# BEFORE THE COLORADO WATER QUALITY CONTROL COMMISSION Department of Public Health and Environment, State of Colorado

## RESPONSIVE PREHEARING 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 Responsive Prehearing Statement in the above referenced matter.

## I. Factual and Legal Claims.

**Association Authority.** The Association is the water quality management agency for the Bear Creek Watershed. The Association is responsible for watershed management, restoration and implementation within the context of a management agency and the Bear Creek Control Regulation (Control Regulation 74, 5 CCR 1002-74).

### **Association Summary Position.**

The Association set aside time at their monthly Technical Review Committee meetings over a one-year period to facilitate an exchange of information with the Water Quality Control Division (Division) staff during a technical review process, as requested by the Water Quality Control Commission. The Division presented summaries of technical analyses and facilitated discussions with Association members on the various potential regulatory implications. At the conclusion of the technical review in the fall of 2008, the Division developed proposed revisions to Regulation #38 and Regulation #74 and presented the following summary position of their proposed changes to the Association Board.

The Division proposed numeric standards for chlorophyll and phosphorus to replace the existing narrative standard for the reservoir. These new proposed standards would apply to the mixed layer of Bear Creek Reservoir during the summer months (July-September). The attainment frequency was expected in four of five years (i.e., one exceedance is allowable every five years on average). The Division's proposal also included two basic tasks that would involve the Association working with the Division:

 How to allocate phosphorus loads consistent with the established allowable total phosphorus load into the reservoir; and  A scope and detailed schedule jointly developed by "stakeholders" and the Division before the next triennial review of the control regulation (assumed 3 years after adoption of revised control regulation).

The Division proposed adoption of a temporary (5-year) modification to maintain existing conditions. They give two reasons to the Association for the temporary modification: 1) uncertainty regarding the underlying standards, and 2) concern about imposing an unreasonable burden on wastewater dischargers in the Bear Creek Watershed. Uncertainty about the underlying standards (type iii temporary modification) was directly a result of uncertainty about the extent to which internal release of total phosphorus could be eliminated in the reservoir in the near-term, perhaps a decade.

The Division did not present to the Association as part of the technical review process their proposed allowable load of total phosphorus for Bear Creek Reservoir. As part of the rulemaking process, the Divisions most recent proposed an allowable load of total phosphorus of 4,127 pounds per year, at the median inflow of 28,891 acre-feet per year. Exhibit 1 of the Division proposal still lists an allowable load of 3,876 pounds. The prehearing statement adjusted this allowable annual allocation to 4,127 pounds. There was no formal discussion with the Association by the Division on any of these allowable load allocations or implications to Association watershed management. The Association was give no opportunity to review the actual proposed revisions to regulations #38 and #74 before the Division presented their proposal to the Water Quality Control Commission for hearing notice. This was contrary to the expectation of the Association Board from their understanding of the review process established by the Commission. The Association Board expresses its disappointment in this lack of communication at a critical time in the rulemaking process.

Table 1 summarizes the Division proposed regulatory changes to regulations #38 and #74 as contained in the Prehearing Statement and provided to the Association on March 10, 2009. The following Association position statement is based on the proposed regulatory changes in Table 1.

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

Regulation	Proposed Regulatory Changes
Regulation No. 38	<ul> <li>Numeric standards for chlorophyll and phosphorus, replaces existing narrative standard: 10 ug/L for chlorophyll and 32 ug/L for phosphorus.</li> </ul>
	<ul> <li>Both constituents assessed as average of concentrations in the mixed layer during the summer regulatory season (July through September).</li> </ul>
	<ul> <li>One exceedance allowed in five years, on average.</li> </ul>
	<ul> <li>Temporary modification for existing conditions to expire 12/31/2014</li> </ul>
Regulation No. 74	<ul> <li>Allowable load of 4,127 lbs/y at an annual inflow of 28,891 AF/y.</li> <li>Wasteload allocations held at existing levels until basis for the allocations reviewed.</li> </ul>

The Association collected most of the water quality data set used by the Division as part of the technical review process. As such, the Association has no issue with the data quality or its scientific validity. The Association accepted the water quality issues raised by the Division in

the technical review process as valid concerns. There were no significant disputes in the scientific findings of the Division during this technical review process. Several Association Board members requested the water quality data sets used by the Division staff in the technical review process. The Division database was never provided as requested by the Association. There are a few noted differences in the database used by the WQCD staff compared with the Association record. However, the Association believes the differences are not significant enough to change the scientific interpretation of the data sets.

The Division noted in their prehearing statement:

"There is an implied acceptance of aeration as a permanent basis for treating the symptoms of algal productivity that is higher than the target specified in the narrative standard."

The Association is surprised and disappointed by this statement, which implies the Association has somehow failed to diligently address the water quality concerns in Bear Creek Reservoir. The Association has never viewed the current aeration system as a "permanent" solution. Rather it is one of the tools used by the Association to protect the quality fishery in Bear Creek Reservoir. The Association has noted the problem of elevated algal production even in years with very low nutrient input into the reservoir. The Association knows the reservoir is a relatively high use urban fishery and generally viewed by the fishing population as a good quality fishery. The Association has used the aeration system as an interim management practice while efforts were being implemented to reduce upstream loadings. The Association has been working diligently over a number of years to introduce policies and mechanisms to reduce the nutrient load reaching the reservoir. The Association believes the water data supports their supposition that management practices are reducing watershed loading.

The Association Board carefully reviewed the concept of the narrative standard for Bear Creek Reservoir. The Association assessed how well the reservoir responded to the watershed management activities of the Association over the last decade. The current Association Board members reconsidered the original position of the previous board members related to water quality goals for the reservoir and watershed. The Association supports the original goals for the reservoir that call for an improvement in the water quality of the reservoir that promotes the reservoir having a trophic condition balanced at the lower spectrum of the eutrophic state near a mesotrophic boundary condition. Further, the Association strongly supports a mixed warm/cold water fishery in the reservoir. Consequently, the Association supports the philosophy of improving the water quality conditions in the reservoir over the existing conditions. The technical review process has shown that the value of using a narrative standard for the reservoir has served its original purpose and it is time to establish other marks to measure improvements in reservoir quality. As such, the Association supports adopting numeric standards specifically for chlorophyll a and total phosphorus. The Association supports the Division proposal of assessing these constituents as an average of concentrations in the mixed layer of Bear Creek Reservoir within the central pool of the reservoir at the Association monitoring site 40 during the summer regulatory season (July1 through September 30). The Association supports the exceedance frequency of one exceedance in five years, on average. The Association assumes the exceedance frequency is calculated as a 5-year rolling average.

The Association supports the Division proposal to establish a temporary modification for existing conditions. The Division informed the Association Board that it supports a concept of a five-year temporary modification, renewable as necessary. The Association proposes that the temporary modification be established to expire on 12/31/2016. This is two additional years than shown in

Table 1 as proposed by the Division. The Association has begun discussions to address the internal loading problem, modifications to monitoring to better quantify reservoir responses and researching methods to improve water quality in the reservoir. The Association plans to be proactive in addressing the problem of internal loading and believes having an extended period for a temporary modification is important timing needed to find a solution or at least better understanding when the internal loading will cease to be a problem. The Division notes in their responsive prehearing statement:

"Despite the poor record of attainment, there is good reason to believe that change is coming and that the proposed underlying standards are appropriate. Although there is good reason to expect internal phosphorus release to dissipate, it may take a decade or two for the release to become negligible. As long as internal release exerts a strong influence on summer average phosphorus concentration, it will preclude consistent attainment of the standards."

The Association believes this statement is reasonable and that the internal loading problem will take a longer period to resolve itself than five-years. This statement also supports the Association position that a longer-term temporary modification is more appropriate.

The Division staff repeatedly assured the Association that the wasteload allocations to the point sources would not change because of the current process. The Division's proposal for Regulation #74 defines the total allowable load of phosphorus as an annual input into Bear Creek Reservoir from all sources in the watershed. The Division does state, "that existing individual source allocations will not be adjusted until the proposed activities are completed." However, the Association believes this is just a matter of semantics and that the intent of establishing a total annual phosphorus load well below the existing point source wasteload allocation of 5,255 pounds per year is forcing a drastic reduction in wasteload allocations among the wastewater dischargers within the watershed at a high cost. The Division notes their intent to keep the wastewater discharge allocations at the current levels, which are below the established allocation of 5,255 pounds. The original wasteload allocations were based on growth expectations developed by the Denver Regional Council of Governments (DRCOG), as the planning agency, for the watershed. The projected needed wasteload allocations were based on expected growth within a 2020 planning horizon. Setting the wastewater treatment facility load allocations at current conditions ignores the concept of addressing growth and development as advocated by the DRCOG Metro Vision Plan. Consequently, the re-allocation process that will greatly reduce point source allocations, assign new allocations to various nonpoint source types, including septic systems, and still establish a margin of safety in a total allowable total phosphorus allocation of 4,127 pounds will be very difficult and time consuming. The Association is very concerned about the timing of this task and wants to make sure there is adequate time available to involve all stakeholders in the watershed, DRCOG and other interested parties. The Association is concerned that the Division will drive this process without adequate stakeholder participation. The Association proposes the following statement be modified from the proposed Statement of Basis and Purpose:

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. 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 acknowledged that progress toward development of the allocations will be

contingent\_on the availability of suitable funding <u>for the Division and Association</u> to support completion of the tasks identified in section 74.3.1.B.

The Association recognizes that the proposed annual allowable load of 4,127 pounds at an annual inflow of 28,891 acre-feet per year is consistent with meeting the proposed chlorophyll and phosphorus standards. The Association will support, with reservations, the proposed allowable load. The Association will work with the Division and other vested stakeholders to develop a scope and detailed schedule for those tasks necessary to establish a total maximum annual load for the watershed before the next triennial review. The Association does not believe a TMAL can be completed before the next triennial review of the control regulation. The Association and Division could complete a TMAL by the following triennial review period. The Association supports the proposed regulatory changes to regulations #38 and #74 as summarized in Table 2.

Table 2 Proposed Association Regulatory Changes to Regulations #38 and 74.

Regulation	Proposed Regulatory Changes
Regulation No. 38	<ul> <li>Numeric standards for chlorophyll a and total phosphorus, replaces existing narrative standard: 10 ug/L for chlorophyll and 32 ug/L for total phosphorus.</li> <li>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 monitoring site 40.</li> <li>One exceedance allowed in five years, on average.</li> <li>Temporary modification for existing conditions to expire 12/31/2016</li> </ul>
Regulation No. 74	<ul> <li>Allowable load of 4,127 lbs/y at an annual inflow of 28,891 AF/y.</li> <li>Develop a scope and detailed schedule to establish a total maximum annual load for the watershed before the next triennial review.</li> <li>complete a TMAL by the following triennial review period</li> <li>Wasteload allocations held at existing levels until basis for the allocations reviewed.</li> </ul>

## II. Exhibits and Written Testimony.

The Association reserves the right to submit additional materials as part of the rebuttal process, as necessary.

### III. Witnesses.

The following manager and members of the Association may provide testimony on the appropriateness of proposed changes and rebuttal testimony as needed.

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 Bear Creek Watershed Manager
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## 2. Dave Lighthart

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## 3. Gerald Schulte

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### 4. Alan D. Searcy

Bear Creek Watershed Association Co-Chair City of Lakewood, Public Works Department 480 S. Allison Parkway Civic Center North Lakewood, CO 80226

#### 5. Pat O'Connell

Bear Creek Watershed Association Co-Chair 100 Jefferson County Parkway, Suite 3550 Golden, CO 80419-3550

### CERTIFICATE OF SERVICE

I do hereby certify that a true and exact copy of the Bear Creek Watershed Association Responsive Prehearing 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 31th day of March 2009:

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