

REFINANCE WATER POLLUTION CONTROL PROGRAM ACT

HB17-1285

20 MARCH 2018 18

ANNUAL REPORT TO
THE LEGISLATURE



TM

Foreward

I am pleased to submit the first annual report for HB17-1285 - Refinance Water Pollution Control Program Act for the report period coinciding with federal fiscal year 16-17 (Oct. 1, 2016 - Sept. 30, 2017). 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 shall submit the annual report on or before March 31 of each year. Commencing in 2017, the department shall develop baseline information for reporting. Commencing in 2018, the department shall provide information on improvements that have been made in comparison to the baseline information and information on the barriers to making improvements.

The annual report is provided to the following committees:

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



Patrick Pfaltzgraff, director
Water Quality Control Division
Colorado Dept. of Public Health and Environment
March 30, 2018

| | |
|--|-----------|
| Foreward | 2 |
| Executive summary | 4 |
| Overview: Clean Water Program | 6 |
| Water quality management in Colorado | 6 |
| Work areas and organization | 7 |
| Reporting period and establishing a baseline | 7 |
| Program finances | 7 |
| Permits | 8 |
| Metrics | 8 |
| Definitions | 9 |
| Inspections | 10 |
| Metrics | 10 |
| Definitions | 11 |
| Engineering | 12 |
| Metrics | 12 |
| Enforcement | 13 |
| Metrics | 13 |
| Definitions | 15 |
| Standards | 16 |
| Metrics | 16 |
| Upcoming hearings | 17 |
| Definitions | 18 |
| Conclusion | 19 |
| Appendix A | 20 |
| | |
| List of figures | |
| Figure 1. Total number of FTE by clean water program section. | 4 |
| Figure 2. Organization chart for the Water Quality Control Division. | 7 |
| Figure 3. Permits pending and separated by sector. | 8 |
| Figure 4. Average permit processing time in days. | 9 |
| Figure 5. Inspections completed - compliance oversight. | 10 |
| Figure 6. Annual output from engineering section. | 12 |
| Figure 7. Overview of enforcement activities. | 14 |
| Figure 8. Number of compliance advisories issued. | 14 |
| Figure 9. Number of enforcement actions issued. | 15 |
| Figure 10. Standards tools to manage water quality across the state. | 17 |

Executive summary

The Department of Public Health's Water Quality Control Division and clean water 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. During the 2017 legislative session, the department was successful in funding the clean water program via legislation, HB17-1285. This bill provides secure funding for the the next five years. 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 take effect July 1, 2018.

The first annual report covers federal fiscal year 16-17 (Oct. 1, 2016 - Sept. 30, 2017). The program develops work plans based on the federal fiscal year. In addition, the reporting period is indicative of the program's resources as it began to restore staffing levels based on funding provided by HB17-1285 (see Figure 1). For these reasons, the program selected this reporting period to establish baseline metrics. The clean water program is still restoring staffing levels based on the funding provided by HB17-1285. Staffing levels should be restored for all full-time equivalent positions (FTE) during state fiscal year 18-19 after more information is available about cash revenues associated with the July 1, 2018 cash fee increases. Moving forward, the metrics and associated baselines developed as part of this report should remain at similar levels and for parts of the program, modest gains should be realized. The baselines established as part of this report will be important in measuring the program's success moving forward. When comparing future year's results to the baseline metrics established in this report, the program will be able to identify areas where process improvements are needed and provide an assessment of resources versus level of service provided. In addition to the metrics developed for this report, the division presents information about program costs. The Colorado General Assembly Joint Budget Committee has required the division to report costs associated with the clean water sectors on a quarterly basis. Cost information includes total program costs such as personnel services, administrative services, benefits and indirect costs. This information is in Appendix A.

Figure 1. Total number of FTE by clean water program section.

| Reporting category | Number of FTE |
|--------------------|---------------|
| Enforcement | 6.0 |
| Engineering | 3.9 |
| Inspections | 14.6 |
| Permits | 11.0 |
| Standards | 6.0 |

Permits

The federal Clean Water Act and Colorado Water Quality Control Act prohibit the discharge of pollutants to state waters unless certain conditions are met. The permits section works to issue and manage permits for entities requesting to discharge pollutants to waters of the state. For the reporting period, 2,955 permits were issued, modified, administratively continued or reissued. This includes both individual permits and general permit certifications.

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. A total of 649 inspections were completed.

During the reporting period, staff responded to 359 environmental reported releases. This was slightly more than the five-year average of 347 environmental releases per year.

Engineering

The engineering section 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. For the reporting period, a total of 174 program design reviews were completed.

Enforcement

The clean water 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. For the reporting period, 2,085 compliance advisories and 49 enforcement actions were issued.

Standards

The watershed section is responsible for developing the science utilized by the Water Quality Control 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 fish. There is a set of statewide standards that are designed to protect the beneficial uses of all of Colorado waters. The federal Clean Water Act and Colorado Water Quality Control Act allow statewide standards to be modified based on site-specific factors. Watershed section staff serve as staff to the commission for all standards hearings. There are eight standards related hearings scheduled now through the next reporting period.

Overview: Clean Water Program

The department’s Water Quality Control Division and its clean water program implement the federal Clean Water Act and state 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 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 10,000 entities. Examples of regulated entities include commercial and industrial facilities, mines, construction sites 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 from diffuse sources that are not regulated such as water runoff from agricultural areas, abandoned mines and forested areas. These diffuse 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 including: information gathering, goal setting, protection and restoration, assurance, and technical and financial assistance.

Information gathering: The program gathers scientific data and information that is used to determine the health of Colorado waters for use by people, agriculture and fish. This information is used for all parts of the continuing planning process.

Goal setting: The program develops and presents scientific evidence to the department’s Water Quality Control 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 fish.

Protection and restoration: The program issues permits to entities that discharge pollution to Colorado waters. Permits 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.

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 issues compliance advisories, notices of violation, cease and desist orders and/or penalties.

Technical and financial assistance: The program provides several types of technical and financial assistance for point sources and nonpoint sources. The first step taken when a facility is not in compliance with its permit is compliance assistance. Compliance assistance includes technical support and, for domestic wastewater facilities, financial assistance in the form of grants or loans. For nonpoint sources, the program issues federal grants to fund

Information gathering

Goal setting

Protection and restoration

Assurance

Technical and financial assistance

nonpoint source reduction projects. The program also provides technical support to facilities seeking to utilize tools that provide regulatory flexibility such as variances and site-specific standards.

Work areas and organization

The work to support water quality management processes is divided across multiple groups within the division. This includes 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 stand alone summary section in this report is the community development and partnership section. This group works with the Colorado Water Resources and Power Development Authority to provide funding to implement water pollution control infrastructure projects for domestic wastewater treatment facilities to meet the goals of the federal Clean Water Act and Colorado Water Quality Control Act.

Figure 2. Organization chart for the Water Quality Control Division highlighting core and shared work sections.



Reporting period and establishing a baseline

The first annual report covers federal fiscal year 16-17 (Oct. 1, 2016 - Sept. 30, 2017). The program develops work plans based on the federal fiscal year. In addition, the reporting period is indicative of the program's resources as it began to restore staffing levels based on funding provided by HB17-1285. For these reasons, the program selected this reporting period to establish baseline metrics. Moving forward, the metrics and associated baselines developed as part of this report should remain at similar levels and for parts of the program, modest gains should be realized. The baselines established as part of this report will be important in measuring the program's success moving forward. When comparing future year's results to the baseline metrics established in this report, the program will be able to identify areas where process improvements are needed and provide an assessment of resources versus level of service provided.

Program finances

The Colorado General Assembly Joint Budget Committee requires the division 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 2016-17 and for the first two quarters of state fiscal year 2017-18.

Permits

The federal Clean Water Act and Colorado Water Quality Control Act prohibit the discharge of pollutants to state waters unless certain conditions are met. 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 the National Pollution Discharge Elimination System. 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, 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 the EPA's requirements.

Metrics

For the reporting period, the permits section had 11 FTE processing permits. The number of FTE processing permits during the next reporting period is anticipated to increase to 15 FTE based on funding from HB17-1285. These additional FTE will be focused on reducing permit backlog and increasing timeliness of permit issuance.

For the reporting period, a total of 2,955 permits were issued, modified, administratively continued or reissued. This includes both individual permits and general permit certifications.

- Commerce & Industry - 724.
- Construction - 2,201.
- Municipal Separate Storm Sewer System (MS4) - 5.
- Public & Private Utilities - 25.

Discharge permit categories

1. Domestic wastewater treatment facilities.
2. Industrial process water and stormwater.
3. Construction sites.
4. Municipal stormwater.
5. Pesticide applications.

Figure 3 summarizes the number of pending permits for new and amended permits. Figure 4 summarizes the length of time to process permits. In addition to reporting metrics required by HB17-1285, the permits section has an obligation to report to the EPA on a subset of permits that are administratively extended. 29 percent of permits the EPA assessed were administratively continued during the reporting period. The EPA's national target for administratively extended permits is 17 percent.

Figure 3. Permits pending and separated by sector*.

| Action Type | Commerce and Industry | Construction | MS4 | Public & Private Utilities | Total |
|--------------|-----------------------|--------------|----------|----------------------------|-----------|
| Modification | 5 | 13 | 1 | 3 | 22 |
| New | 2 | -- | -- | -- | 2 |
| Total | 7 | 13 | 1 | 3 | 24 |

* Federal law and the Colorado Water Quality Control Act allow administrative extension of permits that have expired after their five-year term. These permittees still have permit coverage until their permit is renewed. Numbers reflected in this figure only include permits that have not been acted upon in any way. Based on the total number of permits (10,011), this number is less than 0.2 percent.

Figure 4. Average permit processing time in days*.

| Action Type | Commerce and Industry | Construction | MS4 | Pesticides | Public & Private Utilities | Total |
|--------------|-----------------------|--------------|-----|------------|----------------------------|-------|
| Modification | 31 | 22 | -- | -- | 63 | 26 |
| New | 52 | 7 | 55 | 7 | 55 | 11 |
| Renewal | 702 | -- | -- | -- | 593 | 629 |

* Average number of days a permit application is in the system before the permit was issued. Two years of data were included to capture the extent of the significant backlog in processing individual permit renewals for the Commerce & Industry and Public & Private Utilities sectors. These individual permit renewals are extremely complex and often take a permit writer several months to process. In addition, over the past two-years, some of these renewal actions have been subject to significant litigation, which impacts the capacity of permit writers to process additional applications.

Definitions

New permit - A permit that is being issued for the first time. These permittees do not have permission to discharge waste to state waters prior to issuance.

Modification - A change to an existing permit during its term. These permittees have permission to discharge waste to state waters, but may need a modification based on a change in their operations.

Renewal - A permit that has expired after its five-year term, but the permittee has filed a renewal application to continue to discharge to state waters.

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 the 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 to facilities following an inspection.

The field services section is also responsible for responding to environmental releases (e.g. spills) that are reported to the department. For federal fiscal year 16-17, staff responded to 359 environmental reported releases. This was slightly more than the five-year average of 347 releases per year. 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.

Metrics

Metrics for compliance oversight are tracked as inspections for major and minor facilities, and additional oversight that does not constitute a full inspection. The program classifies facilities as either major (discharging greater than one million gallons per day) or minor (discharging less than one million gallons per day) depending on the magnitude and/or character of the discharge. For facilities not subject to this classification system, and for alternative compliance oversight activities, metrics are listed under additional inspections. Additional inspections that fall outside the above descriptions are further defined in the definitions section. Figure 5 is a sector by sector explanation of inspection types for the reporting period. There were 14.6 FTE to complete inspection activities.

Figure 5. Inspections completed - compliance oversight.

| | Commerce & Industry Sector | Public & Private Utilities Sector - Domestic Wastewater and Drinking Water | Public & Private Utilities Sector- Reclaimed Water | Construction Sector | Pesticides Application Sector | Biosolids Applications Sector | MS4 Sector |
|------------------------------------|----------------------------|--|--|---------------------|-------------------------------|-------------------------------|------------|
| Majors Facility Inspections | 10 | 34 | N/A | 0 | 0 | N/A | 0 |
| Minors Facility Inspections | 42 | 71 | 27 | 309 | 0 | 57 | 0 |
| Additional Inspections | 9 | 0 | 0 | 75 | 15 | 0 | 0 |

Definitions

Commerce & Industry, Public & Private Utilities sectors - These sectors include domestic wastewater and drinking water treatment facility wastewater. For both sectors, the division conducts full compliance inspections of facilities and all associated discharge permits. A subset of these facilities have both major permits for the primary process water discharge and minor permits for stormwater discharges. For those facilities, inspections are counted separately for each permit. Some reconnaissance inspections are conducted to provide assistance and are listed as additional inspections. Other types of additional inspections can include biosolid facility inspections, sewage collection system inspections, and review of certificates of no-exposure, which verify that the no exposure exclusion from Colorado Discharge Permit System stormwater permitting is still valid.

Public & Private Utilities sector (reclaimed water) - Facilities that provide or use reclaimed water for approved uses are included in the public and private utilities sector. However, because inspections are very different for oversight of the use of reclaimed water, these are tracked and reported separately.

Construction sector - Compliance inspections for discharges associated with construction projects are typically full compliance inspections. However some reconnaissance and assistance inspections are also conducted and listed under additional inspections. Assistance inspections include oversight of the stormwater management administrator program, a public private partnership created through HB11-1026.

Pesticides application - Current oversight does not include full field oversight of the application of pesticides to state waters. Oversight is primarily based on review of plans and reports, as well as interviews. The program coordinates with the Colorado Department of Agriculture for pesticide related matters.

Biosolids - Inspections are for oversight of the land application of biosolids on agricultural land. In addition to inspections conducted by staff, reported numbers also include inspections conducted by the local health department under contract with the division.

MS4 sector - The program currently 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 in this 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.

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.

Metrics

While the number of FTE design review engineers may vary per year, overall output remains relatively constant on a per FTE basis. As Figure 6 shows, each review engineer completes an average of 46 reviews per year. For the report period, there were 174 reviews completed. This value varies depending on the complexity of reviews received and other competing work assignments.

Figure 6. Annual output from engineering section related to site location and design review applications.

| October | September | Review Engineer (FTE) | 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 |
| AVERAGE | | 3.9 | 99 | 81 | 179 | 46 |

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 division'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 going to 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 penalties.

Formal enforcement - Formal enforcement actions are authorized under §25-8-601 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.

Metrics

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 (referred to as DMRs). Given that there are over 10,000 permittees located across the state and limited program resources, staff are only able to complete onsite evaluations for approximately six 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.

Compliance rates for effluent limits and submission of required DMRs vary by sector. Applicable data indicates noncompliance rates are slightly higher in the public and private utilities sector. The unique challenges faced by these entities with respect to correcting noncompliance including funding, rate restructuring and infrastructure upgrades means that noncompliance may exist for a significant period of time before it is resolved.

The percent of facilities with effluent limitation violations by sector:

- Construction - 15 percent.
- Commerce & Industry - 15 percent.
- Public & Private Utilities - 22 percent
- MS4 and Pesticides - permits for these sectors do not require DMR reporting.

The percent of facilities with delinquent or deficient DMR violations for any reporting period during the year by sector:

- Construction - 45 percent.
- Commerce & Industry - 40 percent.
- Public & Private Utilities - 43 percent.
- MS4 and Pesticides - permits for these sectors do not require DMR reporting.

Generally, the percent of enforcement actions issued per year correlates with the percent of permits in each sector. For example and as shown in Figure 7, for federal fiscal year 16-17, the construction sector was 50 percent of all permits and about 53 percent of the total enforcement actions issued. The commerce and industry sector represented 23 percent of all permits and 24 percent of enforcement actions. The public and private utilities sector was 25 percent of all permits and 20 percent of enforcement actions. A similar trend is observed with the ratio of compliance advisories issued.

Figure 7. Overview of enforcement activities for federal fiscal year 16-17.

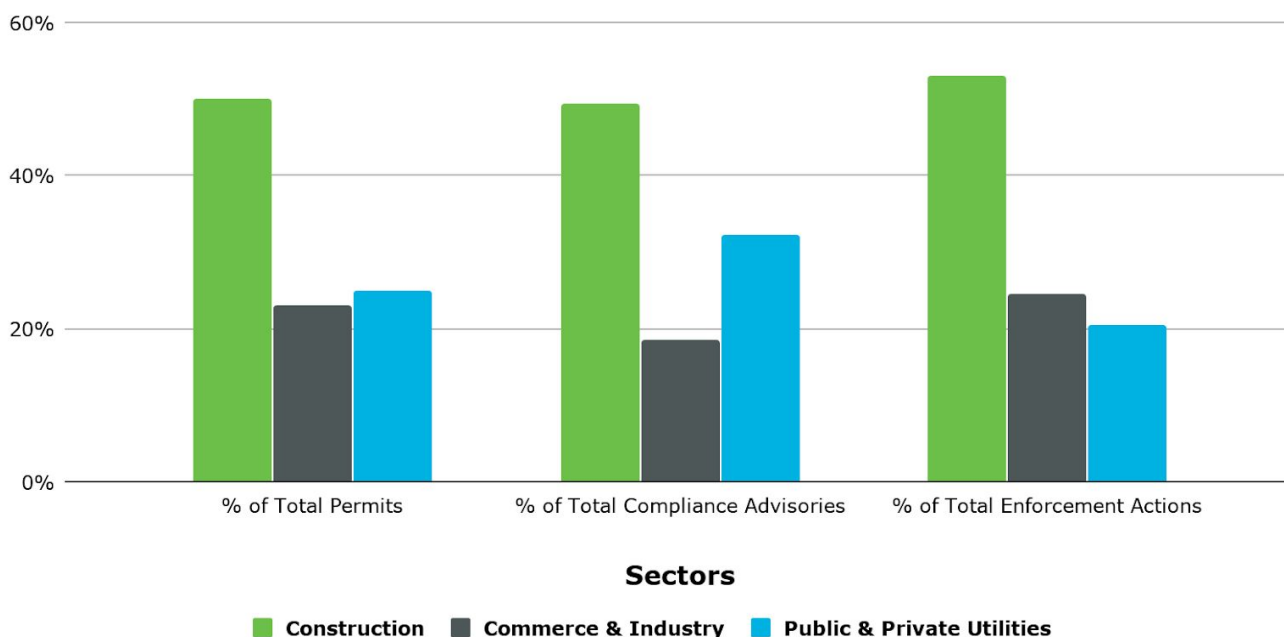


Figure 8 provides an overview of the section’s informal compliance assurance activities by sector and includes the number of compliance advisories issued. Figure 9 summarizes the number of enforcement actions issued by sector.

Figure 8. Number of compliance advisories issued (for permits that include effluent limitations or compliance schedule items).

| Sector | Estimated number of permits (as of October 2017) | Number of compliance advisories issued |
|----------------------------|--|--|
| Construction | 4,885 | 1,029 |
| Commerce & Industry | 2,254 | 385 |
| Public & Private Utilities | 2,405 | 671 |
| MS4 | 124 | 0 |
| Pesticides | 73 | 0 |

Figure 9. Number of enforcement actions issued (including amendments to existing orders).

| Sector | 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 | 5 | 6 | 5 | 0 | 26 |
| Commerce and Industry* | 6 | 3 | N/A | 3 | 0 | 12 |
| Public & Private Utilities | 6 | 3 | N/A | 0 | 1 | 10 |
| MS4 | 0 | 0 | N/A | 0 | 1 combined state/ federal | 1 |
| Pesticides | 0 | 0 | NA | 0 | 0 | 0 |

* Does not include animal feeding operations.

Definitions

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 division 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 division 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 division’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.

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 fish. 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.

Metrics

Water quality standards are typically expressed numerically. Numeric standards may be applied in a few different ways. There is a set of statewide standards that are designed to protect the beneficial uses of all of Colorado waters and these statewide standards are contained in the commission’s Regulation 31 (5 CCR 1002-31). The federal Clean Water Act and 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 beneficial use the standard is meant to protect, to work with stakeholders, and to formulate recommendations to the commission. Colorado is a national leader in developing standards on a site-specific basis that result in flexibility for the regulated community.

In Colorado, there are three major site-specific tools used to modify a statewide standard: site-specific numeric standards, temporary modifications and variances. Site-specific numeric standards are a modification of a statewide standard based on consideration of site-specific factors such as water chemistry or fish 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 table value standards. Figure 10 shows the relative breakout of standards tools that have been adopted in segments for the major river basins across the state as of October 2017. This information can serve as a baseline for future comparison of these site-specific tools.

Figure 10. The number of site-specific standards, variances and temporary modifications across the state*.

| Basin | Segments | Temporary Modifications | | | Variances | Site-Specific Standards | |
|--------------|----------|-------------------------|-----------------|-------------|-----------|-------------------------|--------------|
| | | All TMs | Non-Arsenic TMs | Arsenic TMs | Variances | Temp SSS | Non-Temp SSS |
| Arkansas | 145 | 85 | 35 | 50 | 1 | 10 | 77 |
| Colorado | 134 | 41 | 3 | 64 | 0 | 14 | 44 |
| Gunnison | 163 | 61 | 5 | 56 | 1 | 6 | 82 |
| Rio Grande | 104 | 38 | 10 | 28 | 0 | 4 | 60 |
| San Juan | 158 | 60 | 4 | 56 | 1 | 9 | 45 |
| South Platte | 233 | 151 | 55 | 96 | 1 | 19 | 89 |
| Yampa/White | 131 | 67 | 7 | 34 | 0 | 7 | 14 |
| Statewide | 1068 | 503 | 119 | 384 | 4 | 69 | 411 |

Upcoming hearings

For the remainder of this reporting year and for the next reporting year (Oct. 1, 2018 through Sept. 30, 2019), the watershed section will be working on the following standards development actions and rulemaking hearing proceedings:

- **April 2018** - Rulemaking hearing for site-specific groundwater standards for perfluorinated compounds in Colorado's Security and Widefield areas (Regulation No. 42).
- **June 2018** - Arkansas River and Rio Grande Basins (Regulation Nos. 32 and 36) rulemaking hearing. 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 be will reviewed and revised as appropriate.
- **August 2018** - Site-specific standards rulemaking hearing for Upper South Platte Segments 2b and 2c. The focus of this rulemaking hearing will be to consider adoption of site-specific standards or a variance that recognizes water quality conditions that are possible to achieve via feasible pollutant source control and treatment.
- **October 2018** - South Platte River Basin (Regulation No. 38) issues scoping hearing. The focus of this hearing will be the routine triennial review of use classifications and standards for these basins, 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 be will reviewed and revised as appropriate.
- **December 2018** - 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 may also occur on a limited basis.
- **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 the temperature standards based on site-specific aquatic life use and revisions to water supply use classifications for various segments. Site-specific standards be will reviewed and revised as appropriate.
 - Issues formulation hearing - **November 2018**.
 - Rulemaking hearing - **June 2019**.
- **May 2019** - Basic and site-specific standards for groundwater (Regulation Nos. 41 and 42) public informational hearing. The focus of this hearing will be to incorporate 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.

Definitions

SSS - Site-specific standards. The commission adopts site-specific standards to take into account factors specific to a site such as naturally high levels of a given parameter (e.g. iron or zinc) in the water, a unique composition of fish and aquatic insects in that waterbody or other irreversible factors that influence the waterbody.

- Temp SSS - All temperature standards are site specific standards. These are shown separately in the figure due to the large number.
- All other SSS - This category includes site specific standards for every other parameter besides temperature.

Variances - A variance to a water quality standard is one of several regulatory tools that can be used to address compliance challenges. Variances should be used after other avenues (such as compliance schedules and temporary modifications) have been shown to be inappropriate, or when granting a variance is preferable as a matter of policy. Variances establish a temporary water quality standard that represents the highest degree of protection of a classified use that is feasible within 20 years. It is a hybrid standard that maintains the long term water quality goal of fully protecting all designated uses, while temporarily authorizing an alternative effluent limit to be developed.

TMs - Temporary modifications. These are standards granted by the commission for stream segments when there is a demonstrated or predicted compliance problem from a point source discharge and there is uncertainty on the long term plan regarding the appropriate water quality standard or the extent to which human induced conditions can be corrected. The duration of temporary standards are determined on a case-by-case basis and the goal is to determine the appropriate standard.

- Arsenic TMs - are temporary modifications for arsenic. Due to the large number of these specific temporary modifications, it is called out separately from the other temporary modification. The section is currently gathering information that could be used by the commission to revise the table value arsenic standard.
- Non-arsenic TMs - This category includes temporary modifications for every other parameter other than arsenic.

Conclusion

The clean water program is still restoring staffing levels based on funding provided by HB17-1285. Staffing levels should be fully restored during state fiscal year 18-19 once more information is available about cash revenues associated with the July 1, 2018 cash fee increases. The metrics developed in this report will serve as a baseline for the future. Moving forward, the metrics and associated baselines developed as part of this report should remain at similar levels and for parts of the program, modest gains should be realized. The baselines established as part of this report will be important in measuring the program's success moving forward. When comparing future year's results to the baseline metrics established in this report, the program will be able to identify areas where process improvements are needed and provide an assessment of resources versus level of service provided.

Appendix

- A. Quarterly revenue and expenditure statements as forwarded to the Colorado General Assembly Joint Budget Committee (coinciding with reporting period, federal fiscal year 16-17).



Fiscal Year 2016-17 Quarterly RFI

SFY16-17 Year End Results

| Sector Budget: | TOTAL Spending Auth* | Collected Revenue** | Sector Expenses | Admin Expenses*** | POTS Expenses | Indirect Expenses*** | Total Expenses |
|---------------------------------|----------------------|---------------------|-----------------|-------------------|---------------|----------------------|----------------|
| Commerce and Industry | \$ 2,568,476 | \$ 965,528 | \$ 1,726,932 | \$ 319,607 | \$ 275,836 | \$ 251,909 | \$ 2,574,284 |
| General Fund | \$ 1,280,266 | \$ - | \$ 997,106 | \$ 111,907 | \$ 173,894 | \$ - | \$ 1,282,907 |
| Cash Funds - 2019 | \$ 960,453 | \$ 965,528 | \$ 556,852 | \$ 57,247 | \$ 101,942 | \$ 166,434 | \$ 882,475 |
| Federal Funds | \$ 327,757 | \$ - | \$ 172,974 | \$ 150,453 | \$ - | \$ 85,475 | \$ 408,902 |
| Construction | \$ 2,235,897 | \$ 2,435,623 | \$ 1,467,351 | \$ 232,081 | \$ 243,227 | \$ 356,161 | \$ 2,298,820 |
| General Fund | \$ 447,864 | \$ - | \$ 338,721 | \$ 42,592 | \$ 55,865 | \$ - | \$ 437,178 |
| Cash Funds - 2021 | \$ 1,632,067 | \$ 2,435,623 | \$ 1,073,182 | \$ 117,893 | \$ 187,362 | \$ 323,907 | \$ 1,702,344 |
| Federal Funds | \$ 155,966 | \$ - | \$ 55,448 | \$ 71,596 | \$ - | \$ 32,254 | \$ 159,298 |
| MS4 | \$ 311,340 | \$ 152,651 | \$ 193,215 | \$ 42,898 | \$ 25,561 | \$ 28,445 | \$ 290,119 |
| General Fund | \$ 143,784 | \$ - | \$ 116,843 | \$ 10,941 | \$ 17,009 | \$ - | \$ 144,793 |
| Cash Funds - 2023 | \$ 119,282 | \$ 152,651 | \$ 57,988 | \$ 9,796 | \$ 8,552 | \$ 17,937 | \$ 94,273 |
| Federal Funds | \$ 48,274 | \$ - | \$ 18,384 | \$ 22,161 | \$ - | \$ 10,508 | \$ 51,053 |
| Pesticides | \$ 157,771 | \$ 11,825 | \$ 170,486 | \$ 62,626 | \$ - | \$ 62,373 | \$ 295,485 |
| General Fund | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Cash Funds - 2022 | \$ 22,371 | \$ 11,825 | \$ 5,966 | \$ 472 | \$ - | \$ 1,835 | \$ 8,273 |
| Federal Funds | \$ 135,400 | \$ - | \$ 164,520 | \$ 62,154 | \$ - | \$ 60,538 | \$ 287,212 |
| Public/Private Utilities | \$ 4,620,508 | \$ 2,310,436 | \$ 3,033,387 | \$ 609,348 | \$ 497,828 | \$ 445,494 | \$ 4,586,057 |
| General Fund | \$ 2,258,483 | \$ - | \$ 1,784,149 | \$ 174,188 | \$ 298,907 | \$ - | \$ 2,257,244 |
| Cash Funds - 2024 | \$ 1,700,939 | \$ 2,310,436 | \$ 1,107,519 | \$ 131,695 | \$ 198,921 | \$ 332,291 | \$ 1,770,426 |
| Federal Funds | \$ 661,086 | \$ - | \$ 141,719 | \$ 303,465 | \$ - | \$ 113,203 | \$ 558,387 |
| WQ Certifications | \$ 282,352 | \$ 29,558 | \$ 23,265 | \$ 16,791 | \$ 2,458 | \$ 10,646 | \$ 53,160 |
| General Fund | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Cash Funds - 2018 | \$ 255,272 | \$ 29,558 | \$ 11,738 | \$ 4,360 | \$ 2,458 | \$ 4,360 | \$ 22,916 |
| Federal Funds | \$ 27,080 | \$ - | \$ 11,527 | \$ 12,431 | \$ - | \$ 6,286 | \$ 30,244 |
| Total | \$ 10,176,344 | \$ 5,905,621 | \$ 6,614,636 | \$ 1,283,351 | \$ 1,044,910 | \$ 1,155,028 | \$ 10,097,925 |
| General Fund | \$ 4,130,397 | \$ - | \$ 3,236,819 | \$ 339,628 | \$ 545,675 | \$ - | \$ 4,122,122 |
| Cash Funds | \$ 4,690,384 | \$ 5,905,621 | \$ 2,813,245 | \$ 321,463 | \$ 499,235 | \$ 846,764 | \$ 4,480,707 |
| Federal Funds | \$ 1,355,563 | \$ - | \$ 564,572 | \$ 622,260 | \$ - | \$ 308,264 | \$ 1,495,096 |

*The total 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 2017-18 Quarterly RFI

SFY17-18 Second Quarter Results

| Sector Budget: | TOTAL Spending Auth* | Collected Revenue** | Sector Expenses | Admin Expenses*** | POTS Expenses | Indirect Expenses*** | Total Expenses |
|---------------------------------|----------------------|---------------------|-----------------|-------------------|---------------|----------------------|----------------|
| Commerce and Industry | \$ 2,872,423 | \$ 892,305 | \$ 708,877 | \$ 65,576 | \$ 131,760 | \$ 84,038 | \$ 990,251 |
| General Fund | \$ 1,058,053 | \$ - | \$ 400,945 | \$ 55,648 | \$ 74,853 | \$ - | \$ 531,446 |
| Cash Funds - 2019 | \$ 1,440,468 | \$ 892,305 | \$ 159,968 | \$ 9,855 | \$ 29,783 | \$ 45,499 | \$ 245,105 |
| Federal Funds | \$ 373,902 | \$ - | \$ 147,964 | \$ 73 | \$ 27,124 | \$ 38,539 | \$ 213,700 |
| Construction | \$ 2,355,725 | \$ 2,309,600 | \$ 705,844 | \$ 32,781 | \$ 126,418 | \$ 150,432 | \$ 1,015,475 |
| General Fund | \$ 323,625 | \$ - | \$ 163,595 | \$ 21,040 | \$ 29,518 | \$ - | \$ 214,153 |
| Cash Funds - 2021 | \$ 1,749,017 | \$ 2,309,600 | \$ 394,260 | \$ 11,713 | \$ 73,165 | \$ 112,594 | \$ 591,732 |
| Federal Funds | \$ 283,083 | \$ - | \$ 147,989 | \$ 28 | \$ 23,735 | \$ 37,838 | \$ 209,590 |
| MS4 | \$ 316,939 | \$ 154,685 | \$ 118,930 | \$ 1,174 | \$ 19,041 | \$ 16,200 | \$ 155,345 |
| General Fund | \$ 114,891 | \$ - | \$ 57,932 | \$ - | \$ 9,507 | \$ - | \$ 67,439 |
| Cash Funds - 2023 | \$ 157,742 | \$ 154,685 | \$ 15,653 | \$ 1,173 | \$ 2,140 | \$ 4,457 | \$ 23,423 |
| Federal Funds | \$ 44,307 | \$ - | \$ 45,345 | \$ 1 | \$ 7,394 | \$ 11,743 | \$ 64,483 |
| Pesticides | \$ 150,453 | \$ - | \$ 43,548 | \$ 8,077 | \$ 12,240 | \$ 11,172 | \$ 75,037 |
| General Fund | \$ 118,830 | \$ - | \$ 4,350 | \$ 7,725 | \$ 1,225 | \$ - | \$ 13,300 |
| Cash Funds - 2022 | \$ 9,828 | \$ - | \$ 438 | \$ 343 | \$ 123 | \$ 213 | \$ 1,117 |
| Federal Funds | \$ 21,795 | \$ - | \$ 38,760 | \$ 9 | \$ 10,892 | \$ 10,959 | \$ 60,620 |
| Public/Private Utilities | \$ 4,799,740 | \$ 1,969,406 | \$ 1,292,955 | \$ 119,557 | \$ 245,523 | \$ 189,594 | \$ 1,847,629 |
| General Fund | \$ 1,655,859 | \$ - | \$ 616,162 | \$ 77,124 | \$ 116,422 | \$ - | \$ 809,708 |
| Cash Funds - 2024 | \$ 2,564,843 | \$ 1,969,406 | \$ 288,000 | \$ 42,333 | \$ 55,106 | \$ 89,456 | \$ 474,895 |
| Federal Funds | \$ 579,038 | \$ - | \$ 388,793 | \$ 100 | \$ 73,995 | \$ 100,138 | \$ 563,026 |
| WQ Certifications | \$ 361,210 | \$ 24,666 | \$ 18,922 | \$ 1,964 | \$ 2,646 | \$ 5,345 | \$ 28,877 |
| General Fund | \$ 10,202 | \$ - | \$ 39 | \$ 731 | \$ 8 | \$ - | \$ 778 |
| Cash Funds - 2018 | \$ 309,663 | \$ 24,666 | \$ 18,670 | \$ 1,232 | \$ 2,597 | \$ 5,287 | \$ 27,786 |
| Federal Funds | \$ 41,346 | \$ - | \$ 213 | \$ 1 | \$ 41 | \$ 58 | \$ 313 |
| Total | \$ 10,856,491 | \$ 5,350,662 | \$ 2,889,076 | \$ 229,129 | \$ 537,628 | \$ 456,781 | \$ 4,112,614 |
| General Fund | \$ 3,281,460 | \$ - | \$ 1,243,023 | \$ 162,268 | \$ 231,533 | \$ - | \$ 1,636,824 |
| Cash Funds | \$ 6,231,561 | \$ 5,350,662 | \$ 876,989 | \$ 66,649 | \$ 162,914 | \$ 257,506 | \$ 1,364,058 |
| Federal Funds | \$ 1,343,470 | \$ - | \$ 769,064 | \$ 212 | \$ 143,181 | \$ 199,275 | \$ 1,111,732 |

*The total 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 Spending Auth for General Funds. Where appropriate Federal Funds spending authority has been increased to the grant award. 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.