HB17-1285

REFINANCE WATER POLLUTION CONTROL PROGRAM ACT

ANNUAL REPORT

TO THE LEGISLATURE

2020

MARCH 2020

CDPHE

Foreword

I am pleased to submit the HB17-1285 - Refinance Water Pollution Control Program Act for the report period coinciding with federal fiscal year 18-19 (10/2018-9/2019). The legislation has specific requirements for the annual report including:

- 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. Outreach regarding this year's report is planned for May 2020.

The annual report is provided to the following committees:

- Senate Agriculture & Natural Resources Committee.
- House of Representatives Energy & Environment Committee.
- House of Representatives Rural Affairs & Agriculture Committee.

Patrick Pfaltzgraff, Director
Water Quality Control Division
Colorado Dept. of Public Health and Environment
March 31,2020

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Executive Summary

The Colorado Department of Public Health and Envrionment's Water Quality Control 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.

During the baseline or 10/2016-9/2017 reporting year, the program began to restore staffing levels based on funding provided by HB17-1285. Staffing levels have been restored and the program is experiencing historical levels of attrition. It was anticipated that for reporting year 10/2017-9/2018, production levels would be similar to the baseline year (10/2016-9/2017) and that some areas of the program would see modest gains in production. The table below summarizes how all reporting years compared to the baseline year for HB17-1285 reporting requirements. During the 10/2017-9/2018 reporting year, staff were added to the Permits Section, which is consistent with the legislative intent of HB17-1285. The increase in permit staff has resulted in an increase in permit production and improvement in permit timeliness. Production levels for the remaining reporting categories were similar to the baseline year's production levels as anticipated.

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

Reporting requirements	10/2017-9/2018 compared to baseline year	10/2018-9/2019 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."

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 waters of the state. For this reporting year there was an increase in permit production and timeliness compared to the baseline year.

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 Control Act requirements. The number of inspections completed has been consistent throughout all reportng years. Due to funding constraints, the number of inspections completed for the Clean Water Program sectors for commerce and industry and municipal separate storm sewers did not meet Environmental Protection Agency national targets.

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 Program 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 2017-18 and for the first two quarters of state fiscal year 2018-19. Program finances are on track with the spending plan that was established with the passage of HB17-1285.

Recommendations: For the next reporting year, the program will continue to explore ways to improve permit production and timeliness and also begin to discuss with stakeholders potential funding mechanisms for increasing field inspections for the commerce and industry and municipal separate storm sewer system sectors.

Overview of Clean Water Program

The Colorado Department of Public Health and Environment's (department) Water Quality Control Division (division) and its 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 the discharge of pollutants to state waters for more than 7,000 entities. 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 Environmental Protection Agency (EPA) databases.

Goal setting: The program develops and presents scientific evidence to the department's 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 noncompliance 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 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 trainings. 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

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.

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. The program has completed hiring from HB17-1285 and staffing levels for the 10/2018-9/2019 reporting year include vacancies due to attrition that is commensurate with historic rates at the division. 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
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
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

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

Reporting year	Enforcement	Engineering	Inspections	Permits	Standards	Total
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
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
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

Clean Water 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 2018-19 and for the first two quarters of state fiscal year 2019-20. For state fiscal year 2018-19, the program spent less than its budget. For 2019-20, the program is on target to spend its budget. For the first few years after HB17-1285's passage, revenue was anticipated to exceed expenditures, as the fee increases included in the bill were intended to fund the program for five years. Since expenditures would be less than revenue, the program would need to spend down cash reserves developed during the first few years after the bill was passed.

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 for 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.

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 including:

- 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. There were no changes between reporting years for any of the classified uses.

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

Classified Use	Number of Colorado criteria that are the same as EPA criteria	Number of Colorado Criteria that are more stringent than EPA criteria	Number of Colorado criteria that are less stringent 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
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
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
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

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

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

Aquatic life

For aquatic life, Table 2 shows that Colorado has four criteria more stringent than EPA criteria. For three of the four 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. With respect to the fourth, the commission adopted cadmium aquatic life criteria consistent with EPA's criteria December 2019 and this will be reflected in next year's report.

Table 2 shows that Colorado has eight aquatic life criteria less stringent than EPA's 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 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 aluminium, zinc, or acrolein.

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 these compounds. However, 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, and regulated entities are not facing compliance issues with these criteria.

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 2020 to revise the criteria to be consistent with EPA's criteria.

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 commision 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

	Temporary Modifications		Variances	Site-Specific Standards	
Basin	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
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

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

Basin	Temporary Modifications		Variances	Site-Specific Standards	
	Non-Arsenic Temporary Modifications	Arsenic Temporary Modifications	Variances	Temperature Site-Specific Standards	Non-Temperature Site-Specific Standards
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
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
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
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
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
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

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 10/2018-9/2019 reporting year, 38 percent of stream segments have temporary modifications, less than one percent have variances, and 23 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
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
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
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
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

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

Basin	No. of Segments	Temporary Modifications	Variances	Site-Specific Standards
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
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
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

Upcoming standards rulemakings

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

- April 2020 - Basic and site-specific standards for groundwater (Regulation Nos. 41 and 42) and organic chemicals standards for surface water and groundwater (regulation Nos. 31 and 41) triennial review rulemaking hearing. The focus of this hearing will be for the commission to consider updated values for certain organic chemicals, revisions to the criteria used by the division to determine points of compliance for groundwater permits, the establishment of additional specified areas for groundwater, and other minor housekeeping revisions.
- June 2020 - South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin (Regulation Nos. 38) triennial review rulemaking hearing. The focus of this hearing will be the routine triennial review of 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.
- October 2020 - Nutrients Management Control Regulation (Regulation Nos. 85) triennial review rulemaking hearing. The focus of this hearing will be the routine triennial review of this statewide control regulation.
- Basic Standards and Methodologies for Surface Water (Regulation No. 31) - The focus of this hearing will be the routine triennial review of antidegradation designations, use classifications, and standards statewide.
    - Issues formulation hearing - November 2020.
    - Rulemaking hearing - June 2021
- December 2020 - Temporary modifications rulemaking hearing. This is an annual rulemaking hearing to review temporary modifications set to expire in the next two years. Site-specific standard considerations

and variance review will also occur on a limited basis, including discharger specific variances developed by the division in conjunction with facilities operating small lagoon facilities throughout the state.

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's 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 pemrit. 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 permits terms and conditions. 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 the number of individual permits that were issued/reissued increased more than three-fold when compared to the baseline year. Figure 3 shows that the total number of general permit certifications that were issued/reissued has increased significantly. The construction general permit was renewed during the reporting year and all of the certifications for were reissued. The number of certifications for this sector is anticipated to decrease in future reporting years.

Figure 2 Number of individual permits issued/reissued by sector

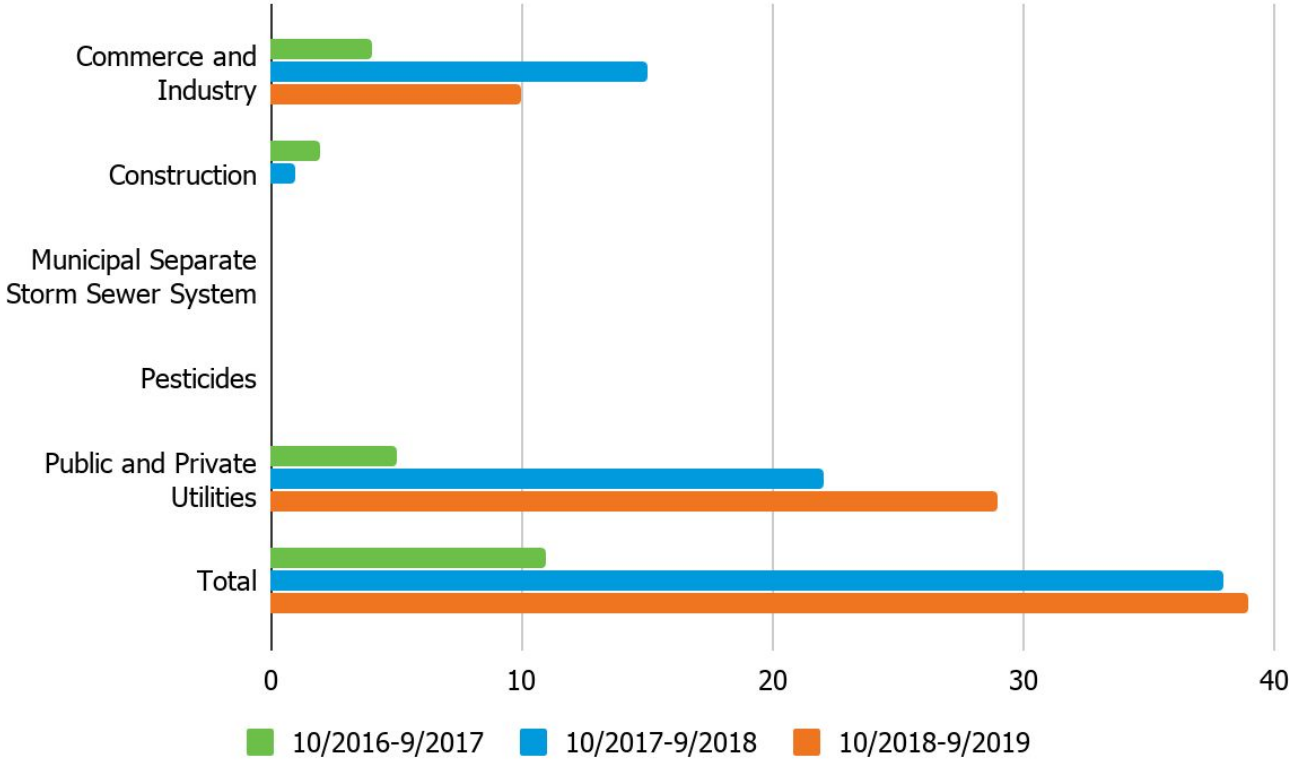
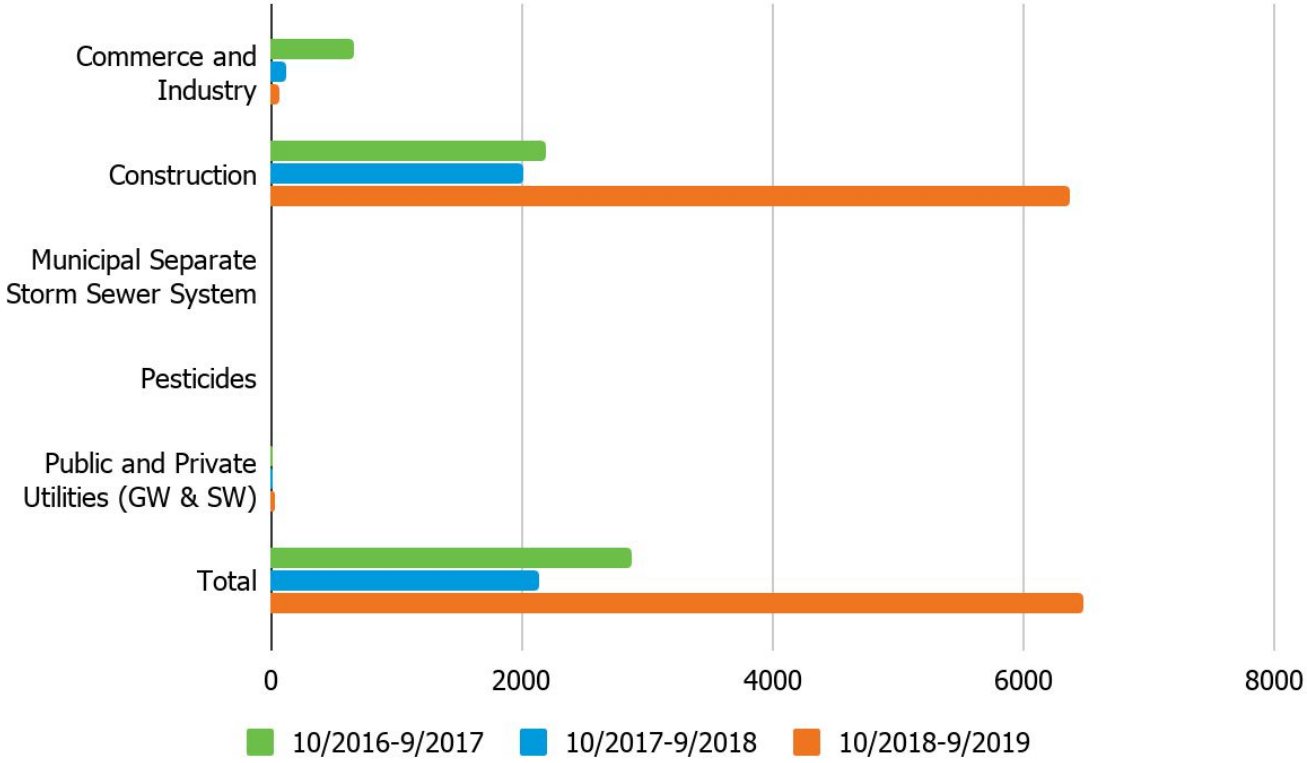


Figure 3 Number of issued/reissued general permit certifications by sector



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. Figures 4 shows there has been an overall downward trend of individual permit modifications. 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 in a change in program practices. Figure 5 demonstrates that the number of general permit certification modifications has been similar across reporting years. Appendix B provides a list of the modifications which the program processed for the 10/2018-9/2019 reporting year. The number of general permit certification modifications does not include modifications of construction stormwater general permit certifications, which are typically modified to reflect changes of acreage covered by the certification. These construction stormwater permit certification modifications are not included in EPA's permit tracking databases, which was used to generate the information in Figures 4 and 5 below.

Figure 4 Number of individual permit modifications by sector

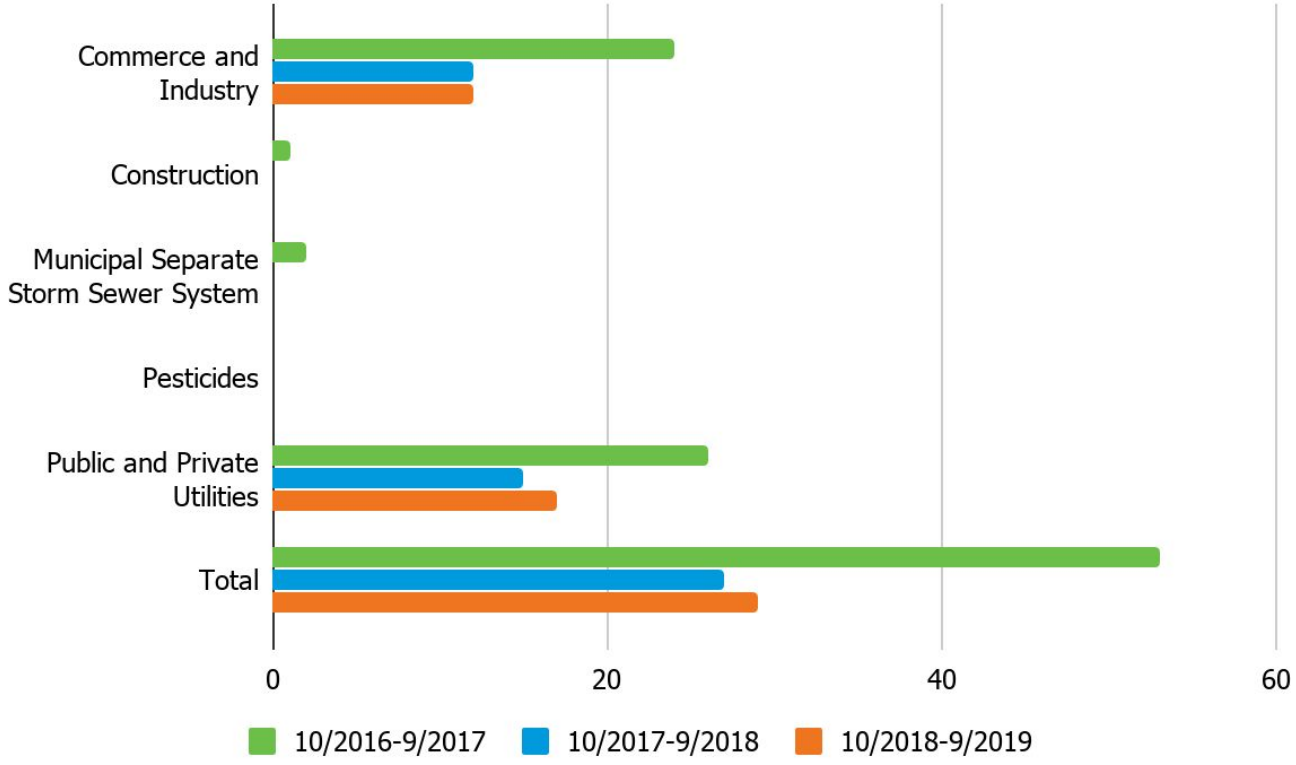
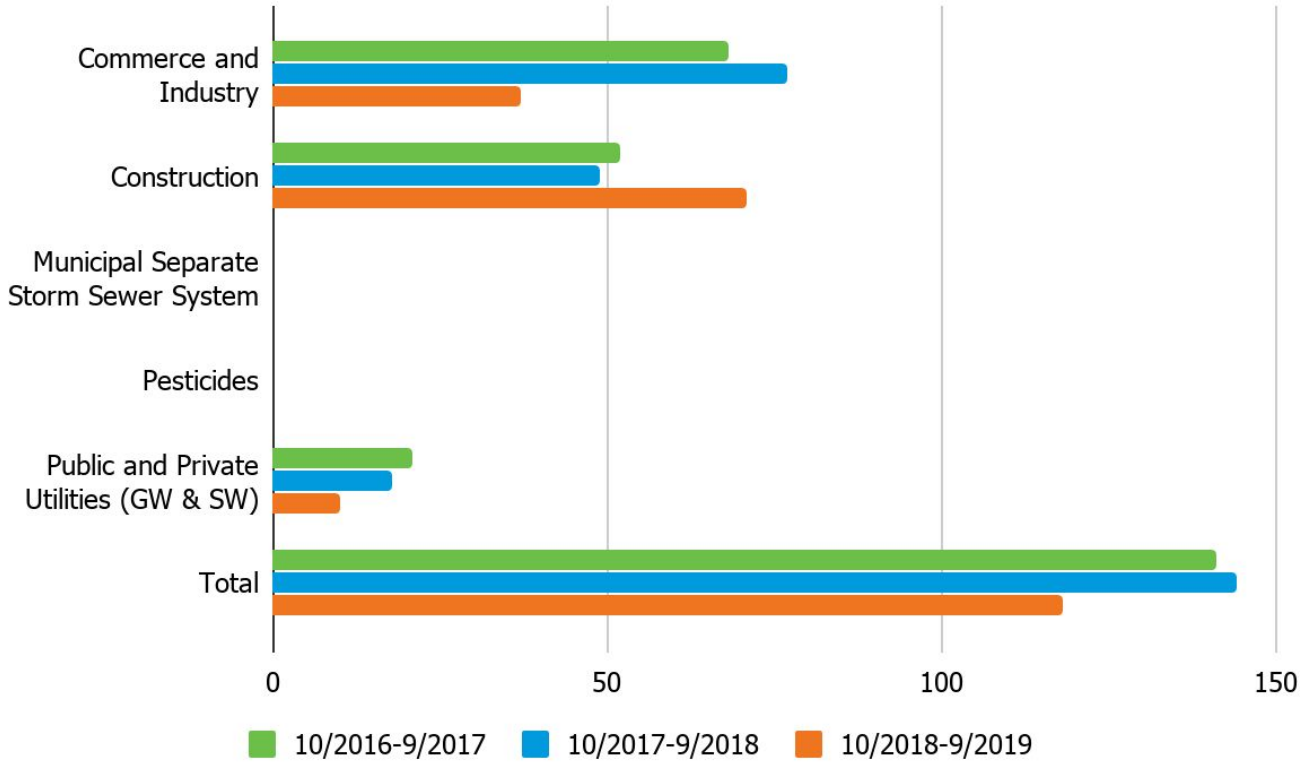


Figure 5 Number of general permit certification modifications by sector



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 permits terms and conditions. The program administratively continues both individual and general permits. Figure 6 shows that the number of individual permits continued for the 10/2018-9/2019 reporting period is less than the previous years. The number of general permit certifications administratively continued for the 10/2018-9/2019 reporting year were less than previous years as shown in Figure 7. These measures will need to be monitored over the next several reporting years to determine if a trend can be established. Permit backlog will be further discussed with subsequent information in this report.

Figure 6 Number of individual permits administratively continued by sector

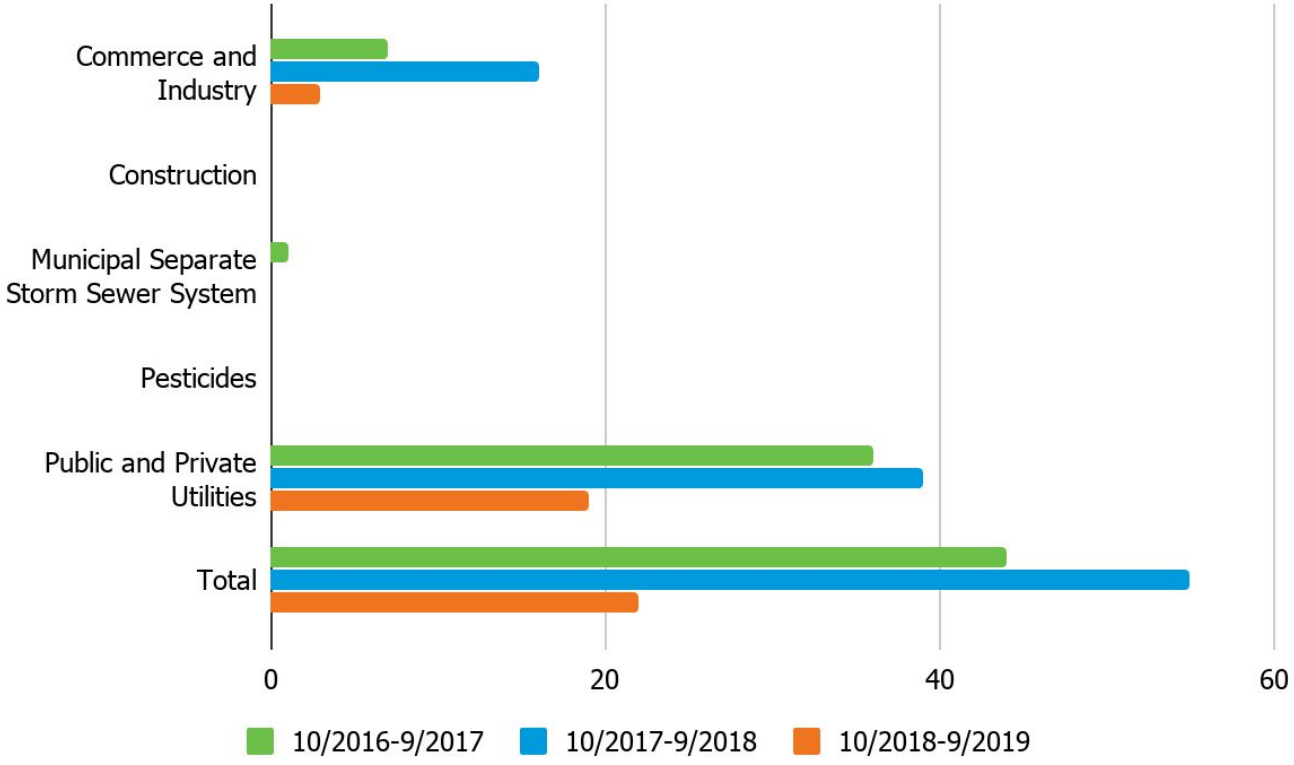
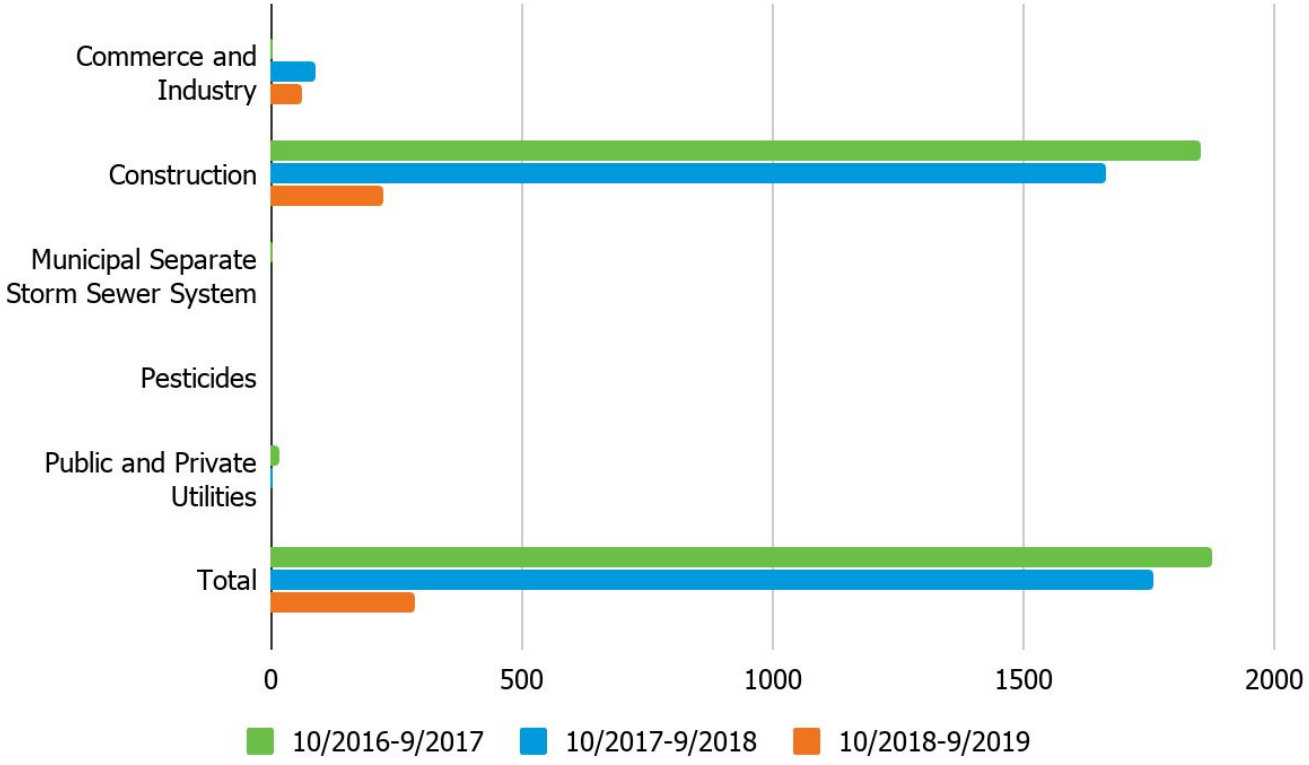


Figure 7 Number of general permit certifications administratively continued by sector



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.

Figures 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, 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 there has been a decrease in the percent of groundwater general permits backlogged and an increase in the percent of surface water process water permits backlogged. There was a significant decrease in backlog for surface water stormwater general permits. 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

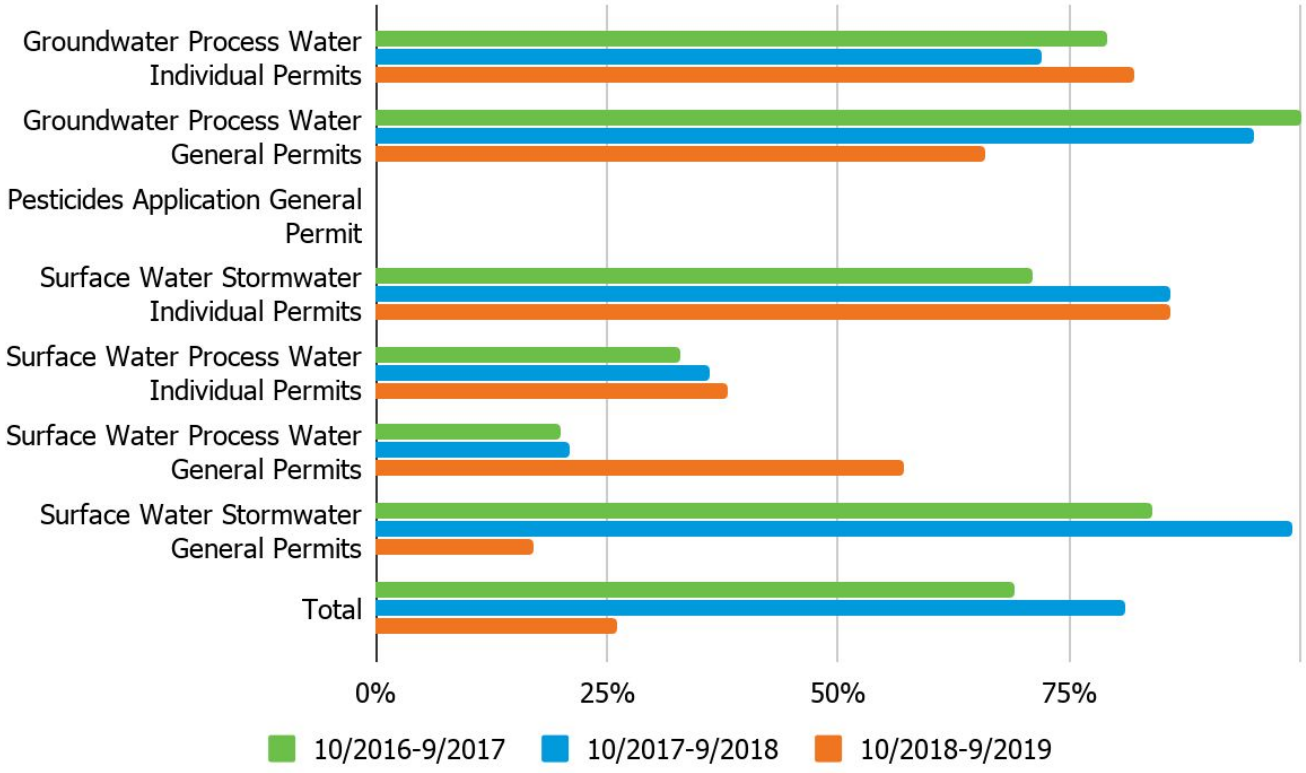
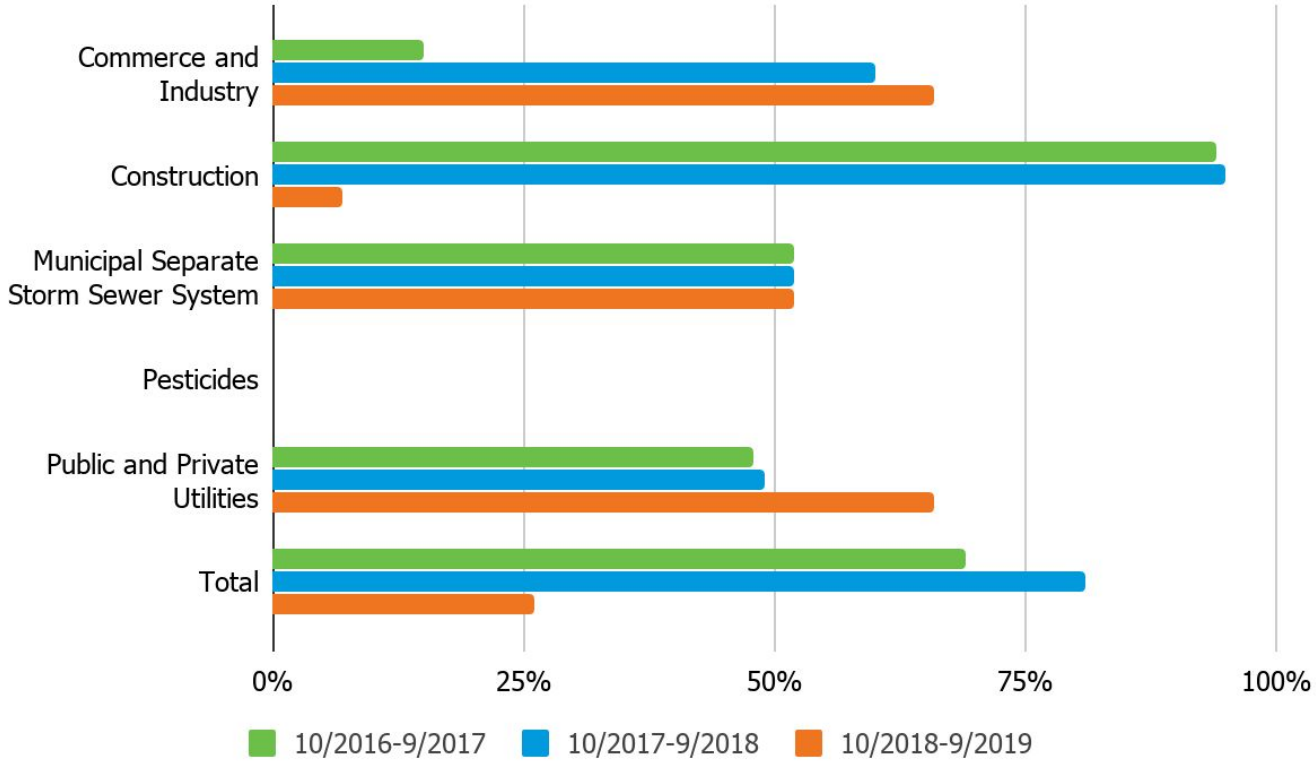


Figure 9 shows the percentage of permits backlogged by sector. Figure 9 indicates an increase in permit backlog for the commerce and industry sector and public and private utilities, that the MS4 sector backlog remained the same that there was a dramatic decrease in the backlog for the construction sector. Detailed accounting used to calculate the percentages in Figures 9 can be reviewed in Appendix C.

Figures 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.

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 9/20/2018 (years)	Range of time backlogged as of 9/20/2019 (years)
Groundwater Process Water Individual Permits	0 to 22	0 to 23	0 to 22
Groundwater Process Water General Permits	0.5 to 11	0 to 12	0 to 13
Pesticide Application General Permit	0	0	0
Surface Water Stormwater Individual Permits	0 to 3	0 to 4	0 to 4

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

Permit Type	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)
Surface Water Process Water Individual Permits	0 to 10	0 to 11	0 to 5
Surface Water Process Water General Permits	0 to 6	0 to 7	0 to 13
Surface Water Stormwater General Permits	0 to 6	0 to 7	0 to 8

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)
Commerce and Industry	0 to 10	0 to 11	0 to 13
Construction	0 to 5	0 to 6	0 to 3
Municipal Separate Storm Sewer System	0 to 4	0 to 5	0 to 6
Pesticides	0	0	0
Public and Private Utilities	0 to 22	0 to 23	0 to 24

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. In addition, the program issues preliminary effluent limitations to support domestic wastewater treatment facility site application and design review. As was explained previously, EPA tracks the backlog of individual and general process water permits for surface water. The average processing time for these types of permits is less than other permit types, as shown in Table 7. The average amount of time that permits have been backlogged by sector stayed the same for the commerce and industry sector, decreased for the public and private utilities and construction sectors, and increased slightly for the MS4 sector as shown in Table 8.

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)
Groundwater Process Water Individual Permits	10	10	9
Groundwater Process Water General Permits	5	6	7
Pesticide Application General Permit	0	0	0
Surface Water Stormwater Individual Permits	2	3	4
Surface Water Process Water Individual Permits	2	2	3
Surface Water Process Water General Permits	4	5	2
Surface Water Stormwater General Permits	5	5	2

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 9/20/2018 (years)	Average time backlogged as of 9/20/2019 (years)
Commerce and Industry	4	2	2
Construction	5	6	1
Municipal Separate Storm Sewer System	4	5	6
Pesticides	0	0	0
Public and Private Utilities	5	5	4

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.Additional years of information will be needed to establish trends for the measure established in Table 9. The average permit processing time appears to be trending downward based as shown in Table 9.

Table 9 Average processing time (days) for modifications and issued certification 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
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
General Permit Certifications Issued					
10/2016-9/2017	47	7	13	10	97
10/2017-9/2018	50	10	10	2.5	112
10/2018-9/2019	35	2	n/a	1	139
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

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.

While the number of design review engineers may vary per year, overall output remains relatively constant on a per engineer basis. As Table 10 shows, each review engineer completes an average of 45 reviews per year. For the 2018-19 reporting period, there were 169 reviews completed. This value varies depending on the complexity of reviews received and other competing work assignments. Site location and design review efforts are for the public and private utility sectors.

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 (FTE)
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	3.9	97	72	169	43
Average	3.9	99	77	176	45

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 their 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 work load because the timing and magnitude of response

are unpredictable. The program responded to more spills during the 10/2018-9/2019 reporting year than previous years.

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
Average	220	160	380

The program conducts two types of inspections: compliance evaluation inspections and reconnaissance inspections. Compliance evaluation inspections include an on-site inspection of the facilities wastewater treatment facilities or best management practices, an assessment of their condition, a review of the facilities 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 also 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, 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.

Table 12 Number of compliance oversight Inspections completed by sector

Year	Commerce & Industry	Public & Private Utilities Domestic Water & 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
10/2018-9/2019 Targets	8	31	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
10/2018-9/2019 Targets	254	107	53	480	n/a	60	24

Table 12 Number of compliance oversight Inspections completed by sector (continued)

Year	Commerce & Industry	Public & Private Utilities Domestic Water & Wastewater	Public & Private Utilities Reclaimed Water	Construction	Pesticides	Biosolids	MS4
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
10/2018-9/2019 Targets	n/a	n/a	n/a	106	17	0	n/a
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

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 follow 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 resolution of noncompliance problems without the more rigorous and resource intensive administrative or judicial enforcement process. This includes 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 8,000 permittees 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 number of facilities with delinquent or deficient DMR violations by sector. There has been a downward trend in the number of DMR violations for the construction sector as the program has made a concerted effort over the past several years to improve the amount and quality of DMR submissions for this sector.

Table 13 Number of facilities with delinquent or deficient DMR violations by sector

Sector	10/2016-9/2017	10/2017-9/2018	10/2018-9/2019
Commerce and Industry	432	321	423
Construction	485	390	350
Public and Private Utilities	241	144	198
MS4, Pesticides, and Biosolids	DMR Reporting not required for these sectors	DMR Reporting not required for these sectors	DMR Reporting not required for these sector

Table 14 shows the number of facilities with effluent violations by sector. The number of facilities with violations was similar across reporting years.

Table 14 Number of facilities with effluent violations by sector

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

Table 15 summarizes the number of compliance advisories that were issued by sector. The amount of compliance advisories has been fairly consistent throughout all reporting years except for the commerce and industry sector. Starting with the 10/2017-9/2018 reporting year, 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.

Tables 15 Number of facilities that had compliance advisories issued

Sector	10/2016-9/2017	10/2017-9/2018	10/2018-9/2019
Commerce & Industry	422	1,404	942
Construction	1,029	1,384	1,163
Public & Private Utilities	785	763	656
MS4	0	7	0
Pesticides	0	0	0
Biosolids	0	2	2
Total	2,236	3,560	2,763

Table 16 summarizes the number of enforcement actions issued by sector for the reporting year, which are similar across reporting years. 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 notification 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 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 is $10,000 per day of violation. 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 (continued)

Sector/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
Biosolids						
10/2016-9/2017	0	0	N/A	0	0	0
10/2017-9/2018	0	0	N/A	0	0	0
10/2018-9/2019	3	0	N/A	0	0	3

Conclusion and Recommendations

During the baseline or 10/2016-9/2017 reporting year, the program began to restore staffing levels based on funding provided by HB17-1285. Staffing levels have been restored and the program is experiencing historical levels of attrition. It was anticipated that for reporting year 10/2017-9/2018, production levels would be similar to the baseline year (10/2016-9/2017) and that some areas of the program would see modest gains in production. Table 17 summarizes how all reporting years compared to the baseline year for HB17-1285 reporting requirements. During the 10/2017-9/2018 reporting year, staff were added to the Permits Section, which is consistent with the legislative intent of HB17-1285. The increase in permit staff has resulted in an increase in permit production and improvement in permit timeliness. Production levels for the remaining reporting categories were similar to the baseline year's production levels as anticipated.

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
Program staffing levels	↑	↑
Standards development	↔	↔
Permit production	↑	↑
Permit timeliness	↔	↑
Engineering reviews production	↔	↔
Inspection production	↔	↔
Enforcement actions	↔	↔

For the next reporting year, the program will continue to explore ways to continue to improve permit production and timeliness. To meet EPA inspection targets for the commerce and industry and MS4 sectors, the program will engage stakeholders to discuss potential funding mechanisms for increasing field inspections.

Appendix A Program Finances

Revenue and expenditures provided to the Colorado General Assembly Joint Budget Committee for SFY17-18 and first half of SFY18-19.

Fiscal Year 2018-19 Financial Results

SFY18-19 Year End Results

Sector Budget:	TOTAL LB Spending Auth*	Collected Revenue**	Sector Expenses	Admin Expenses***	POTS Expenses	Indirect Expenses***	Total Expenses
Commerce and Industry	$ 2,872,014	$ 1,395,005	$ 1,686,658	$ 266,638	$ 311,483	$ 216,145	$ 2,480,924
General Fund	$ 1,232,239	$0	$ 877,747	$158,557	$ 184,165	$0	$ 1,220,469
Cash Funds - 2019	$ 1,213,517	$1,395,005	$ 618,064	$84,886	$ 127,318	$167,441	$ 997,709
Federal Funds	$ 426,258	$0	$ 190,847	$23,195	$ -	$48,704	$ 262,746
Construction	$ 3,054,512	$ 2,592,434	$ 1,958,330	$ 168,302	$ 340,057	$ 442,290	$ 2,908,979
General Fund	$ 365,674	$0	$ 223,386	$47,452	$ 51,988	$0	$ 322,826
Cash Funds - 2021	$ 2,379,123	$2,592,434	$ 1,519,550	$103,289	$ 288,069	$390,995	$ 2,301,903
Federal Funds	$ 309,715	$0	$ 215,394	$17,561	$ -	$51,295	$ 284,250
MS4	$ 389,779	$ 201,117	$ 248,594	$ 30,145	$ 34,123	$ 38,317	$ 351,179
General Fund	$ 141,976	$0	$ 92,165	$18,789	$ 16,869	$0	$ 127,823
Cash Funds - 2023	$ 173,749	$201,117	$ 112,094	$8,607	$ 17,254	$28,154	$ 166,109
Federal Funds	$ 74,054	$0	$ 44,335	$2,749	$ -	$10,163	$ 57,247
Pesticides	$ 174,636	$ 11,521	$ 115,632	$ 19,265	$ 27,313	$ 4,511	$ 166,721
General Fund	$ 141,076	$0	$ 95,815	$17,424	$ 26,374	$0	$ 139,613
Cash Funds - 2022	$ 10,306	$11,521	$ 4,848	$489	$ 939	$887	$ 7,163
Federal Funds	$ 23,254	$0	$ 14,969	$1,352	$ -	$3,624	$ 19,945
Public/Private Utilities	$ 5,207,110	$ 2,829,055	$ 3,410,142	$ 440,392	$ 597,257	$ 552,184	$ 4,999,975
General Fund	$ 1,900,363	$0	$ 1,227,215	$245,538	$ 277,267	$0	$ 1,750,020
Cash Funds - 2024	$ 2,553,409	$2,829,055	$ 1,625,984	$158,935	$ 319,990	$425,722	$ 2,530,631
Federal Funds	$ 753,338	$0	$ 556,943	$35,919	$ -	$126,462	$ 719,324
WQ Certifications	$ 274,271	$ 104,958	$ 107,557	$ 6,804	$ 12,493	$ 23,409	$ 150,263
General Fund	$ 12,416	$0	$ 7,410	$1,612	$ 1,906	$0	$ 10,928
Cash Funds - 2018	$ 234,025	$104,958	$ 84,556	$2,628	$ 10,587	$18,933	$ 116,704
Federal Funds	$ 27,830	$0	$ 15,591	$2,564	$ -	$4,476	$ 22,631
Total	$ 11,972,322	$ 7,134,090	$ 7,526,913	$ 931,546	$ 1,322,726	$ 1,276,856	$ 11,058,041
General Fund	$ 3,793,744	$0	$ 2,523,738	$489,372	$ 558,569	$0	$ 3,571,679
Cash Funds	$ 6,564,129	$7,134,090	$ 3,965,096	$358,834	$ 764,157	$1,032,132	$ 6,120,219
Federal Funds	$ 1,614,449	$0	$ 1,038,079	$83,340	$ -	$244,724	$ 1,366,143

*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 2019-20 Financial Results

SFY19-20 Second Quarter Results

Sector Budget:	TOTAL LB Spending Auth*	Collected Revenue**	Sector Expenses	Admin Expenses***	POTS Expenses	Indirect Expenses***	Total Expenses
Commerce and Industry	**$ 2,856,779**	**$ 1,377,365**	**$ 929,968**	**$ 121,350**	**$ 158,940**	**$ 230,549**	**$ 1,245,661**
General Fund	$ 1,083,639	$ -	$ 19,118	$ 26,718	$ 449	$ -	$ 46,285
Cash Funds - 2019	$ 1,403,605	$ 1,377,365	$ 701,578	$ 68,469	$ 158,491	$ 183,455	$ 1,111,993
Federal Funds	$ 369,535	$ -	$ 209,272	$ 26,163	$ -	$ 47,094	$ 282,529
Construction	**$ 2,408,180**	**$ 2,595,395**	**$ 1,145,772**	**$ 118,290**	**$ 190,870**	**$ 288,390**	**$ 1,743,322**
General Fund	$ 294,164	$ -	$ 10,432	$ 7,993	$ 1,297		$ 19,722
Cash Funds - 2021	$ 1,834,240	$ 2,595,395	$ 946,989	$ 90,489	$ 189,573	$ 246,585	$ 1,473,636
Federal Funds	$ 279,776	$ -	$ 188,351	$ 19,808	$ -	$ 41,805	$ 249,964
MS4	**$ 326,528**	**$ 164,463**	**$ 153,276**	**$ 13,116**	**$ 20,788**	**$ 26,205**	**$ 213,385**
General Fund	$ 116,474	$ -	$ 44,092	$ 3,166	$ 8,534	$ -	$ 55,792
Cash Funds - 2023	$ 166,265	$ 164,463	$ 73,323	$ 6,849	$ 12,254	$ 18,377	$ 110,803
Federal Funds	$ 43,789	$ -	$ 35,861	$ 3,101	$ -	$ 7,828	$ 46,790
Pesticides	**$ 153,979**	**$ -**	**$ 131,115**	**$ 7,267**	**$ 14,084**	**$ 396**	**$ 152,862**
General Fund	$ 122,984	$ -	$ 131,115	$ 5,382	$ 14,002	$ -	$ 150,499
Cash Funds - 2022	$ 9,454	$ -	$ -	$ 360	$ 82	$ 89	$ 531
Federal Funds	$ 21,541	$ -	$ -	$ 1,525	$ -	$ 307	$ 1,832
Public/Private Utilities	**$ 4,656,965**	**$ 2,265,805**	**$ 1,877,543**	**$ 90,694**	**$ 266,785**	**$ 375,737**	**$ 2,610,759**
General Fund	$ 1,522,133	$ -	$ 254,398	$ 44,195	$ 35,082	$ -	$ 333,675
Cash Funds - 2024	$ 2,562,558	$ 2,265,805	$ 1,232,262	$ 5,982	$ 231,703	$ 290,912	$ 1,760,859
Federal Funds	$ 572,274	$ -	$ 390,883	$ 40,517	$ -	$ 84,825	$ 516,225
WQ Certifications	**$ 284,877**	**$ 55,128**	**$ 20,612**	**$ 5,307**	**$ 8,777**	**$ 6,385**	**$ 41,081**
General Fund	$ 9,989	$ -	$ -	$ 272	$ 5	$ -	$ 277
Cash Funds - 2018	$ 234,025	$ 55,128	$ (3,652)	$ 2,142	$ 8,772	$ 926	$ 8,188
Federal Funds	$ 40,863	$ -	$ 24,264	$ 2,893	$ -	$ 5,459	$ 32,616
Total	**$ 10,687,308**	**$ 6,458,156**	**$ 4,258,286**	**$ 356,024**	**$ 660,244**	**$ 927,662**	**$ 6,202,216**
General Fund	$ 3,149,383	$ -	$ 459,155	$ 87,726	$ 59,369	$ -	$ 606,250
Cash Funds	$ 6,210,147	$ 6,458,156	$ 2,950,500	$ 174,291	$ 600,875	$ 740,344	$ 4,466,010
Federal Funds	$ 1,327,778	$ -	$ 848,631	$ 94,007	$ -	$ 187,318	$ 1,129,956

*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 10/2017-9/2018.

NPDES ID	PermitSector	Permittee
CO0000213	Commerce and industry	Elk Ridge Mining and Reclamation LLC
CO0000612	Commerce and industry	Public Service Co of Colorado
CO0000612	Commerce and industry	Public Service Co of Colorado
CO0001104	Commerce and industry	Public Service Co of Colorado
CO0001163	Commerce and industry	MillerCoors USA LLC
CO0001163	Commerce and industry	MillerCoors USA LLC
CO0001163	Commerce and industry	MillerCoors USA LLC
CO0020443	Public and private utilities	Crested Butte Town of
CO0020443	Public and private utilities	Crested Butte Town of
CO0020443	Public and private utilities	Crested Butte Town of
CO0021067	Public and private utilities	Widefield Water and Sanitation District
CO0021121	Public and private utilities	Colorado City Metropolitan Dist
CO0021687	Public and private utilities	Mancos Town of
CO0023132	Public and private utilities	Monte Vista City of
CO0024082	Public and private utilities	Durango City of
CO0032409	Public and private utilities	La Veta Town of
CO0038954	Commerce and industry	Union Gold Inc
CO0039641	Public and private utilities	Delta City of
CO0040053	Public and private utilities	Mesa County Grand Junction City of
CO0040533	Public and private utilities	Creede City of
CO0044458	Public and private utilities	Alamosa City of
CO0046728	Public and private utilities	Brighton City of
CO0047287	Public and private utilities	Evans City of
CO0047341	Public and private utilities	Todd Creek Village Metropolitan District
CO0048119	Commerce and industry	LKA International Inc
CO0048275	Commerce and industry	Peabody Sage Creek Mining LLC
CO0048861	Public and private utilities	Hidden View Estates HOA
CO0049005	Construction	McDonald Farms Enterprises Inc
CO0049033	Commerce and industry	JRS Mining LLC
COG076007	Construction	ECI Site Construction Management Inc
COG076115	Construction	Noble Midstream Partners
COG076115	Construction	Noble Midstream Partners
COG076115	Construction	Noble Midstream Partners
COG076131	Construction	Red Mountain Estates LLC
COG076199	Construction	Noble Midstream Partners
COG076199	Construction	Noble Midstream Partners
COG076199	Construction	Noble Midstream Partners
COG076199	Construction	Noble Midstream Partners
COG076231	Construction	HEI Civil
COG076236	Construction	SJ Louis Construction of Texas

COG076249	Construction	Premier Earthworks and Infrastructure Inc
COG076256	Construction	Shea Homes LP
COG076261	Construction	Aslan Construction Inc
COG076281	Construction	Iron Woman Construction and Environmental Services, LLC
COG076383	Construction	Kraemer North America LLC
COG076396	Construction	ONEOK Elk Creek Pipeline LLC
COG076410	Construction	McMillen LLC
COG076426	Construction	Noble Midstream Services LLC
COG076426	Construction	Noble Midstream Services LLC
COG076447	Construction	Schmidt Construction Co
COG076466	Construction	Koru Ltd
COG076486	Construction	Noble Midstream Services LLC
COG076486	Construction	Noble Midstream Services LLC
COG076488	Construction	Gerrard Excavating Inc
COG076497	Construction	AP Mountains States LLC dba Adolfson and Peterson Construction
COG076513	Construction	ECI Site Construction Management Inc
COG076525	Construction	Public Service Company of Colorado (PSCo)
COG076526	Construction	Noble Midstream Services, LLC
COG076546	Construction	Nicholson Building Co and Excavating, LLC
COG076571	Construction	Mortenson
COG076597	Construction	American West Construction
COG076615	Construction	Weld County Department of Public Works
COG076627	Construction	Black Hills Energy
COG076641	Construction	Ralph L. Wadsworth Construction Company, LLC
COG076656	Construction	SEMA-Kraemer Joint Venture
COG076677	Construction	GYS General Contracting LLC
COG076682	Construction	Lendlease
COG076701	Construction	Kerr McGee Gathering LLC
COG315260	Construction	Safeway Inc
COG315365	Construction	Regional Rail Partners
COG315432	Construction	Reynolds Construction LLC
COG315464	Construction	Google LLC
COG315473	Construction	2298 West 28th Avenue
COG315473	Construction	2298 West 28th Avenue
COG315474	Construction	Ralph L Wadsworth Construction Co LLC
COG315479	Construction	2850 Zuni LLC
COG315497	Construction	Iron Woman Construction and Environmental Services
COG315519	Construction	SJ Louis Construction of Texas
COG315523	Construction	T Lowell Construction Inc
COG315533	Construction	Waypoint Residential Services LLC
COG315536	Construction	Brannan Construction Co

COG315536	Construction	Brannan Construction Co
COG315548	Construction	Milender White Construction Co
COG315555	Construction	Kraemer/IHC Joint Venture
COG315558	Construction	AP Mountain States, LLC
COG315563	Construction	Ames Construction
COG315567	Construction	Fransen Pittman General Contractors
COG500082	Commerce and industry	Castle Concrete Co dba Castle Aggregates
COG500216	Commerce and industry	Oldcastle SW Group Inc
COG500250	Commerce and industry	Aggregate Industries WCR Inc
COG500250	Commerce and industry	Aggregate Industries WCR Inc
COG500417	Commerce and industry	LG Everist Inc
COG500420	Commerce and industry	Oldcastle SW Group Inc
COG500437	Commerce and industry	Oldcastle SW Group Inc
COG500437	Commerce and industry	Oldcastle SW Group Inc
COG500481	Commerce and industry	Varra Companies Inc
COG501545	Commerce and industry	Whitewater Building Materials
COG501573	Commerce and industry	Arcosa LWB LLC
COG501574	Commerce and industry	Prowers Aggregate Operators LLC
COG501594	Commerce and industry	Martin Marietta Materials Inc
COG501594	Commerce and industry	Martin Marietta Materials Inc
COG501616	Commerce and industry	Martin Marietta Materials Inc
COG501713	Commerce and industry	Castle Concrete Co dba Castle Aggregates
COG501718	Commerce and industry	Aggregate Industries WCR Inc
COG501729	Commerce and industry	LG Everist Inc
COG501875	Commerce and industry	Hill Top Gravel LLC
COG501875	Commerce and industry	Hill Top Gravel LLC
COG501959	Commerce and industry	Greer Family Trust
COG588016	Public and private utilities	Snyder Sanitation Dist
COG589010	Public and private utilities	Purgatory Metro Dist
COG589012	Public and private utilities	Manzanola Town of
COG589107	Public and private utilities	Saddler Ridge Metro District
COG604333	Construction	Noble Midstream Partners
COG604339	Construction	Noble Midstream Partners
COG604339	Construction	Noble Midstream Partners
COG604341	Construction	Noble Midstream Services LLC
COG604341	Construction	Noble Midstream Services LLC
COG604342	Construction	Rockies Express Pipeline LLC
COG604346	Construction	Ames Construction Inc
COG604347	Construction	Elk Creek Pipeline LLC
COG604347	Construction	Elk Creek Pipeline LLC
COG604355	Construction	Archer Western Construction LLC

COG604356	Construction	Rocky Mountain Midstream LLC
COG604358	Construction	Rocky Mountain Midstream LLC
COG604372	Construction	Kum and Go LC
COG641063	Public and private utilities	Estes Park Town of
COG641194	Public and private utilities	Sunnyside Ranch at Telluride West HOA
COR900334	Commerce and industry	Peak Ready Mix
COR900352	Commerce and industry	Aggregate Industries WCR Inc
COR900674	Commerce and industry	CMC Steel Fabricators Inc dba CMC Rebar Denver
COR900690	Commerce and industry	Cobham Colorado Springs Inc
COR900785	Commerce and industry	Wells Concrete
COR900789	Commerce and industry	Wells Concrete
COR900847	Commerce and industry	Boulder Scientific Co LLC
COR900891	Commerce and industry	Johns Manville
COR900905	Commerce and industry	Halliburton Energy Services Inc
COR901015	Commerce and industry	Corden Pharma Boulder Inc
COR901235	Commerce and industry	Simon Contractors Inc
COR901285	Commerce and industry	Rock and Rail LLC
COR901294	Commerce and industry	Springs Fabrication LLC
COR901458	Commerce and industry	Agilent Technologies Inc
COR901482	Commerce and industry	Colorado Paint Co II LLC
COR901499	Commerce and industry	WHC Worldwide/zTrip
COX622052	Public and private utilities	Abbey of Saint Walburga
COX631050	Public and private utilities	Grover Town of
COX631052	Public and private utilities	University of Colorado
COX634006	Public and private utilities	Happy Camper RV Park

Appendix C Permit Backlog Detail

Permit backlog information used to generate figures in 2019 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%
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%
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%
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%
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%
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%
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%
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%

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	1,164	763	1,927	60%
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	4,832	257	5,089	95%
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%
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	75	75	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	310	325	635	49%
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%