GULF RESTORATION NETWORK
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RE: **MVN 2018- 00159-CM** **WQC 180816-01**
FG LA, LLC, Formosa / " Sunshine" / "Greenfield Chemical" Polymer Plant in St James Parish

Mr. Gauthier, Ms. Hill,

I am writing on behalf of Gulf Restoration Network ("GRN"),[1] We have serious concerns about any application for any Section 404 Permit (**MVN 2018- 00159-CM)** and Water Quality Certification, (**WQC 180816-01**) submitted to the United States Army Corps of Engineers ("Corps") , Louisiana Department of Environmental Quality ("LDEQ"), respectively, by FG LA, LLC ("Applicant").

The Applicant requests Section 404 permitting and a Water Quality Certification ("WQC") and a Coastal Use Permit ("CUP") for its proposed construction of a Polymer plant and associated feedstock pipelines ("Project"). The Project cannot separate the pipelines from the alternatives analysis of the project, as they have no independent purpose and are not on separate parcels.

While a project of this magnitude is significant in its own right, we are concerned about the additive effects of continued fossil-fuel development on behalf of foreign and outside parties within a notably vulnerable area like the St James community (District 5), an Environmental Justice community. Impacts within the 1 mi buffer affect White Castle, another historic EJ community, where African American residents have sheltered since the end of the civil war. This community is already under severe distress, economically and healthwise, from these developments, placed in their community due to their race. There is currently no evacuation

[1] GRN is a diverse coalition of individual citizens and local, regional, and national organizations committed to uniting and empowering people to protect and restore the natural resources of the Gulf of Mexico.

route to 3127 for residents to escape chemical incidents, and this project threatens the integrity of that evacuation route.

We note local schools like 5th Ward Elementary School are newly encircled by the Sunshine alternative and we request an EJ analysis of the loss of this school from safety.

There are safer, less impactful alternative sites outside of African American river towns where this plant could be cited. We note that the applicant has not looked for the 5 sites required by a complex justification, we challenge the applicant to cite the project in a non-minority area.

This area is slated for floodproofing under the State Master Plan (St James - Vacherie project). There must be a TR-55 review of the plant for a 500-year rain, as the area has experienced such events every year in the past few years. Homes in the back of Burton Lane flooded in Aug 2017 from such a rain--the State Master Plan has a specific project to floodproof this area, but no consistency review has been done.

As the State Master Plan contemplates moving coastal residents into this area, once coastal flooding takes a turn for the worse circa 2040, we are disturbed that the flood and chemical hazards of this location are such that that residents already seek to flee if they are able. Schools have disappeared, roads have deteriorated, and drainage is poor. Frankly, the State seems to be planning on moving coastal residents into a gas chamber. There must be coastal consistency review for the St James-Vacherie Master Plan Project. LDNR and LDEQ must require the applicant to plan for the 500-year rain, and require additional flood hazard infrastructure, as contemplated by the St James-Vacherie Master Plan Project. We do not need another Murphy Oil or Stolthaven disaster to know what will happen when hazardous materials are placed in flood zones next to communities that must evacuate disasters.

Long before communities are flooded out, their homes are rendered uninhabitable by industry, and disparate burden of cost benefit. We ask for an analysis of disparate cost and benefit in an EIS.

LDEQ and LDNR cannot be passive umpires, but have Article IX, public trust duties and must consider the integrity of 3127, the DOTD evacuation route, and require a minimum of a 1200ft buffer.

The Corps, LDEQ, and LDNR must require a complex justification and market analysis from the applicant, as well an Environmental Impact Statement (“EIS”) and hold eastbank and westbank public hearings to gain further insight into this sort of wetland destruction and endangerment in a heavily impacted area.

Although the Applicant also proposes to buy credits from a mitigation bank to offset any unavoidable losses to wetland functions caused by project implementation, we are concerned about the inevitable indirect and cumulative wetland effects that may result from a project of this scale in the State Master Plan area. As proposed wetland mitigation will occur outside of the state master plan planning area (St James - Vacherie), and not replace all habitat and storm attenuation functions, much less the hydrologic functions.

Conflicts between the wetlands on site and the proposed wetland benefits of the Ama Diversion project must be reviewed. If these wetlands are water retention for floodwaters

GRN opposes the Applicant's request for a Section 404 Permit, WQC, and CUP, and we ask the Corps, LDEQ, LDNR to deny this request based on the following concerns:

1. The Project is inconsistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast and a 2016 Executive Order.

Disrupting these wetlands directly conflicts with Louisiana's restoration and community-protection goals, particularly the St James - Vacherie floodproofing plan, the Ama Diversion, and wetland benefits of any other Diversions. The *Comprehensive Master Plan for a Sustainable Coast* ("Master Plan") clearly states that valuable wetlands must be preserved, and yet, there has been no engineering review of the consistency of the project with these restoration plans. CPRA may not take a position, but a measureable review with a written justification is warranted. Why must residents be prepared for the 100-yr flood, but facilities only for the 25-year rain? What increase to the floodproofing costs will this facility have on schools like the 5th Ward Elementary school in Welcome?

One of the key assumptions of 2007's Master Plan is that "a sustainable landscape is a prerequisite for both storm protection and ecological restoration."[2] And in 2012's iteration, these land-use specifications were further clarified:

We do not want construction of new hurricane protection systems to encourage unwise development in high risk areas, as has occurred in the past. Such development increases overall levels of risk and diminishes the effectiveness of the protection structures themselves. This phenomenon is called "Induced Risk," and it runs counter to the master plan's objectives of sustaining wetland ecosystems and reducing the flooding risks borne by coastal communities.

[2] Coastal Protection and Restoration Authority of Louisiana, *Executive Summary*, *in* Louisiana's Comprehensive Master Plan for a Sustainable Coast 3 (2007).

Similarly, wetland areas inside the hurricane protection system need to remain intact and undeveloped [emphasis added].[3]

Filling in these wetlands removes both the ecosystem and flood-protection functions of these tracts of land, in direct conflict with the state's goals. The Master Plan further states that "overall hydrology must be improved by minimizing impediments to water flow."[4] Allowing the Applicant to impact up to 100 acres or more of coastal wetlands not only limits ecological function, but it also fails to minimize water-flow impediment or improve overall hydrology.

The Louisiana Legislature approved the latest version of the Coastal Master Plan during the 2012 Regular Session,[5] with overwhelming public support.[6]

On April 4th, 2016, Louisiana Governor John Bel Edwards gave even greater weight to the foundational recommendations laid out in the Master Plan by issuing Executive Order No. JBE 2016-09 ("Executive Order"). Like Executive Order No. BJ 2008-7 issued by his predecessor,[7] the Governor's mandate again requires all state agencies, departments, and offices to "administer their regulatory practices, programs, projects, contracts, grants, and all other functions vested in them in a manner consistent with the Coastal Master Plan and public interest to the maximum extent possible."[8] This requirement is intended to "effectively and efficiently pursue the State's integrated coastal protection goals."[9]

While the Executive Order strives to implement the Master Plan's goals to preserve wetland areas, the Applicant seek to obtain a permit extension for their Project that will potentially destroy over 100 acres of coastal wetlands and fastlands that protect communities from localized flooding, all to expand an polymer export terminal.

In the OCM's *Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone* New Industrial Developments must *"at a minimum"* "identify the availability and capacity of existing infrastructure (roads, utilities, water, sewer, etc.). Describe any new infrastructure required (excluding tie-in from individual units to existing infrastructure)." Notably, the infrastructure required for flood hazard mitigation and

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[3] Coastal Protection and Restoration Authority of Louisiana, *2012 Comprehensive Master Plan for a Sustainable Coast*, p 159*).*
[4] *Id.*
[5] SCR No.62, 2012 Leg., Reg. Sess. (La. 2012).
[6] Louisiana Coastal Master Plan Public Opinion Survey, Southern Media & Opinion Research, Inc. Online at http://www.mississippiriverdelta.org/files/2012/04/2012-Louisiana-CMP-Opinion-Survey.pdf.
[7] *See* Exec. Order No. BJ 2008-7, issued 1/23/08: http://dnr.louisiana.gov/assets/docs/conservation/groundwater/Appendix_B.pdf
[8] *See* Exec. Order No. JBE 2016-09, issued 4/4/16: http://gov.louisiana.gov/assets/ExecutiveOrders/JBE16-09.pdf
[9] *Id.*

evacuation routes has not been assessed. The lack of analysis of infrastructure needed by the surrounding communities to protect from floods and disasters, as a result of the proposed facility, is completely unjust and environmentally racist. The loss of wetlands onsite will further minimize the amount of water that can be held by wetlands, and will therefore put additional water the adjacent communities during flooding events.

Additionally, regarding the pipeline infrastructure, it is completely unacceptable that the pipeline is not being considered within the same permit. Without the pipeline the facility will not have the raw material to produce plastics and therefore would not be functional. It is not enough to say that the "applications should be submitted and processed in a similar timeframe." We need an evaluation of the total impacts of this project, and this piecemealing is a complete disservice to the people who will be impacted by all aspects of this proposed project. Furthermore, we have not seen a notice for the associated pipeline--the projects are not being considered in a similar time frame.

Neither LDEQ nor LDNR can both follow the Executive Order and issue a WQC and/or CUP to the Applicant. The destruction of water flow and loss of ecosystem services is contrary to the unequivocal language of the Master Plan. The Application is incomplete and must be re-noticed.

2. Water Dependence of The Project has not been demonstrated by the Applicant.

The intent of Corps regulation is to avoid the unnecessary destruction or alteration of Waters of the United States, including wetlands, and to compensate for the unavoidable loss of such waters. Corps regulations require that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

Based on this provision, an evaluation is required in every case for use of non-aquatic areas and other aquatic sites that would result in less adverse impact to the aquatic ecosystem, irrespective of whether the discharge site is a special aquatic site or whether the activity associated with the discharge is water dependent. A permit cannot be issued, therefore, in circumstances where an environmentally preferable practicable alternative for the proposed discharge exists.

For proposed discharges into wetlands and other special aquatic sites, The Corps requires consideration of whether the activity associated with the proposed discharge is "water dependent." Water dependency is defined in terms of an activity requiring access or proximity to or siting within a special aquatic site to fulfill its basic project purpose.

According to the Applicant's application submitted to the Louisiana Department of Natural Resources ("LDNR") for a Coastal Use Permit ("CUP"), the purpose of the Project is to construct a greenfield chemical complex that will include rail and docking facilities, power generation, and a central wastewater treatment plant.

Pipelines and polymer production and transport are not water dependent, and the Applicant has not clearly demonstrated that the Project is an exception. The Applicant has also failed to demonstrate that practicable alternatives do not exist.

According to 40 CFR §230.10(a)(3):

[W]here the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or sitting within the special aquatic site in question to fulfill its basic purpose (i.e. not water dependent), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the same aquatic ecosystem, unless clearly demonstrated otherwise.[10]

Wetlands are considered "special aquatic sites."[11] There is no reason or explanation given by the Applicant concerning why this development must be sited in wetlands to "fulfill its basic purpose." Since the burden of proof rests with the Applicant, it must therefore be concluded that this proposal is not water dependent. And according to the regulations, non-wet practicable alternatives must then exist.[12]

In its present form, The Corps, LDEQ, and LDNR must deny the Applicant's requests for a Section 404 Permit, WQC, and CUP. There is no need to cite this project in such a risk-filled area.

[10] 40 C.F.R. §230.10(a)(3) (2009).
[11] 40 C.F.R. §230.41.
[12] It should be further noted that 40 C.F.R. §230.20(a)(2) allows for the consideration of alternative sites *not owned* by the Applicant if they can be reasonably obtained and utilized for the basic purpose. Here, where the basic purpose is industrial polymer export, it can be easily assumed that numerous non-wetland properties could be reasonably obtained to fulfill the basic purpose, and it is clearly within the Applicant's burden to demonstrate otherwise.

3. Project Alternatives have not been adequately addressed.

Regarding coastal use permit applications, the Office of Coastal Management (OCM) has published *Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone*.

As the OCM uses this document to review all coastal use permit applications, this permit application must provide all of the stated required documentation. As a new commercial development, FG LA, LLC Greenfield Chemical / Sunshine Plastics Plant must meet the requirements below. The Corps cannot issue a permit unless these requirements are met.

We challenge the Corps, EPA, and LDEQ to require mere *consideration* of alternative sites that are not in African American river towns. Otherwise, we must argue that this seems like violation of title VI of the Civil Rights Act, and must request an investigation into the reason that African American block groups were *exclusively* considered.

	FG LA, LLC			Coastal P20171048	MVN 2018-00159-CM	
	Table 1. Comparison of Demographic Conditions for Areas Potentially Impacted by Construction and/or Operation of the Project					
	Census Tract and Block Group	Persons below poverty Level (5)	Minority (%)	Highest Minority (%)	Highest Minority (Name)	Native American (%)
Alt.	**St James Parish**	**17.99**	**52.6**	**50.6**	**African American**	**0.2**
Sunshine	Census Tract 405, Block Group 2	31.65	94	92.9	African American	0.5
	Total Number of Block Groups		1	*Proportion of Impact*		*100.00%*
	Number of EJ Block Groups		1		*Disproportionate*	
St Emma	Tract 405, Block Group 1	29.58	82.9	75.5	African American	na
Shady Grove	Tract 404, Block Group 1	35.1	80.4	80.2	African American	na

New Commercial Developments: Alternatives Analysis

Table 1 in this section details the determination of the minimum "...Range of Alternatives that should be considered and the level of detail required in the Justification Analysis..."

The resource impact indicated in this permit application - 63 acres - identifies this project as having a "Large" scope of development ("1 acre or more") that falls under "Category 3" (greater than "5 acres of resource impact"), which requires a minimum of five (5) "alternative feasible sites [that] must be considered."

In a document submitted to Mr. Hester on February 27, 2018, the applicant offered only the three following alternative site analyses, which **does not meet the minimum of five** alternative sites.

Option 1: Shady Grove (730 acres)
Option 2: St. Emma (1,617 acres)
Option 3: Sunshine - Preferred Alternative (2,319 acres)

Additionally, the application submitted to the OCM **DOES NOT** meet the following requirements:

2. "...**If less than the minimum number of sites... have been considered, please explain why** and provide documentation demonstrating the efforts made to find alternate sites."
3. "Describe each site considered. Include parcel size relative to development size, topography... Identify any limiting factors and explain how those factors limit development."
4. "Identify the availability and capacity of existing infrastructure... Describe any new infrastructure required..."
5. **"**Describe the surrounding land use within... one (1) mile (Category 3) of each site considered. Include type and extent of existing use and any planned future uses..."
6. "Identify the current zoning of the site and indicate if any zoning variances will be required prior to development."
7. **"Explain how the use will affect existing infrastructure, including evacuation and identify any additional permits required..."**

New Commercial Developments: Justification Analysis

Table 2 in this section details the determination of the minimum "level of detail required in the Justification Analysis."

As a “Large” development (“1 acre or more”) with “Moderate” surrounding land use and creating more than “5 acres of resource impact,” this application requires a “**Complex**” justification.

The application submitted to the OCM **DOES NOT** meet the following requirements, and must be re-submitted.

Simple Justification

2. “Identify all competitor facilities...”
3. “Provide a narrative explaining how the proposed development will introduce or enhance the existing availability of goods and/or services in the target geographic area... Include in the narrative an **explanation of the coastal water dependent nature** of the proposed development...”

Moderate Justification

4. “Indicate the density and % occupancy of any residential developments identified in #1 above [(‘...identify to what geographic area the development will provide these goods and/or services...’)]...”
5. “Include a map showing the geographic area identified in #1 above to which the development will provide goods and/or services.”
6. “Provide the anticipated volume of users from various driving distances...and various socio-economic groups within target geographic area.”
7. “Provide existing retail goods and services expenditures trends from 2000 to 2010 for the target geographic area.”

Complex Justification

8. “Provide population trend data and household income trend data from 2000 to 2010.”
9. “Provide labor force trend data from 2000 to 2010 in the target geographic area.”

Additionally, the application should clarify the following:

Simple Justification

1. “...[I]Identify to what geographic area the development will provide these goods and/or services...”

   The original answer provided was:
   “The proposed project is needed to supply polymers to the domestic and worldwide markets.”

In summary, this application fails to meet the minimum criteria as put forth by the LDNR OCM. The applicant provides insufficient or no explanation of the economic and social impacts of its proposed development. There is no justification for siting the project in coastal zone wetlands.

In general, the regulations provide that no discharge of dredged or fill material shall be permitted: (1) if there is a practicable alternative to the proposed discharge; (2) if the discharge causes or contributes to violations of applicable state water quality standards; (3) if the discharge will cause or contribute to significant degradation of the environment; and (4) unless all appropriate steps have been taken to minimize potential adverse impacts.[13] The Corps' regulations also require that destruction of wetlands is to be avoided to the extent practicable.[14]

The regulations further provide that "practicable alternatives" include "not discharging into the waters of the U.S. or discharging into an alternative aquatic site with potentially less damaging consequences."[15] If a project is not "water dependent," as is the case with pipelines and plastic production, the guidelines contain a presumption that a less environmentally damaging practicable alternative exists while also requiring that the applicant clearly demonstrates that practicable alternatives which would not involve discharge of fill material into special aquatic sites were not available.[16]

Publicly-available documents provide no evidence that the Applicant has engaged in a proper alternative analysis, to determine if non-wet potential project sites exist. The alternative analysis must include direct, indirect, secondary, and cumulative impacts that take into account aspects of water quality, wildlife, and flood protection. Presently, the public has not received any information as to why the Project must be sited in the Applicant's preferred location. We request a full real estate analysis, including a MLS as well as any reasons why more suitable locations, including areas outside of the coastal zone, were denied.

Impacts to wetland areas could obviously be minimized if the development were relocated to non-wet regions. Impacts to the coastal zone and tidal wetlands and hazards could obviously be minimized by locating the site outside of the coastal zone. As noted above, a burden to show the non-existence of practicable alternatives rests with the Applicant, when the proposed project is located in a special aquatic habitat and is not water-dependent.

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[13] 40 C.F.R. § 230.10.
[14] 33 C.F.R. § 320.4(r).
[15] 40 C.F.R. §§ 230.5(c), 230.10(a).
[16] 40 C.F.R. § 230.10(a)(3).

The Applicant has not considered site locations outside of historic African American towns. These basic oversights are testaments to the lack of consideration given to project alternatives. [17] The St. Emma Alternative is within the proximity of two predominantly African American towns (see figure 1). The Shady Grove Alternative is within the proximity of three predominantly African American towns (see figure 2). The Sunshine Alternative is within the proximity of six African American communities (see figure 3). These figures support that the applicant's request is environmentally racist as it is mostly African Americans being affected by all three project alternatives. The Applicant must follow executive orders and site the facility in areas that do not disproportionately affect non-white groups.

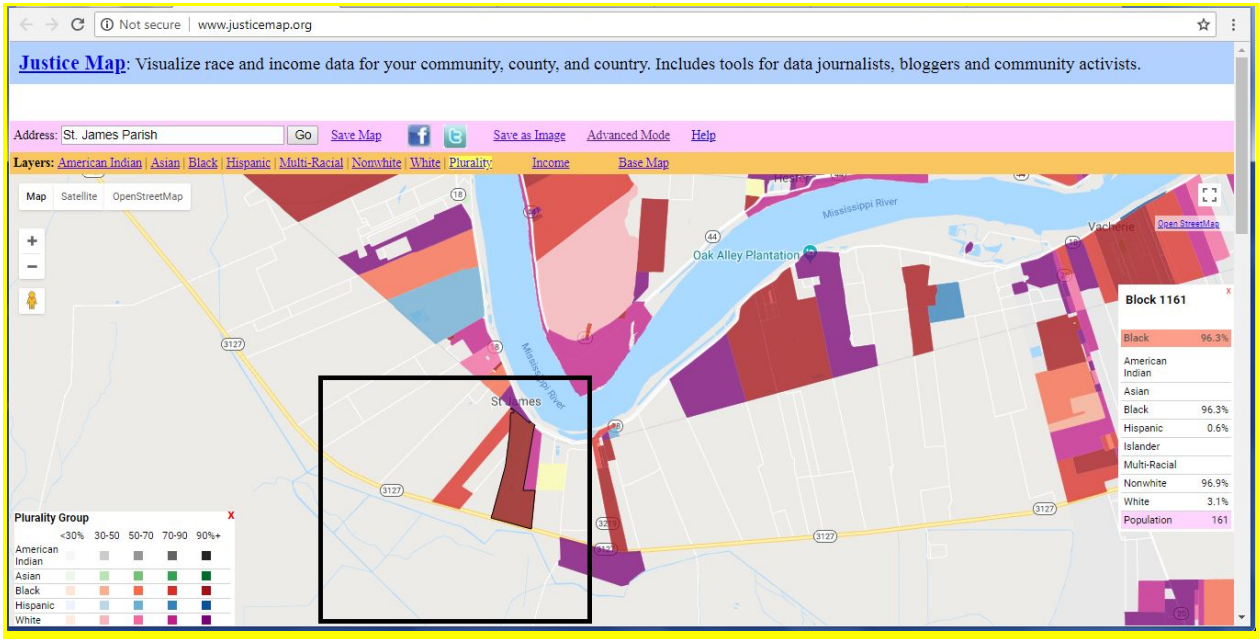

Figure 1 Block 1161 in Block Group 1, showing a larger percentage of African American residents than the Parish--75.5% to 52.6%

[17] LDNR online Application for P20171048

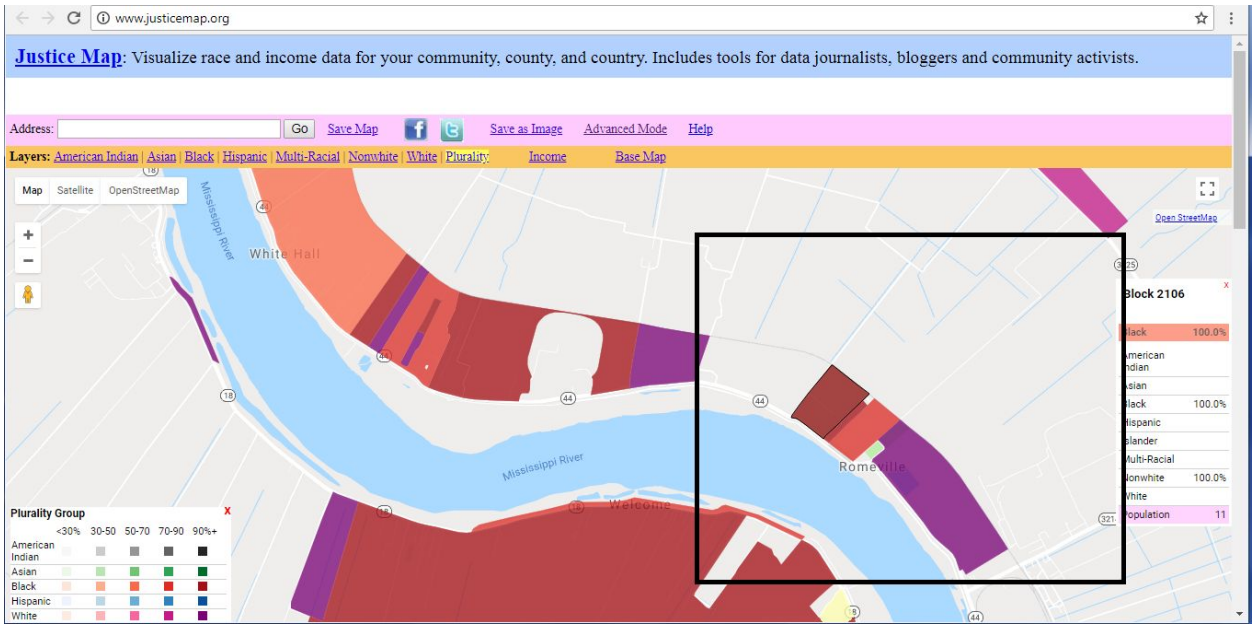

Figure 2 Block 2016, Block Group 2, showing a larger percentage of African American residents than the Parish, 67.2% to 52.6%.

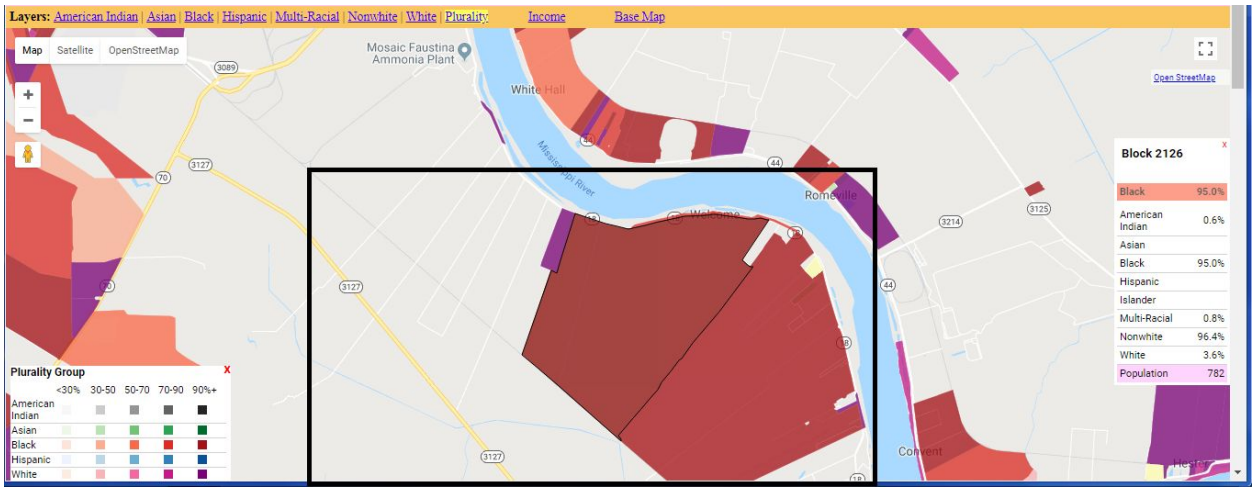

Figure 3. Census Block 2126, Block Group 2, Westbank St James showing a higher percentage of African American and minority residents than the Parish -- 94 % to 52.6 %

Because the Applicant has not shown the Project to be water dependent, it is then assumed under the regulations that practicable alternatives exist to aspects of the Project that impact Waters of the United States. The Applicant has failed to demonstrate adequate consideration of alternatives, or an avoidance of impacts to the maximum extent practicable. Therefore, GRN respectfully submits that The Corps cannot issue the requested permit under Clean Water Act Section 404.

Drinking Water Impact Requirements and Alternatives
Bayou Lafourche Freshwater District Permits must be granted before any decision on an EA is made. This facility has two feeder or product pipelines that go under Bayou Lafourche, but we can find no mention of its potential impact to drinking water, which is disturbing given the 2017 gas pipeline incident on Bayou Lafourche.

Bayou Lafourche is part of the master plan, and must be dredged deeper for water flow. We want a considerate review of this engineering conflict, not promises to move the pipeline later. These promises are rarely fulfilled--only if the agency involved can muster legal resources. These impacts are occuring in areas that lack access to the courts to enforce any agreements to bury or move pipelines, despite conditions like these being written into permits and records of decision.

There will also be a 408 application process, and yet we see no mention of this in the public notice.

We request 50' clearance under the Bayou for a safety margin, because Bayou Lafourche is the drinking water for 300,000 people in four Parishes. They seem to require two permits from the Bayou Lafourche Freshwater District (State of Louisiana Special District), but this should have been in the public notice, and we cannot sufficiently comment, although we are aware of recent gas pipeline problems on Bayou Lafourche.

We request an adequate alternatives analysis in response to this letter. LDNR must require the applicant to conduct a complex justification, including labor market analysis. The applicant must review sites outside of African American towns.
USACE must conduct an Environmental Justice Review.
USACE and LDEQ must require an alternatives analysis that considers that siting the project alternatives exclusively in African American block groups is a disparate impact.

4. Direct, indirect, secondary, and cumulative impacts must be fully considered.

Article IX, Section 1 of Louisiana's Constitution provides that "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."[18]

[18] *See* Article IX of Louisiana Constitution at link

In its 'Save Ourselves' decision, the Louisiana Supreme Court outlined how state agencies, as public trustees, can implement this constitutional guarantee. All agencies must determine whether a project avoids or minimizes adverse environmental impacts, balances environmental costs and benefits with economic and social factors, and consider whether alternate projects, sites, or mitigating measures would better protect the environment.[19]

Given the information available in public documents, it does not appear that LDNR or the Applicant have fully weighed the costs and benefits relevant to the Project. Direct, indirect, secondary, and cumulative impacts of the proposed wetland fill and clearing remain overlooked.

As mentioned above, the Project's direct impact from 100 to as many as 170 wetland acres is certainly significant. There would be considerable impacts to water quality and wildlife habitat, including potential threats to threatened species that either reside or feed in this area such as such as the Bald Eagles we regularly see in St James.
(see http://www.wlf.louisiana.gov/wildlife/species-parish-list?tid=All&type_1=All)

The fill of such a large area is in violation of the federal and state anti-degradation policy for Bayou Verret and the upper Barataria Basin. The Louisiana policy states that "administrative authority will not approve any wastewater discharge or certify any activity for federal permit that would impair water quality or use of state waters."[20]

Federal regulations have not been fully implemented. Per executive orders 11988 and 11990, in order to prevent impacts to wetlands certain aspects need to be analyzed. Title 18 of the Code of Federal Regulations states:

> It is the policy of the Council to provide leadership in floodplain management and the protection of wetlands. Further, the Council shall integrate the goals of the Orders to the greatest possible degree into its procedures for implementing the National Environmental Policy Act. The Council shall take action to: Avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and the destruction or modification of wetlands; Avoid direct and indirect support of floodplain development and new construction in wetlands wherever there is a practicable alternative; Reduce the risk of flood loss; Promote the use of nonstructural loss reduction methods to reduce the risk of flood loss; Minimize the impact of floods on human health, safety and welfare; Minimize the destruction, loss or degradation of

[19] 452 So. 2d 1152 (La. 1984).
[20] La. Admin. Code tit. 33, pt. IX §1109(A)(2).

wetlands; Restore and preserve the natural and beneficial values served by floodplains; Preserve and enhance the natural and beneficial values served by wetlands.[21]

Given that the Public Notice does not thoroughly adhere to the executive order, The Corps, LDEQ and LDNR should deny the permit application.

The destruction of these wetlands, in direct opposition to the Master Plan, would further weaken the state's storm defenses. And allowing this project to proceed would also set a precedent for further petrochemical development, in turn jeopardizing even more valuable wetland habitat and extirpating Louisiana residents. There exists a significant push to develop and construct these sorts of export terminals along the Gulf Coast. Thanks to hydraulic fracturing, domestic natural-gas producers now possess historic supplies as well as the expectation that they will be sold to international interests.

The Code of Federal Regulations recognizes the significance of secondary impacts from wetland destruction by emphasizing that "minor loss of wetland acreage may result in major losses through secondary impacts."[22] Where more than 100 acres of wetlands are involved, it is unacceptable that the Applicant offers no analysis of these probable impacts.

The cumulative impacts on storm and flood protection must also be taken into consideration. This project could incite additional construction and in turn jeopardize even more wetlands unique to this area. This activity, combined with similar wetland-destroying projects, could result in more flooding in nearby communities, *as well as degraded water quality in the Bayou Verret, Upper Barataria Basin, and surrounding wetlands that are hydrologically connected to the Ama Diversion, Davis Pond, and the Mid Barataria Diversion.* The whole region must be looked at as an interrelated ecological unit in order to adequately assess the true cumulative impacts. There must be review of master plan projects in the footprint of the development.

The eventual export of polymers is not isolated from its extraction. *Natural gas must first be captured from underground deposits, before it can be transported anywhere.* Recognizing these connections allow for the 'total cost' of the Project to then be calculated. That is, accounting for the Project's external costs in the forms of environmental and health damages felt by communities in coastal Louisiana and beyond. Citizens across the Gulf are exposed daily to air and waterborne contaminants because of the natural-gas industry. All the while, their surrounding natural beauty is impacted by drilling wells, storage facilities, compressor stations, train cars, access roads, rail lines, and miles and miles of pipe.

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[21] 18 C.F.R. §725.2.
[22] 40 C.F.R. §230.41.

Climate change is threatening our region mainly in the form of sea level rise, extreme rain events[23], hotter days and nights, and more intense storms. In recent years, areas flooded which never flooded before. Sea level rise is already the dominant mode of Louisiana land loss outside of the Birdfoot Delta[24], in 2018. USACE, LDEQ, LDNR must evaluate the relative contribution of the carbon impact of this project to the loss of land, life, and property we are facing.

Since the Public Notice does not assess, or even recognize, the potential direct, indirect, and cumulative impacts that will result from the disruption of over 100 acres of wetlands, The Corps, LDEQ and LDNR cannot approve this proposal as submitted.

5. The Applicant must develop disaster-response plans, and local floodplain officials should be included in the notification of this permit since the proposed site sits within an area

The Applicant must have plans for disaster response scenarios, in place prior to project permitting. We have yet to see any mention of this sort, in any public documents. In fact, in their permit application, the Applicant even goes as far to say that the Project does not involve the drilling, production, and/or storage of oil and gas.[25] The location of this proposed project is especially critical because of the fragile nature of St James area, and the overwhelming and oft-repeated need for evacuation plans along the LDOTD designated evacuation route, highway 3127. People must be able to travel from St James to the hospital in Baton Rouge, and have full access to the Sunshine bridge. Relatives and emergency response vehicles have to be able to move into places like Burton Lane, and also leave Burton Lane, get to 3127, and be able to move out of the area during an incident.

Neither LDEQ nor LDNR can be a "passive umpire" when it comes to permitted materials. This responsibility was distinctly highlighted in the recent ruling, *Sierra Club Delta Chapter v. La. Dep't Nat. Res.*, No. 00060916, Div. A.[26] LDEQ andLDNR must accept responsibility for materials permitted under the umbrella of water-quality and coastal-use. Until the Applicant has drafted an adequate incident-response plan, its application for a 404, WQC, and CUP ought to be deemed inadequate.

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[23] Karin van der Wiel, Sarah B. Kapnick, Geert Jan van Oldenborg, Kirien Whan, Sjoukje Philip, Gabriel A. Vecchi, Roop K. Singh, Julie Arrighi, and Heidi Cullen. Rapid attribution of the August 2016 flood-inducing extreme precipitation in south Louisiana to climate change. Hydrol. Earth Syst. Sci., 21, 897–921, 2017 www.hydrol-earth-syst-sci.net/21/897/2017/ doi:10.5194/hess-21-897-2017

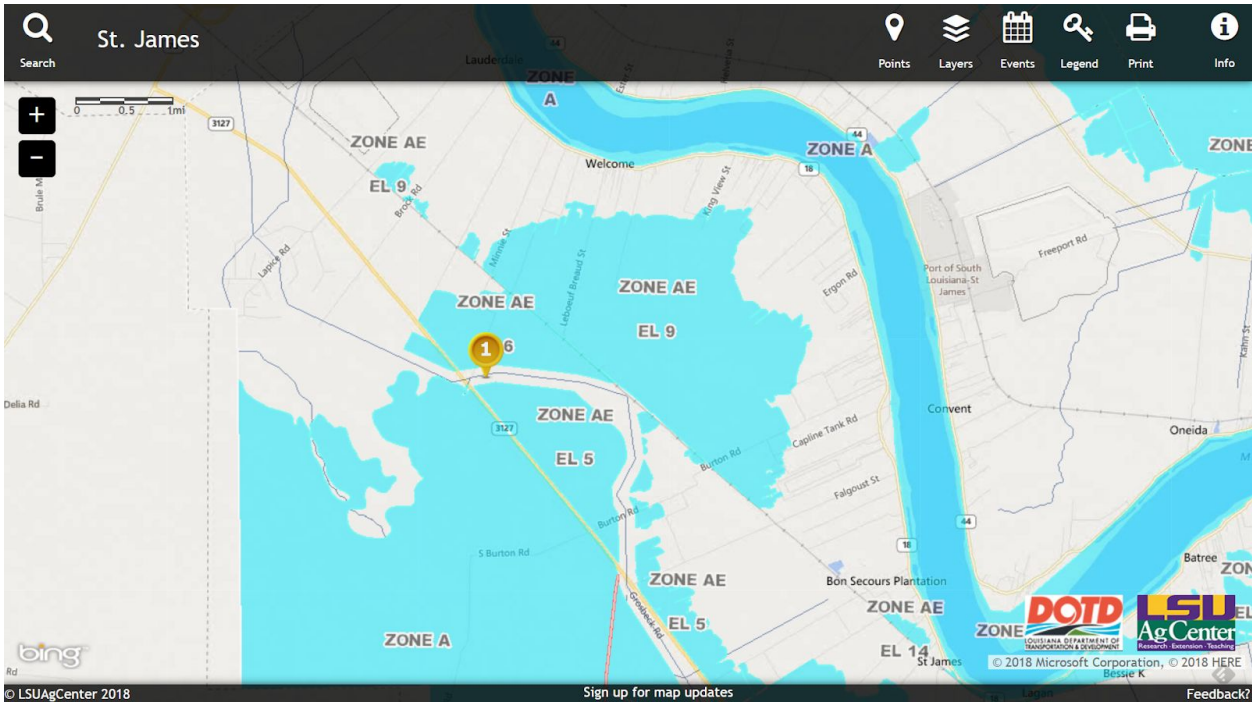
[24] Belhadjali, Karim, 08-03-2016. Governor's Advisory Commission on Coastal Protection, Restoration, and Conservation August 3, 2016 - 2017 Coastal Master Plan: Planning for an Uncertain Future. 2017 Coastal Master Plan_GAC_8-3-16 - Karim Blehadjali.pdf https://cims.coastal.louisiana.gov/recorddetail.aspx?root=0&sid=18787

[25] *See* Joint Permit Application For Work Within the Louisiana Coastal Zone

[26] La. 19th JDC Dec. 3, 2014.

These wetlands also lie within the 100-year floodplain and are clearly susceptible to storm-surge events and large rains (Figure 4).[27] However, the Applicant makes no mention of any containment plans for explosive or hazardous materials. This is deeply concerning, given the proposed site's distinct geography.

The responsibility of managing flood risk in Louisiana lies largely with individual parishes. Since parish officials are charged with administering the hazard mitigation program, they should also be informed of this permit request that impacts flood-mitigating wetlands.



(via http://maps.lsuagcenter.com/floodmaps/)

Figure 4: Proposed site in area at-risk for flooding

The Applicant's application must be deemed inadequate until it submits an incident-response plan. We also request that local floodplain managers be notified of the associated, significant flood and spill risks.

Hazardous and Explosive facilities must be located 1200 ft from Highway 3127 and Highway 18 in order to ensure a safe passage for St James residents and local schools.

6. The Public Notice fails to adequately describe the Mitigation Plan.

[27] FEMA Floodmap, St James Parish http://maps.lsuagcenter.com/floodmaps/.

Federal law also requires the Applicant to compensate for, or mitigate, the damages resulting from the destruction of our nation's wetlands, should a permit be issued. In the public notice, there is only a vague mention of proposed plans for the use of a mitigation bank to offset any unavoidable losses to wetland functions caused by project implementation.[28]

The Corps "must ensure that adequate [mitigation plan] information is included in the Public Notice to enable the public to provide meaningful comment," providing exception only for data which is "legitimately confidential for business purposes."[29] According to the joint EPA/USACE "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule," mitigation plans for all wetland compensatory mitigation projects must contain the twelve elements, including:[30]

- ❏ site selection criteria
- ❏ baseline information for impact and compensation sites
- ❏ ecological performance standards
- ❏ monitoring requirements

The mere mention of legally-required details does not satisfy this requirement of "adequate information" to allow "meaningful comment." Considering that localities in Coastal Louisiana have a strong public interest in minimizing the effects of storm surge and localized flooding, the nature and location of compensatory mitigation is of vital importance to those who wish to provide public comments. As just one example, hardwood canopy-cover values ought to be publicly provided, given the significant impacts to forests that make up the majority of this proposal's potential wetland destruction.
For the sake of detail, further mitigation requirements in 33 C.F.R. § 332 are included below.

To satisfy the Clean Water Act, mitigation plans must provide a level of detail "commensurate with the scale and scope of the impacts"[31] and include the following information:

1. "A description of the resource type(s) and amount(s) that will be provided, the method of ecoregion, physiographic province, or other geographic areas of interest."[32]

We request that the St James Vacherie floodproofing project area be cited as a hydrologic and planning unit.

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[28] Joint Permit Application For Work Within the Louisiana Coastal Zone
[29] 40 CFR § 230.94(b).
[30] 33 CFR § 322.4[c].
[31] 33 C.F.R. § 332.4(c).
[32] 33 C.F.R. § 332.4(c)(2).

2. “A description of the factors considered during the site selection process. This should include consideration of watershed needs, onsite alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site.”[33]

3. “A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project.”[34]

4. “A description of the ecological characteristics of the proposed compensatory mitigation project site.... This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of waters of the United States on the proposed compensatory mitigation project site.”[35]

We request an engineering review (TR-55 or adapted) of how the mitigation project will attenuate surge or rain flood risk, critical wetland functions in coastal louisiana, to local residents.

We request a quantitative review of windshed impacts, give the inordinate impact to canopy cover. St James was unable to make the last LDNR hearing due to local storms.

5. “A description of the number of credits to be provided, including a brief explanation of the rationale for this determination,” including “an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.”[36]

6. “Detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community;

[33] 33 C.F.R. § 332.4(c)(3).
[34] 33 C.F.R. § 332.4(c)(4).
[35] 33 C.F.R. § 332.4(c)(5).
[36] 33 C.F.R. § 332.4(c)(6).

plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures."[37]

7. "A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed."[38]

8. "Ecologically-based standards that will be used to determine whether the compensatory mitigation project is achieving its objectives."[39]

9. "A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included."[40] The mitigation plan must provide for a monitoring period that is sufficient to demonstrate that the compensatory mitigation project has met performance standards, but not less than five years. A longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs).[41]

Storm (flood and wind) Damage attenuation metrics must be included, given the site's importance in the State Master Plan for coastal restoration (Ama Diversion, etc) and floodproofing (St James Vacherie Project).

10. "A description of how the compensatory mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resources, including long-term financing mechanisms and the party responsible for long-term management."[42]

11. "A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success."[43]

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[37] 33 C.F.R. § 332.4(c)(7).
[38] 33 C.F.R. § 332.4(c)(8).
[39] 33 C.F.R. § 332.4(c)(9).
[40] 33 C.F.R. § 332.4(c)(10).
[41] 33 C.F.R. § 332.6.
[42] 33 C.F.R. § 332.4(c)(11).
[43] 33 C.F.R. § 332.4(c)(12).

12. “A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with its performance standards.”[44]

13. The mitigation plan must provide for a monitoring period that is sufficient to demonstrate that the compensatory mitigation project has met performance standards, but not less than five years. A longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs).[45]

The monitoring period must align with the State Master Plan, that is, until 2067.

14. The compensatory mitigation requirements must be clearly stated and include special conditions that “must be enforceable.” The special conditions must: “(i) Identify the party responsible for providing the compensatory mitigation; (ii) Incorporate, by reference, the final mitigation plan approved by the district engineer; (iii) State the objectives, performance standards, and monitoring required for the compensatory mitigation project, unless they are provided in the approved final mitigation plan; and (iv) Describe any required financial assurances or long-term management provisions for the compensatory mitigation project, unless they are specified in the approved final mitigation plan....”[46] “The special conditions must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.”[47]

15. “The real estate instrument, management plan, or other mechanism providing long-term protection of the compensatory mitigation site must, to the extent appropriate and practicable, prohibit incompatible uses (e.g., clear cutting or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project.”[48]

A key element of a legally adequate mitigation plan is the inclusion of ecological performance standards for assessing whether the mitigation is achieving its objectives, and these are described under 33 C.F.R. § 332.5:

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[44] 33 C.F.R. § 332.4(c)(13).
[45] 33 C.F.R. § 332.6.
[46] 33 C.F.R. § 332.3(k).
[47] 33 C.F.R. § 332.3(l).
[48] 33 C.F.R. § 332.7(a).

> "Performance standards should relate to the objectives of the compensatory mitigation project, so that the project can be objectively evaluated to determine if it is developing into the desired resource type, providing the expected functions, and attaining any other applicable metrics (e.g., acres)."[49]

And, further:

> "Performance standards must be based on attributes that are objective and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner. Performance standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics, and/or comparisons to reference aquatic resources of similar type and landscape position. The use of reference aquatic resources to establish performance standards will help ensure that those performance standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. Performance standards based on measurements of hydrology should take into consideration the hydrologic variability exhibited by reference aquatic resources, especially wetlands. Where practicable, performances standards should take into account the expected stages of the aquatic resource development process, in order to allow early identification of potential problems and appropriate adaptive management."[50]

The information provided on impacts and mitigation is insufficient to allow for meaningful comments, especially regarding bottomland hardwoods. However, what is clear is that the federal regulations are not being followed, and the project is inconsistent with the State Master Plan.

To assure that minimization and mitigation in the same watershed and for the correct type of wetlands are occurring, we request that, at the minimum, mitigation banks the and avoidance and minimization statement used are included in the Public Notice. Since this regulation is not followed, the Public Notice is incomplete and must be reissued with a mitigation plan.

7. The final plan, with mitigation plan included, should be made available to the public before any permits are granted.

We feel that the current Public Notice system is not adequate to fully involve the public in the Section 404 permitting process. The only items available to the public throughout the entire

[49] 33 C.F.R. § 332.5(a).
[50] 33 C.F.R. § 332.5(b).

process are the Applicant's CUP application and associated Public Notice. And significantly, these documents are released before The Corps and the Applicant go through the "avoid, minimize, and mitigate" process.

The public is therefore never given an opportunity to comment on the final project, including the mitigation plan. We have often been told that many changes happen to the permits before they are issued, but the public never sees them until the wetlands have already been filled and water quality altered.

We request more information in the initial Public Notice (e.g., mitigation plans, efforts made to avoid impacts, necessity of project location, adequate alternative analysis, environmental assessments, etc.). Because this regulation is not followed, the Public Notice is incomplete and must be reissued with a mitigation plan.

8. We question whether any wetland mitigation could completely replace the functions and values lost.

Should any impacts to wetlands occur because of the Project, mitigation is required. Given the history of failure of mitigation, particularly in the New Orleans District, particularly since the implementation of LRAM, we feel that it would be extremely difficult to replace the function and values of this particular wetland if offsite mitigation takes place. Recent scientific literature reviews of wetland mitigation sites have described these kinds of failure in detail, but the failure is due partially to the fact that the functions of wetland soils are largely unaccounted for:[51,52]

> [O]verall lack of recovery of biogeochemical functioning may have been driven largely by the low recovery of the carbon storage and the low accumulation of soil organic matter.

A recent LSU master's thesis has outlined the failure to replace ecological functions by the New Orleans District 404 regulatory branch.[53] Although acreages were replaced around a 1:1 ratio, a functional analysis showed that the acreage of improved wetland needed to replace ecological functions was close to 2.4:1 for every acre destroyed.

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[51] Spieles, D. J. 2005. Vegetation Development in Created, Restored, and Enhanced Mitigation Wetland Banks of the United States. Wetlands. 25:51-63.

[52] Moreno-Mateos D , Power ME , Comín FA , Yockteng R , 2012 Structural and Functional Loss in Restored Wetland Ecosystems. PLoS Biol 10(1): e1001247. doi:10.1371/journal.pbio.1001247.

[53] WETLAND MITIGATION BANKS AND THE NO-NET-LOSS REQUIREMENT: AN EVALUATION OF THE SECTION 404 PERMIT PROGRAM IN SOUTHEAST LOUISIANA by Abbey Anne Tyrna http://etd.lsu.edu/docs/available/etd-04102008-141642/unrestricted/Tyrna_thesisx.pdf.

Purchasing compensatory credits is inadequate information to base an evaluation of cumulative impacts from loss of wetland function. Even if mitigation were to take place within the same hydrologic basin and planning area, we question whether any amount of acreage offsite would be able to replace the functions and values (local flood mitigation, local flora/fauna, etc.) that these wetland tracts currently perform--given the explicit plans to floodproof this area for human habitation into 2067.

As outlined in the below table of values provided with the joint Public Notice, the majority of proposed work would impact forested wetlands. While re-creating habitat is already a difficult task, forested regions require perhaps the most ingenuity and commitment. Unlike their peers, these sorts of habitats develop over centuries. These time-scales are in stark contrast to those expected by regulators, so we accordingly question any accompanying mitigation measures as well as the 'temporary' classification.

We request more information in the initial Public Notice on efforts made to avoid impacts, necessity of project location, and agency comments.

9. Neither Nationwide Permit 12 nor any other Nationwide Permit can be used for construction of any significant portion of the Project

The Nationwide Permit 12 is one of several categories of general permits issued by The Corps for activities that will have minor environmental impacts. Nationwide Permit 12 applies to specific projects required in the construction of utility lines, which include pipelines, located in waters of the United States. Federal regulations mandate that an applicant seeking a Nationwide Permit 12 must comply with general conditions.[54]

As set forth in the conditions, limitations, and restrictions:[55]

> (e) Discretionary authority:
>
> *(1)* A division engineer may assert discretionary authority by modifying, suspending, or revoking NWP [Nationwide Permit] authorizations for a specific geographic area, class of activity, or class of waters within his division, including on a statewide basis, whenever he determines sufficient concerns for the environment under the section 404(b)(1) Guidelines or any other factor of the public interest so requires, or if he otherwise

[54] 33 CFR § 330.4.
[55] §330.4, 2013.

> determines that the NWP would result in more than minimal adverse environmental effects either individually or cumulatively.
> (2) A DE may assert discretionary authority by modifying, suspending, or revoking NWP authorization for a specific activity whenever he determines sufficient concerns for the environment or any other factor of the public interest so requires. Whenever the DE determines that a proposed specific activity covered by an NWP would have more than minimal individual or cumulative adverse effects on the environment or otherwise may be contrary to the public interest, he must either modify the NWP authorization to reduce or eliminate the adverse impacts, or notify the prospective permittee that the proposed activity is not authorized by NWP and provide instructions on how to seek authorization under a regional general or individual permit. . .
>
> (4) NWPs do not authorize any injury to the property or rights of others.

To qualify for NWP authorization, the prospective permittee must comply with the applicable general conditions, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. The general conditions limit the application of Nationwide permits when they would affect:

- Aquatic Life Movements
- Spawning Areas
- *Migratory Bird Breeding Areas*
- Shellfish Beds
- Water Supply Intakes
- *Management of Water Flows*
- *Fills Within 100-Year Floodplains*
- Soil Erosion and Sediment Controls
- Removal of Temporary Fills
- Wild and Scenic Rivers
- Endangered Species
- Migratory Bird and Bald and Golden Eagle Permits.

A review of publicly-available documents shows the Project, as proposed, would be associated with many of the effects listed above. Moreover, the Project would result in more than minimal adverse environmental effects either individually or cumulatively and is otherwise contrary to the public interest. The Corps must accordingly modify the NWP authorization to reduce or eliminate the adverse impacts of pipeline construction (including any segment thereof) for which construction under NWP 12 or any other nationwide permit is sought. Or, LDNR and the Corps must prohibit the use of NWP 12 or any other nationwide permit.

10. The Project does not appear to offer any public benefit or be in the public interest. Disparate benefit must be accounted for as well as disparate impact, in an EIS. Failure to consider Louisiana has rendered Louisiana uninhabitable and with low to negative economic growth. There are risks to investors as well as disparate impact to residents.

As already noted, The Corps must not only consider alternative pipeline routes, it must also choose the least-damaging practicable alternative.[56] The least-damaging practicable alternative is the “no action” alternative, additional alternatives to comply with guidelines, and alternatives that are not racist. But the "no-action" alternative goes to the heart of this entire process – whether there even exists a public need for the Project.

No mention is made regarding how the actual residents of St James Parish, or even the Parish itself would benefit from the Project. Economic Benefits must be analysed at the Parish level, since the Parish conducts road maintenance, drainage, and evacuation functions critical for public safety. Community members are instead likely to be left with all the unaccounted, external costs of the Project: health and environmental impacts, reduced flood protections, heightened leak and explosion risks, and the countless other costs associated with the climate-disrupting reliance on fossil-fuel infrastructure.

Given the well-known volatility of natural-gas export markets, particularly during a trade conflict with important partners, the Applicant must demonstrate the long-term viability of the Project. To demonstrate at least some of the projected project-related benefits, an analysis that includes no fewer than ten years of historical market data should be included and weighed in the decision-making process. The State has to plan for 50 years, the Applicant should also be taking its job as seriously.

Cost-Benefit Analysis ("CBA")

[56] 40 C.F.R. § 230.10(a).

• CBA and consideration of alternatives generally is the backbone of NEPA; this project is certainly significant and must provide more jobs to Louisiana through an EIS process.

This permitting clearly constitutes a major federal agency action with significant impact on the environment and the end-around allowed the relevant parties to push the expansion through with inadequate justification; this section will highlight key pipeline considerations that are broadly applicable in the quantifiable realm of CBA.

Discounting

• It is axiomatic across CBA, economics, and finance that alleged future net benefits be discounted to present value. For every quantified future stream of dollars used to justify a project, we ask Formosa what discount rate it has applied and how it was developed.
• We assume that such rates have been arbitrarily assigned, as we have seen no mention of the concept.

• Discounting, though axiomatic, is also problematic for a number of reasons—e.g., regulatory discount rates may be undynamic and backward-looking, discount rates are largely speculative by nature (with their efficacy perhaps decaying with increases in project duration), social and environmental discounting may involve costs and benefits that do not fit the logic of the time-value of money.

Cost of Carbon

• A persistent issue in CBA relative to fossil fuels concerns how to quantify damages from emissions and related climate change. Various models—particularly the three major integrated assessment models and especially Nordhaus's RICE/DICE model in the U.S.—have attempt to systematize such (very) long-term and expansive effects and costs. We Epect such an analysis from the Formosa project, given that their 11 million tons of CO2 per year will contribute to the major driver of wetlands loss from the state, and even the very integrity of the landform upon which the project will be sited.

• A 2017 pipeline case in federal court—Sierra Club v. Federal Energy Regulatory Commission, 867 F.3d 1357 (D.C. Cir. 2017)—held that federal agencies must clarify Their view on the Social Cost of Carbon. Formosa's impact onto communities that have been selected as receiver communities for Louisiana coastal residents fleeing lower areas is an instance where evaluating social cost of carbon takes on a particular urgency.

Fraudulent Claims of Energy “Independence” or “Dominance”

• This somewhat nebulous, nationalistic component is often cited with regard to U.S. fossil fuel development as an America-first benefit and perhaps even a national security imperative. We see little to no benefit to the contamination of air, water, and soil, especially as we look across the nation at this company's horrid compliance record with the law.

• A Cornell University Global Labor Institute report (https://www.ilr.cornell.edu/sites/ilr.cornell.edu/files/GLI_KeystoneXL_012312_FIN.pdf) on the job and related impacts of the Keystone XL pipeline pointed out that claims pertaining to U.S./Canada energy independence were misleading because key parts of the supply stream were owned by Chinese companies and Aramco. This absurdity holds true for this Foreign company. The USACE must not allow a Foreign company to profit from the destabilization of our national security.

• Any mention of energy independence or dominance as a benefit is usually relative to the country as a whole as opposed to individual states. The Empower report on the Bayou Bridge Pipeline highlighted the fact that the largest Bayou Bridge distributions were paid to billionaires in other states. With regard to any given project, Formosa included, Louisiana is adopting an outsized portion of the project’s downside while out-of-state entities are set to enjoy a greatly outsized portion of the upside. Such projects effectively keep Louisiana dependent on richer, out-of state parties who exploit the state’s natural resources.

• Further, this “independence” also entails dependence on fossil-fuel infrastructure, which may divert resources from green-energy jobs or at least carbon neutral jobs. This opportunity cost exists in the example of Formosa, as the site it first desired is now one of the State's top tourist attractions, the Whitney Plantation. There is a history of economic benefit to denying these permits.

Risk Adjustment

• Investment returns—e.g., stock market returns—are often risk-adjusted for the sake of presentation, comparison, and analysis. The general logic behind this is one of efficiency relative to volatility: e.g., rational investors prefer a lower level of risk given the same expected return.

• This same logic can be applied to pipeline CBA across multiple aspects, particularly with regard to spill costs and disaster costs. We doubt Formosa has done this for their facility, even though it is sited in a flood zone, like the ill-fated SASOL NA GTL plant, or any of a number of Port Arthur projects, which were cancelled after Harvey.

• Taking data from pipeline spills and related cleanup costs can create a cost distribution for the purpose of risk adjustment. Such costs must be evaluated in a place like St James, which has some of the highest rates of facility and pipeline incidents in the State of Louisiana. A mean, median, standard deviation, etc. can be generated and used to directly assess potential costs or risk-adjust broadly according to the volatility of such costs.

• Failing to burying the pipeline deeper threatens the drinking water of Bayou Lafourche, and 300,000 residents, but also threatens the cost of pipeline risk.

. Parish-level Costs and Benefits

• Generally, it is not at all clear how, in the case of Formosa, projected tax revenues, costs, risks, expenditures, etc. are allocated across parishes. We assume such CBA considerations supposed to be evenly distributed relative to miles of pipeline in each parish?

• Regardless, if a given pipeline CBA does not address parish-level impacts, the CBA is deficient. The reasoning behind this is analogous to the reasoning behind looking at U.S.-centric or Louisiana-centric considerations: the costs and benefits of the project may well be disparate relative to any given political unit.

We do request block group CBA to discover disproportionality in economic benefits of the project. We know that African American communities are targeted with the burden, do they share the benefit? State and Federal revenues have already escaped these block groups and communities. Citing State or Federal benefit assumes that, say, schools in District 5 St James will ***not*** benefit.

The Corps and LDEQ must examine the allocation of labor dedicated to Louisiana.
The Corps and LDEQ how would labor/construction investment be allocated across parishes and block groups? Are there parishes and block groups that will bear an undue amount of project and pipeline risk and receive a limited allocation of wages?

Job Creation

• What percentage of projected investment is allocated to labor generally? What is the allocation between temporary and long-term employment?

• How sticky is the labor demand and wage rate? How easily can the project developer retrench labor projections? If, for example, the cost of steel increases because of protectionism, will this affect project employment or viability? What is the baseline employment (i.e., the level and allocation of employment that is structurally required)?

• Will the pipeline developer be contractually bound to hire some amount of Louisiana labor?

• Who is supplying the pipe? Who is fabricating the steel? Who is pouring the concrete? Who is preparing the 'dirt work'? Who is supplying the steel itself? How much of the materials have already been purchased? What percentage of the projected investment has already been committed?

• Who is designing the project or pipeline? Who is inspecting the project or pipeline? How many jobs are created in making sure the construction process is followed? We generally lack those jobs in Louisiana unless agencies enforce the law. Our members have been approached by company representatives for employment in these positions during the construction process, so the companies realize that they are needed. Agencies must create the jobs.

• What is the breakdown between higher-wage and lower-wage jobs generally and across states?
• What sources have been relied upon for jobs projections?

Macro Economics
• Formosa is far more reliant on site development than Louisiana needs this development.
• The River is not going anywhere. The value of a clean river (billions of dollars in fisheries economy, drinking water replacement value) is worth far more than the benefits of the project.

SUMMARY

1. **The Project is inconsistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast and a 2016 Executive Order.**

2. **Water dependence of the Project has not been demonstrated by the Applicant.**

3. **Project Alternatives have not been addressed.**

4. **Direct, indirect, secondary, and cumulative impacts must be fully considered.**

5. **The Applicant must develop a spill-response plan, and local floodplain officials should be included in the notification of this permit, since the proposed site sits within an area vulnerable to flooding.**

6. **The Public Notice fails to adequately describe the mitigation plan.**

7. **The final plan, with mitigation plan included, should be made available to the public before any permits are granted.**

8. **We question whether any wetland mitigation could completely replace the functions and values lost.**

9. **Neither Nationwide Permit 12 nor any other Nationwide Permit can be used for construction of any significant portion of the Project.**

10. **The Project does not appear to offer any public benefit or be in the public interest.**

In conclusion, the Corps and LDEQ must take the mandates put forth by the Clean Water Act, Louisiana's Comprehensive Master Plan for a Sustainable Coast, Executive Orders, and the Louisiana Supreme Court seriously. These responsibilities are only heightened when faced with the inadequacy of the Applicant's public documents.

The Applicant has not shown that the basic purpose of the Project is water-dependent, has not demonstrated a lack of practicable alternatives, has not assessed significant impacts, has only vaguely described plans for compensatory mitigation, and has not explained how the Project offers public benefit or is in the public interest. The Benefits have not been proposed to the communities receiving the disparate impact, health burden, and cost burden of the project. It is discriminatory in effect if not intent. We ask for some consideration.

More than decade since the 2005 hurricane season, Gustav, Isaac, and the annual heavy rains in St James and nearly every Parish in the State, GRN is beyond alarmed by the coastal wetland destruction occurring throughout Louisiana and the Gulf Coast. We hope the Corps and LDEQ and LDNR will act upon the above comments accordingly.

In order to keep us and the public properly informed, we request notification of denials, approvals, and/or changes to the Applicant's request for a 404 permit and WQC. As previously stated, we see pressing needs to require a complex justification and a EIS and to hold public hearings to fully weigh the impacts of continued impacts to wetland forests in these African American river towns in St James Parish.

We look forward to a written response.

For a healthy Gulf,
[sent via e-mail]

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