectors, spending authority assigned to the sectors from HB 16-1413, the Admin and Indirect Cost line items, and POTS allocations.

**Revenue applies to cash funds only. Refer to LB Spending Auth for General and Federal Funds. Revenue is billed in the first quarter of the year for the entire fiscal year for Commerce & Industry, MS4, and Public/Private Utilities; therefore revenue is front loaded in the first quarter for these three sectors. The remaining sectors receive funding throughout the year. This total includes collected cash fund revenues only.

***The Admin and Indirect expenses refer to expenses at the Division level that support the Clean Water Sectors.

Fiscal Year 2021-22 Financial Results

SFY21-22 Second Quarter Results (July 2021 - December 2021)

Sector Budget:	TOTAL LB Spending Auth*	Collected Revenue**	Sector Expenses	Admin Expenses***	POTS Expenses	Indirect Expenses***	Total Expenses
Commerce and Industry	\$ 3,222,771	\$ 1,296,395	\$ 1,013,348	\$ 137,835	\$ 179,198	\$ 123,616	\$ 1,453,997
General Fund	\$ 1,295,327		\$ 468,192	\$ 58,704	\$ 87,203		\$ 614,099
Cash Funds - 2019	\$ 1,528,751	\$ 1,296,395	\$ 495,697	\$ 56,313	\$ 91,995	\$ 111,099	\$ 755,104
Federal Funds	\$ 398,693		\$ 49,459	\$ 22,818		\$ 12,517	\$ 84,794
Construction	\$ 2,651,825	\$ 2,919,327	\$ 861,902	\$ 100,154	\$ 172,228	\$ 169,003	\$ 1,303,287
General Fund	\$ 388,712		\$ 120,368	\$ 17,616	\$ 25,019		\$ 163,003
Cash Funds - 2021	\$ 1,972,570	\$ 2,919,327	\$ 708,323	\$ 65,910	\$ 147,209	\$ 160,331	\$ 1,081,773
Federal Funds	\$ 290,543		\$ 33,211	\$ 16,628		\$ 8,672	\$ 58,511
MS4	\$ 361,368	\$ 202,732	\$ 124,072	\$ 9,435	\$ 8,531	\$ 15,777	\$ 157,815
General Fund	\$ 149,774		\$ 47,726	\$ 6,788	\$ 8,531		\$ 63,045
Cash Funds - 2023	\$ 165,342	\$ 202,732	\$ 73,669	\$ -	\$ -	\$ 14,851	\$ 88,520
Federal Funds	\$ 46,252		\$ 2,677	\$ 2,647		\$ 926	\$ 6,250
Pesticides	\$ 382,475	\$ -	\$ 46,315	\$ 18,554	\$ 13,320	\$ 2,249	\$ 80,438
General Fund	\$ 245,597		\$ 41,478	\$ 11,130	\$ 12,656		\$ 65,264
Cash Funds - 2022	\$ 7,151	\$ -	\$ 2,452	\$ -	\$ 664	\$ 542	\$ 3,658
Federal Funds	\$ 129,727		\$ 2,385	\$ 7,424		\$ 1,707	\$ 11,516
Public/Private Utilities	\$ 5,323,539	\$ 2,291,686	\$ 1,595,307	\$ 265,623	\$ 295,372	\$ 220,010	\$ 2,376,312
General Fund	\$ 2,089,495		\$ 658,971	\$ 94,695	\$ 123,205		\$ 876,871
Cash Funds - 2024	\$ 2,600,656	\$ 2,291,686	\$ 867,924	\$ 134,679	\$ 172,167	\$ 201,933	\$ 1,376,703
Federal Funds	\$ 633,388		\$ 68,412	\$ 36,249		\$ 18,077	\$ 122,738
WQ Certifications	\$ 314,083	\$ 18,544	\$ 13,330	\$ 3,593	\$ 1,510	\$ 2,111	\$ 20,544
General Fund	\$ 10,870		\$ 3,849	\$ 493	\$ 752		\$ 5,094
Cash Funds - 2018	\$ 249,044	\$ 18,544	\$ 6,723	\$ -	\$ 758	\$ 1,092	\$ 8,573
Federal Funds	\$ 54,169		\$ 2,758	\$ 3,100		\$ 1,019	\$ 6,877
Total	\$ 12,256,061	\$ 6,728,684	\$ 3,654,274	\$ 535,194	\$ 670,159	\$ 532,766	\$ 5,392,393
General Fund	\$ 4,179,775	\$ -	\$ 1,340,584	\$ 189,426	\$ 257,366	\$ -	\$ 1,787,376
Cash Funds	\$ 6,523,514	\$ 6,728,684	\$ 2,154,788	\$ 256,902	\$ 412,793	\$ 489,848	\$ 3,314,331
Federal Funds	\$ 1,552,772	\$ -	\$ 158,902	\$ 88,866	\$ -	\$ 42,918	\$ 290,686

*The LB spending authority amount represents the clean water sectors, spending authority assigned to the sectors from HB 16-1413, the Admin and Indirect Cost line items, and POTS allocations.

**Revenue applies to cash funds only. Refer to LB Spending Auth for General and Federal Funds. Revenue is billed in the first quarter of the year for the entire fiscal year for Commerce & Industry, MS4, and Public/Private Utilities; therefore revenue is front loaded in the first quarter for these three sectors. The remaining sectors receive funding throughout the year. This total includes collected cash fund revenues only.

***The Admin and Indirect expenses refer to expenses at the Division level that support the Clean Water Sectors.

Appendix B Permit modifications

List of permit modifications completed from 10/2020-9/2021.

Appendix B - Permit Modifications

PermitID	Sector	Permittee
CO0027171	Public and private utilities	Mount Crested Butte Water and Sanitation Dist
CO0032115	Commerce and industry	Trapper Mining Inc
CO0042447	Commerce and industry	Tri-State Generation and Transmission Assn Inc
CO0046931	Commerce and industry	Pacificorp
CO0048854	Public and private utilities	Fruita City of
COG500216	Commerce and industry	Oldcastle SW Group Inc
COG500320	Commerce and industry	Aggregate Industries WCR Inc
COG500325	Commerce and industry	Martin Marietta Materials Inc
COG500439	Commerce and industry	Elam Construction Inc
COG500498	Commerce and industry	Oldcastle SW Group Inc
COG501501	Commerce and industry	Ready Mixed Concrete Co LLC
COG501532	Commerce and industry	CW Construction LLC
COG501548	Commerce and industry	Burnco Colorado LLC
COG501581	Commerce and industry	Martin Marietta Materials Inc
COG501586	Commerce and industry	Asphalt Specialties Co Inc
COG501594	Commerce and industry	Martin Marietta Materials Inc
COG501603	Commerce and industry	Asphalt Specialties Co Inc
COG501608	Commerce and industry	Fremont Paving and Redi Mix Inc
COG501619	Commerce and industry	C and H Excavation LLC
COG501708	Commerce and industry	Oldcastle SW Group Inc
COG501722	Commerce and industry	6 S Land and Cattle Co
COG501747	Commerce and industry	Martin Marietta Materials Inc
COG501812	Commerce and industry	Oldcastle SW Group Inc
COG501829	Commerce and industry	Gallegos Corp
COG501851	Commerce and industry	General Shale Brick Inc
COG501854	Commerce and industry	Oldcastle SW Group Inc
COG501860	Commerce and industry	TJH Stone Ltd
COG501940	Commerce and industry	Oldcastle SW Group Inc
COG502028	Commerce and industry	Martin Marietta Materials Inc
COG502182	Commerce and industry	Aggregate Industries WCR Inc
COG502190	Commerce and industry	J-2 Contracting Co Inc
COG588035	Public and private utilities	MHCO San Soucie of Glenwood Springs LLC
COG588061	Public and private utilities	Talbott Enterprises Inc
COG588123	Public and private utilities	59 Camp LLC
COG589012	Public and private utilities	Manzanola Town of
COG589154	Public and private utilities	Chateau Chaparral Owners Assn
COG589155	Public and private utilities	Transport Metro District 1
COG589163	Public and private utilities	Geneva Glen Camp Inc
COG604341	Construction	Noble Midstream Services LLC
COG604394	Construction	PCI Construction Inc
COG604395	Construction	Kiewit Infrastructure Co
COG604419	Construction	Kiewit Infrastructure Co
COG607130	Commerce and industry	Coolsys Light Commerical Solutions LLC
COG641044	Public and private utilities	Grand County Water Sanitation Dist 1
COG641087	Public and private utilities	Grand County Water Sanitation Dist 1

Appendix B - Permit Modifications

PermitID	Sector	Permittee
COG641133	Public and private utilities	Carter Lake Filter Plant
COG641151	Public and private utilities	Thornton City of
CONOX0333	Commerce and Industry	Linde Inc
CONOX0484	Commerce and Industry	Spartan Acquisition LLC dba GeoTree Solutions
CONOX0572	Commerce and Industry	Linde Inc
COR040291	Commerce and industry	Rio Grande Silver Inc
COR900166	Commerce and industry	Vestas Nacelles America Inc
COR900556	Commerce and industry	Molson Coors USA LLC
COR900585	Commerce and industry	Montrose Forest Products LLC
COR900642	Commerce and industry	Aggregate Industries WCR Inc
COR900666	Commerce and industry	Norgren Inc
COR900687	Commerce and industry	CS Wind America Inc
COR900698	Commerce and industry	Kodak Alaris Inc
COR900808	Commerce and industry	Aggregate Industries WCR Inc
COR900820	Commerce and industry	Metro Water Recovery
COR900844	Commerce and industry	Master Builders Solutions Admixtures US LLC
COR900847	Commerce and industry	Boulder Scientific Co LLC
COR901030	Commerce and industry	La Junta Metals and Recycling LLC
COR901322	Commerce and industry	Metro Water Recovery
COR901328	Commerce and industry	Trussway Manufacturing Inc
COR901490	Commerce and industry	Aggregate Industries WCR Inc
COR901523	Commerce and industry	Master Builders Solutions US LLC
COR901540	Commerce and industry	Voestalpine Railway Systems Nortrak Inc
COR901542	Commerce and industry	Pavestone LLC
COR901553	Commerce and industry	Mountain Waste and Recycling
COX631012	Public and private utilities	Dotsero MHP LLC
COX631014	Public and private utilities	Spear Inc
COX631047	Public and private utilities	Bear Ranch LLC
COX631056	Public and private utilities	New Vision Investments, LLC
COX631075	Public and private utilities	Pueblo County School District 70
COX631080	Public and private utilities	Sun Jelly-Larkspur CO RV LLC
COX634011	Public and private utilities	Petroleum Wholesale LP
COX634025	Public and private utilities	Prairie PK-12 School Dist
COX634027	Public and private utilities	Navigators Eagle Lake Camp
COX634028	Public and private utilities	Camp IDRAHAJE
COX634041	Public and private utilities	Catamount Metro Dist
COX634042	Public and private utilities	Direct TV
COX634046	Public and private utilities	Gunnison RV Park LP
COX634048	Public and private utilities	Mesa County Valley School District No. 51
COX634066	Public and private utilities	Upper Blue Sanitation District
COX634071	Public and private utilities	GS Pinon Pines LLC
COX634075	Public and private utilities	Fort Garland Water Sanitation Dist
COR402375	Construction	Jackson Ranch LLC
COR405575	Construction	JSM Builders, Inc.
COR404701	Construction	Toll Co LP

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PermitID	Sector	Permittee
COR403454	Construction	M.A. Mortenson Company
COR401174	Construction	Creekstone Homes Inc
COR401687	Construction	Flatiron AECOM LLC
COR402892	Construction	M.A. Mortenson Company
COR407655	Construction	David Weekley Homes
COR408238	Construction	Crosslands Construction Company
COR400582	Construction	Brookfield (Colorado) Management LLC dba Barefoot
COR402905	Construction	MA Mortenson Construction
COR402906	Construction	MA Mortenson Construction
COR405945	Construction	Prosper Land and Development
COR400478	Construction	Bonanza Creek Operating Co LLC
COR402855	Construction	Lokal Homes LLC
COR408599	Construction	Shaw Construction LLC
COR401452	Construction	Eagle Development Co
COR403075	Construction	Brookfield Residential
COR405667	Construction	Ridgeline Homes, LLC
COR401083	Construction	Conestoga Developers Company LLC
COR407281	Construction	Brinkman Construction
COR409502	Construction	Catamount Constructors
COR405687	Construction	Catamount Constructors, Inc
COR401799	Construction	Garden of the Gods Club LLC
COR403607	Construction	Interquest Westside LLC
COR408320	Construction	Acumen Environmental Services
COR405089	Construction	Wyatt Construction Co Inc
COR406819	Construction	Bryan Construction Inc.
COR402257	Construction	HT Canyons South Development LP
COR410137	Construction	LGI Homes Colorado LLC
COR406518	Construction	Continental 464 Fund LLC
COR404172	Construction	Tralon Homes, LLC
COR409578	Construction	GLH Construction Inc.
COR408244	Construction	Taproot Rockies Midstream
COR404458	Construction	St Vrain Lakes Metropolitan District 1
COR409924	Construction	HEI Civil
COR405551	Construction	KB Home Colorado Inc
COR403354	Construction	Oakwood Homes LLC
COR403214	Construction	Naranjo Civil Constructors Inc
COR402238	Construction	Horizon View Homes LLC
COR408947	Construction	Richmond American Homes of Colorado, Inc.
COR405833	Construction	UP 18, LLC
COR402505	Construction	KB Home Colorado Inc
COR409044	Construction	Fransen Pittman
COR403624	Construction	Professional Construction Services LLC
COR408545	Construction	Fransen Pittman General Contractors
COR404849	Construction	Vanguard Homes Inc
COR404651	Construction	Brinkmann Constructors

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PermitID	Sector	Permittee
COR409460	Construction	Tralon Homes, LLC.
COR403840	Construction	RCD Partners LLC
COR406520	Construction	Symmetry Builders Inc.
COR404489	Construction	Stone Creek Metropolitan District
COR409520	Construction	Richmond American Homes of Colorado Inc.
COR403348	Construction	Oakwood Homes LLC
COR400650	Construction	CalAtlantic Group Inc
COR409598	Construction	Global Underground Corporation
COR410267	Construction	Water Valley Land Company
COR405849	Construction	Wonderland Homes
COR401353	Construction	Development Management Inc
COR408717	Construction	Brikor Associates
COR406920	Construction	Shea Homes LP
COR407892	Construction	Raindance Land Company, LLC
COR404178	Construction	Saint Aubyn Homes LLC
COR408316	Construction	Elite Surface Infrastructure
COR403238	Construction	Nash Inspiration LLC
COR402898	Construction	Gaylord Rockies Resort & Convention Center
COR402544	Construction	Kevamra LLC
COR405572	Construction	M.A. Mortenson Company
COR408557	Construction	Wonderland Homes
COR406924	Construction	Water Valley Land Company
COR403352	Construction	Oakwood Homes LLC
COR402523	Construction	KB Home Colorado Inc
COR407952	Construction	Oakwood Homes
COR403362	Construction	Oakwood Homes LLC
COR403353	Construction	Oakwood Homes LLC
COR404177	Construction	Tralon Homes, LLC
COR407737	Construction	Iron Woman Construction and Environmental Services, LLC
COR405245	Construction	Continuum Partners, LLC
COR408441	Construction	Mesa Properties
COR401169	Construction	Craig Realty Group - Castle Rock LLC
COR409596	Construction	Hall-Irwin Corporation
COR404367	Construction	Silverpick Contracting
COR405346	Construction	PC Project Managers, Inc.
COR402571	Construction	Kiowa Park LLC
COR403995	Construction	Richmond American Homes of Colorado, Inc.
COR402520	Construction	KB Home Colorado Inc
COR403950	Construction	Richmond American Homes of Colorado, Inc.
COR409470	Construction	Richmond American Homes
COR410345	Construction	Lennar Colorado LLC
COR408725	Construction	Challenger Communities LLC
COR404338	Construction	Shea Homes LP
COR409582	Construction	KB Home Colorado Inc.
COR407932	Construction	David Weekley Homes

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PermitID	Sector	Permittee
COR401921	Construction	Gold Hill Neighborhood LLC
COR404279	Construction	SEMA Construction Inc
COR404458	Construction	St Vrain Lakes Metropolitan District 1
COR408070	Construction	Windsor Ridge Homes
COR403260	Construction	New Aria Townehomes LLC
COR402157	Construction	Hensel Phelps Construction Co
COR403747	Construction	Public Service Co of Colorado
COR406025	Construction	Covington Homes
COR410441	Construction	Swinerton Builders
COR401920	Construction	Gold Hill Neighborhood LLC
COR406864	Construction	ColoCorp Builders LLC
COR405599	Construction	Richmond American Homes of Colorado
COR410054	Construction	Becknell Services LLC
COR401525	Construction	Elite Properties of America Inc
COR407908	Construction	JKL Associates, LLC
COR402799	Construction	Lennar Colorado LLC
COR400584	Construction	Brookfield Residential Colorado LLC
COR400224	Construction	TreyTyn Homes LLC
COR407844	Construction	Mountain Valley Contracting
COR410311	Construction	American Legend Homes
COR401452	Construction	Eagle Development Co
COR405172	Construction	Eagle Development Co
COR406736	Construction	Eagle Development Company
COR401458	Construction	Eagle Development Co
COR406031	Construction	LGI Homes Colorado LLC
COR405486	Construction	Dream Finders Homes, LLC
COR406512	Construction	Century Communities, Inc.
COR407291	Construction	KB Home Colorado, Inc.
COR402519	Construction	KB Home Colorado Inc
COR410542	Construction	Territory Unlimited, Inc.
COR406782	Construction	Meritage Homes of Colorado Inc
COR401457	Construction	Eagle Development Co
COR406478	Construction	Toll Southwest, LLC
COR404000	Construction	Sabell Development GC, LLC
COR409228	Construction	Adamo Homes
COR409990	Construction	Toll Southwest, LLC
COR402579	Construction	Kitchel Lake Partners LLC
COR408895	Construction	Pinkard Construction Co
COR405493	Construction	AP Mountain States, LLC
COR404704	Construction	Toll Southwest LLC
COR403818	Construction	Raindance Land Company LLC
COR404367	Construction	Silverpick Contracting
COR407417	Construction	Brinkmann Constructors
COR404179	Construction	Tralon Homes, LLC
COR404458	Construction	St Vrain Lakes Metropolitan District 1

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PermitID	Sector	Permittee
COR404849	Construction	Vanguard Homes Inc
COR403104	Construction	MMC Two LLC
COR403614	Construction	PRI 2 LLC
COR404847	Construction	Vanguard Homes, Inc.
COR407830	Construction	Elite Properties of America, Inc.
COR402938	Construction	Martin Marietta Materials Inc
COR400077	Construction	Aerotropolis Area Coordinating Metro District
COR410171	Construction	Tralon Homes, LLC
COR406218	Construction	Vanguard Homes Inc.
COR403747	Construction	Public Service Co of Colorado
COR401407	Construction	Downtown Grand Junction Regeneration LLC
COR407892	Construction	Raindance Land Company, LLC
COR407868	Construction	Oakwood Homes, LLC
COR410409	Construction	GERRARD EXCAVATING, INC
COR410037	Construction	Public Service Company of Colorado (PSCo)
COR403315	Construction	North Star RV Storage
COR410054	Construction	Becknell Services LLC
COR407198	Construction	Public Service Company of Colorado
COR404154	Construction	Saddletree Holdings Inc
COR410411	Construction	Naranjo Civil Constructors Inc
COR409214	Construction	Melody Homes, Inc
COR406803	Construction	DFH Mandarin LLC
COR405760	Construction	Richmond American Homes of Colorado, Inc.
COR402274	Construction	Painted Prairie Metropolitan District Nos. 1-12
COR403366	Construction	Oakwood Homes LLC
COR401257	Construction	David Weekley Homes
COR408364	Construction	Murray and Stafford Inc.
COR406278	Construction	Challenger Building, LLC
COR401255	Construction	David Weekley Homes
COR401253	Construction	David Weekley Homes
COR401471	Construction	East Ridge Holding LLC
COR400535	Construction	Bridgewater Homes LLC
COR408006	Construction	Colorado Department of Transportation
COR404722	Construction	Trammell Crow Residential
COR408573	Construction	Lennar Colorado LLC
COR402756	Construction	Lennar Colorado LLC
COR408617	Construction	Eagle Development
COR410463	Construction	Integrity Homes LLC
COR409522	Construction	Richmond American Homes
COR405042	Construction	Taylor Morrison of Colorado Inc
COR410941	Construction	THB Baseline LLC
COR403522	Construction	POCO Holdco, LLC
COR401673	Construction	Hines
COR402909	Construction	Magpie Operating Inc
COR403067	Construction	Mesa Properties

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PermitID	Sector	Permittee
COR409520	Construction	Richmond American Homes of Colorado Inc.
COR409932	Construction	HEI Civil
COR408783	Construction	Fransen Pittman Construction
COR401253	Construction	David Weekley Homes
COR403049	Construction	Meritage Homes of Colorado Inc
COR405509	Construction	VIP Realty Development LLC
COR406161	Construction	Ames Construction
COR406272	Construction	KB Home Colorado, Inc.
COR407176	Construction	Tralon Homes, LLC
COR410427	Construction	Fletemeyer Homes LLC
COR410722	Construction	Connell Resources, Inc.
COR410267	Construction	Water Valley Land Company
COR404006	Construction	Ridgeline Homes LLC
COR402632	Construction	KUH Boulevard One LLC
COR400631	Construction	C & C Land LLC
COR404851	Construction	Vantage Homes Corp
COR401353	Construction	Development Management Inc
COR408100	Construction	Hall Irwin Corporation
COR404367	Construction	Silverpick Contracting
COR406506	Construction	Alliance Construction Solutions
COR410417	Construction	JM Weston Homes LLC
COR404342	Construction	Shea Homes LP
COR410451	Construction	BT Construction, Inc.
COR408334	Construction	Sage Design Build LLC
COR408509	Construction	Chartered Development
COR404651	Construction	Brinkmann Constructors
COR404337	Construction	Shea Homes LP
COR404341	Construction	Shea Homes LP
COR410459	Construction	JHL Constructors, Inc.
COR404343	Construction	Shea Homes LP
COR407699	Construction	Edge Contracting, Inc.
COR407098	Construction	KB Home Colorado, Inc.
COR406278	Construction	Challenger Building, LLC
COR409970	Construction	Melody Homes, Inc
COR405056	Construction	Winds of the Spirit LLC
COR411103	Construction	Interquest Marketplace No. 10. LLC
COR406053	Construction	Lennar Colorado LLC
COR402329	Construction	Infinity Home Collection at Castle Pines LLC
COR402869	Construction	Lot Holdings Investments LLC
COR410712	Construction	THB SF LLC
COR406672	Construction	RLW/SEMA A Joint Venture, L.P.
COR409123	Construction	Mapleton Public Schools
COR402327	Construction	Infinity Communities LLC
COR410562	Construction	Infinity Communities
COR410102	Construction	Crow Creek Construction, LLC

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PermitID	Sector	Permittee
COR405397	Construction	Heron Ridge Investments, LLC
COR402292	Construction	Hunters Crossing Investments LLC
COR408052	Construction	Connell Resources, Inc.
COR403953	Construction	Richmond American Homes of Colorado Inc
COR408324	Construction	Murray and Stafford, Inc.
COR405849	Construction	Wonderland Homes
COR402175	Construction	High Country Developers LLC
COR410345	Construction	Lennar Colorado LLC
COR410708	Construction	CR Minerals Co, LLC
COR408473	Construction	CDOT
COR410813	Construction	Meritage Homes of Colorado, Inc.
COR402750	Construction	Lendlease Horizon
COR403914	Construction	Richfield Homes LLC
COR406920	Construction	Shea Homes LP
COR403958	Construction	Richmond American Homes of Colorado Inc
COR402512	Construction	KB Home Colorado Inc
COR406496	Construction	BT Construction, Inc.
COR400541	Construction	BrightStar Redlands Mesa Investment LLC
COR400540	Construction	BrightStar Redlands Mesa Investment LLC
COR408945	Construction	WE O'Neil Construction Company of Colorado
COR408681	Construction	Eagle Development Co
COR408519	Construction	Saunders Construction, LLC
COR406518	Construction	Continental 464 Fund LLC
COR407064	Construction	Hartford Homes LLC
COR404079	Construction	Rocky Mountain Metro Airport
COR409623	Construction	Shaw Construction
COR408441	Construction	Mesa Properties
COR403237	Construction	Nash Inspiration LLC
COR407759	Construction	Campbell Homes LLC
COR410899	Construction	DHIC - Horizon Uptown, LLC
COR404124	Construction	Covington Homes LLC
COR401858	Construction	WINDSOR PLAINS LLC
COR405550	Construction	KB Home Colorado Inc
COR403004	Construction	McStain Constructors LLC
COR407767	Construction	AP Mountain States, LLC
COR409776	Construction	Baessler Homes
COR411177	Construction	Public Service Company of Colorado (PSCo)
COR405903	Construction	Baseline Metropolitan District
COR409214	Construction	Melody Homes, Inc
COR403918	Construction	Richfield Homes LLC
COR402670	Construction	Lakes at Centerra Metropolitan District 1
COR401047	Construction	Community Development Group - Morgan Hill, Inc
COR411221	Construction	Wonderland Homes
COR407769	Construction	Lennar Colorado, LLC
COR402785	Construction	Lennar Colorado LLC

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PermitID	Sector	Permittee
COR402429	Construction	Jetstream Developments II LLC
COR408557	Construction	Wonderland Homes
COR409228	Construction	Adamo Homes
COR403226	Construction	Nash Anthem LLC
COR410877	Construction	Tralon Homes, LLC
COR407281	Construction	Brinkman Construction
COR403982	Construction	Richmond American Homes of Colorado, Inc.
COR402793	Construction	Lennar Colorado LLC
COR403458	Construction	Park Land Company
COR402236	Construction	Horizon View Homes LLC
COR405297	Construction	Lennar Colorado LLC
COR409308	Construction	Heyl Construction
COR405160	Construction	HT Flatiron LP
COR400539	Construction	Brighton Crossing Residential LLC
COR409032	Construction	JB Homes LLC
COR405479	Construction	JB Homes LLC
COR410690	Construction	L&M Enterprises, Inc.
COR410083	Construction	ECI Site Construction Management, INC
COR408152	Construction	Town of Erie
COR407932	Construction	David Weekley Homes
COR407417	Construction	Brinkmann Constructors
COR403224	Construction	Nash Anthem LLC
COR404848	Construction	Vanguard Homes Inc
COR406478	Construction	Toll Southwest, LLC
COR409990	Construction	Toll Southwest, LLC
COR400845	Construction	Century Communities Inc
COR407245	Construction	American Legend Homes
COR411063	Construction	Vantage Homes Corp.
COR408146	Construction	DFH Mandarin LLC
COR408100	Construction	Hall Irwin Corporation
COR408228	Construction	Pyramid Construction, Inc.
COR411111	Construction	Forestar (USA) Real Estate Group Inc.
COR404847	Construction	Vanguard Homes, Inc.
COR409885	Construction	Taylor Morrison Colorado, Inc.
COR401920	Construction	Gold Hill Neighborhood LLC
COR402257	Construction	HT Canyons South Development LP
COR408334	Construction	Sage Design Build LLC
COR410433	Construction	Black Hills Energy
COR406696	Construction	Public Service Company of Colorado (PSCo)
COR402892	Construction	M.A. Mortenson Company
COR405510	Construction	Catamount Constructors Inc
COR408074	Construction	Gold Hill Neighborhood, LLC
COR401898	Construction	Glen Development Co
COR407860	Construction	Tri Pointe Homes, Inc.
COR407046	Construction	TRI Pointe Homes Inc

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PermitID	Sector	Permittee
COR403747	Construction	Public Service Co of Colorado
COR400251	Construction	Artesio Lot Holdings LLC dba American Legend Homes
COR411556	Construction	LGI Homes Colorado LLC
COR403355	Construction	Oakwood Homes LLC
COR405550	Construction	KB Home Colorado Inc
COR401879	Construction	Gilbert Contracting Inc
COR402750	Construction	Lendlease Horizon
COR408797	Construction	Oakwood Homes
COR410071	Construction	Fransen Pittman General Contractors
COR400476	Construction	Boedecker Lake Partners LLC
COR400852	Construction	Century Communities, Inc.
COR401209	Construction	Crystal Valley Recovery Acquisition LLC
COR410757	Construction	Oakwood Homes LLC
COR400882	Construction	Challenger Building LLC
COR411319	Construction	Public Service Company of Colorado
COR411445	Construction	City of Greeley
COR400631	Construction	C & C Land LLC
COR404117	Construction	Rocky Mountain Natural Gas LLC
COR400499	Construction	BC Rogers Farm LLC
COR401903	Construction	GLH Construction Inc
COR410411	Construction	Naranjo Civil Constructors Inc
COR409524	Construction	GLH Construction LLC
COR411329	Construction	SEEC Enterprises, LLC DBA Massimino Development
COR411139	Construction	Richmond American Homes of Colorado Inc.
COR410311	Construction	American Legend Homes
COR408945	Construction	WE O'Neil Construction Company of Colorado
COR405314	Construction	Brinkman Construction
COR410564	Construction	JKS INDUSTRIES, LLC
COR403790	Construction	Pure Cycle Corp
COR404272	Construction	Second Creek Development
COR402579	Construction	Kitchel Lake Partners LLC
COR403049	Construction	Meritage Homes of Colorado Inc
COR411177	Construction	Public Service Company of Colorado (PSCo)
COR407291	Construction	KB Home Colorado, Inc.
COR411011	Construction	ESCO Construction Co.
COR410143	Construction	Nash Anthem LLC
COR405516	Construction	Rago Enterprises, LLC
COR400559	Construction	Brinkman Construction Inc
COR408709	Construction	Pacific North Enterprises, LLC
COR408100	Construction	Hall Irwin Corporation
COR410225	Construction	JHL Constructors Inc
COR401673	Construction	Hines
COR402121	Construction	Hartford Construction LLC
COR410797	Construction	HYDER CONSTRUCTION INC.
COR409610	Construction	Fortenberry Construction

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PermitID	Sector	Permittee
COR404622	Construction	TEP Rocky Mountain LLC
COR410515	Construction	Murray & Stafford, Inc.
COR411477	Construction	Public Service Company of Colorado
COR403374	Construction	Oakwood Homes LLC
COR405484	Construction	BT Construction, Inc.
COR411764	Construction	Forestar (USA) Real Estate Group Inc.
COR403917	Construction	Richfield Homes LLC
COR410903	Construction	Baker Builders, LLC
COR401471	Construction	East Ridge Holding LLC
COR404458	Construction	St Vrain Lakes Metropolitan District 1
COR411101	Construction	TF Johnstown Farms, L.P.
COR410672	Construction	Melody Homes, Inc
COR403818	Construction	Raindance Land Company LLC
COR410359	Construction	Forestar (USA) Real Estate Group Inc
COR406149	Construction	Baessler Homes
COR402848	Construction	Lokal Homes LLC
COR406986	Construction	KB Home Colorado Inc
COR410781	Construction	Toll Southwest, LLC
COR401353	Construction	Development Management Inc
COR410528	Construction	Woelke Land Company LLC
COR411608	Construction	BNBuilders, Inc
COR408593	Construction	K.R. Swerdfeger Construction, Inc.
COR410441	Construction	Swinerton Builders
COR402750	Construction	Lendlease Horizon
COR408118	Construction	Tri Pointe Homes, Inc.
COR401206	Construction	Richmond American Homes of Colorado, Inc.
COR407004	Construction	Timbers Development Group
COR404673	Construction	Timbers Development Group
COR406512	Construction	Century Communities, Inc.
COR408074	Construction	Gold Hill Neighborhood, LLC
COR411770	Construction	Brightwater Cattle Company
COR405479	Construction	JB Homes LLC
COR403234	Construction	Nash Inspiration LLC
COR408677	Construction	Pinkard Construction Co.
COR403954	Construction	Richmond American Homes of Colorado Inc
COR400273	Construction	Aspen Ridge BuildCo
COR404338	Construction	Shea Homes LP
COR409028	Construction	WE O'Neil Construction Company of Colorado
COR411596	Construction	Richmond American Homes of Colorado, Inc.
COR402506	Construction	KB Home Colorado, Inc.
COR408747	Construction	Tralon Homes, LLC
COR408551	Construction	HEI Civil
COR410417	Construction	JM Weston Homes LLC
COR411371	Construction	Alliance Residential Realty
COR410377	Construction	VRD at Loveland, LLC

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PermitID	Sector	Permittee
COR411716	Construction	HEI Civil
COR403451	Construction	MA Mortenson Company
COR408573	Construction	Lennar Colorado LLC
COR404853	Construction	Vantage Homes Corp
COR400061	Construction	Velocity Metropolitan District No. 1
COR404851	Construction	Vantage Homes Corp
COR402752	Construction	Lennar Colorado LLC
COR402801	Construction	Lennar Colorado LLC
COR403918	Construction	Richfield Homes LLC
COR402850	Construction	Lokal Homes LLC
COR402239	Construction	Horizon View Homes LLC
COR401253	Construction	David Weekley Homes
COR401254	Construction	David Weekley Homes
COR410011	Construction	Tralon Homes, LLC
COR410137	Construction	LGI Homes Colorado LLC
COR400886	Construction	Challenger Communities LLC
COR404849	Construction	Vanguard Homes Inc
COR409470	Construction	Richmond American Homes
COR409004	Construction	Bridgewater Homes LLC
COR403958	Construction	Richmond American Homes of Colorado Inc
COR400938	Construction	Clayton Properties Group II
COR411231	Construction	Melody Homes
COR410463	Construction	Integrity Homes LLC
COR407814	Construction	ECI Site Construction Management INC
COR409840	Construction	Century Communities, Inc.
COR410560	Construction	RAINDANCE AQUATIC INVESTMENTS, LLC
COR400848	Construction	Century Communities Inc
COR411671	Construction	Greenways Investments, LLC
COR404177	Construction	Tralon Homes, LLC
COR402033	Construction	Great Western Operating Co LLC
COR400844	Construction	Century Communities Inc
COR410100	Construction	JHL Constructors, Inc.
COR410775	Construction	Buildings By Design
COR407908	Construction	JKL Associates, LLC
COR400880	Construction	Challenger Building LLC
COR406803	Construction	DFH Mandarin LLC
COR405669	Construction	Ridgeline Homes, LLC
COR411363	Construction	Saunders Construction, LLC
COR402121	Construction	Hartford Construction LLC
COR409244	Construction	Richmond American Homes of Colorado, Inc.
COR402236	Construction	Horizon View Homes LLC
COR404125	Construction	ROS Equity Holding
COR410401	Construction	Western States Reclamation
COR404346	Construction	Shea Properties LLC
COR410117	Construction	K & D Construction, Inc.

Appendix B - Permit Modifications

PermitID	Sector	Permittee
COR404415	Construction	South Beebe Draw Metro Dist
COR408751	Construction	Richfield Homes, LLC
COR403966	Construction	Richmond American Homes of Colorado Inc
COR408821	Construction	Homes by Creekstone Builders, LLC
COR402670	Construction	Lakes at Centerra Metropolitan District 1
COR402511	Construction	KB Home Colorado Inc
COR404623	Construction	TEP Rocky Mountain LLC
COR404622	Construction	TEP Rocky Mountain LLC
COR404624	Construction	TEP Rocky Mountain LLC
COR404625	Construction	TEP Rocky Mountain LLC
COR404628	Construction	TEP Rocky Mountain LLC
COR404626	Construction	TEP Rocky Mountain LLC
COR404627	Construction	TEP Rocky Mountain LLC
COR401471	Construction	East Ridge Holding LLC
COR411608	Construction	BNBuilders, Inc
COR407932	Construction	David Weekley Homes
COR408781	Construction	Scott Contracting, Inc.
COR400938	Construction	Clayton Properties Group II
COR403166	Construction	MREC Oakwood Colorado Ranch LLC
COR407892	Construction	Raindance Land Company, LLC
COR407088	Construction	Infinity Communities, Inc.
COR411532	Construction	HEI Civil
COR407571	Construction	Lennar Colorado LLC
COR405945	Construction	Prosper Land and Development
COR412130	Construction	Coyote Ridge Construction, LLC
COR405500	Construction	Melody Homes, INC
COR402163	Construction	Heritage Ridge Metropolitan District
COR410574	Construction	American Legend Homes
COR403375	Construction	Oakwood Homes
COR412334	Construction	Promontory Investments, LLC
COR410051	Construction	Pulpit Rock Investments LLC
COR405903	Construction	Baseline Metropolitan District
COR406019	Construction	Lennar Colorado LLC
COR409970	Construction	Melody Homes, Inc
COR403025	Construction	Melody Homes Inc
COR410672	Construction	Melody Homes, Inc
COR402780	Construction	Lennar Colorado LLC
COR410495	Construction	Crow Creek Construction
COR412334	Construction	Promontory Investments, LLC
COR411590	Construction	Elite Properties of America, Inc.
COR408074	Construction	Gold Hill Neighborhood, LLC
COR402053	Construction	GRVP LLC
COR405341	Construction	Bella Partners, LLC
COR411532	Construction	HEI Civil
COR403960	Construction	Richmond American Homes of Colorado, Inc.

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PermitID	Sector	Permittee
COR411500	Construction	Milender White Construction Company
COR411177	Construction	Public Service Company of Colorado (PSCo)
COR410560	Construction	RAINDANCE AQUATIC INVESTMENTS, LLC
COR401920	Construction	Gold Hill Neighborhood LLC
COR405479	Construction	JB Homes LLC
COR409032	Construction	JB Homes LLC
COR408433	Construction	LGI Homes Colorado LLC
COR412419	Construction	Meritage Homes of Colorado Inc.
COR410054	Construction	Becknell Services LLC
COR405197	Construction	Lokal Homes LLC
COR404367	Construction	Silverpick Contracting
COR408943	Construction	David Weekley Homes
COR404332	Construction	Shaw Ltd
COR408441	Construction	Mesa Properties
COR409748	Construction	Milender White Construction Co.
COR402505	Construction	KB Home Colorado Inc
COR411504	Construction	LGI Homes Colorado LLC
COR410871	Construction	David Weekley Homes
COR408709	Construction	Pacific North Enterprises, LLC
COR410193	Construction	Homestead North, LLC
COR401253	Construction	David Weekley Homes
COR411179	Construction	Kraemer North America, LLC
COR407767	Construction	AP Mountain States, LLC
COR410165	Construction	Challenger Building, LLC
COR410941	Construction	THB Baseline LLC
COR408727	Construction	Challenger Communities LLC
COR410712	Construction	THB SF LLC
COR403950	Construction	Richmond American Homes of Colorado, Inc.
COR409645	Construction	SR Severance Investments, LLC
COR400853	Construction	Century Communities Inc
COR410801	Construction	Kinston Metropolitan District No 1
COR410297	Construction	Oakwood Homes LLC
COR411269	Construction	Pulte Home Company, LLC
COR407447	Construction	Redlands Mesa Holdings, LLC
COR409932	Construction	HEI Civil
COR410137	Construction	LGI Homes Colorado LLC
COR412544	Construction	David Weekley Homes
COR410205	Construction	Public Service Company of Colorado
COR410560	Construction	RAINDANCE AQUATIC INVESTMENTS, LLC
COR401254	Construction	David Weekley Homes
COR410369	Construction	Elite Properties of America, Inc.
COR411776	Construction	Kramer North America
COR409520	Construction	Richmond American Homes of Colorado Inc.
COR411556	Construction	LGI Homes Colorado LLC
COR405515	Construction	Rago Enterprises, LLC

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PermitID	Sector	Permittee
COR412632	Construction	GLH Construction, LLC
COR403402	Construction	Opus Design Build LLC
COR403786	Construction	Pulpit Rock Investments LLC
COR407559	Construction	Challenger Communities LLC
COR400961	Construction	Cola LLC
COR408895	Construction	Pinkard Construction Co
COR407621	Construction	AP Mountain States, LLC
COR409885	Construction	Taylor Morrison Colorado, Inc.
COR402257	Construction	HT Canyons South Development LP
COR412268	Construction	Melody Homes
COR410225	Construction	JHL Constructors Inc
COR411071	Construction	ECI Site Construction Management, Inc.
COR407180	Construction	Central Connection, LLC
COR404991	Construction	Western Equipment and Truck Inc
COR408781	Construction	Scott Contracting, Inc.
COR408725	Construction	Challenger Communities LLC
COR410102	Construction	Crow Creek Construction, LLC
COR410451	Construction	BT Construction, Inc.
COR410674	Construction	Melody Homes, Inc.
COR407611	Construction	Vantage Homes Corp
COR407968	Construction	Forestar (USA) Real Estate Group Inc
COR404847	Construction	Vanguard Homes, Inc.
COR411986	Construction	Gerrard Excavating, Inc.
COR410610	Construction	Covington Homes
COR404006	Construction	Ridgeline Homes LLC
COR411840	Construction	KB Home Colorado Inc
COR406003	Construction	Colorado Land Acquisition
COR412461	Construction	GLH Construction LLC
COR412419	Construction	Meritage Homes of Colorado Inc.
COR405319	Construction	Oakwood Homes LLC
COR409428	Construction	Waterfall Canyon, LLC
COR403953	Construction	Richmond American Homes of Colorado Inc
COR409348	Construction	Tralon Homes, LLC
COR409978	Construction	Cimarron Creek Properties II, LLC
COR409744	Construction	Bear Creek Land & Development, LLC
COR410391	Construction	Evergreen Devco Inc
COR409706	Construction	Vantage Homes Corp.
COR411471	Construction	Tezak Heavy Equipment Inc
COR410323	Construction	Copper Creek Builders, LLC
COR409522	Construction	Richmond American Homes
COR408100	Construction	Hall Irwin Corporation
COR404338	Construction	Shea Homes LP
COR404704	Construction	Toll Southwest LLC
COR408429	Construction	Horizon View Homes LLC
COR402164	Construction	Heron Lakes Investments LLC

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PermitID	Sector	Permittee
COR406256	Construction	Brinkman Construction
COR411305	Construction	Bemas Construction
COR409883	Construction	BT Construction, Inc.
COR407387	Construction	Paulscorp - Strasburg Residential
COR403818	Construction	Raindance Land Company LLC
COR405847	Construction	Wonderland Homes
COR406003	Construction	Colorado Land Acquisition
COR404172	Construction	Tralon Homes, LLC
COR411506	Construction	Elam Construction
COR407501	Construction	McKinney Classic 3 LLC
COR411125	Construction	North Canyons Development Company
COR401578	Construction	Epic Homes
COR409460	Construction	Tralon Homes, LLC.
COR409520	Construction	Richmond American Homes of Colorado Inc.
COR408781	Construction	Scott Contracting, Inc.
COR412244	Construction	M.A. Mortenson Company
COR410401	Construction	Western States Reclamation
COR401862	Construction	GGC LLC
COR400884	Construction	Challenger Communities LLC
COR410596	Construction	Golden Triangle Construction
COR411693	Construction	Golden Triangle Construction
COR404354	Construction	Sheridan Station Transit Village LLC
COR403104	Construction	MMC Two LLC
COR404848	Construction	Vanguard Homes Inc
COR411439	Construction	Centerra Metropolitan District No 1
COR409625	Construction	Lennar Colorado LLC
COR410051	Construction	Pulpit Rock Investments LLC
COR402239	Construction	Horizon View Homes LLC
COR401254	Construction	David Weekley Homes
COR407184	Construction	Hargrave Construction Inc.
COR412847	Construction	W.E. O'Neil Construction Company of Colorado
COR402164	Construction	Heron Lakes Investments LLC
COR409522	Construction	Richmond American Homes
COR403965	Construction	Richmond American Homes of Colorado Inc
COR404651	Construction	Brinkmann Constructors
COR406478	Construction	Toll Southwest, LLC
COR409582	Construction	KB Home Colorado Inc.
COR408657	Construction	Staack Developers Inc.
COR411968	Construction	RangeWater Real Estate
COR410781	Construction	Toll Southwest, LLC
COR403243	Construction	Native Excavating Inc
COR409244	Construction	Richmond American Homes of Colorado, Inc.
COR403607	Construction	Interquest Westside LLC
COR407862	Construction	Toll Southwest LLC
COR410523	Construction	Forestar (USA) Real Estate Group Inc.

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PermitID	Sector	Permittee
COR400938	Construction	Clayton Properties Group II
COR412931	Construction	Forestar (USA) Real Estate Group Inc.
COR412696	Construction	Thompson Thrift Construction
COR412150	Construction	McStain Constructors LLC
COR404308	Construction	SH of Colorado Inc
COR403757	Construction	Public Service Co of Colorado
COR404613	Construction	Tech Contractors
COR409004	Construction	Bridgewater Homes LLC
COR407064	Construction	Hartford Homes LLC
COR410075	Construction	McCarthy Building Companies
COR405479	Construction	JB Homes LLC
COR403374	Construction	Oakwood Homes LLC
COR405760	Construction	Richmond American Homes of Colorado, Inc.
COR412349	Construction	Saunders Construction, LLC
COR402121	Construction	Hartford Construction LLC
COR409908	Construction	Howell Construction
COR413019	Construction	GH Phipps Construction Companies
COR409932	Construction	HEI Civil
COR412028	Construction	Castle Rock Construction Company of Colorado, LLC
COR405945	Construction	Prosper Land and Development
COR409294	Construction	AP Mountain States, LLC
COR403030	Construction	Melody Homes Inc
COR404354	Construction	Sheridan Station Transit Village LLC
COR412502	Construction	Hamon Infrastructure Inc.
COR411439	Construction	Centerra Metropolitan District No 1
COR411716	Construction	HEI Civil
COR401353	Construction	Development Management Inc
COR411113	Construction	Pinecrest Townhomes, LLC
COR408723	Construction	Tri Pointe Homes, Inc
COR405841	Construction	Woodbury Corporation
COR401457	Construction	Eagle Development Co
COR410159	Construction	Tralon Homes, LLC
COR406736	Construction	Eagle Development Company
COR404674	Construction	Timnath Ranch LLC
COR406920	Construction	Shea Homes LP
COR405849	Construction	Wonderland Homes
COR412849	Construction	Bryan Construction, Inc.
COR409792	Construction	Melody Homes, Inc
COR402053	Construction	GRVP LLC
COR401254	Construction	David Weekley Homes
COR411479	Construction	Public Service Company of Colorado
COR413281	Construction	VORTEX ENGINEERING & Architecture, INC
COR410813	Construction	Meritage Homes of Colorado, Inc.
COR400882	Construction	Challenger Building LLC
COR401471	Construction	East Ridge Holding LLC

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PermitID	Sector	Permittee
COR407868	Construction	Oakwood Homes, LLC
COR401168	Construction	Craft Bandera Acquisition Company LLC
COR403747	Construction	Public Service Co of Colorado
COR408074	Construction	Gold Hill Neighborhood, LLC
COR404367	Construction	Silverpick Contracting
COR410941	Construction	THB Baseline LLC
COR411596	Construction	Richmond American Homes of Colorado, Inc.
COR407088	Construction	Infinity Communities, Inc.
COR410562	Construction	Infinity Communities
COR410620	Construction	Public Service Company of Colorado
COR402236	Construction	Horizon View Homes LLC
COR412764	Construction	Public Service Company of Colorado (PSCo)
COR412847	Construction	W.E. O'Neil Construction Company of Colorado
COR403325	Construction	Barnard Construction Company Inc.
COR404615	Construction	Tectonic Management Group Inc
COR405056	Construction	Winds of the Spirit LLC
COR409970	Construction	Melody Homes, Inc
COR404847	Construction	Vanguard Homes, Inc.
COR401168	Construction	Craft Bandera Acquisition Company LLC
COR406149	Construction	Baessler Homes
COR407932	Construction	David Weekley Homes
COR411764	Construction	Forestar (USA) Real Estate Group Inc.
COR413421	Construction	Forestar (USA) Real Estate Group Inc.
COR413175	Construction	Catamount Constructors Inc.
COR403137	Construction	Chatfield Reservoir Mitigation Company. Inc.
COR404853	Construction	Vantage Homes Corp
COR402033	Construction	Great Western Operating Co LLC
COR413263	Construction	ECI Site Construction Management INC
COR410753	Construction	KB Home Colorado Inc
COR411840	Construction	KB Home Colorado Inc
COR412214	Construction	DFH Mandarin, LLC
COR413483	Construction	Garney Companies, Inc
COR410712	Construction	THB SF LLC
COR411671	Construction	Greenways Investments, LLC
COR406117	Construction	Richmond American Homes of Colorado Inc.
COR410369	Construction	Elite Properties of America, Inc.
COR408781	Construction	Scott Contracting, Inc.
COR407064	Construction	Hartford Homes LLC
COR408779	Construction	Scott Contracting, Inc.
COR404177	Construction	Tralon Homes, LLC
COR403818	Construction	Raindance Land Company LLC
COR404179	Construction	Tralon Homes, LLC
COR407176	Construction	Tralon Homes, LLC
COR408747	Construction	Tralon Homes, LLC
COR409460	Construction	Tralon Homes, LLC.

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PermitID	Sector	Permittee
COR413585	Construction	OTB Supply Inc.
COR403014	Construction	Melody Homes
COR409596	Construction	Hall-Irwin Corporation
COR413691	Construction	Crow Creek Construction, LLC
COR409885	Construction	Taylor Morrison Colorado, Inc.
COR407769	Construction	Lennar Colorado, LLC
COR400559	Construction	Brinkman Construction Inc
COR410674	Construction	Melody Homes, Inc.
COR409572	Construction	Winsome LLC
COR402799	Construction	Lennar Colorado LLC
COR406161	Construction	Ames Construction
COR405146	Construction	Water Valley Land Company
COR412443	Construction	Aurora Crossroads Metro District #1
COR411856	Construction	SH Lyric, LLC
COR412373	Construction	Toll Southwest, LLC
COR412345	Construction	Murray & Stafford, Inc.
COR410171	Construction	Tralon Homes, LLC
COR404170	Construction	Tralon Homes, LLC
COR404172	Construction	Tralon Homes, LLC
COR405221	Construction	Tralon Homes, LLC
COR413427	Construction	M.A. Mortenson Company
COR405222	Construction	Tralon Homes, LLC
COR408389	Construction	Tralon Homes, LLC
COR409348	Construction	Tralon Homes, LLC
COR410011	Construction	Tralon Homes, LLC
COR410745	Construction	Tralon Homes, LLC
COR402541	Construction	Kerr McGee Oil and Gas Onshore LP
COR402542	Construction	Kerr McGee Oil and Gas Onshore LP
COR402543	Construction	Kerr McGee Oil and Gas Onshore LP
COR410877	Construction	Tralon Homes, LLC
COR411522	Construction	Tralon Homes, LLC
COR400413	Construction	Berthoud Homes LLC
COR408751	Construction	Richfield Homes, LLC
COR413227	Construction	Senegy Builders
COR407868	Construction	Oakwood Homes, LLC
COR402562	Construction	Kiewit Infrastructure Co
COR409478	Construction	Habitat Management, Inc.
COR403237	Construction	Nash Inspiration LLC
COR410102	Construction	Crow Creek Construction, LLC
COR402238	Construction	Horizon View Homes LLC
COR412933	Construction	GLH Construction LLC
COR412766	Construction	Public Service Company of Colorado (PSCo)
COR406518	Construction	Continental 464 Fund LLC
COR410051	Construction	Pulpit Rock Investments LLC
COR411177	Construction	Public Service Company of Colorado (PSCo)

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PermitID	Sector	Permittee
COR411038	Construction	Hanover R.S. Construction LLC
COR409776	Construction	Baessler Homes
COR410159	Construction	Tralon Homes, LLC
COR408286	Construction	Oakwood Homes LLC
COR411409	Construction	Lennar Colorado LLC
COR410102	Construction	Crow Creek Construction, LLC
COR400044	Construction	610 RLLLP
COR405486	Construction	Dream Finders Homes, LLC
COR403840	Construction	RCD Partners LLC
COR413050	Construction	Hines
COR409460	Construction	Tralon Homes, LLC.
COR408052	Construction	Connell Resources, Inc.
COR405945	Construction	Prosper Land and Development
COR402756	Construction	Lennar Colorado LLC
COR410915	Construction	Mountain Valley Contracting
COR411349	Construction	Byers Peak Properties, LLC
COR400646	Construction	Caerus Piceance LLC
COR413579	Construction	Ford Construction Company, Inc.
COR402632	Construction	KUH Boulevard One LLC
COR404367	Construction	Silverpick Contracting
COR412032	Construction	Castle Rock Construction Company of Colorado, LLC
COR402670	Construction	Lakes at Centerra Metropolitan District 1
COR402022	Construction	Granite Falls GJ LLC
COR408573	Construction	Lennar Colorado LLC
COR403572	Construction	Platte River Midstream Inc
COR405667	Construction	Ridgeline Homes, LLC
COR413205	Construction	Tralon Homes, LLC
COR406684	Construction	Baxter Construction
COR406920	Construction	Shea Homes LP
COR412373	Construction	Toll Southwest, LLC
COR401253	Construction	David Weekley Homes
COR402121	Construction	Hartford Construction LLC
COR406272	Construction	KB Home Colorado, Inc.
COR410102	Construction	Crow Creek Construction, LLC
COR413327	Construction	Tralon Homes, LLC
COR411441	Construction	Garney Construction
COR412512	Construction	Saunders Heath
COR407421	Construction	MW Residential Colo LLC
COR406478	Construction	Toll Southwest, LLC
COR400938	Construction	Clayton Properties Group II
COR413691	Construction	Crow Creek Construction, LLC
COR401257	Construction	David Weekley Homes
COR410051	Construction	Pulpit Rock Investments LLC
COR408074	Construction	Gold Hill Neighborhood, LLC
COR404847	Construction	Vanguard Homes, Inc.

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PermitID	Sector	Permittee
COR412636	Construction	Shaw Builders LLC
COR412990	Construction	Forestar (USA) Real Estate Group Inc.
COR409036	Construction	CDOT
COR413351	Construction	American Legend Homes
COR401858	Construction	WINDSOR PLAINS LLC
COR411389	Construction	Elite Sanctuary Development, LLC
COR411387	Construction	Elite Sanctuary Development, LLC
COR404648	Construction	THB Superior MF LLC
COR401471	Construction	East Ridge Holding LLC
COR400434	Construction	Bison Oil and Gas LLC
COR414049	Construction	Marketplace Interquest, LLC
COR412780	Construction	Crosslands Construction
COR413559	Construction	Toll Southwest, LLC
COR401765	Construction	Front Range Investment Holdings LLC
COR411111	Construction	Forestar (USA) Real Estate Group Inc.
COR409582	Construction	KB Home Colorado Inc.
COR411876	Construction	Connell Resources, Inc.
COR403953	Construction	Richmond American Homes of Colorado Inc
COR401673	Construction	Hines
COR411147	Construction	Bridgewater Homes, LLC
COR410137	Construction	LGI Homes Colorado LLC
COR403238	Construction	Nash Inspiration LLC
COR413691	Construction	Crow Creek Construction, LLC
COR413982	Construction	Betts Lake, LLC
COR405347	Construction	Grand Park Development
COR411671	Construction	Greenways Investments, LLC
COR414064	Construction	Tralon Homes LLC
COR402085	Construction	Hall Irwin Corporation
COR402164	Construction	Heron Lakes Investments LLC
COR404851	Construction	Vantage Homes Corp
COR405847	Construction	Wonderland Homes
CO0021440	Public and private utilities	Fort Lupton City of
CO0021571	Public and private utilities	Fowler Town of
CO0024171	Public and private utilities	Westminster City of
CO0031984	Public and private utilities	Cedaredge Town of
CO0027171	Public and private utilities	Mount Crested Butte Water and Sanitation Dist
CO0032115	Commerce and industry	Trapper Mining Inc
CO0042480	Commerce and industry	CBS Operations Inc
CO0046451	Public and private utilities	Wellington Town of
CO0045161	Commerce and industry	Colowyo Coal Co LP
CO0047651	Public and private utilities	Boulder County
CO0044971	Public and private utilities	Circle C Ranch King LLC

Appendix C Permit backlog detail

Permit backlog information used to generate figures in 2022 HB17-1285 report.

Appendix C Additional Metrics Information

Table C-1 Summary of backlogged permits by permit type

Permit Type	No. of backlogged permits	No. of current permits	Total	Percent of backlogged permits
Groundwater Process Water Individual Permits				
Backlogged permits as of Sept. 30, 2017	15	4	19	79%
Backlogged permits as of Sept. 30, 2018	13	5	18	72%
Backlogged permits as of Sept. 30, 2019	14	3	17	82%
Backlogged permits as of Sept. 30, 2020	11	1	12	92%
Backlogged permits as of Sept. 30, 2021	9	1	10	90%
Groundwater Process Water General Permits				
Backlogged permits as of Sept. 30, 2017	135	0	135	100%
Backlogged permits as of Sept. 30, 2018	129	7	136	95%
Backlogged permits as of Sept. 30, 2019	88	45	133	66%
Backlogged permits as of Sept. 30, 2020	54	80	134	40%
Backlogged permits as of Sept. 30, 2021	40	80	120	33%
Pesticides Application General Permit				
Backlogged permits as of Sept. 30, 2017	0	73	73	0%
Backlogged permits as of Sept. 30, 2018	0	75	75	0%
Backlogged permits as of Sept. 30, 2019	0	76	76	0%
Backlogged permits as of Sept. 30, 2020	0	79	79	0%
Backlogged permits as of Sept. 30, 2021	0	78	78	0%
Surface Water Stormwater Individual Permits				
Backlogged permits as of Sept. 30, 2017	5	2	7	71%
Backlogged permits as of Sept. 30, 2018	6	1	7	86%
Backlogged permits as of Sept. 30, 2019	6	1	7	86%
Backlogged permits as of Sept. 30, 2020	6	1	7	86%
Backlogged permits as of Sept. 30, 2021	5	2	7	71%
Surface Water Individual Permits				

Backlogged permits as of Sept. 30, 2017	123	245	368	33%
Backlogged permits as of Sept. 30, 2018	138	242	380	36%
Backlogged permits as of Sept. 30, 2019	145	238	383	38%
Backlogged permits as of Sept. 30, 2020	163	219	382	43%
Backlogged permits as of Sept. 30, 2021	239	136	375	64%
Surface Water Process Water General Permits				
Backlogged permits as of Sept. 30, 2017	296	1,163	1,459	20%
Backlogged permits as of Sept. 30, 2018	291	1,091	1,382	21%
Backlogged permits as of Sept. 30, 2019	855	654	1,509	57%
Backlogged permits as of Sept. 30, 2020	714	624	1338	53%
Backlogged permits as of Sept. 30, 2021	496	924	1420	35%
Surface Water Stormwater General Permits				
Backlogged permits as of Sept. 30, 2017	4,659	884	5,543	84%
Backlogged permits as of Sept. 30, 2018	5,792	61	5,843	99%
Backlogged permits as of Sept. 30, 2019	1,068	5,206	6,274	17%
Backlogged permits as of Sept. 30, 2020	1,064	5,425	6,489	16%
Backlogged permits as of Sept. 30, 2021	1,056	6,085	7,141	15%
Total				
Backlogged permits as of Sept. 30, 2017	5,233	2,371	7,604	69%
Backlogged permits as of Sept. 30, 2018	6,369	1,482	7,851	81%
Backlogged permits as of Sept. 30, 2019	2,176	6,223	8,399	26%
Backlogged permits as of Sept. 30, 2020	2,012	6,429	8,441	24%
Backlogged permits as of Sept. 30, 2021	1,845	7,306	9,151	20%

Table C-2 Summary of backlogged permits by sector

Permit Type	No. of backlogged permits	No. of current permits	Total	Percent of backlogged permits
Commerce and Industry				
Backlogged permits as of Sept. 30, 2017	288	1,594	1,882	15%
Backlogged permits as of Sept. 30, 2018	1,164	763	1,927	60%
Backlogged permits as of Sept. 30, 2019	1,300	681	1,981	66%
Backlogged permits as of Sept. 30, 2020	1,279	664	1,943	66%
Backlogged permits as of Sept. 30, 2021	1214	633	1,847	66%
Construction				
Backlogged permits as of Sept. 30, 2017	4,572	312	4,884	94%
Backlogged permits as of Sept. 30, 2018	4,832	257	5,089	95%
Backlogged permits as of Sept. 30, 2019	391	5,191	5,582	7%
Backlogged permits as of Sept. 30, 2020	262	5,490	5,752	5%
Backlogged permits as of Sept. 30, 2021	121	6,353	6,474	2%
Municipal Separate Storm Sewer System				
Backlogged permits as of Sept. 30, 2017	65	59	124	52%
Backlogged permits as of Sept. 30, 2018	65	60	125	52%
Backlogged permits as of Sept. 30, 2019	65	60	125	52%
Backlogged permits as of Sept. 30, 2020	66	60	126	52%
Backlogged permits as of Sept. 30, 2021	59	64	123	52%
Pesticides				
Backlogged permits as of Sept. 30, 2017	0	73	73	0%
Backlogged permits as of Sept. 30, 2018	0	75	75	0%
Backlogged permits as of Sept. 30, 2019	0	76	76	0%
Backlogged permits as of Sept. 30, 2020	0	79	79	0%
Backlogged permits as of Sept. 30, 2021	0	78	78	0%
Public and Private Utilities				
Backlogged permits as of Sept. 30, 2017	308	333	641	48%
Backlogged permits as of Sept. 30, 2018	310	325	635	49%

Backlogged permits as of Sept. 30, 2019	420	215	635	66%
Backlogged permits as of Sept. 30, 2020	405	233	638	63%
Backlogged permits as of Sept. 30, 2021	451	178	629	72%
Total				
Backlogged permits as of Sept. 30, 2017	5,233	2,371	7,604	69%
Backlogged permits as of Sept. 30, 2018	6,369	1,482	7,851	81%
Backlogged permits as of Sept. 30, 2019	2,176	6,223	8,399	26%
Backlogged permits as of Sept. 30, 2020	2,012	6,429	8,441	24%
Backlogged permits as of Sept. 30, 2021	1,845	7,306	9,151	20%