

Chapter One

Introduction to the Clean Water Act: History, Objective, Goals, and Scope of the Act

The Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387, has its origins in a series of Federal acts aimed at preventing the discharge of pollutants into the nation's waters (see Figure One). This lineage of Federal enactments began in 1899 with the Rivers and Harbors Act (also known as the Refuse Act), which was designed to eliminate pollution that would interfere with navigation. The Refuse Act specifically prohibited the discharge of any type of refuse, other than liquid discharge from streets and sewers, into navigable waterways without a permit. Apart from navigation, water pollution control in the early 1900s focused on human waste which was the primary cause of waterborne diseases. Prior to the end of World War II, efforts to control water pollution were largely the responsibility of the states, and tended to focus on the water quality of receiving waters by establishing water quality standards.

Figure One: Clean Water Act Major Amendments

| Year | Act | Public Law |
|------|---|---------------------------------------|
| 1948 | Federal Water Pollution Control Act | P.L. 80-845 (Act of June 30, 1948) |
| 1956 | Water Pollution Control Act of 1956 | P.L. 84-660 (Act of July 9, 1956) |
| 1961 | Federal Water Pollution Control Act | P.L. 87-88 |
| 1965 | Water Quality Act of 1965 | P.L. 89-234 |
| 1966 | Clean Water Restoration Act | P.L. 89-753 |
| 1970 | Water Quality Improvement Act of 1970 | P.L. 91-224, Part I |
| 1972 | Federal Water Pollution Control Act, Amendments | P.L. 92-217 |
| 1977 | Clean Water Act of 1977 | P.L. 95-217 |
| 1981 | Municipal Wastewater Treatment Construction Grants Amendments | P.L. 97-117 |
| 1987 | Water Quality Act of 1987 | P.L. 100-4 |

Codified generally as 33 U.S.C. 1251-1387.

Water pollution control entered the modern era in 1972 with the passage of the Federal Water Pollution Control Act of 1972 (FWPCA).¹ This statute switched regulatory focus to discharge standards rather than receiving water standards. The statute required the Environmental Protection Agency (EPA) to set nationwide effluent standards on an industry-by-industry basis based on the capabilities of pollution control technologies. However, standards based on the quality of receiving waters were not completely abandoned. The FWPCA provided that the EPA could impose more stringent pollution controls where technology-based limitations were insufficient to assure that the quality of receiving waters did not reach unacceptable levels.

This section provides an overview of the CWA with an emphasis on those aspects most important to management of Federal lands and resources. The activities most likely to generate water pollution on BLM lands are timber management, livestock grazing, road building, mining, and oil and gas development. Many of these activities are governed by the CWA and state laws implementing it.

I. Objectives, Goals, and Tools of the CWA

The stated *objective* of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”² Title I establishes the *goals* of 1) eliminating the discharge of pollutants into navigable waters; and 2) achieving interim water quality that will protect fish, shellfish, and wildlife while providing for recreation (“fishable and swimmable”) in and on the water whenever attainable.³ The Act also states that the “discharge of toxic pollutants” shall be prohibited.⁴

¹ Pub. L. No. 92-500, 86 Stat. 816 (1972).

² 33 U.S.C. § 1251(a), CWA § 101(a).

³ 33 U.S.C. § 1251(a)(1)-(2), CWS § 101(a).

⁴ 33 U.S.C. § 1251(a)(3), CWA § 101(a)(3).

The CWA contains a broad range of regulatory *tools* that states and the Federal government can use to achieve the statutory goals and objectives. These tools include the following major elements:

- A prohibition of discharges, except as in compliance with the CWA (§ 301);
- A permit program to authorize and regulate certain discharges (§ 402);
- A process for cooperative Federal/state implementation (§§ 401 and 402);
- A system for preventing, reporting, and responding to spills (§ 311);
- A permit program for governing the discharge or placement of dredge or fill material into the nation's waters (§ 404); and
- Strong enforcement mechanisms (§§ 309 and 505).

In addition, amendments to the CWA in 1987 established a comprehensive program for controlling toxic pollutants, added a program requiring states to develop and implement programs to address nonpoint source pollution, authorized wastewater treatment assistance, and revised many of the CWA's regulatory, permit, and enforcement provisions. Many of these tools and other elements of the CWA applicable to Federal land management will be discussed throughout this summary.

II. Scope of the CWA: Prohibition of Discharge

Section 301 of the CWA establishes a broad prohibition against “the discharge of any pollutant by any person” except as in compliance with the Act.⁵ The effect of the “except as in compliance” language is to shift the burden of proof to the discharger. The discharger must prove that the discharge was in compliance with the CWA.

Because the CWA prohibits the “discharge of a pollutant,” it is important to understand what this means. The CWA defines the “discharge of a pollutant” to mean “any addition of any

⁵ 33 U.S.C. § 1311(a), CWA § 301(a).

pollutant to navigable waters from any point source.”⁶ The interpretation of the terms addition, pollutant, navigable waters, and point source are important in determining the scope of the CWA.

A. Addition

The EPA and the courts have interpreted the term “addition” broadly, and it has been generally understood to mean introduced from the outside world – that is, from outside of the water body.⁷ The scope of the term has been limited only by the requirement that there must be an addition of a new material or an increase in the amount or type of material that is already present.⁸ For example, the transfer of turbid water from a reservoir to a stream is an addition requiring a National Pollutant Discharge Elimination System (NPDES) permit;⁹ however, discharges of water from dam operations that adversely affect the temperature or dissolved oxygen content of the receiving waters are not additions.¹⁰

B. Navigable Waters

The CWA is grounded in Congress’s authority to protect the flow of interstate commerce – authority granted by the Commerce Clause of the U.S. Constitution. Through the CWA, Congress protects the quality of the waters and the ecosystems hydrologically connected to those waters, in order to maintain interstate commerce. The scope of jurisdiction under the CWA has fluctuated over time and exactly where the CWA applies has been a continuous source of

⁶ 33 U.S.C. § 1362(12), CWA § 502(12).

⁷ May, James. 2003. ELR News and Analysis “Where the Water Hits the Road: Recent Developments in Clean Water Act Litigation.” Environmental Law Institute. Washington, DC.

⁸ See *United States v. Wilson*, 133 F.3d 251 (4th Cir. 1997).

⁹ *Catskill Mountains Chapter of Trout Unlimited, Inc. v New York City*, 273 F.3d 481 (2d Cir. 2001).

¹⁰ *National Wildlife Federation v. Consumers Power Co.*, 862 F.2d 580 (6th Cir. 1988); *National Wildlife Federation v. Gorshuch*, 693 F.2d 156 (D.C. Cir. 1982).

contention. This controversy has largely resulted from differing definitions of “navigable waters of the United States.” “Navigable waters” is defined by the CWA to mean “waters of the United States,” including the territorial seas.¹¹

Under EPA regulations, the term “waters of the United States” includes all of the following:

1. All waters that are currently used, were used in the past, or may be susceptible to use in the future in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate “wetlands”;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds of which the use, degradation, or destruction would affect or could affect interstate or foreign commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in 1-4 of this definition;
6. The territorial seas; and
7. “Wetlands” adjacent to waters identified in 1-6 of this definition.¹²

For many years, courts followed the EPA’s lead on defining navigable waters to include most any water body that could be involved in interstate commerce. Courts have held that waters which are not physically navigable,¹³ intermittent streams,¹⁴ and irrigation ditches¹⁵ are waters of the United States. In 2001, however, the U.S. Supreme Court limited the scope of the CWA in *Solid Waste Agency of Northern Cook County (SWANCC) v. Army Corps of Engineers*.¹⁶ The Supreme Court held that the mere use of an isolated wetland by migratory birds did not render it a “navigable water” within the meaning of the CWA. This ruling thereby

¹¹ 33 U.S.C. § 1362(7), CWA § 502(7).

¹² 40 C.F.R. § 122.2.

¹³ *United States v. T.G.R. Corp*, 171 F. 3e 762, 1999 (2nd Circuit, 1999).

¹⁴ *Driscoll v. Adams*, 181 F. 3d 1285 (11th Cir. 1999).

¹⁵ *Community Ass’n for Restoration of the Env’t v. Henry Bosma Dairy*, 65 F. Supp. 2d 1129 (W.D. Wash. 1999).

¹⁶ *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, 531 U.S. 159 (2001).

excluded *isolated wetlands* from CWA regulation if the sole basis for regulating those waters was the use of those waters as habitat for migratory birds.

There has also been a shift in the judicial recognition of the EPA's regulatory interpretation of including *intermittent streams* within the definition of navigable waters. In 2001, the Fifth Circuit effectively ruled that the EPA does not have authority under the Clean Water Act (CWA) and the Oil Pollution Act (OPA) to regulate discharges into waterbodies that only exist intermittently.¹⁷ If this ruling were adopted in other circuits, it could substantially limit the scope of the CWA, especially in arid areas where the EPA has previously regulated intermittent waterbodies such as occasionally flowing streams.¹⁸

Administrative attempts to further the principles in the Fifth Circuit case have been met with resistance. In 2003, the Bush administration considered proposing a new EPA rule that would remove the CWA's applicability to waterways without annual flow.¹⁹ A draft rule that was leaked to the media would have required "regular and continuous flow" between wetlands and tributaries in order for wetlands to be covered by the CWA.²⁰ Pipes, ditches, drainage and other connections between navigable waters and tributaries also would have been excluded. About two-thirds of the nation's streams flow intermittently, especially in the arid west. The EPA decided not to propose a regulatory change, but the future scope of the CWA remains uncertain.

¹⁷ *Rice v. Harken*, 250 F.3d 264, 271 (5th Cir. 2001). But also see *United States v. Newdunn*, 344 F.3d 407 (4th Cir. 2003) (an intermittent water provides a sufficient nexus between a wetland and navigable water to subject the wetland to CWA jurisdiction), cert. denied, 124 S. Ct. 1874 (1994).

¹⁸ However, see *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 534 (9th Cir. 2001) (even tributaries that flow intermittently are waters of the United States).

¹⁹ No rule was ever officially proposed. The EPA issued an Advanced Notice of Proposed Rulemaking, inviting public input on the issue. The EPA never officially offered an indication of the actual language it was considering.

²⁰ Pitzer, Gary. Bush Administration Backs Off Proposed Easing of Clean Water Act Rules. *Western Water*. Water Education Foundation. January/February 2004.

There is also controversy over whether or not *groundwater* is within the scope of “waters of the United States.” The EPA has taken the position that it has jurisdiction over discharges to groundwater where there is a hydrological connection between the groundwater and surface water. The courts, however, are divided on the subject.²¹ Groundwater is included in many states’ definition of “waters of the state” and, in these states, point source discharges into groundwater may be covered by the state’s water permit program.

Many disputes concerning the reach of the CWA have arisen in the context of the Corps of Engineers exercising its jurisdiction over wetlands. Chapter Six specifically addresses wetlands and further explores the hydrologic and legal scope of the CWA. However, for now, it is important to note that the CWA applies to: 1) all navigable waters including rivers, streams, and lakes; 2) continuously flowing non-navigable tributaries; and 3) wetlands adjacent to navigable waters and their tributaries. The CWA does not apply to isolated wetlands that are not hydrologically connected to navigable water but used by migratory birds for habitat, and its application to intermittent non-navigable tributaries and hydrologically-connected groundwater is somewhat uncertain.

C. Pollutant

Pollutant is defined by the CWA to include dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and

²¹ *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F3d 962, 965 (7th Cir.), cert. denied, 115 S. Ct. 322 (1994) found that EPA has no jurisdiction over discharges to groundwater regardless of hydrological connection to surface water; and *Unatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312 (D. Or. 1997) found that the NPDES program does not apply to discharges to groundwater. Alternatively, *Sierra Club v. Colorado Refining Co.*, 838 F. Supp. 1428 (D. Colo. 1993) found that the CWA’s prohibition on discharges to navigable waters extends to discharges reaching navigable water as a result of discharge to connected groundwater; and *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182, 1193-96 (E.D. Cal. 1988) found that discharge to groundwater that has an effect on surface water may violate the CWA.

industrial, municipal, and agricultural waste discharged into water.²² The term has been broadly interpreted by the courts to include these as well as virtually any other material. It has also been interpreted to include water characteristics such as toxicity or acidity.²³

D. Point Source

Sources of water pollution can be divided into two categories: 1) point sources and 2) nonpoint sources. The CWA defines a “point source” as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”²⁴ Congress, in 1977, categorically exempted irrigation return flows from point source regulation. Point sources also include sources from which pollutants “may be” discharged. Thus the term includes sources from which a pollutant may be discharged in extreme conditions, such as during a storm event.

There are three types of regulated *point source* pollutants: 1) toxic pollutants, 2) conventional pollutants, and 3) nontoxic nonconventional pollutants. These three categories apply to “end-of-the-pipe” regulation and are not to be confused with pollutants identified under water quality criteria provisions discussed in Chapter Two. The EPA publishes a list of toxic pollutants as required by § 307(a)(1) of the CWA.²⁵ Conventional pollutants regulated by the CWA are biological oxygen demand (BOD), total suspended solids (TSS), coliform, pH, and oil

²² 33 U.S.C. § 1362(6), CWA § 502(6).

²³ See for example, *Natural Resources Defense Council v. EPA*, 859 F.2d 156 (D.C. Cir. 1988); *United States v. Hamel*, 551 F.2d 107, 110-12 (6th Cir. 1977).

²⁴ 33 U.S.C. § 1362(14), CWA § 502(14).

²⁵ There are currently 65 compounds on the list. This list was last updated on July 1, 2003, and can be found at 40 C.F.R. § 401.15.

and grease. Nontoxic nonconventional pollutants are anything not included in the other two categories but still may pose a threat. Examples include ammonia and thermal pollution.

Contrasted with point sources are nonpoint sources. Congress defined point sources, thus it follows that “nonpoint sources” are defined as everything that is not a point source. Activities that produce nonpoint source water pollution include agriculture/ranching, construction, mining, silviculture, urban runoff, and spills of oil or hazardous materials. In general, nonpoint source pollution is created when rain or snow picks up pollutants as it runs off the land and into water bodies. Therefore, to control nonpoint source pollution, land use activities must be controlled. The Federal government has historically left this area of water pollution control to the states, and, as we will see in Chapter Five, Congress has struggled with ways to achieve the goals of the CWA without infringing upon the traditional state function of controlling land use.