



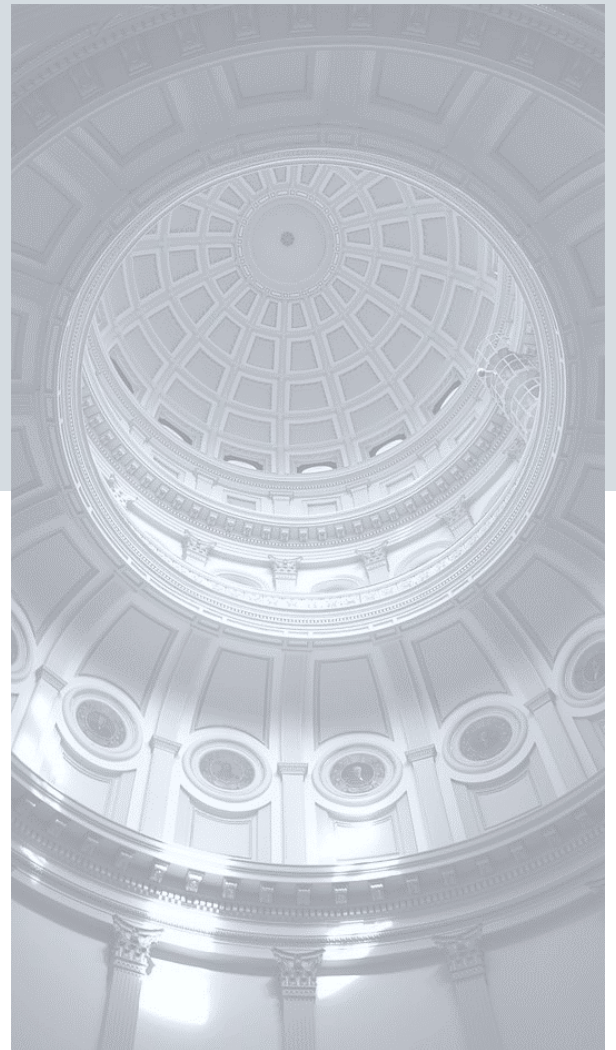
**COLORADO**

**Department of  
Regulatory Agencies**

Colorado Office of Policy, Research &  
Regulatory Reform

# 2023 Sunset Review

State Plumbing Board



October 13, 2023



**COLORADO**

**Department of  
Regulatory Agencies**

Executive Director's Office

October 13, 2023

Members of the Colorado General Assembly  
c/o the Office of Legislative Legal Services  
State Capitol Building  
Denver, Colorado 80203

Dear Members of the General Assembly:

The Colorado General Assembly established the sunset review process in 1976 as a way to analyze and evaluate regulatory programs and determine the least restrictive regulation consistent with the public interest. Pursuant to section 24-34-104(5)(a), Colorado Revised Statutes (C.R.S.), the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) at the Department of Regulatory Agencies (DORA) undertakes a robust review process culminating in the release of multiple reports each year on October 15.

A national leader in regulatory reform, COPRRR takes the vision of their office, DORA and more broadly of our state government seriously. Specifically, COPRRR contributes to the strong economic landscape in Colorado by ensuring that we have thoughtful, efficient, and inclusive regulations that reduce barriers to entry into various professions and that open doors of opportunity for all Coloradans.

As part of this year's review, COPRRR has completed an evaluation of the State Plumbing Board (Board). I am pleased to submit this written report, which will be the basis for COPRRR's oral testimony before the 2024 legislative committee of reference.

The report discusses the question of whether there is a need for the regulation provided under Article 155 of Title 12, C.R.S. The report also discusses the effectiveness of the Board in carrying out the intent of the statutes and makes recommendations for statutory changes for the review and discussion of the General Assembly.

To learn more about the sunset review process, among COPRRR's other functions, visit [coprrr.colorado.gov](http://coprrr.colorado.gov).

Sincerely,

Patty Salazar  
Executive Director





## Sunset Review: State Plumbing Board

### Background

#### *What is regulated?*

The State Plumbing Board (Board) licenses plumbers. Plumbers are practitioners who install and repair water-related systems in buildings. The Board also registers professionals who specialize in water-conditioning systems, which are machines that remove unwanted substances from potable water. The Board also inspects plumbing and gas piping installations.

#### *Why is it regulated?*

Improper plumbing can adversely affect the health of the public. It is potentially lethal and can cause widespread disease. As such, plumbing must be done by professionals who have proven their knowledge and skill.

#### *Who is regulated?*

At the end of fiscal year 21-22, there were a total of 19,068 licensees, including plumbers and water conditioning specialists. Licensees and registrants are regulated by the Board, which is located in the Department of Regulatory Agencies' Division of Professions and Occupations (Division).

#### *How is it regulated?*

The Board consists of eight Governor-appointed members including five plumbers, one member-at-large, one employee of a local inspecting entity, and one non-voting representative of the Department of Public Health and Environment.

To obtain a license, an applicant must satisfy certain experiential requirements and pass a Board-approved examination. To renew a license, each applicant must pay a fee. Plumbing licensees in particular must also complete eight hours of approved continuing education every 12 months.

#### *What does it cost?*

In fiscal year 21-22, the Division expended \$2,171,863.69 to administer the program. The Division allotted 3.45 full-time equivalent employees to implement the program. There were also 12.50 full-time equivalent employees conducting inspections for the program.

#### *What disciplinary activity is there?*

During the period examined for this sunset review, fiscal years 17-18 through 21-22, there were 1,317 complaints filed and 348 disciplinary actions were taken by the Board.

### Key Recommendations

- Continue the Board for 13 years, until 2037.
- Include in the grounds for discipline aiding or abetting a violation of the statute.
- Clarify that plumbing contractors are allowed to work on water conditioning systems.
- Amend the Act to use the term of "Journeyworker" rather than "Journeyman."

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## Background

### Sunset Criteria

Enacted in 1976, Colorado's sunset law was the first of its kind in the United States. A sunset provision repeals all or part of a law after a specific date, unless the legislature affirmatively acts to extend it. During the sunset review process, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) within the Department of Regulatory Agencies (DORA) conducts a thorough evaluation of such programs based upon specific statutory criteria<sup>1</sup> and solicits diverse input from a broad spectrum of stakeholders including consumers, government agencies, public advocacy groups, and professional associations.

Sunset reviews are guided by statutory criteria and sunset reports are organized so that a reader may consider these criteria while reading. While not all criteria are applicable to all sunset reviews, the various sections of a sunset report generally call attention to the relevant criteria. For example,

- In order to address the first criterion and determine whether the program under review is necessary to protect the public, it is necessary to understand the details of the profession or industry at issue. The Profile section of a sunset report typically describes the profession or industry at issue and addresses the current environment, which may include economic data, to aid in this analysis.
- To address the second sunset criterion--whether conditions that led to the initial creation of the program have changed--the History of Regulation section of a sunset report explores any relevant changes that have occurred over time in the regulatory environment. The remainder of the Legal Framework section addresses the fifth sunset criterion by summarizing the organic statute and rules of the program, as well as relevant federal, state and local laws to aid in the exploration of whether the program's operations are impeded or enhanced by existing statutes or rules.
- The Program Description section of a sunset report addresses several of the sunset criteria, including those inquiring whether the agency operates in the public interest and whether its operations are impeded or enhanced by existing statutes, rules, procedures and practices; whether the agency or the agency's board performs efficiently and effectively and whether the board, if applicable, represents the public interest.
- The Analysis and Recommendations section of a sunset report, while generally applying multiple criteria, is specifically designed in response to the fourteenth criterion, which asks whether administrative or statutory changes are necessary to improve agency operations to enhance the public interest.

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<sup>1</sup> Criteria may be found at § 24-34-104, C.R.S.

These are but a few examples of how the various sections of a sunset report provide the information and, where appropriate, analysis required by the sunset criteria. Just as not all criteria are applicable to every sunset review, not all criteria are specifically highlighted as they are applied throughout a sunset review. While not necessarily exhaustive, the table below indicates where these criteria are applied in this sunset report.

**Table 1  
Application of Sunset Criteria**

Sunset Criteria	Where Applied
(I) Whether regulation or program administration by the agency is necessary to protect the public health, safety, and welfare.	<ul style="list-style-type: none"> <li>• Profile of the Profession</li> <li>• Legal Framework</li> <li>• Recommendation 1</li> </ul>
(II) Whether the conditions that led to the initial creation of the program have changed and whether other conditions have arisen that would warrant more, less, or the same degree of governmental oversight.	<ul style="list-style-type: none"> <li>• History of Regulation</li> <li>• Legal Framework</li> <li>• Recommendations 1 and 4</li> </ul>
(III) If the program is necessary, whether the existing statutes and regulations establish the least restrictive form of governmental oversight consistent with the public interest, considering other available regulatory mechanisms.	<ul style="list-style-type: none"> <li>• Legal Framework</li> <li>• Recommendation 7</li> </ul>
(IV) If the program is necessary, whether agency rules enhance the public interest and are within the scope of legislative intent.	<ul style="list-style-type: none"> <li>• Legal Framework</li> </ul>
(V) Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource, and personnel matters.	<ul style="list-style-type: none"> <li>• Legal Framework</li> <li>• Program Description and Administration</li> <li>• Recommendations 2-5, 7, and 8</li> </ul>
(VI) Whether an analysis of agency operations indicates that the agency or the agency's board or commission performs its statutory duties efficiently and effectively.	<ul style="list-style-type: none"> <li>• Program Description and Administration</li> <li>• Recommendation 4</li> </ul>
(VII) Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates.	<ul style="list-style-type: none"> <li>• Program Description and Administration</li> <li>• Recommendation 1</li> </ul>
(VIII) Whether regulatory oversight can be achieved through a director model.	<ul style="list-style-type: none"> <li>• Recommendation 1</li> </ul>
(IX) The economic impact of the program and, if national economic information is not available, whether the agency stimulates or restricts competition.	<ul style="list-style-type: none"> <li>• Profile of the Profession</li> </ul>

Sunset Criteria	Where Applied
(X) If reviewing a regulatory program, whether complaint, investigation, and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession or regulated entity.	<ul style="list-style-type: none"> <li>• Complaints</li> <li>• Disciplinary Activity</li> <li>• Recommendation 1</li> </ul>
(XI) If reviewing a regulatory program, whether the scope of practice of the regulated occupation contributes to the optimum use of personnel.	<ul style="list-style-type: none"> <li>• Profile of the Profession</li> <li>• Licensing</li> </ul>
(XII) Whether entry requirements encourage equity, diversity, and inclusivity.	<ul style="list-style-type: none"> <li>• Recommendation 6</li> </ul>
(XIII) If reviewing a regulatory program, whether the agency, through its licensing, certification, or registration process, imposes any sanctions or disqualifications on applicants based on past criminal history and, if so, whether the sanctions or disqualifications serve public safety or commercial or consumer protection interests. To assist in considering this factor, the analysis prepared pursuant to subsection (5)(a) of this section must include data on the number of licenses, certifications, or registrations that the agency denied based on the applicant's criminal history, the number of conditional licenses, certifications, or registrations issued based upon the applicant's criminal history, and the number of licenses, certifications, or registrations revoked or suspended based on an individual's criminal conduct. For each set of data, the analysis must include the criminal offenses that led to the sanction or disqualification.	<ul style="list-style-type: none"> <li>• Collateral Consequences</li> </ul>
(XIV) Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.	<ul style="list-style-type: none"> <li>• Recommendations 1-9</li> </ul>

## Sunset Process

Regulatory programs scheduled for sunset review receive a comprehensive analysis. The review includes a thorough dialogue with agency officials, representatives of the regulated profession and other stakeholders. Anyone can submit input on any upcoming sunrise or sunset review on COPRRR's website at [coprrr.colorado.gov](http://coprrr.colorado.gov).

The functions of the State Plumbing Board (Board), as enumerated in Article 155 of Title 12, Colorado Revised Statutes (C.R.S.), shall terminate on September 1, 2024, unless continued by the General Assembly. During the year prior to this date, it is the duty of COPRRR to conduct an analysis and evaluation of the Board pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the currently prescribed regulation should be continued and to evaluate the performance of the Board. During this review, the Board must demonstrate that the program serves the public interest. COPRRR's findings and recommendations are submitted via this report to the Office of Legislative Legal Services.



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## Methodology

As part of this review, COPRRR staff interviewed staff in the Division of Professions and Occupations, practitioners, and officials with state professional associations, and reviewed and reviewed complaint file summaries, Colorado statutes and rules, and the laws of other states.

The major contacts made during this review include, but are not limited to:

- Colorado Department of Labor and Employment
- Colorado Department of Local Affairs
- Colorado Department of Public Health and Environment
- Colorado Division of Professions and Occupations
- Plumbers and Pipefitters Union (Local #3)
- Plumbing-Heating-Cooling Contractors of Colorado
- Rocky Mountain Mechanical Contractors Association
- Rocky Mountain Pipe Trades District Council No. 5
- State Plumbing Board members

In July 2023, COPRRR staff conducted a survey of all individuals and entities regulated by the Board. The survey was sent to 10,579 email addresses and 93 emails were returned as undeliverable. The survey received 465 responses, which is a 4.43 percent response rate. Survey results may be found in Appendix A.

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## Profile of the Profession

In a sunset review, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) is guided by the sunset criteria located in section 24-34-104(6)(b), Colorado Revised Statutes (C.R.S.). The first criterion asks whether regulation or program administration by the agency is necessary to protect the public health, safety, and welfare.

To understand the need for regulation, it is first necessary to recognize what the profession does, where they work, who they serve and any necessary qualifications.

Plumbers are practitioners who mainly install and repair piping systems in buildings.<sup>2</sup> In general, plumbers do the following:<sup>3</sup>

- Install water and gas piping systems in buildings;
- Test or inspect pipe systems and pipelines;
- Repair malfunctioning plumbing systems;
- Determine the materials and equipment needed for a job;
- Prepare cost estimates for clients; and
- Read construction blueprints.

Plumbers work in all types of settings including commercial and residential buildings.<sup>4</sup> They are utilized during a building's design process, its construction phase, and during emergencies.

Most plumbers learn their trade through a four-to-five-year apprenticeship.<sup>5</sup> During apprenticeships, plumbers typically attain 2,000 hours of on-the-job training and receive technical instruction.<sup>6</sup> Apprenticeship programs are often sponsored by unions, trade associations, government agencies, or businesses.<sup>7</sup>

After an apprenticeship program, plumbers will become what is known as journey-level workers. Journey-level plumbers can perform more tasks independently, such as alterations or repairs.<sup>8</sup> Plumbers with several years of journey-level plumbing

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<sup>2</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-2>

<sup>3</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-2>

<sup>4</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-2>

<sup>5</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>6</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>7</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>8</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

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experience can then earn a master status, usually after passing an examination.<sup>9</sup> Some states, including Colorado, require master plumber status in order to obtain a plumbing contractor's license or registration.<sup>10</sup>

The State Board of Plumbing (Board) offers a special category of registrations for professionals who work with water conditioning systems. These are specialized machines that remove unwanted substances from potable water. While plumbers have the expertise to work with such systems, these registrations are available specifically for non-plumbers who specialize on water conditioning systems. The Board also conducts inspections of water conditioning installations performed by water conditioning registrants.

Although Colorado law directs the Board to adopt a gas code and inspect gas piping installations, it does not create a category of licenses for professionals who work exclusively with gas piping systems such as gasfitters, pipefitters, and steamfitters as other states do.<sup>11</sup> A gas fuel system is an entirely separate scheme, has a completely different purpose, and satisfies completely different needs in a building. However, the same piping infrastructure is often involved in transporting both gas and water.

The ninth sunset criterion questions the economic impact of the program and, if national economic information is not available, whether the agency stimulates or restricts competition. One way this may be accomplished is to review the projected salary and growth of the profession.

There are nearly 10,000 people in Colorado employed at some level of the plumbing profession as licensed practitioners, registered apprentices, and/or registered contractors. In 2021, the median annual wage for plumbers was \$60,090.<sup>12</sup> Employment of plumbers is projected to grow two percent from 2022 to 2032, which is considered slower than the average for other occupations.<sup>13</sup> However, despite limited growth, national projections estimate that about 42,600 openings for plumbers are projected each year, on average, over the next decade.<sup>14</sup> Demand for plumbers stems from new construction and from the need to maintain and repair existing residences and buildings.<sup>15</sup>

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<sup>9</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>10</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>11</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-4>

<sup>12</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved September 8, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-6>

<sup>13</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved September 8, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-6>

<sup>14</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved September 8, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-6>

<sup>15</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved September 8, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-1>

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## Legal Framework

### History of Regulation

In a sunset review, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) is guided by the sunset criteria located in section 24-34-104(6)(b), Colorado Revised Statutes (C.R.S.). The first sunset and second sunset criteria question:

Whether regulation or program administration by the agency is necessary to protect the public health, safety, and welfare; and

Whether the conditions that led to the initial creation of the program have changed and whether other conditions have arisen that would warrant more, less or the same degree of governmental oversight.

One way that COPRRR addresses this is by examining why the program was established and how it has evolved over time.

Regulation of plumbing in Colorado began in 1917, when the Examining Board of Plumbers (Examining Board) was organized in what was then the Department of Health. The Examining Board licensed journeyman and master plumbers by an examination.

In 1970, administration of the Examining Board transferred to the Division of Registrations (now the Division of Professions and Occupations, hereinafter referred to as the Division) in the Department of Regulatory Agencies (DORA), while inspection of plumbing work remained in the Department of Health. The Examining Board was also authorized to promulgate rules and regulations regarding the practice of plumbing.

In 1982, a number of changes were made to state regulation of the profession:

- Authority over plumbing inspections transferred to DORA;
- The Examining Board was required to adopt a Colorado plumbing code;
- Registration of plumbing apprentices began; and
- A new licensing class, residential plumber, was adopted.

In addition, sunset reviews of the Examining Board have resulted in numerous changes to the profession:

- In 1987, a sunset review resulted in a new, seven-member composition of the Examining Board;
- In 1992, a sunset review resulted in a revision of how the Examining Board approves alternate materials and methods; and
- In 2002, a sunset review resulted in the Examining Board attaining the authority to issue cease and desist orders to licensed, noncompliant plumbers.

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2012 saw the last sunset review of plumbers. It recommended that the Examining Board be able to permit and inspect plumbing installations in municipalities that do not have plumbing programs. It also recommended that the Examining Board adopt a separate gas code to ensure gas installations are being made properly. The sunset review also recommended adoption of the International Plumbing Code (IPC) as the basis for the state plumbing code. The IPC is a model code that regulates the design and installation of plumbing systems in all types of buildings. It is currently used in most states around the country.

Apart from the recommendation to adopt the IPC, the General Assembly adopted each of the recommendations via Senate Bill 13-162. The bill also changed the name of the Examining Board to the State Plumbing Board (Board). It should be noted that the Board adopted the IPC independent of a statutory directive to do so.

In 2015, the General Assembly passed Senate Bill 15-202 to create registration requirements for entities that specialize in water conditioning installations. It included three new registration categories, and it directed the Division to issue permits for and inspections of water conditioning systems.

During the 2019 legislative session, the General Assembly recodified Title 12, C.R.S. At that time, Article 58 was repealed and reenacted as Article 155. Though there were changes in the manner in which the law reads and many provisions of law were combined with common elements of other laws, none of those changes affected the implementation or enforcement of the plumbing statutes.

In 2019, the General Assembly also passed House Bill 19-1086 to allow for contemporaneous reviews to take place during inspections. Contemporaneous reviews are procedures to verify whether all plumbers on the job site are licensed. It also enacted a mandatory continuing education requirement for licensed plumbers. Licensees must complete eight hours of continuing education for every twelve months that have passed.

In 2020, the General Assembly passed Senate Bill 20-120 to include additional requirements for plumbing apprentices. Most notably, it requires any employer responsible for apprentices to track the practical training hours given to each apprentice and to report them to the Board. The bill also imposed an examination requirement for individuals who have been registered as apprentices for more than six years.

In 2021, the General Assembly passed House Bill 21-1212. This requires the Governor to make reasonable efforts to appoint members of diverse groups to statewide boards, including the Board.

In 2022, the Colorado General Assembly passed House Bill 22-1346, which directed the Board to conduct compliance checks to enforce licensing and supervisor-to-apprentice ratio requirements applicable to plumbers on projects throughout the state.

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## Legal Summary

The third, fourth, fifth and seventh sunset criteria question:

Whether the existing statutes and regulations establish the least restrictive form of governmental oversight consistent with the public interest, considering other available regulatory mechanisms;

Whether agency rules enhance the public interest and are within the scope of legislative intent;

Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource, and personnel matters; and

Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates.

A summary of the current statutes and rules is necessary to understand whether regulation is set at the appropriate level and whether the current laws are impeding or enhancing the agency's ability to operate in the public interest.

The laws that govern plumbing are contained in Article 155 of Title 12, Colorado Revised Statutes, C.R.S. (Act). The Act gives the Board authority to license, register, and regulate both plumbers and professionals who specialize in working with water conditioners. It also authorizes the Board to permit and inspect plumbing and gas installations.

### Plumbing Board

The Board is a Governor-appointed, eight-member, Type 1 board made up of:<sup>16</sup>

- One journeyman plumber;
- One master plumber;
- One general contractor;
- Two plumbing contractors;
- One employee of a local agency that conducts inspections;
- One member of the public at large; and
- One representative from the Department of Public Health and Environment as an *ex officio*, nonvoting member.

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<sup>16</sup> § 12-155-104(2)(a)(I), C.R.S.

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At least one member of the Board must be a resident of the Western Slope.<sup>17</sup> Board members serve four-year terms.<sup>18</sup> No major political party can have more than one member more than the other major political party.<sup>19</sup> Board members must attain confirmation by the Senate.<sup>20</sup>

The Act prescribes the Board additional powers and duties, including:<sup>21</sup>

- Conducting inspections of plumbing installations,
- Performing investigations and hearings regarding discipline of licensees,
- Allowing variances to the Plumbing Code, and
- Inspecting gas piping installations.

Plumbing and gas installations are inspected in localities that do not conduct their own inspections.<sup>22</sup> The Plumbing Code adopted by the Board is required to be used as the minimum standard for all installations, alterations, and repairs of systems and fixtures in the state.<sup>23</sup>

#### LICENSES

There are three types of licenses available:<sup>24</sup>

- Master Plumber,
- Journeymen Plumber, and
- Residential Plumber.

A master plumber is one who has extensive training and knowledge to properly plan, lay out, install, and repair most plumbing systems.<sup>25</sup>

A journeyman plumber is not a master plumber but also has sufficient knowledge to repair and renovate plumbing in accordance with standards without supervision.<sup>26</sup>

A residential plumber is a person other than a master or journeyman plumber or plumbing apprentice who has necessary training and experience to install plumbing apparatus primarily in residential structures.<sup>27</sup>

The Board is required to issue licenses to persons who have, by examination and experience, shown themselves competent and qualified to engage in the business,

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<sup>17</sup> § 12-155-104(2)(a)(III), C.R.S.

<sup>18</sup> § 12-155-104(3)(a), C.R.S.

<sup>19</sup> § 12-155-104(4), C.R.S.

<sup>20</sup> § 12-155-104(2)(a)(I), C.R.S.

<sup>21</sup> § 12-155-105(1), C.R.S.

<sup>22</sup> § 12-155-120(1)(a), C.R.S.

<sup>23</sup> § 12-155-106(1), C.R.S.

<sup>24</sup> § 12-155-110(1)(a), C.R.S.

<sup>25</sup> § 12-155-103(4), C.R.S.

<sup>26</sup> § 12-155-103(3), C.R.S.

<sup>27</sup> § 12-155-103(13), C.R.S.

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trade, or calling of a residential plumber, journeyman plumber, or master plumber.<sup>28</sup> The Board determines the minimum level of experience needed to sit for an examination.<sup>29</sup> The maximum hours the Board may require for an applicant to qualify are:<sup>30</sup>

- 3,400 hours for a residential plumber,
- 6,800 hours for a journeyman plumber, and
- 8,500 hours for a master plumber.

Candidates can include experience attained outside of the state if they can demonstrate to the Board that the experience is adequate to comply with the Act.<sup>31</sup>

The Board is required to hold examinations for licensure at least four times per year.<sup>32</sup> The examination may be administered either by the Board or an authorized agent.<sup>33</sup> Examinations include written or practical tests consistent with current practical and theoretical requirements of the practice of plumbing.<sup>34</sup> The Board must ensure that the examination passing grade reflects a minimum level of competency.<sup>35</sup>

Temporary permits are available for journeyman plumbers and residential plumbers.<sup>36</sup> These permits are used for individuals who desire to work and have met the experience requirements to take the examination but are still waiting to take an examination.<sup>37</sup> Temporary permits are valid for 30 days.<sup>38</sup> They may also be revoked at any time by the Board.<sup>39</sup> No permits are allowed for individuals who have twice previously failed an examination or who have already received two temporary permits.<sup>40</sup>

No master, journeyman, or residential plumber may have a license renewed or reinstated unless they have completed eight hours of continuing education for every 12 months that have passed after the later of the last date of renewal or reinstatement.<sup>41</sup>

The Board may also issue licenses by endorsement to someone licensed in another state.<sup>42</sup> The candidate must present satisfactory proof that they have credentials and qualifications that are substantially equivalent to those required by Colorado.<sup>43</sup>

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<sup>28</sup> § 12-155-110(1)(a), C.R.S.

<sup>29</sup> § 12-155-110(1)(a), C.R.S.

<sup>30</sup> § 12-155-110(1)(a), C.R.S.

<sup>31</sup> § 12-155-111, C.R.S.

<sup>32</sup> § 12-155-110(2), C.R.S.

<sup>33</sup> § 12-155-110(3), C.R.S.

<sup>34</sup> § 12-155-110(3), C.R.S.

<sup>35</sup> § 12-155-110(3), C.R.S.

<sup>36</sup> § 12-155-117(1), C.R.S.

<sup>37</sup> § 12-155-117(1), C.R.S.

<sup>38</sup> § 12-155-117(3), C.R.S.

<sup>39</sup> § 12-155-117(2), C.R.S.

<sup>40</sup> § 12-155-117(3), C.R.S.

<sup>41</sup> § 12-155-112(3)(a), C.R.S.

<sup>42</sup> § 12-155-116, C.R.S.

<sup>43</sup> § 12-155-116, C.R.S.



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## REGISTRATIONS

In addition to the three plumbing licenses, there are a number of specialty registrations available from the Board:

- Plumbing Apprentices,
- Plumbing Contractors,
- Water Conditioning Installers,
- Water Conditioning Principals, and
- Water Conditioning Contractors.

A plumbing apprentice is a person who is actively engaged in learning from and assisting experienced plumbers.<sup>44</sup> They must perform work under the supervision of a licensed journeyman plumber, master plumber, or residential plumber who can be disciplined for the work.<sup>45</sup> Employers must register apprentices with the Board within 30 days of employment.<sup>46</sup>

Plumbing contractors typically refer to plumbing businesses. “Plumbing Contractor” means any person, firm, partnership, corporation, association, or other organization that intends to offer services related to plumbing installations.<sup>47</sup> They must be registered with the Board and comply with state and federal workers’ compensation laws.<sup>48</sup>

A plumbing contractor must be or employ a full-time master plumber.<sup>49</sup> No master plumber may be responsible for more than one plumbing contractor at a time.<sup>50</sup> A contractor’s designated master plumber must notify the Board within 15 days after separation or termination from the plumbing contractor.<sup>51</sup>

Water conditioning systems are machines that remove unwanted substances from potable water. Water conditioning systems are included within the definition of “plumbing”.<sup>52</sup> However, while plumbers have the expertise to work with such systems, there are three registrations required specifically for non-plumbers who specialize on water conditioning systems:

- Water Conditioning Installers,
- Water Conditioning Principals, and
- Water Conditioning Contractors.

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<sup>44</sup> § 12-155-103(9), C.R.S.

<sup>45</sup> § 12-155-124(1), C.R.S.

<sup>46</sup> § 12-155-108(2)(a), C.R.S.

<sup>47</sup> § 12-155-103(10), C.R.S.

<sup>48</sup> § 12-155-108(3), C.R.S.

<sup>49</sup> § 12-155-103(10), C.R.S.

<sup>50</sup> § 12-155-108(3), C.R.S.

<sup>51</sup> § 12-155-108(3), C.R.S.

<sup>52</sup> § 12-155-103(8)(a), C.R.S.

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Water Conditioning Installers are the professionals who have the training and experience to plan, install, and service water conditioning systems.<sup>53</sup> Water Conditioning Principals are similar, except they can supervise Installers.<sup>54</sup> To register, both Installers and Principals must be certified by the Water Quality Association, the national accrediting body for water conditioning professionals.<sup>55</sup>

Water Conditioning Contractors are similar to Plumbing Contractors, as they are available to any business, person, partnership, corporation, association, or other organization that desires to act or advertise as a water conditioning contractor.<sup>56</sup> They must be or employ a full-time Water Conditioning Principal and must comply with state and federal workers' compensation laws.<sup>57</sup>

As with plumbing, the Board must conduct inspections of water conditioning systems, ensure compliance, and can impose discipline on water conditioning registrants.

### Inspections

The Board has the authority to employ licensed journeyman or master plumbers as state plumbing inspectors, and to charge fees for making inspections of any plumbing or gas piping installation in any new construction or remodeling or repair.<sup>58</sup> State inspectors only inspect plumbing work in areas where the local government or qualified state institution of higher education does not conduct inspections or issue any permits.<sup>59</sup> This includes the inspection of water conditioning systems, as such systems are included within the definition of plumbing.<sup>60</sup>

Prior to the commencement of any plumbing or gas piping installation, the person making the installation must apply for an inspection permit and pay the required fee for installation.<sup>61</sup> State inspectors must make inspections within three days of an application for inspection.<sup>62</sup>

Noncompliant installations discovered during inspections trigger a notice of disapproval, including needed corrective actions, which are sent to both the Board and the contractor.<sup>63</sup> If an inspector determines that the situation warrants, plumbing or gas service can be paused until a situation is corrected.<sup>64</sup> Any permit holder may appeal a disapproval notice to the Board and a hearing must be granted within seven days.<sup>65</sup>

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<sup>53</sup> § 12-155-103(15)(a), C.R.S.

<sup>54</sup> § 12-155-103(16)(a), C.R.S.

<sup>55</sup> § 12-155-103(15)(a)(II), C.R.S.

<sup>56</sup> § 12-155-103(14)(a), C.R.S.

<sup>57</sup> § 12-155-108(4)(a), C.R.S.

<sup>58</sup> § 12-155-105(1)(h), C.R.S.

<sup>59</sup> § 12-155-105(1)(h), C.R.S.

<sup>60</sup> § 12-155-103(8)(a), C.R.S.

<sup>61</sup> § 12-155-120(1)(c), C.R.S.

<sup>62</sup> § 12-155-120(1)(b), C.R.S.

<sup>63</sup> § 12-155-120(4), C.R.S.

<sup>64</sup> § 12-155-120(2)(b)(I), C.R.S.

<sup>65</sup> § 12-155-120(2)(b)(I), C.R.S.

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The Board's staff has authority to conduct full or partial contemporaneous reviews during inspections.<sup>66</sup> Contemporaneous reviews are utilized to ensure that all individuals on a work site are licensed.<sup>67</sup>

In addition, an inspector may conduct a compliance check.<sup>68</sup> Compliance checks are utilized to ensure compliance with the licensing and supervisor-to-apprentice ratio requirements.<sup>69</sup> One licensed journeyman plumber, master plumber, or residential plumber may not supervise more than three apprentice plumbers at the same job site.<sup>70</sup> State compliance checks can occur on projects all throughout the state regardless of whether the inspection permit was issued by the Board, locality, or a qualified state institution of higher education.<sup>71</sup>

### Discipline

The Board may discipline any license or registration for violations, including:

- Any violation of the Act;<sup>72</sup>
- Any violation of the rules or orders of the Board, including aiding or abetting of such violation;<sup>73</sup>
- Failure or refusal to remove within a reasonable time the cause for disapproval of an inspection;<sup>74</sup>
- Commitment of any act or omission that does not meet generally accepted standards of plumbing practice;<sup>75</sup>
- Conviction of or acceptance of a plea guilty or *nolo contendere* by a court to a felony;<sup>76</sup>
- False or misleading advertising;<sup>77</sup>
- Fraud or deception in attempting to obtain a license;<sup>78</sup>
- Failure to adequately supervise an apprentice;<sup>79</sup>
- Failure of any licensee to report to the Board any known violations or civil judgements that arose from work performance;<sup>80</sup>
- Failure to report a substance use disorder;<sup>81</sup>
- Evidence of a violation in another jurisdiction;<sup>82</sup> or

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<sup>66</sup> § 12-155-120(10)(b)(l), C.R.S.

<sup>67</sup> § 12-155-120(10)(b)(l), C.R.S.

<sup>68</sup> § 12-155-119(5)(b), C.R.S..

<sup>69</sup> § 12-155-119(5)(c), C.R.S.

<sup>70</sup> § 12-155-124(1), C.R.S.

<sup>71</sup> § 12-155-119(5)(c), C.R.S.

<sup>72</sup> § 12-155-113(1)(a), C.R.S.

<sup>73</sup> § 12-155-113(1)(b), C.R.S.

<sup>74</sup> § 12-155-113(1)(c), C.R.S.

<sup>75</sup> § 12-155-113(1)(e), C.R.S.

<sup>76</sup> § 12-155-113(1)(f), C.R.S.

<sup>77</sup> § 12-155-113(1)(g), C.R.S.

<sup>78</sup> § 12-155-113(1)(h), C.R.S.

<sup>79</sup> § 12-155-113(1)(i), C.R.S.

<sup>80</sup> § 12-155-113(1)(j), C.R.S.

<sup>81</sup> § 12-155-113(1)(l), C.R.S.

<sup>82</sup> § 12-155-113(1)(n), C.R.S.

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- Violating any building, construction safety, labor, health, worker’s compensation, or state and federal tax laws.<sup>83</sup>

The Board may issue a letter of admonition, a confidential letter of concern, citations, or cease-and-desist orders to licensees.<sup>84</sup>

- Letters of admonition are the least severe form of disciplinary action.
- Confidential letters of concern are issued when a complaint is dismissed, but the Board noticed conduct during the investigation that could be a concern if not otherwise corrected.
- Actions that need correcting can result in citations, with the opportunity for appeal or negotiated settlement.
- If the Board believes that a licensee’s actions present a health and safety threat, it is empowered to issue a cease-and-desist order.

Denials, probations, suspensions, dismissals, and revocations can also be issued with the opportunity for appeal or negotiated settlement, conducted under Board rules.<sup>85</sup>

The Act also directs the Board to adopt a uniform fining schedule.<sup>86</sup> In developing the schedule of fines, the Board must not exceed a maximum of:<sup>87</sup>

- \$1,000 for the first offense,
- \$2,000 for the second offense, and
- \$2,000 for any subsequent offense for each day that a violation occurs.

### Local Entities and Qualified State Institutions

Local governments can license plumbing contractors and water conditioning contractors independently.<sup>88</sup> Local governments can also conduct their own inspections of plumbing, gas, and water conditioning systems.<sup>89</sup> No state inspections will take place in counties that conduct their own inspections.<sup>90</sup> This does not, however, apply to compliance checks which can take place in any locality.<sup>91</sup>

Local jurisdictions may also amend plumbing codes for their jurisdictions.<sup>92</sup> However, any amendment must be at least equal to the minimum requirements set forth in the Plumbing Code.<sup>93</sup> If a local government fails to meet the minimum requirements, the

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<sup>83</sup> § 12-155-113(1)(q), C.R.S.

<sup>84</sup> § 12-155-113(2)-(5), C.R.S.

<sup>85</sup> § 12-155-123(1), C.R.S.

<sup>86</sup> § 12-155-123(2)(a), C.R.S.

<sup>87</sup> § 12-155-123(2)(b), C.R.S.

<sup>88</sup> § 12-155-121(1), C.R.S.

<sup>89</sup> § 12-155-121(1)(a), C.R.S.

<sup>90</sup> § 12-155-105(1)(h), C.R.S.

<sup>91</sup> § 12-155-119(5)(b)(l), C.R.S.

<sup>92</sup> § 12-155-106(2), C.R.S.

<sup>93</sup> § 12-155-106(2), C.R.S.

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Board has the ability to issue an order to cease-and-desist from issuing permits or performing inspections.<sup>94</sup>

The Act has special requirements for qualified state institutions of higher education, which refers to facilities belonging to the University of Colorado and Colorado State University.<sup>95</sup> Such institutions can employ their own inspectors to check plumbing and gas systems.<sup>96</sup> These inspectors are also allowed to conduct compliance checks to ensure supervision requirements are being met.<sup>97</sup>

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<sup>94</sup> § 12-155-105(1)(m), C.R.S.

<sup>95</sup> § 12-155-103(12), C.R.S.

<sup>96</sup> § 12-155-119(4)(a), C.R.S.

<sup>97</sup> § 12-155-119(4)(b), C.R.S.

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## Program Description and Administration

In a sunset review, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) is guided by sunset criteria located in section 24-34-104(6)(b), Colorado Revised Statutes (C.R.S.). The fifth, sixth and seventh sunset criteria question:

Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource, and personnel matters;

Whether an analysis of agency operations indicates that the agency or the agency's board or commission performs its statutory duties efficiently and effectively; and

Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates.

In part, COPRRR utilizes this section of the report to evaluate the agency according to these criteria.

The State Plumbing Board (Board) is housed in the Division of Professions and Occupations (Division) in the Department of Regulatory Agencies.

The laws that govern plumbing are contained in Article 155 of Title 12, Colorado Revised Statutes, C.R.S. (Act). It gives the Board authority to license, register, and regulate both plumbers and professionals who specialize in working with water conditioners. It also authorizes the Board to permit and inspect plumbing and gas installations, and to select a plumbing and gas code.

The Board consists of:<sup>98</sup>

- One journeyman plumber;
- One master plumber;
- One general contractor;
- Two plumbing contractors;
- One employee of a local agency that conducts inspections;
- One member of the public at large; and
- One representative from the Department of Public Health and Environment as an *ex officio*, nonvoting member.

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<sup>98</sup> § 12-155-104(2)(a)(I), C.R.S.

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Table 2, below, demonstrates the costs and full-time equivalent (FTE) employees associated with implementing the Act.

**Table 2**  
**Agency Fiscal Information**

Fiscal Year	Total Program Expenditure	FTE
17-18	\$1,877,527	3.9/10.8
18-19	\$2,114,141	3.95/11.30
19-20	\$2,168,037	4.12/11.30
20-21	\$2,184,310	3.9/12.50
21-22	\$2,171,864	3.45/12.50

Expenditures remained relatively stable throughout the five fiscal years reported. The number of FTE on the left represent Division office staff, whereas the number on the right represent field inspectors.

The number of FTE reflected in Table 2 above does not include employees in the centralized offices of the Division that provide management, licensing, administrative, technical, and investigative support to the Board. However, the cost of those FTE is reflected in the total program expenditures.

Table 3 provides a job description for the FTE expressed in Table 2.

**Table 3  
Job Descriptions  
Fiscal Year 21-22**

FTE in FY 21-22	Job Description
Program Management III- 0.15 FTE	Senior Program Director - Provides support to the Program Director in higher-level issues of the Board, representation and assistance with senior management as needed.
Program Management II- 0.40 FTE	Program Director, Programs - Manages and provides direction of the business of the Board and manages program area staff in performing these functions. This includes managing budgets, hiring and personnel management of staff, conducting meetings of the Board, Board representation and participation in national organization activities, education and conducting outreach activities.
Technician IV - 0.20 FTE	Program Manager - Supervises Administrative Assistant III positions to ensure timely and accurate processing of enforcement cases and applications referred to the program area as well as Board meeting preparation.
Technician III - 0.40 FTE	Compliance Specialist - Performs compliance management functions for the Board including all duties after a case is referred for disciplinary action. This includes preparation of materials for Board meetings.
Administrative Assistant III (2 positions) - 0.40 FTE; 0.30 FTE	The First position manages general Board email box, prepares reports of investigation for Board consideration, and Board meeting follow-up for non-disciplinary cases.  The second position processes applications, conducts various Board meeting duties, processes six-month letters to respondents and complainants of open cases.
Program Management II- 0.50 FTE	Program Director, Inspections - Directly supervises Plumbing Inspector Supervisors. Coordinates logistics for inspections including staffing, fleet management, advises on problem inspections, and coordinates regular inspector meetings. Collaborates with industry leaders as needed to address inspection/installation issues.
LTC (Labor, Trade, Craft) Operations II- 1.0 FTE	Inspector Supervisor - Provides supervision of Plumbing Inspectors to assist in managing schedules, problem inspections, and reviews. Assists in the evaluations of inspectors.
Inspector II 1.0 FTE x 12 Inspectors	These positions coordinate their schedules to inspect (and reinspect where necessary) all plumbing and gas piping installations in any new construction or remodeling or repair, for the jurisdictions that do not perform their own inspections as well as state buildings.



The Board is cash-funded through the collection of license, registration and inspection permit fees. Table 4, below, illustrates, for the fiscal years indicated, the fees for master plumber licenses (MP), journeyman licenses (JP), residential plumbers (RP), plumbing contractor registrations (PC) and apprentices.

**Table 4  
Licensing Fees**

License/Certification Type: MP/JP/RP/PC/Apprentice		
Fiscal Year	Initial	Renewal
17-18	\$140/120/100/210/30	\$140
18-19	\$140/120/100/210/30	\$140
19-20	\$140/120/100/210/30	\$140
20-21	\$140/120/100/210/30	\$140
21-22	\$140/120/100/210/30	\$140

Fees have remained the same for the entire five-year period examined. All fees are based on the cost of administering the program. Fees for apprentices are paid by the employer when they "register" the apprentice with their company.<sup>99</sup>

For each of the three types of water conditioning registrations, the initial registration fee was \$495 for the entire five-year period. Renewal fees for water conditioning registrations were \$40 during fiscal year 21-22. Water conditioners are possibly charged a higher fee due to being a specialized license type.

Table 5, below, shows the inspection permit fees.

**Table 5  
Inspection Permit Fees:**

Fiscal Year	Fee Amount
17-18	\$104
18-19	\$104
19-20	\$52
20-21	\$26
21-22	\$26

Fees are set yearly by the Board and are based on the cost of the program.

<sup>99</sup> § 12-155-108(2), C.R.S.

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## Inspections

State inspectors inspect plumbing work in areas where local government or qualified state institutions of higher education do not conduct inspections or issue any permits.<sup>100</sup> Prior to the commencement of any plumbing or gas piping installation, the person making the installation must apply for an inspection permit and pay the required fee.<sup>101</sup> State inspectors must make inspections within three days of an application for inspection.<sup>102</sup> Noncompliant installations discovered during inspections trigger a notice of disapproval, including needed corrective actions, which are sent to both the Board and the contractor.<sup>103</sup>

The Board's staff has authority to conduct full or partial contemporaneous reviews during inspections.<sup>104</sup> Contemporaneous reviews are utilized to ensure that all individuals on a work site are licensed.<sup>105</sup>

In addition to contemporaneous reviews, the Board is directed to hire inspectors to perform compliance checks.<sup>106</sup> Compliance checks are utilized to specifically ensure compliance with licensing and supervisor-to-apprentice ratio requirements.<sup>107</sup> One licensed journeyman plumber, master plumber, or residential plumber may not supervise more than three apprentice plumbers at the same job site.<sup>108</sup>

Table 6 enumerates the inspections performed by Division inspectors during the period under review.

**Table 6**  
**Plumbing Inspections**

	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Number of Inspections	15,570	15,963	17,721	18,377	19,007

The number of inspections remained stable until fiscal year 19-20, when staff began remote inspections, allowing for more inspections to be completed state-wide.

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<sup>100</sup> § 12-155-105(1)(h), C.R.S.

<sup>101</sup> § 12-155-120(1)(c), C.R.S.

<sup>102</sup> § 12-155-120(1)(b), C.R.S.

<sup>103</sup> § 12-155-120(4), C.R.S.

<sup>104</sup> § 12-155-120(10)(b)(I), C.R.S.

<sup>105</sup> § 12-155-120(10)(b)(I), C.R.S.

<sup>106</sup> § 12-155-119(5)(b), C.R.S.

<sup>107</sup> § 12-155-119(5)(c), C.R.S.

<sup>108</sup> § 12-155-124(1), C.R.S.

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## Licensing

The eleventh sunset criterion questions whether the scope of practice of the regulated occupation contributes to the optimum use of personnel.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

For plumbers, there are three types of credentials available:<sup>109</sup>

- Master Plumber License,
- Journeymen Plumber License, and
- Residential Plumber License.

The Board is required to issue licenses to persons who have, by examination and experience, shown themselves competent and qualified.<sup>110</sup> The Board determines the minimum level of experience needed to sit for the required examination.<sup>111</sup> The maximum hours the Board may require for an applicant to qualify are:<sup>112</sup>

- 3,400 hours for a residential plumber;
- 6,800 hours for a journeyman plumber; and
- 8,500 hours for a master plumber.

Candidates can include experience attained outside of the state if they can demonstrate to the Board that the experience is adequate to comply with the Act.<sup>113</sup>

In addition, there are significant continuing education requirements for licensed plumbers. No master, journeyman, or residential plumber may have a license renewed or reinstated unless they have completed eight hours of continuing education for every 12 months that have passed after the later of the last date of renewal or reinstatement.<sup>114</sup> The Division is currently conducting its first audit of licensees who renewed their licenses in February 2023, the first renewal date since this requirement went into effect.

The table below shows the total number of new licenses for all license types in each fiscal year.

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<sup>109</sup> § 12-155-110(1)(a), C.R.S.

<sup>110</sup> § 12-155-110(1)(a), C.R.S.

<sup>111</sup> § 12-155-110(1)(a), C.R.S.

<sup>112</sup> § 12-155-110(1)(a), C.R.S.

<sup>113</sup> § 12-155-111, C.R.S.

<sup>114</sup> § 12-155-112(3)(a), C.R.S.

**Table 7  
Number of Licenses**

Number of Licenses - Total				
Fiscal Year	New/Exam	Endorsement	Renewal	Total
17-18	2,029	7	0	17,362
18-19	2,234	8	8,341	17,508
19-20	1,902	13	0	18,362
20-21	2,255	12	8,631	17,722
21-22	2,587	6	0	19,047

As of the fiscal year 21-22, there were 19,000 licenses under the program. The number of licenses remained stable each year. A breakdown of licenses by category can be found in Appendix B.

In addition to the plumbing licenses, there are a number of specialty registrations available from the Board:

- Plumbing Apprentices,
- Plumbing Contractors,
- Water Conditioning Installers,
- Water Conditioning Principals, and
- Water Conditioning Contractors.

As shown in Appendix B, there were a total 2,589 registered Plumbing Contractors in fiscal year 21-22. There were 8,810 registered apprentices that fiscal year. three water conditioning registrations had a very small number of registrants in fiscal year 21-22, with only:

- 8 Water Conditioning Installers,
- 13 Water Conditioning Principals, and
- 11 Water Conditioning Contractors.

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## Examinations

The eleventh sunset criterion questions whether the scope of practice of the regulated occupation contributes to the optimum use of personnel.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

The Board is required to hold examinations for licensure at least four times per year.<sup>115</sup> The examination may be administered either by the Board or an authorized agent.<sup>116</sup> Examinations include written or practical tests consistent with current practical and theoretical requirements of the practice of plumbing.<sup>117</sup> The Board must ensure that the examination passing score reflects a minimum level of competency.<sup>118</sup>

Prometric was used as the examination vendor until fiscal year 19-20. The Board currently uses PSI Exams as its examination vendor.

Table 8 indicates the number of written examinations given in the previous five fiscal years.

**Table 8**  
**Number of Examinations Given**

Number of Colorado Written Examinations Given and Pass Rate (%)						
Fiscal Year	Residential	Pass Rate	Journeyman	Pass Rate	Master	Pass Rate
17-18	76	63.16%	258	61.24%	306	57.19%
18-19	148	61.49%	497	59.76%	420	55.48%
19-20	108	61.11%	424	53.54%	350	51.43%
20-21	207	60.87%	571	57.27%	506	57.51%
21-22	205	51.98%	572	55.52%	547	57.72%

The number of examinations rose gradually each year. In 2020, the General Assembly passed Senate Bill 20-120, which imposed an examination requirement for individuals who have been registered as apprentices for more than six years. This explains the increase in examinations in the last two fiscal years.

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<sup>115</sup> § 12-155-110(2), C.R.S.

<sup>116</sup> § 12-155-110(3), C.R.S.

<sup>117</sup> § 12-155-110(3), C.R.S.

<sup>118</sup> § 12-155-110(3), C.R.S.

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## Complaints

The eighth and tenth sunset criteria require COPRRR to examine whether regulatory oversight can be achieved through a director model, and whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession or regulated entity.

In part, COPRRR utilizes this section of the report to evaluate the program according to these criteria.

The table below shows the breakdown of all complaints received since fiscal year 17-18.

**Table 9  
Complaints**

Nature of Complaints	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Practicing w/o a License	117	68	64	43	67
Aiding and Abetting Unlicensed Practice	19	37	13	32	4
Standard of Practice	7	14	50	47	74
Failure to Report	138	73	64	5	5
False Advertising	0	3	0	0	4
Outside the Scope of Practice	4	0	1	3	0
Improper Supervision	28	2	15	11	3
Unprofessional Conduct	3	11	47	20	19
Violation of Board Order	1	1	0	1	3
Criminal Conviction	43	23	18	7	11
Education/Experience Review	15	40	1	3	0
<b>Total</b>	<b>375</b>	<b>272</b>	<b>273</b>	<b>172</b>	<b>190</b>

Most complaints are related to practicing without a license, standard of practice, and failure to report violations. There was a significant decrease in complaints received in fiscal year 18-19, and again in fiscal year 20-21. However, it is not clear as to the cause for the decreases. The numbers fluctuate based on the number of complaints received from the public.

A breakdown of complaints by license type can be found in Appendix C.

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## Disciplinary Activity

The tenth sunset criterion requires COPRRR to examine whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession or regulated entity.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

The Board may issue a letter of admonition, a confidential letter of concern, citations, or cease-and-desist orders to licensees:<sup>119</sup>

- Letters of admonition are used when the Board finds that no formal disciplinary action is needed, but that the complaint should not be dismissed as being without merit.
- Confidential letters of concern are issued when a complaint is dismissed, but the Board noticed conduct during the investigation that could be a concern if not otherwise corrected.
- Actions that need correcting can result in citations, with the opportunity for appeal or negotiated settlement.
- If the Board believes that a licensee's actions present a health and safety threat, it is empowered to issue a cease-and-desist order.

Denials, probations, suspensions, dismissals, and revocations can also be issued with the opportunity for appeal or negotiated settlement, conducted under Board rules.<sup>120</sup>

Table 10 breaks down all disciplinary actions taken for the five fiscal years indicated.

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<sup>119</sup> §§ 12-155-113(2)-(5), C.R.S.

<sup>120</sup> § 12-155-123(1), C.R.S.

**Table 10**  
**Final Agency Actions**

Type of Action	FY 17-18	FY 18-19	FY 19- 20	FY 20-21	FY 21- 22
Revocation / Surrender / Voluntary Relinquishment	2	2	2	0	2
Suspension	0	0	0	0	1
Probation / Practice Limitation	32	43	13	18	24
Letter of Admonition	2	28	6	4	4
License Denied	0	9	2	1	0
Cease and Desist Orders	20	23	19	36	28
Final Agency Order (Revocation)	2	4	1	0	0
Final Agency Order (Fine)	0	1	1	1	6
Citation	0	0	1	1	0
Injunction	0	0	1	1	7
<b>Total Disciplinary Actions</b>	<b>58</b>	<b>110</b>	<b>46</b>	<b>62</b>	<b>72</b>
Dismiss	153	160	115	73	90
Dismissed Application	0	0	0	0	0
Letter of Concern	146	52	52	5	9
<b>Total Dismissals</b>	<b>299</b>	<b>212</b>	<b>167</b>	<b>78</b>	<b>99</b>

The number of disciplinary actions taken decreased in fiscal year 19-20, potentially as a result of a policy change within the Division, which included issuing fewer cease and desist orders. A final agency order is a disciplinary action issued by the Director after receiving an initial decision by an Administrative Law Judge. A more detailed breakdown of disciplinary actions by license type can be found in the Appendix D.

The Act also directs the Board to adopt a uniform fining schedule.<sup>121</sup> in developing the schedule of fines, the Board must not exceed a maximum of:<sup>122</sup>

- \$1,000 for the first offense,
- \$2,000 for the second offense, and
- \$2,000 for any subsequent offense for each day that a violation occurs.

Table 11, below, shows the total number of fines imposed and collected.

<sup>121</sup> § 12-155-123(2)(a), C.R.S.

<sup>122</sup> § 12-155-123(2)(b), C.R.S.



**Table 11  
Fining Activity**

Fiscal Year	Number of Fines Imposed	Total Value of Fines Imposed	Total Value of Fines Collected
17-18	8	\$2,420	\$11,100
18-19	26	\$14,925	\$21,250
19-20	12	\$10,730	\$8,130
20-21	17	\$10,377	\$8,000
21-22	24	\$22,585	\$14,437

The imposed and collected dates can vary and cross over fiscal years, hence the difference in the value of fines imposed and collected. Additionally, many licensees request payment plans that can span into more than one fiscal year. It is not known why there was a spike in fines imposed during fiscal year 18-19. However, most of the fines that year were imposed on plumbing contractors. The number of fines imposed, as well as the value of the fines imposed and collected, by license type, can be found in Appendix E.

Table 12 shows the average number of days, for each fiscal year, that it takes to close a jurisdictional complaint, as calculated from the date the complaint is received until the date of the final agency action.

**Table 12  
Case Processing Time**

Fiscal Year	Number of Days
17-18	110
18-19	157
19-20	198
20-21	208
21-22	144

The case processing time fell in fiscal years 21-22 as a result of an increase in staffing.

The average length of time it took to close a case, by license type, can be found in Appendix F.

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## Collateral Consequences - Criminal Convictions

The thirteenth sunset criterion requires COPRRR to examine whether the agency, through its licensing, certification or registration process, imposes any sanctions or disqualifications on applicants based on past criminal history and, if so, whether the sanctions or disqualifications serve public safety or commercial or consumer protection interests.

COPRRR utilizes this section of the report to evaluate the program according to this criterion.

The tables below demonstrate the number of conditional licenses in the five fiscal years examined.

**Table 13**  
**Collateral Consequences of Criminal Activity Licensing**

Nature of Sanction or Disqualification	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Conditional Licenses	9	9	2	1	2
<b>Total</b>	9	9	2	1	2

The criminal activity behind each conditional license varied:

- In fiscal year 17-18, types of crimes often included felonies for menacing with a real or simulated weapon and felonies for possession of controlled substances;
- In fiscal year 18-19, types of crimes often included felonies for menacing, felonies for possession of controlled substances, felonies for driving under the influence (DUI) with multiple prior offenses, and felonies for motor vehicle theft;
- In fiscal year 19-20, one candidate had a DUI with multiple prior offenses and another candidate had felonies for possession of a controlled substance and vehicular eluding;
- In fiscal year 20-21, one candidate was issued a conditional license as they had a prior felony for reckless driving; and
- In fiscal year 21-22, one candidate had a felony for sexual exploitation of a child. Another had felonies for assault and burglary.

The tables below demonstrate the number of licenses that received sanctions or disqualifications for the five fiscal years indicated.

**Table 14**  
**Collateral Consequences of Criminal Activity Licensing**

Nature of Sanction or Disqualification	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Denials	0	3	0	1	0
Suspensions	0	0	0	0	1
Stipulations	2	1	0	1	1
Revocations	0	0	0	0	1
<b>Total</b>	2	4	0	2	3

Each year, the criminal activity behind each sanction or disqualification varied:

- For fiscal year 17-18, one stipulation was issued to a licensee for a felony sexual assault on a child. Another stipulation was issued for felony child abuse;
- For fiscal year 18-19, denials were issued to three candidates who had prior criminal histories such as felony assaults, sexual assaults, and vehicular thefts;
- For fiscal year 20-21, one candidate was denied an application as the applicant had a recent felony for violating a court order. A stipulation was issued to the same candidate; and
- For fiscal year 21-22, a suspension was issued to a licensee with felony menacing and stalking charges. A stipulation was given to a licensee convicted of felony sexual assault. Lastly, a revocation was issued to an individual who failed to report a prior felony sexual assault on a minor.

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## Analysis and Recommendations

The final sunset criterion questions whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest. The recommendations that follow are offered in consideration of this criterion, in general, and any criteria specifically referenced in those recommendations.

### Recommendation 1 – Continue the State Plumbing Board for 13 years, until 2037.

Plumbers are one of Colorado’s oldest regulated professions. The General Assembly created the Act, now located at section 12-155-101, *et seq.*, Colorado Revised Statutes (C.R.S.), to ensure plumbing installations, including water conditioning systems, are made by persons who have proven their knowledge and skill.<sup>123</sup> The General Assembly also identified that improper plumbing can adversely affect the health of the public.<sup>124</sup>

Faulty plumbing can indeed lead to contamination between a building’s potable water supply and its non-potable water systems. A faulty installation may affect the premises and individuals in the surrounding area. For example, if a septic line leaks into a building or into the ground, the contamination can result in the spread of disease or death.

Plumbers are hence necessary to maintain septic systems and ensure their separation from potable water systems.<sup>125</sup> They also must be available to work before, during, and after the construction of such structures (such as during emergencies).<sup>126</sup> As such, regulation of plumbers should continue given that they are essential to maintaining public health.

The Act gives the Board licensing, inspection, and rulemaking authority. Licensing authority by the Board helps ensure only qualified individuals remain eligible to perform plumbing in an ongoing manner.

Because of the technical variations that occur in plumbing systems, the Board has the authority to adopt the state’s plumbing code.<sup>127</sup> The Board’s technical expertise is necessary to establish and maintain the code, which serves as the main standard for the state’s standards regarding plumbing installations and plumbing materials. Local governments are permitted to amend the code for their jurisdictions as long as the amendments are at least equal to the minimum requirements set forth in the state

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<sup>123</sup> § 12-155-101(1)(b), C.R.S.

<sup>124</sup> § 12-155-101(1)(a), C.R.S.

<sup>125</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-2>

<sup>126</sup> U.S. Bureau of Labor Statistics. *Plumbers, Pipefitters, and Steamfitters*. Retrieved August 22, 2023, from <https://www.bls.gov/ooh/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm#tab-3>

<sup>127</sup> § 12-155-106(1), C.R.S.

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plumbing code.<sup>128</sup> As such, the entire state relies on the expertise of the Board when it comes to plumbing installations in buildings.

Regarding plumbing installations, two safeguards are incorporated as a result of the Act. Firstly, it requires an experienced plumber to be in charge of every plumbing installation in Colorado. Installations are subsequently inspected by the Board. These two steps are important prerequisites because every detail of every installation is not spelled out in a building design, and unexpected emergencies or setbacks could always occur. Because of these safeguards, the potential risk of a consumer being harmed is kept to a minimum.

In addition, the Board has the duty to adopt and maintain a gas code.<sup>129</sup> A gas fuel system is an entirely separate scheme, but the piping materials used for gas are typically similar to piping materials used for plumbing. Although licenses for gas installations are not required, the Board conducts inspections of gas installations to ensure that they are correctly finished. Hence, the expertise of the Board proves, once again, to be necessary. Making sure the final piping is installed properly furthers the legislative purpose of protecting the public from unskilled work.

The Board licensed more than 10,000 plumbers and conducted more than 19,000 inspections in fiscal year 21-22. One-hundred ninety-two complaints were received that year, and 72 disciplinary actions were taken. The state follows mostly a similar licensing scheme as most other states, which also have different levels of licensure from apprentices to master plumbers.

The Board meets every other month to discuss each complaint and determine disciplinary measures. As part of the sunset review, COPRRR staff attended these Board meetings. The Board carefully considered each complaint, disciplinary case, variance request, and any other item put forth. Most meetings took close to an entire business day to complete, representing the extensive amount of deliberation that occurred between Board members. The meetings also illuminated firsthand how much technical knowledge is needed properly understand and debate plumbing-related topics.

The first sunset criterion asks whether regulation is necessary to protect the public health, safety and welfare. The second criterion examines the conditions that led to the initial creation of a program, whether they have changed, and whether other conditions have arisen that would affect the degree of governmental oversight provided. The eighth criterion asks whether regulatory oversight can be achieved through a director model.

As highlighted above, the Act and Board serve to protect the public by, among other things, ensuring that plumbing and gas installations are being installed properly. Proper installations ensure a separation between potable water systems with non-potable systems. Any cross-contamination between the two is detrimental not only to the

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<sup>128</sup> § 12-155-106(2), C.R.S.

<sup>129</sup> § 12-155-106(5), C.R.S.

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building in which it is located, but also to piping in the surrounding area. These risks continue today, and extensive training is required to understand how to deal with these issues administratively. The Board consists of plumbers that have years of experience and confidence to tackle such issues.

Therefore, the General Assembly should continue the Act and Board for 13 years, until 2037.

**Recommendation 2 – Include in the grounds for discipline aiding or abetting a violation of the Act.**

The Act, at section 12-155-113(1)(b), C.R.S., provides that it is a violation of the Act to aid or abet another in violating any of the Board’s rules or orders. However, the Act is silent on whether it is a violation of the Act to aid or abet another in violating the Act itself.

This has caused problems with respect to plumbing contractors that subcontract work to unregistered contractors.

Plumbing contractors usually refer to plumbing businesses. They can be any person, firm, partnership, corporation, association, or other organization that undertakes or offers to undertake for another the planning, installing, or repairs for the installation of plumbing.<sup>130</sup> In order to act as a plumbing contractor, the person, firm, partnership, corporation, association, or other organization must either be or employ a full-time master plumber.<sup>131</sup> The entity must also register with the Board.<sup>132</sup>

According to Division staff and to Board members, there have been numerous instances where the Board receives a complaint against plumbing contractors that subcontract their work to other entities, including unregistered plumbing contractors. Plumbing work by unregistered entities can pose several issues such as inferior plumbing work, improper supervision, and the potential for further plumbing problems.

Section 12-155-113, C.R.S., lays out the disciplinary authority of the Board. However, there are currently no clear grounds for discipline over plumbers who work with unregistered plumbing contractors. The closest measure the Board has in in section 12-155-113(1)(b), C.R.S., which states that the Board can take action for,

violation of the rules or orders promulgated by the Board in conformity with the provisions of [the Act] or aiding or abetting in such violation.

This “aiding or abetting” provision only captures acts that were made in violation of a Board order or rule. If an aiding and abetting provision were to apply to the entire Act,

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<sup>130</sup> § 12-155-103(10), C.R.S.

<sup>131</sup> § 12-155-103(10), C.R.S.

<sup>132</sup> § 12-155-108(3), C.R.S.

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it would allow the Board to discipline registrants that subcontract work to unregistered entities. This change is in line with other disciplinary sections of Title 12, such as those administered by the State Electrical Board.<sup>133</sup>

The fifth sunset criterion asks whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes or procedures. The tenth criterion examines whether disciplinary procedures adequately protect the public. Because there have been instances of plumbing contractors that subcontract work out to unregistered entities, and because unregistered activity can pose problems with plumbing installations, the Board should be given more disciplinary authority over plumbing contractors that subcontract work out to unregistered contractors.

Therefore, the General Assembly should include in the grounds for discipline, aiding or abetting a violation of the Act.

**Recommendation 3 – Repeal the requirement that those appointed to the Board be confirmed by the Senate.**

Section 12-155-104(3), C.R.S., currently requires Board members to be confirmed by the Senate. This poses a number of issues. For Board members living outside the Denver Metro area, this can prove a hardship in terms of travel and time away from work. Although they can act temporarily, Board members must wait until their confirmations to properly carry out their duties. Additionally, Division staff do not recall an instance in which a Board member was denied Senate confirmation.

The fifth sunset criterion asks, among other things, whether the agency’s operations are impeded or enhanced by existing statutes. Because the Board must wait for members to be confirmed, business by the Board may be impeded. Requiring appointees to travel to Denver for a pro forma confirmation hearing impedes, albeit minimally, the Board’s ability to operate.

Therefore, the General Assembly should repeal the requirement that those appointed to the Board be confirmed by the Senate.

**Recommendation 4 – Repeal the Board’s political affiliation requirements for members.**

Section 12-155-104(6), C.R.S., dictates that no major political party shall be represented on the Board by “more than one member more than the other major political party.”

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<sup>133</sup> 12-115-122(1)(a), C.R.S.

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This political affiliation requirement is unnecessary and presents multiple issues. Firstly, the Governor must already follow new guidance from the General Assembly with regards to filling vacancies on the Board. In 2021, the General Assembly passed House Bill 21-1212. This requires the Governor to make reasonable efforts to appoint members of diverse groups to statewide boards, including the Board. This includes members from rural and urban parts of the state, along with members of “diverse political, racial, disability, and cultural groups and of diverse sexual orientations and genders.”

The language is also unnecessary because the Board is not partisan in nature. During the sunset review, COPRRR analysts attended Board meetings and noted that the technical nature of plumbing installations dominated almost every discussion.

According to the Division, many boards (including the State Electrical Board) no longer have such political affiliation requirements. As such, the language is antiquated. Removing this restriction may even assist in filling Board vacancies, which has been an issue of concern.

The second sunset criterion asks whether the conditions that led to the initial creation of the program have changed and whether other conditions have arisen that would warrant a different degree of governmental oversight. The fifth sunset criterion asks whether the agency operates in the public interest and whether its operation is impeded by existing statutes. The sixth sunset criterion asks whether the board performs its statutory duties efficiently and effectively. As described, the Governor must follow new guidance from the General Assembly in appointing diverse members to the Board. Further, the Board is not partisan in nature. It is made up mostly of plumbers who spend the majority of the Board’s business discussing the technicalities of plumbing. Hence, this language is not needed.

Therefore, the General Assembly should repeal the Board’s political affiliation requirements, for members.

### **Recommendation 5 – Clarify that plumbing contractors are allowed to work on water conditioning systems.**

In 2015, the General Assembly passed Senate Bill 15-202 (SB 202) to create registration requirements for those that specialize in water conditioning installations. It included three new registration categories, and it directed the Board to issue permits for and conduct inspections of water conditioning systems.

Plumbers by trade and experience have the necessary understanding of water conditioning systems. However, there are a small number of practitioners who are not traditional plumbers yet specialize in servicing water conditioning systems. SB 202 allows these practitioners, when registered with the Board, to work on such systems without the need for a plumbing license.



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However, since the passage of SB 202, there has been confusion as to whether plumbing contractors can install water conditioning systems without needing to obtain one of the additional water conditioning registrations.

Section 12-155-103(10), C.R.S., states that a “‘plumbing contractor’ does not include a water conditioning contractor, a water conditioning installer, or a water conditioning principal.”

Section 12-155-103(14)(a), C.R.S., states that “‘water conditioning contractor’ does not include a plumbing contractor.”

These two provisions have been the source of misunderstanding for practitioners, many of which expressed confusion about which registration they need to properly offer services. Some plumbing contractors are unsure of whether they are allowed to work on water conditioning systems without obtaining the additional water conditioning contractor registration. Such an apparent prohibition is unnecessarily restrictive to those who are seeking to be properly registered by the Board.

The Act already provides that registered plumbing contractors can work on water conditioning installations by stating:

nothing in this section limits the ability of a licensed residential, journeyman, or master plumber, a plumbing apprentice, or a registered plumbing contractor to practice within his or her respective area as authorized by [the Act] with regard to water conditioning appliances.<sup>134</sup>

The fifth sunset criterion asks whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes. Because there has been confusion from practitioners as to which registrations are required, these three provisions should be harmonized.

Therefore, the General Assembly should clarify that plumbing contractors can work on water conditioning installations.

**Recommendation 6 – Amend the Act to use the term of “Journeyworker” rather than “Journeyman.”**

The license classification for journey-level plumbers is titled “journeyman plumber.” The term “journeyman” might be seen as an inherent barrier against those who identify as female who may wish to work in the industry.

The term “journeyman” has been used since the inception of the modern plumbing industry. However, the terms “journeyworker” and “journeyperson” are increasingly

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<sup>134</sup> § 12-155-108(1)(b), C.R.S.

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being used by companies and even by other government agencies. The federal apprenticeship program enacted under the Inflation Reduction Act currently uses the term “journeyworker”.<sup>135</sup>

Connecticut,<sup>136</sup> Minnesota,<sup>137</sup> and Hawaii<sup>138</sup> each use terms such as “journeyworker” or “journeyperson” in their regulations. California,<sup>139</sup> Maryland,<sup>140</sup> Michigan,<sup>141</sup> and Washington<sup>142</sup> have started to use phrases like “Journey Workers”, “Journey Level Plumbers”, or simply “Journey Plumbers.”

Within Colorado, the term “journeyworker” is already being used in state statute. Senate Bill 23-146 created a state-wide apprenticeship program that would offer opportunities to candidates of multiple professions, including plumbers. The bill explicitly included the word “journeyworker” three times to describe eligible candidates of the program. This bill was passed and has been codified in section 8-83-308, C.R.S.

The twelfth sunset criterion asks whether entry requirements encourage equity, diversity, and inclusivity. In this case, it is not necessarily the entry requirements that pose an obstacle, but rather the very language used to identify the regulated profession.

To remove this potential barrier to entry, the General Assembly should amend the Act to use the word “journeyworker” rather than “journeyman.”

**Recommendation 7 – Amend the language in the grounds for discipline referring to substance use disorder.**

Under section 12-155-113(l), C.R.S., the Board can take action against a licensee who has:

A substance use disorder, as defined in section 27-81-102, or excessive use of any habit-forming drug, any controlled substance, as defined in section 18-18-102 (5), or any alcohol beverage[.]

This provision should be amended to repeal references to “substance use disorder.”

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<sup>135</sup> 29 U.S.C. § 29.2 (2023)

<sup>136</sup> Conn. Gen. Stat. § 20-334d-1.(d)(i) (2023).

<sup>137</sup> Minn. Stat. 326.43 Section 3 (2022)

<sup>138</sup> Haw. Rev. Stat. § 448E-1 (2023).

<sup>139</sup> Cal. Code Regs. tit. 8 § 212.2(a)(2) (2023).

<sup>140</sup> Md. Code (2023), Art. 6, § 307.1.

<sup>141</sup> Mich. Comp. Laws § 339.6115(1) (2023).

<sup>142</sup> Wash. Rev. Code. § 18.106.010(4) (2023).

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In *Robinson v. California*,<sup>143</sup> the U.S. Supreme Court held that narcotic addiction is an illness and that any state law that seeks to punish a person because of an illness is a violation of the Fourteenth Amendment. Although this case referred to a criminal prohibition, it may be considered persuasive in the administrative context.

Furthermore, in *Colorado State Board of Nursing v. Crickenberger*,<sup>144</sup> the Colorado Court of Appeals addressed a provision in the Nurse Practice Act substantially similar to the one at issue here. In vacating the Board of Nursing’s disciplinary action, the court held that the plain language of the statute requires addiction at the time of hearing.

These two cases, taken together, suggest that disciplinary action based on addiction is not the most effective way to discipline practitioners who abuse alcohol or controlled substances.

In *Colorado State Board of Medical Examiners v. Davis*,<sup>145</sup> the Colorado Court of Appeals held that disciplinary action based on excessive use of alcohol or a controlled substance does not require current addiction or use of alcohol or controlled substances at the time of the disciplinary hearing.

The third and fifth sunset criteria ask: whether the existing statutes and regulations establish the least restrictive form of regulation consistent with the public interest, and whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes.

Because it may be unconstitutional to discipline a professional based on addiction to controlled substances or alcohol and since “excessive use” does not require current addiction or use at the time of the disciplinary hearing, the language should be amended to remove references to substance use disorders.

As such, the General Assembly should repeal the prohibition against an substance use disorder and amend the statute to include habitual or excessive use or abuse as a potential element for consideration in the grounds for discipline under the Act.

**Recommendation 8 – Repeal the requirement that the Board send a letter of admonition by certified mail.**

Certified mail is a service offered by the U.S. Postal Service with the purpose of providing a delivery confirmation. Section 12-155-113(2), C.R.S., requires the Board to send a letter of admonition (LOA) to licensees via certified mail. However, a certified letter does not guarantee the letter was reviewed by the recipient. Moreover, sending a letter via certified mail is more costly than sending a letter via first class priority mail.

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<sup>143</sup> 370 U.S. 660 (1962).

<sup>144</sup> 757 P.2d 1167 (Colo. App. 1988).

<sup>145</sup> 893 P.2d 1365 (Colo. App. 1995).

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LOAs are the only form of discipline that the Act requires to be sent to licensees via certified mail. This process is inconsistent with other practice acts in Colorado as well as more costly. Therefore, the General Assembly should repeal the requirement that the Board send an LOA to licensees via certified mail. Doing so removes an unnecessary requirement that is both more costly for the Division and inconsistent with other practice acts.

The fifth sunset criterion asks whether operation of the Act is impeded or enhanced by existing statutes, rules, or procedures. Hence, the General Assembly should repeal the requirement that the Board send an LOA by certified mail.

### **Recommendation 9 – Make technical amendments to the Act.**

The Act contains outdated language that should be revised to eliminate obsolete references and to reflect current terminology and administrative practices. Therefore, the Act should be amended to address the following technical issues:

- Repeal section 12-155-104(4), C.R.S., as obsolete;
- Replace the term “administrator” with “director” in section 12-155-107, C.R.S., as the former is obsolete; and
- Replace the phrase “he or she has” with “they have” in sections 12-155-108(1)(a), 12-155-110(1)(b)(I), 12-155-117(1), and 12-155-117(4), C.R.S., as the latter will be more inclusive.

These changes are mostly technical in nature and will have no substantive impact on the regulation of plumbing.

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## Appendix A – Customer Service Survey

In July 2023, COPRRR staff conducted a survey of all individuals and entities regulated by the Board. The survey was sent to 10,579 email addresses and 93 emails were returned as undeliverable. The survey received 465 responses, which is a 4.43 percent response rate. Survey results may be found in Appendix A.

### What is your relationship to the State Plumbing Board?

Relationship	Percentage
Residential Plumber	3.01%
Journeyman Plumber	20.65%
Master Plumber	45.59%
Master Plumber & Plumbing Contractor	19.57%
Apprentice	6.45%
Plumbing Contractor	4.73%
Water Conditioning Contractor	0%
Water Conditioning Installer	0%
Water Conditioning Principal	0%

If you are a member of the profession or occupation that is regulated by the State Plumbing Board, please indicate your years of experience.

Number of Interactions	Percentage
1 to 2 years	3.9%
2 to 5 years	3.3%
5 to 10 years	8.9%
10 to 15 years	7.6%
15 to 20 years	8%
20 plus years	68.3%

In the past year, how many times have you interacted with the State Plumbing Board? Please count all forms of interaction (telephone, e-mail, internet or website, regular mail, in person).

Number of Interactions	Percentage
I have not interacted	19.4%
1 to 2 times	43.2%
2 to 4 times	14.4%
4 to 6 times	8.2%
6 to 8 times	3.4%
8 or more times	11.4%

If you have interacted with the State Plumbing Board, what was your primary purpose in doing so?

Purpose of Interaction	Percentage
Licensing or registration	50.6%
Inspection, audit or examination	10.2%
To file a complaint	0.4%
To learn about the requirements for a profession/occupation	2.6%
To learn about the functions of (insert name of program/agency)	0%
To obtain help with an issue	2.2%
Respond to a complaint	1.1%
Respond to a request made to you	0.7%
Participate in a board, committee, commission, taskforce or working group for the agency	1.5%
Comment on or learn about existing/proposed rules or legislation	1.5%
Continuing education	13.2%
Update my information	1.1%
Questions about the scope of practice	0.9%
Not applicable	14%
Other	0%

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Overall please rate the service provided by the State Plumbing Board.

Service Provided	Percentage
Excellent	28.4%
Good	34.3%
Fair	16.5%
Poor	8.2%
Unacceptable	3.3%
Not Applicable	9.3%

Please rate the usefulness of the State Plumbing Board's website in answering your questions or providing needed information.

Website Usefulness	Percentage
Excellent	19.9%
Good	31%
Fair	25.3%
Poor	8.9%
Unacceptable	3%
Not Applicable	11.9%

Please rate the usefulness of the State Plumbing Board's communications in answering your questions or providing needed information.

Communications Usefulness	Percentage
Excellent	23.9%
Good	31.7%
Fair	18.8%
Poor	8.6%
Unacceptable	2.8%
Not Applicable	14.2%

Regardless of the outcome of your most recent issue, do you feel the State Plumbing Board listened to your concerns?

Listening to Concerns	Percentage
Excellent	19.9%
Good	29.2%
Fair	13%
Poor	7.9%
Unacceptable	3.2%
Not Applicable	26.8%

Please rate the timeliness of the Division Profession and Occupations in responding to your issues.

Response Timeliness	Percentage
Excellent	20.3%
Good	28.7%
Fair	16.4%
Poor	7.3%
Unacceptable	4.1%
Not Applicable	23.2%

Please provide the number and types of interactions that were required to resolve or address your most recent issue. (Please select all applicable types of interactions used AND the number times for each type of interaction selected.)

Number of Interactions	Type of Interaction				
	Phone	Website	E-mail	In Person	Regular Mail
0 times	144	85	113	192	203
1 to 2 times	136	196	138	25	17
3 to 4 times	40	35	46	8	3
5 to 6 times	14	26	13	4	0
7 or more times	4	17	6	0	0



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Please rate the helpfulness of the State Plumbing Board in resolving your issue or need.

Helpfulness	Percentage
Excellent	23%
Good	29.5%
Fair	16.5%
Poor	7.4%
Unacceptable	3%
Not Applicable	20.6%

Please rate the professionalism of the program's staff.

Professionalism	Percentage
Very professional	25.8%
Professional	36.1%
Somewhat professional	11.9%
Not very professional	2.2%
Unprofessional	2.1%
Not applicable	21.9%

Please rate the accuracy of information provided by the agency.

Professionalism	Percentage
Very accurate	25.4%
Accurate	39.8%
Somewhat accurate	15.4%
Not very accurate	3.3%
Inaccurate	1.3%
Not applicable	14.8%

## Appendix B – License by Examination, Endorsement, and Renewal by Occupation

The following table provide the number of new licenses by examination, endorsement, and renewal licenses, as well as the total number of active licenses by occupation type during fiscal years 17-18 through 21-22.

**Number of Licenses per Type and Occupation**

Fiscal Year	New/Exam	Endorsement	Renewal	Total
<b>Master Plumber</b>				
FY 17-18	168	3	0	4,136
FY 18-19	207	6	3,931	4,077
FY 19-20	174	10	0	4,312
FY 20-21	264	7	4,004	4,168
FY 21-22	289	5	0	4,527
<b>Residential Plumber</b>				
FY 17-18	47	0	0	226
FY 18-19	69	0	162	218
FY 19-20	66	0	0	282
FY 20-21	110	0	213	282
FY 21-22	96	1	0	362
<b>Plumbing Contractor</b>				
FY 17-18	145	0	0	2,234
FY 18-19	216	0	2,070	2,207
FY 19-20	160	0	0	2,400
FY 20-21	203	0	2,149	2,304
FY 21-22	234	0	0	2,589
<b>Plumbing Apprentice</b>				
FY 17-18	1,519	NA	NA	8,379
FY 18-19	1,490	NA	NA	8,679
FY 19-20	1,274	NA	NA	8,775
FY 20-21	1,386	NA	NA	8,539
FY 21-22	1,692	NA	NA	8,810

## Appendix C – Complaint Information by License Type

The following table list the number of alleged violation types received from complaints for fiscal years 17-18 through 21-22 for all license types.

**Number of Alleged Violations per Type and Occupation**

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Master Plumber					
Practicing w/o a License	24	4	3	3	11
Aiding and Abetting Unlicensed Practice	6	10	3	9	1
Standard of Practice	3	6	11	13	18
CE Violation	0	0	0	0	0
Failure to Report	13	3	10	2	0
False Advertising	1	1	0	0	1
Outside the Scope of Practice	0	0	0	1	0
Improper Supervision	6	1	3	1	2
Unprofessional Conduct	1	3	17	4	5
Violation of Board Order	0	0	0	0	0
Criminal Conviction	12	4	2	1	2
Education/Experience Review	7	11	1	2	1
<b>Total</b>	<b>73</b>	<b>43</b>	<b>50</b>	<b>36</b>	<b>41</b>

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Journeyman Plumber					
Practicing w/o a License	28	9	2	1	7
Aiding and Abetting Unlicensed Practice	0	0	1	0	0
Standard of Practice	2	0	2	2	5
CE Violation	0	0	0	0	0
Failure to Report	14	6	4	0	0
False Advertising	0	2	0	0	1
Outside the Scope of Practice	2	0	0	1	0
Improper Supervision	18	1	0	0	0
Unprofessional Conduct	1	3	13	1	0
Violation of Board Order	1	1	0	0	0
Criminal Conviction	23	14	8	3	3
Education/Experience Review	6	14	0	1	0
<b>Total</b>	<b>95</b>	<b>50</b>	<b>30</b>	<b>9</b>	<b>9</b>
Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Residential Plumber					
Practicing w/o a License	3	2	0	1	5
Aiding and Abetting Unlicensed Practice	0	0	0	0	0
Standard of Practice	0	0	0	0	1
Failure to Report	0	0	0	0	0
CE Violation	7	1	5	0	0
False Advertising	0	0	0	0	0
Outside the Scope of Practice	0	0	0	0	0
Improper Supervision	2	0	0	0	0
Unprofessional Conduct	0	0	3	0	0
Violation of Board Order	0	0	0	0	0
Criminal Conviction	3	1	1	0	2
Education/Experience Review	3	7	0	0	0
<b>Total</b>	<b>18</b>	<b>11</b>	<b>9</b>	<b>1</b>	<b>8</b>

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Apprentice Plumber					
Practicing w/o a License	4	18	28	16	21
Aiding and Abetting Unlicensed Practice	1	2	0	5	0
Standard of Practice	6	0	3	3	4
Failure to Report	0	0	0	0	0
False Advertising	0	0	0	0	0
Outside the Scope of Practice	0	0	1	1	0
Improper Supervision	1	0	1	4	0
Unprofessional Conduct	1	0	1	1	3
Violation of Board Order	0	0	0	0	1
Criminal Conviction	6	4	1	3	2
Education/Experience Review	0	2	0	0	0
<b>Total</b>	<b>19</b>	<b>26</b>	<b>35</b>	<b>33</b>	<b>31</b>
Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Plumbing Contractor					
Practicing w/o a License	30	9	7	2	5
Aiding and Abetting Unlicensed Practice	12	24	9	11	3
Standard of Practice	14	8	26	25	34
Failure to Report	103	63	41	3	5
False Advertising	1	0	1	0	2
Outside the Scope of Practice	2	0	0	0	0
Improper Supervision	2	0	10	6	1
Unprofessional Conduct	0	4	10	13	10
Violation of Board Order	0	0	0	1	0
Criminal Conviction	0	0	0	0	0
Education/Experience Review	0	6	0	0	0
<b>Total</b>	<b>164</b>	<b>114</b>	<b>104</b>	<b>61</b>	<b>60</b>

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Unlicensed					
Practicing w/o a License	28	26	34	21	20
Aiding and Abetting Unlicensed Practice	1	1	0	4	0
Standard of Practice	9	0	5	3	10
Failure to Report	0	0	3	0	0
False Advertising	0	0	0	0	0
Outside the Scope of Practice	0	0	0	0	0
Improper Supervision	0	0	0	0	0
Unprofessional Conduct	0	1	2	1	2
Violation of Board Order	0	0	0	0	1
Criminal Conviction	0	0	0	0	0
Education/Experience Review	0	0	0	0	0
<b>Total</b>	<b>38</b>	<b>28</b>	<b>44</b>	<b>29</b>	<b>33</b>

Unlicensed complaints refer to:

- Complaints against plumbers who are not licensed,
- Complaints against plumbers who are licensed but may be practicing a higher level of plumbing that is beyond the scope of their license, or
- Complaints against plumbers who are not properly registered as a plumbing contractor.

## Appendix D – Final Agency Actions by License Type

The following tables summarize disciplinary actions taken by the Board in fiscal years 17-18 through 21-22 for each license type.

### Disciplinary Actions per License Type

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Master Plumber</b>					
Revocation / Surrender / Voluntary Relinquishment	0	0	0	0	0
Suspension	0	0	0	0	0
Probation / Practice Limitation	4	6	2	4	4
Letter of Admonition	0	7	1	1	1
License Denied	0	4	0	1	0
Other	2	1	2	1	4
<b>Total Disciplinary Actions</b>	<b>6</b>	<b>18</b>	<b>5</b>	<b>7</b>	<b>9</b>
Dismiss	28	35	27	13	20
Dismissed Application	0	0	0	0	1
Letter of Concern	30	2	11	1	1
<b>Total Dismissals</b>	<b>58</b>	<b>37</b>	<b>38</b>	<b>14</b>	<b>22</b>
Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Journeyman Plumber</b>					
Revocation / Surrender / Voluntary Relinquishment	0	1	1	0	0
Suspension	0	0	0	0	1
Probation / Practice Limitation	7	11	1	1	1
Letter of Admonition	0	11	1	0	0
License Denied	0	4	1	0	0
Other	1	1	2	0	0
<b>Total Disciplinary Actions</b>	<b>8</b>	<b>28</b>	<b>6</b>	<b>1</b>	<b>2</b>
Dismiss	47	37	16	3	8
Dismissed Application	0	0	0	0	4
Letter of Concern	28	2	9	0	1
<b>Total Dismissals</b>	<b>75</b>	<b>39</b>	<b>25</b>	<b>3</b>	<b>13</b>

Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Residential Plumber</b>					
Revocation / Surrender / Voluntary Relinquishment	0	0	0	0	0
Suspension	0	0	0	0	0
Probation / Practice Limitation	1	0	0	0	2
Letter of Admonition	0	0	0	0	0
License Denied	0	1	1	0	0
Other	1	0	0	0	1
<b>Total Disciplinary Actions</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>
Dismiss	11	14	7	0	2
Dismissed Application	0	0	0	0	2
Letter of Concern	3	0	2	0	1
<b>Total Dismissals</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>0</b>	<b>5</b>
Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Apprentice Plumber</b>					
Revocation / Surrender / Voluntary Relinquishment	1	1	0	0	1
Suspension	0	0	0	0	0
Probation / Practice Limitation	2	0	0	0	1
Letter of Admonition	0	0	0	0	0
License Denied	0	0	0	0	0
Other	2	6	8	15	10
<b>Total Disciplinary Actions</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>15</b>	<b>12</b>
Dismiss	12	10	9	10	6
Letter of Concern	0	0	0	0	0
<b>Total Dismissals</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>10</b>	<b>6</b>



Complaint	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Plumbing Contractor					
Revocation / Surrender / Voluntary Relinquishment	1	0	1	0	1
Suspension	0	0	0	0	0
Probation / Practice Limitation	18	26	7	13	17
Letter of Admonition	2	10	4	3	3
License Denied	0	0	0	0	0
Other	1	3	2	4	9
<b>Total Disciplinary Actions</b>	<b>22</b>	<b>39</b>	<b>14</b>	<b>20</b>	<b>30</b>
Dismiss	40	50	45	39	29
Dismissed Application	0	0	0	0	1
Letter of Concern	85	48	30	4	6
<b>Total Dismissals</b>	<b>125</b>	<b>98</b>	<b>75</b>	<b>43</b>	<b>36</b>

## Appendix E – Fines Imposed by License Type

The following tables provide information regarding the number of fines imposed, the total value of fines imposed, and the total dollar amount of fines paid for fiscal years 17-18 through 21-22 for each category of licenses.

### Fines Imposed per License Type

Fines	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Master Plumber</b>					
Number of Fines Imposed	0	4	1	4	4
Total Value of Fines Imposed	0	\$3,050.00	\$300.00	\$3,452.00	\$2,956.25
Total Value of Fines Collected	\$750.00	\$3,050.00	\$1,250.00	\$1,800.00	\$3,027.00
Fines	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Journeyman Plumber</b>					
Number of Fines Imposed	NA	3	3	NA	NA
Total Value of Fines Imposed	NA	\$1,875.00	\$1,530.00	NA	NA
Total Value of Fines Collected	NA	\$2,100.00	\$1,530.00	NA	NA
Fines	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Residential Plumber</b>					
Number of Fines Imposed	1	NA	NA	NA	0
Total Value of Fines Imposed	\$1,000.00	NA	NA	NA	0
Total Value of Fines Collected	\$1,000.00	NA	NA	NA	\$900.00
Fines	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
<b>Plumbing Contractor</b>					
Number of Fines Imposed	7	19	8	13	20
Total Value of Fines Imposed	\$3,100.00	\$10,000.00	\$8,900.00	\$6,925.00	\$19,628.75
Total Value of Fines Collected	\$9,350.00	\$16,100.00	\$5,350.00	\$6,200.00	\$11,110.00

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## Appendix F – Case Processing Time by Occupation

The following tables provide information regarding the average number of days for case processing time during fiscal years 17-18 through 21-22 for each license type. Each case lifespan is tabulated from the filing of the initial complaint through the final agency action taken.

### Case Processing Time per License Type

Average Number of Days to Closure	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Master Plumber	161	191	190	220	196
Journeyman Plumber	92	122	143	108	89
Residential Plumber	76	132	84	NA	61
Apprentice Plumber	144	217	280	270	197