

**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL COMMISSION**

5 CCR 1002-93

REGULATION #93

SECTION 303(d) LIST WATER-QUALITY-LIMITED SEGMENTS REQUIRING TMDLS

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EFFECTIVE: April 30, 2006

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL COMMISSION

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**REGULATION #93 SECTION 303(d) LIST WATER-QUALITY-LIMITED SEGMENTS
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93.1 Authority

These regulations are promulgated pursuant to section 25-8-101 et seq C.R.S. as amended, and in particular, 25-8-202 (1) (a), (b), (i), (2) and (6); 25-8-203 and 25-8-204.

93.2 Purpose

This regulation establishes Colorado's List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads ("TMDLs"). This list fulfills section 303(d) of the federal Clean Water Act which requires that states submit to the U.S. Environmental Protection Agency a list of those waters for which technology-based effluent limitations and other required controls are not stringent enough to implement water quality standards.

93.3 Water-Quality-Limited Segments Requiring TMDLS

WBID	Segment Description	Portion	Impairment	Priority
COAR	Arkansas River Basin			
COARFO01	Fountain Creek and tributaries above Monument Creek	all	E. coli, Se	H/L
COARFO02a	Fountain Creek, Monument Creek to Hwy 47	all	E. coli	H
COARFO02b	Fountain Creek from Hwy 47 to the Arkansas River	all	Se	L
COARFO06	Monument Creek from National Forest to Fountain Creek	all	Se	L
COARFO07a	Pikeview Reservoir, Willow Springs Ponds #1 and #2	Willow Springs Ponds #1 & #2	PCE	M
COARLA01a	Arkansas River, Fountain Creek to Colorado Canal headgate	all	Fe(trec), Se	L

WBID	Segment Description	Portion	Impairment	Priority
COARLA01b	Arkansas River, Colorado Canal headgate to John Martin Reservoir	all	Se	L
COARLA01c	Arkansas River, John Martin Reservoir to stateline	all	Se	L
COARLA04	Apishapa River, Timpas Creek, Lorencito Canyon	all	Fe(trec), Se	L
COARLA07	Purgatoire River, I-25 to Arkansas River	all	Se	L
COARLA09a	Mainstem of Adobe Creek and Gageby Creek...	all	Se	L
COARLA09c	Rule Creek, Muddy Creek, Caddoa Creek, Clay Creek, Cat Creek...	Chicosa Creek	Fe(trec), Se	L
COARMA02	Arkansas River, Pueblo Reservoir to Wildhorse Creek	all	Se	L
COARMA03	Arkansas River, Wildhorse Creek to Fountain Creek	all	Se	L
COARMA04a	Wildhorse Creek	all	Se, E. coli	L/H
COARMA05	St. Charles River and tributaries, source to CF&I diversion	all	Se	L
COARMA06	St. Charles River and tributaries, CF&I diversion to Arkansas River	all	Fe(trec), Se	L
COARMA10	Sixmile Creek	all	Fe(trec), Se	L
COARMA12	Huerfano River, from Muddy Creek to the Arkansas River	all	Se	L
COARMA13	Cucharas River, source to Walsenburg PWS diversion	all	Se, f. coliform	L/H
COARMA18a	Boggs Creek	all	Se, Zn	H
COARUA02b	Arkansas River, California Gulch to Lake Fork	all	Cd*, Zn*	H

WBID	Segment Description	Portion	Impairment	Priority
COARUA02c	Arkansas River, Lake Fork to Lake Creek	all	Zn*	H
COARUA03	Arkansas River, Lake Creek to Pueblo Reservoir	Lake Creek to Badger Creek	Zn	H
COARUA05	Arkansas River tributaries from source to Brown's Creek	Halfmoon Creek	Pb	H
COARUA07	Evans Gulch from source to Arkansas River	all	Zn	M
COARUA11	South Fork Lake Creek, source to Lake Creek	all	pH, Al, Cu*, Zn	H
COARUA12a	Chalk Ck.	below Mary Murphy Mine	Zn	M
COARUA14b	Tributaries to the Arkansas River, from Pueblo Reservoir to Colorado Canal headgate	Teller Reservoir	Hg*	H
COGU	Gunnison River Basin			
COGULG02	Gunnison River, Uncompaghre River to Colorado River	all	Se*, temperature	H/L
COGULG04a	Tributaries to Gunnison River, Crystal Reservoir to Colorado River	all	Se	H
COGULG04b	Tributaries to Gunnison River, Kannah Creek	Kannah Creek below USGS station 09152000	Se	H
COGULG09	Fruitgrowers Reservoir	all	D.O.	H
COGUNF05	Tributaries to N. Fork Gunnison River, USFS boundary to N. Fork	Leroux Creek, Jay Creek, Big Creek, Short Draw	Se*	H
COGUNF06	Tributaries to N. Fork of Gunnison River not on USFS property	Cottonwood Creek	Se	L
COGUSM03a	San Miguel River, Bridal Veil & Ingram Creek to Marshall Creek	below Idarado Mine	Zn*	H

WBID	Segment Description	Portion	Impairment	Priority
COGUSM03b	San Miguel River, Marshall Creek to S. Fork San Miguel	below Idarado Mine	Zn*	H
COGUSM06a	Ingram Creek, source to San Miguel River	all	Zn	H
COGUSM06b	Marshall Creek, source to San Miguel River	all	Zn*	H
COGUUG08	Slate River, Coal Creek to East River	all	Zn	H
COGUUG10	Oh-Be-Joyful Creek from wilderness to Slate River	all	Cd, Zn	H
COGUUG11	Coal Creek from Elk Creek to Crested Butte water supply intake, plus Elk Creek	all	Cd, Pb, Zn	H
COGUUG12	Coal Creek and tributaries from Crested Butte water supply intake to Slate River	Coal Creek	Zn	H
COGUUG31	Palmetto Gulch	all	Cd, Zn	M
COGUUN02	Uncompahgre River, source to Red Mountain Creek	all	Cu, Zn	H
COGUUN03	Uncompahgre River, Red Mountain Creek to Montrose	all	Cu, Fe(trec)	H
COGUUN04b	Uncompahgre River, La Salle Road to Confluence Park	all	Se*	H
COGUUN04c	Uncompahgre River, Confluence Park to Gunnison River	all	Se*	H
COGUUN09	Canyon Creek, Imogene Creek, Sneffles Creek	all	Zn	M
COGUUN12	Tributaries to Uncompahgre River, South Canal to Gunnison River	all	Se	H
COGUUN14	Sweitzer Lake	all	Se*	H
COLC	Lower Colorado River Basin			

WBID	Segment Description	Portion	Impairment	Priority
COLCLC03	Colorado River, Gunnison River to state line	all	Se	M
COLCLC04a	Tributaries to Colorado River, Roaring Fork to Parachute Creek except for specific segments	all	Se	M
COLCLC13a	Tributaries to Colorado River blw Parachute Creek, except named segments	Salt Creek	sediment	L
COLCLC13b	Tributaries to Colorado River from Government Highline Canal Diversion to Salt Creek	tributaries on the north side of the river	Se	M
COLCLC13c	Walker Wildlife Area Ponds	all	Se	M
COLCLC14b	Roan Creek & tribs, Clear Creek to the Colorado River	Dry Fork	Se	L
COLCWH09b	Flag Creek and Sulphur Creek	Flag Creek	Se	L
COLCWH22	Tributaries to White River, Douglas Creek to Colorado/Utah border	West Evacuation Wash, Douglas Creek	sediment	L
CORG	Rio Grande River Basin			
CORGCB06	San Luis Lake	all	D.O., NH ₃ , Fe(trec)	H
CORGCB09a	Kerber Creek above Brewery Creek and tributaries, except those in segment 8	all	Ag*, Cd*, Pb, pH	H
CORGCB09b	Kerber Creek, Brewery Creek to San Luis Creek	all	Cd*, Cu*, Zn*	H
CORGRG04	Rio Grande River, Willow Creek to Alamosa County line	Cd Willow Creek to Wagon Wheel Gap, Zn Willow Creek to Del Norte	Cd*, Zn*	H
CORGRG07	West Willow Creek from Park Regent Mine to confluence with Rio Grande	Willow Creek from confluence of E and W Willow Creek	pH	H

WBID	Segment Description	Portion	Impairment	Priority
CORGRG30	Culebra Creek, including all tributaries, lakes, and reservoirs from HWY 159 to the Colorado/New Mexico border	Sanchez Reservoir	Hg*	H
COSJ	San Juan River Basin			
COSJDO04	Dolores River, Bear Creek to Bradfield Ranch Bridge	McPhee Reservoir	Hg	H
COSJDO09	Silver Creek from Rico DW diversion to Dolores River	all	Zn	H
COSJLP04	Mancos River and tributaries above HWY 160	E. Mancos River	Cu	H
COSJLP11	Narraguinnep, Puett, and Totten Reservoir	Narraguinnep Reservoir	Hg	H
COSP	South Platte River Basin			
COSPBD01	Mainstem of Big Dry Creek, including all tributaries, lakes, reservoirs and wetlands, from the source to the confluence with the South Platte River	all	E. coli, Se	H/L
COSPBO02	Boulder Creek, Indian Peaks Wilderness to South Boulder Creek	below 13 th Street in Boulder	E. coli	H
COSPBO04a	South Boulder Creek and tributaries from source to outlet of Gross Reservoir	Gamble Gulch	Cu, Zn, pH	H
COSPBO07b	Coal Creek, HWY 36 to Boulder Creek	all	E. coli	H
COSPBO10	Boulder Creek, Coal Creek to St. Vrain Creek	all	E. coli	H
COSPBT05	Big Thompson River, I-25 to S. Platte River	all	Se, NH ₃	L
COSPBT09	Little Thompson River, Culver Ditch to Big Thompson River	all	Se, E. coli	L/H
COSPBT10	Tributaries To the Little Thompson River	Big Hollow	Se	L
COSPCH02	Cherry Creek Reservoir	all	chlorophyll a	M

WBID	Segment Description	Portion	Impairment	Priority
COSPCL02	Mainstem of Clear Creek, I-70 Bridge above Silver Plume to Argo Tunnel	mainstem	Cu*, Pb, Zn*	
COSPCL03a	Mainstem of S. Clear Creek	all	Zn	M
COSPCL03b	Leavenworth Creek	all	Pb, Zn	M
COSPCL06	West Clear Creek tributaries	Mad Creek	Zn	M
COSPCL09a	Fall River & tributaries, source to Clear Creek	Fall River	Cu	M
COSPCL09b	Trail Creek & tributaries, source to Clear Creek	all	Cd, Cu, Pb, Zn	M
COSPCL11	Clear Creek, Argo Tunnel to Farmers Highline Canal	all	Cd, Pb, Zn*	H
COSPCL13b	N. Clear Creek & tributaries, lowest water supply intake to Clear Creek	Mainstem of N. Clear Creek	Cd*, Fe(trec), Mn*, Zn*, Aquatic Life Use*	M
COSPCL14b	Clear Creek, Denver Water conduit #16 to Youngfield St	all	Aq Life Use, organic sediment	L
COSPCL15	Clear Creek, Youngfield St. to S. Platte River	all	E. coli, Aq Life Use, organic sediment	H/L
COSPCL18a	Ralston Creek and tributaries below Arvada Reservoir	Ralston Creek	E. coli	H
COSPCP12	Cache la Poudre River, Box Elder Creek to S. Platte River	all	Se	L
COSPCP12	Cache la Poudre River, Box Elder Creek to S. Platte River	below Eaton Draw	E. coli	H
COSPCP13a	All tributaries to the Cache La Poudre River, including all lakes reservoirs and wetlands, from the North Fork of the Cache La Poudre River to the confluence with the South Platte River	Fossil Creek	Se	L
COSPCP13b	Boxelder Creek from source to the Cache la Poudre River	all	Se	L
COSPCP14	Horsetooth Reservoir	all	D.O.	L

WBID	Segment Description	Portion	Impairment	Priority
COSPLS02b	Tributaries to S Platte River, Beaver Creek, Bijou Creek and Kiowa Creek	Beaver Creek	Se, E. coli	L
COSPMS03a	Tributaries to S. Platte River, Big Dry Creek to Weld/Morgan county line	Horse Creek Reservoir	pH	L
COSPMS04	Barr Lake and Milton Reservoir	all	pH	M
COSPSV04a	Left Hand Creek, source to Hwy 36	pH, Cu, Zn (Hwy 72 to James Ck); Cu blw James Ck	pH, Cu, Zn	M
COSPSV04b	James Creek, Little James Creek	Little James Creek	Cu, Pb	M
COSPSV06	Tributaries to the St Vrain River	Dry Creek	E. coli	H
COSPSV06	Tributaries to the St Vrain River	all	Se	L
COSPUS02a	Tributaries to S. Platte R, source of S. & M. Forks to Tarryall Creek	Twin Creek	sediment	L
COSPUS03	Tributaries to S.Platte River, Tarryall Creek to N.Fk.S.Platte R	Trout Creek and tributaries on USFS property	sediment*	M
COSPUS04	N. Fk. S. Platte River & Tributaries, source to S.Platte R	Hall Valley area to Geneva Ck	Cu*	H
COSPUS05b	Geneva Creek, Scott Gomer Creek to N. Fork S. Platte River	all	Cu, Zn*	H
COSPUS14	S. Platte River, Bowles Ave. to Burlington Ditch	all	E. coli*	H
COSPUS15	S. Platte River, Burlington Ditch to Big Dry Creek	Clear Creek to Fulton Canal diversion and Burlington canal headgate to MWRD.	E. coli	H
COSPUS16a	Sand Creek	all	Se, E. coli	L/H
COSPUS16c	Tributaries to S. Platte River, Chatfield Reservoir to Big Dry Creek except specific listings	East Toll Gate Creek, West Toll Gate Creek, Toll Gate Creek	Se	L

WBID	Segment Description	Portion	Impairment	Priority
COSPUS17a	Washington Park Lakes, City Park Lake, Rocky Mountain Lake, Berkley Lake	Berkley Lake	As	H
COUC	Upper Colorado River Basin			
COUCBL06	Snake River and tributaries, source to Dillon Reservoir	Snake R. mainstem, Sts. John Creek	pH, Cd*, Cu*, Pb*, Zn*	H
COUCBL07	Peru Creek, source to Snake River	all	Cd*, Cu*, Pb, Mn, Zn, pH	H
COUCBL12	Illinois Gulch and Fredonia Gulch	Illinois Gulch	Zn	M
COUCEA05	Eagle River, Belden to Gore Creek	all	Cu, Zn*	H
COUCEA06	Tributaries to Eagle River, Belden to Lake Creek, except specific segments	Black Gore Creek, adjacent to I-70	sediment	H
COUCEA07	Cross Creek, source to Eagle River except segment 1	lower portion	Zn*	H
COUCNP04	Tribs to the N Platte exc Segs 1, 5, 6, & 7	Illinois River	Fe (trec)	M
COUCNP07	Government Creek, Spring Creek	Spring Creek	D.O.	M
COUCUC07b	Muddy Creek and tribs	Alkali Slough	Fe (trec), Se	L
COUCYA13d	Dry Creek	Below Seneca sample location 8	Se	L*
COUCYA20	Tributaries to the Yampa River above Elkhead Creek within National Forest	First Creek below Second Creek, Elkhead Creek below First Creek	E. coli	H

93.5 - 93.9 Reserved

93.10 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MARCH, 2004 RULEMAKING

The provisions of C.R.S. 25-8-202(1)(a), (b) and (i), (2) and (6); 25-8-203; 25-8-204; and 25-8-401; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

BASIS AND PURPOSE

A. Introduction

This regulation establishes Colorado's List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads ("TMDLs"). This list was prepared to fulfill section 303(d) of the federal Clean Water Act ("Act") which requires that states submit to the U.S. Environmental Protection Agency ("EPA") a list of those waters for which technology-based effluent limitations and other required controls are not stringent enough to implement water quality standards.

Once listed, the State is required to prioritize these water bodies or segments (rivers, streams, lakes reservoirs) based on the severity of pollution and other factors. It will then determine the causes of the water quality problem and allocate the responsibility for controlling the pollution. This analysis is called the TMDL Process, and results in the determination of: 1) the amount of a specific pollutant that a segment can receive without exceeding a water quality standard (the TMDL), and 2) the apportionment to the different contributing sources of the pollutant loading (the allocation). The TMDL must include a margin of safety, waste load allocation (for point sources) and a load allocation (for non-point sources and natural background). The TMDL must include upstream loads in the assessment and apportionment process.

B. List Development

1. Listing Methodology

The "Section 303(d) Listing Methodology - 2004 Listing Cycle" contains a description of the listing process, the criteria for listing, and the criteria for determination of TMDL priority. The Listing Methodology was developed through a public process and finalized as a policy at a Water Quality Control Commission administrative action hearing on September 9, 2003.

This Listing Methodology sets forth the criteria that generally were used to make decisions regarding which waters to include on the 2004 Section 303(d) List and the 2004 M&E List. However, this methodology was not adopted by the Commission as a rule. The Commission therefore has the flexibility to take into account other appropriate factors in making site-specific listing decisions.

2. Information Considered

The Commission has considered all existing and readily available information in developing the 2004 Section 303(d) List. In determining whether data and information are existing and readily available, it has taken into account such data and information as the Division has utilized in the preparation of those identification processes, calculations and models referenced in 40 CFR §130.7(a)(5)(i), (ii) and (iv) and that credible data and information presented in a readily usable format and submitted in reports provided to the Division as referenced in 40 CFR §130.7(a)(5)(iii). In addition, the Commission accepted credible data and information that was submitted in accordance with the listing process schedule, whether submitted by EPA or any other interested party. The Division also continues to independently collect and analyze new data on a rotating basin basis as part of its triennial review efforts and will utilize such data and information in making future listing determinations. Existing data which was not brought forward through one of the above mechanisms or otherwise presented to the Commission in accordance with the schedule was not treated as "readily available" for purposes of making the 2004 listing decisions. Such information will be considered in the next listing cycle.

C. Prioritization

The objective of prioritization is to identify those waterbody segments where the Division and the public should concentrate their resources. Priorities of High, Medium and Low were established according to section IV. of the 2004 Section 303(d) Listing Methodology. Segments/parameters where the

Commission determined that an appropriate plan is in place to resolve the uncertainty as specified in section 93.4 have been denoted as “L*”. A Low priority may also be assigned to other segments as per section IV.

D. Discussion of Issues Raised in the Hearing

During the course of the hearing, the status of approximately 30 segments was debated. The basis for the Commission’s decisions regarding the major issues for these segments is recorded below.

1. Selenium: Several parties questioned whether selenium, where the source is underlying native shale, should be considered a pollutant. The Commission found that selenium, like many other naturally occurring metals in Colorado is a pollutant and is classified as such on EPA’s list of priority toxic pollutants (62 FR 42160). If the source of impairment is natural, that is grounds for consideration of an ambient quality-based, site-specific standard as described in Regulation No. 31 at 31.7 1(b)(ii). However, the listing decisions must be made based upon a comparison of the current adopted standard and the ambient condition for the segment. Although parties to the rulemaking submitted testimony questioning the decision to list several specific segments for selenium, such as Lower Colorado River segment 3 and Lower Arkansas River segment 1a, the evidence provided was directed largely at questioning the appropriateness of the current selenium standards. The Commission has determined, based on the evidence submitted, that these segments are not in attainment of the current selenium standards.

2. Segments where there is no new data, but following the 2004 Listing Methodology resulted in a different conclusion than in 2002: The following segments had no new data included in the assessments since the 2002 listing cycle. However, clarification and changes in the 2004 Listing Methodology resulted in the segments moving from the Monitoring and Evaluation List to the 303(d) List. The modifications that resulted in the most changes had to do with more clearly specifying that segments with small datasets where the ambient condition exceeds the standard by more than 50 percent should be listed. The following segments were affected:

Gunnison River Basin:	Lower Gunnison segment 27 Uncompahgre segment 2
Lower Colorado River Basin:	White River segment 9b

3. Segments with multiple tributaries: Issues were raised regarding what is the appropriate way to handle segments with multiple tributaries where there is evidence of impairment. The Commission found that since segments are generally treated as having consistent uses and characteristics, their impairment should be handled in a similar fashion. Unless either water quality data or other evidence has been presented that shows that the impairment is not present in the entire segment, the entire segment has been listed as impaired. “Other evidence” may include changes in geology within a segment or the confluence with a stream known to be impaired. Nevertheless, it is anticipated that before any TMDL is developed and implemented in “all tributary” segments, work will be performed to determine the causes and locations of the impairment, such that efforts and controls are not inappropriately directed towards individual tributaries that are not truly of concern, and the Section 303(d) List can be modified accordingly. Where other evidence shows that some portions are in exceedance and other portions are not, only the impaired portion needs to be listed. The following segments were listed based on this rationale:

Gunnison River Basin:	Lower Gunnison segments 4a and 4b North Fork segments 5 and 6
Lower Colorado River Basin:	Lower Colorado segment 4a

E. Segment- Specific Issues

1. San Juan Basin, Dolores River below McPhee Reservoir: Despite a recent decline in the fish population in this reach, the Commission found that there was not adequate readily available evidence to conclude that there exists an impairment of the aquatic life use due to other than extraordinary events associated with the long-term drought that has existed in southwest Colorado for several years. In view of evolving operations of McPhee Reservoir and varying (and generally declining) hydrologic conditions, the Commission is not able at this time to identify an "expected condition" upon which to base a decision of impairment. Further, even if an impairment caused by other than the extraordinary events associated with the drought were found to exist, the Commission could not conclude based on this record that the decline was due to a "pollutant" as compared to "pollution." Nevertheless, the Commission encourages cooperation by all interested parties in the implementation of habitat improvement measures that may serve to enhance the quality of the fishery in the reach. The Commission is prepared to revisit the concept of "expected condition" as it applies to this reach should that be warranted by changes in habitat condition. Certainly the achievement of goals set under the 1996 Operating Agreement for McPhee Reservoir may influence the nature of the expected condition. Finally, any evidence of impairment due to pollutants can be brought forth at the next listing hearing.
2. South Platte Basin, Clear Creek, segments 14b and 15: Available data, with specific reference to biological information on fish species collected over time and visual observations of the physical condition of the stream bed, provide an indication of "use-impairment" for Clear Creek Segments 14b and 15 relative to aquatic life. Though organic sediment appears to be a significant contributor to the impairment, the exact interaction of potentially numerous causative factors need to be further explored. No single source or cause of the impairment has been identified to date. Coors Brewing Company has voluntarily come forward with a study plan for segments 14a, 14b and 15 as part of the "pilot study" approach outlined in the section 309 study report recently submitted to the State Legislature. This pilot study would assist in defining the expected condition for these segments in view of existing hydrological/habitat conditions and in fashioning the best approach to remedying the impairment. Should Coors decide to proceed with the pilot study, the Division will identify segments 14b and 15 as "low priority" and refrain from any further TMDL implementation measures until such time as the study results are known and an appropriate approach to rectifying the identified problems is crafted in cooperation with basin stakeholders.
3. Upper Colorado Basin, Blue River segments 6 and 8 (Camp Cr, Jones Gulch, Keystone Cr, and Mozart Creek): The four identified tributaries in these two segments were proposed by the Division to be listed as impaired relative to measured pH levels. The evidence submitted raised questions regarding the representativeness of the data showing a possible standards exceedance, particularly in the absence of data regarding seasonality of pH levels for multiple years. Therefore, the Commission determined that it is more appropriate to include these specific tributaries on the Monitoring and Evaluation List at this time. Keystone Resorts has stated that it will complete a Use Attainability Analysis for Camp Creek and Jones Gulch, and that it is willing to include Keystone Creek and Mozart Creek in this analysis. The Commission believes that it is appropriate to revisit the attainment status of these segments following completion of the UAA. Depending on the results of this analysis, the adoption of site-specific seasonal pH standards is one option that can be considered. Indeed, the Commission notes that the evidence submitted to it showed that nearby snowmaking actually mitigates pH levels in the snow.
4. Uncompahgre River, segment 6b (Red Mountain Creek): The Commission does not believe that an impairment of the aquatic life use of segment 6b relative to a realistic expected condition for this segment has been shown. The Commission found that the aquatic community in segment 6a is not the appropriate expected condition for this segment. The Commission endorses the Division's proposal not to list at this time, while moving forward to investigate segment 6b and make a recommendation to the Commission regarding the attainable aquatic life use and appropriate numeric standards in the context of the next basin-wide standards and classification rulemaking proceedings. However, it is uncertain at this time whether any future remediation activities in this area will improve the aquatic life use of this segment. In the absence of

documentation that the attainable expected condition for this segment is an aquatic life use that is better than the current condition of this segment, it would be inappropriate to identify this segment as impaired.

5. Bear Creek segment 1a: This segment was proposed by the Division and by Trout Unlimited to be included on the Section 303(d) List. The evidence submitted demonstrated adverse impacts to the aquatic life use in this segment during 2002, and documented that the use had started to recover in 2003, although full recovery had not yet occurred. The evidence also demonstrated that the unusual and extreme drought conditions in 2002 were the determinative cause of the adverse impacts to aquatic life. Although there was evidence submitted indicating that ammonia concentrations or elevated temperatures may have adversely affected the aquatic life, the evidence demonstrated that these potentially harmful conditions would not have been present except for the drought. The Commission has concluded that this segment should be included on the Monitoring and Evaluation List for potential aquatic life, ammonia and temperature impairments, and that its status should be reconsidered in future updates of Regulations No. 93 and No. 94. Any evidence of impairment due to pollutants can be brought forth at the next listing hearing.
6. Lower Colorado segment 13b: This is an “all tributaries” segment that was proposed by the Division to be listed in its entirety for selenium. All of the ambient water quality data available in the record for this hearing was from tributaries on the north side of the Colorado River. In addition, there was testimony regarding significant differences in the geology on the north and south sides of the Colorado River in this area. Therefore, the Commission determined that it is appropriate that only the tributaries on the north side of this segment should be listed as impaired for selenium.
7. West Fork of Clear Creek, segment 5: The Commission found that the acute zinc standard in the West Fork of Clear Creek was exceeded more than once in three years. Because the chronic zinc standard is in attainment, and because Climax presented credible biological evidence that the aquatic life use classification is supported, the Commission determined that listing for acute zinc is not warranted in this instance. This segment is included on the Section 303(d) List as impaired for copper.
8. Middle South Platte segment 1: The Division proposed that the portion of this segment from Big Dry Creek to Highway 60 be included on the Section 303(d) List as impaired for dissolved oxygen during the months of August and September. The evidence submitted offered conflicting interpretations of what the available data for this segment show regarding attainment. Because this segment appears to be in compliance with dissolved oxygen standards based on the established convention of looking at the 15th percentile of the available data for the entire segment, the Commission determined that it is more appropriate at this time to include this segment on the Monitoring and Evaluation List for further assessment of dissolved oxygen conditions. The Commission also believes that future clarification of the appropriate methodology for assessing attainment of dissolved oxygen standards, e.g. within specific months of the year, would be helpful.

F. Plans to Resolve Uncertainty

Three parties presented plans to resolve uncertainty for segments that have temporary modifications based on uncertainty [see Regulation No. 31.7(3)(a)(iii)]. These segments will not be subject to the development of a TMDL as long as there is a plan in place that addresses the following:

- (1) There is an appropriate plan in place to remove the uncertainty;
- (2) The plan includes an implementation schedule that will resolve the uncertainty in a time frame consistent with Colorado’s timeline for the development of TMDLs; and

- (3) The plan is being implemented in accordance with its terms.

The Commission found that the following segments have adequate plans. It is the Commission's intent to revisit these plans at the next listing cycle to determine if they continue to meet the Commission's intent.

1. Fountain Creek segment 6 (Monument Creek from the National Forest boundary to Fountain Creek): The selenium water quality standard for Fountain Creek segment 6 has a temporary modification for uncertainty pursuant to section 31.7(3)(a)(iii) of the Basic Standards. The City of Colorado Springs submitted an appropriate plan to remove the uncertainty
2. Lower Arkansas segment 1a (Arkansas River from Fountain Creek to the Colorado Canal): The selenium water quality standard for Lower Arkansas segment 1a has a temporary modification for uncertainty pursuant to section 31.7(3)(a)(iii) of the Basic Standards. The City of Pueblo submitted an appropriate plan to remove the uncertainty
3. Upper Yampa segment 13d (Dry Creek): In the 2003 Upper Colorado River rulemaking hearing, the Commission adopted a temporary modification (based on uncertainty) of 60 ug/L for selenium in Dry Creek. This temporary modification was based on five WQCD samples collected in Dry Creek in 2001 and 2002 near its confluence with the Yampa River. The Commission approved Seneca Coal Company's plan to monitor Dry Creek with the objective of determining the source or sources of selenium loading, where the loading is isolated in the lower portion of Dry Creek and to determine whether the loading is due to natural or irreversible man-induced sources.

93.11 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; FEBRUARY, 2006 RULEMAKING, EFFECTIVE DATE OF APRIL 30, 2006

The provisions of C.R.S. 25-8-202(1)(a), (b) and (i), (2) and (6); 25-8-203; 25-8-204; and 25-8-401; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

BASIS AND PURPOSE

A. Introduction

This regulation updates Colorado's List of Water-Quality-Limited Segments Requiring Total Maximum Daily Loads ("TMDLs") to reflect additional water quality information available since the Regulation was promulgated in 2004. This list was prepared to fulfill section 303(d) of the federal Clean Water Act ("Act") which requires that states submit to the U.S. Environmental Protection Agency ("EPA") a list of those waters for which technology-based effluent limitations and other required controls are not stringent enough to implement water quality standards.

B. List Development

1. Listing Methodology

The "Section 303(d) Listing Methodology - 2006 Listing Cycle" contains a description of the listing process, the criteria for listing, and the criteria for determination of TMDL priority. The Listing Methodology was developed through a public process and finalized as a policy at a Water Quality Control Commission administrative action hearing on May 9, 2005.

This Listing Methodology sets forth the criteria that generally were used to make decisions regarding which waters to include on the 2006 Section 303(d) List and the 2006 M&E List. However, this methodology was not adopted by the Commission as a rule. The Commission therefore has the flexibility to take into account other appropriate factors in making site-specific listing decisions.

2. Information Considered

The Commission has considered all existing and readily available information in developing the 2006 Section 303(d) List. In determining whether data and information are existing and readily available, it has taken into account such data and information as the Division has utilized in the preparation of those identification processes, calculations and models referenced in 40 CFR §130.7(a)(5)(i), (ii) and (iv) and that credible data and information presented in a readily usable format and submitted in reports provided to the Division as referenced in 40 CFR §130.7(a)(5)(iii). In addition, the Commission accepted credible data and information that was submitted in accordance with the listing process schedule, whether submitted by EPA or any other interested party. The Division also continues to independently collect and analyze new data on a rotating basin basis as part of its triennial review efforts and will utilize such data and information in making future listing determinations. Existing data which was not brought forward through one of the above mechanisms or otherwise presented to the Commission in accordance with the schedule was not treated as "readily available" for purposes of making the 2006 listing decisions. If submitted, such information will be considered in the next listing cycle.

C. Prioritization

The objective of prioritization is to identify those waterbody segments where the Division and the public should concentrate their resources. Priorities of High, Medium and Low were established according to section IV. of the 2006 Section 303(d) Listing Methodology.

D. Temporary Modifications and Plans to Eliminate Uncertainty

Consistent with the recent changes to the Basic Standards and Methodologies for Surface Water (Regulation No. 31) and the Discharge Permit Regulations (Regulation No. 61), the Commission deleted subsection 93.4 "Plans to Eliminate Uncertainty." The Statement of Basis for the June 2005 rulemaking hearing for Regulation No. 31 states:

The Commission recognizes that portions of the temporary modification provisions adopted in this rulemaking may be inconsistent with current provisions in Regulation No. 93. The Commission intends that the provisions adopted in this rulemaking will govern until appropriate revisions will be adopted in the Regulation No. 93 in the next rulemaking hearing reviewing that regulation.

In 2004, this provision was added to Regulation No. 93 to identify those waterbodies where work independent of the TMDL process was proceeding to identify the appropriate underlying standards. In these cases, TMDLs and permit limits were not to be based on the underlying standards until the uncertainty was resolved. The intent was that dischargers should not be forced to comply with underlying standards where there is ongoing work being done to resolve acknowledged uncertainty regarding the appropriateness of those underlying standards.

Dischargers are now protected from complying with underlying standards before the uncertainty is resolved by recent changes in the Basic Standards and the Permit Regulations. Now, for discharges to waters where a temporary modification has been adopted, a permit may contain compliance schedules that recognize this ongoing work and may extend beyond the end of the permit term. The Commission believes it appropriate for dischargers to focus their available resources on addressing uncertainty with respect to appropriate water quality standards, rather than on complying with standards that may change in a short time.

Consistent with this new approach to temporary modifications, the Commission intends that a more thorough consideration will be given to the causes and sources of non-attainment before temporary modifications are proposed. In cases where the appropriate way to address non-attainment of underlying standards is through the TMDL program, not through adoption of temporary modifications, the Commission may assign a higher TMDL priority to such waters.

E. Segment- Specific Issues

Fountain Creek segment 2a: The Division had proposed inclusion of this segment due to non-attainment of the assigned E. coli standard. The Division noted that its proposal erroneously identified the listing as a "low" priority. The Section 303(d) Listing Methodology, 2006 Listing Cycle indicates that TMDLs for waters in non-support of Recreation 1a use classifications be designated as "high" priority. The Commission has therefore adopted a "high" priority designation for this segment.

Fountain Creek segment 2b: This segment is the lowermost of three that comprise the mainstem of Fountain Creek. Both of the upper two segments are included on the List of Impaired Waters for E. coli. The Sierra Club had proposed that this lowermost segment should also be listed for E. coli. The Commission has decided that the Division's analysis of the available data is consistent with the procedures contained in the Section 303(d) Listing Methodology, 2006 Listing Cycle and that the results of that analysis do not support inclusion of this segment on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs.

North Fork Gunnison River segment 6: The Division had proposed that this "all tributary" segment be listed in its entirety for non-attainment of the aquatic life use-based chronic selenium standard. The Colorado River Water Conservation District provided evidence that the standard is, in fact, attained at several locations within this segment. It is therefore appropriate that only that portion of the segment for which non-attainment has been documented be included on the list. The Commission has identified the affected portion of the segment as "Cottonwood Creek" and has revised the proposal accordingly.

Uncompahgre River segment 6b (Red Mountain Creek): The Commission had in a February 2004 Rulemaking Hearing determined that there is not adequate data to support a finding of impaired Aquatic Life Use relative to the expected condition. Information offered in the 2006 hearing further reinforces this conclusion by demonstrating that the Commission's classification assumes an extremely limited aquatic life use in this segment. In a rulemaking hearing scheduled for June 12, 2006, the Commission will consider a proposal to delete the aquatic life use classification for this segment. The Commission has therefore opted not to include Red Mountain Creek on the 2006 Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs.

Lower Gunnison segment 2: The Division proposed that this segment be listed for selenium and temperature, with a "high" priority for each. In view of evidence that it may be appropriate to reconsider the cold water aquatic life classification of this segment prior to initiating a TMDL, the Commission chose to change the priority for the temperature listing to "low".

Lower Colorado River segment 3: The Division had initially proposed listing of this segment for ammonia. During discussions with the City of Grand Junction it was noted that during the course of the Division's assessment an error had been made relative to the dataset utilized. The Division subsequently modified its proposal to withdraw this segment from its proposal. The Commission has not included the segment on the 2006 Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs.

Lower Colorado River segment 13a (Salt Creek): Salt Creek was proposed by the Division to be listed for sediment based upon a study of this and other tributary segments performed in conjunction with the BLM and Chadwick and Associates. Mesa County objected to the inclusion of Salt Creek on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs, arguing that the assessment protocols used were inconsistent with Commission Policy 98-1, the Implementation Guidance for Determining Sediment Deposition Impacts to Aquatic Life in Streams and Rivers. The assessment performed utilized the same approach embodied in the Sediment Guidance with respect to comparison of the affected reach to an expected condition. The validity of this comparative, expected condition analysis is not dependent on this being a high gradient, cobble bottom stream. The Commission has determined that the assessment adequately demonstrated non-attainment of the narrative sediment standard and consequent impairment of Salt Creek.

Bear Creek segment 1a: The Division proposed that this segment be retained on the Monitoring and Evaluation list for non-attainment of the assigned aquatic life use classification and for temperature. The evidence submitted demonstrated adverse impacts to trout populations at two stations (Bear Creek cabins and O'Fallon Park) situated in the upper reach of this segment since 2002 and documented that the use continued to recover well into 2004, although full recovery had not yet occurred. This evidence is consistent with the Commission's conclusion in 2004 that the demonstrative cause of adverse impacts to aquatic life was the extreme drought in 2002. The 2006 Listing Methodology states that "Data collected during or immediately after temporary events influencing the waterbody that are not representative of normal conditions shall typically be discounted in making the listing decision." Several parties argued that water quality conditions might have adversely affected the aquatic life. However, there was no evidence submitted demonstrating exceedance of the Mean Average Weekly Temperature criterion during 2004 or 2005, or demonstrating that impairment was otherwise caused by pollutants. The Commission has decided that the Division's interpretation of the available data is consistent with the procedures contained in the Section 303(d) Listing Methodology, 2006 Listing Cycle and has determined that this segment should be retained on the Monitoring and Evaluation List for aquatic life impairments and temperature, and that its status should be reconsidered in future updates of Regulations No. 93 and No. 94.

The fact that impacts to Bear Creek aquatic life continue to appear to be related to the 2002 extreme drought is an adequate and appropriate basis for including this segment on the Monitoring and Evaluation List, rather than the Section 303(d) List. However, the Commission also notes that, even if continuing impacts did not appear to be tied to the drought, where there is no evidence that a numerical standard has been exceeded, the Commission's practice has been to place waters on the Monitoring and Evaluation List if there is not evidence that a use impairment has been caused by a pollutant. The 2006 Listing Methodology states "Water bodies that are impaired but it is unclear whether the cause of impairment is attributable to pollutants as opposed to pollution will be placed on the M&E List." EPA's guidance for such circumstances differs. EPA's guidance says that where there is an impairment but there has not been a demonstration that the impact is not caused by a pollutant, the water segment should be included on the Section 303(d) List. Because this provision appears in EPA guidance only, and the Commission is aware of no specific provisions of the Clean Water Act or EPA regulations that would dictate this result, the Commission believes that it has policy discretion to use different approach – i.e., to refrain from listing unless a pollutant has been identified as the cause of the use impairment.

Clear Creek segment 13b (North Fork Clear Creek): The Division had proposed this segment be retained on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs for several parameters and for non-attainment of the assigned aquatic life use classification. The Commission has adopted this proposal, but notes that the segment attains the assigned numeric copper standard. The listing therefore does not include copper. Further, the Commission notes that the Division had proposed a "high" priority for completion of TMDLs for this segment, due to the fact that the North Fork of Clear Creek was included on the 1998 List of Impaired Waters and is therefore subject to provisions of the 1999 Settlement Agreement addressing TMDL development by the Division. The Commission has determined that a "medium" priority will be assigned for TMDL development, while recognizing that the Division remains obligated to completion of TMDLs for this segment by June 30, 2008. If the underlying standards are revised in the 2009 South Platte River basin rulemaking, TMDLs and/or Wasteload Allocations based on the superceded standards should be revisited.

Cache la Poudre segment 14 (Horsetooth Reservoir): The Division proposed inclusion of Horsetooth Reservoir on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs due to non-attainment of the dissolved oxygen standard. Data for a ten-year period of record was found to be representative of conditions in the Reservoir. The Commission determined that in this instance it is appropriate to consider data for more than the most recent five years, in view of evidence that the most recent five years include a potentially unrepresentative period of reservoir drawdown. While the available data do not include samples spaced throughout a 24-hour period, the data are typical of that usually available for lakes and reservoirs. If diel variation were expected, it is likely that any such data would demonstrate a slight depression of dissolved oxygen concentration in the epilimnion during non-daylight hours. However, the area of non-attainment of dissolved oxygen in Horsetooth Reservoir is in the metalimnion, or middle layer of the reservoir. Testimony from Division staff indicated that it is unlikely that

diel variation in dissolved oxygen levels would be expected in the metalimnion, since this deeper layer is unlikely to be affected by photosynthesis that occurs in the epilimnion. The Commission interprets the reference in the Listing Methodology to lake and reservoir samples representative of diel variation to apply only in those factual circumstances (e.g. dissolved oxygen in the epilimnion) where such variation would be expected.

The assessments and recommendations by the Division regarding Horsetooth Reservoir were consistent with the Section 303(d) Listing Methodology, 2006 Listing Cycle. However, the Commission notes that this hearing identified a need to provide further clarifications regarding appropriate procedures for assessing compliance with dissolved oxygen standards, particularly for lakes and reservoirs. The Commission encourages the Division to pursue such clarifications in preparation of the 2008 Listing Methodology, including, e.g., addressing variations in attainment status from year-to-year and further clarification of what constitutes representative data.

Evidence regarding the status of aquatic life in Horsetooth Reservoir does not override the fact that the data demonstrate a long term standards exceedance. The Commission's practice has been to list waterbodies on the Section 303(d) List whenever representative data demonstrate non-attainment of a numerical standard, including dissolved oxygen. For other waters listed for non-attainment of dissolved oxygen, the Commission has not required evidence of the cause of the non-attainment. Although the provisions of the 2006 Listing Methodology arguably contain potentially conflicting language on this point, the Commission's practice has not been to apply the provision regarding "water bodies that are impaired but it is unclear whether the cause of impairment is attributable to pollutants" to waters with dissolved oxygen impairments. Moreover, although the Commission was willing to consider listing Horsetooth Reservoir on the M&E List if the cause of the dissolved oxygen impairment was recent reservoir draw downs (i.e., reservoir operations), the evidence did not support this conclusion.

Middle South Platte River segment 03a (Horse Creek Reservoir): The Division proposed that Horse Creek Reservoir be included on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs due to non-attainment of the assigned pH standard. The recommendation was based upon a representative dataset including four years of water quality monitoring results. The Commission has determined that inclusion of the Reservoir on the Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs for pH is appropriate and consistent with the Section 303(d) Listing Methodology, 2006 Listing Cycle. Dissolved oxygen data for the same four-year period demonstrate attainment of the dissolved oxygen standard. Although EPA questioned the Division's current practice of averaging dissolved oxygen data within the sampling profile or profiles for a single sampling event, the Commission has determined that this practice is acceptable and appropriate, and consistent with the 2006 Listing Methodology. EPA's proposal that Horse Creek Reservoir be listed for dissolved oxygen is based upon analytical procedures that are inconsistent with the Division's current assessment practice. The Commission has determined that the Reservoir is not impaired with respect to the dissolved oxygen standard.

Upper Colorado River segment 07b (Muddy Creek): The Division had proposed the listing of Muddy Creek for non-attainment of the assigned temperature standard. The Colorado River Water Conservation District objected to the Division's proposal and has provided evidence suggesting that the USGS sampling station (data from which formed the basis for the Division's proposal) is situated such that any temperature data generated is likely not representative. The Commission has therefore included the segment on the 2006 Monitoring and Evaluation List to allow further examination of temperature data from this station.

Upper Yampa River segment 07b: This segment comprises a portion of the Yampa River mainstem. The Division had proposed that this segment be listed for temperature, again based upon USGS monitoring data. The Colorado River Water Conservation District provided evidence concerning the location of the USGS sampling station below the Steamboat Springs hot springs discharge. Again parties have agreed that such data is likely not representative of instream conditions. The Commission has placed the segment on the 2006 Monitoring and Evaluation List.

Upper Yampa River segment 20 (First Creek, Elkhead Creek): These waters are classified for Recreation Use 1a, and are assigned a numeric E coli standard of 126 org./100 mL. Ambient E. coli levels exceed the assigned numeric standard. The U. S. Forest Service has raised concerns regarding the current assigned Recreation Use and the associated numeric standards. The Commission has included the segment on the 2006 Section 303(d) List of Water-Quality-Limited Segments Requiring TMDLs based upon the current classification and standards. However, it is the intent of the Commission that these issues be examined in the context of the 2008 Upper Colorado surface water standards rulemaking prior to the initiation of the TMDL development process.

PARTIES TO THE RULEMAKING

1. The City of Grand Junction
2. The Colorado Division of Wildlife
3. Evergreen Trout Unlimited and Colorado Trout Unlimited
4. The City of Colorado Springs
5. The City of Black Hawk
6. The Colorado River Water Conservation District
7. Friends of Bear Creek
8. Big Thompson Watershed Forum
9. The Bear Creek Watershed Association
10. The Northern Colorado Water Conservancy District
11. U.S. Environmental Protection Agency, Region 8
12. Evergreen Metropolitan District and West Jefferson County Metropolitan District
13. USDA Forest Service, Medicine Bow-Routt National Forests
14. Colorado Rock Products Association
15. City and County of Broomfield
16. Climax Molybdenum Company
17. The Metro Wastewater Reclamation District
18. Mount Carbon Metropolitan District