



COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

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United States Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Via regulations.gov: Docket ID No. EPA-HQ-OW-2018-0063

Subject: Clean Water Act Coverage of “Discharges of Pollutants” via a Direct Hydrologic Connection to Surface Water - Request for Comment

The Colorado Department of Public Health and Environment’s Water Quality Control Division (CDPHE) has been delegated authority to issue National Pollutant Discharge Elimination System (NDPES) permits under the Clean Water Act (CWA). As Colorado’s regulatory agency responsible for implementing the CWA, we provide important input on the coverage of “discharges of pollutants” via direct hydrologic connection to surface water.

It has been the governing case law in Colorado for at least 25 years that the discharge of a pollutant into ‘navigable waters’ can include a discharge which reaches those waters through groundwater. *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428 (D. Colo. 1993). CDPHE has used this flexible authority, when appropriate based on site-specific conditions, to permit such discharges as discharges to surface water in order to protect federal and state surface waters from exceeding water quality standards, particularly aquatic life standards. CDPHE requests that the Environmental Protection Agency (EPA) allow states to retain their current flexibilities to regulate these discharges using our discretion to determine which laws and regulatory schemes apply under the CWA and other state and federal laws. If federal law does not allow protection of surface water from a discharge to groundwater, this could compromise CDPHE’s ability to protect federal and state surface waters in accordance with CDPHE’s responsibilities under the federal CWA and the Colorado Water Quality Control Act.

CDPHE appreciates EPA seeking comments from the states on this issue. CDPHE has significant experience dealing with this issue as well as technical expertise and knowledge of our state waters and regulatory structures. In the spirit of cooperative federalism, we look forward to working with EPA on this issue. CDPHE is providing its own comments and also supports comments submitted by the Association of Clean Water Administrators (ACWA).



EPA's request for comment asks:

- 1) Whether subjecting pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a direct hydrologic connection to a jurisdictional surface water to CWA permitting is consistent with the text, structure, and purposes of the CWA,
- 2) Whether those discharges would be better addressed through other federal authorities as opposed to the NPDES permit program, and
- 3) Whether some or all such discharges are addressed adequately through existing state statutory or regulatory programs or through other existing federal regulations and permit programs.
- 4) Whether EPA should clarify its previous statements concerning pollutant discharges to groundwater with a direct hydrologic connection to jurisdictional water in order to provide additional certainty for the public and regulated community.
- 5) What issues should be considered if further clarification is undertaken, including, for example, the consequences of asserting CWA jurisdiction over certain releases to groundwater or determining that no such jurisdiction exists.
- 6) What format or process EPA should use to revise or clarify its previous statements (e.g., through memoranda, guidance or in the form of rulemaking) if the Agency pursues further action in response to this request for comment.

Relevant case law from the 10th Circuit court of appeals supports that discharges of pollutants from point sources to groundwater that has a hydrological connection to surface water falls within the jurisdiction of the CWA and its ultimate purpose -- to restore and maintain the integrity of the Nation's waters. CDPHE notes that these cases are highly factually dependent, and jurisdictional determinations have relied upon an evidentiary determination that there is a hydrological connection between the groundwater, and an evidentiary determination that the pollution that enters the groundwater can reach surface water. Topographical and geological conditions that result in hydrological connection to surface water differ significantly between sites. It will be difficult for the EPA to establish a single national rule of general applicability that can cover the various hydrological flow conditions in each state, the broad scope of fact specific issues that have been addressed by various federal courts to date, and future potential discharges that may arise in the future. State agencies that have delegated permitting authority from the EPA should be able to retain the flexibility to analyze and address the hydrological flow conditions that exist within its state and determine which permitting approach is appropriate.

CDPHE's specific response to the EPA's request for comments are provided as follows:

- 1) **Whether subjecting pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a direct hydrologic connection to a jurisdictional surface water to CWA permitting is consistent with the text, structure, and purposes of the CWA.**

The text, structure, and purpose of the CWA, when taken as a whole, covers pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that have a clear hydrological connection to a jurisdictional surface water.

The CWA establishes its purpose as having the broad objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters -- or jurisdictional surface water. 33 U.S.C. 1251. The CWA facilitates this goal by prohibiting the discharge of any pollutant from a point source to jurisdictional surface waters unless a permit is issued authorizing the discharge of the pollutant. 33 U.S.C. 1311(a), 1342, 1344, and 1362.

A straightforward reading of the CWA demonstrates that the text and structure of the Act establishes the broad objective of protecting the Nation's jurisdictional surface waters by covering discharges of pollutants from point sources to groundwater or subsurface water that has a hydrological connection to the jurisdictional surface waters. In other words, the CWA covers discharges of pollutants from point sources to groundwater or subsurface water that reach a jurisdictional surface water.

Purpose

The purpose of the CWA establishes the broad objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, and included to purpose to prevent discharges of pollutants to navigable waters by 1985. This purpose involves covering as much jurisdictional water as possible, including discharges of pollutants that reach jurisdictional surface waters via groundwater in order to protect the jurisdictional waters.

The case law governing the 10th Circuit also supports a broad interpretation of this jurisdiction of the CWA in order to achieve this purpose. See *Sierra Club v. Colo Ref. Co.*, 838 F. Supp. 1428 (D. Colo. 1993) (The "Tenth Circuit has chosen to interpret the terminology of the CWA to give full effect to Congress' declared goal and policy 'to restore and maintain the chemical, physical and biological integrity of the Nation's waters'" and apply the CWA to a discharge of a pollutant that reaches navigable waters through groundwater); *Quivira Min. Co. v. U.S.E.P.A.*, 765 F.2d 126, (10th Cir. 1985) ("It is the intent of the [CWA] to cover, as much as possible, all waters of the United States instead of just some"); *U.S. v. Earth Sciences, Inc.*, 599 F.2d 368 (10th Cir. 1979) ("This chapter was designed to regulate to the fullest extent possible those sources emitting pollution into rivers, streams and lakes"); *Friends of Santa Fe County v. LAC Minerals, Inc.*, 892 F. Supp. 1333, 1357 (D.N.M. 1995) ("the Tenth Circuit's expansive construction of the CWA's jurisdictional reach 'foreclose any argument that the CWA does not protect groundwater with some connection to surface waters").

The purpose of CWA to protect jurisdictional waters, even if that discharge occurs through a hydrologically connected groundwater. The study of hydrogeology that has occurred in the last 40 years since the CWA was enacted recognizes that surface waters are inextricably tied to alluvial groundwater, such as with ‘losing’ and ‘gaining’ stream channels. CDPHE has found that allowing discharges of pollutants to alluvial groundwater can result in impacts to the water quality of the surface water itself. These impacts can have dire consequences on surface water quality. Limiting the jurisdiction of the CWA to only cover direct discharges of pollutants to surface water would counter the underlying purpose of the CWA. States must have the regulatory ability to protect surface water by controlling discharges to hydrologically connected groundwater through NPDES permitting, and EPA should enforce protection of surface water in this way also. Adoption of a rule that would restrict CWA jurisdiction could allow a facility to circumvent protection of waters of the U.S. by discharging into hydrologically connected groundwater in order to avoid the more stringent NPDES requirements. This is contrary to the purpose of the CWA, and a loophole that should not be permitted.

Text and Structure

A straightforward reading of the text and structure of the CWA demonstrates that it covers discharges of pollutants from a point source to jurisdictional surface waters via groundwater or subsurface waters that have a hydrological connection to the jurisdictional surface waters.

The CWA’s definitions of “discharge of pollutants,” “point source,” “pollutant,” and “navigable waters” clarify the goal of the CWA:

- “Discharge of a pollutant” and “discharge of pollutants” each means “any addition of any pollutant to navigable waters from any point source.” See 33 U.S.C. 1362(12).
- “Point source” means “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. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.” 33 U.S.C. 1362(14).
- The term “pollutant” means “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 industrial, municipal, and agricultural waste discharged into water.” See 33 U.S.C. 1362(6).
- “Navigable waters” means “the waters of the United States, including the territorial seas.” 33 U.S.C. 1362 (7).

The text and structure of the CWA allows for broad coverage over discharges of pollutants from point source into navigable waters. Justice Scalia’s plurality opinion in *Rapanos* makes this point clear. He provided in his opinion that “[t]he Act does not forbid the ‘addition of any pollutant *directly* to navigable waters from any point source,’ but rather the ‘addition of any pollutant *to* navigable

waters.’” *Rapanos v. United States*, 547 U.S. 715 at 743 (2006) (quoting 33 USC section 1362(12)(A)) (emphasis added in *Rapanos* plurality opinion). Scalia further recognized that “from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates [section] 1311(a), even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.” *Id.* In analyzing the text of the Act, it is clear that Congress has intended the Act to have broad jurisdictional authority over any addition of pollution that reaches jurisdictional waters from a point source, including ground or subsurface water that is hydrologically connected or reaches jurisdictional waters.

The expansive definition of point source to include basically anything “from which pollutants are or may be discharged” further clarifies this broad authority by covering sources of pollution far beyond a direct discharge to a navigable water, and specifically includes both conduits and wells. These specific point sources, by their very nature, will discharge to navigable waters via a direct hydrologic connection. A “well” cannot physically discharge to a surface water directly without first passing through groundwater with a direct hydrologic connection. Similarly a “conduit,” which is commonly defined as a “natural or artificial channel through which something is conveyed,” encompasses discharges of pollutants through hydrologically connected groundwater. When coupled with the purpose of the Act to maintain the integrity of the Nation’s waters, is clear that Congress intended the CWA to cover discharges of pollutants that reach jurisdictional surface waters through groundwater.

Importantly, the CWA does not include any expressed or implied limitations on jurisdictions over hydrologically connected groundwater as it does for other sources of pollution. Congress clearly limited the jurisdiction of the Act over known sources of pollution of surface water from agricultural stormwater and return flows from irrigation. These sources of pollution are not point sources. 33 USC 1362(14). Congress did not include a similar limitation on “groundwater.” *Id.* While it is clear that the Act is intended to cover discharges of pollution to navigable waters, it does not expressly limit the Act’s jurisdiction to direct discharges to navigable waters alone.

Cases Analyzing the CWA’s Purpose, Text, and Structure

In its Request for Comment, the EPA referenced various cases that provide different rulings on whether discharges of pollutants to jurisdictional waters via groundwater are within the jurisdiction of the CWA. While the EPA’s Request for Comment asks whether the CWA covers discharges to groundwater that has a “direct hydrological connection” to jurisdictional surface water, the focus of the courts finding that discharges of pollutants to surface water via groundwater is not necessarily whether there is a “direct hydrological connection” or even “hydrological connection,” but the purpose of the CWA to maintain jurisdictional waters and whether the pollution reaches the jurisdictional surface water through groundwater. The courts use a variety of terms to make that determination. The division addresses these cases below, along with cases from Colorado and Tenth Circuit cases that specifically govern it.

The most recent Circuit court case law hold that discharges from point sources to jurisdictional waters via groundwater are within the jurisdiction of the CWA, including *Hawai'i Wildlife Fund v. County of Maui*, 881 F.3d 754 (9th Cir. 2018), which was cited in the Request for Comment, and *Upstate Forever, et al v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637 (4th Cir. 2018), which was decided after the Request for Comment was published. Importantly, in *Upstate Forever*, the 4th Circuit held that plaintiff must allege a direct hydrological connection between groundwater and navigable waters in order to state a claim under the CWA for a discharge of a pollutant that passes through groundwater, and that the discharge of pollution from groundwater to surface water must be traceable. The court found that “This determination necessarily is fact-specific.” *Id.* at 651. Other courts have also determined that CWA jurisdiction exists as long as the discharged pollutants reach the jurisdictional water. In *Tennessee Clean Water Network v. Tennessee Valley Authority*, 273 F. Supp. 3d 775 (M.D. Tenn. 2017) the middle district court of Tennessee found that discharges of pollutants to jurisdictional waters through groundwater may be within the CWA, but with the “crucial caveat” that a plaintiff ‘prove a link between contaminated ground waters and navigable waters’ tracing “pollutants from their source to surface waters”. *Id.* at 827. It also required that a plaintiff prove a pollutant can be traced from the source to surface water.

Of particular interest to the state of Colorado is the long-standing established case law governing the state, which has provided for at least 25 years that the CWA covers the discharge of any pollutant into ‘navigable waters’ through groundwater. *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428 (D. Colo. 1993). This is not a recent development. In the case, the court reviewed relevant case law from the Tenth Circuit and other circuits. While it noted a conflict in the circuits, it concluded that the “[CWA’s] preclusion of the discharge of any pollutant into ‘navigable waters’ includes such discharge which reaches ‘navigable waters’ through groundwater.” *Id.* at 1434. The court based this conclusion on other Tenth Circuit case law, including the ruling and purpose of the CWA as cited by *U.S. v. Earth Sciences, Inc.*, 599 F.2d 368, 373 and 375 (10th Cir. 1979) (“The court ruled that unpermitted leach mining waste escaping into the Rito Seco Creek through overflow of a reserve sump and through groundwater seeps violated the [CWA] which was ‘designed to regulate to the fullest extent possible those sources emitting pollution into rivers, streams and lakes’) and (“[i]t seems clear Congress intended to regulate discharges into every creek, stream, river or body of water that in any way may affect interstate commerce.”) The court also relied on the purpose of the CWA as determined by the Tenth Circuit in *Quivira*, 765 F.2d at 130 (“it was the clear intent of Congress to regulate waters of the U.S. to the fullest extent possible”). The *Colo. Ref. Co.*, noted that the court in *Quivira* found that discharges to dry arroyos that soak into the earth’s surface with rainfall, then become part of the underground aquifer and eventually discharge into springs is within the purview of the CWA. *Id.* at 129 and 130.

In its Request for Comment the EPA referenced several cases that provide different rulings on whether discharges of pollutants via groundwater to jurisdictional waters are within the jurisdiction of the CWA. While there appears to be a conflict in the courts about this premise, one of the cases referenced by the EPA explained the perceived conflict and ruled that discharges of pollutants via

groundwater to jurisdictional water fall within the CWA. See *Idaho Rural Council v. Bosma*, 143 F.Supp. 2d 1169 (D. Idaho 2001).

In *Bosma*, the court ultimately held that the CWA included discharges to jurisdictional water through groundwater, but that the pollutants must be traced from a point source to the jurisdictional waters. *Id.* at 1180. The court also addressed the perceived conflicting view of this issue between courts. See *Id.* at 1179-1180. It found that courts that had ruled that discharges to jurisdictional waters through groundwater were within the authority of the CWA were based on the CWA's purpose of protecting the quality of surface waters, which could be affected by hydrologically connected groundwaters. *Id.* It also considered and then rejected the decisions from courts that have held that the CWA does not regulate the discharge of pollutants into groundwaters even if they ultimately affect surface water. *Id.* (The EPA referenced one of these cases in its Request for Comment: *Village of Oconomowoc Lake v. Dayton Hudson Corporation*, 24 F.3d 962, 965 (7th Cir. 1994)). The court in *Bosma* found that those cases focused on the legislative history of the CWA, pointing out that Congress intended to exclude groundwater from regulation largely "ground waters" are distinct from "navigable waters," and jurisdiction of groundwater should remain with the states. *Id.* However, the court in *Bosma* ultimately determined that while it agreed the legislative history demonstrates that Congress did not intend to regulate discharges to groundwater, there was no indication that Congress intended to exclude discharges to hydrologically connected groundwater that affect surface water. *Id.* at 1180.

The EPA has referenced other cases that hold discharges to groundwater are not within the CWA even if there is a hydrological connection.

- *Cape Fear River Watch v. Duke Energy Progress*, 25 F.Supp. 3d 798, 810 (E.D.N.C. 2014) ("Congress did not intend the CWA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow 'hydrologically connected' to navigable surface waters.")
- *Village of Oconomowoc Lake v. Dayton Hudson Corporation*, 24 F.3d 962, 965 (7th Cir. 1994), cert denied, 513 U.S. 930 (1994) ("Neither the Clean Water Act nor the EPA's definition [of waters of the United States] asserts authority over ground waters, just because these may be hydrologically connected with surface waters")
- *Rice v. Harken Exploration Co.*, 250 F.3d 264, 272 (5th Cir. 2001) ("A generalized assertion that covered surface waters will eventually be affected by remote, gradual, natural seepage from contaminated groundwater" was outside the scope of the Oil Pollution Act in order "to respect Congress's decision to leave the regulation of groundwater to the States.")

CDPHE notes that, these cases all focus on the view that the legislative history of the CWA demonstrated that Congress did not intend to regulate groundwater since the legislative history shows that "groundwater" is distinct from "navigable waters," and jurisdiction of groundwater should remain with the states. However, as determined by the court in *Idaho Rural Council*, while the legislative history does demonstrate Congress did not intend to regulate isolated or nontributary groundwater, it does not demonstrate that Congress intended to exclude discharges of pollutants

from point sources into groundwater that could negatively affect jurisdictional water. Idaho Rural Council, 143 F.Supp. 2d at 1180.

It is clear that based on the purpose, text, and structure of the CWA, and the courts' interpretations of the same - - especially the Ninth Circuit's most recent decision in Hawai'i Wildlife Fund, that the CWA covers any discharge of pollutants from a point source to jurisdictional waters via groundwater if those discharges have a hydrologic connection resulting in pollution of the jurisdictional water.

2) Whether those discharges would be better addressed through other federal authorities as opposed to the NPDES permit program

No. In CDPHE's opinion, the CWA offers the best regulatory mechanism to address these types discharges. Other federal programs may be able to cover these types of discharges in some instances, but they often lack the framework that is necessary to assess impacts to water quality and derive appropriate permit limitations. Discharges of pollutants to jurisdictional waters via hydrologically connected groundwater are best addressed by EPA and the states through the CWA permitting authority. The question of whether a discharge to groundwater is hydrologically connected to groundwater is a highly factual determination and should be a case-by-case analysis. The topography, geology, and thus gravitational water flow are strikingly different in each situation and may vary based on the hydrogeology of a region. Each state and its technical staff should have the ability to assess the facts before it to determine if a discharge of pollutants from a point source reaches a jurisdictional water via groundwater.

3) Whether some or all such discharges are addressed adequately through existing state statutory or regulatory programs or through other existing federal regulations and permit programs.

No. In general, not all states have independent state laws and regulations protecting groundwater that account for the complexity of the relationship between hydrologically connected groundwater and surface water. In order to adequately protect the surface water resource, states need to have the flexibility to look at discharges to hydrologically connected groundwater and apply the NPDES surface water permitting framework when appropriate. For example, often, the assigned beneficial uses for groundwater do not cover beneficial uses for surface water. For example, in Colorado the beneficial uses for groundwater often include only agricultural and drinking water. Discharges to hydrologically connected groundwater that reach surface waters could impact other assigned beneficial uses, such as aquatic life, that may be more sensitive to pollutants of concern, such as heavy metals (i.e., arsenic, lead, zinc, or silver). In that situation, discharges of heavy metals to hydrologically connected groundwater, if regulated exclusively under state groundwater permitting without applying the NPDES surface water permitting framework, could result in exceedances of the surface water standards for aquatic life and harm to the environment. If federal law does not allow protection of surface water from a discharge to groundwater, that may compromise states' ability to apply surface water protections to groundwater discharges, even where states have jurisdiction over the groundwater.

4) Whether EPA should clarify its previous statements concerning pollutant discharges to groundwater with a direct hydrological connection to jurisdictional water in order to provide certainty for the public and the regulated community.

EPA does not need to take any action to clarify its previous statements that discharges to groundwater may require a NPDES permit. EPA's previous statements in federal register notices and otherwise provide sufficient framework to indicate that a permit may be required under certain circumstances when a sufficient hydrological connect exists between the source of the discharge pollutant and the jurisdictional water. Furthermore, it would be virtually impossible to anticipate all of the possible activities and factual circumstances that would and would not justify protection of surface water for a groundwater discharge. These situations are highly fact specific and should be handled based on actual facts rather than trying to define it in the abstract. If EPA chooses to clarify its previous statements, it must follow existing case law interpreting the text and scope of the CWA and should not impede a state's ability to apply the NPDES framework to control discharges to hydrologically connected groundwater, especially considering that the topography, geology and gravitational water flow differs between states.

5) What issues should be considered if further clarification is undertaken, including, for example, the consequences of asserting CWA jurisdiction over certain releases to groundwater or determining that no such jurisdiction exists.

No further clarification should be taken. See response to Request for Comment number 4.

6) What format or process EPA should use to revise or clarify its previous statements (e.g., through memoranda, guidance or in the form of rulemaking) if the Agency pursues further action in response to this request for comment.

Again no further clarification should be taken. See response to Request for Comment number 4. However, if EPA chooses to clarify its previous statements, it should do so either by frequently asked questions, memorandum, or guidance, not through rulemaking. A rulemaking on this issue would be extremely resource intensive, especially considering the numerous potential factual scenarios in existence between states. The EPA has other priorities on which it should expend its limited resources.

Sincerely,

s/Patrick Pfaltzgraff

Patrick Pfaltzgraff
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