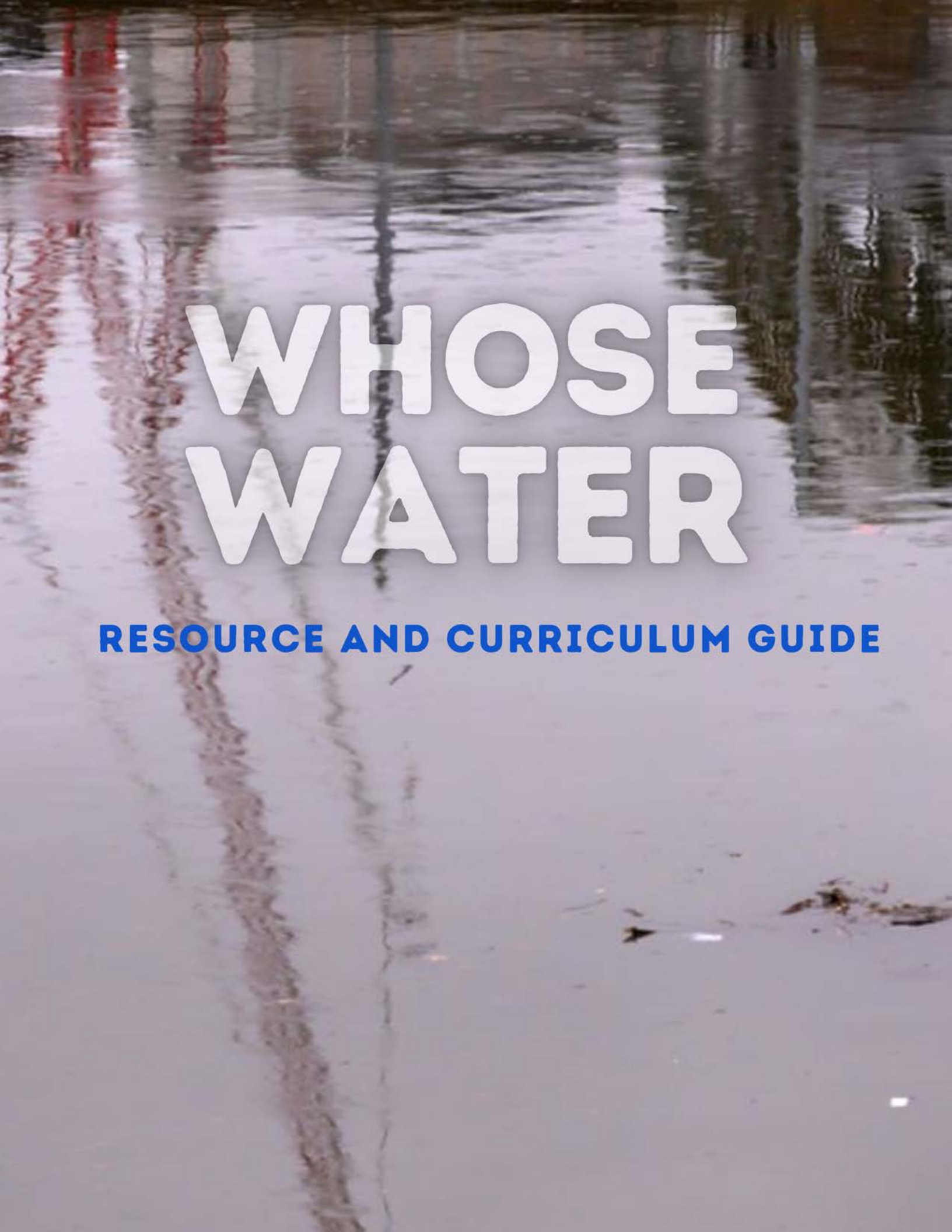

WHOSE WATER

RESOURCE AND CURRICULUM GUIDE

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CHARTS AND INFOGRAPHICS

This guide is intended for educational settings such as high schools, universities, graduate schools and vocational programs. It's also intended for grassroots groups, nonprofits and NGOs including legislative and legal advocacy groups, aid providers, and community organizers. It offers an opportunity to delve deeper into the issues approached in the film, as well as to explore how local dynamics play out on a national level.

The film and the toolkit operate on the premise that access to safe, affordable water and sanitation is a human right, as recognized by the United Nations. Thus, the histories, institutions and policies examined by Whose Water and its toolkit are evaluated based on their ability to support or impede the human right to water and sanitation. The film and toolkit also accept as fact that racism, sexism and anti-Indigenous policies have long corrupted American institutions. All have played significant roles in preventing access to safe, affordable water and sanitation.

This film and toolkit enter the world as the United States moves from the Biden Administration's more progressive environmental policies to President Trump's agenda to dismantle the government's role in protecting public resources. Political agendas and outcomes in the United States vary across local, state and federal arenas. In different times and contexts, diverse strategies of communities, activists and lawmakers have varying levels of success in ensuring the right to safe, affordable water and sanitation. The fight for the human right to water is a longstanding struggle for many communities across the United States, especially those historically excluded from power structures. As you use this in your pedagogical settings, it's important to devise ways to both build on and rethink these longstanding strategies.

PART 1: FROM A REGIONAL TO A NATIONAL FIGHT

In 2015, Michigan activists were fighting mass water shutoffs in disinvested cities, pushing to get an aging oil pipeline out of the Great Lakes, and working to draw attention to what would eventually be known as the Flint Water Crisis. Recognizing that the roots of these issues spread beyond local politics, a coalition of Michigan organizations convened a gathering of communities from across the country. There, they shared their unique but all too common experiences fighting for access to water and sanitation. Out of this gathering, an organization called the National Coalition for Legislation on Affordable Water was born. They began analyzing the needs of diverse communities and drafting comprehensive federal legislation to ensure the human right to water and sanitation in the United States. Whose Water grew out of this initiative, drawing on stories from communities whose struggles informed the goals of the legislation. Each segment of the film touches on how legislation might bolster a community's access to safe, affordable water and sanitation. In this module, we delve further into the dynamics of the Great Lakes Region, the Corn Belt, Appalachia, the Rural South and Tribal Nations, and offer possible connections between these regions, other parts of the country and the United States as a whole.

THE GREAT LAKES REGION

TOPICS

- WATER SHUTOFFS
- WATER AFFORDABILITY
- INFRASTRUCTURE
- THE CLEAN WATER ACT

WATER EVERYWHERE BUT NOT A DROP TO DRINK

The film examines the specific causes of Detroit's water affordability crisis, and the methods activists have used to fight for a water affordability program. But Detroit and Flint are just two examples of crises playing out in every major Great Lakes city.

While the Great Lakes region is home to 21% of the world's freshwater, residents in the Great Lakes region pay higher costs for water than most other areas of the country. For example, in 2019, a family of four in Phoenix paid two-thirds less for water than a family living in Cleveland. Most Great Lakes cities have policies to shut off water to households who cannot afford to pay their water bills. An APM Report analyzed data from water shutoffs, and found that water shut-offs were disproportionately concentrated in majority low income, Black, or Latino neighborhoods in the six largest Great Lakes cities (Chicago, Cleveland, Milwaukee, Detroit, Buffalo and Duluth)

THE GREAT LAKES

21% OF THE WORLD'S FRESHWATER

30 MILLION PEOPLE RELIANT ON WATER FOR DRINKING

367,740 WATER SHUT-OFFS FOR NONPAYMENT IN SIX LARGEST CITIES

Sources: NOAA Office for Coastal Management and APM Reports

AGING INFRASTRUCTURE

Why does water cost more in the Great Lakes region than in the desert? One reason is the average age of its infrastructure. Virtually all of Phoenix's water mains were installed after the 1960s, and many were replaced after 2000. Yet half of Milwaukee's water mains were installed prior to 1954(2). In 2022, the EPA estimated that $1.2 trillion is needed to upgrade and repair water and sanitation infrastructure across the US, a number which excludes tribal wastewater needs. One significant factor contributing to this high dollar amount is climate change, which increases the number and severity of storms that put pressure on aging infrastructure (3).

Old wastewater infrastructure has environmental and economic implications. Over 700 US cities, primarily concentrated in the Great Lakes region and the Northeast, rely on combined sewage overflow systems (CSOs). These systems combine sewage, industrial wastewater and rainfall into one pipe. When the system is overwhelmed, the excess flow is diverted through an "outfall," which leads directly into bodies of water. When this happens, wastewater treatment plants must treat these outfalls. Yet the public utilities are often unable to keep up, and thereby violate the Clean Water Act(4). CSO systems are now seldom built, but replacing these systems represents a substantial share of infrastructure funding needs.

Until the 2022 Bipartisan Infrastructure law was passed, federal funding for water and sanitation infrastructure was 1/7 of what it was in the 1970s. Still, the 2022 Bipartisan Infrastructure Law earmarked only $50 billion for the Environmental Protection Agency (EPA) to invest in wastewater and drinking water systems. This was among the largest single allocations to clean water that the federal government has ever made (5).

Without sufficient government funding to upgrade wastewater systems, utilities will have to pass the costs on to their ratepayer directly, or issue municipal bonds (7), which pass interest costs on to the ratepayers while banks profit.

UPDATES

In 2022, after nearly two decades of pressure from activists, Detroit finally passed an income-based water affordability plan, "The Lifeline Plan." In 2024, Over 25,000 of Detroit's 800,000 residents were enrolled, paying $18-$56 dollars per month. The plan also removed previous arrears. As of January, 2025, the program is no longer accepting applications.

For eight years in a row, a coalition of Michigan lawmakers and organizations introduced a bill in the State House of Representatives to ensure water affordability across the state. The bill never made it to a vote. But in the lame duck session of 2024, it did. But it failed to pass by one vote--a Democrat's.

Ten years after Flint's residents discovered lead in their water, the impacts of the crisis are tangible. Public trust has been severely eroded. Under a 2017 court ruling, the city was ordered to replace all of its lead service lines with funding from the state. However, the city is currently in contempt court for failing to do so. The state agreed to step in and finish the job. To learn more, ProPublica and CBS News have both authored extensive updates on Flint, and Flint Rising and the Natural Resources Defense Council publishes regular updates on their website.

Philadelphia's Tiered Assistance Program is still the most robust in the nation. In 2023, a record high of nearly 22,000 Philadelphia residents were enrolled. In 2024, they tripled the enrollment to nearly 60,000 enrolled, which they accomplished by sharing data with other agencies to identity income-eligible customers and enroll them without the need to apply. Read an in-depth case study of how the TAP program was passed by Center for Neighborhood Technology.

FURTHER READING

- Maria Zamudio and Will Craft, "So Close Yet So Costly" from American Public Media
- Mollie Mills and Aleena Oberthur, "Water System Upgrades Could Require More Than $1 Trillion Over Next 20 Years" from The Pew Charitable Trusts
- The Alliance for the Great Lakes' Campaign for Clean, Safe, Affordable Tap Water
- "Going Back to the Well,State Water Infrastructure Report Cards by the Natural Resources Defense Council an issue paper by the Natural Resources Defense Council
- Sophia Campbell and David Wessel "What Would it Take to Replace All the Nation's Lead Water Pipes" from The Brookings Institute
- Water affordability expert Roger Colton's testimony for the Philadelphia City Council
- "Removing Lead Pipes Would Yield Hundreds of Billions of Dollars in Health Benefits" from the Natural Resources Defense Council
- The Detroit Water and Sewerage Department: A Public Timeline
- Anna Clark and Sarahbeth Maney, "Ten Years After the Flint Water Crisis, Distrust and Anger Linger" from ProPublica
- Kelly Vaughen, "Michigan Still dealing with Fallout from Flint water Crisis 9 years later; Plus new Water Worries" from CBS News
- The NRDC's Water Affordability Advocacy Toolkit
- Flint Rising
- DetroitMindsDying.com, a comprehensive research and interviews database about Detroit's water crisis

THE CORN BELT

TOPICS

- THE CLEAN WATER ACT
- REGULATION STRATEGIES
- GREEN ENERGY
- INDUSTRIAL AGRICULTURE

SWALLOWING THE COSTS OF BIG AG

In the film, we see how Des Moines Water Works must shoulder costs to clean up after industrial corn and soybean producers. Industrial agricultural operations drain water from their fields, polluting rivers and streams with nitrates. As a result, water utilities must spend millions of dollars to treat drinking water. To force farms to clean up their runoff, the Des Moines Water Works filed an unprecedented lawsuit, arguing that the Clean Water Act should regulate these enormous farming operations. Their unsuccessful suit argued that underground drainage systems should be regulated as a point source (see box on page 8).

CONTINUING PRESSURE

In 2018, the Hawai'i Wildlife Fund sued the County of Maui (8). The group alleged that the county's disposal of wastewater into wells violated the Clean Water Act because it impacted groundwater that eventually flowed into the Pacific Ocean. Groundwater is not protected under the Clean Water Act. Yet in 2020, the Supreme Court ruled favorably on the case, asserting that the Clean Water Act "requires a permit if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into [protected] waters"(9). However, no lawsuit has yet to be successful in using this ruling to successfully regulate runoff from farm drainage systems.

HOW THE CLEAN WATER ACTS REGULATES POLLUTION

WHEN POLLUTION, LIKE WASTEWATER OR FACTORY EFFLUENT, IS FROM ONE SOURCE, THE EPA CALLS THIS A **POINT SOURCE** AND **A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT** IS REQUIRED TO MONITOR POLLUTION

THE EPA DOES NOT REQUIRE A PERMIT FOR **"NON-POINT SOURCES,"** TRADITIONALLY DEFINED AS POLLUTION THAT COMES FROM TWO OR MORE SOURCES, ALLEGEDLY MAKING IT DIFFICULT TO PINPOINT.

EXAMPLES OF NON-POINT SOURCES INCLUDE STORM WATER RUNOFF, FARM DRAINAGE TILES AND GROUNDWATER DISCHARGES INTO STREAMS.

COURT CASES THAT STRENGTHENED THE CLEAN WATER ACT

- COUNTY OF MAUI, HAWAII V. HAWAI'I WILDLIFE FUND ET AL (2020)
- UPSTATE FOREVER V. KINDER MORGAN ENERGY PARTNERS (2018)

COURT CASES THAT FAILED TO STRENGTHEN THE ACT

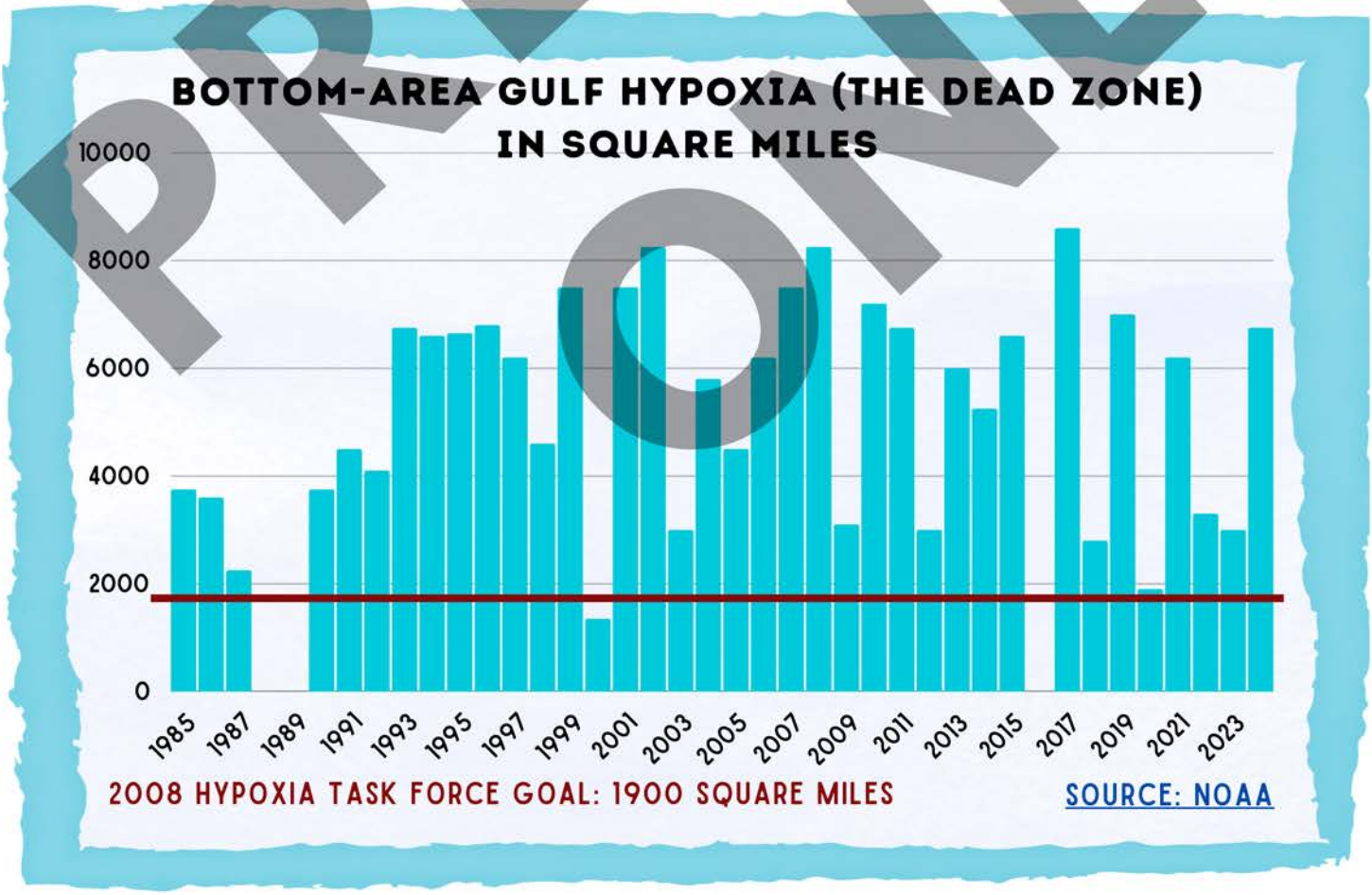
- DES MOINES WATER WORKS V. SAC COUNTY (2015)
- PACIFIC COAST FEDERATION OF FISHERMAN'S ASSOCIATIONS (PCFFA) V. GLASER (2013)

CLEAN ENERGY?

Iowa is the largest corn and soybean producer in the United States, a commodity that has become increasingly precious as an alternative to fossil fuels. While burning ethanol and biodiesel do not inflict the same level of air pollution as burning oil, the impacts on our water systems can be just as deadly. As demand for these fuels increases, so too do chemical and organic nutrients that run from farm fields into the Mississippi River. These pollutants end up in the Gulf of Mexico, creating a "Dead Zone," thousands of square miles that cannot sustain marine life/

NO GUARANTEES

So long as large agricultural operations are not held to mandatory standards, the health of waterways will remain dependent on the voluntary will of large agricultural producers to implement protection measures in exchange for meager rewards. In 1997, the EPA founded the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force to learn the causes and impacts of "the Dead Zone." After releasing a 2001 assessment, they began to work with state agencies and tribal governments on plans to eliminate nutrients like nitrates. Yet implementation of the plans are voluntary, and the task force funding has proved inadequate (10). After thirty years of the task force's existence, the size of the Dead Zone remains roughly the same (11) In 2021, President Biden's Bipartisan Infrastructure Law allocated $12 million per year for five years to bolster the efforts of the Gulf Nutrient Task Force (12).



CONFINED ANIMAL FEEDING OPERATIONS: HOGGING RESOURCES

14.5 percent of global greenhouse gasses can be attributed to livestock operations, with the U.S. as the third highest emitter(13). 90 percent of soybeans (14) and 40 percent of corn produced in the U.S. becomes animal feed (15). Most recent estimates from USDA data trace the origin of 99% of meat and other animal products to Confined Animal Feeding Operations (CAFOs)16, where livestock is contained for large periods of time in cramped conditions. People who live near CAFOs are more likely to experience cardiovascular issues and have a significantly higher risk of dying from kidney disease (17). Just one of these operations can produce as much raw sewage as the city of Philadelphia (18). In total, CAFOs are responsible for approximately fifteen percent of toxic nutrients entering the Gulf of Mexico (19) Still, due to lax enforcement and loopholes related to size, only 30% of these operations are monitored by the EPA (20).

FURTHER READING

- Hypoxia Task Force Nutrient Reduction Strategies
- Keith Schneider, "'It's getting worse'" – U.S. failing to stem tide of harmful farm pollutants" from the Iowa Capital Dispatch
- Saloni Doshi and Meghan O'Neal, "Lessons from Ethanol: Why Corn Isn't the Sustainable Fossil Fuel Substitute We Think It Is"
- Bipartisan Infrastructure Law: Gulf Hypoxia Program FY 24 Guidance for State Cooperative Agreements
- The Stray Dog Institute's "The Growing Movement to Stop CAFOs"
- Marina Bolotnikova and Kenny Torrella "9 charts that show US factory farming is even bigger than you realize," from Vox
- Valerie Baron, "Big Ag Is Hiding in Plain Sight and It's Making Us Sick" from the Natural Resources Defense Council
- "This Land is Our Land: The Farm Crisis in America" by Deep Dish TV
- Full Earl Butz Speech, "The Future Belongs to Those Who Prepare for It, " 1972

APPALACHIA

TOPICS

- INFRASTRUCTURE FUNDING
- RURAL WATER SYSTEMS
- COAL MINING

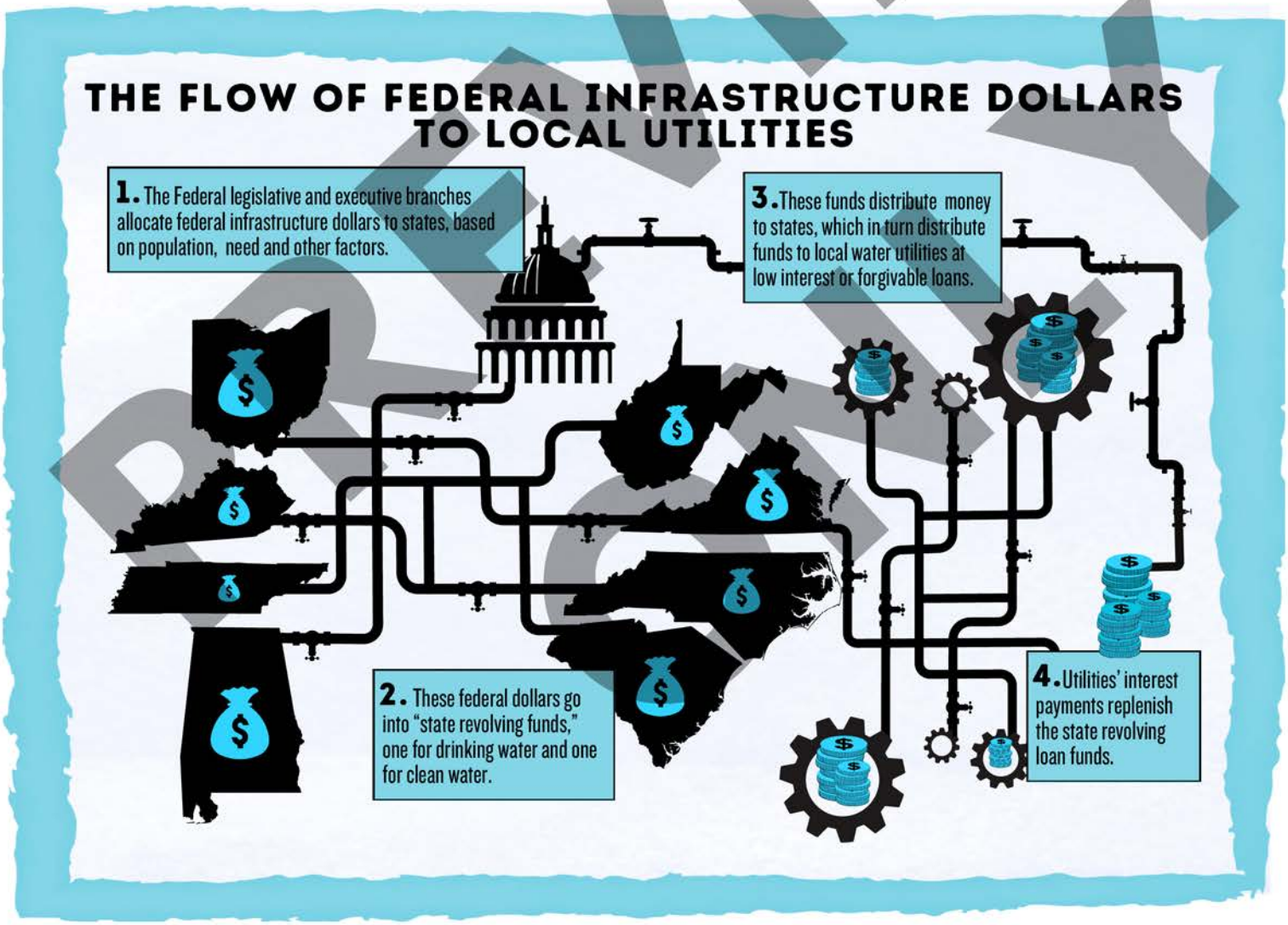
AMERICA'S BURDEN ON APPALACHIA

Appalachia, in the words of Mickey McCoy, "has fueled this country through two world wars and the industrial revolution." While the coal industry extracted billions of dollars worth of coal from Appalachian communities like Martin County, tax revenue from these operations is insignificant (21) in light of the environmental damages left behind. Often overlooked in these damages are the significant impairment and neglect of public water systems across the region. As in industrial agriculture-heavy areas of the U.S., water systems in Appalachia are burdened with the cost of treating surface waters contaminated by coal mining. This is compounded by a high poverty rate (as high as 40% in some rural Appalachian communities), which makes funding water infrastructure nearly impossible.

A ROBUST PROGRAM FOR INFRASTRUCTURE

75% of Appalachian households are connected to public water systems (22), much higher than other rural areas (23), in part due to coal mining's impact on private wells that is explored in the film.

Through the Infrastructure Investment and Jobs Act (IIJA) of 2021, of the $50 billion dollars allocated to improve drinking water and wastewater infrastructure, $647 million was earmarked for Kentucky communities. Yet as we saw in the film, much of Appalachia's public infrastructure is crumbling. This leads to water leaking from the system, and with this loss, higher water rates. Many community groups across the country have noted that the IIJA is missing a requirement that utilities must enforce affordable rate structures as a condition for funding.



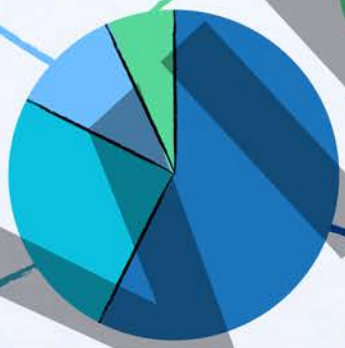
THE FLOW OF FEDERAL DOLLARS IN THE INFRASTRUCTURE AND JOBS ACT

$5 BILLION
GRANTS TO ADDRESS CONTAMINANTS IN DISADVANTAGED COMMUNITIES

- Upgrades to infrastructure to comply with the Safe Drinking Water Act
- Removing PFAs
- Addressing lead from source waters

$3 BILLION
ENVIRONMENTAL PROTECTION

- Funding to protect local ecosystems from climate change, habitat loss and pollution: $1.7 billion
- Natural Estuary Program: $132 million
- Gulf of Mexico Hypoxia Task Force: $60 million



$11.7 BILLION
CLEAN WATER STATE REVOLVING FUNDS

- Constructing wastewater treatment plants
- Addressing non-point source pollution
- Improving decentralized wastewater management like septic tanks
- Stormwater management
- Water conservation

$26.7 BILLION
DRINKING WATER STATE REVOLVING FUNDS

- Lead service line replacement: $15 billion
- General funds for communities: $11.7 billion (half of which is forgivable)
- Address PFAs or "forever chemicals: $4 billion

FURTHER READING ON THE US INFRASTRUCTURE INVESTMENT AND JOBS ACT OF 2021

- Evan Koslof, " Who decides where infrastructure funding goes? Which projects get funding?" From WUSA9, Washington DC
- "Infrastructure Investment and Jobs Act 2-Year Progress Report" from the Brookings Institute, 2023
- "Tracking Infrastructure Investment and Jobs Act Water Infrastructure Spending" by Bluefield Research, 2024
- The EPA's IIJA Fact Sheet
- The EPA's Local Infrastructure Investment Stories

SOURCE: EPA.GOV

FUNDING OBSTACLES FOR APPALACHIA

The EPA administrator requested that governors prioritize "disadvantaged communities" as recipients of these new federal funds, yet there has been no directive to focus on rural communities or towns with less than 10,000 residents. Yet across the U.S., 90 percent of community water systems serve less than 10,000 people (23). These small communities face myriad obstacles in accessing this federal funding. These challenges include lack of administrative capacity to receive funds and inability to take on additional debt, even if loans are forgivable (24).

UPDATES

In Martin County, as of 2024, 70% of the system's water is lost to line breaks. The hundreds of millions of dollars that have poured into Appalachian states from the Federal Infrastructure and Jobs Act are unprecedented. Yet Martin County estimates it needs over $40 million to control its water loss, and a total of $60 million to fix the system as a whole (25). Since 2019, Martin County water rates have increased 70%. Customers now pay four to five times (26) what is considered affordable by the United Nations and the U.S. EPA for water they cannot drink. As a result, one third of households connected to the Martin County Water District's system were disconnected for nonpayment. In the Fall of 2024, Martin County applied for a $28 million grant from the state to make repairs to its system.

FURTHER READING

- Mary Cromer and Ricki Draper, "Drinking Water Affordability Crisis in Martin County, Kentucky," from the Appalachian Citizens' Law Center and Martin County Concerned Citizens
- How-To Video on Community Water Testing: Martin County Community Water Testing Report Back
- "Drop-by-Drop: Drowning in Water Unaffordability: Martin County (KY) Water District" by Fisher, Sheehan & Colton
- "Amanda Darling et al, "Microbiological and chemical drinking water conaminants and associated health outcomes in rural Appalachia, USA," in Science of the Total Environment, 2023
- "How the infrastructure package could impact Appalachians living with failing water systems,"from Southerly Magazine

THE RURAL SOUTH

ON-SITE SYSTEMS: A CHALLENGE ACROSS THE U.S.

TOPICS

- ON-SITE SYSTEMS
- SANITATION
- CONNECTIONS TO HOUSING

The film explored the causes and effects of inadequate on-site sanitation systems in Lowndes County, a majority-Black rural area in Alabama with a median household income of $36,000 (27). With low incomes and sparse population density, legislators and activists alike agree that on-site septic systems, rather than centralized sewage systems, are a more cost-effective way of providing sanitation (28). Across the U.S., Approximately 25 percent of households rely on septic systems (29). The cost to maintain these systems is increasing, and replacements can cost tens of thousands of dollars. As Catherine Flowers notes, "I think Lowndes County was just the canary in the coal mine" (30). I've been around the country and people are having the same problems they're having in the Black Belt" (31).

THE LINK BETWEEN MOBILE HOMES AND SANITATION

One reason Pamela Rush had no extra money to install a septic tank was because of the exorbitant payments she owed for her crumbling mobile home. Residents of the U.S. are increasingly turning to manufactured "mobile" homes as an alternative to traditional housing (31). Often, manufactured home owners lease the land on which they place the structure. In these instances, mobile home owners may not have the authority to make necessary improvements to their onsite septic systems. Their home is also considered "personal property," not "real estate," and is ineligible for conventional mortgages (32). Residents instead turn to the home manufacturers themselves for financing, or a "chattel mortgage," where the home itself is collateral for the loan. In 2015, a flurry of news articles exposed billionaire philanthropist Warren Buffet's predatory lending schemes for low-quality mobile homes (33, 34, 35). Regardless of why, when housing is unaffordable, paying for water and sanitation is impossible.

UPDATES

As a result of the American Rescue Plan of 2021, a program to aid COVID recovery, Lowndes County received $3.7 billion to help low-income homeowners replace failing septic systems (36). In 2022, at an event in Lowndes County, Catherine Flowers, the USDA and the EPA announced the Closing America's Wastewater Access Gap Community Initiative, which provides no-cost technical assistance to communities with failing septic systems or nonexistent wastewater infrastructure. The program also helps these communities apply for sanitation funding through the Bipartisan Infrastructure Law. In 2024, the program was expanded to 150 communities across the U.S. (37).

In 2023, the U.S. Departments of Justice and Health and Human Services ordered the Alabama Department of Public Health to take immediate action on raw sewage issues in Lowndes County, to which the Alabama Department agreed. The Alabama Department also agreed to stop reporting residents to the police for improper septic systems so long as those residents apply for help (38).

Still, inequities remain largely unaddressed. That same year, Flowers' organization, the Center for Rural Enterprise and Environmental Justice, joined with the Southern Poverty Law Center to file a civil rights complaint against the Alabama Department of Environmental Management for discriminating against minority communities in its distribution of funding for wastewater infrastructure (39, 40). The complaint is currently under investigation (41)

FURTHER READING

- "Q&A: Catherine Coleman Flowers on the Black Belt, infrastructure and climate resilience" in the Alabama Reflector
- The EPA's Closing America's Wastewater Access Gap Program Overview
- Waste: One Woman's Fight Against America's Dirty Secret by Catherin Coleman Flowers
- "Sanitation Inequity and the Cumulative Effects of Racism in Colorblind Public Health Policies" by Jennifer Carrera and Catherine Coleman Flowers
- The Center for Rural Enterprise and Environmental Justice
- The Full US Congressional Hearing of the Poor People's Campaign in 2018 featuring Pamela Rush

TRIBAL NATIONS

QUASI-SOVEREIGN

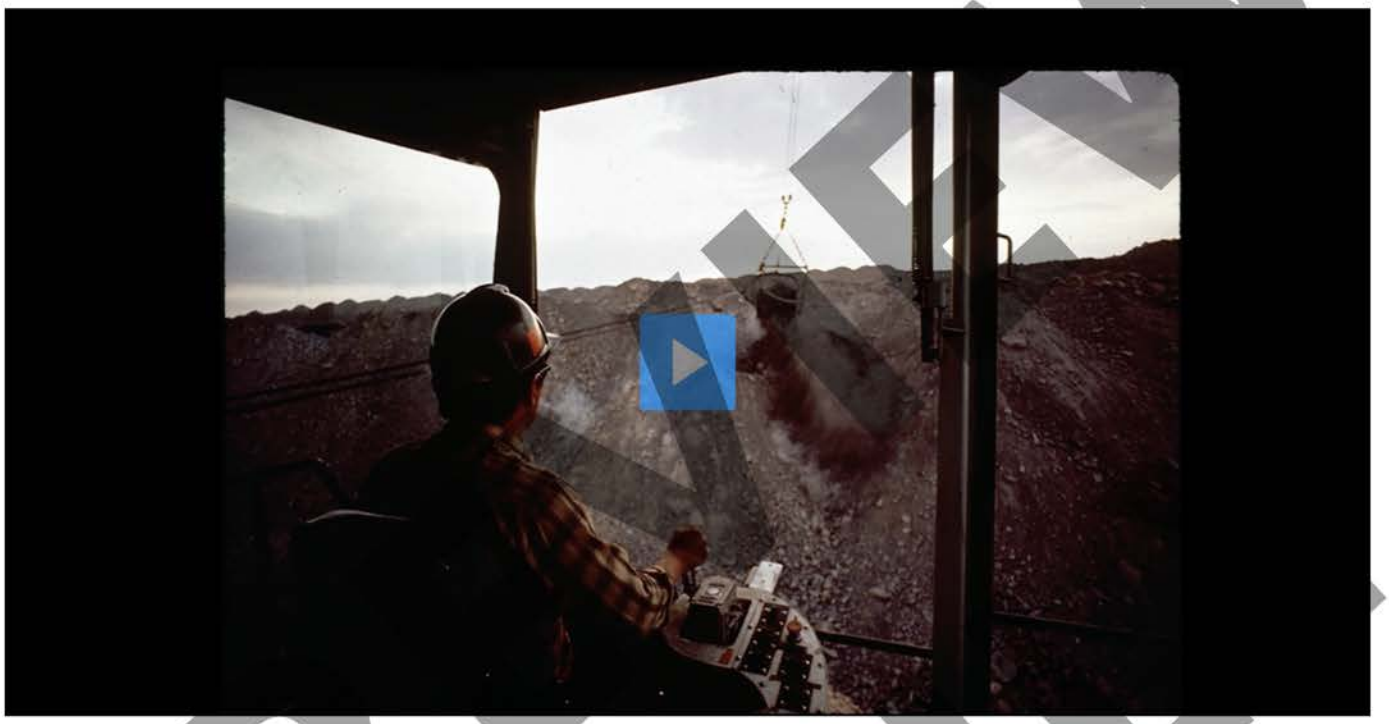
TOPICS

- INFRASTRUCTURE FUNDING
- RURAL WATER SYSTEMS
- COAL MINING

The film visited Navajo Nation where ⅓ of all residents are unable to access drinking water and sanitation. This is partially rooted in the legacy of uranium mining on the reservation. Lacking full sovereignty over how minerals are extracted, Navajo Nation has relied on the federal government to act in their best interest. This promise has yet to be fulfilled.

While uranium mining was banned in Navajo Nation in 2005, contamination in groundwater remains. Moreover, Navajo Nation's groundwater is quickly being depleted. In the 1960s, the Federal government began using its position as trustee for Navajo lands to enable Peabody Coal to set up operations on Navajo Nation. Lured by the promise of revenue and employment, the Tribe's government acquiesced. This operation drew substantial amounts of water from the underground aquifer on which Navajo Nation depends, with little paid to the Tribe in return. When Peabody filed for bankruptcy in 2016 (42), the multi-billion dollar company left Navajo Nation's groundwater depleted and contaminated, and left the tribe with an unemployment rate of 48 percent (43).

VIDEO: LEARN ABOUT THE EXPLOITATION OF NAVAJO NATION BY PEABODY COAL AND THE FEDERAL GOVERNMENT



COURT VICTORIES FOR WATER RIGHTS ON TRIBAL LANDS

UNITED STATES V. WINANS (1905)
WINTERS V. UNITED STATES (1908)
ARIZONA V. CALIFORNIA (1983)
BALEY V. UNITED STATES (2019)

COURT RULINGS AGAINST WATER RIGHTS ON TRIBAL LANDS

ARIZONA ET AL. V. NAVAJO NATION ET AL (2023)

NOT JUST NAVAJO NATION

Across the U.S., 48 percent of households on Native American reservations do not have clean water or adequate sanitation (44). The causes are multiple.

CONTAMINATION Tribal economies have long been reliant on mining, often by outside companies that are subjected to few regulations requiring pollution and cleanup (45). Fifty-four percent of mining activities globally are located on or near Indigenous Peoples' lands (46), but contamination does not just occur from mineral extraction. For example, 75 percent of people living on Hopi land are drinking water contaminated by arsenic (47, 48) which cannot be filtered out without proper treatment facilities (49).

INADEQUATE INFRASTRUCTURE In Navajo Nation alone, the Indian Health Services estimates it will cost over $700 million to provide access to safe drinking water and sanitation to all homes (50). In comparison, the Bipartisan Infrastructure Law of 2021 has allocated less than $150 million for all Tribes across the US to aid water systems (51).

OPERATIONS COSTS Many tribes, like the Jicarilla Apache Nation, do not collect property tax revenue from residents to fund water and sanitation departments, (52) as the land is held in trust by the U.S. government (53).

FURTHER READING

- An overview of Indigenous People's Rights and Mining in the US
- Dreaming of Sheep in Navajo Country by Marsha Weisiger, about New Deal policies that impacted Navajo Nation's economic and social sovereignty
- Report on Universal Access to Clean Water for Tribes in Colorado River Basin
- Brief History of Water Rights in Navajo Nation
- United States EPA Abandoned Uranium Mine Cleanup Database
- Native American Rights Fund's Tribal Water Institute

CLEAN, SAFE, AFFORDABLE WATER DURING DONALD TRUMP'S FIRST TERM (2017-2021)

- Repealed the Clean Water Rule, narrowing what is defined as "water of the United States," and eliminating restrictions on pollution into smaller or seasonal waterways and half of all U.S. wetlands
- Opened tens of millions of acres of public land to oil and gas drilling, most of which are in the top 25% most important areas for wildlife
- Offered nearly 100 million acres of publicly owned waters to oil and gas drilling
- Rescinded efforts to close nearly ten million acres of lands and waters to mining
- Opened 125 million acres of the Arctic Ocean to oil and gas drilling
- Halted bans on toxic chemicals
- Rolled back the federal share of funding on water and sanitation infrastructure projects
- Further shifted burden of funding insfrastructure to local and state governments
- Pledged $14 billion to water infrastructure financing, which included no funding for State Revolving Funds nor new infrastructure

Sources: 1, 2, 3, 4, 5, 6, 7

CLEAN, SAFE, AFFORDABLE WATER DURING JOE BIDEN'S TERM (2021-2025)

- Reversed Trump's Clean Water Rule Rollbacks, extending protections back to smaller bodies of water
- Created protections for 647 million acres of US lands and waters (more than any other president in US history)
- Banned offshore drilling for over 625 million acres of waters
- Allocated $15 billion to lead service line replacement
- Invested $4 billion to detect and reduce water contaminants
- Directed nearly half of State Revolving Loan Funds to disadvantaged communities
- Taxed chemical and petroleum industries to secure Superfund Cleanup funding
- Allocated billions of dollars to modernize facilities, promote clean energy manufacturing and cut methane through the Inflation Reduction Act
- Channeled $35 billion into land and water conservation actions

Sources: 1, 2, 3, 4, 5, 6

2025 AND BEYOND

- Bobby Magill, "Biden Clean Water Rules Vulnerable in New Trump Administration," in Bloomberg Law
- Leda Huta, "How Do President Trump's Executive Orders Impact Your Clean Water?" from American Rivers.
- Mónica Cordero, "With Lee Zeldin tapped to head EPA, President Trump sets the stage for regulatory rollbacks" from Investigate Midwest
- Alejandro Maceira Rozados, "2025 U.S. Presidential shift: water policy impact and industry implications," in Smart Water Magazine
- Ian James, "Trump wants to upend California water policy. State officials say it could do harm," in LA Times

PART 2: DISCUSSION QUESTIONS AND LESSON PLANS

IF YOU HAVE 10- 60 MINUTES

BEST FOR

- HIGH SCHOOL STUDENTS
- COMMUNITY GROUPS
- ACTIVISTS/ADVOCATES
- UNDERGRADUATES
- GOVERNMENT AGENCIES
- CIVIL SERVANTS

- What similarities do you see playing out in your own community to those playing out in the film? Note: Instructors may narrow the scope of the question to a specific region, such as: "What similarities do you see between obstacles facing your community and those facing Navajo Nation?" or "How does access to on-site sanitation in your community compare to that of residents in Lowndes County, Alabama?"

- What differences in access to safe, affordable water and sanitation have you experienced between the Trump administration and the Biden administration? This could include tangible impacts you noticed in your community or changes in your perception of these issues.

- In the film and/or toolkit, what connections did you see between a community's access to safe, affordable water and sanitation and their democratic agency and access to democratic processes?

- What local policies might enable the public to have more of a say in how safe, affordable water and sanitation is delivered? (Note: Participants' knowledge of their local political landscape will vary. Participation, regardless of knowledge level, should be encouraged. If a policy proposed by a participant already exists or is logistically complicated, this is an opportunity to provide more information to encourage that participant's civic involvement.)

- In the film, we saw examples of how the media influences public opinion about who deserves access to safe, affordable water and how this access is best achieved. How has the media influenced your perception of communities struggling with access to safe affordable water? How has it influenced your ideas about what is needed to ensure this human right?

- In Lowndes County, a predatory home loan was one reason Pamela Rush was unable to afford a septic tank and other basic needs. In your community, what are some of the satellite issues that impact your ability to access safe, affordable water and sanitation?

- Which approaches to activism in the film are most relevant to your community and its current political landscape? Which are the least relevant?

IF YOU HAVE 1-3 HOURS

BEST FOR

- COMMUNITY GROUPS
- ACTIVISTS/ADVOCATES
- GOVERNMENT AGENCIES
- CIVIL SERVANTS

FINDING COMMON GROUND

In Martin County, we saw people with various means of subsistence and interests come together through Martin County Concerned Citizens to push for common goals. The organization included coal miners, lawyers, utility board members and community organizers. One way to encourage such coalitions is to tailor messaging to stakeholders based on their specific interests.

- Identify an issue that blocks your community's access to safe, affordable water or sanitation and its root cause. Let's use, as an example, "lack of enforcement of pollution regulation causes unsafe water for downstream and upstream residents."

- On a shared document, make three columns. In the first column list all of the individuals and institutions who are stakeholders in the issue. In the second column, list how they are harmed by the issue.
  See the following page for an example.

STAKEHOLDER	COST OF ISSUE
DOWNSTREAM RESIDENTS AND WATER SYSTEMS	• HIGH COSTS TO TREAT WATER • LOWER PROPERTY VALUES • PUBLIC HEALTH SCARES • IMPAIRMENT OF RECREATIONAL WATERS
SMALLER, ECO-CONSCIOUS FARMS	• CROP DAMAGE • WHEN LARGE OPERATIONS AVOID REGULATIONS, MAKING THEIR SHORT-TERM COSTS LOWER, ECO-CONSCIOUS FARMS' PRODUCTS BECOME LESS PRICE COMPETITIVE
NEIGHBORS TO LARGE AGRICULTURAL OPERATIONS	• POLLUTED GROUNDWATER • HEALTH ISSUES • DEVALUED LAND • LITTLE RECOURSE FOR POSSIBLE VIOLATIONS
WORKERS AT LARGE AGRICULTURAL OPERATIONS	• EXPOSURE TO CHEMICAL CONTAMINATION • LITTLE RECOURSE FOR POSSIBLE VIOLATIONS
OWNERS OF LARGE AGRICULTURAL OPERATIONS	• BAD REPUTATION • LIABILITY FOR CONTAMINATION IF REGULATION IS UNEXPECTEDLY ENFORCED • LOSS OF NUTRIENTS FROM SOIL AND CROPS
STATE GOVERNMENT	• ANGRY, DISAFFECTED VOTERS
AGRICULTURAL LOBBY	• ADVERSARIAL RELATIONSHIPS WITH LAWMAKERS, THE PUBLIC AND SMALLER, ECO-CONSCIOUS FARMERS • IN THE ABSENCE OF INFORMATION FROM REGULATORS, LOBBIES MAY BE OVERBURDENED WITH HELPING FARMERS IMPLEMENT PRODUCTIVE CONSERVATION MEASURES
BANKS/LENDERS	• BORROWER'S INABILITY TO PAY IF LAND BECOMES POLLUTED OR SADDLED WITH LAWSUIT

LONGER ASSIGNMENTS

BEST FOR

- ADVANCED UNDERGRADUATE
- GRADUATE
- COMMUNITY RESEARCH PARTNERSHIPS
- RESEARCH BASED ADVOCACY GROUPS

FIELDS OF STUDY

- U.S. HISTORY
- SOCIOLOGY
- POLITICAL SCIENCE
- CIVICS
- ENVIRONMENTAL POLICY
- SOCIAL JUSTICE

EXAMINING WATER SYSTEMS IN OUR COMMUNITY

- Watch the full film, or any of the five location segments from within the film.
- Participants read relevant sections from the toolkit
- In small groups of 2-3, participants discuss the following questions:
  - What obstacles to accessing safe, affordable water and sanitation do you see in your own community?
  - What obstacles do you see as a potential threat (due to geographical, demographic or political similarities) to your community?
  - What obstacles are neighboring communities facing?
- Groups report back and discuss. If there are connections between multiple obstacles, the facilitator should group these obstacles into one.
- Participants then vote on the obstacle or set of obstacles they see as most pressing. There may or may not be a consensus on the top concern.

- Assign individuals or teams to research the following topics related to the obstacle of most concern. (Note: this will likely require several hours or days, and will likely be considered a major assignment.)
  - HISTORICAL CONTEXT OF THE OBSTACLE
    - Policies that created and/or enabled the current problem
    - Historical beliefs and narratives that created and/or enabled the problem
    - Political, geographical and power dynamics that created and/or enabled the problem. For example, did the barring of Black residents from certain neighborhoods create uneven infrastructural development? Do certain demographics now live in areas zoned for industrial activity?
    - Historical initiatives to change these dynamics, policies and beliefs, and their successes or failures
  - CURRENT POLICIES AND THE SPECIFIC WAYS THEY PLAY OUT IN COMMUNITIES
    - Current laws
    - Regulatory standards
    - Agency rules
    - Departmental policies
  - CURRENT INITIATIVES FOR CHANGE, INCLUDING THOSE BY ACTIVISTS, OFFICIALS AND COMMUNITY MEMBERS
    - Legal
    - Legislative
    - Mutual Aid
    - Community Organizing
    - Research/Reporting
    - Protest
    - Narrative/Media/Storytelling
    - The role of those most impacted in change efforts
  - CURRENT OBSTACLES TO CHANGE INITIATIVES INCLUDING POLICIES, OFFICIALS, DIFFERING AGENDAS AND BELIEF SETS (1-3 PARTICIPANTS)
    - Individuals in power within the public or private sector
    - Agendas of elected officials
    - Differing needs of various communities within the same geography
    - Public belief sets
    - Media narratives
    - Financial considerations
- Participants present their findings to the group, and take notes on similarities running throughout the presentations.
- In small groups, participants brainstorm next steps. Depending on participants' relationships to the issue, this could include supporting an existing initiative, speaking at an upcoming meeting in support of legislation, requesting a meeting with an elected official, producing a report to be circulated among journalists or city government workers, or creating a short film or podcast on the issue.

WHOSE MEDIA?

BEST FOR

- HIGH SCHOOL
- UNDERGRADUATES
- COMMUNITY GROUPS
- POLITICAL CAMPAIGNS

FIELDS OF STUDY

- MEDIA STUDIES
- COMMUNICATIONS
- FILM STUDIES
- JOURNALISM
- SOCIAL JUSTICE

- Watch Whose Water or any of the five location segments from within the film.
- Read all or parts of the toolkit
- The film examines the impact of pollution from farms and mining on water systems. As a class, catalogue your local media ecosystem's coverage of issues related to your community's access to safe, affordable water and sanitation. These sources could include television and print media, press releases from local officials, city council discussions, reports by local organizations or community members social media posts.
- Assign participants individually or in small groups two media sources. This works best if they are preselected by the facilitator so students don't duplicate articles. Alternatively, one group could work on cataloguing this coverage over the course of a longer independent study.
  - How do the different sources approach the topic?
  - Do they focus on problems or solutions?
  - Do they examine institutions that make it difficult to access water?
  - Who do these sources identify as contributing to the problem?
  - Who do these sources identify as contributing to the solution?
  - Which demographics do they represent in their coverage?
  - Which demographics do they leave out?
  - What is the tone of their coverage? Emotional, urgent?
  - How are people facing the issue shown or discussed? Are they treated as sources of knowledge? Victimized? Blamed? Seen as an obstacle for progress?

EXAMINING THE POWER OF THE UNITED NATIONS

BEST FOR

- GRADUATE
- ACTIVISTS/ADVOCATES
- COMMUNITY GROUPS

FIELDS OF STUDY

- LAW
- INTERNATIONAL RELATIONS
- POLITICAL SCIENCE
- HUMAN RIGHTS

Visits by the UN to specific locations occur as either "official" or "unofficial" visits. Official visits are made by granting a request by a government, while unofficial visits are made by accepting an invitation by a Non-government organization.

In the film, Special Rapporteurs from the United Nations made an unofficial visit to Detroit. While their visit did little to compel the state or city to enforce more equitable policies related to water shutoffs, it generated a flurry of media attention.

- Members of the group view the Detroit segment of Whose Water and read the corresponding toolkit section.
- Referencing the U.S. Special Rapporteur for Water and Sanitation's Press Releases, or list of Official Country Visits' Statement and Followup Reports, the facilitator choses several locations where a rapporteur has visited and produced a report.
- Using the Rapporteur's' public communications and reports, news media coverage and statements by advocacy groups, individual participants trace:
  - What events led to the visit?
  - Who was the rapporteur and what is their biography?
  - What did the rapporteur do during the visit?
  - What were the impacts of the visit?
- Each participant presents their research to the group. The group then compares and contrasts each case study.

PART 3: WAYS TO GET INVOLVED

Across the United States, educational institutions, public officials and organizations of all sizes continue to fight for the human right to water and sanitation. This section provides examples of myriad types of successful initiatives and idenitifies national organizations working to secure the right to clean, affordable water and sanitation.

CASE STUDIES AND TRAININGS

- HOW FLINT RESIDENTS TEAMED UP WITH THE ACLU OF MICHIGAN AND VIRGINIA TECH TO TEST THEIR WATER AND PROVE THAT THERE WAS LEAD IN THEIR WATER
- HOW COMMUNITY LEGAL SERVICES WORKED WITH PHILADELPHIA RESIDENTS AND CITY COUNCIL TO PASS THE TIERED ASSISTANCE PROGRAM
- HOW LOCAL COMMUNITIES HAVE RECLAIMED PRIVATIZED WATER DEPARTMENTS AND TURNED THEM BACK INTO PUBLIC UTILITIES
- HOW CALIFORNIA WON THE STATE HUMAN RIGHT TO WATER LAW CASE STUDY 1 AND CASE STUDY 2
- MODEL LEGISLATION TO PREVENT EXTRACTION OF GROUNDWATER IN MICHIGAN
- A CANADIAN GROUP SHUT DOWN A BOTTLED WATER PLANT AND LEADS TRAININGS FOR GRASSROOTS GROUPS ON HOW TO RUN A SUCCESSFUL CAMPAIGN
- HOW COLORADO ENACTED LEGISLATION TO PROTECT WETLANDS AFTER THE SUPREME COURT ROLLED BACK PROTECTIONS OF THE CLEAN WATER ACT
- PAGE 8 OF THIS TOOLKIT OUTLINES COURT CASES THAT ATTEMPTED TO STRENGTHEN THE CLEAN WATER ACT
- PAGE 18 OF THIS TOOLKIT OUTLINE CASES THAT PROTECTED WATER IN TRIBAL LANDS

NATIONAL ORGANIZATIONS

WHO	WHAT	HOW TO GET INVOLVED
NATIONAL COALITION FOR EDUCATION AND LEGISLATION ON AFFORDABLE WATER	A TEAM OF LAWYERS AND LEGISLATORS WORKING TO DRAFT AND INTRODUCE FEDERAL-LEVEL HUMAN RIGHT TO WATER LEGISLATION	CALL OR WRITE YOUR LEGISLATORS. DIRECT THEM TO NCELA WATER'S DRAFT LEGISLATION AND ASK THEM IF THEY PLAN TO SUPPORT THIS TYPE OF LEGISLATION.
NATIONAL RESOURCE DEFENSE COUNCIL	A LARGE NON-PROFIT THAT USES SCIENCE, POLICY, LAW, AND PEOPLE POWER TO PROTECT THE ENVIRONMENT, INCLUDING ACCESS TO SAFE, AFFORDABLE WATER	VISIT NRDC'S PETITIONS AND LETTERS OR TOOLKITS PAGES TO FIND AND PARTICIPATE IN CURRENT INITIATIVES
CLEAN WATER ACTION	BRINGS TOGETHER VARIOUS TYPES OF EXPERTISE FROM RESIDENTS OF HARD-HIT COMMUNITIES TO THINK TANKS TO WIN STRONG HEALTH AND ENVIRONMENTAL PROTECTIONS RELATED TO WATER AND FUNDS LOCAL INITIATIVES THROUGH THE CLEAN WATER FUND	JOIN ONE OF THEIR MANY CAMPAIGNS, DONATE TO THE CLEAN WATER FUND OR VOLUNTEER
NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES	A CLEAN WATER ASSOCIATION GOVERNED BY PUBLIC UTILITIES THAT GIVES ACCESS TO COURT REPRESENTATION AND GROUP POLICY ADVOCACY EFFORTS	JOIN AS A PUBLIC UTILITY OR CORPORATION
CENTER FOR RURAL ENTERPRISE AND ENVIRONMENTAL JUSTICE	RESEARCH, POLICY ADVOCACY, LEADERSHIP AND TECHNOLOGICAL DEVELOPMENT ORGANIZATION WORKING WITH RURAL COMMUNITIES TO ACCESS SANITATION INFRASTRUCTURE	VIEW THEIR INITIATIVES AND REACH OUT TO CONNECT
FOOD AND WATER WATCH	BUILDS A BASE TO MOBILIZE FOR CLEAN WATER INITIATIVES AND AGAINST LARGE CORPORATE POLLUTERS	TAKE DIRECT ACTION OR VOLUNTEER FOR ONE OF THEIR MANY INITIATIVES
WATERKEEPER ALLIANCE	A NATIONAL COALITION OF GRASSROOTS GROUPS WORKING IN THEIR OWN COMMUNITIES TO PROTECT THE ECOSYSTEMS OF WATERWAYS	FIND A GROUP NEAR YOU