

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

PREHEARING STATEMENT OF THE WATER QUALITY CONTROL DIVISION

**IN THE MATTER OF THE 2012 LIST OF WATER-QUALITY-LIMITED SEGMENTS
REQUIRING TOTAL MAXIMUM DAILY LOADS AND COLORADO'S
MONITORING AND EVALUATION LIST (REGULATION NO. 93)**

I. STATEMENT OF FACTUAL AND LEGAL CLAIMS

The Water Quality Control Division (“Division”), serving as staff to the Water Quality Control Commission (“Commission”), is providing information to support the Division’s proposals for the 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List.

II. WRITTEN TESTIMONY

The Division has provided written testimony in separate exhibits regarding a number of topics. A summary of the Division's position is set forth in the draft Statements of Basis, Specific Statutory Authority and Purpose contained in the hearing notice for the lists proposed by the Division (Notice Exhibit 1). Division Exhibits 1-32, 1-33, 1-34, 1-35, 1-36, 1-37, 1-38 and 1-AL of this Prehearing Statement contain the rationales for the proposed listings (2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List) on a segment-by-segment basis. Division Exhibit 2 contains the Division’s Revised Proposal and Statement of Basis and Purpose to Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List

In addition, several items have emerged during the Division’s focused attention on the details of Regulation No. 93. The Division has identified the following changes to the noticed proposal for the 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and the 2012 Monitoring and Evaluation List. These modifications to the noticed proposal do not extend beyond the scope of the notice. The modifications are listed in this Prehearing Statement and noted in Division Exhibit 2, the Division’s Revised Proposal and Statement of Basis and Purpose. Where the Division originally proposed a listing to be added to either list and has since withdrawn that proposal, the segment is noted with both a double-underline and strike out. Where the Division is proposing to refine a listing (adding another parameter or refining the portion) the change is noted with a double-underline.

The Division originally proposed priorities for all provisionally listed segments. However, on

page 35 of the 2012 Listing Methodology (Section IV) it states that provisionally listed segments will not be prioritized for TMDL development. If the Division were to follow strict interpretation of the Listing Methodology, the proposal should not reflect priorities for these segments. In spite of this provision, the Division is aware that the Listing Methodology is inconsistent with the Clean Water Act and that EPA will object if priorities are not identified. For this reason, the Division is proposing to keep these priorities in its proposal, but to change all proposed provisionally listed segments to low priorities. It is our understanding that various parties will disagree with this decision. We believe that this section of the 2014 Listing Methodology should be changed to be consistent with the Clean Water Act.

A. The Division originally proposed 51 new Aquatic Life listings for the 2012 303(d) List. These listings are based on a new assessment method and new Commission policy that was approved in 2010. Some listings have been found to be associated with an identified pollutant and listed simply as an impairment of the Aquatic Life Use alongside the pollutant identified. Those segments where a determination of an Aquatic Life impairment was found but no pollutant has yet been identified, the listings are designated as “provisional”. These new listings have generated a lot of attention and many parties in this rulemaking hearing will be providing comments to the Commission regarding the Division’s proposal.

In October 2010, the Commission adopted Policy 2010-1, Aquatic Life Use Attainment, Methodology to Determine Use Attainment for Rivers and Streams. As stated on page 1 of Policy 10-1:

This policy document provides the Colorado Water Quality Control Commission’s (“Commission”) methodology for determining whether the aquatic life use is attained in rivers and streams. The procedures detailed in this guidance rely upon direct measurement of the aquatic life use rather than on comparing existing water quality to numeric standards for individual pollutants (e.g. copper, zinc, ammonia) set to protect aquatic life.

The Commission’s approach to making aquatic life use-attainment decisions has evolved over time. The intent of this policy is to describe the cumulative result of regulatory actions taken by the Commission. It is envisioned that as the Commission gains experience and takes action on individual use-attainment decisions in the context of Regulation No. 93 “Colorado’s Section 303(d) List of Impaired Waters and Monitoring and Evaluation List” and in considering re-classification of water bodies in rulemaking hearings, this policy document will be revised to reflect those new policy decisions.

In March 2011, the Commission adopted provisions in the 2012 303(d) Listing

Methodology to address how the Aquatic Life Use will be assessed with the addition of this new policy. Policy 10-1 was developed in a stakeholder process and adopted by the Commission. Changes to the Listing Methodology were made in a stakeholder process and adopted by the Commission. The Division developed their proposal for new aquatic life listings, both provisional and non-provisional based on strict interpretation of these documents as adopted by the Commission. The Division anticipates that many of its proposed listing decisions for Aquatic Life will be called into question. It is anticipated that many policy decisions already made by the Commission and reflected in these documents will also be questioned. It was the intention of the Division to make these listing decisions consistent with the methods identified in these documents.

Methods:

Colorado’s Multi-Metric Index (MMI) Bioassessment Tool was developed to detect environmental stresses that result in the alteration of the biological community. Determining biological condition involves the steps of calculating the MMI for the appropriate biotype and comparing the MMI score to a threshold. To calculate an MMI a representative macroinvertebrate sample is collected from the appropriate habitat(s). Standardized procedures for collecting macroinvertebrates are identified in Appendix B of the Policy and include information on representative site selection and two macroinvertebrate sampling procedures. Both macroinvertebrate sampling procedures used by WQCD are semi-quantitative and are collected using a modified kick net. Field sampling is typically followed by preservation, laboratory identification and enumeration, and entry into a biological database capable of calculating the MMI.

The assessment methods as defined in Policy 10-1 identify biological thresholds as:

Biological Thresholds means numeric values or narrative expressions that describe the expected biological quality of aquatic communities in waters of a given classified aquatic life use, and are based on direct measurement of the aquatic community, its structure and functions.

Assessment:

Once MMI scores are calculated they are compared to the following biological thresholds:

Table 1. Aquatic Life Use Thresholds			
	Biotype	Attainment Threshold	Impairment Threshold
1	Transition	52	42
2	Mountains	50	42
3	Plains & Xeric	37	22

- Class 2 water bodies: When the MMI score falls within the gray zone (between the attainment and impairment thresholds discussed above) and the site is from a Class 2 stream, the stream is considered to be in support of the use.
- Class 1 water bodies: An MMI score in the gray zone for site on a Class 1 water requires examination of additional information – see Subsection 4 below.

Recognition of Class 1 / Class 2 Distinction: The Hilsenhoff Biotic Index and the Shannon Diversity Index are used as auxiliary metrics that supplement the MMI for Class 1 waters with MMI scores between the attainment and impairment thresholds. If a Class 1 site fails to meet the criteria shown in Table 2 for either auxiliary metric, the site will be considered impaired. For Class 2 waters, the premise that these “waters are not capable of sustaining a wide variety of cold or warm biota, including sensitive species” mitigates the need to further confirm attainment or impairment through use of auxiliary metrics. Accordingly, for Class 2 waters, a single threshold provides the basic determinant between attainment and impairment (see Table 1). Auxiliary metrics are not applicable to Class 2 waters.

Table 2. Auxiliary Metric Thresholds For Class 1 Waters with MMI Scores Between the Attainment and Impairment Thresholds			
Biotype		Hilsenhoff Biotic Index	Shannon Diversity Index
1	Transition	<5.4	>2.4
2	Mountains	<5.1	>3.0
3	Plains & Xeric	<7.7	>2.5

Division Interpretation of Policy 10-1 and the 2012 Listing Methodology

The Division’s proposal reflects the exact methods as defined in Policy 10-1 and the 2012 Listing Methodology. Where data was obtained outside of the period of record (before October 1, 2005), those segments were proposed for the M&E List. Where applicable, data from multiple stations that were found for a given segment that resulted in different attainment results, the Division has modified its proposal to reflect a portion of a segment. This is consistent with the practice used for portioning segments in regards to other impairments as defined in the Listing Methodology. In cases where data from multiple sampling events in the same, or comparable, locations in a segment that result in different attainment results – the Division proposed this segment (or a portion of that segment) for the M&E List. This practice is consistent with past listing decisions.

Refinement of Division proposal

Since the time of the Division's original proposal, several parties have approached the Division with additional data and concerns due to the proposed listings. Through discussions with these parties and review of additional data, the Division has revised its proposal. These revisions are listed in the section below.

B. Oversights, Errors and Corrections

1. Oversights and errors were discovered in the Notice. The Division proposes to change the following items included in Exhibit 1, Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List:

Arkansas River Basin

Fountain Creek Segment 2b (COARFO02b) Fountain Creek from Highway 47 to the Arkansas River was previously listed for selenium. The Division is proposing to remove selenium from the 303(d) List for the entire segment due to attainment of its site-specific selenium standard. The Environmental Protection Agency (EPA) sampled Fountain Creek in 2010 and the data provided to the Division supports the Division's conclusion.

Upper Arkansas Segment 5 (COARUA05) In its original proposal, S. Cottonwood Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (7/26/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

Gunnison River Basin

Lower Gunnison River Segment 2 (COGULG02) Lower Gunnison Segment 2 is currently on the 303(d) List for sulfate. Water Supply standards for sulfate are assessed using the least restrictive of table value criteria (250 mg/L) or the existing quality as of January 1, 2000 (480 mg/L). Eighty-fifth percentile sulfate concentrations of 350 mg/L were assessed against the 480 mg/L value and found to be in attainment. Therefore, the Division is proposing to remove sulfate from the 303(d) List for the entire segment due to attainment of its Water Supply Use-based standard. Consequently, the Division is also proposing to delete the low priority that corresponded to this parameter.

Lower Gunnison River Segment 3 (COGULG03) The Division originally proposed to include Eggleston Reservoir on the M&E List for total recoverable iron. However, the 85th percentile concentration for the lower layer is greater than 150% of the standard.

Section III(D)(6)(e) of the 2012 Listing Methodology states that for lakes and reservoirs where the sample size is 3 or 4 and there is overwhelming evidence of impairment, the waterbody will be placed on the 303(d) List. As such, the Division is recommending Eggleston be moved from the M&E List to the 303(d) List for Fe(Trec).

Lower Gunnison River Segment 4a (COGULG04a) The Division originally proposed to include Whitewater Creek on the M&E List for impairment of the Water Supply Use-based uranium standard. After further review of the data (n=1), qualifier data indicated quality assurance/qualitycontrol (QA/QC) issues may have been present. Consequently, the Division is proposing to remove uranium from the M&E List.

Lower Gunnison River Segment 4a (COGULG04a) The Division originally proposed to include Peach Valley Creek on the 303(d) List for total recoverable iron. After further data review, the segment is also in non-attainment of its Water Supply Use-based sulfate standard. For sulfate, Regulation 31 allows for a table value or existing water quality on January 1, 2000. Comparing current ambient water quality against the January date conditions indicates that Peach Valley Creek is not in attainment of the Water Supply Use-based standards for sulfate. However, due to only a limited data set for both parameters, Peach Valley Creek is proposed for the M&E List to collect additional data required to make an impairment determination.

Lower Gunnison River Segment 4b (COGULG04b) Juniata Reservoir was placed on the 303(d) List for fish tissue mercury in 2010. The 303(d) Listing Methodology was revised in 2012 for the assessment of mercury (Hg) in fish tissue. The newly adopted methods compare the median fish Hg for each waterbody and species to a 0.3 ppm Hg threshold. A sample size requirement of 30 fish per waterbody/species was also introduced in order to list new waterbodies for Hg Fish Tissue. Waterbodies can additionally be listed if there is a sample size of at least 10 fish and overwhelming evidence of impairment (>0.45 ppm Hg).

The Water Quality Control Division, with the assistance of the Colorado Division of Parks and Wildlife, collected a total of 40 fish from two species from Juniata Reservoir on June 26th, 2007 and August 2nd, 2011. Composite samples of fillets from smallmouth bass and walleye were analyzed by the Department of Public Health and Environment's laboratory. The median mercury level for both species was less than the 0.3 ppm attainment threshold. The sample size for the smallmouth bass dataset is sufficient, considering the new guidelines. As such, the Division is proposing to remove Juniata Reservoir from the 303(d) List for mercury fish tissue.

Lower Gunnison River Segment 7 (COGULG07) In its original proposal, the Division proposed to remove the selenium M&E listing for Ward Creek. After further review, Ward Creek should remain on the M&E List for selenium.

North Fork Gunnison River Segment 4 (COGUNF04) In its original proposal, the Division proposed to include E. Muddy Creek on the 303(d) List for selenium and total recoverable iron. Upon further review, QA/QC issues have been identified with a portion of the selenium samples, therefore the Division is recommending that selenium be moved to the M&E List.

North Fork Gunnison River Segment 5 (COGUNF05) In its original proposal, the Division proposed to include Leroux Creek on the M&E List for *E.coli*. Upon further review, Leroux Creek is in attainment of its Secondary Contact Recreation Use-based *E. coli* standard and the Division no longer proposes to add it to the M&E List.

North Fork Gunnison River Segment 6b (COGUNF06b) In its original proposal, Cottonwood Creek was included on the M&E List for total recoverable iron. Upon further review, Cottonwood Creek is also in non-attainment of its Water Supply Use-based sulfate and manganese standards. Therefore, the Division proposes to add these parameters to the M&E List.

North Fork Gunnison River Segment 6b (COGUNF06b) In its original proposal, Alum Gulch was included on the 303(d) List for total recoverable iron and sulfate. Because of the small sample size (n=4), and the magnitude of non-attainment (<150%), the Division proposes to include Fe(Trec) on the M&E List in order to gather more information and make a determination of impairment.

San Miguel River Segment 2 (COGUSM02) In its original proposal, the Howards Fork above Swamp Canyon was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (8/28/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

San Miguel River Segment 4b (COGUSM04b) In its original proposal, San Miguel Segment 4b was included on the 303(d) List for impairment of its Aquatic Life Use-based selenium standard. From the data presented for this hearing QA/QC issues have arisen regarding the selenium impairment, therefore, the Division is proposing to list the entire segment on the M & E List until more data can be gathered to determine the extent of the selenium impairment.

San Miguel River Segment 6b (COGUSM06b) In its original proposal, Marshall Creek was removed from the 303(d) List for impairment of its Aquatic Life Use-based cadmium, copper and zinc standards. The removal of copper from the list was an oversight. The ambient copper water quality exceeds the standard and is proposed for the M&E List in an effort to collect additional data since the sample size is less than ten and

does not exceed the standard by greater than 50%.

Upper Gunnison River Segment 7 (COGUUG07) In its original proposal, the portion of the Slate River below Oh-be-Joyful Creek was included on the M&E List for cadmium and the 303(d) List for impairment of its Aquatic Life Use-based zinc sculpin standard. Upon further review, the Division recommends that the M&E listing for cadmium be removed due to attainment of the standard.

Upper Gunnison River Segment 8 (COGUUG08) In its original proposal, the Slate River was included on the M&E List for lead and the 303(d) List for impairment of its Aquatic Life Use. Upon further review, the Division has decided to withdraw its recommendation for the M&E listing for lead due to attainment of the standard. Additionally, after discussions with members of the Upper Gunnison Watershed Group and review of conflicting MMI scores on the Slate River, the Division is proposing to move the Aquatic Life listing to the M&E List until more data can be gathered to determine the extent of the Aquatic Life impairment.

Upper Gunnison River Segment 16 (COGUUG16) In its original proposal, all of Upper Gunnison Segment 16 was proposed for inclusion on the M&E List for *E. coli*. The Division has revised its proposal to include only the portion, Ohio Creek, on the M&E List for *E. coli*.

Upper Gunnison River Segment 24 (COGUUG24) In its original proposal, Cochetopa Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Since the original proposal and through discussion with members of the Upper Gunnison Watershed Group, the Division has revised its proposal to include only the portion of Cochetopa Creek from the confluence with Rock Creek to the confluence with Tomichi Creek as impaired for its Aquatic Life Use.

Upper Gunnison River Segment 26 (COGUUG26) In its original proposal, the Division included the Cimarron River on the M&E List for impairment of its Aquatic Life Use-based lead standard. Upon further review and through discussion with members of the National Park Service, it was identified that the station that exceeded the lead standard was located in another segment. All other stations on that segment were in attainment of the chronic lead standard. Therefore, the Division has revised its proposal to remove the Cimarron River from the M&E List.

In addition, the Division's draft PHS included a portion of the segment, Beaver Creek for non-attainment of its Water Supply Use-based standard for manganese (N=1). Through communication with the National Park Service, additional data was submitted to the Division with regards to this site, with a resulting 85th% manganese concentration of 37.36 µg/L. Water Supply standards for manganese are assessed using the least restrictive

of table value criteria (50 µg/L) or the existing quality as of January 1, 2000 (45 µg/L), therefore data were assessed against the 50 µg/L value, and found to be in attainment. Therefore, the Division is proposing to remove Beaver Creek from the M&E List for manganese. Beaver Creek was also originally proposed for provisional listing on the 303(d) List as impaired for Aquatic Life. After further analysis of the data, it was determined that the original proposed listing was in error, and the MMI score actually increased as opposed to decreased. This segment is currently in attainment of the Aquatic Life Use and the Division is proposing to remove it from the 303(d) List.

Upper Gunnison River Segment 29a (COGUUG29a) In its original proposal, the Division provisionally listed the Lake Fork of the Gunnison River on the 303(d) List for impairment of its Aquatic Life Use. Upon further review and through discussion with members of the Upper Gunnison Watershed Group, the Division has revised its proposal to include only that portion of the Lake Fork between Cooper and Silver Creek as provisionally listed on the 303(d) List for impairment of its Aquatic Life Use. In addition, it was determined that this segment should also be included on the 303(d) List for non-attainment of its Water Supply Use-based manganese standard.

Upper Gunnison River Segment 30 (COGUUG30) In its original proposal, the Division included Henson Creek on the 303(d) List for impairment of its Aquatic Life Use-based standards for pH, copper, total recoverable iron and Water Supply Use-based standards for manganese and dissolved iron. It was also included on the M&E List for non-attainment of its chronic lead standard. The previously listed parameters of cadmium and zinc were proposed to be removed due to a TMDL that was approved in July 2010. Upon further review, it was identified that the station that exceeded these standards was incorrectly identified in this segment and was located in another segment. Therefore, the Division has revised its proposal to remove Henson Creek from the 303(d) List.

Uncompahgre River Segment 4c (COGUUN04c) In its original proposal, the Division proposed to add Upper Gunnison Segment 4c to the 303(d) List for total recoverable iron. Upon further review, it was identified that this segment also exceeded its chronic lead standard. However, due to QA/QC concerns with the lead samples, the Division has revised its proposal to include lead on the M&E List in order to gather more information and determine whether or not the segment is impaired for lead.

Uncompahgre River Segment 7 (COGUUN07) In its original proposal, the Division proposed to add Gray Copper Gulch to the 303(d) List for copper due to exceedances of the standard by greater than 150%. Upon further review, it was identified that this segment was also in non-attainment of the Aquatic Life Use-based minimum standard for pH. Since there were only four samples, however, the Division has revised its proposal to include pH on the M&E List in order to gather more information and determine

whether or not the segment is impaired for pH.

Lower Dolores River Segment 1 (COGULD01) In its original proposal, the Division included the Dolores River from Disappointment Creek to the San Miguel County line on the M&E List for impairment of its Aquatic Life Cold 1 temperature standard. Upon further review, it was identified that there was one exceedance of the temperature standard in the period of record assessed. The Division allows for a one in three year exceedance frequency, therefore, the Division has revised its proposal to remove the Dolores River from the M&E List for temperature.

Lower Dolores River Segment 3a (COGULD03a) In its original proposal, the Division included Disappointment Creek on the 303(d) List for impairment of its Aquatic Life Use-based selenium and Recreation Use-based *E. coli* standards. Upon further review, it was identified that due to the small sample size (n=2), this portion of the segment should be on the M&E List. The Division has revised its proposal to include Disappointment Creek on the M&E List for selenium and *E. coli*.

Lower Colorado River Basin

Lower Yampa Segment 22c (COLCLY22c) In its original proposal, the Division originally included in Talamantes Creek in Segment 22c. This was incorrect. In its revised proposal, the portion Talamantes Creek will be provisionally listed on the 303(d) List as impaired for its Aquatic Life Use in Lower Yampa Segment 22a, the mainstem of Vermillion Creek, including all tributaries and wetlands, from the Colorado/Wyoming border to a point just below the confluence with Talamantes Creek.

Rio Grande River Basin

Rio Grande River Segment 02 (CORGRG02) In its original proposal, South Clear Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (8/23/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

San Juan River Basin

Animas and Florida River Segment 13c (COSJAF13c) In its original proposal, Salt Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (3/28/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

La Plata River Segment 5a (COSJLP05a) In the Division's original proposal, this segment proposed to be listed based on two exceedances of the acute Aquatic Life Use-based standard for cadmium. However, when multiple result values obtained inside a 7 day period are averaged, a single exceedance within a 3 year period exists. Therefore the Division recommends that this segment be removed from the M&E List.

La Plata River Segment 6a (COSJLP06a) In its original proposal, Chicken Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Since the list was noticed, additional data has been collected (7/7/11) and submitted by Division staff, and the resulting MMI scores demonstrate attainment of the Aquatic Life Use. Therefore, the Division is proposing to remove Chicken Creek from the 303(d) List due to attainment of its Aquatic Life Use.

Los Pinos Segment 1 (COSJPN01) In its original proposal, this segment was proposed to be included on the M&E List for exceedance of the pH standard. After further review of the data, it appears that the dissolved oxygen and pH values were switched during data entry. Consequently, Lost Creek no longer exceeds the pH standard. Therefore, the Division has revised its proposal to remove Lost Creek from the M&E List based on the exceedances of the pH standard.

South Platte River Basin

Boulder Creek Segment 9 (COSPBO09) In its original proposal, Boulder Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Since the list was noticed, additional data has been submitted. According to the City of Boulder's data, the portions of Boulder Creek above 107th Street (Highway 287) and below the confluence with Coal Creek are in attainment. Therefore, the Division proposes to only list the portion of Boulder Creek from 107th Street to Coal Creek as impaired for Aquatic Life Use.

Big Thompson Segment 2 (COSPBT02) In its original proposal, the Big Thompson from Rocky Mountain National Park to the Home Supply Canal was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (11/15/04), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

Laramie River Segment 2a (COSPLA02a) In its original proposal, the Division incorrectly identified Laramie River Segment 2a as Lower South Platte Segment 2a. The Division has revised its proposal to reflect the correct segmentation.

Upper South Platte Segment 14 (COSPUS14) In its original proposal, South Platte Segment 14 was included on the 303(d) List for impairment of its Aquatic Life Use. Upon further review, the Aquatic Life guidance is only applicable to streams and rivers with a watershed area less than 2700 square miles. Since the watershed area where this sample was collected is greater than 2700 square miles, the Division has revised its proposal to remove the Aquatic Life listing for this segment from the 303(d) List.

Upper South Platte Segment 15 (COSPUS15) In its original proposal, a portion of South Platte Segment 15 was included on the M&E List for impairment of its Aquatic Life Use-based total recoverable iron standard. Upon further review and through discussions with Metro Wastewater staff, it was determined that exceedances of the total recoverable iron standard were non-representative of the lower portion of the segment; therefore the Division is proposing to remove the M&E listing for iron.

Upper South Platte Segment 17b (COSPUS17b) – Sloan’s Lake – In its original proposal, the Division inadvertently crossed out DO from the 303(d) List of parameters. This was incorrect. The Division recommends that Sloan’s Lake remain on the 303(d) List for exceedances in DO.

Upper South Platte Segment 22 (COSPUS22) – Horse Creek Reservoir – This lake was originally included in segment 22, however, it was also listed in segment COSPMS07. The latter segment is the appropriate one for Horse Creek Reservoir. Horse Creek should be removed from segment 22.

Upper South Platte Segment 23 (COSPUS23) – Barnum Lake – In its original proposal, the Division proposed to include Barnum Lake on the 303(d) List for impairment of its Recreation Use-based *E. coli* standard. Upon further review, the Division has identified that this *E. coli* impairment is incorrect. The Division is proposing to remove *E. coli* from the 303(d) listed parameters for Barnum Lake.

Upper South Platte Segment 23 (COSPUS23) – Vanderbilt Lake – In its original proposal, the Division inadvertently crossed out DO from the M&E List of parameters. This was incorrect. The Division recommends that Vanderbilt Lake be moved to the 303(d) list for exceedances of its DO standard.

Upper South Platte Segment 23 (COSPUS23) – Rocky Mountain Lake – In its original proposal, the Division crossed out pH from the M&E List of parameters for Rocky Mountain Lake. Rocky Mountain Lake is actually in Segment 17a, and it was correctly identified as impaired for pH.

Upper Colorado River Basin

Blue River Segment 17 (COUCBL17) – In its original proposal, the Division included the Blue River on the 303(d) List for impairment of its Aquatic Life Use. The Division based its original proposal on one data point collected in 2004, which indicated impairment. However, since the time of the original proposal, the U.S. Forest Service has provided additional macroinvertebrate data for five sampling sites on the Blue River. The Division has revised its proposal to include the portion of the Blue River from the outlet of Dillon Reservoir to the North Rock Creek confluence as a provisional Aquatic Life listing on the 303(d) List. Because data from the lower portion was outside of our period of record, the Division proposes to include the portion of the Blue River from the North Rock Creek confluence to the confluence with Colorado River on the M&E List. Division staff has collected data on the Blue River over the summer of 2011, but we have not yet received any of the data back. The Division anticipates that a conclusion about Aquatic Life Use attainment on the lower portion of the Blue River will be completed by the 2014 listing cycle.

Eagle River Segment 6 (COUCEA06) – Black Gore Creek - The Division based its original proposal on one data point collected in 2006. This data indicates impairment. Since the time of the original proposal, the U.S. Forest Service and the ERWSD have provided additional macroinvertebrate data for four sampling sites on National Forest System Land and one sampling site in the Town of Vail collected by the ERWSD. The more recent MMI scores from September 2010 include 1 site that indicates impairment (BGC at MM 185) and 5 sites which indicate attainment. Because there is conflicting data as to whether or not Black Gore Creek is in attainment of its Aquatic Life Use, the WQCD proposes to include this segment on the Monitoring and Evaluation List for further evaluation. The Division proposes to keep Black Gore Creek on the 303(d) List for sediment impairment.

Gore Creek - The Division based its original proposal on one data point collected in 2008 at station 12557. This data indicated impairment. Since the time of the original proposal, the U.S. Forest Service and the Eagle River Water & Sanitation District (ERWSD) have provided additional macroinvertebrate data for three sampling sites on National Forest System Land upstream from the Division's sampling site and two samples recently collected by the ERWSD at the same site that was sampled by the Division. MMI scores and other macroinvertebrate health metrics show that this segment is in attainment of its Aquatic Life Use on National Forest System Land upstream. Below the Forest Service/Town of Vail Boundary, the MMI scores for two samples collected on September 15, 2010 at immediately adjacent locations are contradictory. The samples collected by the ERWSD in 2009 and 2010 show attainment while the WQCD score from a sample collected at the same site in 2010 is below the attainment threshold. The Division therefore proposes to modify its original proposal and list only

the portion of Gore Creek from the Forest Service/Town of Vail boundary to the confluence with Black Gore Creek to the Monitoring and Evaluation List for Aquatic Life. Data from Gore Creek above the Forest Service/Town of Vail Boundary indicates attainment of the Aquatic Life Use.

Lake Creek – In its original proposal, the Division proposed to list Lake Creek for impairment of its Aquatic Life Use. Since the time of the original proposal, the U.S. Forest Service has provided additional macroinvertebrate data for sampling sites on the forks of Lake Creek on National Forest System Land and they are in attainment of their Aquatic Life Use. Therefore the Division proposes to modify our proposed listing to include just the Mainstem of Lake Creek on the 303(d) List for Aquatic Life Use impairment (Provisional).

Beaver Creek - The Division based its original proposal on one data point collected in 2008 at WQCD station 12541. This data indicates impairment. Since the time of the original proposal, the U.S. Forest Service and the ERWSD have provided additional macroinvertebrate data for two sampling sites on National Forest System Land within the Beaver Creek Ski Area upstream from the Division's sampling site, which is located at the USGS Gage near the mouth of Beaver Creek. The samples collected by the Forest Service in upper Beaver Creek show MMI scores that are above the attainment threshold. The USGS collected a sample on September 15, 2008 at the same location as the Division (near the mouth of Beaver Creek), and it shows an MMI score that is in the grey zone, but its auxiliary metrics demonstrate attainment. The Division collected a sample at the same site one week later on September 23, 2008, and it shows an MMI score that is in the grey zone, but its auxiliary metrics demonstrate non-attainment. In addition, there are indications that this sampling site may be impacted by an upstream tributary, known as Wayne Creek, that receives drainage from a golf course and other development. Because of the conflicting MMI scores for Beaver Creek at the mouth, the Division proposes to modify its original proposal and list only the portion of Beaver Creek from Wayne Creek to the mouth to the Monitoring and Evaluation List. Data from Beaver Creek above Wayne Creek indicates attainment of the Aquatic Life Use.

Red Sandstone Creek - The Division based its original proposal on one data point collected in 2008 at WQCD station 12515. This data indicates impairment. Since the time of the original proposal, the U.S. Forest Service has provided additional macroinvertebrate data for three sampling sites on National Forest System Land upstream from the Division's sampling site which is located just above the mouth of Red Sandstone Creek. The lower Forest Service sample site is located just above the Forest Service/Town of Vail boundary. These scores and other macroinvertebrate health metrics show that this segment is in attainment of Aquatic Life Use on National Forest System Land upstream from the Forest Service/Town of Vail boundary. Below the Forest Service/Town of Vail Boundary, the MMI score for the sample collected on September

24, 2008 by the WQCD is below the Aquatic Life attainment threshold. The Division therefore proposes to revise its original proposal to list all of Red Sandstone Creek to only proposing to list the lower portion from the Forest Service/Town of Vail boundary to the confluence with Gore Creek to the 303(d) List for Aquatic Life (Provisional). Data from Red Sandstone Creek above the Forest Service/Town of Vail Boundary indicates attainment of the Aquatic Life Use.

Eagle River Segment 9a (COUCEA09a) – Eagle River - The Division originally proposed listing this segment for temperature, sediment, and Aquatic Life Use impairment based primarily upon data collected for a 319 stream restoration project Measurable Results Study that covers a 1.6 mile reach located above and below the confluence of Lake Creek. As stated in the Project Implementation Plan (PIP), “The [overall] goal of the Edwards Eagle River Restoration project is to improve aquatic habitat health and function in the Edwards reach of the Eagle River by reducing fine sedimentation, decreasing overly high in-stream temperatures and increasing dissolved oxygen levels during summer months.” Following the proposed listing, the ERWSD has provided additional macroinvertebrate data for a number of sampling sites at various locations, above and below the stream restoration reach. The MMI scores for samples collected from areas at the lower end of the Measurable Results Study Reach and below the Edwards Wastewater Treatment Facility outfall show attainment of Aquatic Life Use, with the exception of one River Watch sample (Station RW-995) collected on November 30, 2009

MMI scores for samples collected at seven sites upstream from the Measurable Results Study reach by the ERWSD, the Division and River Watch in 2009 and 2010 all show attainment of Aquatic Life Use. Because the Eagle River, Segment 9a, above and below the Measurable Results Study Reach is in attainment of its Aquatic Life Use, the Division is proposing to modify its proposal by including only that portion of the segment from Berry Creek to Squaw Creek on the M&E List in order to gather more information and determine whether or not the segment is in attainment of its Aquatic Life Use.

North Platte Segment 4a (COUCNP04a) – Snyder Creek - In its original proposal, Snyder Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (8/10/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

Roaring Fork Segment 3a (COUCRF03a) – Roaring Fork - In its original proposal, the Division proposed to list the Roaring Fork River below Aspen as impaired for its Aquatic Life Use. Since its original proposal, additional data collected on the Roaring Fork River by both Riverwatch and the Water Quality Control Division were reviewed. Because all of the additional sites on the Roaring Fork were in attainment, the Division

proposes to refine the provisional Aquatic Life listing to only list the portion of the Roaring Fork from the confluence with Difficult Creek to below the Brush Creek confluence.

Cattle Creek – In its original proposal, the Division proposed to list Cattle Creek as impaired for its Aquatic Life Use. Since its original proposal, additional data has been submitted by the USFS on the upstream portion of Cattle Creek. Because this upper site on Cattle Creek was in attainment, the Division proposes to refine the provisional Aquatic Life listing to only list the portion of Cattle Creek from the source to the confluence with Iola Creek as impaired for its Aquatic Life Use.

Roaring Fork Segment 4 (COUCRF04) – Brush Creek - In its original proposal, the Division proposed to list Brush Creek for impairment of its Aquatic Life Use. Since the time of the original proposal, the U.S. Forest Service has provided additional macroinvertebrate data for sampling sites on the forks of Brush Creek on National Forest System Land and they are in attainment of their Aquatic Life Use. Therefore the Division proposes to clarify our proposed listing to include just the Mainstem of Brush Creek on the 303(d) List for Aquatic Life Use impairment.

Roaring Fork Segment 7 (COUCRF07) – South Fork Frying Pan River - In its original proposal, the Division proposed to list the South Fork of the Frying Pan River for impairment of its Aquatic Life Use based on one data point collected in September 2006 below the transbasin diversion. Since the time of the original proposal, the U.S. Forest Service has provided additional macroinvertebrate data for a sampling site located 2.7 miles downstream. The most recent sampling event from August 2010 indicates that it is in attainment of its Aquatic Life Use. Consequently, the Division proposes to modify our proposed listing to include just the portion of the South Fork Frying Pan River from the transbasin diversion to the confluence with the unnamed tributary (39.25128°N, -106.59442°W) on the 303(d) List for Aquatic Life Use impairment.

Upper Colorado Segment 7a (COUCUC07a) In its original proposal, Big Alkali Creek was included on the 303(d) List for impairment of its Aquatic Life Use. Because the sample date was outside of the assessed period of record (7/13/05), the Division is recommending this segment be placed on the M&E List for Aquatic Life in order to gather more information and make a determination of impairment.

C. Refinements in the Division Proposal

In any case where refinement to the proposal makes it appropriate to combine lines in the proposal – the Division will do so. A revised proposal and revised Statement of Basis

and Purpose will be included in Exhibit 2 of the Division's Prehearing Statement.

III. WITNESSES

1. Rebecca Anthony, Assessor Work Group Leader, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
2. Aimee Konowal, Environmental Data Unit Manager, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
3. Blake Beyea, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
4. Sarah Wheeler, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
5. Robert Hillegas, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
6. John Hranac, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
7. Sarah Johnson, Standards Unit Manager, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
9. Melynda May, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
10. Skip Feeney, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.

11. Christy Pickens, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
12. Jim Saunders, Biologist, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
13. Chris Theel, Biologist, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed.
14. Arne Sjodin, Surface Water Quality Assessor, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed
15. Curtis Hartenstine, NPS Project Coordinator, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed
16. Holly Brown, TMDL Specialist, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed
17. Phil Hegeman, TMDL Work Group Leader, Water Quality Control Division, may provide testimony on the appropriateness of proposed listings and rebuttal testimony as needed

The Division reserves the right to call any other witnesses, as needed, for purposes of rebuttal.

IV. EXHIBITS

1. Notice of Public Rulemaking Hearing (Proposed Regulation and Statement of Basis and Purpose, Regulation No. 93, Exhibit 1 of the original Notice, August 30, 2011.
- 1-32. Arkansas Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011.
- 1-33. Upper Colorado Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments

Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011.

- 1-34. San Juan Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
- 1-35. Gunnison Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
- 1-36. Rio Grande Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
- 1-37. Lower Colorado Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
- 1-38. South Platte Basin Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
- 1-AL Aquatic Life Rationale for Segments and Parameters Proposed for Inclusion in Regulation No. 93, 2012 List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads and 2012 Monitoring and Evaluation List, October 4, 2011
2. Revised Proposed Regulation and Statement of Basis and Purpose, Regulation No. 93, October 4, 2011.
3. Compact Disk of Data Files (Files available on request. Files will also be made available on the Division's FTP Site)

Water Quality Control Division
Prehearing Statement
December 2011 Regulation No. 93

Respectfully submitted this 4th day of October, 2011.

FOR THE WATER QUALITY CONTROL DIVISION



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October 4, 2011