

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

REBUTTAL STATEMENT OF THE BEAR CREEK WATERSHED ASSOCIATION

IN THE MATTER OF THE RULEMAKING HEARING FOR CONSIDERATION OF REVISIONS AND ADOPTION OF SITE-SPECIFIC REVISIONS TO WATER QUALITY STANDARDS FOR BEAR CREEK RESERVOIR IN THE CLASSIFICATIONS AND NUMERIC STANDARDS FOR SOUTH PLATTE RIVER BASIN, LARAMIE RIVER BASIN, REPUBLICAN RIVER BASIN, SMOKY HILL RIVER BASIN, REGULATION #38 (5 CCR 1002-38) AND REVISIONS TO THE BEAR CREEK WATERSHED CONTROL REGULATION, REGULATION #74 (5 CCR 1002-74).

The Bear Creek Watershed Association (hereinafter "Association") presents its Rebuttal Statement in the above referenced matter.

I. STATEMENT OF FACTUAL AND LEGAL CLAIMS

The Association as the responsible watershed management authority is required to implement the Bear Creek Control Regulation (Control Regulation 74, 5 CCR 1002-74). The Association provides information in the form of this rebuttal statement on the proposed rule changes to the Bear Creek Watershed Control Regulation #74 and Regulation #38.

II. WRITTEN TESTIMONY

The Association is generally supportive of the proposed changes to regulations #38 and #74 as made by the Water Quality Control Division (Division) in their March 10, 2009 prehearing statement.

The Association recommends Commission adoption of the proposed rule changes summarized in Table 1 for Regulations #38 and #74. The Association recommends the Commission adopt language in the Statement of Basis and Purpose that includes specific dates for the development of a detailed scope and schedule for a TMAL process as a first step in the regulatory process (January 2013), followed by the completion of a TMAL for the Bear Creek Watershed by January 2016. Further, the Association recommends the Commission adopt a temporary modification as proposed by the Division to expire on January 31, 2016, which coincides with the completion of a TMAL for the Bear Creek Watershed.

Table 1 Proposed Association Regulatory Changes to Regulations #38 and #74.

Regulation	Proposed Regulatory Changes
Regulation No. 38	<ul style="list-style-type: none">• Numeric standards for chlorophyll a and total phosphorus, replaces existing narrative standard: 10 ug/L for chlorophyll and 32 ug/L for total phosphorus.• Both constituents assessed as average of concentrations in the mixed layer during the summer regulatory season (July 1 through September 30) in the central pool of the reservoir at Bear Creek Watershed Association Reservoir monitoring site 40.

Regulation	Proposed Regulatory Changes
	<ul style="list-style-type: none"> • One exceedance allowed in five years, on average. • Temporary modification for existing conditions to expire 1/31/2016
Regulation No. 74	<ul style="list-style-type: none"> • Allowable load of 4,127 lbs/y of total phosphorus at a median inflow into Bear Creek Reservoir of 28,891 AF/y. • Develop a scope and detailed schedule to establish a total maximum annual load (TMAL) for the watershed before the next triennial review (January 2013). • Complete a TMAL by the following triennial review period (January 2016). • Existing point source wasteload allocations held at existing levels until basis for the allocations reviewed and complete in January 2016. • Complete a detailed Bear Creek Reservoir internal load evaluation/study before the next triennial review (January 2013).

The Association does not believe that is appropriate to wait and see if the internal load problem in Bear Creek Reservoir will simply disappear over time. Rather, the Association would prefer to have a better understanding of this internal problem, since this issue will affect the scope and schedule of the future TMAL process. As such, the Association, in cooperation with the Division staff, proposes to complete a detailed internal load evaluation/study of Bear Creek Reservoir before the next Triennial review (January 2013). The Association believes this evaluation/study could address a number of the issues raised by United States Environmental Protection Agency (EPA), Region 8.

The Association proposes modifying the following statements from the Divisions’ proposed Statement of Basis and Purpose, as noticed:

To be consistent with the revised standards in Regulation #38, the Commission adopted changes in this Control Regulation for Bear Creek Reservoir (Regulation #74). The Commission adopted an Allowable Load of total phosphorus of ~~3876~~ 4,127 lbs/y under a median inflow into Bear Creek Reservoir of 28,891 AF/y. This Allowable Load reflects the assumed linkage between watershed total phosphorus load and the in-lake total phosphorus concentration.

The Commission directed the Division ~~and the~~ Association and other vested stakeholders to complete a scope and detailed schedule for a TMAL before the next triennial review of the control regulation (January 2013). The TMAL process must address the TMAL by developing nonpoint source (load) and point source (wasteload) allocations related to the Allowable Load ~~for submittal during the next control regulation triennial review. The Commission directed the Division and Association to complete a~~ TMAL by the following Triennial Review period (January 2016). The Commission acknowledged that progress toward development of the allocations will be contingent on

the availability of suitable funding [for the Division and Association](#) to support completion of the tasks identified in section 74.3.1.B.

[Based on the historical water quality data record, The-the](#) underlying standards ~~are~~ [can](#) not ~~being~~ [be](#) attained in most years due to the seasonal augmentation of phosphorus concentrations from internal sources. Until internal loading becomes negligible, the Commission will apply a temporary modification of “existing conditions.” [The Commission directed the Division and Association to complete a more detailed internal load evaluation/study of Bear Creek Reservoir before the next Triennial Review \(January 2013\).](#) The expected benefits of reduced external load have not been realized in Bear Creek Reservoir due to the protracted effect of internal loading. Consequently, there is uncertainty regarding the appropriate linkage between chlorophyll and phosphorus, and thus uncertainty in the magnitude of the phosphorus standard. [The Commission sets the temporary modification to expire on January 31, 2016.](#)

In Regulation #74, the wasteload allocations for wastewater treatment facilities in section 74.3.2 (a) needs a correction to reflect existing permitting conditions. The Conifer Center Sanitation Association is now connected to the Conifer Metropolitan District, which the 40-pound total phosphorus allocation assigned from the Conifer Center Sanitation Association to the Conifer Metropolitan District. The Association recommends a footnote (3) be added to the table to reflect this permit reallocation. The Davidson Lodge is now the Bear C reek Cabins and the Singing River ranch is no longer associated with the West/Brandt Foundation.

<u>Wastewater Treatment Facility</u>	<u>Pounds per year</u>
Evergreen Metropolitan District	1,500
West Jefferson County Metro District	1,500
Genesee Water and Sanitation District	1,015
Town of Morrison	600
Kittredge Sanitation and Water District	240
Forest Hills Metropolitan District	80
Jefferson County Schools - Conifer High School	110
Conifer Center Sanitation Association	40 ¹
West/Brandt Foundation – Singing River Ranch	30
Aspen Park Metropolitan District	40 ⁴ 40 ²
Conifer Metropolitan District	40 ⁴ 40 ²
The Fort	18 ⁴ 18 ^{2, 23}
Brook Forest Inn	5
Bear Creek Development Corp. - Tiny Town	5
Jefferson County Schools – Mount Evans Outdoor Lab School	20
Davidson Lodge Bear Creek Cabins	5
Geneva Glen Camp	5
Reserve Pool	2
Total Wastewater Treatment Facility Phosphorus Wasteload (lbs. per year)	5,255

¹ [Treatment plant closed, wasteload allocation assigned to the Conifer Metropolitan District](#)

² ~~1~~ ² This wasteload allocation requires treatment to 0.5 mg/l total phosphorus.

² ~~2~~ ³ The Fort is in the Town of Morrison wastewater service area.

The Responsive Prehearing Statement of the EPA, Region 8 questions the need for a temporary modification because there is no indication of “a permit compliance problem” if the standards are enforced without a temporary modification. Additionally, EPA questions the “potential for wastewater treatment facilities in the Bear Creek Reservoir basin to achieve lower effluent limits” (e.g., 0.05 mg/l).

The Association strongly supports the need for a temporary modification because there are indications of permit compliance problems. This potential for permit compliance problems was a significant discussion point made by the Association Board throughout the review process with the Division staff. All of the discharging treatment facilities in the watershed are basing operations on the existing higher wasteload allocations for total phosphorus, which are designed to meet growth expectations of the Denver Regional Council of Governments Metro Vision Plan through the current planning horizon.. It is a great credit to these discharge facilities that they have work diligently to achieve much lower annual poundage dischargers of total phosphorus than allocated. However, the current discharge systems are not configured to consistently meet the existing discharge pounds under future growth or business use conditions. Fixing the discharging treatment facilities even at the 2008 discharge numbers could easily result in exceedances within the next five years. The Association knows Bear Creek Reservoir will not meet the proposed new standards. Consequently, without a temporary modification, the watershed will be instantly out of compliance with the proposed standards, which could result in a high priority impairment listing. This in turn could lead to an accelerated TMAP process and permit compliance problems.

There are currently only 16 permitted wastewater treatment facilities in the watershed (not 19 as EPA claims) and only two newer facilities (not 3 as EPA claims) are required to meet an effluent limit of 0.5 mg/l total phosphorus, which both discharge into groundwater exfiltration galleries. The Conifer Center Sanitation Association treatment plant is closed with wastewater treated at the Conifer Metropolitan District. The Singing River Ranch while still permitted has a plugged discharge pipe and no longer discharges. The Fort is a large septic system under going permitting as a wastewater facility. All treatment plants in the watershed are classified by the Division as minor treatment systems. Of the 15 discharging treatment facilities, three discharge into exfiltration galleries, two discharge into lagoon ponds, and three are very small package plants and the remainder surface discharge. Currently, there are only four treatment works that could consistently meet a lower total phosphorus limit of 0.2 mg/l by the addition of chemicals to the treatment train at a very high cost. Several of the smaller wastewater treatment systems have already shown difficulty meeting a 1.0 mg/l effluent limit on a long-term consistent basis. The Association can assure the Commission that imposing an effluent limit of .05 mg/l would not be achievable by eight out of the 15 discharging facilities, as constructed. An overtly restrictive effluent limit would be cost prohibitive and could result in the closure of 5 or 6 of the businesses, including the Jefferson County Mount Evans Outdoor School, Bear Creek Cabins, Geneva Glen Camp, Tiny Town, Brook Forest Inn, and the Fort Restaurant.

CERTIFICATE OF SERVICE

I do hereby certify that a true and exact copy of the Bear Creek Watershed Association Rebuttal Statement in the matter of the rulemaking hearing for consideration of the adoption of revisions to water quality standards for Bear Creek Reservoir in the Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, Regulation #38 (5 CCR 1002-38) and revisions to the Bear Creek Watershed Control Regulation, Regulation #74 (5 CCR 1002-74), was e-mailed to the following on the 29th day of April 2009:

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