December 9, 2022

Submitted via Internet comments and electronic mail

Joshua Latino
Louisiana Department of Natural Resources
Office of Coastal Management
617 North 3rd Street
Baton Rouge, LA 70804-4487
joshua.latino@la.gov

RE: CP2 LNG Terminal Application for a Coastal Use Permit, CUP #P20211131

Dear Mr. Latino:

Healthy Gulf,[1] Sierra Club (as co-counsel for itself and Healthy Gulf),[2] Earthjustice[3] (as co-counsel for Healthy Gulf and Sierra Club), and additional signatories, Micah 6:8 Mission, Turtle Island Restoration Network, Louisiana Bucket Brigade, and Earthworks oppose the application for a Coastal Use Permit by Venture Global, Inc. through its subsidiary, Venture Global CP2 LNG, LLC (together, "Applicant," "VG" or "Venture Global") (Application No. P20211131). Further, the Commenters request a public hearing on Venture Global's permit application. The application seeks approval from the Louisiana Department of Natural Resources' Office of Coastal Management ("LDNR") to construct and operate a methane gas liquefaction, storage, and export facility that would occupy or affect over 775 acres in Cameron Parish (the "Terminal") and connect with a proposed 85.4 mile pipeline through the Coastal Zone (the "CP Express Pipeline" or the "Pipeline") to the existing pipeline grid in east Texas (the "Application").[4] Venture Global is seeking a Coastal Use Permit for its proposed Pipeline through a separate proceeding (P20211132). Venture Global and these Comments each refer to the Terminal and the Pipeline, together, as the "Project." Healthy Gulf and Sierra Club, together with other signatories, submitted comments on the Pipeline and the Project on September 9, 2022

[1] Healthy Gulf's purpose is to collaborate with and serve communities who love the Gulf of Mexico by providing research, communications and coalition-building tools needed to reverse the long-pattern of over exploitation of the Gulf's natural resources.

[2] Sierra Club is an environmental organization that champions solutions to the climate crisis, and work for clean air, safe water, land protection, and a vibrant natural world.

[3] Earthjustice is a public-interest environmental law firm with offices nationwide, including attorneys and staff based in Louisiana and Texas.

[4] Citations to the "Application" refer to the "Joint Permit Application for Work within the Louisiana Coastal Zone" for the Terminal, unless the application for the Pipeline is specified. Venture Global submitted one Joint Permit Application Narrative ("JPA Narrative") for both the proposed Terminal and Pipeline, though a November revised version is available only for the Terminal's public comment period.

(the "9/9 Pipeline Comments"), which are attached to, hereby incorporated fully into, and further supplemented by these Comments.[5]

Importantly, LDNR has the authority and the obligation both to require all pertinent or otherwise necessary information and to deny a Coastal Use Permit unless Venture Global can show it has avoided adverse environmental impacts to the maximum extent practicable, including through a full consideration of alternatives sites and methods. While the Natural Gas Act limits some local permitting authority for LNG Terminals, it expressly provides, "nothing in this chapter affects the rights of States under … the Coastal Zone Management Act of 1972," as well as under the Clean Air Act and Clear Water Act.[6] Further, FERC has not yet approved—or even completed its draft environmental review for—the Terminal or the Pipeline. Accordingly, an LDNR decision finding non-conformance with the Coastal Use Guidelines—particularly for failure to show proper review of alternatives and avoidance of adverse environmental impacts to the maximum extent practicable—will serve to inform FERC, enforce Louisiana law, and meet the constitutional mandate to "provide active and affirmative protection for the rights of the public."[7] Indeed, were LDNR not to exercise its full authority, as Venture Global suggests with its overly narrow reading of state authority that it proposed in LDNR's Pipeline docket in response to the 9/9 Pipeline Comments, that alone would violate LDNR's public trust duty, and be arbitrary and capricious.

The Project is one of many proposals seeking Louisiana permits to construct massive, long-term fossil fuel infrastructure in the United States to export fossil fuels abroad. The applications for this Project, along with other liquified methane "natural" gas ("LNG") export terminal proposals in the U.S., state a goal of meeting short-term, immediate demand in Europe—a time frame this massive Project could not meet even if approved promptly. In addition, its approval would saddle the economy with high U.S. gas prices and inflation and entrench the significant and adverse environmental impacts from LNG that destroy wetlands and habitat and intensify climate change as well as its impacts on the Louisiana Coastal Zone.

The proposed Terminal is especially detrimental to the Coastal Zone and its uses, even compared to other proposed LNG export projects, because Venture Global plans to chop approximately 100 acres from Monkey Island, which sits at the mouth of Calcasieu Pass. This excision would remove crucial storm-protections for Lake Charles and risk increased salt-water intrusion into Calcasieu River and Lake, among other adverse impacts. Remarkably, Venture Global fails to account for these impacts in its assessment of alternatives. The company even presents the proposed site on Monkey Island as if the excavation and conversion of 102.3 acres of land and wetlands to open water at ~ -44 feet had already occurred, rather than acknowledging them as impacts to the Coastal Zone that LDNR must consider. Indeed, Venture Global fails to present pertinent information throughout its Application and cannot show that its proposal considered or would avoid adverse environmental impacts "to the maximum extent practicable" or "possible."

---

[5] Attachment A (9/9 Pipeline Comments). The 9/9 Pipeline Comments are generally applicable for the impacts of the Terminal portion of the Project as well as for the Pipeline portion and whole Project.
[6] 15 U.S.C. § 717b(d); *see id.* § 717b(e).
[7] *Save Ourselves*, 452 So.2d 1152, 1157.

LDNR must deny Venture Global's Application for a Coastal Use Permit for the Terminal (as well as for the Pipeline) under its regulatory and constitutional public trustee duties given the proposed Project's tremendous real and potential adverse environmental impacts and the many failures to provide information sufficient to assess, balance, or properly mitigate those impacts, in addition to other shortcomings. Venture Global fails to provide the necessary information to perform those analyses, including information necessary to assess compliance with Coastal Use Guideline §§ 701 (All Uses); 703 (Levees); 705 (Linear Facilities);[8] 707 (Dredged Spoil Deposition); 709 (Shoreline Modification); 711 (Surface Alterations); 717 (Alteration of Waters Draining into Coastal Waters); and 719 (Oil, Gas, and Other Mineral Activities). For example, Venture Global omits information regarding:

- the adverse impacts of the Project on the local economy, including commercial and recreational fishing in Calcasieu Lake and the Gulf, hunting, and tourism—more than just an eyesore, the facility would increase ship traffic, sedimentation in shipping channels, and salination in Calcasieu Lake and its surrounding waters and wetlands;
- alternative sites for the proposed Terminal, like current wetlands acreages and alternative pipeline routes for each terminal alternative, as well as for the Project as a whole;
- a need or basis for building a 20 million tonnes per annum ("MTPA") Terminal versus a smaller capacity alternative;
- quantification of the Terminal's and the Project's costs and benefits;
- the Terminal's and the Project's real, potential, and cumulative adverse environmental impacts on the Coastal Zone and its people—particularly in an area with some of Louisiana's most important coastal resources, like protective wetlands and chenier habitats, one that is already saturated with oil and gas development and one suffering the impacts of climate change that this development exacerbates.

Further, should Venture Global provide additional information, LDNR must ensure that adverse environmental impacts are avoided or minimized to the maximum extent practicable—including through the adoption of alternatives and imposition of conditions.

Notably, Venture Global effectively confirmed its failure to provide relevant information and confirmed the importance of the environmental matters at issue and need for a public hearing, with its November 23, 2022 "Reply" to the 9/9 Pipeline Comments. That 27-page reply, submitted to the Pipeline docket only (P20211132), included hundreds of pages of supplemental information— information that was not available during the public comment on the Pipeline and is not presented in the Terminal docket (P20211131) for the public to comment on now.

Finally, in addition to the fact that LDNR cannot lawfully grant a Coastal Use Permit on this Application, the agency *should* not approve the Application. This coastal area cannot handle any new fossil fuel infrastructure, due to the sensitive chenier wetlands, impaired waterway, and storm-soaked flood zone. As LDNR itself explained: "Almost one-third of Louisiana's people

[8] Notably, Venture Global fails to provide sufficient information, including an emergency plan, on its proposed linear facilities both for the Pipeline route and for the Transfer Lines it proposed to run under Calcasieu Pass from its "Terminal Facilities" to its "Marine Facilities."

live in the coastal area. For ecological, economic, and recreational reasons, this vast ecosystem is priceless. If lost, it cannot be replaced."[9] Approving a Coastal Use Permit for the CP2 LNG Terminal would cost the State and Louisianans this high value ecosystem and replace it with industry that will pollute the remaining coastal area and make it more vulnerable to climate change. There are already **six** LNG facilities approved or operating in the Lake Charles, Calcasieu River area—including two already in the immediate vicinity of the proposed Terminal, each of which contributes to wetland and habitat loss, climate change, and increased risks of accidents and catastrophic events. There must be a point when LDNR's Office of Coastal Management says, "Enough." LDNR should deny the Permit.

We request a public hearing in Cameron Parish, written notice of LDNR's decision, and we reserve the right to rely on all public comments submitted.

I. Public Hearing and Opportunity to Comment on Completed Permit

LDNR should hold a public hearing on the Application in Cameron Parish, where affected communities can attend and voice their concerns. LDNR should grant a public hearing if "the issues raised are substantial, and there is a valid public interest to be served by holding a public hearing."[10] LDNR should also consider factors such as "significant public opposition to a proposed use," or whether it is a "controversial [case] involving significant economic, social, or environmental issues."[11] Notably, Venture Global does not oppose a public hearing, at least on its Pipeline application.[12]

Venture Global's coastal-use permit Application raises "substantial" issues, and a hearing would serve "a valid public interest."[13] The environmental, social, and economic issues related to the Terminal portion of the Project alone are substantial. Not only would the Project site an explosive hazard at the mouth of Calcasieu Pass, the Project would remove hundreds of acres of wetland and other storm protections from an area that needs it most—Cameron Parish and the Lake Charles area. It would also change and pollute waterways and increase shipping traffic, adversely impacting commercial and recreational fishing. Venture Global's Project also would channel enormous volumes of fossil gas for export, adversely impacting U.S. fossil gas prices and inflation, and resulting in large-scale greenhouse gas emissions that threaten the survival of South Louisiana communities due to impacts like land-loss and worsening storms. Further, Venture Global claims local and ad valorem tax benefits of the project without disclosing whether it has sought or expects to receive tax abatements or credits that could undermine any such benefits.

Further, the Project adversely impacts environmental justice communities, including

---

[9] LDNR, OCM, *A Coastal User's Guide, the Louisiana Coastal Resources Program* (updated 2015), Introduction, *available at* https://data.dnr.la.gov/LCP/LCPHANDBOOK/FinalUsersGuide.pdf (last visited 12/6/2022).

[10] LAC 43:I.723(C)(6)(b)–(c).

[11] *Id.*

[12] *See* Venture Global "Reply" to the 9/9 Pipeline Comments (November 23, 2022) (submitted to Pipeline docket, P20211132).

[13] *Id.* Examples of substantial issues and valid public interests are described throughout these comments.

Indigenous, minority, and low-income peoples.[14] Moreover, these impacts exacerbate and compound the damage caused by nearby existing and proposed LNG facilities, and cumulatively impact the Coastal Zone and its people. LDNR must hear and consider public input regarding Venture Global's proposal before making the crucial decision of whether to issue or deny the Permit.

Since LDNR's own review process for this Permit is currently "on hold"—and has been since May 5, 2022—to await additional information,[15] public hearing at a later date is necessary to allow the public to comment with full access to the same Application that LDNR is reviewing. As recently as November 3, 2022, LDNR informed Venture Global that it had "determined that we are unable to continue the processing of the application until we receive the following information" and requested information "pursuant to LAC, Title 43, Part I, Chapter 7, § 701 F, G, H, 709, 711, and 717."[16] LDNR also noted: "Further information may be required based on your answers to the above questions or to questions which may arise during processing."[17] As a result, the public does not have access to the information needed for full participation in LDNR's decision-making process. Among other things, this reaffirms the valid public interest in a public hearing.

II. Factual Background

The CP2 LNG Terminal is a proposed "plan to construct and operate natural gas liquefaction, storage, and export facilities at a liquefied natural gas (LNG) terminal … on the east side of the Calcasieu Ship Channel in Cameron Parish, Louisiana, along with associated pipeline facilities … connecting the Terminal … to the existing natural gas pipeline grid in east Texas and southwest Louisiana. The Terminal …, which will provide 20 million tonnes per annum of nameplate LNG export capacity. … The Terminal Facilities and Pipeline System are collectively referred to as the CP2 LNG and CP Express Project (Project)."[18]

The Terminal alone consists of three sets of facilities, which Venture Global identifies as: 1) the Terminal Site, which would include the liquefaction and power stations and occupy 543.3 acres on the mainland (and affect an additional ~67, at least), and be surrounded by a 34.5 foot high metal wall, 2) the Marine Facilities, a 120-acre deep-draft ship berthing area that is currently the southwest corner of Monkey Island, and 3) the LNG Transfer Lines, a 1-mile long, 42-inch diameter pipeline with utilities added that would move liquified methane gas, as well as a power line, under Calcasieu Pass from the Terminal Site to the Marine Facilities.

---

[14] *See*, *infra*, section IV and Attachment A, section VII.

[15] *See* Attachment B (LDNR webpage screenshot, *available at* https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_cmd_permit.cart_permit_frame?pcup_num=P20211131).

[16] LDNR "Request for Information" to Venture Global (November 3, 2022), *available at* https://sonlite.dnr.state.la.us/sundown/cart_prod/pkg_crm00100_forms.cart_menu?pcup_num=P20211131.

[17] *Id.*

[18] Joint Permit Application Narrative, p. 1 (revised November 2022). Notably, Venture Global revised its Joint Permit Application Narrative ("JPA Narrative") in November 2022, *i.e.,* after the public comment period for the pipeline portion of the Project had closed. These Comments refer to the JPA Narrative revised November 2022 throughout.

The colossal size of the proposed Terminal upon the Louisiana coast and the devastating real and potential environmental impacts it would bring to Louisiana, its Coastal Zone, and its people can hardly be overstated. Venture Global seeks to dig out a 100-plus acre corner of an island at the mouth of the Calcasieu River to deeper than -40 feet just for its shipping berth. It would pave over and build a nearly 40-foot flood wall around an additional approximately 545 acres[19] of Coastal Zone, currently functioning as storm protection and wildlife habitat for Cameron Parish. It would emit 8,528,260 tons per year of greenhouse gases ("GHG") from its Terminal, exacerbating the risks and impacts of climate change, and would be a major source of criteria and hazardous air pollutants.[20] The Project implicates no less than 16 of the 21 sets of adverse environmental impacts that the Coastal Use Guideline 701(G) presumptively prohibits.[21]

Critically, more than just destroying the habitat, cheniers, and wetlands under its enormous footprint, the proposed Terminal would throw coastal water flow, sedimentation and salination into disarray, pollute the surrounding air and waters, and risk catastrophe from leaks, explosions, and other failures—all at a location that is one of the most vulnerable to flooding, storms, sea level rise, and other hazards in the United States.

The CP2 LNG Project is one of four Venture Global LNG export projects operating, constructing, or proposed in Louisiana. Venture Global's Plaquemines LNG is permitted, and Calcasieu Pass LNG has begun operating. CP2 LNG and Delta LNG remain proposed. The proposed CP2 Terminal would sit next to the Calcasieu Pass LNG Terminal. While the JPA Narrative states that Venture Global would transfer land for the proposed Terminal site to the Terminal's specific corporate entity,[22] Venture Global has provided the Federal Energy Regulatory Commission ("FERC") different information.[23]

Venture Global has already allowed accidents, failures, and permit violations at its project sites. The 9/9 Pipeline Comments list several of these failures at pages 4-5, including Venture Global's leak of an estimated 180,099 pounds of natural gas—approximately 90 tons of methane—from its LNG storage tank "into the atmosphere and offsite" over the course of four days in January 2022.[24] Venture Global conceded that "[t]he unauthorized discharge of natural gas was preventable" and concluded that the causes arose from "a combination of a failure in the management of change process, lack of adherence to procedures, and lack of training;"[25] Venture

---

[19] Venture Global cites 543.3 acres for its operational footprint.

[20] *See* Attachment C at 1-6 (excerpts from CP2 LNG July 2022 Air Pollutant Permit Application ("CP2 Air Permit Application"), Louisiana Department of Environmental Quality ("LDEQ") Electronic Document Management System ("EDMS") Doc. # 13411196, *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13411196. Doc. # 13411196 is volume 1 of 2 for Venture Global's CP2 LNG air permit application. EDMS Doc. # 13410576 is volume 2 of 2. Together, the two-volume air pollutant emissions permit application is over 1000 pages.

[21] *See, e.g.*, LAC 43:I.701(G)(1), (2), (5) – (11), (15) – (21).

[22] *See* JPA Narrative, p. 7, Table 3-1.

[23] *See* Attachment D, FERC Request for Information to Venture Global, dated November 17, 2022. FERC is the federal agency with authority to approve or deny a proposed LNG terminal site.

[24] Attachment A (9/9 Pipeline Comments), p. 4, n. 15 (Ex. 2).

[25] *Id.* p. 4, n. 16 (Ex. 2).

Global also leaked an estimated 831 pounds of natural gas from a flange on a gas line in February 2022;[26] and it reported an unintentional release of an estimated 3,360 pounds of nitrogen oxides from its turbines in February 2022.[27]

Venture Global's Calcasieu Pass facility also reported accidents and unlawful discharges related to Hurricane Laura in 2020—a foreseeable event in an area particularly vulnerable to hurricanes. For example, Venture Global allowed "Hurricane Laura's storm surge and wind [to] displace[ ] and rupture[ ] the [frac] tank, resulting in the escape of its contents [an estimated 6,600 gallons of hydrotest water] into the environment."[28]

III. Legal Background

In assessing Venture Global's Application, LDNR must comply with three interrelated sets of legal obligations: its obligation as a public trustee for environmental protection under Article IX of the Louisiana constitution; its obligation to comply with the State and Local Coastal Resources Management Act, La. R.S. §§ 49:214.21–.42 (the "Coastal Resources Management Act" or "CRMA"), and its implementation of coastal use guidelines regulations, LAC 43:I, Chapter 7 (the "Coastal Use Guidelines").

LDNR maintains its full authority to require additional information and to deny approval for the proposed Terminal and Pipeline under the Coastal Resources Management Act and its Coastal Use Guidelines despite the National Gas Act's preemption of some local authorities. The Natural Gas Act expressly provides, "nothing in this chapter affects the rights of States under … the Coastal Zone Management Act of 1972," as well as under the Clean Air Act and Clean Water Act.[29] And Louisiana is entitled to "all necessary information and data" to apply its program.[30] While some states may cede authority, the CRMA does not and instead confirms Louisiana's full authority and obligation to enforce the state's program as to all activities:

> The governor, through the secretary, shall ensure that any activity within or outside the coastal zone that affects any land or water use or natural resources of the coastal zone which is undertaken, conducted, or supported by any governmental body is consistent with the state program … to the maximum extent practicable and, with respect to federal agencies, to the fullest extent allowed under federal law, particularly 16 U.S.C. 1456 and 15 C.F.R. 930.1-930.154 and amendments thereto.[31]

Accordingly, LDNR can and must assure full compliance with Louisiana's law and constitution.

---

[26] *Id.* p. 4, n. 17 (Ex. 2).
[27] *Id.* p. 4, n. 18 (Ex. 2).
[28] *Id.* p. 5, n. 19 (Ex. 2).
[29] 15 U.S.C. § 717b(d) (retaining state authority to regulate coastal zone uses); *see id.* § 717b(e) (assuming federal authority for LNG terminal licensing other than under the Coastal Zone Management Act, Clean Water Act, and Clean Air Act).
[30] 16 U.S.C. § 1456(c)(3)(A).
[31] La. R.S. § 49:214.32(B).

A. Public Trust Duty, Article IX of the Louisiana Constitution

Louisiana's public trust doctrine derives from Article IX, § 1 of the state constitution. It provides:

> The natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people. The legislature shall enact laws to implement this policy.[32]

The Louisiana Supreme Court explained that Article IX, § 1 mandates agencies to "determine that adverse environmental impacts have been minimized or avoided as much as possible consistently with the public welfare," "*before* granting approval of proposed action affecting the environment."[33] LDNR is not in a neutral role; its "role as the representative of the public interest does not permit it to act as an umpire passively calling balls and strikes for adversaries appearing before [the Secretary]; the rights of the public must receive active and affirmative protection at the hands of [LDNR]."[34] LDNR must do more than simply apply its own regulations.[35]

The First Circuit has refined the Supreme Court's Article IX review requirement into a 5-part set of "*IT* questions." The agency is required to address whether:

(1) The potential and real adverse environmental effects of the proposed facility have been avoided to the maximum extent possible;

(2) 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;

(3) There are alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits;

(4) There are alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits;

(5) There are mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits.[36]

---

[32] La. Const. art. IX, § 1.

[33] *Save Ourselves*, 452 So.2d at 1157 (emphasis added).

[34] *Id.* at 1157 (emphasis added).

[35] *Id.* at 1160 (stating, "From our review it appears that the agency may have erred by assuming that its duty was to adhere only to its own regulations rather than to the constitutional and statutory mandates.").

[36] *In re Am. Waste and Pollution Control Co.,* 633 So.2d 188, 194 (La. App. 1 Cir. 1993). Some agencies refer to this 5-part inquiry as the "*IT* Requirements" or "*IT* Questions" after the name of the permittee in *Save Ourselves*. In other decisions, the First Circuit has collapsed this 5-factor test into three factors,

These questions, derived from the Louisiana Supreme Court's seminal ruling in *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, 452 So.2d 1152, 1158 (La. 1984), "[include] features similar to those of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321 et seq., and state environmental quality acts patterned after NEPA."[37] As a result, the Supreme Court has explained that "federal and state cases interpreting those statutes may provide guidance in applying the Louisiana statutes."[38] Both NEPA[39] and state constitutional provisions analogous to Article IX,[40] require the agency to analyze cumulative impacts of the proposal, along with other past, present, and reasonably foreseeable environmental harms. NEPA further requires examining "connected actions," such as those that "[a]re interdependent parts of a larger action and depend on the larger action for their justification."[41]

To complete its duty as a public trustee, LDNR must provide written, detailed, rational explanation for its decision:

> LDNR is duty-bound to demonstrate that it has properly exercised the discretion vested in it by making basic findings supported by evidence and ultimate findings that flow rationally from the basic findings; and it must articulate a rational connection between the facts found and the order, or in this case, the permit issued.[42]

B. The Coastal Resources Management Act and Coastal Use Guidelines

The Coastal Resources Management Act ("CRMA") mandates that persons wishing to commence "any use or activity within the coastal zone which has a direct and significant impact on coastal waters,"[43] must first obtain a coastal use permit (also referred to as a "CUP") from

---

simply merging parts (3)–(5) without any alteration to their substance. *See, e.g., in re Oil & Gas Explo., Dev., & Prod.,* 2010-1640, p.4 (La. App. 1 Cir. 2011); 70 So.3d 101, 104.

[37] *Save Ourselves*, 452 So.2d at 1158.

[38] *Id.*

[39] 40 C.F.R. § 1508.7 (2019) (requiring consideration of cumulative impacts); *see* 42 U.S.C. § 4332(C)(2) (requiring both discussion of the "environmental impact of the proposed action," as well as "*any adverse environmental effects* which cannot be avoided should the proposal be implemented" (emphasis added)); *Hanly v. Kleindienst*, 471 F.2d 823, 831 (2d Cir. 1972) ("[I]t must be recognized that even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more factory polluting air and water in an area zoned for industrial use may represent the straw that breaks the back of the environmental camel. Hence the absolute, as well as comparative, effects of a major federal action must be considered."); *see also* 40 C.F.R. § 1502.15 (2020) ("The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration, including the reasonably foreseeable environmental trends and planned actions in the area(s).").

[40] *See Robinson Twp., Washington Cty. v. Com.*, 83 A.3d 901, 959 (Pa. 2013); *Sullivan v. Resisting Envtl. Destruction on Indigenous Lands (REDOIL)*, 311 P.3d 625, 634-35 (Alaska 2013); *In re Water Use Permit Applications*, 9 P.3d 409, 455 (Haw. 2000) (citing *Save Ourselves*).

[41] 40 C.F.R. § 1508.25 (2019); *accord id.* § 1501.9(e) (2020) (stating same).

[42] *In re Oil & Gas Explo.*, 2010-1640, at 4; 70 So.3d at 104 (emphasis in original).

[43] La. R.S. § 49:214.23(13).

LDNR or the applicable local government.[44] LDNR issues coastal use permits for any use of "state concern," which includes crude-oil pipelines and export terminals, like the Project.[45]

LDNR's implementing regulations for the CRMA, the Coastal Use Guidelines ("Guidelines"), impose detailed criteria against which to judge whether the adverse impacts of projects on coastal resources warrants denying a permit or substantially modifying the project to reduce its harm.[46] The Guidelines first mandate LDNR to collect an array of relevant information about the activity, ranging from environmental characteristics of the area impacted, to the economic need for the use.[47]

The Guidelines then require LDNR to assess whether the applicant's planned activity would avoid a series of presumptively forbidden adverse impacts to coastal resources to the "maximum extent practicable."[48] These include more than 20 potential impacts that could result from any type of use, like

- "destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features;"[49]
- "alterations of the natural temperature regime of coastal waters;"[50] and
- "increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such hazards."[51]

The Guidelines also regulate and require avoidance of adverse impacts specific to a certain types of uses that are applicable to the proposed Terminal, including but not limited to "surface alterations,"[52] "shoreline modification,"[53] "levees" like the proposed flood wall, [54] "linear facilities" like the transfer lines,[55] and "uses that result in the alteration of waters draining into coastal waters.[56] The Guidelines impose a high bar for a showing that a proposed project has attempted to avoid the delineated adverse impacts to the "maximum extent practicable." To comply with these Guidelines, either the applicant must fully avoid the adverse impact in question, or LDNR must complete a strict, four-part test, to:

1) Find that "there are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the modified standard;" and

---

[44] La. R.S. § 49:214.30(A).
[45] *See id.*
[46] LAC 43:I, Chapter 7.
[47] LAC 43:I.701(F).
[48] *See* LAC 43:I.701–19.
[49] LAC 43:I.701(G).
[50] LAC 43:I.701(G)(7).
[51] LAC 43:I.701(G)(20).
[52] *See* LAC 43:I.711.
[53] LAC 43:I.705.
[54] LAC 43:I.703.
[55] LAC 43:I.709.
[56] LAC 43:I.717.

2) Find that "benefits resulting from the proposed use would clearly outweigh the adverse impacts resulting from noncompliance with the modified standard . . .;"[57] and

3) Modify the application with any feasible conditions to bring the activity into full compliance with the Coastal Use Guidelines, or that would at least "minimize or offset those adverse impacts;"[58] and

4) Find that "a. significant public benefits will result from the use; or b. the use would serve important regional, state, or national interests, including the national interest in resources and the siting of facilities in the coastal zone identified in the coastal resources program; or c. the use is coastal water dependent."[59]

If LDNR relies on the "maximum extent practicable" standard in lieu of Guideline conformance, it must impose conditions that "shall assure that the use is carried out utilizing those locations, methods, and practices which maximize conformance to the modified standard; are technically, economically, environmentally, socially, and legally feasible and practical; and minimize or offset those adverse impacts listed in § 701.G and in the Subsection at issue."[60]

LDNR further published a 2020 *Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone* (the "Alternatives Guide") for applicants that indicates what the agency has deemed sufficient information for its analysis of projects.[61] For example, an "Alternatives Analysis should provide documentation that clearly demonstrates that reasonable efforts were made to find less damaging sites and should provide an explanation for why each less damaging site was not feasible."[62]

While the CUP Guidelines and the requisite public trustee analysis overlap, LDNR must ensure that it meets all facets of the public trustee analysis. For example, the CUP Guidelines require LDNR to consider the "availability of feasible alternative sites or methods of implementing the use."[63] But under the Louisiana Constitution, LDNR must determine whether there are alternative sites or alternative projects "which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits."[64] The alternatives analysis, thus, is not about feasible alternatives or methods, generically, but more specifically about the alternative sites and methods that offer more protection to the environment without unduly curtailing non-environmental benefits. Indeed, the

---

[57] LAC 43:I.701(H)(1); *see also Pardue v. Stephens*, 558 So.2d 1149, 1164 (La. Ct. App. 1 Cir. 1989) (explaining that the activity is prohibited based on violating a Guidelines standard, unless LDNR shows it would nonetheless meet the "maximum extent practicable" test set out in the Coastal Use Guidelines).
[58] LAC 43:I.701(H)(2).
[59] LAC 43:I.701(H)(1).
[60] LAC 43:I.701(H)(2).
[61] *See* LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 54–62 (2020), http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined_Document_rev1_Mar2020.pdf.
[62] *Id.* at 3.
[63] LAC 43:I.701(F)(5).
[64] *In re Am. Waste*, 633 So. 2d at 194.

requirement to determine whether the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible requires a broad inquiry. And all potential and real adverse environmental effects of the proposed project must be weighed against any purported benefits. This includes effects that remain after mitigative or regulatory measures. As the Supreme Court explained in *Save Ourselves*, an "agency may … err[ ] by assuming that its duty was to adhere only to its own regulations rather than to the constitutional and statutory mandates."[65]

Finally, CRMA requires LDNR to seek public comment on permit applications and issue a written decision.[66] Its final decision must represent "a full and fair consideration of all information before the permitting body, and shall represent an appropriate balancing of social, environmental, and economic factors."[67]

IV. LDNR Cannot Grant the Permit Because the Application is Not Complete.

LDNR lacks key information for its review—like the federal reviews the Application relies on and consideration of the whole Project's impacts—and so cannot meet its public trust, statutory, and regulatory duties at this time, such that granting the proposed Permit would be premature and arbitrary or capricious. Similarly, the lack of key information deprives the public of the opportunity to participate in the public decision-making process that they are entitled to do.[68] LDNR's website confirms the inadequacy of information available—for public comment or agency decision-making—as the status of the Application is and has been "on hold" since May 5, 2022.[69]

Among other things, to meet Guideline 701(H)'s standard, which applies whenever a use would only comply with another Guideline requirement "to the maximum extent practicable," LDNR must perform "a systematic consideration of ***all pertinent information*** regarding the use, the site and the impacts of the use as set forth in [Guideline 701(F)]" before it can make any finding of compliance with those other Guideline requirements.[70] Since the proposed Terminal and Project implicates most of the adverse impacts Guideline 701(G) prohibits unless shown to have been avoided to the maximum extent practicable, LDNR must review all information

---

[65] *Save Ourselves*, 452 So. 2d at 1160.

[66] LAC 43:I.723(C).

[67] LAC 43:I.723(C); *Pardue v. Stephens*, 558 So.2d 1149, 1164 (La. Ct. App. 1 Cir. 1989) (rejecting activity in conflict with Guidelines where there was no evidence that written decision followed the multi-part, "maximum extent practicable" test laid out in the Coastal Use Guidelines).

[68] *Cf. Louisiana Environmental Action Network, Inc. v. Brown*, 2019-0607 (La. App. 1 Cir. 1/9/20), 294 So.3d 1066 (2020) (finding agency's "improper acceptance of [ ] incomplete permit application resulted in its issuance of a public notice referencing a faulty application … [such that] an interested party was unable to assess the potential risk of [the] expected wastewater discharge and was unable to comment on [agency's] issuance of the draft permit as inappropriate before the close of the public comment period").

[69] *See* Attachment B, *available at* https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_cmd_permit.cart_permit_frame?pcup_num=P20211131 (last visited 11/18/22).

[70] LAC 43:I.701(H) (emphasis added).

pertinent to those impacts.[71]

The 9/9 Pipeline Comments give examples of missing pertinent information—information without which LDNR cannot satisfy Guideline 701(H), among others, or its public trust duty, including:

- a federal Environmental Impact Statement ("EIS"), which FERC has not yet presented even in draft form. The information from an EIS is necessary, for example, to consider the direct, indirect, and cumulative impacts of the Project on the Coastal Zone, and so to be able to satisfy LDNR's obligations under Guidelines like §§ 701(G) & (H) and its public trustee analysis.[72] Venture Global's Application expressly relies upon the future findings and determinations of FERC, as well as related federal reports.[73]

- the application for the Project as a whole, *i.e.,* the proposed Terminal CUP Application (P20211132) together with the application for the proposed Pipeline (P20211132). By segmenting its applications, Venture Global omits information for each that the agency needs to grant either Coastal Use Permit—and that the public needs to comment fully as well. LDNR must review the Project as a whole before it can approve either application because the purpose, impacts, and potential alternatives, mitigating measures, and purported benefits, among other things, of the Terminal and Pipeline are inextricably linked such that segmented review would be arbitrary and capricious.[74]

Moreover, a FERC November 17, 2022, Request for Information to Venture Global demonstrates still more critical information is missing from the Application, most noticeably relating to a "Carbon Capture and Storage System" for the Terminal that would require, at the least, an additional, volatile and hazardous pipeline system.[75] Importantly, Venture Global's federal environmental impact statement for its 20 MTPA LNG terminal in Plaquemines Parish considered CCS and concluded, based on Venture Global's own statements, that even if feasibility could be demonstrated (it could not), "**any CCS system would cause significant adverse energy and environmental impacts due to the additional water and energy needs for system operation**, with the associated generation of additional GHGs and other criteria pollutants from natural gas firing in combustion units.[76] The federal environmental impact

[71] *See, e.g.*, LAC 43:I.701(G)(1), (2), (5) – (11), (15) – (21).
[72] Attachment A, p. 10-12.
[73] *See*, *e.g.*, Attachment A, p. 11-12.
[74] *See Save Ourselves*, 452 So.2d 1152, 1157 (La. 1984) (explaining the Constitution requires an agency to perform its analysis of costs, benefits, alternative projects and sites, and mitigating measures, "*before* granting approval of proposed action affecting the environment.")
[75] *See* Attachment C, FERC Nov. 17, 2022, Request for Information ("RFI") to Venture Global; *see also* Attachment B, at 1-7 (CP2 Air Permit Application excerpt, referencing CCS system plan). FERC's RFI also seeks other critical information, including on environmental justice matters. *See infra* § VIII.
[76] Attachment E, p. 4-167 – 4-168 (excerpt of May 3, 2019, Final Environment Impact Statement for Plaquemines LNG, FERC Docket Nos. CP17-66-000 & CP17-67-000) (emphasis added).

statement for Venture Global's Calcasieu Pass says the same.[77]

Among other things, failing to incorporate plans for CCS into its Terminal CUP Application inherently fails to avoid or minimize adverse environmental impacts, since constructing such a pipeline after construction of the Terminal or Pipeline would interfere with potential alternatives and could mean re-damaging wetlands and other coastal areas within the same footprints for its infrastructure. Similarly, failing to incorporate CCS into Venture Global's CUP alternatives review means it would be arbitrarily and capriciously omitted from the comparison of costs and benefits at each alternative site, which is particularly relevant because Alternatives sites # 1 and # 2 would appear to have the significant benefit of avoiding running CO2 pipelines through wetlands and much of the Coastal Zone.

Ultimately, Venture Global's decision to omit its plan to incorporate CCS into its CP2 LNG facility from its Terminal and Pipeline CUP applications demonstrates further inappropriate segmentation of the Project, including failure to provide complete information for review of the Project and failure to minimize adverse environmental impacts from the Project as a whole.

Finally, in another Terminal-related example, Venture Global fails to provide information about its plan upon termination of the project. To meet Coastal Use Guidelines 711, it must describe how it would return the area to its natural state upon termination of the use.[78] Would Venture Global fill back in the ~120 acres that it proposed to remove from Monkey Island to a depth of ~ -44 feet? Would it remove its massive flood walls? Would it remove the impermeable flooring of the main facility and restore wetlands to allow storm water absorption and avoid run-off pollutants into wastewater systems or elsewhere?

LDNR and the public cannot adequately review this CUP Application without the benefit of complete information, both as should be provided for in the EIS and otherwise. It would be arbitrary and capricious to forego that information and to grant a Coastal Use Permit at this time.

V. LDNR Must Deny the Permit for Insufficient Information on and Failure to Avoid Adverse Impacts to Wetlands, Coastal Waters, and Habitats.

LDNR cannot lawfully grant the Permit because Venture Global fails to adequately evaluate harm to the unique and sensitive wetlands and waters of the Louisiana Coastal Zone.

---

[77] Attachment E-1, p. 4-298 (excerpt of October 22, 2018, Final Environment Impact Statement for Calcasieu Pass LNG, FERC/EIS-0278F, Docket Nos. CP15-550-000, CP15-551-000, CP15-551-001) (emphasis added).

[78] *See* LAC 43.I.711(F) ("Areas modified by surface alteration activities shall, to the maximum extent practicable, be revegetated, refilled, cleaned, and restored to their predevelopment condition upon termination of the use."); *see also id.* § 709(G) ("Neglected or abandoned shoreline modification structures, piers, docks, and mooring and other harbor structures shall be removed at the owner's expense, when appropriate.").

Article IX[79] and the Coastal Use Guidelines[80] require LDNR to undertake a full analysis of the potential for the Project to harm wetlands and unique coastal ecosystems and to attempt to minimize those harms to the maximum extent practicable. Article IX also requires LDNR to fully evaluate and limit adverse impacts to the state's fisheries and their habitat, to the maximum extent possible.[81]

These coastal wetlands are vital to the region's ecology and serve a protective role for coastal communities.[82] Wetlands provide a critical role in carbon storage and a growing body of literature advocates for preservation and conservation (not just restoration) of existing wetlands as an important and necessary way to slow the effects of climate change and increasing greenhouse emissions.[83] However, coastal wetlands are also highly fragile and susceptible to the impacts of storms. In 1957, Hurricane Audrey slammed into southwest Louisiana as a Category 4, bringing a storm surge 40 kilometers (24.9 mi) inland, killing off vital wetland vegetation, and eroding chenier plain beaches by 60-90 meters.[84] Hurricane Rita hit the region in 2005 and "increased the water area in the chenier plain by 295 km^2" while killing off entire marshes.[85] A study from last year calculated impacts from tropical storms, and found that "…counties with more wetland coverage experienced significantly less property damage."[86] In fact, those authors found that recent wetland losses accounted for an additional $430 million in property damage from Hurricane Irma. The 2020 hurricane season, with the combined effects of Hurricanes Laura and Delta, revealed how vulnerable southwest Louisiana is to storm impacts. Yet the Applicant seeks to destroy more of our rapidly disappearing wetlands to install an unnecessary Project.

---

[79] *See in re Am. Waste,* 633 So.2d at 194; *Avenal v. State*, 2003-3521 (La. 10/19/04, 23); 886 So.2d 1085, 1101 ("We find that the implementation of the Caernarvon coastal diversion project fits precisely within the public trust doctrine. The public resource at issue is our very coastline, the loss of which is occurring at an alarming rate.").

[80] *See, e.g.*, LAC 43:I.701(G), 711. For example, the Guidelines require avoidance of the "destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features," *id.* 701(G)(5), and "of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands," id at 701(G)(16). They also require avoidance of detrimental changes in "sediment transport processes" and "detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging." *Id.* 701(G)(9), (11).

[81] *See, e.g., in re Oil & Gas Explo.*, 2010-1640, at 5, 14; 70 So.3d at 105, 110–11 (reversing LDEQ produced water discharge permit on public trustee duty grounds, for failing to adequately ensure marine life in territorial seas would not be harmed when evidence showed risk of such harm).

[82] Sun and Carson (2020). *Coastal wetlands reduce property damage during tropical cyclones*. PNAS March 17, 2020, 117 (11) 5719-5725. https://www.pnas.org/doi/10.1073/pnas.1915169117.

[83] A. M. Nahlik & M. S. Fennessy, Carbon storage in US wetlands, 7 Nat Commun 13835 (2016), *available at* https://www.nature.com/articles/ncomms13835.pdf.

[84] Morton, R. A., & Barras, J. A. (2011). Hurricane impacts on coastal wetlands: A half-century record of storm-generated features from southern Louisiana. *Journal of Coastal Research*, *27*(6A), 27-43. pp. 36-37.

[85] *Id.* at 38.

[86] National Geographic, *How powerful hurricanes hasten the disappearance of Louisiana's wetlands*, Sep. 11, 2020, https://www.nationalgeographic.com/science/article/how-hurricane-laura-hastens-louisiana-wetland-loss.

The Calcasieu-Sabine Basin has lost at least 517 km^2 already between 1932 and 2016,[87] the equivalent of over half of the city of New Orleans (including New Orleans East and the West Bank). The impact by the Project to Louisiana's valuable wetlands should not be taken lightly.

Further, these coastal waters support commercial and recreational fishing—uses that are already suffering from the existing Calcasieu Pass LNG facility and would be worsened by CP2 LNG and other LNG build-out.[88] Venture Global's Application omits consideration of these cultural and economic uses entirely.

The 9/9 Comments describe numerous reasons for why LDNR must not approve the Project, including:

- Missing, unsupported, and inaccurate information on wetland impacts;
- Failure to consider chenier plains and habitat; and
- Failure to show the Project meets mitigation requirements. [89]

Those shortcomings remain, despite Venture Global's revisions to its JPA Narrative and to its Draft Compensatory Mitigation Plan and its Draft Beneficial Use of Dredged Materials Plan, as described below. And LDNR must consider those shortcomings, too, in the context of the proposed Terminal, which would also destroy or adversely impact cheniers and other wetlands, as well as coastal waters and coastline. Further, LNDR must consider additional failures to consider or avoid the Terminal's and Project's adverse impacts to wetlands, coastal Waters, and habitats.

A. Venture Global Continues to Fail to Accurately Account for Wetland Impacts.

Although the updated JPA Narrative and revised Draft Compensatory Mitigation Plan ("CMP") and Beneficial Use of Dredged Material Plan ("BUDMP" and, together with the CMP, the "CM/BUDM Plan")[90] now includes quantification of extended temporary impacts for the Project, it continues to misrepresent the character of these impacts and again fails to propose compensatory mitigation for all Project construction related impacts.

---

[87] USGS Coastal Louisiana Land Area Change 1932-2016: Calcasieu-Sabine Basin (-517 km^2 observed; -578 +/- 100 km^2 modeled), https://pubs.usgs.gov/sim/3381/sim3381_pamphlet.pdf; Brady R. Couvillion et al., *Land area change in Coastal Louisiana (1932 to 2016)* 26 at p. 13 (2017), *available at* https://pubs.usgs.gov/sim/3381/sim3381_pamphlet.pdf.

[88] *See* Attachment F, American Press, *Flotilla of Shrimp Boats on Calcasieu River Protesting LNG Summit* (November 3, 2022) (*also available at* https://www.americanpress.com/2022/11/03/flotilla-of-shrimp-boats-on-calcasieu-river-protesting-lng-summit/); Attachment G, The Lens, *Fishermen, Shrimpers Stage Boat Convoy To Protest Methane Refinery Buildout in Lake Charles Area* (November 4, 2022) (*also available at* https://thelensnola.org/2022/11/04/fishermen-shrimpers-stage-boat-convoy-to-protest-methane-refinery-buildout-in-lake-charles-area/).

[89] Attachment A, § V.A., pp. 15-16.

[90] Venture Global submitted a revised Draft CM/BUDM Plan for both its Terminal and Pipeline applications on October 31, 2022.

For example, Venture Global continues to arbitrarily characterize impacts as temporary or extended temporary/permanent, suggesting that temporary impacts would not result in losses to coastal resources.[91] For the Terminal, Venture Global arbitrarily characterizes impacts from installation of the slurry pipeline to move dredged sediments to the BUDMP sites as "temporary" and so without compensatory mitigation.[92] Similarly, the updated Draft CM/BUDM Plan – and Venture Global's response to the 9/9 Pipeline Comments – again distinguishes "extended temporary impacts" (for which it proposes compensatory mitigation) from "temporary impacts" (for which it would not compensate).[93] Venture Global represents that 749.2 acres of wetlands and 99.6 acres of waters would experience short-term, temporary impacts from construction of the Pipeline system.[94] Consequentially, it excludes these impacts from further discussion in the Draft CM/BUDM Plan.[95] As noted in the 9/9 Pipeline Comments, wetlands can suffer long-term or permanent impacts even if the activity causing the disturbance from dredging only takes place for less than a year.[96] This is particularly true in Louisiana's fragile and endangered coastal wetlands. The Applicant's characterization of impacts as temporary, and thus not requiring compensatory mitigation, in these vulnerable coastal wetlands where one hurricane or substantial flood season can cause irreparable harm and loss, is arbitrary and unreasonable. At a minimum, the CMP should include concrete performance criteria, monitoring plans, and mitigation bank options for wetland impacts from pipeline construction. To ensure adequate representation and evaluation of all adverse impacts associated with the project, LDNR should require an OCM Field Biologist to conduct a Biological Field Investigation to independently determine all wetland impacts associated with the Terminal and Pipeline facilities. Further, LDNR should

---

[91] *See* 9/9 Pipeline Comments, Attachment A, § V.

[92] Draft CM/BUDM Plan at 26 ("[A] temporary slurry pipeline will be installed from the dredge area to the marsh creation/restoration area using a combination of floating, submerged, bored, and aboveground pipe sections. …. The slurry pipeline will follow the same land-based portion of the route that was used for the Calcasieu Pass Project and any wetland impacts will be temporary.") LDNR and Venture Global must consider how the proposed use of the same route for both projects' slurry pipelines would contribute to greater impacts to these areas; they are likely not temporary.

[93] CP2 LNG describes extended temporary impacts as those workplaces outside of the floodwall that would be impacted for the duration of Project construction (which it now represents as anywhere from 3 to 5 years), and temporary impacts as those subject to short-term use only (up to one year). *See*, *e.g.*, JPA Narrative at 8, 35; Draft CM/BUDM Plan at 12.

[94] Draft CM/BUDM Plan at 16.

[95] *See*, *e.g.*, JPA Narrative at 35 ("Apart from the long-term conversion of forested wetland to other wetland types, the impacts associated with pipeline installation are considered temporary and, following construction, preconstruction conditions will be restored to the extent practicable."); Draft CM/BUDM Plan at 3 ("Other Project-related wetland impacts are considered temporary and short-term with respect to acreage loss, occurring where the construction duration is one year or less; such impacts will be mitigated by restoration of pre-construction conditions to the extent practicable and do not require compensatory mitigation."); *id.* at 12, note 20 ("The loss of wetland acreage associated with pipeline installation is considered temporary and, following construction, preconstruction conditions will be restored to the extent practicable. … the Applicants will restore temporarily disturbed locations to preconstruction conditions as assessed and to the level determined appropriate after one full growing season following the end of construction disturbance. Areas not deemed sufficiently restored will either be reworked and monitored by the Applicants …, or will be quantified and post-construction mitigation agreed upon in coordination with the appropriate agencies.").

[96] *See* Attachment A, 9/9 Pipeline Comments, § V.A., pp. 15-16 (discussing inefficacies in wetland restoration and unlikelihood of restoring to original conditions).

include a condition requiring the Applicant to monitor all "temporarily" impacted areas for a minimum of one growing season, to provide photographs documenting the conditions of "temporarily" impacted areas pre- and post-construction, and to perform post-construction remediation and mitigation where pre-construction conditions and contours are not achieved, including construction of the main Pipeline and the new temporary slurry pipeline for transporting dredged sediment to the BUDMP sites.

Venture Global also fails to account for its impacts counter to the Louisiana Coastal Master Plan. LDNR cannot issue a coastal use permit, unless it finds that the "activity for which application is being made is consistent with the state's master plan for integrated coastal protection."[97] For example, neither the updated JPA Narrative nor the Draft CM/BUDM Plan present the direct, indirect and cumulative adverse impacts from the proposed excavation of 30.7 acres of delineated wetlands on Monkey Island for the berthing area within the dredge prism.[98] It is well known that the Calcasieu Ship Channel (CSC) moves high-salinity water into adjacent marshes contributing to marsh loss and increased salinity in the area.[99] The proposed excavation and creation of a new shoreline in the southwest corner of Monkey Island is substantial and would certainly impact surrounding waters and wetlands. Venture Global does not provide sufficient information to cure its continued failure to accurately account for – and mitigate – all wetland impacts and coastal shore losses from the proposed Terminal or Pipeline facilities. LDNR should disallow any coastal wetland losses that impair ecological function and the overall hydrology of the coastal watershed.

LDNR must explain how the Terminal and Project can be consistent with the state's Coastal Master Plan. LDNR must require Venture Global to fully account for the real and foreseeable loss of coastal wetlands, cheniers, water bottoms and other significant habitat from the entire Terminal and Pipeline Project and to provide necessary information to evaluate proposed mitigation to avoid, minimize and compensate for ecological losses of coastal resources values.[100]

B. The Updated Draft CM/BUDM Plan is Incomplete and Inadequate.

The Draft CM/BUDM Plan proposes a combination of mitigation banking and marsh creation/restoration to compensate for "unavoidable permanent acreage loss, extended temporary acreage loss, and permanent type conversion impacts on wetlands and waters" in the Project footprint.[101] However, the updated plan suffers the same incomplete and inadequate deficiencies as the Preliminary Plan.[102] Because the Draft CM/BUDM Plan is provisional – Venture Global

[97] La. R.S. § 49:214.30(A)(2).
[98] Draft CM/BUDM Plan at 14 (identifying 30.7 acres of delineated wetlands within the dredge prism on Monkey Island would undergo conversion to offshore deep water).
[99] *See infra* § V.C.
[100] LAC 43:I.724(B)(1)(a)-(c).
[101] JPA Narrative at 37; Draft CM/BUDM Plan, generally.
[102] *See* Attachment A, 9/9 Pipeline Comments, at § V.C., pp. 19-23.

concedes the need for further study[103] and the plan itself lacks specificity and support to meet state and federal mitigation and BUDM requirements – solicitation of public comments are premature at this time.

1. Draft CM/BUDM Plan – Compensatory Mitigation

Venture Global's proposal relies on mitigation banking that appears neither to be available nor qualified. Louisiana law requires "compensatory mitigation" to offset any net loss of coastal resources ecological value that is anticipated to occur [because of the proposed activities] despite efforts to avoid, minimize, and restore permitted/authorized impacts."[104] Coastal resource losses must be accurately evaluated and completely offset by appropriate compensatory mitigation.[105] Compensatory mitigation must be of the same habitat type or produce similar ecological values to those impacted.[106] But the Draft CM/BUDM Plan is incomplete and insufficient to allow the public to meaningfully comment on the project's impacts and mitigation at this time. The Draft CM/BUDM Plan proposes to purchase credits from three mitigation banks – the South Fork Coastal Mitigation Bank, the South Fork II Coastal Mitigation Bank, and the Calcasieu Mitigation Bank – to mitigate impacts to palustrine wetlands.[107] But it appears the proposed mitigation banks either do not have some or all of the requisite type and amount of wetland credits available for use and purchase by Venture Global.

For example, Venture Global represents that nearly all impacted palustrine wetlands would be compensated by purchasing fresh marsh and coastal prairie credits from the South Fork Coastal Mitigation Bank ("SFCMB").[108] But LDNR's updated Mitigation Bank Summary Spread Sheet (dated November 2, 2022) represents that no Wetlands Valuation Assessment currently exists for Coastal Prairie habitat at the SFCMB.[109] Also, OCM's Mitigation Bank Summary Spreadsheet only identifies one SFCMB, it fails to list the Calcasieu Mitigation Bank as an active coastal mitigation bank, and reflects that there are no available in-basin, in-kind bottomland hardwood credits from mitigation banks located in the Calcasieu/Sabine Basin to offset impacts to palustrine forested wetlands from the pipeline facilities.[110] This highlights a recurring issue with mitigation banks in Louisiana's coastal zone – the continued lack of sufficient, adequate in-

[103] *See*, *e.g.*, Draft CM/BUDM Plan at 25-26 (The Applicants plan to conduct further geotechnical studies at both the dredging location and the proposed BUDM site to assist spoil characterization and site design." As discussed *infra*, mere mention of needed studies is insufficient to allow meaningful comment on a permit application and associated draft CM/BUDM Plan and to ensure that the proposed plan meets legal requirements to benefit and offset impacts to Louisiana's coastal resources.

[104] LAC 43:I.724(B)(1)(c).

[105] *See, e.g.,* LAC 43:I.724(C)(4)(a), (E), and (J)(3).

[106] LAC 43:I.724(J)(4).

[107] Draft CM/BUDM Plan at 7; *see id.* at 3, note 7.

[108] *Id.* at 3.

[109] *See* Attachment H, "OCM Approved Mitigation Banks – Updated 11/2022", *available at* http://www.dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=95 ("Mitigation Bank Summary Spread Sheet").

[110] *See* Attachment H, Mitigation Bank Summary Spread Sheet; Draft CM/BUDM Plan at 3 (stating Venture Global would purchase bottomland hardwood credits from SFCMB).

kind/in-basin credits available to offset the coastal resources values lost.[111]

Finally, as discussed in the 9/9 Pipeline Comments, the SFCMB is not an adequate mitigation bank to offset the project's coastal impacts.[112] Compensatory mitigation must be sufficient and properly located, and siting shall be consistent with the Louisiana Coastal Master Plan.[113] But Venture Global proposes to mitigate the lion's share of wetland losses by purchasing credits at the SFCMB, a bank located on the Cameron-Calcasieu Parish border, far from the impacted wetlands, and outside the Coastal Zone conservation boundary.[114] Further, the SFCMB's ledger and electronic files with the Regulatory In-Lieu Fee and Bank Information Tracking System ("RIBITS") show that it "has no previous annual inspections" and reflects noncompliance with monitoring requirements.[115] It further states "this bank should not be used to offset impacts to tidally influenced wetlands and water bottoms designated by NMFS as essential fish habitat," and coastal prairie credits are limited to mitigating for impacts to particular wetlands.[116] In short, it does not appear, and Venture Global has certainly not shown, that SFCMB and other active mitigation banks in the basin are actually compatible with coastal restoration objectives such that their use would be legally compliant.

2. Draft CM/BUDM Plan – Beneficial Use of Dredged Material

The Draft CM/BUDM Plan's proposed beneficial use of material dredged for the Terminal is also flawed and inadequate. For example, Venture Global proposes to mitigate impacts to brackish/saline marsh estuarine wetlands and onshore waters from the Terminal by creating/restoring marsh at a BUDM site in the East Cove Unit of the Cameron Prairie National Wildlife Refuge (CPNWR).[117] For this plan, Venture Global would dredge 6,398,600 cubic yards of material from the Calcasieu Ship Channel (CSC) to construct the project's Marine Facilities and transport the dredged material by temporary slurry pipeline to the CPNWR.[118] Of the total volume of dredged material, 893,000 cubic yards would go to a 200-acre contained area at the CPNWR to create or restore brackish marsh across 178 acres of open water to offset approximately 20 acres of impacts to estuarine wetlands.[119] The Applicant purports this placement alone would satisfy both its compensatory mitigation for those wetlands and its beneficial use of dredge material obligations for the Marine Facilities portion of the Terminal.[120]

Venture Global would place the remainder of the dredged material—5,505,00 cubic

---

[111] *See* Attachment A, 9/9 Pipeline Comments, § V.C., p. 22 (discussing how mitigation banks in the coastal region often lack high-value wetland types like fresh marsh and that many banks in Louisiana do not contain fresh marsh at all because it is difficult to effectively build).
[112] *See* Attachment A, 9/9 Pipeline Comments, § V.C, p. 22.
[113] LAC 43:I.724(J)(2).
[114] *See* Attachment A, 9/9 Pipeline Comments, § V.C, p. 22.
[115] RIBITS South Fork Coastal Mitigation Bank information *available at* https://ribits.ops.usace.army.mil/ords/f?p=107:10:::::P10_BANK_ID:4344.
[116] *Id.*
[117] Draft CM/BUDM Plan at 4, 6.
[118] *Id.* At 4.
[119] *Id.*
[120] *See id.* At 4.

yards—peripherally in a wider semi-contained area across 1,760 acres of open water to promote additional marsh growth.[121] Remarkably, it asserts that, while this placement of about 5.5 million of dredged fill in open water could constitute beneficial use of dredged material, it is not required for compensatory mitigation and thus no permit conditions regarding revegetation criteria and monitoring requirements should apply.[122]

Like the proposed Compensatory Mitigation Plan, however, this Draft BUDM Plan suffers many deficiencies. First, it lacks inclusion/meaningful discussion of pre-construction surveys, analysis, and study of the dredged location and BUDM sites and fails to articulate specific performance standards and monitoring plans necessary to ensure the efficacy and benefit of the permittee-responsible BUDM plan.[123]

The Draft BUDM Plan fails to articulate pre-construction monitoring and soil testing of the dredged material. For example, it mentions "pertinent studies" in passing without citing or including these studies or findings in the Plan and relies on nondescript plans for future study to ascertain soil characterization of the dredged material.[124] Similarly, the updated JPA Narrative and Draft CM/BUDM Plan pay insufficient attention to the characterization of the proposed dredged sediments and excavated soils to be beneficially used for marsh creation/restoration at the CPNWR. The JPA Narrative simply states that "CP2 LNG will perform characterization analyses of the sediments to be dredged and the nearshore soils to be excavated in the Marine Facilities area as part of the planning for th[e] transport [to CPNWR] and [beneficial] use."[125] The Draft CM/BUDM Plan fails to articulate any clear plans or standards to analyze soil characteristics of the dredged material for beneficial use prior to project construction or cite existing studies it relies on for its proposal.

The Calcasieu Ship Channel is a highly industrial navigation channel. Contaminated soils and sediments distributed across the open waters and marsh restoration area in the CPNWR could adversely impact sediment quality, water quality, fisheries, wildlife, and other resources in and around the site.

The Draft Plan also fails to present adequate construction performance standards and

---

[121] *Id.* At 4.

[122] *Id.*

[123] The marsh creation/restoration proposed for the contained 200-acre BUDM site constitutes an individual compensatory mitigation measure under Louisiana regulations or permittee-responsible mitigation under federal law. *See* LAC 43:I.724(H); 33 C.F.R. § 332.3(b)(2), (4) (discussing preference for mitigation banks over permittee-responsible mitigation).

[124] *See, e.g.*, Draft CM/BUDM Plan at 25-26 ("The specific location of spoil deposition and the design of the marsh creation/restoration area are based on: (a) the Applicants' evaluation of site conditions, as determined through field reconnaissance and document review; (b) the quantity of available and suitable dredged material, as predicted through pertinent studies and dredging activities performed during development of the Calcasieu Pass Project; and (c) consultation with CPNWR staff. The Applicants plan to conduct further geotechnical studies at both the dredging location and the proposed BUDM site to assist spoil characterization and site design."). There is no mention of previous soil sampling at the dredging location.

[125] JPA Narrative at 20.

vegetative monitoring requirements for the BUDM sites.[126] Again, Venture Global mentions monitoring but without presenting a monitoring plan for the nondescript "subsequent monitoring events."[127] It does not propose water quality sampling during dredging to determine salinity of the material prior to deposition in the BUDM area; turbidity monitoring at the BUDM sites and adjacent discharge areas; or post-construction measures to reduce the spread of sediments from the BUDM areas (*e.g.*, post-construction vegetation planting or placement of silt curtains). Of particular concern is the potential for sediment to escape from the periphery, open waters disposal site to adjacent waters in the absence of required monitoring and permittee response.[128]

Essentially, the BUDM plan lacks any meaningful discussion of measures Venture Global would employ to achieve natural marsh function and thus satisfaction of mitigation and BUDM requirements. Rather, the plan merely proposes to dump dredged sediment from the industrial ship channel by way of temporary slurry pipeline at the BUDM sites, makes a passing reference to a less than 14-year monitoring period and immediate monitoring follow-up in the first year for the contained BUDM site,[129] and purports to call it beneficial use and mitigation. It does not discuss the responsibilities of the Applicant and the USFWS with respect to performance monitoring and intervention at this government-sponsored project site (should FWS approve the use of CPNWR for mitigation and BUDM – to be determined). The Draft Plan is insufficient; more information is needed to allow for meaningful evaluation and comment on the project application and Draft CM/BUDM Plan.

Both compensatory mitigation proposals and BUDM projects must have an "anticipated positive impact" on the ecological value of the Louisiana Coastal Zone.[130] Yet the Draft BUDM Plan fails to provide reasonable assurance that the proposed activity would have a positive impact on the ecological value of Louisiana's coast.

Second, the Draft BUDMP unreasonably relies on the Applicant's Calcasieu Pass LNG Project precedents to find adequate mitigation and beneficial use here.[131] Not only are the studies, surveys and other analyses prepared for the Calcasieu Pass LNG project stale,[132] but as

---

[126]The Louisiana Administrative Code requires permittee monitoring and submission of monitoring reports to LDNR at years one, three, and five and every five years thereafter to ensure compliance and performance of the individual compensatory mitigation measure. LAC 43:I.724(H)(5).

[127] *See, e.g.,* Draft CM/BUDM Plan at 27.

[128] *See* Draft CM/BUDM Plan at Attachment A, Figs. 5-6 (indicating that the containment berm does not extend to the full shoreline in the BUDM site at the CPNWR).

[129] *See* Draft CM/BUDM Plan at 4, 27.

[130] LAC 43:I.723(H)(3)(c)(ii); *id.* at 724(J)(4).

[131] *See, e.g.,* Draft CM/BUDM Plan at 4 ("The FWS previously approved use of the CPNWR for BUDM and marsh creation/restoration in connection with [Venture Global's] Calcasieu Pass Project"); *see* Attachment A, § V.C.

[132] Venture Global references the Corps and LDNR's analysis and mitigation requirements for the Calcasieu Pass LNG project in support of its Draft Plan, but these analyses and findings were made in or before 2018. *See*, *e.g.*, Draft CM/BUDM Plan at 4, 11-12, 19, 22, 24 (Table 5, footnotes 3 and 4), 25-27, Attachment B-2, notes 6 & 7. Here, Venture Global anticipates FERC to authorize the Project in the fourth quarter of 2023 and represents that Phase 1 construction of the Terminal Facilities and Pipeline System would begin "shortly thereafter." JPA Narrative at 18, "Construction Sequence and

stated in the 9/9 Pipeline Comments, coastal marsh creation/restoration for the Calcasieu Project has not yet proven to be ecologically successful.[133]

Third, in addition to failing to present adequate performance standards and monitoring plans for "temporary" impacts from the main pipeline and slurry pipeline construction, the Draft CM/BUDM Plan fails entirely to explain the new proposed temporary slurry pipeline for transporting dredged material to the BUDM sites in any meaningful detail. For example, Venture Global's preliminary BUDM Plan represented that the dredged material "consists primarily of clay that is not compatible with long-distance transportation by pipeline", that "[s]ignificant cost constraints and technical impracticabilities prohibit the delivery of these additional volumes to the CPNWR" and proposed nearshore placement and contribution to the Coastal Resources Trust Fund.[134] But now, without explanation for the change and without identification and discussion of any soil sampling and survey analyses of the characteristics of the material to be dredged, the Draft CM/BUDM Plan shifts to propose a transport by slurry pipeline for which all impacts are considered temporary and thus not proposed for compensatory mitigation.

Finally, Venture Global has failed to timely respond to LDNR's November 3, 2022 request for information relating to the BUDM Plan.[135] LDNR identifies an overlap of the BUDM placement area proposed for CP2 LNG and another proposed project (P20190900, the Commonwealth LNG project) and requests "documentation of coordination and approval from the landowner stating that the applicant is allowed to place their dredged material in the proposed locations, or modify the proposed BUDM plan to place the material in an alternate location."[136] Venture Global also mentions this overlap with another project involving BUDM in the East Cove Unit of the CPNWR and states that "[i]f/when a coastal use permit is issued for the other project, the Applicants may pursue an alternative layout offering the same level of compensatory mitigation in terms of marsh creation/restoration and the same overall BUDM contribution."[137]

LDNR required a response to its outstanding request for information to be submitted within 30 days of November 3, 2022, but—as of the date of this comment—Venture Global has not submitted a response. Substantive changes to the BUDM Plan, including modification of the site location because of this flagged placement overlap for the BUDM area, should be made available for subsequent public comment.

In essence, the Draft CM/BUDM Plan is provisional, incomplete, and inadequate, and

---

Procedures." Thus, *at the earliest*, Venture Global may begin construction of the project in early 2024. Reliance on evaluations for the Calcasieu Pass LNG project prepared in or before 2018 is unreasonable particularly considering the anticipated construction schedule for this project and the significant weather events that have impacted the area in the intervening years.

[133] *See* Attachment A, 9/9 Pipeline Comments, § V.C, pp. 22-23.

[134] See Venture Global April 2022 Preliminary Draft CM/BUDM Plan at 4.

[135] LDNR Letter to Venture Global, dated November 3, 2022, *available at* https://sonlite.dnr.state.la.us/sundown/cart_prod/pkg_crm00100_forms.cart_menu?pcup_num=P20211131 (*Request for Information* 11/03/2022).

[136] *Id.*

[137] JPA Narrative at 37, note 19.

even acknowledges such shortcomings in portions.[138] It fails to account for all losses of coastal resources values attributable to the proposed project. It lacks necessary information including surveys of water bottom depths, tidal range, adjacent marsh elevations, water quality, habitat and geology and soil analysis of the BUDM area, and soil testing for contaminants in the CSC dredged and excavated material, dredge source material bulking factors and settlement tests. And it lacks the "rigorous scientific and technical analysis" needed to ensure mitigation for losses to, and restoration of, an outstanding coastal wetland resource.[139]

Compensatory mitigation must completely offset unavoidable net losses of coastal resources caused by the proposed activity, and BUDM plans must be designed specifically to provide for the long-term viability of the coastal ecosystem.[140] Venture Global's Draft CM/BUDM Plan does not meet these legal minimums and lacks information necessary to evaluate as much. More than inadequate and inconsistent with applicable guidelines and regulations, its substantive deficiencies stymie public comment. [141] At a minimum, LDNR should require Venture Global to supplement the Draft CM/BUDM Plan with the requisite information for the agency (and the public) to reasonably evaluate the proposal. But, ultimately, LDNR should deny permitting the proposed project as it is inconsistent with Coastal Use Guidelines, mitigation requirements and Louisiana's coastal restoration initiatives.

C. Failure to Assess Impacts of Excavating More than 100 Acres of Monkey Island Shoreline.

Neither the JPA Narrative nor the Draft CM/BUDM Plan meaningfully represent or consider the magnitude of impacts the proposed deep-water dredging and excavation at Monkey Island would have in the area, including in context with similar projects proposed in this area.[142] Venture Global only represents permanent acreage impacts directly attributable to dredging and excavation for the berthing area. It fails to consider for its proposal pre- and post-construction surveys, studies or monitoring for salinity and sedimentation impacts that compliance with Guidelines requires.[143] Dredging has significant impacts on wetland ecosystem services already

---

[138] *See*, *e.g.*, Draft CM/BUDM Plan, p. 4("This acreage is based on a provisional [] assessment" and "it may differ when field survey data become available." The Draft CM/BUDM Plan does not discuss when that data will be available or a plan to submit a final BUDM Plan for public review.

[139] *See* 33 CFR § 332.3(b)(2) (federal mitigation regulations).

[140] LAC 43:I.723(H)(3)(c)(ii); *id.* at 724(J)(4).

[141] LAC 43:I.723(H)(4)(b)(viii). The BUDM plan is part of the CUP application and is subject to the requirements of the CUP application process, "including distribution, public notice of the application, public comment, consideration of public comment, public hearings, provision of additional information regarding incomplete or inaccurate applications, review, permit decision, and public notice of a permit decision." LAC 43:I.723(H)(3)(B). The discussed information not included in the Draft Plan is necessary for proper evaluation of the Plan (LAC 43:I.723(C)(2)) and additional information is necessary to assess the proposed Plan accurately. LAC 43:I.723(C)(2), (C)(7)(a).

[142] For example, the Commonwealth LNG project (P20190900) proposes to dredge the CSC and excavate shoreline to establish a berthing/access area on the west shoreline of the Calcasieu Ship Channel just southwest of the proposed berthing area for CP2 LNG.

[143] For example, LDNR must consider, "soil and water conditions [… of the] site; … existing drainage patterns and water regimes of surrounding area including flow, circulation, quality, quantity, and

threatened by the effects of climate change, sea level rise, erosion, and severe weather events that pose increasing threats to Louisiana's remaining coastal wetlands and shoreline.

1. The Proposed Excavation of a Section of Monkey Island Would Significantly Alter the Hydrodynamic, Sedimentation Rates, and Salinity Exchange at Calcasieu Pass.

Venture Global is proposing to excavate 6.4 million cubic yards of Monkey Island ("dredge prism" in Figure 1), and transport the material through a slurry pipeline to the southern edge of Calcasieu Lake for "marsh creation" (Figure 1).[144] The proposed excavation would widen part of Calcasieu Pass significantly and change this stretch of the channel into a trapezoid (Figure 2).[145] Modifying the shape of a river channel would inevitably affect the local hydrodynamics (flow velocities and patterns), the sedimentation, and the salinity exchange from tidal action,[146] any or all of which could aggravate existing causes of land loss and wetland degradation in the Calcasieu Basin – and all of which LDNR must evaluate fully based on data not available in the Application.

salinity; and impacts on them; … [and the] extent of impact on existing and traditional uses of the area and on future uses for which the area is suited[.]" LAC 43:I.701(F)(2); (F)(4); (F)(11). LDNR must also consider whether the proposed removal of a significant area of Monkey Island is consistent with the policy of the coastal resources program to avoid adverse impacts including, among other things, "reductions in the natural supply of sediment and nutrients to the coastal system by alterations of freshwater flow; … adverse alterations of … protective coastal features; detrimental changes in littoral and sediment transport processes; land loss, erosion, and subsidence; … [and] increases in the potential for flood, hurricane, and other storm damage[.]" LAC 43:I.701(G)(1); (G)(5); (G)(9); (G)(19)-(20).

[144] *See* Application, Sheet 26 (page 11 of Plat 2 of 2 of Public Notice Materials), *available at* https://srfrxprod.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=14181362.

[145] *Id* at page 4.

[146] For example, a study conducted by Zhang et al. (2021), demonstrated that the effects of channel deepening and narrowing strongly affected the tidal hydrodynamics in Lingdingyang Bay of the Pearl River Estuary. *See* Attachment I, Ping Zhang et al., *Stepwise alterations in tidal hydrodynamics in a highly human-modified estuary: The roles of channel deepening and narrowing*, 597 Journal of Hydrology 126153 (2021).

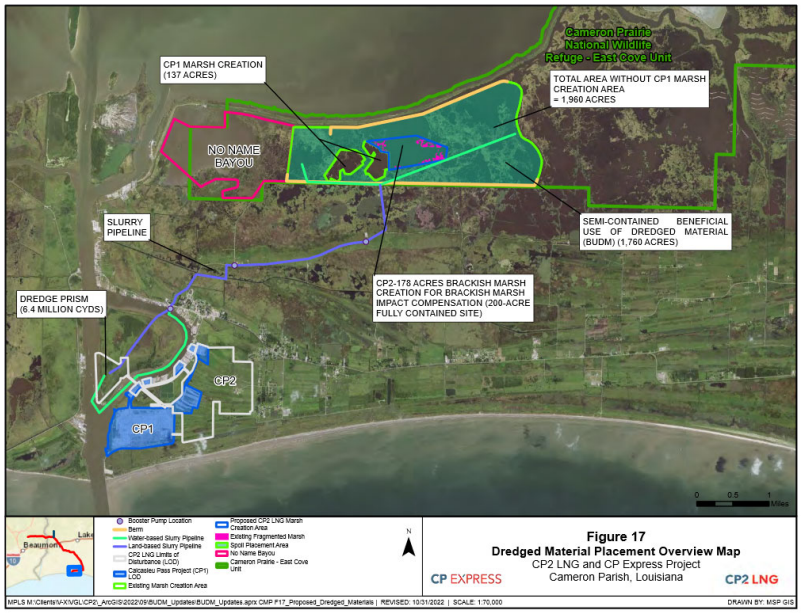

Figure 1. Proposed dredged material placement from the Monkey Island excavation ("Dredge Prism") to a marsh creation site south of Calcasieu Lake.[147] According to LDNR's Request for Information, dated November 3, 2022, which remains unanswered, Venture Global's proposed placement of the "Beneficial Use of Dredged Material" (BUDM) for CP2 LNG overlaps with the proposed material placement area of Commonwealth LNG.

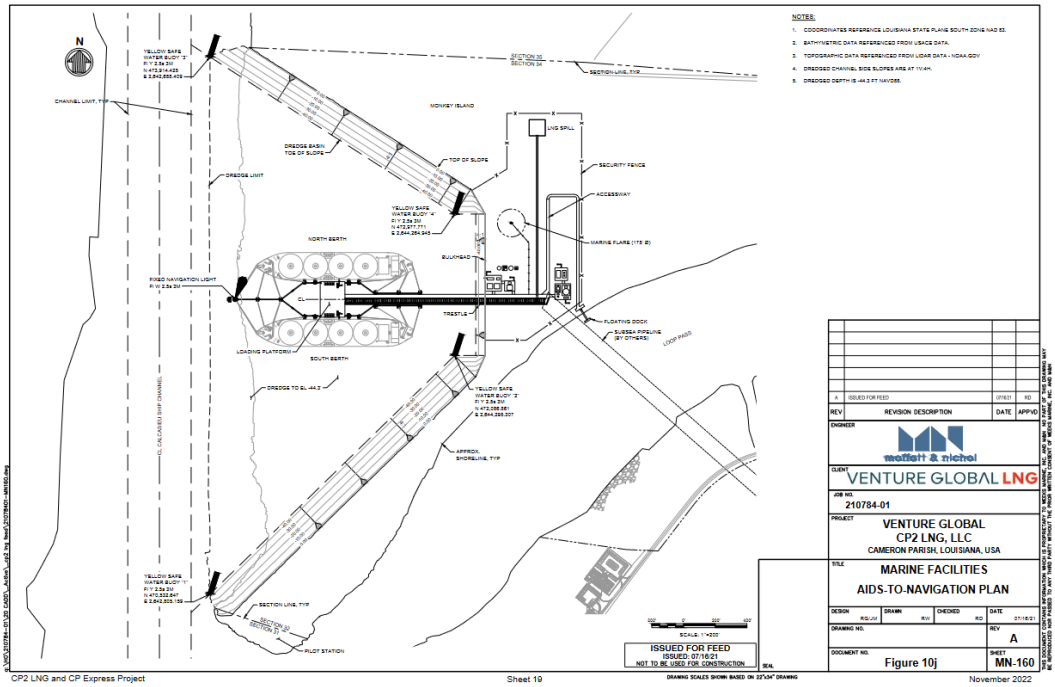

Figure 2. Schematic of the proposed CP2 LNG marine facility after excavating 6.4. million cubic yards of Monkey Island.[148]

[147] Application, Sheet 26 (page 11 of Plat 2 of 2 of Public Notice Materials).
[148] Application, Sheet 19 (page 4 of Plat 2 of 2 of Public Notice Materials).

a. Historical modifications to the Lower Calcasieu River to accommodate the CSC have already caused land loss from saltwater intrusion into Calcasieu Lake and surrounding wetlands.

The Lower Calcasieu River has already been significantly altered over time to accommodate the Calcasieu Ship Channel (CSC). Starting in 1874, the U.S. Army Corps of Engineers (USACE) modified the river channel to maintain navigation.[149] At various intervals since then, the ship channel continued to be modified and deepened until 1968, when it was widened to 400 feet and dredged to its current depth of 40 feet (Figure 3).[150] Monkey Island was formed at one of these intervals as a result of channel straightening.

These alterations became a major cause of land loss in the basin due to saltwater intrusion through the CSC.[151] Calcasieu Lake and surrounding freshwater wetlands were severely impacted from the resulting saltwater intrusion.[152] In fact, the Calcasieu-Sabine Basin lost 517 square kilometers (km^2; or nearly 200 square miles) between 1932 and 2016 (Figure 4).[153] Additional industrial development that would change the geometry of a section of the CSC could aggravate the conditions of an already vulnerable estuary.

[149] *See* Attachment J, p. 4-25, USACE, *Calcasieu River and Pass, Louisiana dredged material management plan and supplemental environmental impact statement - Volume I*, (2010), *available at* https://www.mvn.usace.army.mil/Portals/56/docs/PD/Projects/CalcasieuDMMP/DMMP_SEIS%20Main%20Report-November%2022%202010.pdf.

[150] *See id.*

[151] *Id*. "Removal of the channel mouth bar, coupled with subsequent widening, deepening, and lengthening of the ship channel, allowed increased saltwater and tidal intrusion into the estuary, resulting in catastrophic marsh loss, tidal export of vast quantities of organic marsh substrate, and an overall shift to more saline habitats in the region (USDA, 1994, in LCWCRTF, 2002). In addition, the ship channel permits the upriver flow of denser, more saline water as a saltwater wedge."

[152] *Id*.

[153] *See* Attachment K, page 13 in Brady R. Couvillion, et al., *Land area change in Coastal Louisiana (1932 to 2016)*, 26 (2017), *also available at* https://pubs.usgs.gov/sim/3381/sim3381_pamphlet.pdf.

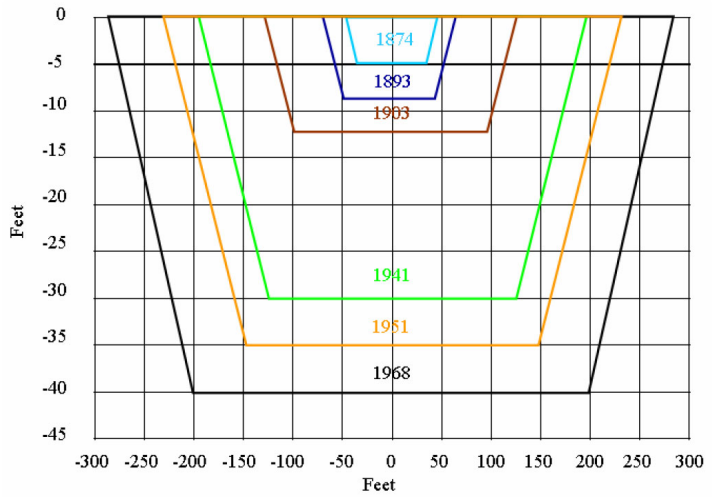

Figure 3. Historical Calcasieu Ship Channel dimension modifications from 1874 to 1968.[154]

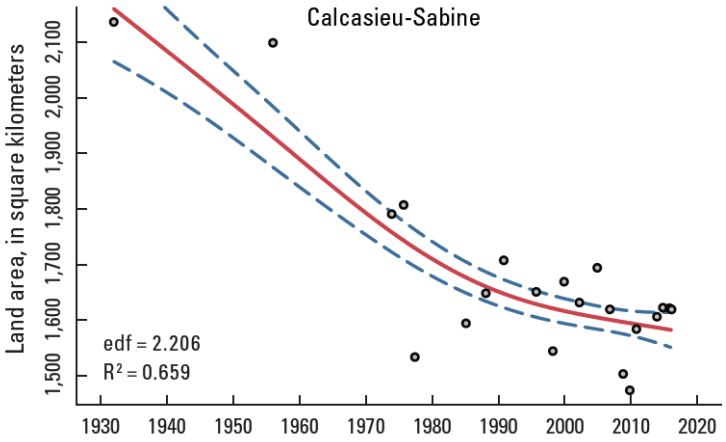

Figure 4. Land area decrease in the Calcasieu-Sabine Basin from 1932 with 2,136 km^2 of land area to 2016 with 1,619 km^2 of land area.[155]

b. Numerical modeling analyses of the changed geometry of a section of Calcasieu Pass are needed to understand how the Project would affect local hydrodynamics, sedimentation, and salinity exchange.

Excavating a section of Monkey Island would modify the geometry of a section of Calcasieu Pass. In turn, the hydrodynamics (flow velocities and pattern) through Calcasieu Pass would change, influencing sedimentation rates and patterns, as well as salinity exchange with tides. Numerical modeling analyses could provide a reasonable approximation for how hydrodynamics, sedimentation, and salinity exchange may change as a result of the

[154] Attachment J, p. 4-25, USACE, *Calcasieu River and Pass, Louisiana dredged material management plan and supplemental environmental impact statement - Volume I*, (2010), available at: https://www.mvn.usace.army.mil/Portals/56/docs/PD/Projects/CalcasieuDMMP/DMMP_SEIS%20Main%20Report-November%2022%202010.pdf.

[155] Attachment K, p.4, 7.

excavation.[156] But Venture Global's Hydrology Impact Analysis focuses only on drainage and storm surge, and does not conduct hydrodynamic modeling of the CSC as a result of the excavation.[157] LDNR must require such modeling, especially for an area that has suffered from saltwater intrusion and constant dredging operations due to sedimentation in the CSC.

For example, although currently "[t]he presence of strong tidal currents in [Calcasieu Pass] prevents the accumulation of sediments [and] [d]redging in this reach is not required,"[158] if flow velocities decrease as a result of the excavation and channel widening, then sedimentation rates could increase, leading to increased dredging needs. With reduced flow velocities, sediment that would be in suspension at higher flow velocities would fall out of suspension and lead to higher sedimentation rates in Calcasieu Pass. [159] More sedimentation is dangerous for navigation. There would need to be additional dredging operations as well as disposal areas for the dredged material, increasing costs, as well as shipping traffic and delay.

If, on the other hand, flow velocities increase, especially during the flood tide (tide going into the channel), the salt wedge, or additional salt water from the Gulf entering the channel could migrate upstream and into Calcasieu Lake, [160]aggravating an existing cause of land loss for this area. Additionally, widening part of Calcasieu Pass could be especially problematic during storm surges allowing more high salinity Gulf water to enter the CSC and the Calcasieu estuary. For example, tides from Tropical Storm Cindy in June 2017 elevated the water level in the CSC, resulting in storm surge inundation and flooding in Cameron Parish.[161]

To inform a decision for this permit application, LDNR must (or must ask Venture

---

[156] *See* Attachment L, p. 417, Melissa M. Baustian et al., *Development of an integrated biophysical model to represent morphological and ecological processes in a changing deltaic and coastal ecosystem*, 109 Environmental Modelling & Software 402 (2018). "Integrated ecosystem models are advancing to encompass more of the complexity of natural resources because of a demand to better represent ecosystems and projected future conditions and processes. Of especial importance is capturing feedback among hydrodynamics, nutrient dynamics, vegetation dynamics and morphodynamics processes. Such transfer of information back and forth, results in a better representation of ecosystems as a whole but have not been well developed."

[157] *See* Application, Storm Surge Study, *passim*, p. 25 (concluding, "[t]he storm surge study for the proposed Calcasieu Pass 2 LNG facilities confirms that the project site area is vulnerable to storm surge from tropical storms and hurricanes.") (*available at* https://srfrxprod.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=14003182).

[158] *See* Attachment J, page 2-35, USACE, *Calcasieu River and Pass, Louisiana dredged material management plan and supplemental environmental impact statement - Volume I*, (2010), *available at* https://www.mvn.usace.army.mil/Portals/56/docs/PD/Projects/CalcasieuDMMP/DMMP_SEIS%20Main%20Report-November%2022%202010.pdf.

[159] *See id.*, Attachment J, pages 1-2 and 1-3 ("When the velocity of water slows in a navigation channel its sediment-carrying capacity decreases. Sediment drops out and settles on the channel bottom… Periodic dredging is required to remove accumulated sediments and thus maintain the channel at its authorized depth…")

[160] *See id.*, Attachment J, p. 3-61 ("A bottom saltwater wedge in the ship channel can sometimes extend from the Gulf to the saltwater barrier, depending upon drought conditions in the area.").

[161] National Weather Service, Tropical Storm Cindy June 20-23, 2017, https://www.weather.gov/lch/2017cindy.

Global to) complete a numerical modeling analysis to understand how excavating 6.4 million acres of Monkey Island would 1) change the hydrodynamics, sedimentation, and salinity patterns in the CSC and 2) affect the salinities in Calcasieu Lake and surrounding wetlands.

c. *The excavation of Monkey Island could interfere with the state's Coastal Master Plan restoration efforts*.

The Louisiana Coastal Protection and Restoration Agency (LA CPRA or CPRA) has put forth a state Coastal Master Plan (CMP) to mitigate land loss and protect existing sensitive habitats in coastal Louisiana. [162] According to the 2017 CMP, the state plans to implement a number of salinity control measures along the CSC to minimize the saltwater intrusion into Calcasieu Lake (Figure 5).[163] Furthermore, a recent amendment to the state's RESTORE Act Implementation Plan recommends reinforcing water management practices through water control structures along the lake rim, drainage improvements to reduce flood stress, and a number of marsh creation projects (Figure 5).[164] A revised version of the CMP is expected in 2023 which would include updated project proposals for the state, including in southwest Louisiana.

[162] *See* Attachment M, p. ES-2, LA CPRA, *Louisiana's comprehensive Master Plan for a sustainable coast*, 184 (2017), available at: http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan_Web-Single-Page_CFinal-with-Effective-Date-06092017.pdf, "The 2017 Coastal Master Plan sets an ambitious path to respond to the loss of our coastal land and the threats from storm surge events. The master plan, in its purest sense, is a list of projects that build or maintain land and reduce risk to our communities. Because the funding for all of those projects is not available now, the master plan identifies a long-term program of construction, operations and maintenance, and adaptive management that is guided by a robust and continuous planning process, to be implemented as funds become available."

[163] *See id.,* Attachment M, p. 42 ("Calcasieu Ship Channel Salinity Control Measures Project.").

[164] *See* Attachment N, p. 3, CPRA, *Second amendment to the state of Louisiana's RESTORE Act multiyear implementation plan*, (2021), available at: https://coastal.la.gov/wp-content/uploads/2021/02/RESTORE-Act-Direct-Component-Multiyear-Plan.pdf.

Figure 5. Flood stress reduction and salinity control measures along the CSC and Calcasieu Lake rim as proposed by CPRA.[165]

The excavation of Monkey Island could impede the evaluations of the success of the proposed projects, specifically, the excavation could affect the results from the numerical modeling efforts used to select, fund, and design these projects.[166] Given that altering the geometry (or "morphology") of Calcasieu Pass could modify the hydrodynamics that the numerical models for these projects are built upon, the lack of such modeling is a major oversight. LDNR cannot approve this permit as is, and certainly without information on how the excavation would affect the hydrodynamics of the CSC.

D. Failure to Assess Project Impacts to Marine Mammals.

Venture Global must assess impacts on marine mammals, as well as endangered and threatened species. Although Venture Global has initiated consultation with the U.S. Fish and Wildlife Service ("FWS") and the National Marine Fisheries Service ("NMFS") regarding Project impacts on endangered species and essential fish habitat, it does not appear that Venture Global has consulted with NMFS on marine mammals, including the bottlenose dolphin. Notably, Venture Global's engagement with NMFS on the West Indian manatee "primarily relat[es] to the potential noise impacts associated with marine pile-driving …,"[167] impacts that

---

[165] *See* Attachment O, Slide 12, Chris Barnes & Katie Freer, *Update on RESTORE Act Multiyear Implementation Plan: Calcasieu-Sabine Basin Restoration*, (2020), *available at* https://cims.coastal.la.gov/DocLibrary/FileDownload.aspx?Root=0&id=26749.

[166] *See* Attachment P, page 2 in LA CPRA, *2017 Coastal Master Plan Appendix C: Modeling Chapter 1 – Introduction*, (2017), available at: http://coastal.la.gov/wp-content/uploads/2017/04/Appendix-C_chapter1_FINAL_3.16.2017.pdf. "[I]ndividual projects were evaluated within a systems context using a suite of predictive models [such as models for "Ecohydrology," "Wetland Morphology," "Storm Surge"…] Each of the models provide inputs to other models and/or produce outputs that were used to estimate how the landscape might change and/or how projects might perform on the landscape over times" suggesting that changing the inputs (such as channel geometry and hydrology) in one model has potential to affect the inputs and outputs of the other linked models such as vegetation and storm surge.

[167] JPA Narrative, p. 38.

would also affect bottlenose dolphins. It is well known that the Calcasieu ship channel is home to bottlenose dolphins, including "Pinky," a famous pink dolphin.[168]

Under the Marine Mammal Protection Act ("MMPA"), it is unlawful for "[a]ny person, vessel, or conveyance to take[169] any marine mammal in waters or on lands under the jurisdiction of the United States[.]"[170] Noise pollution, like that associated with dredging or the operation of large vessels, is known to interfere with "key life functions of marine mammals" such as "foraging, mating, nursing, resting, [and] migrating" by "impairing hearing sensitivity, masking acoustic signals, eliciting behavioral responses, or causing physiological stress."[171] The construction of the marine terminal facilities would require excavation and dredging,[172] as well as marine pile-driving[173] which would all contribute to noise pollution, as well as turbidity and other pollutants or habitat interferences.

Potential noise impacts are one of many impacts to marine mammals that must be assessed. Venture Global must not only consult on the West Indian manatee but also on the bottlenose dolphin. To ensure that the potential for unlawful takes is minimized, LDNR should not issue the requested CUP until consultation with NMFS on all marine mammals in the vicinity of the project is complete.

E. Failure to Consider Chenier Plains and Habitat.

Venture Global fails to address the high storm protection and habitat conservation value of the chenier plain the Pipeline and Project would destroy. LDNR has explained the rarity and importance of the cheniers that the proposed Pipeline and Terminal would destroy:

> The cheniers of southwest Louisiana and the natural ridges of southeast Louisiana are unique geological features that are critical components of the ecology of these areas. They support a diversity of wildlife and, because of their location along important migration pathways, are especially significant for migrating birds, as

---

[168] Kenny Lopez, *'Pinky' the rare Louisiana dolphin is said to be a mom to a pink baby dolphin!*, WGNO, https://wgno.com/news/pinky-the-rare-louisiana-dolphin-is-said-to-be-mom-to-a-pink-baby-dolphin/ (May 7, 2019); *see also Rare pink bottlenose dolphin surfaces in Louisiana lake*, The Guardian, https://www.theguardian.com/environment/2009/mar/03/pink-albino-dolphin-louisiana (Mar. 3, 2009); *see also* David Nield, *Pinky The Rare Pink Dolphin Has Been Spotted in Louisiana Water*, Science Alert, https://www.sciencealert.com/louisiana-s-rare-pink-dolphin-appears-almost-unique-amongst-the-species (Sept. 11, 2015); *see e.g.* Loulla-Mae Eleftheriou-Smith, *Pink dolphin spotted swimming in Louisiana river*, https://www.independent.co.uk/news/world/americas/pink-dolphin-louisiana-river-spotted-swimming-the-calcasieu-ship-channel-a7884751.html (Aug. 9, 2017).

[169] The definition of "take" includes "the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal[.]" 50 C.F.R. § 216.3.

[170] 50 C.F.R. §216.11(b).

[171] Attachment Q, Erbe C., Dunlop R., Dolman S., Effects of Noise on Marine Mammals, Effects of Anthropogenic Noise on Animals, Springer Handbook of Auditory Research, Vol. 66 (2018).

[172] JPA Narrative, p 20.

[173] JPA Narrative, p. 38.

well as providing natural protection against storm surge and flooding.[174]

This rich landscape makes it valuable for many species of migratory birds and ducks and is filled with highly productive estuaries that attract much of Louisiana's famous aquatic species such as blue crabs, shrimp, and oysters.[175] Consequently, LDNR's Guidelines protect cheniers, breeding habitat, and important migratory routes from surface alterations.[176]

Chenier plains are disappearing at an alarming rate, magnifying the proposed Project's impacts.[177] The Louisiana Coastal Protection and Restoration Authority ("LA CPRA"), the agency charged with the state's Coastal Master Plan, is heavily investing in restoration and protection projects in southwest Louisiana to combat ongoing and projected land loss in the region.[178] But the Terminal site and Pipeline route would destroy miles of wetlands and cheniers, directly contradicting public and private efforts to protect these natural resources.[179]

Further, the chenier formations along the Gulf of Mexico have historically been recognized as "one of the most important physiographic areas to migratory birds in North America."[180] A myriad of migratory bird species regularly use this habitat prior to, or immediately after, crossing the Gulf of Mexico.[181] Approximately 30 migratory bird species, protected by the Migratory Bird Treaty Act ("MBTA"), utilize the cheniers at the proposed Terminal site – the Eastern Black Rail which is discussed more thoroughly in Section IX is

---

[174] LDNR, Cheniers and Natural Ridges, p.1 *available at* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.dnr.louisiana.gov/assets/docs/coastal/227-009-001NG-Chenier-Rpt-DNR.pdf.

[175] *See, e.g.,* Attachment A, Exhibit 3, CWPPRA Managing Agencies website, Report, *Louisiana Coastal Wetland Functions and Values*, *also available at* https://lacoast.gov/reports/rtc/1997/4.htm,("Neo-tropical migrants will lose vital resting areas as acreage of barrier islands …, cheniers and natural levee forests … decline.").

[176] *See*, *e.g.*, LAC 43:I.711(I) ("Surface alterations which have high adverse impacts on natural functions shall not occur, to the maximum extent practicable, on barrier islands and beaches, **isolated cheniers**, isolated natural ridges or levees, **or in wildlife and aquatic species breeding or spawning areas, or in important migratory routes**." (emphasis supplied)).

[177] *See* Dahl, T.E. 2011. *Status and trends of wetlands in the conterminous United States 2004 to 2009*. U.S. Department of the Interior; Fish and Wildlife Service, Washington, D.C**.** 108 pp. available at: https://www.fws.gov/wetlands/documents/Status-and-Trends-of-Wetlands-in-the-Conterminous-United-States-2004-to-2009.pdf.

[178] *See* LA CPRA, Louisiana's comprehensive Master Plan for a sustainable coast 184 at p. 108-113 (2017), *available at* https://coastal.la.gov/our-plan/2017-coastal-master-plan/; Attachment A, § V, Figure 1 (map of restoration, structural protection, and nonstructural risk reduction projects to be implemented in chenier plains of southwest Louisiana).

[179] *See, e.g.,* Attachment A, § V (generally), *id.* § V.B, Figures 1, 2, Exhibit 4 (The Gulf Coast Joint Venture: Chenier Plain Initiative Area Fact Sheet, http://www.gcjv.org/About_Us.php); *id.*).

[180] *See* Attachment R, Wylie C. Barrow, et al., *Disruption and Restoration of En Route Habitat, A Case Study: The Chenier Plain*, Studies in Avian Biology No. 20:71-87 (2000), *available at* https://sora.unm.edu/sites/default/files/SAB_020_2000%20P71-87_Disruption%20and%20Restoration%20of%20En%20Route%20Habitat%20A%20Case%20Study%20The%20Chenier%20Plain_Barrow%2C%20Chen%2C%20Hamilton%2C%20Ouchley%2C%20Spengler.pdf.

[181] *Id*.

among those species.[182] The MBTA prohibits the taking and killing of all protected migratory bird species which are native to the United States, among other things.[183] Given the important role that cheniers play for migratory bird species, LDNR should evaluate not only the direct impact that this Project would have on cheniers in the region, but the cumulative impact of all the proposed LNG projects in Southwest Louisiana. Alternatively, LDNR should wait on issuing a permit determination until the agency has had an opportunity to review the United States Fish and Wildlife Service permit determination, which is currently pending.

Venture Global's proposed Project, including nearly the entire Terminal footprint, would destroy those cheniers. The Terminal would sit on and destroy 558 acres, *see* Figure 6. And the pipeline would cut through 7.95 miles of cheniers while threatening more.[184] There are 15,541.9 acres of cheniers within three miles of the Pipeline route and 326.4 acres of cheniers within one mile (this acreage excludes those cheniers on the west bank of Calcasieu Pass).

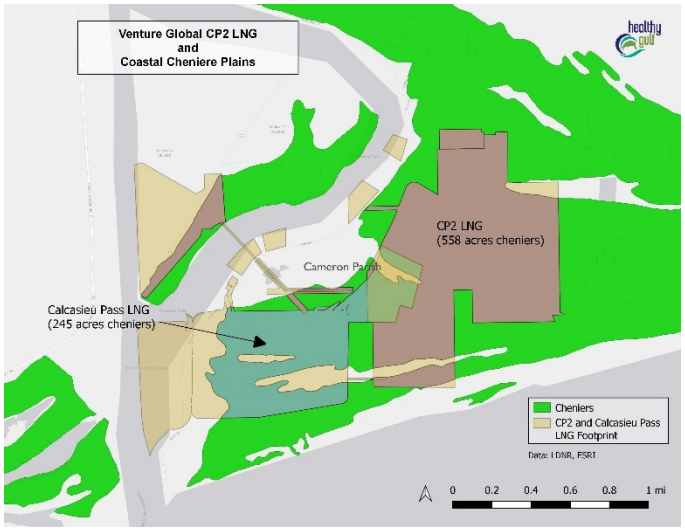

Figure 6. Overlay of proposed CP2 LNG Terminal site on LDNR SONRIS chenier plains map. Cheniers (or chenier plains) are a geologically rare type of coastal formation comprised of sand and shells. Cheniers give rise to unique and valuable coastal habitats and ecosystems. Data sources: LDNR SONRIS, ESRI, Healthy Gulf.

Venture Global fails to recognize that it would build its Terminal in and its Pipeline through these sensitive and rare cheniers and fails to avoid the related adverse impacts. But LDNR must consider the cheniers and avoid the Project's related direct, indirect, and cumulative impacts, as well as its interference with conservation programs.[185]

---

[182] *See infra* at § IX.

[183] 16 U.S.C. § 703; *see also* Migratory Bird Treaty Reform Act of 2004, H.R. 4114, 108th Cong. § 103 (2004).

[184] *See* Attachment A, § V.

[185] *See*, *e.g.*, LAC 43.I.701(F)(14) & (15) (requiring LDNR to consider "proximity to, and extent of impacts on, special areas, particular areas, or other areas of particular concern of the state program or local programs" and "likelihood of, and extent of impacts of, resulting secondary impacts and cumulative impacts"); *id.* at 701(G)(10), (15) & (16) (requiring DNR to avoid "adverse effects of cumulative impacts; … fostering of detrimental secondary impacts in undisturbed or biologically highly

Issuing this Permit would be irresponsible, even if only for the impact on wetlands. We urge LDNR to deny the Permit. At the very least, LDNR must complete an assessment of the Project's cumulative impact on wetlands, including through the Project's contribution to climate change, as a part of their evaluation and impose conditions, like prohibitions on construction and dredging during breeding seasons.

VI. LDNR Must Deny the Permit for Insufficient Information on the Project's Potential Environmental Impacts.

Venture Global's Project would pose tremendous environmental costs to the state from loss of habitat, coastal shoreline and wetlands, gas leaks or explosions, and greenhouse gas emissions. As explained throughout these comments, Venture Global ignores or fails to provide sufficient information for LDNR to fully consider both the actual impacts and the reasonably foreseeable harms the Project could cause. But the risks are real and significant, and LDNR cannot make Article IX's or the Coastal Use Guidelines' required cost-benefit determinations without full consideration of these harms.

The 9/9 Pipeline Comments describe many of Venture Global's failures to provide sufficient information for any determination that adverse environmental impacts would be avoided to the maximum extent practicable or possible, which include Venture Global's failure to evaluate:

- risk of gas leaks, spills and explosions spills and the potential impacts to the Project area, and beyond;[186]
- the threats from storms and flooding in light of the Project's proposed site in an area that has suffered from and continues to be vulnerable to storm surges, flooding, and damage that could impact whole communities and habitats;[187]
- the threat and degree of accelerated climate change from the Project's direct GHG emissions, as well as its lifecycle emissions from upstream production and transportation, and from downstream transportation and consumption.[188]
- potential and real impacts from the Terminal and Project's pollutants to the impaired Calcasieu River and Calcasieu Lake, coastal waters already impaired for dioxin, furan compounds, fecal coliform, enterococcus, and polychlorinated biphenyls ("PCBs").[189]

These failures, together with additional examples, below, related to the proposed Terminal and

productive wetland areas; …adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands").

[186] *See* Attachment A, § VI.A.

[187] *See* Attachment A, § VI.B.

[188] *See* Attachment A, § VI.C.

[189] *See* Attachment A, § VI.D.

Project are unacceptable. Article IX[190] and the Coastal Use Guidelines[191] require LDNR to undertake a full analysis of the potential for the Project to increase the risk of leaks, spills, explosions, and other harmful accidents and to minimize those disastrous risks to our coast to the maximum extent practicable.

A. Threats from Accidents, Leaks and Explosions.

Export operations and gas pipelines are not safe for people or the environment. This is evidenced by the multiple leaks and explosions that have occurred in recent years along the Gulf Coast. The 9/9 Pipeline Comments set forth several examples, including two from July 2022: a pipeline leak of 8.2 million cubic feet of gas in northwest Louisiana and an explosion at a natural gas pipeline outside of Houston, Texas that sparked grassfire, fumigated the area for at least 3 miles, and caused flames visible from 30 miles away, *see* Figure 3.[192] Similarly, in February 2020 in Satartia, Mississippi, a CO_2 pipeline ruptured around dinnertime, immediately exposing dozens of local residents to a cloud of CO_2, which is a deadly asphyxiant at high concentrations and also stalls out gas-powered engines—like cars and rescue vehicles—for lack of oxygen. Residents were on oxygen treatments for several months after the incident.[193] Importantly, Venture Global has indicated to FERC that CO_2 pipelines or transport is part of its CP2 LNG Terminal plan in the form of carbon capture and storage ("CCS"), but the company fails to include any information on its current or future CCS plans for its Coastal Use Permit.[194] And Venture Global offers no assessment of the risks of leaks or explosions that CCS—or any of its proposed Project—would bring or how such risks could be avoided or minimized.[195]

---

[190] *See in re Am. Waste,* 633 So.2d at 194; *Save Ourselves*, 452 So.2d at 1157 (holding agency failed to provide sufficient reasons responding to petitioners' concerns about potential threat to New Orleans' water supply from, among other things, flooding from hazardous waste landfill near Mississippi River).

[191] *See, e.g.*, LAC 43:I.701(G), 705, 711 (Coastal Use Guidelines for all uses, linear facilities, and surface alterations). For example, the Guidelines forbid uses that would increase the potential for flood, hurricane, and other storm damage, or increases in the likelihood that damage will occur from such hazards." *Id.*§ 701(G)(20). Similarly, surface alterations "shall, to the maximum extent practicable, take place only on lands which have foundation conditions sufficiently stable to support the use, and where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved." They also require that all "[s]urface alteration sites and facilities shall be designed, constructed, and operated using the best practical techniques to prevent the release of pollutants or toxic substances into the environment and minimize other adverse impacts." *Id.* § 711(M). In addition, oil spills are predictable events that lead to loss of wetlands and other coastal habitat, which the Guidelines forbid. *See id.* § 701–23.

[192] *See* Attachment A, § VI.A, Exhibits 6 & 7.

[193] *See* Attachment S, (excerpt, Pipeline and Hazardous Material Safety Administration, Failure Investigation Report-Denbury Gulf Coast Pipeline (May 26, 2022), *available at* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-05/Failure%20Investigation%20Report%20-%20Denbury%20Gulf%20Coast%20Pipeline.pdf ; Attachment S-1, Dan Zegart, *The Gassing of Satartia*, Climate Investigations Center and Huffington Post (Aug. 26, 2021), *available at* https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f.

[194] *See* Attachment D (FERC Nov. 17, 2022, Request for Information); Application, *passim*.

[195] Notably, Venture Global acknowledges the risk of leaks in the proposed Pipeline, but does not assess any leak's potential adverse impacts. *See* JPA Narrative, p. 22 ("to help with periodic corrosion/leak surveys, a 25-foot-wide [right of way] corridor centered on the pipeline will be maintained ….").

Additionally, in June 2022, an explosion occurred at the Freeport LNG export terminal knocking the plant offline, *see* Figure 7.[196] The explosion and fire at the Freeport LNG facility caused an immediate shut down of operations.[197] The explosion created a 450-feet-high fireball which lasted for about 7 seconds, while the fire burned for 30 minutes.[198] Although Freeport reported no injuries, people recreating at a nearby beach reported hearing loss. Further, the initial report by the Pipeline and Hazardous Materials Safety Administration ("PHMSA") concluded that "[c]ontinued operation of Freeport's LNG export facility without corrective measures may pose an integrity risk to public safety, property or the environment."[199]

PHMSA's investigation as to the cause of the explosion is ongoing. However, a report released by the agency stated that the incident was caused by "deficiencies in valve testing procedures, failure to adjust alarms that could warn operators of rising temperatures during operations and operating procedures that allowed 'operator discretion' to close valves that might cause LNG to be isolated in pipes."[200] The report stated that the control room did not show when temperatures soared in the pipeline that breached and "severely damaged" electrical wiring likely ignited the released gas.[201]

---

[196] Jacob Bogage, *Explosion at Texas LNG plant puts added strain on global energy market*, Washington Post (June 9, 2022), https://www.washingtonpost.com/business/2022/06/09/explosion-texas-lng-plant-puts-added-strain-global-energy-market/.

[197] U.S. Energy Information Administration, Fire Causes Shutdown of Freeport Liquefied Natural Gas Export Terminal (June 23, 2022), https://www.eia.gov/todayinenergy/detail.php?id=52859 [hereinafter "EIA, Freeport Fire"].

[198] Sergio Chapa, *Freeport LNG Blast Created 450-Feet-High Fireball, Report Shows*, Bloomberg (July 12, 2022), https://www.bloomberg.com/news/articles/2022-07-12/freeport-lng-blast-created-450-feet-high-fireball-report-shows.

[199] *See* Attachment T, Gary McWilliams, U.S. Regulator Bars Freeport LNG Plant Restart Over Safety Concerns, REUTERS (July 1, 2022), https://www.reuters.com/business/energy/us-regulator-finds-unsafe-conditions-freeport-lng-export-facility-bars-restart-2022-06-30/#:~:text=HOUSTON%2C%20June%2030%20(Reuters),an%20outside%20analysis%20is%20complete [hereinafter "U.S. Regulator Bars Freeport LNG Plant Restart"].

[200] *U.S. regulator releases report blaming Freeport LNG blast on inadequate processes*, Reuters (Nov. 16, 2022), https://www.reuters.com/business/energy/freeport-lng-provides-no-timeline-texas-export-plant-restart-2022-11-15/.

[201] *Id*.

Figure 7. Photograph of explosion at Freeport LNG export terminal.[202]

Venture Global, in its relatively short time constructing and operating in Louisiana, has already demonstrated its propensity for errors similar to those at Freeport LNG and a failure to protect the environmental consistent with the law and its permits[203]—failures LDNR must account for when it considers the risks and potential environmental costs.[204]

Further, LDNR must consider the explosion risks associated with terrorism and cybersecurity threats. In September 2022, four explosions occurred along the Nord Stream natural gas pipelines from Russia to Europe, in the North Sea—blasts that Swedish authorities confirmed were "gross sabotage" after finding traces of explosives as part of their ongoing investigation.[205]

[202] *Explosion at US natural gas plant raises risk of shortages in Europe*, The Guardian (June 9, 2022), https://www.theguardian.com/us-news/2022/jun/09/us-natural-gas-plant-explosion-freeport-lng-shortages-europe (photograph).

[203] *See supra*, § II (Background).

[204] *See, e.g.,* La. R.S. § 49:214.30(C)(9) ("The secretary shall take into consideration a permit applicant's history of compliance with the provisions of the Louisiana Coastal Resources Program prior to making a determination of whether to approve, approve with modifications or otherwise conditionally approve, or deny the application for a coastal use permit.")

[205] Washington Post, *Sweden finds explosive traces at Nord Stream blast sites, confirms sabotage* (Nov. 18, 2022), *available at* https://www.washingtonpost.com/world/2022/11/18/nord-stream-sweden-explosives-sabotage/

Figure 8. "This handout picture released on September 27, 2022 by the Danish Defence Command shows the gas leak at the Nord Stream 2 gas pipeline … [T]he Danish Defence's ... photos and videos … show patches of bubbles on the surface of the Baltic Sea, ranging from 200 meters to one kilometer in diameter."[206]

Similarly, this year before the Nord Stream sabotage, U.S. officials announced in a Joint Notice "the discovery of an alarmingly sophisticated and effective system for attacking industrial facilities *that includes the ability to cause explosions in the energy industry*."[207] As detailed in the 9/9 Pipeline Comments, the Washington Post reported that the malware's "top target was probably liquefied natural gas production facilities" and that it "contains capabilities related to disruption, sabotage, and potentially physical destruction."[208]

Explosions or other physical destruction of the facility could have catastrophic impacts on the human environment. A Nobel Prize winning group, Physicians for Social Responsibility, recently explained some of the public safety risks:

> LNG explodes when spilled into water and, if spilled on the ground, can turn into rapidly expanding, odorless clouds that can flash-freeze human flesh and asphyxiate by displacing oxygen. If ignited at the source, LNG vapors can become flaming "pool fires" that burn hotter than other fuels and cannot be extinguished. LNG fires burn hot enough to cause second-degree burns on exposed skin up to a mile away. LNG facilities pose significant risks to nearby population centers and have been identified as potential terrorist targets.[209]

---

[206] Le Monde, *Leaks in Nord Stream Gas Pipelines Create Risk of 'Climate Bomb'* (Sept. 29, 2022), *available at* https://www.lemonde.fr/en/international/article/2022/09/29/leaks-in-nord-stream-gas-pipelines-create-risk-of-climate-bomb_5998552_4.html.

[207] *See* Attachment A at § VI.A, Exhibits 8 and 9 (*added emphasis).*

[208] *See* Attachment A, § VI.A, Exhibit 8.

[209] *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure* at 481, 495 (8th ed. April 2022), *available at* https://www.psr.org/blog/resource/fracking-compendium-8/ (last visited June 2, 2022), at p.481, citing Walter Chukwunonso Ikealumba and Hongwei Wu, "Some Recent Advances in Liquefied Natural Gas

Notably, the April 13, 2022, joint agency warning notice confirms the last point.

Nothing in the Application addresses these threats. And nothing in the Application indicates compliance with Guideline 719's requirement that "[e]ffective environmental protection and emergency or contingency plans shall be developed and complied with for all mineral operations."[210] Further, Venture Global fails completely to quantify the risk of accidents, leaks, and explosions or their potential impacts—not for its Terminal's main site, nor for its marine facilities, nor across its lengthy Pipeline. It also does not explain how it would minimize these risk—risks that Louisiana simply cannot afford.

B. Threats from Storms and Flooding.

The proposed site makes the Terminal and most, if not all, of the Project infrastructure vulnerable to storm surges, flooding, and damage that could impact whole communities (Figure 8). The 9/9 Pipeline Comments discuss the intense storm activity history in Cameron Parish, including from the record-breaking 2020 hurricane season.[211] Since 2017, the Parish has been hit with no less than seven major storms, including the direct hit to the proposed Project site from Hurricanes Laura in 2020—one of two hits that year that communities in the area are still recovering from.[212] These storms have the power to cause immense damage to oil and gas infrastructure, which in turn threatens coastal communities with the effects of spills. Yet the Applicant proposes to place a massive liquefaction and LNG export and storage facility to this already vulnerable situation while weakening existing storm protection for nearby communities and Lake Charles by destroying wetlands and cutting out a chunk of Monkey Island. While acknowledging the vulnerability of its proposed site, Venture Global ignores the fact that its Project would make the area and nearby communities more vulnerable by excavating Monkey Island, destroying wetlands, and increasing GHG emissions. It purports to protect only itself with steel flood walls around parts of its Project to protect "against storm surge and potential wave action."[213] But it does not indicate what heights of water or levels of wind- and wave-forces those walls would be able to withstand, let alone what levels of waters, winds, and wave-force it

---

(LNG) Production, Spill, Dispersion, and Safety," *Energy & Fuels* 28, no. 6 (2014): 3556–86, https://doi.org/10.1021/ef500626u; [Name Redacted], "Liquefied Natural Gas (LNG) Import Terminals: Siting, Safety, and Regulation," Congressional Research Report, December 2009.

[210] *See* LAC 43.I.719(K).

[211] *See* Attachment A, § VI.B.

[212] *See* Attachment U (NOAA website, Historical Hurricane Tracks, *available at* https://coast.noaa.gov/hurricanes/#map=7.36/30.204/-93.223&search=eyJzZWFyY2hTdHJpbmciOiJMYWtlIENoYXJsZXMsIENhbGNhc2lldSBQYXJpc2gsIExvdWlzaWFuYSwgVVNBIiwic2VhcmNoVHlwZSI6Imdlb2NvZGVkIiwib3NtSUQiOiIxMzIxMjYiLCJjYXRlZ29yaWVzIjpbIkg1IiwiSDQiLCJIMyIsIkgyIiwiSDEiLCJUUyIsIlREIiwiRVQiXSwieWVhcnMiOlsiMjAyMiIsIjIwMjEiLCIyMDIwIiwiMjAxOSIsIjIwMTgiLCIyMDE3Il0sIm1vbnRocyI6W10sImVuc28iOltdLCJwcmVzc3VyZSI6eyJyYW5nZSI6WzAsMTE1MF0sImluY2x1ZGVVbmtub3duUHJlc3N1cmUiOnRydWV9LCJidWZmZXIiOjYwLCJidWZmZXJVbml0IjpbIk5hdXRpY2FsIE1pbGVzIl0sInNvcnRZWxlY3Rpb24iOnsidmFsdWUiOiJ5ZWFyc19uZXdlc3QiLCJsYWJlbCI6IlllYXIgKE5ld2VzdCkifSwiYXBwbHlUb0FPSSI6dHJ1ZSwiaXNTdG9ybUxhYmVsc1Zpc2libGUiOnRydWV9).

[213] JPA Narrative, p.8, 18. It is notable that Venture Global fails to provide supporting information for its wall.

expects the site would experience.[214]

Similarly, Venture Global fails to provide sufficient information to show compliance with Guideline 711 for surface alterations. Guideline 711 calls for industrial and commercial uses like the Terminal and the Project as a whole to be in "areas of the coastal zone that are suitable for development."[215] Where, as here, the project is proposed in the Coastal Zone below five feet and outside of fastlands, Guideline 711 requires the use "shall, to the maximum extent practicable, take place only …on lands which have foundation conditions sufficiently stable to support the use, ***and*** where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved, and where the public safety would not be unreasonably endangered," among other things.[216]

But storm and flood hazards are not minimal on the coast of Cameron Parish. Instead, Cameron Parish, where the Louisiana portion of the Project is proposed, is particularly vulnerable to the accelerating sea-level rise and storms that a changing climate will bring, as the 9/9 Pipeline Comments explain.[217] Indeed, the 2017 CMP projections show that even with the implementation of the CMP, under the "High Scenario," placement of infrastructure along the CSC is a high risk and problematic proposition (Figure 9).[218]

Figure 9. Screenshot from the CPRA Master Plan Data Viewer of the proposed Terminal and placement of dredged materials sites in 50 years, under the "High Scenario" with implementation of the 2017 CMP; red represents land loss, green represents land gain. Available at, https://cims.coastal.louisiana.gov/masterplan/.

---

[214] *Cf.* LAC 43.XIX.507(A)(5) (prohibiting construction of oil and gas exploration and production waste storage containers, among other things, in flood zones unless behind "adequate levees" at least 1 foot above 100-year flood elevation and able to withstand the velocity of the 100-year flood).

[215] LAC 43:I.711(A).

[216] *Id.* § 711(A)(2).

[217] *See*, *e.g.*, Attachment A, §§ VI.B & C, VII.D.

[218] *See* Attachment N, "High scenario" in the CMP represents the high range of environmental indicators such as sea level rise and storm intensity, CPRA *2017 Coastal Master Plan Appendix C: Modeling Chapter 2 - Future Scenarios*, (2017), p. 3-4 available at: http://coastal.la.gov/wp-content/uploads/2017/04/Appendix-C_chapter2_FINAL_3.16.2017.pdf

LDNR needs to adjust its more conservative assumptions before it is too late, particularly given the special vulnerability of Venture Global's coastal site. It must also consider the cumulative impacts of multiple hurricanes hitting the Project area in any one season, including from loss of access to the Project site and surrounding areas. As storms become more frequent and more intense, there is no adequate justification for any development that puts these already vulnerable communities at even greater risk. LDNR must assess the risk that the Project's infrastructure could fail in the face of worsening storms, accelerating coastal land-loss, and a shifting environment due to climate change over the Project's anticipated lifespan.

C. Threat of Accelerating Climate Change.

Venture Global's Project would generate significant direct GHGs from the Terminal and Pipeline, in addition to significant lifecycle emissions from upstream production and transportation, and from downstream transportation and consumption. As a public trustee for Louisiana's environment, LDNR is obligated to fully quantify Venture Global's likely direct, indirect, and cumulative greenhouse gas emissions, and to assess the significance of the potential adverse environmental effects of these emissions to the state.[219] Nowhere does the Application quantify these emissions or address the effects and existential threat the project's greenhouse gas pollution poses to Louisiana, vis a vis climate change—a particular failure given the site's frequent and intense storms and flooding that are likely to get more intense still.[220]

The 9/9 Pipeline Comments discuss how science now confirms a trend of intensifying hurricanes due to GHG emissions, including recent reports from the Intergovernmental Panel on Climate Change, the U.S. National Oceanic and Atmospheric Administration, and peer reviewed journals.[221] They also point to the economic costs of climate change impacts as part of the balancing of costs and benefits LDNR must reckon with—for this permit decision and generally.[222]

D. Impacts to the Impaired Calcasieu River and Calcasieu Lake.

The Application fails to address that the Terminal and its Marine Facilities would add pollutants to the Calcasieu River and other nearby coastal waters already impaired for dioxin, furan compounds, fecal coliform, enterococcus, and polychlorinated biphenyls ("PCBs").[223] The

---

[219] *See Sierra Club v. Fed. Energy Reg. Comm'n*, 867 F.3d at 1373–75. The court in *Sierra Club* rejected the argument that FERC had no need to consider downstream greenhouse gas emissions from an LNG pipeline, ruling that Congress, as Article IX here, gave FERC the broad instruction to balance the public benefits against the adverse effects of the project when deciding whether to grant the LNG pipeline approvals. *Id.* at 1373 ("Because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves.") (internal citations omitted).

[215] *See* Attachment A, § VI.C.

[221] *See* Attachment A, § VI.C.

[222] *See* Attachment A, § VI.C.

[223] *See* Attachment V, excerpt from Final 2020 Integrated Report of Water Quality in Louisiana,

proposed Terminal's construction and operations would significantly impact the designated uses of water subsegment 030401, including fish and wildlife propagation, oyster propagation, and primary and secondary contact recreation (*i.e.* fishable/swimmable). Similarly, Venture Global omits to address temperature impacts. Liquefaction of natural gas produces heat to super-cool the gas into a liquid at approximately -260°F (-161.5°C) and power generation (which the Terminal includes) generally produces high temperature discharges that may adversely affect the designated uses of the receiving waters, especially the fish and wildlife propagation.[224] The parameter for subsegment 030401 sets a maximum allowable temperature at 35º C.[225]

In addition, Venture Global's EIS for its Calcasieu Pass LNG facility confirms pollutant concerns from associated shipping ballast: "LNG carriers would discharge ballast water as they are loading cargo. Venture Global Calcasieu Pass has indicated the ballast water discharged into the LNG berthing area would be composed mainly of Gulf of Mexico ocean water. Potential impacts on water quality due to ballast water discharge would be a temporary increase in salinity level, a temporary decrease in dissolved oxygen levels, and potential change in pH level in the immediate vicinity of the LNG berthing area." [226] Venture Global's Application does not assess pollutant impacts on current uses such that approval of its permit Application would be arbitrary and capricious. Indeed, it does not assess the impacts of additional ship traffic on the current uses of the area at all.

VII. LDNR Must Deny the Permit for Insufficient Information on Cumulative Impacts from the Project and other Oil, Gas and Petrochemical Infrastructure.

LDNR must—and Venture Global has failed to provide sufficient information to—examine the cumulative impacts from its Project, including buildout of oil-and-gas and petrochemical infrastructure in southwest Louisiana and the region. In determining whether the proposed use complies with the Coastal Use Guidelines, LDNR must first collect information about the likelihood extent, and resulting secondary impacts and cumulative impacts, from the proposed activity.[227] The Guidelines define "cumulative impacts" as "impacts increasing in significance due to the collective effects of a number of activities."[228] As explained in the legal background section above, Article IX's public trustee duty also requires LDNR to perform a cumulative impacts analysis specifically encompassing the impacts from planned future phases

---

Appendix A: 2020 Water Quality Assessments for Louisiana (FINAL), *also available at* https://www.deq.louisiana.gov/page/2020-water-quality-inventory-integrated-report-305b303d.

[224] *See* Attachment W, N. Madden, A. Lewis & M. Davis, *Thermal effluent from the power sector: an analysis of once-through cooling system impacts on surface water temperature*, 8 Environ. Res. Lett. 035006 (2013) (explaining at section 2.2, "Due to the biological sensitivity of many aquatic organisms to water temperature, temperature increases caused by power plant discharges may have multiple impacts on aquatic ecosystems;" Attachment X, D. Caissie, *The thermal regime of rivers: a review*, 51 Freshwater Biology 1389, 1398 (2006) ("Thermal pollution from industrial effluent, including power generating station cooling water, can also adversely affect aquatic resources by reducing the available area of suitable habitat.").

[225] LAC 33:IX.1123, Table 3.

[226] *See* Attachment EE, Calcasieu Pass LNG FEIS (excerpt), p. 4-22.

[227] LAC 43:I.701(F)(15); *see also id.* 701(G)(10) (prohibiting the "adverse effects of cumulative impacts").

[228] LAC 43:I.700.

of a multi-phase project.[229] In addition, LDNR must also consider the project in light of past, present, and reasonably foreseeable future sources in the area.[230]

Cumulative impacts here include those from the interdependent pieces of the Project—real and potential as set forth in these Comments and in the 9/9 Pipeline Comments.[231] Such cumulative impacts include those from the Project's air pollutant emissions, including the impacts of GHG emissions. LDNR must give particular consideration to the proposed Terminal's cumulative impacts on and from potential storms and flooding, including from its GHG emissions and direct and indirect destruction of storm protections like Monkey Island and wetlands.[232] LDNR should also consider GHG emissions and other impacts from past, present, and reasonably foreseeable new industrial projects. Approximately fourteen liquified fossil gas export facilities are currently in the permitting process off the coast of Louisiana and Texas.[233] Those projects include the Commonwealth LNG, which would sit across the Calcasieu Pass from CP2 LNG and which FERC has licensed and is now before LDNR seeking approval of its Coastal Use Permit. LDNR must assess the combined environmental impacts of these and other facilities in the same area as the Project —especially the cumulative impacts of CP2 LNG with Commonwealth LNG—particularly in terms of the collective loss of wetlands, habitat, and the increasing risk of accidents, spills, and interference with existing activities from these facilities.

VIII. LDNR Must Deny the Permit for Insufficient Information on Environmental Justice and Impacts on Communities.

The Applicant fails to provide any information to enable LDNR to undertake an environmental-justice review. In carrying out its public trust duty, LDNR must fully and carefully assess the potential negative social and environmental consequences of its decision.[234] This includes consideration of the project's environmental justice impacts: the disproportionate burden that the project would force upon communities of color or low-income communities, and first peoples who have an ancestral relationship to the land.[235]

To meaningfully analyze a project's environmental justice impacts, LDNR must identify the communities most impacted by the project. The geographic scope(s) for identifying

---

[229] *O'Reilly v. U.S. Army Corps of Engineers*, 477 F.3d 225, 235 (5th Cir. 2007) (holding that Army Corps of Engineers was required to assess cumulative impacts of likely future phases of residential development).

[230] *Id.* (also holding that Army Corps of Engineers was required to assess cumulative impacts from other similar projects).

[231] *See* Attachment A, section VI.

[232] *See* Attachment A, § VII.D, E, F.

[233] *See* Attachment A, p. 34, Figure 6.

[234] *Save Ourselves*, 452 So.2d at 1157, 1160.

[235] *Cf. N. Baton Rouge Envtl. Ass'n v. La. Dep't of Envtl. Quality*, 2000-1878, p. 12 (La. App. 1 Cir. 11/14/01); 805 So.2d 255, 263 (upholding LDEQ environmental-justice review on its merits); *see* CEQ, Environmental Justice: Guidance Under the National Environmental Policy Act, at pp. 3-5, 7-8 (Dec. 1997), *available at* http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-EJGuidance.pdf.

environmental justice communities should be based on the specific impacts of this project.[236] For example, this could include the communities that could be impacted by the Project's destruction of flood protection, increased air pollution, or risks from gas leaks or explosions. Once it has identified the impacted communities, LDNR must analyze the cumulative burden from pollution and other harms that these communities already face and consider how the Project – the Pipeline and the Terminal - might add to that harm.[237] This includes analyzing unique risk factors and social or economic factors that may exacerbate the severity of the Project's impacts to the specific environmental justice communities.[238]

For its Application, Venture Global merely purports to have considered environmental justice issues for its Terminal alternatives review but fails to discuss, cite, or document any such data or analysis.[239] Indeed, FERC is still seeking information from Venture Global on environmental justice impacts. FERC's outstanding environmental justice review is particularly remarkable because Venture Global purports in its Reply to the 9/9 Pipeline comments that its environmental review to other agencies is concluded.[240]

Moreover, public data shows there are environmental justice communities in the vicinity of the Terminal and Pipeline that LDNR must consider. Indeed, the U.S. Environmental

---

[236] *See Standing Rock Sioux Tribe*¸ 255 F. Supp. 3d at 138–40; *Cmtys. Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 685, 689 (D.C. Cir. 2004); EPA, Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses, §1.2 (April 1998) ("The effects of the proposed action will often vary depending on the distance of the affected community from the action and the type of effect created by the action.").

[237] *See Friends of Buckingham v. State Air Pollution Control Bd*., 947 F.3d 68, 87–92 (4th Cir. 2020) (detailing the steps of an environmental justice analysis in case involving Virginia's state environmental justice requirements that are similar to Louisiana's public trustee mandate); *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F. Supp. 3d 101, 140 (D.D.C. 2017) (requiring agency "to determine whether a project will have a disproportionately adverse effect on minority and low income populations"); *Coliseum Square Ass'n v. Jackson*, 465 F.3d 215, 232 (5th Cir. 2006) (reviewing federal agency's environmental justice analysis in housing redevelopment project and considering agency's findings regarding residents' minority status, as well as social, health, and environmental impacts of the project on surrounding communities).

[238] *See Friends of Buckingham*, 947 F.3d at 90 ("the Board merely falls back on [federal air quality standards] and state air quality standards not tailored to this specific EJ community"); *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F. Supp. 3d at 140 (holding that the Army Corps failed to properly consider the environmental justice impacts of the Dakota Access Pipeline under NEPA where its environmental review was "silent, for instance, on the distinct cultural practices of the Tribe and the social and economic factors that might amplify its experience of the environmental effects of an oil spill."); EPA, Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses, §2.2-2.3 (April 1998).

[239] *See* JPA Narrative, p. 11 (stating, without support or citation: "CP2 LNG considered … the presence of environmental justice factors in identifying alternative locations for the Terminal Facilities.").

[240] *See* Attachment D (FERC November 17, 2022 RFI seeking, among other things: (1) environmental justice information in the form of maps (previously requested in April 2022), (2) a description of visual impacts on nearby residences, roadways, and recreational areas, and (3) a map which depicts environmental justice block groups and projects with potential to contribute to cumulative impacts (previously requested on November 4, 2022).); Venture Global Reply to the 9/9 Pipeline Comments, p. 23-25.

Protection Agency ("EPA") and FERC have confirmed environmental justice communities are in the area and would be disproportionately impacted by a similar LNG facility immediately across the Calcasieu Pass.[241] Our demographics analysis of EJ areas based on the 2016-2020 ACS Census data showed that within a 3-mile buffer, the Project touches three Census Block Group areas with environmental justice concerns, as shown in Figure 10. To determine environmental justice concerns, we compared the Census Block Group's statistics to the statistics for the whole population of Cameron Parish, respectively, using the following variables:

- Non-white population percent
- Native population percent
- Median income amount
- Persons living below the poverty level percent

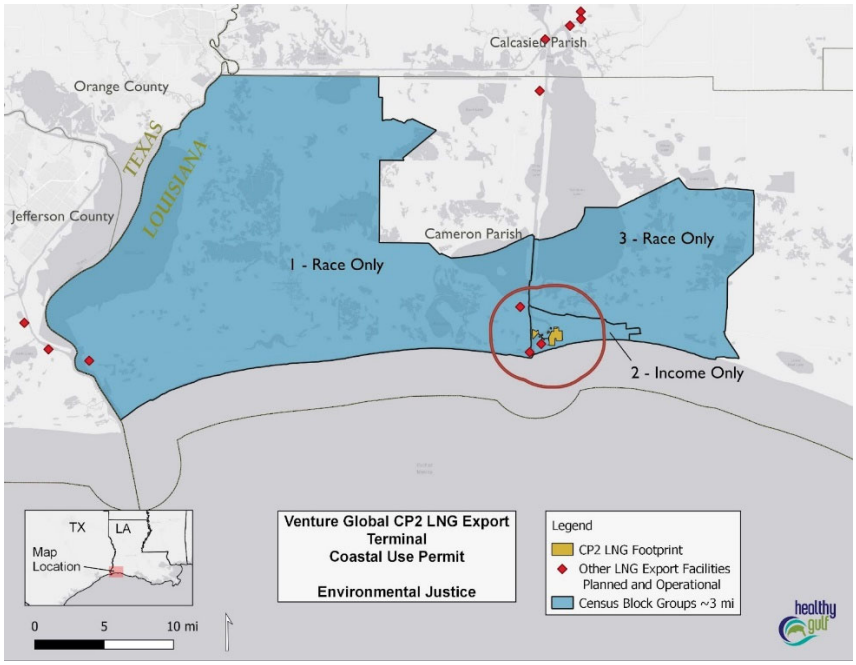

Figure 10. Census block groups overlapping the 3-mile buffer of the terminal site are outlined in black. All three block groups qualify for EJ concern because the block group is greater in percentage or less in amount than the Parish, for race or income level, using the following criteria: Non-white population percent (NW%); Native or Indigenous population percent (I%); Median income amount (INC); Persons living below the poverty level percent (POV%). 1 = NW%; 2 = NW%; 3 = INC+POV%. If the buffer is expanded to 10 miles around the Project site (not pictured), five Census block groups are overlapped and all are of EJ concern, using the same criteria.

We analyzed the Census Block Groups overlapping the three-mile buffer of the Project. For the four metrics outlined above, we compared those block groups within one mile of the Project to the Parish amounts. For Non-white population percent, Native population percent and People living in poverty percent, a Census Block group was identified as an environmental justice concern using the "threshold" analysis method. That is, if the block group's percentage of non-white, native or Indigenous population is greater than the Parish's, the block group is considered

[241] *See* Attachment Y (October 14, 2022, EPA Letter to FERC re Commonwealth LNG).

"of concern." Similarly, for Median income, if the block group's income was below the Parish's median income amount, the block group was considered an environmental justice concern.

The analysis showed that three out of three block groups (100%) are of EJ concern. Expanding the buffer zone to ten miles showed that five out of five block groups that overlap the buffer zone are of EJ concern. The demographics used for this analysis are from 2016; it is possible that the 2020 Census data (when finalized) will show even further disparities—for example, from the impacts of 2020 Hurricanes Laura and Delta. At the least, this analysis shows that LDNR must examine environmental justice impacts more closely.

Further still, LDNR must consider the environmental justice implications of siting the Project within three miles of six planned or existing LNG export terminals in Cameron and Calcasieu Parishes.[242] The proposed Terminal alone would be adjacent to one existing facility (Venture Global's Calcasieu Pass LNG), across the Calcasieu Pass from another (Commonwealth LNG, which has an application pending before LDNR), about two miles from a third proposed facility (G2 LNG), and along the shipping route for four others on the Calcasieu River between the Gulf and Lake Charles, Louisiana (Cameron LNG, Magnolia LNG, Lake Charles LNG, and Driftwood LNG). No other cluster of LNG export terminals like this exists in the United States, indicating the extraordinary disproportionate burden placed on neighboring communities.

In short, the Project would impact several areas of environmental justice concern that the Application fails to consider. Accordingly, LDNR should deny the Permit, at least until it completes a comprehensive environmental justice analysis—for each the Pipeline and the Terminal—and the public has had a chance to review and comment on it.

IX. LDNR Must Deny the Permit for Insufficient Information on Potential Harm to Endangered or Threatened Species and Their Habitat.

Venture Global does not provide sufficient information to analyze the potential harm to endangered or threatened species and their habitat, including from long-term disruption of habitat, cumulative impacts and potential leaks or explosions. In addition to Article IX's general environmental-review requirement, the Coastal Use Guidelines require LDNR to avoid to the maximum extent practicable, "adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands."[243] Venture Global acknowledges that it has not completed a review for endangered species and that its own Biological Assessment for submittal to FERC and FWS and its consultation with NMFS remain pending.[244]

While these Comments and the 9/9 Pipeline Comments raise real and potential impacts to habitat, fish, and wildlife, including threatened and endangered species, throughout, of particular

[242] *See* Attachment A, § VIII, figure 9.
[243] LAC 43:I.701(G)(16).
[244] JPA Narrative, at p. 38.

concern is the Eastern Black Rail, a "small, secretive marsh bird,"[245] which may reside at the proposed Project site in Cameron Parish. The Eastern Black Rail has been primarily understood to occur in Louisiana as a migrant bird, but has been suspected to breed over winter months in the Coastal Zone.[246] The Eastern Black Rail was listed as threatened in 2020.[247] The species is also considered critically imperiled in Louisiana.[248] Populations have declined by more than 75 percent over the last 10 to 20 years.[249] Sea level rise, erosion, and sinking tracts, all pose challenges for the Eastern Black Rail.[250] In Louisiana, the Eastern Black Rail is losing its necessary habitat as the state loses about 10,000 acres of coastal marshes a year.[251]

Studies indicate that the Eastern Black Rail prefers areas of elevated salt marsh, also known as high marsh.[252] United States Geological Survey ("USGS") recently published a Gulf-wide high marsh probability data, which demonstrates possible areas of high marsh in Louisiana, *see* Figure 11. These areas of potential high marsh may provide suitable habitat for the Eastern Black Rail.

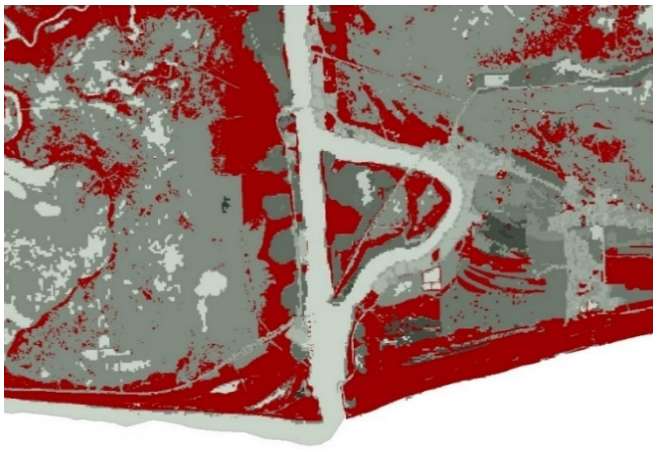

Figure 11. map depicting potential high marsh areas in area of proposed Terminal site. Source: USGS.[253]

[245] *Eastern black rail*, FWS, https://www.fws.gov/species/eastern-black-rail-laterallus-jamaicensis-jamaicensis (last visited Dec. 8, 2022).
[246] *See* Attachment Z, Erik Johnson and Justin Lehman, *Status and Habitat Relationships of the Black Rail (Laterallus jamaicensis) in Coastal Louisiana, USA*, Waterbirds 44(2):234-244 (2021).
[247] 85 Fed. Reg. 63764, No. 196 (Oct. 8, 2020).
[248] Rare Species and Natural Communities by Parish, LDNR, *available at* https://www.wlf.louisiana.gov/page/rare-species-and-natural-communities-by-parish (State designation of S1B and S2N. S1B means that the species breeding population is critically imperiled. S2N means that the species non-breeding population is imperiled.).
[249] Travis Loller, *Elusive eastern black rail threatened by rising sea level*, AP News, https://apnews.com/article/habitat-destruction-wildlife-climate-change-rising-sea-levels-climate-5a8ea861445582c2625d93ba82069c70 (last visited Mar. 30, 2022).
[250] Tristan Baurick, *The Secret Lives of Black Rails, and the Scientist Who Seek Them*, Audubon (Feb. 13, 2019), https://www.audubon.org/news/the-secret-lives-black-rails-and-scientists-who-seek-them.
[251] *Id*.
[252] *See* Attachment Z, Erik Johnson and Justin Lehman, *Status and Habitat Relationships of the Black Rail (Laterallus jamaicensis) in Coastal Louisiana, USA*, Waterbirds 44(2):234-244 (2021).
[253] Enwright et al., *Mapping irregularly flooded wetlands, high marsh, and salt pannes/flats along the northern Gulf of Mexico coast*, USGS (2022), available at https://www.sciencebase.gov/catalog/item/628cf979d34ef70cdba3c03b.

Venture Global acknowledges that the Project "may affect" the Eastern Black Rail[254] and is awaiting clearance by the U.S. FWS.[255] During Venture Global's March 23, 2022, meeting with the FWS, biologists stated that FWS would need site pictures, aerial photography, and possibly surveys to make a determination on the effect of the Project on the species.[256]

Given the elusive nature of the Eastern Black Rail, as well as potential habitat within the Project area, LDNR should heavily weight the adverse impacts this species would experience should the Project go forward. Moreover, given that LDNR's staff did not recognize the potential impacts to threatened and endangered species, at the very least, it should not issue a determination the U.S. Fish and Wildlife Service review is complete and available for review.

X. The Application Fails to Support Purported Benefits or to Quantify Costs and Benefits as It Must for LDNR to Meet its Public Trust Duty.

Venture Global fails to quantify adverse impacts or otherwise provide sufficient information to find that any benefits of the Terminal or Project outweigh its costs. Moreover, Venture Global fails to quantify the purported benefits of the Project, offering instead only loose and unsupported assertions. For example, Venture Global asserts economic benefits would come to Louisiana, but does not quantify any Louisiana specific benefits or otherwise show how any such benefits would outweigh the Project's adverse environmental impacts to Louisiana and its Coastal Zone.[257] This is a particularly glaring omission because the Project entails benefitting an out-of-state company piping out-of-state gas to Louisiana only to export it out, leaving Louisiana with the adverse environmental impacts such as wetlands destruction, air pollution, and potential leaks, explosions, and other accidents and with higher gas costs. Indeed, Venture Global's discussion of benefits only vaguely refers to an "average" of jobs and offers no assurances that any jobs it creates would go to people residing in Louisiana. It also fails to quantify environmental and other costs and does not account for the lost economic value for Cameron Parish from its participation in Louisiana's Quality Jobs and Industrial Tax Exemption programs.

Article IX "requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social and other factors."[258] LDNR must show that, in "a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility," that the benefits exceed the costs."[259] LDNR must quantify any economic benefits and must at least attempt to quantify environmental

[254] Venture Global CP2 LNG, LLC, et al. submits supplemental response to Environmental Information Request No.3 under CP22-21, et al., FERC, Dkt. No. CP22-21 (eLibrary No. 20220722-5160).
[255] JPA Narrative, Appx. I Agency Correspondence ("Anticipated receipt of clearance: November 2022").
[256] Venture Global CP2 LNG, LLC, et al. submits supplemental response to Environmental Information Request No.3 under CP22-21, et al., FERC, Dkt. No. CP22-21 (eLibrary No. 20220722-5160).
[257] *See* JPA Narrative, p. 4, 6.
[258] *Save Ourselves*, 452 So.2d at 1157.
[259] *Matter of Am. Waste*, 633 So.2d at 194.

costs.[260] The Coastal Use Guidelines provide an overlapping test, requiring LDNR to undertake an "appropriate balancing of social, environmental, and economic factors."[261] LDNR must not merely consider possible economic benefits, but also avoid "adverse economic impacts on the locality of the use and affected governmental bodies," to the maximum extent practicable.[262] And, beyond Article IX requirements, when an applicant's activity may conflict with one of the Guidelines' standards, LDNR must find that the "the benefits resulting from the proposed use would *clearly outweigh* the adverse impacts resulting from noncompliance with the modified standard."[263] Venture Global fails those tests.

The 9/9 Pipeline Comments provide specific examples of Venture Global's failures to provide sufficient information to merit a Coastal Use Permit, including on its failure to provide information to determine benefits and failure to provide information to determine benefits for a port at section X. Those examples have been incorporated herein and apply as well for Venture Global's Terminal CUP Application. It is further notable that nothing in the Application even purports to quantify the environmental impact costs of the Terminal and the Project, such that LDNR cannot perform the necessary balancing process.

XI. LDNR Cannot Grant the Permit without Additional Information on and Consideration of Alternatives.

It would be arbitrary and capricious for LDNR to grant the Permit because Venture Global's unsupported and cursory alternatives review cannot support a finding that the enormous impacts of its Terminal or Project have been minimized or avoided and so cannot satisfy the Coastal Use Guidelines or LDNR's public trust duty.[264] "Implicit in the permit application process is the burden placed upon the permit applicant … to present sufficient evidentiary proof that the permit should be granted."[265] LDNR's own guidance explains that the larger the impacts, the broader, more detailed, and more supported the analysis of alternative sites and methods must be:

> OCM has taken a tiered approach to these analyses and has graded the level of detail required to be reflective of the extent of potential resource impacts. In

[260] *Save Ourselves*, 452 So.2d at 1160 (remanding agency decision where "[t]he record is silent on … whether it made any attempt to quantify environmental costs and weigh them against social and economic benefits of the project).

[261] LAC 43:I.723.C(8)(a); *see also* LAC 43:I.701(F) (requiring LDNR to collect and assess information on a variety of environmental and economic impacts from the proposed activity).

[262] LAC 43:I.701(G)(2).

[263] LAC 43:I.701(H)(1) (*emphasis added*).

[264] *See In re Browning-Ferris Indus. Petit Bois Landfill*, 93-2050 (La. Ct. App 1 Cir. 6/23/95), 657 So.2d 633, 639 (quoting *Save Ourselves*, 452 So.2d at 1160) (Alternatives presented must be "sufficient to enable [an agency] to fulfill its responsibility for insuring 'that the environment would be protected to the maximum extent possible consistent with the health safety and welfare of the people.'").

[265] *Id.* at 637.

general, the greater the risk to coastal resources, the more detailed the required analyses must be.[266]

Yet Venture Global's analysis for its massive Project (and each of its parts) is narrow, short on details, inconsistent, and unsupported. Some of those shortcomings are highlighted in the 9/9 Pipeline Comments' discussion,[267] including but not limited to:

- Venture Global does not consider a sufficient number of alternative sites for each the Terminal, the Pipeline, and the compressor station. Venture Global proposes new facilities with "High" coastal resource impacts, so it must consider no less than five "alternate feasible sites" for each.[268] Instead, it provides only three (3) alternatives to the proposed Terminal site and only three (3) alternatives to the proposed Pipeline route (several of which are not "feasible" in any event, as they must be to count);[269]

- Venture Global fails to provide sufficient information on the alternative terminal sites and pipeline routes and fails to adequately support even its proposed sites and routes. For example, it failed to consider and compare potential pipeline routes from the three alternative terminal sites presented or alternative points of connection to the existing natural gas infrastructure;

- the geographic scope of alternatives that Venture Global considers is inadequate, including for failure to look outside of Louisiana for alternatives to its proposed Terminal site when the Project is expected to serve a much broader area;[270] and

- Venture Global's fails to discuss or document its process for choosing and considering alternatives sites and methods as LDNR's Alternatives Guidance requires.[271]

---

[266] OCM Alternatives Guidance, p. 3-4, *available at* http://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined_Document_rev1_Mar2020.pdf.

[267] *See* Attachment A, § XI.

[268] OCM Alternatives Guidance, p. 5, 21, *available at* http://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined_Document_rev1_Mar2020.pdf.

[269] *See* OCM Alternatives Guidance, p. 3 ("The Alternatives Analysis should address several options for project siting that are compared equally for feasibility and will allow OCM to determine the least damaging feasible site for the proposed use."), *available at* http://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined_Document_rev1_Mar2020.pdf; JPA Narrative, p. 11-16.

[270] *In re Browning-Ferris Indus. Petit Bois Landfill*, 93-2050 (La. App. 1 Cir. 6/23/95); 657 So.2d 633, 639 (quoting *Save Ourselves*, 452 So.2d at 1160) ("[I]t appears inherently unreasonable … to limit consideration of alternative sites to arbitrary geographical boundaries where the potential benefits and risks of the proposed facility will impact a multiparish, if not a multi-state region.")

[271] *See*, *e.g.*, OCM NAJ Guidance, 5, 21 ("Documentation that clearly demonstrates that each parcel was compared equally and explains why less damaging parcels were eliminated will be required. Documentation that supports the reasons for elimination should be included with the analysis."); *id.* at 47 ("Documentation of … efforts [to consider alternative pipeline routes and methods] should be

Further, Venture Global presents false, unequal, and otherwise inadequate comparisons for the proposed and alternative Terminal sites, as described below and further exemplifying how any decision based on Venture Global's alternatives review would be arbitrary and capricious.

A. Venture Global Presents False and Unequal Comparisons to Justify Its Proposed Terminal Site.

Venture Global's false and unequal comparison of the proposed and alternative Terminal sites means its assessment cannot support a lawfully granted Permit. LDNR's Guidance "require[s]" an any alternatives assessment provide "[d]ocumentation that clearly demonstrates that each parcel was compared ***equally*** and explains why less damaging parcels were eliminated."[272] Examples of such failures in the Application include:

1) Inconsistent Wetland Measures, like "NWI Mapped" versus Delineated Wetlands.

Venture Global applies inconsistent and inaccurate wetlands measures for its Terminal site alternatives assessment. For example, Venture Global states in its "Impact Summary and Land Requirements" section (*i.e.*, § 6) that the Terminal would impact 367 acres of delineated wetlands on the proposed site.[273] But for its alternatives assessment (§ 4), Venture Global ignores those hundreds of acres of acknowledged impacts.[274] Instead, Venture Global bases its alternatives comparison on "NWI Mapped" wetlands (*i.e.* data from FWS's National Wetland Inventory mapping tool[275]) rather than "delineated wetlands", thereby counting only 88 acres of "NWI wetlands" at the proposed site for its alternatives comparison. Notably, 367 wetland acres is more than or about the same as the "NWI Mapped" wetland acreage that Venture Global cites for two of the three alternative terminal sites—whereas 88 acres is less than the "NWI Mapped" acreage Venture Global cites for all three alternatives, such that it appears that Venture Global uses the arbitrary and inconsistent measures to mislead about the advantages and disadvantages of the alternative sites.[276] Venture Global does not explain the discrepancy or the switched standard and does not provide supporting materials for its numeric assertions.

Further, not only is Venture Global's use of the "NWI Mapped" wetlands for its alternatives review inconsistent, it is also unreliable and even patently inaccurate. First, the approximately 280-acre difference between the delineated and "NWI Mapped Wetlands" at the proposed site indicates that the NWI Mapping is not accurate. Moreover, the "Data Limitations and Uses" section of the manual for using the NWI Mapper acknowledges the likelihood of inaccuracy, stating:

---

preserved for inclusion in an Alternatives Analysis if adverse impacts to coastal resources cannot be avoided."); *see* JPA Narrative, § 4.

[272] *See*, *e.g.*, OCM NAJ Guidance, 12 (emphasis added).

[273] *See*, *e.g.*, JPA Narrative, p. 30, 31.

[274] *See* JPA Narrative, p. 11 – 14.

[275] The "NWI Mapper" is available at https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper .

[276] *See id.*

> A margin of error is inherent in the use of imagery [i.e., the Wetland Mapper's data set]; thus, detailed on the ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis…. Metadata should be consulted to determine the date of the source imagery used and any conventions or issues that may have been identified. mapping Wetlands or other mapped features may have changed since the date of the imagery and/or field work natural processes or human related activity. Therefore, there due to may be differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on the ground.[277]

NWI Mapped Wetlands acreage does not qualify for use to assess federal jurisdiction or carry other regulatory weight.[278]

Moreover, review of the satellite imagery and information from the NWI Mapping tool reveals that actual wetlands are fewer at the alternative sites than Venture Global's NWI Mapper acreage claims and, further, that the NWI Mapped information is significantly out of date. For example, the satellite photo showing Terminal Alternative Sites 1 and 2 (*see* Figure 12), as well as current Google Maps imagery (*see* Figure 13) show significant fill or development covering more than half of Alternative site # 1. And data from the NWI Mapper itself shows that the wetland information for Alternative sites # 1 and # 2 are based on 1988 imagery, *i.e.,* it is approximately 35 years out of date (*see* Figures 14 and 15). Similarly, for Alternative Site # 3, the NWI Mapper data states the wetlands information dates to 2010, over ten years out of date (*see* Figure 16).

---

[277] U.S. Fish & Wildlife Service, Wetlands Mapper Documentation and Instruction Manual, attached in relevant part at Attachment AA; *see also* U.S. FWS website, at https://www.fws.gov/node/264582 ("Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.").

[278] *See* FWS website, NWI Mapper, *Wetlands Data Limitations, Exclusions and Precautions*, *available at* https://www.fws.gov/node/264582 ("Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies.")

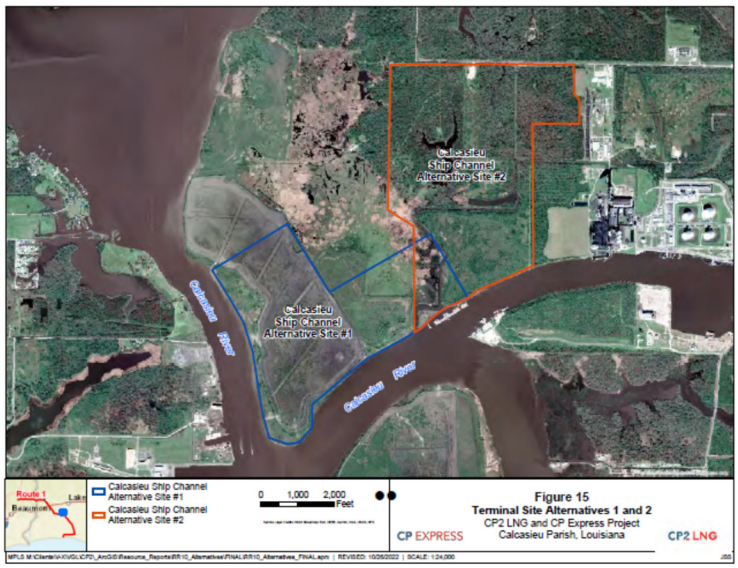

Figure 12. VG's Sheet 24, Figure 15, included in the Public Notice Materials.

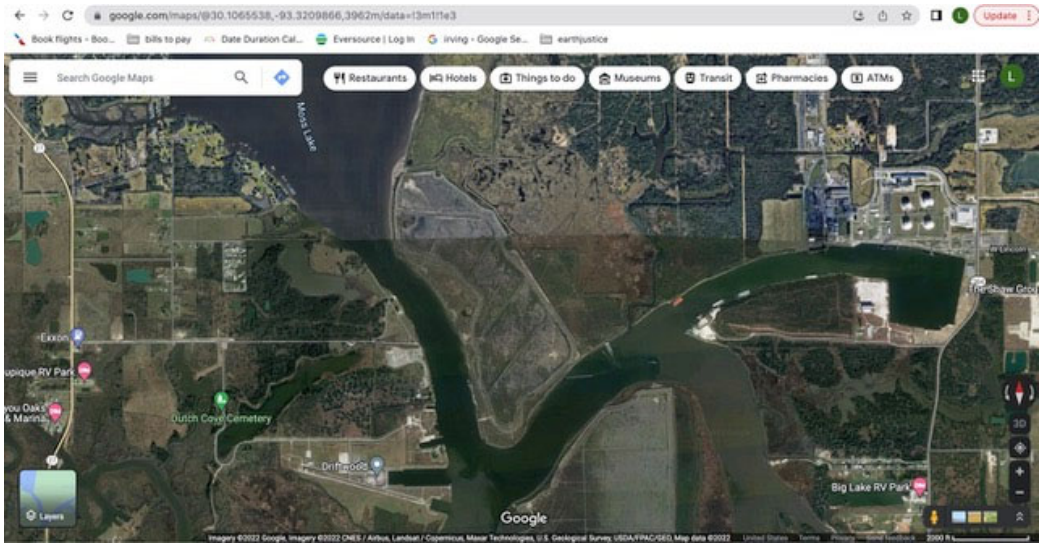

Figure 13. Google Map, showing 2022 satellite image of Alternative sites # 1 and # 2 locations.[279]

[279] Google website, *available at* https://www.google.com/maps/@30.1086757,-93.3251665,4091m/data=!3m1!1e3.

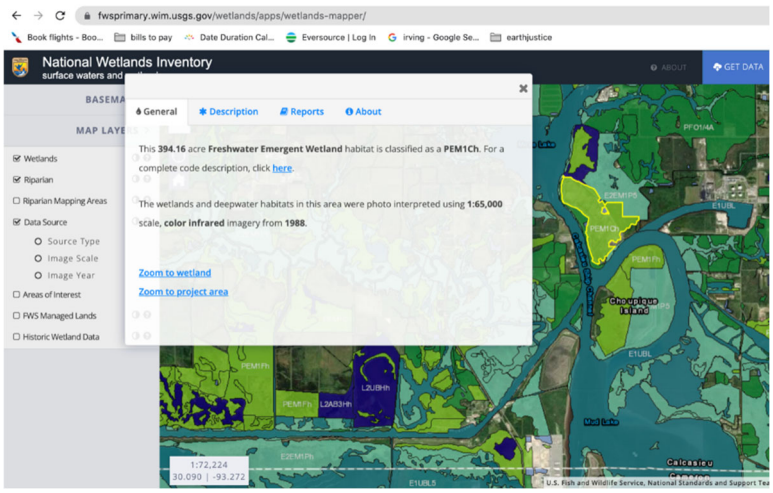

Figure 14. FWS NWI Mapper, Alternative Site # 1 "wetlands" outlined in yellow with Alternative , with insert of basis, stating "The wetlands and deepwater habitats in this area were photo interpreted using … imagery from 1988." U.S. FWS webpage, at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

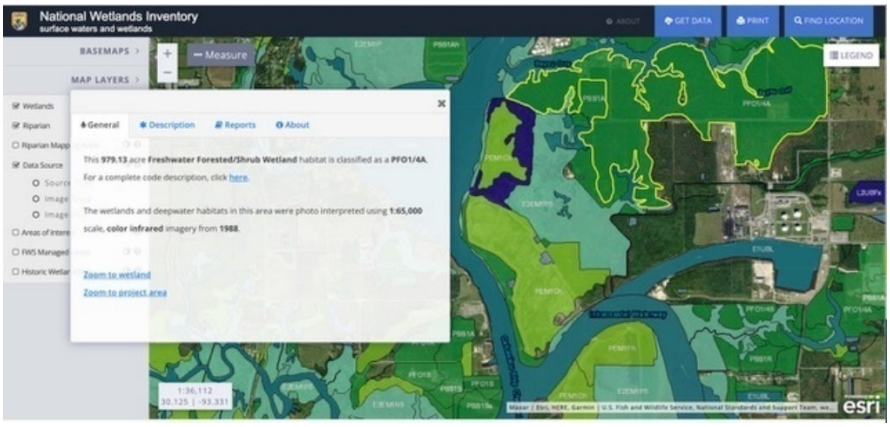

Figure 15. FWS NWI Mapper, Alternative Site # 2 "wetlands" outlined in yellow, with insert of basis, stating "The wetlands and deepwater habitats in this area were photo interpreted using … imagery from 1988." U.S. FWS webpage, at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

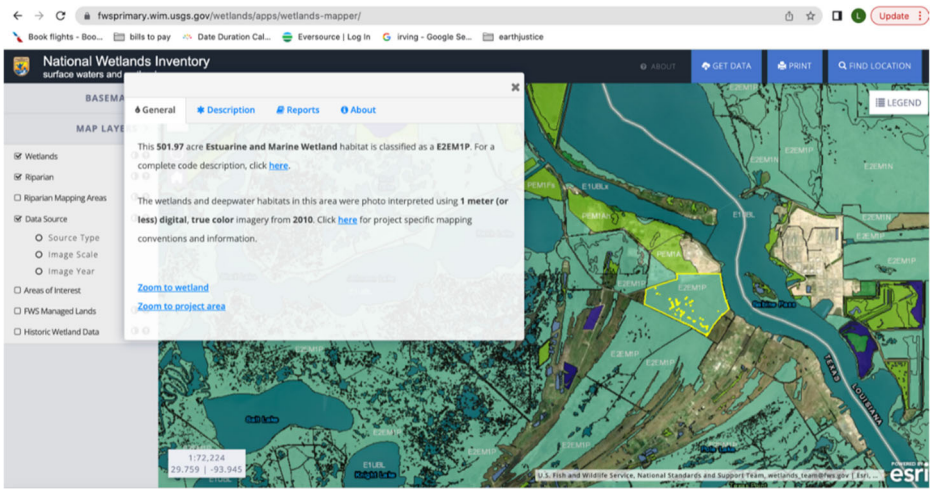

Figure 16. FWS NWI Mapper, Alternative Site # 3 "wetlands" outlined in yellow, with insert of basis, stating "The wetlands and deepwater habitats in this area were photo interpreted using … imagery from 2010." U.S. FWS webpage, at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

Indeed, Venture Global acknowledges that, at Alternative site # 1, there are fewer wetlands than the 385-acre figure it relies on, stating: "it appears that some ["NWI Mapped"] wetlands have been filled due to placement of dredged material."[280] Importantly, Venture Global fails to account for the number of filled acres. But its own reckoning of the area—which it states is a federal "dredge material placement area" —suggests that as much as 298 acres of the 385 purported acres of "NWI Mapped" wetlands" is, in fact, filled and not wetlands at all.[281] Remarkably, Venture Global fails to note or explain the shortcomings and inaccuracies in its use of "NWI Mapped" wetlands information. In fact, it fails to provide any underlying data to support its asserted NWI Mapper acreage assertions for each Alternative site.

In short, Venture Global's alternatives review presents inconsistent measurement standards and inaccurate wetlands acreage for the sites it purports to compare. Indeed, Venture Global even acknowledges that some of the 385 "NWI Mapped" wetlands it claims at Alternative Site # 1 are, in fact, filled. Ultimately, among other things, Venture Global fails to account for the actual number of wetlands currently extant at each alternative Terminal site. Contrary to Venture Global's conclusions, the information it provides shows 367 acres of delineated wetlands at the proposed site, *i.e.,* more wetlands than even the purported "NWI Mapped" wetland acres at Alternative site #2 and about the same as the those at Alternative site # 1. Further, those NWI Mapped measures for Alternative Site 1, 2, and 3 are based on 1988 and 2010 imagery and the 2022 satellite imagery appears to show far fewer wetlands. So, it appears that the "NWI Mapped" wetland acreage that Venture Global relies on are overestimates—by as much as 298-acres for Alternative site # 1. Therefore, the information Venture Global does provide indicates that the proposed site would call for destroying the most wetlands, at least compared to Alternative sites # 1 and # 2—such that approval of the proposed Terminal site would be contrary to the Coastal Use Guidelines and the public trust doctrine.

[280] JPA Narrative, p. 12.

[281] JPA Narrative, p. 12 (stating that 298 acres of Alternative Site # 1 is a federal dredge material placement area, *i.e.,* an area where fill has been placed).

2) Venture Global Uses Standards for Selecting Alternative Sites that the Proposed Terminal Site Does Not Meet.

Venture Global's alternatives assessment is invalid because it sets different standards for potential alternative sites than for its proposed site—standards that the proposed site does not meet. For its Application, Venture Global asserts: "CP2 LNG evaluated alternative terminal sites that could satisfy the following site selection criteria necessary to meet the Project's purpose and need:

- Direct access to a deep draft (defined as water depths of at least 40 feet below mean sea level) shipping channel requiring minimal maintenance dredging;
- Water frontage of at least 3000 linear feet; and
- Sufficient size (approximately 400 acres) to construct and operate the LNG facility."[282]

But the proposed Terminal site itself does not meet this criteria. For example, the proposed site does not, in fact, have "direct access" to a deep draft shipping channel. Instead, Venture Global proposes to remove a 100-plus-acre chunk of Monkey Island and dredge down to ~ -44 feet to create "deep draft" access. In other words, Venture Global is demanding criteria of the alternative sites that the proposed site does not have.

These unequal criteria mean that the Venture Global's comparisons are skewed. For example, when comparing "available waterfront acreage," Venture Global does not provide information on what the amount of waterfront acreage is currently available at the proposed site, as it does for the three alternatives (at 10,000, 4,000, and 3,000 feet for Alternatives ## 1, 2, and 3, respectively). Instead, Venture Global purports an equal number to Alternative #3 (3000 feet), but in a footnote states such frontage is only ***after*** modification, *i.e.,* that "Monkey Island would be modified to accommodate the necessary waterfront."[283]

In short, Venture Global omits the actual "water frontage" of the proposed site and, further, omits the costs and adverse environmental impacts of modifying Monkey Island and dredging out over 100 acres of "deep draft" access from its comparison of alternatives.

3) Venture Global Fails Fully or Consistently To Compare the Advantages and Disadvantages of the Alternative Sites.

Venture Global's unequal comparisons of potential alternative Terminal sites can also be seen in its inconsistent review of each the proposed and the alternative sites' advantages and disadvantages. For example, while Venture Global points to the disadvantages at Alternative Sites 1 and 2 (but not 3) for having to construct roads or electrical connections and the like,[284] it

[282] JPA Narrative at 11.
[283] JPA Narrative at 12, Table 4-1, note b.
[284] JPA Narrative at 12, 13.

omits to consider the costs and other disadvantages of having to contrast a 37.5 flood wall at the proposed site.

Similarly, Venture Global fails to compare the relative vulnerability of the proposed Terminal site to that of the Alternative sites. Such review is key for compliance with Guidelines 701 and 711(A[285]). Remarkably, VG's own "Storm Surge Study" concludes: "The storm surge study for the proposed Calcasieu Pass 2 LNG facilities confirms that the project site area is vulnerable to storm surge from tropical storms and hurricanes."[286] But Venture Global does not compare this factor to the Alternative Sites or otherwise consider it for the alternatives assessment. Notably, the more inland locations of the Alternative sites could mean they are less vulnerable to storms and flooding, such that the proposed Terminal site for the Project does not avoid these impacts to the maximum extent practicable.

B. Venture Global omits to include potential pipeline routes for the alternatives Terminal sites.

Venture Global's alternatives review is inadequate because it fails to consider alternative pipeline routes that would be available for each of the alternative Terminal sites. The feasible pipeline routes for connecting any or all of the three alternative terminal sites to the national infrastructure for methane gas could have less adverse impacts—for example, if they would be shorter or destroy fewer wetlands or risk fewer water crossings than the proposed Pipeline route—then the advantage of those fewer impacts must be balanced in and may call for choosing an alternative site over the proposed Terminal.

Indeed, Venture Global's own maps show the locations of alternative terminal sites # 1 and # 2 are in close proximity to the proposed pipeline route and could begin that proposed route

[285] *See* LAC 43:I.701(G)(20) ("all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable significant … increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such hazards"); *id.* § 701(H)(1) (setting high bar to show compliance with Guidelines' avoidance to "the maximum extent practicable" requirements, including that "there are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the modified standard"); *id.* § 711(A)(ii) (activity "shall, to the maximum extent practicable, take place only …on lands which have foundation conditions sufficiently stable to support the use, and where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved").

[286] *See* Venture Global Storm Surge Report, p. 25 of 26, *available at* https://srfrxprod.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=14003182.

at a point that would avoid the majority of wetlands that the proposed Pipeline route would impact or destroy.

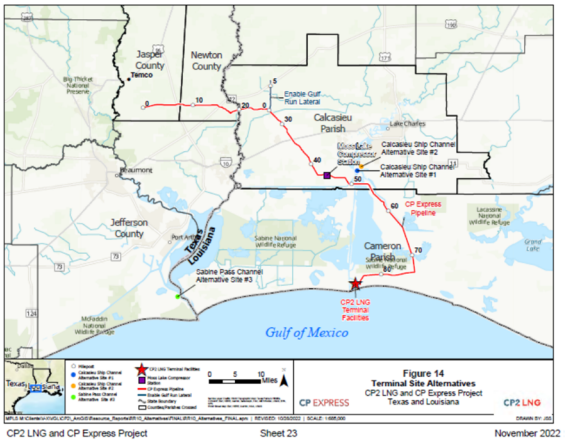

Figure 17. Map from Application, Sheet 23 (page 8 of Plat 2 of 2 of Public Notice Materials).

As such, the analysis that Venture Global should have included but omitted again appears to favor choosing alternative # 1 or # 2. Remarkably, Venture Global acknowledges the potential benefit of avoiding wetlands impacts by using a shorter pipeline from Alternatives # 1 and # 2, but dismisses "any environmental benefits", asserting they would be overridden by the sites' disadvantages without actually performing or sharing the analysis or underlying information. It also appears to have considered only one such alternative pipeline route for those Alternative sites.[287] But Venture Global fails to provide that information. Notably, the Application indicates such alternative pipeline routes to alternative sites exist, but Venture Global chose not to share them – at least not for its Coastal Use Permit Application.[288]

Similarly, Venture Global fails to include its plan for CCS at the Terminal facility as part of its alternatives review. The proposed Terminal site would require an extensive pipeline system through the Coastal Zone to transport CO2 to any carbon storage facility. Any or all of the three Alternative sites could shorten that route, minimizing direct and indirect, real, and potential impacts from the CCS system—advantages of the Alternative Sites that Venture Global fails to consider.

C. Venture Global Fails to Consider Reducing the Scope of Its Project to Avoid or Minimize Impacts.

LDNR's guidance explains that when there are wetlands impacts, an applicant "will have to demonstrate that there is a need to impact the wetlands and that there are no feasible alternatives available (such as reducing the scope of your project or changing its

[287] *See* JPA Narrative, p. 12 ("**The** natural gas pipeline that would provide feed to Alternative Site 1 would be about 51 miles long.") (emphasis added); *id.* at 14 ("**The** natural gas pipeline that would provide feed to Alternative Site 2 would be about 52 miles long.")

[288] *See*, *e.g.*, JPA Narrative, p. 14 ("Further, a pipeline to supply natural gas to Alternative Site 3 could be proximate to congested residential and commercial areas.").

configuration)."[289] Yet Venture Global fails to consider reducing scale of the Project to avoid any of its proposed Project's more than one thousand acres of wetlands impacts.

Moreover, the proposed capacity for the Terminal, 20 million tonnes per annum ("MTPA"), appears to be arbitrary. Venture Global offers no support in its Application for why its requested capacity is or needs to be 20 MTPA versus another amount. Recent reports indicate an expected glut of LNG.[290] Indeed, Venture Global's Joint Permit Application response to "Why is the proposed project needed" does not state a needed capacity amount:

> The basic project purpose is to construct an LNG export facility to process domestically-produced natural gas and then liquefy, store, and subsequently export the gas as LNG to the overseas global market.

Venture Global has other facilities with smaller capacity; its Calcasieu Pass Terminal, located adjacent to the proposed CP2 LNG Terminal, has only a 10 MTPA.[291] And other LNG facilities have smaller capacity, as well. A reduced capacity could mean a smaller footprint, a smaller Pipeline—or even no new pipeline if a reduction means that the pipeline currently serving Calcasieu Pass LNG could also serve CP2 LNG— fewer wetlands destroyed, more available alternative sites, and fewer direct and indirect impacts generally, among other things. But Venture Global fails to consider that alternative.

D. Other Failures in Venture Global Alternatives Analysis.

1) *Venture Global Relies on Speculation about Alternatives in Lieu of Supported Facts.*

Throughout its discussion of alternatives, Venture Global offers only speculation for its comparison of Alternative sites to the proposed Terminal site rather than facts upon which LDNR could base a decision. For example, while recognizing that Alternatives # 1 and # 2 would require shorter pipelines to connect to national infrastructure than the proposed site, it dismisses the "**any** environmental benefits" related to that alternative without assessing what those benefits would be.[292] Given that those alternative would mean avoiding about 50 miles of pipeline in wetlands and the Coastal Zone, the benefits would likely include avoiding hundreds

---

[289] LDNR, OCM webpage, Frequently Asked Questions, Questions on Wetlands, *available at* http://www.dnr.louisiana.gov/index.cfm/page/1387#CUP (last visited 9/5/22).

[290] *See* Attachment BB, The Guardian, *'Major Push' for Gas Amid Ukraine War Accelerating Climate Breakdown* (November 10, 2022) ("There will be an oversupply of liquified natural gas across the world, reaching about 500 megatonnes of LNG by the end of this decade, according to new data."), *also available at* https://www.theguardian.com/environment/2022/nov/10/major-push-for-gas-amid-ukraine-war-accelerating-climate-breakdown#:~:text='Major%20push'%20for%20gas%20amid%20Ukraine%20war%20accelerating%20climate%20breakdown,-Experts%20say%20world&text=The%20global%20dash%20for%20gas,of%20safety%2C%20analysis%20has%20shown.

[291] *See* Venture Global website, *available at* https://ventureglobalLNG.com/project-calcasieu-pass/ .

[292] JPA Narrative, p. 12, 14 (emphasis added).

of acres of impacts from the Pipeline[293] and possibly more from alternative compressor stations sites that might then be available.

Similarly, Venture Global asserts "a pipeline to supply natural gas to Alternative Site 3 **could be** proximate to congested residential and commercial areas," but does not say or show that it would, in fact, be near those areas or that those areas could not be avoided.[294] It also suggests that route "would likely cross federal and state lands," but does not show or conclude that is the case. Such unsupported hypotheses cannot support an LDNR finding that adverse environmental impacts would be avoided or minimized.

In another example, for Alternative Site # 2, Venture Global asserts the site "**appears** to contain the pimple mounds characteristic of remnant coastal prairie habitat, a Louisiana Department of Wildlife and Fisheries (LDWF) vegetation community of special concern."[295] Appearing to contain is not the same as, in fact, containing. But Venture Global does not offer any citation or other confirmation on its opinion about the appearance of the site's vegetation. Moreover, it offers no comparison to the vegetation or special concerns present at the proposed and other alternative sites.

[293] *See* JPA Narrative, p. 33.
[294] *See* JPA Narrative, p. 14 (emphasis added).
[295] *See* JPA Narrative, p. 13 (emphasis added).

XII. Conclusion

We ask that LDNR deny the Permit, because Venture Global's Application for the CP2 LNG Terminal fails to provide the information necessary to weigh and address the severe environmental harms from the Terminal and the Project to the state's Coastal Zone and the people who depend on it, as required by the Coastal Resources Management Act and Louisiana Constitution Article IX. The CP2 LNG Terminal and the Project would cause long-lasting or irreversible damage to vanishing chenier plains and wetlands that sustain southwest Louisiana while simultaneously increasing the risks to these wetlands and the people of Cameron Parish and Louisiana as a whole. LDNR simply cannot allow such significant, potential consequences without the consideration the law requires, and should not allow them at all. Should LDNR nonetheless choose not to deny the Permit at this time, we ask that you first seek the legally required information lacking in Venture Global's Application, as outlined in these and the 9/9 Pipeline comments, and allow further opportunity for public comment and a public hearing.

Sincerely,

Elizabeth Livingston de Calderon, Senior Attorney
Adrienne Bloch, Managing Attorney
Earthjustice
900 Camp Street, Suite 303
New Orleans, LA 70130
ecalderon@earthjustice.org
abloch@earthjustice.org

/s/ Lisa Diaz
Lisa Diaz, Attorney
Sierra Club
910 Julia Street
New Orleans, LA 70119
lisa.diaz@sierraclub.org

/s/ Naomi Yoder
Naomi Yoder, Staff Scientist
Cynthia Sarthou, Executive Director
Healthy Gulf
P.O. Box 2245
New Orleans, LA 70176
naomi@healthygulf.org
cyn@healthygulf.org

/s/ Anne Rolfes
Anne Rolfes, Director
Louisiana Bucket Brigade
anne@labucketbrigade.org

/s/ Cynthia Robertson
Cynthia Robertson, Director
Micah 6:8 Mission
cindy@micah68mission.org

/s/ Joanie Steinhaus
Joanie Steinhaus, Gulf Program Director
Turtle Island Restoration Network
joanie@tirn.net

/s/ Jennifer Krill
Jennifer Krill, Executive Director
Earthworks
jkrill@earthworksaction.org

Attachments:
A, B, C, D, E, E-1, F, G, H, I, J, K, L, M, N, O, P,Q, R, S, S-1, T, U, V, W, X, Y, Z, AA, BB