
Allison R. White

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Like water itself, water regulation can be just as fluid, a series of imperfect attempts to contain an uncontainable force of nature. In efforts to harness water’s resources for their personal benefit, humans consequently pollute the water sources fundamental to their subsistence. As pollution concerns have increased over time, the legislature has passed statutes such as the Clean Water Act (CWA) to remedy past and present water source contamination.

The CWA aims to uphold water integrity and eliminate toxic pollutant discharges into waters mutually utilized by humans and wildlife. In modern society, achieving this goal proves more than challenging. As politics influences government agencies, administrative goals affect the Environmental Protection Agency (EPA)’s considerations when implementing environmental safeguards.

President Trump’s pro-industry administration holds economic growth of paramount concern, an issue undoubtedly at the


4. Id. § 1251(a) (outlining current and future Clean Water Act objectives). The CWA strives to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” and eliminate pollution to navigable waters by 1985. Id. (stating CWA’s main purpose). While water pollution was not eliminated by 1985, the CWA sets up future plans to regulate non-point source pollution to further this goal. See id. § 1251(a)(7) (showing legislators intended further regulation in future).

5. See Water Pollution, supra note 2 (discussing negative effect of infrastructure modernization on environment).

6. See Matthew R. Bowles, Speak Now or Forever Be Overruled: Deferring to Political “Judgement” in EPA Rulemakings, 20 GEO. MASON L. REV. 591, 592-93 (2013) (describing judicial deference to EPA’s political considerations as long as considerations are reasonable and disclosed to public).
foreground of current policy. When industrial growth enters through the doorway, however, environmental effects follow shortly behind. EPA regulations force industry leaders to question where their pollutants settle. The more stringent EPA regulations become, the more companies must invest to implement environmentally safe practices. Consequently, the administration must balance the interests of fostering business in the United States with environmental compliance costs.

In *Hawaii Wildlife Fund v. County of Maui*, the United States Court of Appeals for the Ninth Circuit highlighted water pollution concerns resulting from modern ways of life. Despite public opinion that most water pollution arises from factories directly unloading pollutants into oceans, studies show runoff and groundwater transport the vast majority of pollution into national waters.

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12. 886 F.3d 737 (9th Cir. 2018) (holding CWA covers indirect discharges).

13. See id. at 752 (holding CWA covers pollutant discharges with indirect hydrological connections to navigable waters).

Ninth Circuit held the CWA permits the EPA to regulate pollution discharges with indirect hydrological connections to national waters, provided all other CWA factors are met. After the EPA submitted an amicus brief advising to only implicate those who directly discharge pollutants, the Ninth Circuit’s decision to abandon the EPA’s proposal illustrates tensions between the executive and judicial branches. With circuit courts split over the CWA’s appropriate scope, Hawaii Wildlife Fund marks a legal movement toward regulation of indirect pollutant discharges and more environmentally protective application of the CWA.

This Note examines the Ninth Circuit’s decision in Hawaii Wildlife Fund, beginning with a discussion of the facts in Part II. Part III describes the legal background surrounding Hawaii Wildlife Fund, including a discussion of the CWA and its disputed terms. Subsequently, Part IV illustrates the Ninth Circuit’s analysis, and Part V critically examines the court’s decision. Finally, with a potential Supreme Court decision on the horizon, Part VI forecasts Hawaii Wildlife Fund’s impact on pollution regulation.

15. See Haw. Wildlife Fund, 886 F.3d at 752 (holding CWA covers indirect discharges because those discharges have same effect as direct discharges).


18. For further discussion of the facts behind Hawaii Wildlife Fund, see infra notes 22-47 and accompanying text.

19. For further discussion of the CWA and the legal backstory preceding Hawaii Wildlife Fund, see infra notes 48-124 and accompanying text.

20. For a summary of the Ninth Circuit’s holding, see infra notes 125-149 and accompanying text. For a further critical analysis of the court’s rationale, see infra notes 150-178 and accompanying text.

21. For further discussion of Hawaii Wildlife Fund’s potential impact, see infra notes 179-200 and accompanying text.
II. PROBLEMS IN PARADISE? THE FACTS OF HAWAII WILDLIFE FUND

Hawaii’s Lahaina Wastewater Reclamation Facility stored the majority of West Maui’s liquid waste in four underground wells. When studies concluded that pollutants seeped out of the wells and into the Pacific Ocean via groundwater, environmental organizations alleged the County of Maui violated the CWA by indirectly discharging pollutants into the ocean. The County pushed back, arguing that the CWA only imposed liability for direct discharges into navigable waters.

A. County Injection Wells

The Lahaina Wastewater Reclamation Facility serves as the primary water treatment plant for West Maui, Hawaii. As part of Lahaina’s water treatment plan, the facility isolates reusable water from sewage, resulting in a treated wastewater by-product known as effluent. At the facility’s inception, the County of Maui contemplated building an ocean outfall to release the effluent directly into the Pacific Ocean. After weighing environmental concerns, the County decided to instead store the effluent in four injection wells. Of the four wells, the third and fourth well receive a major-

23. See id. at 742-43 (discussing controversy and procedure of case).
24. See id. at 743 (describing County’s arguments that direct discharge requirement precludes liability for indirect discharges).
25. See id. at 742 (discussing origin of wastewater reclamation facility).
27. Haw. Wildlife Fund, 886 F.3d at 742 (determining discharge of pollutants directly into Pacific Ocean is too harmful to coastal waters).
28. Id. (noting four wells inject 2.8 gallons of pollutants per day into groundwater). Injection wells are devices consisting of long pipes that deposit materials into underground porous rock formations. General Information About Injection Wells, U.S. ENVTL. PROT. AGENCY, https://www.epa.gov/uic/general-information-about-injection-wells (last visited Dec. 29, 2018) (explaining scientific principles behind injection wells). The wells can be located at depths as shallow as soil level or as deep as bedrock limestone. Id. In theory, a properly constructed well utilizes the surrounding rock in conjunction with multiple cement layers to isolate stored substances from the surrounding environment. Id. Beginning in the 1930s, munici-
ity of the facility’s effluent.\textsuperscript{29} Once the effluent enters the wells, the treated wastewater filters into groundwater at a rate of approximately three to five million gallons per day.\textsuperscript{30}

B. Environmental Reviews and Tracer Dye Study

The County of Maui (the County) conducted an environmental review before the CWA came into effect in 1973.\textsuperscript{31} The review determined that waste eventually traveled from the wells, through groundwater, and into the Pacific Ocean.\textsuperscript{32} After the CWA took effect, a follow-up review in 1991 confirmed that thousands of gallons of effluent reached the Pacific Ocean on a daily basis.\textsuperscript{33} Throughout these years, the County maintained that any adverse effects on water quality were diminished once the effluent mixed with ocean waters.\textsuperscript{34}

In 2013, the EPA conducted a tracer dye study with the assistance of the Hawaii Department of Health and the University of Hawaii.\textsuperscript{35} Researchers placed dye into injection wells two, three, and four.\textsuperscript{36} After eighty-four days, the dye from wells three and four visibly emerged into the Pacific Ocean from submarine seepage points.\textsuperscript{37}

C. Opposition to County Actions

Following the tracer dye results, plaintiffs Hawaii Wildlife Fund and other environmental organizations brought an action against

\begin{itemize}
\item \textsuperscript{29} Haw. Wildlife Fund, 886 F.3d at 743 (explaining high volume exiting wells three and four reroute effluent flow patterns from well two).
\item \textsuperscript{30} \textit{See id.} at 742 (equating volume of effluent injected into coastal waters to permanently running one garden hose every meter for 800 meters of coastline).
\item \textsuperscript{31} \textit{See id.} (revealing county consultant informed Maui in both 1973 and 1991 that effluent would enter Pacific Ocean).
\item \textsuperscript{32} \textit{Id.} at 742 (finding effluent would emerge some distance off of West Maui’s shore).
\item \textsuperscript{33} \textit{Id.} (describing one out of every seven gallons of groundwater entering Pacific Ocean was effluent).
\item \textsuperscript{35} \textit{See Haw. Wildlife Fund,} 886 F.3d at 742-45 (describing purpose of study to determine hydrological connection between wells and Pacific Ocean).
\item \textsuperscript{36} \textit{See id.} at 743 (noting researchers declined to test well one and instead predicted outcomes based on results from well two).
\item \textsuperscript{37} \textit{See id.} (describing point of effluent emergence as seafloor location close to shoreline half-mile southwest from water treatment facility).
\end{itemize}
the County in the District Court of Hawaii. The plaintiffs alleged the County violated the CWA by releasing pollutants into navigable waters without the required National Pollutant Discharge Elimination System (NPDES) permit. Although the County applied for a permit in 2012, they were still awaiting approval at the time of suit.

The County did not refute that the Pacific Ocean qualified as a navigable water or that the effluent was a pollutant as defined under the CWA. Despite acknowledging that effluent from the wells reached the Pacific Ocean, the County argued it was not liable under the CWA. A recently proposed EPA rule stated the CWA only requires NPDES permits when pollutants are discharged into navigable waters through a direct hydrological connection. Relying on the proposed rule, the County argued it did not need an NPDES permit under the CWA, as effluent discharges reached the Pacific Ocean indirectly through groundwater.

The United States District Court for the District of Hawaii granted summary judgment in favor of the plaintiffs. The County then appealed to the United States Court of Appeals for the Ninth Circuit, arguing the CWA only regulates direct discharges of pollutants to navigable waters. The Ninth Circuit affirmed the district court, refusing to defer to the EPA’s recommendations and holding

38. See Haw. Wildlife Fund I, 24 F. Supp. 3d at 983 (describing plaintiff’s argument of discharge without NPDES permit and county’s argument that they applied for permit).


40. See id. (describing County’s argument that applying for permit is functional equivalent of obtaining permit for purposes of suit).

41. See Haw. Wildlife Fund, 886 F.3d at 742 (stating defendant acknowledged pollution entering Pacific Ocean but disputed amount and diffusion route).

42. See id. at 744 (arguing no liability under CWA for non-point source discharge).

43. See id. at n.3 (noting proposed rule to impose liability only on direct discharges of pollutants); see also Clean Water Act Coverage of “Discharges and Pollutants” via a Direct Hydrological Connection to Surface Water, 83 Fed. Reg. 7,126, 7,126-28 (Feb. 2, 2018) (to be codified at 40 C.F.R. pt. 122) (allowing comment on proposed rule only imposing liability for direct hydrological connections to surface water).

44. Haw. Wildlife Fund, 886 F.3d at 749 (holding defendant liable despite arguments because pollutant discharge is more than de minimus).


46. See Haw. Wildlife Fund, 886 F.3d at 742 (stating County’s appeal of district court’s use of conduit theory to impose liability for indirect discharges).
the CWA requires an NPDES permit for indirect pollutant discharges to navigable waters.47

III. Murky Waters: A Legal Background

The CWA, formerly known as the Federal Water Pollution Control Act, serves as a primary method of preventing water source pollution.48 In addition to monitoring water quality, the CWA regulates the quantity, composition, and method of pollutant discharged into the nation’s waters.49 Despite a historical deference to the EPA’s implementation of environmental statutes, the judiciary now shows opposition to the EPA’s nonparty proposed liability rule which would narrow the CWA’s reach.50

A. The Clean Water Act (CWA)

In response to national water pollution concerns, the CWA strives to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”51 When a party “(1) discharge[s] (2) a pollutant (3) to navigable waters (4) from a point source” without obtaining an NPDES permit, it violates the CWA.52 NPDES permits allow the EPA to regulate the method and quantity of pollutant discharge with respect to preventing adverse effects on wildlife and human health.53 To obtain a permit, an entity must apply to the state where it is located.54 The state then posts the permit application for public comment.55 Once the EPA determines that the entity has corrected any permit violations, paid monetary fees and/or fines, and complied with state and national

47. Id. at 752 (holding defendant liable and stating CWA forbids direct and indirect actions ending in same result). The court stated the decision “is about preventing the County from doing indirectly that which it cannot do directly.” Id. (finding direct and indirect discharges have same effect).
49. See id. (clarifying CWA’s implementation).
50. See Haw. Wildlife Fund, 886 F.3d at n.3 (stating lack of deference to EPA’s recommendations).
52. See Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 532 (9th Cir. 2001) (defining CWA’s violation factors); see also Haw. Wildlife Fund, 886 F.3d at 744 (utilizing Headwaters analysis).
54. See id. (describing NPDES permit application process).
55. See id. (describing public comment process).
regulations, the EPA will then authorize the state to issue the permit.56

In defining the CWA’s factors, the legislature describes “discharge” to mean the release of a pollutant.57 The EPA defines “pollutants” broadly to include any type of waste, ranging from industrial by-products to sediment particulates.58 “Navigable waters,” though far less explicit, includes any physically navigable water as well as the tributaries to that water, such as a stream leading to a river.59 A “point source” is a “discernible, confined and discrete conveyance” that carries pollutants, a classification to which wells belong.60 Despite attempts to streamline the CWA and define its factors, courts still disagree on how to delineate exactly when a point source discharge occurs in various situations.61

B. Point Sources

One of the first attempts to further define point sources occurred in 1979 in United States v. Earth Sciences, Inc.,62 wherein the Tenth Circuit held a gold ore sump constituted a point source for runoff containing a sodium cyanide-hydroxide by-product.63 The polluted runoff filtered into a nearby river, killing a significant portion of the local fish population.64 The court determined a pollutant’s origin qualifies as a point source under the CWA when the pollutant can be traced back to an “identifiable point” of discharge.65

In 1984, courts debated point sources once again in Trustees for Alaska v. EPA,66 when the Ninth Circuit examined wastewater re-

56. See id. (illustrating NPDES permit requirements).
57. See Haw. Wildlife Fund, 886 F.3d at 745-46 (equating discharge to release).
58. See generally id. at 744-45 (showing broad interpretation of pollutant); see also NPDES Permit Basics, supra note 53 (giving examples of covered pollutants under CWA).
59. See NPDES Permit Basics, supra note 53 (discussing judicial and administrative’s broad interpretations of navigable waters and listing examples).
60. Haw. Wildlife Fund, 886 F.3d at 744 (defining point sources and applying definition to wells).
61. See id. at 744-45 (explaining lack of clarity in CWA and need to define “point source” in light of “non-point source” to provide clarity).
62. 599 F.2d 368 (10th Cir. 1979) (creating point source definition).
63. See id. at 370, 373 (holding runoff stemming from inadequate construction of mining site is point source discharge).
64. See id. at 370 (describing melting snow carried runoff into river killing fish in Rito Seco river).
65. See id. at 373 (finding ability to trace back pollutant to identifiable point aligns with congressional intent to give “point source” and “discharge” broadest possible definitions).
66. 749 F.2d 549 (9th Cir. 1984) (defining point sources further).
leased from placer mining operations into nearby waters. To separate gold from glacial ice deposits, miners used a sluice box to filter gold from wastewater solution flowing through the device. While the miners argued that mining operation output qualifies as a non-point source discharge, the Ninth Circuit held the sluice box was the type of discrete conveyance the CWA contemplated. The decision rendered the wastewater flowing “through” the confined sluice box to be a point source discharge.

Courts also tried to demystify point sources through defining what does not qualify as a point source. The Ninth Circuit addressed “non-point source” pollution in Ecological Rights Foundation v. Pacific Gas & Electric Co., which concerned wood preservatives washing off telephone poles into nearby waters. As the parties did not dispute that the telephone poles released preservatives, the petitioner argued the poles were an identifiable point of discharge and, therefore, a point source. The Ninth Circuit disagreed and held storm water runoff qualified as non-point source pollution, because the polluted runoff was never confined or collected. Comparing the wood preservatives to automobile residue on a highway, the court stated runoff carrying such pollutants is difficult to trace or regulate. In addition, the court noted if Congress could have determined a way to regulate diffuse discharges without extreme difficulty, it would have created a provision in the CWA.

67. See id. at 552 (describing process of excavating pay dirt from glacial deposits and using water and mercury to isolate gold).
68. See id. (describing wastewater by-product consists of sediment, mercury, and arsenic).
69. See id. at 558 (outlining miners’ argument that CWA defines mining activities as non-point source activities).
70. See id. (holding sluice box is confined channel to collect wastewater and thus point source).
71. See Haw. Wildlife Fund v. County of Maui, 886 F.3d 737, 744-45 (9th Cir. 2018) (identifying what is not point source can clarify what qualifies as point source).
72. 713 F.3d 502 (9th Cir. 2013) (explaining non-point source pollution).
73. See id. at 507 (describing how rain caused preservatives to run off of utility poles into nearby water sources).
74. See id. at 509 (describing plaintiffs’ contention that point sources are any “tangible, identifiable thing”).
75. See id. at 509-10 (holding utility poles are not point sources because they were not designed to collect pollutants and its classification as point source was disputed amongst parties).
76. See id. (finding practicality necessitates limitation on qualifying discharges).
77. See Ecological Rights Found., 713 F.3d at 509-10 (finding poles not within CWA’s textual definition of point sources).
C. Discharges to Navigable Waters

In addition to challenges interpreting point sources, courts find it equally challenging to determine when the CWA covers a pollutant discharge, as exemplified in *Northern California River Watch v. City of Healdsburg*.[78] In *City of Healdsburg*, the court established a two-part, baseline test for determining if a discharge is within the CWA’s scope.[79] In order to establish the requisite “nexus” between the discharge and the navigable water for the CWA to take effect, there must be (1) a hydrologic connection between the point source and the navigable water, and the pollutant must (2) significantly alter the physical, chemical, and biological integrity of the water.[80]

While *City of Healdsburg* helps elucidate qualifications for covered discharges, the case leaves ambiguities as to the hydrologic connection level required for CWA coverage.[81] After *Hawaii Wildlife Fund* entered the District Court of Hawaii, the EPA posted a request for comment, proposing the CWA should require a direct hydrological connection between the point source and the navigable water.[82] The EPA stated, “[c]ontinuities releasing pollutants to groundwater . . . [having] a direct hydrologic connection to the jurisdictional surface waters may be . . .” affected by how the CWA defines “discharges.”[83] The EPA further acknowledged that proposed changes would directly impact states, tribes, territories, federal agencies, and industries.[84] Previously, the Ninth Circuit commented on the EPA’s ability to define environmental statutes in *League of Wilderness Defenders v. Forsgren*,[85] stating the EPA has authority to refine definitions within statutes where there is “room for

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78. See 496 F.3d 993, 1000 (9th Cir. 2007) (finding need to examine multiple hydrological connections separately to determine if point source involved).
79. See id. at 999-1000 (noting navigable waters as main issue on appeal but hydrological connections must be examined in light of statute’s purpose).
80. See id. (describing test for requisite nexus under CWA).
82. See id. (explaining rule change necessary due to scientific uncertainties and need to resolve conflicting legal precedent).
83. Id. (stating additional factors such as distance traveled and time for pollutants to emerge should be taken into account).
84. See id. (stating rule change requires industries to reevaluate discharges and agencies to reconsider municipal projects near waters).
85. 309 F.3d 1181 (9th Cir. 2002) (commenting on EPA’s authority).
reasonable interpretation . . . ”86 The court further cautioned that such authority should not contradict congressional intent by altering terms in situations where the solution is clearly defined.87

D. Direct or Indirect Discharges: Which is Required?

In the 1980s, Sierra Club v. Abston Construction Co.88 held runoff qualified as point source pollution, challenging preconceived notions of runoff as an indirect discharge immune to the CWA’s coverage.89 The defendants managed a coal mine near a tributary to Alabama’s Black Warrior River and constructed sediment basins to collect strip mining runoff.90 Despite the argument that storm water caused the basin to overflow and water to naturally diffuse toward the nearby creek, the Fifth Circuit deemed the runoff a point source discharge.91 The Fifth Circuit asserted the basins were a point source because they confined and collected runoff before it entered navigable waters.92 As a result of the decision, diffuse discharges caused by gravity flow, common with storm water runoff, could potentially qualify as point source discharges under the CWA.93

For years after Sierra Club, courts followed the indirect discharge approach and continued to do so in Concerned Area Residents for the Environment v. Southview Farm.94 In Southview Farm, the Second Circuit found that liquid manure sprayed from a tank onto a field constituted a point source discharge, even though runoff car-

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86. See id. at 1190 (emphasis omitted) (arguing EPA cannot define entity as non-point source when it is clearly defined as point source by statute).

87. See id. (finding statute definition contradicts both congressional intent and established legal precedent).

88. 620 F.2d 41 (5th Cir. 1980) (defining when runoff is point source pollution).

89. Id. at 44-45 (holding not all mining activities are non-point source activity).

90. See id. at 43 (describing sediment basin’s purpose to prevent runoff from entering creeks and rivers).

91. See id. at 47 (finding runoff may qualify as point source discharge under correct circumstances).

92. See id. at 45 (agreeing with government’s middle-ground argument that if pollutant exits confined, discrete conveyance and enters navigable water, it is covered by CWA).

93. See Abston Constr. Co., 620 F.2d at 45 (holding runoff discharge via gravity flow may qualify as point source discharge after fact-specific inquiry).

94. See 34 F.3d 114 (2d Cir. 1994) (holding aerial dispersion of chemicals from spray nozzle is point source discharge); see also Peconic Baykeeper, Inc. v. Suffolk Cty., 600 F.3d 180 (2d Cir. 2010) (determining discharge covered by CWA when pollutants originate from qualifying point source and enter navigable waters through indirect dispersion means).
ried the manure to nearby water sources. Similarly, *Peconic Baykeeper, Inc. v. Suffolk County* involved aerially sprayed pesticides settling in local water sources. Though the county argued aerially diffused pollutants were not confined, the Second Circuit held pesticide spraying constituted a point source discharge because the spraying apparatus served as a discrete conveyance to release pesticides.

The Supreme Court addressed the hydrological connection issue in *Rapanos v. United States*, which involved constructed drains emptying into Michigan wetlands. Between an opinion by Justice Scalia and an extensive concurrence by Justice Kennedy, the Court determined by a plurality that wetlands qualified as a navigable water under the CWA. In dicta, Justice Scalia remarked that while the directness of a hydrological connection was not an issue on appeal, such issues should be determined by reading the CWA on its face. The CWA reads that parties are liable when they discharge pollutants “to navigable waters from any point source.” As the CWA does not state discharges must be direct, indirect discharges should qualify under the act. Furthermore, in *Carson Harbor Village, Ltd. v. Unocal Corp.*, the Ninth Circuit proposal to require only direct discharges did not coincide with legislative intent to impose strict liability for CWA violations. In *Carson Harbor*, the court stated that strict liability is more logical in a system where direct and indirect discharges are covered by the CWA.

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95. *See Concerned Area Residents for the Env't*, 34 F.3d at 118-19 (holding liquid manure spraying type of human-initiated activity CWA intended to cover).

96. 600 F.3d 180 (2d Cir. 2010) (focusing on aerial pollution).

97. *See id.* at 182-84 (recounting county’s efforts to reduce West Nile exposure by spraying aerial pesticides which eventually settled on certain waters).

98. *See id.* at 188-89 (finding spray nozzle discrete conveyance and thus point source discharging pollutants onto navigable waters).


100. *See id.* at 719-20 (discussing land developing constructing drains and ditches between eleven and twenty miles away from wetlands).

101. *See id.* at 757 (vacating Sixth Circuit decision that wetlands do not qualify as navigable water).

102. *See id.* at 743 (focusing on “to” and “from” language in statute and refusing to impart extra meaning or qualifications).

103. Id. (emphasis added) (emphasizing statute’s plain language).

104. *See Rapanos*, 547 U.S. at 743 (noting Act forbids both direct and indirect discharges).

105. 270 F.3d 863 (9th Cir. 2001) (commenting on strict liability standards).

106. *See id.* at 881 (determining strict liability not necessary under easily definable direct discharge theory).

107. *See id.* (determining CWA would have causation requirement if Congress only intended liability for direct discharges).
Not all discharges require regulation, as illustrated in *Greater Yellowstone Coalition v. Lewis*.\textsuperscript{108} In 2010, *Greater Yellowstone* examined toxic waste rock solutions emitted from a mine expansion operation.\textsuperscript{109} Investigations showed that water filtering through waste rock picked up deadly selenium contents, diffused hundreds of feet through the ground, and eventually resurfaced in nearby streams, which threatened fish populations.\textsuperscript{110} The Ninth Circuit found two potential point source discharges.\textsuperscript{111} In the first, rain water entered pits of waste rock before filtering through the soil.\textsuperscript{112} In the second, a drainage system collected runoff before it diffused underground.\textsuperscript{113} The court held that the drainage system was a point source because it intentionally collected wastewater, while the pits were not a point source because they did not actually confine the runoff.\textsuperscript{114}

Some courts favor narrower interpretations of the CWA, for example, the Seventh Circuit in *Inland Steel Co. v. EPA*.\textsuperscript{115} In *Inland Steel*, a steel company disposed of ammonia-containing waste in injection wells, which then released the waste into groundwater.\textsuperscript{116} As the company injected the waste below a layer of non-permeable rock, the waste could not rise to surface waters.\textsuperscript{117} The Seventh Circuit held the company’s actions were not a true point source discharge under the CWA, stating not all wells and injections of pollutants into waters must be regulated.\textsuperscript{118}

\textsuperscript{108} See 628 F.3d 1143 (9th Cir. 2010) (examining multiple discharges and only qualifying half as requiring NPDES permit).

\textsuperscript{109} Id. at 1146 (noting waste rock contained high selenium concentration).

\textsuperscript{110} See id. at 1147-48 (describing studies showing waste water diffusion was hundreds of feet into ground and later surfacing).

\textsuperscript{111} See id. at 1152-53 (examining confining qualities of sources to determine if it was point source).

\textsuperscript{112} See id. (determining water not collected and confined by drain cover before entering pits).

\textsuperscript{113} See *Greater Yellowstone Coal.*, 628 F.3d at 1152-53 (finding water running off cover into drain system was confined and discrete conveyance under CWA).

\textsuperscript{114} See id. (holding pits do not confine water).

\textsuperscript{115} See 901 F.2d 1419, 1422 (7th Cir. 1990) (describing injections as disposals and not discharges under CWA).

\textsuperscript{116} See id. at 1420-22 (describing injection wells’ positioning and depth).

\textsuperscript{117} See id. at 1420-21 (finding wells located one quarter mile below lowest aquifer and underneath non-porous rock).

\textsuperscript{118} See id. at 1422 (stating limitations inherent in CWA).
E. “Discharge” versus “Disposal”

In light of decisions like Inland Steel, courts must distinguish between a discharge of pollutants and mere disposals.\(^{119}\) Under the CWA, the terms are not mutually exclusive.\(^{120}\) The Seventh Circuit stated all discharges are disposals, but not all disposals are discharges.\(^{121}\) The CWA defines a disposal as a “‘discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste.’”\(^{122}\) Meanwhile, a “land disposal” is specifically placing “hazardous waste” into an injection well.\(^{123}\) Discharges, however, are disposals that have the potential to reach navigable waters of the United States, such as streams, rivers, lakes, or oceans.\(^{124}\)

IV. DREDGING THE WATERS: THE NINTH CIRCUIT’S ANALYSIS

Upon de novo review, the Ninth Circuit concluded the CWA covers both direct and indirect discharges, holding the County of Maui liable for releasing pollutants into the Pacific Ocean.\(^{125}\) The court determined the County could not escape liability solely because pollutants traveled to the ocean through intermediary means.\(^{126}\) In affirming the district court, the Ninth Circuit reasoned that direct and indirect pollutant discharges achieve the same damaging results and held the CWA covers both types of discharges.\(^{127}\)

A. Point Sources

The Ninth Circuit relied on a four-factor test for determining CWA violations proposed in Headwaters, Inc. v. Talent Irrigation Dis-

\(^{119}\) See id. at 1422 (determining EPA distinguished between disposal and discharge).

\(^{120}\) See Haw. Wildlife Fund v. County of Maui, 886 F.3d 737, 752 (finding NPDES permits only required for disposals that are also discharges).

\(^{121}\) Inland Steel Co., 901 F.2d at 1422 (defining differences between two terms).

\(^{122}\) Id. (emphasis omitted) (clarifying CWA’s definition).

\(^{123}\) See id. (illustrating additional sub-categories of non-CWA covered pollutant releases).

\(^{124}\) See id. (describing discharges with no potential to reach navigable waters as undeniable disposals not covered by CWA).

\(^{125}\) Haw. Wildlife Fund, 886 F.3d at 752 (explaining pollutants’ indirect route through groundwater to ocean did not preclude liability under CWA).

\(^{126}\) Id. at 752 (reasoning indirectly releasing pollutants into ocean has same effects as directly dumping waste into Pacific Ocean).

\(^{127}\) Id. at 751-52 (alleging County knew effluent’s harmful effects when it decided against creating direct ocean outfall to dispose pollutants).
Thus, if a party fails to obtain an NPDES permit and “(1) discharge[s] (2) a pollutant (3) to navigable waters (4) from a point source,” the party violates the CWA. Neither party contested that effluent was a pollutant and the Pacific Ocean constituted a navigable water under the Act. Additionally, the court noted that the CWA specifically qualifies wells as point sources. The County’s injection wells collected and channeled the area’s wastewater, making the wells a “confined, discrete conveyance” under the CWA’s definition of “point source.” When considering whether a discharge occurred, the court realized ambiguities exist within the CWA’s text and judicial history.

B. Coverage of Indirect Discharges

The Ninth Circuit addressed the County’s argument that “the point source itself must convey the pollutants directly into the navigable water under the CWA.” The County relied on Alaska’s language requiring pollution to travel “through a confined, discrete conveyance.” Focusing on the word “through,” the County argued the pollution must be released to navigable waters directly from a confined point source. Pollutants released from a point

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128. See 243 F.3d 526, 532 (9th Cir. 2001); see also Haw. Wildlife Fund, 886 F.3d at 744 (stating conditions for CWA violation).
129. Haw. Wildlife Fund, 886 F.3d at 744 (finding discharge definition to be main issue on appeal).
130. Id. (describing uncontested findings of law).
131. Id. (noting County’s wells fell perfectly within point source definition). Though wells are listed as an example of CWA point sources, the Ninth Circuit noted Inland Steel created an exception when pollution is completely contained. Id. at 750 (holding not all disposals to groundwater are regulated). The wells in Inland Steel did not require NPDES permits because they were located beneath impermeable rock, making pollution of the above groundwater impossible. Inland Steel Co. v. EPA, 901 F.2d 1419, 1420, 1422 (7th Cir. 1990) (justifying completely contained pollutant disposals).
132. Haw. Wildlife Fund, 886 F.3d at 746 (defining “point source” under CWA).
133. Id. at 745-46 (citing contradictory interpretations of “discharges” under CWA).
134. Id. at 745 (recounting County’s arguments to escape liability).
135. Id. at 746 (citing Trs.’ for Alaska v. EPA, 749 F.2d 549, 558 (9th Cir. 1984)) (defining point source).
136. See id. at 745-46 (explaining County argues diffusion through groundwater is not comparable to direct ocean outfalls). The Ninth Circuit noted that even if the court accepted such narrow language, the County would still be liable because the effluent flows “through” the wells before entering the Pacific Ocean. Id. (stating plaintiffs still prevail under direct discharge requirements). The County’s interpretation of Alaska’s language, as limiting the CWA’s scope to direct hydrological connections, is inaccurate. Id. (explaining Alaska did not encounter non-point source discharge issue).
source but entering a navigable water through diffuse or indirect means, such as through groundwater, would not require NPDES permits under the CWA. 137

The Ninth Circuit rejected the County’s interpretation of Alaska, relying on Greater Yellowstone to support liability for discharges with indirect hydrological connections to navigable waters. 138 The court found the County’s groundwater conveyance comparable to Greater Yellowstone’s NPDES permit requirement for water filtering hundreds of feet underground from a point source before reentering surface waters. 139 Additionally, the court looked at qualifications of aerial diffusion into nearby waters as a point source discharge, as discussed in Peconic Baykeeper, Inc. v. Suffolk County. 140 Despite ambiguities in the judicial interpretation of “discharge” under the CWA, the Ninth Circuit found the rationales in cases such as Greater Yellowstone and Peconic Baykeeper supported coverage of indirect discharges. 141

Justifying this theory, the Ninth Circuit looked to Justice Scalia’s opinion in Rapanos to clarify ambiguities in the direct-versus-indirect discharge debate. 142 Though the Ninth Circuit historically deferred to Justice Kennedy’s concurrence clarifying wetland involvement under the CWA, the lack of wetlands at issue led the court to examine Justice Scalia’s textualist interpretation of the statute. 143 Justice Scalia observed that neither the words “direct” nor “directly” appear in the CWA. 144 The CWA only forbids the "‘addi-
tion of any pollutant directly to navigable waters,” an encompassing definition upon which all justices in Rapanos agreed upon.\textsuperscript{145}

Despite an argument for deference to the EPA’s recommendations to limit the CWA’s coverage to only “direct hydrological connections,” the court denied the EPA’s statutory interpretation.\textsuperscript{146} The court asserted that the EPA “reads . . . words into the CWA . . . that are not there.”\textsuperscript{147} As researchers and the EPA informed the County of its polluting actions on multiple occasions, the Ninth Circuit found the County had fair notice that its actions violated the CWA.\textsuperscript{148} The court held when pollutants in navigable waters are more than “de minimus” and are “fairly traceable” to a point source, the CWA covers such indirect discharges.\textsuperscript{149}

V. CAUGHT UP IN THE CURRENT: A CRITICAL ANALYSIS

The Ninth Circuit’s decision in Hawaii Wildlife Fund draws a line in the sand during one of the most controversial times in CWA history.\textsuperscript{150} With the judicial and executive branches at odds over the appropriate scope of the CWA, Hawaii Wildlife Fund pushes the law toward greater levels of environmental protection.\textsuperscript{151} Despite taking a stance on the hydrological connection issue, the court’s decision leaves many other questions unanswered.\textsuperscript{152}

\textsuperscript{145. Id. (agreeing with Justice Scalia’s textualist analysis rooted in judicial history).}
\textsuperscript{146. Haw. Wildlife Fund, 886 F.3d at 749 (finding indirect discharge is functional equivalent of direct discharge).}
\textsuperscript{147. Id. at 752 n.3 (stating historical deference to EPA does not give EPA authority to read non-existent words into CWA).}
\textsuperscript{148. Id. at 752 (finding reasonable person would understand CWA prohibited County’s actions).}
\textsuperscript{149. Id. at 749 (setting standard for liability under CWA).}
\textsuperscript{151. See Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone, Bloomberg Env’t & Energy Report (May 16, 2018), https://www.bna.com/practitioner-insights-maui-n73014476005/ (describing EPA’s reliance on states to implement CWA).}
\textsuperscript{152. See Brief for United States as Amicus Curiae In Support of Plaintiffs-Apellees at 24, Haw. Wildlife Fund v. County of Maui, 886 F.3d 737 (9th Cir. 2018) (No. 15-17447), 2016 WL 3099501, at *24 (noting ambiguities left open even if hydrological connection issue is resolved).}
A. Precedential Consistency

While the court’s judgement does not defer to the EPA, it aligns with the majority of precedent. 153 Second Circuit decisions in Southview Farm and Peconic Baykeeper find indirect pollutant discharges to be of equal concern and effect as direct discharges. 154 The Fourth Circuit concurs with this viewpoint, especially in cases following Hawaii Wildlife Fund. 155 Furthermore, the court follows previous Ninth Circuit precedent. 156 Though rejecting the County’s narrow interpretation of Alaska and its language requiring pollutants to flow “through” a point source, the court remarks the narrow interpretation would still apply here, as water still flowed through injection wells before entering the Pacific Ocean. 157

Despite cases like Ecological Rights where the EPA did not require NPDES permits for indirect discharges, these situations dealt with non-point source pollution. 158 The Hawaii Wildlife Fund court only purports to regulate point source pollution in line with the CWA’s text. 159 The Ninth Circuit decision espousing direct hydrological connection requirements thus finds itself in sync with a judi-

153. See Peconic Baykeeper, Inc. v. Suffolk Cty., 600 F.3d 180, 188-89 (2d Cir. 2010); see also Concerned Area Residents for the Env’t v. Southview Farm, 34 F.3d 114, 118-19 (2d Cir. 1994); Sierra Club v. Abston Constr. Co., 620 F.2d 41, 44-45 (5th Cir. 1980); Carson Harbor Vill., Ltd. v. Unocal Corp., 270 F.3d 863, 881 (9th Cir. 2001) (illustrating Ninth Circuit aligns with case law from Second, Fifth, and Ninth Circuits).

154. Accord Peconic Baykeeper, 600 F.3d at 188-89; Southview Farm, 34 F.3d at 118-19 (explaining CWA point source language emphasizes starting point for pollution, not method of conveyance).

155. See generally Upstate Forever v. Kinder Morgan Energy Partners, L.P., 887 F.3d 637, 650 (4th Cir. 2018) (holding CWA only requires discharge comes “from” point source). As the CWA’s language emphasizes where pollutants originate and where they settle in navigable waters, there is no emphasis on the method of conveyance. Id. (supporting idea of less emphasis on conveyance methods). The statute’s plain meaning does not require that the point source “convey the discharge directly to navigable waters.” Id. (analyzing CWA through traditional form of judicial interpretation).

156. See Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 532 (9th Cir. 2001); see also Greater Yellowstone Coal. v. Lewis, 628 F.3d 1143, 1147, 1153 (9th Cir. 2010); N. Cal. River Watch v. City of Healdsburg, 496 F.3d 993, 999-1000 (9th Cir. 2007); League of Wilderness Defenders v. Forsgren, 399 F.3d 1181, 1190 (9th Cir. 2002) (illustrating how Haw. Wildlife Fund continues trajectory of Ninth Circuit precedent).

157. See Haw. Wildlife Fund v. County of Maui, 886 F.3d 737, 746-47 (9th Cir. 2018) (noting both broad and narrow interpretations of Alaska would still require County to acquire NPDES permit).


159. See Haw. Wildlife Fund, 886 F.3d at 749 (emphasizing decision regulates point source discharges and not all discharges).
cial history supportive of an inclusive CWA “discharge” interpretation and more stringent environmental protections.\footnote{160. See generally Peconic Baykeeper, Inc. v. Suffolk Cty., 600 F.3d 180 (2d Cir. 2010); Greater Yellowstone Coal. v. Lewis, 628 F.3d 1143 (9th Cir. 2010); Carson Harbor Vill., Ltd. v. Unocal Corp., 270 F.3d 863 (9th Cir. 2001); Sierra Club v. Abston Constr. Co., 620 F.2d 41 (5th Cir. 1980) (illustrating Ninth Circuit’s consistency with other courts).}

B. Ambiguities in Interpretation

While legislators intended the CWA to provide guidelines for reducing water pollution, the statute lacks hard-line rules according to practitioners.\footnote{161. See R. Timothy Weston, et al., What’s the Point (Source)? New Developments in the Ongoing Debate Concerning Clean Water Act Jurisdiction over Indirect Discharges via Groundwater, K&L GATES (Mar. 4, 2018), http://www.klgates.com/whats-the-point-source-03-04-2018/ (discussing lack of EPA guidance and effects amongst courts).} The point source discharge requirement is no exception, as questions persisted for decades regarding what types of discharges may be regulated.\footnote{162. See Charles Duhigg & Janet Roberts, Rulings Restrict Clean Water Act, Foiling E.P.A., N.Y. TIMES (Feb. 28, 2010), https://www.nytimes.com/2010/03/01/us/01water.html (describing years of CWA litigation where defendants argued ambiguity precluded prosecution).} In the circuit court debate over the substantiality of required hydrological connections for CWA coverage, the Ninth Circuit responded that direct hydrological connections are not required.\footnote{163. See Haw. Wildlife Fund, 886 F.3d at 749 (affirming textual interpretation of CWA is unsupportive of direct discharge requirement).}

Despite this seemingly firm stance, the decision opens up concerns that \textit{Hawaii Wildlife Fund} defined groundwater as a “water of the United States.”\footnote{164. See Patrick Parenteau, The Clean Water Rule: Not Dead Yet, 48 ENVTL. L. 377, 394-95 (2018) (expressing concern that Ninth Circuit’s decision defines groundwater as “water of United States” under CWA).} Though scholars note this ambiguity, the court expressly stated that it was not deciding that issue in this case.\footnote{165. \textit{Haw. Wildlife Fund}, 886 F.3d at n.2 (stating court’s holding does not universally categorize groundwater as water of United States under CWA).} The Ninth Circuit did not advocate to regulate all groundwater, leaving the question of whether groundwater should be entirely regulated for another day.\footnote{166. See id. at 749 (stating issue of when hydrological connection is too tenuous is saved for future proceedings).} The holding only addresses if the method of conveyance to a navigable water affects a pollutant’s coverage under the CWA.\footnote{167. See id. at 752 (finding method of conveyance irrelevant provided pollutants originate from point source).}

In line with decisions such as \textit{Inland Steel}, when pollution is deposited into groundwater that never
reaches navigable waters, it is not subject to NPDES permits. The Ninth Circuit does not stretch precedent by holding groundwater is only covered by the Act when it conveys pollutants from a point source to a navigable water.

Though the Ninth Circuit properly decided the CWA covers indirect discharges, its language breeds uncertainty by stating the CWA provides coverage when pollutants are “fairly traceable” to a point source. “Fairly traceable” is a murky standard, which may spur future litigation over the traceability of an entity’s pollutant discharge. The decision creates a need for a sliding scale approach to the CWA’s analysis, one dependent upon facts and circumstances. Just like water, the analysis is difficult to delineate and takes the shape of whichever mutable limitations contain it. Despite these ambiguities, the court’s holding values environmental protection over administrative convenience.

Overall, the court’s decision marks a necessary refusal to narrow the CWA, rather than an attempt to broaden it. Justice Scalia’s textualist analysis in Rapanos persuasively alleges that the addition of a direct hydrological connection requirement adds meaning to the CWA in contravention of Congressional intent.

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168. See id. at 751 (stating categorical protections or exclusions for wells is inappropriate under CWA).
169. See Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 532 (9th Cir. 2001); see also Greater Yellowstone Coal. v. Lewis, 628 F.3d 1143, 1147, 1153 (9th Cir. 2010); N. Cal. River Watch v. City of Healdsburg, 496 F.3d 993, 999-1000 (9th Cir. 2007); League of Wilderness Defenders v. Forsgren, 309 F.3d 1181, 1190 (9th Cir. 2002) (listing legal background in accordance with Ninth Circuit decision).
170. See Haw. Wildlife Fund, 886 F.3d at 749 (listing standards for liability under CWA).
171. See Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone, supra note 151 (noting further definition needed for “fairly traceable” standard).
173. See Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone, supra note 151 (noting difficulties in CWA interpretation).
175. See Haw. Wildlife Fund v. County of Maui, 886 F.3d 737, 746 (stating Justice Scalia’s textualist approach highlighted that direct discharge requirement never appears in CWA).
176. See Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone, supra note 151 (illustrating Rapanos’s role in Ninth Circuit decision).
Specifically, the legislature’s choice to write the CWA’s text to state “discharge” rather than “direct discharge” illustrates a congressional intent for the CWA to cover both direct and indirect discharges to navigable waters. As a statute designed for environmental protection, further restrictions on its breadth unduly undermine its purpose.

VI. IMPACT: WHAT HAWAII WILDLIFE FUND WASHES ASHORE

The Ninth Circuit’s decision challenges the sense of “cooperative federalism” on which the EPA depends. Throughout its history, the EPA largely depended on state and local authorities to implement the CWA. Broadening the CWA’s scope, however, narrows the autonomy of local authorities.

By allowing state and local entities to determine when an NPDES permit is required, the amount of environmental protection afforded will depend on local attitudes toward environmental regulations and industry. As a result, some states will experience less regulations and more pollution than others, affecting wildlife and human health. As water pollution does not discriminate between state boundaries, pollution from one state may end up in another. In the past, the EPA’s lax approach to permit enforcement gave states more individualized control over permitting re-


181. See generally Heath, supra note 7 (discussing balance between business autonomy and government regulation).

182. Id. (analyzing how differences in state grants’ effectiveness correlated with differences in ability to regulate through permits).

183. See id. (drawing attention to inconsistencies in state CWA application and effects).

requirements, resulting in more variation amongst state permitting systems. The Ninth Circuit’s holding requiring NPDES permits for all point source discharges, whether direct or indirect, attempts to remedy this concern and equalizes protections available to the states. While the court’s holding does take away some state autonomy and raises federalism concerns by increasing EPA oversight, it reflects concerns of pollution’s pervasive effect on all states and wildlife.

As the County of Maui petitioned the Supreme Court for certiorari on August 27, 2018, Hawaii Wildlife Fund’s broad impacts remain hanging in the balance. Even if the Supreme Court refuses to grant certiorari, the Ninth Circuit’s holding still marks a shift in circuit opinions toward a refusal to narrow the CWA, a trend influential over CWA implementation. Given the many cases following Hawaii Wildlife Fund’s lead, a future Supreme Court decision on the matter remains a clear possibility.

186. See Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone, supra note 151 (discussing need for any step toward clarifying CWA).
187. See id. (noting Hawaii Wildlife Fund’s imperfections and concerns pitted against environmental needs).
188. See Ria Rana, Splitting from Other Circuits, Sixth Circuit Limits the Scope of the Clean Water Act, ENVTL. L. MONITOR (Sept. 27, 2018), https://environmental-lawmonitor.com/2018/09/27/splitting-from-other-circuits-sixth-circuit-limits-the-scope-of-the-clean-water-act/ (analyzing circuit splits on CWA’s interpretation). With recent shifts in the Supreme Court’s makeup, it is unclear if the Court will favor a textualist interpretation or one in favor of clearer implementation. See Adam Liptak, How Brett Kavanaugh Would Transform the Supreme Court, N.Y. TIMES (Sept. 2, 2018), https://www.nytimes.com/2018/09/02/us/politics/judge-kavanaugh-supreme-court-justices.html (explaining Supreme Court ideological shifts). As Justice Kennedy, traditionally a “swing vote” justice, played a significant role in deciding environmental precedent, his retirement and the recent confirmation of Justice Kavanaugh mark a shift toward a more conservative Court. Id. (illustrating ideology’s impact on judicial interpretation). If the Supreme Court takes on the hydrological connections issue, it is unclear whether Justice Kavanaugh will heavily weigh EPA recommendations aligning with the Sixth Circuit’s approach to the CWA or the textualist analysis supported by the Ninth Circuit and made by former ideologically conservative, Justice Scalia. Id. (explaining Justice Kavanaugh’s powerful impact on Supreme Court decisions).
189. See Rana, supra note 188 (outlining Sixth Circuit opposition to CWA’s indirect discharge coverage and illustrating industrial concerns over broad statute implementation).
190. See id. (hypothesizing split between Sixth Circuit and Fourth and Ninth Circuits will lead to Supreme Court intervention).
terms and expedient implementation.\textsuperscript{191} Such an outcome would leave billions of gallons of pollution unregulated.\textsuperscript{192} If the Court follows precedential trends and decides in favor of the Plaintiffs, however, the decision will institute stronger environmental protections with a cost of spurring future litigation over unclear terms such as “fairly traceable.”\textsuperscript{193} Either way, it is likely that the legislature will be continuously prompted to clarify the CWA’s terms.\textsuperscript{194}

Ultimately, the Ninth Circuit created an opportunity for broad environmental protections.\textsuperscript{195} For industry-driven states and companies, however, such precedent will unavoidably raise compliance costs as these entities adapt to new practices.\textsuperscript{196} Specifically, the decision will have the greatest impact on local municipalities and the agricultural, construction, and mining industries.\textsuperscript{197} As these activities have high potential to produce non-point source pollution from chemical runoff or waste by-product groundwater contamination, those entities will need to invest in costly storage and filtration systems to prevent water contamination.\textsuperscript{198} Notwithstanding this sizable up-front investment, the Ninth Circuit decided \textit{Hawaii Wildlife Fund} with an eye on the long-term impacts of water pollution.\textsuperscript{199} As it stands, \textit{Hawaii Wildlife Fund} helped institute one of the most

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\textsuperscript{191} See Haw. Wildlife Fund v. County of Maui, 886 F.3d 737, 748 (9th Cir. 2018) (describing Justice Scalia’s commentary that word “direct” never appears in CWA).

\textsuperscript{192} See \textit{What is the Biggest Source of Water Pollution in the Ocean?}, supra note 14 (illustrating billions of gallons of water pollution resulting from indirect discharges).

\textsuperscript{193} See Carney, supra note 11 (discussing environmental regulations’ effect on businesses); see also \textit{Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone}, supra note 151 (noting potential for future litigation over CWA’s unclear terms).

\textsuperscript{194} See \textit{Practitioner Insights: Maui Groundwater Case Shows Government Retreat is Bad for Everyone}, supra note 151 (discussing need for future definition of CWA).

\textsuperscript{195} See \textit{Water Pollution}, supra note 2 (discussing need to counteract pollution’s effects); see also \textit{Greater Yellowstone Coal. v. Lewis}, 628 F.3d 1143, 1147, 1153 (9th Cir. 2010) (showing Ninth Circuit’s impact); \textit{N. Cal. River Watch v. City of Healdsburg}, 496 F.3d 993, 999-1000 (9th Cir. 2007) (exemplifying Ninth Circuit’s broad protections); \textit{League of Wilderness Defenders v. Forsgren}, 309 F.3d 1181, 1190 (9th Cir. 2002) (demonstrating broad definition of point source); \textit{Headwaters, Inc. v. Talent Irrigation Dist.}, 243 F.3d 526, 534 (9th Cir. 2001) (providing expansive environmental protection).

\textsuperscript{196} See Carney, supra note 11 (noting high costs of switching toward greener practices).

\textsuperscript{197} See id. (discussing industries primarily affected by CWA).

\textsuperscript{198} See id. (noting compliance costs).

\textsuperscript{199} See \textit{Headwaters, Inc.}, 243 F.3d at 532 (looking to long-term effects); see also \textit{Greater Yellowstone Coal.}, 628 F.3d at 1147, 1153 (outlining Ninth Circuit’s precedent); \textit{City of Healdsburg}, 496 F.3d at 999-1000 (establishing two-part test); \textit{League of Wilderness Defenders}, 309 F.3d at 1190 (discussing EPA’s reasonable interpretation standard).
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controversial debates in CWA history, diverting the legal current toward more inclusive regulation and showing that indirect discharge pollution is far from water under the bridge.200

Allison R. White*

200. For a discussion on the political and judicial climate surrounding the CWA, see supra note 188 and accompanying text.

* J.D. Candidate, 2020, Villanova University Charles Widger School of Law; B.A. Nonfiction Writing, 2017, University of Pittsburgh. I dedicate this Note to my mother, Carrie White, whose unending resilience and strength continues to inspire me. Thank you for always being my greatest supporter, showing me the value of hard work, and exemplifying the beauty behind the selflessness you show toward everyone around you. I would like to thank my entire family for their constant love and support over the years, as well as Joe Tramontana for being a shoulder to lean on when I need it most. I feel eternally grateful to have all of you in my life. This Note is in remembrance of my father, Robert White.