2012 NWCCOG REGIONAL WATER QUALITY MANAGEMENT PLAN

VOLUME I - POLICY PLAN

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NWCCOG 208 PLAN INTRODUCTION

Pollution of the region's waters is a threat to public health and welfare. It may create public nuisances, be harmful to wildlife, and may impair needed uses of these waters. The citizens of the region value high quality waters and recognize the necessity of protecting their existing uses for the benefit of residents, visitors, and future generations.

The primary goal of the 208 plan is the protection of the existing water quality and designated uses of waters in the region. Chapter 2 of Volume II reveals that the two most significant water quality concerns in the region are Nonpoint Source Pollutants from Development Areas and Acid Rock Drainage.

The NWCCOG 208 plan region consists of the area within Eagle, Grand, Jackson, Pitkin, and Summit Counties. Northwest Colorado Council of Governments (“NWCCOG”) is the designated regional water quality management agency responsible for water quality planning within this region.

This NWCCOG 208 Plan is adopted pursuant to Section 208 of the Federal Clean Water Act as implemented through Colorado Water Quality Control Act.

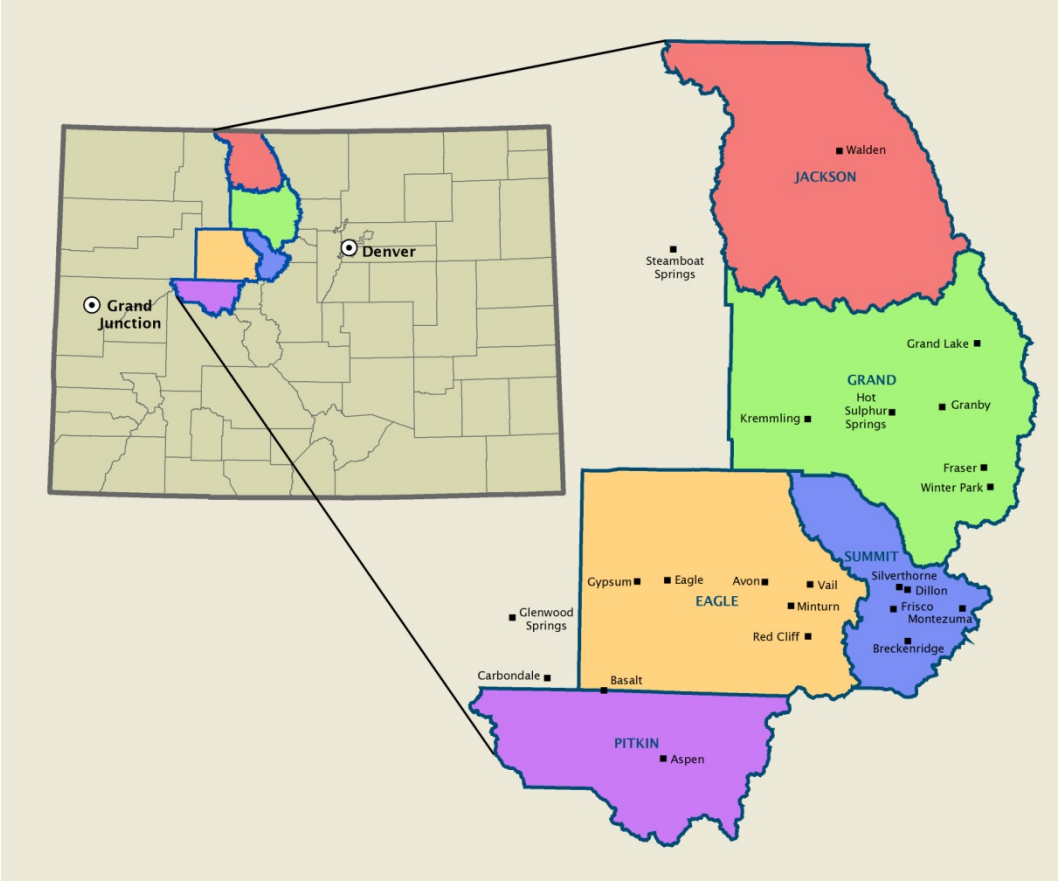
The Colorado General Assembly adopted the Colorado Water Quality Control Act:

> "to protect, maintain, and improve where necessary and reasonable, water quality for public water supplies, for protection and propagation of wildlife and aquatic life, for domestic, agricultural, industrial, and recreational uses" (CRS 25-8-102).

The purpose of Section 208 of the Federal Clean Water Act is to require plans for coordinated regional approaches to water quality management. This 2011 Regional Water Quality Management Plan, or 208 Plan, is a technical revision of the NWCCOG 208 Plan that was last approved in 2002 by Governor Owens.

This 208 Plan consists of two volumes and appendices (including a glossary). Volume I consists of the Regional Policies and describes recommendations to protect and enhance the water quality within the NWCCOG region. Volume II, which consists of the Regional Water Quality Assessment, describes existing water quality, identifies the major regional water quality issues, and presents the individual Water Quality Management Plans for each of the five watersheds within the NWCCOG region (Figure 1).

Figure 1. Northwest Colorado Council of Governments' Regional and Watershed Boundaries



HOW TO USE THIS PLAN

Volume I, the Policy Plan, consists of six policies. Policy 1 outlines NWCCOG's recommendations to the Colorado Water Quality Control Commission regarding water quality regulations. The next four policies recommend actions to minimize water quality impacts for political jurisdictions that have the authority to regulate land use and development. These jurisdictions are federal, state, and local governments. The last policy identifies entities or "Management Agencies" that are responsible for implementing the recommended actions.

Volume II, Water Quality Program Development, describes the water quality assessments that were used to develop the policies in Volume I. The Regional Water Quality Assessment is a summary of the major water quality issues identified in the region. This section is also provided to inform readers of water quality impacts from various activities and gives an overview of the existing systems which protect water quality.

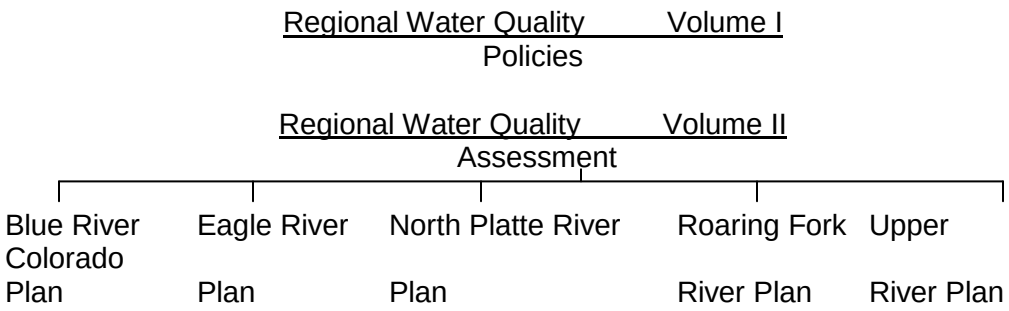
The five individual watershed plans in Volume II form the foundation of this 208 Plan. Each watershed plan has the following sections:

- A summary of the watershed characteristics and how the plan was developed;
- An summary of existing water quality data and studies;

- Identification of Point and Nonpoint Source issues and recommendations for specific water quality issues in the basin;
- A description of existing and potential water quality improvement projects (including education);
- A summary of local water quality related land use regulations;
- A summary of water quality monitoring efforts and needs;
- A discussion of watershed stream segment water quality designations, classifications, standards and recommended changes.

The flow chart below (Figure 2) illustrates the structure of this 208 Plan.

Figure 2. NWCCOG Regional Water Quality Management Plan Structure



LEGAL AND REGULATORY FRAMEWORK

In 1972, the United States Congress overrode a presidential veto to pass the Federal Water Pollution Control Act Amendments of 1972 (PL92-500), also known as the Clean Water Act. This Act has been further amended with significant changes in 1977 (PL95-217) and 1987 (PL100-4). The Clean Water Act states that the ultimate objective of the Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In beginning the process to improve water quality, Section 208 of the Clean Water Act identified a number of planning programs to be initiated at various levels of government.

To maximize efficient use of resources and provide regional coordination, Section 208 (titled "Areawide Waste Treatment Plans") of the Act established an areawide approach to planning for the abatement of pollution. It also provides criteria to design local plans based on an integrated and comprehensive planning process. In February 1976 the governor of Colorado designated NWCCOG as the areawide waste treatment management planning authority, under Section 208. NWCCOG develops and maintains the Areawide Water Quality Management Plan (208 Plan) for the NWCCOG.

The NWCCOG planning region (Region XII) includes the area within Eagle, Grand, Jackson, Pitkin, and Summit Counties and includes two river basins: the Colorado River Basin and the North Platte River Basin.

FEDERAL AND STATE LAWS AND COORDINATION FOR 208 PLANS

1. Federal Authority

The NWCCOG 208 plan is derived from Section 208 of the federal Clean Water Act. The Act was created in 1972 to empower the EPA to work with the states "to restore and maintain the chemical, physical, and biological integrity of the Nation's
Waters." The Act says, "it is the national policy that areawide treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State."

The Clean Water Act set a national policy where programs for the control of nonpoint sources of pollution need to be developed and implemented to enable the goals of the Act for the control of both point and nonpoint sources of pollution.

The purpose of Section 208 of the Clean Water Act is to encourage and facilitate the development and implementation of local waste treatment management plans. To comply with the Clean Water Act, local elected officials or other designated agencies must identify important waters (areas) that require or are affected by waste treatment management plans. This 208 plan for State water quality planning Region 12 is in compliance with Section 208 of the Clean Water Act and represents the region's water waste treatment management plan.

2. State Coordination

The Colorado Water Quality Control Commission (WQCC) has established fourteen regional water quality management areas. Of the fourteen regional water quality management areas, NWCCOG is one of four designated by the Governor as "regional water quality planning agencies" with the authority to conduct water quality planning in their respective regions.

Colorado also has developed a statewide water quality management plan (SWQMP) that sets the framework for all water quality planning. (Statewide Water Quality Management Plan Colorado Department of Public Health and Environment, Water Quality Control Division. June 1, 2011.) The SWQMP encourages use of a watershed approach to water quality prevention and restoration as an effective framework for managing water quality. Essentially, the SWQMP provides a framework for water quality and information on water quality protection and restoration. The SWQMP also catalogs point and nonpoint strategies that can be employed to mitigate water quality problems at watershed scale. The SWQMP includes plans for the seven river basins and certain sub-basins. The basin plans provide descriptive information, such as location and physical setting, ecology, climate, land ownership and land use, demographic and socioeconomic conditions, and hydrography and hydrology. The plans summarize the classified uses established within each sub-basin and basin. Finally, SWQMP basin plans provides information on total maximum daily loads (TMDLs), including the number of TMDLs to be developed and the number recently completed. Projects or strategies that have been used to address

specific water quality problems are also provided. The SWQMP is a supplement or companion document to the Colorado Continuing Planning Handbook.

The SWQMP is designed to incorporate the existing 208 plans by reference. Thus, the NWCCOG 208 plan will become a more detailed component of the SWQMP. The recommendations and actions of 208 planning and management agencies in regard to stream classifications, wasteload allocations, grant and/or loan priority information, planning reviews, and site application provide information to the WQCC to ensure that local water quality goals and objectives are considered in state and federal water quality decision making. The WQCC cannot approve a site plan request for a new or expanded wastewater treatment plant unless it is consistent with an adopted 208 plan.

USING THE 208 PLAN AND LOCAL GOVERNMENT LAND USE CONTROLS TO PROTECT WATER QUALITY.

Section 208 charts a course not only for addressing point sources of pollution, but also developing processes to control run-off sources of pollution. Implicit in the structure of § 208 is the notion that these so-called processes to control run-off implicate local government land use controls. NWCCOG regularly receives requests from member municipalities and counties to evaluate land use and development proposals for compliance with the 208 Plan. Because 208 Plans are adopted pursuant to federal law, and authorized by the State of Colorado, local regulations incorporating 208 policies are less vulnerable to preemption challenges.

The 208 Plan is implemented through a variety of land planning policies and regulations.
NWCCOG has prepared a model water quality regulation that can be adopted by local governments as they consider how to prevent water quality degradation associated with the non-point source impacts of development. This is found in Appendix 6.

1. Local Government Comprehensive Land Use Plans

Comprehensive plans establish policies to guide decision-makers during the land planning process. These plans typically articulate long-term policies to guide decisions in such areas as transportation, housing, future land use, water and sewer, and other infrastructure.

When used as a watershed management tool, a comprehensive plan can include statements of goals and objectives to address watershed management taken directly from the 208 Plan. In addition, the comprehensive plan can be used to identify critical areas for water quality protection such as open space sites, stream corridors,
drainage-ways and wetlands. In the NWCCOG region, local government comprehensive plans should and typically do incorporate the land use policies and strategies identified in the 208 plan as a means to further water quality protection.

2. Local Government Zoning Regulations

Zoning regulations can be adopted to implement 208 goals. For example, zoning regulations often address development characteristics that have a direct impact on water quality such as density, lot area coverage, and impervious surface ratios. Setbacks from streams, lakes and wetlands are frequently required by zoning ordinances to minimize sedimentation, bank erosion, and chemical pollutants from interfering with water quality.

An alternative to traditional zoning requirements is the overlay district. An overlay district can be applied to impose site-specific standards in environmentally sensitive areas. For example, portions of a watershed may be designated as an overlay district to prohibit land uses from degrading the aquatic habitat. Transfer of development rights programs can also be used to transfer permitted densities from areas critical to water quality protection. Special use permits also impose specific requirements on uses before they are allowed in a particular zoning district. Special use requirements can include a host of water quality protection techniques that must be implemented before a permit is issued.

By incorporating the 208 Plan by reference into these provisions, local governments have an additional legal rationale for these regulatory mechanisms.

3. Subdivision Controls

Another way to protect water quality at the local level is through subdivision design standards. Water quality impacts can be minimized by erosion and sedimentation control requirements, stormwater management systems, drainage design standards, landscaping specifications and construction management practices. To the extent polluted run-off from a subdivision cannot be avoided, developers-should be required to mitigate the impacts of increased polluted run-off through some other project.

Snow storage requirements can be implemented to ensure that snowmelt does not result in a direct discharge to waterbodies. Subdivision site design standards can prevent direct stormwater discharge to water bodies by requiring urban runoff to first pass over vegetated, undisturbed land. Site design standards can prohibit major modifications of stream channels, wetlands or lake shorelines. The design of the subdivision itself can affect water quality by encouraging clustering of dwelling units and protecting recharge areas, wetlands, and steep slopes to be left free from development.

Subdivision standards can include the requirement that subdivisions be designed and constructed to comply with the 208 Plan.

4. “1041” Regulations.

The NWCCOG Region has experienced great success addressing water quality impacts associated with transmountain diversions by using powers granted to

local governments under the Areas and Activities of State Interest Act, otherwise known as 1041 Regulations. (See C.R.S. 24-65.1-101). Most of the areas 1041 Regulations include a provision that requires the applicant for a 1041 permit to comply with the NWCCOG 208 Plan. These 1041 Regulations have survived a variety of legal attacks over the years and remain an excellent tool for regulating the environmental impacts of water diversion projects, and projects located on federal lands.

NWCCOG 208 Plan Policy Summary

Policy 1. Protect and Enhance Water Quality

The surface and ground waters of the region shall be protected to minimize degradation of existing water quality and maintain existing and designated uses of those waters; waters not currently supporting designated uses shall be restored as soon as is financially and technically feasible.

Policy 2. Water Use and Development

The project developer shall mitigate the impacts to water quality and the aquatic environment caused by water projects.

Policy 3. Land Use and Disturbance

Water quality, including wetlands, floodplains, shorelines and riparian areas, must be protected from land use and development so that significant degradation of water quality is prevented.

Policy 4. Domestic, Municipal, and Industrial Water and Wastewater Treatment Facilities

Decisions to locate water supplies, wastewater treatment systems, and other water and wastewater facilities shall be made in a manner which protects water quality and the aquatic environment. Where growth and development requires the need for additional facility capacity, existing facilities should be expanded instead of developing new facilities, unless expansion is not feasible because of technical, legal or political reasons.

Policy 5. Chemical Management

The uses of pesticides, fertilizers, algaecides, road deicing and friction materials, and other chemicals which would temporarily or permanently cause a significant degradation of water quality or impair the current or designated uses of these waters should be regulated to the extent allowed by law in a manner that minimizes potential for degradation of water quality.

Policy 6. Management System

Management agencies are designated to best reflect their legal and jurisdictional authorities.

The waters of the region shall be protected by a management agency structure within the existing governmental and regulatory framework that allows decisions to be made at the most appropriate level of control. For nonpoint source pollution control the recommended level of management is at the watershed level. Table 2 identifies the recommended management agency structure.

Policy 1. Protect and Enhance Water Quality

The surface and ground waters of the region shall be protected to minimize degradation of existing water quality and maintain existing and designated uses of those waters; waters not currently supporting designated uses shall be restored as soon as possible.

Implementation Recommendations

1.1 Meet Existing Water Quality Standards:

The WQCD has divided the surface waters of this region into stream segments, assigned designations, classifications, and set water quality standards. The five watershed plans in Volume II identify the existing designations, classified uses, and water quality standards in each of the watersheds. These designations, classifications, and standards are incorporated by reference and should be met though actions of designated management agencies, as identified in Policy 6. NWCCOG will advocate implementation of the State's antidegradation provision in addition, and the protection of high quality waters.

1.2 Recommend Revisions to Water Quality Standards and Classifications:

Existing water body designations, classifications, and standards are documented in Section 8.1 of the watershed water quality plans. These designations, classifications and water quality standards should be met through all actions of designated management agencies.

NWCCOG recommends a water quality standard for Grand Lake that represents an attainable level of clarity.

NWCCOG, after consultation with designated management agencies, will recommend selected revisions to these standards at triennial reviews and rule making hearings scheduled by the Commission.

1.2.1 Streams which should be Investigated for Outstanding Waters Designation in Region XII

NWCCOG does not currently recommend any additional waterbodies to the list of "Outstanding Waters" designation.

1.2.2 Use-Protected Waters in Region XII

Stream segments currently designated "Use-Protected" (discharges in these segments are not subject to antidegradation review) are listed in the appropriate watershed plans.

NWCCOG does not recommend any new segments for designation as "Use Protected" as of 2011.

1.2.3 Changes to Temporary Modifications in Region XII

Existing stream segments with temporary modifications are identified in the appropriate watershed plans in Volume II.

NWCCOG does not recommend any new temporary modifications as of 2011.

1.2.4 Designated Uses Recommendations in Region XII

Designated Uses are defined as: domestic water supply, agriculture, recreation, and the preservation of aquatic life. No changes in designated uses are recommended to the stream segments in Region XII.

1.2.5 Limited Water Quality – Polluted waters in Region XII

The WQCD prepares a 303(d) list that identifies waters "Not Supporting" classified uses because of water pollution. The use may be present, but at a significantly reduced level from full support in all or some portion of the waterbody. The list can be found at: http://www.cdphe.state.co.us/regulations/wqccregs/93_2012(03).pdf

The existing "Not Supporting" identified segments are listed in the appropriate watershed water quality plan in the Water Quality Standards section of Volume II. These segments are reflected in the State's April 30, 2012 303(d) list as impaired waters and may be segments where the WQCD has completed but not yet implemented a Total Maximum Daily Load (TMDL) analysis.

The following is a summary of the "Not Supporting" segments in the NWCCOG 208 region, including those where a TMDL has been completed but the water quality issue has not been corrected**:**

Blue River

- Segment 2a – Mainstem of the Blue River from the confluence with French Gulch to a point one half mile below Summit County Road 3 for Manganese (Water Supply use).

- Segment 6 - Snake River source to Dillon Reservoir for zinc, cadmium, copper, lead. (TMDL approved in 2008)

- Segment 7 - Peru Creek source to Snake River confluence for zinc, cadmium, copper, lead. (TMDL approved in 2008)

- Segment 12 Illinois Gulch for cadmium (TMDL completed in)

- Segment 18 Straight Creek source to Blue River confluence – sediment (TMDL approved in 2000).

Eagle River:

- Segment 5c – Eagle River from Martin Creek to Gore Creek confluence for cadmium.

- Segments 5a/5b/5c – Eagle River for copper and zinc (TMDL out for public review)

- Segment 6 - Black Gore Creek adjacent to I-70 for sediment.

- Segment 6 – Mainstem of Lake Creek from below the confluence with East and West Lake Creek to the mouth for Aquatic Life (provisional) concerns

- Segment 6 – Red Sandstone Creek from north side of I-70 Frontage Road to confluence with Gore Creek for Aquatic Life (provisional) concerns

- Segment 7b - Cross Creek for copper and zinc (TMDL out for public review)

- Segment 9a – Mainstem of Eagle River from Ute Creek to confluence with Rube Creek for temperature

- Segment 9a – Eagle River from confluence with Berry Creek to confluence with Squaw Creek for sediment

Roaring Fork River:

- Segment 3a – West Sopris Creek for Aquatic Life (provisional) concerns

- Segment 3a – Roaring Fork River from confluence with Hunter Creek to below Brush Creek confluence for Aquatic Life (provisional) concerns

- Segment 4 – Mainstem of Brush Creek for Aquatic Life (provisional) concerns

- Segment 7 – South Fork Frying Pan River from transbasin diversion to confluence with unnamed tributary (39.25128 N – 106.59442 W) for Aquatic Life (provisional) concerns

Upper Colorado River:

- Segment 2 – Willow Creek Reservoir for Manganese

- Segment 3 – Colorado River mainstem from CR 578 bridge to just above the Blue River confluence for temperature.

- Segment 7a – Alkali Slough for total recoverable iron and selenium

- Segment 7b – Muddy Creek from Cow Gulch to the Colorado River for temperature

- Segment 10a Fraser River and Vasquez Creek for Aquatic Life (provisional) concerns

- Segment 10a– Ranch Creek for temperature.

- Segment 10c – Mainstem of the Fraser River from Hammond Ditch to the Colorado River for temperature

- Segment 12 – Shadow Mountain Reservoir for DO

- Segment 12 – Lake Granby for Aquatic Life Use (Mercury in fish tissue).

North Platte:

- Segment 4b - Illinois River for total recoverable iron

- Segment 7b – Spring Creek for DO

- Segment 9 – Lake John for DO

1.2.7 Monitoring and Evaluation Recommendations in Region XII for 2012 303(d) List

The WQCD lists segments where the data is insufficient to determine whether the classified use is being supported. NWCCOG supports this list, which is summarized below for segments in the NWCCOG 208 region.

The Northwest Colorado Council of Governments recommends that several segments in the region be added to the State of Colorado's 303(d) list for monitoring and evaluation as follows:

Blue River Watershed:

- Segment 4a – Gold Run Gulch below Jessie Mine for Cadmium and Zinc.

- Segment 17 – Blue River from outlet of Dillon Reservoir to N. Fork Rock Creek confluence for Aquatic Life concerns

- Segment 20 - Spruce Creek for total recoverable iron.

Eagle River Watershed

- Segment 6 - Black Gore Creek adjacent to I-70 for Aquatic Life concerns
- Segment 6 - Beaver Creek from confluence with Wayne Creek to mouth for Aquatic Life concerns
- Segment 6 – Red Sandstone Creek from USFS Boundary to north side I-70 Frontage Road for Aquatic Life concerns
- Segment 9a – Eagle River from Berry Creek to confluence with Ute Creek for temperature.
- Segment 9a - Eagle River from Berry Creek to confluence with Squaw Creek for Aquatic Life concerns
- Segment 9a - Eagle River from Gore Creek to confluence with Berry Creek, and from Squaw Creek confluence with Rube Creek for sediment.
- Segment 10a - Eby Creek for selenium

Upper Colorado Watershed:

- Segment 3 – Colorado River from the outlet of Windy Gap Reservoir to 578 Road Bridge for Aquatic Life Use concerns
- Segment 6b – Mainstem of unnamed tributary from the headwaters to Willow Creek Reservoir road for DO
- Segment 7a – Muddy Creek and tributaries for temperature
- Segment 7b – Muddy Creek from Wolford Mountain Reservoir to Cow Gulch for temperature
- Segment 10c - Fraser River from Town of Fraser to the confluence with the Colorado River for copper.
- Segment 10c – Fraser River from Town of Tabernash to the Town of Granby for lead.

Roaring Fork Watershed:

- Segment 3a – Capital Creek for selenium
- Segment 3b - Landis Creek portion for total recoverable iron.

- Segment 10 - Thompson Creek for total recoverable iron

North Platte :

- Segment 1 - South Fork Big Creek for Copper and E. coli
- Segment 4a - Canadian River portion for dissolved iron and E. coli
- Segment 4a - Grizzly Creek and Little Grizzly Creek for Aquatic Life concerns
- Segment 4a - Little Grizzly Creek for E. coli and total recoverable iron
- Segment 4a - Lake Creek for pH and total recoverable iron.
- Segment 4a – Big Creek Reservoir for Aquatic Life Use (mercury in fish tissue)
- Segment 9 - Lake John and North Delany Lake for pH

1.3. Implement Local Governmental Land Use Controls to Address Nonpoint sources.

1.3.1 Counties and municipalities should continue to adopt and enforce land use regulations designed to address water quality impacts associated with land use activities

1.3.2 NWCCOG should assist counties and municipalities to implement the NWCCOG Model Water Quality Regulations through their individual land use codes. The priority areas for implementation are Grand, Summit and Eagle Counties

1.3.3 Municipalities should adopt watershed protection regulations to protect the area located upstream of their intake point for municipal water supply pursuant to CRS 31-15-707(1)(b).

1.4 Implement Water Quality Improvement Projects

NWCCOG will facilitate activities of designated management agencies and other interested parties to implement voluntary water quality improvement projects.

The Regional Priorities for projects and project funding is based on the regional priorities listed in Volume II and include::

Nonpoint Source Pollutants from Development Areas
Acid Rock Drainage
Hydrologic Modifications From Water Projects

Large Area Soil Disturbance Activities
Roadways and Pavements
Point Source Discharges From Developed Areas

Of these, the two most significant water quality priorities in the region are Nonpoint Source Pollutants from Development Areas and Acid Rock Drainage. NWCCOG recommends that projects addressing Acid Rock Drainage and Nonpoint Source Pollutants from Development Areas receive the highest priority for grant funding and direction of personnel activity.

Nonpoint Source Pollutants from Development Areas:

Areas of focus should include: Urbanized areas in the Fraser River, Blue River, Gore and Eagle River, and Roaring Fork River

Pollutants of interest include: Nutrients and Sediment. A subset of this area of focus is related to groundwater impacts in development areas and includes impacts from septic systems and urban activities.

Acid Rock Drainage

Areas of focus should include: Snake River Watershed, French Gulch, Eagle River in the Belden area and should include consideration of mine portals and dumps in addition to naturally occurring acid rock drainage.

Chapter 4 in each of the watershed plans identifies watershed-specific projects that NWCCOG supports.

Policy 2. Water Use and Development

The project developer shall mitigate the impacts to water quality and the aquatic environment caused by water supply projects.

Implementation Recommendations

2.1 Local Governments

Local governments, through their regulations, should require mitigation of impacts to water quality and the aquatic environment caused by water diversion projects.

2.2 NWCCOG Review

NWCCOG will review and comment on proposed federal permits to ensure that water quality mitigation is required to the extent allowed by law.

2.3 Instream Flows

NWCCOG will support efforts by local water user groups and water quality management agencies to preserve stream flows by requesting the Colorado Water Conservation Board establish instream flows. NWCCOG will also work with local governments to identify Recreational In-Channel Diversions to provide recreational amenities for local communities.

2.4 Joint water quality data development

NWCCOG will initiate efforts to jointly develop water quality and quantity data with operators of trans-mountain diversion projects so that those projects can be operated to avoid increases in wastewater treatment costs and to minimize adverse impacts to waterbodies within the Region.

2.5 Improving Water Use Efficiency

NWCCOG supports efforts to improve water use efficiency such as conjunctive use agreements, water banking, water metering, potable and non-potable reuse, landscaping requirements and conservation.

2.6 Stream Restoration Projects

NWCCOG will facilitate public/private cooperative efforts to implement stream restoration projects that address the adverse impacts of hydrologic modifications (specific recommendations are listed in the individual watershed water quality management plans in the Watershed Improvement Projects Section).

2.7 Address Impacts Outside of Project Location

Local governments should require applicants for permits seeking to construct

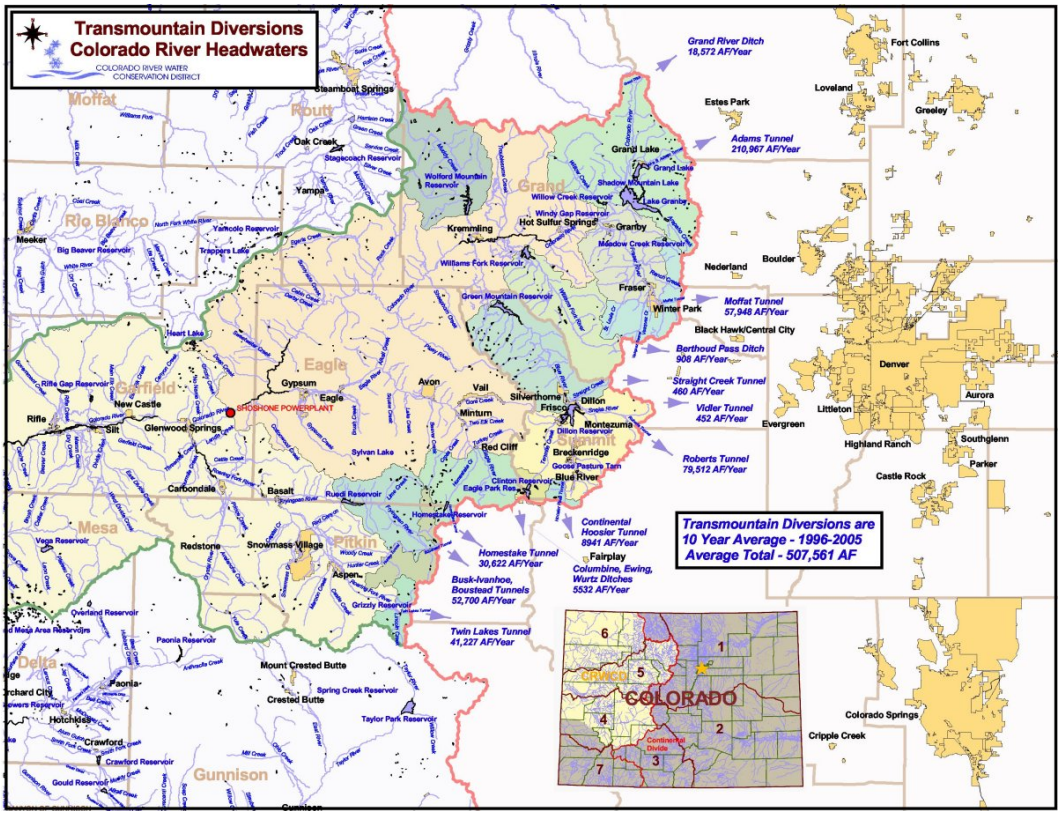
major water projects to address impacts to water quality in affected areas outside of the project location.

2.8 Water Conservation and Recycling

Plans for new water projects should include water conservation programs and maximize recycling and reuse to minimize demand for new water supply.

2.9 Trans-mountain Diversions

Denver Water will not acquire new water rights or develop new trans-mountain diversions from the region unless agreed to by the county of origin per the Colorado River Cooperative Agreement (.http://www.crwcd.org/media/uploads/Summary_Briefing_FINAL.pdf)



Policy 3. Land Use and Disturbance

Water quality, including wetlands, floodplains, shorelines and riparian areas, must be protected from impacts of land use and development so that significant degradation of water quality is prevented.

Implementation Recommendations

3.1 NWCCOG Water Quality Regulations

Local governments should amend their land use codes to adopt the NWCCOG Water Quality Regulations (Appendix 10) or other regulations that require: building setbacks from waterbodies, erosion control, post-construction stormwater detention, snow storage and melt criteria, and related techniques to prevent degradation of water quality associated with building and development.

3.2 Agricultural BMP

NWCCOG and local governments should encourage the agricultural community to implement voluntary Best Management Practices (BMPs) for agricultural activities to minimize adverse impacts to water quality from these activities. Examples of BMPs can be found in Appendix 11.

3.3 Protecting Water Resources

Developers should protect streams, floodplains, wetlands, riparian areas, and reservoir shorelines through conservation easements, land exchanges, transfer of development rights, setbacks, or similar resource protection techniques.

3.4 Maintaining Hydrological Characteristics

Developers should maintain the hydrological characteristics of the development site similar to pre-development conditions. Drainage plans should be designed and implemented, including calculation of storm runoff volumes and velocities (before and after development), using accepted hydrologic calculation procedures,

3.5 Minimizing impervious surfaces

Development should minimize impervious surfaces and break up large connected impervious areas utilizing techniques such as those outlined by EPA: http://www.epa.gov/owow/NPS/lid/

3.6 Stormwater discharges

Stormwater discharges should not result in any significant increase in total pollutant loads and should not result in the direct discharge of stormwater to a waterbody or drainage way. Efforts should be taken to practice “green infrastructure” , see:

http://www.asla.org/uploadedFiles/CMS/Government_Affairs/Federal_Government_Affairs/Banking%20on%20Green%20HighRes.pdf

3.8 Golf Courses

Design, construction, operation, and maintenance of golf courses should follow "Guidance for Water Quality Enhancement at Golf courses through the Use of Best Management Practices" prepare for the Colorado Nonpoint Source Council, December, 1996 (Appendix 11).

3.9 Mountain Driveways

Design and maintenance of mountain driveways should follow "Mountain Driveway Best Management Practices", prepared for the Colorado Nonpoint Source Task Force, June 1999 (Appendix 11).

Policy 4. Domestic, Municipal, and Industrial Water and Wastewater Treatment Facilities

Decisions to locate water supplies, wastewater treatment systems, and other water and wastewater facilities shall be made in a manner that protects water quality and the aquatic environment. Where growth and development requires the need for additional facility capacity, existing facilities should be expanded instead of developing new facilities, unless expansion is not feasible because of technical, legal or political reasons.

Implementation Recommendations

4.1 Review of Water Projects

NWCCOG will review site applications for wastewater treatment plants, and permit applications for municipal and industrial water treatment facilities for consistency with this plan and forward comments to the affected local government, and to appropriate state and federal agencies.

4.2 Minimizing Nonpoint Source Pollution

NWCCOG and appropriate watershed management agencies will coordinate efforts to minimize nonpoint source pollution so that point source dischargers do not bear a disproportionate share of water quality protection costs.

4.3 Pollutant Trading

NWCCOG will recommend that the WQCD evaluate the effectiveness of pollutant trading opportunities during facility planning and drafting of Colorado Discharge Permits (CDPS).

4.4 Consolidating Wastewater Treatment Plants

To avoid proliferation of wastewater treatment plants and operating agencies, consolidation should be required wherever possible.

4.5 Private Wastewater Operators

The ownership and management of wastewater treatment facilities by homeowner associations or private wastewater operators should be avoided whenever possible.

4.6 Biosolids

Counties should consider requiring re-use of biosolids as an alternative to allowing landfill disposal of biosolids.

4.7 New Water Treatment Facilities

The design of new and upgraded water treatment facilities should include energy

efficiency techniques such as heat exchangers or solar powered pumps, see: http://www.epa.gov/region9/waterinfrastructure/technology.html

4.8 Septage Disposal

Disposal plans for septage from onsite wastewater systems and recreational vehicles should be required when local governments approve such systems. Local governments should require regular inspections of septic systems, and inspection upon sale of homes served by such systems.

4.9 Water Provider Forums

NWCCOG will facilitate watershed-based water and wastewater provider forums to discuss Total Maximum Daily Loads (TMDLs), waste load allocation and management, and information sharing. Existing examples include the Summit Water Quality Committee and the East Grand Water Quality Board.

Policy 5. Chemical Management

The application of pesticides, fertilizers, algaecides, road deicing and friction materials, and other chemicals should not cause significant degradation of water quality or impair the current or designated uses of these waters.

Implementation Recommendations

5.1 Chemical Use Reduction Plans

Local governments should require chemical use reduction plans for new industrial and commercial land uses. These plans should reflect integrated approaches to pest control and detailed soil testing and plant analyses. Appropriate management agencies will encourage education efforts in cooperation with the Natural Resources Conservation Service and State Extension Service to inform the public and other users of fertilizers and pesticides concerning the appropriate use and alternatives to the use of these materials in order to minimize water quality impacts.

5.2 Road Deicing and Sanding

NWCCOG and county governments will provide these recommendations to state and federal agencies for road maintenance and deicing:

5.2.1 Sanding materials and chemical application rates should be the minimum necessary to obtain safe and efficient operation of streets, roads, and highways.

5.2.2 Salt and other chemicals should be applied only when removal of snow and ice cannot be accomplished by blading, plowing or sanding.

5.2.3 Minimize use of sand and chemicals in and adjacent to environmentally sensitive areas such as streams, lakes, ponds, wetlands, potential aquifers, and flood prone areas.

5.2.4 Chemically treated or sanded snow and ice should not be dumped, plowed or stored where melt can flow directly into surface waters.

5.2.5 Discharges from snow storage areas to waterbodies require a Colorado Discharge Permit.

5.3 Storage, Handling and Use of Hazardous Substances

Local governments should enact regulations to require that storage**,** handling, and use of hazardous substances be conducted in accordance with the following general guidelines:

5.3.1 All materials should be kept in appropriate containers and/or under cover, protected from precipitation and stormwater flows and in

compliance with state and federal hazardous waste and management laws.

5.3.2 All storage areas should be kept clean of spilled material.

5.3.3 Handling and moving of materials should be minimized.

5.3.4 Hazardous substances should not be stored on potential aquifer recharge areas, unstable slopes, flood prone and other geologic hazard areas.

5.3.5 Fracking materials used for oil and gas development should be disclosed to local governments for emergency preparedness.

5.4 Transportation of Hazardous Substances

Transportation of large amounts of hazardous substances should be tracked and monitored throughout the region by the local fire departments or designated emergency response provider.

5.5 Source Water Protection Programs

Local governments should implement source water protection programs (see: http://www.cdphe.state.co.us/wq/sw/swaphom.html).

5.6 Management of Hazardous Household Wastes

Local governments and solid waste disposal facilities should encourage responsible management of hazardous household wastes (oil, paint, acids, pesticides, etc.) through public education outreach.

POLICY 6. Management System

Management agencies are designated to best reflect their legal and jurisdictional authorities.

The waters of the region should be protected by a management agency structure within the existing governmental and regulatory framework that allows decisions to be made at the most appropriate level of control. The watershed level is the recommended level for management of nonpoint source pollution control. Table 2 identifies the recommended management agency structure.

Background

The federal Clean Water Act requires the governor of each state to designate management agencies responsible for carrying out the provisions of approved water quality management programs. Once designated by the governor and approved by the Regional Administrator of the Environmental Protection Agency, functional responsibility for carrying out the provisions of the water quality management plan is legally assigned to that entity.

Further, the Federal Clean Water Act specifies that:

- Future construction grants for wastewater treatment facilities under Section 201 of the Act will be awarded only to entities that are designated as management agencies.
- No discharge permit will be issued which is in conflict with the recommendations of an approved 208 Plan as updated by the designated planning and management agencies.

The Designation Process

The designation of management agencies establishes part of the legal basis for delegation of authorities necessary to carry out the recommendations of Water Quality Management Plans. The management agency structure by NWCCOG is outlined in Table 2.

Implementation Recommendations

See Table 2 for the Recommended Management Agency Structure to implement the NWCCOG Regional Water Quality Management Plan.

6.1 Federal Lands

Federal land management agencies (USFS, BLM, NPS) manage in cooperation with counties where the land is located.

6.2 Local Governments

Municipal and county governments are designated as management agencies for local land use decisions within their jurisdictions.

6.3 Sanitation Districts

Sanitation districts, water and sanitation districts and wastewater management authorities are designated as management agencies for the construction, operation, and maintenance of wastewater facilities within their service area.

6.4 Municipal and County Facilities

The Towns of Eagle, Gypsum, Hot Sulphur Springs, Red Cliff, Silverthorne/Dillon, and Summit County (Snake River) are designated as wastewater management agencies for the construction, operation, and maintenance of wastewater facilities within their service area.

6.5 Operating Agencies

No HOA or other privately owned wastewater treatment facilities may provide wastewater treatment without an agreement with the local government or special district with jurisdiction over its facility. Homeowner associations and private owners of wastewater treatment facilities are designated as operating agencies for their own facilities.

6.7 The Role of NWCCOG

6.7.1 Develop, review and revise the Regional Water Quality Management Plan.

6.7.2 Provide outreach and education to its member jurisdictions.

6.7.3 Support watershed water quality planning processes.

6.7.4 Encourage and assist local governments in developing regulations which address water quality issues as recommended in the 208 Policy Plan.

6.7.5 Facilitate intergovernmental agreements which will further watershed water quality planning.

6.7.6

Provide technical support in development of water quality improvement projects.

6.7.7 Review, and comment when appropriate, on site applications, water quality standards, environmental impact statements and permits in the region, in accordance with the 208 Plan policies and implementation recommendations.

6.7.8 Participate in state water quality proceedings such as WQCD hearings and state water quality work groups, to represent the interests of NWCCOG members consistent with this 208 Plan.

Volume I Reference Section

This Plan is structured to satisfy the applicable state guidelines and to satisfy local planning considerations that dictate a flexible and innovative approach to water quality planning to avoid future water quality problems.

Table 1 provides a summary of the elements of water quality planning recommended under the State Guidelines compared to the elements contained in this Plan. The Policy Plan (Volume I) together with the technical appendices contain all of the State elements.

Table 1. Water Quality Planning Elements

208 Plan Element	Plan Policy (Vol. I)						Vol. II	Appendices							
	1	2	3	4	5	6		1	2	3	4	5	6	7	8
Facility location						X	x			X	X				
Facility needs							x			X					
Facility capacity							x			X	X				
Facility timing							x			X					
Population projections							x		X						
Service area										X					
Treatment level				X			x			X					
Permit conditions							x			X					
Wasteload allocations				X			x			X					
NPS information							x						x	x	
Management agencies						X	x					x			
WQ standards recommend	X						X								
Hydrologic modifications		X					x								x
Stream setbacks			X				x						x	X	
Silviculture activity			X				x							X	
Construction activity			X				x						x	X	
Urban runoff	X		X				X						x	X	
Onsite wastewater systems				X		X	x							X	
Chemical management					X		x						x	X	
WQ assessment	X						x								
BMP recommendations		x	X	x	x	X	x						x	X	
Water efficiency		X	X				x						x		
Model ordinances			x		X		x						x	X	
Mine drainage management	X						x						x		
Agricultural management		x	X	x			x							x	

Table 2. Management Agency Structure.

Activity and Policy	Management Agency
Areawide Water Quality Planning	Northwest Colorado Council of Governments
Local Land Use Planning	Counties and municipalities
Policy 1. Protect and enhance water quality	
Recommend water quality standards revisions	NWCCOG, counties, municipalities, special districts, Water Quality Control Division
Policy 2. Water Use and Development	
Issue 1041 permits	Counties and municipalities
Issue Special Use Permits/Right of ways	USFS, BLM, Counties
Issue 404 permit	US Army Corps of Engineers
Issue 401 certifications	Colorado Water Quality Control Division
Appropriate Instream flows	Colorado Water Conservation Board
Policy 3. Land Use and disturbance	
Encroachment	Counties, municipalities, special districts, federal land management agencies
Public facilities	Counties, municipalities, special districts, federal land management agencies, Colorado Department of Transportation
Vegetative disturbance	Counties, municipalities, special districts, federal land management agencies
Soil Disturbance	Counties, municipalities, special districts, federal land management agencies, Natural Resource Conservation Service
Issue 1041 Permits	
Impervious Cover	Counties, municipalities
Stormwater	Counties, municipalities, Colorado Water Quality Control Division
Policy 4. Domestic, municipal, and industrial water and waste treatment facilities	
Issue Colorado Discharge Permit s	Colorado Water Quality Control Division
Approve site applications	Colorado Water Quality Control Division
Review site applications	NWCCOG, counties, municipalities, special districts
Issue 1041 permits	Counties, municipalities
Biosolids Applications	Counties, Water Quality Control Division, Hazardous Materials Division
Landfill site approvals	Counties, Hazardous Materials Division
Onsite wastewater system permits	Counties, Colorado Water Quality Control Division
Policy 5. Chemical Management	
Spill prevention and cleanup	Colorado Department of Public Health and Environment, CDOT, municipalities, special districts