



REFINANCE WATER POLLUTION CONTROL PROGRAM ACT
HB17-1285

2019

ANNUAL REPORT



Foreword

I am pleased to submit the HB17-1285 - Refinance Water Pollution Control Program Act for the report period coinciding with federal fiscal year 17-18 (10/2017-9/2018). 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. The department has incorporated stakeholder feedback on the 2018 report into the development of this report. Additional outreach regarding this year's report is planned for May 2019.

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 29, 2019

Table of Contents

Executive Summary	5
Overview: Clean Water Program	7
Water quality management in Colorado	7
Work areas and organization	8
Figure 1 Organization chart for the Water Quality Control Division highlighting Clean Water Program work areas	8
Baseline year and reporting period	8
Staffing summary	9
Table 1 Summary of full-time equivalents for HB17-1285 reporting requirements and permitting sector	9
Program finances	10
Goal Setting: Standards	10
Comparison of Colorado and EPA water quality criteria	10
Table 2 Comparison of Colorado's and EPA's water quality criteria	11
Standards modified based on site-specific factors	12
Table 3 Number of temporary modifications, variances and site-specific standards across the state	13
Table 4 Number of segments with temporary modifications, variances, and site-specific standards across the state	14
Upcoming standards rulemakings	15
Protection and Restoration: Permits	16
Figure 2 Number of individual permits issued/reissued by sector	17
Figure 3 Number of issued/reissued general permit certifications by sector	17
Figure 4 Number of individual permit modifications by sector	18
Figure 5 Number of general permit certification modifications by sector	19
Figure 6 Number of individual permits administratively continued by sector	20
Figure 7 Number of general permit certifications administratively continued by sector	20
Figure 8 Percentage of permits backlogged by permit type	21
Figures 9 Percentage of permits backlogged by sector	22
Table 5 Range of time permits have been backlogged by permit type	22
Table 6 Range of time permits have been backlogged by permit sector	23
Table 7 Average amount of time permits have been backlogged by permit type	23








Table 8 Average of time permits have been backlogged by permit sector	24
Table 9 Average processing time (days) for modifications and issued certification and permits	24
Protection and Restoration: Engineering	25
Table 10 Annual output related to site location and design review applications	25
Assurance: Inspections	25
Table 11 Number of compliance oversight Inspections completed by sector	26
Assurance: Enforcement	27
Table 12 Number of facilities with delinquent or deficient DMR violations by sector	28
Table 13 Number of facilities with effluent violations by sector	28
Tables 14 Number of facilities that had compliance advisories issued	29
Table 15 Number of enforcement actions issued including amendments to existing orders	30
Conclusion and Recommendations	30
Table 16 Comparison of HB17-1285 requirements for 10/2017-9/2018 reporting year to baseline year	31
Appendix A Program Finances	32
Appendix B Permit Modifications	35
Appendix C Permit Backlog Detail	40

Executive Summary

The Colorado Department of Public Health and Environment'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 was successful in funding the Clean Water Program (program) via legislation, HB17-1285. This bill secured funding for the program through the 2022 timeframe. The bill establishes the funding mix between general fund and cash funds that each clean water sector (established in 2015) should receive in the future. The bill also established fee increases that took effect July 1, 2018.

During the baseline(10/2016-9/2017) reporting year, the program began to restore staffing levels based on funding provided by HB17-1285. Staffing levels were nearly restored during the 10/2017-9/2018 reporting year. It was anticipated that for this reporting year (10/2017-9/2018) that 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 this reporting year compares to the baseline year for HB17-1285 reporting requirements.

Comparison of HB17-1285 requirements for 10/2017-9/2018 reporting year to baseline year

Reporting requirements	10/2017-9/2018 compared to baseline year
Program staffing levels	
Standards development	
Permit production	
Permit timeliness	
Engineering reviews production	
Inspection production	
Enforcement actions	

Program staffing levels: During the 10/2017-9/2018 reporting year, the program added permitting staff, which is consistent with the legislative intent of HB17-1285 that states "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 utilized 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. There are eight standards related hearings scheduled now through the next reporting period. The level of standards development for the 10/2017-9/2018 reporting year are consistent and similar to the baseline year.

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. The increase in permit staff resulted in an increase in permit production for the 10/2017-9/2018 reporting year. However, permit timeliness remained similar 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 for the 10/2017-9/2018 reporting year are comparable to baseline year.

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 for the 10/2017-9/2018 reporting year are consistent with the number completed during the baseline year. Due to funding constraints, the amount of inspections completed for the Clean Water Program sectors for commerce and industry and municipal separate storm sewers are less than Environmental Protection Agency national targets.

Enforcement: The program is responsible for ensuring 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 for the 10/2017-9/2018 reporting year are similar to the baseline year.

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: Clean Water Program

The Colorado Department of Public Health and Environment's (department) Water Quality Control 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 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 designs 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

Information gathering

Goal setting

Protection and restoration

Assurance

Assistance

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 also issues federal grants where nonpoint sources contribute to a water body not meeting its water quality goals and for regional water quality planning. The program also provides compliance assistance via telephone, email, guidance documents and trainings to help people and entities understand and comply with regulatory requirements. In addition, the program provides technical assistance to point source and nonpoint source dischargers. This technical assistance includes providing information that can be used to understand the technical and economic feasibility of treatment options and providing 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 within the Water Quality Control Division. This includes several sections that are shared between the Clean Water Program and Safe Drinking Water Program (gray in the figure below). The only shared work area without a stand alone 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

A baseline year of October 1, 2016 through September 30, 2017 was established during the first HB17-1285 report submitted in March 2018. The baseline was selected because the program develops work plans based on the federal fiscal year which occurs on an annual basis from October through September. In addition, this time frame 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. The established baseline will be important in measuring the program's success moving forward.

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 that the program regulates. 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 to this reporting year 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. Finally, HB17-1285's legislative declaration stated "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 are 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
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
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
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

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

Reporting year	Enforcement	Engineering	Inspections	Permits	Standards	Total
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
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

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 2017-18 and for the first two quarters of state fiscal year 2018-19. For state fiscal year 2017-18 the program spent less than its budget and for 2018-19 is on target to spend slightly less than was budgeted. For the first few years after HB17-1285's passage it was anticipated that revenue would exceed expenditures as the fee increases included in the bill were intended to fund the program for a period of 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. The information presented in Appendix A shows that for state fiscal year 2017-18 cash revenue exceeded cash expended and that projections for state fiscal year 2018-19 indicate the same result.

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 which 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 are typically 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.

The process the commission typically follows in establishing Colorado criteria is to examine EPA criteria to determine if they should be modified to reflect conditions specific to Colorado. Table 2 provides a comparison of

Colorado's and EPA's criteria. Information as of 9/30/2017 and 9/30/2018 are provided. 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 <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
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
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
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
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

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 have plans to revise the criteria to the same as EPA. 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, in December 2019, the program will present evidence to the commission to revise Colorado's cadmium criteria for aquatic life to be consistent with EPA's criteria.

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, in coordination with stakeholders, have developed a 10-year plan for developing 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. For nitrogen, phosphorus and chlorophyll 'a', Colorado adopted criteria for these compounds. However, EPA did not approve them and recommended

suggestions for improvement that will take additional effort. For the remaining three (aluminium, zinc, and acrolein), the program does not have plans to recommend any criteria revisions to the commission.

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 than EPA's (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 that is 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 standards on a site-specific basis that vary from the statewide or national criteria but are still protective of classified uses.

In Colorado, there are three major site-specific tools used to modify a statewide standard: temporary modifications, variances and site-specific standards. Site-specific numeric standards are a modification of a statewide standard based on consideration of site-specific factors such as water chemistry or aquatic life located at the site. 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 as site-specific temperature standards have been a review element of focus for the commission in recent rulemaking hearings. Overall, there was a slight increase in the number of temporary modifications, variances and site-specific standards when comparing the 10/2017-9/2018 reporting year to the baseline year.

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
Colorado					
As of 9/30/2017	3	64	0	14	44
As of 9/30/2018	2	67	0	15	43
Gunnison					
As of 9/30/2017	5	52	1	4	81
As of 9/30/2018	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
San Juan					
As of 9/30/2017	4	60	1	11	46
As of 9/30/2018	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
Yampa/White					
As of 9/30/2017	7	34	0	7	14
As of 9/30/2018	9	35	0	7	12

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
Statewide					
As of 9/30/2017	119	384	4	69	411
As of 9/30/2018	108	397	6	79	429

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. There was a slight increase in the number of these actions when comparing the 10/2017-9/2018 reporting year to the baseline year. Across the state and for the 10/2017-9/2018 reporting year, 39 percent of stream segments have temporary modifications, less than one percent have variances, and 22 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
Colorado				
As of 9/30/2017	131	65	0	24
As of 9/30/2018	131	68	0	23
Gunnison				
As of 9/30/2017	152	52	1	44
As of 9/30/2018	152	52	1	48
Rio Grande				
As of 9/30/2017	104	29	0	20
As of 9/30/2018	107	32	0	24
San Juan				
As of 9/30/2017	169	64	1	34
As of 9/30/2018	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
Yampa/White				
As of 9/30/2017	134	39	0	14
As of 9/30/2018	134	42	0	12
Statewide				
As of 9/30/2017	1,068	410	5	219
As of 9/30/2018	1,082	426	6	233

Upcoming standards rulemakings

For the remainder of this reporting year, and for the next reporting year (10/2019 through 9/2020), the Watershed Section will be working on the following standards development actions and rulemaking hearing proceedings:

- **May 2019** - Basic and site-specific standards for groundwater (Regulation Nos. 41 and 42) triennial review informational hearing. The focus of this hearing will be to discuss updated values for certain organic chemicals, as well as updates to the assumptions used to evaluate exposure levels for drinking water intake, body weight and fish consumption for consideration in a future rulemaking hearing. A rulemaking hearing may be requested for the 2020-2021 timeframe.
- **June 2019** - Upper and Lower Colorado River Basins (Regulation Nos. 33 and 37). The focus of this rulemaking hearing will be the routine triennial review of use classifications and standards for these basins, refinement of temperature standards based on site-specific aquatic life use and revisions to water supply use classifications for various segments. Site-specific standards will be reviewed and revised as appropriate.
- **October 2019** - Basic Standards and Methodologies for Surface Water (Regulation No. 31) issues scoping hearing. The focus of this hearing will be the routine triennial review of antidegradation designations, use classifications, and standards statewide.
- **November 2019** - Molybdenum standards rulemaking hearing. The focus for this rulemaking hearing will be consideration of the adoption of revisions to the molybdenum standards in the Basic Standards and Methodologies for Surface Water (Regulation No. 31), and resolution of the molybdenum temporary modification on Segment 14 of the Blue River (Regulation No. 33).
- **December 2019** - Cadmium standards rulemaking hearing. The focus for this rulemaking hearing will be consideration of the adoption of revisions to the cadmium standards in the Basic Standards and Methodologies for Surface Water (Regulation No. 31), and basin regulations (Regulation Nos. 32-38) where the standards have not previously been considered on a site-specific basis as part of the triennial review process.
- **December 2019** - 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.

- **South Platte River Basin (Regulation No. 38)** - The focus of this rulemaking hearing will be the routine triennial review of use classifications and standards for this basin, refinement of the temperature standards based on site-specific aquatic life use and revisions to water supply use classifications for various segments. Site-specific standards will be reviewed and revised as appropriate.
 - Issues formulation hearing - **November 2019.**
 - Rulemaking hearing - **June 2020.**

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 the 10/2017-9/2018 reporting year versus the baseline year. 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 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 the baseline year versus this reporting year (10/2017-9/2018) 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 number of general permit certifications that were issued/reissued was similar to the baseline year. The general permit for sand and gravel operations was reissued in the baseline year construction which resulted in many reissued certifications for the commerce and industry sector during the baseline year and reduction between the baseline year to this reporting year was anticipated. For construction certifications, the number of certifications issued/reissued are similar. The number of certifications issued/reissued for this sector vary based on construction starts and some variability is expected for this sector from year to year.

Figure 2 Number of individual permits issued/reissued by sector

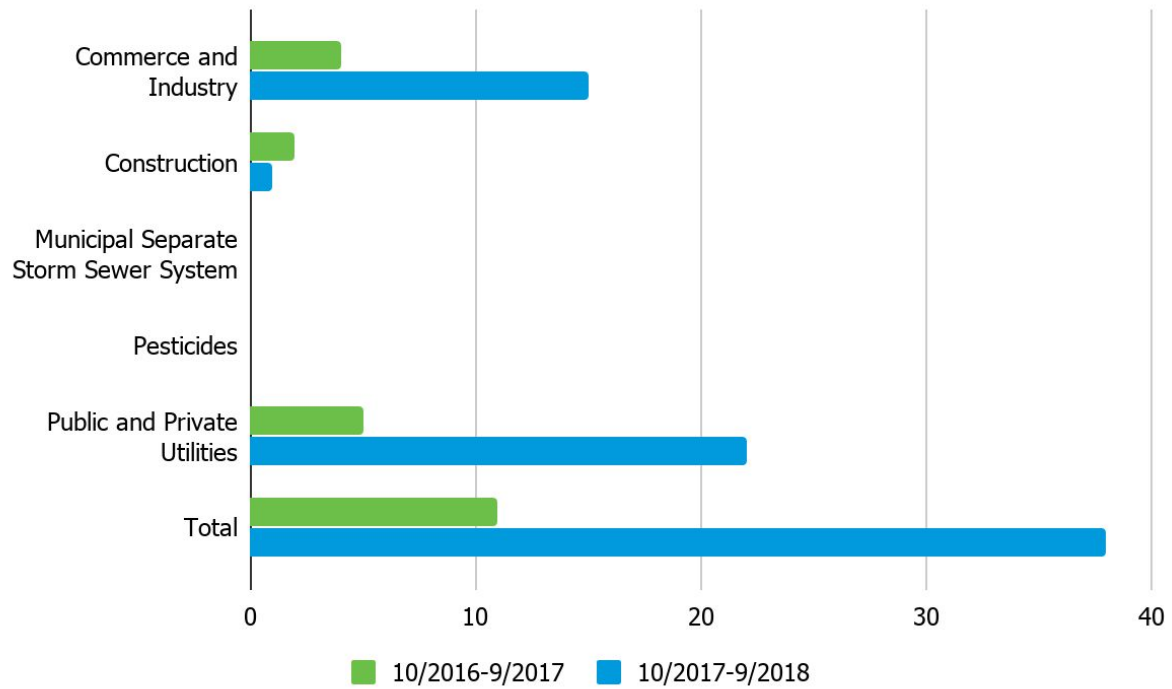
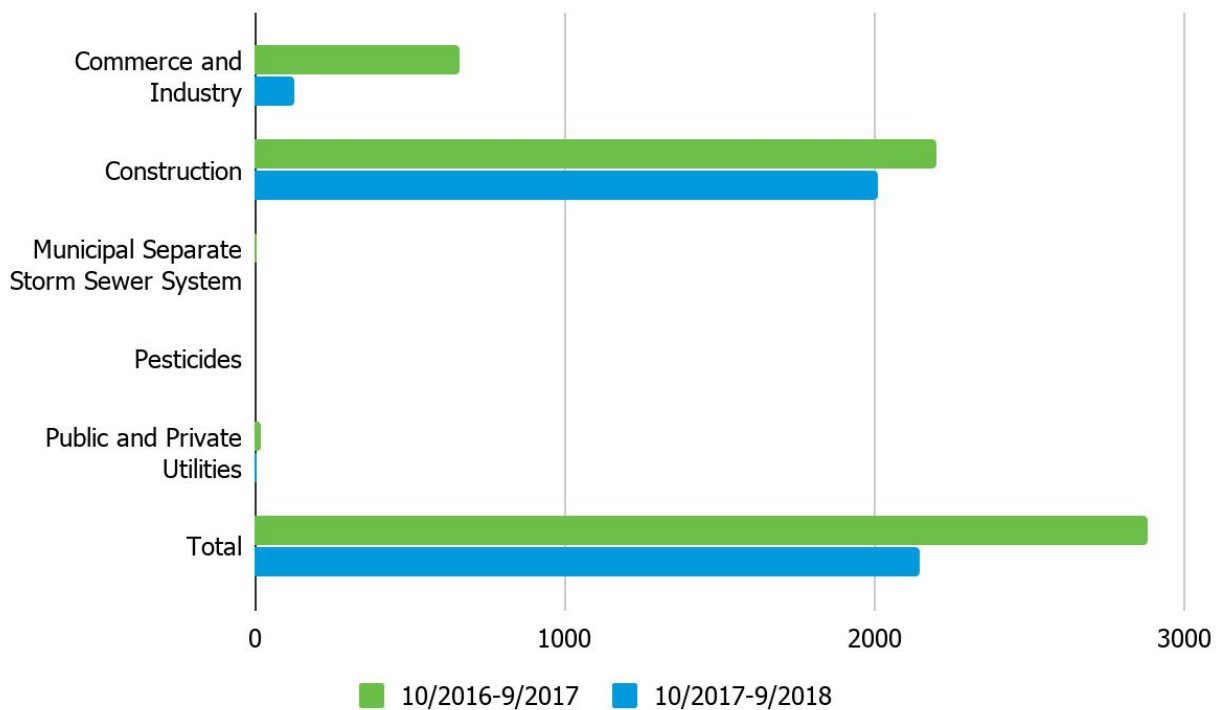


Figure 3 Number of issued/reissued general permit certifications by sector



Figures 4 and 5 show the number of individual permits and general permit certifications that were modified by sector for the baseline year and this reporting year. As previously mentioned, a permit modification is a change to an existing permit during its term. Figure 4 shows there was a decrease in the number of individual permits modified from the baseline to the current reporting year. 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 were similar for the baseline year and this reporting year. Appendix B provides a list of the modifications which the program processed for the 10/2017-9/2018 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

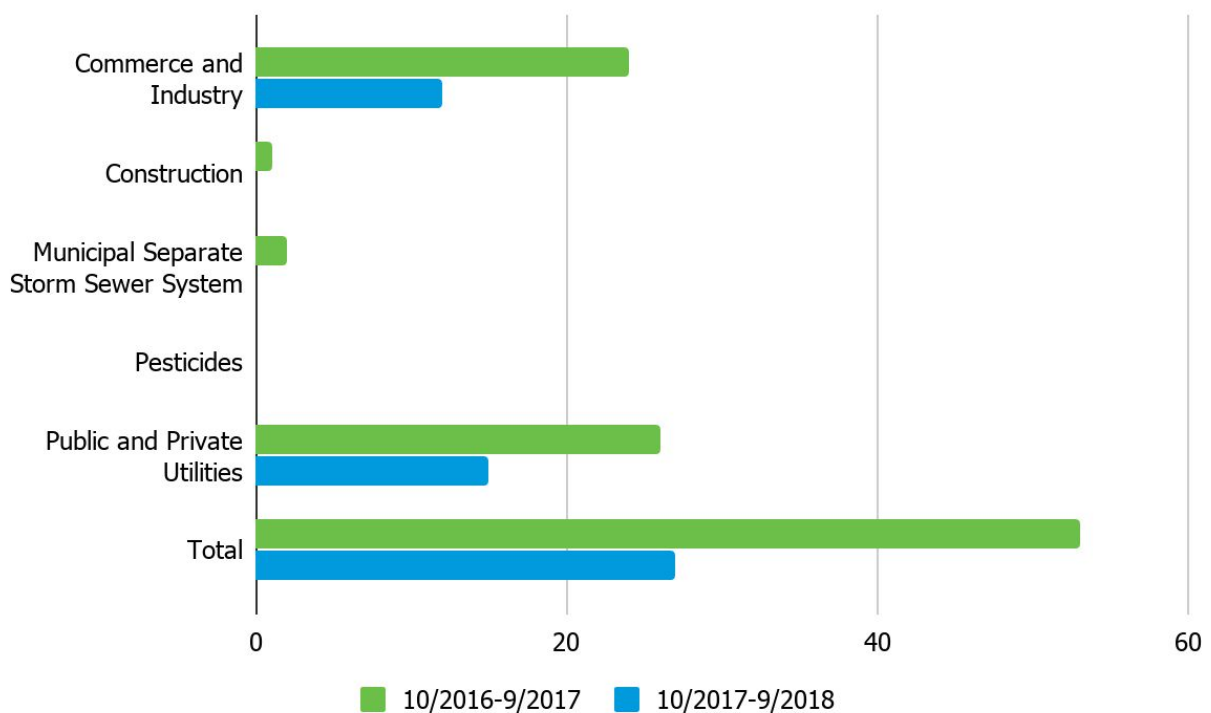
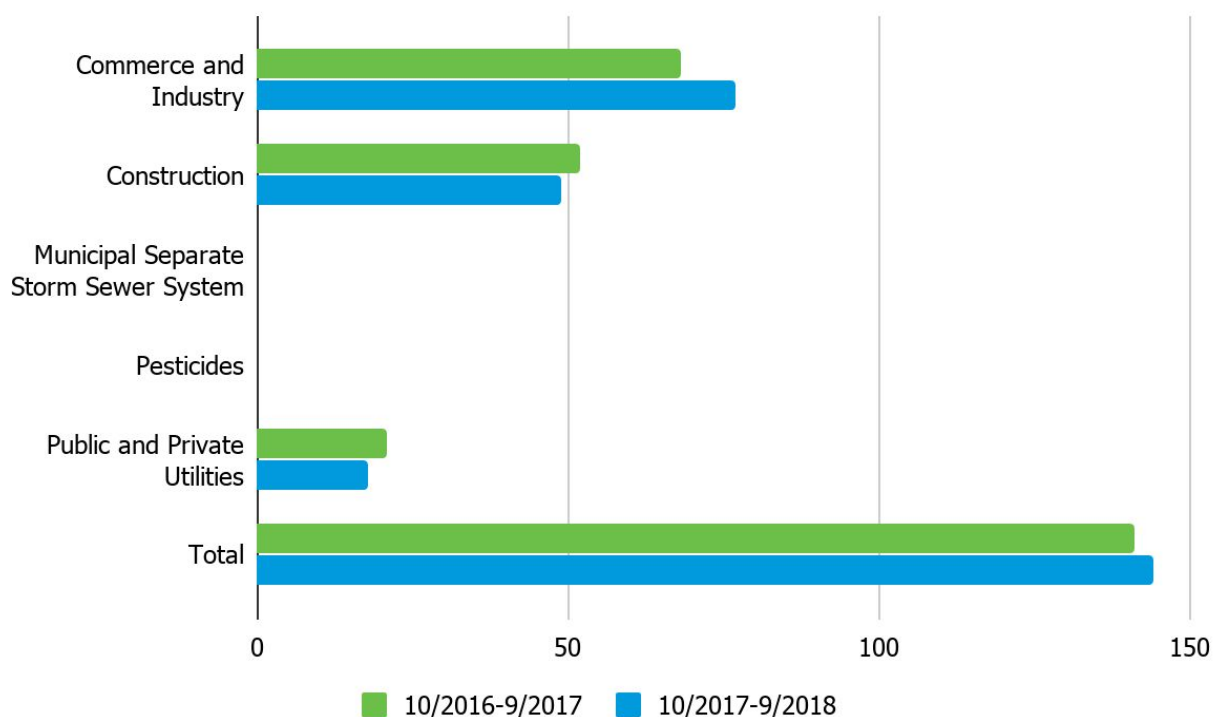


Figure 5 Number of general permit certification modifications by sector



Figures 6 and 7 show the number individual and general permit certifications that were continued for the baseline year and this reporting year. 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 10/2017-9/2018 reporting period is greater than the baseline year. The number of general permit certifications administratively continued for the 10/2017-9/2018 reporting year was slightly less than the baseline year 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. Note that the number of individual permits that were continued (Figure 6) exceeds the number of individual permits that were issued (Figure 2) which increases the backlog of administratively continued permits. Permit backlog will be further discussed with subsequent information in this report.

Figure 6 Number of individual permits administratively continued by sector

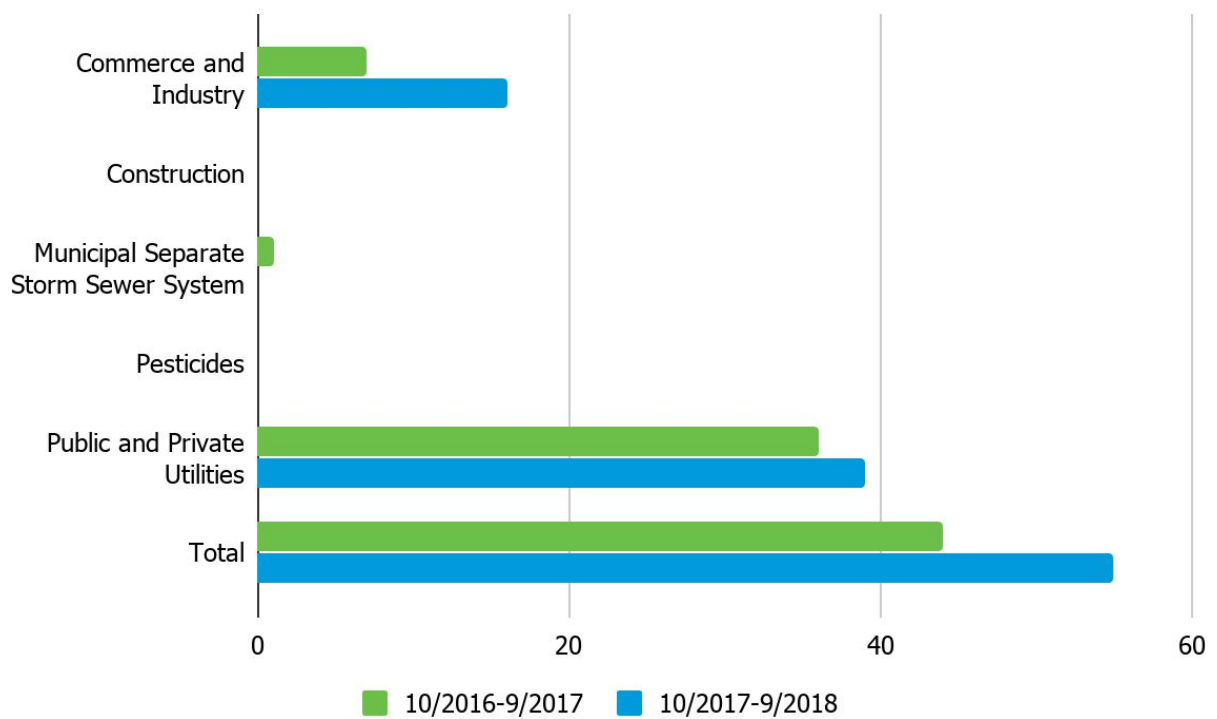
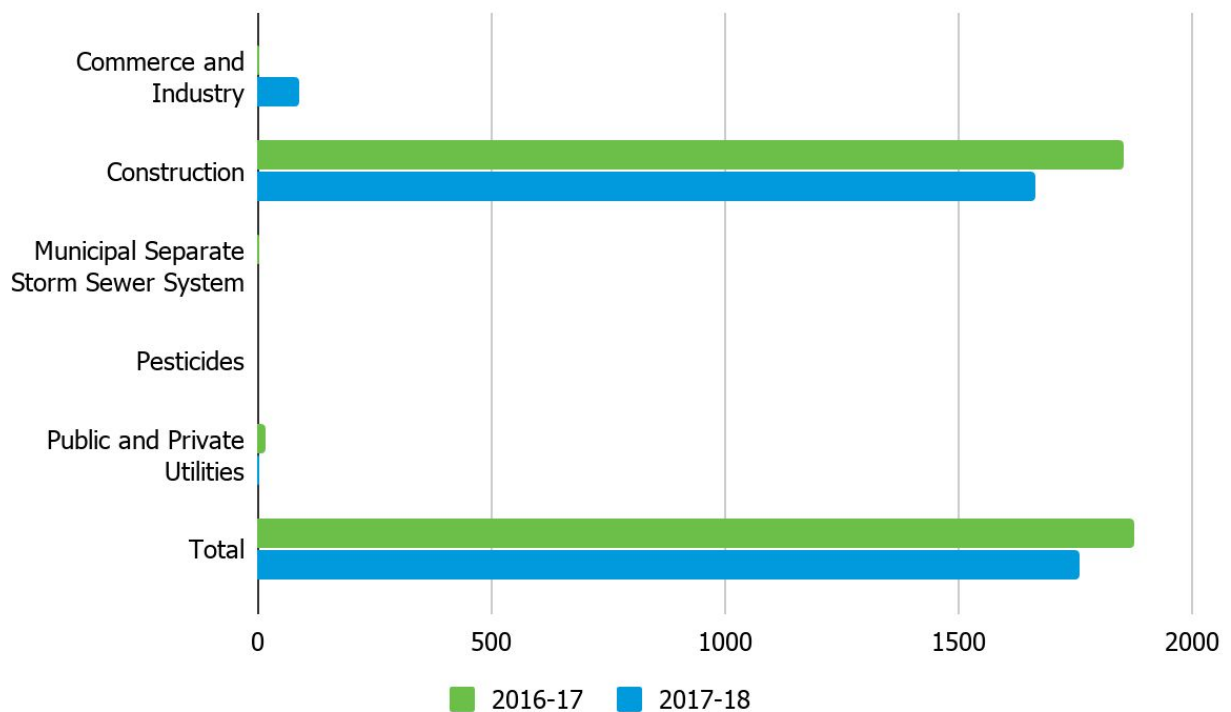


Figure 7 Number of general permit certifications administratively continued by sector



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.

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, 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 slight decrease in the percent of groundwater permits backlogged and an increase in the percent of surface water permits backlogged. The surface water stormwater general permits backlog should decrease dramatically next year due to the issuance of the general permit for construction activities. Detailed accounting used to calculate the percentages in Figure 8 can be reviewed in Appendix C. EPA tracks state's backlog for individual process water permits and general process water permits discharging to surface water. The program has prioritized reissuing these types of permits over stormwater and groundwater permits to address EPA's national goals for process water permits discharging to surface water. This has resulted in a smaller percentage of backlog for these permit types compared to other permit types.

Figure 8 Percentage of permits backlogged by permit type

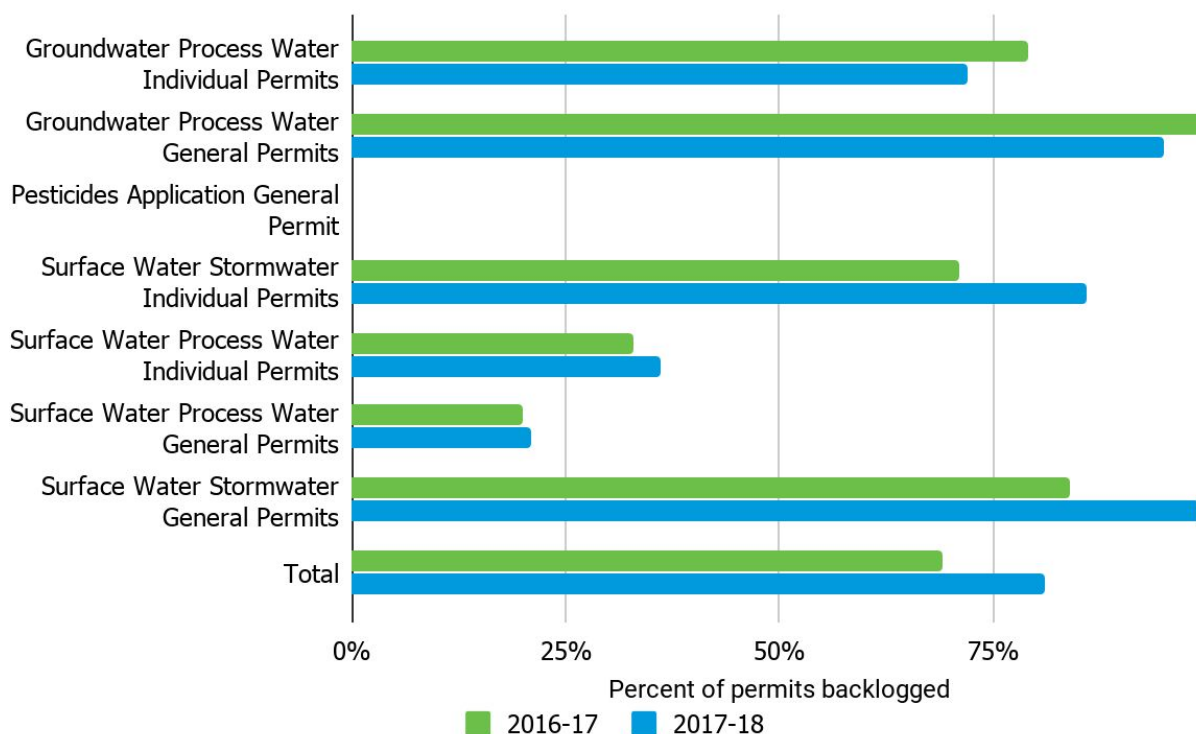
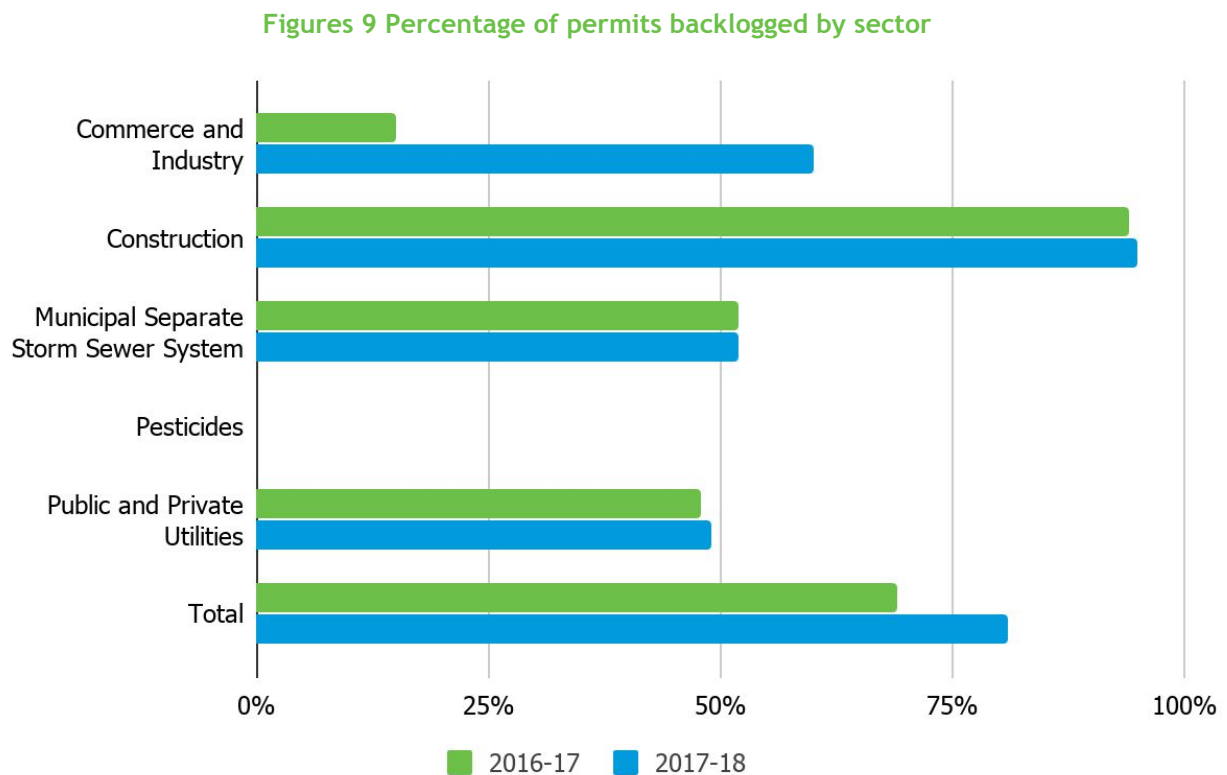


Figure 9 shows the percentage of permits backlogged by sector. Figure 9 indicates an increase in permit backlog for the commerce and industry sector and that the remaining sectors' backlog for this reporting year is similar to the baseline year. Several general permits in the commerce and industry sector expired during this reporting year and this increased the amount of permits backlogged for this sector. Detailed accounting used to calculate the percentages in Figures 9 can be reviewed in Appendix C.



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 show 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 when comparing the baseline to this reporting year.

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)
Groundwater Process Water Individual Permits	0 to 22	0 to 23
Groundwater Process Water General Permits	0.5 to 11	0 to 12
Pesticide Application General Permit	0	0
Surface Water Stormwater Individual Permits	0 to 3	0 to 4
Surface Water Process Water Individual Permits	0 to 10	0 to 11
Surface Water Process Water General Permits	0 to 6	0 to 7
Surface Water Stormwater General Permits	0 to 6	0 to 7

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

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 averaging 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 decreased for the commerce and industry sector, remained the same for the public and private utilities sector, and increased slightly for all other sectors when comparing the baseline to current reporting year 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)
Groundwater Process Water Individual Permits	10	10
Groundwater Process Water General Permits	5	6
Pesticide Application General Permit	0	0
Surface Water Stormwater Individual Permits	2	3
Surface Water Process Water Individual Permits	2	2
Surface Water Process Water General Permits	4	5
Surface Water Stormwater General Permits	5	5

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)
Commerce and Industry	4	2
Construction	5	6
Municipal Separate Storm Sewer System	4	5
Pesticides	0	0
Public and Private Utilities	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. Three new individual permits were issued in the 10/2017-9/2018 reporting year. Additional years of information will be needed to establish trends for the measure established in Table 9. The average permit processing time is fairly consistent when comparing this reporting year to the baseline year.

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
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
General Permit Certifications Issued					
10/2016-9/2017	47	7	13	10	97
10/2017-9/2018	50	10	10	2.5	112
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

Protection and Restoration: Engineering

The Engineering Section provides engineering review, compliance assistance, and technical assistance for domestic wastewater treatment facilities. The section achieves this 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, 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 reporting period, there were 165 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 utilities sector.

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)
2012-2013	4	82	74	156	39
2013-2014	4	100	85	185	46
2014-2015	4.5	111	95	206	45
2015-2016	3.3	109	66	175	53
2016-2017	3.8	91	83	174	46
2017-2018	3.8	101	64	165	43
Average	3.9	99	78	177	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. For the 10/2017-9/2018 reporting year, staff responded to 353 reported environmental releases. The number of releases was essentially the same as the five-year average of 355 releases per year. Of the 353 total number of releases, 160 were assigned to the Public and Private Utilities sector and 193 to the Commerce & Industry sector. Responding to an environmental release is a significant unplanned work load, as incidents are unpredictable with respect to timing and magnitude of the necessary response.

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 and 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 with those conditions, 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 11 summarizes the number of inspections by sector for the categories described above. In addition to the number of inspections completed for the 10/2017-9/2018 reporting year and baseline year, 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 11 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 and therefore funding from this bill was not intended for oversight of this sector. The amount of inspections conducted for the 10/2017-9/2018 reporting year are consistent with the number of inspections completed during the baseline year except for the construction sector. For this sector, the program finalized its strategy for completing inspections based on funding provided from HB15-1249 during the baseline year, and for the 10/2017-9/2018 reporting year the program fully implemented this strategy.

Table 11 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
10/2017-9/2018 Targets	8	31	n/a	n/a	n/a	n/a	1

Table 11 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
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
10/2017-9/2018 Targets	254	107	53	480	n/a	60	24
Reconnaissance Inspections							
10/2016-9/2017	9	0	0	75	15	0	0
10/2017-9/2018	16	0	3	97	13	1	0
10/2017-9/2018 Targets	n/a	n/a	n/a	106	17	0	n/a
Total							
10/2016-9/2017	61	105	27	384	15	57	0
10/2017-9/2018	73	153	17	529	13	72	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 with the limitations in their respective permit(s). This data is reported to the program via discharge monitoring reports (DMR). Given that there are over 7,000 permittees located across the state and limited program resources, staff 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 12 shows the number of facilities with delinquent or deficient DMR violations by sector. The number of DMR violations for the 10/2017-9/2018 reporting year are less than the reporting year. Additional reporting years will help establish a trend. The program has made a concerted effort over the past several years to improve the amount and quality of DMR submissions.

Table 12 Number of facilities with delinquent or deficient DMR violations by sector

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

Table 13 shows the number of facilities with effluent violations by sector. The number of facilities with violations was similar between the 10/2017-9/2018 reporting year and the baseline year.

Table 13 Number of facilities with effluent violations by sector

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

Table 14 summarizes the number compliance advisories that were issued by sector. 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. This was a one time effort and it is not likely to be sustained in the future.

Tables 14 Number of facilities that had compliance advisories issued

Sector	10/2016-9/2017	10/2017-9/2018
Commerce & Industry	385	1,361
Construction	1,029	1,384
Public & Private Utilities	671	623
MS4	0	7
Pesticides	0	0
Biosolids	0	2
Total	2,085	3,377

Table 15 summarizes the number of enforcement actions issued by sector. The number of enforcement actions is similar when comparing the 10/2017-9/2018 reporting year to the baseline year. Note that the number of formal enforcement actions is significantly less than the number of facilities with violations as reported in Table 13 above. The enforcement actions summarized in Table 15 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. Where an NOV, CDO or CUO has been issued, the program typically imposes civil penalties.

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 15 Number of enforcement actions issued including amendments to existing orders

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
Construction						
10/2016-9/2017	10	5	6	5	0	26
10/2017-9/2018	19 (includes 4 orders that were issued as combined NOV/OCP)	7	0	10 (includes 4 orders that were issued as combined NOV/OCP)	0	36
Commerce and Industry						
10/2016-9/2017	6	3	N/A	3	0	12
10/2017-9/2018	5	2	0	2	1	10
Public & Private Utilities						
10/2016-9/2017	6	3	N/A	0	1	10
10/2017-9/2018	2	2	0	0	1	5
MS4						
10/2016-9/2017	0	0	N/A	0	1 combined state/ federal	1
10/2017-9/2018	0	0	N/A	0	0	0
Pesticides						
10/2016-9/2017	0	0	N/A	0	0	0
10/2017-9/2018	0	0	N/A	0	0	0

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 were nearly restored during the 10/2017-9/2018 reporting year. It was anticipated that for this reporting year (10/2017-9/2018) that 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 16 summarizes how this reporting year compares 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 resulted in an increase in permit production, but permit timeliness remained similar to the baseline year as the number of permits issued was less than the number of permits that were administratively continued. Additional years of information will be needed to establish trends for permit timeliness. Production levels for the remaining reporting categories were similar to the baseline year's production levels.

Table 16 Comparison of HB17-1285 requirements for 10/2017-9/2018 reporting year to baseline year

Reporting Category	10/2017-9/2018 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 and also begin to discuss with stakeholders potential funding mechanisms for increasing field inspections for the commerce and industry and MS4 sectors to meet inspection targets set by EPA for these sectors.

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 2017-18 Financial Results

SFY17-18 Year End Results

Sector Budget:	TOTAL LB Spending Auth*	Collected Revenue**	Sector Expenses	Admin Expenses***	POTS Expenses	Indirect Expenses***	Total Expenses
Commerce and Industry	\$ 2,772,289	\$ 907,448	\$ 1,627,944	\$ 164,498	\$ 272,442	\$ 253,658	\$ 2,318,542
General Fund	\$ 957,919	\$0	\$ 732,866	\$74,720	\$ 150,332	\$0	\$ 957,918
Cash Funds - 2019	\$ 1,440,468	\$907,448	\$ 662,379	\$70,796	\$ 122,110	\$198,440	\$ 1,053,725
Federal Funds	\$ 373,902	\$0	\$ 232,699	\$18,982	\$ -	\$55,218	\$ 306,899
Construction	\$ 2,568,261	\$ 2,643,745	\$ 1,617,940	\$ 121,704	\$ 271,700	\$ 385,265	\$ 2,396,609
General Fund	\$ 323,625	\$0	\$ 246,835	\$28,250	\$ 48,541	\$0	\$ 323,626
Cash Funds - 2021	\$ 1,961,553	\$2,643,745	\$ 1,223,971	\$86,148	\$ 223,159	\$351,253	\$ 1,884,531
Federal Funds	\$ 283,083	\$0	\$ 147,134	\$7,306	\$ -	\$34,012	\$ 188,452
MS4	\$ 348,923	\$ 155,040	\$ 244,675	\$ 16,939	\$ 34,833	\$ 42,707	\$ 339,154
General Fund	\$ 112,389	\$0	\$ 89,346	\$7,906	\$ 15,137	\$0	\$ 112,389
Cash Funds - 2023	\$ 192,227	\$155,040	\$ 126,070	\$8,643	\$ 19,696	\$36,223	\$ 190,632
Federal Funds	\$ 44,307	\$0	\$ 29,259	\$390	\$ -	\$6,484	\$ 36,133
Pesticides	\$ 139,621	\$ 11,275	\$ 93,492	\$ 13,447	\$ 24,326	\$ 5,185	\$ 136,450
General Fund	\$ 107,826	\$0	\$ 74,650	\$10,372	\$ 22,803	\$0	\$ 107,825
Cash Funds - 2022	\$ 10,000	\$11,275	\$ 5,792	\$472	\$ 1,523	\$1,765	\$ 9,552
Federal Funds	\$ 21,795	\$0	\$ 13,050	\$2,603	\$ -	\$3,420	\$ 19,073
Public/Private Utilities	\$ 4,581,169	\$ 2,330,942	\$ 3,022,128	\$ 243,525	\$ 512,795	\$ 519,384	\$ 4,297,832
General Fund	\$ 1,511,388	\$0	\$ 1,171,697	\$103,555	\$ 236,137	\$0	\$ 1,511,389
Cash Funds - 2024	\$ 2,490,743	\$2,330,942	\$ 1,507,241	\$113,579	\$ 276,658	\$439,424	\$ 2,336,902
Federal Funds	\$ 579,038	\$0	\$ 343,190	\$26,391	\$ -	\$79,960	\$ 449,541
WQ Certifications	\$ 361,211	\$ 58,967	\$ 52,274	\$ 5,479	\$ 4,858	\$ 12,224	\$ 74,835
General Fund	\$ 10,202	\$0	\$ 7,614	\$980	\$ 1,607	\$0	\$ 10,201
Cash Funds - 2018	\$ 309,663	\$58,967	\$ 40,382	\$4,249	\$ 3,251	\$11,226	\$ 59,108
Federal Funds	\$ 41,346	\$0	\$ 4,278	\$250	\$ -	\$998	\$ 5,526
Total	\$ 10,771,474	\$ 6,107,417	\$ 6,658,453	\$ 565,592	\$ 1,120,954	\$ 1,218,423	\$ 9,563,422
General Fund	\$ 3,023,349	\$0	\$ 2,323,008	\$225,783	\$ 474,557	\$0	\$ 3,023,348
Cash Funds	\$ 6,404,654	\$6,107,417	\$ 3,565,835	\$283,887	\$ 646,397	\$1,038,331	\$ 5,534,450
Federal Funds	\$ 1,343,471	\$0	\$ 769,610	\$55,922	\$ -	\$180,092	\$ 1,005,624

*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 2018-19 Financial Results

SFY18-19 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	\$ 1,385,218	\$ 852,232	\$ 142,711	\$ 150,797	\$ 99,921	\$ 1,245,661
General Fund	\$ 1,083,639	\$ -	\$ 480,731	\$ 94,119	\$ 90,102	\$ -	\$ 664,952
Cash Funds - 2019	\$ 1,403,605	\$ 1,385,218	\$ 299,860	\$ 34,857	\$ 60,695	\$ 81,872	\$ 477,284
Federal Funds	\$ 369,535	\$ -	\$ 71,641	\$ 13,735	\$ -	\$ 18,049	\$ 103,425
Construction	\$ 2,408,180	\$ 2,386,902	\$ 866,580	\$ 79,905	\$ 165,477	\$ 195,092	\$ 1,307,054
General Fund	\$ 294,164	\$ -	\$ 158,614	\$ 28,168	\$ 32,661	\$ -	\$ 219,443
Cash Funds - 2021	\$ 1,834,240	\$ 2,386,902	\$ 652,099	\$ 41,338	\$ 132,816	\$ 181,160	\$ 1,007,413
Federal Funds	\$ 279,776	\$ -	\$ 55,867	\$ 10,399	\$ -	\$ 13,932	\$ 80,198
MS4	\$ 326,528	\$ 201,117	\$ 113,081	\$ 16,891	\$ 15,601	\$ 14,954	\$ 160,527
General Fund	\$ 116,474	\$ -	\$ 57,055	\$ 11,153	\$ 8,774	\$ -	\$ 76,982
Cash Funds - 2023	\$ 166,265	\$ 201,117	\$ 43,309	\$ 4,110	\$ 6,827	\$ 11,932	\$ 66,178
Federal Funds	\$ 43,789	\$ -	\$ 12,717	\$ 1,628	\$ -	\$ 3,022	\$ 17,367
Pesticides	\$ 153,979	\$ -	\$ 45,379	\$ 11,381	\$ 13,645	\$ 876	\$ 71,281
General Fund	\$ 122,984	\$ -	\$ 42,661	\$ 10,343	\$ 13,316	\$ -	\$ 66,320
Cash Funds - 2022	\$ 9,454	\$ -	\$ 1,010	\$ 237	\$ 329	\$ 347	\$ 1,923
Federal Funds	\$ 21,541	\$ -	\$ 1,708	\$ 801	\$ -	\$ 529	\$ 3,038
Public/Private Utilities	\$ 4,656,965	\$ 2,407,161	\$ 1,621,396	\$ 223,639	\$ 286,494	\$ 233,441	\$ 2,364,970
General Fund	\$ 1,522,133	\$ -	\$ 755,247	\$ 145,751	\$ 151,783	\$ -	\$ 1,052,781
Cash Funds - 2024	\$ 2,562,558	\$ 2,407,161	\$ 667,842	\$ 56,618	\$ 134,711	\$ 187,847	\$ 1,047,018
Federal Funds	\$ 572,274	\$ -	\$ 198,307	\$ 21,270	\$ -	\$ 45,594	\$ 265,171
WQ Certifications	\$ 284,877	\$ 41,950	\$ 39,030	\$ (255)	\$ 4,342	\$ 9,941	\$ 53,058
General Fund	\$ 9,989	\$ -	\$ -	\$ 957	\$ 112	\$ -	\$ 1,069
Cash Funds - 2018	\$ 234,025	\$ 41,950	\$ 37,025	\$ (2,730)	\$ 4,230	\$ 9,211	\$ 47,736
Federal Funds	\$ 40,863	\$ -	\$ 2,005	\$ 1,518	\$ -	\$ 730	\$ 4,253
Total	\$ 10,687,308	\$ 6,422,348	\$ 3,537,698	\$ 474,272	\$ 636,356	\$ 554,225	\$ 5,202,551
General Fund	\$ 3,149,383	\$ -	\$ 1,494,308	\$ 290,491	\$ 296,748	\$ -	\$ 2,081,547
Cash Funds	\$ 6,210,147	\$ 6,422,348	\$ 1,701,145	\$ 134,430	\$ 339,608	\$ 472,369	\$ 2,647,552
Federal Funds	\$ 1,327,778	\$ -	\$ 342,245	\$ 49,351	\$ -	\$ 81,856	\$ 473,452

*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.

Permit ID	Permit Sector	Modification Issue Date
CO0000002	Commerce and industry	03/30/18
CO0000003	Commerce and industry	07/31/18
CO0000591	Commerce and industry	05/23/18
CO0000612	Commerce and industry	08/31/18
CO0000612	Commerce and industry	09/28/18
CO0001104	Commerce and industry	09/28/18
CO0001163	Commerce and industry	09/28/18
CO0032158	Commerce and industry	07/31/18
CO0042480	Commerce and industry	09/28/18
CO0047767	Commerce and industry	08/31/18
CO0047776	Commerce and industry	08/31/18
CO0048003	Commerce and industry	08/31/18
CO0048054	Commerce and industry	08/31/18
CO0048275	Commerce and industry	10/31/17
CO0048577	Commerce and industry	06/29/18
CO0048691	Commerce and industry	08/31/18
CO0048964	Commerce and industry	08/02/18
COG130004	Commerce and industry	08/24/18
COG130011	Commerce and industry	07/05/18
COG500010	Commerce and industry	10/23/17
COG500088	Commerce and industry	10/23/17
COG500092	Commerce and industry	04/12/18
COG500100	Commerce and industry	03/20/18
COG500119	Commerce and industry	10/23/17
COG500161	Commerce and industry	10/23/17
COG500216	Commerce and industry	10/23/17
COG500250	Commerce and industry	12/20/17
COG500263	Commerce and industry	11/22/17
COG500267	Commerce and industry	08/09/18
COG500299	Commerce and industry	10/23/17
COG500320	Commerce and industry	03/07/18
COG500325	Commerce and industry	03/23/18
COG500346	Commerce and industry	03/20/18
COG500364	Commerce and industry	10/23/17
COG500380	Commerce and industry	10/23/17
COG500419	Commerce and industry	10/23/17
COG500437	Commerce and industry	10/23/17
COG500458	Commerce and industry	10/23/17
COG500464	Commerce and industry	10/23/17
COG500467	Commerce and industry	10/23/17
COG500481	Commerce and industry	03/20/18
COG500482	Commerce and industry	10/23/17
COG501501	Commerce and industry	02/20/18
COG501501	Commerce and industry	07/20/18
COG501505	Commerce and industry	10/23/17
COG501510	Commerce and industry	10/23/17
COG501524	Commerce and industry	10/23/17
COG501526	Commerce and industry	03/20/18
COG501528	Commerce and industry	10/13/17

Permit ID	Permit Sector	Modification Issue Date
COG501542	Commerce and industry	10/23/17
COG501547	Commerce and industry	08/28/18
COG501549	Commerce and industry	04/30/18
COG501567	Commerce and industry	10/23/17
COG501583	Commerce and industry	03/20/18
COG501584	Commerce and industry	03/20/18
COG501595	Commerce and industry	07/20/18
COG501714	Commerce and industry	09/27/18
COG501717	Commerce and industry	02/20/18
COG501723	Commerce and industry	02/20/18
COG501747	Commerce and industry	02/20/18
COG501749	Commerce and industry	12/06/17
COG501749	Commerce and industry	01/26/18
COG501753	Commerce and industry	04/17/18
COG501764	Commerce and industry	01/16/18
COG501856	Commerce and industry	10/10/17
COG501870	Commerce and industry	01/18/18
COG501938	Commerce and industry	03/07/18
COG501969	Commerce and industry	11/22/17
COG501991	Commerce and industry	12/19/17
COG502030	Commerce and industry	03/26/18
COG502109	Commerce and industry	12/11/17
COG502109	Commerce and industry	04/30/18
COG502126	Commerce and industry	10/10/17
COG502151	Commerce and industry	09/20/18
COG502155	Commerce and industry	05/18/18
COG603157	Commerce and industry	06/11/18
COG603293	Commerce and industry	05/09/18
COR900009	Commerce and industry	04/06/18
COR900026	Commerce and industry	05/21/18
COR900073	Commerce and industry	03/17/18
COR900123	Commerce and industry	04/02/18
COR900356	Commerce and industry	08/09/18
COR900429	Commerce and industry	03/22/18
COR900467	Commerce and industry	08/09/18
COR900490	Commerce and industry	12/19/17
COR900544	Commerce and industry	06/28/18
COR900586	Commerce and industry	09/11/18
COR900683	Commerce and industry	07/30/18
COR900787	Commerce and industry	04/20/18
COR900867	Commerce and industry	12/29/17
COR901019	Commerce and industry	01/31/18
COR901187	Commerce and industry	09/04/18
COR901285	Commerce and industry	09/27/18
COR901346	Commerce and industry	05/16/18
COG074763	Construction	02/14/18
COG075271	Construction	11/27/17
COG075491	Construction	01/09/18
COG075537	Construction	02/01/18

Permit ID	Permit Sector	Modification Issue Date
COG075537	Construction	07/05/18
COG075562	Construction	12/04/17
COG075562	Construction	05/14/18
COG075975	Construction	02/12/18
COG075990	Construction	10/10/17
COG075996	Construction	04/24/18
COG076054	Construction	05/21/18
COG076082	Construction	12/15/17
COG076115	Construction	01/31/18
COG076115	Construction	03/05/18
COG076115	Construction	03/09/18
COG076115	Construction	06/18/18
COG076118	Construction	08/15/18
COG076121	Construction	04/30/18
COG076131	Construction	08/27/18
COG076136	Construction	03/09/18
COG076151	Construction	02/01/18
COG076151	Construction	02/20/18
COG076151	Construction	04/06/18
COG076159	Construction	08/27/18
COG076198	Construction	03/22/18
COG076199	Construction	03/23/18
COG076199	Construction	06/18/18
COG076228	Construction	05/03/18
COG076300	Construction	06/18/18
COG315250	Construction	10/04/17
COG315250	Construction	10/17/17
COG315261	Construction	03/09/18
COG315315	Construction	04/23/18
COG315439	Construction	02/14/18
COG315453	Construction	12/08/17
COG315462	Construction	12/19/17
COG315462	Construction	01/23/18
COG315465	Construction	10/17/17
COG315481	Construction	07/01/18
COG315497	Construction	08/22/18
COG315510	Construction	08/28/18
COG315524	Construction	05/07/18
COG315524	Construction	06/13/18
COG315525	Construction	09/18/18
COG315536	Construction	07/30/18
COG604273	Construction	01/22/18
COG604305	Construction	12/15/17
COG604305	Construction	02/12/18
COG604329	Construction	09/14/18
CO0000005	Public and private utilities	04/30/18
CO0000011	Public and private utilities	12/29/17
CO0021261	Public and private utilities	07/31/18
CO0024392	Public and private utilities	05/31/18

Permit ID	Permit Sector	Modification Issue Date
CO0026468	Public and private utilities	01/16/18
CO0026701	Public and private utilities	04/30/18
CO0026735	Public and private utilities	01/29/18
CO0027171	Public and private utilities	04/30/18
CO0033791	Public and private utilities	10/31/17
CO0037681	Public and private utilities	04/30/18
CO0040339	Public and private utilities	10/31/17
CO0041840	Public and private utilities	01/29/18
CO0042030	Public and private utilities	09/28/18
CO0046876	Public and private utilities	05/31/18
CO0048852	Public and private utilities	10/31/17
CO0049019	Public and private utilities	01/29/18
COG588020	Public and private utilities	04/18/18
COG588101	Public and private utilities	08/29/18
COG589005	Public and private utilities	06/11/18
COG589012	Public and private utilities	03/01/18
COG589072	Public and private utilities	12/14/17
COG589138	Public and private utilities	02/06/18
COG589141	Public and private utilities	03/30/18
COG641054	Public and private utilities	06/13/18
COG641133	Public and private utilities	01/05/18
COG641190	Public and private utilities	12/04/17
COX631051	Public and private utilities	12/12/17
COX631052	Public and private utilities	03/09/18
COX632060	Public and private utilities	03/09/18
COX632073	Public and private utilities	05/02/18
COX632076	Public and private utilities	02/20/18
COX632096	Public and private utilities	12/04/17
COX632097	Public and private utilities	02/16/18
COX632098	Public and private utilities	10/05/17

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%
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%
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%
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%
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%
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%
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%
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%

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%
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%
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%
Pesticides				
Backlogged permits as of Sept. 30, 2017	0	73	73	0%
Backlogged permits as of Sept. 30, 2018	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%
Total				
Backlogged permits as of Sept. 30, 2017	5,233	2,371	7,604	69%
Backlogged permits as of Sept. 30, 2018	310	325	635	49%