



**CO L O R A D O**

**Water Quality Control Division**

Department of Public Health & Environment

# 2015 Program Report to the Water and Wastewater Facility Operators Certification Board

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## Introduction

Operator certification is an important element in protecting public health and the environment by promoting compliance with the Safe Drinking Water Act, the Clean Water Act, and federal and state implementing regulations.

The goal of the operator certification program is to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water as well as the collection and treatment of wastewater prior to discharge. The State of Colorado's Operator Certification Program was approved by the U.S. Environmental Protection Agency as consistent with the requirements of the *Final Guidelines for the Certification and Recertification of the Operators of Community and Non-Transient Non-Community Public Water Systems*, 64 FR 5916 on June 22, 2001.

## Purpose of this report

The report provides the Water and Wastewater Facility Operators Certification Board (board) with a comprehensive overview of program activities. The report covers calendar year 2015 and includes data for the previous four years, where available, for comparison and trending purposes. The sources of data used to compile this report are the official annual reports to the U.S. Environmental Protection Agency, board contractors' annual reports, and records maintained by the board's contractors and the Colorado Department of Public Health and Environment, Water Quality Control Division (division).

## Organizational information

The board is a nine member governor-appointed board representing a variety of water and wastewater professionals. The board is established by Article 9 of Title 25, C.R.S. The Board published *Regulation 100 Water and Wastewater Facility Operators Certification Requirements* in accordance with sections 25-9-101 through 110, C.R.S.

The facility operators certification program is made up of four distinct groups: the board, the board administrator, the division and the board contractors. They have interrelated responsibilities for activities within the program.

	Application review	Application appeal	Training unit approval	Examinations	Compliance & enforcement	Facility penalty	Outreach & education	Facility classification	Classification appeals	Disciplinary actions	Regulation & policy revisions
Board		X				X			X	X	X
Board administrator		X				X			X		X
Division					X	X	X	X	X	X	X
Contractors	X	X	X	X							

Table 1 - Responsibilities of the board, administrator, division, and contractors.

The division is responsible for compliance and enforcement to ensure every water and wastewater facility is under the supervision of a certified operator holding a certificate equal to or greater than the classification of the facility. The division is also responsible for the

classification of all water and wastewater facilities in accordance with Regulation 100, sections 100.4 to 100.8, and for the investigation of complaints of misconduct by certified operators in the performance of their duties. The division serves as staff to the board and as liaison between the division and the board, the board's contractors, certified operators, and facility owners providing compliance assistance, regulation implementation, outreach and education.

The board contracts the operator certification and examination aspects of the program to the Colorado Environmental Certification and Training, Inc. (CECTI), a non-profit organization comprised of subject matter experts who volunteer their time and expertise in support of the program. The members of CECTI also review and approve training courses to meet the professional development requirements for certification renewal. The contractor subcontracts daily operations to Total Events and Management Services, Inc. (TEAMS). TEAMS manages the Operator Certification Program Office (OCPO), which oversees the daily operation of operator certification.

### Facility compliance

Article 9 of Title 25, C.R.S., requires "every water treatment facility, domestic or industrial wastewater treatment facility, wastewater collection system and water distribution system be under the supervision of a certified operator, holding a certificate in a class equal to or higher than the class of the facility or system."

Compliance with this requirement is determined by the answers the following three questions for each regulated facility:

- Has the facility owner reported the ORC's name and operator identification number to the division?
- Does the ORC have a valid certificate?
- Is the reported ORC's certificate at or above the level of classification of the facility they are operating?

If the answers to all three questions are not in the affirmative, the facility owner is determined to be out of compliance with Regulation 100.

### *Public water systems*

In late 2011 the division began integrating the facility classifications and the water treatment and distribution operator in responsible charge (ORC) information into the Safe Drinking Water Information System. The integration was completed in September 2013. Reports were also developed to utilize both the division's facility data and OCPO's operator certification data. The reports compare the facility classification with the operator certificate level and the validity of the certificate at the time of the report.

The integration of data into a single data system significantly improved the division's ability to accurately determine compliance with Regulation 100.

As part of the integration project, the division discovered that there were approximately 200 transient non-community water systems that were not being tracked for compliance with Regulation 100. Table 2 shows the increase in the inventory of transient non-community water systems being tracked from 2011 to 2012.

Table 2 also shows a decrease in the number of regulated community water systems. In late 2012 and early 2013, the division systematically reviewed how the *Colorado Primary Drinking Water Regulations* applicability criteria were being applied to consecutive systems. As a result approximately 50 community water systems, from a high of 933 in 2011, were removed from the active community water system inventory.

Reporting year	Public water systems	In compliance	Non-compliant	Compliance rate (%)	Combined compliance rate (%)
<i>Community water systems</i>					
2011	933	916	17	98%	98%
2012	871	848	23	97%	97%
2013	869	811	58	93%	93%
2014-T <sup>1</sup>	745	709	36	95%	95%
2014-DS <sup>2</sup>	854	810	44	95%	
2015-T <sup>1</sup>	743	724	19	97%	97%
2015-DS <sup>2</sup>	858	836	22	97%	
<i>Non-transient, non-community water systems</i>					
2011	182	180	2	98%	98%
2012	176	171	5	97%	97%
2013	167	157	10	94%	94%
2014-T	152	143	9	94%	94%
2014-DS	100	93	7	93%	
2015-T <sup>1</sup>	154	148	6	96%	96%
2015-DS <sup>2</sup>	103	99	4	96%	
<i>Transient, non-community water systems</i>					
2011	782	746	36	95%	95%
2012	968	859	109	89%	89%
2013	970	839	131	86%	86%
2014-T	926	816	110	88%	87%
2014-DS	529	444	85	84%	
2015-T <sup>1</sup>	904	848	56	94%	94%
2015-DS <sup>2</sup>	521	489	32	94%	

<sup>1</sup> Water treatment facilities

<sup>2</sup> Drinking water distribution systems

**Table 2 -Public water system facilities and compliance status.**

Integration of ORC and facility classification data into SDWIS results in an accurate inventory for ORC tracking, but the addition of systems previously not tracked for compliance contributed to a decrease in compliance rate from 2011 to 2012. The division began evaluating compliance requirements for both water treatment and distribution system ORCs in 2012. This paradigm shift in compliance determination also contributed to a decrease in the compliance rate starting with reporting year 2012.

Accurate and timely compliance determination is a direct result of the integration of data efforts. In October 2013, the division began to determine the complete compliance status for all drinking water systems with the requirements of Regulation 100 on a monthly basis. The result was an additional drop in the compliance rate for 2013.

The most significant decrease in compliance rate is for transient non-community water systems which experienced a nine percentage point drop from 2011 to 2013. In 2013, the division identified approximately 60 transient non-community water systems whose operator held a Class T certificate, but the facility did not meet the restrictions identified in section 100.18.5(c). Specifically, the system had additional treatment beyond non-gaseous chlorine and in accordance with Regulation 100 the Class T certificate was not sufficient to operate the treatment facility. These violations contributed significantly to the lower compliance rate for reporting year 2013.

The division's increased ability to maintain an accurate inventory coupled with the improved ability to assess compliance has resulted in an improved compliance rate since 2013 for public water systems.

*Wastewater facilities*

During calendar year 2015, the division continued its work to integrate the facility classifications and ORC information. The division historically tracked classification and ORC information separate from the Integrated Compliance Information System (ICIS), the data system of record for all wastewater facilities subject to division oversight. Unlike drinking water facilities whose identification number is specific to a physical location, permits are issued to a permittee and can be transferred, expire or are reissued under a different permit number. This made maintaining an accurate inventory very difficult.

Reporting year	Permitted wastewater facilities	With operator	No operator of record	% with operator of record
Permitted domestic wastewater facilities				
2011	598	581	17	97%
2012	854	743	111	87%
2013	911	893	18	98%
2014	393	358	35	91%
2015 Individual	246	245	1	99%
2015 General	262	257	5	98%
Permitted industrial wastewater facilities				
2011	129	127	2	98%
2012	131	82	49	63%
2013	167	117	50	70%
2014	191	102	89	53%
2015 Individual	115	103	3	97%
2015 General	59	39	20	66%

**Table 3 - Wastewater facilities required to have an ORC.**

Table 3 shows the number of facilities that reported an ORC and the number of those that did not report having an ORC for calendar years 2011-2015. In addition, the table is broken into domestic wastewater and industrial wastewater which have different compliance rates. In 2015 the facilities are further broken down into those with individual permits and those with general permits. This provides a better description of compliance rates across the wastewater portion of the program.

The division was not able to complete the verification of ORC status and facility classification for a significant number of permitted facilities in 2012. This is reflected in the lower numbers of facilities that have reported an operator for 2012-2014 as detailed in Table 3.

The integration of ORC and facility classification for permitted domestic and industrial wastewater facilities into ICIS was substantially complete in late 2014. Reports were also developed to utilize both the division's facility data and OCPO's operator certification data. The reports compare the facility classification with the operator certificate level and the validity of the certificate at the time of the report. In late 2014, the division contacted all wastewater facilities, provided the ORC requirements for the facility and requested the ORC information for each facility. This outreach provided up-to-date ORC information and improved compliance rates.

With the updated ORC information, the integrated ORC and facility classification in ICIS, and the comprehensive reporting capability the division was able to complete the ORC compliance determination for calendar years 2014 and 2015 as reported in Table 3 above. The increase in compliance rates can be attributed to the division's outreach and informal enforcement efforts.

#### **Permitted industrial Class 2 facilities**

Industrial facilities permitted under the Colorado Discharge Permit System are classified as either Class 1 or Class 2 facilities. Industrial Class 2 facilities are exempt from complying with the ORC requirement. There were 5,070 Class 2 industrial facilities in 2015.

Class 2 facilities include facilities which discharge pursuant to a Colorado Discharge Permit System general industrial permit for:

- Industrial stormwater.
- Construction stormwater.
- Municipal stormwater.
- Water treatment plant wastewater discharge.
- Construction dewatering activities.
- Aquatic animal production.
- Sand and gravel mining and processing stormwater.
- Sand and gravel mining wastewater and stormwater combined.
- Minimal industrial discharge.
- Subterranean dewatering or well development.
- Hydrostatic testing of pipelines, tanks and similar vessels.
- Non-contact cooling water.
- Pesticides application.
- Commercial washing of outdoor structures.

During 2015 the board approved two reclassifications from class 1 to class 2 industrial facilities, Chevron Edna Mine Site and Eagle Valley Clean Energy. There are a total of eleven facilities that the board has reclassified to class 2 industrial facilities since 2012.

#### **Facility enforcement**

Notices of Violation (NOV) are formal enforcement actions that are taken against the owner of facilities who fail to comply with the requirement to ensure their facility is under the

supervision of a certified operator who holds a certificate in a class equal to or higher than the class of the facility or system. Prior to 2011 there was no formal enforcement for failure to comply with the requirements of Regulation 100.

Reporting year	Drinking water	Wastewater	Total NOVs issued	Returned to compliance
2011	2	0	2	2
2012	11	4	15	15
2013	1	3 <sup>1</sup>	4	2
2014	2	3	5	3
2015	1	1	2	0

<sup>1</sup> In addition, there were two unpermitted facilities that were required to place the facility under the direct supervision of an ORC as part of an enforcement action. Both have complied.

**Table 4 - Notices of violation with status.**

### Operator certification

#### *Exams*

Building an educated, experienced, and professional workforce is a primary focus in operator certification. To facilitate monitoring and evaluation of certification trends, data are maintained that includes the number of exams taken, certified operator counts and training opportunities.

Reporting year	Exams Taken	Number Pass	Number Fail	Pass Rate
<i>Written exams</i>				
2011	2047	1081	966	53%
2012	1660	909	751	55%
2013	1548	827	721	53%
2014	1451	772	679	53%
2015	1350	706	644	52%
<i>Electronic exams</i>				
2011	467	293	174	63%
2012	649	429	220	66%
2013	1039	688	351	66%
2014	1393	906	487	65%
2015	1696	1062	634	63%
<i>Overall, written and electronic</i>				
2011	2514	1374	1140	55%
2012	2310	1338	971	58%
2013	2587	1515	1081	59%
2014	2844	1678	1166	59%
2015	3046	1768	1278	58%

**Table 5 - Examination pass rates, all levels.**

The table above indicates that the written exam pass rate has fluctuated between 52 and 55 percent over the last five years. The 2015 pass rate for exams taken electronically was 63 percent, 11 percentage points higher than for written exams. The overall pass rate is 58 percent.

The increase in overall pass rate the past five years is a result of the increased pass rate for those taking the exams electronically. Electronic testing allows operators to make an appointment to take exams at their convenience in the OCPO office. Electronically administered exams are administered in a room with a maximum of eight people taking the exam. The atmosphere is quieter, more relaxed and questions are presented one at a time eliminating the distractions inherent in the traditional paper and pencil exams. As more people opt to take the exams electronically, the program anticipates an increase in the overall pass rate.

*Late Fees*

In 2012, the board authorized a late fee for submitting a renewal application after the certificate's expiration date and for submitting the administrative fee for new certificates more than 60 days after the notice of eligibility.

Calendar Year	Amount of late fees collected
2013	20,450
2014	28,350
2015	26,350
Total	75,150

Table 6 - Late fees collected.

*Restricted certificates*

There were 110 certified operators who held 141 valid restricted certificates in 2014. Section 100.17, Regulation 100 provides the criteria for operators who were distribution and collection system operators in responsible charge on January 30, 2001 to continue functioning in that capacity. These operators are designated as have restricted certificates and can only work as certified operators at the facilities they worked at on January 30, 2001 and must continue to meet all requirements as stipulated in section 100.17, Regulation 100.

*Professional development*

	2011	2012	2013	2014	2015
Total approved courses available	571	600	575	550	500

Table 7 - Approved training opportunities for professional development.

*Certificates Issued—new, renewal and by reciprocity*

Certification category	2011	2012	2013	2014	2015
Water treatment	308	818	1067	873	208
Water distribution	334	877	1091	1110	206
Class S water	96	196	196	207	*
Class T water	*	24	24	23	*

Certification category	2011	2012	2013	2014	2015
Wastewater treatment	271	629	762	708	137
Industrial treatment	*	*	213	205	33
Wastewater collection	260	650	753	845	181
Class S wastewater	*	71	68	61	*
<b>Total</b>	<b>1269</b>	<b>3265</b>	<b>4174</b>	<b>4029</b>	<b>765</b>

\* Counts not reported by OCPO

**Table 8 - Total certificates issued by category.**

*Active Operator Count*

In calendar year 2015, Colorado had 5,906 active water and wastewater certified water professionals holding 13,057 certificates.

Water treatment								
	W-A	W-B	W-C	W-D	W-S	W-T		
2011	760	239	569	778	539	75		
2012	795	303	637	856	584	76		
2013	778	336	623	906	582	77		
2014	792	343	633	929	580	69		
2015	845	418	729	1091	653	76		
Wastewater treatment								
	WW-A	WW-B	WW-C	WW-D	WW-S			
2011	580	146	401	671	Not reported			
2012	609	160	423	772	204			
2013	599	162	448	788	191			
2014	608	183	481	785	189			
2015	655	228	535	933	221			
Industrial wastewater treatment								
	Ind-A	Ind-B	Ind-C	Ind-D				
2011	113	31	174	172				
2012	117	32	176	166				
2013	119	47	172	184				
2014	125	60	173	209				
2015	134	71	190	260				
Water distribution				Wastewater collection				
	D-1	D-2	D-3	D-4	C-1	C-2	C-3	C-4
2011	1079	604	139	865	699	401	145	687
2012	1117	631	179	879	765	390	160	684
2013	1145	635	203	857	804	417	163	666
2014	1272	696	246	845	887	465	189	661
2015	1490	798	295	882	1054	558	239	701

**Table 9 - Active operator count by category and level.**

There were 2,178 certified operators who held the highest level certificate in one or more certification categories.

Number of categories:	Number of operators
One category	1462
Two categories	514
Three categories	119
Four categories	58
Five categories	25

Table 10 - Certified operators with multiple highest level certificates.

### Disciplinary Action Investigations

The board is authorized to take disciplinary action against a certified operator under sections 25-9-104(6) and -104(6.5) C.R.S. This authority provides the board with discretion to reprimand a certified operator or suspend or revoke an operator's certification. As delegated in statute, the division investigates allegations of operator misconduct and makes recommendations to the board for action.

Complaints are received by phone, email or mail. Complaints can be made anonymously and confidentiality of the complainant is maintained throughout the investigation and disposition of the complaint. Complaints come from facility customers, co-workers, supervisors, subordinates, etc. and division staff from a variety of interactions including during on-site inspections and visits.

Types of complaints received:

- Waterborne disease outbreak resulting from failure to properly maintain the distribution system
- Sample collection protocol not maintained
- Failure to monitor and report in compliance with the Colorado Primary Drinking Water Regulations
- Falsification of experience/education requirements on applications for examination
- Falsification of laboratory data/falsification of records
- Un-cooperative with division staff during the investigation of an acute situation at a drinking water system while acting as the facility's operator in responsible charge

Below is a summary of the disposition of complaints received against a certified operator for misconduct in the exercise of their duties.

Type of action	2011	2012	2013	2014	2015
Formal board actions taken					
Letter of reprimand	0	0	0	0	1
Consent agreement	0	0	0	1	0
Suspension or revocation	0	0	0	0	1
Informal division disposition of complaint					
Conference	0	0	0	1	0
Warning letter	0	0	0	0	1
Investigation concluded lack of evidence of misconduct	1	6	0	0	1
<b>Total investigations</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>3</b>

Table 11 - Disciplinary action investigations conducted (with disposition).

### Stakeholder groups and participation

The EPA has identified stakeholder involvement as important to the public health objectives of the program. It helps ensure the relevancy and validity of the program, and the confidence of all interested parties. States are required to include ongoing stakeholder involvement in the revision and operations of State operator certification programs. Stakeholder involvement goes beyond public comment on rule revisions and participation in board meetings.

Examples of stakeholders include:

- Certified operators.
- Drinking water system owners.
- Domestic and industrial wastewater permittees.
- Environmental/public health groups.
- The general public.
- Consumer groups.
- Technical assistance providers.
- Utility managers.
- Trainers.
- Water and wastewater professional organizations.

Division facility operator certification staff participated as a member of the USEPA operator certification re-energizing workgroup, Rocky Mountain Section American Water Works Association and Rocky Mountain Water Environment Association Joint Small Systems Committee, the CDPHE 2015 Public Water System Training Strategy Administrative Framework Project Task Force and the Water Quality Management Program advisory boards at both Red Rocks Community College and Emily Griffith Technical College.

The EPA has recommended each state have a stakeholder advisory committee. The division is committed to expanding its participation in existing organizations and other outreach activities. The division is also working toward the formation of a stakeholder advisory committee.

### Regulation revisions

Table 10 briefly identifies revisions to Regulation 100, 5 CCR 1003-2 and the effective date of the revisions. For a detailed description of the changes refer to the corresponding statements of basis and purpose comprising sections 100.45-100.50, Regulation 100.

Reporting year	Regulation 100 revisions	Statement of basis and purpose
2011	Amended 11/29/11, effective 01/30/12	section 100.48
2012	Amended 04/24/12, effective 06/30/12	section 100.49
2013	No changes	
2014	Amended 08/26/14, effective 10/30/14	section 100.50
2015	Amended 06/30/15, effective 08/30/15	section 100.51
2015	Amended 12/09/15, effective 01/30/16	Section 100.52

Table 12 - Regulation 100, 5 CCR 1003-2 revisions.

### Division outreach and education efforts

The division liaison to the board participates in conferences, seminars, and trainings. These specifically targeted presentations provide additional opportunities for contact with the

public, businesses owners and permittees, special district and town boards, trustees, city councils and other municipal officials and certified water professionals. Presentations have been given to contract operators and regional certified water professional organizations.

The following table gives a brief overview of outreach and assistance efforts by division operator certification staff.

	Number of Events				
	2011	2012	2013	2014	2015
Total events attended	28	29	16	15	12

Table 13 - Facility operator certification staff outreach and education.

**Program cost information**

*Fees*

Income originates from fees charged to applicants for individual operator certification and training unit approvals as authorized by statute and regulation. All fees are paid directly to the board’s contractors.

*Program cost*

Tables 12 and 13 provide program costs for the board contractors, the board’s administrator and division staff. These expenditures only reflect a portion of the actual cost of the program.

In addition to the members of the Water and Wastewater Facility Operators Certification Board, there are many certified water professionals from across the state who volunteer their time and expertise serving on the CECTI board and participating as members of the calendar, exam application, exam review, proctor, reciprocity, renewal and training unit approval committees. These volunteers donated over 3,377 hours in support of the certification program in 2014. In addition, many non- certified water professional volunteers have donated their time in support of the program in various capacities, such as exam proctors.

	Estimated volunteer contribution		Administrative Services
	CECTI <sup>1</sup>	Certification Council <sup>1</sup>	Great Events/TEAMS
2011	\$269,695	\$234,225	
2012	\$264,705	\$224,026	
2013 <sup>2</sup>	\$350,362		
2014 <sup>2</sup>	\$387,092		\$188,192
2015 <sup>2</sup>	\$391,100		\$238,590

<sup>1</sup> From contractor’s annual reports to the board based on \$116 per hour, the median cost of a consultant.

<sup>2</sup> CECTI and the Certification Council merged in 2013 to become CECTI.

Table 14 - Contractor program expenses.

Board administrator and division program staff salary expenses are identified below in Table 13. Salary costs for division and the board administrator staff are paid through state general funds, federal grants, and drinking water and permitted facility fees, not by facility operator certification program fees.

Salary expenses for board administrator and division program staff		Full time equivalent (FTE)
SFY <sup>1</sup> 2011	\$132,178	1.965 FTE 0.05 <sup>2</sup> Management 0.1 PA <sup>3</sup> III 0.53-EPS <sup>4</sup> III 1.0-EPS II 0.33-PA I
CY <sup>5</sup> 2012	\$249,994	3.425 FTE 0.05 <sup>2</sup> Management 0.1 PA <sup>3</sup> III 1.0-EPS <sup>4</sup> III 1.0-EPS II 0.66-PA I 0.66 GP <sup>6</sup> I
CY 2013	\$210,663	2.308 FTE 0.034 <sup>7</sup> Management 0.05 <sup>8</sup> Management 0.1 PAIII 1.0-EPS III 0.75-EPS II <sup>9</sup> 0.375-PA I <sup>9</sup>
CY 2014	\$134,046	1.2 FTE 0.1 Management 0.1 PAIII 1.0-EPS III
CY 2015	\$137,607	1.2 FTE 0.1 Management 0.1 PAIII 1.0-EPS III

<sup>1</sup> SFY - State fiscal year (July 1- June 30); not reported are salary costs for July 1 to December 31, 2011

<sup>2</sup> Part time position 0.5 FTE January-August 2013 - estimated 10% dedicated to WWFOCB

<sup>3</sup> PA - Program Assistant

<sup>4</sup> EPS - Environmental Protection Specialist

<sup>5</sup> CY—Calendar year; reporting moved to calendar year reporting effective January 1, 2012

<sup>6</sup> GP - General Professional; Position was a term-limited position and expired in August 2012

<sup>7</sup> Part time position 0.5 FTE January-August 2013 - estimated 10% dedicated to WWFOCB

<sup>8</sup> Full time position, effective July 1, 2013 - estimated 10% dedicated to WWFOCB

<sup>9</sup> Positions were moved to other programs within the division effective October 1, 2013

**Table 15 - Board administration and division salary expenses.**

From July 2010 through December 2014, there were many changes in facility operator certification program staffing within the division. Some of these changes are reflected above in Table 15. The division liaison to the board retired in 2010 after a decade of service and a new division liaison was hired in mid-2011. A term-limited position was filled in early 2011 then vacated in mid-2011. The position was originally at an EPS III level and was changed to a GP1 level in 2012. This left two and a half full time division staff dedicated to the facility operator certification program. In addition, the board administrator retired in August 2013 and a new board administrator was hired in July 2013.

Division management recognized the correlation between compliance with Regulation 100 and overall compliance with permits or drinking water regulations. For each regulated entity

there were several different division staff members who were responsible for one piece or another of the facility's compliance with all applicable requirements. This frequently led to a duplication of efforts by division staff. It was not unusual for a regulated entity to receive multiple letters from the division requiring them to communicate with several different staff members. This often led to confusion for both division staff and the regulated entity.

To facilitate a more holistic approach to interactions between division staff and the regulated community and to efficiently use limited division resources, division management made several significant changes within division programs in October 2013. Each water and wastewater facility is assigned to a single compliance specialist. The compliance specialist oversees the facilities compliance with all applicable regulations including Regulation 100. The drinking water specialist oversees compliance with the primary drinking water regulations and with Regulation 100 for drinking water facilities. The clean water specialist oversees compliance with clean water regulations, the permit and with Regulation 100 for wastewater facilities.

As part of this change, one and a half dedicated facility operator program staff positions were moved to other positions within the division. The division liaison to the board position remains dedicated to the facility operator certification program.

Many duties assigned to the division through facility operator certification statute and regulation are now performed as part of routine duties including compliance, enforcement, sanitary survey and inspection, design review and approval, administrative support, and management oversight work. Because of the changes made in 2013, the division is better able to fulfill the oversight obligations assigned by statute and regulation.

The costs associated with the routine tasks assigned to over 76 division staff members are not included in the table above. All division staff are paid through state general funds, federal grants and drinking water and permitted facility fees.

The true costs of the operator certification program to the citizens of Colorado are difficult to assess because of the division of duties among division staff and the countless hours donated by volunteers to the program. Together, the program fees charged to individuals and trainers remain as low as possible because of the countless volunteers participating in the program and the support of division staff through federal grants, the state general.

## Reviews

### *Internal and external reviews*

As part of the *Final Guidelines for the Certification and Recertification of the Operators of Community and Nontransient Noncommunity Public Water Systems*, February 5, 1999, the U.S. Environmental Protection Agency recommends that states perform periodic internal reviews and occasional external or peer reviews. Examples of items to review include: regulations, exam items for relevancy and validity, compliance, enforcement, budget and staffing, training relevancy, training needs through examination performance, and data management systems.

The program has not participated in an external program review. The division is working with adjoining state operator certification programs to assist each other with an external review. Division staff participated on the national operator certification re-energizing workgroup. The

workgroup developed suggested methods for conducting external reviews. The division continues to work toward developing a standardized approach for both internal and external program reviews.

#### *Sunset review*

The sunset review provides for the analysis and evaluation of regulatory agencies to determine the least restrictive regulation consistent with the public interest. The purpose of the sunset review is to evaluate the need for the continued existence of existing regulatory bodies in accordance with the criteria established in statute. Sunset reviews are valuable reviews and provide valuable information for the program, but in accordance with the *Operator Certification Guidelines Implementation Guidance*, January 2000, the U.S. Environmental Protection Agency determined a sunset review does not meet the periodic external or peer review requirement.

#### Summary

The staff and volunteers focus on ensuring that skilled, certified water professionals throughout Colorado are overseeing the treatment and distribution of safe drinking water as well as the collection and treatment of wastewater prior to discharge to waters of the state. The division remains committed to working to improve the exam pass rate and increase compliance by facility owners without compromise.