

State Wetland Protection

Status, Trends, & Model Approaches

A 50-state study by the Environmental Law Institute

With support from the U.S. Environmental Protection Agency

2008

Appendix: State Profiles

Colorado

I. Overview

Wetlands cover less than two percent of Colorado's land area, but are recognized for the important environmental and economic functions they provide throughout the state. Rapid population growth, conversion of agricultural lands, increased urbanization, and increased water demand within Colorado are accelerating pressure on the state's remaining wetlands.¹

State-level wetland regulation is conducted through the §401 water quality certification program, which is administered by Colorado's Department of Public Health and Environment. The state has adopted a broad set of regulations that establish procedures for certifying or denying federal licenses and permits in accordance with §401, including required best management practices. In 1993, Colorado's Water Quality Standards were significantly amended to specifically account for wetlands. In 1997, Colorado's Department of Natural Resources created a Colorado Wetland Partnership Program to implement non-regulatory wetland restoration and protection efforts. Today, however, wetlands receive moderate emphasis at the state level.

II. Regulatory Programs

Wetland definitions and delineation

"State waters," as defined by the Colorado Water Quality Control Act (CWQCA), include "any and all surface and subsurface waters which are contained in or flow in or through this state, but [do] not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed." However, Colorado regulations clarify that wetlands are in fact covered in the state definition of waters. The Colorado Water Quality Control Commission, the agency responsible for CWQCA administration, "considers the existing definition of 'state waters' broad enough to include wetlands." 5

The CWQCA defines wetlands consistently with the Clean Water Act (CWA). "[W]etlands" include "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The regulations further

¹ Colorado Division of Wildlife Wetlands Program, *Colorado Wetlands Initiative: 1997-2000* (on file with the Colorado Division of Wildlife).

² 5 COLO. CODE REGS. § 1002-82.

³ *Id.* § 1002-31.

⁴ Colo. Rev. Stat. § 25-8-103(19).

⁵ 5 Colo. Code Regs. § 1002-31.27.

⁶ *Id.* § 1002-31.5(50).

define several different kinds of wetlands, ⁷ including "compensatory wetlands," "constructed wetlands," "created wetlands," and "tributary wetlands." ¹¹

The state relies on the U.S. Army Corps of Engineers' 1987 *Wetlands Delineation Manual*¹² for delineating wetlands, but may elect to provide further clarification or refinement to account regional differences or other issues pertaining to the federal delineation manual.¹³

Organization of state activities

The two primary state agencies involved in wetland regulation and conservation are the Department of Public Health and Environment (CDPHE) and the Department of Natural Resources (CDNR). CDPHE takes an exclusively regulatory approach to wetlands protection, administering the state's §401 water quality certification program and §402 discharge permit program. CDNR takes a non-regulatory approach, utilizing voluntary initiatives to protect wetlands. The agencies infrequently communicate on wetland issues or projects in the state. ¹⁴

Colorado Department of Public Health and Environment. The §401 water quality certification program is administered by the CDPHE, Water Quality Control Division. Approximately one-third of one full-time equivalent (FTE) issues §401 certifications for the state. Program costs are covered by a mixture of state and federal funds. The program is based in the CDPHE headquarters office in Denver. ¹⁵

⁷ *Id*.

⁸ "Compensatory wetlands" means "wetlands developed for mitigation of adverse impacts to other wetlands (e.g. wetlands developed pursuant to section 404 of the federal Act)."

⁹ "Constructed wetlands" means "those wetlands intentionally designed, constructed and operated for the primary purpose of wastewater or stormwater treatment or environmental remediation provided under CERCLA, RCRA, or section 319 of the federal Act, if (a) such wetlands are constructed on non wetland sites that do not contain surface waters of the state, or (b) such wetlands are constructed on previously existing wetland sites, to the extent that approval or authorization under section 404 of the federal Act has been granted for such construction or it is demonstrated that such approval or authorization is not, or was not, required. This term includes, but is not limited to, constructed swales, ditches, culverts, infiltration devices, catch basins, and sedimentation basins that are part of a wastewater or stormwater treatment system or a system for environmental remediation mandated under CERCLA or RCRA. Compensatory wetlands shall not be considered constructed wetlands. Constructed wetlands are not state waters."

[&]quot;Created wetlands" means "those wetlands other than compensatory wetlands created in areas which would not be wetlands in the absence of human modifications to the environment. Created wetlands include, but are not limited to wetlands created inadvertently by human activities such as mining, channelization of highway runoff, irrigation, and leakage from man-made water conveyance or storage facilities. Wetlands resulting from hydrologic modifications such as on-channel reservoirs or on-channel diversion structures that expand or extend the reach of adjacent classified state waters are not considered created wetlands."

¹¹ "Tributary wetlands" means "wetlands that are the head waters of surface waters or wetlands within the floodplain that are hydrologically connected to surface waters via either surface or ground water flows. The hydrologic connection may be intermittent or seasonal, but must be of sufficient extent and duration to normally reoccur annually. Tributary wetlands do not include constructed or created wetlands."

¹² U.S. Army Corps of Engineers, Wetlands Research Program Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual (1987), *available at* http://www.mvn.usace.army.mil/ops/regulatory/wlman87.pdf.

¹³ See 5 Colo. Code Regs. § 1002-31.27(A)(1).

¹⁴ Personal communication with Bill Goosmann, Colo. Div. of Wildlife (Aug. 23, 2004).

¹⁵ Personal communication with John Hranac, Colo. Dep't of Pub. Health and Env't (Aug. 20, 2004).

Colorado Department of Natural Resources. The Colorado Department of Natural Resources' Division of Wildlife (CDOW) has a Colorado Wetland Partnership Program devoted to the administration of non-regulatory, voluntary wetland initiatives in the state. ¹⁶ Nine wetland-related volunteer committees are associated with the program. One FTE, based in CDOW's headquarter office in Denver, coordinates statewide and local committee activities and allocates funding among committees and projects throughout the state. The annual budget for the program is approximately \$1.5 million and is supported by proceeds from a state lottery¹⁷ and CDOW license fees, such as waterfowl stamps. ¹⁸

§401 certification

Any actions that require a federal permit, license, or approval that results in a discharge into waters of the state, including §404 dredge and fill permits and nationwide permits, require CWA §401 certification. State regulations establish a procedure for making certification determinations. The procedure requires CDPHE staff to consider the state's antidegradation policies, surface and groundwater regulations, water classifications and their assigned water quality standards, applicable effluent limitations or control regulations, stormwater discharge provisions, public comments, and any project-specific conditions. ¹⁹ Approximately 100 §401 water quality certifications are issued by the CDPHE each year. Project applications are generally approved, although some certifications may be issued with conditions. CDPHE staff rely on a combination of best professional judgment and qualitative assessment as determined by the water quality certification decision-making procedure.

Nationwide permits

In Colorado, all nationwide permits (NWPs) are §401 certified by state statute.²¹ Although the U.S. Army Corps of Engineers issues statewide regional conditions,²² CDPHE staff do not review and approve, condition, or deny nationwide permits (NWPs).²³

-

¹⁶ Colorado Division of Wildlife, *Colorado Wetlands Program, at* http://wildlife.state.co.us/LandWater/WetlandsProgram/ (last updated June 14, 2006).

¹⁷ Colorado established a state-sponsored lottery in 1983, with proceeds directed toward land conservation in the state. In 1992, the Great Outdoors Colorado (GOCO) Trust Fund was created. GOCO currently receives 50 percent of the lottery proceeds, with a \$35 million cap (proceeds above that are returned to the state's general fund). Colorado also participates in the multi-state Powerball lottery, with proceeds divided amongst GOCO, Conservation Trust Fund, and State Parks. The GOCO Trust Fund is administered by a 15-member Board of Trustees and is used to fund outdoor recreation, wildlife protection, and open space acquisition. State and local government agencies, including special districts, and nonprofit land conservation organizations are eligible to apply for wetland-related grants, and 25-50 percent matching funds are required. Between 1994 and 2001, GOCO distributed \$240.9 million to 1,419 projects. For example, GOCO has contributed grant funds to the Colorado Wetlands Initiative, a program that conserved approximately 210,000 acres between 1997 and 2004. *See* The Trust for Public Land, *Funding Profile: Colorado, at* http://www.tpl.org/tier3_cdl.cfm?content_item_id=875&folder_id=706 (last visited July 18, 2007).

¹⁸ Goosmann, supra note 14.

¹⁹ 5 COLO. CODE REGS. § 1002-82.5(A)(1).

²⁰ Hranac, *supra* note 15.

²¹ 5 COLO. CODE REGS. § 1002-82.1.

²² U.S. ARMY CORPS OF ENGINEERS OMAHA DISTRICT, PUBLIC NOTICE FOR FINAL STATEWIDE REGIONAL CONDITIONS FOR THE NATIONWIDE PERMIT PROGRAM IN THE STATE OF COLORADO (2002), available at https://www.nwo.usace.army.mil/html/od-tl/nwp-rc-may2002.doc.

²³ Hranac, *supra* note 15.

Mitigation

Colorado has not adopted any legislation regulating compensatory mitigation for wetlands. However, inclusion of a mitigation plan is among the state's selected best management practices for applicants seeking §401 water quality certification.²⁴

Compliance and enforcement

Colorado regulations do outline enforcement and compliance procedures for CDPHE's Water Quality Control Division to utilize where necessary. If notified of a water quality violation, the Division may modify the certification, notify federal authorities of the violation, or suspend or revoke §401 certification.²⁵ Typically, however, enforcement for violations to §401 or §404 of the Clean Water Act is handled at the federal level.²⁶

Tracking systems

The Water Quality Control Division does maintain a database that keeps applicant information records, but it does not include data on mitigation, monitoring, or other wetland-related fields.²⁷

III. Water Quality Standards

The State of Colorado has developed wetland-specific water quality standards and use classifications, which are used both for issuing §401 water quality certifications and National Pollution Discharge Elimination System (NPDES) permits. Depending on the applicable wetland classification, either narrative or numeric water quality standards apply. Identification of the appropriate water quality classification can be a two-step process. First, an interim classification with numeric standards is applied to wetlands that are tributary to other surface waters (except created wetlands, which are subject only to narrative standards initially). A new classification may then be applied according to procedures outlined in the state's regulations, with resulting standards of protection that may be narrative and/or numeric.

All wetlands (except constructed wetlands³³) are subject to narrative criteria.³⁴ Compensatory³⁵ and tributary wetlands are generally subject to the classification and standards of the segment with which they are associated. Wetlands that are not tributary or created (generally, "geographically isolated" wetlands) are also initially subject to narrative standards that apply to all surface waters of the state. These wetlands are also subject to protection by the state's ground water quality standards.³⁶

```
<sup>24</sup> 5 COLO. CODE REGS. § 1002-82.
<sup>25</sup> Id. § 1002-82.7.
<sup>26</sup> Hranac, supra note 15.
<sup>27</sup> Id.
<sup>28</sup> 5 COLO. CODE REGS. § 1002-31(1).
<sup>29</sup> U.S. ARMY CORPS OF ENGINEERS, supra note 12.
<sup>30</sup> See supra note 11.
<sup>31</sup> 5 COLO. CODE REGS. § 1002-31.13(1)(e)(v).
<sup>32</sup> Id. § 1002-31.27(2).
<sup>33</sup> See supra note 10.
<sup>34</sup> Narrative criteria are outlined in 5 COLO. CODE REGS. § 1002-31.11.
<sup>35</sup> See supra note 9.
```

³⁶ 5 COLO. CODE REGS. § 1002-31.27.

Classifications are made according to designated uses outlined in the state's regulations.³⁷ Colorado has adopted designated uses for wetlands (except constructed wetlands), based on the functions³⁸ provided by the wetland in question.³⁹

IV. Monitoring and Assessment

CDPHE does not have a monitoring and assessment program in place for wetlands, but does have a program for lakes and streams. Basic standards for assessment methodologies are outlined in the state's regulations and involve biological and chemical assessment. Assessment methodologies are mainly used for developing 303(d) lists and 305(b) reports. The program also utilizes citizen monitoring data where it is available. Support for the program comes from U.S. Environmental Protection Agency (EPA) grants and NPDES permit fees.

CDNR has conducted various wetland assessment projects for non-regulatory purposes. For example, CDOW coordinated a study entitled *Characterization and Functional Assessment of Reference Wetlands in Colorado*. Participating agencies and organizations included Colorado Geological Survey, the Colorado School of Mines, and Colorado State University. Five reference wetland study sites were identified in the Colorado, Yampa, and Green River basins and were assessed using the hydrogeomorphic approach. The purpose of the study was to offer a starting point from which to create guidebooks for wetland management from a regional perspective. The project was funded by the EPA State Wetlands Grant program.

CDOW's Wetland Partnership Program also has worked in partnership with the Colorado Natural Heritage Program to classify wetlands statewide. The Comprehensive Statewide Wetlands Classification and Characterization (CSWCC) project, initiated in 1999, seeks to utilize data collected by previous vegetation studies of Colorado's wetlands in order to develop a tool for community-based conservation and protection of wetlands. 43

Finally, CDOW has contracted with the Rocky Mountain Bird Observatory to conduct monitoring and assessment of wetland projects within the Division's Wetlands Program. At present, project participants are working to create a more targeted statewide effort. 44

³⁷ *Id.* § 1002-31.13.

³⁸ Wetland functions that may warrant site-specific protection include ground water recharge or discharge, flood flow alteration, sediment stabilization, sediment or other pollutant retention, nutrient removal or transformation, biological diversity or uniqueness, wildlife diversity or abundance, aquatic life diversity or abundance, and recreation. Because some wetland functions may be mutually exclusive (e.g., wildlife abundance, recreation), the functions to be protected or restored will be determined on a wetland-by-wetland basis, considering natural wetland characteristics and overall benefits to the watershed. *See* 5 COLO. CODE REGS. § 1002-31.13(1)(e)(v).

³⁹ 5 Colo. Code Regs. § 1002-31.13.

⁴⁰ *Id.* § 1002-31.

⁴¹ Hranac, *supra* note 15.

⁴² Colo. Geological Survey et al., Characterization and functional assessment of reference wetlands in Colorado (1998).

⁴³ Denise Culver & Ric Hupalo, *Comprehensive Statewide Wetlands Classification and Characterization Project*, 11(4) THE GREEN LINE (Winter 2000), *available at* http://coloradoriparian.org/GreenLine/V11-4/Classification.html. ⁴⁴ Goosmann, *supra* note 14.

V. Restoration and Partnerships

The main goal of CDOW's Wetlands Program is to protect wetlands and wetland-dependent wildlife. The program was created in 1997 out of the Division's existing waterfowl program, signified by the release of *The Colorado Wetlands Initiative*, a state wetland conservation strategy. The plan emphasizes voluntary, incentive-based mechanisms and partnerships among government natural resource agencies, nongovernmental organizations, private landowners, and citizens for the protection of wetlands. The initial plan for the Wetland Program established the key objective of "protecting 100,000 acres of biologically significant wetlands and associated uplands for wetland-dependent species...by 2005." Between 1997 and 2004, a reported 210,000 acres of wetlands and their associated uplands, as well as over 200 miles of streams, were protected. The program is to protected and their associated uplands, as well as over 200 miles of streams, were protected.

CDOW is in the process of updating a statewide strategy for the Wetlands Program. From 2004 to 2005, CDOW, Partners for Fish and Wildlife, Ducks Unlimited, and The Nature Conservancy held a series of meetings and met with each local wetland focus area committee. Discussions were conducted on program revenue, partnerships and communication, identity and direction, and administration. Discussions have continued into 2006 and 2007, and wetland habitat priorities from the original strategy continue to be refined.

The Wetlands Program operates at both the state and local levels. The initiation of projects and input on priorities often comes from local wetland focus area committees. The process for selecting projects for funding is currently under revision, but it is anticipated that funding decisions will continue to involve priority-setting and project rankings from state biologists and regional or area wildlife managers in the CDOW, and approval by the director's staff of CDOW. It is anticipated that the statewide strategy for the program, which will guide project selection, will be completed in 2007.⁴⁸

At the local level, nine "wetland focus area committees" are located in the state's major drainages. As of 2007, five of these committees are considered active. ⁴⁹ Committees were first associated with the Joint Ventures of the North American Waterfowl Management Plan and have existed in the San Luis Valley, South Platte River, the plains of southeastern Colorado, North Park, South Park, Yampa/White River, Lower Colorado River ("Five Rivers"), Gunnison River, and southwestern Colorado. Committees are composed of volunteers and conduct a variety of activities, including identification of potential restoration and conservation projects, assistance to landowners and others interested in conducting restoration and conservation projects, and education and outreach. Committee membership varies and typically includes: local, state, and federal natural resource professionals; citizens; nongovernmental organizations; university

⁴⁵ Colorado Division of Wildlife, supra note 16.

⁴⁶ Colorado Division of Wildlife Wetlands Program, supra note 1.

⁴⁷ Goosmann, supra note 14.

⁴⁸ Personal communication with Diane Gansauer, Colo. Div. of Wildlife (Apr. 5, 2007).

⁴⁹ *Id*.

professors; landowners; and land trusts. Because of the variation in membership, access to technical expertise and project resources also varies.⁵⁰

VI. Education and Outreach

Both CDOW and CDPHE are engaged in various education and outreach activities. However, neither agency has formally developed wetland-specific education or outreach efforts. For example, CDPHE watershed coordinators conduct education and outreach related to watersheds, but none specific to wetlands.⁵¹ CDOW has a very well developed education and outreach program, but it does not coordinate regularly with the agency's Wetlands Program.⁵²

VII. Coordination with State and Federal Agencies

The main role of CDOW's Wetlands Program is coordination among the program's statewide partners and the local wetland focus area committees. Statewide partners include the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife, Ducks Unlimited, The Nature Conservancy, federal joint ventures, Rocky Mountain Bird Observatory, and the Colorado Natural Heritage Program. Local wetland committees are composed of a variety of members, including local, state, and federal natural resource professionals, citizens, nongovernmental organizations, university professors, landowners, and land trusts. The CDPHE Water Quality Control Division coordinates with federal agencies such as the Corps on specific §401 certification applications, as the need arises. Occasionally, interagency meetings are held and are attended by various federal agency representatives. Coordination between CDOW and CDPHE is infrequent. The committee of the program is statewise attended to the program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy and the Colorado Natural Program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy and the Colorado Natural Program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy and the Colorado Natural Program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy, and the Colorado Natural Program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy, and the Colorado Natural Program is statewise partners include the U.S. Fish and Wildlife, Ducks Unlimited, The Nature Conservancy, and the Colorado Natural Program is statewise partners.

VIII. Acronyms and Abbreviations

CCR - Code of Colorado Regulations

CDNR - Colorado Department of Natural Resources

CDOW - Colorado Department of Natural Resources, Division of Wildlife

CDPHE - Colorado Department of Public Health and Environment

CRS - Colorado Revised Statutes

CSWCC - Comprehensive Statewide Wetlands Classification and Characterization

CWA - Clean Water Act

CWQCA - Colorado Water Quality Control Act

EPA – U.S. Environmental Protection Agency

FTE - Full-time Equivalent

⁵⁰ Colorado Division of Wildlife Wetlands Program, *supra* note 1; Colorado Division of Wildlife, *Partnership Priorities*, *at* http://wildlife.state.co.us/LandWater/WetlandsProgram/PartnershipPriorities/ (last updated Jun. 14, 2006).

⁵¹ Hranac, *supra* note 15.

⁵² Goosmann, supra note 14.

⁵³ *Id*

⁵⁴ Hranac, *supra* note 15.

GOCO - Great Outdoors Colorado NPDES - National Pollution Discharge Elimination System NWPs - Nationwide Permits