













ISSUE PAPER

CLEAN WATER ACT ON TRIAL:

THE DEVASTATING POTENTIAL CONSEQUENCES OF SACKETT V. EPA

For the past 50 years, the Clean Water Act (CWA) has improved the condition of rivers, lakes, wetlands, and other water bodies around the United States and prevented the pollution of countless more. The Clean Water Act's national protections—which don't depend on local politics or polluter influence in the place one happens to live—are essential.

Despite the CWA's tremendous success in improving water quality across the country, a threat to the law as we know it looms: In *Sackett v. Environmental Protection Agency* (EPA), right-wing lobby groups and legal organizations, along with an army of polluting industries, have asked the Supreme Court to reinterpret the law in a way that would exclude most of the nation's streams and wetlands from federal safeguards against pollution.

If the court sides with the plaintiffs or their industry supporters in *Sackett*, it would put crucial water bodies at risk of pollution or other forms of degradation. This paper

presents several representative case studies of the kinds of places that would be at risk of losing federal pollution safeguards. These include areas that the Army Corps found not to be covered by the Clean Water Act under a radically narrow rule adopted by the Trump administration, as well as areas where the watershed contains the kinds of water bodies that the Supreme Court has now been asked to exclude from the law. But these cases are just a small sample of what's threatened; the majority of the nation's streams and wetlands could be excluded from protection under the different arguments presented to roll back the law in the *Sackett* case.¹



A Bartram's marsh-pink flower growing in Big Cypress National Preserve, Florida.



Firefighters spray water onto a fire burning on the Cuyahoga River in Cleveland, Ohio, on November 3, 1952.

HALF A CENTURY OF CLEAN WATER PROTECTIONS

By the 1960s, before the Clean Water Act, the health of the nation's waterways had deteriorated to an alarming degree. Symbolic of their disastrous state was the Cuyahoga River, running through Cleveland, Ohio, into Lake Erie; it became so polluted with industrial waste in the 1950s and 1960s that it caught fire on more than one occasion.² In the 1960s, Lake Erie itself became so polluted from municipal waste and agricultural runoff that some scientists declared it biologically "dead." In 1969, some 26 million fish died as a result of the contamination of Lake Thonotosassa in Florida.4 Industry discharged so much mercury into the Detroit River that in-stream levels exceeded recommended public health limits six times over. Waterways in many cities across the country were reduced to nothing more than sewage receptacles for industrial and municipal waste. The rate of wetlands loss from the 1950s to the 1970s was approximately 450,000 acres per year.⁶

Because of these and myriad other problems, Congress passed the Clean Water Act in 1972.⁷ The law directs how bodies of water must be protected from pollution and cleaned up when they are contaminated, including:

- requiring facilities to develop plans to prevent and respond to oil spills;
- establishing requirements for the disposal of sewage sludge;
- requiring permits for, and limiting the discharge of, industrial pollutants and municipal wastewater;
- requiring the cleanup of waters that are too polluted for fishing or swimming; and
- regulating and mitigating dredge and fill activity that buries streams, marshes, and other waters.

Countless water bodies that were once essentially open sewers have now recovered, and the CWA has prevented deterioration in many more.⁸

However, keeping our waterways clean is an ongoing process—and we need the Clean Water Act to keep doing its job. In fact, a 2022 Gallup poll found that more than 50 percent of respondents were worried a great deal about pollution in rivers, lakes, and reservoirs, making surface water pollution the number-two environmental concern.⁹

The Androscoggin River in Maine is an example of both how much the law has accomplished and how much we need to do. The river was once so filthy with industrial waste that it inspired one of the Clean Water Act's principal authors, Senator Ed Muskie, to develop the law. The river has rebounded dramatically since the CWA was passed, but there is still room for improvement. Today, the Natural Resources Council of Maine reports:

The river is much cleaner than it used to be and people can now use it for recreation. But the river is still the dirtiest of Maine's major rivers and could be much cleaner if the upstream mills invested in modern, widely used pollution prevention technologies.¹¹



Buildings in Old Lewiston as seen from the South Bridge on the Androscoggin River in Maine, June 1973.



The Androscoggin River flowing past forest and farmland near Turner, Maine.

The CWA provides key tools to make these kinds of improvements, if it is fully and faithfully enforced; for instance, the CWA requires dischargers to limit their pollution to ensure that state-established standards for water quality are met and requires EPA to set discharge limits on an industry-by-industry basis that reflect advancements in technology. 12 Without the CWA's protections, however, advocates and pollution control officials would lose their most powerful tool to push for continued water quality improvements in the Androscoggin and in water bodies across the country.

The Importance of Defining "Waters of the United States" **Under the Clean Water Act**

The Clean Water Act regulates activities that affect water quality in any "navigable waters," which Congress defined expansively as the "waters of the United States." Prior to the 2000s, presidential administrations, courts, and agencies took a broad view of this definition, placing virtually all water bodies in the United States under the CWA's protection. In contrast, industrial facilities and other polluters have long lobbied to keep that category as narrow as possible. These corporate interests have typically focused on excluding wetlands and non-perennial (i.e., seasonal and rain-dependent) or small streams, often claiming that the law protects only waters used for navigation.¹³

In the face of industry challenges, the Supreme Court upheld the CWA's protections for wetlands near streams, rivers, and other water bodies in 1985.14 However, in 2001 and 2006, the court revisited the outer limits of the Clean Water Act, leading to a narrowed working definition of "waters of the United States." 15 In particular, though the 1985 decision said that the use of the word navigable in the CWA was of "limited import," the later decisions suggested that the term was an indication of the limits of the law. Although the court decisions did not strike down any regulations protecting waters, industry opponents claimed the legal analysis in these decisions supported dramatic rollbacks of Clean Water Act regulations. 16 In response, the George W. Bush administration issued public guidance outlining the protections of permanently and seasonally flowing tributary streams, wetlands with surface connections to those streams, and other waters that scientific evidence indicated had a significant impact on the physical, chemical, or biological condition of larger waters downstream.¹⁷ These guidelines in fact represented a retreat from prior agency practice, under which virtually all water bodies in the country were protected. But they at least directed agency experts to consider the functions that different water bodies provided and to protect upstream waters if scientific evidence showed they had significant impacts on water quality.

Unfortunately, in subsequent years the Trump administration embraced industry arguments and radically

weakened CWA protections by adopting the "Navigable Waters Protection Rule" (NWPR), which completely excluded precipitation-dependent streams and rivers and huge swaths of wetlands from the regulatory definition of "waters of the United States." The NWPR removed an estimated 51 percent of the wetlands in the continental United States from the CWA's protection, along with at least 1.19 million miles of rain-dependent streams and rivers. 19 The NWPR was successfully challenged in the courts, and in 2022 the Biden administration moved to repeal and replace the NWPR with rules that would largely return to the longstanding Bush-era guidelines.²⁰

Sackett v. EPA Threatens the Scope of the CWA

On January 24, 2022, the Supreme Court announced it would hear a new case about the scope of the Clean Water Act, Sackett v. EPA, involving an Idaho couple represented by the Pacific Legal Foundation, a right-wing organization that has long fought against Clean Water Act regulations (and many other environmental requirements). Although the case technically involves only a single wetland area near a large lake, the court may use this case to redefine what kinds of streams, wetlands, and other water bodies count as "waters of the United States" and are therefore protected by the Clean Water Act from unregulated pollution.

The Sacketts, who ran an excavation company, filled in wetlands on their property a stone's throw from Priest Lake, a large lake in northern Idaho renowned for recreational activity.21 Water flows belowground from a large wetland area known as the Kalispell Fen, through the Sackett property, and into Priest Lake.²² After finding that the fen and the Sacketts' wetlands significantly affect Priest Lake, two federal courts ruled that the Clean Water Act's water quality safeguards applied to the wetlands.²³ This analysis was consistent with the Supreme Court's 2006 decision and with rulings of lower courts in similar cases around the country.

But the Sacketts, their lawyers, and numerous CWAregulated industries argue that the Supreme Court previously got it wrong. Specifically, the Sacketts claim that the Clean Water Act can only "regulate traditional navigable waters, as well as intrastate navigable waters over which interstate commerce could pass, plus the non-navigable wetlands inseparably bound up with such waters—but no more."24 That is, only waters on which a boat could float, plus a smattering of wetlands. Other entities supporting the Sacketts argue for a slight variation on their approach, pushing for an interpretation that would deny protections to streams that are periodically or ordinarily dry and wetlands that lack surface water connections to other covered waters (even if extensive other connections exist); this interpretation would mimic the Trump administration's devastating NWPR regulation.25



Patsy Pond in Croatan National Forest on the Atlantic coast of North Carolina

WETLANDS, AS WELL AS HEADWATER AND NON-PERENNIAL STREAMS, ARE IMPORTANT WATER BODIES—AND THEY ARE AT RISK

Numerous kinds of water bodies are at risk of losing Clean Water Act protections in *Sackett*, especially wetlands and those streams that do not flow year-round or are not large enough to float a boat.

The Trump administration's NWPR removed protections from tributary streams that flow only in response to precipitation and from ponds, wetlands, and other water bodies that do not have surface water connections to larger downstream waters. In <code>Sackett</code>, some polluting industries have asked the Supreme Court to adhere to this same restrictive and unscientific approach. Others have asked the court to go even further; plaintiffs in the <code>Sackett</code> case have urged the Supreme Court to exclude water bodies that cannot support navigation and all wetlands except those that directly abut actually navigable waterways and are indistinguishable from them.

Either of these approaches would be devasting to protections for wetlands and numerous kinds of streams. Non-perennial streams, ones that do not flow year-round,

are often found in the upper reaches of a watershed. But they also can be large features that develop in areas where precipitation is infrequent, like the desert washes prevalent in the Southwest. These seasonal and precipitationdependent streams—known in the scientific literature as intermittent and ephemeral streams, respectively-make up nearly 60 percent of the streams in the continental United States.²⁶ Additionally, many perennial streams are very small; these are often feeder streams high in the watershed and are commonly known as headwater streams. Wetlands are areas where water saturates or covers soil for all or important parts of the year, including the growing season; as EPA explains, "The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils."27

Wetlands, headwater streams, and non-perennial streams are crucial elements of our nation's water resources. To deny them protection under the CWA could prove disastrous for the quality of water in waterways people use for fishing and swimming, agriculture, and other businesses. It also would diminish the numerous ecological services these waters provide, from flood control to pollution filtration to wildlife habitat.

Wetlands

Our nation's wetlands-marshes, bogs, fens, and swamps (and many more)—are unique, dynamic, and critically important water bodies. They improve people's lives and the environment in many ways, including by preventing flooding, filtering pollution, providing wildlife habitat, and trapping carbon in soils. In fact, one recent estimate of wetland benefits worldwide quantified their value at \$47.4 trillion per year (2011 dollars).²⁸

Despite performing critical ecosystem services, wetlands are currently under threat. Globally, an estimated 85 percent of wetland area has been lost.²⁹ In the continental United States, approximately 53 percent of wetland area that existed prior to European colonization has been destroyed, and, of the remaining area, a national survey found that less than half is in "good" condition, while 32 percent is in "poor" condition.30

Wetlands Prevent Flooding

Wetlands are commonly referred to as natural sponges. They have the capacity to retain water that might otherwise flow downstream and cause flooding or harmful erosion. EPA says one acre of wetlands can store up to 1.5 million gallons of floodwater, which is about the amount of water in three Olympic-size swimming pools. With roughly 110.1 million acres of wetlands in the continental United States, the total amount of flood control they provide is substantial.31

Wetlands along streams and in their floodplains can help limit the harm to surrounding areas during floods. In 2015, EPA scientists found that "floodplain wetlands reduced or delayed floods in 23 of 28 studies."32 Wetlands located beyond the floodplain of streams also buffer flood waters by capturing runoff during storms. Non-floodplain wetlands



Potholes and grassland in the Prairie Pothole Region of South Dakota.

"perform hydrologic sink functions" for downstream waters, "particularly by reducing peak flows."33 Similarly, so-called isolated wetlands can have significant effects, especially when considered together with other, similar wetlands.34 For example, one analysis of the importance of "isolated" waters reported that prairie "pothole wetlands in North Dakota's Devils Lake Basin can store as much as 72% of the total runoff from a two-year frequency storm and about 41% from a 100-year storm."35

Because of this flood-control function, wetlands can provide direct economic benefits. Wetland loss was significantly related to increased reported damage in a 2011 study of insured property losses across 144 coastal counties in all five Gulf Coast states (plus several counties in extreme southwest Georgia) between 2001 and 2005.36 Similarly, another study of flood damage around Houston found that being surrounded by freshwater wetlands was the land use/land cover variable that had the strongest influence on reducing flood damage.³⁷ In the Southeast, North Carolina has been hit with multiple devastating 500-year storms; the estimated damage from Hurricane Florence reached nearly \$17 billion and Hurricane Matthew cost \$4.8 billion, with most of the damage caused by floodwaters. 38 According to the North Carolina Department of Environmental Quality, without the storage capacity of the state's remaining wetlands, the flooding damage would have been even more catastrophic. 39 That agency also said that "back-toback hurricanes" like these are "projected to increase in frequency, power, and duration," making the preservation of wetlands more important than ever. 40

Wetlands Filter Pollution

Wetlands help keep downstream waters clean. Water flowing into a wetland may be laden with sediment as well as nitrogen and phosphorus from fertilizers, manure, or leaking septic tanks. When that water reaches a wetland, it slows down, allowing vegetation or soil microorganisms to absorb suspended contaminants and causing sediment (often carrying other pollutants) to fall to the wetland floor.41

Wetlands located alongside or within the floodplains of rivers and streams can prevent pollution from reaching those waters and can change the chemical composition of contaminants so that they are less harmful. 42 Similarly, wetlands outside floodplains help prevent pollution of other water bodies by intercepting water carrying contaminants. As one overview of such wetlands' functions noted, "Wetlands are hotspots for sediment deposition, nutrient retention and transformation, organic matter cycling and storage, and metal and pesticide immobilization. Predictably, downstream water quality declines where wetlands are lost."43

Wetlands Are a Natural Climate Solution

Wetlands cover only 5 percent to 8 percent of the world's land area, but they account for more than one-third of the organic carbon stored in soil.⁴⁴ Plants in wetlands use carbon dioxide in the air to grow via photosynthesis. As Ducks Unlimited Canada explains, "when they die, that carbon doesn't get released back into the atmosphere. Instead, the plant sinks to the bottom of the wetland where it can't fully decompose. Over time, carbon accumulates in partially decomposed plant matter at the bottom of wetlands, and this carbon is stored for hundreds or even thousands of years."45 Relatedly, wetland disturbance worsens climate change: Those that are drained, converted to dry land, or otherwise destroyed release carbon to the atmosphere.46

The U.S. Fish and Wildlife Service estimates there are 104.3 million acres of freshwater wetlands in the lower 48 states. 47 Freshwater wetlands in the continental United States have absorbed 11.76 billion tons of carbon, according to a 2016 estimate. 48 To put this in perspective: freshwater wetlands in the continental U.S. currently contain the amount of carbon 2,856 coal-fired power plants would emit in a year. 49 They contain the vast majority (more than 90 percent) of the soil carbon stored in wetlands, due to their far larger extent in the country; approximately 91 percent of all wetland area is freshwater.⁵⁰

Wetlands' ability to trap carbon varies, based on the type of wetland and its condition. 51 One paper reported that "carbon stocks are significantly lower at wetland sites with most anthropogenic disturbance compared with sites with intermediate or least disturbance," highlighting the need to prevent destruction and pollution of intact wetlands.⁵²

Wetlands Provide Habitat for Wildlife

Wetlands are essential—and enormously productive ecosystems. According to EPA, wetlands' productivity is "comparable to rain forests and coral reefs." 53 As the agency explains, "Wetlands can be thought of as 'biological supermarkets.' They provide great volumes of food that attract many animal species. These animals use wetlands for part of or all of their life-cycle. Dead plant leaves and stems break down in the water to form small particles of organic material called 'detritus.' This enriched material feeds many small aquatic insects, shellfish and small fish that are food for larger predatory fish, reptiles, amphibians, birds and mammals."54

A wide variety of wildlife depends on wetlands. More than a third of North American bird species use wetlands, and "at least 138 are wetland dependent," meaning they cannot survive without them.⁵⁵ According to EPA, "The fish and shellfish that depend on wetlands for food or habitat constitute more than 75% of the commercial and 90% of the recreational harvest."56 Also, "More than one third of the United States' threatened and endangered species live only



Sandhill cranes in the Bosque del Apache National Wildlife Refuge, New Mexico.

in wetlands, and nearly half use wetlands at some point in their lives."57

Aquatic wildlife moves extensively between wetlands within floodplains and the rivers and streams they surround. 58 That said, geographically isolated wetlands are also essential to wildlife biodiversity.⁵⁹ For example, approximately half of the continent's waterfowl hatch in the area of the Great Plains where prairie pothole wetlands are common; playa lakes (seasonal ponds concentrated in Texas and New Mexico) are used by more than 90 percent of the region's sandhill cranes and numerous species of amphibians; and Carolina Bay wetlands are similarly major habitats for amphibians.60

Among the biggest drivers of the global biodiversity crisis are changes in land use, unfortunately including the conversion of wetlands to dry land for agriculture and development.⁶¹ Without the protections of the CWA, this type of conversion could become even more common.

Headwater, Seasonal, and Rain-Dependent Streams

Overwhelming scientific evidence shows that streams of all types, even ones that are small or don't flow year-round, are critically important components of the aquatic ecosystem; we depend on them. In a 2015 state-of-the-art review of the scientific literature, EPA scientists found that non-perennial streams provide the bulk of water to larger rivers and provide numerous benefits to other waterways, including moving nutrients downstream and providing habitat for many species. 62 Additionally, headwater, seasonal, and rain-dependent streams contribute to the drinking water supplies of more than 117 million people. 63

Streams that do not flow year-round, like those that flow only in response to precipitation, are critically important to the physical, biological, and chemical condition of downstream waters. Healthy vegetation alongside nonperennial streams can trap sediment and the contaminants it can carry, improving water quality downstream.



A stream in the Appalachian Mountains.

Conversely, when these non-perennial streams have high flows, they can quickly move polluted water to larger streams and rivers, underscoring the importance of controlling pollution into these streams. ⁶⁴ Even the floodplains associated with ephemeral streams dissipate floodwaters and reduce the downstream risk of property loss or human injury. ⁶⁵

Ephemeral streams also effectively recharge groundwater because, as the National Audubon Society notes, "their sandy and coarse grained soils . . . provide a much more rapid infiltration of water when compared to the tight clay soils of the surrounding area." Without these stream channels, water would be more likely to evaporate and be unavailable for other uses. 67

Finally, wildlife concentrates near these streams and in the wooded areas next to them. For example, in Arizona, "numerous birds, mammals, reptiles, and amphibians utilize Arizona's natural ephemeral streams, including Lucy's Warblers, Bell's Vireos, Phainopeplas, Ladder-backed Woodpeckers, ring tail cats, javelina, gray fox, desert mule deer, mountain lions, and desert tortoises."⁶⁸

Losing protections for non-perennial and headwater streams could needlessly decrease the health of waterways across the country, reduce critical habitat, and increase flood risk for nearby communities.

STREAMS AND WETLANDS ACROSS THE COUNTRY ARE AT RISK IN SACKETT V. EPA

The Supreme Court's decision to hear *Sackett v. EPA* and potentially return us to the diminished protections of the NWPR—or go further—could well determine whether the Clean Water Act can adequately protect our waterways in the future.

Here's a look at some places around the country that contain waters that the Sacketts or their allies want the Supreme Court to exclude; they include areas that were specifically found to lack protection when the NWPR was in effect and areas that contain the kinds of streams, wetlands, and other waters that are at stake in <code>Sackett</code>. These particular waters—and, more important, countless additional water bodies like them—are at risk if this case curbs the CWA's coverage. If waters like these are not protected by the CWA, the kinds of safeguards discussed above do not apply, including federal requirements to avoid and mitigate the harm caused by filling wetlands, to take precautions in handling oil or sewage sludge, to comply with state standards meant to keep waters safe for swimming and fishing, and more.

Rain-Dependent Streams in Multiple Counties in Texas and New Mexico

After the Trump administration narrowed the reach of Clean Water Act protections, the Army Corps applied the NWPR to exclude multiple ephemeral streams that would be crossed by the Double E Pipeline between New Mexico and Texas.⁶⁹ This pipeline started operating in November 2021, according to a published report, and is "a 70-30 joint venture among Summit Midstream Partners and ExxonMobil subsidiary XTO Energy."70 Exempting this project from Clean Water Act scrutiny is worrisome, especially considering that Summit Midstream Partners LLC was a defendant in a recently resolved enforcement action brought by the United States and North Dakota following a spill from a different pipeline of more than 700,000 barrels of produced water (wastewater brought to the surface by an operating well), and that the company pleaded guilty in a criminal case resulting from the same incident.⁷¹



Cypress trees and lily pads in the Okefenokee National Wildlife Refuge, Georgia.

Okefenokee Swamp in Georgia

The Okefenokee Swamp is, as the U.S. Fish and Wildlife Service puts it, "like no other place on earth." 72 It is one of the world's largest intact freshwater ecosystems, the source of the Suwannee and St. Marys Rivers, and home to world-renowned biodiversity, and it contains deep peat formations that sequester carbon. Yet an Alabama company, Twin Pines, LLC, wants to strip-mine titanium and zirconium from hundreds of acres of wetlands adjacent to the Okefenokee Swamp National Wildlife Refuge—wetlands that are critical to the swamp's health. These nearly 600 acres of wetlands-which would have been covered by the CWA but for the NWPR—lost protection overnight under the NWPR, leaving Twin Pines free to destroy the wetlands with no federal protections or oversight.74

EPA, the U.S. Fish and Wildlife Service, and the Georgia Department of Natural Resources have all expressed concerns about the proposed mine, warning it could result in "unacceptable," "permanent," and "irreversible" damage to the Okefenokee Swamp. 75 In June 2022, citing its own failure to consult with the Muscogee (Creek) Nation when it assessed whether the site contained protected waters, the Army Corps rightfully invalidated its earlier decision based on the NWPR. However, without justification or explanation, the agency bucked the Clean Water Act once again in August 2022 by revoking the wetlands' protections to settle a lawsuit brought by Twin Pines, putting the wetlands—and the Okefenokee Swamp—back at risk.⁷⁶



A small stream in the Chena River watershed.

Wetlands in Fairbanks, Alaska

In October 2020, the Army Corps relied on the NWPR to strip 355 acres of wetlands in Fairbanks, Alaska, of Clean Water Act protections.⁷⁷ The agency's decision reversed a prior determination that these wetlands were protected because they directly abut a tributary to the Chena River and significantly affect the water quality of the river. The agency said it changed its determination because the wetlands are separated from the river by an artificial berm that does not allow a direct surface water connection in a "typical year," and the NWPR excluded it from coverage. 78 The Chena River runs right through downtown Fairbanks and is used for salmon fishing.⁷⁹

Tijeras Arroyo in Albuguergue, New Mexico

The Tijeras Arroyo is a tributary to the Rio Grande that flows through Bernalillo County, New Mexico. 80 According to the state, "Tijeras Arroyo originates from springs in the Sandia and Manzano Mountains and flows perennially for 15 miles through Tijeras Canyon and the foothills of Albuquerque.... [It] quickly becomes ephemeral and winds for 11 miles through developed and undeveloped areas of Albuquerque, including Kirtland Air Force Base, before entering the Rio Grande."81 Bernalillo County contains critical habitat for endangered and threatened wildlife such as the Rio Grande silvery minnow and the yellow-billed cuckoo.82

A Clean Water Act cleanup plan for the arroyo notes that a permitted cement manufacturer discharges into one of its ephemeral tributaries and that a municipal stormwater system serving several communities also discharges to Tijeras Arroyo.⁸³ New Mexico officials note that a significant portion of the arroyo is at risk of losing federal protection; they are concerned that if Clean Water Act protections are weakened, these dischargers and other threats to water quality might not be subject to federal safeguards. 84 If that were to happen, facilities dumping into the stream would be able to ignore federal pollution limits.

Wetlands in McKinley, Minnesota

In 2021, the Army Corps excluded 117 acres of wetlands in McKinley, Minnesota, from CWA protections by applying the NWPR to a project to make room for a support facility for a nearby open-pit iron ore mine. 85 The owner of the associated ArcelorMittal Minorca Mine said in a December 2021 report that "there are currently no outstanding enforcement items at the facility."86 But the operation has had pollution problems in the past; the Minorca Mine experienced a failure of a mine waste pipeline that affected more than 15 acres of wetlands, resulting in "over \$300,000 in fines for tailings spills in 2013 and 2014."87 Because the Army Corps has broad authority under the Clean Water Act to issue site-specific permits only when in the "public interest," the Corps could have considered this history and imposed conditions that would limit the impacts of a possible spill or even denied the permit altogether—but only if the on-site wetlands were protected by the CWA.

Rain-Dependent Streams in Arizona

Hudbay Minerals is seeking permits to dig an open-pit copper mine in the Santa Rita Mountains of Arizona. The mine would bury sites sacred to the Tohono O'odham Nation, Pascua Yaqui Tribe, Hopi Tribe, and others. Fortunately, these Tribes as well as lawyers at Earthjustice have succeeded in halting full-scale development of the mine while federal agencies undertake critical environmental

analyses required by the courts—even though Hudbay has repeatedly attempted to move forward, forcing the Tribes to go back to court.88

Although the Tribes have—so far—halted mining on the east side of the Santa Rita Mountains, Hudbay expanded its plans to encompass the west side and hastily pressed forward with bulldozing the network of ephemeral streams feeding the Santa Cruz River. 89 The company claims that these streams are not covered by the Clean Water Act because they flow only in response to rain events, and it has proceeded with development without any federal permits. 90

This case sharply illustrates what's at stake in the Supreme Court. If ephemeral streams are protected by the Clean Water Act, Hudbay will need to design and operate the mine to avoid harming the streams as much as possible and then get a permit from the Army Corps for unavoidable impacts. The permitting process would provide the public, including downstream communities, with an opportunity to present their concerns. The CWA could also require the Army Corps to ensure that the mine's far-reaching adverse impacts are mitigated. 91 Unfortunately, this project was proposed when the NWPR was in effect, and the Army Corps found that dozens of acres of ephemeral features on the planned mine site were not protected by the act's safeguards.92

Lake Whippoorwill and Wetlands in Orlando, Florida

Lake Whippoorwill in Orlando, Florida, roughly a third the size of New York's Central Park, is used for recreational boating and fishing.93 However, in August 2020, the Army Corps relied on the NWPR to exclude the 317-acre lake and about three acres of wetlands from the Clean Water Act's safeguards. 94 This lake would have been protected prior to the NWPR because—among other things—people rent boats for use on the lake. 95 However, the Trump administration discouraged the protection of such waters by adopting an NWPR implementation policy that required Army Corps field staff to get special permission from Washington, D.C., headquarters before protecting a water body on the basis of its use for recreational boating.96



A stream in Gardner Canyon at Coronado National Forest in the Santa Rita Mountains, Arizona.



The shore of Lake Whippoorwill in Orlando, Florida.

The Sacketts have argued that a water body needs to be a part of a chain of interstate commerce to be protected. If the Supreme Court agrees with this interpretation, lakes like Lake Whippoorwill across the country are at risk of losing Clean Water Act protection. This would mean that a polluter could dump raw sewage into the lake, threatening its safety for fishing. No Clean Water Act permit would limit the pollutants in its discharge, to say nothing of many other threats that could result from eliminating federal protections.

Rain-Dependent Streams in Kane and Washington Counties, **Utah, and Coconino and Mohave Counties, Arizona**

In November 2020, the Army Corps relied on the NWPR to exclude 273 ephemeral streams (more than eight acres of area) from Clean Water Act protections for the Lake Powell Pipeline project between Arizona and Utah. 97 The pipeline project is a proposal from the Utah Division of Water Resources to withdraw 82,000 acre-feet of water from Lake Powell (a reservoir on the Colorado River) and transport it to two Utah counties for municipal supply.98

The other Colorado River basin states have urged the Bureau of Reclamation, the federal agency overseeing the environmental impact analysis of the project, not to finalize its review now and instead to support a multistate collaborative process to resolve competing demands for Colorado River water.99

Additionally, concerned stakeholders argue that the project is a boondoggle. According to the Utah Rivers Council, "This \$2.4 billion project would pump 28 billion gallons of water 2,000 feet uphill across 140 miles of desert to provide just 160,000 residents in Southwest Utah with more water primarily for watering their lawns." Further, "the Lake Powell Pipeline is completely unnecessary because an array of less-expensive water sources exist to provide residents with water, who already have an abundance of water. 100

If the Supreme Court agrees with arguments in the Sackett case that rain-dependent streams cannot be protected, any harm caused to the 200-plus such streams that the planned pipeline crosses would not have to be avoided or mitigated under the Clean Water Act. On the other hand, if the project has to go through full-scale CWA permitting, the Army Corps would need to undertake a public interest review, in which community members would have an opportunity to make the case that the pipeline would harm the public interest by further stressing the Colorado River and could unnecessarily damage important local waterways.

Wetlands in Hardeeville, South Carolina

In South Carolina, the Savannah National Wildlife Refuge's roughly 30,000 acres contain pristine wetland systems, including freshwater marshes, tidal rivers and creeks, and bottomland hardwoods, all of which support a diverse array of plants and animals. 101 The edge of the refuge along the Savannah River in Jasper County is no place for a massive industrial, residential, and commercial development, but that is where a Texas-based developer seeks to build the 4,260-acre RiverPort. 102 The South Carolina Department of Natural Resources has raised concerns about the RiverPort project, calling attention to the long-term, devastating impacts it would have on the refuge's water bodies and its unique and endangered species. 103

The RiverPort developer initially sought a Clean Water Act permit because the on-site wetlands were protected under then-applicable regulations. However, when the less-protective NWPR was adopted, the developer asked the Army Corps to apply it to the site and the Corps found more than 200 acres of wetlands were excluded from Clean Water Act coverage. 104 The developer currently plans to fill 33 acres of wetlands and to surround and fragment nearly 1,400 more acres of wetlands within the project area. 105

If allowed to proceed, RiverPort will destroy habitat, increase pollution, and worsen runoff and flooding in and around the development and the Savannah National Wildlife Refuge. Nearly the entire tract of land, which comprises 50 percent of the watershed, would be paved or built over to accommodate residential, business, and warehouse buildings as well as roads and parking lots, creating impervious surfaces that destroy habitat and worsen runoff and flooding. 106 Moreover, if the Supreme Court weakens the law's protections to resemble the NWPR or worse, the developer could alter its project plan and destroy even more of the site wetlands without federal agency oversight.



Bald cypress in a bottomland hardwood forest at Savannah National Wildlife Refuge, Georgia.

Rain-dependent streams in Memphis, Tennessee

The now-canceled Byhalia Pipeline was a proposed 49-mile crude oil conduit that would have cut through lower-wealth, Black neighborhoods in southwest Memphis, Tennessee. 107 Southwest Memphis neighborhoods are already heavily burdened by polluting industries, including an oil refinery, a steel mill, a recently retired coal plant, and an active methane gas plant. The area is also a hot spot for toxic air pollution, with a cancer risk four times the national average, and is already saddled with surface water and groundwater contamination.¹⁰⁸ The pipeline route would have crossed a drinking water well field that serves these overburdened neighborhoods, risking contamination of the community's sole drinking water source.

Had it not been canceled for other reasons, the pipeline would have crossed more than 130 streams and wetlands in Tennessee and Mississippi, requiring a Clean Water Act permit from the Army Corps. However, because the site also contained 95 ephemeral streams that lost protection under the NWPR—and that would not be protected under arguments advanced in Sackett—the Army Corps would not have been able to require mitigation measures for the damage done to those streams under a narrow understanding of the Clean Water Act, compounding the risks to the Memphis community. 109 Without protections for rain-dependent streams like these that feed drinking water sources, communities that have historically carried a disproportionate burden of pollution will continue to suffer that injustice.

And many more . . .

Frighteningly, the handful of examples presented in this paper are just the very tip of the iceberg. The kinds of waters that are most at risk in the Supreme Court case are widespread and critical for water quality. And these waters face constant development and pollution threats; in just the short period between June 22, 2020, and September 1, 2021, when the NWPR was being implemented, the federal government applied the rule to exclude 19,259 wetlands and 13,692 rain-dependent waters from Clean Water Act protection. 110 Thus, if the Supreme Court embraces arguments pushing for an interpretation like the NWPR, the damage to water quality across the country will be enormous. If the court goes even farther and accepts the Sacketts' more radical ideas, the loopholes that would be created, and the attendant degradation of important waterways, will be far worse.

WHAT COMES NEXT?

The Supreme Court heard oral arguments in Sackett v. EPA on October 3, and the justices may come to a decision on the Clean Water Act's fate by early 2023.

If the court rejects the arguments on the Sacketts' side, EPA and the Army Corps should promptly develop regulations that follow the scientific evidence and honor the purpose of the law to protect water bodies throughout our watersheds, from headwaters to large rivers and lakes, so that they may be used for things like fishing, swimming, water-dependent commerce, and drinking water supply.

If the court rules in favor of the Sacketts and against clean water, Congress will need to step in and reaffirm what it intended in 1972: to establish broad protection for the nation's water bodies. As we learned during the brief implementation of the NWPR, a lot can be lost in a short time, so Congress must act quickly. Until it does, community groups, businesses, states, tribes, and wetland and floodplain managers will need to use and strengthen the patchwork of other protective tools to stem the losses of our essential waters, including:

- Advocate for increased federal funding to conservation programs that can be used to acquire aquatic areas or pay landowners not to develop such areas.
- Enforce state, tribal, and local water protections currently on the books and increase funding for enforcement agencies.
- Adopt new state, tribal, and local requirements to prevent and clean up water pollution.

All these strategies are, at best, stopgap measures. The reason we have a Clean Water Act is that national protections—ones that don't depend on local politics or polluter influence in the place one happens to live-are essential. We must hope that the Supreme Court upholds the full protective measures of this crucial law.

ENDNOTES

- Brief of Outdoor Recreation and Conservation Organizations as Amici Curiae in Support of Respondents, Sackett v. EPA, No. 21-454, June 17, 2022, 7, 15, $https://www.supremecourt.gov/DocketPDF/21/21-454/228291/20220617124552018_Sackett\%20Amicus\%20Brief\%20final\%20pdfa.pdf.$
- U.S. v. Ashland Oil & Transp. Co., 504 F.2d 1317, 1326 (6th Cir. 1974).
- Robert W. Adler, Jessica C. Landman, and Diane M. Cameron, The Clean Water Act 20 Years Later (Washington, DC: Island Press, 1993), 20. 3
- Ibid., 5. 4
- 5 Ibid.
- 6 W. E. Frayer et al., Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950's to 1970's, U.S. Fish and Wildlife Service, April 1983, 3, https://www.fws.gov/wetlands/documents/Status-and-Trends-of-Wetlands-and-Deepwater-Habitats-in-the-Conterminous-United-States-1950s-to-1970s.pdf.
- U.S. Environmental Protection Agency (hereinafter EPA), "History of the Clean Water Act," accessed September 20, 2022, https://www.epa.gov/laws-regulations/ history-clean-water-act.
- 8 David A. Keiser and Joseph S. Shapiro, "Consequences of the Clean Water Act and the Demand for Water Quality," Cowles Foundation for Research in Economics $at\ Yale\ University,\ June\ 2018,\ 2-3,\ https://cowles.yale.edu/sites/default/files/files/pub/d20/d2070-r.pdf.$
- 9 Lydia Saad, "A Seven-Year Stretch of Elevated Environmental Concern," Gallup, April 5, 2022, https://news.gallup.com/poll/391547/seven-year-stretch-elevated-
- Natural Resources Council of Maine, "Cleaning Up the Androscoggin River," accessed July 28, 2022, https://www.nrcm.org/programs/waters/cleaning-up-the-10 androscoggin-river/.
- 11
- EPA, "National Pollutant Discharge Elimination System (NPDES): Permit Limits—TBELs and WQBELs," accessed October 4, 2022, https://www.epa.gov/npdes/ 12 permit-limits-tbels-and-wqbels.
- Laura Gatz and Kate R. Bowers, "Redefining Waters of the United States (WOTUS): Recent Developments," Congressional Research Service R46927, July 8, 2022, 13 1, https://crsreports.congress.gov/product/pdf/R/R46927.
- U.S. v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985).
- 15 Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001); Rapanos v. U.S., 547 U.S. 715 (2006).
- See, for instance, Comments of the Waters Advocacy Coalition (WAC) on the U.S. Environmental Protection Agency's and U.S. Army Corps of Engineers' Proposed 16 $Revised\ Definition\ of\ ``Waters\ of\ the\ United\ States,"\ Docket\ No.\ EPA-HQ-OW-2021-0602,\ February\ 7,\ 2022,\ www.abc.org/Portals/1/CLRF\%20Meetings/No.\ EPA-HQ-OW-2021-0602,\ Water No.\ Water N$ Comments.pdf?ver=2022-02-09-113955-100.
- EPA and U.S. Army Corps of Engineers, "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. United States" (hereinafter Rapanos Guidance), December 2, 2008, 1, https://www.epa.gov/sites/default/files/2016-02/documents/cwa_jurisdiction_following_ rapanos120208.pdf.
- Brent H. Gurney, H. David Gold, and Shannon Morrissey, "Unsettled Waters: Navigable Waters Protection Rule Narrows the Definition of Waters of the United States," WilmerHale, February 27, 2020, https://www.wilmerhale.com/en/insights/client-alerts/20200227-unsettled-waters-navigable-waters-protection-rulenarrows-the-definition-of-waters-of-the-united-states.
- Ariel Wittenberg, "EPA Claims 'No Data' on Impact of Weakening Water Rule. But the Numbers Exist," Science, December 11, 2018 (originally published by E&E News), https://www.science.org/content/article/epa-claims-no-data-impact-weakening-water-rule-numbers-exist; EPA and U.S. Army Corps of Engineers, Economic Analysis for the Proposed "Revised Definition of 'Waters of the United States" Rule, November 17, 2021, 148-150, https://www.epa.gov/system/files/ documents/2021-11/revised-definition-of-wotus_nprm_economic-analysis.pdf.
- EPA, "Current Implementation of Waters of the United States," accessed July 29, 2022, https://www.epa.gov/wotus/current-implementation-waters-united-states. 20
- Brief of Amicus Curiae, Idaho Conservation League, Sackett v. U.S. EPA, No. 21-454, 6-7, June 17, 2022, https://www.supremecourt.gov/DocketP-21 $DF/21/21-454/228334/20220617143504924_21-454\%20 Amicus\%20 Idaho\%20 Conservation\%20 League.pdf.$
- Brief of United States of America, Sackett v. U.S. EPA, No. 21-454, June 2022, 9, https://www.supremecourt.gov/DocketPDF/21/21- $454/227721/20220610173641467_21\text{-}454 bs United States.pdf.$
- Sackett v. U.S. EPA, 8 F.4th 1075 (9th Cir. 2021). 23
- 24 Brief of Michael and Chantell Sackett, Sackett v. U.S. EPA, No. 21-454, April, 2022, 43, https://www.supremecourt.gov/ DocketPDF/21/21-454/220716/20220411143433423_FINAL%20Sackett%20Opening%20Brief.pdf.
- 25 Brief of Fourteen National Agricultural Organizations as Amici Curiae in Support of Petitioners, Sackett v. U.S. EPA, No. 21-454, April 2022, 29, https://www. $supreme court.gov/DocketPDF/21/21-454/221151/20220415135223396_21-454\%20Sackett\%20v\%20EPA\%20Amicus\%2014\%20Ag\%20Orgs\%20PDFA.pdf.$
- 26 $EPA, "Streams\ Under\ CWA\ Section\ 404," accessed\ November\ 2,\ 2021,\ https://www.epa.gov/cwa-404/streams-under-cwa-section-404.$
- 27 EPA, "What Is a Wetland?" accessed November 2, 2021, https://www.epa.gov/wetlands/what-wetland.
- Nick C. Davidson et al., "Worth of Wetlands: Revised Global Monetary Values of Coastal and Inland Wetland Ecosystem Services," Marine & Freshwater 28 Research 70, no. 8 (March 7, 2019): 1189-94, https://doi.org/10.1071/MF18391.
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, The Global Assessment Report on Biodiversity and Ecosystem Services: 29 Summary for Policymakers, 2019, 11, https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf.
- Thomas E. Dahl, Wetlands Losses in the United States 1780's to 1980's: Report to Congress, U.S. Department of Interior and U.S. Fish & Wildlife Service, 1990, 1, https://www.fws.gov/wetlands/documents/Wetlands-Losses-in-the-United-States-1780s-to-1980s.pdf; EPA, Office of Wetlands, Oceans and Watersheds, Office of Research and Development, National Wetland Condition Assessment 2011: A Collaborative Survey of the Nation's Wetlands, May 2016, EPA-843-R-15-005, viii, $https://www.epa.gov/sites/default/files/2016-05/documents/nwca_2011_public_report_20160510.pdf.$

- EPA, Office of Water, Functions and Values of Wetlands, EPA 843-F-01-002c, September 2001, 2, https://www.epa.gov/sites/default/files/2016-02/documents/ functionsvaluesofwetlands.pdf; Cassidy Armbruster, "Olympic Swimming Pool: How Deep, Cold, and Long Is It and How Many Gallons Does It Hold?" Diario ES, July 24, 2021, https://en.as.com/en/2021/07/24/olympic_games/1627085157_017387.html; Thomas. E. Dahl, Status and Trends of Wetlands in the Conterminous United States 2004 to 2009: Report to Congress, U.S. Fish & Wildlife Service, 2011, 16, https://www.fws.gov/wetlands/documents/status-and-trends-of-wetlandsin-the-conterminous-united-states-2004-to-2009.pdf.
- 32 EPA, Office of Research and Development, Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence, EPA/600/R-14/475F, January 2015, 4-7, https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414.
- 33 Charles Lane et al., "Hydrological, Physical, and Chemical Functions and Connectivity of Non-Floodplain Wetlands to Downstream Waters: A Review," Journal of the American Water Resources Association 54, no. 2 (April 2018): 346-71, https://owl.cwp.org/mdocs-posts/hydrological-physical-and-chemical-functions-andconnectivity-of-non-flood plain-wetlands-to-downstream-waters-a-review/.
- Mark Rains et al., "Geographically Isolated Wetlands Are Part of the Hydrological Landscape," Hydrological Processes 30, no. 1 (January 2016): 153-60, https://onlinelibrary.wiley.com/doi/10.1002/hyp.10610.
- Ralph W. Tiner, "Geographically Isolated Wetlands of the United States," Wetlands 23, no. 3 (September 2003): 494-516, https://aswm.org/wetlandsonestop/ tiner_geographically_isolated_wetlands.pdf.
- Samuel D. Brody et al., "Examining the Influence of Development Patterns on Flood Damages Along the Gulf of Mexico," Journal of Planning and Education 36 Research 31, no. 4 (2011): 438-48, https://vivo.library.tamu.edu/vivo/display/n335867SE.
- Samuel D. Brody et al., "Examining the Impact of Land Use/Land Cover Characteristics on Flood Losses," Journal of Environmental Planning and Management 57, 37 $no.\ 8\ (2014):\ 1252-65,\ https://www.tandfonline.com/doi/abs/10.1080/09640568.2013.802228.$
- Comments of the North Carolina Department of Environmental Quality and the Office of the North Carolina Attorney General on Proposed Revised Waters of the 38 United States ("WOTUS"), Rule, 3-4, April 15, 2019, https://www.regulations.gov/comment/EPA-HQ-OW-2018-0149-4362.
- Ibid. 39
- 40 Ibid., 4.
- EPA, Functions and Values of Wetlands, 1,
- 42 EPA, Connectivity of Streams and Wetlands, ES-3.
- 43 Matthew J. Cohen et al., "Do Geographically Isolated Wetlands Influence Landscape Functions?" Proceedings of the National Academy of Sciences 113, no. 8 (February 23, 2016): 1978-86, https://www.pnas.org/content/pnas/113/8/1978.full.pdf.
- Ramsar Convention on Wetlands, "Wetland Restoration for Climate Change Resilience," Briefing Note, 2018, 3, https://www.ramsar.org/sites/default/files/ 44 documents/library/bn10_restoration_climate_change_e.pdf.
- Ducks Unlimited Canada, "Wetlands: A Powerful Carbon Sink," accessed September 9, 2022, https://www.ducks.ca/resources/educators/wetland-carbon-sink. 45
- Ramsar Convention on Wetlands, "Wetland Restoration for Climate Change Resilience," 4. 46
- 47 U.S. Fish & Wildlife Service, National Wetlands Inventory, Status and Trends of Wetlands in the Conterminous United States 2004 to 2009, July 2011, https://www.fws.gov/wetlands/documents/Key-Messages-Status-Trends-Wetlands-Conterminous-US-2004-2009.pdf.
- 48 Amanda M. Nahlik and M. Siobhan Fennessy, "Carbon Storage in US Wetlands," Nature Communications 7 (December 13, 2016): 12835, https://www.nature.com/ articles/ncomms13835.
- 49 EPA, "Greenhouse Gas Equivalencies Calculator," accessed November 4, 2021, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.
- 50
- Ramsar Convention on Wetlands, "Wetland Restoration for Climate Change Resilience," 4. 51
- Nahlik and Fennessy, "Carbon Storage in US Wetlands."
- EPA, "Why Are Wetlands Important?" accessed October 20, 2021, https://www.epa.gov/wetlands/why-are-wetlands-important.
- 54 Nahlik and Fennessy, "Carbon Storage in US Wetlands."
- Jon Kusler, "Common Questions: Wetland Conservation and the Protection of Migratory Birds," Association of State Wetland Managers, June 2006, 1, 55 https://www.nawm.org/pdf_lib/13_migratory_birds_6_26_06.pdf.
- Maine Department of Environmental Protection, "Threats to Wetlands," 2019, https://www.maine.gov/dep/water/wetlands/threats.htm. 56
- U.S. Fish & Wildlife Service, "American Wetlands Month: Essential Habitats," May 3, 2021, https://www.fws.gov/wetlands-month/essential-habitats. 57
- EPA, Connectivity of Streams and Wetlands, 4-17 to 4-20,
- 59 Tiner, "Geographically Isolated Wetlands of the United States."
- 60
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, The Global Assessment Report on Biodiversity and Ecosystem Services, 12. 61
- Connectivity of Streams and Wetlands, ES 7-9. 62
- EPA, "Geographic Information Systems Analysis of the Surface Drinking Water Provided by Intermittent, Ephemeral, and Headwater Streams in the U.S.," 63 accessed November 4, 2021, https://www.epa.gov/cwa-404/geographic-information-systems-analysis-surface-drinking-water-provided-intermittent.
- 64 National Audubon Society, "The Importance of Arizona's Ephemeral Streams," October 2020, 2, https://nas-national-prod.s3.amazonaws.com/file-attachments/ article/importance_of_ephemeral_streams_audubon.pdf.
- 65 Ibid.
- 66 Ibid., 3.
- Ibid.

- 68 Ibid.
- U.S. Army Corps of Engineers, Regulatory Program, Approved Jurisdictional Determination Form (Interim): Navigable Waters Protection Rule, ORM No. SPA-216 A J D. pdf? ver = 2020-09-03-181510-443.
- S&P Global Commodity Insights, "Permian's Double E Pipeline Enters Service as West Texas Gas Output Surges," November 15, 2021, https://www.spglobal.com/ platts/en/market-insights/latest-news/natural-gas/111521-permians-double-e-pipeline-enters-service-as-west-texas-gas-output-surges.
- 86 Fed. Reg. 44,056 (August 11, 2021); U.S. Department of Justice, "Pipeline Company Sentenced for Largest-Ever Inland Oil Spill," press release, December 6, 71 2021, https://www.justice.gov/opa/pr/pipeline-company-sentenced-largest-ever-inland-oil-spill.
- 72 U.S. Fish and Wildlife Service, "Okefenokee: About the Refuge," last updated June 8, 2020, https://perma.cc/WC5R-NWKM.
- Hazma Shaban, "Army Corps Blocks Strip Mine Near Okefenokee Wetlands After Opposition," Washington Post, June 4, 2022, https://www.washingtonpost.com/ 73 nation/2022/06/04/okefenokee-mine-blocked/.
- U.S. Army Corps of Engineers, Approved Jurisdictional Determination SAS-2018-00554, January 24, 2020 (on file with SELC); U.S. Army Corps of Engineers, Approved Jurisdictional Determination SAS-2018-00554 (October 14, 2020), https://perma.cc/WAW7-X2YC; U.S. Army Corps of Engineers, Approved Jurisdictional Determination SAS-2018-00554-ACM, March 24, 2021, https://perma.cc/8RN4-BLZ5.
- Letter from Mary S. Walker, EPA, to Col. Daniel M. Hibner, U.S. Army Corps of Engineers, October 3, 2019 (on file with SELC), 1; Letter from Jeaneanne Gettle, EPA, to Col. Daniel Hibner, U.S. Army Corps of Engineers, September 12, 2019 (on file with SELC); Letter from Catherine Phillips and David Viker, U.S. Fish & Wildlife Service, to Col. Daniel Hibner, U.S. Army Corps of Engineers, October 8, 2019 (on file with SELC); Letter from U.S. Fish & Wildlife Service to U.S. Army Corps of Engineers, February 20, 2019 (on file with SELC), 3; E-mail from Stephen Weidl, Georgia Environmental Protection Division, to Holly Ross, U.S. Army Corps of Engineers, December 2019 (on file with SELC), 3.
- 76 Marissa Mecke, "Okefenokee Swamp Mine Is Back On as Army Corps of Engineers Settles Lawsuit," Savannah Morning News, August 23, 2022, https://www. savannahnow.com/story/news/environment/2022/08/23/twin-pines-minerals-mine-set-continue-after-army-corps-settles-suit/7872256001/.
- U.S. Army Corps of Engineers, Regulatory Program, Approved Jurisdictional Determination Form (Interim): Navigable Waters Protection Rule, ORM No. POA- $2003-01422, October\ 29,\ 2020, https://www.poa.usace.army.mil/Portals/34/docs/regulatory/JDs/2020/POA_2003_01422_JD_29OCT2020.pdf.$
- Ibid. The term typical year was a component of the now-defunct NWPR. 78
- Alaska Department of Fish & Game, "Roadside Salmon Fishing in the Tanana River Drainage," 2009, 2, https://www.adfg.alaska.gov/static/fishing/pdfs/sport/ 79 byarea/interior/publications/roadside_salmon.pdf.
- Letter from James C. Kenney, Cabinet Secretary, New Mexico Environment Department, to EPA and U.S. Army Corps of Engineers (hereinafter NMED Letter), $April\ 15,\ 2019,\ 8,\ https://www.env.nm.gov/wp-content/uploads/2019/04/2019-04-15-Final-NMED-WOTUS-Comments-v2.pdf.$
- 81
- U.S. Fish & Wildlife Service, "Endangered Species," Information for Planning and Consultation, Bernalillo County, New Mexico, accessed August 15, 2022, 82 https://ipac.ecosphere.fws.gov/location/OFIZMJXZYRADFG2GIBT4T2XUQE/resources.
- New Mexico Environment Department, EPA-Approved Tijeras Arroyo Nutrients Total Maximum Daily Load (TMDL), October 12, 2017, 18-19, https://www.env. 83 $nm.gov/surface-water-quality/wp-content/uploads/sites/25/2016/03/EPA_Approved-TIJERAS-ARROYO-TMDL_101217.pdf.$
- 84 NMED Letter, 8.
- $U.S.\ Army\ Corps\ of\ Engineers,\ Regulatory\ Program,\ Approved\ Jurisdictional\ Determination\ Form\ (Interim):\ Navigable\ Waters\ Protection\ Rule,\ ORM\ No.MVP-Interimation\ Program and Prog$ 3VKWrCtGjtrF5xHSN6DHg%3d%3d; SLR International, Technical Report Summary on the Minorca Property, Minnesota, USA, SK 1300 Report, prepared for Clevel and - Cliffs Inc., February 7, 2022, 1, https://www.sec.gov/Archives/edgar/data/764065/000076406522000033/a 20220211-8xkxex962.htm.
- 86 Ibid., 170.
- 87 Richard Thomas, "When the Levee Breaks: Hector vs. Polymet," Duluth Reader, May 17, 2018, https://duluthreader.com/articles/2018/05/17/110638-when-thelevee-breaks-hector-vs-polymet; Elizabeth Dunbar, "ArcelorMittal Fined for Fouling Wetlands With Mining Waste," MPR News, June 24, 2015, https://www.mprnews.org/story/2015/06/24/arcelor-mittal-fined.
- 88 Alison Cagle, "Tribes Halt Major Copper Mine on Ancestral Lands in Arizona," Earthjustice, May 13, 2022, https://earthjustice.org/blog/2019-november/ $rosemont\hbox{-}mine\hbox{-}arizona\hbox{-}tribes\hbox{-}Tohono\hbox{-}Oodham.$
- 89
- Earthjustice, "Tribes Request Temporary Restraining Order to Prevent Rosemont Copper from Destroying West Side of Santa Rita Mountains," April 20, 2022, 90 https://earthjustice.org/news/press/2022/tribes-request-temporary-restraining-order-to-prevent-rosemont-copper-from-destroying-west-side-of-santa-rita.
- $U.S.\ Army\ Corps\ of\ Engineers, "Obtain\ a\ Permit,"\ accessed\ August\ 18,\ 2022,\ https://www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/Regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/regulatory-Program-and-permits/www.usace.army.mil/missions/civil-works/regulatory-permits/www.usace.army.mil/missions/civil-works/regulatory-permits/www.usace.army.mil/missions/civil-works/regulatory-permits/www.usace.army.mil/missions/civil-works/regulatory-permits/www.usace.$ 91 Obtain-a-Permit/.
- U.S. Army Corps of Engineers, Regulatory Program, Approved Jurisdictional Determination Form (Interim): Navigable Waters Protection Rule, ORM No. SPL- $2008-00816-MB, March\ 24,\ 2021, \ https://www.spl.usace.army.mil/Portals/17/docs/regulatory/JD/AJD/2021/AJD200800816_1.pdf.$
- $Central\ Park\ Conservancy, "Park\ History," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ September\ 9,\ 2022,\ https://www.centralparknyc.org/park-history;\ Reserve\ America, "Orlando\ SE\ /\ Laker Conservancy," accessed\ New Yorlando\ N$ 93 Whippoorwill KOA, Florida—Camping and Campgrounds," accessed August 24, 2022, https://www.reserveamerica.com/explore/orlando-se--lake-whippoorwillkoa/KOAI/730445/overview.
- U.S. Army Corps of Engineers, Regulatory Program, Approved Jurisdictional Determination Form (Interim): Navigable Waters Protection Rule, ORM No. SAJ-2020-00066, August 17, 2020, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/15240.
- Rapanos Guidance, 5 n. 20 (saying that the Clean Water Act protects "waters currently being used for commercial navigation, including commercial water-borne recreation [e.g., boat rentals, guided fishing trips, water ski tournaments, etc.]").
- David Ross, EPA Office of Water, and R. D. James, assistant secretary of the Army (Civil Works), "Memorandum for U.S. Army Corps of Engineers Director of Civil Works and U.S. EPA Regional Administrators I-X," 2-3, June 30, 2020, https://www.epa.gov/sites/default/files/2020-07/documents/final_tnw_elevation_ memo_06.2020.pdf.

- $U.S.\ Army\ Corps\ of\ Engineers,\ Regulatory\ Program,\ Approved\ Jurisdictional\ Determination\ Form\ (Interim):\ Navigable\ Waters\ Protection\ Rule,\ ORM\ No.\ SPK-particles and the property of the program of the program of the property of the property of the program of the property of the prope$ 2008-00354, November~23, 2020, https://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/2020/2020.11-Nov/200800354-AR-Apprvd-JD-Form-Indiana (November 2019) and the contraction of the contractNWPR.pdf.
- Brian Maffly, "Surrounding States Bash Utah's Lake Powell Pipeline Project," Salt Lake Tribune, September 9, 2020, https://www.sltrib.com/news/ environment/2020/09/09/surrounding-states-bash/?ct=t(October_Lowdownl0_20_2016_COPY_01).
- 99
- Utah Rivers Council, "Lake Powell Pipeline: What Is the Lake Powell Pipeline and Why Is It a Bad Idea?" accessed August 24, 2022, https://utahrivers.org/lake-100 powell-pipeline.
- See U.S. Fish & Wildlife Service, "Savannah National Wildlife Refuge," accessed September 21, 2022, https://perma.cc/582J-5GKC.
- U.S. Army Corps of Engineers, Charleston District, Revised JPN SAC-2010-00064 (hereinafter Revised RiverPort Joint Public Notice), January 29, 2021, https://perma.cc/D54K-K7P4.
- 103 Letter from Robert Perry, director, Office of Environmental Programs, South Carolina Department of Natural Resources, to Allison Monroe, Corps Charleston District, June 24, 2010, https://perma.cc/ZLR3-EFZC (hereinafter USFWS Letter) (Attachment 8).
- Revised RiverPort Joint Public Notice; U.S. Army Corps of Engineers, Approved Jurisdictional Determination, SAC-2010-00064, October 5, 2020, https://perma.cc/C5HJ-EFX4.
- 105 Revised RiverPort Joint Public Notice 6, 11-18 (showing locations of 1,346 acres of "preserved" wetlands interspersed among impacted wetlands).
- 106 USFWS Letter, 1
- "Company Cancels Byhalia Connection Pipeline Project," Pipeline & Gas Journal, July 6, 2021, https://pgjonline.com/news/2021/july/company-cancels-byhaliaconnection-pipeline-project; Micaela A. Watts and Laura Testino, "Memphians Question Plains All American About Route for Proposed Byhalia Connection Pipeline," Memphis Commercial Appeal, February 15, 2020, https://www.commercialappeal.com/story/news/2020/02/15/memphians-question-plains-allamerican-byhalia-connection-pipeline/4761549002/; Leanna First-Arai, "Pipeline Through the Heart: A Black Neighborhood's Uphill Battle Against Oil Developers, ``MLK50, September 10, 2020, https://mlk50.com/2020/09/10/this-black-neighborhood-is-trying-to-stop-an-oil-pipeline-theyre-running-out-of-time/. The property of the property of
- 108 Chunrong Jia and Jeffrey Foran, "Air Toxics Concentrations, Source Identification, and Health Risks: An Air Pollution Hot Spot in Southwest Memphis, TN," Atmospheric Environment 81 (December 2013): 112-116, https://perma.cc/JF37-S9G3; Sarah Macaraeg, "5 Things to Know: How Polluted Streams Interact With the Memphis Sand Aquifer," Memphis Commercial Appeal, August 17, 2021, https://perma.cc/Y6VL-CVDG; Kody Leibowitz, "Memphis Coal-Fired Power Plant One of 10 Worst Contamination Sites in U.S., New Report Says," Fox13 Memphis, March 4, 2019, https://perma.cc/JWL9-Y8K3.
- Sarah Macaraeg, "What You Need to Know About the Byhalia Connection Pipeline in Memphis," Memphis Commercial Appeal, April 2, 2021, $https://www.commercial appeal.com/story/news/2021/03/23/byhalia-pipeline-memphis-what-you-need-know-environmental-justice/4772256001/; U.S.\ Armyntonia appeal.com/story/need-know-environmental-justice/4772256001/; U.S.\ Armyntonia appeal.com/story/need-know-environmental-justice/4772256001/; U.S.\ Armyntonia appeal.com/story/need-know-environmental-justice/47722560$ Corps of Engineers, Approved Jurisdictional Determination MVK-2019-00473-TB, January 25, 2021, https://www.mvk.usace.army.mil/Missions/Regulatory/ Jurisdictional-Determinations/Approved-JDs/FileId/306445/.
- 110 EPA, "Clean Water Act Approved Jurisdictional Determinations" (data download), accessed August 25, 2022, https://watersgeo.epa.gov/cwa/CWA-JDs/.