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QQ Quarterly Board Meeting

Friday, June 14, 2019

10 AM – 3 PM

[Third Street Center](#), Calaway Room
520 South Third Street, Carbondale, CO 81623

DRAFT AGENDA

- 10 AM Introductions
- 10:15 AM Instream Flows in the QQ Region
Linda Bassi, Colorado Water Conservation Board, Stream and Lake Protection Section Chief
April Long, Director, Ruedi Water and Power Authority
PLUS member discussion—please come ready to discuss any benefits observed or quantified from instream flows in your community or region!
- 11:30 AM SB 181 and upcoming rulemakings regarding local authority to regulate oil and gas
Julie Murphy, Assistant Director, Colo. Oil & Gas Conservation Commission (COGCC)
- 12:00 PM Lunch
- 12:30 PM Member updates. Focusing on climate and drought planning. 1-2 minutes only, please! (30 members at 2 minutes = an hour)
- 1 PM Water quality update. *Ashley Bembenek and Lane Wyatt*
- 1:30 PM Introduction to QQ's Water Savings Measures in the Headwaters, Policy Scans and Guidance Document
Gretel Follingstad, Terra Planning
- 2:30 PM Legislative and other updates. *Torie and others.*



MEMORANDUM

To: QQ Members
From: Barbara Green, SGS, LLC, and Torie Jarvis
Re: Summary of SB 181 provisions of interest to local governments.
Date: April 23, 2019

This memorandum summarizes the provisions of SB 19-181 that affect local governments' regulatory authority and increase the state's responsibility to protect the public from impacts of oil and gas operations. Because SB 19-181 clarifies local government and state regulatory roles, preemption challenges to local government regulatory authority are less likely to succeed than under existing law.

Governor Polis signed SB 19-181 on Tuesday, April 16, 2019. The bill goes into effect 30 days from this signing date. The Act is available at this link:
http://leg.colorado.gov/sites/default/files/2019a_181_signed.pdf.

1. Amends “1041” Areas and Activities of State Interest Act – **eliminates COGCC oversight of local government 1041 designation.**

Removes requirement that the COGCC must first identify an area of oil and gas development before a local government can designate an oil and gas development area as an area of state interest under 1041.

Sections 1 & 2, pp. 1-2, repeals C.R.S. §24-65.1-202(1)(d) and 302.

Comment

Municipalities and counties currently have the authority under “1041” to designate and regulate matters of state interest, including mineral resource areas. Under the existing law, local governments cannot regulate a mineral resource area containing oil and gas unless the COGCC identifies the oil and gas area to be designated. This has dissuaded local governments from attempting to use their 1041 authority over oil and gas. SB 181 eliminates this requirement.

2. Amends Local Government Land Use Control Enabling Act – **clarifies express local government authority over “surface impacts” of oil and gas operations.**

“(1) Each local government in its respective jurisdiction has the authority to plan for and regulate the use of land by:”

“(h) Regulating the surface impacts of oil and gas operations in a reasonable manner to address matters specified in this subsection 1(h) and to protect and minimize adverse impacts to public health, safety, welfare, and the environment.”

a. Regulating surface impacts of oil and gas in subsection 1(h) includes these matters:

- land use
- location and siting
- impacts to public facilities and services
- water quality and source
- noise
- vibration
- odor
- light
- dust
- air emissions and air quality
- land disturbance
- reclamation procedures
- cultural resources
- emergency preparedness and coordination with first responders
- security
- traffic and transportation impacts
- financial securities, indemnification, and insurance, and
- all other nuisance type effects of oil and gas development.

Section 4, pp. 3-4, amends C.R.S. § 29-20-104(1)(h).

“To implement the powers and authorities in 1(h), a local government within its respective jurisdiction has the authority to. . .”

- inspect facilities,
- impose fines for leaks, spills, and emissions, and
- impose fees to cover permitting, monitoring, and inspection costs.

Section 4, pp. 4-5, adds a new section C.R.S. § 29-20-104(2).

b. Under amended C.R.S. § 29-20-104(1)(h), local governments have authority to regulate for the use of land by: “Regulating the surface impacts of oil and gas operations in a reasonable manner. . .to protect and minimize adverse impacts to public health, safety, welfare, and the environment.” Emphasis added.

“Minimize adverse impacts” means “to the extent necessary and reasonable, to protect public health, safety, and welfare and the environment by avoiding adverse impacts from oil and gas

operations and minimizing and mitigating the extent and severity of those impacts that cannot be avoided.” Emphasis added.

Section 4, pp. 3-4, amends C.R.S. § 29-20-104(1)(h).

Comment

The term “reasonable manner” modifies the clause “regulating the surface impacts of oil and gas operations to address matters specified in subsection 1(h) and to protect and minimize adverse impacts to public health, safety, welfare, and the environment. . . .” Thus, local regulation of surface impacts must be done in a “reasonable manner.” The addition of the term “reasonable manner” does not change general legal principles that apply to local government regulatory authority; all local government regulation must be carried out in a reasonable manner to satisfy constitutional requirements.

The term “to the extent necessary and reasonable” modifies the clause “minimize adverse impacts.” Thus, local governments can regulate surface impacts of oil and gas to *minimize adverse impacts* (i.e. avoiding adverse impacts from oil and gas operations and minimizing and mitigating the extent and severity of those impacts that cannot be avoided) “to the extent necessary and reasonable.” This means that that local governments cannot impose mitigation requirements or permit conditions that go beyond those that are necessary to minimize adverse impacts. For example, a permit condition that required an operator to donate a library would go beyond what is necessary and reasonable to mitigate adverse impacts of oil and gas operations unless the demand for the new library was directly attributable to the oil and gas operation. This is similar to the “nexus text” that is currently used to determine whether a land use permit condition is valid.

The phrase “to the extent necessary and reasonable” does *not* modify the list of matters that local governments can regulate under 1(h), or the general power to protect public health, safety, welfare and the environment.

3. Amends Local Government Land Use Control Enabling Act – **technical review board.**

“(3)(a)(I) Once an operator . . . files an application for location and siting of an oil and gas facility or oil and gas location and the local government has made either a preliminary or final determination regarding the application, the local government having land use jurisdiction may ask the [COGCC] director . . . to appoint a technical review board to conduct a technical review of the preliminary or final determination and issue a report that contains the board’s conclusion.”

“(II) Once a local government determination has been made a final determination . . . or if the local government has not made a final determination . . . within two hundred ten days after filing by the operator, the operator may ask the director to appoint a technical review board to conduct a technical review of the final determination and issue a report that contains the board’s conclusion.”

“(b) A local government may finalize its preliminary determination without any changes based on the technical review report, finalize its preliminary determination with changes based on the report, or reconsider or do nothing with regard to its already finalized determination.”

“(c) If an applicant or a local government requests a technical review . . . the period to appeal a local government’s determination pursuant to Rule 106(a)(4). . . is tolled until the report. . . has been issued, and the applicant is afforded the full period to appeal thereafter.”

Section 4, pp. 5-6, adds new section C.R.S. § 29-20-104(3).

Technical review board is outlined in more detail in Section 10, pp. 13-14, amending at COGCA at C.R.S. § 34-60-104.5(3)(a).

Comment

The addition of a technical review board could provide an opportunity for an operator and a local government to avoid litigation by bringing a dispute to a technical review board. The efficacy of the technical review board will depend on the nature of the dispute and the composition of the review board. Importantly, the opinion or findings of the review board are non-binding on the local government.

4. Amends C.R.S. §30-15-401 – **restores County noise authority.**

Removes a prohibition on county authority to adopt noise ordinances for oil and gas development.

Section 5, p. 6.

6. Amends the Colorado Oil and Gas Conservation Act (COGCA) – **eliminates “foster” and requires protection of public health, safety and welfare, and environment.**

Changes the statutory charge of the Colorado Oil and Gas Conservation Commission (COGCC) to “regulate the development and production of the natural resources of oil and gas in the state of Colorado in a manner that protects public health, safety, and welfare, including protection of the environment and wildlife resources.”

Section 6, pp. 6-7, amends C.R.S. § 34-60-102.

Comment

In addition to requiring the COGCC to regulate instead of foster the oil and gas industry, eliminating the term "foster" removes the argument that local regulations to protect public health, safety, welfare and the environment are in "operational conflict" with the state's interest.

7. Amends the COGCA – **changes the make-up of the COGCC.**

Immediately upon the Governor’s signature, the COGCC make up will be 7 commission members:

- 1 with industry experience,

- 1 local government official,
- 1 with environmental protection experience,
- 1 with wildlife protection experience,
- 1 with “technical expertise relevant to the issues considered by the Commission” or training in soil conservation or reclamation,
- 1 actively engaged in agricultural production or a royalty owner,
- 1 with public health experience.
- Retains the COGCC and CDPHE Directors or designees as ex officio members.

By 2020, changes make-up of the COGCC to include 5 commission members:

- 1 with industry experience,
- 1 with land use/planning experiences,
- 1 with environmental, wildlife, or reclamation experience,
- 1 with public health expertise, and
- 1 whose experience “will aid the commission in making sound, balanced decisions.”
- Retains the COGCC and CDPHE Directors or designees as ex officio members.

Section 8, pp. 10-11, amends C.R.S. § 34-60-104.

Comment

The addition of commissioners with experience in land use and that will "aid the commission in making sound, balanced decisions" replaces two seats on the commission held by industry. This change plus the new conflict of interest provisions in this same section were designed to improve the public's confidence in the COGCC. Commission members will serve full time with pay by 2020; the implications of creating a body with full-time commissioners like the PUC are unknown.

8. Amends the COGCA – **savings provision for local regulations.**

Nothing in the COGCA “alters, impairs, or negates the authority of:

(V) A local government to regulate oil and gas operations pursuant to Section 29-20-104.”

Section 11, pp. 14-15, amends C.R.S. § 34-60-105(b).

Comment

This provision expresses legislative intent to preserve local regulatory authority over oil and gas as itemized under the Local Government Land Use Control Enabling Act. *See Part 2 of memo, above.*

9. Amends the COGCA – **COGCC permit application requires evidence of local permit application or that no local regulations require permit.**

Requires COGCC permit application to include evidence that a) the operator has filed a permit application with the local government with jurisdiction or b) there are no local government regulations requiring such a permit. Same evidence required when applying for drilling units for forced pooling.

Section 12, pp. 16-17, for permit applications, and Section 14, p. 23, for drilling unit applications, amend C.R.S. § 34-60-106(1)(f)(I)(A) and 34-60-116(b)(I) respectively.

Comment

These provisions place the burden on the operator to determine applicable local government requirements before submitting a permit or seeking a pooling order. The COGCC cannot act on an application that does not include this information.

10. Amends the COGCA – **Director may delay permit determination.**

“[U]ntil the Commission has promulgated any rules required to be adopted by subsections (2.5)(a), (11)(c), and (19) [see Section 3, pp. 2-3] . . . and each rule specified in this subsection (1)(f)(III)(A) has become effective, the director may delay the final determination regarding a permit application if the director determines, pursuant to objective criteria. . . and following a public comment period, that the permit requires additional analysis to ensure the protection of public health, safety, and welfare or the environment or requires additional local government or other state agency consultation.”

Section 12, p. 17, amends C.R.S. § 34-60-106(1)(f)(III)(A).

Comment

To avoid the demand to issue permits for pending applications before the new COGCC Rules can be adopted, the Director may delay a final determination on a permit that requires additional analysis to protect public health, safety, and welfare or the environment or additional consultation with a local government or state agency. The Director must develop objective criteria for such delays within 30 days of Governor’s signature (the effective date of the bill).

11. Amends the COGCA – **mandatory protection against adverse environmental impacts and conditions/denial not waste.**

“(a) [T]he commission shall regulate oil and gas operations in a reasonable manner to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources and shall protect against adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations.

(b) The nonproduction of oil and gas resulting from a conditional approval or denial. . . does not constitute waste.”

Section 12, p. 18, adds a new C.R.S. § 34-60-106(2.5)(a-b).

Comment

This new section replaces the current language that allows the COGCC to prevent "significant adverse impacts" and requires the COGCC to "take into consideration cost-effectiveness and technical feasibility." COGCC is now required to "protect against adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations." In addition,

loss of production that might occur because of COGCC regulation is not "waste." (Waste is prohibited under the COGCA.)

12. Amends the COGCA – limitations on "forced pooling."

“(6)(b)(I). In the absence of voluntary pooling, the commission, upon the application of a person who owns, or has secured the consent of the owners of, more than forty-five percent of the mineral interests to be pooled, may enter an order pooling all interests in the drilling unit . . .”

“(7)(a). Each pooling order must:

(IV) prohibit the operator from using the surface owned by a nonconsenting owner without permission from the nonconsenting owner.”

Section 14, pp. 23-24, amends C.R.S. § 34-60-116.

Comment

Under current law, any non-consenting owner can be "forced pooled." The amendments now require an operator to secure consent from the owners of more than forty-five percent of the mineral interests to be pooled. Local governments who own mineral rights will be able to coordinate with other mineral-rights owners. Also, under current law, the nonconsenting owner of the surface estate cannot prevent an operator from using the surface estate to access minerals in the pool, subject to the "reasonable accommodation" doctrine. The amendments now prohibit surface use of surface owned by a nonconsenting owner, including a local government, without permission.

13. Adds a new section to COGCA titled “No land use preemption” – local regulations may be more protective.

Local governments and state agencies all have regulatory authority over oil and gas development, and a local government’s regulations “may be more protective or stricter than state requirements.”

Section 17, p. 27, adds C.R.S. § 34-60-131.

Comment

Many challenges to local regulations by the oil and gas industry were based on the theory that local regulations that were in addition to or more stringent than state regulations caused an operational conflict with the state interest and were therefore, preempted. This provision eliminates that challenge. Note, however, that local government regulations, and the implementation of those regulations, must still be "reasonable," and regulatory requirements or conditions must be "necessary and reasonable."

14. Amends the COGCA – requires multiple rulemakings to address public health and safety. Selected rulemakings described below.

a. Air quality and emissions control.

“The commission shall adopt rules to minimize emissions of methane and other hydrocarbons, volatile organic compounds, and oxides of nitrogen... in the processing, gathering and boosting, storage, and transmission segments of the natural gas supply chain.”

“The commission shall review its rules for oil and natural gas production facilities and compressor stations and specifically consider adopting more stringent provisions, including:”

- Requirement for semiannual leak detection,
- Additional inspection requirement for transmission pipelines and compressor stations,
- Requirement of continuous methane emissions monitoring at larger facilities or those in close proximity to occupied dwellings, and
- Requirement to reduce emissions from pneumatic devices.

Section 3, p. 2, adding new C.R.S. § 25-7-109(10).

b. Alternative location analysis.

“(11)(c). The Commission shall adopt rules that:

(I) Adopt an alternative location analysis process and specify criteria used to identify oil and gas locations and facilities proposed to be located near populated areas that will be subject to the alternative location analysis process.”

Section 12, p. 19, amending C.R.S. § 34-60-106 (11)(c).

c. Cumulative health impacts.

“(11)(c). The Commission shall adopt rules that:

(II) In consultation with the department of public health and the environment, evaluate and address the potential cumulative impacts of oil and gas development.

Section 12, p. 19, amending C.R.S. § 34-60-106 (11)(c).



**NWCCOG SUMMARY OF RECOMMENDATIONS
RE: Blue River Segment 11 (“lower French Gulch”)**

- 1. NWCCOG remains opposed to the Division’s proposed option to temporarily adopt Table Value Standards (TVS) for cadmium and zinc on French Gulch.**
- 2. NWCCOG offers three alternative recommendations for cadmium and zinc in lower French Gulch which pose less potential harm to Summit County and Breckenridge:**
 - A. (*Preferred*): Maintain the narrative “existing quality” standard for French Gulch while parties work towards site-specific standards or;
 - B. Adopt the numeric “existing quality” standards developed in the NWCCOG UAA that reflect shared understanding of water quality when the WQCC adopted the “existing quality” narrative standard (see Figure 2 in NWCCOG Responsive Prehearing Statement); or
 - C. Relying on USGS data analysis, adopt the 85th percentile values derived from samples collected from 2012-2016 (8.7 ug/L for cadmium and 2,288 ug/L for zinc).
- 3. Regardless of the outcome today, NWCCOG and its member local governments are committed to working with the WQCC, Division, EPA, CPW, and others to develop appropriate numeric site-specific standards before the next Regulation 33 Rulemaking.**

**BEFORE THE WATER QUALITY CONTROL COMMISSION
STATE OF COLORADO**

**IN THE MATTER OF REVISIONS TO THE WATER QUALITY CLASSIFICATIONS,
STANDARDS AND DESIGNATIONS FOR MULTIPLE SEGMENTS IN THE UPPER
COLORADO RIVER BASIN AND NORTH PLATTE RIVER, REGULATION NUMBER
33 (5 CCR 1002-33)**

**RESPONSIVE PREHEARING STATEMENT FOR THE NORTHWEST COLORADO
COUNCIL OF GOVERNMENTS WATER QUALITY/QUANTITY COMMITTEE**

The Northwest Colorado Council of Governments Water Quality/ Quantity Committee (NWCCOG) submits this responsive prehearing statement to the proponent’s prehearing statements regarding proposed revisions to the water quality classifications, standards and designations for multiple segments in the Upper Colorado River Basin and North Platte River, Regulation Number 33 (5 CCR 1002-33).

I. INTRODUCTION

NWCCOG is the designated water quality planning agency for Region 12, which encompasses the Upper Colorado and North Platte River Basins.

NWCCOG derives guidance for evaluation of the proposed changes to Regulation 33 based on the policy statements of its 208 Regional Water Quality Management Plan, the policy positions of the Water Quality/ Quantity Committee (QQ), and the impact of proposed Reg. 33 changes to NWCCOG members. NWCCOG includes county and municipal governments and water and sanitation districts that this rulemaking is likely to affect. Relevant to this rulemaking, the City of Steamboat Springs, the Town of Breckenridge, and Summit County are all members of NWCCOG and NWCCOG.

**II. SEASONAL TEMPORARY MODIFICATIONS TO TEMPERATURE
STANDARDS FOR YAMPA RIVER SEGMENT COUCYA02B (SEGMENT 2B)**

Recommendation:

NWCCOG supports the City of Steamboat Springs’ proposed temporary modifications for acute and chronic temperature standards for Yampa River segment COUCYA02B, and supports continued discussions to define the operative value of the proposed temporary modifications.

Rationale:

The City of Steamboat Springs (Steamboat) has proposed seasonal temporary modifications to the chronic and acute temperature standards for Yampa River segment COUCYA02B¹ with an expiration date of December 31, 2024.

NWCCOG recognizes the difficult issues surrounding temperature standards, especially for permitted dischargers like Steamboat who face compliance problems. This concern must be balanced with ensuring water quality standards are protective of designated uses. In the June 2016 Regulation 31 hearing and subsequent hearings,² NWCCOG supported site-specific revisions to temperature standards, rather than the statewide elevation-based approach proposed by the Division. The Commission agreed with NWCCOG and other parties that a basin-level, site-specific approach is best to implement temperature standards. NWCCOG continues to agree with this approach.

Because of the data collection and analysis necessary to support site-specific temperature standards, temporary modifications may be necessary until this work is completed. While NWCCOG does not often support temporary modification proposals, Steamboat's proposal for seasonal temporary modifications and its plan to reduce uncertainty will result in a protective, site-specific solution and is an example of the site-specific approach NWCCOG supports.

Steamboat has documented that additional time is needed to develop a more permanent solution. Just three months after the Regulation 31 hearing, Steamboat began an extensive data collection effort, the data Steamboat collected was used to justify a temporary modification but currently lack some of the elements necessary to develop a site-specific standard, an ambient-based standard, a discharger-specific variance (DSV), or resegmentation. Thus, additional time is needed to collect and analyze data to develop a proposal to protect the highest attainable use in the Yampa River. NWCCOG supports Steamboat's proposed five-year duration for developing a more permanent, science-based temperature standard.

In its prehearing statement, Steamboat also demonstrated eligibility for a temporary modification under Regulation 31.7(3). First, consistent with the requirement to demonstrate "non-attainment of the underlying standards," Steamboat demonstrates Yampa River is impaired for temperature. 5 CCR 1002-31.7(3). Second, its wastewater treatment facility has "demonstrated or predicted water quality-based effluent limit compliance problem[s]" from May to November. 5 CCR 1002-31.7(3)(a). Third, significant uncertainty is present in both the "water quality standard necessary to protect current and/or future uses" and "the extent to which existing quality is the result of natural or irreversible human-induced conditions." 5 CCR 1002-31.7(3)(a)(i-ii).

Steamboat has also gone beyond what Regulation 31.7 requires in the work already done to begin addressing temperature. Steamboat used the existing stream temperature data to limit the duration of temporary modifications, from May to November, to best correspond with the time of the year when temporary modifications are needed. Steamboat has a detailed plan to collect additional data to resolve uncertainty (See Steamboat Prehearing Statement, Exhibit 1, Plan to

¹ COUCYA02B is "the mainstem of the Yampa River from a point immediately above the confluence with Oak Creek to a point immediately below the confluence with Elkhead Creek."

² During the Regulation 35 hearing in June 2017, NWCCOG provided extensive comments on the site-specific revisions to the temperature standards for segments COGUUG08 and COUGUG18B.

Resolve Uncertainty Regarding Temperatures) and is willing to adapt its temporary modifications should temperature standards be revised during the next Regulation 31 (basic standards) hearing in 2021.

Although NWCCOG does not favor temporary modifications in many cases, Steamboat's proactive data collection and analysis following changes to the temperature standards in 2016 and on-going support of watershed health initiatives (including comprehensive watershed-based scientific investigations, riparian reforestation, and reservoir releases) should continue to assure the highest attainable use is supported in the Yampa River segment 2b. Therefore, NWCCOG supports the temporary modifications to the chronic and acute temperature standards for the Yampa River segment 2b as proposed by Steamboat. NWCCOG supports continued discussion between Steamboat, the Division, and other interested parties to determine the operative value of the temporary modifications (e.g. current conditions or specified assessment locations).

III. SITE-SPECIFIC TEMPERATURE STANDARDS FOR A PORTION OF THE YAMPA RIVER SEGMENT COUCYA02B (SEGMENT 2B)

Recommendation:

NWCCOG supports the Division's proposal for seasonal standards to protect mountain whitefish in Segment 2b of the Yampa river.

Rationale:

NWCCOG has advocated for the refinement of temperature standards using a site-specific approach, consistent with this proposal. Additionally, the seasonal nature and geographic specificity of this proposal lends credibility to the Steamboat's argument that there is significant uncertainty regarding the appropriateness of the underlying standard on this 57 mile-long reach that spans approximately 550 feet in elevation. The length, elevation, and varied habitat types on Segment 2b requires additional evaluation to assure the highest attainable use is supported.

IV. BLUE RIVER SEGMENT 11 ("FRENCH GULCH")

Background:

A timeline of activities surrounding French Gulch is provided in the Statement of Facts found in the Consent Decree (pages 8-17) which is submitted as part of the RPHS, Exhibit F.

Recommendation:

NWCCOG does not support the Division's proposal to replace the "existing conditions" narrative standards for cadmium, lead and zinc with Table Value Standards for Blue River segment 11, lower French Gulch.

NWCCOG does not object to removal of the existing conditions narrative standard, but seeks a numeric standard more appropriate to the situation while the Division determines the site-specific standards necessary to protect the present or attainable aquatic life.

Summary of Rationale:

1. TVS are not appropriate for French Gulch because Segment 11 does not meet the criteria for a cold water aquatic life use classification.
2. Site-specific standards reflecting existing conditions are the appropriate placeholder for protecting existing uses, which in Segment 11 is existing metals-tolerant macroinvertebrates.
3. Instituting TVS for segment 11 would lead to 303(d) listing and a potential TMDL unnecessarily, producing little to no water quality benefits beyond those already realized through remediation efforts.
4. Summit County and the Town of Breckenridge face significant negative impacts to ongoing remediation efforts upon 303(d) listing.
5. Given the large body of existing water quality information, the Division should assign an interim value, based on existing and attainable uses, rather than adopting an unattainable TVS.

Detailed Rationale:

NWCCOG, Summit County, and the Town of Breckenridge do not support the Division's approach to segment 11 for reasons outlined below.

1. TVS is not appropriate for French Gulch because Segment 11 does not meet the criteria for a cold water aquatic life use classification.

TVS for cold water aquatic life are intended for "waters that (1) currently are capable of sustaining a wide variety of cold water biota, including sensitive species, or (2) could sustain such biota but for correctable water quality conditions. Waters shall be considered capable of sustaining such biota where physical habitat, water flows or levels, and water quality conditions result in no substantial impairment of the abundance and diversity of species." 5 CCR 1002-31.13 (1)(c)(i).

A wide variety of cold water biota and sensitive species cannot be sustained in lower French Gulch. Physical habitat is severely impaired by historic dredge mining operations. The 2003 *Use-Attainability Analysis, Lower French Gulch and the Blue River Downstream from French Gulch* (UAA) and data provided by the Division show that macroinvertebrates are the only species of aquatic life in lower French Gulch. See Exhibit A. There are no fish present in French Gulch downstream of Wellington-Oro ("W-O") mine. It is extremely unlikely that fish or sensitive species will ever be present, even with the water quality and habitat improvements to address water quality conditions (see discussion below). Further, aquatic macroinvertebrates will always be limited due to both degraded habitat and impaired water quality. Therefore, TVS are not appropriate because French Gulch does not support the aquatic life use conditions.

2. Site-specific standards are the appropriate placeholder for existing aquatic life uses, which in Segment 11 is existing metals-tolerant macroinvertebrates.

A numeric standard will be assigned by the Commission when it is presented with evidence that a particular numeric level for a parameter is the suitable limit for protecting the classified use. . . 5 CCR 1002-31.7(1)(b)

Where ambient water quality levels are worse than specific [TVS

. . .] the Commission may adopt. . . site-specific ambient quality-based standards.” 5 CCR 1002-31.7(1)(b)(ii)(B).

The only species of aquatic life present or that can reasonably be expected in segment 11 are metal-tolerant macroinvertebrates. The UAA points out that the presence of *Rhithrogena hageni*, *Epeorus longimanus*, *E. deceptivus*, *Cinymula sp.* (“Indicator mayflies”), and *Baetis tricaudatus* is the most reliable indicator for potential recovery at metal contaminated sites; none of these species are present in segment 11. Nor are these species ever be expected to be present, because the 85th percentile of zinc in French Gulch is over 10 times the tolerable level for these mayflies. See Exhibit A, Fig. 3.2-2. More recent research indicates that despite reductions in dissolved metals concentrations and improvements in habitat quality, benthic macroinvertebrate communities downstream of heavily- impacted mining sites may remain impaired and dominated by metal-tolerant species. Exhibit B, Clements et al.

The current concentrations of cadmium and zinc are adequate to support those macroinvertebrate species currently present, so a placeholder site-specific standard reflecting current water quality is most appropriate at this time.

3. Instituting TVS for segment 11 would lead to 303(d) listing and a potential TMDL unnecessarily, producing little to no water quality benefits beyond those already realized through remediation efforts.

Few mine-contaminated segments in Colorado have been the focus of as much remedial and data-gathering efforts as segment 11. The current concentrations of cadmium and zinc in segment 11 are well in excess of TVS. Listing French Gulch as impaired is unnecessary and counter-productive because the Division recognizes segment 11 will require site-specific standards in the future. The local parties, the Division, and EPA all agree that the data demonstrate that a site-specific standard should be developed; this proposed change to TVS and resultant 303(d) listing ignores existing agreements and the significant work-to-date to improve water quality.

Significant remedial actions have been undertaken in French Gulch to improve water quality in Blue River segments 11 and 2. This includes surface treatment and completion of a repository for roaster fines and other hot metals sources at the Wellington-Oro Mine, cleanup of the Jessie and IXL/Royal Tiger Mines that are tributary to segment 2, and the design, construction and ongoing operation of a \$5M Water Treatment Plant (WTP) to treat water seeping from the mine pool into French Gulch from the W-O Mine. It is inconceivable that a TMDL process could identify additional projects that are as effective at metal loading reduction than those that have been undertaken by Summit County and the Town of Breckenridge.

The existing WTP was EPA’s chosen remedial alternative for water quality improvements in French Gulch and the Blue River downstream of the confluence. The WTP is very effective, removing from 5-10 tons of zinc per year, based on assay of recovered waste from the WTP (Laura Lynch, Town of Breckenridge Water Division Manager, personal communication). The WTP boasts an impressive metals removal efficiency, with an annual average between 88-98 percent. See Figure 1.

WEO Zinc Removal Percentages													
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Annual
2015		99	99	99			99	99	94	99	99	99	98
2016	99	99	99	99	99		98	97	82	81	98	98	95
2017	84	80	100	100	89	94	92	96	97	90	100	89	93
2018	87	96	100	82	96	56	93	93	96	100	87	73	88

Figure 1. From Town of Breckenridge Water Department, via Laura Lynch

Even with this tremendous amount of metals removal, French Gulch has not seen significant water quality improvements downstream. EPA, Summit County, and the Town of Breckenridge are implementing 3-D modeling as part of ongoing evaluations of improvements to the remedial action under the terms of their Consent Decree, and this activity does not involve the Division. It is extremely unlikely that a TMDL would produce any better results.

The Division contends “that a better condition is attainable in French Gulch, and that the standards must eventually reflect the improved condition.” Division PHS at 14. This conclusion appears to be based on a 2018 technical memorandum by the US Geological Society. Division PHS, Appendix A. The Division’s summary indicates that, in 2017 when the WTP was operating more continuously, the 85th percentile metals concentrations were less than in previous five years. See Division PHS, Table 2 at 10.

We question this conclusion. The 85th percentile of existing water quality condition for 2017 in the Division’s PHS at Table 2 is based on only three samples taken during high flow period of an unusually dry year. As pointed out in the UAA, significant seasonal and annual hydrologic variations and resultant variations in water quality conditions exist for French Gulch. Exhibit B at Sections 3.3 and 4.1.1. In fact, the UAA water quality analysis was specifically broken up into high flow and low flow conditions because water quality conditions in French Gulch are so driven by hydrology, with lower metals concentrations and 85th percentile values during high flow conditions, and higher metals concentrations and 85th percentile values during low flow. See Figure 2. High flows conditions were defined as May through October. All the 2017 USGS samples were taken during the high flow season.

Figure 2. French Gulch [Site FG-9] Statistical Indicator-Value Comparison from UAA, Table 3.3-6.

<u>Statistic</u>	<u>HRD (mg/L)</u>	<u>D-Cd</u>	<u>T-Cd</u>	<u>D-Zn</u>	<u>T-Zn</u>	<u>SC (umhos/cm)</u>	<u>Q(cfs)</u>
POR Avg.	114	6.4	5.8	2686	2072	251	15.3
POR 85 th	158	8.1	8.1	3636	2712	347	30.7
Hi-Q Avg.	95.1	5.6	5.4	2144	1823	208	22.7
Hi-Q 85 th	120	7.8	7.6	2709	2281	264	53.9
Lo-Q Avg.	145	7.7	7.0	3460	2822	330	2.7
Lo-Q 85 th	160	8.9	9.3	4218	3416	370	3.6

Moreover, decreasing metals concentrations have been seen for decades, including before the WTP was in place. Compare Figure 3 and Figure 4, following page. Concluding that water quality improvements are based on better operation of the WTP is a leap of faith. The Commission should not initiate a change in standards based only on three 2017 USGS samples taken during the high flow season. Robust data sets have shown periodic declines and a high degree of variability in French Gulch both before and after the water treatment operations began. Decisions should not be based upon such a severely redacted data set.

Finally, the Division has indicated that listing segment 11 as impaired may make 319 and other funds more attainable. However, the EPA indicated that the scope and complexity of this remediation go beyond the capacity and resources of the nonpoint source program. *See* Exhibit C, EPA's Action Memorandum, at CD Appendix 3A. EPA's conclusion is based on significant site investigation by the Colorado Division of Reclamation Mining and Safety - 319 funding will not help address water quality improvements beyond those already in place.

4. Summit County and the Town of Breckenridge face significant impacts to ongoing remediation efforts upon 303(d) listing.

The Division acknowledges they do not know how the application of TVS and subsequent 303(d) listing may interfere with extensive and ongoing remedial efforts in the watershed and is not concerned about potential harm to local governments from adoption of TVS.³ Summit County and Breckenridge do not share that perspective.

The local government concern is based on the *Applicable or Relevant and Appropriate Requirements (ARAR) Compliance Document* (Exhibit G) which outlines the discharge limits that will need to be met by the new Wellington Oro Mine Water Treatment System. That document states: "The State of Colorado's Basic Standards and site-specific water quality standards adopted by the State for French Creek and the Blue River are the predominant ARARs for the Wellington Oro Mine Water Treatment System discharge" page 13-14.

EPA's 2015 first Five Year Report (FYR) for French Gulch establishes numeric water quality standards for cadmium and zinc as ARARs. Exhibit D at vi. Page 18 of the same states, "Response actions are required to comply with the ARARs identified in the action memorandum addendum #1, which the EPA signed on November 30, 2004. In performing the FYR, any newly promulgated standards including revised chemical specific requirements [such as maximum contaminant levels (MCLs), ambient water quality criteria], revised action and location-specific requirements, and state standards, if they were considered ARARs in the decision documents, are reviewed to establish whether the new requirement indicates that the response action is no longer protective", thus opening the door for additional requirements for the local governments without attendant benefits to water quality.

³ "The division's proposal to revert lead, cadmium and zinc standards to TVS would not impact any treatment plant or permit limits. Targets for the W-O treatment facility are not based on water quality standards in French Gulch, but rather standards applied in downstream segments of the Blue River." Division PHS at 13.

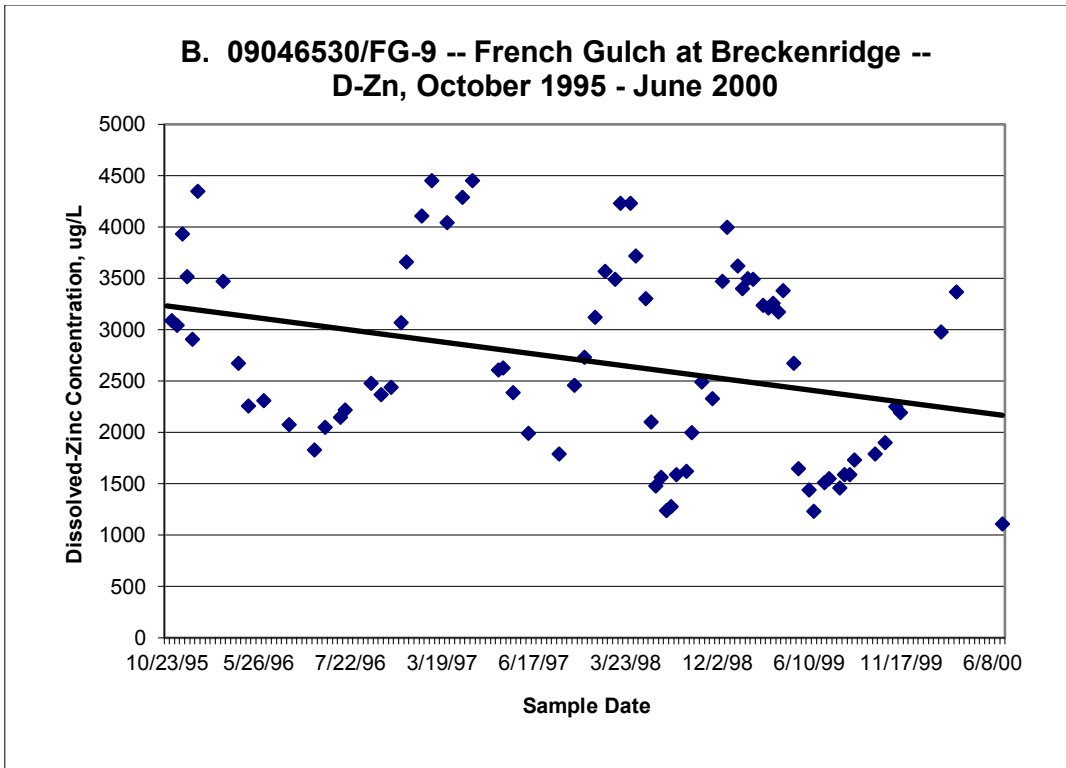


Figure 3. Data prior to WTP from FG9 (French Gulch confluence with the Blue River) from UAA.

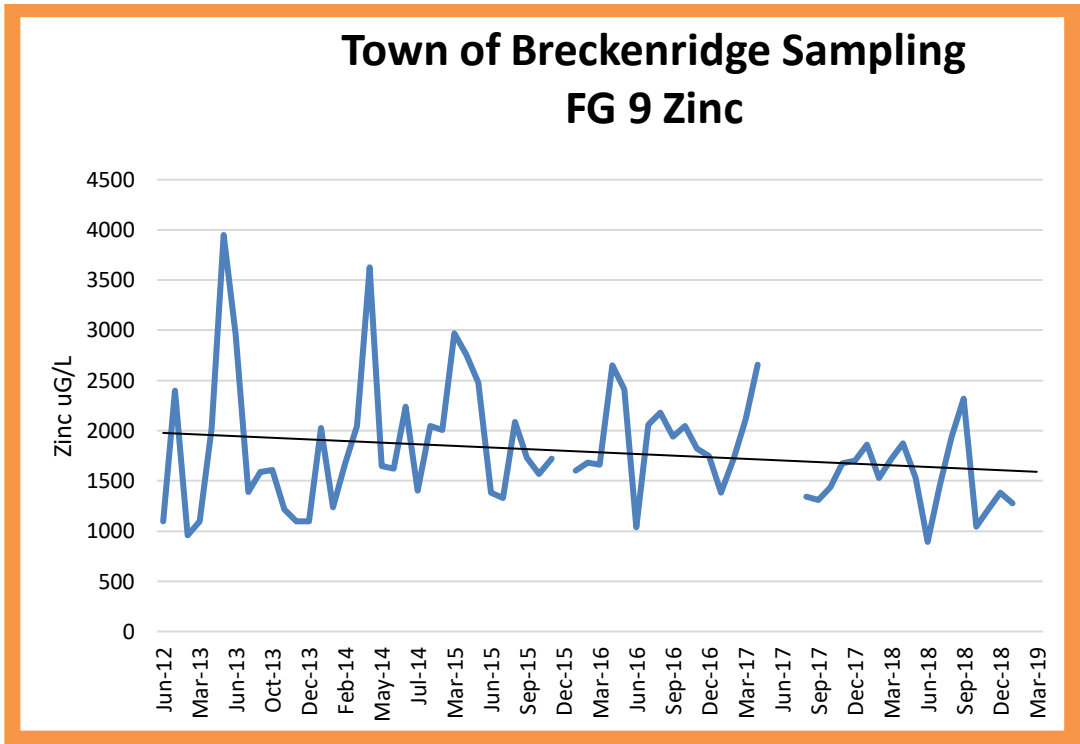


Figure 4. More recent data for FG9 (French Gulch confluence with the Blue River)

As an example of this concern, actions taken by the WQCC to list manganese under 303(d) resulted in EPA implementing new monitoring requirements for Summit County and the Town of Breckenridge. “Although cadmium and zinc were the specified [contaminants of concern] in the 2005 Consent Decree, in 2012 manganese was added to the state of Colorado's Clean Water Act water body list [the 2012 Clean Water Act section 303(d) list], which the EPA approved on March 20, 2013, as meeting the requirements of section 303(d) of the Clean Water Act and the EPA's implementation regulations. *Although the 303(d) list priority for manganese in Blue River Segment 2a is low, manganese has been included in the water quality analysis for both the Blue River and French Creek sampling locations.*” Exhibit D at page 18, emphasis added. It is not unreasonable to assume that listing French Gulch on the 303(d) list could have other, more costly implications for these local governments.

For these reasons, NWCCOG, Summit County, and Breckenridge continue to be concerned that failure to meet TVS standards and subsequent 303(d) listing could significantly and negatively impact the ongoing remedial work.

5. Given the large body of existing water quality information, the Division should assign an interim value, based on existing and expected uses, rather than adopting an unattainable TVS.

The Division seeks to apply Regulation 31 in a fashion that ignores years of precedent documented in Regulation 33 (UAA and past Statements of Basis and Purpose) and the multitude of studies completed by local parties and EPA superfund program. And this proposal threatens to negatively impact existing agreements and local remedial work. An alternative is needed.

The Division indicates that site specific standards require comprehensive analyses to “identify the sources and causes of the elevated levels and characterizes existing conditions,” examine those “improved water quality conditions” that have occurred and may be expected to occur (or not), consistent with Regulation 31.7. 5 CCR 1002-31.7(1)(b)(2)(B). The Division concludes that this comprehensive analysis of sources of contamination and to what extent of remediation can correct that contamination has not been completed. The Division’s conclusion is incorrect.

First, the EPA has completed an Ecological Risk Assessment for French Gulch (Exhibit E) and conducted two Engineering Evaluation and Cost Analyses (EECAs) for French Gulch:

- Unilateral Administrative Order issued to B&B Mines for Surface Waste Engineering Evaluation and Cost Analysis (EECA), completed April 27, 1998.
- EECA for Mine Pool, completed May 29, 2002. Exhibit F.

An EECA includes a site characterization, including source, nature and extent of contamination; identification of removal action objectives including scope of removal actions; identification and analysis of removal action alternatives, including cost and effectiveness; comparative analysis of removal action alternatives; and recommended removal action alternative. See EPA Publication: 9360.0-32FS EPA/540/F-94/009 PB93-963422, December 1993.

In addition, a UAA was completed May 5, 2003. Exhibit A. The UAA was approved by the WQCC as justification for the current ambient based standards in French Gulch and segment 2 of the Blue River.

These EECAs and the UAA are important as they were used to assess the contamination of French Gulch and the Blue River and formed the justification for the expenditure of millions of dollars in remedial activities and the current status of water quality.

We hope to work with the Division and other interested parties before the Commission's hearing to identify an appropriate value for proposed placeholder standards.

6. The Division's suggestion to institute a comprehensive, 20-year analysis of contamination ignores decades of work to improve water quality.

The Division contends that "a comprehensive analysis of all sources of contamination in the watershed and what extent remediation of those sources is feasible (**within 20 years**) has not been completed." Division PHS at 13 (emphasis added). While NWCCOG, Summit County and Breckenridge welcome further study of French Gulch and the Blue River to estimate water quality potential, we are adamantly opposed to the notion that feasibility should be evaluated based on what is possible in the next 20 years. That 20-year clock has been running for quite some time now, and millions of dollars have been spent on monitoring, data assessment, and remedial actions. It is not clear what action should start the 20-year clock (EECA in 1998, UAA and current standards adopted in 2003, CDPHE's signature of the Consent Decree in 2005, completion of WTP in 2008), but it is unacceptable for the Division to suggest that because they have not done their analysis yet, the ongoing work of the local governments in the watershed should become part of the baseline and feasibility should be measured as what is attainable in 20 years from this point forward.

7. Conclusion

All parties agree that water quality has improved to some extent since the UAA was completed in 2003. The aquatic life use for the TVS is not fully attained in French Gulch. To align with current and expected aquatic life, and to avoid significant adverse impacts to the local governments working to remediate the segment, site-specific standards are required. An interim site-specific value derived from the existing data set is the best tool use prior to the development of a revised site-specific standard.

V. BLUE RIVER SEGMENTS 2A, 2B, 2C

Recommendation:

NWCCOG supports the Division's proposal to leave site specific water quality standards for cadmium, lead and zinc Blue River for Blue River segments 2a, 2b and 2c in order to provide time to evaluate the status of and potential for aquatic life use in these segments and the appropriate site specific standards for protection of this use.

Rationale:

NWCCOG supports the Division's approach on these Blue River segments and hope to apply the logic in retaining existing standards to French Gulch as well. Since water quality in lower French Gulch is the single most important factor for water quality in both segment 11 and Blue River segments 2a, 2b and 2c, it makes sense to coordinate any future additional analysis of water quality for all segments. Why would the placeholder for the more impacted portion of these segments be TVS, while the downstream portion is based on the UAA that developed site-specific standards for cadmium and zinc? Summit County and the Town of Breckenridge have

implemented improvements in habitat and provided for flow connectivity in Blue River segment 2 since the UAA. It makes sense to coordinate actions on these segments rather than applying unattainable standards for French Gulch while working to establish water quality standards for all reaches.

VI. EXHIBITS

NWCCOG presents the following exhibit and reserves the right to introduce exhibits necessary for rebuttal:

Exhibit A, Use Attainability Analysis, Lower French Gulch and the Blue River Downstream of French Gulch (May 5, 2003), available at <http://nwccog.org/programs/watershed-services/> (at bottom of page).

Exhibit B, Clements, et al, *Does Long Term Exposure to Metals Permanently Alter the Structure of Benthic Food Webs in Stream Ecosystems?* Colorado Water, Sept.-Oct. 2018, at 14-17.

Exhibit C, U.S. EPA Action Memorandum re: Request for Removal Action for the French Gulch/ Wellington Oro Site (Nov. 24, 2002).

Exhibit D, U.S. EPA, Five Year Review Report for French Gulch (2015), <http://nwccog.org/wp-content/uploads/2019/04/EPA-5-year-Review-Report-for-French-Gulch-2015.pdf>.

Exhibit E, Ecological Risk Assessment for French Gulch.

Exhibit F, EECA for Mine Pool, completed May 29, 2002.

Exhibit F, Settlement Agreement, Covenants Not to Sue, and Consent Decree, *United States vs. B&B Mines, et al* (2005).

Exhibit G, Applicable or Relevant and Appropriate Requirements (ARARs) Compliance Document for Wellington-Oro Mine, Summit County, Colorado (July 13, 2005).

VII. WITNESSES

The following people may provide testimony on behalf of NWCCOG

Torie Jarvis, NWCCOG Director and Staff Attorney
Barbara Green, NWCCOG and NWCCOG General Counsel
Lane Wyatt, NWCCOG 208 Administrator
Ashley Bembenek, Soil and Water Scientist
Brian Lorch, Director, Summit County Open Space and Trails
Laura Lynch, Water Division Manager, Town of Breckenridge

Respectfully submitted this 17th day of April, 2019.

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**BEFORE THE WATER QUALITY CONTROL COMMISSION
STATE OF COLORADO**

**IN THE MATTER OF REVISIONS TO THE WATER QUALITY CLASSIFICATIONS,
STANDARDS AND DESIGNATIONS FOR MULTIPLE SEGMENTS IN THE UPPER
COLORADO RIVER BASIN AND NORTH PLATTE RIVER, REGULATION NUMBER 33
AND 37 (5 CCR 1002-33)**

**REBUTTAL STATEMENT FOR THE NORTHWEST COLORADO COUNCIL OF
GOVERNMENTS WATER QUALITY/ QUANTITY COMMITTEE**

The Northwest Colorado Council of Governments Water Quality/ Quantity Committee (NWCCOG) submits this rebuttal statement regarding proposed revisions to the water quality classifications, standards and designations for multiple segments in the Upper Colorado River Basin and North Platte River, Regulation Number 33 (5 CCR 1002-33).

In this rebuttal, NWCCOG has refined its recommendations relating to zinc and cadmium standards for Blue River Segment 11. NWCCOG maintains its other positions in its responsive prehearing statement, in support of Steamboat Springs’ proposed temporary modification and support for retaining the numeric standards for segments downstream from French Gulch, Blue River Segments 2a, 2b, and 2c.

I. BLUE RIVER SEGMENT 11 (“FRENCH GULCH”)

Recommendation:

NWCCOG continues to oppose the Division’s proposal to institute table value standards (TVS) for cadmium and zinc in Blue River Segment 11 (“Segment 11” or “French Gulch”) until site-specific standards can be developed. NWCCOG offers two alternative recommendations for the WQCC’s consideration:

- 1) Maintain the existing narrative standard until the next Regulation 33 rulemaking, when more realistic and appropriate site-specific standards can be adopted (NWCCOG’s preference), or
- 2) Adopt a numeric feasibility-based ambient standard utilizing existing information.

Rationale:

Importantly, NWCCOG, Summit County, and the Town of Breckenridge are all supportive of efforts to develop technically-sound, site-specific standards for French Gulch as an alternative to the current narrative standard of existing quality. On this point, we are in line with the Division, EPA, and CPW. The Regulation 33 hearing in 2024 is approximately twenty years after initial efforts to revise the water quality standards for lower French Gulch. As discussed below, the

WQCC envisioned this timeline as reasonable to implement remediation activities within the Lower French Gulch watershed and to further characterize complex water quality conditions created by the interaction of groundwater and surface water in a watershed affected by multiple historic mine sites and placer mining. Developing a site-specific numeric standard by the next Regulation 33 hearing is reasonable.

NWCCOG's concern is the Division's recommendation to adopt TVS for French Gulch as an interim solution prior to creating site-specific standards. We ask the WQCC to consider other appropriate alternatives to TVS that will not create undue risk to the local communities.

1. TVS are not appropriate for French Gulch.

When the WQCC adopted a narrative "existing quality" standard for French Gulch in 2003, it found:

[A]dditional water quality improvement beyond that accomplished through collection and treatment of mine water at the Wellington-Oro site is infeasible. Therefore a finding has been made that post-remediation cadmium, lead and zinc levels will likely exceed Table Value Standards as a result of irreversible anthropogenic causes.

5 CCR 1002-33.36, Statement of Basis, Basic Statutory Authority and Purpose (SBP) for June 2003 Rulemaking.

NWCCOG Rebuttal Exhibit H, *Background on water quality issues and mine clean-up efforts in French Gulch*, documents the lengthy history of data collection and remediation efforts by Summit County, Breckenridge, and EPA in French Gulch. All parties agree that, despite significant investment, French Gulch will not attain TVS. NWCCOG's responsive prehearing statement elaborates the many reasons that TVS for cold water aquatic life is not appropriate because French Gulch is not, nor will ever be, "capable of sustaining such biota where physical habitat, water flows or levels, and water quality conditions result in no substantial impairment of the abundance and diversity of species." See 5 CCR 1002-31.13 (1)(c)(i); NWCCOG RPHS at 4-6.

As part of the CERCLA action, Summit County and the Town of Breckenridge entered into an agreement with EPA to construct the Water Treatment Plant (WTP) at the Wellington-Oro mine seep based on the WQCC decision to adopt "existing quality" standards for French Gulch. This decision established that certain metals standards for Segment 11 would not be treated as "applicable or relevant and appropriate requirements" (ARARs) under the Consent Decree and guided the design of the WTP. See NWCCOG RPHS Exhibit G. When Summit County and the Town of Breckenridge decided to acquire the Wellington-Oro Mine site, the WQCC's 2003 finding that TVS were infeasible for French Gulch was a critical consideration. The application of TVS standards in French Gulch, where a diversity of species, including sensitive species, will never be possible, is inconsistent with WQCC regulations and its earlier findings.

2. The WQCC has two options other than adopting TVS to serve as an interim standard.

a. The WQCC can maintain the current “existing quality” narrative standards for cadmium and zinc in French Gulch while the Division develops site-specific numeric standards for the next Regulation 33 rulemaking.

A change in the existing standard is not necessary at this time, especially because the Division plans to propose site-specific standards at the next Regulation 33 rulemaking. In this case, opting to wait to develop a site-specific standard will not set a precedent, as we understand these are the only “existing quality” water quality standards in Colorado.

The Clean Water Act (CWA) does require that “criteria for toxic pollutants [including zinc and cadmium] . . . shall be numerical criteria.” 33 U.S.C. § 1313(c)(2)(B). However, this same section provides that, “[w]here such numerical criteria are not available, whenever a State reviews water quality standards . . . such State shall adopt criteria based on biological monitoring or assessment methods.” *Id.* The monitoring and remediation efforts for French Gulch have been robust since the 1990s; however, the Division maintains that additional time is needed to develop an appropriate site-specific standard. Maintaining the current narrative standards for cadmium and zinc and developing a numeric standard based on monitoring and assessment does comply with the CWA.

Moreover, the WQCC understood the complexities and significant amount of time and resources involved in characterizing and addressing water quality problems stemming from historic mining activity. In 1999, the WQCC created narrative site-specific standards for waters impacted by historic mining activity, “to encourage improvement - or not discourage such improvement - for waters impacted by historical mining activities. The WQCC found that neither of the primary options set forth in the Basic Standards - table value standards or ambient quality-based standards - are the best possible fit for many of these situations.” *See* 5 CCR 1002-31.37, SBP, July 2000 Rulemaking Hearing. The WQCC helped Summit County and Breckenridge invest in a water treatment plant and craft ARARs with the EPA based on the narrative water quality standards put in place in 2003. *See* Exhibit H.

The WQCC also estimated, wisely, it would take about twenty years to understand potential water quality benefits that could be achieved through remedial efforts. Under the regulations, a narrative standard for waters impacted by historic mining activities is appropriate “where . . . improvement is likely within 20 years.” 5 CCR 1002-31.7(1)(c)(ii). Accordingly, the WQCC adopted the French Gulch narrative standard in 2003. The next Regulation 33 hearing in 2024 will coincide with the twenty-year window envisioned for understanding possible water quality improvements through mine site remediation efforts.

Leaving the narrative standard in place for five years, with a clear, well-documented path towards working cooperatively to develop a numeric standard at the next rulemaking, is consistent with the Clean Water Act and the WQCC regulations. Importantly, it also avoids potential problems from a 303(d) listing upon adoption of TVS for the Town and County, as documented in NWCCOG’s RPHS. *See* pp. 7-8.

b. In the alternative, the WQCC has sufficient information to adopt an interim feasibility-based ambient numeric standard for French Gulch.

NWCCOG recommends maintaining existing standards for cadmium and zinc. If the WQCC decides to adopt numeric standards for cadmium and zinc in this rulemaking, NWCCOG recommends a feasibility-based ambient standard as being more appropriate for the situation than TVS. An ambient quality-based standard is appropriate “where ambient water quality levels are worse than [TVS], but are determined adequate to protect the highest attainable uses.” *See* 5 CCR 1002-37.1(1)(b)(ii)(A). The feasibility-based ambient standard is appropriate “where water quality can be improved, but not to the level required by the current numeric standard.” *See* 5 CCR 1002-37.1(1)(b)(ii)(A)(I).

Summit County and Breckenridge have invested significant resources in improving water quality in lower French Gulch, including the Wellington-Oro WTP. The WTP is remarkably effective, removing 88-98 percent of zinc; however, downstream water quality has not shown significant improvement. *See* NWCCOG RPHS at 5-7 and Figure 1. While metals concentrations have been decreasing over the past decades, the connection with the WTP is unclear. *See* NWCCOG RPHS at 7-8, Figures 2 and 3. Summit County, Breckenridge, and EPA have also completed nonpoint source clean-up projects in French Gulch. In 2003, “[t]he Commission [] determined that additional water quality improvement beyond that accomplished through collection and treatment of mine water at the Wellington-Oro site is **infeasible**.” *See* 5 CCR 1002-33.36, SBP for June 2003 Rulemaking, emphasis added. Therefore, feasible water quality improvements should be measured according to those benefits realized from the WTP.

As the NWCCOG RPHS describes, the highest attainable use for lower French Gulch is limited to metals-tolerant macroinvertebrates, which are currently present in the stream. *See* NWCCOG RPHS at 4-5; *see also* NWCCOG RPHS Exhibit B, Clements et al. With no other feasible remedial options available, little additional water quality improvement should be expected. Therefore, a feasibility-based ambient standard that captures current existing conditions, protective of existing macroinvertebrate life, is appropriate.

Table 5 of the USGS technical memorandum that the Division relied on in its prehearing statement has 85th percentile for Segment 11 for the five year period 2012-2016 as 8.7 ug/L for cadmium and 2,288 ug/L for zinc. *See* WQCD PHS at 10, Table 2. Using the 85th percentile to characterize existing conditions complies with the WQCC’s methodology for determining existing quality. *See* Colorado Department of Public Health and Environment, Water Quality Control Division, 2017, Section 303(d) Listing Methodology, 2017 Appendix B, p. 1.

Ample evidence exists to establish an ambient feasibility-based standard. Ambient standards are appropriate “only where a comprehensive analysis and review is conducted.” *See* 5 CCR 1002-37.1(1)(b)(ii)(B). Existing studies more than meet the requisite elements of a comprehensive analysis, as described below:

Element 1 of Comprehensive Analysis: “identifies the sources and causes of the elevated levels and characterizes existing conditions, including spatial and temporal variation.” 5 CCR 1002-37.1(1)(b)(ii)(B)(I)

Available data: EPA’s 2002 Ecological Risk Assessment (ERA) documents the “sources and causes of the elevated levels and characterizes existing conditions” in French Gulch. *See* NWCCOG RPHS Exhibit E. The ERA provides a site history of sampling activities and investigations intended to identify sources of

elevated metals and ecological risks associated with those levels. It summarizes water quality and provides other data analysis and evaluations. It provides information on the potential for adverse effects to aquatic receptors (including benthic invertebrates and fish) exposed via direct contact to chemicals of potential concern in surface water and sediments. It presents a site conceptual model that summarizes pathways by which mining-related chemical contaminants may be released to and migrate through the environment, along with exposure pathways by which ecological receptors may be exposed to those contaminants.

EPA's 2004 Action Memorandum summarizes "numerous investigations into the surface and groundwater near and downgradient of the (Wellington Oro) mine," concluding that "Wellington Oro Mine was found to be the primary contributor of zinc and cadmium contamination found in French Creek and the Blue River." *See* NWCCOG RPHS Exhibit C.

Element 2 of Comprehensive Analysis: "Where sources and causes are not natural. . . identifies the improved water quality conditions (if any) that could result from feasible pollution control alternatives. CCR 1002-37.1(1)(b)(ii)(B)(II).

Available data: EPA's comments on the Mine Pool Engineering Evaluation and Cost Analysis includes a summary of alternatives considered to address seeps from the Wellington-Oro Mine pool into French Gulch. *See* NWCCOG RPHS, Exhibit F1. Alternatives include no action, reduce mine thru-flow, suppress sulfide oxidation, in-situ mine treatment, ex-situ water treatment. Ex-situ water treatment, the preferred approach, considered three different collection point alternatives and three generalized types of treatment (active, passive and semi-passive). Note that other alternatives for this site were previously considered but rejected as not feasible or ineffective. Those other alternatives included upgradient groundwater pumping to decrease influx of water to mine pool and mixing FG-6C water with effluent from the Breckenridge Wastewater Plant.

EPA's 2002 ERA built on a previously released Screening Ecological Risk Assessment in order to develop information on the ecological objectives for French Gulch and the Blue River including to a) utilize new site data to refine and confirm risk estimates for aquatic and terrestrial receptors; b) utilize site-specific toxicity testing to confirm calculated risk estimates and to help identify a preliminary remediation goal for surface water in the Blue River downstream of the confluence with French Gulch; and refine the evaluation of habitat suitability in order to determine if French Gulch would support a viable trout population absent significant metals toxicity. *See* NWCCOG Exhibit E at 42-43.

Water quality data in the ERA are provided in graphical or tabular form, however all relevant and reliable data for the site were assembled into an electronic database. *See* ERA Appendix. This database is available upon request from USEPA Region 8.

Element 3 of Comprehensive Analysis: "includes a rationale for either retaining or revising the current use classification(s)." CCR 1002-37.1(1)(b)(ii)(B)(III).

Available data: NWCCOG's Use Attainability Analysis (UAA) used available data, information, and an extensive review of the scientific literature and research

studies to develop recommendations for site-specific stream standards for cadmium, lead and zinc concentrations in Blue River, Segments 2 and 11. NWCCOG RPHS, Exhibit A. The primary purpose of a UAA is to create technically sound recommendations for site-specific use classifications and standards. The NWCCOG RPHS and rebuttal both include rationale for retaining the current use classification and for revising the standards to current existing quality based on the wealth of available information.

Element 4 of Comprehensive Analysis: “[C]haracterizes the highest attainable use.” CCR 1002-37.1(1)(b)(ii)(B)(IV).

Available data: The UAA drew on extensive literature reviews (see UAA, Appendix B) and professional judgment to determine the aquatic life potential for the stream segments in the study area, recognizing projected a) future water quality conditions (after implementation of the Wellington-Oro Mine treatment facility) and b) existing physical, biologic or hydrologic limitations to aquatic life. More recent research indicates that French Gulch will likely remain impaired and dominated by metal-tolerant species. *See* NWCCOG RPHS Exhibit B, Clements et al; *see also* NWCCOG RPHS at 4-6. All parties agree that fish are unlikely in French Gulch, and that metals tolerant macroinvertebrates are likely the highest attainable use.

NWCCOG has provided recommended edits to the division’s draft SBP, consistent with its request to maintain existing standards until appropriate site-specific standards can be developed, as Exhibit I.

II. CONCLUSION

French Gulch is truly a unique situation within Colorado. Local governments invested significantly to clean up French Gulch, starting in 1999 when they volunteered as potentially responsible parties to the CERCLA cleanup. Much of the progress to date was based on cooperative efforts centered on the WQCC establishing an ambient “existing quality” standard in 2003 that was protective of the local governments’ efforts. Unfortunately, the Division’s proposal is an impediment to, rather than a continuation of, the work performed to date.

NWCCOG fully supports jointly working towards a numeric standard by the next Regulation 33 rulemaking. However, NWCCOG respectfully requests the WQCC maintain the existing standards until the appropriate site-specific ones are developed to ensure the parties can continue working towards a solution that is protective of French Gulch in the long-term.

III. EXHIBITS

Exhibit H. Background on water quality issues and mine clean-up efforts in French Gulch

Exhibit I. NWCCOG Recommended edits to WQCC SBP.

Respectfully submitted this 15th day of May, 2019.



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COLORADO

Water Quality Control Division

Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

MEMORANDUM

To: Trisha Oeth, Water Quality Control Commission Administrator

From: Blake Beyea, Standards Unit Manager, Water Quality Control Division

Date: May 29, 2019

Subject: Request to Postpone the November 12, 2019 Molybdenum Standards Hearing

A rulemaking hearing regarding molybdenum standards is currently scheduled for November 12, 2019. As you are aware, the molybdenum standards hearing was originally scheduled for December 2017, but was ultimately continued until November 2019. The continuation was premised, in part, on the Water Quality Control Division's position that the Water Quality Control Commission should wait to revise its own molybdenum standards until the Agency for Toxic Substances and Disease Registry (ATSDR), finalized its toxicological assessment for molybdenum based on newly available science.

At the time the December 2017 hearing was continued, it was believed that ATSDR would revise and finalize its April 2017 draft toxicological profile in time for consideration at a November 2019 hearing. Since 2017, the division, the commission, and Climax Molybdenum Company have all urged ATSDR to take timely action in releasing the revised toxicological profile. However, due to other national priorities (including PFAS), ATSDR's revision of the molybdenum toxicological profile has not yet been published. While ATSDR is working on revising this profile, it will likely not be ready in time for thorough consideration in a hearing in 2019.

Thus, the division suggests that the molybdenum standards hearing be postponed until after the ATSDR profile is available. Climax and the division have discussed this postponement, and have agreed that a postponement would be appropriate.

The division alerted stakeholders who attended the April 23, 2019 stakeholder meeting to the possibility of a postponement. Climax recently e-mailed interested molybdenum stakeholders, including the parties from the December 2017 molybdenum standards hearing, letting them know about the potential postponement. Climax has made significant progress to timely meet the other commission requirements for additional analysis in the Statement of Basis and Purpose. Climax will be hosting another stakeholder meeting on June 26, 2019, at the division, and intends to discuss the status of its work related to revision of the molybdenum standard as well as progress made on the temporary modification further with all interested parties at that time.

Therefore, the division requests that the commission postpone the molybdenum standards rulemaking hearing. It is the intention of the division and Climax that, after the ATSDR profile is finalized, or some other federal action is final¹ such as a revision of the draft 1993 EPA Health Advisory for Molybdenum, a hearing be scheduled in an expeditious manner.

¹ https://www.colorado.gov/pacific/sites/default/files/HM_human-health-toxicity-values-in-risk-assessment-policy.pdf



QQ Policy Review by Region

Purpose and Methodology for the Policy Scans

The policy scan was conducted to identify the presence of policy elements across the 28 QQ communities to:

1. Establish a comparative baseline for the QQ member headwater communities.
2. Better understand what policies are currently being implemented to achieve water conservation and efficiency in these communities.
3. Identify model policy language or local case studies to be included in this water savings guidance document.
4. Provide member communities feedback to inform planning.

The policy scan included two reviews. First, a review of existing policy documents to look for the inclusion and comprehensiveness of water supply and demand summaries, water conservation programs, and water resource related goals and strategies. Document review included water plans (such as water supply plans or water efficiency plans from water districts, counties, basins, utilities, etc.), comprehensive or master plans as well as community sustainability or resiliency plans. Second, the policy scan included a review of development regulations to determine how land use regulations address water conservation and efficiency. Regulations in the review included, water supply standards, zoning, landscape ordinances, water protection or conservation standards, and building and plumbing codes. The complete policy scan results can be found in **Appendix B**.

To collect data from each community, a survey was distributed to identified team leaders tasked with gathering information from their water districts, utilities, and planning departments. The total response rate was about 50% for the 28 communities. For communities that did not complete a survey, the consultant team gathered land use policies and regulations that were publicly available online. Information related to water utilities including water supply and demand balance, rate structures, and water conservation programs was not reviewed unless it was provided in the survey.

As a result of the policy scan, the following water conservation and efficiency opportunities summary was developed to guide the development of the content for this paper. Each of the opportunity summaries below identifies a regions strengths, gaps, and opportunities, and this guidance document should serve as a useful reference, along with QQ support, when considering updates or changes based on this summary. Each category in the below summary is included as a chapter in this guidance document with the exception of water quality standards, which are coered more thoroughly in QQ's [Model Water Quality Protection Standards](#).

Regional Opportunities for Water Conservation and Efficiency

1. Opportunities Summary: Eagle County, Eagle, Gypsum, Minturn, Red Cliff, Vail

This region has demonstrated capacity for regional cooperation through the Eagle River Watershed Council as well as interest in water conservation and efficiency as demonstrated by Eagle County's participation in Growing Water Smart with the Eagle River Water and Sanitation District.

Comprehensive Plans:

All communities should consider adding water in sections or as an element in future updates.

Water Supply Standards:

Eagle County, Gypsum, and Minturn have water supply standards that clearly outline expectations for future water supply. Eagle County includes the requirement for a water budget to estimate development demand. These regulations could be updated to be stronger and include best practices and incentivize conservation.

Landscape Ordinance:

Current landscape ordinances are tailored primarily for aesthetic purposes and mitigating visual impacts. Only Eagle County's landscape ordinance includes water conservation and efficiency as a policy goal. While most of the communities recommend native plants, Minturn requires them. However, homeowners may modify their landscape post-occupancy. Eagle County is the only jurisdiction to require efficient irrigation practices. Across the region, there are significant water conservation and efficiency opportunities for reducing outdoor water demand.

Redevelopment and Point of Sale:

Currently, this tool is not being utilized in this region. This tool is often included in a water conservation ordinance or landscaping ordinance and is applied to either a minimum square footage redevelopment project or as a certificate of approval required for resale of property. The ordinance requires meeting a minimum water conservation and efficiency standard such as fixture or appliance retrofits or water wise landscape upgrades. See *Section* ____, below.

Commercial Water Conservation:

Currently, commercial water conservation standards are not being utilized. Health and education institutions, restaurants and hotels can be large water consumers. An assessment of regional water demand by the commercial sector would help to understand potential benefits from this kind of ordinance.

Compact Form and Land Use Patterns:

The communities all have high quality zoning districts that promote higher densities. The question for each community is to determine the potential water savings that could come from applying a higher density development pattern as a greater percentage of total development. A density assessment by zone district that includes the average water demand in that district could prove useful in understanding how the use of zoning and density can minimize water demand and increase water efficiency in future development.

Water Quality Standards:

While this region does explicitly express goals for protecting water quality, standards vary across communities. Eagle County, Red Cliff, Vail, and Gypsum all use environmental reviews to assess impacts to hydrological systems. Minturn and Vail have adopted watershed ordinances to permit review of projects that may have a negative impact on drinking water supplies. Minturn has a strong erosion mitigation and stormwater ordinances that include best practices for reducing runoff. Setback requirements, while present, are not very strong. Gypsum includes erosion and stormwater standards in their public works manual. A regional review of policies and comparison against QQ's [Model Water Quality Protection Standards](#) could identify gaps for code updates that would strengthen water quality protection.

Plumbing and Building Codes:

In-depth review of plumbing and building codes were not conducted. It may be beneficial to integrate commercial water efficiency standards into the commercial building code and integrate water conservation and efficiency into the green building code. Gypsum's water conservation ordinance includes a requirement requiring water efficient/low flow fixtures for all new commercial, industrial, and non-residential constructions including toilets, shower heads, spigots and faucets. Given the State passed a regulation requiring EPA WaterSense appliances and fixtures for new development, the standards identified should be made consistent or stronger than the State policy. Additionally, the ordinance should be reviewed to evaluate whether additional savings could be gained by any fixtures not covered under the State rule. Water efficiency standards for residential development should also be explored.

Eagle County Sustainable Community Index

Eagle County utilizes a development review tool to rate the quality of project proposals against County standards. The tool applies a points system for river setbacks and water quality plans, protection of existing vegetation, reductions in stormwater runoff, compact form and/or clustering, protection of sensitive land and environments, limitation and type of turf and xeriscaping. This tool could be reviewed to consider how certain areas of the county may have weighted criteria to incentivize achieving specific goals such as water quality and conservation.

2. Opportunities Summary: Grand County, Granby, Grand Lake, Fraser, Kremmling, Hot Sulphur, Winter Park

Comprehensive Plans:

All communities in this region should consider adding water in sections or as an element in future comprehensive plan updates.

Landscape Ordinance:

Current landscape ordinances are tailored primarily for aesthetic purposes and mitigating visual impacts. Winter Park has developed a high-quality landscaping guideline for aesthetics. It does include some water conservation components (irrigation, mulching, turf and native plant selection), but would benefit from requiring a water budget with the landscape plan which would benefit the town's ability to assess the potential water savings. See ____, below. The other communities have no or minimal landscaping requirements.

Redevelopment and Point of Sale:

Currently, this tool is not being utilized in this region. This tool is often included in a water conservation ordinance or landscaping ordinance and is applied to either a minimum square footage redevelopment project or as a certificate of approval required for resale of property. The ordinance requires meeting a minimum water conservation and efficiency standard such as fixture or appliance retrofits or water wise landscape upgrades.

Commercial Water Conservation:

Currently, commercial water conservation standards are not being applied in this region. Health and education institutions, restaurants and hotels can be large water consumers. An assessment of regional water demand by the commercial sector would help to understand potential benefits from this kind of ordinance.

Compact Form and Land Use Patterns:

The communities in this region include zoning districts that promote higher densities within resort districts. There are however many low-density zoning districts across the region. The question for each community is to determine the potential water savings that could come from applying a higher density development pattern as a greater percentage of total development. A density assessment by zone district that includes the average water demand in that district could prove useful in understanding how the use of zoning and density can minimize water demand and increase water efficiency in future development.

Water Quality Standards:

While this region does explicitly express goals for protecting water quality, standards vary across communities. Stream setbacks range from 30 up to 150 feet in Fraser when ecological values are present. Fraser adopted erosion and stormwater manuals from Grand County and the water district that provide guidance to protect water quality. Both Fraser and Granby adopted water quality protection districts. A regional review of policies and comparison against the QQ's [Model Water Quality Protection Standards](#) could identify gaps for code updates that would strengthen water quality protection.

Plumbing and Building Codes:

In-depth review of plumbing and building codes were not conducted. It may be beneficial to integrate commercial water efficiency standards into the commercial building code and integrate water conservation and efficiency into the green building code.

3. Opportunities Summary: Gunnison County, Crested Butte

This region includes the County, Crested Butte, and four additional communities not in QQ (Mt. Crested Butte, South CB, Almont, and City of Gunnison). The perception in this region is that the potential for water supply imbalance is low. However, due to the ecological and recreational tourism interests in the region, water quality is a significant concern for the Gunnison River and its tributaries.

Comprehensive Plans:

Both Crested Butte and Gunnison should consider adding water in sections or as an element in future updates.

Water Supply Regulations:

Gunnison County and the Town of Crested Butte both have substantive water supply standards. The Town's is standard for a municipal utility. The County's, however, is well above the standard and offers opportunity as a case study for counties of an ordinance that meets the State's 2017 requirements. The regulations could be updated to be stronger and include best practices and incentivize conservation.

Landscape Ordinance:

Current landscape ordinances do not maximize water conservation and efficiency opportunities. Gunnison County's landscape ordinance is tailored primarily for aesthetic purposes and mitigating visual impacts while Crested Butte's is a tree ordinance. Crested Butte limits outdoor watering.

Redevelopment and Point of Sale:

This tool is often included in a water conservation ordinance or landscaping ordinance and is applied to either a minimum square footage redevelopment project or as a certificate of approval required for resale of property. The ordinance requires meeting a minimum water conservation and efficiency standard such as fixture or appliance retrofits or water wise landscape upgrades. Crested Butte includes this as an option in Section 13-2-60 for Installation of Water Conservation Devices with the intent to increase use of water efficient fixtures. This regulation has been in effect for many years and should be evaluated to determine savings potential from remaining retrofits.

Commercial Water Conservation:

Currently, commercial water conservation standards are not being applied in this region. Education and health-based institutions, restaurants and hotels can be large water consumers. Given the tourism-based economy, an assessment of regional water demand by the commercial sector would help to understand potential benefits from a new ordinance targeting these sectors.

Compact Form and Land Use Patterns:

Both Gunnison County and Crested Butte have zoning districts that promote higher densities. The question for each community is to determine the potential water savings that could come from applying a higher density development pattern as a greater percentage of total development. While Crested Butte is considered nearly built out, the County might benefit from a density assessment by zone district that includes the average water demand in that district could prove useful in understanding how the use of zoning and density can minimize water demand and increase water efficiency in future development.

Water Quality Standards:

This region does not explicitly express goals for protecting water quality. Both communities have standards for erosion control and stormwater management. Additionally, Crested Butte's Watershed Protection District uses express statutory authority under C.R.S. § 31-15-707(1)(b) to extend its regulatory jurisdiction beyond the Town limits over the area 5-miles upstream from the points of intake for its water supply system. Certain development within the Crested Butte Watershed District must conduct a thorough environmental impact analysis. The County uses an additional water protection standard that includes buffers, in addition to the erosion and stormwater

protection standards, to protect vegetation and minimize contamination. However, the standard 25-foot buffer and exemption of residential development under 10,000 square feet may not offer intended protections. There is an opportunity to strengthen the water quality protection standard for the County. A regional review of policies and comparison against the QQ's [Model Water Quality Protection Standards](#) could identify gaps for code updates that would strengthen water quality protection.

Plumbing and Building Codes:

In-depth review of plumbing and building codes were not conducted. It may be beneficial to integrate commercial water efficiency standards into the commercial building code and integrate water conservation and efficiency into the green building code. Water efficiency standards for residential development should also be explored. Crested Butte does have a conservation ordinance within Section 13-2-60 requiring water efficient toilets, shower heads, and faucets for new and remodeled properties. Given the State passed a regulation requiring EPA WaterSense appliances and fixtures for new development, the standards identified should be made consistent or stronger than the State policy. Additionally, the ordinance should be reviewed to evaluate whether additional savings could be gained by any fixtures not covered under the State rule. Given this rule expanded what was covered beyond Crested Butte's list of fixtures, the retrofit requirement can now be expanded to the fixtures under state rule if the ordinance is updated.

4. Opportunities Summary: Pitkin County, Aspen, Basalt, Carbondale, Glenwood Springs

This region has demonstrated capacity for regional cooperation through the Roaring Fork Watershed Plan as well as interest in water conservation and efficiency as demonstrated by Roaring Fork Regional Water Efficiency Plan.

Comprehensive Plans:

Basalt's comprehensive plan had the strongest explanation of the town's water system. All communities could strengthen their plan to better educate the community about the water system as well as support planning. These communities have additional information about water supply and demand available in their water efficiency plans.

Water Supply Regulations:

Aspen's code requires municipal water connection for new development. Basalt requires a dedication of water rights or fee in lieu for all new development and annexations except for single family dwellings. Basalt also has clear standards for water rights dedication, including calculation of water demand and ability to review the proposed development for compliance.

Landscape Ordinance:

Aspen's landscape ordinance is the strongest in the QQ region and could serve as a model to other communities. Basalt requires landscaping for aesthetic purposes in some districts. Pitkin County's landscape ordinance mitigates visual impacts of commercial developments and protects trees. Carbondale's landscape ordinance only applies to non-residential and multifamily units (>3 units). Carbondale's sustainability code includes options for limiting site disturbance and turf amounts, preserving topsoil, mulching, xeriscaping, and instituting drip irrigation, hydrozones, irrigation timer controls, and rain sensors. The regional Water Efficiency Plan identified a model regional landscape ordinance as a goal.

Redevelopment and Point of Sale:

This tool is often included in a water conservation ordinance or landscaping ordinance and is applied to either a minimum square footage redevelopment project or as a certificate of approval required for resale of property. The ordinance requires meeting a minimum water conservation and efficiency standard such as fixture or appliance retrofits or water wise landscape upgrades. Aspen's landscape ordinance requires all new construction with internal work that demolishes greater than 50% of the existing structure to institute new efficient indoor fixtures.

Commercial Water Conservation:

Currently, commercial water conservation standards are not being utilized. Health and education institutions, restaurants and hotels can be large water consumers. An assessment of regional water demand by the commercial sector would help to understand potential benefits from this kind of ordinance.

Compact Form and Land Use Patterns:

The communities all have high quality zoning districts that promote higher densities. Carbondale has one of the stronger codes for promoting compact form. The question for each community is to determine the potential water savings that could come from applying a higher density development pattern as a greater percentage of total development. A density assessment by zone district that includes the average water demand in that district could prove useful in understanding how the use of zoning and density can minimize water demand and increase water efficiency in future development.

Water Quality Standards:

While this region does explicitly express goals for protecting water quality, standards vary across communities. Aspen and Basalt both define environmentally sensitive areas (ESAs). Aspen's water quality protection ordinance applies to within 100-feet of designated rivers, and requires natural vegetation protection and an erosion and stormwater management plan for developments. Basalt's protection standards apply within 150 feet of designated rivers and prohibits construction in the 50-foot buffer as well as riparian and wetland vegetation destruction. Pitkin County includes a strong standard with a 100-foot setback with a non-disturbance zone from rivers and 25-foot from isolated wetlands and riparian areas. The standard aims to protect water quality, prevent erosion, and protect riparian habitat. Glenwood Springs includes most standards under the limits to disturbance criteria in the Sensitive Areas Protection that includes erosion mitigation, vegetation protection, water conservation, stream and wetland protection, and minimal site disturbance. All communities have floodplain standards to limit water pollution. A regional review of policies and comparison against the QQ's [Model Water Quality Protection Standards](#) could identify gaps for code updates that would strengthen water quality protection.

Plumbing and Building Codes:

In-depth reviews of plumbing and building codes were not conducted. In 2018, Basalt adopted a new Sustainable Building Code with a points system for new and re-development. It includes points for erosion control, native landscaping, water efficient landscaping with turf and plant standards, indoor water efficiency to achieve 20-40% reductions, and tankless water heaters. Carbondale and Glenwood Springs both adopted the International Energy Conservation Code, 2009 Version with amendments. In Carbondale the code includes limiting site disturbance, preservation of topsoil, erosion mitigation, mulching, turf limitations, xeriscaping, drip irrigation, hydrazones, irrigation timer controls, rain sensors, and efficient plumbing fixtures and appliances. It may be beneficial to integrate commercial water efficiency standards into the commercial building code and integrate water conservation and efficiency into the green building code.

5. Opportunities Summary: Summit County, Breckenridge, Dillon, Frisco, Silverthorne

This region's communities are already collaborating through the Blue River Regional Water Efficiency Plan on how to incorporate water conservation and efficiency into land use. The participating communities have expressed interest in water efficiency incentives for redevelopment, landscape ordinances to reduce outdoor watering demand, and integrating water conservation and efficiency into the existing Summit County Green Building Code.

Comprehensive Plans:

Comprehensive plans in the region include varying information about the regional water system. The region has excellent data about its watersheds, water supply and demand, and current practices. Inclusion of this information in comprehensive planning would serve to educate the community and build support for future policy actions.

Landscape Ordinance:

Current landscape ordinances are tailored primarily for aesthetic purposes and mitigating visual impacts. Only Frisco and Silverthorne include water conservation and efficiency as a goal. All of the towns have commercial landscaping standards that require a minimum square footage as opposed to limits to landscaped area.

Redevelopment and Point of Sale:

Currently, this tool is not being utilized in this region. This tool is often included in a water conservation ordinance or landscaping ordinance and is applied to either a minimum square footage redevelopment project or as a certificate of approval required for resale of property. The ordinance requires meeting a minimum water conservation and efficiency standard such as fixture or appliance retrofits or water wise landscape upgrades.

Commercial Water Conservation:

Education and health institutions, restaurants and hotels can be large water consumers. Apart from Frisco's current policies to provide glasses of water only by request in their drought restrictions, there are no additional commercial water conservation standards being utilized. An assessment of regional water demand by the commercial sector would help to understand potential benefits from a new ordinance.

Compact Form and Land Use Patterns:

The communities in Summit County all have high quality zoning districts that promote higher densities. The question for each community is to determine the potential water savings that could come from applying a higher density development pattern as a greater percentage of total development. A density assessment by zone district that includes the average water demand in that district could prove useful in understanding how the use of zoning and density can minimize water demand and increase water efficiency in future development.

Water Quality Standards:

While this region does explicitly express goals for protecting water quality, standards vary across communities. A regional review and comparison of QQ's [Model Water Quality Protection Standards](#) could identify gaps for community updates that would strengthen water quality protection.

Plumbing and Building Codes:

In depth review of plumbing and building codes were not conducted. It may be beneficial to integrate commercial water efficiency standards into the commercial building code and integrate water conservation and efficiency into the green building code.

Bill No.	Bill Description	Sponsors	Notes	QQ Position
<u>HB 19-1006</u>	Forest Management Fuels Reduction Projects Grant Program	Reps. McLachlan, Carver/ Sen. Fields	Wildlife Matters Review Committee	Support
<u>HB 19-1015</u>	Recreation of the Colorado Water Institute	Rep. Arndt.	CO Water Institute accidentally sunsetted so required reauthorization	Support
<u>HB 19-1026</u>	Parks and Wildlife Violations of Law	Reps. Catlin, McCluskie / Sens. Coram, Donovan		Monitor
<u>HB 19-1050</u>	Promoting xeriscaping in HOA common areas and special districts	Rep. Titone		Support
<u>HB 19-1082</u>	Water rights holders may make necessary repairs within ditch	Reps. Catlin/Valdez; Sen. Coram		Support
<u>HB 19-1108</u>	Allowing nonresident electors in special districts	Reps. Liston, Hooton; Sen. Tate	POSTPONED INDEFINITELY, due in large part to work of Eagle River Water & San. with QQ weighing in towards the end. This issue came up several years in a row, so it could pop up again (but we'll hope not)	Oppose

<u>HB 19-1113</u>	Water quality protections in hardrock mining permitting	Reps. Roberts, McLachlan/ Sen. Donovan	QQ supported in 2018 also	Support
<u>HB 19-1200</u>	Establishing a point of compliance for testing reclaimed wastewater used for toilet flushing	Rep. Arndt	Essentially a clarification bill for 2018 reclaimed water for toilet flushing bill.	Support
<u>HB 19-1231</u>	New energy and water efficiency standards for appliances	Reps. Froelich, Kipp		Support in Concept (recommended)
<u>HB 19-1247</u>	Authorizing study of agricultural applications of blockchain technology.	Reps. Valdez, Catlin; Sen. Donovan, Coram.		Monitor
<u>HB 19-1259</u>	Species Conservation Trust Fund.	Reps. Roberts, Pelton; Sen. Donovan		Support (recommended)
<u>HB 19-1327</u>	Authorizing a ballot measure for the collection of tax on sports betting, with proceeds in part going to implementation of the Water Plan	Reps. Garnett, Neville; Sens. Donovan, Cooke.	This idea will be discussed greatly moving towards the 2020 ballot question.	Support (recommended)
<u>HJR 19-1005</u>	Water Projects Eligibility List	Rep. Roberts/ Sen. Donovan		No position

<u>SB 19-016</u>	Changes to distribution methods for Severance Tax Operational Fund	Sens. Donovan/Coram and Reps. Esgar/Saine/Roberts/Arndt/Catlin	An important bill for ensuring water projects receive more sustainable funding through severance tax funds. Passed easily as an interim water committee bill.	Support
<u>SB 19-032</u>	Hazardous Materials Transportation Routing	Sen. Scott/ Rep. McCluskie	This is a study bill—and the study must include environmental impacts and will include relevant Summit Co local governments in the stakeholder group.	Monitor
<u>SB 19-181</u>	Clarifying local authority to regulate oil and gas development (and lots of other things).	Sen. Fenberg/ Rep. Becker	QQ expects to participate in some of the rulemakings stemming from this legislation—where rules relate to local authority to regulate oil and gas.	Support with exception of Gypsum
<u>SB 19-186</u>	Add surface water to Dep’t of Ag groundwater quality monitoring program.	Sens. Donovan, Coram; Rep. Arndt.		Support (recommended)
<u>SB 19-212</u>	Appropriation for Implementing State Water Plan.	Sen. Rankin; Rep. Esgar.	This bill marks the first time Water Plan funding has come out of the General Fund.	Support (recommended)
<u>SB 19-221</u>	Colorado Water Conservation Board Construction Fund	Sen. Donovan; Rep. Roberts		Monitor (recommended)

BILLS OF INTEREST FOR SUMMER 2019 AND 2020 LEGISLATIVE SESSION:

<u>HB 19-1271</u>	<p>Allowing augmentation for instream flow.</p>	<p>Rep. Arndt; Sen. Coram</p>	<p>POSTPONED INDEFINITELY in Senate Ag. To be discussed at Interim Water Resource Review Committee Aug. 21st in Steamboat Springs (at CWC conference). Flagged for QQ participation.</p>	<p>Support (recommended)</p>
<u>HB 19-1218</u>	<p>Expanding instream flow leasing program</p>	<p>Rep. Roberts; Sen. Donovan</p>	<p>Same as above.</p>	<p>Support (recommended)</p>