

ENVIRONMENT

The battle for Lake Maurepas

Chemical companies want to capture carbon, but local communities don't want it under their lake

by **Rick Mullin**

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began in the parish. She added that state representatives are committed to improving their efforts at keeping the public informed on the projects.

"I'm hoping before they can move forward that we can get some concrete answers and that we all feel safe," said Hodges, one of several state legislators on hand to hear presentations from company and state officials.

Chemical production has long been central to Louisiana's economy, and it was unusual to hear Louisiana legislators say they are skeptical about projects that promise local investment and jobs. Stranger still was that a standing-room-only crowd of close to 300 residents of Livingston Parish and surrounding parishes in the mostly White, Republican, and industry-supportive region surrounding Lake Maurepas came to the meeting in vocal opposition to the projects.

especially around Lake Maurepas, beneath which Air Products hopes to bury over 5 million metric tons of the waste annually. The lake communities are joining with environmentalists and environmental justice communities where new blue hydrogen and ammonia ventures will capture carbon, creating an unprecedented front against development in the chemical breadbasket.

While many in the region work in heavy industry, many others rely on the lake for their livelihood. The community has a deep cultural affinity with the 240 km² lake, which is northwest of Lake Pontchartrain, a larger body of water just outside New Orleans. The two big lakes stand out in the region for having little industrial development. Maurepas has several small oil wells that are long abandoned.

Kinion Bankston, a local businessman and outdoorsman, was asked by the parish council to speak on behalf of residents about Air Products' work on the lake, beneath which the company plans to sequester carbon dioxide. That waste gas would come from a hydrogen and ammonia plant it wants to build some 56 km away on the Mississippi River in Ascension Parish. Bankston asked the elected officials how a project that would disturb the wetlands, and capture CO₂ from a new plant rather than current ones, would benefit Louisiana.

"Why are you going to allow them to come into our lake to do this?" Bankston asked, adding a vigorously applauded allusion to what he'd heard was Air Products' plans to sell much of the plant's output to China.

An Air Products representative later responded that the plant's hydrogen would be transported via the company's Gulf Coast pipeline to industrial and utility users between New Orleans and Texas City, Texas. The ammonia, she said, "will be going into a ship and shipped overseas."

“ There is a certain familiarity in Louisiana with oil and gas wells that I think we thought would carry over into people’s understanding.

— **Andrew Connolly**, *vice president of large low-carbon hydrogen projects, Air Products and Chemicals*

Throughout the 4 h meeting, Air Products and Oxy representatives discussed the science and safety behind long-practiced techniques of drilling, pipeline management, and chemical storage that come together in carbon capture and sequestration, or CCS. They seemed, however, to make little headway in winning over the crowd—a crowd quite familiar with drilling, pipelines, and chemical storage. Their contention that the geography of southeast Louisiana is ideal for their projects met with objections.

State representative Sherman Q. Mack, who joined in Hodges's appeal for more information on the science and safety of CCS, contended that the projects are moving too fast. He commended the parish council for its planned moratorium on the drilling of test and storage wells.

Wayne Rowe, director of surface operations at Air Products, expressed sympathy on behalf of the company, as well as a modicum of contrition on his own part. "I can feel the energy here. And I will say on behalf of myself, we should have been talking to you earlier," Rowe said. Toward the end of the meeting he commented on the status of the projects. "Everything is up in the air. Everything," he said. "We don't know if we are going to be able to do the project."

IN THE WORKS

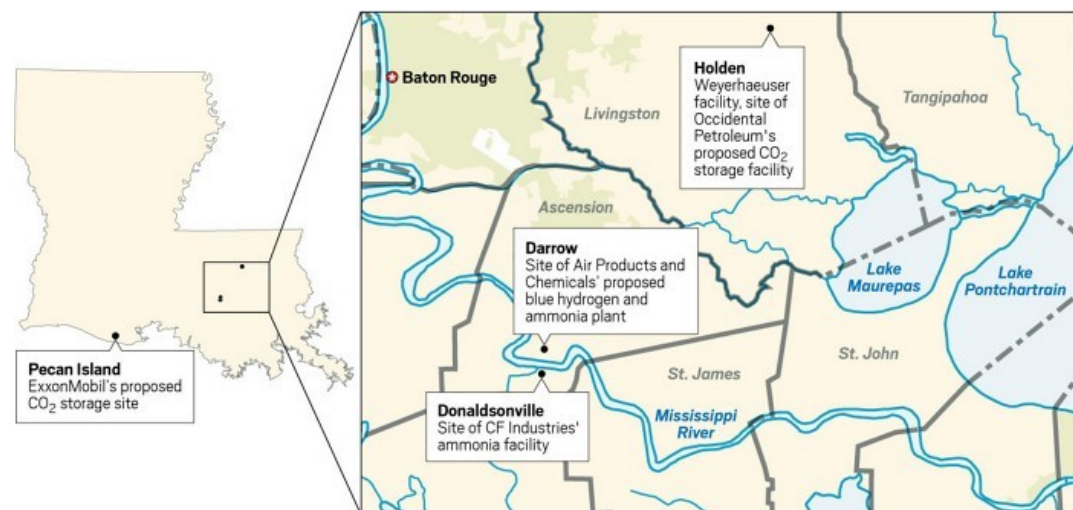
The projects by Air Products and Oxy are among several slated for southeast Louisiana, which is shaping up as the US frontier in commercializing CCS as a means of cutting carbon dioxide emissions without cutting industrial production. In the technique, CO₂ is removed from the smokestacks of fossil fuel-burning power plants, chemical factories, or other industrial facilities and transported in a supercritical or near-liquid state to a permanent storage site deep underground.

Chemicals such as ammonia and hydrogen that are manufactured with CCS are known as blue.

A process similar to CCS has been employed for decades in enhanced oil recovery, in which CO₂ is used to push oil from partially depleted reservoirs. Industrial facilities that capture and sequester CO₂, on the other hand, are just getting started. There are only two in the US, in Illinois and North Dakota.

CAPTURE AND SEQUESTRATION

Air Products and CF Industries plan to begin carbon capture operations on the Mississippi River in Ascension Parish. Air Products would transport CO₂ to Lake Maurepas for sequestration. CF would move the CO₂ to an ExxonMobil sequestration site in Pecan Island. Meanwhile, Occidental Petroleum is preparing to deposit CO₂ in Holden, a town in Livingston Parish.



Credit: Yang H. Ku/C&EN/Shutterstock

But activity is ramping up, **spurred by an increased tax credit for CO₂ storage under section 45Q** of the US Internal Revenue Code. With the Joe Biden administration's **Inflation Reduction Act**, the tax incentives increased from \$50 to \$85 per metric ton, making large industrial projects not only feasible but profitable.

Of the 60 permit applications before the US Environmental Protection Agency for the drilling of wells for CO₂ storage, referred to as class VI wells, 19 are from Louisiana. The state was far in the lead before a rush of applications from California, whose count rose from 7 to 18 in late March.

Air Products announced plans in 2021 to build what it says will be the **world's largest CCS-based hydrogen complex**, in Darrow, Louisiana, a community on a heavily industrialized stretch of the Mississippi River about a half-hour drive from Lake Maurepas. Dubbed the Louisiana Clean Energy Complex, the \$4.5 billion investment will be the company's largest US venture, producing 20 million m³ of blue hydrogen daily when it comes on line in 2026.

Air Products plans to capture 95% of the CO₂ generated at the plant, sequestering or permanently depositing over 5 million metric tons (t) per year in geological pore space more than 1 km under the lake.

In 2022, CF Industries announced plans to capture carbon from ammonia production in Donaldsonville, Louisiana. That site, across the river from Air Products' intended plant, produces about 4.3 million t of traditional ammonia annually. The process will capture the two-thirds of the CO₂ from the Donaldsonville facility that is not used for the production of urea and other chemicals. CO₂ will be transported over 160 km to an ExxonMobil facility on Pecan Island on the Louisiana Gulf Coast.

CF last year formed a **partnership with Mitsui & Co.** that is evaluating the construction of another blue ammonia plant in Ascension Parish.

And Oxy Low Carbon Ventures, Oxy's low-carbon technology business unit, said in 2022 that it was exploring a partnership with Weyerhaeuser in which CO₂ captured from industries along the Gulf Coast would be transported to subsurface pore space controlled by the lumber conglomerate in Holden, about 29 km north of Lake Maurepas. The project was presented as the first step in the Oxy subsidiary 1PointFive's initiative to build or acquire multiple sequestration hubs on the Gulf Coast and elsewhere in the US to offer storage capacity to chemical and power plants.

The three companies will need to secure class VI permits before drilling wells to sequester CO₂. Meanwhile, the State of Louisiana is petitioning the EPA to be granted permitting authority for such wells.

Project managers and independent scientists agree that the geology in southeast Louisiana is ideal for siting the deep wells required for CO₂ sequestration. The state is already home to major CO₂-emitting refineries and chemical plants with a long history of well drilling and management and pipeline transportation of oil, gas, and chemicals.

Opponents of the projects, however, contend that severe weather and the network of faults and salt domes running across the region undercut claims of geological suitability for CCS. They point to a 2020 **rupture of a CO₂ pipeline** running through rain-saturated soil in Satartia, a small town on the western edge of Mississippi, as the kind of event that could occur with CO₂ pipelines in Louisiana. About 200 people were evacuated after the Satartia accident, and 45 sought medical attention.

The projects are also opposed by the residents of the largely Black communities along the river in Ascension, St. John the Baptist, and St. James Parishes. Community leaders are speaking out against the projects, which they view as additional investment in polluting operations—plants that emit more than CO₂—in a region that many people call Cancer Alley.

Efforts to halt work continue. The Livingston Parish Council approved a moratorium of up to 12 months on injection and storage wells in October in an attempt to pause the Air Products project. But after Air Products sued to have the order rescinded, **a judge ruled in January that the parish could not enforce it.** The outcome was not a surprise. In fact the council's lawyer had advised that it could not enact a moratorium given the company's operating agreement with the state.

Earlier this month, state representative William Wheat Jr., a Republican representing the city of Ponchatoula in Tangipahoa Parish, said he **plans to introduce a bill** calling for a moratorium on drilling CCS wells beneath Lake Maurepas. "I understand the emphasis that's being put on carbon sequestration," Wheat told the *Greater Baton Rouge Business Report*. "I don't know that the public has enough information to feel 100% comfortable at this point, and until we get to that point, I think it's important that we put the brakes on."

ON THE LAKE

Air Products has met with the public and local officials several times since the September meeting in Livingston Parish. Representatives from the company were questioned by the St. John's Parish Council in October. And Andrew Connolly, vice president of large low-carbon hydrogen projects at Air Products, was on hand to address public concerns at a public meeting at the Ponchatoula Lions Club the week before.

Kim Coates, a member of the Tangipahoa Parish Council, organized the Lions Club meeting along with Wheat. Connolly, who took over the project in October, gave assurances similar to those offered at the Livingston meeting—that the work on the lake and subsequent operation of a CO₂ sequestration hub would not damage the environment or interfere with the community's access to and use of the lake.



Credit: Julie Dermansky

Kim Coates (center), a member of the Tangipahoa Parish Council, listens to an Air Products and Chemicals presentation at a meeting she helped organize in Ponchatoula, Louisiana, in October.

The company's message has met with resistance, says Coates, who in 2018 led successful **efforts to stop Syrah Resources**, a battery manufacturer, from building a plant, and real estate developers from siting an ecotourism facility in Manchac, a town on Lake Maurepas.

ADVERTISEMENT “The St. John’s council really gave them the third degree,” she says, questioning the benefit of a CCS project to the community and objecting to the company’s claims that there would be no restricted access to the lake, given that restrictions were in fact made during seismic testing.

Coates and others are particularly vexed that the state’s Department of Natural Resources signed an **operating agreement** with Air Products in October 2021 enabling the company to develop the land beneath the lake in exchange for payments to the state. The one public meeting on the agreement was held as a Zoom call that Oct. 4, when the region had not yet recovered from Hurricane Ida and many residents lacked internet access or even electricity, according to Coates and others.

Opponents of Air Products’ project also note that **Louisiana Senate bill 353**, an update to the law allowing the state to enter operating permits for CCS, was sponsored by state senator **Sharon Hewitt**. Hewitt’s husband, Stan Hewitt, an engineer, received royalties from the CO₂ pipeline development firm Denbury in 2020, the year the bill passed into law. Denbury, the company that owns the pipeline that ruptured in Mississippi, had input in the drafting of the bill, which some say could make it more difficult for landowners to dispute pipeline projects. Sharon Hewitt is currently running for governor.

Air Products provided C&EN a list of public meetings and notices dating back to April 2021. The list notes that no comments were received at the Oct. 4 meeting.

Meetings with Air Products have been well attended since the fall, and a growing number of opponents to the CCS projects have been watching developments closely.

“At every meeting I’ve attended, people in this area do not want to see this project go through,” says Caleb Atwell, vice president of the Lake Maurepas Preservation Society, a group recently formed to



Credit: Julie Dermansky

Caleb Atwell, vice president of the Lake Maurepas Preservation Society, has organized several events aimed at uniting communities around Lake Maurepas and along the Mississippi River in opposition to carbon-capture-and-sequestration projects.

coordinate opposition to the project. “From everything we know, nothing about the Air Products project improves the quality of the lake.” It will only disrupt the wetland environment as the company prepares to permanently deposit tons of CO₂, he says. “People have enough common sense to know that, ‘Hey, this isn’t a good idea,’ ” Atwell says.

The preservation society has been using social media to inform area residents about the project. So has Bankston, who spoke at the September meeting in Livingston Parish. Southern Boyz Outdoors, a store he launched in conjunction with a television show about outdoor life, has over 3 million followers on Facebook.

“The lake is actually a sanctuary for white shrimp. Home to manatee,” Bankston says. He is concerned that the project would result in a “spiderweb” of underwater pipelines connected to several wells—pipelines prone to corrosion in the lake’s brackish water.

“The lake is only 7 ft deep,” Bankston adds. “Big rigs and barges will have to come in to haul supplies, so they are going to get in there to dredge channels all through the lake,” despite laws prohibiting dredging and trawling.

While the focus is on the lake, residents near Oxy’s proposed sequestration site in Holden have also expressed concerns, foremost about a lack of information. Eric Harrell, a nuclear applications specialist, said he’d read about the Oxy-Weyerhaeuser project online.

“I started asking questions about it, basically just before they were fixing to drill their class V test well,” he says, referring to a CCS test well. “None of the local politicians knew anything ahead of time. A few were asking questions but just weren’t getting the answers.”

People in the area are concerned about eminent domain when pipelines are constructed and about the impact of the project on private water wells. Harrell cites a policy paper published by **the Massachusetts Institute of Technology** detailing the plume spread of deposited CO₂ that suggests a possible impact on drinking water. Residents are wary of plans to transport and deposit what is viewed as chemical waste underground, and they question the ability of Holden’s volunteer

fire department to deal with an accident.

“People out here all work in one way, shape, or form related to the chemical/refinery business. We know the pipeline situation,” Harrell says. “We’ve had a lot of things in the past in the area that have left a bad taste in our mouth.”

People also fault Louisiana for poor performance in monitoring and maintaining existing infrastructure, especially abandoned wells and pipelines.

State maintenance of CO₂ sequestration facilities is a key consideration, says Jane Patton, campaign manager for plastics and petrochemicals at the Center for International Environmental Law (CIEL), a legal research and advocacy group. She notes that the law enabling the state to enter operating agreements for CCS projects allows developers to petition to have liability for projects revert to the state 10 years after the sequestration is complete and the wells capped. Patton says she is not entirely surprised by the pushback against the projects in the parishes surrounding Lake Maurepas. “The loss of land, loss of jobs, and accumulated evidence of air pollution are turning the tide on how people feel about the oil and gas industry,” she says. “Now when we see these things come to town, an unknown technology never tested here, we are starting to see the public at large say, ‘Enough is enough.’”

IN PRACTICE

“The main problem with it is it’s new,” says Donald J. DePaolo, a professor of geochemistry and senior scientist at Lawrence Berkeley National Laboratory’s Energy Geosciences Division. “But in a lot of ways, it’s very straightforward.” The mechanics of CCS have been deployed in enhanced oil recovery and other applications for decades, he says.

Permanent deposits do pose a geological engineering challenge, however. “When you pump CO₂ into the ground, it is in a supercritical state, meaning pretty much at the density of a liquid, a little lighter than water,” DePaolo says. “Water has a density of 1 g/cm³; supercritical CO₂ at subsurface temperature is about 0.6 or 0.7. Consequently, when you pump it into the ground, it wants to rise up to the surface.”

A successful well requires a deep layer of porous rock, such as sandstone, extending in a broad 2D range beneath a layer of nonporous rock, such as shale, which prevents CO₂ from rising to the surface.

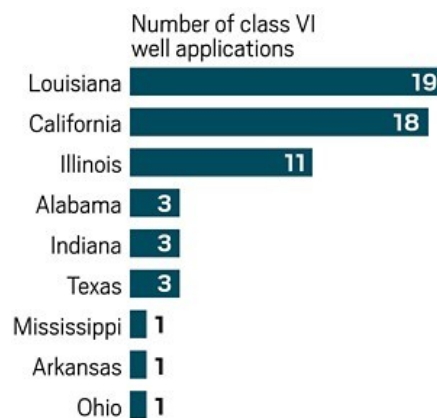
“Even if there is a fracture in the shale, it’s hard to get CO₂ to go through it,” DePaolo says. “It reacts with the shale and tends to seal up fractures.” What’s more, CO₂ escaping from a well poses little danger, he says. “We’re pumping CO₂ into the air all the time.” Escape into potable water is a concern, though the result would be slightly carbonated water—an assurance Air Products gave at community meetings to the derision of residents who resented the comparison to drinking a Coke.

“What they are trying to get is 99% storage, less than 1% leakage over hundreds of years,” DePaolo says. “If they fail to do that, and it’s a few percent over 10 or 20 or 30 years, nobody is going to notice that, especially in these industrial areas where they are pumping CO₂ into the air already.”

The US Department of Energy began supporting carbon capture demonstration projects about 20 years ago, the most successful of which, according to DePaolo, was the **Southeast Regional Carbon Sequestration Partnership**, which put about 5 million t of natural CO₂ in about a dozen wells near

WELLHEAD

Louisiana leads the US in class VI well applications under review by the US Environmental Protection Agency.



Source: US Environmental Protection Agency **Note:** As of March 28, 2023. Class VI wells are those that store carbon dioxide in rock formations.

Cranfield, Mississippi, between 2008 and 2013.

Susan D. Hovorka, now a senior research scientist at the Bureau of Economic Geology at the University of Texas at Austin's Jackson School of Geosciences, led the Cranfield project. She says extensive monitoring indicates no escape of CO₂ from the wells. Her group has monitored seven other projects with similar results, one storing 80 million t of CO₂ beneath the Ogallala and Dockum Aquifers in Texas.

“ **I** f they are trying to educate me, why can't they stop and take a breath and educate me?

— **Caleb Atwell**, vice president, Lake Maurepas Preservation Society

Another project, involving Air Products, began capturing and storing 1 million t annually from the company's Port Arthur, Texas, hydrogen plant at a site in Texas's West Hastings oil field beginning in 2013.

There is wide agreement among scientists that CCS will play a key role in the US government's effort to reach net-zero carbon emissions by 2050. A 2021 **report published by the Andlinger Center for Energy and the Environment** at Princeton University presents several models for achieving net zero, including a mix of nuclear power and renewable energy sources such as wind and solar. The report, funded in part by ExxonMobil and BP, includes large-scale CCS and CO₂ utilization in all its models.

But scientists disagree over the environmental benefit of producing blue hydrogen and ammonia. A frequently referenced 2021 paper by Robert W. Howarth and Mark Z. Jacobson contends that while CO₂ emissions from the process are lower, fugitive methane emissions from producing blue hydrogen are higher than for conventional hydrogen because of the increased use of natural gas to power carbon capture (*Energy Sci. Eng.*, DOI: [10.1002/ese3.956](https://doi.org/10.1002/ese3.956)).

IN THE FIELD

Blue hydrogen and ammonia plants planned for Louisiana will take advantage of world-leading infrastructure. CF's Donaldsonville facility is the world's largest producer of ammonia. And Air Products operates the world's largest privately owned hydrogen pipeline system in the region.



Credit: Julie Dermansky

The Mississippi River at Darrow, Louisiana, where Air Products and Chemicals plans to site a blue hydrogen and ammonia facility.

“The primary purpose of the site is to provide clean hydrogen, in this case blue hydrogen, to others to support decarbonization of their own processes,” Air Products’ Connolly says about the Darrow project.

Kristine Clark, director of clean energy technology at CF, says the highly pure stream of CO₂ from the Donaldsonville plant means that carbon capture will operate at lower energy use and cost than would a project capturing CO₂ from other industrial processes or power plants.

Connolly and Clark say the geology in southeast Louisiana is ideal for the deep-well storage of CO₂. While there may be even better geological locations in less populated areas of the US, those locations lack pipeline infrastructure and, significantly, industry from which to capture carbon.

ADVERTISEMENT The sequestration at ExxonMobil’s Pecan Island facility, where CF plans to deposit CO₂, has not had a challenge from local communities anywhere as strong as the one Air Products faces at Lake Maurepas. Connolly, however, cites problems with siting the CO₂ wells at industrial sites farther west on the Gulf Coast.

“One of the challenges in the Gulf is that there has been extensive oil and gas operations in the area,” he says. “That creates potential for many leak points with old, legacy wells. It would also require miles and miles of additional pipeline through multiple lakes, multiple wetland areas.”

Connolly says Air Products was taken aback by the vehemence of opposition to the project around the lake. “There is a certain familiarity in Louisiana with oil and gas wells that I think we thought would carry over into people’s understanding,” he says. “But this is a new technology in Louisiana. One of our goals in community outreach is to continue to educate.”

The company claims that the project’s impact on the lake will be minimal during the sequestration operation, as the wells are over 1 km underground. In all, the company is likely to erect 12–16 platforms supporting nine sequestration wells and six monitoring wells. The ongoing seismic testing will deploy 16,000 2.5 kg charges. Charges are placed at least 60 ft (18 m) below the bottom of the lake, Connolly says.

“ **E**xonMobil is taking their carbon capture procedures to the Gulf. We feel like Air Products can do the same thing.

— **Jon M. Populis**, resident of Manchac, Louisiana, on Lake Maurepas

Dredging has been minimal to date, Connolly says. He adds that he doesn’t know the total amount of dredging needed to establish platforms and situate pipelines or whether channel dredging will be required to accommodate barge traffic on the shallow lake.

Air Products and CF have not announced where they plan to market blue ammonia, according to Connolly and Clark.

Oxy declined to be interviewed for this article. Doug Conquest, vice president of low-carbon venture services for the company, said at the September meeting in Livingston Parish that Oxy envisions a project with 5 or 6 class VI wells and 8–10 class V monitoring wells on the site in Holden.

ON THE RIVER

The Ascension Parish Community Advisory Panel (CAP), established in the mid-1990s, is the locus of interaction between communities and 15 chemical companies on the east side of the heavily developed Mississippi River.

Air Products, which operates an air-separation plant in Geismar, on the east side of the river, is a member of the CAP. CF's Donaldsonville plant, on the west side, is not. Neither company has discussed its CCS ventures at the CAP's meetings, according to Tim Johnson, head of a public relations firm that facilitates this CAP and others.

At a recent meeting, however, scientists from Louisiana State University gave a presentation on CCS. The event was not prompted by the Air Products and CF plans specifically but by increasing interest in CCS among regional industries. "Carbon sequestration has been a really hot topic, and I wouldn't be surprised at all if a number of the plants are at least in the planning stages, given the **state has a 2050 net-zero goal**," Johnson says.

Johnson attributes the pushback on CCS projects from communities around the lake to unfamiliarity with the concept. He adds that the lake communities also fear that the cratering of a salt dome well owned by Oxy, which in 2012 resulted in a sinkhole that destroyed land and property in a community called **Bayou Corne**, may foreshadow a similar disaster with a CO₂ well failure. Johnson and industry sources dismiss these concerns because of the greater depth of the CO₂ wells and sturdier geological conditions.

"I think it's incumbent on us to show we can be a leader [in CCS] because of geology and the scientific nature of what has been done here for a long time," Johnson says. "We've got to be more focused on a real education of the general public."

But many people in neighborhoods along the river that have suffered years of direct exposure to industrial pollution and related health impacts are opposed to new chemical production in the region.

"Everybody knows Louisiana doesn't say no," says Kaitlyn Joshua, Gulf Coast representative of the environmental group Earthworks. She says the river **communities are inundated with industrial pollution**. "But our local governments and state government will still say yes" to investment in new chemical manufacturing. The new CCS projects in Ascension Parish are no exception, in her view.

Joshua says the communities in the parish and adjacent St. James Parish have done their best to say no, most recently organizing powerful **opposition to a Formosa Plastics plant**. Community response to the CF and Air Products projects has yet to coalesce, however.

"We're still kind of spreading the word," Joshua says, admitting that many in the parish are reticent about coming out against industry. "Our main message has been around the school," she says, referring to Sorrento Primary School, which is near where Air Products will run a CO₂ pipeline from the hydrogen and ammonia facility to the lake.

"But we are also trying to paint a bigger picture," Joshua says. "This is a project that would include pipelines in St. James and St. John." There will be a chemical plant in Ascension involved with industrial development on Lake Maurepas. Organizers emphasize that permanent CO₂ sequestration is new "and that scientists are still trying to figure out the long-term implications of CCS," Joshua says.

Beverly Wright, executive director of the New Orleans-based Deep South Center for Environmental Justice, opposes any new industrial development along the river. She also views CCS as a diversion of funding from projects that would significantly reduce pollution in the area.

"It's at the experimental stage," she says. "And we are the experiment. And the communities that suffered from the petrochemical industry in particular will find no relief as we move toward decarbonizing. I'm not against science. What we are saying is that you should take this someplace else."

Wright contests claims that the geology and topography of southeast Louisiana are conducive to the



Credit: Rick Mullin/C&EN

Kaitlyn Joshua, an organizer with the environmental group Earthworks, with her daughter in front of Sorrento Primary School. Joshua is optimistic that communities around the lake and those on the river will find common cause in pushing back on carbon capture and sequestration in the region.

transport and storage of CO₂, evoking the Mississippi CO₂ pipeline accident as an indication of what could happen in Louisiana. But she is not surprised that Ascension Parish was selected as the starting point for big CCS projects. "That is where they have the kind of built environment they need to continue doing the destructive things they have been doing to communities' health," she says.

Joshua says CCS presents the White and Black communities around the lake and along the river with a common cause. But they approach the issue from different perspectives: lake communities, predominantly White, object to the possible destruction of the environment; riverside communities, predominantly Black, are more focused on the health impact of further industrial development.

The differences are frustrating, Joshua says, “but I think that is also the beauty of it. It is helping folks to understand that this is something that is going to continue to affect all of us. Nobody is going to be able to hide from it.”

AT THE MEETING

“This meeting tomorrow is about bringing all the different communities together,” Atwell said last month after a prayer circle at the AmVets hall in Springfield, a small town in Livingston Parish. The group of about 20 had gathered to pray for the success of a community meeting the following day arranged by the Lake Maurepas Preservation Society.

“We’re getting people geared up about the state legislative session that starts in April. There are bills that would kill this project,” Atwell said, referring to Air Products’ work on the lake. “We are going to rally the troops.”

Atwell scoffed at the notion of industry’s commitment to educating communities about CCS, noting that Air Products sued Livingston Parish over its 1-year drilling moratorium. “If they are trying to educate me, why can’t they stop and take a breath and educate me?” he asked.

Over 250 people from the communities surrounding the lake and along the river showed up at the meeting to hear from environmentalists, including CIEL’s Patton and retired lieutenant general Russel Honoré—who leads the GreenARMY, a coalition of environmental advocates. Other speakers included Alex Kolker, a scientist with the Louisiana Universities Marine Consortium; Tangipahoa Parish Council member Coates; and state representative Wheat.

People in attendance said they were already feeling the effects of the work on the lake. Jon M. Populis owns a camp on the lake. A retired postal worker, she and her husband have commercial fishing licenses, and Air Products has disrupted fishing, she says. “Just 2 weeks ago, they came in and did a seismic survey, and you can’t even fish,” Populis said. “The water’s nasty. Muddy. It was never like that before.”

She is also concerned about the effect of the CCS project on drinking water. She and others have private wells on the lake.

Populis said her children work in the chemical industry. “It’s a hard thing,” she said. “We’re not against the chemical industry. They do provide jobs. The point is that ExxonMobil is taking their carbon capture procedures to the Gulf. We feel like Air Products can do the same thing.”

Wheat addressed the gathering first, speaking about his moratorium bill and a follow-up bill that would call for the US Army Corps of Engineers to complete an environmental impact statement. Atwell, who moderated the afternoon event, noted that Mack, who attended, plans to introduce a bill that would require a public vote to approve CCS projects in affected parishes and another bill that would require developers to site sequestration in an industrial area on the Gulf Coast.

Also in attendance was **Sharon Lavigne**, the founder of Rise St. James, a grassroots group that has worked to halt the Formosa project. The firm was forced in 2021 to complete an environmental impact statement.

Kolker and Matt Rota of the environmental group Healthy Gulf gave presentations detailing geological aspects of the region that pose risks to the wetlands. Rota said that there are 58 inactive wells around the lake, one of which cannot be located. Patton and Honoré spoke critically of government support for CCS.

“It’s wrong, it’s crooked, and it’s corrupt. That’s why it’s in Louisiana,” said Honoré, a revered environmental voice in Louisiana. Referring to upcoming state elections, he admonished his audience to “lean hard” on their elected officials. “If we don’t stand up for this,” he said, “we’re not going to stand up for anything.”



Credit: Rick Mullin/C&EN

Jon M. Populis, who owns a camp property in Manchac, Louisiana, on Lake Maurepas, says life on the lake has already been affected by seismic testing.

CORRECTION:

This story was updated on April 5, 2023, to correct the name of a member of the environmental group Healthy Gulf. It is Matt Rota, not Rotta.

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