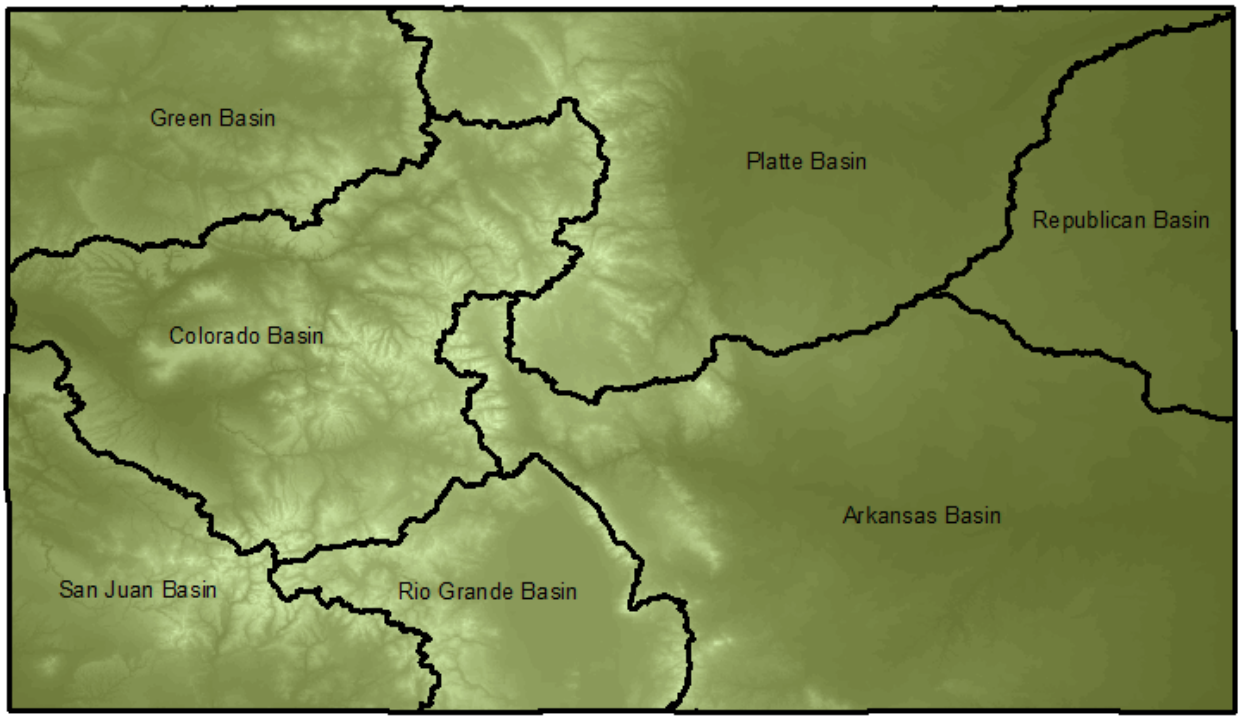

Statewide Water Quality Management Plan

Colorado Department of Public Health and Environment

Colorado Department of Public Health and Environment
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

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Contents

Exhibits

Each of the basin chapters (chapters 6-12) contains similar maps and exhibits. The following list of exhibits is a representative example of exhibits included in each of these chapters. Some maps and exhibits may be added or excluded from some chapters, due to variations among the basins.

Appendices

DISCLAIMER

This Statewide Water Quality Management Plan represents a compilation of internally and externally-derived information, including information produced by a variety of public and other outside sources. As such, the Colorado Department of Public Health and Environment makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, or suitability with respect to any information derived from such outside sources. In no event shall the Colorado Department of Public Health and Environment be liable to anyone for special, incidental, consequential, or exemplary damages incurred due to reliance on such information.

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- Colorado Water Conservation Board for graciously allowing the use of information, data, and maps from several of its recent publications;
- Members of the Citizen Advisory Group;
- Representatives from the designated 208 planning agencies; and
- the U.S. EPA for its participation throughout the SWQMP development process.

Their participation in scoping meetings and their review and comment of draft SWQMP materials is greatly appreciated.

Numerous WQCD staff assisted on multiple occasions in the development and review of the SWQMP. Staff from the Environmental Data, Restoration and Protection, and Standards Units in the Watershed Program, and the Permits and Engineering Sections of the Water Pollution Control Program provided their subject matter expertise in the compilation of the information. Their input and willingness to contribute to the SWQMP is greatly appreciated.

Executive Summary

The Statewide Water Quality Management Plan (SWQMP) is intended to be a living document that provides a framework for water quality planning based on federal regulations at section 130.6 of title 40 of the *Code of Federal Regulations* (40 CFR 130.6). Within this watershed framework, comprehensive information about current *statewide* water quality is presented to assist water policymakers, managers, and others in setting priorities, developing strategies, and evaluating the progress of water quality protection and restoration efforts. The water quality information is based on readily available, peer reviewed water quality information, particularly the data in the *2010 Integrated Water Quality Monitoring and Assessment Report* (2010 Integrated Report or Clean Water Act (CWA) section 305(b) report)[1]. In addition to the statewide aggregation of data, the SWQMP also presents water quality data at a *basin* scale. This information is incorporated into the 40 CFR 130.6 framework as "Basin Plans."

The other elements defined in 40 CFR 130.6 complete the foundation for the SWQMP and present information about water quality management agencies, effluent limitations, total maximum daily loads, municipal and industrial waste treatment, nonpoint source management and control, water quality management plan implementation measures, dredge and fill, and groundwater. These elements are primarily discussed at a programmatic level, with focus placed on summarizing Water Quality Control Division (WQCD) activities. Existing documents that provide information about how the elements help direct implementation activities in the state are incorporated by reference. A schematic of this framework is provided in exhibit 2-3 in chapter 2.

Therefore, this first edition of the SWQMP:

- Provides a comprehensive information resource for water policymakers and managers to serve as a foundation for setting priorities, developing strategies, and evaluating the progress of water quality restoration, maintenance, and protection activities previously undertaken.
- Fulfills the requirements of 40 CFR 130.6 as required by the CWA to develop water quality management plans. These plans are to be developed in accordance with CWA sections 208 (areawide waste treatment management) and 303 (water quality standards and implementation plans). They are used to direct implementation and are updated based on water quality problems identified in CWA section 305(b) reports. The state's Continuing Planning Process[2] for water quality management identifies the process and schedule for revising the water quality management plan.
- Provides a summary of current statewide water quality and includes a discussion of state classifications and standards for surface water, known impairments, and known pollutant sources based primarily on the state's latest CWA section 305(b) report.
- Provides a summary of state groundwater classifications and standards and identifies the state's wetland resources as indicated in the National Wetlands Inventory.

[1] The Integrated Reports are prepared by the WQCD on a biennial basis and are approved by the WQCC as Regulation No. 93: *Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List,* 5 CCR 1002-93 (WQCC 2010b; WQCD 2010a).

[2] Regulation No. 23: *Regulations for State of Colorado Continuing Planning Process,* 5 CCR 1002-23, sets forth the legal and regulatory objectives and requirements of the program, organizational structure, intergovernmental decision-making process, and time relationships required to accomplish the objectives and requirements.

- Provides a summary of strategies for improving water quality, including contemporary *green strategies* that will also save water and/or energy and reduce greenhouse gas emissions consistent with the goals of the Colorado Climate Action Plan.
- Provides a basin plan for each of Colorado's seven major river basins: Arkansas, Colorado, Green, San Juan, Rio Grande, Platte, and Republican. These plans:
  - Provide a summary of readily available public information regarding each basin's physical location and setting, ecology, climate, land ownership, land cover/uses, and hydrography and hydrology.
  - Provide a snapshot of current water quality use classifications and standards, known impairments, and known pollutant.
  - Identify projected treatment upgrades based on the state's latest Intended Use Plan[3].
  - Identify implemented CWA section 319 nonpoint source grant projects from the previous five years to address water quality problems.
  - Summarize other strategies that have been implemented and that have been identified under the state's total maximum daily loads completed to date.

However, the SWQMP does NOT:

- Replace existing water quality management documents and reports. It simply draws from these materials and synthesizes the information at different scales using a variety of communication tools (e.g., GIS maps, tables, diagrams, and narrative text).
- Provide conclusions, recommendations, or establish policy.
- Comprehensively link each specific impairment or problem to sources and strategies except where this information is known.
- Specify measures of success for various strategies.

The WQCD proposes to use this version of the SWQMP as the foundation for longer-term, iterative, statewide water quality planning. Future updates to the SWQMP will focus on the separate basins in the year following the associated standards triennial review hearing. This approach provides for the latest water quality information and data to be integrated into the SWQMP. For the year following the Regulation No. 31 *Basic Standards and Methodologies for Surface Water*, 5 CCR 1002-31, rulemaking hearing, efforts would concentrate on the non-basin specific portions of the SWQMP, and scheduling of an Administrative Action Hearing with the WQCC to review and approve the five years of cumulative updates.

Both the WQCC and the WQCD are aware of many other water quality data sources. Organizations and other parties with water quality data are encouraged to get involved in "calls for data" for the biennially completed CWA section 305(b) reports. The data sources that are used in forthcoming CWA section 305(b) reports will subsequently be used in future iterations of the SWQMP.

[3] The Intended Use Plan in Regulation No. 51: *State of Colorado Water Pollution Control Revolving Fund Rules*, 5 CCR 1002-51, drives the implementation schedule and priorities for the WQCD's financial solutions unit for processing grant and loan applications under the Water Pollution Control Revolving Fund and the Domestic Wastewater Treatment and Drinking Water Grant Program (WQCC 2009b).

Acronyms and Abbreviations

ADPP	Agricultural Drainage Planning Program
AFO	animal feeding operation
AFY	acre-feet per year
AIS	aquatic invasive species
ARRA	American Recovery and Reinvestment Act
BLM	Bureau of Land Management
BMP	best management practice
BOD	biochemical oxygen demand
BuRec	Bureau of Reclamation
BWA	Blanco Wetlands Area
CAFO	concentrated animal feeding operation
CAG	Citizens Advisory Group
CAMR	Clear Air Mercury Rule
CCR	*Code of Colorado Regulations*
CDA	Colorado Department of Agriculture
CDMG	Colorado Division of Minerals and Geology
CDPHE	Colorado Department of Public Health and the Environment
CDPS	Colorado Discharge Permits System
CDOT	Colorado Department of Transportation
CDOW	Colorado Division of Wildlife
CFR	*Code of Federal Regulations*
cfs	cubic feet per second
CGS	Colorado Geological Survey
CGWC	Colorado Ground Water Commission
CGWPP	Colorado Ground Water Protection Program
CHP	Combined Heat and Power
CMS	conservation management system
CNHP	Colorado Natural Heritage Program
COGs	Councils of Government
CPP	continuing planning process
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program
C.R.S.	*Colorado Revised Statutes*
CSO	combined sewer overflow
CSS	combined sewer system
CTP	consolidated tailings pile
CUPPS	Checkup Program for Small Systems
CWA	Clean Water Act
CWCB	Colorado Water Conservation Board

CWQCA	Colorado Water Quality Control Act
DHHS	Department of Health and Human Services
DNR	Department of Natural Resources
DRMS	Division of Reclamation, Mining, and Safety
EMS	Environmental Management System
EPA	U.S. Environmental Protection Agency
EROS	National Center for Earth Resources Observation Systems
FCA	fish consumption advisory
GI/LID	green infrastructure/low-impact development
GIS	geographic information system
gpm	gallons per minute
HGM	hydrogeomorphic
HMP	Hydromodification Management Plan
HSI	Hotspot Site Investigation
HUC	hydrologic unit code
I&I	infiltration and inflow
IBCC	Interbasin Compact Committee
ISDS	individual sewage disposal system
IUP	Intended Use Plan
KDHE	Kansas Department of Health and Environment
KWh	kilowatt-hours
LA	load allocation
LFWS	Lake Fork Watershed Stakeholders
LID	low-impact development
LMDT	Leadville Mine Drainage Tunnel
µg/L	micrograms per liter
M&E	Monitoring and Evaluation
M&I	municipal and industrial
mg/L	milligrams per liter
Mgal/d	million gallons per day
MOS	margin of safety
MRP	Measurable Results Program
MS4	municipal separate storm sewer system
NIWQP	National Irrigation Water Quality Program
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	nonpoint source
NRCS	Natural Resources Conservation Service [USDA]
NRD	Natural Resource Damages
NSA	Neighborhood Source Assessment
NWCCOG	Northwest Colorado Council of Governments
NWI	National Wetlands Inventory

NWR	National Wildlife Refuge
PAA	Pervious Area Assessment
PCBs	polychlorinated biphenyls
PCE	Perchloroethylene
pCi/L	picocuries per liter
POTW	publicly owned treatment works
PPA	Performance Partnership Agreement
ppm	parts per million
PVY	Paradox Valley Unit
RC&D	Resource Conservation and Development
SRF	state revolving fund
SSD	Streets and Storm Drains [analysis]
SSI	self-supplied industrial
SSO	sanitary sewer overflow
SWA	State Wildlife Area
SWQMP	Statewide Water Quality Management Plan
SWSI	Statewide Water Supply Initiative
TDS	total dissolved solids
TMDL	total maximum daily load
TPH	total petroleum hydrocarbons
TSS	total suspended solids
TVS	table value standards
U.S.C.	*United States Code*
UAA	use attainability analysis
USA	Unified Stream Assessment
USDA	United States Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VCUP	*Voluntary Cleanup and Redevelopment Act*
VEIB	Voluntary Environmental Improvement Bond
WCRC	Willow Creek Reclamation Committee
WHEAT	Water Health and Economic Analysis Tool
WLA	waste load allocation
WPCRF	Water Pollution Control Revolving Fund
WQBELs	water quality-based effluent limitations
WQCC	Water Quality Control Commission
WQCD	Water Quality Control Division
WQM	water quality management
WRP	Wetlands Reserve Program
WWCP	Wetlands Wildlife Conservation Program
WWTF	wastewater treatment facility