

**Annual Report of Activities Performed by  
the State Engineer's Office  
2025**

**To Satisfy Requirements  
of Senate Bill 89-181  
Regarding Water Quality**



**COLORADO**  
**Division of Water Resources**  
Department of Natural Resources

## Introduction

According to the provisions of Senate Bill 89-181 (SB-181), the Colorado Division of Water Resources/State Engineer's Office (DWR/SEO) is one of the agencies responsible for implementing the water quality standards and classifications adopted by the Colorado Water Quality Control Commission (WQCC). The SEO will implement water quality standards and classifications only where water quality statutes other than the Water Quality Act require the SEO's involvement. This report provides an update on the activities undertaken by the SEO and its Division offices to accomplish its responsibilities pursuant to the provisions of SB-181 in calendar year 2025.

The SEO takes a proactive stance in this matter by cooperating with other agencies and organizations in the development of comprehensive and practical solutions for managing the quantity and quality of the state's waters.

There are three major areas where the SEO exercises its authority in implementing water quality standards and classifications:

- Adoption of points of compliance for discharges to groundwater
- Approval of substitute water supply plans and non-decreed water exchanges
- Adjudication process of plans for augmentation including water exchanges

### **A. Points of Compliance for Discharges to Groundwater**

The SEO ensures that water well construction activities do not result in pollution discharge to state waters through well permitting activities. All wells must be constructed in accordance with the rules and regulations established by the State Board of Examiners of Water Well and Ground Heat Exchanger Contractors (BOE). Licensed well drillers construct domestic and commercial water wells. Monitoring and recovery wells can be constructed either by licensed drillers or under the supervision of a professional engineer or a professional geologist if the well does not penetrate a confining layer. The BOE takes corrective actions against licensed drillers or pump

installers who violate the rules for proper well construction, including penalties and suspension or revocation of their licenses. In the case of unlicensed contractors performing well construction activities that should only be conducted by licensed contractors, legal proceedings are initiated, which usually conclude in significant monetary judgments. Well owners have the ultimate responsibility to correct the deficiencies of improperly constructed wells. Otherwise, the BOE, State Engineer, or both may order the well plugged and abandoned to prevent contamination of groundwater.

The SEO annual well permitting summary is captured in Table 1. The number of well permits issued increased by 12% in 2025 from 2024; continuing an upward trend from a low in 2023. Monitoring hole notice-of-intent to drill (NOI) eForms received by the SEO saw an increase of 61% over 2024 and are similarly well above the previous 4 years average. These also include NOIs for temporary dewatering wells. Monitoring *holes* (in contrast to monitoring *wells*) are used for temporary monitoring (<18 months) of groundwater quality at environmental remediation sites. The SEO can request water quality data from applicants if necessary.

**Table 1 -SEO Annual Well Permitting Summary**

SEO Permitting Activity	2021	2022	2023	2024	2025
1. Permits Issued	7265	6414	4914	5639	6291
2. Monitoring Hole Notice-of-Intent	1019	1074	1171	1138	1839

Table 2 summarizes annual BOE activities (through the Well Inspection Program) for the last five years. In 2025, approved well construction variances (from the Construction Rules) were approximately 24% higher than 2024 and have increased each of the last 5 years. The majority of the variances were for casing & grout issues and for minimum offset from contaminant sources. A fast growing category of variances is for sumps and ratholes below the permitted production zone in the Denver Basin Aquifer wells. The BOE licensed 247 contractors in 2025, 1 more than in 2024. All licensed contractors are required to obtain at least eight hours of continuing education annually for license renewal and the BOE has returned to its normal practice of requiring at least four hours of in-person training.

**Table 2 -Board of Examiners Annual Activity Summary**

BOE Activity	2021	2022	2023	2024	2025
1. Complaints Investigated	14	30	33	38	31
2. Resolved Complaints	15	22	17	42	24
3. Stipulated Settlements (total dollars)	4 (\$1,500)	22 (\$15,400)	16 (\$13,300)	28 (\$31,550)	16 (\$12,650)
4. Licenses suspended or revoked	0	1	0	1	0
5. Letter of admonition/ reprimand	1	1	0	0	0
6. Inspections	1182	1467	997	936	826
7. Well Construction Variances	105	124	127	152	191
8. Licensed Contractors	248	237	244	246	247

The Well Inspection Program was authorized by the legislature in Senate Bill 2003-45 and is funded by \$40 from each well permit application fee, which has not changed since 2003. Presently, the program consists of a Chief Well Inspector headquartered in Denver and two additional well inspectors who perform inspections throughout the state. The Chief Well Inspector coordinates the activities of the program and supports the BOE. The primary objective of the program is to assist the BOE with the enforcement of its rules and regulations for well construction and pump installation. A key focus of the inspection program is to locate and initiate action against unlicensed contractors working illegally in the state; in 2025 ten (10) of the new complaints investigated involved unlicensed contractors and 5 cease and desist letters were issued. BOE staff resolved 24 complaints and investigated and settled 16 allegations of rules violations resulting in \$12,650 of fines and penalties collected.

[BOE Policy 2020-3](#) authorizes discharges of fluid to groundwater via land application that occur during water well construction, development, testing, disinfection, and rehabilitation.

In 2022, the BOE directed its Staff to initiate a stakeholding process to develop proposed changes to the 2016 version of the Well Construction Rules. Over a period of

approximately two and half years, the BOE and Staff held numerous stakeholder meetings with representatives from the groundwater industry including water well contractors, environmental & geotechnical professionals, and others. Collectively, the participants expended considerable time and effort to reach agreement on issues and concerns, and made many compromises and adjustments to reach a reasonable and acceptable level of resource protection and public safety consistent with industry practice. The BOE held a public hearing on the proposed rule changes on May 27-29, 2025 where they heard testimony from interested parties and on May 29, the BOE adopted amendments to the Water Well Construction Rules. Further information related to the rulemaking can be found [online](#). The revised Well Construction Rules are effective January 1, 2026 and are available on the [Division of Water Resources' Website](#).

## **B. Substitute Water Supply Plans and Non-Decreed Water Exchanges**

Substitute water supply plans (SWSPs) provide water users the flexibility of exchanging and replacing out-of-priority depletions on a temporary basis or, if the applicant was to continue such operation permanently, until a court-approved plan for augmentation is obtained. For the approval of SWSPs, the State Engineer requires that the quality of the substituted water meet the requirements of use to which the senior appropriation receiving the substitute supply has normally been put. The SEO reviewed and approved 172 SWSPs in 2025. Of these SWSPs, 69 were related to gravel pits. The 2025 SWSP total represents a 10% decrease from 2024. The majority of substitute water supply plans use river water as the source of substituted water.

Non-decreed water exchanges generally may or may not involve written approval. They are limited to daily or seasonal timeframes and require the local water commissioner's approval prior to the exchange occurring. The water commissioners keep records of these exchanges in the diversion records for the structures involved. The substitute supply water commonly comes from reservoirs or from bypassing stream diversions. The SEO's consideration of water quality in approving these operations is guided by Rule 6 of the State Engineer's Senate Bill 181 Rules. In 2025, the SEO did not find it necessary to

review water quality data or information to ensure the requirements of use of the senior appropriation were met.

### **C. Decreed Exchanges and Plans for Augmentation**

The SEO may oppose applications to Water Court for augmentation plans and exchanges in which the substituted water does not meet the use requirements to which the senior appropriators have normally put the water. The SEO's activities during active water court cases are guided by Rule 7 of the State Engineer's Senate Bill 181 Rules. In 2025 there were no cases where the SEO found it appropriate to opine on the water quality of substituted water. In administering water decrees, the SEO will become involved with issues of water quality where a term in a water court decree requires the State or Division Engineer to consider water quality information. The Water Judge has the ultimate responsibility to determine the adequacy of water quality when approving plans for augmentation or exchange plans.

### **D. Other Issues and Activities**

Every year, staff at the SEO and its Division offices cooperate with public and private agencies and participate in various forums where water quality and quantity issues are considered. Staff at the SEO play an important role by providing input and advice on the impacts of proposed water policies and regulations on the water-using community.

The SEO and WQCD staff have a scheduled quarterly meeting to discuss water quantity and water quality topics of common interest. In 2025, few topics of concern arose on which staff had the need to coordinate.

As required by the Colorado Water Quality Control Act (25-8-104 C.R.S.), SEO staff members respond to referrals from the Water Quality Control Commission (WQCC) to comment on the potential for injury to water rights from actions related to discharge permit applications. These referrals stem from the Act's declaration that no provision of Article 8 of Title 25 will injure rights to put water to beneficial use.

Effective August 6, 2025, House Bill 25-1165 provided updates to the Board of Examiners, Geothermal Notifications, and established a new Registration Process for Prior Geothermal Operations. Updates related to the legislation:

- A Tributary Geothermal Notification List has been created for each Water Division, and interested parties can sign up through the [Notification Lists](#) section of our website. The Tributary Geothermal Notification List will be used to provide notice of applications for geothermal well permits proposing to withdraw tributary groundwater at a rate greater than 50 gallons per minute.
- Owners/operators may [register a Prior Geothermal Operation](#) using the registration form available on the [eForms](#) page of our website. A “Prior Geothermal Operation” is a geothermal well, operation, district, or unit authorized by DWR or ECMC; a commercial geothermal hot spring with a vested water right; or a noncommercial geothermal hot spring that is accessible to and enjoyed by the public. Registration of a Prior Geothermal Operation is required in order to receive electronic notice of applications for proposed water wells or deep geothermal operations within 1/4 mile of the Prior Geothermal Operation.
- The “Board of Examiners of Water Well Construction and Pump Installation Contractors” has been renamed the “Board of Examiners of Water Well and Ground Heat Exchanger Contractors” and will need to conduct a series of rulemakings to implement the statutory requirements of HB25-1165. For more information and documents associated with these rulemakings, please visit our new [Geothermal Webpage](#).

In October 2025, the WQCC requested formal consultation on material injury to water rights, pursuant to section 25-8-104(2)(d), C.R.S. and the 2017 Memorandum of Understanding between the WQCC, the SEO, and the Colorado Water Conservation Board (CWCB) regarding the WQCC’s proposed Regulation #87: Dredge and Fill Control Regulation. DWR reviewed the consultation letter, proposed rules, and prehearing statements submitted by parties where parties suggested a rule could result in material injury to water rights. In a letter to the Water Quality Control Commission dated

November 13, 2025, the Directors of DWR and the CWCB concluded that the proposed rules will not cause or result in material injury to water rights.

**Specific DWR activities around the state involving water quality issues are described below:**

South Platte River Basin (Division 1)

- 10/9/2025: Notice was provided to CPW & CWQCD of potential irregular reservoir operations of Barker Reservoir due to a wildfire in the vicinity of the Town of Nederland adjacent to and upstream of Barker Reservoir - Division 1 understands that the City of Boulder is concerned about water quality impacts from the fire; both immediate and long term. They are anticipating stopping releases from Barker Reservoir in the immediate future to minimize immediate and short term downstream water quality concerns, including concerns at the City of Boulder's potable drinking water intake. Division 1 understands that the City of Boulder is currently performing water quality testing.
- 11/20/2025: Notice was provided to CPW & CWQCD of potential contamination within the Big Thompson River drainage. A concerned citizen, Mr. Jerry Dauth, visited the Division 1 office to report what appears to be a contamination spill that was transported within the Big Thompson River recently. Mr. Dauth indicated that where the water level in the Big Thompson River has dropped, all of the rocks above the high water level along the river banks have a white chalky material coating them on both sides of the river. He indicated that he noticed this on the rocks along the Big Thompson River from near his home located approximately 2 miles east of the Town of Drake, CO (below the Town of Estes Park) and is visually present downstream until at least the Dam Store (approximately 7 miles west of the City of Loveland, CO). Mr. Dauth indicated that he did not attempt to travel upstream of his location to identify the upper extent of the visual potential contaminant.

### Colorado River Basin (Division 5)

- In Water Year 2025 (November 1, 2024 - October 31, 2025) Division 5 experienced continued water quality impacts from the two major fires that occurred in 2020: Pine Gulch in western Garfield County and East Troublesome in Grand County. The USGS streamgage network includes turbidity measurements and indicates that the tributaries within the burn scars are impacted more severely than the Colorado River mainstem. Based on the turbidity data reviewed, it appears that the Pine Gulch burn scar is having the highest impact on water quality affecting Roan Creek and the Colorado River below Roan Creek.

The above information completes the Senate Bill 89-181 report from the SEO to the WQCC for the 2025 calendar year.