



RESPONSE OF STRATEGIC BIOFUELS, LLC TO “IT QUESTIONS”

APRIL 13, 2024

A. Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

Yes.

The proposed facility is comprised of a biorefinery that will produce Sustainable Aviation Fuel (“SAF”) and naphtha and an adjacent, on-site biomass power plant that will provide electrical power to the biorefinery. The biorefinery will consume forestry waste, mostly “roundwood” feedstock from yellow pine plantation thinnings compliant with the federal Renewable Fuel Standard; the on-site biomass power plant will consume primarily sawmill waste supplemented by any other useable biomass waste. The renewable fuels will be shipped via rail to California in compliance with that state’s Low Carbon Fuel Standard (LCFS).

The Louisiana Green Fuels facility was granted Air Permit No. 0540-00040-00 on September 19, 2023, by the Louisiana Department of Environmental Quality (LDEQ). It is classified as a Synthetic Minor Source and all technical data related to the proposed operations can be found within the permit application. In summary, the gaseous byproducts of the biorefinery and its biomass power plant will consist of carbon dioxide, nitrogen oxides and very minor percentages of other waste gases from the combustion of biomass, all of which are currently considered non-hazardous wastes, except the presence of trace amounts of hydrogen sulfide. Other wastes that will be produced are wood-derived ash, periodically removed from the biorefinery’s gasifier units, and minor volumes of wastewater, which will be treated prior to disposal. Virtually all of the carbon dioxide (over 95%) will be captured and injected at safe pressures (via carbon capture and sequestration) into the sequestration reservoirs that Strategic Biofuels has identified in the Cretaceous sandstones described in its pending IMD Class VI permit application. The wastewater will be treated pursuant to LDEQ specifications prior to discharge into the Ouachita River. The wood-derived ash will be disposed of off-site at local landfills or other LDEQ-approved sites.

The combined output of carbon dioxide (approximately 99% pure) will total an estimated 4,307 short tons per day. All carbon dioxide will be safely sequestered beneath the facility and its surrounding area via the proposed CCS operation. The three injection wells proposed to be constructed and utilized by Strategic Biofuels will have the capacity to accept 8,400 short tons per day (2,800 tons per well). Any two of the three wells could accept all output from the facility with a significant safety margin. This redundancy adds additional safety to the operation of the facility.

While the wastes generated by the proposed facility operation are generally non-hazardous, it is possible, however unlikely, that an unplanned leak of waste gas to the air, soil, or USDW could impact the area immediately surrounding the facility. There will be multiple safety systems and six monitor wells installed at and around the facility, which will constantly monitor the surface and subsurface for any indications of a leak of the waste gas. Any such leak would be immediately halted by a cessation of production and/or injection.

A similarly robust monitoring and detection system will monitor the facility for any accidental discharge of untreated wastewater. Numerous retention ponds, levees and other man-made dikes will impede any such untreated wastewater from reaching the Ouachita River. The wood-derived ash cleaned from the facility's gasifiers is a solid waste that should be safely removed without issue.

Some hazardous materials (certain chemicals used in the power plant and biorefinery) will be utilized on a daily basis in small volumes under controlled / sealed conditions. Any leak that occurs involving such chemicals will be mitigated by an immediate shutdown of refinery operations until the leak has been stopped. Strategic Biofuels has filed, as part of its Class VI permit application, a comprehensive Emergency and Remedial Response Plan in compliance with LAC 43:XVII §3623.

The facility will be located principally on land owned by the Columbia Port Commission, a governmental entity of Caldwell Parish, Louisiana, that has been set aside for industrial development at the Port of Columbia. Some adjacent parcels that are not owned by the Port may also be acquired by Strategic Biofuels for use in support of facility operations. Generally speaking, the facility will occupy a site that has been planned and promoted by the Parish and the State for industrial development for decades.

B. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

Yes.

The median annual household income in Caldwell Parish is \$41,000 (2022). The parish is located in the economically depressed Louisiana 5th Congressional District, wherein the median annual household income is only incrementally better at \$43,000 (2022). Caldwell Parish ranks as one of the most impoverished and sparsely populated areas of the State, with only 9,571 residents (2022). It is the 7th most impoverished Congressional District (out of 435) in the U.S. Currently, most young people entering the workforce feel it necessary to leave the area to find gainful employment.

This will change once construction commences on the proposed facility.

An average 635 construction jobs will be created over the 3+ years of construction, peaking at 1,500 jobs during the height of the construction phase. Many good-paying jobs will also be created further downstream in South Louisiana, where portions of the facility will first be constructed as modules and then transported via barge upriver to the site.

Once the facility is up and running, an estimated 151 full-time positions at the facility will each earn a starting pay of \$70,000 per year, remitted mostly to workers from surrounding communities. According to the Louisiana Department of Economic Development, an additional 750 full-time jobs will indirectly be created in the surrounding communities, in support of the facility and as a result of the additional income flowing into the local economy. The taxes collected for use by the parish's schools will initially double from their current levels and increase substantially over time.

Strategic Biofuels and its partners, contractors and vendors have already impacted the local schools in a very positive manner, especially in the sponsorship of STEM programs and internships.

The construction and operation of the facility is projected to have a beneficial impact upon local property values. Public costs may rise for some municipal services but the influx of additional tax dollars from the facility, its employees and contractors should more than compensate for such increase. Truck traffic, especially trucks transporting feedstock to the facility, will increase, but most truck traffic will follow less congested routes and a specially designed highway interchange and underpass, plus a railroad overpass, is planned to be constructed to ensure such trucks entering and leaving the facility will not be forced to turn left against oncoming traffic, nor cross a railroad at grade. The geographical area within a 50-mile radius of the plant will provide all of the feedstock for the biorefinery and the biomass power plant.

Rail traffic will increase since all of the renewable fuels produced by the biorefinery will be transported from the facility by rail to various end users. However, the railroad utilized by the facility will be accessed without the construction or use of a direct railroad crossing of the major highway in the area (Highway 165). The impact upon local transportation will be minimal.

Some materials will be transported to or from the facility by barge, especially during the construction phase of the project. However, such barge traffic is currently not considered to be a major component of feedstock or product transportation. The local access roads leading from Highway 165 to the facility are being improved to handle the increased volume of trucks entering the Port of Columbia industrial site where the facility is located. The improvement of the access roads is being done not only in anticipation of the increased truck traffic to and from the facility, but also as part of a program to upgrade the general Port of Columbia infrastructure as a means of attracting additional industry to the Parish-owned site.

The minimal planned operational life of the facility is twenty years. However, the robust design of the plant and its sequestration complex would permit the extension of the life of the plant for a much longer period of time, assuming regular plant operations and inspections and the granting of permits from the various State agencies in support of such an extension of facility operational life. Strategic Biofuels or its successors in title will own the facility, and many investors will provide the capital to build and operate the project. Assuming the facility commences operation in 2028, closure would occur sometime in 2048. The sequestration complex will also cease operation and be closed shortly after the last injection from the plant has occurred and the injection wells have been shut in. The Post Injection Site Care and Site Closure (“PISC”) Plan has been filed by Strategic Biofuels as part of its pending Class VI permit application and describes in detail the orderly closure of the facility and the plan for lengthy post-closure monitoring.

Strategic Biofuels has also filed a Class VI Permit Financial Assurance Demonstration Plan as part of its pending Class VI permit application. This plan sets forth the financial responsibility of the company, the cost estimates associated with the plant and sequestration complex closure, and a substantial amount (\$10,000,000) set aside for Emergency and Remedial Response. Further, management has also referenced the Underground Injection Control (UIC) Class VI Program Financial Responsibility Guidance document. A surety bond will be acquired that will comply with LAC 43:XVII Chapter 6, Statewide Order No. 29-N-6 (“SWO 29-N-6”) §609.C and 40 C.F.R. §146.85(a). The instrument will be issued by and drawn on a bank or other financial institution authorized under state or federal law to operate in the State of Louisiana. The instrument will contain the protective conditions of coverage required by LAC SWO 29-N-6 §609.C.4.c and 40 C.F.R. §146.85(a)(4), including a provision that it may not be terminated except due to failure to make payment and such termination may not be final until 120 days after receipt of a cancellation notice. A standby trust fund will be used along with the surety bond so the funds can be deposited in the standby trust if needed.

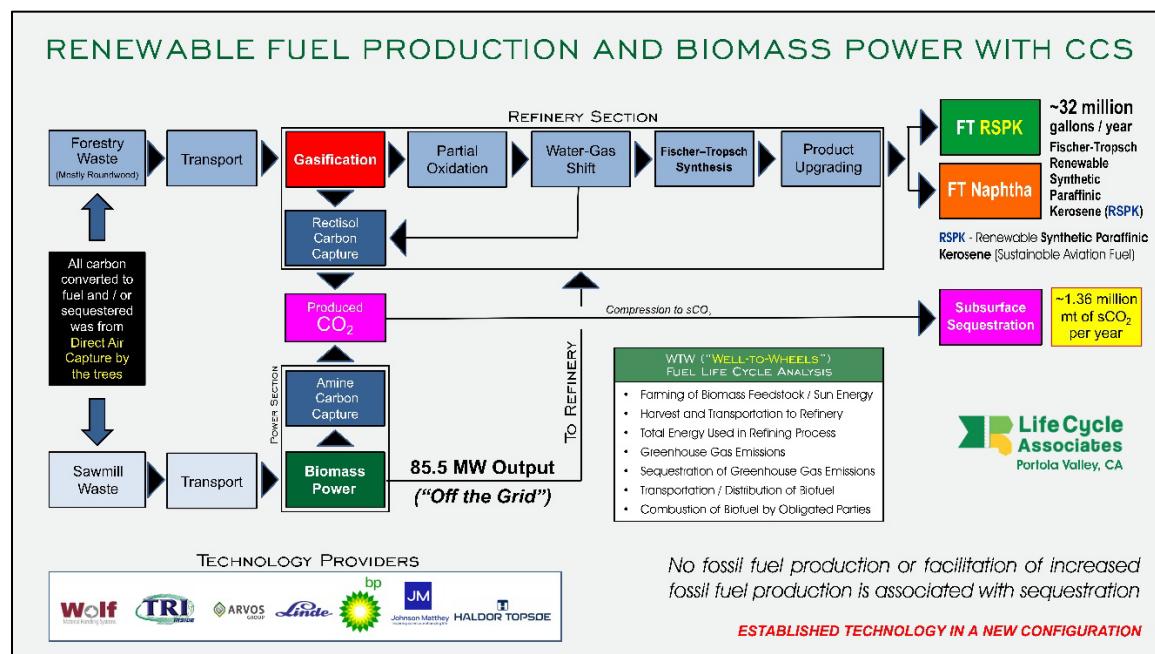
Strategic Biofuels is also applying for LCFS accreditation through the California Air Resources Board, and the LCFS regulations stipulate, among other things, that the facility owner be responsible for the site closure for 100 years after the site has been closed.

Because the facility will be located principally on lands owned by Caldwell Parish that have been set aside for industrial development, there is no likelihood that private individuals will ever purchase the land; and even if they were to somehow acquire rights to the land, it will be with the full knowledge of the past use of the land for industrial purposes, not just by Strategic Biofuels but also by any number of other industrial tenants who have occupied or might occupy the lands or other adjacent lands at some point in the future. Once the site has been closed, the facility has been dismantled, the sequestration complex has been plugged out, and the location restored, the land may be returned to surface use but the subsurface use of the land will be restricted to protect the ongoing underground sequestration of carbon dioxide and other waste gases for the foreseeable future.

C. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

No.

The proposed facility that Strategic Biofuels plans to construct is a state-of-the-art “off the grid” biorefinery with a preliminary Life Cycle Analysis Carbon Intensity (CI) score of -294, which is one of the lowest carbon intensity ratings in the world. The sequestration complex designed for the facility, along with a robust safety protocol and minimal impact to air, soil, and water means this proposed facility will set a high ecological standard for any and all such biorefinery plants that would follow. While the gasification of waste for use in creating renewable fuels is still nascent, the technology used to convert the syngas produced by the gasifiers into SAF and naphtha is a century old and in widespread use in many countries, especially Germany (where it originated) and South Africa. The following chart illustrates the sequence of technology used from arrival of forestry waste at the facility to the creation of renewable fuel and naphtha.



For additional information regarding the sequestration complex that will safely dispose of all produced carbon dioxide from the facility, please refer to the pending Class VI permit application.

Consuming forestry waste in the biomass power plant and the biorefinery to produce renewable fuels while sequestering the carbon from the trees (that captured it from the air) is the optimal life cycle that benefits the environment and the communities that are served by the facility. While the proposed facility does not directly replace older technology that produces more pollution, it does represent a solution to several problems facing this country today.

It removes decaying forestry waste (that emits greenhouse gases) from the managed plantations; it does not draw its power “from the grid”, thus its operation does not require electricity produced from other fuel sources such as coal, oil, gas, or even nuclear power plants; and it produces exceptionally pure synthetic fuel that can supplement or even replace that which is refined from fossil fuels. Using EPA estimates, operation of this facility will be equivalent to removing almost 300,000 gasoline-powered vehicles from the road.

D. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?

No.

As noted above, one of the principal reasons the location of the facility was chosen was because the land is owned by a governmental entity of Caldwell Parish seeking to promote economic development and the land was already designated for industrial use at the Port of Columbia. Other sites were considered in northeast Louisiana, but the Port of Columbia site was deemed optimal because of the confluence of exceptional road, rail, and barge traffic opportunities, as well as a favorable geologic setting for the permanent storage of carbon dioxide.

This means the site can be developed with minimal additional impact to non-industrial lands, for the exact purposes envisioned by the Columbia Port Commission when it acquired and began to develop and market the site to potential industrial customers like Strategic Biofuels. Public ownership and stewardship of the land, along with robust regulatory oversight of the Louisiana Department of Environmental Quality and the Department of Energy and Natural Resources, means there will be an adequate environmental oversight of the facility operations, but it must be emphasized that the sequestration complex planned for the site will make this facility the first grass roots “off the grid” biorefinery of its kind in the region, with minimal environmental impact.

As would be expected in a site near a river, there are some minor wetlands located in the vicinity of the plant site, between the facility and several wells that will be part of the sequestration complex. There will be six monitor wells that are passive in nature in that these six monitor wells will only be equipped with monitoring equipment and will never be used for injection. Of the three Class VI injection wells planned to be drilled and operated, one is located on the plant site while the other two are located a short distance east and southeast of the facility.

To ensure minimal disturbance to the wetlands, the company plans to directionally drill the boreholes through much of it where the pipelines delivering the carbon dioxide (in compressed supercritical form) to the injection wells will be run. The plant site and the sites for the two off-site injection wells are topographically high areas that have not been inundated by floodwaters, even during the exceptional flood event of 1991, in historical time.

There are no known historic or culturally significant areas adjacent to the plant site that will be detrimentally impacted by the facility operations. There is a small park, the Riverton Recreation Area operated by the U. S. Army Corps of Engineers, adjacent to the Port of Columbia; access to the park will be unimpeded by facility operations, however, it is possible that park visitors might notice a minor increase in ambient noise levels because of the proximity to the plant. Otherwise, the recreational area should be unaffected by facility operations.

There is no known precedent for any chemical contamination of the soil at the Port of Columbia, and especially the area where the proposed facility will be constructed. As indicated above, the entire area is in the flood plain of the Ouachita River, but located on a locally high area that is above the historic 100-year flood elevation. In its pending Class VI permit application, Strategic Biofuels has provided an inundation map of the area showing what lands were submerged during the historic flood event of 1991. This map clearly shows the proposed plant site and the sites for the two off-site injection wells were high areas that did not get inundated by floodwaters in 1991. LIDAR DEM maps confirm the elevation of these sites above the historic 62.55-foot 1991 flood elevation.

Because the planned sites are all higher in ground elevation than the historic 100-year flood elevation, no additional diking is considered necessary to provide flood protection. There are existing levees already in place along the periphery of the Ouachita River under the authority of the Tensas Basin Levee District. Some dikes may be constructed around certain areas of the facility as an additional precaution, for both protection from flooding and containment.

The plant site is located in northeast Louisiana, well north of the Gulf Coast and the threat of substantial damage from hurricanes or tropical storms. The facility will be designed to withstand the wind speeds associated with severe thunderstorms and their associated “straight line” winds, as well as to withstand the wind speeds associated with any weakened hurricane or tropical storm that might impact the area from the south.

The MRVA Aquifer, Cockfield Aquifer, and Sparta Aquifer underlie the facility site. The most important MRVA/Cockfield Aquifer will be protected by no less than four strings of casing from the injection activities conducted on site (one well) as well as off-site (two wells). Each casing string will be cemented back to surface and fully tested prior to the commencement of sequestration operations. The Sparta Aquifer, which is currently used for irrigation (but not drinking water) purposes in the area, will also be fully protected.

Strategic Biofuels has thoroughly addressed the protection of these aquifers in its pending Class VI permit application, with the provision of detailed wellbore schematic illustrations that illustrate exactly what and how operations will be conducted in not only the injection wells but also all of the In-zone monitor wells. It should also be noted that an additional basal Wilcox monitor well is planned to be drilled on site, very close to the lone on-site injection well, to monitor for the appearance of injectate at the top of the Upper Confining Zone, the 600 foot-thick Midway Shale.

Strategic Biofuels has also proposed to sample the groundwater from a representative subset of the active water wells that are located within the Area of Review for the sequestration complex and is currently working with the IMD to obtain the State’s approval of its freshwater sampling recommendations. Included in its UIC-60 permit applications and its pending Class VI permit application are many maps that identify the active water wells. In addition, lists of those active water wells that have been diligently identified using all resources available to the company have also been provided.

As noted above, Strategic Biofuels has already received a Synthetic Minor Source air permit from the LDEQ for its facility operations. In granting its permit, LDEQ has already carefully considered all of the risks and benefits associated with the operation of the facility, including taking into account the prevailing wind direction and the potential negative impacts of such minor emissions.

Given the redundant injection well capacity to sequester of all carbon dioxide produced from the facility, the design of the facility to minimize all regulated emissions sufficient to remain below the EPA and LDEQ thresholds of a major source permit requirement, and the thorough treatment of all wastewater prior to discharge, the facility should not pose any potential health risk to the surrounding community. It should also be noted that the area is sparsely populated. That having been said, Strategic Biofuels has identified all of the landowners within the Area of Review and has provided a map and list of each landowner as part of its pending Class VI permit application.

As demonstrated in that application, the company has conducted an extensive geotechnical study of the Area of Review, including the site surface and subsurface geology; soil properties; aquifers; USDW; seismicity risk (which is negligible); and comprehensive geophysical interpretations of the subsurface structure at both Top Upper Confining Zone and Top Lower Confining Zone levels.

E. Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

No.

The facility represents the most prudent and environmentally friendly way to remove carbon from the atmosphere, use it to produce valuable renewable fuels, and then sequester what carbon remains safely underground. The construction of the facility will have a transformative impact upon the local – even the regional – economy, providing hundreds of good-paying jobs and contributing greatly to the tax base.

The proposed facility is a self-sustaining, self-powered, “off the grid” biorefinery, which will sequester virtually all of the carbon dioxide produced by plant operations safely underground. The permanent safe storage of carbon dioxide underground, yielding the facility’s ultra-negative Carbon Intensity, is currently the only method available to substantially reduce the concentration of carbon dioxide in the atmosphere. Strategic Biofuels’ pending Class VI permit application sets forth, in considerable detail, the quality assurance control that will be utilized to protect the environment.

Because of the well-known chemical reactions associated with the biorefinery operations and the manner in which carbon dioxide and the other gases produced during plant operations are captured via the facility’s Rectisol and amine units, there is little likelihood that the concentrations of such waste gases will vary significantly over time. The system is designed to tolerate minor differences in waste gas composition. Any significant change in the waste gas composition will signal an issue with plant operations that will be mitigated as soon as it is detected.

The use of carbon capture and sequestration, combined with the plans to generate all electrical power for the facility through the consumption of sawmill waste in the biomass power plant, makes the Louisiana Green Fuels biorefinery one of the most innovative facilities of its kind in the world.



engineers | scientists | innovators



ENVIRONMENTAL JUSTICE IMPACT REPORT

Prepared for

Strategic Biofuels
303 Wall Street
Columbia, Louisiana 71418

Prepared by

Geosyntec Consultants, Inc.
2600 CitiPlace Court, Suite 500

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ACRONYMS AND ABBREVIATIONS

ACZMW	above confining zone monitoring well
AoR	Area of Review
CCS	carbon capture and storage
CDC	United States Center for Disease Control and Prevention
CEP	Community Engagement Plan
CEJST	Climate & Environmental Screening Tool
CO ₂	carbon dioxide
COPD	chronic obstructive pulmonary disease
DAC	disadvantaged community
DEH	Department of Health
ECHO	Enforcement and Compliance History Online
EJ	Environmental Justice
USEPA or EPA	United States Environmental Protection Agency
ERRP	Emergency and Remedial Response Plan
LAC	Louisiana Administrative Code
LDCC	Louisiana Delta Community College
LDENR	Louisiana Department of Energy and Natural Resources
LDEQ	Louisiana Department of Environmental Quality
LGF	Louisiana Green Fuels
MRVA	Mississippi River Valley Alluvium
NO ₂	nitrogen dioxide
PM	particulate matter
RSEI	Risk
SBf	Strategic Biofuels LLC
TRI	toxic release inventory
TSBF	The Strategic Biofuels Foundation
UIC	Underground Injection Control
USDW	underground source of drinking water

1. SCOPE OF WORK

Strategic Biofuels, LLC (SBf), has prepared this Environmental Justice Impact Report, or “the Report,” in accordance with the Louisiana Department of Energy and Natural Resources (LDENR) Class VI Injection Well Permitting requirements for its Louisiana Green Fuels (LGF) Project (LGF Project or Project), a Sustainable Aviation Fuel (SAF) project at the Port of Columbia in Caldwell Parish, Louisiana.

The Port of Columbia and the people of Caldwell Parish are highly supportive of SBf’s mission to produce SAF and renewable naphtha (a gasoline blendstock) through consumption of forestry waste, mostly “roundwood” feedstock from managed pine plantation forest thinnings compliant with the federal Renewable Fuel Standard. There will be an onsite biomass-fired power plant that will consume primarily sawmill waste supplemented by any other useable biomass waste. The renewable fuels will be shipped via rail to California in compliance with that state’s Low Carbon Fuel Standard (LCFS). State and local partners are also highly supportive of the Project, recognizing the immediate and long-term socioeconomic benefits that the LGF Project will bring to the community. These key factors are integral to derisking this deeply carbon negative footprint transportation fuel production and carbon capture and sequestration (CCS) project.

On December 9, 2022, the United States Environmental Protection Agency (USEPA) sent a letter to state governors recognizing the importance of developing and deploying clean energy technologies that capture and remove carbon from the atmosphere while mitigating impacts on vulnerable communities. USEPA called for states seeking primacy to incorporate Environmental Justice (EJ) and equity into proposed Underground Injection Control (UIC) Class VI programs, including in permitting. USEPA outlined a variety of approaches, such as implementing an inclusive public participation process, consideration of EJ impacts on communities, enforcing Class VI regulatory requirements, and incorporating mitigation measures. Under the Safe Drinking Water Act of 1974 (SDWA), UIC Class VI programs ensure that when carbon dioxide (CO₂) is stored underground to reduce greenhouse gases and mitigate climate change, underground sources of drinking water (USDWs) are protected.

As Louisiana now has primacy, LDENR follows the USEPA’s EJ guidelines for Class VI permits (“Technical Guidelines for Assessing Environmental Justice in Regulatory Analysis,” USEPA 2016, 2023 *draft*). LDENR requires Owners (Class VI applicants) to conduct an environmental justice screening review, perform assessments and prepare an Environmental Justice Impact Report as part of the application process.

1.1 Background

On March 15, 2023, SBf submitted a Class VI application for three injection wells to USEPA Region 6. The application was deemed administratively complete on April 24, 2023, by USEPA. From the date of submission to December 28, 2023, SBf did not receive any Administrative Notice of Deficiency or Request for Additional Information from USEPA Region 6.

On December 28, 2023, USEPA signed a final rule granting the State of Louisiana primary enforcement (Primacy) for the Class VI Program. As a result, enforcement codes for the application now fall under the Louisiana Regulations outlined in Statewide Order No. 29-N-6 (Louisiana Administrative Code [LAC] 43:XVII. Chapter 36). Compliance with all LAC requirements necessitated certain changes and additions to the USEPA Region 6 application.

As a result, SBf prepared this Report to supplement the Class VI application to meet and reference the standards set forth under LAC 43: XVII. Chapter 36. This Report incorporates and expands on information from the socioeconomic and EJ analysis completed by the Gulf South Research Corporation for the LGF Project during the planning phase in 2023 (Gulf South Research Corporation 2023).

1.2 Report Structure

This Report outlines five assessment steps or “themes” and actions to assess EJ issues associated with the development of the LGF injection wells:

- Step 1: Identify communities with potential EJ concerns
- Step 2: Enhance public involvement
- Step 3: Conduct appropriately scoped EJ assessments
- Step 4: Enhance transparency throughout the permitting process
- Step 5: Ensure there are no adverse effects to USDWs and the communities they may serve

An evaluation of each of these steps for the LGF Project injection wells is presented herein. Overall, the analysis will be used to update screening assessments completed as part of the Community Benefits Plan and the most recent National Environmental Policy Act (NEPA) Environmental Assessment and to investigate several new indicators to better understand potential EJ concerns in the community surrounding the LGF Project site.

SBf recognizes that choosing Caldwell Parish is a multi-decade commitment to positively impact local community lives. In this Report, SBf highlights the ongoing collaboration with community partners such as Parish and town officials, industrial and economic development organizations, Louisiana Delta Community College (LDCC), industry groups and workforce development organizations to secure a skilled, high-quality workforce throughout the life of the Project. This Report also illustrates the opportunities that the LGF Project will continue to create for this disadvantaged community and for its residents from underrepresented and underserved backgrounds.

2. IDENTIFY COMMUNITIES WITH POTENTIAL EJ CONCERNs

2.1 Screening EJ Assessments

To integrate EJ considerations into the permitting process for UIC wells, the first step is identifying nearby communities with EJ concerns. The 2023 guidance recommends exploring potential EJ community concerns early in the process, either during site selection, or well before submitting a Class VI permit application.

The most recent socioeconomic assessment identified the region of influence as the towns of Columbia, Louisiana in Caldwell Parish and Monroe, Louisiana in Ouachita Parish. Even though Monroe is situated 25 miles north of the planned facility, it was included in the analysis due to the virtual certainty of the facility employing workers from the larger, more metropolitan region. Conversely, an earlier EJ assessment was conducted based only on a 3-mile radius surrounding the project operational area.

Key results of the USEPA EJScreen assessment from the 2023 analysis (3-mile radius) are as follows:

- The potentially affected population was 373 people.
- According to the 2016-2022 American Community Survey, the population living in the 3-mile radius is 79% Caucasian, and the EJScreen 2010 Census reported the 3-mile area was 81% Caucasian.
- Two EJ indexes were higher than 50th percentile compared to Louisiana and all of the United States: Lead Paint (52nd and 53rd percentile, respectively) and Wastewater Discharge (72nd and 75th percentile, respectively).
- Three EJ Indexes were higher than the 50th percentile compared to all of the United States: Particulate Matter (PM) 2.5 (66th percentile), Air Toxics Cancer Risk (67th percentile), and Air Toxics Respiratory Hazard Index (68th percentile).
- The report concluded that, “Given the results of the EJScreen Standard Report, wastewater discharge, lead paint exposure, and air quality are three key environmental impacts that should be investigated further to see if they may disproportionately impact minority and low-income populations.”

2.2 Updated Screening EJ Assessment

The assessment to identify communities with potential EJ concerns for this Class VI permit application has been built upon the previous EJ analyses. This assessment used a revised area of interest and the most current EJScreen Tool (Version 2.3) (USEPA 2024a), which was updated in July 2024. One key EJScreen update is that the Air Toxics Cancer Risk and Air Toxics Respiratory Hazard Index have been replaced with the indicator "Toxic Releases to Air" in the current version of EJScreen (Version 2.3) available at the time of this assessment.

2.2.1 The Area of Review

The EJ assessment in support of the Class VI permit application will focus on the Area of Review (AoR) associated with the CO₂ injection wells, which delineates the maximum lateral extent of the underground pressure front and/or the CO₂ storage plume. The AoR overlaps with the 3-mile

radius previously evaluated but extends significantly outward in all directions, necessitating the need to assess additional communities. The AoR for the EJ assessment is shown in Figure 1 and covers an approximately 5-mile radius around the Project site and injection wells, totaling about 92 square miles. The AoR is mainly within Caldwell Parish, with a small area (approximately 5 square miles) extending into a very sparsely populated part of Richland Parish comprising about 5% of the AoR area.

The geographic census tract and block groups that are contained in the AoR are shown on Figure 1 and summarized in Table 1.

Table 1: Geographic Boundaries in the EJ Assessment

Parish (Code)	Tract	Tract GEOID	Block Group	EJ Block Group GEOID [1]
Caldwell (021)	000100*	22021000100	1	220210001001
Caldwell (021)	000100*	22021000100	2*	220210001002
Caldwell (021)	000100*	22021000100	3	220210001003
Caldwell (021)	000200	22021000200	1	220210002001
Caldwell (021)	000200	22021000200	3	220210002003
Richland (083) ^[2]	970600	22083970600	3	220839706003

Notes:

* Proposed project is in this block group and tract.

[1] GEOID, used for searching databases = state code + parish (county) code + tract + block group. Louisiana state code = 22. Parish code for Caldwell = 021 and Richland = 083. The next GEOID numbers are 6-digit tract IDs, followed by the single digit block group number.

[2] A sparsely populated edge of Richland Parish, geographically isolated on the opposite side of a river, accounts for approximately 5% of the AoR, and is not the focus of the EJ assessment.

Tables 2, 3, and 4 show a summary of the EJScreen results for demographic indicators, environmental burden indicators, and the EJ Index percentiles. More detailed EJScreen results are shown in Table 5.

2.2.2 Demographics

Several block groups in this area have demographic indices exceeding the 80th percentile, with key issues in the area relating to low income (as high as the 91st percentile compared to the rest of Louisiana); high unemployment (as high as the 88th percentile compared to the rest of Louisiana); low high school education; and some block groups with higher percentiles of populations below age 5 or over age 64. Most of the block groups in the area have fewer minority residents than the rest of Louisiana. The exception is block group 220210002003, which is in the 77th percentile.

Table 2: Demographics by Block Group and Area of Review

Block Group GEOID:	Caldwell Parish Block Groups in Area of Review					Area of Review —
	22021-0001001	22021-0001002*	22021-0001003	22021-0002001	22021-0002003	
Demographic Details	State (National) Percentiles					
Demographic Index	19 (30)	47 (60)	58 (72)	52 (67)	86 (93)	86 (74)
Supplemental Demographic Index	65 (81)	45 (66)	86 (93)	83 (92)	79 (90)	74 (61)
People of Color	5 (3)	50 (56)	5 (0)	9 (9)	77 (80)	44 (49)
Low Income	41 (59)	44 (62)	91 (96)	83 (92)	87 (94)	76 (88)
Unemployment Rate	85 (91)	88 (94)	0 (0)	39 (33)	88 (94)	78 (85)
Limited English Speaking Households	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Population with Less Than High School Education	78 (85)	0 (0)	88 (91)	94 (95)	85 (90)	75 (84)
Population under Age 5	37 (33)	0 (0)	94 (97)	0 (0)	60 (62)	59 (61)
Population over Age 64	95 (94)	85 (85)	33 (32)	38 (37)	31 (30)	61 (59)

Notes:

Values shown in each row are the State Percentile (National Percentile) for each Index per Block Group

* = Block Group containing proposed project. Bold text = Exceeds National Percentile.

Color Key:

State Percentile	Color
≤ 50	White
> 50 - 80	Light Blue
> 80	Dark Blue

2.2.3 EJScreen Environmental Burdens

“Drinking water non-compliance points” and “lead paint” were the only environmental burden indicators above the 50th percentile. Notably “drinking water non-compliance points” was in the 95th percentile compared to the State and 99th percentile compared to the United States. However, the exceedance of this indicator was restricted to one block group (GEOID 220210002001) with a population of 474 people.

Table 3: Environmental Burden by Block Group and Area of Review

Block Group GEOID:	Caldwell Parish Block Groups in Area of Review					Area of Review —
	22021-0001001	22021-0001002*	22021-0001003	22021-0002001	22021-0002003	
Environmental Burden	State (National) Percentiles					
Particulate Matter 2.5	9 (36)	9 (36)	9 (36)	7 (35)	7 (35)	8 (36)
Ozone	25 (13)	25 (13)	25 (13)	21 (12)	21 (12)	23 (13)
Nitrogen Dioxide (NO ₂)	12 (9)	30 (20)	13 (10)	8 (6)	24 (17)	19 (13)
Diesel Particulate Matter	3 (5)	12 (5)	3 (5)	5 (5)	12 (5)	8 (6)
Toxic Releases to Air (toxicity-weighted concentration)	6 (16)	18 (30)	12 (23)	24 (37)	15 (27)	16 (28)
Traffic Proximity and Volume (daily traffic count/distance to road)	16 (7)	16 (8)	7 (3)	9 (3)	23 (11)	16 (7)
Lead Paint (% pre-1960s housing)	34 (29)	63 (49)	28 (25)	40 (33)	64 (50)	50 (40)
Superfund Proximity (site count/km distance)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
RMP Proximity (facility count/km distance)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hazardous Waste Proximity (facility count/km distance)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Underground Storage Tanks (count/km ²)	19 (30)	0 (0)	0 (0)	21 (31)	40 (43)	29 (35)
Wastewater Discharge (toxicity-weighted concentration/m distance)	31 (36)	36 (39)	20 (29)	24 (31)	27 (33)	28 (34)
Drinking Water Non-Compliance (points)	0 (0)	0 (0)	0 (0)	95 (99)	0 (0)	74 (90)

Notes:

Values shown in each row are the State Percentile (National Percentile) for each Index per Block Group

* = Block Group containing proposed project. Bold text = Exceeds National Percentile.

Color Key:

State Percentile	Color
≤ 50	White
> 50 - 80	Light Blue
> 80	Dark Blue

2.2.4 EJScreen EJ Index Results

An EJScreen EJ Index combines environmental burden indicators with the demographic indicators of income and race. Recently, USEPA has introduced the Supplemental Index, which does not include race as a demographic indicator, and instead uses indicators for income, disabilities, limited English speaking, high school education, and low life expectancy to develop the index.

The EJ Index results are presented below in Table 4. Results using the Supplemental Index, which can be reviewed in Table 5, are generally similar to the EJ Index, but because most of the block groups have a low percentile for “people of color,” for some indicators the EJ Supplemental Index

percentiles are higher (both compared to the state or nationally), than the EJ Index. As discussed in the Community Benefits Plan, the jobs provided by the project will improve socioeconomic conditions in the area and will provide measurable benefit to reducing EJ issues in Caldwell Parish.

Table 4: EJSscreen EJ Index by Block Group and Area of Review

Block Group GEOFID:	Caldwell Parish Block Groups in Area of Review					Area of Review
	22021-0001001	22021-0001002*	22021-0001003	22021-0002001	22021-0002003	
EJ Index	State (National) Percentiles					
Particulate Matter 2.5	8 (34)	14 (52)	17 (59)	12 (55)	21 (73)	16 (60)
Ozone	19 (13)	35 (23)	41 (29)	33 (24)	51 (41)	41 (29)
Nitrogen Dioxide (NO2)	12 (11)	38 (36)	25 (26)	16 (15)	52 (50)	35 (34)
Diesel Particulate Matter	3 (4)	18 (18)	7 (10)	10 (12)	34 (31)	18 (18)
Toxic Releases to Air	5 (16)	25 (46)	21 (45)	34 (58)	38 (67)	28 (53)
Traffic Proximity	14 (8)	24 (17)	14 (8)	16 (7)	53 (38)	30 (21)
Lead Paint	28 (29)	61 (63)	42 (48)	49 (54)	86 (85)	60 (63)
Superfund Proximity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
RMP Facility Proximity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Hazardous Waste Proximity	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Underground Storage Tanks	20 (37)	0 (0)	0 (0)	34 (55)	69 (80)	38 (52)
Wastewater Discharge	23 (34)	44 (55)	33 (53)	35 (52)	59 (73)	43 (59)
Drinking Water Non-Compliance	0 (0)	0 (0)	0 (0)	81 (92)	0 (0)	56 (75)

Notes:

Values shown in each row are the State Percentile (National Percentile) for each Index per Block Group.

* = Block Group containing property. Bold text = Exceeds National Percentile.

Color Key:

State Percentile	Color
≤ 50	White
> 50 - 80	Light Blue
> 80	Dark Blue

USEPA (2023) does not provide specific guidance on the percentile level that designates a community as having EJ concerns that necessitate further investigation. However, USEPA's 2016 "Technical Guidance for Assessing Environmental Justice in Regulatory Analysis" suggests using the 80th percentile as a starting point for identifying geographic areas in the United States that may require additional consideration, analysis, or outreach when using EJSscreen. USEPA has recently released a revised version of this report, however, and although it is not final, the new draft does not specify a particular percentile that would trigger further review (USEPA 2023). To be more inclusive of potential EJ concerns, this assessment has used the benchmarks of the 50th and 80th percentiles in any individual block group to trigger further review.

Based on the EJ Index and Supplemental Index (shown in Table 5, and summarized in Table 4), the following indicators were above the 80th percentile in at least one block group:

- Lead Paint

- Drinking Water Non-Compliance

Additionally, these indicators were above the 50th percentile in at least one block group:

- Ozone
- Nitrogen Dioxide (NO₂)
- Traffic Proximity
- Underground Storage Tanks
- Wastewater Discharge

These indicators require further review and are discussed in Section 4.

Step 1 of the UIC Class VI permit EJ evaluation also calls for engaging any EJ-focused groups that can facilitate communication with the community and the development of a community engagement plan. These activities are addressed in Section 3 below.

Table 5: Socioeconomic and Environmental Justice Indicators Summary in Area of Review and Caldwell Parish

Parish GEOID:	Caldwell Parish, Block Groups, Louisiana										Caldwell Parish, Louisiana		Area of Review	
	22021		22021		22021		22021		22021		22021		–	
	22021000100		22021000100		22021000100		22021000200		22021000200		–		–	
	220210001001		220210001002*		220210001003		220210002001		220210002003		–		–	
	459		366		1367		474		1737		9,658		1,453	
Indicator	State Percentile	National Percentile	State Percentile	National Percentile	State Percentile	National Percentile	State Percentile	National Percentile	State Percentile	National Percentile	State Percentile	National Percentile	State Percentile	National Percentile
US EPA EJScreen Environmental Burden Details														
Particulate Matter 2.5 (ug/m3)	9	36	9	36	9	36	7	35	7	35	7	35	8	36
Ozone (ppb)	25	13	25	13	25	13	21	12	21	12	19	12	23	13
Nitrogen Dioxide (NO2) (ppbv)	12	9	30	20	13	10	8	6	24	17	12	9	19	13
Diesel PM (ug/m3)	3	5	12	5	3	5	5	5	12	5	5	5	8	6
Toxic Releases to Air (toxicity-weighted concentration)	6	16	18	30	12	23	24	37	15	27	14	24	16	28
Traffic Proximity and Volume (daily traffic count/distance to road)	16	7	16	8	7	3	9	3	23	11	14	7	16	7
Lead Paint (% pre-1960s housing)	34	29	63	49	28	25	40	33	64	50	45	36	50.01	40
Superfund Proximity (site count/km distance)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RMP Proximity (facility count/km distance)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous Waste Proximity (facility count/km distance)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Underground Storage Tanks (count/km2)	19	30	0	0	0	0	21	31	40	43	25	33	29	35
Wastewater Discharge (toxicity-weighted concentration/m distance)	31	36	36	39	20	29	24	31	27	33	23	31	28	34
Drinking Water Non-Compliance (points)	0	0	0	0	0	0	95	99	0	0	90	93	74	90
US EPA EJScreen Socioeconomic Details														
Demographic Index USA	N/A	30	N/A	60	N/A	72	N/A	67	N/A	93	N/A	61	N/A	74
Demographic Index State	19	N/A	47	N/A	58	N/A	52	N/A	86	N/A	47	N/A	86	N/A
Supplemental Demographic Index USA	N/A	81	N/A	66	N/A	93	N/A	92	N/A	90	N/A	80	N/A	61
Supplemental Demographic Index State	65	N/A	45	N/A	86	N/A	83	N/A	79	N/A	61	N/A	74	N/A
People of Color	5	3	50	56	5	0	9	9	77	80	35	41	44	49
Low Income	41	59	44	62	91	96	83	92	87	94	59	77	76	88
Unemployment Rate	85	91	88	94	0	0	39	33	88	94	79	86	78	85
Limited English Speaking Households	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Population with Less Than High School Education	78	85	0	0	88	91	94	95	85	90	72	82	75	84
Population under Age 5	37	33	0	0	94	97	0	0	60	62	58	59	59	61
Population over Age 64	95	94	85	85	33	32	38	37	31	30	60	59	61	59
US EPA EJScreen Environmental Justice Index [1]														
EJ Index for Particulate Matter 2.5	8	34	14	52	17	59	12	55	21	73	12	51	16	60
EJ Index for Ozone	19	13	35	23	41	29	33	24	51	41	29	22	41	29
EJ Index for Nitrogen Dioxide (NO2)	12	11	38	36	25	26	16	15	52	50	26	25	35	34
EJ Index for Diesel Particulate Matter	3	4	18	18	7	10	10	12	34	31	12	12	18	18
EJ Index for Toxic Releases to Air	5	16	25	46	21	45	34	58	38	67	20	40	28	53
EJ Index for Traffic Proximity	14	8	24	17	14	8	16	7	53	38	24	16	30	21
EJ Index for Lead Paint	28	29	61	63	42	48	49	54	86	85	49	52	60	63
EJ Index for Superfund Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EJ Index for RMP Facility Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EJ Index for Hazardous Waste Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EJ Index for Underground Storage Tanks	20	37	0	0	0	0	34	55	69	80	34	49	38	52
EJ Index for Wastewater Discharge	23	34	44	55	33	53	35	52	59	73	31	47	43	59
EJ Index for Drinking Water Non-Compliance	0	0	0	0	0	0	81	92	0	0	59	79	56	75
US EPA EJScreen Supplemental Index [2]														
Supplemental Index for Particulate Matter 2.5	11	56	9	47	13	66	10	64	10	61	8	53	11	59
Supplemental Index for Ozone	37	20	29	16	46	26	37	23	35	22	28	19	37	21
Supplemental Index for Nitrogen Dioxide (NO2)	17	14	34	28	23	21	14	11	37	33	19	16	28	24
Supplemental Index for Diesel Particulate Matter	3	5	12	11	5	7	7	8	17	14	6	7	10	9
Supplemental Index for Toxic Releases to Air	7	26	19	40	19	46	39	67	23	50	15	38	21	47
Supplemental Index for Traffic Proximity	21	10	17	9	10	5	13	5	37	20	17	9	21	10
Supplemental Index for Lead Paint	43	44	61	59	44	47	58	58	79	77	50	51	59	59
Supplemental Index for Superfund Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supplemental Index for RMP Facility Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supplemental Index for Hazardous Waste Proximity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supplemental Index for Underground Storage Tanks	26	49	0	0	0	0	35	58	59	71	25	42	27	39
Supplemental Index for Wastewater Discharge	43	56	41	51	35	56	40	58	43	59	29	47	39	56
Supplemental Index for Drinking Water Non-Compliance	0	0	0	0	0	0	95	99	0	0	64	81	0	0

Notes:

* = Block Group containing property

[1] EJScreen EJ index combines an environmental factor with demographics: income and race

[2] EJScreen Supplemental EJ Index combines an environmental factor with demographics not including race: income, disabilities, limited English speaking, high school education, and low life expectancy.

Color Key	
Percentile	Color
≤ 50	
> 50 - 80	Light Blue
> 80	Dark Blue

3. ENHANCE PUBLIC INVOLVEMENT

Executive Order 14096 calls for the removal of barriers to meaningful involvement that affect communities with EJ concerns, including those related to disability, language access, and lack of resources. USEPA's meaningful involvement means that the project involves or engages "persons or communities with EJ concerns that are potentially affected by Federal activities by:

- Providing timely opportunities for members of the public to share information and concerns and participate in decision-making processes,
- Fully considering public input provided as part of decision-making processes,
- Seeking out and encouraging the involvement of persons and communities affected by Federal activities; and
- Providing technical assistance, tools, and resources to assist in facilitating meaningful and informed public participation, whenever practical and appropriate" (E.O. 14096).

Through continuous engagement, evaluation, and investment, the LGF Project developer, SBf, is committed to creating a project that is inclusive and benefits the well-being of the surrounding community and stakeholders.

3.1 Community Jobs and Justice Leads

Dr. Paul Schubert, SBf's Chief Executive Officer, leads a team of highly experienced energy, petrochemical, and renewable fuels technology experts focused on developing a series of deeply carbon negative plants in Northern Louisiana. A native of Caldwell Parish, SBf's Chief Operating Officer, Mr. Bob Meredith, took on an early role as primary community ambassador for the Project based on his local experiences and lifetime involvement in the community and the state. Mr. Ken Roberts, Vice President of Commercial Development and Community Benefit programs, brings more than 40 years of experience in the energy sector globally and in implementing community benefits programs. Dr. Schubert, Mr. Meredith and Mr. Roberts are supported by the LGF team of community relations consultants.

3.2 Stakeholder Engagement

SBf's leadership has deep, generational connections throughout Caldwell Parish and the state, which has facilitated robust community involvement and a clear understanding of stakeholder needs and challenges. Regarding all citizens as stakeholders, the SBf development team, with SBf leaders living in the community, has conducted meetings since project inception throughout the Project area. A Community Engagement Plan (CEP) was created for the Project in 2021 and is managed and updated with information gained through development of the LGF Project. The CEP outlines how the LGF Project Team will continue to enhance participation levels with local governments, educational institutions and community-based organizations that support and work with disadvantaged communities. The CEP approach prioritizes frequent and open communication, trust-building, collaboration, and equity. Engagement activities incorporated into the CEP include individual in-person meetings, townhall meetings, newspaper ads announcing project development progress, social media communication, letters, newsletters, websites, and significant participation and major sponsorship in community events.

Community engagements have been as follows:

- April 2021: LA Governor John Bel Edwards visited the plant site and announced the LGF Project to a large gathering in downtown Columbia
- January 2022: Community Leader Town Hall to inform leaders of project progress and establish lines of communication (schools, churches, LGF sponsored STEM program announcement)
- December 2022: Organized a ground-breaking event at the plant site for a key infrastructure upgrade with LA Secretary of Transportation and Development as speaker, over 200 in attendance.
- February 2023: Received unanimous local approval of the Caldwell Parish Police Jury, Caldwell Parish School Board and the Caldwell Parish Sheriff (taxing authorities within the parish) as required for receipt of Louisiana's Industrial Tax Exemption, otherwise provided by state law
- March 2023: In submission of this Class VI Permit application to USEPA and subsequently to LDENR, SBf has made no claim to "Confidential Business Information" (other than licensed materials), choosing to welcome engagement and pursue permit issuance with maximum public opportunity for review and disclosure
- September 2023: Synthetic Minor Air Permit awarded by the LDEQ after public notice, receiving no comments from any person or entity in Caldwell Parish or the State of Louisiana and only one comment from a national non-governmental organization (NGO).
- February 2024: With Louisiana Workforce Commission, participated in initial planning of 1st Parents/Students Career Night at Caldwell Parish High School, had a major presence at well-attended event and engaged with numerous families about career opportunities for high school and vo-tech graduates
- April 2024: Townhall meeting format hosted by a local community bank with open dialogue (introducing SBf Leaders and executives from 1st LGF Project global strategic investor to all community leaders)
- July 2024: Townhall meeting format hosted by a local community bank with open dialogue (introducing executives from 2nd LGF Project global strategic investor to all community leaders)
- September 2024: Participated in 2nd Parents/Students Career Night at Caldwell Parish High School, had a major presence at well-attended event and engaged with numerous families about career opportunities for high school and vo-tech graduates
- Since project inception: Frequent meetings and communication since project inception with the Caldwell Parish Police Jury (parish government), the Caldwell Parish School Board and other local governing bodies to keep them abreast of project development
- Since project inception: On a quarterly basis, SBf has emailed highly informative Stakeholder Updates to hundreds of persons interested in project development progress, including community leaders and government officials at all levels

- September 2024: From its earlier version, announced a fully updated and highly informative website describing the LGF Project

Hundreds of local citizens, business owners, and community leaders were present at these meetings and provided SBf with excellent positive feedback and insight into the needs and desires of the community. The SBf development team has been in regular communication with a broad spectrum of stakeholders and will continue to engage elected officials, landowners, disadvantaged communities, agencies, labor unions, community organizations, environmental organizations, economic development groups, academic institutions, and other interested parties to allow for meaningful engagement.

Meetings have included two-way communications, where SBf has provided educational information about biorefining, CCS and the global efforts toward decarbonization, the nature and scope of the LGF Project and its monumental economic impact on the community, parish and region. As well, information was sought from stakeholders, regarding 1) the issues of concern and needs of their communities; 2) additional stakeholders and community organizations SBf should meet with; and 3) effective means of outreach to stakeholders in the area.

Appendix A includes the following: Community, Labor, and Stakeholder Representatives Engaged by the Project; Caldwell Parish governmental entities unanimous resolutions of project support, Letters of Support; and Community and Labor Stakeholders to Be Engaged.

3.3 Community-Focused Agreements

To create a measurable social impact in the community, SBf and its partners have been actively engaged in developing community programs and investments. These include the following:

- Caldwell Conquerors Café: A partnership with Caldwell Parish High School, a community bank executive and benefactor, the Louisiana Department of Education, and Louisiana Rehabilitation Services. Louisiana Rehabilitation Services is providing secured funding, totaling approximately \$5M, for the Café project over the next 5 years to repurpose a previously abandoned building in downtown Columbia, Louisiana, to provide first-job accommodations to high school students with disabilities (and later, other community members) to develop basic skills, enabling transition into general workforce opportunities in Caldwell Parish. Students will prepare and serve light fare meals and coffee to visitors, encouraging additional business traffic in downtown Columbia. This project is currently underway and was initiated as a summer school early training program in 2024 with 12 students in attendance, all of whom received certifications for food handling and service positions at the Café. Thirty students, receiving special education services from Caldwell Parish High School, are part of this continuing program extending throughout the school year along with other students interested in pursuing opportunities in other food service businesses in the local community.
- An Agricultural Enterprise Program designed to offer students, including those with disabilities, hands-on experience in agriculture, addressing both food insecurity and food desert concerns. Through this initiative with Caldwell Parish High School, Future Farmers of America and Louisiana State University Agricultural Center, 50+ students will acquire essential life skills while contributing to sustainable farming practices,

preparing them for post-graduation success. An expected investment goal of approximately \$500,000 will be required to fully implement this program that will include a commercial operational greenhouse that will serve the local community that is deficient in fresh produce availability. SBF and partners have sought advisory expertise from the nonprofit, Partners Creating Community, to develop the program framework and help establish funding needs from which to seek additional supporters. An early launch of this program is underway that includes basic gardening skill development activities using existing open-box vegetable gardens at Caldwell Parish High School.

- Community Benefit funds, totaling more than \$50,000, have been donated to multiple educational and community programs including the local Junior High robotics team, youth athletics, multiple school organizations, a higher education scholarship committee targeting deserving but disadvantaged high school graduates, local nonprofits, a food bank and early childhood education. Project partners have also contributed to the community, with LGF contractor Hatch pledging \$10,000 per year over multiple years for school robotics and Hunt Guillot and Associates donating \$2,500 for 22 special needs student athletes at Caldwell Parish High School to participate in the LA Gumbo Track Meet at Louisiana Tech University.
- SBF VP Ken Roberts is an active member of the Louisiana Workforce Development Round Table at Caldwell Parish High School which sponsors the annual Parent Student Career Night. This group of community volunteers and businesses in Caldwell Parish recently helped initiate the establishment of an Electrical Technical Diploma pathway for upper-level students at the High School. This program is taught by Caldwell Parish High School faculty and also supported by Monroe International Brotherhood of Electrical Workers (IBEW) with part-time on-campus support. Credits from this program are eligible for transfer to Louisiana Delta Community College with added potential for scholarships and future apprenticeships for those completing the foundational program at Caldwell Parish High School.
- SBF VP Dr. Robert Freerks and Ken Roberts have been collaborating with Louisiana Delta Community College to develop an enhanced technology process curriculum to be launched in early 2025 at the LDCC Campus in Monroe Louisiana, about 30 miles from the site of the Louisiana Green Fuels Project. This program will focus on New Energy Transition technology and includes biomass to power and carbon negative fuels from Geo sequestration as planned for the Louisiana Green Fuels Project. This program is meant to provide new pathways for students in the local and regional communities who have an interest in careers in this New Energy sector including nearby Louisiana Green Fuels Project, and also continues to foster workforce development and strengthen local support for the LGF project.

Appendix A also includes the Community Impacts Presentations which LGF has given to the public detailing some of the efforts to date in support of the community.

A key element in LGF's Community Benefits Plan is the creation of The Strategic Biofuels Foundation (TSBF) aimed at providing benefits from the LGF Project to deserving community programs, especially to local disadvantaged communities (DACs). TSBF, a 501c(3) entity, has been established in 2024. There will be 15 Foundation Advisory Board Members selected from

community leaders, who will participate in nomination of Community Benefits projects and donations that have direct positive benefits for Caldwell Parish and the DACs in the LGF Project Area. SBf Senior Management will serve as Voting Members of TSBF for funding decisions. Through the development phase prior to the start of LGF operations, TSBF has a goal to allocate \$50,000 to \$100,000 annually to prioritized community programs.

TSBF's planned upcoming goals include the following:

- Finalize the charter, goals, Advisory Board, and Voting Members for TSBF—2024
- Create a support roadmap for prioritized spending through the project development phase, which will include a concise list of community programs and projects—2024 initial; semiannual updates thereafter
- Create a strategy and contribution goals for continued community benefits funding through construction commencing in 2026 and the start of LGF facility operations in 2029.

3.4 Stakeholder Outreach for Environmental Review

In addition to the Class VI application and coordination underway with LDENR, the LGF Project has initiated the environmental permitting process with several other key agencies. For the Air Permit, referenced in Section 3.2 above, a notice requesting public comment on the proposed permit was published on June 8, 2023, on the Louisiana Department of Environmental Quality (LDEQ) website, and copies of the public notice were also mailed to individuals who are on the Office of Environmental Services mailing list. There was only one comment received and considered by LDEQ prior to issuing the final permit on September 19, 2023. In addition, other upcoming LDEQ and United States Army Corps of Engineers permitting will go through public notice. Lastly, SBf plans to consult with lead agencies and the US Department of Energy (as part of a pending application to its Loan Program Office) to meet additional public engagement requirements which may be designated as part of the NEPA review process.

4. ENVIRONMENTAL JUSTICE ASSESSMENTS

Step 3 of the UIC Class VI permit EJ evaluation calls for conducting an appropriately scoped EJ assessment. For this, we used the information from the screening assessment in Step 1 and the community feedback from Step 2 to conduct more specific assessments that address the unique circumstances of the permit application. Following Executive Order 14906, the UIC Class VI guidance (USEPA 2023) aims to consider the "effects (including risks) and hazards related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns." The guidance memo provides various factors to consider, but it does not mandate which analyses should be conducted or the specific methodologies that should be used in order to achieve this goal. Some of the topics referenced in the UIC Class VI guidance include the following:

- Evaluation of existing environmental data, including water monitoring, identification of wellhead protection areas, ongoing and climate or, as appropriate, other data
- Evaluation of potential health and environmental effects of the permitting action on the affected community
- Evaluation of the potential health and non-health adverse effects (e.g., noise, odor, and traffic) of the permitting action
- Evaluation of the potential impact of the permit action together with impacts from other regulated and nonregulated sources of pollution and nonpollution stressors in the affected community
- Evaluation of mitigation measures to minimize potential adverse effects of the permitting action on the affected community

4.1 Overview of Current Assessment Data Sources

The following data were reviewed to evaluate EJ issues in the AoR:

- USEPA Environmental Justice Screening and Mapping Tool Version 2.3 (EJScreen): [EJScreen \(epa.gov\)](https://www.epa.gov/ejscreen)
- Council on Environmental Quality Climate and Economic Justice Screening Tool (CEJST): <https://screeningtool.geoplatform.gov/>
- USEPA AirToxScreen: [AirToxScreen Mapping Tool | EPA](https://www.epa.gov/airtotscreen)
- Louisiana Department of Health Data (DEH) Explorer: [Health Data Explorer \(la.gov\)](https://www.doh.la.gov/ehs/ehs-data-explorer)
- LDENR SONRIS Data Portal: <https://www.sonris.com>
- Centers for Disease Control and Prevention (CDC) PLACES Health Data: [PLACES: Local Data for Better Health | CDC](https://www.cdc.gov/places/local-data-for-better-health)
- USEPA Risk-Screening Environmental Indicators (RSEI) Model: [Risk-Screening Environmental Indicators \(RSEI\) Model | EPA](https://www.epa.gov/rseis/risk-screening-environmental-indicators-rsei-model)
- USEPA Toxics Release Inventory database: [Toxics Release Inventory \(TRI\) Program | EPA](https://www.epa.gov/tri-program/toxics-release-inventory-tri-program)

- USEPA Enforcement and Compliance History Online (ECHO) database: <https://echo.epa.gov/trends/loading-tool/water-pollution-search/>
- USEPA Underground Storage Tank (UST) Finder database: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc>

Using these tools, we evaluated the following criteria:

- Sensitive Receptors
- Health Conditions
- Air Quality Indicators
- Climate Change Indicators
- Water Quality Indicators
- Nearby Regulated Facilities
- Proximity to Native Populations
- Lead Paint
- Underground Storage Tanks

Where applicable, comparisons within the AoR were made to the rest of Louisiana and the rest of the United States using percentiles. Indicators over the 50th and 80th percentiles are highlighted in a series of “heatmap” tables and referenced throughout the assessment. Where percentiles were not available, comparisons to other block groups, tracts, parishes, or the rest of Louisiana are highlighted on heatmaps with darker colors being greater (or more disadvantaged) than state averages, and lighter colors being lower.

The analysis for each criterion noted above is presented in Sections 4.2-4.10. The analyses include key results from screening tools, supporting environmental data sources, and a brief discussion on how these baseline results impact risk associated with the use of UIC wells in the AoR

4.2 Sensitive Receptors

As a first step, we identified sensitive receptors within the AoR by locating schools, hospitals, long-term care residences, public housing, prisons, and childcare facilities. Figure 2 shows the few “sensitive receptors” in the AoR. The AoR has low population density, and the only sensitive receptor locations were a school and hospital in the town of Columbia, at the southern edge of the AoR. These receptors are approximately 5 miles from the nearest proposed injection well.

4.3 Health Conditions

Tables 6 and 7 show health indicators from the Louisiana Department of Health (Louisiana DEH 2024) (parish level) and the CDC PLACES dataset (CDC 2024) (tract level).

The Louisiana DEH collaborates with the Office of Public Health and the Bureau of Health Informatics to collect statewide health data from various sources such as state registries, cancer information from Louisiana State University, and Medicaid. The data available is from the years

2017–2021 and covers a wide range of health factors (Louisiana DEH 2024). Table 6 provides information for the entire state, Caldwell Parish, and an average of neighboring parishes regarding asthma, chronic obstructive pulmonary disease (COPD), blood lead levels in children, and premature deaths. Based on available data, Caldwell Parish had a lower prevalence of asthma, COPD emergency room visits, blood lead levels in children, and lower birth weights compared to the rest of Louisiana and neighboring parishes. Additionally, most parishes surrounding Caldwell had higher rates of premature deaths and COPD hospitalizations compared to the rest of Louisiana, including Caldwell Parish.

Table 6: Louisiana Department of Health Prevalence of Health Concerns by Parishes in and Near Caldwell Parish

Area: Health Factor	Louisiana —	Average of Caldwell and Neighboring ^[1] Parishes (Prevalence)	Caldwell Parish, Louisiana GEOID 22021
Asthma ^[2]	50.3	30.6	6.0
COPD ER Visits ^[3]	112.6	116.1	94.4
COPD Hospitalizations ^[4]	22.0	36.7	39.2
Blood Lead ^[5]	0.8%	0.2%	0.0%
Low Birth Weight ^[6]	Not available	1.7%	1.5%
Premature Death ^[7]	9,532	11,125	11,309

Highlight indicates higher prevalence as compared to neighboring^[1] Parishes. **Bold text** = higher than state average (where available).

[1] Neighboring Parishes reviewed: Catahoula, Franklin, Jackson, Lasalle, Ouachita, Richland, and Winn.

[2] Asthma-related Emergency Room Visits: Crude Rate per 10,000 Population (2019)

[3] COPD-related Emergency Room Visits: Crude Rate Per 10,000 Population (2019)

[4] COPD-related Hospitalizations: Crude Rate Per 10,000 Population (2019)

[5] Percent of Children Tested with Confirmed Blood Lead Levels greater than 5 µg/dL.

[6] Percent of Very Low Birthweight (less than 1,500 grams) Live Singleton Term Births (2017–2021)

[7] Years of Potential Life Lost (2019)

An additional source of health data is this CDC PLACES dataset (CDC 2024). CDC PLACES estimates health data factors at the census tract level for the entire United States, by compiling the national Behavioral Risk Factor Surveillance System and American Community Survey data sets with census population estimates. The health data is based on self-reported conditions and is associated with several biases and uncertainties. PLACES data includes prevalence of chronic diseases: arthritis, cancer, kidney disease, COPD, coronary heart disease, asthma, depression, high blood pressure, high cholesterol, obesity, and stroke. PLACES data was most recently updated with seven disability types in July 2024, included on Table 7: hearing, vision, cognition, mobility, self-care, independent living, and any disability. Additional prevalence data in the PLACES dataset relate to healthy living: binge drinking, smoking, physical activity, mental health, sleep, dental care, and availability of health insurance.

Positive health factors related to preventive medical care and screening are also included. PLACES data are most recently available for 2020 and 2021. Table 7 shows the PLACES data for two tracts

in Caldwell Parish included in the AoR, compared to all of Caldwell Parish and State of Louisiana averages. Caldwell Parish exceeds statewide averages for health factors for nearly 90% for most of the factors listed (i.e., higher prevalence for negative factors such as smoking or depression among adults, and lower prevalence for positive factors such as preventative care or cancer screening). The census tract containing the project (GEOID 22021000100) has lower overall negative health factors (or greater overall positive factors) than the census tract to the west of the project area, both compared to the rest of Caldwell Parish or the whole state. The census tract containing the Project site has less asthma, more disabilities and general health factors than the rest of the parish and state, and some higher rates of preventative care.

Table 7: Centers for Disease Control PLACES Dataset Factors for Caldwell Parish in Area of Review

Health Factor	Area: Tract GEOID:	Louisiana	Caldwell Parish, Census Tracts	
		-	22021000100*	22021000200
		Average Crude Prevalence	Crude Prevalence	
Chronic Conditions				
Arthritis among adults aged >=18 years, 2021		27.1	31.7	33.3
Cancer (excluding skin cancer) among adults aged >=18 years, 2021		6.2	7.4	7.4
Chronic kidney disease among adults aged >=18 years, 2021		3.4	3.5	4.1
Chronic obstructive pulmonary disease among adults aged >=18 years, 2021		8.5	10.4	12
Coronary heart disease among adults aged >=18 years, 2021		6.5	7.9	8.8
Current asthma among adults aged >=18 years, 2021		10.8	10.4	11.2
Depression among adults aged >=18 years, 2021		25.8	28.2	27.8
Diagnosed diabetes among adults aged >=18 years, 2021		13.6	13.6	16.3
High blood pressure among adults aged >=18 years, 2021		39.0	40.4	44.4
High cholesterol among adults aged >=18 years who have been screened in the past 5 years, 2021		36.5	40.3	40.6
Obesity among adults aged >=18 years, 2021		38.9	39.5	42.4
Stroke among adults aged >=18 years, 2021		3.9	4	4.9
Taking medicine for high blood pressure control among adults aged >=18 years with high blood pressure, 2021		77.3	79.7	80.9
Disability				
Any disability among adults aged >=18 years, 2021		36.1	37.4	42.5
Cognitive disability among adults aged >=18 years, 2021		18.6	18.3	21.3
Hearing disability among adults aged >=18 years, 2021		6.8	8.5	9
Independent living disability among adults aged >=18 years, 2021		11.0	10.4	13.3
Mobility disability among adults aged >=18 years, 2021		18.2	19.4	23.5
Self-care disability among adults aged >=18 years, 2021		5.7	5.3	7.1
Vision disability among adults aged >=18 years, 2021		7.5	6.6	8.9
General				
Binge drinking among adults aged >=18 years, 2021		17.6	17.4	15.5
Current smoking among adults aged >=18 years, 2021		22.0	23.8	26.7
Fair or poor health among adults aged >=18 years, 2021		22.1	22.1	27.1
Mental health not good for >=14 days among adults aged >=18 years, 2021		19.6	19.1	20.5
No leisure-time physical activity among adults aged >=18 years, 2021		30.7	31.9	37.3
Physical health not good for >=14 days among adults aged >=18 years, 2021		14.0	15.2	17.2
Sleeping less than 7 hours among adults aged >=18 years, 2020		38.0	34.8	37.4
All teeth lost among adults aged >=65 years, 2020		19.8	19.1	24.9
Visits to dentist or dental clinic among adults aged >=18 years, 2020		54.1	55.6	49.3
Current lack of health insurance among adults aged 18-64 years, 2021		10.8	10.1	12.3
Preventative Care				
Cervical cancer screening among adult women aged 21-65 years, 2020		81.3	80.5	78.9
Cholesterol screening among adults aged >=18 years, 2021		84.4	84.9	83.5
Colorectal cancer screening among adults aged 50-75 years, 2020		69.0	68.4	66.7
Mammography use among women aged 50-74 years, 2020		80.5	76.9	77.5
Older adult men aged >=65 years who are up to date on a core set of clinical preventive services [1]		37.3	39.3	35.3
Older adult women aged >=65 years who are up to date on a core set of clinical preventive services [1]		35.4	35.7	31.5
Visits to doctor for routine checkup within the past year among adults aged >=18 years, 2021		78.6	77.8	79

Notes:

* = Tract-containing site

Highlight = more indications of health issues than state average. Negative factors have higher prevalence. Positive factors, such as health screenings, have lower prevalence.

[1] Core set of clinical preventative services: flu shot past year, ppv shot ever, colorectal screening, and, for women, mammogram past 2 years (2020).

The PLACES data is used by the Climate & Environmental Justice Screening Tool (CEJST) (Council on Environmental Quality 2024) and indicates that the prevalence of asthma, diabetes, heart disease, and low life expectancy in at least one of the census tracts in the AoR is at the 75th percentile or higher compared to the rest of the country. Notably, across the two census tracts, diabetes prevalence is in the 77th to 90th percentile, heart disease is in the 88th to 95th percentile and low life expectancy is in the 79th to 95th percentile. The available screening information suggests the communities in the AoR do not have a high prevalence of chronic health conditions and other generally unhealthy attributes (e.g., smoking, binge drinking) compared to the state. The use of preventative services is low.

Although screening tools suggest a relatively high disease burden in the area, the construction or use of UIC wells is not anticipated to introduce any additional chemical exposures via atmosphere or water that would further compromise health. As noted below, no meaningful emission of criteria air pollutants or hazardous air pollutants are expected during well operation. Similarly, a wide array of existing water wells across the plume area are currently being sampled to establish a baseline of water quality to ensure there will be no impacts to groundwater.

Conversely, the addition of a source of employment in this area of Caldwell Parish could positively impact some health factors listed on Table 7, such as access to more mental health support and health insurance. As noted in the Community Benefits Plan, SBf is establishing programs to support community members and students with disabilities through programs like Caldwell Conquerors Café initiative and the Agricultural Enterprise Program. Through the community engagement process, LGF can explore further opportunities to promote preventative healthcare practices and provide education on behaviors that improve health and preventative health habits.

4.4 Air Quality Indicators

Several sources were used to gather information on air quality in communities in the AoR, including tools include EJScreen (USEPA 2024a), CEJST (Council on Environmental Quality 2024), RSEI (EPA 2024b), and AirToxScreen (USEPA 2024c), and the Toxics Release Inventory (TRI) (USEPA 2024d).

As mentioned in Section 2 and shown in Table 5, EJScreen environmental burden indicators related to air quality (PM_{2.5}, ozone, NO₂, Diesel PM, "Toxic releases to air," and traffic proximity) were less than the 50th percentile compared to the state and the rest of the United States within the entire AoR. This is likely due to the lack of significant industrial activity in the area. However, the EJ Indices, which consider the environmental burden in the context of the demographic index, slightly exceeded the 50th percentile for ozone (51st percentile), nitrogen dioxide (52nd percentile) and traffic proximity (53rd percentile), but this was observed in only one of the Caldwell Parish block groups (GEOID 220210002003) on the southern edge of the AoR (EPA 2024a). This exceedance was compared to Louisiana (not the United States as a whole). The only populated area in the block group, where an indicator like traffic proximity is expected to be elevated, is Columbia, Louisiana—approximately 5 miles south of the proposed injection wells. Over half of the block group, including another populated area, is not in the AoR. The proposed project would potentially marginally contribute to the impacts from ozone, NO₂, and traffic proximity due to some increased traffic to the Project site, but these potential impacts would occur 4 to 5 miles from the only part of the AoR currently impacted.

Additionally, when compared to the United States, two block groups had "toxic releases to air" above the 50th percentile but below the 80th percentile (58-67th percentile). A more refined assessment, such as using the microdata in the RSEI, is needed to understand the specific "toxic releases to air" that result in this disproportional, although minimal, impact.

The White House Council on Environmental Quality maintains CEJST, which is largely used to guide federal EJ-related resources. The CEJST tool uses the combination of an environmental indicator (such as expected risks due to air quality) with an EJ-related factor (usually income level) to determine if a census tract has potential EJ concerns. Due to high levels of low income in the AoR, both tracts are considered disadvantaged in the CEJST tool. CEJST has three indicators relevant to assess air quality: PM_{2.5}, diesel PM, and traffic proximity and volume. Of these, only "PM_{2.5} in the air" was above the 50th percentile. Interestingly, the data used by CEJST to inform PM_{2.5} exposure is the same data sources used by EJScreen. However, the data used by EJScreen is more recent (2017 vs 2020)¹ and should be relied on preferentially.

USEPA's RSEI model, Version 2.3.12, includes chemical data reported by the TRI facilities. There are no TRI emitting or RSEI facilities within the AoR; therefore, a RSEI "score" and hazard index could not be modeled for the area, and further in-depth refinements to air quality details could be performed using RSEI's modeled microgrid data.

AirToxScreen is a USEPA tool that focuses on hazardous air pollutants and air quality. It uses emission information from TRI reporting facilities as well as nonpoint air pollution sources like roadways and railroads to estimate human health risks. AirToxScreen data used to be part of the environmental burden indicators in EJScreen, but it was recently removed. However, the AirToxScreen tool (USEPA 2024c) still exists and was used in this assessment to provide further perspective on air quality in the AoR. Table 8 lists the total and individual chemical cancer risk for all Hazardous Air Pollutants in Caldwell Parish by census block. AirToxScreen considers a cancer risk greater than 100 in a million to be "elevated" and requiring further investigation.

In the current evaluation of the AoR, the cancer risk estimates were well under this benchmark (30 in a million). The potential cancer risks in block groups in the AoR are partly due to chemical emissions from natural processes in a forested area, and others could be attributed to nearby point sources where wood products are produced (such as formaldehyde in the production of particle board). The primary cancer risk is from formaldehyde (23 to 24 in a million). Smaller contributions to risk are attributed to biogenics (natural sources, such as emissions from trees), fire, and some volatile organic compounds like carbon tetrachloride and acetaldehyde.

¹ EJScreen data is sourced from "EPA, OAR (fusion of model and monitor data), 2020" (<https://www.epa.gov/ejscreen/ejscreen-change-log#july2024>).

CEJST data is sourced from <https://www.epa.gov/ejscreen/download-ejscreen-data-from-2017>, as compiled by USEPA's EJScreen, sourced from USEPA National Air Toxics Assessment and United State Department of Transportation traffic data <https://screeningtool.geoplatform.gov/en/methodology>.

Table 8: AirToxScreen Cancer Risks in Caldwell Parish in Area of Review

Block Group GEOID:	Caldwell Parish, Block Groups, Louisiana					Louisiana
	220210001001	220210001002*	220210001003	220210002001	220210002003	
Indicator	Cancer Risk (per million)					
Total Cancer Risk (in a million)	30	30	30	30	30	34
1,1,2-Trichloroethane	0.00051	0.00075	0.00072	0.0017	0.00053	0.0068
1,2-Dibromo-3-chloropropane	0	0	0	0	0	0.00035
1,2-Diphenylhydrazine	0	0	0	0	0	0.00023
1,2,3,4,5,6-Hexachlorocyclohexane	0	0	0	0	0	0.000029
1,3-Butadiene	0.10	0.10	0.085	0.096	0.12	0.23
1,3-Dichloropropene	0.000014	0.000017	0.000011	0.000019	0.000014	0.000046
1,3-Propene Sultone	0	0	0	0	0	0
1,4-Dichlorobenzene	0.00084	0.00082	0.00086	0.0010	0.00084	0.0012
2-Acetylaminofluorene	0	0	0	0	0	0
2-Nitropropane	0.0000000058	0.0012	0.00071	0.0020	0.0000000066	0.0023
2,4-Dinitrotoluene	0.0000027	0.0000051	0.0000053	0.0000075	0.0000035	0.00060
2,4-Toluene Diisocyanate	0.00022	0.00026	0.00022	0.00024	0.00022	0.0080
2,4,6-Trichlorophenol	0.0000094	0.0000097	0.0000010	0.0000093	0.0000010	0.0000021
3,3'-Dichlorobenzidine	0	0	0	0	0	0.000100
4-Dimethylaminobenzene	0	0	0	0	0	0
4,4'-Methylenebis(2-chloroaniline)	0	0	0	0	0	0
4,4'-Methylenedianiline	0	0	0	0	0	0.0064
Acetaldehyde	2.1	2.2	2.2	2.1	2.1	2.0
Acetamide	0.00012	0.00036	0.00010	0.00067	0.00021	0.00080
Acrylamide	0.0022	0.0049	0.0035	0.0060	0.0026	0.0079
Acrylonitrile	0.0070	0.0067	0.0068	0.0064	0.0067	0.037
Allyl Chloride	0.00000041	0.00000077	0.00000068	0.00000068	0.00000047	0.00015
Aniline	0	0	0	0	0	0.00075
Arsenic Compounds (inorganic including Arsine)	0.037	0.046	0.033	0.038	0.048	0.064
Benz[a]pyrene	0.010	0.0098	0.0086	0.0098	0.012	0.018
Benzene	0.61	0.66	0.63	0.64	0.65	1.0
Benzidine	0	0	0	0	0	0.28
Benzyl Chloride	0.000075	0.000013	0.000011	0.000012	0.0000092	0.00012
Beryllium Compounds	0.0015	0.0013	0.0018	0.0023	0.0013	0.0083
Bis(2-ethylhexyl) phthalate (DEHP)	0.000061	0.000063	0.000065	0.000061	0.000072	0.00014
Bis(chloromethyl) ether	0	0	0	0	0	0.0000019
Bromoform	0.000000093	0.00000017	0.00000014	0.00000015	0.00000011	0.00018
Chromium VI (Hexavalent)	0.028	0.027	0.029	0.032	0.026	0.076
Cadmium Compounds	0.0067	0.0045	0.0047	0.0051	0.0046	0.014
Carbon Tetrachloride	2.9	2.9	2.9	2.9	2.9	2.9
Chlordane	0	0	0	0	0	0.00000069
Chlorobenzilate	0	0	0	0	0	0.00000030
Chloroprene	0.000077	0.000063	0.000061	0.000011	0.000061	0.21
Coke oven emissions	0	0	0	0	0	0
Dichloroethyl ether (BIS[2-Chloroethyl]Ether)	0	0	0	0	0	0.00061
Epichlorohydrin	0.000061	0.00014	0.00011	0.00018	0.000074	0.00033
Ethylbenzene	0.040	0.044	0.041	0.042	0.046	0.11
Ethyl carbamate (urethane) chloride (chloroethane)	0	0	0	0	0	0.00000043
Ethylene dibromide (dibromoethane)	0.0092	0.010	0.012	0.012	0.0097	0.017
Ethylene dichloride (1,2-dichloroethane)	0.011	0.0094	0.0099	0.010	0.010	0.077
Ethylene Oxide (ETO)	0.60	0.49	0.52	0.51	0.50	2.8
Ethylene thiourea	0	0	0	0	0	0
Ethyldiene dichloride (1,1-dichloroethane)	0.0000050	0.0000012	0.0000083	0.0000018	0.0000062	0.00028
Formaldehyde	23	24	23	23	24	23
Heptachlor	0	0	0	0	0	0.00000042
Hexachlorobenzene	0.000029	0.000038	0.000041	0.000047	0.000036	0.0028
Hexachlorobutadiene	0.000000057	0.00000011	0.000000094	0.000000094	0.000000065	0.00077
Hydrazine	0	0	0	0	0	0.021
Methyl tert-butyl ether	0.000000079	0.00000054	0.00000033	0.00000083	0.000000091	0.000052
Methylene Chloride	0.0031	0.0030	0.0030	0.0030	0.0031	0.0031
N-nitrosodimethylamine	0	0	0	0	0	0.017
N-nitrosomorpholine	0	0	0	0	0	0
Nickel Compounds	0.022	0.022	0.018	0.020	0.023	0.077
Naphthalene	0.30	0.29	0.35	0.27	0.30	0.60
Nitrobenzene	0.00000093	0.00000017	0.00000015	0.00000015	0.00000011	0.0040
Polychlorinated biphenyls (PCBs)(Aroclors)	0.000014	0.000014	0.000014	0.000013	0.000016	0.000033
Pentachlorophenol	0.000000054	0.000000010	0.000000012	0.000000026	0.000000087	0.0000088
Propylene oxide	0.000035	0.000014	0.000087	0.000010	0.000045	0.0018
Tetrachloroethylene	0.0028	0.0026	0.0026	0.0026	0.0027	0.0034
2,4-Toluene diamine	0	0	0	0	0	0.00016
Toxaphene (chlorinated camphene)	0	0	0	0	0	0.0000057
Trichloroethylene	0.0023	0.0024	0.0023	0.0028	0.0023	0.0056
Vinyl bromide	0	0	0	0	0	0
Vinyl chloride	0.0018	0.0014	0.0014	0.0016	0.0015	0.013
o-Toluidine	0.00000032	0.00000059	0.00000052	0.00000052	0.00000036	0.00025
1,4-Dioxane	0.00000032	0.00000059	0.00000053	0.00000053	0.00000036	0.00048
PAH/POM	0.54	0.54	0.57	0.54	0.57	0.65
Onroad: Light Duty Off-Network Gas	0.072	0.087	0.089	0.081	0.080	0.19

Onroad: Light Duty Off-Network Diesel	0.0018	0.0020	0.0017	0.0020	0.0021	0.0045
Onroad: Heavy Duty Off-Network Gas	0.0023	0.0030	0.0026	0.0025	0.0030	0.0044
Onroad: Heavy Duty Off-Network Diesel	0.0031	0.0042	0.0028	0.0035	0.0044	0.0081
Onroad: Light Duty On-Network Gas	0.087	0.11	0.064	0.068	0.14	0.19
Onroad: Light Duty On-Network Diesel	0.013	0.016	0.0068	0.011	0.022	0.031
Onroad: Heavy Duty On-Network Gas	0.0018	0.0025	0.0018	0.0019	0.0025	0.0075
Onroad: Heavy Duty On-Network Diesel	0.020	0.025	0.013	0.019	0.032	0.076
Onroad: Refueling	0.0057	0.0074	0.0044	0.0046	0.0093	0.011
Onroad: Heavy Duty Hoteling	0.00029	0.00059	0.00050	0.00057	0.00036	0.0064
Onroad Total	0.21	0.25	0.19	0.19	0.29	0.53
Nonroad: Recreational (incl. Pleasure Craft)	0.061	0.063	0.061	0.062	0.054	0.14
Nonroad: Construction	0.0033	0.0056	0.0039	0.0058	0.0041	0.030
Nonroad: Commercial Lawn/Garden	0.0052	0.0088	0.0069	0.0100	0.0054	0.043
Nonroad: Residential Lawn/Garden	0.012	0.013	0.014	0.013	0.013	0.037
Nonroad: Agricultural Equipment	0.013	0.013	0.018	0.0076	0.010	0.0078
Nonroad: Commercial Equipment	0.0066	0.0099	0.0084	0.0085	0.0085	0.030
Nonroad: All Other Nonroad Equipment	0.0032	0.0040	0.0029	0.0044	0.0040	0.0084
Nonroad: Commercial Marine Vessels C1 and C2 Ports	0.019	0.00053	0.0019	0.00033	0.00083	0.0069
Nonroad: Commercial Marine Vessels C3 Ports	0	0	0	0	0	0.0076
Nonroad: Commercial Marine Vessels C1, C2, and C3 Underway	0.0060	0.0064	0.0029	0.0043	0.0055	0.078
Nonroad: Locomotives	0.061	0.094	0.042	0.061	0.096	0.052
Nonroad: Airports (point)	0.081	0.026	0.017	0.014	0.033	0.048
Nonroad: Railyards (point)	0.0012	0.0017	0.0011	0.0014	0.0014	0.017
Nonroad Total	0.27	0.25	0.18	0.19	0.24	0.51
Nonpoint: Industrial	0	0	0	0	0	0.0000016
Nonpoint: Commercial Cooking	0.0047	0.0080	0.0051	0.0064	0.0063	0.046
Nonpoint: Oil and Gas	0.23	0.24	0.23	0.30	0.23	0.45
Nonpoint: Solvents and Coatings	0.19	0.22	0.37	0.19	0.19	0.40
Nonpoint: Storage and Transfer, Bulk Terminals, Gas Stage 1	0.026	0.027	0.027	0.021	0.025	0.042
Nonpoint: Miscellaneous Nonindustrial	0.0045	0.0043	0.0044	0.0037	0.0038	0.013
Nonpoint: Fuel Combustion (except Residential Wood)	0.013	0.017	0.015	0.016	0.013	0.072
Nonpoint: Residential Wood Combustion	0.048	0.049	0.044	0.048	0.052	0.13
Nonpoint: Waste Disposal	0.27	0.16	0.19	0.14	0.18	0.66
Nonpoint: Agricultural Livestock Waste	0.00096	0.0014	0.00080	0.0022	0.0011	0.0023
Nonpoint: Agricultural Livestock Silage	0.00049	0.00045	0.00075	0.00027	0.00043	0.00058
Nonpoint Total	0.79	0.73	0.88	0.73	0.69	1.8
Stationary Point	0.52	0.53	0.53	0.61	0.53	3.4
Fire	0.98	0.96	0.90	0.97	1.1	1.1
Biogenics	3.9	4.0	4.1	3.6	3.8	3.2
Secondary	21	22	21	21	22	21
Background	2.9	2.9	2.9	2.9	2.9	2.9

Notes:

* = Block group containing property.

Color scale: individual indicators are highlighted based on their relation to the rest of Louisiana, with darkest colors indicating higher burden.

The previous EJ assessment conducted in 2023 described in Section 2.1.1 identified an elevated EJ Index for Air Toxics Respiratory Hazard Index (Gulf South Research Corporation 2023). This indicator, which characterizes potential noncancer risks to hazardous air pollutants, “is no longer available” from AirToxScreen. The indicator “Toxic releases to air” described above is the environmental burden indicator that replaces the Air Toxics Regulatory Hazard Index and should be relied on preferentially to assess air quality.

In addition to these tools, it should be noted that there are no nonattainment areas near the AoR.

Based on the information presented above, exposure to industrial air emissions is low, with cancer risk below a level of concern. The majority of the risk is from natural processes and industrial emissions, with secondary risks from emissions outside the immediate area. The proposed project, including the UIC well use, is not associated with any meaningful emissions of hazardous air pollutants or priority pollutants (PM, SO₂, NO₂) and will not add to the air toxics risk in the AoR. To the contrary, UIC wells are a necessary component of the proposed facilities plan to sequester CO₂ underground and operate the facility with a carbon-negative footprint.

It would not be expected to have a meaningful impact on the existing risk, as the majority of the risk is from natural processes and industrial emissions, with secondary risks from outside the

immediate area. Additionally, the block group with marginally elevated state percentiles for air quality indicators is not adjacent to the proposed project or injection wells, and any contributions to these environmental impacts would be miles from currently impacted areas.

4.5 Climate Change Indicators

Many data sources are available to evaluate community vulnerabilities related to climate change. For this assessment we relied on CEJST. Table 9 lists the CEJST indicators for the Caldwell Parish Tracts within the AoR: expected building loss rate, expected population loss rate, and project flood risk were over the 80th percentile in at least one census tract in the AoR. EJScreen also contains supplemental map layers with indicators of climate change-related vulnerabilities. In the AoR, the “extreme heat” indicators are in the highest category for the AoR (more than 100–207 days above 90°F). The tracts in the AoR rank as follows:

- As high as over 90th percentile nationally for the following:
 - Expected building and population loss
 - Workforce development (as also noted in EJScreen review)
- Between the 70th–85th national percentiles for the following:
 - Low income
 - Poverty
 - Unemployment
 - Lack of a high school diploma
- 93rd percentile nationally for the following:
 - Health indicators (as noted above)
 - Energy costs

The AoR is significantly impacted by climate change issues. One of the main goals of the LGF project is to reduce the carbon footprint during the production of sustainable aviation fuel, replacing traditional sources that have higher CO₂ emissions. Thus, the LGF facility will contribute to an overall reduction in carbon emissions and climate-related impacts.

Table 9: CEJST Indicators for Caldwell Parish Tracts in Area of Review

Indicator	Tract GEOID: Considered Disadvantaged:	Caldwell Parish Census Tracts Near Project	
		22021000100*	22021000200
		Yes	Yes
National Percentile			
Socioeconomic			
Low Income		75	80
Climate Change			
Expected agricultural loss rate		77	73
Expected building loss rate		94	73
Expected population loss rate		98	91
Projected flood risk		80	88
Projected wildfire risk		33	70
Energy			
Energy cost		93	93
PM2.5 in the air		57	63
Transportation			
Diesel particulate matter exposure		9	8
Transportation barriers		83	39
Traffic proximity and volume		16	26
Housing			
Housing cost		25	27
Lack of green space		30	2
Lack of indoor plumbing		21	21
Lead paint		18	33
Legacy Pollution			
Proximity to hazardous waste facilities		6	7
Proximity to Risk Management Plan facilities		3	2
Proximity to Superfund sites		18	
Water and Wastewater			
Underground storage tanks and releases		7	19
Wastewater discharge		67	56
Health			
Asthma		52	75
Diabetes		77	90
Heart disease		88	95
Low life expectancy		95	79
Workforce Development			
Linguistic isolation		12	26
Low median income		82	75
Percent of individuals < 100% Federal Poverty Line		78	83
Percent of individuals < 200% Federal Poverty Line		70	79
Unemployment		81	85
Percent of individuals > 25 years without a high school degree		79	89

Notes:

* = Tract containing site

Color Key

Percentile	Color
$x \leq 50$	
$> 50 - 80$	
> 80	

4.6 Water Quality Indicators

The EJScreen assessment examined various indicators related to water quality across the AoR. While the EJ Index for water quality indicators was below the 50th percentile in most areas, in one block group (GEOID 220210002001), the EJ Index for "Drinking Water Non-Compliance" was at the 81st percentile compared to the rest of Louisiana and the 92nd percentile compared to the rest of the United States. Additionally, the EJ Index for wastewater discharge exceeded the 59th percentile in one block group (GEOID 220210002003) compared to the rest of Louisiana and the 72nd percentile compared to the entire United States. Based on these findings, groundwater quality in the AoR was further evaluated.

The wastewater discharge and drinking water noncompliance point were further examined using USEPA's Enforcement and Compliance History Online (ECHO) (USEPA 2024e), which compiles pollution sources and USEPA enforcement activities nationwide. Table 10 lists all water pollution from National Pollutant Discharge Elimination System (NPDES) permits so far in 2024 in Caldwell Parish. According to the ECHO database, the only facilities listed in Caldwell Parish are considered "Non-Major" sources under the Clean Water Act, as listed in the ECHO database. Upstream wastewater treatment plants are the only contributors to surface water quality emissions in the area, and the parameters emitted are suspended solids, nutrients nitrogen and phosphorus, biological oxygen demand, and a small (40 pounds per year) amount of oil and grease.

Table 10: USEPA Enforcement and Compliance History Online Releases in Caldwell Parish in 2024 (From the USEPA Integrated Compliance Information System)

NPDES Permit	FRS ID	Facility Name	City	Watershed Name	Pollutant Name	Average Daily Flow (millions gallon/day)	Total Pounds Per Year	Total Toxic-weighted pound-equivalents (pounds/year)	Nearest Tribal Land (Jena Band of Choctaw)
LA0082210	110009049323	CLARKS/GRAYSON WASTEWATER TREATMENT PLANT	CLARKS	Hurricane Creek	Solids, total suspended	0.119	5,838	0	23 miles
LA0060712	110048275775	COLUMBIA HEIGHTS WASTEWATER TREATMENT FACILITY	COLUMBIA	Hurricane Creek	Nitrogen	0.225	4,846	0	
LA0082210	110009049323	CLARKS/GRAYSON WASTEWATER TREATMENT PLANT	CLARKS	Hurricane Creek	Nitrogen	0.119	2,207	0	23 miles
LA0082210	110009049323	CLARKS/GRAYSON WASTEWATER TREATMENT PLANT	CLARKS	Hurricane Creek	BOD, 5-day, 20 deg. C	0.119	1,304	0	23 miles
LA0060712	110048275775	COLUMBIA HEIGHTS WASTEWATER TREATMENT FACILITY	COLUMBIA	Hurricane Creek	BOD, 5-day, 20 deg. C	0.225	1,112	0	
LA0060712	110048275775	COLUMBIA HEIGHTS WASTEWATER TREATMENT FACILITY	COLUMBIA	Hurricane Creek	Solids, total suspended	0.225	942	0	
LA0060712	110048275775	COLUMBIA HEIGHTS WASTEWATER TREATMENT FACILITY	COLUMBIA	Hurricane Creek	Phosphorus	0.225	838	0	
LA0082210	110009049323	CLARKS/GRAYSON WASTEWATER TREATMENT PLANT	CLARKS	Hurricane Creek	Phosphorus	0.119	641	0	23 miles
LAG570544	110012897026	COLUMBIA WASTEWATER TREATMENT FACILITY	COLUMBIA	Bayou Calamus-Ouachita River	Solids, total suspended	0.016	140	0	
LAG570172	110039691900	E. COLUMBIA SD #1*	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Solids, total suspended	0.0095	106	0	
LAG570172	110039691900	E. COLUMBIA SD #1*	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Oil and grease	0.0095	46	0	
LAG570172	110039691900	E. COLUMBIA SD #1*	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	BOD, 5-day, 20 deg. C	0.0095	40	0	
LAG534407	110055101884	FUELTRAC HOWARD'S GROCERY, LLC	COLUMBIA	Woolen Lake-Boeuf River	BOD, 5-day, 20 deg. C	0	0	0	
LAG541233	110020042185	RIVERTON CAMPGROUND LLC	COLUMBIA	Ballard Bayou-Bayou Lafourche	Oil and grease	0	0	0	
LAG530949	110011177038	KELLY ELEMENTARY SCHOOL	KELLY	Black Bayou	Solids, total suspended	0	0	0	20 miles
LAG540064	110048275776	CALDWELL PH POLICE JURY	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	BOD, 5-day, 20 deg. C	0	0	0	
LAG750502	110013345031	COLUMBIA MAINTENANCE UNIT	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Oil and grease	0	0	0	
LAG541233	110020042185	RIVERTON CAMPGROUND LLC	COLUMBIA	Ballard Bayou-Bayou Lafourche	Solids, total suspended	0	0	0	
LAG532322	110031275527	OLD BETHEL BAPTIST CHURCH	CLARKS	Hurricane Creek	Oil and grease	0	0	0	22 miles
LAG532322	110031275527	OLD BETHEL BAPTIST CHURCH	CLARKS	Hurricane Creek	Solids, total suspended	0	0	0	22 miles
LAG540064	110048275776	CALDWELL PH POLICE JURY	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Solids, total suspended	0	0	0	
LAG534677	110057196298	CROSS ROADS BAPTIST OF GRAYSON	GRAYSON	Black Bayou	Solids, total suspended	0	0	0	
LAG533498	110043263795	JACKIE HARRIS TRUCKING LLC	GRAYSON	Hurricane Creek	BOD, 5-day, 20 deg. C	0	0	0	24 miles
LA0070033	110009924476	TEXAS GAS TRANSMISSION, LLC - COLUMBIA COMPRESSOR STATION	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Oil and grease	0	0	0	
LAG380115	110055241750	EAST COLUMBIA WATER SYSTEM	COLUMBIA	Ballard Bayou-Bayou Lafourche	Solids, total suspended	0	0	0	
LAG534407	110055101884	FUELTRAC HOWARD'S GROCERY, LLC	COLUMBIA	Woolen Lake-Boeuf River	Solids, total suspended	0	0	0	
LAG532322	110031275527	OLD BETHEL BAPTIST CHURCH	CLARKS	Hurricane Creek	BOD, 5-day, 20 deg. C	0	0	0	22 miles
LAG570544	110012897026	COLUMBIA WASTEWATER TREATMENT FACILITY	COLUMBIA	Bayou Calamus-Ouachita River	BOD, 5-day, 20 deg. C	0.016	0	0	
LAG380115	110055241750	EAST COLUMBIA WATER SYSTEM	COLUMBIA	Ballard Bayou-Bayou Lafourche	Iron	0	0	0	
LAG533498	110043263795	JACKIE HARRIS TRUCKING LLC	GRAYSON	Hurricane Creek	Solids, total suspended	0	0	0	24 miles
LAG541233	110020042185	RIVERTON CAMPGROUND LLC	COLUMBIA	Ballard Bayou-Bayou Lafourche	BOD, 5-day, 20 deg. C	0	0	0	
LAG380115	110055241750	EAST COLUMBIA WATER SYSTEM	COLUMBIA	Ballard Bayou-Bayou Lafourche	Chloride	0	0	0	
LAG530949	110011177038	KELLY ELEMENTARY SCHOOL	KELLY	Black Bayou	Oil and grease	0	0	0	20 miles
LA0070033	110009924476	TEXAS GAS TRANSMISSION, LLC - COLUMBIA COMPRESSOR STATION	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Total Organic Carbon	0	0	0	
LAG750502	110013345031	COLUMBIA MAINTENANCE UNIT	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Chemical oxygen demand	0	0	0	
LAG540064	110048275776	CALDWELL PH POLICE JURY	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Oil and grease	0	0	0	
LAG534677	110057196298	CROSS ROADS BAPTIST OF GRAYSON	GRAYSON	Black Bayou	BOD, 5-day, 20 deg. C	0	0	0	
LAG750502	110013345031	COLUMBIA MAINTENANCE UNIT	COLUMBIA	Bell Bayou Slough-Bayou Lafourche	Solids, total suspended	0	0	0	
LAG534407	110055101884	FUELTRAC HOWARD'S GROCERY, LLC	COLUMBIA	Woolen Lake-Boeuf River	Oil and grease	0	0	0	
LAG530949	110011177038	KELLY ELEMENTARY SCHOOL	KELLY	Black Bayou	BOD, 5-day, 20 deg. C	0	0	0	20 miles

Notes:

* = Data contains potential outliers.

Table 11 shows the drinking water systems within Caldwell Parish and their violations as compiled in the USEPA ECHO database (USEPA 2024e). Vixen Water System, the smallest water system in Caldwell Parish, serves 744 people, a portion of which reside in block group GEOID 220210002001 of the AoR. Vixen Water System is privately-owned public water supply system that is considered a “serious violator,” with 100 uncorrected violation “points” in the past 5 years²—by far the worst violator in Caldwell Parish. Figure 2 shows locations of known wells in the AoR according to Louisiana’s SONRIS data mapper (LDENR 2024).

Despite receiving federal assistance (Scarlett 2018) to remedy water quality problems, Vixen has had numerous violations and has at least once in the past few years had to issue a boil advisory (Hensley 2021). Due to the serious nature of the violations of Vixen Water System, and history of offenses, this explains the high state and national percentile for drinking water violations in one of the five census block groups in the AoR.

Although there are existing drinking water quality issues in isolated areas within the AoR, the UIC wells are being constructed to ensure they do not further affect drinking water supplies. Drinking water wells in the area draw water from the Mississippi River Valley Alluvium Aquifer, the Cockfield Aquifer, and to a lesser extent, the Sparta Aquifer. The wells drawing from the Sparta Aquifer are the deepest, ranging from 400 to 845 ft below land surface, with a median depth of 525 ft (USGS, 2014); however, the water pumped from the Sparta Aquifer is only used for agricultural and industrial purposes within the AoR (i.e., not currently used as a source of drinking water). CO₂ sequestration will occur in the multiple sandstones of the Upper Tuscaloosa and Paluxy Formations, which are thousands of feet below even the deepest of the shallow water wells in use in Caldwell Parish, as well as the USDW established by the LDENR and the LDEQ in the area, which is at an average depth of 1,000 feet within the AoR (SBf 2023). The evidence presented in the UIC Class VI permit on the geomechanical stability of the Primary and Secondary Upper Confining zones, along with the lack of faults and fractures in the plume expansion area, support the conclusion that there would be no leakage to the underground shallow drinking water zones or USDWs. Also, the corrective action plans detailed within Module B of the Class VI permit (Area of Review and Corrective Action Plan) will ensure that no CO₂ leakage to the USDW from the legacy plugged and abandoned wells (all dry holes) located within the AoR should occur.

SBf is committed to monitoring groundwater quality by first conducting testing of water supply wells (both public and private) within the AoR to establish a baseline of water quality for parameters such as pH, CO₂, total dissolved solids, chloride, specific gravity, and temperature. This effort commenced in May 2024 and is nearing completion. Regularly scheduled sampling will confirm and ensure that water quality will remain unaffected by the CO₂ injection operations.

² Water violations are scored as follows:

10 points: Acute contaminant maximum contaminant level (MCL) violation (total coliform or nitrate);

5 points: MCL or treatment technique violation for regulated contaminants other than total coliform or nitrate; Nitrate monitoring and reporting violation; Total coliform repeat monitoring violation;

1 point: Monitoring and reporting violation not listed above; Public notice violation; Consumer Confidence Report violation; Additional point for each year a violation is unaddressed.

Table 11: Drinking Water Systems in Caldwell Parish

Public Water System (PWS) Name	PWS Id	Primary Water Source	Population Served	Quarters with Violations		Serious Violator	Violation Points Accrued (past 5 years)	Remaining Uncorrected Violation Points	Informal Enforcement		Formal Enforcement Actions
				Violations	Quarters				Actions (past 5 years)		
CLARKS WATER SYSTEM	LA1021001	Groundwater	996	2	No	No	6	1	3	0	
COLUMBIA HEIGHTS WATER DISTRICT	LA1021003	Groundwater	1,965	2	No	No	6	0	4	0	
COLUMBIA WATER SYSTEM	LA1021002	Groundwater	912	3	No	No	2	2	2	0	
COTTON PLANT WATER SYSTEM	LA1021009	Groundwater	783	12	Yes	Yes	14	7	6	0	
EAST COLUMBIA WATER SYSTEM*	LA1021004	Groundwater	2,829	3	No	No	35	0	37	0	
GRAYSON WATER SYSTEM	LA1021005	Groundwater	1,461	10	Yes	Yes	19	11	11	0	
HEBERT WATER SYSTEM	LA1021006	Groundwater	3,048	0	No	No	0	0	0	0	
HOLUM WATER SYSTEM	LA1021007	Groundwater	1,230	12	No	No	75	70	51	0	
KELLY WATER DISTRICT	LA1021008	Groundwater	1,140	6	No	No	1	1	1	0	
VIXEN WATER SYSTEM	LA1021011	Groundwater	774	12	Yes	Yes	127	100	100	0	
WARDS 4 & 5 WATER SYSTEM	LA1021010	Groundwater	1,002	0	No	No	5	0	3	0	

Notes:

* = Water system with wells on proposed project property

Violation Points system:

10 points: Acute contaminant maximum contaminant level (MCL) violation (total coliform or nitrate)

5 points: MCL or treatment technique violation for regulated contaminants other than total coliform or nitrate; nitrate monitoring and reporting violation; total coliform repeat monitoring violation

1 point: Monitoring and reporting violation not listed above; public notice violation; Consumer Confidence Report violation; additional point for each year a violation is unaddressed

4.7 Nearby Regulated Facilities

USEPA's RSEI model, Version 2.3.12 (USEPA 2024b), includes chemical data reported by the TRI (USEPA 2024d) facilities. There are no TRI emitting or RSEI facilities within the AoR, therefore, a RSEI “score” and hazard could not be modeled for the area. One facility is listed in Caldwell Parish, with no emissions from the year 2019, the only year with data available for that facility.

The proposed project would potentially add one regulated facility to Caldwell Parish, but since there are no other facilities in the parish with chemical releases within at least 5 miles of the proposed project, the UIC wells would not impose a significant burden on the area.

4.8 Proximity to Native Populations

The ECHO database (USEPA 2024e) notes if facilities are in tribal land. The facilities within Caldwell Parish are not within tribal land and are at least 20 miles from the nearest tribal land of the Jena Band of Choctaw.

4.9 Lead Paint

In the AoR, one of the EJScreen environmental burden indicators (USEPA 2024a) that showed a higher prevalence than the rest of the state and nation was the presence of lead paint in homes. This indicator is assumed from the percentage of housing units built before 1960, not from testing or reporting of lead paint in homes. When included in the EJ Index, one specific block group had a lead paint EJ Index as high as the 86th percentile. While this requires further investigation, it is important to note that CEJST, which also assesses the presence of lead paint but at the census tract level, indicates that the census tracts in the AoR are both well below the 50th percentile. Additionally, statistics from Louisiana DEH indicate that the percentage of children in Caldwell Parish with elevated blood lead levels is 0%; therefore, the lead paint indicator based on home age does not appear to negatively impact the health of Caldwell Parish residents.

4.10 Underground Storage Tanks

The final elevated EJ Index was for Underground Storage Tanks (USTs), which were above the 50th percentile (but below the 80th percentile) compared to Louisiana in one block group (GEOID 220210002003) and above the 50th percentile (but below the 80th percentile) compared to the United States in two block groups. A review of USEPA's UST Finder tool (USEPA 2024 f) reveals that the block group with elevated percentiles of USTs is at the southern edge of the AoR, approximately five miles south of the injection wells. There are two concentrations of UST areas in the block group: approximately half of the USTs are in Columbia, Louisiana (in the AoR), and approximately half are in Banks Springs, Louisiana (an unincorporated area outside of the AoR). All of the USTs in the block group with elevated UST percentiles are not only approximately 5 miles from the nearest proposed injection well, but the USTs are also on the opposite side of the Ouachita River from the injection wells, and are not expected to be hydraulically connected in the surface aquifers that are primarily affected by USTs.

5. ENHANCE TRANSPARENCY

Louisiana Green Fuels, LLC requested an Initial Air Operating Permit through the LDEQ on June 9th, 2022. The application was declared administratively complete and assigned to the Oil and Gas Division on June 10th, 2022. From that date forward, the application, supporting materials, correspondence, and permit documents were registered at LDEQ under Agency Interest Number 234155 and have been made publicly available for viewing through LDEQ's Electronic Documents Management system (EDMS). Revisions to the application were submitted in June 2023, with publication of notice of the application on June 8th, 2023.

There are several ways that SBf and LDEQ have provided transparency in decision making throughout the air permitting process:

- EDMS contains eighteen records for the project and includes the application, agency correspondence, response to requests for additional information, response to comment, public comment logs, financial statements, the technical basis of the final permit, and the Final Permit No. 0540-00040-00.
- On June 6th, 2023, copies of the public notice were mailed or emailed to individuals who have requested to be placed on LDEQ's mailing list.
- A notice requesting public comment on the proposed permit was published on LDEQ's website on June 6th, 2023 (Document ID 13848433).
- During the comment period, the proposed permit, permit application, and additional information were available for review at LDEQ's Public Records Center, 602 North Street, Baton Rouge, Louisiana.
- During the comment period, the proposed permit, permit application, and additional information were available for review at the Caldwell Parish Public Library, 211 Jackson Street, Columbia, Louisiana.

Through these methods, SBf and LDEQ demonstrated that the administrative record for the permitting action was readily available in a format and location that was easily accessible to the affected community.

6. MINIMIZE ADVERSE EFFECTS TO UNDERGROUND SOURCES OF DRINKING WATER

The UIC Class VI permit application includes details regarding project activities related to the underground CO₂ storage through the periods of pre-injection, injection, and post-injection. One of the main motives of these actions discussed within the permit application is to ensure non-endangerment of the Underground Sources of Drinking Water (“USDW”).

Module A (Project Narrative Report) details the geological extent of the Primary Injection Zone and the Primary and Secondary Upper Confining Zones and their substantive separation from the shallower USDW. The geomechanical and geochemical interactions of CO₂ injection were also adequately addressed to demonstrate the integrity of the confining zones during the lifetime of the project. Operating parameters for injection are optimally designed to prevent the compromising of the containment of injected and stored CO₂, thus preventing the potential endangerment of the USDW. The corrective action plan within the submitted Module B (Area of Review and Corrective Action Plan) also details the measures taken to minimize and effectively eliminate the risk of vertical leakage of CO₂ through wellbores to shallower zones and the USDW. Module B also describes in detail the computational modeling used to delineate the perimeter of the AoR and further derisk the possible endangerment of the USDW.

This section addresses the fifth assessment step, or Step 5, referred to in Section 1.2, to assess the EJ issues associated with the development of the planned injection wells to minimize any adverse impacts of the proposed supercritical CO₂ injection upon the local communities. The following discussion about the proposed monitoring actions to be undertaken by the operator is based on USEPA’s EJ guidelines for Class VI permits (USEPA, 2023), which has been adopted by LDENR.

The Testing and Monitoring Plan, or Module E.1 of the submitted Class VI permit application, outlines the baseline and follow-up monitoring of groundwater quality and geochemical parameters through direct groundwater sampling in a number of Mississippi River Valley Alluvium (“MRVA”) water supply wells. The USDW will be protected through the mechanical integrity tests of the injection wellbores to ensure there is no flow of injected CO₂ out of the injection zones using temperature surveys, tracer surveys, and pulsed neutron logging methods. Continuous downhole pressure monitoring in the injection and monitoring wells will also provide indication of potential upward movement of CO₂ out of the injection zones. Detections of vertical injectate leakage above the Primary Austin Chalk Confining Zone in the Above Confining Zone Monitoring (“ACZMI”) wells will be facilitated by the real-time monitoring of reservoir pressure as well as quarterly sampling of the native brine geochemical composition in the Annona Sand that will be directly monitored with downhole instruments installed in the deep ACZMI well. In the shallow ACZMI well to be constructed on-site at the facility, regular pressure monitoring sampling and adaptive sampling (increasing frequency and spatial distribution on an as-needed basis) of the native brine in the basal Wilcox sand, immediately above the Midway Shale Secondary Upper Confining Zone, will also be conducted; adaptive sampling of the groundwater produced from public water supply wells completed in the MRVA and/or Cockfield Aquifers (i.e., the sources of local drinking water) will also be performed following any substantive changes in pressure or brine composition in any of the ACZMI wells (see the “E.1 - Testing and Monitoring Plan” submitted in Module E for further information and monitoring details).

Besides the subsurface monitoring techniques described above, the project will also employ other surface and near-surface monitoring techniques to facilitate enhanced pollution detection and control measures. Atmospheric monitoring across the AoR will be conducted using a single, broad-range eddy covariance system and a portable gas meter to define and characterize natural background variability, including seasonal and diurnal trends, and to detect potential atmospheric CO₂ leakage. Ecosystem stress monitoring through satellite imagery and soil gas monitoring through the installation of soil gas probes represent additional monitoring methods that the operator will employ to detect, mitigate and/or minimize the surface leakage of CO₂. As noted in the testing and monitoring plan, the subsurface monitoring data collected will be used to validate and guide any required adjustments to the geologic and dynamic models used to predict the subsurface distribution of the injected supercritical CO₂, facilitating accurate ongoing determinations of the expansion of the CO₂ plume and the aerial extent of the AoR.

In accordance with the guidance memo on EJ for UIC Class VI permitting and primacy (USEPA, 2023), SBf has provisions in place to consider any additional mitigation measures to address concerns raised by the local community. Section 3.2 of this EJ report discusses SBf's commitment to abide by the Community Engagement Plan ("CEP"), initiated in 2021, through an active stakeholder engagement by facilitating community involvement to have a clear understanding of their needs and challenges. Townhall meetings have been held in the past as a testimonial to such interactive communications with the local community and other related organizations. Community engagement activities to date are detailed in Appendix A, Table 1: Community, Labor, and Stakeholder Representatives Engaged by the Project. Appendix A, Table 2: Letters of Support Summary, indicates individuals that have provided letters of support for the LGF Project. The Project Team has compiled a comprehensive project stakeholder list Appendix A, Table 3: Community and Labor Stakeholders to Be Engaged, which summarizes stakeholders SBf plans to continue to engage. Such measures allow for establishing a platform for the community representatives to be involved in the planning and development of the particulars of the project related to the Testing and Monitoring Plan and the Emergency and Remedial Response Plan ("ERRP").

The ERRP, submitted as part of the Class VI permit, also discusses the appropriate response actions SBf will take depending on the severity of the categorized emergency event. Monitoring and alarm systems will provide notification of a potential leak of CO₂ or formation fluids out of regulatory zones, from injection wells, monitoring wells, or surface facilities (e.g., pipelines, storage systems, etc.). Monitoring and alarm systems will also monitor injection parameters, the integrity of the injection and monitoring wells, and the overall injection system; and these monitoring systems will be integrated with an automatic shutdown system. Section 6 of the ERRP discusses the communications plan for any event that requires an emergency response. The public will be adequately informed about the severity of the event; its impacts (if any) to the drinking water aquifers and the surrounding community; how the event was investigated; and what responses and remedial actions were taken. Section 5 of the ERRP set forth the emergency contact list for key local, state, and other authorities. This list will be maintained during the lifetime of the Project (Construction, Operation, and Closure). The emergency contact list will comprise all facility management and essential personnel that would be notified, activated, and/or deployed in the case of an event. One person will be designated by the facility to handle all points of communication with the public. The language needs of the local community and the needs of people with disabilities will be considered while developing communication plans and notifying

the emergency issues to the public. SBf will also communicate with entities that may need to be informed about or act in response to the event, including local water systems, pipeline operators, landowners, and Regional Response Teams (as part of the National Response Team). Section 8 of the EERP details the commitment of SBf to provide necessary staff training and skill specific “refresher” courses over the life of the project. This will include training for local responders while training facility staff to respond to emergencies at the facility.

7. CLOSING

This EJ Impact Report covers the evaluation of communities within the AoR with potential EJ concerns, the characterization of SBf's public involvement and engagement, the fit-for-purpose EJ assessments, the enhanced transparency demonstrated through the existing environmental permitting, and the plans to minimize adverse effects to USDWs and the communities they may serve.

SBf has proven an ongoing collaboration with community partners such as Parish and town officials, industrial and economic development organizations, Louisiana Delta Community College (LDCC), industry groups and workforce development organizations to secure a skilled, high-quality workforce throughout the life of the Project. The Project will continue to create opportunities for the disadvantaged communities within the AoR and for residents from underrepresented and underserved backgrounds.

The Project will result in long-term reduction in climate change hazards through decreased CO₂ emissions, which will indirectly benefit all DACs in the AoR and beyond, starting from the beginning of operations. The Project will also contribute to creating clean energy jobs, directly benefiting all DACs in the Project area, by employing local workers for construction and operations, with benefits starting at the construction phase. By SBf and its workers spending in the local communities, the DACs will also experience increased local business revenue starting from the construction phase and continuing throughout the Project's life. SBf will pay ad valorem taxes based on the value of the LGF Project assets (almost doubling the current Caldwell Parish tax base) and sales taxes will be paid based on the millions of dollars of goods and services purchased.

In addition to clean energy employment opportunities, the Project will also provide workforce education that will be enhanced through SBf's investment in and collaboration with LDCC. LDCC will create a curriculum for workforce education in clean energy fields, with SBf reviewing the curriculum and providing input based on SBf's project team experience. SBf will also support the curriculum and LDCC's students by performing guest lectures on energy transition, CCS, the worldwide effort to decarbonize the global economy and both the contemporary status and future outlook of the clean energy industry.

Ultimately, the Project will benefit DACs within the AoR in a variety of ways. These benefits are best summarized through DOE's Justice40 Initiative policy priorities and involve reducing climate change hazards, creating clean energy jobs, providing workforce education, and increasing revenue in DACs.

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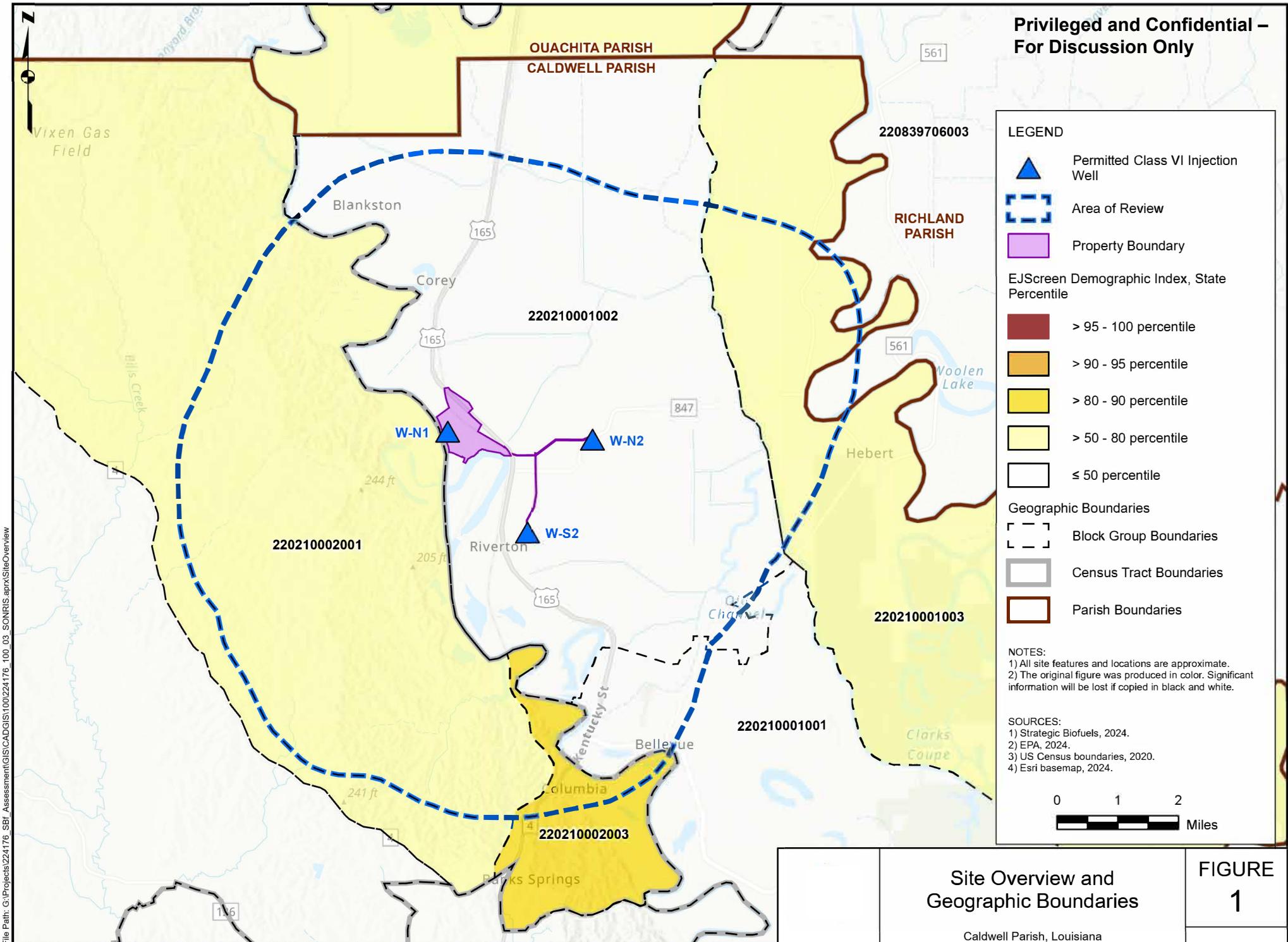
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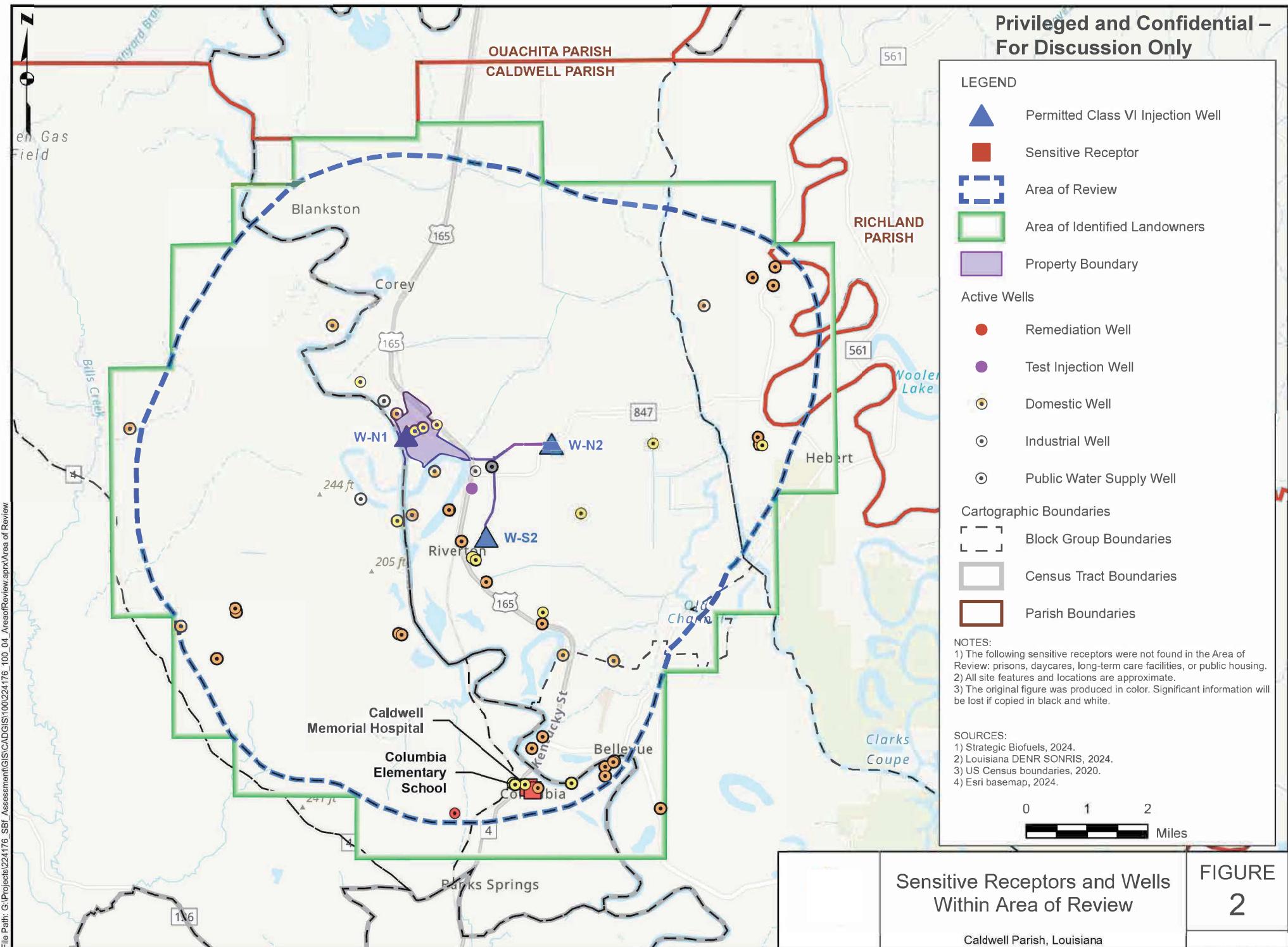
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FIGURES

Privileged and Confidential –
For Discussion Only



Privileged and Confidential –
For Discussion Only



APPENDIX A

Community Outreach and Benefits

Engagement Tables

Community, Labor, and Stakeholder Representatives Engaged by the Project Team

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Local Community/Columbia	Site Visit	4/2021	Former Louisiana Governor John Bel Edwards visited the plant site and delivered a public announcement of the LGF Project to a large gathering in downtown Columbia
Caldwell Parish Officials and Local Authorities Mayor of Columbia: Hanna Springer Caldwell Parish School Board Superintendent of Schools: Niki McCann Caldwell Parish Police Jury (Local Govt): Mark Black Caldwell Parish Sheriff: Clay Bennett Caldwell Parish Tax Assessor: Scott Meredith Office of Rural Revitalization: Kyle Ardion East Columbia Water District: Jeff Masters Caldwell Parish Dept. of Homeland Security: Jerry Bayley Citizens Medical Center Hospital (publicly owned): Steve Bardo (Administrator)	One-on-One Meeting with Two-Way Communication Infrastructure needs Job creation Plant emissions Health care Emergency response availability Tax revenue forecasts	7/1/2021	Conduct regular meetings with project progress updates. Public announcement made regarding job creation. Identification of state support programs for workforce training. Support for Hospital Expansion. Participated in planning for improved fire protection (parish-wide)
Residents/Landowners General Parish Residents Residents Adjacent to Facility Nearby Farmers: Wes Crump, Reynolds Family Partnership, and Dale Powell, (resident road access rights, lifetime accommodations with advanced purchase commitment on demand) Ouachita River Valley Association: David Weeks, Executive Director National Register of Historic Places	Townhall Infrastructure needs Community tax revenues Water contamination Seismic activity Deforestation Job creation Green energy Agricultural land use Plant emissions Industrial accidents Historic preservation	9/1/2021	Ongoing engagement Owners, renters identified Townhall conducted to get resident input regarding concerns and to establish Company's position and influence public opinion Resident Access Rights and Accommodation for Life /Buy-out options

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Economic Development Organizations Caldwell Parish Industrial Development Board: Monty Adams (President) Columbia Port Commission: Greg Richardson (Director) Louisiana Department of Transportation and Development Delta Regional Authority Louisiana Dept of Economic Development (LDED) Louisiana Department of Energy and Natural Resources: Tyler Gray (Secretary)	Group Meeting with Two-Way Communication Infrastructure needs Ground water contamination prevention Secure CO ₂ reservoir storage. Job creation	7/1/2021	Initial discussions regarding road planning. Identified infrastructure grants accessible to the Port. Safety discussions regarding CO ₂ capture and sequestration Public announcement made regarding job creation. Services engaged for safety evaluation services.
Industry Groups RPS (Forest Management Group): Conner House Louisiana Forestry Association: Buck Vandersteen Louisiana Oil & Gas Association, Mike Moncla	Group Meeting with Two-Way Communication Use of farmland for renewable power generation Sustainable forestry, job creation, and green energy	7/1/2021	Group input Potential impacts and benefits Project guidance
Elected Officials Governor of Louisiana: Jeff Landry; Former Governor: John Bel Edwards State Senator Glen Womack State Representative Neil Riser US Representative Julia Letlow US Senator Bill Cassidy	One-on-One Meeting with Two-Way Communication Job creation, green energy, and economic development	7/1/2021	Officials input Potential impacts and benefits Project guidance
Landowners Individual discussions with landowners	One-on-One Meeting with Two-Way Communication Agricultural land use and pore rights	12/1/2021	Landowners input Potential impacts and benefits Project guidance

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Community-Based Organizations Local Youth Athletics Caldwell Parish HS Athletics Caldwell Parish HS Band Local School Robotics and STEM Clubs High School, Jr High School, and Elementary School Paralympics Louisiana Art and Folk Festival HEROES Columbia Lions Club Annual Rodeo Richard Meredith Schepis Foundation University of Louisiana at Monroe (ULM) Pharmacy Council: Susan Chappell	Group and One-on-One Meetings with Two-Way Communication Community sponsorship and donations from The Strategic Biofuels Foundation and multiple project contractors and partners (Hatch, HGA, Sumitomo)	3/29/2021	Ongoing engagement
Emergency Management and Law Enforcement Columbia Chief of Police: Cedric Meredith Caldwell Parish Sheriff: Clay Bennett Caldwell Parish Police Jury: Mark Black (President) Caldwell Parish Dept of Homeland Security: Jerry Bailey	One-on-One Meeting with Two-Way Communication Safety concerns – incidents and fires	10/1/2021	Services have been engaged to develop a plan to address safety and fire services needs for the project. Ongoing engagement.
Educational Institutions Caldwell Parish School Board: Baron Glass (Member) Caldwell Parish Superintendent of Schools Nicki McCann Louisiana Delta Community College: Wendy Tostenson (Vice Chancellor, Curriculum and Student Services) Caldwell Parish High School: Elana Garcia (Principal) Louisiana State Department of Education (Katrina Branson)	Group and One-on-One Meetings with Two-Way Communication Infrastructure needs Education enhancements Workforce Development Round Table Committee at Caldwell High School, (Parent/Student Career Night)	7/1/2021	Caldwell Parish Industrial Board hosted a meeting to introduce educational community representatives. Establishment of STEM Program at Caldwell Parish High School. Developing curriculum with Louisiana Delta Community College. (New Energy Transition Curriculum, low carbon fuels, carbon capture and storage (CCS)

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Port Commission and Tenants Columbia Port Commission: Darren McGuffee (President); Greg Richardson (Director)	Group Meeting with Two-Way Communication Infrastructure needs and industrial accidents	7/1/2021	Regular meetings with the Port Commission. The Port Commission is actively involved in seeking state and federal funding for infrastructure projects (rail spur, rail crossing, road improvements).
Utilities and Offsites Union Pacific Railroad: Steven Ehrlich East Columbia Water District, Jeff Masters Entergy: Amanda Edge Texas Gas Service	Group Meeting with Two-Way Communication Additional rail crossings, safety concerns for new infrastructure adjacent to main rail line, safety concerns from existing water treatment plant, concerns about onsite power generation versus grid connection	7/1/2021	Proposed switch location and rail spur concept agreed upon. Engaged safety consultant to develop Safety Plan. Ongoing negotiations with utility providers regarding demands and project specifics.
Federal and State Agencies Louisiana Department of Transportation (DOTD) Louisiana Department of Environmental Quality (LDEQ) US Environmental Protection Agency (USEPA) Louisiana Department of Energy and Natural Resources (LDENR) Office of Conservation, State of Louisiana: Ben Dienyvено (Commissioner) US Army Corps of Engineers (USACE) Tensas Basin Levee District: Drew Keahey (President) Department of Environmental Quality: Bliss Higgins (Assistant Secretary) USEPA: Brandon Maples	Group Meeting with Two-Way Communication Traffic and road design, infrastructure needs, wastewater permitting, air permitting, CO2 leakage from reservoir, seismic activity, pore rights, industrial accidents, levy crossings and construction near toe of levee, wetlands impact	9/1/2021	Pre-application meetings, agency coordination and permitting underway for several early needs. Traffic study completed for DOTD. Minor Synthetic Air Permit obtained. Wastewater pre-application meeting conducted. Class VI application submitted to USEPA. Class VI application being prepared for DNR based on agency coordination. Process for obtaining Operating Agreement from USACE defined. Levee District coordination ongoing.

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Community Local Community Leaders	Town Hall	1/2022	Community Leader Town Hall to inform leaders of project progress and establish lines of communication (schools, churches, LGF-sponsored STEM program announcement)
Community Local Community	Ground-breaking Event	12/2022	Organized a ground-breaking event at the plant site for a key infrastructure upgrade with LA Secretary of Transportation and Development as speaker, over 200 in attendance.
Parish Taxing Authorities Caldwell Parish Police Jury Caldwell Parish School Board Caldwell Parish Sheriff	Louisiana Industrial Tax Exemption	2/2023	Received unanimous local approval of the Caldwell Parish Police Jury, Caldwell Parish School Board, and Caldwell Parish Sheriff (taxing authorities within the parish) as required for receipt of Louisiana's Industrial Tax Exemption, otherwise provided by state law.
Federal and State Agencies United States Environmental Protection Agency Louisiana Department of Energy and Natural Resources	Class VI Permit Application Submission	3/2023	In submission of this Class VI Permit application to USEPA and subsequently to LDENR, SBf has made no claim to "Confidential Business Information" (other than licensed materials), choosing to welcome engagement and pursue permit issuance with maximum public opportunity for review and disclosure
Federal and State Agencies Louisiana Department of Environmental Quality	Synthetic Minor Air Permit	9/2023	Synthetic Minor Air Permit awarded by the LDEQ after public notice, receiving no comments from any person or entity in Caldwell Parish or the State of Louisiana and

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
			only one comment from a national non-governmental organization (NGO).
Community Parents, students, families of Caldwell Parish High School Vo-Tech Graduates	Parents/Students Career Night Career Opportunities	2/2024	With Louisiana Workforce Commission, participated in initial planning of 1st Parents/Students Career Night at Caldwell Parish High School, had a major presence at well-attended event and engaged with numerous families about career opportunities for high school and vo-tech graduates
Community Local Community Leaders	Town Hall	4/2024	Townhall meeting format hosted by a local community bank with open dialogue (introducing SBf Leaders and executives from 1st LGF Project global strategic investor to all community leaders)
Community Local Community Leaders	Town Hall	7/2024	Townhall meeting format hosted by a local community bank with open dialogue (introducing executives from 2 nd LGF Project global strategic investor to all community leaders)
Community Parents, students, families of Caldwell Parish Highschool Vo-Tech Graduates	Parents/Students Career Night Career Opportunities	9/2024	Participated in 2nd Parents/Students Career Night at Caldwell Parish High School, had a major presence at well-attended event and engaged with numerous families about career opportunities for high school and vo-tech graduates

Name of Organization or Community of Interest Engaged	Type of Engagement and Concerns	Date of Initial Engagement	Outcome of Engagement
Emergency Management and Law Enforcement Elected Officials Caldwell Parish Police Jury (parish government) Caldwell Parish School Board Additional Local Governing Bodies	Frequent Meetings and Communication Project Development	From project inception	Frequent meetings and communication since project inception with the Caldwell Parish Police Jury (parish government), the Caldwell Parish School Board and other local governing bodies to keep them abreast of project development
Community Elected Officials Community Leaders Government Officials at all levels Other relevant parties interested in project development	Emails Project Development	From project inception	On a quarterly basis, SBf has emailed highly informative Stakeholder Updates to hundreds of persons interested in project development progress, including community leaders and government officials at all levels
Community Local Community All interested parties	Website	9/2024	From its earlier version, announced a fully updated and highly informative website describing the LGF Project

Letters of Support Summary

Entity	Point of Contact	Date
Caldwell Parish School Board	Melinda Ballard	September 12, 2024
Port of Columbia	Greg Richardson, Director	April 8, 2024
Louisiana House of Representatives	Neil Riser, State Representative, District 20	April 5, 2024
Caldwell Parish School District	Niki McCann, Superintendent	April 5, 2024
Caldwell Parish School Board, District 4	Baron D. Glass	April 5, 2024
Caldwell Parish Industrial Development Board	Monty Adams, President	April 5, 2024
Caldwell Bank and Trust Company	Steven Richardson, President	April 4, 2024
Caldwell Parish	Scott Meredith, Assessor	April 4, 2024
Citizen's Medical Center	Steve Barbo, CEO	April 4, 2024
Caldwell Holding Company	Monty Adams, CEO	April 4, 2024
House of Representatives: 5 th District, Louisiana	Julia Letlow, Member of Congress	March 8, 2024
Police Jury of the Parish of Caldwell	Kenneth Graham	October 3, 2022

Community and Labor Stakeholders to Be Engaged

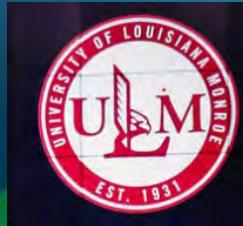
Name of Organization or Community of Interested Engaged	Type of Engagement	Frequency of Engagement	Intended Outcome of Engagement
Residents and Community Leaders	Townhalls Infrastructure needs, community tax revenues, water contamination, seismic activity, deforestation, job creation, green energy, agricultural land use, plant emissions, industrial accidents, historic preservation, CO2 leakage from reservoir	Quarterly	Through meetings with smaller groups of community leaders and town hall meetings for broader audiences, we provide regular opportunities for community access and feedback on the project. Engage in iterative dialog to address key concerns and issues from residents as the project progresses.
Non-Profits and Environmental Organizations	Group Meeting with Two-Way Communication CO2 leakage from reservoir, seismic activity, deforestation, open burning of forestry waste, water contamination	Monthly, or more frequently	Project education for environmental and other non-profit advocates. Demonstration of impact minimization, risk mitigation, and project specific environmental benefits to local and global climate.
Economic Development Organizations	Group Meeting with Two-Way Communication Infrastructure needs, water contamination, CO2 leakage from reservoir, job creation, plant emissions	Monthly, or more frequently	Continued collaboration to address community concerns, develop required infrastructure, and develop workforce.
Industry Groups	Group Meeting with Two-Way Communication Use of farmland for renewable power generation, deforestation, job creation, green energy	Monthly, or more frequently	Continued collaboration to address community concerns, develop required infrastructure, and develop workforce.
Tribal Leaders and State Historic Preservation Office (SHPO)	Individual Meeting with Two-Way Communication Phase II Cultural Surveys underway. If applicable, we will engage with appropriate tribal leaders and the SHPO.	Upon artifact discovery, if applicable	Preservation of recognized cultural resources. Avoidance of impacts.

Name of Organization or Community of Interested Engaged	Type of Engagement	Frequency of Engagement	Intended Outcome of Engagement
Regulatory Agencies	Group Meeting with Two-Way Communication Infrastructure needs, water contamination, CO2 leakage from reservoir, seismic activity, plant emissions, pore rights, industrial accidents, levy crossings for cooling water and wastewater, permitting and authorizations to construct and operate	Agency or permit timeline specific intervals	Provide clear representations and application packages for environmental and site development approvals. Maintain favorable project reputation and rapport with key agency stakeholders.
Elected officials	One-on-One Meeting with Two-Way Communication Job creation and green energy	Monthly, or more frequently	Relationship-building, education, Project understanding and support.
Landowners	One-on-One Meeting with Two-Way Communication Land use, pore rights	As needed	
Community-Based Organizations	Group and One-on-One Meetings with Two-Way Communication Sponsorships and donations	Monthly, or more frequently	Relationship-building, community outreach and education.
Emergency Management and Fire Departments	Group Meetings with Two-Way Communication Safety concerns. Fire and emergency response infrastructure.	Agreed upon intervals as design progresses	Identification of any project-sponsored or informed solutions for emergency readiness and preparedness. Infrastructure improvements and workforce development.
Educational Institutions	Group Meetings with Two-Way Communication Infrastructure needs, seismic activity, education, Seismic activity	As needed, per institution	Continued development of STEM learning opportunities. Continued development of training programs and higher education curricula. Share information regarding seismic studies and impact mitigation with academic community.

Name of Organization or Community of Interested Engaged	Type of Engagement	Frequency of Engagement	Intended Outcome of Engagement
Port Commission and Tenants	Infrastructure needs and industrial accidents	Monthly, or more frequently	Continued collaboration on mutual infrastructure improvements and execution of commitments to the community.
Utilities and Offsites	<p>Group Meeting with Two-Way Communication</p> <p>Additional rail crossings, safety concerns for new infrastructure adjacent to main rail line, safety concerns from existing water treatment plant, concerns about onsite power generation versus grid connection</p>	Agreed upon intervals as design progresses	Maintain clear channels of communication for design reviews. Timely identification of any challenges to water supply, power, and other key services.
Labor Unions	Group Meetings with Two-Way Communication		
Workforce Development Organizations	Group Meetings with Two-Way Communication		

Community Presentations

The Strategic Biofuels Foundation



Caldwell Parish Spartans



Community Benefits Programs



Sumitomo Corporation

Enriching lives and the world



Strategy for Project and Community Success

One of the key strategies for success by the Louisiana Green Fuels Project (“LGF”) is to prioritize the development of broad training and educational programs that benefit the local community well beyond serving the needs of the Project itself.

Science, Technology, Engineering and Math (“STEM”) programs are already being expanded across the education spectrum in our region with support of multiple LGF partners who have generously donated their time and funding to support these foundational programs.

LGF, working with its key project partners and suppliers, along with support from local and regional governments and businesses, will enable Caldwell Parish and its neighboring communities to significantly benefit from the emerging energy transition and decarbonization economy.

The combination of job creation by the LGF project and focused training, and “Energy Transition Education” within the local communities, provide the core basis upon which this Project and the entire region and its residents will succeed and thrive.

Caldwell Parish Junior High School Robotics Team



Caldwell Parish Jr High Robotics team members: Front row left to right: Kole Swett, Isabella Fife, Sponsor Kaci Fontenot, Drake Fitzgerald, Cody Shiflett. Back row: Sawyer Watts, Bentley Carroll, Brooklyn Exline, Zane Mercer, Owen Clark, Brandon Laffoon.

Caldwell Parish High School Robotics Team



Sponsored by Hatch Engineering

The Strategic Biofuels Foundation

Supporting LGF Community Benefit Programs (“CBPs”)

The Strategic Biofuels Foundation (“TSBFF”) is a 501c (3) non-profit special purpose entity established to oversee the financial support pathways developed for the Louisiana Green Fuels Project Community Benefits Program under the DOE Title 17 Clean Energy Financing Loan Guarantee Program.

TSBF also manages broad funding solicitation from LGF partners, contractors as well as supports grant applications for Louisiana state economic development grants available for LGF Project Community Benefit Plan project in Caldwell Parish Louisiana.

The guiding vision of The Strategic Biofuels Foundation is for broad regional economic development by way of improved education and training as well as commitment to the DOE Loan Office Program “pillars” of Diversity, Equality, Inclusion, and Accessibility related to the support for LGF Project.

Louisiana Green Fuels Commitment to DOE

LGF CBP-1

A community engagement with Caldwell Parish High School and the Louisiana Department of Education (LDOE), Louisiana Rehabilitation Services (LRS) and Local Education Agencies (LEAs) seeking to establish the Louisiana Center for Effective Transitions (LCET) to provide support to students with disabilities. Strategic Biofuels Foundation and Louisiana Green Fuels Project has committed its support in creating innovative models for statewide implementation of inclusive workforce development and job creation.

Strategic Biofuels Foundation is pleased to have recruited Partners Creating Community, a non-profit organization in Pennsylvania, who has pioneered similar programs for students with disabilities in their area with great passion and success for their community.



LGF CBP-1

DOE Loan Office Pt2 Application

Vision:

Re-purpose a previously closed building in downtown Columbia, Louisiana for providing support and work accommodation to high school students and other local community members with disabilities who need opportunities to develop life and work skills leading to successful transition to local jobs that are sustainable, long-term opportunities in Caldwell Parish, Louisiana.

DOE Pillars to be accomplished

- **Diversity:**
- **Equality:**
- **Inclusion:**
- **Accessibility**
- **Implementation of Justice 40**

Louisiana Green Fuels
CBP Partners

Community Advisory Board Members
currently being recruited





Caldwell Conquerors Café

212 Main Street Columbia, Louisiana

This is an alternative environment high school facility for students with disabilities who are in transition to local workforce as well as for upper-level students interested in pursuing careers in health care and social services.

Rebekah Meredith Caldwell Parish Director of Special Education Takshi Homma, Sumitomo Co. of America, Community Programs “Mr Wilson” (Contractor for Stakeholder, Caldwell Bank and Trust)



Caldwell Conquerors Café
212 Main Street
Columbia, Louisiana

The Students prepared 25 salads for the staff using menus created to fit their needs. The students then “door dashed” the plates to the teachers before their lunch. The students stated they enjoyed getting to make and deliver the food !!!

APRIL 26, 2024

The Students with the help of Mrs. Piercy’s Nutrition class made salads for the CPHS Staff on April 26. The students were able to practice their food handler and customer service skills.



**Caldwell Conquerors
Café
212 Main Street
Columbia, Louisiana**



**APRIL 26, 2024
Making “door-dash” salads for 25 Teachers at
Caldwell Parish High School**



Caldwell Conquerors Café

*212 Main Street
Columbia, Louisiana*







Louisiana Delta Community College Update

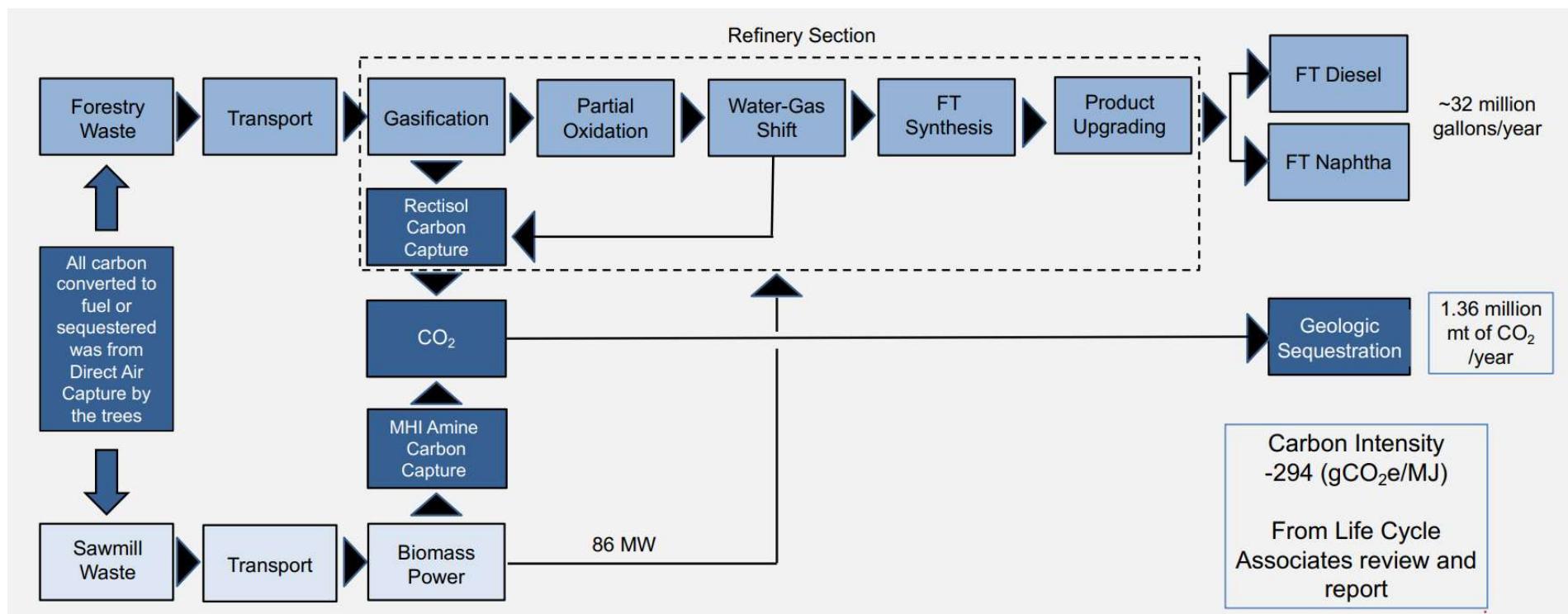
September 11, 2024



Newly announced Energy Transition Operations Curriculum
A workforce development collaboration with Strategic Biofuels, LLC.



Early LGF Block Flow Diagram



Examples of Future Positions at Louisiana Green Fuels

Management and Administration

Technical Services Mgr
HSSE Manager
Sr. Administrative Assist.
Accountant
Document Control / CAD
Payroll / HR
Warehouse Supervisor
Administrative Assistant

Maintenance and Production

Shift Supervisor
Operator
Lead Mechanic
Mechanic
Instrument Tech
Data Control System Tech
Sr. Electrician
Electrician

Material Handlers / Woodyard Staff

Traffic Coordinator
Purchasing Agent
Field Yard Supervisor
Field Yard Support Staff

Laboratory

Senior Chemist
GC Analyzer Tech
Lab Tech



Future Employment Opportunities

151 direct full-time positions @ \$70k/year average
750+ indirect full-time jobs in the region
635 construction jobs with a peak of 1500

Successful long term talent recruiting depends on close collaboration with local schools, community colleges and higher education opportunities for students in the state of Louisiana.





The new curriculum development partnership with Strategic Biofuels provides new career pathways for local and regional students interested in careers in renewable, the lower-carbon fuel production sector. The program builds upon LDCC's solid foundation of experience in Gulf Coast Region oil and gas Industry training and STEM education fundamentals.

LDCC is using existing resources and collaboration with Strategic Biofuels subject matter experts with other industry and labor collaboration support to enhance the long running LDCC energy operations training curriculum.



Vision for Future Education and Training for Louisiana Green Fuels Project



LDCC / SBf Curriculum Under Development

Fundamental STEM

1. Basic Safety
2. Basic Hazard Communication
3. Basic Lockout-Tagout
4. Basic Math 1
5. Basic Math 2
6. Basic Math 3
7. Physics 1
8. Physics 2
9. Physics 3

Choose other fundamentals from
current LDCC vocational training
programs Electrical Power Operations

Bio-Refinery Basic Operations

1. Woody Biomass Transport, Preparation and Feedstock Handling
2. Gasification
3. Heat Exchangers
4. Lubrication and Bearings
5. Electrical Safety
6. Electricity for Operators and Technicians
7. Industrial Valves
8. Compressed Air
9. How to Read Block Flow Diagrams
10. Process and Instrumentation Drawings
11. Basic Process Instrumentation and Control
12. Refining 1000: Introduction to Bio-Refining

Louisiana Green Fuels Project

Supporting Community Benefit Programs

Project Updates for Educators

STEM Program Support and Collaboration

Vocational and Career Training

Recruiting and Mentoring of Local Talent in
Advance of LGF Project Start-up

Creating a Pathway to Improve
Broad Community Economic Development



Caldwell Parish High School Robotics Team



Sponsored by Hatch Engineering
Calgary, Canada



Letters of Support

A. Melinda Ballard, Caldwell Parish School Board

On motion by Melinda Ballard, seconded by Maria Bass, the following resolution was offered:

RESOLUTION

BE IT RESOLVED BY the Caldwell Parish School Board (the "Board") duly convened in regular session at its offices in Columbia, Louisiana on this 12th day of September 2024:

WHEREAS, the Board is charged with the sole responsibility for providing the most effective educational opportunities for all children and youth in Caldwell Parish and administering all of the schools within the Parish's school system, and

WHEREAS, the Board consists of seven elected School Board members from various districts throughout the Parish representing all the citizens of Caldwell Parish and is reflective of its residents, and

WHEREAS, in addition to statutory funding from the State of Louisiana, the Board also relies on tax revenue generated within Caldwell Parish to support its mission, including revenue specifically dedicated to maintain its infrastructure and supplement its teacher salaries, and

WHEREAS, the growth of tax revenues available to the Board to improve and expand its programs and educational offerings is directly linked to sustained economic development in the Parish and resulting growth in population, all of which is recognized as promoting the betterment of life in the Parish for all its citizens, and

WHEREAS, the Board has previously considered and approved the application of Louisiana Green Fuels for partial Industrial Tax Exemption to assist the company with its ability to attract billions of dollars of private investment to plan, design, construct, commission and operate in Caldwell Parish a renewable fuels biorefinery using forestry waste as a feedstock and with a primary product of ultra-carbon-negative Sustainable Aviation Fuel (commonly, jet fuel) that will provide a pathway for the aviation industry to achieve "carbon net zero" emissions, and

WHEREAS, the Board is informed and remains updated by the leadership of Louisiana Green Fuels of all aspects of the industrial project and its development progress, including its additional components of self-generated onsite "green power" and the use of onsite carbon capture and sequestration that enable the project to achieve the extraordinarily negative carbon footprint of its renewable fuel products, and has had the opportunity to question the company's leadership about all facets of the project, and

WHEREAS, the Board has considered all of the impacts on Caldwell Parish that the planned Louisiana Green Fuels project will bring to the Parish, including environmental, economic and overall quality of life for all citizens of the Parish, all of which are deemed positive, and

WHEREAS, the Board, mindful of its relationship with all segments of the community, specifically in the vicinity of the planned facility, and being knowledgeable of all aspects of the many factors considered in recognizing and assessing disadvantaged communities and the regulatory requirements associated with such, has determined in its unanimous collective view

Letters of Support

that the Louisiana Green Fuels plant, including its planned carbon capture and sequestration facility, will not impose environmental harm on any disadvantaged community or saddle any such community with negative environmental impacts, nor has the Board been informed by any citizen of opposition to the planned facility for any reason,

WHEREFORE BE IT RESOLVED, that the Caldwell Parish School Board does hereby recognize the Louisiana Green Fuels project at the Port of Columbia as being in the public interest and to the benefit of all citizens, regardless of economic status, place of residence or other demographic category, recognizes the unprecedented opportunity before the Parish, and re-affirms its hope and desire for the project to be fully constructed and operational for the betterment of life in Caldwell Parish for many decades to come.

Resolution adopted this 12th day of September, 2024 with the following vote recorded:

YEAS: 7

NAYS: 0

ABSENT: 0



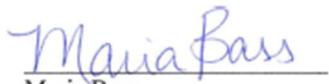
Gary Cassels, President
Ward 7



Randy Lentz
Ward 1



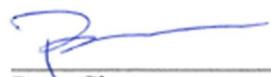
Melinda Ballard
Ward 3



Maria Bass
Ward 5



Bo Barton
Ward 2



Baron Glass
Ward 4



Johnni Fallin
Ward 6

B. Steven Richardson - President, Caldwell Bank and Trust Company



Caldwell Bank and Trust Co.

Steven C. Richardson
President

April 4, 2024

Department of Energy

Re: Letter of Support
Strategic Bio Fuels, LLC
Louisiana Green Fuels, LLC

Dear Sir,

I am writing this letter to support the above captioned entities for the purpose of seeking capital needs to bring this project to fruition. I believe this project will bring remarkable changes to not only Caldwell Parish, but the entire North Louisiana Region. The economic impact the project will bring is hard to quantify, however the results could quite frankly be unmeasurable.

The community (Caldwell Parish) has been onboard since the inception. Mr. Schubert and Mr. Meredith along with their team have worked tireless hours to get this project to the present stage.

In conclusion, I deeply support the efforts of Strategic Bio Fuels, LLC., and Louisiana Green Fuels, LLC to seek funding to support the capital needs of this project. Your support and assistance will be greatly appreciated.

Sincerely,

Steven C. Richardson
President

C. Scott Meredith – Assessor Caldwell Parish

SCOTT MEREDITH
Caldwell Parish Assessor

April 4, 2024

U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

RE: Carbon Capture Project in Caldwell Parish, Louisiana
Columbia, Louisiana Port

Dear Sirs:

Concerning Strategic Biofuels LLC/LA Green Fuels referenced project, the impact on Caldwell Parish will be enormous and very positive. Even with the eighty percent tax exemption, the estimated tax revenue to the parish will add almost as much as we are currently generating. We are most excited about the impact it will have on our parish wide consolidated public school system, as well as our parish owned hospital. Also, we plan to create a professional fire department to replace our current piecemeal volunteer system. Our Sheriff's Department needs funding for personnel and our parish government needs funding for infrastructure. As much as anything though, our parish is in need of jobs. We have almost no industry.

We sincerely appreciate any consideration you can give to this much needed project.

Sincerely,

Scott Meredith
Scott Meredith
Assessor

SM/tmb

D. Steve Barbo, CEO – Citizen's Medical Center

Phone: 318-649-6100



P.O. Box 1070
7939 Hwy 165
Caldwell, Louisiana 71418

April 4, 2024

Jigar Shah, Director
US Department of Energy
Loan Programs Office
1000 Independence Avenue SW
Washington DC, 20585

RE: Guaranteed Loan- Strategic Biofuels

Dear Director Shah,

On behalf of Citizen's Medical Center, I am writing to express strong support for Strategic Biofuels and their efforts to secure \$2 Billion in a guaranteed loan. Caldwell Parish is a distressed parish and has not seen noticeable growth in quite some time. This loan will be used to develop clean energy. Not only is this great for the environment but it will add as many as 900 jobs to area and will increase the population in this Parish. The entire community is excited about this awesome opportunity that we are finally taking a step in the right direction. This means people can stay home and find work. They will not have travel to West Texas, Gulf of Mexico or Overseas for that matter to find good paying jobs.

When the news of this plan surfaced a few years back it made us take a long look at our hospital and the care that we provide. We decided that we needed to expand our emergency room to meet the needs of the growing population and have the facility add providers to care for such an influx of people. We have already started Phase one of our construction that includes increased parking and a new clinic. Phase 2 is scheduled to start late this fall and will include a ten room Emergency Department and an ICU with a complete Imaging Center.

Strategic Biofuels has been very supportive of our efforts, and we are supportive of their project. This project will utilize left over products from our Timber industry and turn it into Biofuel for Jets to be used nationwide.

The community outreach via Biofuels has been unprecedented. They have invested in our schools with science programs, sponsoring ball teams and just giving the citizens of this Parish confidence that better times are ahead.

Again, Citizen's Medical Center firmly supports Strategic Biofuels efforts to secure a \$2 billion loan and construct a top rated environmental friendly plant located in Caldwell Parish.

Sincerely,

A handwritten signature in blue ink that appears to read "Steve Barbo".

Steve Barbo CEO

E. Monty Adams, CEO – Caldwell Holding Company



April 4, 2024

Subject: Letter of Support for of Strategic Biofuels Caldwell Parish project

Caldwell Holding Company was supportive of the Biofuels project from early on and continues to be in full support of this project. This project appears to be a mutually beneficial opportunity for this community and the surrounding areas with both the carbon sequester capabilities and the abundant raw material resources in the parish and the parishes adjacent. The quality workforce available to this venture adds an additional layer to this already strong bond.

It is our view that the community is very favorable, in regards to, this project. Many individuals and businesses invested in the initial phases placing their dollars behind their belief in the project. Over the various phases of this project, many individuals have attended the town and civic organization meetings to stay engaged. There is a renewed life in Caldwell parish as people see the benefits that this project can bring to the communities and their families.

Specifically for Caldwell Holding Company, we believe the Biofuels project will add a significant impact to Caldwell parish and the surrounding communities. Job creation and economic lift in these areas are critical to the rural community's ability to support the next generation. Caldwell parish is a great place to live and with a strong local economy we are certain this parish and the surrounding parishes will avoid the decline seen in many rural areas and continue to thrive.

Sincerely,

The handwritten signature of Michael R. Wilson.

Michael R. Wilson
President
Caldwell Holding Company

The handwritten signature of Monty Adams Sr.

Monty Adams Sr.
Chief Executive Officer
Caldwell Holding Company

F. Neil Riser – Louisiana State Representative

LOUISIANA HOUSE OF REPRESENTATIVES

P.O. Box 117
Columbia, LA 71418
Phone: 318-649-0977
Fax: 318-649-0979
risern@legis.la.gov



COMMITTEE ASSIGNMENTS:
Commerce
Natural Resources and
Environment

NEIL RISER
State Representative ~ District 20

April 5, 2024

Strategic Biofuels, LLC
Louisiana Green Fuels, LLC
P.O. Box 1269
Columbia, LA 71418
ATTN: Bob Meredith

RE: Louisiana Green Fuels Project
Caldwell Parish, Louisiana

Dear Bob:

I am honored to write in support of the Louisiana Green Fuels Project in Caldwell Parish. As State Representative for District 20, that covers Caldwell Parish. I am so pleased that this project is located in Caldwell Parish. Our area is very rural and this project will help boost the economy.

As a State Representative, I have been able to help secure funding on the State level to assist with this project. This project is strategically located on U.S. Highway 165, which is a major highway, along with the Union Pacific Railroad and the Ouachita River. Also, it has been my experience that the local community is extremely supportive of this project.

Please note that I will continue to work diligently with the local community and the State of Louisiana regarding this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Neil Riser".

Neil Riser
State Representative
District 20

nr:acm

G. Niki McCann Superintendent, Caldwell Parish School District



Nicki McCann, Superintendent
7112 Highway 165 South | P.O. Box 1019
Columbia, LA 71418
318.649.2689 | 318.649.0636 (Fax)
www.caldwell-education.org

April 5, 2024

To Whom It May Concern:

It is with great anticipation that I write this letter in support of the LA Green Fuels Project in Caldwell Parish. One of the items that has most impressed me is the desire of the investors to make an impact within a community instead of just what it can get out of a community. Our community is full of hard working people that have stayed in our community because of the strong desire to be a part of something special. To others, we might be viewed as a diamond in the rough but to us, it is home.. and Caldwell Parish is truly a special place.

As a lifelong resident of the parish, there is simply no other place I would rather be and as the Superintendent for the Caldwell Parish School District, I have the dream job of preparing our students for whatever they desire to pursue. Our past graduates have jobs in many walks of life ranging from those that stayed within the parish as some of our own teachers. For those that work outside of our area, our graduates can be found all over the United States working as doctors, veterinarians, accountants, pipeliners, drillers, etc. It is exciting to know that many of our graduates will now have the opportunity to work for Louisiana Green Fuels!

Workforce Impact

As you likely know, Caldwell Parish is a rural parish with approximately 10,000 residents. The District has approximately 1,500 students and 300 employees that work to provide a well rounded learning environment for our students. For our employees, one of the issues that impacts quality of life is being a single parent for significant portions of the year due to the spouse working off-shore, in construction, and other such fields. Most if not all of these off-site spouses would prefer to have full-time employment within the parish. Louisiana Green Fuels will provide for that opportunity.

Additionally, one of the District's chief issues is being able to retain teachers, especially first year teachers. Many times, the District will hire a new teacher fresh out of college, invest time and resources into this teacher only to lose them when a position opens up at a neighboring and higher paying school district.

Financial Impact

From a financial standpoint on the Caldwell Parish School District, the impact is best described as significantly altering its financial landscape from two points. *Note that all data is projected based on known data. It also is a conservative projection with no inflation component and no growth factor for additional purchases.*

School Board Members

Gary Casseus, President | Randy Rentsi, Vice President
Bo Baron | Melinda Ballard | Baron Glass | Maria Bass | Johnnie Fa

Letters of Support

1. **Sales Tax Benefit**

The District has a two percent sales tax (two taxes at one percent each). Assuming a two-billion-dollar price tag for this anticipated plant, then the District will receive \$40,000,000 in sales tax revenue during the construction phase, likely over two or three years. After the construction phase, it is estimated that the annual purchases of \$60,000,000 will generate an additional \$1,200,000 annually for the life of the plant. The District's current sales tax revenue is approximately \$2,750,000 per year so the additional \$1,200,000 in annual revenue represents an increase of over forty percent.

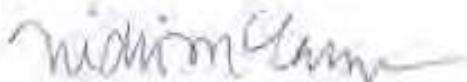
The disbursement of the sales tax revenue is dedicated exclusively to salaries and benefits of the District's employees and the allocation of the disbursement is determined by the board members of the District. A portion of the funds will likely, subject to board approval, be used to pay for the retirement benefits of past employees. The remainder will likely be used, and again subject to board approval, to enhance the salaries of the current staff and for recruitment. The sales tax component is truly a gigantic and favorable shift for the District's financial picture.

2. **Property Tax Benefit**

The property tax component is a bit more convoluted due to its impact on how a school district is funded by the State of Louisiana but still favorable. For the first ten years after the plant goes into operation, property tax revenue will increase from the current \$2,575,000 per year (General Fund and Maintenance Fund only) to a projected \$4,825,000, an increase of \$2,250,000. This increase will be offset to a large degree by the funding received by the State of Louisiana. After ten years when the 80% exemption is no longer in place, property taxes will increase by another \$9,000,000 to bring projected revenues to \$13,825,000. At this point, State funding will likely be eliminated since the property tax revenue increases (the \$2,250,000 plus the \$9,000,000) would likely exceed the formula used to determine the allocation of State funding to each school district. Again note that the current property tax revenue is \$2,575,000 and beginning in year eleven of operation, the increases, with the full 100% tax on the plant, to \$13,825,000.

Thus, the favorable impact is greater autonomy for the District and the dollars that are freed up from the District would be allocated to other more financially needy districts which is a benefit for the students throughout the State of Louisiana. Basically, the financial impact is transferred from Caldwell Parish School District to the State of Louisiana.

Sincerely,



Nicki McCann, Superintendent

School Board Members:

Gary Cassels, President | Randy Rentz, Vice President
Bo Barton | Melinda Ballard | Baron Glass | Manli Bass | Johnnie Fallon

H. Baron D. Glass, Caldwell Parish School Board, District 4

Baron D. Glass
P.O. Box 992
Columbia, La. 71418
318-594-2142
alkibaestate@yahoo.com

Subject: Supporting the Establishment of a Biofuel Plant in Our Rural Community

Dear Department of Energy,

I have been elected locally since 1993 until this current day. I have been involved with Economic Development in other areas of the State as well, but have never been prouder than this moment now. Therefore, I am writing to express my enthusiastic support for the proposed biofuel plant in our small rural area of Caldwell Parish. As a life-long resident, I believe that this initiative has the potential to transform our community in significant ways like never before. We are a rural Parish, economically deprived, with no industry and the largest employer being the Caldwell Parish School System. Allow me to outline the compelling reasons why this project deserves your endorsement.

- 1. Economic Revival:** Our community has faced economic challenges for decades. With little industry to sustain us, families have struggled to make ends meet. The establishment of a biofuel plant would inject much-needed vitality into our local economy. It would create jobs, stimulate business growth, and provide a stable source of income for our residents. Imagine the positive impact on our struggling businesses, from the corner store to the diner down the road.
- 2. Job Creation:** A biofuel plant would not only provide direct employment opportunities but also generate ancillary jobs. From skilled technicians to administrative staff, our community members would find meaningful work. These jobs would empower our youth, reduce unemployment rates, and foster a sense of pride in contributing to something larger than themselves. We have already created a School to Industry pipeline and hosted the largest Job Fair for our High School Students and parents linking them with businesses for potential jobs all within a 2-month time span.
- 3. Environmental Benefits:** Biofuels offer a cleaner alternative to fossil fuels. By producing renewable energy from organic materials, we can reduce our carbon footprint and mitigate climate change. Our region's abundant agricultural resources—such as corn and timber—can be harnessed to create sustainable energy. This alignment with environmental stewardship is essential for our community's long-term well-being.
- 4. Quality of Life Enhancement:** For the past century, our community has yearned for progress. The biofuel plant represents a beacon of hope—a chance to improve our quality of life. Cleaner air, economic stability, and a renewed sense of purpose await us. Our children will grow up in a community that values innovation, sustainability, and resilience.

Letters of Support

This project from the beginning, has been 100% inclusive of the community. Every local governing body has been a part of the process. Information has been provided to the community. The community has bought into this concept. The community has been involved and it has not been forced on them. This has created a bond and a solid foundation. We as a community feel it's our time to grow. The proper things have taken place and this project will create growth, not just to the parish of Caldwell, but the region as well. If that's not growth, I don't know what is.

In conclusion, I urge the Department of Energy to wholeheartedly support the establishment of this biofuel plant. Let us seize this opportunity to revitalize our community, create jobs, and pave the way for a brighter future. Together, we can make life here better than it has ever been especially within the last 100 years.

Thank you for your attention to this matter.

Sincerely,



Baron D. Glass

Caldwell Parish School Board
District 4

I. Greg Richardson, Port of Columbia Director



Columbia Port
Commissioners

Greg McGuire | President | Charles Homy | Secretary/Treasurer
Monty Adams, #1 | Hildie R. Frazee | Jim Cooksey - MD

Bob Meredith
COO, Strategic Biofuels, LLC
COO, Louisiana Green Fuels, LLC
303 Wall Street.
Columbia, La 71418

April 8, 2025

RE: LETTER OF SUPPORT FOR LGF'S DOE APPLICATION

Dear Bob,

The Columbia Port Commission is wholeheartedly endorsing Louisiana Green Fuels' endeavor to secure a guaranteed loan from the United States Department of Energy (DOE). We recognize the monumental impact that LGF's project will have on the Port of Columbia and our surrounding community. Over the past two years, the Columbia Port Commission has worked closely with LGF in anticipation of the Biofuel Facility's development. Together, we have secured \$38 million in state and federal funds to bolster infrastructure investments at the Port, aligning with the requirements of LGF's proposed project. These investments encompass property acquisitions, road constructions, rail spur developments, the establishment of a Truck Parking Facility, creation of an Emergency Staging Area, and enhancements to our existing dock facilities.

Our success in obtaining grants underscores the collective effort and unwavering support received from all stakeholders, ranging from citizens and businesses to local communities, governmental agencies, and elected officials at local, state, and federal levels. The Port proudly advocates for Louisiana Green Fuels and recognizes the indispensable role that the DOE loan program plays. We firmly believe that our community project will serve as a beacon, demonstrating the program's capacity to effect meaningful change in rural and disadvantaged communities.

Sincerely,


Greg Richardson

Port Director

Columbia Port Commission



J. Monty Adam, Caldwell Parish Industrial Development Board

Caldwell Parish Industrial Development Board
P. O. Box 1261
Columbia, LA 71418
318-649-2351

April 5, 2024

Jigar Shah, Director
US Department of Energy
Loans Programs Office
1000 Independence Ave SW
Washington, DC 20585

Dear Director Shah,

I am writing to express my strong support for the Strategic Biofuels and Louisiana Green Fuels plant to be in Columbia, Louisiana. We firmly believe that what benefits our environment also enhances the community and quality of life for Louisiana and its residents.

Once complete, the Louisiana Green Fuels plant will create approximately 151 direct jobs onsite with an average annual income of \$70,000 per year, excluding benefits, while five to six times as many indirect job opportunities are expected. During peak construction times, an estimated 1,500 jobs will need to be filled to further the plant to operation. As a result, Strategic Biofuels will substantially improve the local quality of life in the nation's seventh poorest (5 Congressional District (LA-5) and tenth poorest Parish in Louisiana, which has an average household income of just \$11,900 per year. The team is also actively involved with Caldwell Parish School District and has helped support several programs championing career and personal development.

The Strategic Biofuels and Louisiana Green Fuels project aligns with our shared vision for regional economic growth. I am confident that the Strategic Biofuels and Louisiana Green Fuels project fosters economic development and would be a positive utilization of DOL funds. As President of the Caldwell Parish Industrial Development Board, I am fully aware of the vital role that this project plays in the economic development of our region.

In closing, I am strongly in support of the Strategic Biofuels and Louisiana Green Fuels plant, and I respectfully ask that you give your full consideration to their proposal and ask for special consideration of this from our disadvantaged rural community, with limited resources, working together to make a difference.

Sincerely,


Monty Adam, President
Caldwell Parish Industrial Development Board
318-649-2351

K. Julia Letlow Ph.D, Member of Congress, 5th District, Louisiana

JULIA LETLOW, Ph.D.
5th District, Louisiana

COMMITTEE ON APPROPRIATIONS

Subcommittee on Agriculture, Energy,
Natural Resources,
Food & Rural Development,
and Related Agencies

Subcommittee on Labor, Health
and Human Services, Education, and
Related Agencies

Subcommittee on Energy and Water
Development and Related Agencies

COMMITTEE ON EDUCATION
AND THE WORKFORCE

letlow@mail.house.gov

Congress of the United States
House of Representatives
Washington, DC 20515-1505

March 8, 2024

WASHINGTON, D.C.
102 Cannon House Office Building
Washington, DC 20515
Toll: 202-225-3592
Fax: 202-225-5238

OFFICE OF APPROPRIATIONS
Washington, D.C. Office
1200 New York Avenue, Suite 200
Washington, D.C. 20004-167201
Fax: 202-225-3592

CHAMBER OF REPRESENTATIVES
411 Cannon House Office
Washington, D.C. 20515
Fax: 202-225-5238

BOARD OF TRUSTEES
1025 G Street, N.W.
Anchorage, AK 99501
Fax: 907-284-5500

Dr. Paul Schubert
Chief Executive Officer (CEO)
Strategic Biofuels
PO Box 1269
303 Wall Street
Columbia, LA 71418

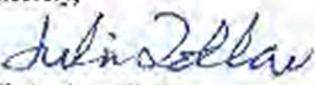
Dear Dr. Schubert:

I write in support of the Louisiana Green Fuels project located in Caldwell Parish, Louisiana. This project can provide an economic boost to Louisiana's Fifth Congressional District and support a region of the state that has historical economic disadvantages due to its rural location. I have been told the project is estimated to deliver 151 permanent jobs with an average salary of \$70,000, in addition to the hundreds of indirect employment opportunities across the entire region.

It is my understanding that the Sumitomo Corporation has invested significant resources into this project and will be a crucial partner of the \$3 billion Louisiana Green Fuels project. I am encouraged to hear of this partnership and the positive economic and social impact it will bring to my constituents.

I will always be an advocate for bringing in new investments and resources to Louisiana's Fifth District and am thankful for the partnership between Strategic Biofuels and Sumitomo Corporation. Please do not hesitate to contact me through my Senior Policy Advisor, Tyler Levins, at Tyler.Levins@mail.house.gov if I can be of further assistance to you in this matter.

Sincerely,



Julia Letlow, Ph.D.
Member of Congress

Community Engagement Activities

CALDWELL PARISH COMMUNITY LEADERS

I hope this letter finds you well and in good health. I am writing to extend a heartfelt invitation to you to participate in an upcoming event – a **Workforce Development Roundtable** – an immense significance for the Caldwell Parish community. As a respected leader in the community, your insights and perspectives are essential. We believe your presence will greatly contribute to the success of this community and workforce development initiative.

Caldwell Parish Workforce Development Roundtable

Monday, December 18, 2023
2:00 p.m. – 3:00 p.m.

Caldwell Parish High School

Fine Arts Building
163 Spartan Drive
Columbia, LA 71418

The purpose of Workforce Development Roundtable is to bring together key community leaders, businesses, educational institutions and vested people in Caldwell Parish to collectively discuss and strategize ways to cultivate workforce development in the community. We understand the pivotal role workforce development plays in fostering economic growth, creating job opportunities, and ensuring overall prosperity of the community.

The agenda for the roundtable may include:

Introduction and Welcome Brief introduction and welcome to set the tone for discussions Resources from Community Leaders Workforce development roundtable members (YOU) introductions Open Discussion and Creative Collaboration Interactive session to share thoughts, ideas, and suggestions for collaborative efforts to address workforce development challenges Collaborative Action Planning (as time allows) Creating action plan(s) & identifying specific steps to enhance workforce development in the Caldwell Parish community Your presence at the Caldwell Parish Workforce Development roundtable is crucial, as we believe your expertise and influence can significantly contribute to the depth and breadth of our discussions. We are confident the outcomes of the roundtable will not only benefit the community in the short term but also pave the way for sustained growth. We look forward to the opportunity to collaborate with you and other community leaders for the betterment and prosperity of the community.

To confirm your attendance, please RSVP by replying to this email (kbranson@lwc.la.gov) or contacting Katrina Branson at 318-362-3281 (office) / 225-489-9390 (mobile)

Regards, Katrina Branson

Louisiana Workforce Development Workforce Development Consultant



CALDWELL PARISH WORKFORCE DEVELOPMENT ROUNDTABLE

Caldwell Parish High School Fine Arts Building

December 18, 2023

AGENDA

INTRODUCTIONS

WELCOME

Terri Mitchell, Executive Director
Workforce Development Board 83

COMMUNITY PARTNER

Alanna Garcia, Principal
Caldwell Parish High School

ROUNDTABLE DISCUSSION

Topic: Connecting Education to Industry

Facilitator

Katrina Branson, Industry Sector Coordinator
Workforce Development Consultant
Louisiana Workforce Commission

NEXT MEETING

January 29, 2023

Parent/Student Career Information Night



February 26, 2024
6:00 PM
CPHS Gym



CPHS will hold a Career Information Night for parents and students in grades 8-12. We will have local business and industry along with colleges/universities who will provide information about various careers and pathways for students and parents so that students can make informed decisions about their future. Students can earn 10 bonus points to be used for the 4th nine weeks.



Chamber of Commerce
of the Parish



Caldwell Parish School System Parent & Student Career Night Booth Information

February 26, 2024



Louisiana Green Fuels Project



Mid-South Extrusion Company



Caldwell Bank



Louisiana Delta Community College



Homeland Bank



Alumni



Caldwell Parish High School



Caldwell Parish School Board

THANK YOU!

From Katrina Branson

To:Shelly Barton <sbarton@ulm.edu>;Maria Bass <mariabbass@gmail.com>;shae20230203121713592 <shae@bayou.com>;beckiecrain@yahoo.com;bfisher@seasidehc.com;Alanna Garcia <agarcia@caldwelledu.org>;B Glass <alkibaestate@yahoo.com>;Marcia Johnson <mrjohnson@caldwelledu.org>;Brian <KAUFMANB@bayou.com>;jmassey@bayou.com;Nicki McCann <nmccann@caldwelledu.org>;jmckeithen@cpso.us;Bob Meredith;tmitchel@bayou.com;LeBrone Robinson <LRobinson2@lwc.la.gov>;Michael Robinson (LWC) <MRobinson2@lwc.la.gov>;vslack@gt.rr.com;Hannah Springer <hannah.springer@gmail.com>;tillman22@gmail.com;rvassel@bellsouth.net; hershelvolentine@gmail.com;mwiley@caldwelledu.org;ricky1wiley@aol.com;Rebekah Meredith <rmeredith@caldwelledu.org>;Michelle Lindsey <mlindsey@caldwelledu.org>;Kristy Wells <kristyw@caldwelledu.org>;Ken Roberts;Lula Jenkins/CST <lmj@bayou.com>;deannekiper@ladelta.edu; mayortownofclarksla@gmail.com;townofclarksla@gmail.com;mayor@townofcolumbia.net; hspringer@caldwelledu.org;Stella Stilletto <stellastilletto318@gmail.com>;jfallin@caldwelledu.org

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Good afternoon,

Sending my heartfelt thanks and appreciation to all of you for making the Parent-Student Information Night a tremendous success! I'm still smiling inside thinking of all the faces we saw yesterday and the people who showed up!

I wanted to take a moment to express my sincere gratitude to each of you and your contribution. From the contacts, phone calls made and emails sent, the logistics and setup, the informative materials, welcoming students, parents and employers to the plethora of door prizes we were able to secure, I'm sure this will be an annual event and even bigger next year! The collaborative spirit, active participation and involvement by the roundtable for these past three months prove we can and will accomplish great things in Caldwell Parish!

I look forward to many more successful collaborations in the future.

Warm regards,

Katrina L. Branson, MPA

Workforce Development Consultant (Region 8)
Louisiana Workforce Commission
24 Accent Drive, Suite 151
Monroe, Louisiana 71202
(O) 318-362-3281
(F) 318-362-5146
(C) 225-489-9390



kbranson@lwc.la.gov