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IN THE UNITED STATES DISTRICT COURT

DISTRICT OF HAWAI'I

HAWAI'I WILDLIFE FUND, a Hawai'i non-profit corporation, SIERRA CLUB - MAUI GROUP, a non-profit corporation, SURFRIDER FOUNDATION, a non-profit corporation, and WEST MAUI PRESERVATION ASSOCIATION, a Hawai'i non-profit corporation, Plaintiffs, v. COUNTY OF MAUI, Defendant.	CIVIL NO. 12-00198 SOM BMK PLAINTIFFS' MEMORANDUM IN SUPPORT OF MOTION FOR PARTIAL SUMMARY JUDGMENT

PLAINTIFFS' MEMORANDUM IN SUPPORT
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I. INTRODUCTION

Even before defendant County of Maui broke ground to build its Lahaina Wastewater Reclamation Facility ("LWRF"), defendant was well aware that effluent pumped into the facility's injection wells would travel underground and ultimately end up in the Pacific Ocean. In succeeding years, study after study sounded the alarm that wastewater from the LWRF was, indeed, discharging with groundwater into West Maui's nearshore waters, with a huge plume detected offshore of Kahekili Beach containing the highest levels of sewage-derived nitrogen ever recorded. Last year, a government study conclusively demonstrated the hydrologic connection between the LWRF injection wells and the nearby coastal waters of West Maui, with tracer dye placed into the injection wells emerging from nearshore seeps off Kahekili Beach less than three months later.

Plaintiffs Hawai'i Wildlife Fund, Sierra Club-Maui Group, Surfrider Foundation and West Maui Preservation Association have brought this lawsuit to address the harm that defendant's effluent discharges are inflicting on the marine environment at Kahekili.[1] While there is ample evidence of that harm, to

[1] As set forth in the declarations of Hannah Bernard, Antoinette Lucienne de Naie, Gary Savage, Lauren Campbell and Sharyn Matin, attached to plaintiffs' concise statement, defendant's operation of the injection wells at the LWRF in violation of the Clean Water Act and the resulting discharges of pollutants into ocean waters have adversely affected and continue to adversely affect plaintiffs' environmental, aesthetic, recreational, scientific, and educational interests. Plaintiffs bring this motion to protect their organizational, and their members' individual, interests from further injury.

determine whether defendant has violated, and continues to violate, the federal Clean Water Act, this Court need not resolve the parties' disputes about the seriousness of defendant's violations, which are relevant only to the "amount of [the] civil penalty" defendant should pay, not its liability. 33 U.S.C. § 1319(d). "[T]he Act categorically prohibits any discharge of a pollutant from a point source without a permit." Committee to Save Mokelumne River v. East Bay Mun. Util. Dist., 13 F.3d 305, 309 (9th Cir. 1993). Accordingly, to establish defendant's liability, plaintiffs need demonstrate only that defendant has "(1) discharged a pollutant …; (2) into navigable waters …; (3) from a point source …; (4) without a discharge permit." Id.

As discussed below, plaintiffs respectfully ask the Court to enter summary judgment that defendant has violated and is violating section 301(a) of the federal Clean Water Act, 33 U.S.C. § 1311(a), which prohibits discharges of pollutants without a National Pollutant Discharge Elimination System ("NPDES") permit, by discharging wastewater and other pollutants from LWRF Injection Wells 3 and 4 into groundwater that has a hydrologic connection to the Pacific Ocean and that "significantly affects the physical, biological and chemical integrity" of the receiving waters. Northern California River Watch v. City of Healdsburg, 496 F.3d 993, 1001 (9th Cir. 2007), cert. denied, 552 U.S. 1180 (2008). Plaintiffs further seek summary judgment that defendant has violated the Clean Water Act every day that it has discharged wastewater into Injection Wells 3 or 4 and that

those violations will continue until defendant obtains and complies with an NPDES permit for such discharges. Finally, plaintiffs respectfully ask the Court to hold that, based on the evidence presented for the period from January 1, 2008 through March 31, 2013, defendant's unpermitted discharges from Injection Wells 3 and 4 constitute 3,792 days of Clean Water Act violations.

II. STATUTORY FRAMEWORK

Congress enacted the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To further this central goal, section 301(a) of the Act mandates that "the discharge of any pollutant by any person shall be unlawful." Id. § 1311(a). The Ninth Circuit has recognized this prohibition as "[t]he 'cornerstone' and 'fundamental premise' of the Clean Water Act." Northwest Environmental Advocates v. United States Envt'l Prot. Agency, 537 F.3d 1006, 1020 (9th Cir. 2008) (citation omitted).

Section 402 of the Act provides for an exception to the general prohibition imposed by section 301(a) through the issuance of a permit under the National Pollutant Discharge Elimination System "for the discharge of any pollutant or combination of pollutants." 33 U.S.C. § 1342(a)(1). The NPDES permitting program is considered the "centerpiece" of the Clean Water Act and the primary method for enforcing the effluent and water-quality standards established by the

the federal Environmental Protection Agency ("EPA") and state governments. American Iron & Steel Inst. v. Environmental Prot. Agency, 115 F.3d 979, 990 (D.C. Cir. 1997).

Section 402(b) of the Act, 33 U.S.C. § 1342(b), gives the EPA Administrator authority to allow a state to administer its own NPDES program. In the state of Hawai'i, the EPA has delegated authority to DOH to issue NPDES permits. Id.; 40 C.F.R. § 123.24. A state-issued NDPES permit can impose effluent limits and other provisions that are more stringent than the federal requirements for an NPDES permit, but all provisions must be at least as stringent as the federal requirements. 40 C.F.R. § 123.25(a); H.A.R. § 11-55-02(c).

Under Hawai'i law, as under the federal Clean Water Act, "[no] person, including any public body, shall discharge any water pollutant into state waters, or cause or allow any water pollutant to enter state waters" except in compliance with the state's water pollution regulations. H.R.S. § 342D-50(a); see also H.A.R. § 11-55-03.

In the absence of compliance with a valid NPDES permit, a discharger cannot escape liability by arguing that its point source discharge does not "create[] a net increase in the level of pollution." Committee to Save Mokelumne River, 13 F.3d at 309. Rather, the Clean Water Act imposes strict liability, "categorically prohibit[ing] any discharge of a pollutant from a point source without a permit." Id.; see also Save Our Bays and Beaches v. City and County of Honolulu, 904 F.

Supp. 1098, 1105 (D. Haw.1994) ("The Act imposes strict liability for NPDES violations"); Hawaii's Thousand Friends v. City and County of Honolulu, 821 F. Supp. 1368, 1391 (D. Haw. 1993) ("Section 301(a) … prohibits any discharges into navigable waters of the United States by any person (including a municipality) without a NPDES permit").

Congress chose a strict liability permitting regime for the Clean Water Act because it recognized that earlier laws, which "employed ambient water quality standards … as the primary mechanism in its program for the control of water pollution," had failed to clean up the nation's waters. Environmental Prot. Agency v. California ex rel. State Water Resources Control Bd., 426 U.S. 200, 202 (1976); see also id. at 203 (noting "conclusion of the Senate Committee on Public Works that 'the Federal water pollution control program . . . has been inadequate in every vital aspect'"). By imposing "direct restrictions on discharges," Congress intended to "facilitate enforcement by making it unnecessary to work backward from an overpolluted body of water to determine which point sources are responsible and which must be abated." Id. at 204. To determine whether the Clean Water Act is being violated, the straightforward, threshold question is whether the discharge of pollutants – regardless of quantity or environmental impact – into waters of the United States is authorized under an NPDES permit. If not, the law is being violated. Id. at 205 ("it is unlawful for any person to discharge a pollutant without obtaining a permit and complying with its terms").

III. FACTUAL BACKGROUND

A. Operation Of The Lahaina Wastewater Reclamation Facility.

Defendant owns and operates the Lahaina Wastewater Reclamation Facility. Exh. 11: Answer (Dkt. No. 41) ¶¶ 2, 16. The LWRF currently uses four injection wells for the disposal of wastewater. Id. ¶ 21. Each injection well consists of a long pipe that extends approximately 200 feet underground. Exh. 12: 1993 Injection Well Report at 7 & Fig. 2; Exh. 13: 2004 Underground Injection Control ("UIC") Permit Application at Attachment M. Wastewater is pumped to the top of the well, where gravity moves the water down through the pipe, discharging into the groundwater below the facility. 1993 Injection Well Report at 4, Fig. 6 & App. B; Exh. 14: 2010 Section 401 Water Quality Certification Application at 2, 13; Exh. 15: 2011UIC Consent Decree ¶¶ 28-29; Exh. 16: 1996 UIC Permit at 7.

Defendant first began discharging wastewater into Injection Wells 1 and 2 at the LWRF in May 1982, and began additional discharges into Injection Wells 3 and 4 in 1985. Answer ¶ 21; Exh. 17: First Amended Complaint (Dkt. No. 36) ¶ 43. Defendant has continued discharging into some or all of the four injection wells on a nearly daily basis to the present. Answer ¶ 21; First Amended Complaint ¶ 43; see, e.g., Exh. 2: Final Tracer Dye Study Report at Table 1-2; Exh. 18: 2008 Injection Records; Exh. 19: 2009 Injection Records; Exh. 20: 2010 Injection Records; Exh. 21: 2011 Injection Records; Exh. 22: 2012 Injection Records; Henkin Decl. ¶¶ 23-25.

On average, defendant disposes of three to five million gallons of wastewater per day into the LWRF's injection wells. Answer ¶ 22. In recent years, Wells 3 and 4 have served as "the primary injection wells, receiving more than 80 percent of the treated wastewater" from the LWRF. Tracer Study at ES-21 & Table 1-2. In the nearly five-year period from January 1, 2008 through August 31, 2012, there were only seven days when defendant did not discharge effluent into both Wells 3 and 4, and, on two of those days, when one well was out of service, the other was used. See 2010 Injection Records; 2011 Injection Records; Henkin Decl. ¶¶ 17-18.

Defendant does not have an NPDES permit for its discharges from the LWRF injection wells. Answer ¶¶ 2, 12, 31.

B. The LWRF Injection Wells Have A Hydrologic Connection To The Pacific Ocean At Kahekili Beach.

Even prior to the construction of the LWRF, defendant was well aware that effluent discharged from the injection wells into groundwater below the facility would not stay there. When the project underwent environmental review in 1973, defendant's consultant readily acknowledged "the effluent will eventually get into the ocean." Exh. 23: 1973 Environmental Impact Statement at 91.

A couple of decades later, when defendant was considering upgrades to the LWRF, the conventional wisdom regarding the fate of effluent discharged from the injection wells had not changed. In its environmental assessment, defendant noted:

> Effluent from the Lahaina Wastewater Reclamation Facility currently is discharged via injection wells to fractures in the underlying basalt. This effluent, via gravity and the pressure from up-gradient groundwater, flows towards the ocean.

Exh. 24: 1991 Environmental Assessment at 6-2. Defendant understood that the marine environment was on the receiving end of pollutants from the LWRF injection wells, conceding that "[t]reatment plant effluent contributes various constituents, including but not limited to, suspended solids, dissolved oxygen, and nutrients such as nitrogen and phosphorous to the ocean." Id. at 6-3.

Since then, study after study has confirmed that LWRF effluent discharges into groundwater and then flows with that groundwater to the ocean, emerging offshore of Kahekili Beach. In the summer of 2007, marine biologist Dr. Jennifer Smith and other researchers surveyed the waters around Maui, using isotopes of nitrogen associated with human waste ($\delta^{15}N$) in marine algae to identify locations of significant sewage inputs into the marine environment. Smith Decl. ¶ 7.[2] The study identified the ocean off Kahekili Beach as a hot spot for sewage input, with algae samples grown over freshwater seeps in the nearshore waters containing the highest $\delta^{15}N$ values ever reported in the scientific literature. Id. ¶ 8. The discovery

[2] "$\delta^{15}N$" refers to a nitrogen isotope ratio used to distinguish between naturally-occurring nitrogen or nitrogen from fertilizer, and nitrogen derived from sewage. Id. ¶ 15. Naturally-occurring nitrogen and nitrogen from fertilizer have low levels of $\delta^{15}N$, while sewage that has gone through a treatment plant has notably higher levels.

of record levels of $\delta^{15}N$ in algae grown over the Kahekili seeps indicated that wastewater from the LWRF was entering the ocean through the seeps. Id. ¶ 16.

Dr. Smith and her fellow researchers returned to Kahekili in 2009 to determine the extent of the LWRF effluent plume across the coral reef at Kahekili, deploying samples of *Ulva fasciata* – a seaweed that has caused nuisance macroalgal blooms in shallow coastal waters around Maui – at 32 sites spanning the Kahekili area. Id. ¶ 17. The researchers found that all samples deployed over freshwater seeps drastically and significantly increased in $\delta^{15}N$ values. Id. Significant increases in algal $\delta^{15}N$ values were observed throughout the nearshore shallow region, including sites 345 meters to the south of the freshwater seeps. Id.; Exh. 8: Elevated $\delta^{15}N$ Values at Kahekili. The study's results confirmed that injected effluent from the LWRF is continuously flowing through the reef at Kahekili and then subsequently flows to the south. Smith Decl. ¶ 17.

Also in 2009, the U.S. Geological Survey ("USGS") published the results of its study of nearshore marine waters at Kahekili, which "convincingly" detected a wastewater plume from the LWRF injection wells. Exh. 4: 2009 USGS Study at 65; see also id. at Fig. 40. The USGS found that "[t]reated wastewater presence was confirmed by multiple 'inherent' wastewater tracers, the most conclusive being pharmaceuticals, organic waste indicator compounds, and heavy $\delta^{15}N$. Id. at 68; see also id. at iii. The USGS study confirmed Dr. Smith's earlier, "convincing

detection of the effluent plumes offshore" at Kahekili using algae $\delta^{15}N$ surveys. Id. at 9; see also Paytan Decl. ¶ 6.

After reviewing Dr. Smith's and USGS's studies, EPA concluded the studies "strongly suggest that effluent from the facility's injection wells is discharging into the near shore coastal zone of the Pacific Ocean." Exh. 25: 3/10/10 EPA Letter at 2. Consequently, EPA insisted that, before it would give further consideration to defendant's UIC permit renewal application for the LWRF, defendant would first have to secure Clean Water Act section 401 certification to ensure that continued use of the injection wells "will not violate applicable water quality standards." Id.

In 2011, EPA collaborated with the State of Hawai'i Department of Health ("DOH"), the U.S. Army Engineer Research and Development Center and researchers at the University of Hawai'i to investigate the "existence of a hydraulic connection between the injection of treated wastewater effluent at the ["LWRF"] and nearby coastal waters, confirm locations of emerging injected effluent discharge in these coastal waters, and determine a travel time from the LWRF injection wells to the coastal waters." Exh. 2: Final Tracer Dye Study Report at ES-1. The centerpiece of the study was the addition of tracer dye to the LWRF injection wells and the subsequent monitoring of the nearshore seeps off Kahekili Beach for the arrival of the dye in the marine environment. Paytan Decl. ¶¶ 6-15. Fluorescein dye that had been added to LWRF Injection Wells 3 and 4 was first detected at Kahekili's nearshore seeps eighty-four (84) days after being placed in

the wells and continued to flow to the ocean, with average travel time to the seeps of 14 to 16 months. Final Tracer Dye Study Report at ES-1; Paytan Decl. ¶ 15. The study's results "conclusively demonstrate that a hydrogeologic connection exists between LWRF Injection Wells 3 and 4 and the nearby coastal waters of West Maui." Final Tracer Dye Study Report at ES-3; see also Paytan Decl. ¶¶ 5, 17, 36; Smith Decl. ¶¶ 11, 13.

C. Groundwater Emerging From Kahekili's Seeps Substantially Affects The Chemical, Physical and Biological Integrity Of The Nearshore Marine Waters At Kahekili.

The Tracer Dye Study determined that the average total discharge from Kahekili's nearshore seeps and surrounding diffuse flow is about 2.19 to 3.33 million gallons per day ("mgd"), with the freshwater component of that flow about 1.61 to 2.88 mgd. Final Tracer Dye Study Report at ES-2; Paytan Decl. ¶ 24. Since the groundwater discharging at Kahekili's seeps differs markedly from the surrounding ocean water in terms of temperature, nutrient concentration, acidity, salinity and dissolved oxygen, the millions of gallons of groundwater discharging through the seeps each day have substantial effects on the chemical, physical and biological integrity of the nearshore marine waters. Paytan Decl. ¶¶ 5, 23-36; Smith Decl. ¶¶ 13-40. The fact that the groundwater is percolating up from the nearshore seeps through the reef's limestone framework renders it particularly influential on Kahekili's biota, since there is no way for corals and reef-building

organisms to escape from the low salinity, low pH, low oxygen and high temperature water that is laden with inorganic nitrogen and phosphorus. Smith Decl. ¶ 13.

1. Nutrients.

As discussed above, researchers have documented in the groundwater discharging from Kahekili's nearshore seeps the highest levels of sewage-derived nitrogen ever recorded. These exceptionally elevated $\delta^{15}N$ values have allowed researchers to track the plume of effluent-rich groundwater emerging from the seeps across a broad swath of Kahekili's nearshore waters, vividly illustrating the groundwater's substantial influence on the receiving water's chemistry. Id. ¶¶ 17-18 & Exh. 8; 2009 USGS Study at iii, Fig. 40. Water quality samples taken from the seeps also test unusually high for another nutrient, phosphorous, when compared with background concentrations along the West Maui coast. Paytan Decl. ¶ 33; Smith Decl. ¶¶ 11, 19, 40.

In addition to affecting the chemical integrity of Kahekili's nearshore waters, the high levels of nutrients pose a serious threat to coral reefs. Smith Decl. ¶¶ 9, 20-21, 40. The primary threat comes from the potential for elevated levels of nutrients to accelerate growth rates of fleshy seaweed. On a healthy reef, corals and algae compete for space and often co-exist in a balance where a combination of low nutrient levels and high rates of grazing by herbivorous fishes prevent algae

from overgrowing or dominating benthic substrates. When these factors are altered substantially, such as with the introduction of nutrient-laden wastewater, a "phase-shift" can occur where an environment dominated by reef-building corals can shift to dominance by fleshy algae, which compete with corals and can overgrow and even kill them, ultimately destroying the reef and eliminating habitat for reef-dependent fish and other marine animals.

The threats from nutrient input to the biological integrity of Kahekili's nearshore waters are more than theoretical. Id. ¶ 22. The coral reefs at Kahekili have been repeatedly subjected to algal blooms, which have contributed to a dramatic decline in coral cover – from 55% to 33% between 1994 and 2006 – and associated harm to reef-dependent species. Id. ¶¶ 22-25 & Exhs. 9-10.

2. Low pH (High Acidity).

The groundwater discharging from the seeps at Kahekili is substantially lower in pH (i.e., more acidic) than the receiving ocean water. Paytan Decl. ¶ 31; Smith Decl. ¶ 29. In addition to causing substantial changes to the local ocean's chemistry, the addition of low-pH groundwater can have substantial negative effects on coral health. Smith Decl. ¶¶ 29-30. Ocean acidification reduces the amount of carbonate ions available for species such as corals, mussels, and limpets that build calcium carbonate shells and skeletons and simultaneously promotes the growth of seaweeds that compete with corals. Id. ¶ 27. Notably, the pH values

measured at the Kahekili seeps are substantially lower (more acidic) than the pH most researchers use to assess the dire effects of global ocean acidification that is expected to occur by the year 2100, when some species of reef-building corals and coralline algae will begin to dissolve and suffer mortality. Id. ¶¶ 28-30.

3. Low Salinity.

The groundwater that is coming out of the submarine seeps at Kahekili is much lower in salinity than the seawater at the control sites, substantially altering the chemistry of the waters surrounding the seeps. Smith Decl. ¶ 32; Paytan Decl. ¶ 34. This low salinity poses threats to Kahekili's coral reefs, which have evolved to live in seawater, not fresh water. Smith Decl. ¶¶ 31, 33. Indeed the salinity values measured at Kahekili's seeps are much lower than has been observed in large-scale, fresh-water coral reef kills in Hawai'i. Id. ¶ 32.

4. Low Dissolved Oxygen.

Oxygen concentrations in the groundwater discharging from Kahekili's seeps are substantially lower at than in marine water elsewhere in West Maui. Smith Decl. ¶ 35; Paytan Decl. ¶ 34. This alteration to the chemistry of the marine water at Kahekili likely adversely affects the health of the corals and other animals that are exposed to LWRF effluent discharging from the seeps. Smith Decl. ¶¶ 34-36; Paytan Decl. ¶¶ 34-35. Fleshy seaweeds that compete with corals are much more tolerant of low oxygen concentrations than are corals. Smith Decl. ¶ 34.

Moreover, when exposed for a long enough time to low oxygen conditions, corals essentially get suffocated, leading to loss of coral tissue and mortality. The low oxygen concentrations from polluted groundwater are likely contributing to the coral reef's decline at Kahekili. Id. ¶ 35.

5. High Temperature.

In addition to the substantial changes to the chemistry of Kahekili's nearshore waters, the groundwater discharging through the seeps has a profound effect on the receiving water's physical properties. The groundwater is substantially warmer than ocean water collected from control sites to the north and south of the seeps. Paytan Decl. ¶ 25; Smith Decl. ¶ 38. As part of the Tracer Dye Study, researchers mapped the spatial extent of the influence of the groundwater's elevated temperature and found that the thermal anomaly extends over more than 167 acres. Paytan Decl. ¶¶ 26-29; Exh. 3: Interim Tracer Dye Study Report at Fig. ES-5.

The groundwater's warm temperature can have devastating effects on the coral reefs at Kahekili, making them prone to bleaching and subsequent mortality. Smith Decl. ¶ 37. At a minimum, the warm water percolating through the reef adds to strain on the corals' health. Id. ¶ 38.

IV. DEFENDANT'S UNPERMITTED DISCHARGES OF WASTEWATER FROM LAHAINA INJECTION WELLS 3 AND 4 VIOLATE THE CLEAN WATER ACT

While there is ample evidence that the discharges from the LWRF's injection wells are causing substantial harm to the marine environment at Kahekili, questions related to "the seriousness of [defendant's] violation[s]" are not currently before the Court, as they relate only to the "amount of [the] civil penalty," not liability. 33 U.S.C. § 1319(d); see generally Paytan Decl.; Smith Decl. The Ninth Circuit has instructed:

> The Act does not impose liability only where a point source discharge creates a net increase in the level of pollution. Rather, the Act categorically prohibits any discharge of a pollutant from a point source without a permit.

Committee To Save Mokelumne River, 13 F.3d at 309 (emphasis added).

Accordingly, to establish defendant's "liability under the Clean Water Act," plaintiffs must prove only that defendant has "(1) discharged a pollutant …; (2) into navigable waters …; (3) from a point source …; (4) without a discharge permit," regardless of the effect of those discharges on the receiving waters. Id.; see also Order Denying Motion to Dismiss (Dkt. No. 34) at 5. As a matter of law, each of these factors is present here, warranting entry of summary judgment in plaintiffs' favor.

A. Defendant Has Discharged A Pollutant.

The Clean Water Act's broad definition of "pollutant" includes sewage, sewage sludge, biological materials and municipal waste. 33 U.S.C. § 1362(6). Wastewater from sewage treatment plants like the LWRF is unquestionably a "pollutant" under the Act. Hawaii's Thousand Friends, 821 F. Supp. at 1391.

Defendant admits that, "on average, it disposes of 3 to 5 million gallons of treated wastewater per day into LWRF's injection wells." Answer ¶ 22; see also Exh. 26: 2012 NPDES Permit Application at 4; 2008 Injection Records; 2009 Injection Records; 2010 Injection Records; 2011 Injection Records; 2012 Injection Records; Final Tracer Dye Study Report at Table 1-2. As a matter of law, defendant has discharged, and continues to discharge on a nearly daily basis, one or more pollutants within the meaning of the Act.

B. Defendant Discharges Wastewater Into Waters Under Clean Water Act Jurisdiction.

The Clean Water Act defines the term "navigable waters" as "the waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). The nearshore ocean waters at Kahekili unquestionably constitute navigable waters within the meaning of the statute. See Rapanos v. United States, 547 U.S. 715, 739 (2006) (plurality) ("the phrase 'the waters of the United States' includes" oceans); 33 U.S.C. § 1362(8) (phrase "territorial seas" extends from the coastline "seaward a distance of three miles").

Here, defendant does not discharge wastewater directly into the ocean. Rather, the LWRF injection wells discharge directly into groundwater located beneath the facility. See 1993 Injection Well Report at 4 & App. B; Def's Section 401 Water Quality Certification Application at 2, 13; 2011UIC Consent Decree ¶¶ 28-29. As discussed in Part III.B, supra, it is undisputable that the groundwater into which LWRF Injection Wells 3 and 4 discharge wastewater has a hydrologic connection to the nearshore waters at Kahekili.

The Supreme Court has held that, to achieve the Clean Water Act's goal to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," 33 U.S.C. § 1251(a), the statutory prohibition on unpermitted discharges of pollutants extends to "some waters that are not navigable in the traditional sense." Rapanos, 547 U.S. at 767 (Kennedy, J., concurring). In United States v. Riverside Bayview Homes, 474 U.S. 121 (1985), the Court emphasized that "Congress chose to define the waters covered by the Act broadly" and had made "it clear that the term 'navigable' as used in the Act is of limited import." Id. at 133. Noting "the evident breadth of congressional concern for protection of water quality and aquatic ecosystems," the Court upheld Army Corps regulations that interpreted "the term 'waters' to encompass wetlands adjacent to waters as more conventionally defined." Id. (noting the regulation "abandon[ed] traditional notions of 'waters'").

Earlier in this case, this Court denied defendant's motion to dismiss, which was premised on defendant's argument that "it is not discharging pollutants into navigable waters." Order Denying Motion to Dismiss at 6. The Court held that "[w]hether a discharge of wastewater into an injection well qualifies as a discharge of pollutants into navigable waters depends on the circumstances." Id.

To identify the relevant circumstances, this Court looked to the Ninth Circuit's decision in Northern California River Watch v. City of Healdsburg, 496 F.3d 993 (9th Cir. 2007). Id. In that case, the Ninth Circuit considered whether a municipal wastewater treatment plant was required to obtain an NPDES permit for wastewater discharges into a body of water known as "Basalt Pond," a rock quarry pit that had filled with water from the surrounding aquifer located next to the Russian River, "a navigable water of the United States protected by the [Clean Water Act]." Northern California River Watch, 496 F.3d at 995. Water continuously flowed between Basalt Pond and the Russian River via the "vast underground aquifer." Northern California River Watch v. City of Healdsburg, 2004 WL 201502, *2 (N.D. Cal. Jan. 23, 2004).

To determine whether an NPDES permit was required for discharges into Basalt Pond, the Ninth Circuit examined the Supreme Court's decision in Rapanos, concluding that "Justice Kennedy's concurrence provides the controlling rule of law." Id. at 999-1000. In Justice Kennedy's view, in order for a water to be protected under the Clean Water Act, "the body of water itself need not be

continuously flowing, but that there must be a 'significant nexus' to a waterway that is in fact navigable." Id. at 995.

As this Court explained:

> The Ninth Circuit noted that a "mere hydrological connection" could be too insubstantial to provide the required nexus. Focusing on the need for a "significant nexus," the Ninth Circuit noted that any connection had to be evaluated in light of the Clean Water Act's goals of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The Ninth Circuit concluded that Basalt Pond had a "significant nexus" to navigable waters, "not only because the Pond waters seep into the navigable Russian River, but also because they significantly affect the physical, biological, and chemical integrity of the River."

Order Denying Motion to Dismiss at 7 (citations omitted).

The question here, then, is whether the groundwater underlying the LWRF, which has an undeniable hydrologic connection to the Pacific Ocean, "has a significant effect on 'the chemical, physical, and biological integrity'" of the receiving waters at Kahekili. Northern California River Watch, 496 F.3d at 1000. As discussed at length in Part III.C, supra, the groundwater discharging at Kahekili's seeps differs markedly from the surrounding ocean water in terms of temperature, nutrient concentration, acidity, salinity and dissolved oxygen. Accordingly, the millions of gallons of groundwater discharging through the seeps each day have profound effects on the chemistry and temperature of the receiving ocean waters. See, e.g., Smith Decl. ¶¶ ¶¶ 17-18 & Exh. 8 (plume of nitrogen-rich groundwater seeps across a broad swath of Kahekili's nearshore waters); Interim

Tracer Dye Study Report at Fig. ES-5 (temperature anomaly from groundwater extends more than 167 acres). Moreover, particularly because the groundwater into which the injection wells discharge percolates up through the structure of the reef itself, the groundwater significantly affects the biological integrity of Kahekili's coral reef ecosystem. Smith Decl. ¶ 13; Cf. Riverside Bayview Homes, 474 U.S. at 132 (Clean Water Act's use of "the word 'integrity' ... refers to a condition in which the natural structure and function of ecosystems [are] maintained") (quoting H.R. Rep. No. 92-911, 92d Cong., 2d Sess. 76 (1972)).

Because protecting the groundwater underneath the LWRF is essential to protect the ocean water to which it is hydrologically connected, as a matter of law, the groundwater into which defendant's injection wells discharge "warrants protection as a 'navigable water' under the [Clean Water Act]." Northern California River Watch, 496 F.3d at 1001; see also Association Concerned Over Res. and Nature, Inc. v. Tenn. Aluminum Processors, 2011 WL 1357690, at *17 (M.D. Tenn. Apr. 11, 2011) ("groundwater is subject to the [Clean Water Act] provided an impact on federal waters"); Hernandez v. Esso Standard Oil Co., 599 F. Supp. 2d 175, 181 (D. Puerto Rico 2009) (same); Idaho Rural Council v. Bosma, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001) (Clean Water Act regulates "discharges into hydrologically connected groundwater which adversely affect surface water"); Wash. Wilderness Coal. v. Hecla Mining Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994) ("since the goal of the [Clean Water Act] is to protect the

quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation by NPDES permit"); Williams Pipe Line Co. v. Bayer Corp., 964 F. Supp. 1300, 1319-20 (S.D. Iowa 1997) (same); Sierra Club v. Colorado Ref. Co., 838 F. Supp. 1428, 1434 (D. Colo. 1993) ("Clean Water Act's preclusion of the discharge of any pollutant into navigable waters includes such discharges which reach navigable waters through groundwater").[3]

C. The LWRF Injection Wells Are Point Sources.

A "point source" includes "any discernible, confined and discrete conveyance, including but not limited to any pipe, … tunnel, conduit, [or] well … from which pollutants are or may be discharged." 33 U.S.C. § 1362(14). Each of the LWRF injection wells consists of a long pipe that extends approximately 200 feet underground, discharging wastewater into a well. See 2004 Underground

[3] Plaintiffs are not, at this point, asking the Courtto make any findings of fact regarding the environmental harm associated with discharges from the LWRF injection wells into Kahekili's nearshore waters. Rather, at the liability phase of this proceeding, the evidence presented in Part III.C, supra, serves to confirm that the groundwater coming out of the nearshore seeps can have a substantial effect on the marine environment at Kahekili, bringing that groundwater within the ambit of Clean Water Act jurisdiction. Simply put, because the groundwater into which the LWRF injection wells discharge can materially affect achievement of Congress's goal "to restore and maintain the chemical, physical, and biological integrity of the Nation's water," the Clean Water Act regulates defendant's activities. 33 U.S.C. § 1251(a).

Injection Control ("UIC") Permit Application at Attachment M. By definition, each injection well is a point source.

D. Defendant Does Not Have A Permit For The Discharges From The LWRF Injection Wells.

Defendant admits that it does not have an NPDES permit for discharges from the LWRF injection wells. Answer ¶¶ 2, 12, 31.

V. DEFENDANT VIOLATED THE CLEAN WATER ACT EACH DAY IT DISCHARGED WASTEWATER FROM INJECTION WELLS 3 OR 4 WITHOUT AN NPDES PERMIT AND WILL CONTINUE TO VIOLATE THE ACT UNTIL IT SECURES PERMIT COVERAGE

The Clean Water Act provides for the Court to impose civil penalties based on the number of days that "each violation" persists. 33 U.S.C. § 1319(d); see also Borden Ranch Partnership v. United States Army Corps of Engineers, 261 F.3d 810, 817 (9th Cir. 2001) ("each distinct violation is subject to a separate daily penalty assessment"). In this case, because defendant lacked an NPDES permit for its wastewater discharges from the LWRF injection wells, "the number of violations is readily calculated by simply counting the number of days of illegal discharges." United States v. Gulf Park Water Co., Inc., 14 F. Supp. 2d 854, 857-58 (S.D. Miss. 1998).

In citizen enforcement actions brought under the Clean Water Act, the otherwise applicable "five-year statute of limitations period is tolled sixty days before the filing of the complaint, to accommodate the statutorily-mandated sixty-

day notice period." Sierra Club v. Chevron, USA, Inc., 834 F.2d 1517, 1524 (9th Cir. 1987). Since plaintiffs filed their complaint on April 16, 2012, the relevant period for calculating the number of days that defendant has violated the Clean Water Act extends back to February 15, 2007. See Complaint (Dkt. No. 1).

For the period from January 1, 2008 through March 31, 2013, defendant's own records of operations at the LWRF show that defendant discharged wastewater from Injection Well 3 every day during 2008 (366 days), every day during 2009 (365 days), on 362 days during each of 2010 and 2011, every day during January through August and October through December of 2012 (336 days) and every day during the first three months of 2013 (90 days), for a total of 1,881 days of unpermitted discharges. See 2008 Injection Records; 2009 Injection Records; 2010 Injection Records; 2011 Injection Records; 2012 Injection Records; Final Tracer Dye Study Report at Table 1-2; Henkin Decl. ¶¶ 17-25. The same records show that defendant discharged wastewater from Injection Well 4 every day during 2008 (366 days), every day during 2009 (365 days), on 362 days during each of 2010 and 2011, every day during 2012 (366 days) and every day during the first three months of 2013 (90 days), for a total of 1,911 days of unpermitted discharges.

Due to this case's procedural history, plaintiffs have not yet secured discovery regarding the number of days that defendant discharged pollutants from LWRF Injection Wells 3 and 4 in 2007 and in the year since March 2013, and from

Injection Well 3 during the month of September 2012. Henkin Decl. ¶¶ 2-3.[4] For purposes of this motion, plaintiffs respectfully ask the Court to hold that defendant violated the Clean Water Act on every day that it discharged wastewater from either Injection Well 3 or Injection Well 4 and that those violations will continue until defendant obtains and complies with an NPDES permit for any discharges from either injection well in the future. See Environmental Prot. Agency v. State Water Resources Control Bd., 426 U.S. at 205 ("it is unlawful for any person to discharge a pollutant without obtaining a permit and complying with its terms").

In addition, the Court should find that (1) defendant's unpermitted discharges from Injection Well 3 during the period from January 1, 2008 through August 31, 2012, and from October 1, 2012 through March 31, 2013 constitute 1,881 days of Clean Water Act violations, and (2) defendant's unpermitted discharges from Injection Well 4 during the period from January 1, 2008 through March 31, 2013 constitute an additional 1,911 days of Clean Water Act violations. In total, the evidence before the Court establishes 3,792 days of violation.

VI. CONCLUSION

In adopting the Clean Water Act, Congress established the NPDES permit program as its chosen "means of achieving and enforcing the effluent limitations"

[4] Plaintiffs expect that defendant will likely be willing stipulate to the number of days that Wells 3 and 4 were used during those time periods. If not, plaintiffs reserve the right to adduce additional evidence later in this proceeding to establish defendant's violations during those time periods.

required to protect our nation's waters. Environmental Prot. Agency v. State Water Resources Control Bd., 426 U.S. at 205. To ensure that permits would be both secured and complied with, Congress "categorically prohibit[ed] any discharge of a pollutant from a point source without a permit" and provided for severe penalties for those who subvert the statutory scheme. Committee to Save Mokelumne River, 13 F.3d at 309; see generally 33 U.S.C. § 1319.

For decades, defendant has defied Congress's ban, discharging on a nearly continuous basis wastewater into groundwater that flows into the ocean and through the coral reefs at Kahekili, without an NPDES permit. It is high time to hold defendant accountable for its illegal conduct. Plaintiffs respectfully submit that the undisputed facts in this case compel a finding that defendant's discharges of pollutants from LWRF Injection Wells 3 and 4 have violated, and continue to violate, the Clean Water Act and that entry of the requested partial summary judgment is warranted.

Dated: Honolulu, Hawai'i, March 17, 2014.

EARTHJUSTICE
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