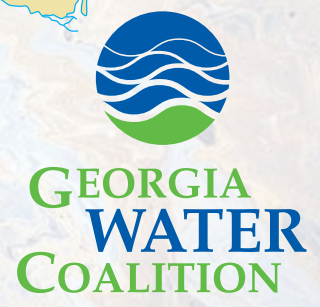


2024 GEORGIA'S DIRTY DOZEN



2024's Worst Offenses Against **GEORGIA'S WATER**



2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA WATER COALITION'S DIRTY DOZEN

A Call to Action

The Georgia Water Coalition's Dirty Dozen report highlights the politics, policies and issues that threaten the health of Georgia's water and the well being of more than 11 million Georgians.

The Dirty Dozen is not a list of the state's "most polluted places." Instead the report is a call to action for Georgia's leaders and its citizens to solve ongoing pollution problems, eliminate potential threats to Georgia's water and correct state and federal policies and actions that lead to polluted water.

Proudly, Georgia touts itself as the No. 1 state to do business, but that success in economic development is not without its consequences. When we fail to plan for growth; when we don't enforce existing laws to protect our water resources; and when we provide anemic funding for the state agency charged with protecting the state's natural resources, economic development inevitably impacts those resources upon which we all depend.

The deepening of the Savannah Harbor, completed in 2022, has ushered in a new era of megaships at the nation's third busiest port and spurred growth in surrounding coastal communities. This growth is threatening the region's surface and groundwater supplies on **Abercorn Creek** and in the **Floridan Aquifer**. With saltwater intrusion limiting withdrawals from the Floridan on the coast, communities are scrambling to find new water sources to meet the needs of developments like the massive Hyundai electric vehicle plant in Bryan County. Coordinated and enforceable water planning is sorely needed for the region.



This year's legislative session saw bills introduced that would have made it easier for private entities to claim ownership of some of the state's 400,000 acres of salt marshes. The bill was not passed, but raised a red flag as one of several measures aimed at privatizing the state's natural resources.



Georgia's rivers and streams, in addition to providing water for homes, businesses and industries, support an outdoor recreation economy that generates an estimated \$27.3 billion annually in consumer spending.

authority lured a massive monkey breeding facility to the community. When residents found out, the backlash was immediate. The "No Monkey Farm" signs cropping up around town shine a spotlight on the "monkey business" potential of local development authorities.

Economic growth means growing state revenues, and in recent years, state budget writers have been blessed with record budget surpluses. But, those surpluses have not made it to the principle state agency whose job it is to ensure that development does not dirty our state's natural resources.

Similarly, economic incentives adopted by the state to lure data centers to Georgia have led to unintended consequences for **Georgia's Rivers**. These massive facilities that enable our online lives and keep our digital data use tremendous amounts of energy and water. This year, Georgia Power Company successfully petitioned the Public Service Commission to tap fossil-fuel power sources to meet the unexpected energy demands of all the state's new data centers. State leaders need to rethink tax incentives for data centers, taking into consideration the state's available water and power resources.

In Southwest Georgia along the **Flint River**, the drive to lure new business to Georgia backfired on leaders in Decatur County and Bainbridge and highlighted the dangers of the blind pursuit of economic development at any costs by quasi-governmental development authorities. Without the public's knowledge, the local development



The discharge from the RYAM pulp mill in Jesup discolors the Altamaha River. Georgia's Environmental Protection Division is poised to issue a permit for the facility that will allow this kind of discharge to continue.

Adjusted for inflation, the budget for Georgia's Environmental Protection Division has been slashed by 30 percent from 2013 to 2024. Over the past two decades as the state's population has grown by some three million and state revenues have more than doubled, EPD's staff has shrunk by about 150 employees. The agency has about 12 employees whose responsibility it is to inspect sites and enforce erosion and sedimentation laws statewide in some 380 jurisdictions. Predictably, the result is anemic enforcement of state laws designed to prevent dirt from development sites from soiling **Georgia's Streams** and adjacent property.

Similarly, a more than two-decade-long effort by the agency to development nutrient standards for the state's rivers and streams has still not been completed, in part because of lack of funding and staff. High levels of nitrogen and phosphorus in **Georgia's Water** has led to dangerous algal blooms at numerous popular water recreation destinations around the state. State leaders must give EPD the resources it needs to do its job.

This year's Dirty Dozen also highlights emerging pollutants. PFAS, a group of man-made chemicals that persist in the environment, were once thought of as modern miracles because of their ability to make fabric stain resistant and fire retardant (among other things), but over the last two decades, we've discovered these chemicals are hazardous to our health. Today, they are found everywhere, but especially in the **Conasauga River** and **Ogeechee River** where they were used by carpet and textile manufacturers. Though use of many PFAS has been phased out, they are still being used and they are still polluting our rivers and contaminating our fish. Georgia must act to force users of PFAS to prevent them from reaching our rivers and begin testing fish so subsistence anglers can be warned of any potential dangers of eating these wild-caught fish.

Three pollution problems make return appearances on this year's Dirty Dozen. On the **Altamaha River**, discharges from a Jesup pulp mill still sully the river, impacting the use and enjoyment of Georgia's "Little Amazon" by boaters and anglers. On the **Coosa River**, a closed coal ash pond at Georgia Power Company's shuttered Plant Hammond still pollutes groundwater, and on the outskirts of the **Okefenokee Swamp** in Charlton County, mining remains a threat because of the General Assembly's failure to take action to protect Georgia's global natural wonder.

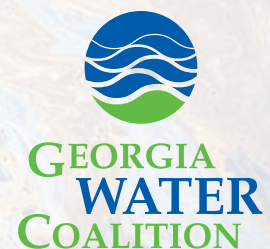
Finally, the report notes a troubling trend in Georgia water policy: the move to privatize **Georgia's Water Resources**. During this year's legislative session, a measure was introduced that would have made it easier for private entities to claim ownership of the state's marshlands, virtually all of which have been held in the "public trust" by the state for generations. Other measures that were introduced and passed included a bill allowing privately-owned water providers to circumvent local water plans and a bill that could lead to some waterfront property owners asserting ownership of the streambed and prohibiting individuals from stopping to fish in front of their property.

Addressing the issues highlighted in this report through stronger funding and enforcement for clean water laws, legislative action, sound permitting and policy decisions by state and federal agencies and critical water resource planning at the regional level will ultimately lead to cleaner, healthier streams, rivers, lakes and estuaries. Of course, responsible actions by individuals, businesses, industries and local governments are also critical to solving these pollution problems.

The Georgia Water Coalition is a consortium of more than 260 conservation and environmental organizations, hunting and fishing groups, businesses and faith-based organizations that have been working to protect Georgia's water since 2002. Collectively, these organizations represent thousands of Georgians.



Despite overwhelming public support for protecting the Okefenokee Swamp from mining threats, Georgia's General Assembly passed no legislation to do so during this year's legislative session. More than 70,000 citizens sent letters and e-mails to Georgia's Environmental Protection Division asking the agency to stop a proposed heavy mineral sands mine in Charlton County.



2024's Worst Offenses Against GEORGIA'S WATER



ABERCORN CREEK

Growth Spurred by Port of Savannah Threatens Region's Water Supplies

INTRODUCTION

When Gen. James Oglethorpe sailed up the Savannah River in 1733, the "port" at Yamacraw Bluff which would grow into modern-day Savannah had a depth of some 10 feet. Today, that same port, altered by the hand of man, boasts a depth of 47 feet. The most recent harbor deepening cost taxpayers \$973 million and enabled a new era of megaships to create the country's third busiest port. The port's success has been both blessing and curse. It generates an estimated \$5 billion for the state's economy, but it has also spawned a local warehouse building and population boom that is transforming rural landscapes and threatening local communities and the health of coastal streams, estuaries and marshes. Land surrounding Abercorn Creek which supplies drinking water for the City of Savannah and neighboring communities was not insulated from this boom. Recent warehouse construction near the creek prompted the City of Savannah to deem its water source at great risk of contamination due to commercial and industrial development. Coupled with already scarce water sources because of saltwater intrusion into the area's underground aquifer, the rampant growth has elicited a backlash from residents and local water advocates who are urging regional leaders to manage the growth, plan for future water supplies and enforce regulations aimed at protecting water sources like Abercorn Creek.

THE WATER BODY

Abercorn Creek in Effingham County is just one of hundreds of streams feeding the Savannah River, but since 1948 when Savannah leaders built a water intake on the creek to supplement the city's primary groundwater sources, it has played an oversized role in the growth and sustainability of the region. As demand for the region's groundwater has increased, saltwater has intruded into the pristine Floridan aquifer, making Abercorn Creek a critical surface water source for some 400,000 residents in Chatham, Effingham and Bryan counties. So important, in fact, that the U.S. Army Corps of Engineers has invested millions of dollars in protecting the Savannah River water supplies. In the early 2000s, the agency spent \$4.3 million to divert a portion of the Savannah's flow into the Abercorn drainage to improve the health of water pumped from the creek. Then in 2018 when the Corps



In communities surrounding the Port of Savannah, the boom in warehouse construction has galvanized local residents who have organized "Don't Box Us In" groups aimed at preserving the area's rural landscape and historic culture.

recognized that continued harbor deepening at the Port of Savannah could lead to saltwater reaching as far inland as the city's intake pipes on Abercorn, the agency built for Savannah a \$43.5 million emergency off-stream reservoir to hold freshwater from the creek as a hedge against that pending threat.

THE DIRT

Those products coming to and from the Port of Savannah need a place to stay on their way to market. Thus, the warehouses. In 2022, Savannah ranked second in the nation among cities in terms of growth of warehouse development. In 2023, the pace did not slow. Within an 80-mile run of I-95 surrounding the port, the year saw some 100 million square feet of warehouse space constructed or planned—the equivalent of paving 2,000 acres.



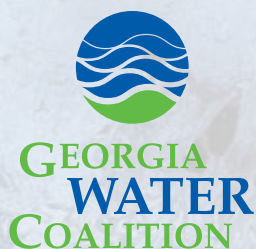
A container ship passes historic Fort Jackson on the Savannah River. Deepening of the harbor to 47 feet cost taxpayers \$973 million but ushered in a new era of megaships to create the nation's third busiest port. The success of the port has spurred a construction and population boom.

This growth comes just as Georgia's Environmental Protection Division capped water withdrawals from the Floridan Aquifer in a four county area surrounding Savannah to 2004 levels and in 2013 extended a moratorium on new withdrawals from the aquifer. To date the utilities have steadily reduced their daily withdrawals through water conservation and efficiency measures, but the recent growth spurt threatens to undo those gains.

Indeed, new home development associated with the Hyundai plant prompted recent passage of a controversial bill that allows a private water utility to supply water to Bryan County's new residences. Opponents argued the bill would undermine local government water planning and create dangerous competition for limited water resources.

WHAT MUST BE DONE

Local leaders must work cooperatively across jurisdictions to implement ordinances that mitigate the impacts of rampant land development and protect the region's surface and groundwater water supplies. With an assist from the state, these same leaders must develop a realistic, long-term water supply plan for the region.



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In 2022, Effingham County approved the construction of 1.1 million square feet of warehouses near Savannah's water intake on Abercorn Creek, sparking protests from the city and clean water advocates alike. The warehouses ultimately were built, but only after Effingham County appeased the City of Savannah by requiring builders to install stormwater controls aimed at mitigating the impacts of the big-box development.

The controversy highlighted ongoing conflicts between the region's port-spawned warehouse boom and local residents who have organized "Don't Box Us In" groups aimed at preserving the area's rural landscape and historic culture.

Growth is not limited to warehouses though; people are coming too. Bryan County, immediately west of Savannah and home to the now-under-construction Hyundai electric vehicle plant, ranked as the fastest growing county in Georgia and sixth fastest in the nation, according to the 2020 census. And the growth isn't slowing; the Hyundai plant will employ some 8,000 workers.



The City of Savannah's water intake on Abercorn Creek was built in 1948. Since then it has played an oversized role in the growth and sustainability of the region. The surface water source has been especially important as limits on groundwater withdrawals have been put in place because of saltwater intrusion.

2024's Worst Offenses Against GEORGIA'S WATER



ALTAMAHA RIVER

State Allows Pulp Mill to Continue Polluting Georgia's "Little Amazon"

INTRODUCTION

The saga of pollution from the RYAM (formerly Rayonier or Rayonier Advanced Materials) pulp mill on the Altamaha River near Jesup is well documented. This marks its ninth appearance in Georgia Water Coalition's Dirty Dozen report since 2011. At issue is the color and odor of some 50 million gallons of effluent RYAM discharges daily to the river in the production of refined wood pulp that is ultimately used in everything from sausage casings to LCD screens. At low river levels common during the peak summer recreation season, the black discharge from the mill noticeably discolors the river and leaves it smelling of "rotten eggs." This summer, while boaters and anglers choose to—or choose not to—recreate in the river below this discharge, Georgia's Environmental Protection Division (EPD) will make decisions about how much and what kinds of pollutants the facility can continue to legally discharge. If EPD's draft permit for the facility released to the public earlier this year is enacted without changes, the status quo will remain and Altamaha River users will be forced to continue navigating—or avoiding—these uninviting waters.

THE WATER BODY

The Altamaha is Georgia's largest river and the third largest contributor of freshwater to the Atlantic Ocean on North America's eastern shore. It drains a 14,000-square mile basin stretching from Atlanta and Athens to Darien. It is a place of unsurpassed beauty. Often called "Georgia's Little Amazon," it was named to The Nature Conservancy's list of the 75 last great places on Earth. A treasure trove of biodiversity, the Altamaha River basin is home to 120 species of rare or endangered plants and animals. The two major forks that form the Altamaha, the Ocmulgee and Oconee rivers, provide drinking water to communities from metro Atlanta to Middle Georgia. With more than 100,000 acres of conservation land along its banks, boaters, anglers and hunters can travel for about 60 miles downstream of the RYAM discharge near Jesup to the Georgia coast through a vast wilderness. Only the smell from the pulp mill and discolored water from its discharge mars the experience.



In an image shot in October 2023, the black discharge from the RYAM pulp mill in Jesup discolors the Altamaha. Altamaha Riverkeeper contends that the mill's effluent interferes with the public's use and enjoyment of the river because of the discharge's color and strong odor.

THE DIRT

"Industry has not yet reached the millennium where there will be no odors, noises or waste disposal problems," said Rayonier president Clyde Morgan. The year was 1955; months earlier, Rayonier's pulp mill on the Altamaha River had opened and its discharge immediately killed thousands of fish prompting legal action from downstream anglers.

Seventy years later, the RYAM mill continues to pollute the river even though we have reached a day when modern treatment systems can remove the odor and color from RYAM's wastewater.

Georgia's water quality laws guarantee that "all waters shall be free from material related to municipal, industrial or other discharges which produce turbidity, color, odor or other objectionable conditions which interfere with the designated use of the water body." Altamaha Riverkeeper contends that the mill's discharge interferes with the public's use and enjoyment of the river because of the discharge's offensive smell and impact on the river's color.

In 2016, a state administrative law judge agreed with the Riverkeeper. In response to this ruling, EPD weakened the state's "narrative water quality" standard such that on appeal, state courts in 2018 ruled that the mill's discharge did not "unreasonably interfere with the designated use" of the water body...in this case fishing.



An immature little blue heron rests on a snag overlooking the Altamaha. The river is a treasure trove of biodiversity—home to 160 different species of birds as well as 120 species of rare or endangered plants and animals.



The RYAM pulp mill rises above the banks of the Altamaha. The facility discharges some 50 million gallons of treated wastewater daily to the river in the production of refined wood pulp that is ultimately used in everything from sausage casings to LCD screens.

Since then, the U.S. Environmental Protection Agency has weighed in telling EPD that its weakened narrative water quality standard didn't meet federal muster. Undeterred, EPD is now poised to renew RYAM's wastewater discharge permit for five more years without enacting pollution limits that will noticeably change the color of the mill's discharge.

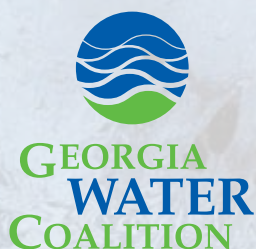
While a 2008 consent decree with EPD has led to marked improvements in RYAM's discharge over the past 15 years, the effluent released still falls well short of what is now considered the industry standard.

"Similar mills in other countries are required to discharge completely clear wastewater," said Altamaha Riverkeeper's Maggie Van Cantfort. "Even in neighboring states, pulp mill color discharge has been 66% less than RYAM's current discharge."

While the technology exists to relieve Altamaha River users of this long-standing pollution problem, EPD appears willing to let the mill continue the status quo.

WHAT MUST BE DONE

EPD should issue a wastewater discharge permit for RYAM that will lead to the elimination of the odor and dark color that currently fouls the river and dissuades fishing and recreational use of a remarkable and otherwise protected 60-mile river corridor from the RYAM discharge to the Georgia coast.



FOR MORE INFORMATION

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2024's Worst Offenses Against GEORGIA'S WATER



CONASAUGA RIVER

Forever Chemicals Continue to Poison Drinking Water Sources

INTRODUCTION

In the late 1980s, they were all the rage in home flooring, ushering in a golden era of carpet marketing and helping transform Dalton into Georgia's "Carpet Capitol of the World;" 30 years later those stain resistant carpets are the scourge of water providers in northwest Georgia and northeast Alabama. As it turned out the miracle chemicals that made the carpets impervious to wine and chocolate milk spills were also toxic. Researchers have found that PFAS, a group of man-made chemicals that persist in the environment, are linked to depressed immune systems, changes in liver enzymes and elevated cholesterol levels, hypertension in pregnant women and kidney and testicular cancer. While manufacturers have phased out production of some of these "forever chemicals," they continue to produce and Dalton's carpet manufacturers continue to use other forms of the chemicals. Dalton Utilities wastewater treatment system is incapable of removing the contaminants, and thus, PFAS continue to foul the Conasauga River, impacting downstream water users and the river's wildlife. Lawsuits filed against Dalton Utilities, PFAS manufacturers and Dalton carpet companies by downstream water utilities have resulted in hundreds of millions of dollars in settlements. Those funds are now being used to rid drinking water of PFAS that originated more than 100 miles upstream.

THE WATER BODY

The Conasauga and the river it flows into, the Oostanaula, are known for their rich aquatic biodiversity. Part of the larger Upper Coosa River basin, no other river system in North America has a higher percentage of endemic species than does the Upper Coosa. Thirty species of mussels, snails, crayfishes and fishes can be found in the waters of the Coosa and nowhere else on Earth. Federally protected snails and mussels including the interrupted rocksnail, Coosa moccasinshell and Georgia pigtoe and fishes like the Conasauga logperch, trispot darter and amber darter all find homes there. In a recent study of some 300 river systems in 11 Southern states, the Conasauga ranked as the seventh most imperiled watershed because of its rich biodiversity. Northwest Georgia's and Northeast Alabama's human population is also dependent upon clean water flowing in these rivers. Rome, Georgia, along with Centre and Gadsden, Alabama all secure their drinking water from these streams originating in Northwest Georgia.



A popular paddling destination, the Conasauga River is tainted by an invisible toxin. While manufacturers have phased out some PFAS, there are some 9,000 different forms of PFAS, and they are still being used in the production of carpet in Dalton.

THE DIRT

In the 1930s as lab-created PFAS were emerging on the scene, the DuPont chemical company—one of the primary producers of PFAS—adopted the slogan “Better Things for Better Living Through Chemistry.” Now, the slogan—altered in popular culture to Better Living Through Chemistry—is painfully ironic. PFAS have joined a host of other chemicals once considered miracles that are now known health hazards.

Since the early 2000s, the manufacture of many PFAS has been phased out in the U.S., and in April, the U.S. Environmental Protection Agency (EPA) set drinking water standards for six kinds of PFAS. But, the problem is there are some 9,000 different forms of PFAS, and they are still being used in the production of carpet in Dalton.

Many of these carpet factories treat their waste stream before sending to the public sewer system where it ultimately receives final treatment at Dalton Utilities’ Loopers Bend facility. Unfortunately, PFAS are not removed in either the manufacturer’s pretreatment process or at the public wastewater treatment facility.

Instead, wastewater containing PFAS is sprayed on forests and fields at Dalton Utilities’ 9,800-acre land application site which is surrounded on three sides by a five-mile oxbow of the Conasauga River known as Loopers Bend. From here, the PFAS find a path to the Conasauga.

The impacts to downstream water users have been costly. With the new EPA standards for PFAS in drinking water, water utilities are scrambling to find ways to remove the toxins. Rome, which recently reached a \$278 million settlement with Dalton Utilities, carpet manufacturers and PFAS manufacturers, is now building a new water treatment facility capable of removing PFAS that will cost hundreds of millions of dollars.



The city of Rome, some 100 miles downstream from Dalton, recently reached a \$278 million settlement with Dalton Utilities, carpet manufacturers and PFAS manufacturers, and is now building a new \$100 million drinking water treatment facility capable of removing PFAS.



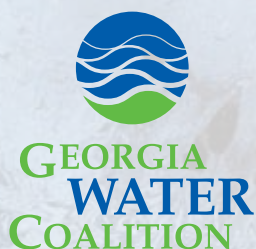
Though heavily impacted by industrial discharges, the Conasauga River is one of the most biologically diverse rivers in the country, harboring a host of federally protected fish, mussels and snails as well as more common fish like bronze darters.

For the rivers and streams and wildlife that call them home, however, there is no relief. Water tests conducted by the Coosa River Basin Initiative in 2023 showed PFAS levels immediately downstream from Loopers Bend more than 23 times EPA’s safe limit for drinking water.

While the pollution continues, Georgia’s Environmental Protection Division has been mostly passive in regulating the contaminants. No efforts have been made to require manufacturers to remove the chemicals from their waste stream or require Dalton Utilities to prevent the toxins from reaching the Conasauga.

WHAT MUST BE DONE

EPD must take a role in regulating PFAS and preventing them from entering the state’s rivers and streams. EPD must provide greater oversight of pretreatment permits, require companies to disclose the use of PFAS in manufacturing, and demand that water utilities remove these chemicals prior to discharging their wastewater.



FOR MORE INFORMATION

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2024's Worst Offenses Against GEORGIA'S WATER



COOSA RIVER

Plan for Coal Ash Cleanup Pollutes Groundwater, Threatens Coosa River

INTRODUCTION

In 2020, when the U.S. Environmental Protection Agency (EPA) gave Georgia's Environmental Protection Division (EPD) the authority to oversee the cleanup of millions of tons of toxic coal ash stored in unlined pits at power plants across the state, it did so with the understanding that state authorities would ensure any cleanup complied with federal standards. Foremost among those standards: coal ash could not be left in place where it could contaminate groundwater. Instead of complying with these standards, EPD in September 2023 agreed to allow Georgia Power Company to leave some one million tons of coal ash in an unlined landfill at Plant Hammond, a now retired 70-year-old power plant on the banks of the Coosa River just west of Rome. Now, state regulators find themselves in hot water. In February, EPA informed EPD that the closure plan for Plant Hammond failed to meet federal standards, noting that groundwater beneath the Hammond ash pond was in direct contact with the toxic waste. While Georgia faces off with the feds, state regulators and power utilities elsewhere have largely abandoned "cap-in-place" cleanups and are moving their coal ash to lined storage facilities.

THE WATER BODY

The upper Coosa River basin is considered one of North America's most biologically unique river basins with 30 endemic aquatic species, and the Coosa River in particular is unique because it is one of only a handful of locations in the country where land-locked striped bass still spawn. The Coosa River in Georgia also feeds Weiss Lake in Alabama, located just downstream from Plant Hammond's discharge. The 30,200-acre Alabama Power reservoir is the economic calling card for Centre, Alabama and Cherokee County. Tourism associated with the lake is the county's primary industry, with an economic impact of \$250 million annually. The lake also serves as the primary drinking water source for residents of Centre and Gadsden.



Located in the far left of this photo, Ash Pond 3 now appears as a 25-acre grassy mound along Ga. 20 in the foreground. It looms over Pisgah Baptist Church to the west and Cabin Creek to the east. It appears benign, but in fact, beneath the surface coal ash extends some 44-feet deep and ten feet below the upper limit of the groundwater table.

THE DIRT

The legacy of decades of dependence on coal-burning power plants for our electrical supply has left Georgia with an expensive and dangerous waste disposal problem. The contaminants found in coal ash include substances that cause cancer and impair brain function in children; Georgia Power estimates the cost of cleaning up its 29 ash disposal sites at some \$8 billion. At 19 of those sites the company is excavating the ash and removing it to lined landfills, but at the remaining sites the company wants to keep the ash in unlined storage where toxins can come in direct contact with groundwater.

These plans leave both groundwater and surface water at risk, and EPD has been complicit in allowing these inadequate cleanup plans to move forward, despite objections from federal regulators. EPA now says the EPD-approved plan for Ash Pond 3 at Plant Hammond does not pass muster.

In a February letter to EPD, Jeneanne Gettles, acting EPA Regional Administrator, wrote: "The Agency is unaware of a circumstance where these standards could be, or have been, met when the waste in a closed, unlined impoundment remains in contact with groundwater that freely migrates in and out of the [coal ash] remaining in the closed unit."

The "unit" in question now appears as a 25-acre grassy mound along a busy four-lane highway, looming over Pisgah Baptist Church to the west and Cabin Creek to the east. It appears benign, but in fact, beneath the surface coal ash extends some 44-feet deep and ten feet below the upper limit of the groundwater table. Water tests around the Ash Pond 3 show levels of the toxin molybdenum exceeding state groundwater protection standards.

Equally troubling is the pond's location adjacent to Cabin Creek and within the Coosa River's 100-year floodplain. During such a event, floodwaters will rise above the base of the storage area, infiltrate and move contaminants into both surface and ground water while creating the possibility of a catastrophic breach of the embankments surrounding the stored coal ash. A scenario that would send toxic ash spilling into the Coosa.

In other southern states, regulators and utilities alike have abandoned efforts to "cap-in-place" coal ash left in unlined storage basins. In North Carolina, after years of fighting regulators in court, Duke Energy agreed to excavate all its coal ash to approved landfills. Likewise in South Carolina, utilities have agreed to excavate all unlined ash pits along the state's rivers, and in Virginia, a politically-divided state legislature passed legislation requiring that coal ash kept in unlined storage units be removed to lined landfills.

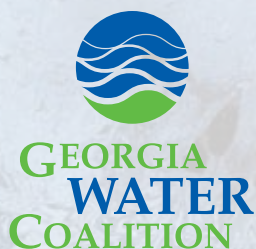
When it comes to coal ash, however, Georgia's legislature has been impotent. Despite repeated bills introduced by legislative champions to protect drinking water from this legacy pollution, these measures have all died for lack of support from state leadership.

WHAT MUST BE DONE

EPD must reject "cap-in-place" cleanup plans and force Georgia Power to remove coal ash to safe storage areas. If EPD continues to issue permits that do not meet federal requirements, EPA must revoke Georgia's authority to manage this dangerous waste.



Located on the Coosa River west of Rome, the now shuttered Plant Hammond, a coal-fired power plant, was home to four coal ash ponds. Ash in three of those ponds is slated to be dewatered and moved off site to lined landfills. A final ash pond has been capped in place. That pond holds some one million tons of coal ash that is in contact with groundwater.



FOR MORE INFORMATION

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2024's Worst Offenses Against GEORGIA'S WATER



FLINT RIVER

Monkey Breeding Facility in Bainbridge Exposes “Monkey Business” Potential of Local Development Authorities

INTRODUCTION

Imagine a quasi-public agency that has the ability to obligate public assets including taxes, land, roads, buildings and services to private businesses. Now, imagine that same agency is not elected or accountable to voters. Then imagine that deals these agencies broker can be made in complete secrecy. As you might imagine, within such agencies there are plenty of opportunities for monkey business. That’s the situation among the state’s more than 350 local industrial and economic development authorities whose job it is to woo new businesses. In southwest Georgia earlier this year, the Development Authority of Bainbridge and Decatur County landed in hot water over some real monkey business when residents discovered the authority had brokered a secret deal to provide a sweetheart loan, tax breaks and more to a monkey breeding facility. If built, the facility would ultimately house as many as 30,000 primates to sell for medical research—more monkeys than there are people in Decatur County. The deal was cloaked in secrecy and the public was not privy to the plan until many of the aspects of the agreement with the company were signed. The backlash from residents was immediate. Concerned about loss of property values, spread of infectious diseases and the impacts to natural resources including the Flint River, citizens crammed city and county commission meetings. Within two months of approving the deal, elected officials yielded to public pressure and rescinded their decisions. Lawsuits are now pending that will decide the breeding facility’s fate, but this monkey business underscored a long-running complaint about local development authorities: that they lack accountability and transparency; are ripe for corruption; and foist projects on communities that threaten local quality of life, strain local budgets, diminish property values and wreck natural resources.

THE WATER BODY

Perhaps the state’s most unique river, the Flint courses 346 miles from metro Atlanta (it flows in a pipe beneath the runways of Hartsfield-Jackson Atlanta International Airport) to southwest Georgia where it joins the Chattahoochee to form the Apalachicola River in Florida. When the Flint arrives in southwest Georgia it interacts with the limestone of the Dougherty Plain with spectacular results. Limestone bluffs front the river and breathtakingly cold and beautiful



The Flint River flows for some 42 miles through Decatur County and is a signature natural feature of the community. When residents learned of the proposed monkey breeding facility with plans to discharge treated effluent to the Flint River, they organized to protest the secret deal.

blue hole springs rise up along its flanks to feed it. Meanwhile, a host of fish and wildlife call it home, including the shoal bass, the state's official riverine sport fish, which attracts anglers from across the globe. For Bainbridge and Decatur County, the Flint and Lake Seminole which it feeds are top tourist attractions and economic drivers, bringing thousands of professional anglers, duck hunters and other nature-based tourists to the region annually.

THE DIRT

The saga of Bainbridge's monkey business is reminiscent of many local development authority deals that have flaunted public accountability. Dubbed "Project Liberty" by the Bainbridge-Decatur County authority, the secret project did indeed take liberties with the rights of local taxpayers.

Wooed by the promise of a \$396 million facility and more than 200 local jobs, the Development Authority of Bainbridge and Decatur County promised Safer Human Medicine, the company behind the project, 200 acres of prime industrial property near the Flint River for just \$10, a free sewer hookup, a \$300 million bond at six percent interest backed by local taxpayers and full and partial tax abatements on the property for 19 years. The total incentives package amounted to seven times the City of Bainbridge's annual property tax revenue. Critically, the authority signed non-disclosure agreements that kept the plan hidden from the public until the agreement was signed. The Decatur County Commission actually violated state open meetings laws by approving the tax abatement deal without public notice.

Once the deal became public, residents held captive both city and county commissions.

They raised concerns about impacts to property values, risks of communicable diseases (the Centers for Disease Control & Prevention considers the primates a public health concern), escapes from the facility and the consequences of the more than 400,000 gallons of wastewater created by the facility daily. The effluent—which would amount to about 30 percent of treatment capacity at the county's industrial park—would ultimately be discharged to the Flint River. The site is also very vulnerable to dangerous tropical storms and hurricanes, plus flooding, leading to increased chances of power outages, waste-elimination failures, disease release, and animal escape.

City and county commissions—along with the development authority—quickly reversed course, rescinding their approvals of the tax deals, but now Safer Human Medicine has filed suit to save its controversial project. Meanwhile, local citizens have filed additional suits in opposition to the project.

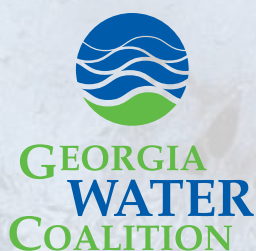
What has happened in Bainbridge will undoubtedly happen again unless development authorities are held more accountable. While such bodies have benefited many communities with good, sustainable growth, the lure of economic development projects, especially in economically-depressed rural areas, can lead to some of the riskiest propositions—for local taxpayers and the area's natural resources.

WHAT MUST BE DONE

Given chronic abuses of power by local development authorities, the Georgia General Assembly should enact reforms that will hold locally-appointed members of these development authorities more accountable. Secrecy encourages bad behavior, thus reforms should include measures to make development deals more transparent and ensure that residents have a say in which economic development projects are supported with local tax dollars.



Citizens protest the proposed "monkey farm" outside Bainbridge's city offices. The deal struck between Safer Human Medicine and the Development Authority of Bainbridge and Decatur County was kept hidden from the public until key portions of the agreement were already signed by local officials. Upon learning of the plan, residents flooded city and county commission meetings; local officials have now rescinded their decisions to approve the development.



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2024's Worst Offenses Against GEORGIA'S WATER



FLORIDAN AQUIFER

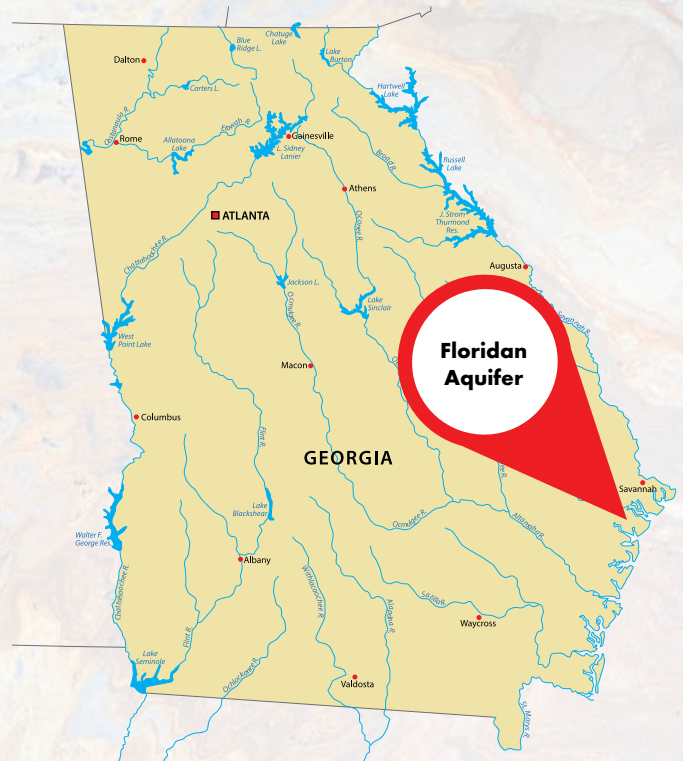
Growth in Coastal Counties Stresses Fragile Water Supply

INTRODUCTION

Metro Atlanta has long been Georgia's poster child for out-of-control and poorly managed growth, and the region's unbridled thirst for water sparked a more than three-decade water conflict with neighboring states over the use of the Chattahoochee and Flint rivers. Today, Georgia's water conflicts have gone coastal. With growth fueled by the expansion of the Port of Savannah, residents and leaders in Chatham, Bryan, Effingham, Liberty and Bulloch counties are now wrangling with one another over access to water. In December of last year, some 120 Bulloch County residents crowded a public meeting to express their opposition to a plan that would send water from Bulloch County wells into neighboring Bryan County to support the massive Hyundai Electric Vehicle plant and associated development. The proposed wells lie just over the Bulloch-Bryan county line and outside a four-county area surrounding Savannah in which the state has limited withdrawals from the Floridan Aquifer due to saltwater intrusion in the underground supply. As one attendee at the December meeting noted, the underground aquifer doesn't stop at the county line, nor do impacts from new water pumps. With residents, farmers and industries all having a straw in the same limited drink, more conflicts are sure to arise as the region surrounding the booming port continues to expand.

THE WATER BODY

Spanning some 100,000 square miles covering all of Florida and portions of South Carolina, Georgia, Alabama and Mississippi, the Floridan Aquifer is considered one of the most productive aquifer systems in the world. The system provides drinking water for more than 10 million people in the region, including virtually all of South Georgia with the biggest single user being the City of Savannah. When it comes to economic development in South Georgia over the past 75 years, the aquifer has been the driving force as total withdrawals have quintupled since 1950. This increase has taken its toll. Decreased head pressure from the aquifer has resulted in saltwater intrusion on the coast and a marked decrease in flows from the aquifer's famous springs that dot Florida, Georgia and Alabama, in some instances drying up not only springs but entire creeks. By comparison, when Savannah first tapped the aquifer in 1887, pressure in the system was such that the artesian wells pushed water 40 feet above ground level without the aid of pumps.



Bryan County's plan to drill four new wells in neighboring Bulloch County has angered local residents concerned about the impact on their private wells. Meanwhile, Georgia's Environmental Protection Division has encouraged local governments to develop surface water sources to ease pressure on scarce groundwater supplies. The nearby Ogeechee River could be a potential water source.

THE DIRT

The Floridan aquifer is under stress. Saltwater was first noted creeping into the underground supply of Hilton Head Island in the late 1900s. The plume of saltwater is steadily moving toward Savannah, threatening the region's primary water source. In 2008, Georgia's Environmental Protection Division (EPD) capped withdrawals from the aquifer in Chatham, Bryan, Liberty and a portion of Effingham counties at 2004 levels and in 2013 extended a moratorium on new withdrawals to include both the Upper and Lower Floridan aquifers. Bryan County, for one, has reached the limit of its state-issued water withdrawal permit capacity.

Excluding aggressive water conservation measures, the caps leave local leaders with only more expensive options for new water supplies: constructing desalination systems, tapping untested and less productive aquifers or accessing surface water from local rivers or streams.



With withdrawals from the Floridan Aquifer restricted in Bryan County, providing water for the massive Hyundai electric vehicle plant and associated development has proven difficult. Bryan County leaders have opted to tap the aquifer in neighboring Bulloch County just outside the boundary governing restrictions on the Floridan. Local residents have raised concerns about the new wells impacting production for nearby domestic and agricultural wells.



With population growth and development fueled by the expansion of the Port of Savannah, residents and leaders in Chatham, Bryan, Effingham, Liberty and Bulloch counties are now wrangling with one another over access to water. Since 2004, the communities surrounding Savannah have seen their withdrawals from the Floridan Aquifer capped due to saltwater intrusion into the underground water source.

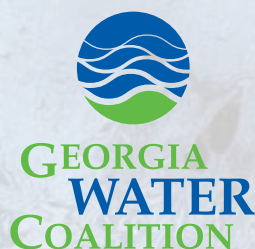
WHAT MUST BE DONE

With growth spawned by the Port of Savannah not likely to slow, water demands will only escalate. Local and state leaders must initiate regional water planning that will protect the Floridan aquifer from saltwater intrusion, limit groundwater transfers into water-restricted jurisdictions, initiate meaningful water efficiency and conservation measures and secure water sources for a sustainable future. Unlike existing regional water plans which provide only guidance, future plans must be enforceable and local governments must adhere to the plan.

Bryan County leaders' solution, however, has been to simply tap the aquifer just outside the boundary of the moratorium and transfer it into their water-limited area. The seven-million gallon a day suck from the Floridan aquifer needed to meet demands of the Hyundai plant and associated development will only threaten nearby domestic and agricultural wells while increasing the likelihood of more saltwater intrusion.

Indeed, in issuing a draft permit for the four proposed Bulloch County wells, EPD strongly encouraged Bryan and Bulloch counties to cooperatively identify and access surface water sources rather than placing further stress on groundwater supplies.

The conflict even worked its way into the Georgia General Assembly this session, as the legislature passed a controversial measure that will allow a private water supplier with existing permit capacity to provide water to Bryan County residential developments—a move that undermines local water and sewer planning.



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2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA'S RIVERS

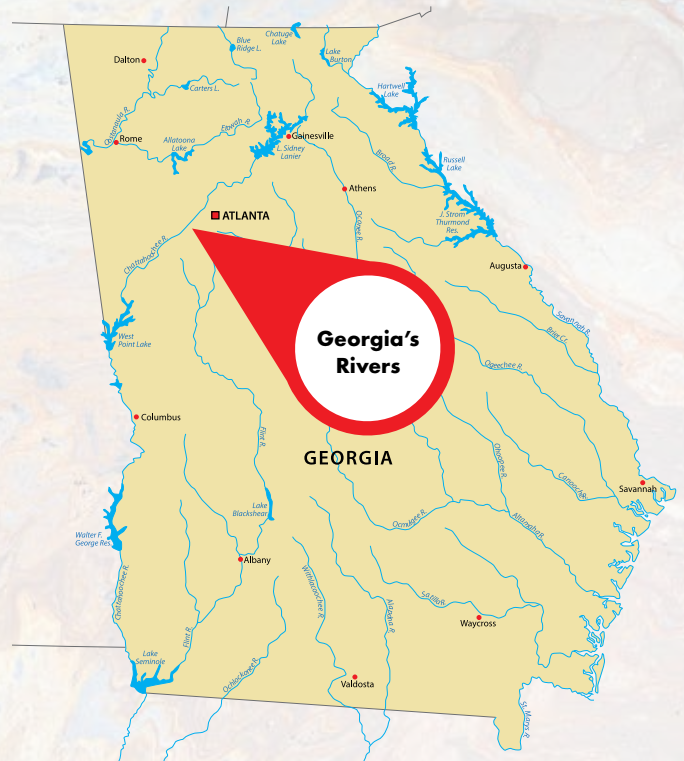
Data Centers Sap Energy Grid, Stress Water Supplies

INTRODUCTION

In 2018, in the never-ending quest to make Georgia the “top state to do business,” the General Assembly passed a bill providing tax breaks for data centers willing to locate in Georgia. At the time, the incentive was seen as a way to court this growing industry. Data centers are large, climate-controlled facilities necessary for managing, processing, and storing digital data. They make it possible for us to send and receive e-mails, share photos electronically and store our data in the “cloud.” They also use significant amounts of electricity and water. Electricity powers data center computers; water feeds the center’s cooling systems. The largest centers can demand up to a million gallons of water a day and sap more than 200 megawatts of electricity from the grid—enough power to serve more than 80,000 homes. And since the tax break was enacted, data centers have proliferated in Georgia. This year, Georgia Power Company told the Public Service Commission that projected load growth had jumped to levels 17 times greater than originally forecast and that 80 percent of that increase was due to data centers. During this legislative session, the General Assembly passed a measure that would have suspended the data center credit and formed a commission to review the incentive and its consequences, but Gov. Brian Kemp vetoed the bill. With the tax credit in place through 2031, it’s likely more are on the way. By 2030 the number of centers in the U.S. is projected to double. In the face of a climate crisis and water scarcity, how they are powered and cooled here in Georgia will have global implications.

THE WATER BODY

A little understood fact about Georgia’s rivers: they mean power. Water is essential to energy production at fossil-fuel and nuclear power-generating facilities. Indeed, some 17 percent of Georgia’s water demands are dedicated to energy production, with virtually all of that water being pumped from the state’s rivers. Factoring in electricity generated at the state’s hydro-power dams, about 94 percent of the state’s power depends on Georgia’s rivers. Of course, these rivers are also essential for drinking water, agricultural production and industry. Georgians use some 1.3 billion gallons of water daily in homes and businesses, some 1.4 billion gallons a day for



In 2023, the Atlanta market ranked sixth nationally in terms of data center inventory. The proliferation of these storage centers for our digital data following passage of a 2018 tax break has stressed the state’s water and energy supplies. Georgia Power Company has reported that 80 percent of increases in projected power demand growth are attributed to data centers. The company plans to fill the need in part with energy from coal-fired power plants similar to Plant Bowen pictured here.

agricultural purposes and 721 million gallons is employed daily for manufacturing and industrial purposes. Georgia's economy dries up without its rivers. Managing demands placed on these water sources is critical for the long-term sustainability of both our rivers and our society.

THE DIRT

"Unintended consequences" These are words heard at the Georgia General Assembly as often as "taxes" and "budgets." Legislators pass laws with good intentions, but once put into practice, unforeseen complications arise.

Such is the case with the state's tax break for data centers which included breaks for risky cryptocurrency mining data centers. The tax breaks have made Georgia a data center destination, with the Atlanta market ranking sixth nationally in 2023 in terms of data center inventory while Georgia ranks second nationally in the number of cryptocurrency centers in operation.

The unexpected suck on the state's power grid has frustrated the state's transition to a cleaner renewable energy portfolio.

After emergency approval from the Public Service Commission, Georgia Power, which had previously announced plans to retire its coal-powered plants, said the new data center demands will have to be met by energy produced at several coal and gas-powered plants.

Meanwhile, data centers stress local water supplies. Typically, these centers demand between 500,000 and 200 million gallons of water annually. In Douglas County, a Google data center diverts about 30 percent of the effluent from Douglasville-



Georgia's rivers like the Chattahoochee River, shown here adjacent to Plant Wansley in Carroll County, are critical to the state's power supply. Factoring in electricity generated at the state's hydro-power dams, about 94 percent of the state's power depends on Georgia's rivers.



Two new nuclear reactors at Plant Vogtle on the Savannah River which came into operation during the last year were expected to meet the state's immediate power demands, but the state's new data centers have forced regulators to approve additional power production to be met with coal and fossil fuel plants.

Douglas County Water and

Sewer Authority's wastewater treatment facility for reuse as cooling water. The innovative water reuse program helps limit demand on potable water, but still consumes about 305 million gallons annually—water that would otherwise be discharged to the Chattahoochee River and an amount that is equal to about seven percent of the Authority's daily drinking water production.

With Gov. Kemp's veto, we can expect more big box data centers to arrive in Georgia. Nationally, by 2030, more than \$156 billion in new data center construction is expected, and the growth will only complicate water and energy planning at local levels.

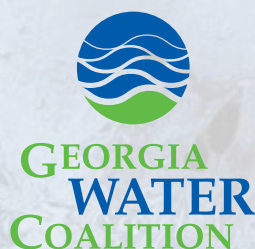
WHAT MUST BE DONE

Georgia must pause tax incentives for data centers and initiate a state-wide analysis of data center infrastructure needs. The state should require data centers to disclose energy and water use, meet minimum standards for energy and water efficiency, invest in renewable energy and storage to meet power needs, and equitably share the cost of energy infrastructure with already existing power customers.

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2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA'S STREAMS

Lax Enforcement of State Laws Allows Dirt From Development Sites To Soil Creeks

INTRODUCTION

By all measures, Georgia's economy is booming. Last summer, the state announced that with some \$24 billion in investments for new business/industry developments, Georgia's economy set economic development records for a third consecutive year. Massive developments like the \$7 billion Hyundai electric vehicle plant in Bryan County, and the \$5 billion Hyundai/SK electric battery plant in Bartow County are fueling the growth, spurring additional residential and business development in surrounding communities. But, the conversion of forests and fields to construction sites is coming at a cost to local streams. Dirt running off cleared land during every rain enters Georgia's smallest streams and literally chokes the life out of them, with impacts rippling downstream to other property owners and our state's big rivers. Since the mid-1970s, Georgia erosion and sedimentation laws have been in place to minimize the dirt washing off construction sites; but 50 years after those laws went on the books, they are not followed and poorly enforced. The black silt fences, rock dams and retention ponds you see at building sites often fail, and just as often state and local authorities fail to force builders to fix these water pollution problems. Predictably, the result is damaged streams and angry downstream property owners. As it turns out, when environmental laws are not enforced, being the No. 1 state to do business has serious consequences.

THE WATER BODY

There are more than 70,000 miles of rivers and streams in Georgia, but of those miles, the state's 14 major rivers and their significant tributaries account for less than 10 percent of the total stream miles. The remainder of this life-giving system of water is made up of the thousands of small streams that course through business corridors in our cities, border backyards in the suburbs, run past pastures in rural areas and, where the our land remains untouched, through dense forests. Indeed, some 34 percent of the state's total stream miles are classified as intermittent, meaning they do not even flow year round. But, these small streams are vitally important. They link land and water and are the vehicle by which critical nutrients for aquatic flora and fauna



Under natural conditions, Georgia's streams run cool and clear. These small streams are vitally important. They link land and water and are the vehicle by which critical nutrients for aquatic flora and fauna are transported downstream. Healthy small streams translate into healthy big rivers and reservoirs.

are transported downstream. Healthy small streams translate into healthy big rivers and reservoirs from which we draw our drinking water and where we boat, fish and swim. When land is cleared and laws to keep dirt out of these streams are not enforced, these small streams are the first to feel the impacts.



Mass grading of a 600-acre data center development in Fayetteville as seen from above. Georgia's erosion and sedimentation laws are enforced by a mix of local and state inspectors. Georgia's Environmental Protection Division, which is responsible for enforcement in 380 jurisdictions, has about 12 inspectors to cover the state.

While EPD personnel say they have enough funding and staff to administer and enforce the law, budget and employment trends at the state agency suggest otherwise.

To enforce the law in those 380 jurisdictions, EPD has the equivalent of 11.5 erosion and sedimentation inspectors statewide.

A fee program in the Erosion and Sedimentation Act intended to support inspection and enforcement generated \$2.4 million in 2023. These collections, paid by developers on a per-acre basis, would be enough to hire more than 48 environmental compliance specialists at EPD's recently-advertised beginning salaries.

It's Georgia's elected leaders that are responsible for appropriating those funds to EPD, but over the past two decades as Georgia's population has grown by more than three million and as state revenues have more than doubled to upwards of \$35 billion annually, EPD has seen its staff and budget shrink. In 2002, the agency employed some 900; today, EPD has a staff of just over 700. Adjusted for inflation, EPD's 2024 budget represents a cut of 30 percent over 2013 funding levels. When compared to EPD budgets prior to 2000, the cuts are even greater.

The consequences of weak enforcement of Georgia's erosion and sedimentation laws at both state and local levels are readily evident after every rain. Typically clear flowing streams flow the color of surrounding dirt. And, the problems are widespread—from residential development in North Georgia to utility-scale solar arrays in South Georgia to industrial development along the coast.

WHAT MUST BE DONE

Georgia state leaders must appropriate enough funds to allow EPD to robustly enforce the state's erosion and sedimentation laws, and where local governments are responsible for enforcement, EPD must ensure that local authorities are enforcing the law.

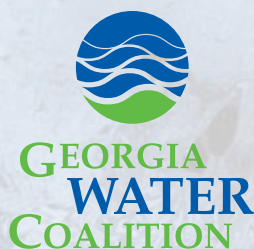
THE DIRT

Georgia's Erosion and Sedimentation Act, first adopted in 1974 and amended multiple times since, is supposed to protect Georgia's streams from excessive sediment as a result of land development. When enforced, the law works. But, in too many incidences Georgia Water Coalition's (GWC) member organizations have found both local and state regulators' enforcement actions to be anemic. Often, it takes the threat of legal action on the part of private citizens to get developers and builders to keep their dirt on site and out of streams and neighboring property.

Some 323 local governments have responsibility to enforce the state's erosion and sedimentation laws; Georgia's Environmental Protection Division (EPD) has responsibility for enforcing the law in the state's other 380 municipalities and counties, while also overseeing local governments to ensure they are enforcing the laws.



Run off from upstream development in Fayette County reveals itself where SandyCreek enters Lake Bennett. When dirt from construction sites enters Georgia's smallest streams, it literally chokes the life out of them, with impacts rippling downstream to other property owners and our state's big rivers.



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2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA'S WATER

State Makes Slow Progress in Limiting Algae-Causing Pollution

INTRODUCTION

In 2021, the death of a family pet as a result of ingesting cyanotoxins after playing at a popular recreation spot along the Chattahoochee River near Roswell shocked the public and underscored the dangers of high nutrient levels in our state's streams and rivers. When excess nitrogen and phosphorus enter these water bodies they interact with warm water to generate algae, including toxic cyanobacteria. What's more, this particular form of algae is indistinguishable from other non-toxic algae. But, all algae creates issues for our state's water. When the algae dies off it robs oxygen from the water, and if large enough, can cause fish kills. In short, high nutrients and high water temperatures kill. In Georgia, we have both. Unfortunately, progress toward identifying specific standards for nitrogen and phosphorus pollution in the state's rivers and streams has been slow. While Georgia's Environmental Protection Division (EPD) has set standards and developed "cleanup" plans for some of the state's major reservoirs, the agency has yet to establish standards for rivers, streams and estuaries as required by the federal Clean Water Act. Begun in 2004, the project to establish "nutrient criteria" for all of the state's water was expected to be completed by 2020.

THE WATER BODY

Georgia's major reservoirs are well known—Lanier, Allatoona, Oconee, Sinclair, Blue Ridge, Burton, Jackson, Russell, Clarks Hill and more—as recreation destinations. What many don't understand is that none of these reservoirs are natural water bodies. Virtually all of Georgia's ponds and lakes are man-made—the result of damming a stream or river. Thus, the health of these popular summer boating, fishing and swimming spots is dependent on the health of the water bodies flowing into them. There are more than 4,000 "large" reservoirs in Georgia, according to one U.S. Environmental Protection Agency study. The state's public reservoirs alone cover more than 400,000 acres. Wherever they exist they become economic drivers. For instance, Lakes Sinclair and Oconee have transformed Greene, Putnam, Morgan, Hancock and Baldwin counties into "Georgia's Lake Country." In 2021, Greene County, home of the Ritz Carlton Reynolds Plantation, saw \$124 million in visitor spending in large part thanks to Lake Oconee.



While naturally occurring, nitrogen and phosphorus in excessive amounts can do damage. They cause algal blooms that pose health risks to humans and can cause fish kills that harm the state's popular sport fisheries.

THE DIRT

As catch basins, nutrients accumulate in Georgia's reservoirs. Recognizing this, over the past two decades, EPD has used its limited resources to set nutrient standards for these water bodies. Today specific nitrogen and phosphorus standards are in place for six large reservoirs—Allatoona, Carters, Jackson, Lanier, Walter F. George and West Point. But, EPD has not set similar standards for the state's other major reservoirs; nor has it done so for the state's streams and rivers.

Major stumbling blocks for the agency have been funding and staffing. When EPD updated its plan for adopting nutrient water quality standards in 2013, it set a goal of completing the standards by 2020, but it warned that success would depend upon "funding and staff resources."

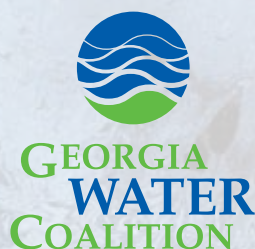
Adjusted for inflation, EPD's 2024 budget represents a cut of 30 percent over 2013 funding levels. Meanwhile state revenue surpluses have steadily increased, reaching \$16 billion by the end of fiscal year 2023.

EPD's total employment has dropped from close to 900 in 2009 to 719 at the end of fiscal year 2023. Retaining employees has also been a problem. Between 2009 and 2022, the agency's turnover rate climbed, peaking at nearly 20 percent in 2022.

Cost of living pay increases adopted by state leaders for this year's budget have helped drop employee exodus, but the agency still finds it difficult to compete with the private sector which can offer higher wages. The turnover rate and the need to train new employees has slowed advancement of some of EPD's programs, including the effort to monitor streams and develop instream standards for phosphorus and nitrogen pollution.



The state's public reservoirs alone cover more than 400,000 acres. Wherever they exist they become economic drivers. For instance, Lakes Sinclair and Oconee have transformed Greene, Putnam, Morgan, Hancock and Baldwin counties into "Georgia's Lake Country." In 2021, Greene County, home of the Ritz Carlton Reynolds Plantation, saw \$124 million in visitor spending in large part thanks to Lake Oconee.



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Algae pools along the shore of Lake Harding on the Chattahoochee River. When excess nitrogen and phosphorus enter Georgia's reservoirs, they interact with warm water to generate algae. Algae can cause fish kills and in some cases create toxic cyanobacteria that can be lethal to animals and humans.

Such pollution is inherently hard to eliminate or manage because it comes from so many diverse sources. Municipal and industrial wastewater treatment facilities are obvious sources, but less obvious are the nutrients that wash off urban streets, farm fields and other developed landscapes during rain events.

While naturally occurring, nitrogen and phosphorus in excessive amounts can do damage. They cause algal blooms that pose health risks to humans as well as aquatic wildlife. They also notably cause naturally occurring organic material like leaves and woody debris in streams to decompose more rapidly leaving less food and habitat for critters at the bottom of the aquatic food chain.

Finalizing instream standards for nitrogen and phosphorus will aid EPD in developing ways to reduce pollution levels and maintain the natural balance of nutrients needed for healthy streams.

WHAT MUST BE DONE

State leaders must provide EPD with the funds it needs to complete numeric nutrient standards as required by the federal Clean Water Act.

2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA'S WATER RESOURCES

Push to Privatize Threatens Water Resources, Access to State's Rivers

INTRODUCTION

Who owns Georgia's water? Who owns its marshlands? Who should determine ownership and access to these resources? Multiple pieces of legislation introduced during this year's General Assembly session attempted to answer these questions, and more often than not, the measures were aimed at transferring ownership away from the public and into the hands of private entities. Some failed; others gained passage, but the "privatization" trend amongst legislators was alive and well. One measure that ultimately failed sought to make it easier for landowners to claim ownership of the state's salt marshes. Less than one percent of Georgia's nearly 400,000 acres of salt marsh are privately owned; the state holds in the public trust and protects the remainder. Another measure which gained passage will allow private water suppliers to skirt local water plans in water-scarce regions of the state, thus undermining public planning for a critical resource. Yet another hotly-contested measure which gained passage might arguably allow riverfront property owners to prohibit rivers users from fishing in front of their property in some instances. When it comes to preserving and managing long-standing public resources and rights, collectively these measures raise red flags, for in each the public good is compromised for the benefit of private interests.

THE WATER BODY

Georgia's water resources are vast. The state is home to more than 70,000 miles of streams and rivers, 425,000 acres of reservoirs and vast stores of groundwater. Along the coast, nine large estuaries are fringed by some 400,000 acres of coastal marshes. These water bodies, along with underlying aquifers, provide our drinking water. At sewage treatment plants, they assimilate our treated waste. And, along their courses where we fish, boat and recreate, they support an outdoor recreation economy that generates an estimated \$27.3 billion annually in consumer spending and \$1.8 billion in state and local taxes. And, for many, these waterways provide sustenance in the form of fish and shellfish. Because of their importance, the state manages water based on the public good. This regulated riparian rights model allows riverfront property owners to utilize the water flowing by their property but only in a manner that does not impact its use by the next riparian owner.



Less than one percent of Georgia's nearly 400,000 acres of salt marsh are privately owned; the state holds in the public trust and protects the remainder. Legislators considered but did not pass a measure that would have made it easier to transfer these state marshlands into the hands of private owners.

THE DIRT

It's been said often: "The most dangerous 40 days in Georgia are those 40 days when the General Assembly is in session." While the citizen legislators do much important work in those 40 days, there's always a slew of questionable bills introduced. During the 2023-24 session, legislators filed more than 4,000 measures for consideration. Among bills were multiple measures assaulting the "public trust"—the legal principal that natural resources belong to the public and are kept in trust by the state.



Who should determine ownership and access to Georgia's water resources? Multiple pieces of legislation introduced during this year's General Assembly session attempted to answer these questions, and more often than not, the measures were aimed at transferring ownership away from the public and into the hands of private entities.

HB 1172 also passed. This ambiguous bill could lead to some waterfront property owners asserting their ownership of the streambed and prohibiting individuals from stopping to fish in front of their property. Companion legislation, which failed to advance, created a list of navigable streams. Such a list, if enacted, has the potential to greatly limit where Georgians have a right to boat, fish and hunt and leaves streams not deemed "navigable" at risk of being closed to the public. These could include streams that have been used by anglers and recreational boaters for generations. A special House Study Committee on Navigable streams is expected to meet later this year and make recommendations on what streams in Georgia should remain open to the public.

WHAT MUST BE DONE

Georgia legislators must protect Georgia's long-standing water rights doctrine and reject efforts to privatize the state's water resources. Legislators must also protect recreational access to the state's rivers and streams and preserve existing uses that have been in place for generations.

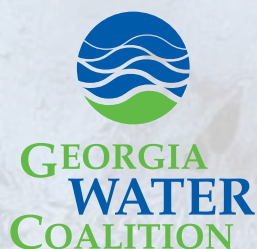
HB 370 attacked that principal as it applies to Georgia's coastal marshes. The bill made it easier for property owners adjacent to marshes to claim ownership. Existing law says that the state owns the marshes unless a property owner can trace their title to a grant issued by the King of England prior to independence. It's common to possess land granted in such a way; but it's highly uncommon to be able to prove clear title.

HB 370 would have flipped that on its head, making the transfer of these public lands to private entities relatively easy. The change was driven by developers seeking to claim ownership of the marshes, not to build upon them (they are protected by state law) but to conserve them...and get paid to do so, thus converting a public resource into a private commodity.

HB 1146, which ultimately did pass, was a gift to a private water company. It will allow the company to sell water in water-challenged Bryan County without coordinating with local governments or existing water providers. The change in law now threatens to undermine water planning and pits private water suppliers against publicly-held suppliers not just in Bryan County but across South Georgia.



HB 1172 was just one bill adopted during the 2024 General Assembly session that could lead to the erosion of public rights on Georgia's rivers. This ambiguous bill could lead to some waterfront property owners asserting their ownership of the streambed and prohibiting individuals from stopping to fish in front of their property.



FOR MORE INFORMATION

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2024's Worst Offenses Against GEORGIA'S WATER



OGEECHEE RIVER

Toxic “Forever Chemicals” Taint Fish; Threaten Human Health

INTRODUCTION

In Georgia our wild fish are subject to toxins that make some of this wild game dangerous to eat on a regular basis. Tests conducted by state scientists have found toxins like mercury, PCBs and chlordane in fish, and as a result, the state issues consumption advisories annually for specific fish and water bodies. Recently, another toxin in fish has been identified—PFAS, the acronym for per- and poly-fluoroalkyl substances. Lab-created beginning in the 1930s, these chemicals have been used for years to manufacture carpet, upholstery, food paper wrappings and flame retardant apparel, among other things. PFAS have been linked to a number of health risks including cancer as well as impacts to immune systems and cholesterol levels. Known as “forever chemicals” because they do not breakdown and persist in the environment, they are now found in rivers across Georgia, especially the Ogeechee and Conasauga where they were extensively used by manufacturers and then discharged to the rivers. Once in rivers, PFAS contaminate the smallest organisms and then bioaccumulate up the food chain, poisoning top-tier predators like fish and fowl. While the U.S. Environmental Protection Agency (EPA) in April issued standards for PFAS in drinking water, no such safe standards have been issued for PFAS levels in fish. Nor has Georgia’s Department of Natural Resources (DNR) begun testing fish tissue for PFAS. Failure to obtain data on PFAS levels in Georgia’s wild fish will delay the process of creating consumption advisories and put those Georgians who eat wild-caught fish at greater risk of these toxic chemicals.

THE WATER BODY

The 245-mile long Ogeechee River is one of Georgia’s last remaining free flowing rivers. A blackwater beauty, it runs through Eastern Georgia, draining a 5,540 square-mile basin that encompasses wetlands, forests, farms, and scores of towns and cities. Within that basin, thousands of Georgians rely on the river and its tributaries for fish to feed their families, and the underlying aquifer for their drinking water. The Ogeechee also supports a diversity of wildlife, offers countless recreational opportunities, supplies water for agricultural and industrial uses, and carries off wastewater. Notably, it is home to several protected species, including the endangered Atlantic and shortnose sturgeons which spawn in its tea-colored water during the winter and early spring.



Georgia is home to millions of anglers. Many catch and release, but others depend on wild-caught fish for a portion of their regular diet. For those anglers, the health risks of eating fish contaminated with PFAS are exaggerated.

THE DIRT

When they were created, we considered them miracles of modern science. PFAS made carpet stain resistant and clothing flame retardant. On the Ogeechee River, a textile manufacturer specializing in flame retardant fabrics discharged PFAS to the river for years. Though that plant is now closed, PFAS persist in the river. In 2020, Ogeechee Riverkeeper tested bass, bluegill and redbreast harvested from the river and found PFAS in all fish tested.

This is particularly alarming given the number of recreational and subsistence anglers that depend on the Ogeechee for a portion of their diet. Consumed infrequently and in small quantities, fish tainted with toxins pose marginal risks. But, for those regularly consuming wild-caught fish—typically low-income families that depend on these catches for a portion of their diet—the risks are exaggerated. Children and pregnant women are at greater risk. In one study, a cohort of Central New York anglers who regularly ate wild-caught fish had levels of certain PFAS in their blood up to 25 times greater than the national average.

Currently, EPA is conducting studies on PFAS levels in fish and developing guidance to enable states to develop consumption advisories, but the agency's "PFAS Strategic Roadmap" is running months behind schedule. Drinking water standards, originally expected to be finalized in late 2023, were just released in April.



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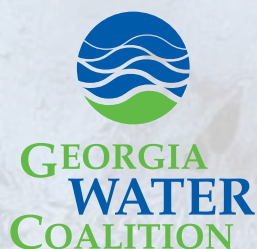
Once in rivers, PFAS contaminate the smallest organisms and then bioaccumulate up the food chain, poisoning top-tier predators like fish and fowl, including this fish-eating cormorant.

And while manufacturers of PFAS have phased out production of some of the most toxic PFAS known, thousands of other varieties are still in use.

At the state level, Georgia's Department of Natural Resources has conducted limited monitoring of PFAS levels in the state's rivers and has not yet conducted any testing of tissue from fish harvested from the state's rivers. Based on results of nationwide tests, it is likely that PFAS contamination exists in virtually all of Georgia's rivers.

WHAT MUST BE DONE

To speed the process of developing fish consumption guidelines and protect recreational and subsistence anglers consuming wild-caught fish, DNR should begin testing fish statewide for PFAS. When EPA finally issues its guidance, the delay in developing guidelines can be minimized.



FOR MORE INFORMATION

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2024's Worst Offenses Against GEORGIA'S WATER



OKEFENOKEE SWAMP

State Leaders' Inaction Leaves Natural Wonder at Risk

INTRODUCTION

During the past six years, an Alabama-based mining company and its leaders have dropped thousands of dollars into the election coffers of Georgia leaders. During that same time span, Twin Pines Minerals has steadily pushed forward its plans to dig for titanium-bearing minerals on land along Trail Ridge, a sandy rise adjacent to the Okefenokee Swamp in Charlton County. Coincident or not, no legislation protecting the Okefenokee Swamp gained passage during Georgia's recently completed 2024 legislative session. Indeed, despite the fact that a bi-partisan coalition of more than half the House of Representatives sponsored a bill that offered meaningful protections, that bill never even received a vote. Meanwhile the permitting process moves forward and Georgia's Environmental Protection Division (EPD), unmoved by tens of thousands of comments urging them to stop the mine, appears poised to give the mine the green light. If permitted, expert hydrologists warn that mining on Trail Ridge, which plays a role in regulating swamp water levels, will cause more frequent drought conditions in the swamp. The impacts will increase the likelihood of wildfires that threaten neighboring commercial timberlands, decrease recreational use of the swamp's wilderness canoe trails and increase carbon dioxide fluxes to the atmosphere as the swamp's carbon-rich peat dries out and oxidizes.



THE WATER BODY

The Okefenokee Swamp is a signature landscape of Georgia and was recently nominated by the Department of Interior as a candidate for inclusion as a UNESCO World Heritage Site. Covering 438,000 acres, it is considered the largest blackwater wetland in North America and virtually all of it—some 630 square miles in Charlton, Ware, and Clinch counties as well as Baker County in Florida— is protected as the Okefenokee National Wildlife Refuge. It is home to a dizzying array of flora and fauna, with more than 600 species of plants and more than 400 species of vertebrates, including 200 varieties of birds and 60 kinds of reptiles. From the swamp flow the St. Marys River to the east, and the fabled Suwannee River to the southwest. These rivers and the swamp are popular tourist and recreation destinations. The swamp attracts some 800,000 visits annually and swamp tourism spending amounts to \$91.5 million annually. In addition to supporting local economies, the swamp also provides ecological services like storm protection, water quality, commercial and recreational fishing habitat and carbon storage that are annually worth as much as \$4 billion.



An icon of the swamp, the American alligator is found in abundance within the Okefenokee, offering visitors up-close-and-in-person encounters with the ancient reptile.

THE DIRT

The state's failure to protect the Okefenokee Swamp from mining threats has been baffling. Opposition to Twin Pines Minerals' proposed "demonstration mine" has been overwhelming and from both sides of the political divide.

U.S. Department of Interior Secretary Deb Haaland in 2022 wrote Gov. Brian Kemp urging him to deny permits for the proposed mine, and earlier this year former Speaker of the House Newt Gingrich in an op-ed published in the Atlanta Journal-Constitution implored state leaders to take action. Polls have shown that 69 percent of Georgians want Gov. Kemp to take immediate action to protect the swamp, and federal and state agencies have been literally swamped with some 200,000 comments opposing the Twin Pines Minerals mine.

The Okefenokee Protection Act, introduced during the 2023 legislative session and aimed at stopping mining on Trail Ridge adjacent to the swamp, ultimately gained more than 90 sponsors.

The bi-partisan coalition of supporters was more than enough to assure the act's passage in the House of Representatives, but the bill was never granted a vote in the House Natural Resources Committee.

Other measures aimed at protecting the swamp died when Senate leaders intimated that decisions about mining "shouldn't be made by political entities." Other leaders have opposed protections, claiming that prohibiting mining on private lands would be the equivalent of "taking" property rights, despite the fact that local and state governments routinely act in the public interest to dictate what activities can take place on private property.

With inaction on the part of state leaders, the decision about whether to risk the Okefenokee Swamp to acquire common minerals found in abundance elsewhere, now lies solely with EPD.

A 60-day public comment period for the mining permits ended April 9 with more than 70,000 citizens urging the state agency to stop the mine. History suggests EPD will be unmoved.

To date, EPD has disregarded the dire warnings of scientists familiar with the swamp's hydrology and sided with Twin Pines' paid consultants who contend that the mine will not impact the swamp. If permitted, the initial 820-acre mine site will likely be the first of many. Twin Pines owns some 8,000 acres along Trail Ridge.

WHAT MUST BE DONE

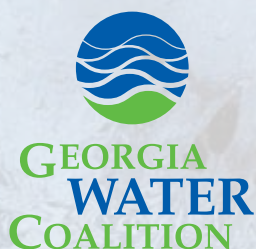
Gov. Brian Kemp must take decisive action to protect the Okefenokee Swamp from mining operations. Permits for the proposed Twin Pines mine should be denied and through legislative action or conservation measures, Trail Ridge should be permanently protected from mining.



Since 2018, an Alabama-based mining company has been waiting to mine at the doorstep of the Okefenokee Swamp, and its leaders have dropped thousands of dollars into the election coffers of Georgia leaders, including Gov. Brian Kemp and key members of the Georgia legislature. During that same time span, Twin Pines Minerals has steadily pushed forward its mining plans. During the most recent General Assembly session, no measures aimed at protecting the Okefenokee Swamp from mining threats gained passage.



Noted for its soaring, Spanish-moss draped cypress trees, the Okefenokee Swamp has been nominated for inclusion as a UNESCO World Heritage Site. If so designated, it will join other national natural treasures like the Great Smoky Mountains and Grand Canyon national parks.



FOR MORE INFORMATION

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