JEFF LANDRY
GOVERNOR

DUSTIN H. DAVIDSON
SECRETARY

DEPARTMENT OF CONSERVATION AND ENERGY
OFFICE OF PERMITTING AND COMPLIANCE

November 18, 2025

To: File P20190900, Commonwealth LNG LLC

Re: Revised Basis of Decision

Attached please find the Revised Basis of Decision pursuant language of Honorable Penelope Richard October 23, 2025 ruling in *Sierra Club, et al vs. Louisiana Department of Energy and Natural Resources*, Docket No. C-1021127. Coastal Use Permit No. P20190900 is hereby re-issued.

Keith Lovell

Executive Director, Office of Permitting and Compliance
Louisiana Department of Conservation and Energy

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GOVERNOR

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SECRETARY

DEPARTMENT OF CONSERVATION AND ENERGY
OFFICE OF PERMITTING AND COMPLIANCE

Memorandum

November 18, 2025

To: File P20190900, Commonwealth LNG LLC

Approved By: Keith Lovell, Executive Director
Kyle F. Balkum, Administrator

Prepared By: Christine Charrier, Manager
Lorna Putnam-Duhon, Coastal Resources Scientist
Matthew O'Neal, Coastal Resources Scientist[1]
LDCE - Office of Legal Services

Re: Revised Basis of Decision

I. APPLICATION DESCRIPTION

The activities under consideration for authorization and issuance of this Coastal Use Permit (CUP) are described as:

> Proposed construction of a natural gas liquefaction (LNG) and export facility, which includes a 15,769' long, 42" diameter natural gas pipeline, six gas liquefaction processing units, six LNG storage tanks and one marine loading berth. Approximately 112,000 cubic yards of concrete, 141,000 cubic yards of rock, 9,750 cubic yards of gravel, 240,000 cubic yards of sand, 50,150 cubic yards of soil, and 880,000 cubic yards of structural fill will be hauled in for use as fill material. Approximately 2,522,000 cubic yards of native material will be excavated and placed onsite, and 90,000 cubic yards will be excavated and hauled offsite.

II. CHRONOLOGY

The CUP Joint Permit Application (JPA) for the proposed project was submitted to the Louisiana Department of Energy and Natural Resources (Department), Office of Coastal Management (OCM)[2] by Commonwealth LNG LLC (Applicant) on August 30, 2019. The JPA was deemed complete on December 10, 2019.

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[1] Separated May 26, 2023.

[2] Pursuant to Act 458 of the 2025 Regular Session of the Louisiana Legislature and effective as of October 1, 2025, the Louisiana Department of Energy and Natural Resources has been renamed the Louisiana Department of Conservation and Energy and the Office of Coastal Management has been reorganized into the Office of Permitting and Office of Enforcement. For consistency's sake the previous names of the department and office are used throughout.

OCM requested additional information from the Applicant on January 17, 2020, January 23, 2020, February 4, 2020, February 20, 2020, April 9, 2021, May 11, 2021, [3] August 25, 2021, September 20, 2021, October 14, 2021, October 26, 2021, July 12, 2022, and November 3, 2022, in order to accurately and fully evaluate the proposed activity and its potential impacts. Responses to OCM's requests for information were provided on January 17, 2020, January 24, 2020, January 27, 2020, February 5, 2020, February 6, 2020, April 23, 2021, May 28, 2021, September 8, 2021, September 24, 2021, October 19, 2021, November 12, 2021, and November 10, 2022.

The applicant provided information sufficient to complete the Hydrologic Modification Impact Analysis on February 6, 2020. OCM determined that the project would have little or no negative impact on the local hydrology.

On December 22, 2021, OCM approved the first Needs, Alternatives, and Justification (NAJ) analysis for the project.

First Public Notice Period

On April 30, 2020, OCM placed the proposed project on public notice in accordance with La. Admin. Code Tit. 43, Pt. I, § 723(C). During this formal 25-day notice period, no comments were received. On August 27, 2021, OCM received a joint letter from non-governmental organizations (NGOs) Healthy Gulf Network, Sierra Club, Louisiana Bucket Brigade, Turtle Island Restoration Network, Center for Biological Diversity, and Audubon Society of Louisiana objecting to the proposed project and requesting a public hearing. On September 7, 2021, OCM received a letter from RESTORE objecting to the proposed project. The Applicant submitted a response to these comments on October 18, 2021.

OCM also received comments from four state agencies (Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana Office of State Lands, Louisiana Department of Environmental Quality (LDEQ), Coastal Protection and Restoration Authority (CPRA), Louisiana State Historic and Preservation Office (SHPO)), and the Cameron Parish Local Coastal Zone Management Office) regarding potential impacts to their respective resources.

On March 3, 2022, OCM received an objection letter from a private citizen. Based on this objection letter, OCM requested additional information from the Applicant on March 15, 2022. A response was received on March 22, 2022, and deemed sufficient.

Second Public Notice Period

As the first public notice was published more than two years prior, OCM determined a new public notice was necessary. As such, OCM placed the proposed project on public notice on November 22, 2022, in accordance with LAC 43, Pt. I, § 723(C). During the formal 25-day notice period, 420 public comments were received, including comments from one state agency (SHPO), three NGOs, and 412

[3] All documents received, reviewed and considered relative to this CUP Application and specifically, those referenced in this decision document, are included in the Administrative Record and incorporated herein by reference as if printed in extenso. The comments/concerns correspondence received during (and after) the public comment period additionally can be found in the permit file on SONRIS or through the SONRIS Document Access system.
See "P20190900_Plat_Corrections_Request_5-11-21.pdf" comment dated 5/27/21.

private citizens. Of those received, 418 objected to the project. The Applicant submitted a response to the objections on January 5, 2023.

Public Hearing

OCM conducted a public hearing on March 1, 2023, at the Cameron Parish Police Jury "West Annex" building in Cameron, Louisiana, in order to allow interested parties further opportunity to provide comments. Approximately thirty-two members of the public attended. Fifteen speakers were registered, while one speaker was unregistered. Six speakers were parish officials who spoke in support of the project, six speakers were members of the public who spoke on behalf of NGOs (Healthy Gulf, Louisiana Wildlife Federation, Louisiana Ornithological Society, National Audubon Society, Louisiana Bucket Brigade, Sierra Club) in opposition to the project, and four speakers were private citizens who spoke in opposition to the project. Two exhibits were submitted, both in opposition to the project.

OCM continued to receive comments from members of the public and various NGOs objecting to the proposed project. NGOs who submitted additional comments include Sierra Club, RESTORE, The Gulf Coast Bird Club, National Audubon Society, Orleans Audubon Society, Louisiana Wildlife Federation, and Louisiana Ornithological Society. In response to comments received during and immediately after the public hearing, OCM requested additional information from the Applicant on March 9, 2023, to which a response was received on March 13, 2023, and deemed sufficient.

Approximately 770 comments were received throughout the permit review process including those received during the two formal 25-day notice periods described above. Of those received, 24 were from NGOs in opposition of the project, 709 were from private citizens in opposition of the project, seven were from federal agencies and 26 were from state and local agencies. A summary of the comments received outside of the public notice periods, including the comments received during the March 1, 2023, public hearing can be found following the remaining discussion of the permitting process (see Section II.A).

Chronology after Public Hearing

OCM requested additional information from the Applicant on February 14, 2023, May 3, 2023,[4] May 23, 2023, May 20, 2024,[5] June 24, 2024,[6] July 11, 2024,[7] and July 12, 2024,[8] in order to accurately and fully evaluate the proposed activity and its potential impacts. Responses to OCM's requests for information were provided on February 15, 2023, May 15, 2023,[4] May 24, 2023, June 11, 2024,[9] June 24, 2024,[6] June 27, 2024, July 11, 2024,[7] and July 15, 2024.[8]

In addition to the original HMIA approved on February 6, 2020, the Applicant submitted a revised water control structure (WCS) operational and management plan on January 6, 2023. OCM approved

[4] See "P20190900_agent_correspondence_BUDM_impacts_5_15_23.pdf" comment dated 5/17/23.
[5] See "P20190900_Additional_information-requested-5.20.24.pdf" comment dated 5/24/24.
[6] See "P20190900-OCM_Response-Applicant_Submittal_of_Rev_2_Mitigation_Plan.pdf" comment dated 6/24/24.
[7] See "P20190900-Mitigation_Project_Commencement-Completion_Timelines_Resolved.pdf" comment dated 7/11/24.
[8] See "P20190900_clarification-of-local-emergency-response-MOUs.pdf" comment dated 7/15/24.
[9] See "P20190900-OCM_Response-Applicant_Submittal_of_Requested_Settlement_Curves.pdf" comment dated 6/11/24.

the WCS plan on January 6, 2023, and has determined the project will have little or no negative impact on the local hydrology.

The first NAJ approved a total of 1,154.2 acres of waterbottom and 125.3 acres of emergent wetland impacts, while the second NAJ was approved with a total 529.2 acres of waterbottom and 356.3 acres of wetland impacts. There was only a minimum increase in upland impacts (20.3 to 29.7 acres) and no change to the quantity of forested wetland impacts (14.3 acres). The most significant changes in waterbottom and emergent wetland impacts are due to a change in the end use of the dredge material from the creation of the marine berth. Originally, the 47 acres of dredged material was to be spread over 1,100 acres of waterbottoms offshore. Offshore disposal was determined not to be beneficial. Therefore, in the most recent and final design of the project, the 47 acres of dredged material will be beneficially re-used to create brackish marsh habitat. In the creation of this new marsh, approximately 423 acres of waterbottoms and 231 acres of emergent wetland will be impacted. The change to beneficially use the dredged material accounts for the significant changes seen in the waterbottom and wetland impacts. As the change is a positive one that will result in the creation of new marsh and the majority of the wetland impacts are temporary, the OCM approved the updated NAJ Analyses for the project on July 2, 2024.

The Applicant submitted a signed Applicant/Landowner Intent Form on January 12, 2022. OCM approved the Applicant's proposed mitigation plan on January 14, 2022. The proposed mitigation plan approval letter was revised on July 15, 2022, due to coordination with the U.S. Army Corps of Engineers, New Orleans District (USACE) in order to avoid double mitigation by the Applicant. OCM again requested the Applicant submit confirmation of purchase letters from approved mitigation banks. The Applicant's proposed mitigation plan approval letter was revised again on April 28, 2023, due to a lack of available LDENR fresh marsh habitat within the Calcasieu/Sabine hydrologic basin; OCM again requested that the Applicant submit confirmation of purchase letters from approved mitigation banks. On May 2, 2024, the Applicant uploaded revised plats that included the request to create and maintain an area of brackish marsh habitat within the BUDM area as compensatory mitigation for the impacted brackish marsh. OCM approved the Applicant's revised mitigation plan and updated the required acreages for compensatory mitigation on May 13, 2024. Purchase confirmation of LDENR fresh marsh and Bottomland Hardwood habitat mitigation credits was received on June 26 and 28, 2024. Updated plats with a final version of the Mitigation Plan for brackish marsh habitat was received on June 27, 2024. Final approval of Applicant's Mitigation Plan for the project was issued on July 1, 2024.

Litigation and Trial Court Judgment

On September 4, 2024, OCM was served with a petition for judicial review filed by the Sierra Club, Louisiana Bucket Brigade, and Turtle Island Restoration Network challenging OCM's issuance of CUP No. P20190900 ("CUP"). Following trial, on October 23, 2025, the Honorable Penelope Richard of Louisiana's 38th Judicial District Court, signed a ruling vacating the CUP. Specifically, the Court's Judgment reads in pertinent part,

> "IT IS ORDERED, ADJUDGED AND DECREED that the Court rules in favor of Sierra Club, Louisiana Bucket Brigade, and Turtle Island Network and against Louisiana Department of Energy and Natural Resources and Commonwealth LNG, LLC. This matter is remanded to the Louisiana Department of Energy and Natural

> Resources to allow consideration of the secondary and cumulative impacts, specifically the facility's impact on climate-related change in the coastal zone, if any, in conjunction with the other LNG facilities in the area, as well as environmental justice issues. Coastal Use Permit No. P20190900 is vacated until such time as the Louisiana Department of Energy and Natural Resources has considered these issues and makes a finding that the benefits of the project outweigh its costs to the community and reissues the permit. Costs are assessed to the defendants equally."

Without conceding the correctness of the trial court judgment, nor in anyway limiting the OCM's rights to challenge the trial court's conclusion, and reserving all possible defenses and legal arguments in this matter and others, OCM determines that it being in the best interest of the State to not delay this matter further does here provide additional consideration of the record to specifically analyze "the facility's impact on climate-related change in the coastal zone, if any, in conjunction with the other LNG facilities in the area, as well as environmental justice issues." Therefore, this revised basis of decision is issued, supporting the reissuance of CUP # P20190900 for the reasons set forth herein.

A. Summary of Comments Received During Public Notice Period from 11/22/2022 – 12/16/2022

Comments Received in Opposition of the Project from NGOs

1. Concerns that the proposed project will distort species dominance and further contribute to the loss of the freshwater marsh ecosystem, taking this region further away from its original equilibrium.

2. Concerns that the proposed dredging activities will increase turbidity in the water, which will disrupt major migratory pulses by blinding and suffocating local marine life.

3. Concerns the proposed floodwall may not be properly engineered and could fail in the face of a storm surge.

4. Concerns that the proposed turning basin may be too small for the Applicant's LNG tankers.

5. Concerns that the Applicant has not disclosed the source of the gravel/sand that will be used to fill their proposed geotextile sacks, and that said fill may potentially be taken from environmentally sensitive areas.

6. Concerns that the proposed slurry pipeline and/or BUDM activities could adversely affect the Wilkerson Landfill Louisiana Pollutant Discharge Elimination System (LPDES) outfall.

7. Concerns that the Applicant's proposed slurry pipeline is too close in proximity to the proposed Venture Global CP2 slurry pipeline, and that the combined effects of the two pipelines should be considered together and not separately.

8. Concerns that the Applicant's proposed BUDM area on the Cameron Prairie National Wildlife Refuge (CPNWR) overlaps with Venture Global's proposed dredged material placement area as depicted in P20211131.

9. Concerns that the JPA lacks the necessary information for OCM to conduct an adequate cost-benefits analysis, which OCM must do to comply with its public trust duties under the Louisiana Constitution Article IX, Section I.

10. Concerns that the proposed project is inconsistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast, as well as the Louisiana State and Local Coastal Restoration Management Act. Under Executive Order 2016-09, LDENR must also ensure that its decisions are consistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast.

11. Concerns that the Applicant has not provided sufficient information regarding potential environmental impacts from threats such as terrorism, sea-level rise, explosions, pipeline leaks, land subsidence, hurricanes, climate change, etc.

12. Concerns that the Applicant has not provided adequate information on adverse impacts to coastal resources, and has failed to avoid these adverse impacts to the maximum extent practicable.

13. Concerns that the Applicant's mitigation credit purchase proposal is not sufficient to offset the permanent impacts to brackish marsh, intermediate marsh, Bottomland Hardwoods, and essential fish habitat (EFH).

14. Concerns that the JPA, November 2022 Public Notice, and the Commonwealth LNG CUP docket do not include the October 2022 BUDM plan.

15. Concerns that the proposed dredge area is located in a navigation channel with a "long history of water quality and chemical contaminant problems". The dredged material should be tested for contaminants before it is deposited in the proposed BUDM area.

16. Concerns that the Applicant's justification and alternatives analysis is inadequate and they rejected viable alternative sites that would result in fewer adverse impacts to coastal resources.

17. Concerns that the proposed impacts to coastal chenier habitat will exacerbate the adverse effects of storm surges and flooding, and will degrade valuable habitat for wildlife such as fish, blue crabs, shrimp, oysters and migratory birds.

18. Concerns that the proposed project will adversely impact EFH. The National Marine Fisheries Service (NMFS) objected to the Applicant's Stormwater Culvert Control Plan, stating that the plan "does not adequately identify the purpose and need of the [Water Control System], only stating it is needed to 'maintain appropriate water and salinity levels'."

19. Concerns that the proposed project could adversely affect the Eastern Black Rail (EBR), which was federally listed as threatened under the Endangered Species Act in November 2020.

The proposed project will permanently impact elevated salt marsh, aka "high marsh," which is the EBR's preferred habitat. LDENR cannot rely on the U.S. Fish and Wildlife Service's (USFWS) Biological Opinion (BO) report, as the report is inadequate and fails to consider fully the impacts of the proposed project on the EBR.

20. Concerns that the Applicant has not provided enough information for OCM to conduct and environmental justice review, or review cumulative impacts from other oil and gas facilities in the area.

21. LDENR should hold a public hearing in Cameron Parish to give the public and citizens directly affected by the proposed project a chance to comment on the application.

22. Eighteen exhibits were submitted as part of the joint letter from Sierra Club and Healthy Gulf Network.

Comments Received in Opposition of the Project from Private Citizens

23. Concerns that the Applicant has not demonstrated that it has done everything possible to avoid harming the region's environment, and has not adequately considered alternative sites and methods.

24. Concerns that the proposed project will destroy valuable wetlands and cheniers, which serve as vital habitat for wildlife and natural protection from storm surges.

25. Concerns that the proposed project will harm the already threatened EBR.

26. Concerns regarding adverse impacts to the shoreline from dredging in the Calcasieu Ship Channel.

27. Concerns that the proposed project site is "very vulnerable to storm surges, flooding, and damage that could impact the whole region."

28. Concerns that the proposed LNG facilities will adversely impact environmental justice communities in the region by exposing residents to "high rates of cancer-causing air and water pollutants."
29. Concerns that the proposed LNG facilities will exacerbate the effects of climate change and produce harmful greenhouse gases.

30. Concerns that the fossil fuel industry as a whole is destroying the environment.

31. Concerns that corporate greed is being put before the health of people and the environment.

32. Concerns that the Applicant has provided inaccurate information to state and federal agencies with regard to impacts to EFH and the adjacent area drainage.

33. Concerns that the Applicant will not begin maintaining water and salinity levels until the three-year construction timeline is completed and that existing habitat will be permanently and adversely impacted during this three-year period.

34. Concerns that the NMFS has objected to the proposed Stormwater Culvert Water Control Plan due to its potential impacts on EFH.

35. Concerns that the Applicant's October 2022 Hydraulic Impact Analysis Report is insufficient and will "directly impact EFH and tidal habitat support functions to hundreds of acres of marsh by limiting tidal water ingress volumes and salinity levels, and reducing/removing fisheries access to the marsh complex west of the facility."

Comments Received From State Agencies

36. State Historic Preservation Office recommended that the Applicant perform a Phase I cultural resources survey of the unsurveyed portions of the proposed project area to determine if the project could have impacts on unrecorded archaeological sites.

B. Summary of Comments Received during the March 1, 2023, Public Hearing

Comments Received in Opposition of the Project from Private Citizens

37. The proposed dredging is inconsistent with the Master Plan for Coastal Louisiana.

38. Marketing of LNG to foreign markets will increase costs to families making the return of unhoused hurricane refugees to the area financially impossible.

39. Dredging will lead to a further upstream incursion of saltwater from the Gulf.

40. Sludge is washing ashore from nearshore sediment disposal areas used by previous projects.

41. The operation of the proposed use itself as well as use of the product handled by it will contribute to greenhouse gas in the atmosphere, which will have deleterious effect on coastal habitat.

42. Disturbing the sediment by dredging, operation, and maintenance of the sediment pipeline may disturb contaminants from a nearby National Priorities List site and disburse them, contaminating previously unspoiled areas.

43. Toxic compounds and metals may be liberated with the disturbance of sediment and cause contamination of air and groundwater.

44. The proposed use will destroy a significant portion of the federally threatened EBR habitat and impact other wildlife and aquatic species.

45. The proposed use will destroy habitat important to commercial fishing.

46. Thermal oxidizer use by a nearby LNG facility emits what appears to be unpermitted toxic air pollution, and the noise from its operation is a noise pollution source.

47. The Coastal Use Guidelines must be followed in reviewing permit applications.

48. As proposed, the use will interfere with the natural drainage of the area, destroying the chenier/estuary habitat.

49. The proposed use will exacerbate climate change.

50. Proposed mitigation for the use will not be an adequate replacement for the impacts to coastal habitat.

51. Louisiana is not capable of enforcing its laws.

52. An existing LNG facility operating in the area is not reporting accidents.

53. Toxic emissions from the proposed use are equal to multiple coal plants.

54. Storm surge mitigation structures will function to the detriment of neighbors.

Comments Received in Support of the Project

55. Cameron Parish Tax Assessor commented on the importance of tax revenues that the project would provide the parish.

56. Cameron Parish Port District member commented on the jobs, businesses and infrastructure improvements that the project will bring.

57. Cameron Parish Police Juror commented on the job creation and increased taxes to benefit schools, drainage, fire department, and infrastructure. Furthermore, they believed the facility's exterior wall and dredge material placement would reduce storm surge.

58. Cameron Parish Port District Commissioner and School Board member commented that the project is needed for family survival. They stated that it would benefit schools and ports and create jobs. They also said the LNG company had taken steps to protect the environment.

59. Cameron Parish Port District member commented that increased taxes would help the parish save their coast.

60. Cameron Parish Police Juror commented that past storms have wiped out families, homes, and livestock, and the LNG companies have brought back jobs, incomes, and families.

C. Summary of Comment Received Outside of Comment Periods

Comment received outside of the comment periods were read and considered.

Comments Received in Opposition of the Project from NGOs

61. Concerns that the proposed project will destroy critical habitat that supports approximately 30 EBR.

62. Concerns that the proposed project is inconsistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast, will directly affect 410 acres of wetlands, and directly conflicts with an already-completed $45 million coastal restoration project that was funded by taxpayers. Destruction of these wetlands will put communities at risk and weaken the State's storm defenses in an area that is still recovering from previous storms.

63. Concerns that oil and gas companies have a poor record of compliance with the Coastal Zone Management Act and state and federal agencies have failed to enforce the revegetation of temporary impacts.

64. Concerns that the proposed project would adversely affect nearby environmental justice communities.

65. Concerns that the Applicant has not conducted an adequate Alternatives Analysis or adequately demonstrated why this project is justified. The proposed project is located in the same vicinity as five other proposed or existing LNG facilities.

66. Concerns that the Applicant has not provided adequate plans for disaster response scenarios.

67. Concerns the Applicant's current mitigation plan is inadequate and fails to recognize the long-term destruction of dredging projects on Louisiana wetlands.

68. Concerns that the proposed LNG facility will contribute 3.54 million tons/yr of CO_2 equivalent, which will accelerate climate change in the region. The proposed emissions directly conflict with Louisiana's goal of achieving net zero greenhouse gas emissions by 2050.

69. Concerns that dredging activities are detrimental to wetlands and the wildlife communities that live there and the deposition of dredged material in an attempt to create viable marsh cannot offset the immediate and long-term impacts to local plant and wildlife communities.

70. Concerns that the placement of dredged material in the proposed offshore location will exacerbate the problem of thick, turbid water that must be endured by families visiting beaches along the Gulf Coast. In addition, the increased turbidity will be detrimental to aquatic life.

Comments Received in Opposition of the Project from Private Citizens

71. Concerns that the proposed project will adversely affect the drainage of the neighboring property, which will devastate the wetlands adjacent to the project site.

72. Concerns that the proposed project will destroy valuable wetlands and EFH. The proposed project will also destroy valuable cheniers, which provide natural protection from storm surges.

73. Concerns that the proposed project does not comply with Title 43 guidelines.

74. Concerns that the proposed project will destroy critical habitat that supports approximately 30 EBR, which is an estimated 2% of the entire EBR population.

75. Concerns that the proposed mitigation plan is prone to failure because no one has successfully restored or recreated high marsh in the region.

76. The Applicant should relocate the proposed project to one of the suggested alternative sites, which will result in fewer impacts to wetlands, cheniers, and wildlife communities.

77. Concerns that the project overlaps with existing CPRA projects.

D. Summary of Comments Received from State and Local Agencies

78. CPRA provided comments of no objection for the following projects: CS-0004-A, CS-0033, CS-0020, CS-0065, CS-0079, CS-0087, CS-0088, Map ID: 004.MC.04 Project Name: Mud Lake Marsh Creation, Map ID: 004.SP.05a Project Name: Gulf Shoreline Protection (Calcasieu River to Rockefeller)

79. CPRA uploaded comment with respect to CS-0059 on January 9, 2020 stating that the proposed BUDM disposal area site will impact the drainage in Marsh Creation Area 4, and requested details on how current drainage will be maintained. The Applicant provided the requested information to CPRA and CPRA subsequently uploaded a comment of no objection for CS-0059 on April 8, 2020.

80. CPRA uploaded comment with respect to CS-0087 on July 15, 2022, stating that "surrounding area drainage and conveyance within the lake rim borrow canal must be maintained and containment dikes must be degraded following initial settlement." The Applicant revised the drawings to accommodate CPRA's request, and CPRA subsequently uploaded a comment of no objection for CS-0087 on September 27, 2022.

81. LDWF recommended that chenier impacts be avoided to the greatest extent practicable and that unavoidable impacts to cheniers be mitigated for.

82. LDWF requested the Applicant clarify the need for channel widening and reconsideration of Alternative Site 1.

83. LDWF, Wildlife Diversity Program provided conditions for the piping plover, the *Rufa* subspecies of red knot, manatees, EBR, and bird nesting colonies.

84. LDWF provided recommendations for monitoring the discharge points of the hydraulic dredge pipeline, mitigation measures for chenier impacts, right-of-way (ROW) width for the proposed 30" pipeline, and conditions for erosion control measures and culvert installation.

85. LDWF provided a condition "concerning dredging of fill sand and fill material from water bottoms of the State of Louisiana and severance royalties".

86. LDWF provided a comment that was not in complete agreement with some of the findings in the USFWS's BO report.

87. The Louisiana Office of State Lands uploaded comment stating a Commercial Water Bottom Lease is required.

88. Cameron Parish Police Jury uploaded a letter of no objection.

Comments received were generally focused on one or more of the following topics:

- Alternatives
- Social and Economic Benefits
- Beneficial Use of Dredged Material
- Evaluation of Dredged Material
- Floodwall/Storm Surge Wall
- Prevention, Safety, Control and Contingency Planning
- Commercial Fishing
- Eastern Black Rail
- Cheniers
- CPRA and the State's Master Plan
- Environmental Justice
- Climate Change
- Impacts to Fish and Wildlife Species and Their Supporting Habitats
- Compensatory Wetland Mitigation
- Cultural Resources Surveys
- Air and Noise Pollution

All comments received were given a full and fair consideration by OCM. Furthermore, all comments were sufficiently discussed and addressed in the Review Process (Section III) and Coastal Use Guidelines Analysis (Section IV) below.

III. REVIEW PROCESS

There are several facets of the review process to consider, including the direct impacts to coastal resources and coastal waters; the cumulative, secondary, and indirect impacts to coastal resources and

coastal waters; and the impacts to the public that will occur as a result of the project. Evaluating these impacts and the proposed project's conformance with the Coastal Use Guidelines (Guidelines) are required in a typical CUP JPA review process.[10]

The direct impacts of the proposed project in the coastal zone include effects upon approximately 929.5 acres of habitat. Approximately 167.2 acres will be impacted by the LNG facility, feed natural gas pipeline, and associated gas line structures. The remaining 762.3 acres of impacts will be for the dredging of 47 acres of waterbottoms within the Calcasieu Ship Channel for a marine berth and the subsequent creation of a 640-acre BUDM area that will be created from the beneficial use of the marine berth dredge material. A slurry pipeline will be installed to transport the dredge material from the project site to the BUDM area. This slurry pipeline is anticipated to temporarily impact 9.6 acres of uplands, 33.3 acres of waterbottoms, and 4.5 acres of emergent wetlands. The BUDM area will be constructed in a manner conducive to the creation of brackish marsh. The dredged material will be used to create 423 acres of emergent marsh habitat on existing waterbottoms and will temporarily impact 217 acres of existing marsh habitat within the BUDM area. Additional impacts within the BUDM area include temporary impacts to 5.3 acres of emergent wetlands and 18.3 acres of waterbottom for construction of earthen containment dikes and permanent impacts to 4.2 acres of emergent wetlands for construction of a conveyance channel. A 25-acre area of brackish marsh habitat will be created within the BUDM area to serve as compensatory mitigation for the permanent impacts to brackish marsh resulting from the proposed project.

Of the 929.5 acres of direct impacts, approximately 21.4 acres of uplands and 8.3 acres of upland range habitat will be impacted. Pursuant to 723.B.2, such activities do not normally have direct and/or significant impacts on coastal waters. Based on the information provided by the Applicant and a review by OCM staff, it has been determined that the proposed project impact in the CZ occurring in uplands qualifies for the exemption from OCM permitting requirements pursuant to La. R.S. 49:241.34(A)(1) and (2). The remaining 899.8 acres includes 529.2 acres of waterbottoms, and 370.6 acres that have been classified as vegetated wetlands. The vegetated wetlands can be broken into 0.4 acres of fresh marsh, 73.1 acres of intermediate marsh, 282.8 acres of brackish marsh habitats, and 14.3 acres of forested wetlands.

Under the LCRP, for projects that impact coastal resources, an analysis of the Needs, Justification and Alternatives is required. In general, the greater the adverse impacts to coastal resources, the greater the need for analysis of the required justification and alternatives to ensure that the project's benefits outweigh the adverse impacts. All unavoidable wetland impacts to coastal resources require compensatory habitat mitigation. This process is achieved by a review and analysis of the proposed project for conformance with the Guidelines of the LCRP.

Finally, this basis of decision document should be read in its entirety as analysis discussed under one section of this document may form part of the basis of the analysis in another section of this document. The headings and titles found throughout this document are intended to help organize it, but should not be interpreted as otherwise changing or limiting any analysis to that section alone.

[10] Louisiana Admin. Code Tit., Pt. I, §701 *et seq.* The Coastal Use Guidelines are the regulatory embodiment of the Louisiana Coastal Resources Program Final Environmental Impact Statement, U.S. Department of Commerce, 1980. These Guidelines, FEIS, and the State and Local Coastal Resources Management Act of 1978 (Louisiana R.S. 49:214.21 *et seq.*) are made a part of this decision document by reference as if printed herein *in extenso*.

A. Needs, Alternatives and Justification

Due to the nature, location, and scope of the project proposed, an Environmental Impact Statement (EIS) was prepared by the Federal Energy Regulatory Commission (FERC) to assess potential environmental impacts associated with the proposed project. The Final Environmental Impact Statement (FEIS) has been incorporated into the electronic record for the CUP JPA.[11] OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

The need for the project, as stated in Step 8e of the JPA, is to export domestic natural gas as LNG in response to increasing global demand for an inexpensive, less polluting fuel source. It is stated that the need for such exports is supported by studies commissioned by the U.S. Department of Energy's Office of Fossil Energy (DOE). A 2018 DOE-sponsored study determined that U.S. natural gas exports have a positive effect on domestic economic growth and domestic consumer welfare. As stated in the *Office of Coastal Management Guide to Developing Alternatives and Justification Analyses*,[12] exploration, production, and transportation of oil and gas has been determined to be an issue of national significance. Therefore, based upon the national significance and because the project, as authorized pursuant to this CUP and other applicable water and air quality laws, standards and regulations, is designed to avoid or minimize adverse impacts to the maximum extent practicable, the proposed project is justified.

Site Alternatives

A review of alternatives to identify lesser damaging alternative sites, pipeline routes, site configurations, and/or construction methods is required. The Applicant provided an initial alternative analysis in their JPA Support Document (JPA-SD) found in Step 13 of the JPA submitted on August 30, 2019.[13] After review of the analysis provided, OCM requested additional information concerning justification and potentially less damaging alternatives within the coastal zone on April 9, 2021, October 14, 2021, and October 26, 2021. Additional information was also requested during a conference call between OCM and the Applicant on November 5, 2021. To address these concerns, the Applicant submitted additional information on April 23, 2021, October 18, 2021, and November 12, 2021.

Through the alternatives analysis provided, the Applicant evaluated the proposed facility site as well as four other alternative sites in order to identify the most environmentally sound, technically feasible, and cost-effective location for the proposed facility. Alternative sites were evaluated within the JPA-SD and in supplemental information provided on April 23, 2021, October 18, 2021, and November 12, 2021. Alternatives were compared based on an evaluation of multiple criteria, including:

- sufficient acreage to accommodate the LNG facility
- position adjacent to a navigational channel with sufficient depth to accommodate LNG carriers of up to 216,000 m^3 capacity.
- waterfront acreage with a minimum of 1,500’ of waterfront access,
- access to natural gas supply within reasonable pipeline distance,

[11] See 2/14/23 of comments: https://sonlite.dnr.state.la.us/ords/f?p=129:560:::::P560_CUP_NUM:P20190900:
[12] https://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined_Document_rev1_Mar2020.pdf
[13] See “Commonwealth_JPA_Support_Document_08_30_2019u.pdf” in Step 13 of the JPA.

- commercial availability,
- proximity to residences and/or population centers,
- construction access,
- turning basin complexity,
- impacts to channel during construction activities and module off-loading operations,
- presence of streams found in the National Hydrography Dataset,
- acreage of National Wetlands Inventory (NWI) wetlands and other habitat types,
- known historic sites listed in the National Historic Register,
- acreage of AE and VE flood zones,
- presence of critical habitat of protected species,
- site access, and
- whether or not the site has been previously disturbed.

Although the proposed facility site is in a disadvantageous flood zone, has the largest percentage of wetland habitat impacts relative to the size of the location, impacts chenier habitat, and adversely impacts critical habitat of the EBR, the proposed site meets the minimum overall evaluation criteria. Additionally, the proposed facility site remains commercially available for LNG development and requires the "shortest transit from the Gulf of Mexico, thus reducing impacts from vessel traffic."[14] Furthermore, the proposed site requires less dredging than five of the eight alternatives, thus minimizing impacts to existing surface water and aquatic resources. Therefore, FERC concluded that, "Based on the site-specific analyses of the alternative sites' size and availability, potential for marine operations, infrastructure, and environmental and environmental justice factors, we conclude that alternatives 1-8 would not provide significant environmental advantages to the proposed Project location."[14] The alternative sites did not provide any evidence of a "significant environmental advantage to Commonwealth's proposed site."[15] OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

In addition to alternative sites for the proposed LNG facility, the JPA-SD also considered alternative routes for the proposed 42" natural gas pipeline, which will have sufficient capacity to transport up to 1.44 billion ft^3 of natural gas per day to the LNG facility. Through the alternative analysis provided, the Applicant evaluated various alternatives, including the proposed route, and three other alternative routes in order to identify the most environmentally sound, technically feasible, and cost-effective route for the transportation of natural gas to the LNG facility. Alternative routes were evaluated within the JPA-SD. Alternatives were compared based on an evaluation of several criteria, including:

- total length of route,
- the route's positon parallel to existing rights-of-way,
- length of route through NWI wetlands and other habitat types,
- number of roads crossed,
- number of features found in the National Hydrography Dataset (e.g., lakes/ponds and swamp/marsh), and
- number of property holders.

[14] See page 3-45, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[15] See page 5-419, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

Based on the evaluation of the criteria above, it was determined that none of the alternative pipeline routes presented a significant environmental advantage compared to the proposed route; thus, the proposed route was selected. OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

Wetland impacts, as a result of the natural gas pipeline construction, were minimized via selection of a natural gas pipeline route that minimized the length of wetland crossings to the extent practicable, use of horizontal directional drilling (HDD) at water body and highway crossings, implementation of FERC Procedures during construction, segregation of the top one foot of topsoil, and minimization of the length of time that the topsoil is segregated and the trench is open. Additionally, the natural gas pipeline construction ROW and temporary workspaces will be restored to pre-project conditions in accordance with the FERC Plan and Procedures following installation of the natural gas pipeline and backfilling of the pipeline trench. These restoration efforts will include planting a mixture of vegetative species identified by the Natural Resources Conservation Service as being supported by the soil types along the natural gas pipeline route.

The Applicant also considered an alternative site configuration in the JPA-SD. The initial site configuration (Table 3.2-1, Plot Plan Rev. B) was designed based on use of single-containment LNG storage tanks with individual, circular spill-containment walls. However, during further project development, the Applicant adopted use of full-containment LNG storage tanks, which reduced the required distance between tanks, eliminated the need for individual circular spill-containment walls, and increased the margin of safety in the facility design. Not only is the new configuration (Table 3.2-1, Plot Plan Rev. C) more compact without affecting fire-safety requirements, it also "increases the setback of the LNG Facility from the sensitive Gulf of Mexico shoreline, reduces impacts on the southernmost chenier (identified during the scoping process by the USFWS as sensitive migratory-bird habitat), and locates the dry/wet/spare flare tower farther back from the shoreline and the Calcasieu Ship Channel." As such, the new configuration was chosen as the preferred design for the proposed LNG facility. OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

<u>Construction Alternatives</u>
A combination of construction methods are proposed to be utilized during construction to minimize adverse impacts on environmentally sensitive areas including wetlands and waterbodies. As stated in step 5a of the JPA, the proposed project includes six 40,000 m^3 modular LNG storage tanks. In the JPA-SD, the Applicant considered the use of stick-built LNG storage tanks versus modular LNG storage tanks during development of the project plans. Stick-built LNG storage tanks were considered due to industry familiarity with the technology, and according to the Applicant, modular LNG storage tanks have not been used in a domestic LNG project design prior to this project. However, the use of stick-built tanks presents inherent disadvantages compared to the use of modular tanks. The disadvantages of stick-built LNG tanks are outlined in Section 3.4.1.1 of the JPA-SD, and have been summarized below.

- The use of stick-built tanks would necessitate a longer overall construction schedule due to the need to prepare the laydown area prior to commencing tank construction, as opposed to modular tank construction, which will begin at the existing fabrication yards in advance of site preparation.

- The stick-built LNG tanks would require an on-site laydown workspace, whereas the modular LNG tanks will utilize the existing laydown workspace at the fabrication yards.
- The use of stick-built LNG tanks will result in greater emissions due to the increased construction activity at the project site.
- Due to the project site's remote location, the construction of stick-built LNG tanks would require more difficult quality control measures.
- Construction of stick-built LNG tanks would require a larger on-site workforce.

For the reasons outlined above, it was determined that the use of modular storage tanks will result in fewer environmental impacts and, as such, the modular LNG storage tanks were selected over the stick-built LNG storage tanks.

The JPA-SD also analyzed the use of a multiple small liquefaction trains vs fewer, larger liquefaction trains in the context of utilizing a modular approach to construction (Section 3.4.1.2). The analysis determined that larger liquefaction trains would result in a reduction in land requirements due to the required spacing between the trains. However, larger liquefaction trains must be transported by barge as "super-modules," which are larger than the modules associated with the smaller liquefaction trains. The larger "super-modules" must be transported by fewer vessels than the smaller modules, which limits the flexibility and control of the construction schedule. In addition, the larger liquefaction trains would require more onsite assembly than the smaller trains, and would require additional on-site laydown workspace as well as a larger onsite construction workforce. Based on the comparison of advantages and disadvantages listed above, the Applicant opted to utilize the smaller liquefaction trains. OCM agrees with the Applicant's determination that their modular approach to construction will decrease the overall construction schedule, onsite laydown workspace, and onsite construction workforce, all of which will contribute to reductions in overall environmental impacts.

B. Hydrologic Modification Impact Analysis

The Hydrologic Modification Impact Analysis (HMIA) analysis provided by the applicant on August 30, 2019,[16] with additional information submitted on January 24, 2020,[17] was approved by OCM on February 6, 2020.[18] During the review of the information submitted as part of this JPA, it was determined that the Applicant had submitted enough supporting evidences to determine that the project would have little or no negative impact of the local hydrology. The information showed that the hydrologic modification resulting from the project is not expected to adversely impact the quantity, movement, distribution, and water quality (total suspended solids) within the watershed. The applicant provided modeling results showing that the rerouting of the existing drainage network around the facility and justification for installation of a WCS to replace the existing 60" culvert (existing outfall) was appropriate to maintain the regional hydrology of the marsh complex west of the LNG facility. Furthermore, as discussed in more detail in Section IV.A, C, G, and I, as well as the document titled *Water Control Structure – Setting, Monitoring, and Adaptive Management Plan*,[19] the Applicant will conduct environmental monitoring, adaptively manage, and operate the WCS in agreement with OCM, USACE, and NMFS. The applicant also provided sufficient information

[16] See "JPA_K_Hydraulic_Impact_Analysis-8x11_08_30_2019u.pdf" in Step 13 of the JPA.
[17] See "Commonwealth-OCM-Response_to_Comments-2020-01-24.pdf" comment dated 1/24/2020.
[18] See "P20190900CommonwealthLNGHMIAapproved02062020.pdf" comment dated 2/6/2020.
[19] See "P20190900_WCS_Plan_and_email_1_5_23.pdf" comment dated 1/10/23.

addressing the storm discharge from the proposed facility. A condition will be added to the permit to ensure compliance with this plan (see Section V).

- Applicant shall operate the proposed Water Control Structure (WCS) as outlined in the document titled *Water Control Structure – Setting, Monitoring, and Adaptive Management Plan* submitted to OCM on January 5, 2023. Applicant shall provide to OCM a report showing the baseline hydrologic conditions of the marsh surrounding the permitted activities. This report shall include salinity, tidal range, water elevation (NAVD88), photo-documentation of the water level and representative vegetation, and precipitation readings, including a brief description of any rainfall event. Each data parameter is to be collected weekly for a minimum of three months prior to construction. During and upon completion of construction, applicant shall provide monitoring reports every 6 months (containing the same data parameters collected weekly) for the first two years of operation of the WCS. The baseline hydrologic report and the first post-construction monitoring report may be submitted simultaneously. Applicant shall also provide to OCM an annual summary report identifying any trends or changes in the hydrologic conditions of the marsh surrounding the permitted activities. OCM reserves the right to alter the required frequency of monitoring and/or submission of monitoring reports. If, in OCM's opinion, the hydrology and/or wetland vegetation of the area surrounding the permitted activities is being adversely affected, applicant shall coordinate with OCM to develop and implement a remediation plan to restore the surrounding marsh to the baseline hydrologic conditions.

C. Social and Economic Benefits

In performing a balanced review, the social and economic benefits to the public must outweigh the environmental impacts. In this case, the proposed project will provide direct benefits to communities in Cameron and Calcasieu Parishes through, but not limited to:

- the creation of temporary construction employment;
- full-time, local jobs to operate and maintain the new LNG terminal;
- additional sales tax revenues from the sales of goods and services during construction and long-term to operate and maintain the facility;
- annual state and local community revenue from property taxes; and
- long-term support of regional contractors, manufacturers, distributers, and retailers through the on-going purchase of goods and services to operate and maintain the project.

The Applicant estimates construction of the project will take place over a 36- to 38-month period and will employ approximately 800 workers per month and 2,000 workers during peak construction. Approximately half of these workers are anticipated to be non-local, and the other half will be employed from within Cameron and Calcasieu parishes. Additionally, the Applicant estimates an average of 3,689 secondary jobs will be generated by the project within Cameron and Calcasieu parishes during the construction period. The Applicant estimates approximately $234 million will be distributed in construction payroll to workers over the 36- to 38-month construction period and these workers will spend as much as 20% of their payroll money on local goods and services, in addition to money spent on temporary housing. All of which would be subject to the local sales tax, thereby resulting in an economic benefit to the local economy.

The Applicant estimates, based on the State of Louisiana's 4.45% sales tax rate, the State will collect over $2 million from the Project workforce over the course of the construction period. The income earned from the Project workforce will also be subject to the state income tax (2 to 6% based on income earned), and it is estimated that the State will collect approximately $4 million to $14 million in income tax revenue. In addition, the Applicant also estimates that they will purchase approximately $20 million of construction materials from local sources within Cameron and Calcasieu Parishes, resulting in an additional $890,000 of additional sales tax revenue to the State. The State of Louisiana also allows local governments to collect sales taxes, and the purchase of materials from local sources will result in a temporary increase in local government's collection of sales tax revenue. Finally, the Applicant anticipates hiring 65 new full-time workers to operate and maintain the proposed LNG terminal following construction. The anticipated average annual salaries for the new full-time workers is $73,500, resulting in a combined annual salary of $4.8 million, which will provide additional revenue through spending in surrounding communities. A more complete discussion of economic benefits of the project can be found in *Final Environmental Impact Statement for the Commonwealth LNG Project, Volume I, Section 4.9 – Socioeconomics*.[20] Additional discussion of economic benefits of the project can be found in the JPA-SD. Overall, the project will provide sustainable economic benefits to the United States and the State of Louisiana by increasing employment opportunities and adding to the demand in many manufacturing sectors.

D. Beneficial Use of Dredged Material

Pursuant to LAC 43, Part I, Section 723 H.1., a CUP JPA for an individual activity that involves 25,000 cubic yards or more of dredged material shall include a BUDM plan when the primary purpose of the proposed dredging is to facilitate the movement or mooring of vessels. In order to address this requirement, the Applicant provided a preliminary BUDM plan on August 30, 2019. During processing, the preliminary location of BUDM area was changed to the current location in the CPNWR East Cove Unit, which is also referred to as the Dredged Material Management Plan Area (DMMP Area). The current proposed BUDM plan was submitted on May 2, 2024.[21] On February 16, 2023, OCM received a copy of Special Use Permit #: G2023-05 from the CPNWR for placement of dredged material in the BUDM/DMMP Area by the Applicant.[22] Additionally, OCM received a letter of support for the BUDM plan from Shaun Ziegler, Project Leader/Refuge Manager who is the coordinating official having immediate jurisdiction and administrative responsibility for projects conducted on the Southwest Louisiana National Wildlife Refuge Complex lands and property.[23] OCM reviewed the proposed BUDM plan and determined that it meets the requirements set forth in LAC 43, Part I, Section 723.H. As such, OCM approved the BUDM plan on July 2, 2024.

E. Evaluation of Dredged Material

OCM received comments, which expressed concerns that the sediment to be dredged from the Calcasieu Ship Channels and deposited in the proposed BUDM area could potentially contain harmful

[20] See "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[21] See "CWLNG-000-ENV-PLN-0002_Rev_3-BUDM_Plan-2024-05-01-complete.pdf" in Step 13 of the JPA.
[22] See "SIGNED_43612_G2023-05_Guillory_Commonwealth-LNG_BUDMAT-marsh-creation.pdf" comment dated 2/16/23.
[23] See "P20190900_FWS_BUDM_letter_of_support_3_14_2023.pdf" comment dated 3/14/23.

levels of contaminants. As noted in Section 4.1, "ITM Tier I Evaluation" of the JPA-SD,[24] as well as Section 4.2.1.1, "Terminal" of the FERC's FEIS,[25] the Applicant evaluated the sediments at the project site per protocols in the U.S. Environmental Protection Agency's (EPA) and USACE's *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual*.[26] The Applicant conducted an Inland Testing Manual (ITM) Tier I Evaluation on the sediments near the north end of the proposed marine facility, which was identified during the Applicant's Phase I Environmental Site Assessment. The ITM Tier I Evaluation is a thorough analysis of existing information, including the data and outcomes of physical, chemical, and biological testing from previous evaluations in the project area, in order to determine if there are known instances of contaminated soils in the project area. The results of this ITM Tier I Evaluation revealed that the sediments to be dredged in the project area and deposited in the BUDM area have been thoroughly studied, and the existing data is sufficient to determine that there are no contaminated sediments present. Although the Tier I Evaluation shows no presence of contaminated sediments, the Applicant will still conduct further analyses of the sediments in this area of the marine facility prior to transporting them to the proposed BUDM site.

Using the LDEQ Environmental Database Management System, the Applicant identified four locations along Calcasieu Pass and within 0.125 miles of the proposed project site where known incidents of contamination have occurred. However, as the FEIS notes, none of these locations are within the limits of the project construction area and the regulatory status at each location is such that no further remediation work is required. The JPA-SD also notes that the 2018 FEIS for the Venture Global Calcasieu Pass LNG Project (located on the east side of the Calcasieu Ship Channel across from the Applicant's proposed project site) states Venture Global conducted their own ITM Tier I Evaluation and "identified no evidence of potential sediment pollution due to reported releases and found that the sediments are from locations far removed from sources of contaminants." Additionally, the JPA-SD states that the Applicant consulted with Jeff Corbino, Operations Division at USACE-NOD. Corbino supports the USACE dredging and dredged material disposal activities, including analysis of material utilized for disposal in Dredged Material Placement Areas, nearshore sites, and BUDM sites. Corbino confirmed for the Applicant that there is sufficient existing Tier I Evaluation documentation for sediments in the area of the Calcasieu Ship Channel to be dredged, and noted during consultation that the LDEQ maintains a list of areas where additional testing is required. He also stated that the proposed dredge area is not located within or even in close proximity to such areas. Finally, the JPA-SD and the FEIS note that in the unlikely event that contaminated sediments are uncovered during construction activities, the Applicant would implement the steps and procedures detailed in *Unanticipated Contaminated Sediment and Soils Discovery Plan*.[27] The OCM and the FERC have reviewed this plan and found it to be sufficient. As such, the JPA-SD and the FEIS concluded that dredging and construction at the proposed project site would not impact contaminated soils and sediments. OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso.*

[24] See "Commonwealth_JPA_Support_Document_08_30_2019u.pdf" in Step 13 of the JPA.
[25] See "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[26] EPA 823-B-98-004, Feb 1998.
[27] See "JPA_J_Unanticipated_Contaminated_Sediment_and_Soils_Plan_08_30_2019u.pdf" in Step 13 of the JPA.

F. Floodwall

OCM received comments expressing concern that construction of the proposed LNG terminal and associated storm surge floodwall would exacerbate flooding in the surrounding area through displacement of floodwaters. In the section labeled "Site Construction" found in Section 4.3.2.2 "Surface Water Impacts and Mitigation" of the FEIS, the FERC analyzes potential impacts of the proposed terminal and storm surge floodwall construction on surface floodwaters. In this analysis, the FERC notes that the terminal site is located within a designated FEMA floodplain. Furthermore, the area inside the storm surge wall consists of 84.5 acres and 1.4 million cubic meters within the floodplain, which represents only 0.15 percent of the total acreage in the watershed in which the Project is located. The FEIS goes on to note that in an average storm surge, the volume displaced by the area within the storm surge walls would represent 0.13 percent of the overall floodplain capacity. The FEIS concludes that both impacts are very small in relation to the overall floodplain and would not be expected to impact flooding. OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*. A more complete analysis of project's impacts on surface waters can be found in *Final Environmental Impact Statement for the Commonwealth LNG Project, Volume I, Section 4.3.2 – Surface Water Resources*.[28]

G. Prevention, Safety, Control, and Contingency Planning

The Applicant has provided documentation,[29] which certifies that Commonwealth LNG, LLC is aware of the terms and conditions of each of the following rules and regulations dealing with spill prevention and containment:

- 40 Code of Federal Regulations (CFR) Part 112, Oil Pollution Prevention;
- 49 CFR 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards;
- 49 CFR 193, Liquefied Natural Gas Facilities: Federal Safety Standards; and
- LAC 33, Part IX, Chapter 9, Spill Prevention and Control.

The FEIS "determined that the risk of accidental and intentional events would be less than significant with implementation of the proposed safety and security recommendations that further enhance the safety and security measures that would be required at the LNG terminal by PHMSA regulations under 49 CFR 193 and USCG regulations under 33 CFR 127 and 33 CFR 105, and those required for the LNG marine vessel by USCG regulations under 33 CFR 104 and 46 CFR 154. Furthermore, EPAct 2005 requires LNG terminal operator's Emergency Response Plan be developed in consultation with the USCG and State and local agencies and be approved by the commission prior to final approval to begin construction."[30]

In addition to this document, the Applicant provided a *Contingency Plan for Inadvertent Release of Drilling Fluid During Horizontal Directional Drilled Waterbody Crossings for Commonwealth Pipeline*.[31] This contingency plan outlines the procedures and steps to be taken should an inadvertent release of drilling mud occur during HDD of the proposed natural gas pipeline beneath a waterbody.

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[28] See "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-2_of_6.pdf" comment dated 2/14/23.
[29] See "Commonwealth_LNG-Spill_Regs-2021-12-23-1311_12_23_2021u.pdf" in Step 13 of the JPA.
[30] See page 4-317, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[31] See "JPA_F_Contingency_Plan_for_Inadvertent_Release_08_30_2019u.pdf" in Step 13 of the JPA.

The Applicant states that while waterway crossings vary substantially in installation depth, current profile data indicates minimum depths of cover over 28'. The contingency plan document goes on to detail the elements of the plan including monitoring and sampling procedures, notification procedures, corrective action and cleanup, and abandonment. Environmental inspectors and construction personnel will continuously monitor the operations during drilling activities for evidence of an inadvertent release. Should an inadvertent release be detected, construction personnel will take steps to contain the release as detailed in Section 4.0 "Corrective Action and Clean Up" of the contingency plan. Section 4.0 also includes details of corrective and clean up actions to be taken, as well as procedures for immediate notification of construction management personnel, state regulatory agencies, and downstream water users who may be impacted. Section 5.0 "Abandonment" of the plan states that if the corrective actions do not prevent or control the release of drilling mud into waterbodies, the Applicant may opt to re-drill the hole along a different alignment or suspend operations altogether. Should either of these events occur, the Applicant's contractors would seal the abandoned drill hole, install a soil cap within 10' of the surface, and then grade and re-seed the borehole entry location to restore it to pre-construction conditions.

The facility is proposed to be built in a manner that minimizes the risk to the public from disasters. The FERC FEIS stated geotechnical and structural design information are appropriate for the underlying soil characteristics and the "Project facilities would be in accordance with federal regulations, standards, and recommended and generally accepted good engineering practices."[32] The proposed project has focused on the "resilience of the Project facilities against natural hazards, including extreme geological, meteorological, and hydrological events, such as earthquakes, tsunamis, seiches, hurricanes, tornadoes, floods, rain, ice, snow, regional subsidence, sea level rise, landslides, wildfires, volcanic activities, and geomagnetism."[32] The FERC FEIS also indicated that the Commonwealth project site would be "designed [to] with[stand] a 183 mph 3-second gust wind speed… and adequate floodwall elevations to withstand Category 4 Hurricanes and 500 years flood events."[33] The applicant has agreed to coordinate with local, state and federal agencies in the preparation of an emergency response plan that addresses safety procedures during weather events, including storm surges and hurricanes for the terminal facilities and includes safety procedures for the natural gas pipeline system.

H. Commercial Fishing

OCM received comments regarding the project's potential effects on commercial fishing. The Louisiana Department of Wildlife and Fisheries (LDWF) manages recreational and commercial fishing in the Calcasieu River, Calcasieu Ship Channel, Calcasieu Lake, and within the Gulf of Mexico out to nine nautical miles. Section 6.3.4 of the JPA-SD notes that species commonly fished in these areas, both commercially and recreationally, include brown shrimp, white shrimp, blue crab, eastern oysters, spotted sea trout, red drum, and southern flounder. Comments received from LDWF did not identify any adverse impacts to commercial fish species. Section 4.9.7 of the FERC's FEIS analyzes potential impacts to commercial fisheries due to temporary closure or congestion of the Calcasieu Ship Channel, impacts from construction of the project on aquatic species and/or their habitats, and impacts from construction and operation of the LNG Facility to commercial fisheries,

[32] See page 4-283, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[33] See page 4-294, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf." comment dated 2/14/23.

particularly shrimp, within the Calcasieu Ship Channel. The FEIS concluded that the project will have temporary, but minor impacts, to commercial fisheries. A more complete discussion of the project's impacts to commercial fisheries can be found in *Final Environmental Impact State for the Commonwealth LNG Project, Volume I, Section 4.9.7 – Commercial Fisheries*.[34] OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

I. Eastern Black Rail

OCM received comments regarding potential impacts to the eastern black rail (EBR, *Laterallus jamaicensis*). The EBR is a diminutive waterbird that inhabits both freshwater and saltwater marshes in the United States, Central America, and South America.[34] The EBR is currently considered critically imperiled in Louisiana and, as of October 8, 2020, is federally listed as threatened under the Endangered Species Act. The proposed project would directly impact 33.6 acres of EBR habitat by converting 30.8 acres of suitable habitat to industrial land and temporarily clearing 2.8 acres of suitable habitat to construct the proposed exclusion buffer zone. Anticipated impacts to the EBR would be caused by noise, lighting, day-to-day facility operations, and replacement of vegetated and open water habitats with surfacing materials. The FERC developed a formal Biological Assessment (BA) report, which was submitted to the USFWS on May 4, 2021. Section 3.1.1.4 of the BA report concluded that the project is "likely to adversely affect" the EBR and requested formal consultation with the USFWS, as required under Section 7 of the Endangered Species Act.[35] The USFWS issued a BO report concerning the EBR on September 16, 2021. OCM received a copy of the BO from the USFWS on September 16, 2021.[36] Section 5.4 of the BO report states,

> "Individual activities from the proposed Action that cause direct or indirect effects could result in harm to a maximum of 30 EBRs utilizing the action area. The status of the EBR population within Cameron Parish is uncertain. Based on estimates of potential breeding pairs and recent survey efforts in Louisiana, Cameron Parish may currently support sporadic populations during the breeding and overwintering seasons. Our analysis indicates that while the Action would have a negative effect on 30 EBRs, such effects to a small portion of the Louisiana population would not be appreciable for the survival and recovery of the EBR. After reviewing the status of the species, the environmental baseline for the action area, the effects of the Action and the cumulative effects, it is the USFWS's BO that the Action is not likely to jeopardize the continued existence of the EBR."

OCM agrees with this analysis, adopts these conclusions as our own, and incorporates these responses herein by reference as if printed *in extenso*.

OCM received comments from LDWF on June 4, 2021, March 13, 2022, and March 14, 2023, regarding the EBR. The LDWF comment from March 13, 2022, stated that due to the bird's exceedingly cryptic behavior, its status and distribution are difficult to determine fully. Although LDWF expressed concerns about the project impacts on the EBR, OCM notes that LDWF did not

[34] See "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[35] See "P20190900_correspondence_FERC_BA_5_9_23.pdf" comment dated 5/22/23.
[36] See "P20190900_USFWS_BO_9-16-21.pdf" comment dated 9/17/21.

submit any formal objections to the proposed project. All LDWF comments can be found in the electronic comments and are available in the electronic permit file.[37]

Due to the large volume of comments received during the public notice and hearing process in regards to the EBR, OCM held a phone call with the Applicant on April 19, 2023, and an in-person meeting on May 11, 2023.[38] During the meeting on May 11, 2023, the Applicant and OCM had in-depth discussions regarding the Applicant's consultation history with various state and federal agencies, details of their clearing plan, information on the EBR's life cycle and habitat, and conditions from the USFWS BO report with which the Applicant has agreed to comply. Such conditions shall include careful surveying and marking of project boundaries, close coordination with FERC and the USFWS, feral hog eradication to preserve existing EBR habitat, post-construction monitoring in the exclusion buffer zone, creation of habitat restoration plan, and reports submitted to the USFWS describing efforts taken to address any impacts to the EBR. In addition to the USFWS conditions with which the Applicant has agreed to comply, OCM has added the following conditions to its own CUP in order to minimize impacts to the species and also enhance or conserve its habitat:

- The Permittee shall coordinate with the Cameron Prairie National Wildlife refuge to plant the supratidal wetland habitat within the BUDM site with a minimum of three vegetative species beneficial to the federally threatened Eastern Black Rail. All seedlings/plants must be obtained from a registered, licensed Louisiana nursery grower. The permittee must obtain and provide to LDENR/OCM, certification from the contracting nursery that plant materials are of a Louisiana ecotype species and have been acclimated to Louisiana climatic and habitable conditions at least 90 days prior to planting. Suitable species for planting may include Gulf cordgrass (*Spartina spartinae*), saltgrass (*Distichlis spicata*), sea oxeye (*Borrichia frutescens*), and saltmeadow cordgrass (*Spartina patens*) and may be interspersed with shrubs such as marsh elder (*Iva frutescens*) or saltbush (*Baccharis hamilifolia*).

- Vegetative clearing of Eastern Black Rail critical habitat shall not take place between March 1st and September 1st so as to avoid potential impacts to Eastern Black Rail egg incubation and hatching.

J. Cheniers

Cheniers are a unique vegetative community common in southwest Louisiana and are "considered communities of special concern in Louisiana. Chenier communities form on abandoned beach ridges primarily in coastal southwest Louisiana and are stranded via deltaic sedimentation by the constantly shifting Mississippi River. Cheniers provide storm barriers, limit saltwater intrusion, and provide stopover sites for migratory birds."[39] The FERC FEIS found 13.3 acres of chenier habitat will be permanently impacted by facility construction and another 23.6 acres of chenier would be present within the facility footprint. Though the permanently impacted 13.3 acres is only a small portion of the over 2,000 acres of existing chenier habitat (< 1%), LDWF recommended Commonwealth restore and preserve the 23.6 acres present within the facility footprint.

[37] http://sonlite.dnr.state.la.us/pls/apex/f?p=129:560:3791964734429::::P560_CUP_NUM:P20190900
[38] See" P20190900_EBR_plan_meeting_materials_5_11_23.pdf" comment dated 5/17/23.
[39] See page 4-102, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

The cheniers located within the facility footprint are "generally disturbed due to feral hog activity and altered hydrology."[40] The FERC FEIS summarized feral hogs as "invasive species that are extremely destructive in sensitive vegetative and wildlife habitats. They are referred to as ecosystem engineers. Through their rooting, wallowing, and trampling and their voracious feeding behaviors, they can change or destroy their local habitat by, for example, degrading water quality and increasing runoff in wetlands and shifting the composition and distribution of plant communities…Feral hogs uproot planted and naturally regenerated coniferous and hardwood seedlings, reduce natural forest regeneration through heavy consumption of hard mast, and prey on reptiles, amphibians, small mammals, and the eggs of groundnesting birds such as the eastern black rail." In an effort to preserve the remaining 23.6 acres of chenier habitat within the facility footprint, Commonwealth will install a feral hog exclusion fence around the perimeter of the property. The exclusion fence would be likely to "prevent continued degradation of the existing chenier habitat and would have the potential to substantially improve the quality of the habitat that would not be affected by construction." Commonwealth will preserve the chenier habitat within the facility footprint for the life of the project, which is expected to be 30 years.[41]

As less than 1% of the total existing chenier habitat will be permanently impacted by the construction of the facility, the anticipated preservation of chenier habitat will result in an overall reduction in acreage and potentially a higher value chenier than currently exists. Therefore, FERC concluded the proposed project's impacts on cheniers would be minimal.

K. Coastal Protection and Restoration Authority

The CPRA, the state entity responsible for development, implementation, and enforcement of Louisiana's Comprehensive Master Plan for a Sustainable Coast (Master Plan), was provided multiple opportunities to provide comments on the proposed LNG facility. CPRA staff reviewed the project and found no adverse impacts to coastal restoration projects in the Calcasieu/Sabine Basin, as proposed. Comments to this effect were received from designated project managers of the CPRA staff (see Section II.D). All CPRA project and Master Plan comments can be found in the electronic comments and are available in the electronic permit file.[42] Based on CPRA review and comments, the proposed project is deemed consistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast.

CPRA uploaded a comment on July 15, 2022, stating "surrounding area drainage and conveyance within the lake rim borrow canal must be maintained and containment dikes must be degraded following initial settlement" in reference to their project, "CS-0087—Calcasieu-Sabine Large Scale Marsh and Hydrologic Restoration". The applicant revised the drawings to accommodate CPRA's request by proposing to create a conveyance channel on the eastern border of the BUDM area within the CPNWR. The earthen containment dike borrow will be excavated along the eastern perimeter of the planned BUDM area to create the conveyance channel. After the BUDM area is constructed and the sediment has settled, the containment dikes will be degraded to marsh elevation. CPRA subsequently uploaded a comment of no objection for CS-0087 on September 27, 2022.

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[40] See page 4-97, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[41] See page 4-102, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[42] http://sonlite.dnr.state.la.us/pls/apex/f?p=129:560:65280121463::::P560_CUP_NUM:P20190900

L. Environmental Justice

The Trial Court in *Sierra Club v DENR*, Doc. No. C-1021127-A, 38th Judicial District Court, Parish of Cameron, Louisiana, remanded the case to this agency to consider "environmental justice issues." Without conceding the correctness of the trial court judgment, nor in anyway limiting the department's rights to challenge the trial court's conclusion, and reserving all possible defenses and legal arguments in this matter and others, OCM determines that it being in the best interest of the State to not delay this matter further does here provide additional consideration of the record to specifically analyze "the facility's impact on … environmental justice issues."

The administrative record for this matter already contains environmental justice ("EJ") analysis surrounding the proposed facility. Specifically, sections 4.9.12 of the FERC FEIS provides this analysis including how environmental justice communities were identified and what potential impacts for such communities will potentially relate to the proposed facility.[43] In addition, the administrative record includes LDEQ's environmental justice analysis as provided in its basis for decision.[44] Both the FERC FEIS and LDEQ basis for decision for DEQ Permit Nos. 0560-00997-V0 and PSD-LA-841 are incorporated herein as if copied each in their entirety. They along with all other comments and submissions within the administrative record addressing Environmental Justice, including without limitation those found at 1021127 AR 2873-3698 and 5068-5125 of the administrative record, were considered. Before continuing, we make note that re-creation of the EJ analysis undertaken by both the FERC and LDEQ is no longer possible as the environmental justice tools they utilized, such as EPA's EJ Screen, are no longer available following issuance of Executive Order 14173 by President Donald J. Trump on January 21, 2025.

The term Environmental Justice is not defined in any Louisiana statute or regulation, but rather has been included in Presidential Executive Orders and federal executive agency guidance.[45] Neither the State and Local Coastal Resources Management Act (SLCRMA) nor the Louisiana Coastal guidelines include the term Environmental Justice nor do they explicitly state that an EJ analysis is required. Therefore, in order to address Environmental Justice issues as ordered by the Court, we look to how programs and decisions outside SLCRMA have addressed it. In LDEQ's basis for decision for Permit No's 0560-00997-V0 and PSD-LA-841 Environmental Justice is described as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The basis for decision, further states,

> "Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial operations. Meaningful involvement means:

[43] *See* 1021127 AR 004508, et seq. For this and the following section we reference to the administrative record of the Trial Court in *Sierra Club v DENR*, Doc. No. C-1021127-A, 38th Judicial District Court, Parish of Cameron, Louisiana.
[44] *See* 1021127 AR 5790 – 5794.
[45] For instance environmental justice has previously been addressed in the following U.S. Presidential Executive Orders: 12898 (1994); 13583 (2011); and 13627 (2014), all of which has since been revoked by Executive Order No. 14173 (2025).

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public's contribution can influence the permitting authority's decision;
- Community concerns will be considered in the decision making process; and
- Decision makers will seek out and facilitate the involvement of those potentially affected."[46]

SUMMARY OF FINDINGS

As outlined Part II of this basis of decision, throughout this permitting process: (1) the public have had an opportunity to participate in this permitting process; (2) the public's contribution has influenced the permitting authority's decision; (3) community concerns were considered in the decision making process; and (4) the agency has sought out and facilitated the involvement of those potentially affected.

To ensure that this permit decision does not impose a disproportionate share of negative environmental consequences resulting from the permitted activities due to race, color, national origin, or income we take specific notice of the following portions of the administrative record.

The FERC FEIS specifically summarizes the following categories of potential negative environmental impacts on environmental justice communities: Wetlands Impacts (including loss of marshes and storm surge protection); Impacts on Social Patterns; Impacts on Commercial and Recreational Fishing; and Cumulative Impacts associated with each.

Wetlands – Loss of Marshes – Storm Surge Protection

The impacts on EJ communities from impacts to wetlands is summarized in FERC's FEIS as follows:

> Construction and operation of the Project would result in short-term, temporary (during construction), and permanent (during operation) impacts on wetlands (section 4.4). Wetlands provide various benefits to local populations including shoreline protection, provides habitat for a variety of plant and animal species that can be used for recreation and/or sustenance, and are used by the public for recreation and education (NRCS, 2021). While all the wetland impacts would be outside the boundaries of the identified environmental justice communities, the loss of wetland habitat, and the subsequent decrease in wetland benefits, could affect those environmental justice communities near the Project, particularly the environmental justice community closest to the project (Census Tract 9702.01, Block Group 3). However, the total impacted wetland area for the Project (89.9 acres) represents about 0.3 percent of the approximately 27,000 acres of wetlands contained within the HUC 12 watershed, in which the Project is located. In addition, through implementation of the measures in Commonwealth's revised Workspace Restoration Plan and Project-specific Procedures and Commonwealth's

[46] *See* 1021127 AR 005788.

> compliance with CWA permitting (see section 4.4.2), we conclude that the impacts on wetlands would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities. Wetland impacts are more fully addressed in section 4.4.[47]

Additional discussion of wetland impacts, including loss of marshes and storm surge, is found in the FEIS's consideration of cumulative impacts highlighted below. The FEIS description of potential impacts to wetlands is consistent with OCM's determination regarding potential impacts on coastal wetlands described in more detail under sections III.A and IV.H of this basis of decision. OCM has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result of our independent analysis we find that the potential negative impacts to wetlands are outweighed by the economic and other benefits of the permitted activity. Specifically, we conclude that the impacts on wetlands would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

Social Patterns

Potential disruption of social patterns from the proposed facility is addressed in FERC's FEIS as follows:

> "Project impacts on environmental justice populations may include impacts on socioeconomic factors. Constructing the Project would require, at its peak, about 2,000 workers/contractors. The combined populations of Cameron and Calcasieu Parishes are about 210,000 individuals. The 2,000 workers/contractors would increase the combined populations of the two parishes by about 0.5 percent. The closest environmental justice communities would be those that include the towns of Cameron (Census Tract 9702.01, Block Group 3) and Hackberry (Census Tract 9702.01, Block Group 1). The temporary flux of workers/contractors into the area could increase the demand for community services, such as housing, police enforcement, and medical care. An influx of workers could also affect economic conditions and other community infrastructure. We received several comments concerned that construction and operation of the Project would result in people moving out of the town of Cameron due to the continued industrialization of the area resulting in wetland loss and climate change. Based on US Census Data, between 2010 and 2019, the population of town of Cameron went from 537 individuals to 203. While this does suggest that there is a migration of people out of town of Cameron, we are unable to assess the cause of the population change. While there is potential that people would move away due to additional facilities, the influx of temporary and permanent jobs could potentially also result in additional people moving to the area. Socioeconomic impacts on environmental justice communities would be less than significant. Socioeconomic impacts are more fully addressed in section 4.9."[48]

[47] *See* 1021127 AR 004515.

[48] *See* 1021127 AR 004517.

This is consistent with OCM's determinations found at sections III.C and L, IV.A, and V of this document. OCM has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to social patterns are outweighed by the economic and other benefits of the permitted activity. Specifically, we conclude that the impacts on wetlands would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

Commercial and Recreational Fishing

FERC's FEIS addresses potential impacts from the proposed facility on recreational and commercial fishing as follows:

> "Recreational and commercial fishing could be impacted by construction activities associated with the Terminal. Project activities are anticipated to occur during peak fishing and recreational seasons; however, due to the overall size of the waterway, access to and maneuverability within the Calcasieu Ship Channel would not be significantly affected by the use of barges. Temporary impacts on recreational and commercial users in the Calcasieu Ship Channel, which would likely include individuals from environmental justice communities, may occur in areas where construction is occurring. The construction impacts on recreational and commercial fisheries would be temporary, lasting the duration of construction activities. Permanent impacts on recreational and commercial fisheries in the ship channel, which likely include individuals from environmental justice communities, may occur due to the loss of available fishing areas from operation of the marine facilities and LNG carrier traffic. Although we expect fish, crab, and shrimp species common to the bay could be present, the location does not have any unique features, or habitat characteristics that would draw recreational or commercial users to this particular location. The Project area does not support special habitat that is different from the miles of surrounding habitat. Given these characteristics, and due to the overall size of the waterway, we conclude that these impacts on environmental justice communities would not be significant. Aquatic resources impacts are more fully addressed in section 4.6.2."[49]

The FERC FEIS's analysis is consistent with OCM's determination regarding the project's potential impacts on fisheries found at III. C, H, and L, IV.A, D, E, F, & J of this document. LDENR has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to commercial and recreational fishing are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts on commercial and recreational fishing would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

FERC's FEIS addresses water quality (turbidity, temperature, etc.) in its environmental justice analysis as follows,

[49] *See* 1021127 AR 4516.

> "Construction and operation of the terminal would permanently impact two unnamed waterbodies (a drainage ditch and a tidal slough) within the Project area and would both temporarily (during construction) and permanently (during operation) impact portions of the adjacent Calcasieu Ship Channel. These impacts would result from dredging activities, site construction, marine traffic, stormwater runoff, water use, hydrostatic testing, and could occur from accidental spills or other releases of hazardous substances. Environmental justice communities in proximity to the Project, particularly the environmental justice community closest to the project (Census Tract 9702.01, Block Group 3) would be mostly affected by dredging and resuspension of sediments. Resuspension of sediments within the ship channel could potentially mobilize contaminants. However, as discussed in section 4.2.1, it is unlikely that contaminated sediment is present. Commonwealth would attempt to minimize waterbody impacts by minimizing the Project footprint to the extent possible and using the turning basin that was dredged for the Calcasieu Pass LNG Project, thus minimizing the amount of dredging needed within the Calcasieu Ship Channel. Further, Commonwealth would minimize impacts on water quality by using a hydraulic suction dredge, where turbidity would be focused close to the river bottom and would equate to a storm event within a short distance of the cutterhead. Overall, we do not anticipate significant impacts on environmental justice communities related to surface water.
>
> "Construction and operation of the terminal, as well as marine traffic to and from the terminal, have the potential to adversely impact water quality in the event of an accidental release of a hazardous substance such as fuel, lubricants, coolants, or other material. In order to minimize the risk of a release, Commonwealth would implement the measures outlined in the FERC's *Plan* and Commonwealth's *Procedures* to minimize the likelihood of a spill and would implement its *SPAR Plan* in the event of a spill. These plans would minimize the risk of a spill by requiring Commonwealth to conduct personnel training, equipment inspection, install secondary and spill containment structures for fuels, vehicles, or equipment, and identifying refueling procedures. Additionally, LNG carriers are required to develop and implement a Shipboard Oil Pollution Emergency Plan (SOPEP), which includes measures to be taken when an oil pollution incident has occurred, or a ship is at risk of one. If an accidental release was to occur, environmental justice communities along the ship channel, particularly the environmental justice community closest to the project (Census Tract 9702.01, Block Group 3), as well as individuals from these communities that use the channel, would be affected. However, with the mitigation measures Commonwealth and LNG carriers would implement, we conclude that environmental justice communities would not be significantly impacted by an accidental release."[50]

This likewise is consistent with OCM's determinations regarding the project's potential impact to water quality and turbidity discussed within sections IV.A and D of this document. OCM has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to water quality are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that

[50] *See* 1021127 AR 4515.

the impacts on commercial and recreational fishing would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

Cumulative Impacts

FERC's FEIS considered 45 past, present and reasonably foreseeable activities for its cumulative impacts analysis. These projects include everything from nearby LNG facilities to improvements to the Cameron Parish Courthouse to the construction of residential subdivisions.[51] Of note to the Trial Court's ruling in the *Sierra Club* litigation are the following six LNG facilities in relation to the proposed facility:

TABLE 4.13-3[52]

Actions with the Potential to Cumulatively Impact Surface Waterbodies

Action	Closest Distance to Project (miles)	Permanent Impacts on Surface Waterbodies in Affected HUC-12 Watersheds a/ (acres)
Commonwealth LNG		2.8
Calcasieu Pass LNG	0.3	2.6
CP2 LNG	1.75	[not presented in filings]
Cameron LNG and Expansion Project	16.0	70.1
Driftwood LNG	22.5	67.7
Magnolia LNG	23.5	9.8
	Total	**152.5**

a/ Estimated acreages are based on publicly available project information.

The FERC FEIS describes the potential cumulative impacts on EJ communities, which again considers more than the above listed LNG projects, as follows:

> Based on the scope of the Project and our analysis of the Project's impacts on the environment as described throughout this EIS, we have determined Project-related impacts on wetlands, surface water, aquatic resources, visual resources, socioeconomics, traffic, noise, and air quality may adversely affect the identified environmental justice communities (see section 4.9.12). Cumulative impacts on environmental justice communities could occur for these resources, as discussed in this section.
>
> Construction and operation of the Project would result in short-term, temporary, and permanent impacts on wetlands. Wetlands provide various benefits to local populations, including environmental justice communities. These benefits could include shoreline protection, flood control, habitat for a variety of plant and animal species that can be used for recreation and/or sustenance and use by the public for recreation and education (NRCS,

[51] *See* Table 4.13-2, 1021127 AR 004669 – 004678.
[52] *See* 1021127 AR 004686.

> 2021). Impacts on wetlands associated with the project would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities. If constructed, the projects listed in table 4.13-2 would impact approximately 4 percent of the wetlands within the project's geographic scope for cumulative wetland impacts, which contains approximately 27,000 acres of wetlands. However, per federal regulations, actions that disturb more than five acres of wetlands must not cause a permanent loss of wetland function. Therefore, to acquire the required construction permits from the COE, each project proponent would have to demonstrate no net loss of wetland function through a wetland restoration plan or participation in a mitigation program. The Project would contribute to cumulative impacts on wetlands from the projects within the geographic scope. However, overall, we conclude these wetland impacts would be mitigated and would not have a significant cumulative impact on environmental justice communities. Wetland impacts are more fully addressed in section 4.4 and cumulative wetland impacts are discussed in this section."[53]

Similarly, unavoidable impacts to coastal resources must also be mitigated under SLCRMA and are for this project as more fully discussed herein at sections IV.A, C, F, and J and V. The FEIS decision goes onto discuss potential cumulative impacts to EJ communities as follows:

> "Construction and operation of the Terminal would both temporarily and permanently impact portions of the adjacent Calcasieu Ship Channel. These impacts would result from dredging activities, site construction, marine traffic, stormwater runoff, water use, hydrostatic testing, and could occur from accidental spills or other releases of hazardous substances. Environmental Justice communities in proximity to the Project could be affected by dredging and resuspension of sediments. Resuspension of sediments within the ship channel could potentially mobilize any contaminants. However, as discussed in section 4.2.1, it is unlikely that contaminated sediment is present. If the projects along the ship channel (see table 4.13-2) that require dredging occur simultaneously, there may be increased turbidity within the channel and cumulative impacts on surface water. However, the greatest impacts would be highly localized, thus the potential for cumulative impacts is greatly diminished. Overall, we do not anticipate significant cumulative impacts on environmental justice communities that may use or live near the water related to surface water due to dredging."[54]

This is consistent with LDENR's analysis of potential turbidity and suspended solids caused by dredging, which is further discussed herein at sections IV.A and D. As a result of OCM's independent analysis, OCM agrees with these findings.

The FERC FEIS continues,

> "Construction and operation of the Terminal, as well as marine traffic to and from the Terminal, have the potential to adversely impact water quality in the event of an accidental release of a hazardous substance such as fuel, lubricants, coolants, or other material.

[53] *See* 1021127 AR 004704-5.
[54] *See* 1021127 AR 4705.

> Construction of multiple projects (see table 4.13-2) during the same time period, and the associated vessel traffic, may increase this risk. However, FERC projects would implement the measures outlined in the FERC's *Plan* and Commonwealth's *Procedures* to minimize the likelihood of a spill. Additionally, LNG carriers are required to develop and implement a Shipboard Oil Pollution Emergency Plan (SOPEP), which includes measures to be taken when an oil pollution incident has occurred, or a ship is at risk of one. If an accidental release were to occur, environmental justice communities along the ship channel, as well as individuals from these communities that use the channel, could be affected. However, given that most of these communities are not directly along the ship channel, and given the mitigation measures that would be in place, we conclude that environmental justice communities would not be significantly impacted by an accidental release. Water resource impacts are more fully addressed in section 4.3 and cumulative water resources impacts are discussed in this section."[55]

As a result of OCM's independent analysis, OCM agrees with these findings.

The FERC FEIS describes potential impacts on commercial and recreational fisheries as follows,

> Recreational and commercial fishing could be impacted by construction activities associated with the Project and the projects listed in table 4.13-2. Project activities are anticipated to occur during peak fishing and recreational seasons; however, due to the overall size of the waterway, access to and maneuverability within the Calcasieu Ship Channel would not be significantly affected by the use of construction barges. Temporary cumulative impacts on recreational and commercial users in the Calcasieu Ship Channel, which would likely include individuals from environmental justice communities, may occur in areas where construction of the various projects is occurring. The construction impacts on recreational and commercial fisheries would be temporary. Cumulative impacts on recreational and commercial fisheries in the ship channel, which likely include individuals from environmental justice communities, may occur due to the loss of available fishing areas due to operation of permanent marine facilities. Although we expect fish, crab, and shrimp species common to the area could be present, the location does not have any unique features or habitat characteristics that would draw recreational or users to this particular location. The Project area doesn't support special habitat that is different from the miles of surrounding habitat. Given these characteristics, and due to the overall size of the waterway, we conclude that these cumulative impacts on environmental justice communities would not be significant. Aquatic resources impacts related to fishing are more fully addressed in section 4.8 and cumulative aquatic resources impacts are discussed in this section.[56]

This is consistent with certain findings of OCM highlighted elsewhere in this basis of decision. For example see sections III.H and IV.A,D,E,F, and J. As a result of OCM's independent analysis, OCM agrees with these findings.

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[55] *Id*.
[56] *Id*.

Potential increase to marine traffic is described in FERC's FEIS as follows,

> An increase in marine traffic could result in delays to other large vessels as well as commercial and recreational fisherman and boaters, including those from environmental justice communities. If the other projects along the Calcasieu Ship Channel that are listed in table 4.13-2 were to be constructed at the same time, a cumulative impact on vessel traffic in the waterway, primarily by increasing congestion and vessel travel times could occur. Construction vessel traffic would be temporary, and the extent of the impacts would depend on the frequency and number of deliveries being made for various projects at any given time during the respective construction periods. In addition, Commonwealth's Terminal would be at the entrance of the ship channel, resulting in short inbound and outbound transits. Operation of multiple new LNG facilities along the ship channel would result in an increase in LNG vessels using the ship channel. However, Commonwealth would be located at the start of the channel and vessels would need to traverse long distances, reducing the projects contribution to the overall increase of traffic in the ship channel. According to the Calcasieu Ship Channel Traffic Study (Ausenco, 2018), traffic in the channel is projected to double to 2,183 vessel calls in 2023. Approximately 800 of these new vessel calls are projected to involve LNG carriers (including those listed in table 4.13-2). The proposed increase in vessels over the estimated 2023 number of approximately 2,183 vessels annually and projected future increase in vessels would not likely affect the capability of the channel to handle the proposed ship movements according to the Calcasieu Ship Channel Traffic Study (Ausenco, 2018). Therefore, we conclude that the Project would not have a significant contribution to overall cumulative impacts on marine transportation in the Calcasieu Ship Channel. Marine traffic impacts related are more fully addressed in section 4.9.11 and cumulative marine traffic impacts are discussed in this section.[57]

OCM agrees with this assessment. This is consistent with our other findings discussed further in this document within sections III.H, IV.A, C, D, E, F, and J, and V. OCM has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to marine traffic are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts on marine traffic would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

Cumulative impacts on socioeconomic factors are discussed as follows in the FERC FEIS,

> "Project impacts on environmental justice populations may include impacts on socioeconomic factors. Constructing the Project would require, at its peak, about 2,000 workers/contractors. The combined populations of Cameron and Calcasieu Parishes are about 210,000 individuals. The closest environmental justice communities to the project site would be those that include the towns of Cameron (Census Tract 9702.01 Block Group 3), Hackberry (Census Tract 9702.01 Block Group 1), and Carlyss (Census Tract 33, Block Group 2). We received a comment expressing concern that an influx of construction

[57] *Id* at 4706.

workers/contractors in the region could increase demand for housing and therefore increase housing costs in the region. There are several large LNG terminal projects that have been proposed or approved that could have overlapping construction schedules with Commonwealth. These include Cameron LNG Expansion, Driftwood LNG, Lake Charles LNG, and CP2 LNG. Driftwood LNG began construction in March of 2022 and CP2 LNG is scheduled to begin construction in 2023. The other LNG projects do not have known construction start dates but are fully permitted and could therefore start at any point. Combined, these additional projects could require a peak of more than 20,000 workers, a 10 percent increase in the current population. The temporary flux of workers/contractors into the area would increase the demand for housing and community services, such as police enforcement, and medical care. Available short- and long-term housing would be limited within the two affected Parishes and associated environmental justice communities. Should other major industrial projects listed in table 4.13-2 be constructed at the same time as Commonwealth, 3,500 units would still be available. However, the increased demand for this housing could drive costs up and adversely impact low-income individuals.

"The population increase, as well as various construction projects, may also increase the need for police, fire, and emergency medical services. Because environmental justice and smaller communities could have fewer public service resources available, any increased need due to these projects could negatively affect the availability of these services to the public. However, because applicants would be required to assess the capabilities of local public services and develop appropriate mitigation measures, such as training of internal staff to respond to emergencies, providing training, equipment, or funds to local departments, we have determined that cumulative impacts on police, fire, and emergency medical service within environmental justice communities would be minor.

"We received several comments concerned that construction and operation of the Project, in addition to the existing and growing industrial projects, would result in people moving out of the town of Cameron due to the continued industrialization of the area. Based on US Census Data, between 2010 and 2019, the population of Cameron went from 537 individuals to 203. While this does suggest that there is a migration of people out of Cameron, we are unable to assess if the cause of the population change is due to the increased industrialization of the area.

"Overall, cumulative socioeconomic impacts associated with housing and public services within environmental justice communities would be less than significant; housing units would be available should all the projects be constructed at the same time and impacts on community services would be mitigated as previously described. Socioeconomic impacts are more fully addressed in section 4.9 and cumulative socioeconomic impacts are discussed in this section.

"Area residents may be affected by traffic delays during construction of the Project. There would be a temporary increase in use of area roads by heavy construction equipment and associated trucks and vehicles. Increased use of these roads would result in a higher volume of traffic, increased commute times, and greater risk of vehicle accidents. These impacts would most likely affect those environmental justice communities that are in close

> proximity to several large projects, such as Cameron (Census Tract 9702.01 Block Group 3) and Hackberry (Census Tract 9702.01 Block Group 1), as well as those communities to the north where workers would find housing. Mitigation measures would be implemented to minimize potential road congestion during construction including the use of bus lots away from the facility to limit the number of vehicles traveling to construction sites and the establishment of temporary travel lanes and the use of flaggers and signs, as necessary, to ensure the safety of local traffic. Other large projects in the area would likely use other large available lots for parking for the majority of their workers. Depending on the location of these lots, and timing of construction, there could be some overlap, which would result in minor to significant traffic impacts. These impacts would also be limited to the time of construction. Once construction is complete, the vehicle trips for the permanent workforce and large heavy trucks are not anticipated to significantly increase traffic. Therefore, we do not expect the Project to significantly contribute to cumulative traffic impacts during operation. Traffic impacts are more fully addressed in section 4.9.11 and cumulative traffic impacts are discussed in this section.
>
> "Because most of the projects assessed would be along the Calcasieu Ship Chanel or Calcasieu Lake, it is likely that most non-local workers would find housing in larger towns and cities such as Carlyss and Lake Charles, Louisiana or Port Arthur, Texas. These areas could experience increased traffic volumes due to the influx of workers. Because several projects would be accessed along LA-27, traffic volumes along the road would increase if those projects were constructed concurrently. Commonwealth would use bus lots for Project parking in Carlyss, Louisiana, about 40 miles north of the Terminal site. It is likely that other large projects would also use off-site parking for workers to minimize traffic along LA-27 and other local roadways. Additionally, projects would develop and implement project-specific traffic mitigation plans that would further minimize overall traffic impacts from a project. Overall, cumulative traffic impacts on environmental justice communities would be less than significant. Project transportation needs and impacts are more fully addressed in section 4.9.11 and cumulative transportation impacts are discussed in this section."[58]

This is consistent with OCM's findings discussed within sections III.I and M and IV.A of this document. OCM has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to socioeconomic factors are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts on socioeconomic factors would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

The FERC FEIS also addresses cumulative impacts to air quality on EJ communities. While already and separately considered by LDEQ, and not one of the specific factors the trial court ordered to be analyzed by OCM for impacts to EJ communities, this discussion from the FEIS is included as it also potentially addresses matters OCM was ordered by the trial court to analyze regarding impacts caused by global climate change. The FERC FEIS states,

[58] *Id* at 4706-4708.

"Construction and operation of the Terminal site would result in long-term impacts on air quality. Emissions during Terminal and Pipeline construction would generally be associated with onshore construction activities conducted using on-road and off-road mobile equipment and offshore construction activities conducted using marine vessels such as tugboats or barges and a dredging vessel. Construction emissions in the form of particulate matter (e.g., dust) would occur, and construction emissions from equipment exhaust would result in short-term, localized impacts in the immediate vicinity of construction work areas. Efforts to mitigate exhaust emissions during construction would include using construction equipment and vehicles that comply with EPA mobile and non-road emission regulations, and usage of commercial gasoline and diesel fuel products that meet specifications of applicable federal and state air pollution control regulations. Fugitive dust would be mitigated by applying water to the roadways and reducing vehicle speed. Commonwealth conducted air dispersion modeling to assess air quality impacts and show compliance with applicable NAAQS and Class II PSD Increments for the pollutants subject to PSD review. Additionally, FERC modeled the impacts of mobile sources (LNG carriers and tugs) in addition to the PSD and NAAQS modeling required by the state. The cumulative modeling indicated that operation of the Project would contribute to a potential cumulative nitrogen dioxide (NO2) 1-hour NAAQS exceedance, however the Project's contribution (including LNG stationary and mobile sources) would be less than the significant impact level at each exceedance location. A majority of these potential exceedances within the modeled area would be within an environmental justice community (Census Tract 9702.01, Block Group 1) (see appendix F). Commonwealth's contribution to these exceedances is estimated to be less than the significant impact level at all exceedance locations Therefore, we conclude that the Project would not cause or significantly contribute to an exceedance of the NAAQS and cumulative impacts on environmental justice communities related to air quality. Air Quality impacts are more fully addressed in section 4.11.1 and cumulative air quality impacts are discussed in this section.

"Construction and operation of the project would increase the atmospheric concentration of GHGs, in combination with past and future emissions from all other sources (including those listed in table 4.13-2) and would contribute incrementally to future climate change impacts. While the climate change impacts taken individually may be manageable for certain communities, the impacts of compounded extreme events (such as simultaneous heat and drought, or flooding associated with high precipitation on top of saturated soils) may exacerbate preexisting community vulnerabilities and have a cumulative adverse impact on environmental justice communities.

"This EIS is not characterizing the Project's GHG emissions as significant or insignificant because the Commission is conducting a generic proceeding to determine whether and how the Commission will conduct significance determinations going forward.162 GHG impacts are more fully addressed in section 4.11.1 and cumulative GHG impacts are discussed in this section."[59]

[59] *Id* at 4708-4709.

LDENR has independently reviewed and analyzed this issue, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to EJ communities associated with GHG's are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the cumulative impacts associated with GHG's would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

The FERC FEIS concludes its cumulative impacts on EJ communities analysis as follows,

> "As described throughout this EIS, the proposed Project would have a range of impacts on individuals living in the vicinity of the Project facilities, including environmental justice populations. Based on our analysis, environmental justice communities in the study area would experience cumulative impacts on wetlands, surface water, aquatic resources, socioeconomics, traffic, noise, air quality, GHG and significant visual impacts related to the project and the additional projects listed in table 4.13-2. Cumulative impacts on environmental justice communities related to wetlands, surface water, aquatic resources, visual resources, socioeconomics, traffic, noise, and air quality would be less than significant. However, cumulative impacts related to visual resources would be significant."[60]

LDENR has independently reviewed and analyzed the issue of environmental justice, and we concur with the FERC FEIS's analysis. As a result, of our independent analysis we find that the potential negative impacts to environmental justice are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts from the permitted project would be adequately minimized and sufficiently mitigated and would not have a significant impact on environmental justice communities.

Based upon the record as a whole, therefore, LDENR determines that the environmental impacts to EJ communities from the permitted project will be less than significant and that therefore, a disproportionate share of negative environmental consequences will not result from the permitted activities due to race, color, national origin, or income of these communities. Throughout this permitting process; (1) the public have had an opportunity to participate in this permitting process; (2) the public's contribution has influenced the permitting authority's decision; (3) community concerns were considered in the decision making process; and (4) the agency has sought out and facilitated the involvement of those potentially affected. OCM further determines that there has been "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income," with respect to this permit decision. Taking the entire record before it into account, including those portions highlighted herein, and based upon its independent consideration and analysis of the facility's potential impact on environmental justice communities OCM finds that the benefits of this project outweigh the costs to the community

[60] *Id* at 4709.

M. Climate Change

The Trial Court in *Sierra Club v DENR*, Doc. No. C-1021127-A, 38th Judicial District Court, Parish of Cameron, Louisiana, remanded the case to this agency to consider "the secondary and cumulative impacts, specifically this facility's impact on climate-related change in the coastal zone, if any, in conjunction with the other LNG facilities in the area." OCM determines that it being in the best interest of the State to not delay this matter further and does here provide additional consideration of the record to specifically analyze "the facility's impact on climate-related change in the coastal zone, if any, in conjunction with the other LNG facilities in the area." This additional consideration does not waive or limit the department's right to challenge the trial court's conclusion, and reserves all possible defenses and legal arguments in this matter or future matters. The information being considered herein was already located within the administrative record for this permit application. Both the FERC FEIS and LDEQ's basis for decision for LDEQ Permit Nos. 0560-00997-V0 and PSD-LA-841 are incorporated herein as if copied each in their entirety. They along with all other comments and submissions within the administrative record addressing climate change, including without limitation those found at 102117 AR 005005-5067, 5133-5192, 524- 5263, 5401-5458, and 5537-5604 of the administrative record, were considered.

Greenhouse gases (GHGs)

Consideration of the facility's potential impact on climate-related change in the coastal zone begins with highlighting discussions surrounding global climate change found in the administrative record.

A discussion of greenhouse gases begins FERC's FEIS consideration of climate change impacts,

> "Greenhouse gases (GHGs) occur in the atmosphere both naturally and as a result of human activities, such as the burning of fossil fuels. These gases are the integral components of the atmosphere's greenhouse effect, which warms the Earth's surface and moderates day/night temperature variation. In general, the most abundant GHGs are water vapor, CO2, methane (CH4), nitrous oxide (N2O), and O3. On December 7, 2009, the EPA defined air pollution to include a mix of six long-lived and directly emitted GHGs, finding that the presence of the following GHGs in the atmosphere may endanger public health and welfare through climate change: CO2, CH4, N2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Though the EPA's finding was based on emissions associated with new motor vehicles, the EPA has expanded its regulations to include the emission of GHGs from major stationary sources under the PSD program. The EPA's current rules require that a stationary source must be regulated as a major source for a non-GHG pollutant to be evaluated as a major source for GHGs. As a result, New Source Review (NSR) sources must also obtain a GHG PSD permit prior to beginning construction of a new major source with significant net emission increases of carbon dioxide equivalent (CO2e) equal to or greater than 75,000 tons per year (tpy). There are no NAAQS for GHGs.
>
> "The principal GHGs that would be produced by the Project are CO2, CH4, and N2O. Emissions of GHGs are quantified and regulated in units of CO2e. The CO2e unit of measure takes into account the global warming potential (GWP) of each GHG. The GWP is a ratio relative to CO2 that is based on the particular GHG's ability to absorb solar

radiation as well as its residence time within the atmosphere. Thus, for a 100-year horizon, CO2 has a GWP of 1, CH4 has a GWP of 25, and N2O has a GWP of 298 (Intergovernmental Panel on Climate Change, 2021). To obtain the CO2e quantity, the mass of the particular compound is multiplied by the corresponding GWP, the product of which is the CO2e for that compound. The CO2e value for each of the GHG compounds is then summed to obtain the total CO2e GHG emissions."[61]

Flooding and Storm Impacts

FERC's FEIS addressed flooding and storm-based impacts associated with the project as follows,

"The majority of the Commonwealth Project site would be enclosed for flood protection by construction of storm surge protection walls (floodwalls). A current Commonwealth plan layout present several structures and buildings outside the floodwalls area, which include admin office/main control room, maintenance building, elevated flare, warm flare, jetty platform control room, etc. We received a comment from the public expressing concern regarding the safety of the flare stacks being outside of the floodwalls. Commonwealth indicated the facility components that would be constructed outside of the floodwalls have not been engineered as yet. Commonwealth confirmed these items would be designed per the applicable codes, inclusive of elevation for the flood hazard area, wave, and wind loading. Building elevations would be derived and confirmed during the engineering of these structures, in a future stage of the project. The flares would be designed to withstand wave loading during a hurricane event. A 500-year return for resiliency is the design case. The floodwall minimum height would reflect this elevation.

"We generally evaluate the design against a 500-year stillwater flood elevation (SWEL) with a 500- year wave crest and sea level rise and subsidence. Using maximum envelope of water (MEOW) storm surge inundation maps generated from the Sea, Lake, and Overland Surge from Hurricanes model developed by NOAA National Hurricane Center, a 500-year event would equate to a Category 2 Hurricane and approximately 3-9 feet MEOW. This is lower than indicated in the 500-year FEMA maps. In addition, while NOAA seems to provide higher resolution of topographic features, it limits its SLOSH maps to storm surge levels at high tide above 9 feet. As a result, FERC staff evaluated the storm surge against other sources using SLOSH maps that indicate a similar upper range of 8-10 feet MEOW for Category 2 Hurricanes, and also indicated 13-16 feet MEOW for Category 3 Hurricanes, 16-20 feet MEOW for Category 4 Hurricanes, and 20-25 feet MEOW for Category 5 Hurricanes. This data suggests that current Commonwealth design may not withstand Category 3 or 4 Hurricane storm surge SWEL equivalent to 1,000- to 10,000-year mean return intervals. In addition, wave heights would likely impact the channel side, but would not reach the landward side. We also would expect the sea level rise and vertical land movement to be closer to the 1.21 feet over a 30-year intermediate projection provided by the COE Sea-Level Change Curve Calculator with NOAA et al. 2017 Scenario Source.131 Commonwealth indicated the floodwalls height would be

[61] *See* 1021127 AR 004527 - 004528.

designed to a 500-year SWEL, 500-year wave, and sea level rise height of 8.15 inches, and 8-12 inches of expected settlement, 6.3 inches of local subsidence yielding. Although the sea level rise and subsidence values are different, in total, they are equivalent to the intermediate projections by NOAA

"Given the uncertainty in the 500-year SWEL data, 500-year wave data, SLOSH maps, sea level rise and subsidence projections, and settlement projections and uncertainties, we disagree that the current 20 feet and 25 feet post settlement storm surge floodwalls elevations would provide adequate protection of the Commonwealth site. Commonwealth committed that the Project facility would be designed to handle a 500-year mean recurrence interval flood event to comply with USCG regulations under 33 CFR 127 requirements. In addition, given the uncertainty in storm surge floodwalls settlement, we recommend in section 4.12.1.6 that Commonwealth periodically monitor and maintain the storm surge floodwalls to be no less than a minimum elevation of 500-year mean recurrence interval flood event. We recommend in the section 4.12.1.6 that Commonwealth shall file with the Secretary the final design of storm surge floodwalls to comply with applicable code/standards requirements including but are not limited to 33 CFR 127, NFPA 59A (2019), ASCE/SEI 7(2022 edition) or equivalent, and ASCE/SEI 24 (2014 edition) or equivalent, etc. The floodwalls should be designed and maintained to withstand a minimum of a 500-year mean occurrence interval in consideration of relative sea level rise, local subsidence, site settlement, shoreline recession, erosion and scour effect, and wind-driven wave effects, etc. The sea level rise and vertical land movement should be in accordance with at a minimum intermediate curve corresponding to life of facility in Global and Regional Sea Level Rise Scenarios for the United States. U.S. Department of Commerce. National Ocean and Atmospheric Administration, National Ocean Service Center for Operational Oceanographic Products and Services, February 2022 or equivalent. The final design of floodwalls shall be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana. In addition, we recommend in section 4.12.1.6 that prior to construction of final design, Commonwealth shall file with the Secretary the final design elevation for the structures/buildings outside floodwalls area, including but are not limited to admin office/main control room, maintenance building, elevated flare, marine flare, jetty platform control room, etc. The final design elevation drawings and calculations should be stamped and sealed by the professional engineer-of-record, registered in the State of Louisiana.

"The Texas and Louisiana Gulf Coast area is experiencing the highest rates of coastal erosion and wetland loss in the United States (Ruple, 1993). The average coastal erosion rate is -1.2 meters per year between 2000 and 2012 along the Texas coastal shoreline, with the area between Sabine Pass and Rollover Pass experiencing a shoreline loss rate of -4.7 meters per year between 2000 and 2012 (McKenna, 2014). Shoreline erosion could occur at the Project site and along the opposite shoreline as a result of waves, currents, and vessel wakes. Commonwealth stated that marine slopes would be protected against wave, current, and prop-wash-induced scour using rock rip rap or concrete revetment. Scour protection would be designed by a hydraulic engineer to resist tidal influence, wave action and prop wash forces. As required by ASCE/SEI 7-05/7-10, the erosion and scour should be included in the calculation of flood loads on buildings and other structures in flood hazard areas as

> recommended above. FERC staff would continue our evaluation of final flood loads design within erosion and scour effect for the proposed Project. Even though shoreline erosion is a concern at the site, the recommended and proposed mitigation measures would minimize erosion and scour impacts."[62]

These recommended flood protection structures are outlined throughout the CUP permit and application. For instance see the description of the storm surge wall in CUP application Step 13 (page 72 of 215) and the cross-section of the storm surge wall as well. This is consistent with OCM's determinations discussed further within sections III.A, F, G and L, and IV.A, B, C, F, and J of this document. On this same topic, LDEQ notes,

> "In addition to purchasing wetlands credits to offset impacts, the applicant proposes to transport the sediments that will be dredged from the Calcasieu River to create and maintain the LNG facility's marine berth to the Cameron Prairie National Wildlife Refuge on the southern shore Calcasieu Lake, approximately 6 miles northeast of the project site. Commonwealth will transport 1.73 million cubic yards of sediment to a 640-acre Beneficial Use of Dredged Material (BUDM) site within the wildlife refuge during initial construction of the LNG facility and subsequently transport 152,000 cubic yards of sediment every two years post-construction. The U.S. Fish and Wildlife Service plans to use the transported sediment to create shallow subtidal estuarine and mudflat habitats and as substrate for restoration of emergent wetland habitat. This area is documented in Louisiana's Coastal Master Plan as a marsh restoration area (i.e. Project No. 004.MC.23). Thus, the project will create long-term positive benefits for the NWR through the creation of new wetland habitat and additional wetlands to prevent future erosion and storm surge."[63]

We also point to the mitigation plan submitted as part of the application under review and our independent consideration of unavoidable impacts and mitigation found within sections III.F, E, & L, IV.A, C, D, F, and J, and V of this document. OCM has independently reviewed and analyzed the issue of flooding and storm impacts, and we concur with both the FERC FEIS and LDEQ basis for this decision's analysis. As a result, of our independent analysis we find that the potential negative impacts from potential flooding and storm impacts are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts from the permitted project would be adequately minimized and sufficiently mitigated.

Climate Change Impacts

Reviewing the available information within the record, OCM highlights FERC's description of GHG impacts in its FEIS that,

> "GHG emissions do not result in proportional local and immediate impacts; it is the combined concentration in the atmosphere that affects the global climate system. These are fundamental global impacts that feedback to local and regional climate change impacts.

[62] *See* 1021127 AR 004616 – 004617.
[63] *See* 1021127 AR 005785-6.

> Thus, the geographic scope for cumulative analysis of GHG emissions is global, rather than local or regional. For example, a project 1 mile away emitting 1 ton of GHGs would contribute to climate change in a similar manner as a project 2,000 miles distant also emitting 1 ton of GHGs.[64]

We also note the following findings included by LDEQ in its basis of findings regarding GHGs associated with the proposed facility and potential impacts,

> "Unlike most traditional air pollutants, GHGs become well mixed throughout the global atmosphere so that the long-term distribution of GHG concentrations is not dependent on local emission sources. Instead, GHG concentrations tend to be relatively uniform around the world. As a result of this global mixing, GHGs emitted anywhere in the world affect climate everywhere in the world. In this way, the global CO2 reductions achieved by the use of LNG to displace coal or other fuels with a higher carbon intensity than natural gas will benefit Louisiana.
>
> "For example, a recent study by ICF, which looked at cases in Germany, China, and India, concluded that using United States-sourced LNG or imported pipelined gas for electricity generation produces on average 50.5 percent lower GHG emissions than electricity from coal in all base case scenarios studied."[65]

OCM especially notes and highlights LDEQ's statement above that displacing coal with US-sourced LNG, such as would be produced by this permitted facility, will benefit Louisiana.

Despite OCM jurisdictional limitations to addressing the direct and significant impacts to coastal resources within Louisiana's coastal zone, in undertaking the analysis as ordered by the trial court, we note the following from FERC's FEIS:

> "Emissions of GHGs are typically expressed in terms of CO2e.171 Direct GHG emissions from the operation of the Project would result in an annual increase of CO2e emissions of about 3,559,091 tpy (equivalent to 3,228,754 metric tpy). The estimate for operational emissions is based on the facilities being operated at maximum capacity for 365 days per year, 24 hours per day. Additionally, the estimate includes fugitive and vented blowdown emissions and mobile emissions sources, including berthed vessels, auxiliary engines of vessels in transit, and maintenance dredging. Construction and operation of the Project would increase the atmospheric concentration of GHGs, in combination with past and future emissions from all other sources globally and would contribute incrementally to future climate change impacts. To assess impacts on climate change associated with the Project, Commission staff considered whether it could identify discrete physical impacts resulting from the Project's GHG emissions or compare the Project's GHG emissions to established targets designed to combat climate change.

[64] 1021127 AR 004715.
[65] *See* 1021127 AR 005780 – 005781.

> "To date, Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource impacts, Commission staff are unable to assess the Project's contribution to climate change through any objective analysis of physical impact attributable to the Project. Additionally, Commission staff have not been able to find an established threshold for determining the Project's significance when compared to established GHG reduction targets at the state or federal level. This EIS is not characterizing the Project's GHG emissions as significant or insignificant because the Commission is conducting a generic proceeding to determine whether and how the Commission will conduct significance determinations going forward.**172**
>
> "To provide context for the Project emissions on a national level, we compare the Project's GHG emissions to the total GHG emissions of the United States as a whole. At a national level, 5,222.4 million metric tons of CO2e were emitted in 2020 (inclusive of CO2e sources and sinks; EPA, 2021). The construction-related emissions of the Project could potentially increase CO2e emissions based on 2020 levels by 0.01 percent. The operational emissions could potentially increase CO2e emissions based on the 2020 national levels by 0.06 percent.
>
> "To provide context of the Project emissions on a state level, we compare the Project's GHG emissions to the state GHG inventories. At the state level, energy related CO2 emissions in Louisiana were 194.9 million metric tons of CO2e in 2019 (EIA, 2022). GHG emissions in Louisiana would result from the Project's direct construction and operational emissions; no end-use is expected in Louisiana as the natural gas would be exported from the United States. Construction emissions from the Project could potentially increase CO2e emissions based on the Louisiana 2019 levels by 0.3 percent and Project operations could potentially increase emissions by 1.7 percent."[66]

OCM notes that FERC determined that there is no scientifically backed "methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs." Nevertheless, even when assuming the facility would be "operated at maximum capacity for 365 days per year, 24 hours per day," a highly improbable if not impossible assumption, the FERC FEIS describes the facility's emissions as having an incremental impact. OCM has independently reviewed and analyzed the issue of climate change impacts, and we agree with both the FERC FEIS and LDEQ basis for decision's analysis. As a result, of our independent analysis and consideration we find that the potential negative impacts from potential flooding and storm impacts are outweighed by the economic and other benefits of the permitted activity. Specifically, we find that the impacts from the permitted project would be adequately minimized and sufficiently mitigated.

Recently, the Fourth Circuit Court of Appeals in *Healthy Gulf vs. Secretary, Louisiana Department of Natural Resources*[67],examined DENR's cost benefit analysis in granting a CUP. Specifically the

[66] *Id* at 004717.
[67] *Healthy Gulf vs. Secretary, Louisiana Department of Natural Resources* (La. App. 4 Cir. 12/23/24) 407 So3d 705

court considered whether the analysis was reasonable for providing a dollar value for purported benefits but did not offer quantitative value of the costs of the project. The Court found "[i]n the context of environmental impacts, related cases recognize a cost-benefit analysis is 'not to total up dollars and cents in a sort of profit-loss ledger' rather, qualitative consideration is adequate."[68] This is important for the consideration of climate change impacts on Louisiana's coastal zone attributable to the project and nearby LNG facilities as FERC's FEIS raises the point that they have been unable to identify a scientifically verifiable metric to measure such impacts at a localized level.

Taking the entire record before it into account, including those portions highlighted herein, and based upon its independent consideration and analysis of the facility's potential impact on climate-related change in the coastal zone, in conjunction with the other LNG facilities in the area, OCM finds that the benefits of this project outweigh the costs to the community.

N. Conclusion

The information submitted by the Applicant in support of the proposed project is acceptable and no further information or evaluation is required. The accumulated information from these documents is deemed to adequately address the required information. OCM agrees with these analyses, adopts these materials by reference, and adopts the conclusions therein as our own.

IV. COASTAL USE GUIDELINES ANALYSIS

For a CUP JPA to be granted, the use must be in conformance with the Guidelines (LAC 43:1.701-719). If necessary, authorizations may be conditioned to bring them into compliance with these Guidelines. Following is an analysis of the project and its compliance with the Guidelines. The text of the Guideline is listed in a separate font to distinguish it and then a discussion of the Guideline with regard to this JPA follows.

A. Discussion of §701

This section of the guidelines is applicable to the project as a whole.

§701. Guidelines Applicable to All Uses

A. The guidelines must be read in their entirety. Any proposed use may be subject to the requirements of more than one guideline or section of guidelines and all applicable guidelines must be complied with.

B. Conformance with applicable water and air quality laws, standards and regulations, and with those other laws, standards and regulations which have been incorporated into the coastal resources program shall be deemed in conformance with the program except to the extent that these guidelines would impose additional requirements.

C. The guidelines include both general provisions applicable to all uses and specific provisions applicable only to certain types of uses. The general guidelines apply in all situations. The specific guidelines apply only to the situations they address. Specific and general guidelines should be interpreted to be consistent with each other. In the event there is an inconsistency, the specific should prevail.

D. These guidelines are not intended to nor shall they be interpreted so as to result in an involuntary acquisition or taking of property.

[68] *Healthy Gulf vs. Secretary, Louisiana Department of Natural Resources* (La. App. 4 Cir. 12/23/24) 407 So3d 705, 716. *Citing S. Louisiana Env't Council, Inc. v. Sand*, (5th Cir. 1980) 629 F.2d 1005, 1013, ((c*iting Sierra Club v. Morton*, (5th Cir. 1975) 510 F.2d 813, 827)

E. No use or activity shall be carried out or conducted in such a manner as to constitute a violation of the terms of a grant or donation of any lands or waterbottoms to the state or any subdivision thereof. Revocations of such grants and donations shall be avoided.

F. Information regarding the following general factors shall be utilized by the permitting authority in evaluating whether the proposed use is in compliance with the guidelines:
   1. type, nature, and location of use;
   2. elevation, soil, and water conditions and flood and storm hazard characteristics of site;
   3. techniques and materials used in construction, operation, and maintenance of use;
   4. existing drainage patterns and water regimes of surrounding area including flow, circulation, quality, quantity, and salinity; and impacts on them;
   5. availability of feasible alternative sites or methods of implementing the use;
   6. designation of the area for certain uses as part of a local program;
   7. economic need for use and extent of impacts of use on economy of locality;
   8. extent of resulting public and private benefits;
   9. extent of coastal water dependency of the use;
   10. existence of necessary infrastructure to support the use and public costs resulting from use;
   11. extent of impacts on existing and traditional uses of the area and on future uses for which the area is suited;
   12. proximity to and extent of impacts on important natural features such as beaches, barrier islands, tidal passes, wildlife and aquatic habitats, and forest lands;
   13. the extent to which regional, state, and national interests are served including the national interest in resources and the siting of facilities in the coastal zone as identified in the coastal resources program;
   14. proximity to, and extent of impacts on, special areas, particular areas, or other areas of particular concern of the state program or local programs;
   15. likelihood of, and extent of impacts of, resulting secondary impacts and cumulative impacts;
   16. proximity to and extent of impacts on public lands or works, or historic, recreational, or cultural resources;
   17. extent of impacts on navigation, fishing, public access, and recreational opportunities;
   18. extent of compatibility with natural and cultural setting;
   19. extent of long term benefits or adverse impacts.

G. It is the policy of the coastal resources program to avoid the following adverse impacts. To this end, all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable significant:
   1. reductions in the natural supply of sediment and nutrients to the coastal system by alterations of freshwater flow;
   2. adverse economic impacts on the locality of the use and affected governmental bodies;
   3. detrimental discharges of inorganic nutrient compounds into coastal waters;
   4. alterations in the natural concentration of oxygen in coastal waters;
   5. 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;
   6. adverse disruption of existing social patterns;
   7. alterations of the natural temperature regime of coastal waters;
   8. detrimental changes in existing salinity regimes;
   9. detrimental changes in littoral and sediment transport processes;
   10. adverse effects of cumulative impacts;
   11. detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging;
   12. reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest;
   13. discharges of pathogens or toxic substances into coastal waters;
   14. adverse alteration or destruction of archaeological, historical, or other cultural resources;
   15. fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas;

16. 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;
17. adverse alteration or destruction of public parks, shoreline access points, public works, designated recreation areas, scenic rivers, or other areas of public use and concern;
18. adverse disruptions of coastal wildlife and fishery migratory patterns;
19. land loss, erosion, and subsidence;
20. increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such hazards;
21. reduction in the long term biological productivity of the coastal ecosystem.

H. 1. In those guidelines in which the modifier "maximum extent practicable" is used, the proposed use is in compliance with the guideline if the standard modified by the term is complied with. If the modified standard is not complied with, the use will be in compliance with the guideline if the permitting authority finds, after a systematic consideration of all pertinent information regarding the use, the site and the impacts of the use as set forth in Subsection F above, and a balancing of their relative significance, that the benefits resulting from the proposed use would clearly outweigh the adverse impacts resulting from noncompliance with the modified standard and there are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the modified standard and:
   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.

   2. The systematic consideration process shall also result in a determination of those conditions necessary for the use to be in compliance with the guideline. Those conditions 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.

I. Uses shall to the maximum extent practicable be designed and carried out to permit multiple concurrent uses which are appropriate for the location and to avoid unnecessary conflicts with other uses of the vicinity.

J. These guidelines are not intended to be, nor shall they be, interpreted to allow expansion of governmental authority beyond that established by R.S. 49:214.21-49:214.42, as amended; nor shall these guidelines be interpreted so as to require permits for specific uses legally commenced or established prior to the effective date of the coastal use permit program nor to normal maintenance or repair of such uses.

Subsections A through E

These subsections contain general information about the guidelines and their use as a framework by which to evaluate every CUP JPA.

Subsection F

Subsection F lists the general factors that OCM must utilize in evaluating whether the proposed use is in compliance with the guidelines that follow in Subsection G and other subsequent applicable sections. Conformance with Subsection F means that adequate information is available for a thorough review of the proposed project and is achieved when OCM professional staff concludes that the information received and available is administratively and technically complete. In addition to information provided by the Applicant, OCM professional staff utilize readily available spatial data, to include but not be limited to, aerial photography, topographic maps, light detection and ranging (LiDAR) data, soil survey data, habitat and natural resource

data maps, and other geographic information system tools to verify and evaluate the information submitted within the CUP JPA. OCM's record of existing and historic activities is contained in OCM's CUP database[69] is also used to evaluate proposed coastal uses. OCM finds, as discussed below, that this subsection of the guidelines is met and there is adequate information for a thorough review of the proposed projects impacts and benefits.

Paragraph 1 is satisfied with the following:

- JPA and project plats
- Supplemental attachments in step 13 of the JPA

Paragraphs 2 and 4 are satisfied with the following:

- JPA and attachments
- HMIA documentation (See Section III.B)

Paragraphs 3, 5, 7 – 19 are satisfied with the following:

- JPA attachments
- NAJ documentation (See Section III.A)

Paragraph 6 information is met by virtue of the letter of no objection from the Cameron Parish Police Jury uploaded to the OCM record on July 6, 2020 and by the comments made by local public officials in support of the proposed project at the public hearing held March 1, 2023 (see Section II.D).

Subsection G

Subsection G of the Guidelines lists those aspects and impacts of projects that must be avoided or minimized to the maximum extent practicable. See Subsection H of this section below for a discussion on the applicability of the maximum extent practicable modifier.

Paragraph 1 is met, to the maximum extent practicable, as there will be no anticipated significant alteration or reduction in the supply of sediment or nutrients by alterations of freshwater flow due to the proposed project activities (see Section III.B). Concerns regarding the near-shore disposal of dredged material were addressed by eliminating that option for dredged material disposal from the project (see Section III.D).

Paragraph 2 is met as it has been determined that adverse economic impacts on locality have been avoided or mitigated to the maximum extent practicable (see Section III.A). As proposed, the project is expected to have a positive economic impact on the locality by the creation of short and long-term job opportunities as well as increased tax revenues from project operations and from spending on goods and services near the proposed activities by the workers. Additionally, the Applicant has offered to donate resources to the local emergency preparedness office in order to mitigate the expenses that may become necessary when responding to facility related emergencies.[70] As further evidence of the lack of adverse

[69] http://sonlite.dnr.state.la.us/sundown/cart_prod/cart_cmd_menu
[70] See "P20190900_clarification-of-local-emergency-response-MOUs.pdf"comment dated 7/15/24.

economic impacts on the locality, several public officials from Cameron Parish have provided comments supporting the proposed use (see Section II.D).

Paragraphs 3 and 4 are met, to the maximum extent practicable, as the Applicant will be required, as a condition of accepting a CUP, to obtain and maintain all necessary water discharge permits required by the LDEQ, who is responsible for regulating water quality parameters including dissolved oxygen and nutrients (see Section V).

Paragraph 5 is met, to the maximum extent practicable. OCM has determined that the proposed project has been sited and designed and will be constructed and operated in the least damaging feasible manner (see Section III.A). OCM also has determined that there will be no anticipated adverse impact to hydrology in the project vicinity (see Section III.B). There will be no adverse impacts to tidal passes, inshore waters, waterbottoms, beaches, dunes, barrier islands, or other natural biologically valuable areas or protected coastal features, excluding cheniers. Impacts to cheniers have been minimized to the maximum extent practicable and concerns were addressed by a thorough review of the alternative sites considered (see Section III.A). The FERC FEIS[71] offers the following:

> "Permanent impacts from the Terminal would total 13.3 acres of chenier and represent a small portion of the overall surrounding chenier community. A total of 23.6 acres of existing chenier would remain within the Terminal property. The LDENR reports over 2,000 acres of existing chenier habitat in coastal southwest Louisiana. LDWF recommended that Commonwealth restore and preserve unaffected chenier habitat in the vicinity of the Project to mitigate for unavoidable permanent impacts on chenier habitat at the Project site. Accordingly, Commonwealth has committed to eradicating feral hogs from the Terminal property and installing a hog exclusion fence around the perimeter of the Terminal property and the 23.6 acres of chenier habitat that would not be affected by construction…Commonwealth would preserve the chenier areas on the Terminal property for the life of the Project (anticipated to be 30 years). The relatively small permanent loss of chenier and the anticipated mitigation would result in a minor overall reduction in acreage, but potentially higher value cheniers habitat within the Project area would be preserved. Therefore, we concluded that Project impacts on cheniers would not be significant."

It is OCM's opinion that impacts to the chenier have been minimized to the maximum extent practicable.

Paragraph 6 is met, to the maximum extent practicable. OCM staff have made personal inspections of available maps and other published or publically available spatial data to determine the quality and extent of existing social patterns. These reviews included, but were not limited to, the use of aerial photography, topographic maps, and LiDAR data; agency held information about CUP projects; and the institutional knowledge and experience of the OCM staff making this review. Common social activities in the project vicinity include recreational and commercial fishing, hunting and trapping, bird watching, beach use, and site-seeing. The

[71] See page 4-102, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

proposed activities are not anticipated to adversely disrupt fisheries (see Section III.H) or prevent hunting, trapping, bird watching, beach use, or site-seeing on adjacent properties. The public does not have a right to access private property without permission of the landowner and the majority of the proposed projects features occur on private property. Where project features include state property, the Applicant, as a condition of accepting a CUP, will be required to obtain all necessary permits or other agreements from the Louisiana Office of State Lands (see Section V).

Paragraphs 7 and 8 are met, to the maximum extent practicable, as the Applicant will be required, as a condition of accepting a CUP, to obtain and maintain all necessary water discharge permits required by the LDEQ, who is responsible for regulating water quality parameters including dissolved oxygen and nutrients (see Section V).

Paragraph 9 is met, to the maximum extent practicable, as there is no anticipated change to littoral processes resulting from proposed activities. Concerns regarding water flow from and to the adjacent property to the west of the proposed facility site are addressed by the addition of a perimeter ditch designed to mimic existing water flow patterns. After consultation with resource agencies, the Applicant included at the outfall of the ditch a WCS designed to maintain existing normal water flow patterns while also preventing, during normal conditions, back flow that may have the potential to increase water salinity on the adjacent property (see Section III.B).

Paragraph 10 is met, to the maximum extent practicable. Cumulative impacts are those that increase in significance due to the collective effects of a number of activities. An example is the development of a campsite along a canal. The impact caused by four to five camps is negligible, whereas the impact of 40 to 50 camps to water quality, navigation safety, bankline erosion, etc. can be significant. The Applicant's actions in this case, when considered with other past and present actions, may likely result in cumulative impacts. However, through OCM's consistent application of regulations and guidelines; requirement to offset any loss of wetland acreage; implementation of both the NAJ and HMIA analyses; and efforts to avoid, minimize, and mitigate adverse impacts, it was determined, that on a cumulative basis, this guideline is met to the maximum extent practicable.

The FERC FEIS found there would be no cumulative impacts to cultural resources and soils and a negligible contribution to cumulative impacts on groundwater or geological resources, such as subsidence, erosion, flooding, and mineral resources. Cumulative impacts to surface water quality and aquatic species from dredging, pile driving, ballast water, and marine traffic would be minimal and temporary. Commonwealth is required to obtain a Water Quality Certification and any necessary general and LPDES water quality permits from LDEQ as LDEQ has jurisdictional authority over water quality discharges.[72]

The FEIS concluded that air quality impacts from construction of the proposed project would not be significant, while air quality impacts from operation of the facility would be minor.[73]

[72] Pages 4-362 – 370. "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[73] Pages 4-388 – 392. "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

Air emissions from the facility are regulated by the LDEQ's air permits program and permits for the regulation of air emissions, including any related to global warming/climate change are addressed as part of Commonwealth's Part 70 Permit No. 0560-00997-V0 and Prevention of Significant Deterioration Permit No. PSD-LA-841 that were issued by the LDEQ on March 28, 2023. With regard to public comments requesting an analysis of the proposed projects potential effect on global warming/climate change, such considerations are included in subsection III.M of this basis of decision document.

According to the FERC FEIS, Commonwealth is federally mandated "to demonstrate no net loss of wetland function through a wetland restoration plan or participation in a mitigation program." The Applicant will provide adequate compensatory mitigation for the proposed unavoidable impacts to wetlands. Therefore, the FEIS concluded that the Applicant will not contribute "significantly to overall cumulative impacts on wetlands." Additionally, the FEIS found "the Project would have *no effect* or would be *not likely to adversely affect* all but one of the federally listed species and w*ould not contribute to a trend toward federal listing* for the species under federal review**.** We concluded that the Project *is likely to adversely affect* the eastern black rail." The USFWS was tasked with reviewing the project and determined the continued existence of the EBR would not be jeopardized by the project. Prudent measures along with monitoring and reporting requirements were given to Commonwealth to implement. The FEIS concluded, "given the determination of the [US]FWS and associated guidance, and that the other projects in the geographic scope would be required to follow the ESA Section 7 consultation process (and applicants would be required to follow the terms and conditions of any biological opinion), we conclude cumulative impacts on eastern black rails would not be significant" (see Section III.I).[74]

It bears mentioning, in addition to the proposed Commonwealth LNG, two other LNG facilities (i.e., Venture Global Calcasieu Pass and Venture Global CP2 LNG) have been authorized along lower Calcasieu Pass and/or Calcasieu Ship Channel. OCM considered the cumulative impact of LNG development on vegetated wetlands within the geographic area located south of Calcasieu Lake, which includes substantial salt and brackish marsh habitat (figure 1). Table 1 shows a total of 605.7 acres of permanent wetland impact is anticipated from the three LNG facilities. However, the three CUPs also included a total of 1,408.7 acres of beneficial use (marsh creation/restoration) and 1,085.7 acres of compensatory mitigation (marsh creation and mitigation bank purchases). OCM concluded the cumulative impacts to wetlands will be adequately and appropriately offset.

[74] See pages 4-370 – 377, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

Table 1. *Summary of the permanent wetland impacts, beneficial use of dredged material, and compensatory mitigation for each of these LNG projects in the Calcasieu Pass/Calcasieu Ship Channel area.*

LNG Facility (CUP#)	CUP Status	Permanent wetland impacts (acres)	BUDM (acres)	Compensatory mitigation (acres)
Commonwealth LNG (P20190900)	Recommend Issuance	89.6	398.0	167.5
Venture Global Calcasieu Pass (P20150857)	Issued 2018*	154.0	0.0	275.5
Venture Global CP2 LNG (P20211131)	Issued 2024	362.1	1,010.7	642.7
Total Impact		**605.7**	**1,408.7**	**1,085.7**

*Revised in 2019, 2021, and 2023.

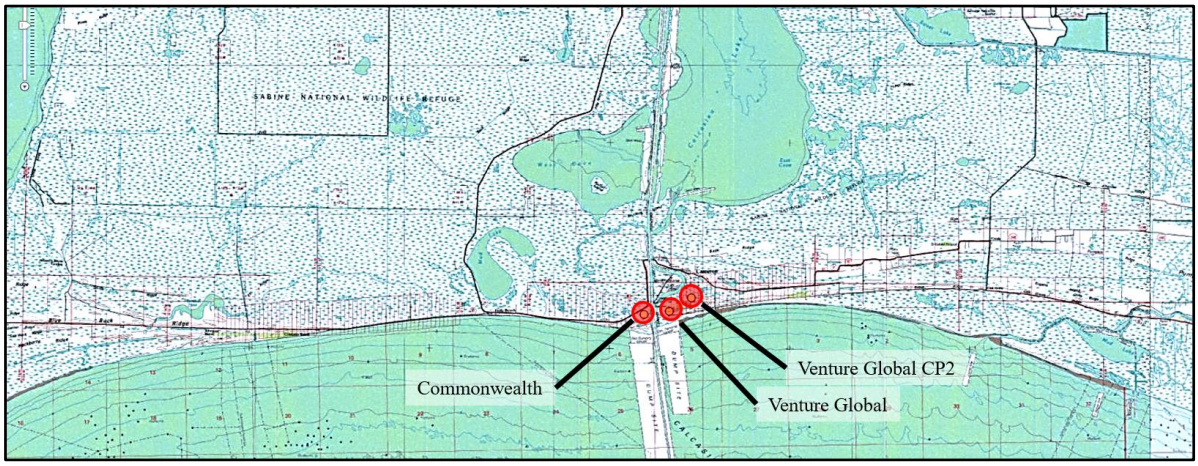

Figure 1. *Approximate Locations of LNG Projects.*

A portion of the proposed project is remotely located with very limited access within an existing natural gas pipeline corridor. Cumulative impacts are not anticipated as there will be no anticipated urban or commercial development or land-use changes in or along the natural gas pipeline ROW as a result of construction of the proposed project and the habitat will be restored once the natural gas pipeline is installed.

Paragraph 11 is met, to the maximum extent practicable, as no discharge of suspended solids is anticipated. Turbidity from excavation will occur but will be temporary and is not anticipated to have significant adverse impacts. The FERC FEIS states, “Based on dredging literature published by NMFS and Commonwealth’s site-specific modeling, we conclude the proposed dredging at the Terminal site would increase suspended sediment and turbidity levels at the Terminal site in the immediate vicinity of the dredging activity; however, sediment and turbidity levels would be indistinguishable from ambient water conditions outside of a small radius surrounding the dredge cutterhead. Therefore, we conclude that dredging impacts on

surface waters at the Project site would be temporary and not significant."[75] Additionally, the Applicant will be required, as a condition of accepting a CUP, to obtain and maintain all necessary water discharge permits required by the LDEQ, who is responsible for regulating water quality parameters including suspended solids and turbidity (see Section V).

Concerns regarding the near-shore disposal of dredged material were addressed in Section III.D. The banklines of the facility will be stabilized by a bulkhead; thus, preventing bank slumping and erosion into the water. All material excavated for the natural gas pipeline will be contained on site and used as backfill once the natural gas pipeline installation is complete.

In regards to the area affected by the installation of the natural gas pipeline ROW, the area will be restored to pre-project contours and elevations and allowed to re-vegetate. Therefore, increases in suspended solids will be prevented.

Paragraph 12 is met, to the maximum extent practicable, as there are no reductions or blockages to water flow or natural circulation patterns within or into an estuarine system or a wetland forest (see Section III.B).

Paragraph 13 is met, to the maximum extent practicable. Point source discharge is under the authority of the LDEQ. OCM includes, as a condition of acceptance of a CUP, that the Applicant obtain and maintain all necessary water discharge permits required by the LDEQ, who is responsible for regulating water quality parameters including pathogens and toxic substances. OCM also includes, as a condition of acceptance of a CUP, that the Applicant ensure all sanitary sewage and/or related domestic wastes generated receive the appropriate treatment before discharge and submit any plans and specifications to the Department of Health (see Section V).

Paragraph 14 is met to the maximum extent practicable. The applicant provided a report from a cultural survey that found no cultural resources within the project footprint. Additionally, OCM will include, as a condition of accepting a CUP, that the Applicant immediately stop work and consult with the SHPO if any archeological, historical, or other cultural resources are encountered during construction activities (see Section V).

Paragraph 15 is met, to the maximum extent practicable. Secondary impacts are those impacts resulting from the proposed activity that cause significant alterations to the physical characteristics of acreage beyond the proposed activity's boundaries. An example is the construction of a road and subsequent development, such as retail and residential areas along the road, since access is possible. OCM's policy is to avoid and minimize secondary impacts by requiring the Applicant, via permit conditions found in the CUP (see Section V), to perform the following:

- limit equipment to access routes and designated work areas,
- monitor hydrologic conditions and wetland vegetation of the marsh surrounding the permitted activities and to implement remediation plans if adversely affected,

[75] See page 5-404, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

- install adequate erosion/siltation control measures around construction areas to ensure that no project related sediments, debris, and pollutants enter adjacent wetlands or waters,
- properly treat or dispose of all sanitary sewage and/or related domestic wastes generated during the project activity, and
- ensure all fill material is clean and free of contaminants and does not contain hazardous materials.

Therefore, through measures like those outlined above, the requirements of other local, state, and federal regulatory authorities, and based on the professional judgment and experience of OCM staff, it was concluded that there are no anticipated secondary impacts to areas of biologically highly productive wetland areas.

Paragraph 16 is met, to the maximum extent practicable. There are no anticipated adverse impacts to fisheries breeding or nursery areas. The BUDM site is located on the CPNWR, a wildlife management area. The USFWS is the manager of the CPNWR refuge and issued a letter of support, which was uploaded to the OCM record on March 14, 2023. The applicant also received a special use permit for work on the refuge, uploaded to the OCM record on February 16. 2023.

Adverse impact to the EBR have been minimized, to the maximum extent practicable, by prohibiting clearing activities during the peak breeding and nesting season and by the Applicant's planned efforts to flush and/or relocate individual birds from the project area prior to land clearing activities (see Section V). Furthermore, consultation with LDWF, the agency responsible for management and protection of the State's renewable natural resources, including all wildlife and all aquatic life, proved beneficial, especially concerning EBR, and resulted in no formal LDWF objection to CUP issuance. Efforts have been included in site preparation activities that will minimize impacts to the EBR (see Section III.I). Additionally, the BUDM area has the potential to create new EBR habitat.

Adverse impacts to wetlands, both emergent and forested, have been minimized, to the maximum extent practicable, through site selection, project design changes, and the use of construction methods that minimize impacts (see Section III.A). Some impacts to wetlands are anticipated to be temporary as some areas will be restored to pre-project elevations and contours and allowed to revegetate once construction activities are complete. Potential wetland impacts will be assessed after one full growing season following completion of construction activities, with site restoration and/or compensatory mitigation required for any impacts to wetlands determined to have occurred as a result of the proposed activities. The applicant will be required to provide compensatory mitigation for all unavoidable permanent impacts.

Paragraph 17 is met, to the maximum extent practicable, as there will be no anticipated adverse impacts to public parks, shoreline access points, public works, designated recreation areas, scenic rivers, or other areas of public use and concern as a result of the proposed activities.

Paragraph 18 is met, to the maximum extent practicable, as adverse disruptions to coastal wildlife and fishery migratory patterns as a result of the proposed activities have been minimized (see Section III.D and I). The FERC FEIS concluded the project would not significantly affect wildlife populations or habitat, provided Commonwealth's compliance with all applicable local, state, and federal laws.

Paragraph 19 is met, to the maximum extent practicable. Based on best professional judgement and review of the HMIA (see Section III.B), there will be no anticipated increases in land loss, erosion, or subsidence as a result of the proposed activities.

Paragraph 20 is met, to the maximum extent practicable as the proposed activities are not anticipated to increase the risk of flooding to the project area or the areas surrounding the project. Concerns regarding water flow from/to the adjacent property to the west of the proposed facility site were addressed by including, as part of the facility, a perimeter ditch/swale designed to mimic existing water flow patterns. After consultation with resource agencies, the Applicant included at the outfall of the ditch a WCS designed to maintain existing normal water flow patterns while also preventing, during normal conditions, back flow that may have the potential to increase water salinity on the adjacent property (see Section III.B).

Additionally, FERC's FEIS addressed concerns regarding the impact of the Applicant's floodwall on the flooding of surrounding properties and found the potential impact to be minimal (see Section III.F).

Paragraph 21 is met, to the maximum extent practicable. After review of the biological field investigation report of the site and follow-up comments provided by the OCM Field Biologist (FB)[76] and a thorough review of all supporting documents provided as part of the JPA review process, OCM has determined that there will be no long-term reductions in biological productivity to the coastal ecosystem. Adverse impacts to wetlands have been minimized, to the maximum extent practicable, through site selection, project design changes, and the use of construction methods that minimize impacts (see Section III.A). Unavoidable permanent impacts to wetlands will require compensatory mitigation. Some initial impacts to wetlands are anticipated to be temporary as these areas will be restored to pre-project elevations and contours and allowed to revegetate once construction activities are complete. Potential permanent wetland impacts from the restored areas will be assessed after one full growing season following completion of construction activities, with site restoration and/or compensatory mitigation required for any new permanent impacts to wetlands that are determined to have occurred as a result of the permitted activities.

[76] See FB comments dated April 21, 2020, July 14, 2021, October 1, 2021, November 15, 2021, December 20, 2021, and February 22, 2023 found in the electronic file:
http://sonlite.dnr.state.la.us/pls/apex/f?p=129:560:65280121463::::P560_CUP_NUM:P20190900

Subsection H

Subsection H contains a description of how to apply the guidelines in which the modifier "maximum extent practicable" is used.

Paragraph 1 outlines three tests that the proposed use must meet in order to apply the maximum extent practicable modifier to the guideline standard it modifies. The proposed activity must meet the first two tests and one of the three criteria in the third test in order to apply the modifier to the specific guideline. The first test requires that the benefits of the project clearly outweigh the adverse impacts. The second test requires no feasible and practical alternative locations, methods, and practices for the use. The third test requires that the use would result in significant public benefits; the use would serve important regional, state, or national interests; or the use is coastal water dependent. If, and only if, the proposed use meets all three tests, the modifier "maximum extent practicable" modifier can be applied to a modified guideline. OCM finds that the proposed use meets all three of the requirements that allow application of the "maximum extent practicable" modifier to the guidelines in which the modifier is present.

First test – Benefits Outweigh Impacts

Project impacts include permanent impacts to 29.7 acres of uplands, 529.2 acres of non-vegetated water bottoms, and 79.6 acres of wetlands (including 33.6 acres of EBR habitat); temporary impacts to 276.7 acres of wetlands; intermittent temporary impacts to fisheries from turbidity during dredging; intermittent temporary impacts to navigation (temporary channel closure for supply vessel access); impacts to air and water quality and impacts to cheniers.

Project benefits include the creation of temporary construction employment; full-time, high-paying local jobs to operate and maintain the facility and natural gas pipeline; secondary jobs and sales tax revenues from retail goods and services used by project construction and operation employees; annual state and local community revenue from property taxes; long-term support of regional contractors, manufacturers, distributers, and retailers through the on-going purchase of goods and services to operate and maintain the project; creation of approximately 640 acres of wetlands; and compensatory mitigation of all unavoidable wetland impacts.

The LCRP FEIS[77] states the development of the coastal zone is necessary and the economy and tax base of the state benefit a great deal from non-renewable resource development activities. The applicant willingly modified construction timelines, construction methods, and project details in order to minimize adverse impacts. In balancing the relative significance of the benefits with the impacts, OCM finds that the public benefits of the project are significant locally, regionally, and nationally, while the impacts are limited, local and, in some cases temporary. Further as shown in the more detailed analysis of climate change and environmental justice issues found at sections III.L and M of this basis of decision document,

[77] Pg 16, LCRP FEIS, 1980. https://www.dnr.louisiana.gov/assets/docs/coastal/LCRPFEIS.pdf

and consistent with the Court's ruling in *Sierra Club v DENR*, Doc. No. C-1021127-A, 38th Judicial District Court, Parish of Cameron, Louisiana, OCM has considered these issues and finds that the benefits of this project outweigh the costs to the community. As such, OCM finds that the project benefits clearly outweigh the project impacts and the first test is met.

Second Test – No Feasible and Practical Alternatives

After thorough consideration of site selection, project design, construction methods, and adaptive management plans for surface water flow and critical wildlife habitat (see Sections III.A, B, and I), OCM finds that the project as proposed represents the least damaging feasible alternative. Therefore, the second test is met.

Third Test – Significant Public Benefit; Regional, State, or National Interest; or Coastal Water Dependent

The third test is a three-part test, requiring the proposed use meets *one* of three criteria. The criteria are as follows:

1) Does the proposed use result in significant public benefit?
2) Does the proposed use serve important regional, state, or national interests?
3) Is the proposed use coastal water dependent?

The totality of the record supports the finding that there exists significant public benefit provided by the proposed project, which has been adequately illustrated during the CUP review process; therefore, the first criterion is met.

Louisiana R.S. 49:214.22(3) declares that it is the public policy of the State, "to support and encourage multiple use of coastal resources consistent with the maintenance and enhancement of renewable resource management and productivity, the need to provide for adequate economic growth and development and the minimization of adverse effects of one resource use upon another, and without imposing any undue restriction on any user." Furthermore, the LCRP's FEIS[78] specifically lists LNG facilities as a national interest facility. Therefore, OCM finds that the proposed project would serve important regional, state, and national interests and the second criterion is met.

Water dependent uses are defined[79] as "those which must be carried out on, in, or adjacent to a water body or wetland or requires the consumption, harvesting, or other direct use of coastal resources or requires the use of coastal water in the manufacturing or transportation of goods." The proposed facility requires access to a navigation channel with the depth and width sufficient for deep draft, ocean-going vessels. Coastal Louisiana offers several existing and maintained navigation channels with dimensions sufficient for ocean-going vessels. As such, OCM finds the proposed facility to be coastal water dependent and the third criterion is met. OCM finds that the proposed use meets all three criteria; thus, the third test is met.

[78] Table 7, LCRP FEIS, 1980.
[79] pg 49, LCRP FEIS, 1980.

Paragraph 2 provides for the conditioning of CUPs in order to achieve maximum conformance with the guidelines in which the maximum extent practicable modifier exists. See Section V for the conditions added to the permit.

Subsection I

Subsection I is met to the maximum extent practicable and applies to the facility and natural gas pipeline portion of the proposed project. The natural gas pipeline corridor will be restored to pre-project conditions and the area allowed to revegetate with native vegetation. Access to the natural gas pipeline corridor will not change, which will allow existing uses to continue. The facility will result in permanent impacts to wetlands and wildlife habitat, though these impacts have been reduced to the maximum extent practicable through modified project design and adaptive management plans. Access to the area will not change as it will remain private property with currently existing restricted access.

Subsection J

Subsection J sets forth legislative intent and does not relate to the review of proposed coastal uses.

B. Discussion of §703

This section of the guidelines is specific to levees and does not apply, as there are no levees included as part of the proposed project.

§703. Guidelines for Levees

A. The leveeing of unmodified or biologically productive wetlands shall be avoided to the maximum extent practicable.
B. Levees shall be planned and sited to avoid segmentation of wetland areas and systems to the maximum extent practicable.
C. Levees constructed for the purpose of developing or otherwise changing the use of a wetland area shall be avoided to the maximum extent practicable.
D. Hurricane and flood protection levees shall be located at the nonwetland/wetland interface or landward to the maximum extent practicable.
E. Impoundment levees shall only be constructed in wetland areas as part of approved water or marsh management projects or to prevent release of pollutants.
F. Hurricane or flood protection levee systems shall be designed, built and thereafter operated and maintained utilizing best practical techniques to minimize disruptions of existing hydrologic patterns, and the interchange of water, beneficial nutrients, and aquatic organisms between enclosed wetlands and those outside the levee system.

C. Discussion of §705

This section of the guidelines applies to the natural gas pipeline, floodwall/bulkhead, slurry pipeline, and to the rerouting of the existing ditch that continues from the adjacent property as indicated in the discussion for each Subsection under this section.

§705. Guidelines for Linear Facilities

A. Linear use alignments shall be planned to avoid adverse impacts on areas of high biological productivity or irreplaceable resource areas.
B. Linear facilities involving the use of dredging or filling shall be avoided in wetland and estuarine areas to the maximum extent practicable.
C. Linear facilities involving dredging shall be of the minimum practical size and length.
D. To the maximum extent practicable, pipelines shall be installed through the "push ditch" method and the ditch backfilled.
E. Existing corridors, rights-of-way, canals, and streams shall be utilized to the maximum extent practicable for linear facilities.
F. Linear facilities and alignments shall be, to the maximum extent practicable, designed and constructed to permit multiple uses consistent with the nature of the facility.
G. Linear facilities involving dredging shall not traverse or adversely affect any barrier island.
H. Linear facilities involving dredging shall not traverse beaches, tidal passes, protective reefs, or other natural gulf shoreline unless no other alternative exists. If a beach, tidal pass, reef, or other natural gulf shoreline must be traversed for a non-navigation canal, they shall be restored at least to their natural condition immediately upon completion of construction. Tidal passes shall not be permanently widened or deepened except when necessary to conduct the use. The best available restoration techniques which improve the traversed area's ability to serve as a shoreline shall be used.
I. Linear facilities shall be planned, designed, located, and built using the best practical techniques to minimize disruption of natural hydrologic and sediment transport patterns, sheet flow, and water quality and to minimize adverse impacts on wetlands.
J. Linear facilities shall be planned, designed, and built using the best practical techniques to prevent bank slumping and erosion, and saltwater intrusion, and to minimize the potential for inland movement of storm-generated surges. Consideration shall be given to the use of locks in navigation canals and channels which connect more saline areas with fresher areas.
K. All nonnavigation canals, channels, and ditches which connect more saline areas with fresher areas shall be plugged at all waterway crossings and at intervals between crossings in order to compartmentalize them. The plugs shall be properly maintained.
L. The multiple use of existing canals, directional drilling, and other practical techniques shall be utilized to the maximum extent practicable to minimize the number and size of access canals, to minimize changes of natural systems, and to minimize adverse impacts on natural areas and wildlife and fisheries habitat.
M. All pipelines shall be constructed in accordance with Parts 191, 192, and 195 of Title 49 of the Code of Federal Regulations, as amended, and in conformance with the Commissioner of Conservation's Pipeline Safety Rules and Regulations and those safety requirements established by R.S. 45:408, whichever would require higher standards.
N. Areas dredged for linear facilities shall be backfilled or otherwise restored to the pre-existing conditions upon cessation of use for navigation purposes to the maximum extent practicable.
O. The best practical techniques for site restoration and revegetation shall be utilized for all linear facilities.
P. Confined and dead end canals shall be avoided to the maximum extent practicable. Approved canals must be designed and constructed using the best practical techniques to avoid water stagnation and eutrophication.

Subsections A and B

Subsections A and B is met as the impacts to areas of high biological productivity or irreplaceable resources have been minimized to the maximum extent practicable. Adverse impacts to wetlands have been minimized through site selection, project design changes, and the use of construction methods that minimize impacts (see Section III.A). Some impacts to wetlands are anticipated to be temporary, as some areas will be restored to pre-project elevations and contours and allowed to revegetate once construction activities are complete. As a condition of accepting a CUP, potential wetland impacts will be assessed after one full growing season following completion of construction activities, with site restoration and/or compensatory mitigation required for any

impacts to wetlands that are determined to have occurred as a result of the permitted activities. Additionally, the Applicant will be required to provide compensatory mitigation of all unavoidable permanent impacts to wetlands (see Section V).

Subsection C

Subsection C is met to the maximum extent practicable as the natural gas pipeline, floodwall/bulkhead, and the rerouted ditch have been designed to be of the minimum practical size and length (see Section III.A).

Subsection D

Subsection D is met as the proposed natural gas pipelines are being installed utilizing the "push ditch" method, where not installed by HDD, and the ditch will be backfilled upon completion of the pipeline construction activities. The slurry pipeline will be temporarily installed by laying on the surface and then removed once project is complete. This Subsection does not apply to the floodwall/bulkhead or ditch re-route.

Subsection E

Subsection E is met as the proposed project makes use of the existing corridors to the maximum extent practicable and sufficient justification has been provided as to why a greater extent of the existing, cleared natural gas pipeline ROW cannot be utilized (see Section III.A). The ditch re-route and the floodwall/bulkhead occur within the proposed facility footprint and do not result in additional impacts. The slurry pipeline is being placed alongside existing roads and canals to the maximum extent practicable to reduce impacts.

Subsection F

Subsection F is met as the proposed project has been designed and will be constructed to allow for multiple uses to occur within the same footprint to the maximum extent practicable (see Section III.A).

Subsections G and H

Subsections G and H do not apply as no barrier islands, beaches, tidal passes, protective reefs, or other natural gulf shorelines will be crossed.

Subsection I

Subsection I is met as all areas affected by natural gas pipeline construction will be restored to pre-project elevations and contours and will have no permanent impact on existing hydrologic or sediment transport patterns, sheet flow, or water quality. Potential wetland impacts resulting from the natural gas pipeline installation are expected to be temporary and any permanent impacts will be assessed after one full growing season following completion of the natural gas

pipeline construction activities. Site restoration and/or compensatory mitigation for any permanent impacts will be required. The existing ditch re-route is designed to maintain existing surface water flow and includes a WCS designed to prevent saltwater intrusion. Additionally, the Applicant has developed a monitoring and adaptive management plan designed to identify and mitigate any adverse impacts to the hydrology of the immediate area, if in OCM's opinion, adverse impacts to hydrology have resulted from the proposed activities. The floodwall/bulkhead is designed to minimally disrupt the natural hydrologic patterns (see Section III.B). The FERC FEIS concluded that impacts are very small in relation to the overall floodplain and would not be expected to impact flooding (see Section III.F). The slurry pipeline will not disrupt the hydrological patterns as it will be temporary and no excavation is required for installation.

Subsection J

Subsection J is met as all areas affected by the natural gas and slurry pipelines will be restored to pre-project elevations and contours. The floodwall/bulkhead is designed to prevent bank slumping and erosion and minimization of storm-generated surges. The re-routed ditch will have a weir installed to prevent saltwater intrusion.

Subsection K

Subsection K is met as the existing ditch re-route includes a WCS designed to prevent saltwater intrusion. Additionally, the Applicant has developed a monitoring and adaptive management plan designed to identify and mitigate any adverse impacts to the hydrology of the immediate area (see Section III.B). Subsection K does not apply to the natural gas pipeline, slurry pipeline, or floodwall/bulkhead portions of the project as they are not canals, channels, or ditches.

Subsection L

Subsection L is met as the Applicant is using existing access roads and navigation channels and has included HDD where possible to minimize changes to natural systems and impacts on natural areas and wildlife and fisheries habitat.

Subsection M

Subsection M is met as the Applicant has acknowledged awareness and intent of compliance for the appropriate natural gas pipeline rules and regulations for natural gas pipeline safety and construction required by the federal and state agencies.

Subsection N

Subsection N does not apply as no new navigation channels are proposed.

Subsection O

Subsection O is met as the project includes restoration of the area to pre-project elevations and contours for the natural gas and slurry pipelines, which will allow regrowth of existing habitat

once construction is complete. Impacts are expected to be temporary and will be assessed after one full growing season following completion of pipeline construction activities. Site restoration and/or compensatory mitigation will be required for any permanent impacts.

Subsection P

Subsection P does not apply as no confined or dead-end canals are proposed.

D. Discussion of §707:

This section of the guidelines is applicable to the proposed natural gas pipeline, proposed facility, and the BUDM area as indicated in the discussion for each Subsection under this section.

§707. Guidelines for Dredged Spoil Deposition

A. Spoil shall be deposited utilizing the best practical techniques to avoid disruption of water movement, flow, circulation, and quality.
B. Spoil shall be used beneficially to the maximum extent practicable to improve productivity or create new habitat, reduce or compensate for environmental damage done by dredging activities, or prevent environmental damage. Otherwise, existing spoil disposal areas or upland disposal shall be utilized to the maximum extent practicable rather than creating new disposal areas.
C. Spoil shall not be disposed of in a manner which could result in the impounding or draining of wetlands orthe creation of development sites unless the spoil deposition is part of an approved levee or land surface alteration project.
D. Spoil shall not be disposed of on marsh, known oyster or clam reefs, or in areas of submersed vegetation to the maximum extent practicable.
E. Spoil shall not be disposed of in such a manner as to create a hindrance to navigation or fishing, or hinder timber growth.
F. Spoil disposal areas shall be designed and constructed and maintained using the best practical techniques to retain the spoil at the site, reduce turbidity, and reduce shoreline erosion when appropriate.
G. The alienation of state-owned property shall not result from spoil deposition activities without the consent of the Department of Natural Resources.

Subsection A

Subsection A applies to the natural gas pipeline, facility, and BUDM portions of the project and is met for each. Material excavated for the natural gas pipeline installation will be returned to the trench from which it was removed and the area restored to pre-project elevations and contours. The material excavated during facility construction will be used as fill on site or will be transported off site and deposited in a manner that does not disrupt water movement, flow, or quality (see Sections III.B and D). Material dredged from the waterbottom will be transported via a slurry pipeline to the BUDM area located within CPNWR. Material will be placed in open water areas in order to create new marsh and surface hydrology is maintained via the conveyance channel excavated adjacent to the BUDM area.

Subsection B

Subsection B applies to only the facility portion of the proposed project as all material excavated during the natural gas pipeline installation will be replaced in the pipeline trench following line

construction (see Section IV.C). Spoil material dredged and/or excavated for the proposed project will be used for fill within the project footprint or used beneficially to create new marsh (see Section III.D).

Subsection C

Subsection C applies to the natural gas pipeline, facility, and BUDM portions of the project and is met for each. The material excavated for the natural gas pipeline will be used as backfill and the area restored to pre-project conditions so as not to impound or drain wetlands. While some of the dredged material will be used for site development, the majority of the material excavated for the marine berth will be used beneficially to create marsh as part of the approved BUDM area in the CPNWR (see Section III.D). The BUDM area will be temporarily impounded by containment dikes, but these will be removed, once the BUDM area vegetates.

Subsection D

Subsection D applies to the natural gas pipeline, facility, and BUDM portions of the proposed project and is met for each. Material will not be placed on oyster or clam reefs or in areas of submerged aquatic vegetation. The material to be excavated for the natural gas pipeline may be temporarily stockpiled on marsh but will be used as backfill, with the area being returned to pre-project contours and elevations. Temporary impacts to marsh may occur and permanent impacts will be determined following one full growing season after completion of construction activities. If permanent wetland impacts are determined to have occurred, the Applicant will be required to restore the area to pre-project conditions and/or provide compensatory mitigation. Some material may be placed on marsh during deposition in the BUDM area; however, impacts will be temporary and any potential permanent impacts will be assessed after one full growing season following completion of material deposition activities. Site restoration and/or compensatory mitigation will be required for permanent wetland impacts.

Subsection E

Subsection E does not apply as dredged material deposition will not result in a hindrance to navigation, fisheries, or timber growth.

Subsection F

Subsection F applies to potential turbidity and erosion associated with the natural gas pipeline, facility, and BUDM portions of the proposed project and is met for each, as described in Section IV.A of this document. Additionally, the BUDM area includes containment dikes designed to hold deposited dredged material in place until such time that it is vegetated.

Subsection G

Subsection G does not apply as excavated material will not be permanently placed on or in a manner that would alienate state-owned property.

E. Discussion of §709:

This section of the guidelines is applicable to the proposed facility and BUDM portions of the project, as no shorelines will be modified for the natural gas or slurry pipelines.

§709. Guidelines for Shoreline Modification

A. Nonstructural methods of shoreline protection shall be utilized to the maximum extent practicable.
B. Shoreline modification structures shall be designed and built using best practical techniques to minimize adverse environmental impacts.
C. Shoreline modification structures shall be lighted or marked in accordance with U.S. Coast Guard regulations, not interfere with navigation, and should foster fishing, other recreational opportunities, and public access.
D. Shoreline modification structures shall be built using best practical materials and techniques to avoid the introduction of pollutants and toxic substances into coastal waters.
E. Piers and docks and other harbor structures shall be designed and built using best practical techniques to avoid obstruction of water circulation.
F. Marinas and similar commercial and recreational developments shall to the maximum extent practicable not be located so as to result in adverse impacts on open productive oyster beds, or submersed grass beds.
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.
H. Shoreline stabilization structures shall not be built for the purpose of creating fill areas for development unless part of an approved surface alteration use.
I. Jetties, groins, breakwaters, and similar structures shall be planned, designed, and constructed so as to avoid to the maximum extent practicable downstream land loss and erosion.

Subsection A

Subsection A is met to the maximum extent practicable and applies to the facility and BUDM portions of the project. Although the facility portion of the project includes the construction of a nonstructural method of shoreline protection for the facility, best professional judgement provides that a bulkhead is the most stable method of bankline protection in high-energy environments such as major navigation channels. The BUDM area will utilize a containment dike to provide stability to the created marsh, but will be degraded to marsh elevation once the created marsh has been established.

Subsection B

Subsection B is met to the maximum extent practicable and only applies to the facility portion of the project, as the BUDM area will not build shoreline modification structures. The facility bulkhead and docking infrastructure will be built using the best practical techniques to minimize adverse environmental impacts (see Section III.A).

Subsection C

Subsection C is met as the Applicant will be required to mark and light all shoreline modifications per U.S. Coast Guard regulations (see Section V).

Subsection D

Subsection D is met as the facility bulkhead and docking infrastructure and BUDM area will be built using the best practical materials and techniques to avoid the introduction of pollutants and toxic substances (see Section III.A).

Subsection E

Subsection E is met to the maximum extent practicable as the proposed docking infrastructure is not anticipated to obstruct water circulation patterns. This subsection does not apply to the BUDM area as no harbor structures will be built in this area. A hydrological modification analysis that included potential impacts of the docking infrastructure was performed and submitted by the Applicant and approved by OCM (see Section III.B).

Subsection F

Subsection F is met to the maximum extent practicable and applies to the facility bulkhead. This subsection does not apply to the BUDM area as this area will not be located on an oyster or submersed grass bed. The construction of the facility bulkhead will permanently impact 0.05 acres of estuarine oyster reef habitat through the removal of existing riprap that is serving as oyster reef habitat. The Applicant will potentially create new "estuarine oyster reef habitat in the form of the new riprap that…[will] armor the shoreline of the marine facility... Although, the new riprap would not immediately function as estuarine oyster reef habitat, as a hard substrate in an estuarine environment, oyster settlement on the riprap would be expected to occur in time in the same fashion that it has occurred with the existing riprap. Thus, we conclude the removal of 0.05 acre of estuarine oyster reef habitat at the marine facility would be considered a short- to long-term, but minor impact."[80]

Subsection G

Subsection G is met as the Applicant will be required to remove all site improvements that fall into a state of disrepair or are abandoned (see Section V). This subsection does not apply to the BUDM area as no structures will be built.

Subsection H

Subsection H is met as the proposed shoreline stabilization is necessary for the LNG berth and is not solely for creating fill areas for the development. This subsection does not apply to the BUDM area as this area will be used for marsh creation only and occurs within a national wildlife refuge, so no development will occur.

[80] See page 4-119, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

Subsection I

Subsection I does not apply as no jetties, groins, breakwaters, or similar structures are part of the proposed activities.

F. Discussion of §711:

This section of the guidelines is applicable to proposed natural gas pipeline, proposed facility, and BUDM portions of the project. Surface alterations include permanent clearing, filling, and construction/operations activities associated within the proposed facility footprint, temporary construction activities within the proposed the natural gas pipeline construction ROW, and filling and construction activities associated with the construction of the BUDM area.

§711. Guidelines for Surface Alterations

A. Industrial, commercial, urban, residential, and recreational uses are necessary to provide adequate economic growth and development. To this end, such uses will be encouraged in those areas of the coastal zone that are suitable for development. Those uses shall be consistent with the other guidelines and shall, to the maximum extent practicable, take place only:
   1. on lands 5 feet or more above sea level or within fast lands; or
   2. 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, and:
      a. the land is already in high intensity of development use; or
      b. there is adequate supporting infrastructure; or
      c. the vicinity has a tradition of use for similar habitation or development.

B. Public and private works projects such as levees, drainage improvements, roads, airports, ports, and public utilities are necessary to protect and support needed development and shall be encouraged. Such projects shall, to the maximum extent practicable, take place only when:
   1. they protect or serve those areas suitable for development pursuant to §711.A; and
   2. they are consistent with the other guidelines; and
   3. they are consistent with all relevant adopted state, local, and regional plans.

C. Reserved.

D. To the maximum extent practicable wetland areas shall not be drained or filled. Any approved drain or fill project shall be designed and constructed using best practical techniques to minimize present and future property damage and adverse environmental impacts.

E. Coastal water dependent uses shall be given special consideration in permitting because of their reduced choice of alternatives.

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.

G. Site clearing shall to the maximum extent practicable be limited to those areas immediately required for physical development.

H. Surface alterations shall, to the maximum extent practicable, be located away from critical wildlife areas and vegetation areas. Alterations in wildlife preserves and management areas shall be conducted in strict accord with the requirements of the wildlife management body.

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.

J. The creation of low dissolved oxygen conditions in the water or traps for heavy metals shall be avoided to the maximum extent practicable.

K. Surface mining and shell dredging shall be carried out utilizing the best practical techniques to minimize adverse environmental impacts.

L. The creation of underwater obstructions which adversely affect fishing or navigation shall be avoided to the maximum extent practicable.

M. Surface 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.
N. To the maximum extent practicable only material that is free of contaminants and compatible with the environmental setting shall be used as fill.

Subsection A

Subsection A applies to the natural gas pipeline and the facility and is met, to the maximum extent practicable. The proposed natural gas pipeline will be designed and installed in a manner suitable for the lands it crosses, taking into consideration soil characteristics and known coastal hazards (e.g., storms, flooding, subsidence, etc.), and will utilize existing pipeline corridors to the maximum extent practicable. The proposed facility will be designed in a manner suitable for the lands on which it will be constructed, taking into consideration soil characteristics and known coastal hazards, and is located on lands that have adequate supporting infrastructure (e.g., marine access, overland access, nearby utilities, and existing pipeline networks). The facility includes a storm surge wall designed to protect the facility from hurricane-force storm surge and flooding known to occur in the project area. Subsection A does not apply to the BUDM area.

Subsection B

Subsection B does not apply as the proposed activities are not public or private works projects.

Subsection C

Subsection C has been Reserved.

Subsection D

Subsection D applies to the natural gas pipeline, facility, and BUDM portions of the project and is met, to the maximum extent practicable. The applicant is proposing to backfill the ROW once the natural gas pipeline construction is complete and then to restore to pre-project elevations and contours. Marsh in the BUDM area may be temporarily impacted by incidental dredge material that falls during the creation of marsh in the adjacent open water. Temporary impacts to marsh may occur and permanent impacts will be determined following one full growing season after completion of construction activities. If permanent wetland impacts are determined to have occurred, the Applicant will be required to restore the area to pre-project conditions and/or provide compensatory mitigation.

The facility includes permanent fill in wetlands to act as a foundation; however, OCM has determined through the NAJ process that the affected area is the minimum practicable size (see Section III.A) and the Applicant will provide compensatory mitigation for unavoidable permanent wetland impacts. By virtue of acceptance of a permit, the Applicant agrees to abide by all local, state, and federal regulations related to this type of facility. Therefore, the risk of property damage and environmental impacts resulting from construction and operations has been minimized to the maximum extent practicable.

Subsection E

Subsection E applies to the facility and BUDM area and is met as OCM has determined both are a coastal water dependent use (see Section IV.A, Subsection H).

Subsection F

Subsection F applies to the natural gas pipeline and facility portions of the proposed activities and is met, to the maximum extent practicable. A condition of the permit will require all structures be removed and the area returned to pre-project conditions if the facility is abandoned (see Section V).

Subsections G

Subsections G applies to the natural gas pipeline, facility, and BUDM portions of the proposed activity and is met to the maximum extent practicable. No permanent clearing will take place during construction of the natural gas pipeline or BUDM area and, through the NAJ process (see Section III.A), OCM has determined that clearing for the facility has been minimized to the maximum extent practicable.

Subsection H

Subsection H applies to the natural gas pipeline, facility and BUDM portions of the proposed activities and is met, to the maximum extent practicable. The natural gas pipeline portion of the proposed activities does not impact critical wildlife areas. Through the NAJ process (see Section III.A), OCM has determined that the selected site for the facility is the least damaging feasible alternative even though some critical habitat of the Easter Black Rail (EBR) will be permanently impacted by the facility. The applicant has developed an adaptive management plan designed to minimize those impacts (see Section III.I). Clearing of the site will be prohibited during peak nesting season and every effort will be made to sweep the site prior to clearing in order to flush out and, if necessary, relocate individual birds. The BUDM site has the potential to create new EBR habitat and will significantly enhance CPNWR through the creation of approximately 423 acres of brackish marsh habitat, which may be suitable for the EBR. The Southwest Louisiana National Wildlife Refuge Complex approved Commonwealth's BUDM area marsh creation project in a Special Use Permit on February 13, 2023.[81]

Subsection I

Subsection I applies to the natural gas pipeline and facility portions of the proposed project and is, to the maximum extent practicable, met. The natural gas pipeline does not impact barrier islands, beaches, isolated cheniers, or isolated natural ridges or levees nor will it have a permanent impact on migratory routes. The facility will result in impacts to an existing chenier but the floodwall proposed as part of the facility will maintain storm surge and flooding barrier

[81] See "SIGNED_43612-G2023-05_Guillory_Commonwealth-LNG_BUDMAT-marsh-creation.pdf" comment dated 2/16/23.

functions of the chenier. The FERC FEIS offers the following: "Permanent impacts from the Terminal would total 13.3 acres of chenier and represent a small portion of the overall surrounding chenier community". Furthermore, the 23.6 acres of chenier habitat located within the terminal property outside of the floodwall will be enhanced through feral hog eradication and long-term preservation. It is OCM's opinion that impacts to the chenier have been minimized to the maximum extent practicable. In addition, impacts to EBR breeding areas have been minimized to the maximum extent practicable through the Applicant's adaptive management plan and consultation between FERC, USFWS, and the Applicant. OCM supports implementation of all General Impact Avoidance, Minimization, and Mitigation Measures (Section 2.3), monitoring and reporting requirements (Section 6.4), and conservation recommendations (Section 7) described in the USFWS Biological Opinion[82] and will condition the CUP to limit site clearing during periods of EBR egg incubation and hatching (see Section III.I).

Subsection J

Subsection J is met, to the maximum extent practicable, as the natural gas pipeline, facility, and BUDM portions of the project are being built to comply with all local, state, and federal standards, which are protective of the environment and surrounding water quality. While the introduction of ballast water and dredging activities may temporarily reduce dissolved oxygen levels, these are expected to only be temporary impacts.

Subsection K

Subsection K does not apply to any portion of the project as surface mining and shell dredging are not included in any part of the proposed activities.

Subsection L

Subsection L is met as the creation of underwater obstructions are not anticipated to occur from any portion of the proposed activities; therefore, no adverse effects to fishing or navigation are anticipated.

Subsection M

Subsection M applies to the natural gas pipeline and facility portions of the proposed activities and is met to the maximum extent practicable. Guideline 701.B requires that the proposed project shall be in conformance with all applicable water and air quality laws, standards, and regulations. The potential release of pollutants or toxic substances is overseen by the LDEQ. The LDEQ issued the Applicant's air permits (Part 70 Permit No. 0560-00997-V0 and Prevention of Significant Deterioration Permit No. PSD-LA-841) on March 28, 2023, and water quality certification (WQC 200227-01) on July 23, 2020. OCM will also include, as a condition in the authorization, that the Applicant obtain any other permits required by LDEQ prior to the initiation of construction activities and operations (see Section V).

[82] See "P20190900_USFWS_BO_9-16-21.pdf" comment dated 9/14/21.

Subsection N

Subsection N applies to the natural gas pipeline, facility, and BUDM portions of the proposed activity and is met as the CUP will be conditioned to require that all materials utilized for the proposed project are free of contaminants and are compatible with the environmental setting (see Section V).

G. Discussion of §713:

This section of the guidelines is applicable to only the facility and BUDM portions of the proposed project as no changes to hydrology or sediment transport mechanisms will occur from the gas or slurry pipelines.

§713. Guidelines for Hydrologic and Sediment Transport Modifications

A. The controlled diversion of sediment-laden waters to initiate new cycles of marsh building and sediment nourishment shall be encouraged and utilized whenever such diversion will enhance the viability and productivity of the outfall area. Such diversions shall incorporate a plan for monitoring and reduction and/or amelioration of the effects of pollutants present in the freshwater source.

B. Sediment deposition systems may be used to offset land loss, to create or restore wetland areas or enhance building characteristics of a development site. Such systems shall only be utilized as part of an approved plan. Sediment from these systems shall only be discharged in the area where the proposed use is to be accomplished.

C. Undesirable deposition of sediments in sensitive habitat or navigation areas shall be avoided through the use of the best preventive techniques.

D. The diversion of freshwater through siphons and controlled conduits and channels, and overland flow to offset saltwater intrusion and to introduce nutrients into wetlands shall be encouraged and utilized whenever such diversion will enhance the viability and productivity of the outfall area. Such diversions shall incorporate a plan formonitoring and reduction and/or amelioration of the effects of pollutants present in the freshwater source.

E. Water or marsh management plans shall result in an overall benefit to the productivity of the area.

F. Water control structures shall be assessed separately based on their individual merits and impacts and in relation to their overall water or marsh management plan of which they are a part.

G. Weirs and similar water control structures shall be designed and built using the best practical techniques to prevent "cut arounds," permit tidal exchange in tidal areas, and minimize obstruction of the migration of aquatic organisms.

H. Impoundments which prevent normal tidal exchange and/or the migration of aquatic organisms shall not be constructed in brackish and saline areas to the maximum extent practicable.

I. Withdrawal of surface and ground water shall not result in saltwater intrusion or land subsidence to the maximum extent practicable.

Subsections A through F

Subsections A, B, C, D, E, and F are not applicable as this project is not intended to operate as a controlled diversion for the purpose of water or sediment introduction or as a water, sediment, or marsh management plan.

Subsection G

Subsection G applies only to the re-routed ditch and is met as the ditch and the WCS are designed to maintain upstream pre-project water flow patterns, prevent "cut arounds," permit tidal influence upstream, and allow migration of aquatic organisms (see Section III.B).

Subsection H

Subsection H applies to the facility and BUDM portions of the proposed project and is met to the maximum extent practicable. The applicant provided modeling results showing that the rerouting of the existing drainage network around the facility and justification for installation of a WCS to replace the existing 60" culvert (existing outfall) was appropriate to maintain the regional hydrology of the marsh complex west of the LNG facility (see Section III.B) and will not results in an impoundment. The facility plan includes a storm surge wall that surrounds the LNG facility grounds. The wall is designed to prevent inundation of the facility from events ranging from normal tidal exchange to hurricane-force storm surge. The wall will isolate the interior area, effectively impounding the LNG facility grounds. However, the habitat surrounding the facility will still maintain access to open water and, therefore, normal tidal exchange and migration of aquatic organisms within the surrounding habitat will still occur. While a containment dike will be constructed around the BUDM area initially, this dike will be degraded to marsh elevation after the BUDM has become populated with wetland vegetation, thus no impoundment will be permanently installed.

Subsection I

Subsection I applies to the facility portion of the proposed project and is met to the maximum extent practicable. The FERC FEIS[83] provided a demonstration of the Applicant's potential impact on ground and surface water. The facility will utilize a municipal water source during construction and approximately 860,000 gallons per month for operations. The Applicant proposes to tie-in to an existing 10-inch-diameter water line associated with Water District 10. The natural gas pipeline portion of the project will use about 80,000 gallons of water during construction and an additional 1.2 million gallons of water for hydrostatic testing. The Applicant will obtain the hydrostatic test water and HDD drilling water via truck from its Water District 10 tie-in. Water District 10 has more than three million gallons of surplus water per month and, therefore, will have sufficient water to service the Applicant's needs without affecting other users or relying on surface water or groundwater for its needs. As the Applicant will not utilize surface or groundwater, no saltwater intrusion or land subsidence will occur due to water withdrawal from the Applicant.

Additionally, the Applicant will utilize surface water from the Calcasieu Ship Channel for hydrostatic testing of their storage tanks. This testing will require about 9.9 million gallons of water. Tanks will be tested one at a time and the water used for the initial test will be transferred to the adjacent tank to be used for its testing. This will reduce the overall volume of water needed for hydrostatic testing. Once testing is complete, the water quality testing will be performed to

[83] See "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

ensure compliance with the LPDES General Permit LAG670000 – Hydrostatic Test and Vessel Testing Wastewater authorization permit limits. The water will then be returned to the Calcasieu Ship Channel. The anticipated water withdrawal is estimated to be about 0.2 percent of the volumetric flow of the Calcasieu Ship Channel. Testing occurs only as needed during construction and will be only occur on an infrequent basis. Thus, the withdrawal of water from the Calcasieu Ship Channel would have minimal impacts on surface water. As the use of surface water by the Applicant will be minimal, no saltwater intrusion is anticipated.

H. Discussion of §715:

This section of the guidelines is not applicable as the Applicant it not proposing to be a waste disposal facility. Any waste generated incident to construction or through facility operations after construction will be handled as authorized under the Applicant's LDEQ permit and as required under the Environmental Regulatory Code, LAC 33:VII.

§715. Guidelines for Disposal of Wastes

A. The location and operation of waste storage, treatment, and disposal facilities shall be avoided in wetlands to the maximum extent practicable, and best practical techniques shall be used to minimize adverse impacts which may result from such use.
B. The generation, transportation, treatment, storage, and disposal of hazardous wastes shall be pursuant to the substantive requirements of the Department of Environmental Quality adopted pursuant to the provisions of R.S. 30:217, et seq.; as amended and approved pursuant to the Resource Conservation and Recovery Act of 1976 P.L. 94-580, as amended, and of the Office of Conservation for injection below surface.
C. Waste facilities located in wetlands shall be designed and built to withstand all expectable adverse conditionswithout releasing pollutants.
D. Waste facilities shall be designed and constructed using best practical techniques to prevent leaching, control leachate production, and prevent the movement of leachate away from the facility.
E. The use of overland flow systems for nontoxic, biodegradable wastes, and the use of sump lagoons and reservoirs utilizing aquatic vegetation to remove pollutants and nutrients shall be encouraged.
F. All waste disposal sites shall be marked and, to the maximum extent practicable, all components of waste shall be identified.
G. Waste facilities in wetlands with identifiable pollution problems that are not feasible and practical to correct shall be closed and either removed or sealed, and shall be properly revegetated using the best practical techniques.
H. Waste shall be disposed of only at approved disposal sites.
I. Radioactive wastes shall not be temporarily or permanently disposed of in the coastal zone.

I. Discussion of §717

This section of the guidelines is applicable to the proposed facility and the conveyance channel portion of the BUDM area, as no permanent changes to the flow of surface water will occur due to the installation of the natural gas or slurry pipelines (see Section IV.B).

§717. Guidelines for Uses that Result in the Alteration of Waters Draining into Coastal Waters

A. Upland and upstream water management programs which affect coastal waters and wetlands shall be designed and constructed to preserve or enhance existing water quality, volume, and rate of flow to the maximum extent practicable.

B. Runoff from developed areas shall to the maximum extent practicable be managed to simulate natural water patterns, quantity, quality, and rate of flow.

C. Runoff and erosion from agricultural lands shall be minimized through the best practical techniques.

Subsections A and B

Subsections A and B of the guideline are met as the project is not anticipated to change upstream water volume, flow, or quality (see Section III.B). The project includes measures to ensure that existing waterflow patterns and water quality are maintained. Existing water conveyances have been rerouted around the proposed facility to maintain waterflow. OCM added the following condition to its CUP in order to monitor natural water patterns:

- Applicant shall operate the proposed Water Control Structure (WCS) as outlined in the document titled *Water Control Structure – Setting, Monitoring, and Adaptive Management Plan* submitted to OCM on January 5, 2023. Applicant shall provide to OCM a report showing the baseline hydrologic conditions of the marsh surrounding the permitted activities. This report shall include salinity, tidal range, water elevation (NAVD88), photo documentation of the water level and representative vegetation, and precipitation readings, including a brief description of any rainfall event. Each data parameter is to be collected weekly for a minimum of three months prior to construction. During and upon completion of construction, applicant shall provide monitoring reports every 6 months (containing the same data parameters that are collected weekly) for the first two years of operation of the WCS. The baseline hydrologic report and the first post-construction monitoring report may be submitted simultaneously. Applicant shall also provide to OCM an annual summary report identifying any trends or changes in the hydrologic conditions of the marsh surrounding the permitted activities. OCM reserves the right to alter the required frequency of monitoring and/or submission of monitoring reports. If, in OCM's opinion, the hydrology and/or wetland vegetation of the area surrounding the permitted activities is being adversely affected, applicant shall coordinate with OCM to develop and implement a remediation plan to restore the surrounding marsh to the baseline hydrologic conditions.

CPRA provided a comment on the initial project designs that "surrounding area drainage and conveyance within the lake rim borrow canal must be maintained." The Applicant updated their design to accommodate CPRA's request by proposing the creation of a conveyance channel on the eastern border of the BUDM area. The conveyance channel will be created by excavating a channel along the eastern border and utilizing this borrow to construct the earthen containment dike along the eastern perimeter. CPRA approved the design of the conveyance channel; thus, the surrounding area drainage will be maintained. Therefore, there are no anticipated changes to natural water patterns, quantity, quality, and rate of flow for either the facility of BUDM area.

Subsection C

Subsection C of the guideline does not apply as the proposed project is not for agricultural lands.

J. Discussion of §719:

This section of the guidelines is applicable to the proposed natural gas pipeline and facility as indicated in the discussion for each Subsection under this section. This section of the guidelines does not apply to the slurry pipeline or BUDM portions of the project as they are not oil and gas activities.

§719. Guidelines for Oil, Gas, and Other Mineral Activities

A. Geophysical surveying shall utilize the best practical techniques to minimize disturbance or damage to wetlands, fish and wildlife, and other coastal resources.

B. To the maximum extent practicable, the number of mineral exploration and production sites in wetland areasrequiring floatation access shall be held to the minimum number, consistent with good recovery and conservation practices and the need for energy development, by directional drilling, multiple use of existing access canals, and other practical techniques.

C. Exploration, production, and refining activities shall, to the maximum extent practicable, be located away from critical wildlife areas and vegetation areas. Mineral operations in wildlife preserves and management areas shall be conducted in strict accordance with the requirements of the wildlife management body.

D. Mineral exploration and production facilities shall be to the maximum extent practicable designed, constructed, and maintained in such a manner to maintain natural water flow regimes, avoid blocking surface drainage, and avoid erosion.

E. Access routes to mineral exploration, production, and refining sites shall be designed and aligned so as to avoid adverse impacts on critical wildlife and vegetation areas to the maximum extent practicable.

F. Drilling and production sites shall be prepared, constructed, and operated using the best practical techniques to prevent the release of pollutants or toxic substances into the environment.

G. All drilling activities, supplies, and equipment shall be kept on barges, on drilling rigs, within ring levees, or on the well site.

H. Drilling ring levees shall to the maximum extent practicable be replaced with small production levees or removed entirely.

I. All drilling and production equipment, structures, and storage facilities shall be designed and constructed utilizing best practical techniques to withstand all expectable adverse conditions without releasing pollutants.

J. Mineral exploration, production, and refining facilities shall be designed and constructed using best practical techniques to minimize adverse environmental impacts.

K. Effective environmental protection and emergency or contingency plans shall be developed and complied with for all mineral operations.

L. The use of dispersants, emulsifiers, and other similar chemical agents on oil spills is prohibited without the prior approval of the Coast Guard or Environmental Protection Agency on-scene coordinator, in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan.

M. Mineral exploration and production sites shall be cleared, revegetated, detoxified, and otherwise restored as near as practicable to their original condition upon termination of operations to the maximum extent practicable.

N. The creation of underwater obstructions which adversely affect fishing or navigation shall be avoided to the maximum extent practicable.

Subsection A

Subsection A is not applicable as no geophysical surveying is proposed as part of the proposed activity.

Subsection B

Subsection B is not applicable as the proposed activities do not include mineral exploration or production sites.

Subsection C

Subsection C has been met to the maximum extent practicable. Although the project will impact preferred habitat of the EBR, measures to be undertaken by the Applicant to minimize impacts to the rail have been incorporated into the site preparation plans (see Section III.I). Additionally, the BUDM site has the potential to create new EBR habitat and will significantly enhance Cameron Prairie National Wildlife Refuge through the creation of approximately 615 acres of brackish marsh habitat. The final permit will include conditions aimed at avoiding and minimizing impacts to this species (see Section V).

Subsection D

Subsection D is not applicable as the proposed activities do not include mineral exploration or production sites.

Subsection E

Subsection E has been met to the maximum extent practicable as the project is utilizing existing access roads.

Subsection F

Subsection F is not applicable as the proposed activities do not include drilling or production sites.

Subsection G

Subsection G is not applicable as the proposed activities do not include drilling activities, supplies, and equipment.

Subsection H

Subsection H is not applicable as the proposed activities does not include drilling sites.

Subsection I

Subsection I applies to the LNG storage tanks and has been met to the maximum extent practicable. The FERC FEIS stated, “Project facilities would be in accordance with federal

regulations, standards, and recommended and generally accepted good engineering practices."[84] The proposed project has focused on the resilience of the facility against natural hazards such as hurricanes, tornadoes, floods, rain, regional subsidence, and sea level rise.[84] The FEIS also indicated that the Commonwealth project site would be designed to withstand a 183 mph 3-second gust wind speed and Category 4 hurricanes and 500 years flood events.[85] The applicant has agreed to coordinate with local, state and federal agencies in the preparation of an emergency response plan that addresses safety procedures during weather events, including storm surges and hurricanes for the terminal facilities and includes safety procedures for the natural gas pipeline system (see Section III.G).

Subsection J

Subsection J has been met to the maximum extent practicable. Section III.A discusses the construction methods to be utilized, how these techniques are the best practical ones available, and how the methods minimize the environmental impacts to the maximum extent practicable. Additionally, the FERC FEIS concluded, "that construction and operation of the Commonwealth LNG Project would result in limited adverse environmental impacts. Most adverse environmental impacts would be temporary or short-term during construction and operation, but long-term and permanent environmental impacts would also occur as part of the project."[86] OCM has determined through the NAJ process that the affected area is the minimum practicable size (see Section III.A) and the Applicant will provide compensatory mitigation for unavoidable permanent wetland impacts.

Subsection K

Subsection K is met, as the Applicant has acknowledged and agrees to abide by all laws, rules, and regulations related to spill prevention and containment; has developed a contingency plan for the inadvertent release of drilling fluids during pipeline HDD and will coordinate with local, state, and federal agencies on an emergency response plan for the facility, once constructed (see Section III.A). All information provided regarding measures to be implemented should an inadvertent spill occur during construction activities or once the natural gas pipeline is operational have been submitted, reviewed and deemed to be appropriate and reasonable by OCM.

Subsection L

Subsection L is met as the proposed natural gas pipeline and the proposed facility have been designed to avoid spills. In the event of an unauthorized or threatened discharge, effective spill response will be coordinated through local, state, and federal agencies responsible for spill response (see Section III.A). These agencies include, but are not limited to, the LDEQ, the Louisiana Oil Spill Coordinator's Office, and the U.S. Coast Guard. The facility has prepared an emergency response plan along with other plans should a spill occur (see Section III.G).

[84] See page 4-283, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[85] See page 4-294, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.
[86] See page 5-400, "20220909-3017_Commonwealth_LNG-FEIS-Vol_I-1_of_6.pdf" comment dated 2/14/23.

Subsection M

Subsection M is not applicable as the proposed facility is not an exploration or production site.

Subsection N

Subsection N is not applicable as no underwater obstructions will be created as a result of the proposed activities.

V. DECISION

OCM staff have analyzed and carefully reviewed all of the information submitted by the Applicant; local, state, and federal agencies; and the public. A permit decision was made only after a full and fair consideration of all the information, including balancing social, environmental, and economic factors. Therefore, OCM recommends issuance of this CUP with project specific conditions to bring the activity into full conformance with the Guidelines (LAC 43:1.701-719) outlined above (see Section IV). These project specific conditions are as follows. The conditions are grouped below under specific headings for clarity.

Mitigation

- To mitigate for the unavoidable loss of 63.4 acres of intermediate marsh habitat, the Office of Coastal Management (OCM) received documentation on June 26, 2024, that the permittee has purchased the OCM required 29.7 acres of LDENR fresh marsh habitat credits from South Fork Coastal Mitigation Bank as well as the purchase of 68.3 acres of LDENR fresh marsh habitat credits from Willow Lake Mitigation Bank, and on June 28, 2024 for the purchase of 29.5 acres of LDENR fresh marsh habitat credits from Bull Island Mitigation Bank.

- To mitigate for 14.3 acres of Bottomland Hardwood (BLH) habitat, the OCM received documentation on June 28, 2024, that the permittee has purchased the OCM required 15.0 acres of LDENR BLH habitat from the Bull Island Mitigation Bank.

- To mitigate for the unavoidable loss of 11.9 acres of brackish marsh habitat, the permittee shall provide compensatory mitigation through the creation of 25 acres of brackish marsh habitat located within the Cameron Prairie National Wildlife Refuge in accordance with the OCM approved Mitigation Plan Proposal submitted on June 27, 2024.

- The mitigation bank credit purchases and the successful completion of the marsh creation project referenced above and in accordance with the following conditions will satisfy the requirements of compensatory mitigation and allow permittee to conduct the activities authorized under this permit.

- Commencement of the permitted mitigation project shall occur within 60 days following the initiation date of the permitted impacts authorized under the above referenced permit P20190900.

- The Office of Coastal Management (OCM) shall be notified in writing within five (5) days of the date the required compensatory mitigation was initiated and again when it is completed to the Louisiana Department of Energy and Natural Resources, Office of Coastal Management, P.O. Box 44487, Baton Rouge, LA 70804-4487, Attn: Compliance Section or upload a comment by logging into the SONRIS online database menu at: http://sonris.com/direct.asp?server=sonris-www&path=/sonris/cmdPermit.jsp?sid=PROD

- The mitigation project shall be completed within 12 months of initiation.

- Permittee shall contact the Region 6 OCM Field Biologist, Sarah Droddy at 337-491-2525 or Sarah.Lavergne@LA.GOV at year one (1) and at year three (3) following completion of the subject work to coordinate a site visit to the mitigation area.

- Permittee shall submit As-built drawings of the mitigation area including an elevation survey in accordance with the approved Mitigation Plan Proposal attached hereto within thirty (30) days of completion of the mitigation project to the Louisiana Department of Energy and Natural Resources, Office of Coastal Management, P.O. Box 44487, Baton Rouge, LA 70804-4487.

- A minimum of 80% of the surface area of the mitigation site shall be within 6" of the initial construction marsh elevation in the As-Built Report and a minimum of 80% the site is within 6" of the target settled marsh elevation at Years 1, 3, 5, 10, 15, and 20 as identified in Mitigation Plan Proposal attached hereto.

- Permittee shall submit Monitoring reports in accordance with the approved Mitigation Plan Proposal attached hereto no later than Nov. 1 of Years 1, 3, 5, 10, 15, and 20 to the Louisiana Department of Energy and Natural Resources, Office of Coastal Management, P.O. Box 44487, Baton Rouge, LA 70804-4487 and/or by uploading the document into the comments section of the permit file by logging into the SONRIS online database menu at: http://sonris.com/direct.asp?server=sonris-www&path=/sonris/cmdPermit.jsp?sid=PROD.

- If vegetative plantings are proposed, all vegetative plantings shall utilize plants obtained from a registered, licensed Louisiana nursery grower. The permittee must obtain and provide to DNR/OCM, certification from the contracting nursery that plant materials are of a Louisiana ecotype species and have been acclimated to Louisiana climatic and habitable conditions for at least 90 days prior to planting. Precautions will be taken to ensure that all plant materials stay moist during mobilization and while on the site prior to planting and receive adequate water during planting.

- A map shall be provided that depicts the location of the vegetative plots as well as a coordinating list containing the coordinates for each for OCM review/approval.

- If the vegetative coverage of species indicative to the surrounding habitat is less than 80 percent after the third growing season, the Permittee shall be required thereafter, on an annual

basis, to plant OCM approved brackish marsh vegetative species or replace dead and/or missing plants until 80 percent coverage has been achieved through a complete growing season. Percent vegetative coverage shall not include exotic/invasive species.

- Exotic/invasive species control methods shall be implemented as warranted in order to ensure the percentage of exotic/invasive species does not exceed 3% of the total vegetative cover.

- The Permittee is made aware that if the mitigation site does not meet the following success criteria: 1) Projected acreage of marsh habitat creation, 2) 80% of the site is within 6" of the target construction and target settled marsh elevations, 3) Exhibits 80% vegetative coverage of non-exotic/invasive marsh species, the permittee shall be required by OCM to implement remedial measures necessary to ensure full compensation, to extend the required maintenance/monitoring period, or to provide additional or alternative mitigation to compensate for any deficiency.

- Permittee shall monitor and maintain the mitigation project for a minimum of 20 years starting from the date the compensatory mitigation project was completed. Verification of completion shall be based on permittee's submittal of photographic documentation and as-built drawings conditioned above.

- The Permittee is made aware that satisfying mitigation requirements through an approved contractor does not remove and/or diminish the permittee's accountability to OCM as the primary party responsible for implementing and maintaining required mitigation in accordance with permit conditions.

- If any portion of the mitigation site is destroyed or adversely impacted by activities and/or occurrences, Permittee will promptly notify the OCM, and then restore the affected area or implement equal alternative mitigation, as approved by the OCM.

- Should any aspects of the mitigation plan become infeasible or otherwise not occur, Permittee shall be given 30 days from the date of notification to develop and submit an acceptable alternate mitigation plan to OCM and 60 days to acquire all necessary permits and/or approvals required to initiate the alternate mitigation project.

- If marsh creation measures permitted under this mitigation plan fail more than once, the applicant shall be required to purchase credits from a mitigation bank approved in accordance with §724.F or an approved in-lieu-fee program, or where applicable, through a contribution to the Coastal Mitigation Account to satisfy all remaining mitigation obligations associated with the permitted activity.

- This authorization does not preclude the necessity of obtaining a separate Coastal Use Permit, should one be required, for mitigation site maintenance.

- The requirement for compensatory mitigation for anticipated temporary impacts to marsh habitat resulting from the referenced project will be determined after one full growing season

(March 1 to November 1) following the completion of the permitted activities. This assessment shall include both primary impacts and secondary impacts, which may result from the permitted activities.

Permittee shall provide on-ground pre- and post-construction photographic documentation, including a photograph key that shows location and direction of each photograph that clearly shows all vegetated wetlands occurring within the permitted project area. The post-construction photos should be taken at the same location and in the same direction as the pre-construction photos. The post-construction documentation shall be acquired (photos actually taken) and submitted within 60 days of the end of the first full growing season following completion of the project. Permittee shall notify OCM of the date of completion of permitted activities within 5 working days of completion.

If OCM determines permanent impacts to wetlands or other coastal resources has resulted from permitted activities following one full growing season, the permittee shall be responsible for restoration or mitigation of those damages. The permittee shall submit a restoration plan proposal or if site restoration is anticipated to be unachievable, a compensatory mitigation plan to OCM within 30 days of notification of assessment of permanent impacts. Evaluation of the restoration or mitigation proposal will require consideration of landowner rights, location factors, and interagency coordination. A compensatory mitigation plan shall include a written alternatives analysis or justification document outlining the reason(s) site restoration of permanent impacts is not feasible.

All necessary approvals shall be obtained for the restoration or compensatory mitigation plan and the plan shall be implemented as directed by OCM. A processing fee will be assessed for the determination of compensatory mitigation requirements and evaluation of the proposed compensatory mitigation plan in accordance with LAC Title 43, Part I, Chapter 7, §724.D. This fee shall apply regardless of which compensatory mitigation option is selected and does not include the cost incurred to implement the required compensatory mitigation.

- All equipment utilized to perform activities authorized under this permit shall stay within the access routes and work areas designated on the permit plats utilizing the least damaging route and/or open water areas. For the placement of the hydraulic dredge pipeline upon vegetated wetlands, marsh buggy/tracked equipment access shall be limited to one pass ingress and one pass egress and shall not fall within the same tracts.

<u>BUDM</u>

- Permittee shall closely monitor discharge points of the hydraulic dredge pipeline(s) in the BUDM area as to prevent the excessive accumulation of sediments (i.e., not to exceed a settled height of 6” above existing marsh elevations).

- Containment constructed for the overall BUDM area shall be breached/degraded when "post settlement" marsh elevations are reached in order to allow the return of natural hydrologic tidal connectivity.

- In accordance with LAC Title 43, Part I, Chapter 7, c., §723 H. Beneficial Use of Dredged Material guidelines, dredged material resulting from activities permitted under this authorization shall be used beneficially to create, enhance or protect coastal wetlands. Permittee shall adhere to the *Beneficial Use of Dredged Material Plan* submitted on May 2, 2024.

- Permittee shall remove all temporary fill placed at land based booster pump locations for the slurry pipeline placed within wetland habitats and restore the site to pre-project conditions (i.e. elevations) upon completion of permitted activities.

- With regard to the placement of fill upon existing marsh habitat within the proposed BUDM sites, the benefits to offset impact determination is based on the proposed creation of marsh habitat achieving 80% vegetative coverage and fisheries access re-established by year 3 of the project life, and shall be determined after the third full growing season (March 1 to November 1) following the completion of permitted activities. This assessment shall include both primary impacts and secondary impacts, which may result from the permitted activities.

  Permittee shall notify OCM of the date of completion of permitted activities within 5 working days of completion.

  Should the permitted BUDM project not provide the anticipated benefits to offset temporary impacts to result from the placement of fill upon existing marsh habitat within the BUDM area or permanent impacts from the construction of the conveyance channel, OCM may determine that compensatory mitigation is required, and permittee shall submit a compensatory mitigation plan for approval within 30 days of notification of the compensatory mitigation requirements by OCM. All necessary approvals shall be obtained for the compensatory mitigation plan and the plan shall be implemented as directed by OCM. Permittee should be aware that compensatory mitigation projects may be required to be maintained for as many as 20 years for marsh mitigation projects and 50 years for forested wetland mitigation projects. A processing fee will be assessed for the determination of compensatory mitigation requirements and evaluation of the proposed compensatory mitigation plan in accordance with LAC Title 43, Part I, Chapter 7, §724.D. This fee shall apply regardless of which compensatory mitigation option is selected and does not include the cost incurred to implement the required compensatory mitigation.

- In an effort to prevent the erosion of interior marsh, the applicant shall place bankline stabilization material at the interface of marsh and open water for all pipeline crossings installed via the open trench method.

- The Permittee shall coordinate with the Cameron Prairie National Wildlife refuge to plant the supratidal wetland habitat within the BUDM site with a minimum of three vegetative species beneficial to the federally threatened Eastern Black Rail. All seedlings/plants must be obtained from a registered, licensed Louisiana nursery grower. The permittee must obtain and provide to LDENR/OCM, certification from the contracting nursery that plant materials are of a Louisiana ecotype species and have been acclimated to Louisiana climatic and habitable

conditions at least 90 days prior to planting. Suitable species for planting may include Gulf cordgrass (*Spartina spartinae*), saltgrass (*Distichlis spicata*), sea oxeye (*Borrichia frutescens*), and saltmeadow cordgrass (*Spartina patens*) and may be interspersed with shrubs such as marsh elder (*Iva frutescens*) or saltbush (*Baccharis hamilifolia*).

WCS

- Applicant shall operate the proposed Water Control Structure (WCS) as outlined in the document titled *Water Control Structure – Setting, Monitoring, and Adaptive Management Plan* submitted to OCM on January 5, 2023. Applicant shall provide to OCM a report showing the baseline hydrologic conditions of the marsh surrounding the permitted activities. This report shall include salinity, tidal range, water elevation (NAVD88), photo-documentation of the water level and representative vegetation, and precipitation readings, including a brief description of any rainfall event. Each data parameter is to be collected weekly for a minimum of three months prior to construction. During and upon completion of construction, applicant shall provide monitoring reports every 6 months (containing the same data parameters collected weekly) for the first two years of operation of the WCS. The baseline hydrologic report and the first post-construction monitoring report may be submitted simultaneously. Applicant shall also provide to OCM an annual summary report identifying any trends or changes in the hydrologic conditions of the marsh surrounding the permitted activities. OCM reserves the right to alter the required frequency of monitoring and/or submission of monitoring reports. If, in OCM's opinion, the hydrology and/or wetland vegetation of the area surrounding the permitted activities is being adversely affected, applicant shall coordinate with OCM to develop and implement a remediation plan to restore the surrounding marsh to the baseline hydrologic conditions.

LDWF and threatened species

- The Permittee shall adhere to all State statutes (R.S. 56:2011 et seq.) and Department of Wildlife and Fisheries regulations (LAC 76:XIII.101 et seq) concerning dredging of fill sand and fill material from water bottoms of the State of Louisiana and severance royalties. For more information, contact LDWF's Dave Butler at 504-286-4173.

- The permittee shall properly install adequate erosion/siltation control measures around construction areas that require land based earthwork (i.e. excavation and/or deposition of fill materials, land contouring, machinery rutting, fill maneuvering and redistribution, etc.), to ensure that no project related sediments, debris and other pollutants enter adjacent wetlands or waters. Acceptable measures include but are not limited to the proper use and positioning of temporary silt fences, straw bales, fiber/core logs, wooden barriers, seeding or sodding of exposed soils, or other approved EPA construction site storm-water runoff control and best practices. Control techniques shall be installed prior to the commencement of earthwork activities and maintained until the project is complete and/or the subject areas are stabilized.

- Vegetative clearing of Eastern Black Rail critical habitat shall not take place between March 1st and September 1st so as to avoid potential impacts to Eastern Black Rail egg incubation and hatching.

- The LDWF database indicates that Eastern Black Rail (*Laterallus jamaicensis*) may occur within the project footprint. This diminutive waterbird is included within a group of birds known as the secretive marsh birds due to the species' exceedingly cryptic behavior. Black Rail is currently considered critically imperiled (S2N, S1B) in Louisiana and is listed as federally threatened under the Endangered Species Act. Because the species is so difficult to study, its distribution and status are difficult to fully ascertain. Based on limited, contemporary, field work in coastal Louisiana, as well as historical literature and museum specimens, the Black Rail can be found in Louisiana throughout the year; the species is likely a very rare breeder and a rare migrant/winter visitor. Black Rails prefer high marsh habitat, possibly associated with Sea Ox-eye Daisy (*Borrichia frutescens*) and Gulf Cordgrass (*Spartina spartinae*). Please minimize disturbance and alteration to high marsh habitats. Contact Rob Dobbs for additional information at 337-735-8675.

- The Piping Plover (*Charadrius melodus*) may occur within one mile of the project area. The Piping Plover is Federally listed as threatened in Louisiana, and its Federally designated Critical Habitat occurs along the Louisiana coast. Piping Plovers spend nonbreeding season in Louisiana, where they arrive in late July and may be present for 8 to 10 months of the year. Piping Plovers feed on intertidal beaches, mudflats, and sand flats with little or no emergent vegetation; they also require unvegetated or sparsely vegetated areas for roosting. Primary threats to Piping Plovers in Louisiana include habitat loss/degradation due to coastal development, beach stabilization and re-nourishment, sediment diversion, disturbance by humans, and environmental contaminants. We recommend that you take the necessary precautions to protect the nonbreeding habitat of this species. For more information on Piping Plover Critical Habitat, visit the UFWS website: http://endangered.fws.gov.

- The Rufa subspecies of Red Knot (*Calidris canutus rufa*) may occur within one mile of the project area. Federally listed as threatened, the Rufa Red Knot may be found in coastal Louisiana throughout the year, with the greatest number of knots migrating through each spring. Red Knots forage on intertidal beaches, mudflats, marsh edges, and sand flats with sparse emergent vegetation. Primary threats to this species are anthropogenic destruction and degradation of nonbreeding habitat and food resources, habitat loss from shoreline erosion and subsidence, and human disturbance of foraging birds. For more information on the Rufa Red Knot, visit the U.S. Fish and Wildlife website: http://endangered.fws.gov.

- Manatee (*Trichechus manatus*) may occur in the surrounding water bodies of your site location. Manatees are large mammals inhabiting both fresh and salt water. Although most manatees are year round residents of Florida or Central America, they have been known to migrate to areas along the Atlantic and Gulf coast during the summer months. Manatee is a threatened species protected under the Endangered Species Act of 1973 and the Federal Marine Mammal Protection Act of 1972. In Louisiana, taking or harassment of a manatee is in violation of state and federal law. Critical habitat for manatee includes marine submergent vascular vegetation (seagrass beds). Areas with sea-grass beds should be avoided during project activities if possible. Report all manatee sightings to the LDWF at 337-735-8676 or 1-800-442-2511.

- The LDWF database indicates the presence of bird nesting colonies within one mile of this proposed project. Please be aware that entry into or disturbance of active breeding colonies is prohibited by LDWF. In addition, LDWF prohibits work within a certain radius of an active nesting colony.

  Nesting colonies can move from year to year and no current information is available on the status of these colonies. If work for the proposed project will commence during the nesting season, conduct a field visit to the worksite to look for evidence of nesting colonies. This field visit should take place no more than two weeks before the project begins. If no nesting colonies are found within 1,000' (2,000' for Brown Pelicans) of the proposed project, no further consultation with LDWF will be necessary. If active nesting colonies are found within the previously stated distances of the proposed project, further consultation with LDWF will be required. In addition, colonies should be surveyed by a qualified biologist to document species present and the extent of colonies. Provide LDWF with a survey report, which is to include the following information:

  1. qualifications of survey personnel;
  2. survey methodology including dates, site characteristics, and size of survey area;
  3. species of birds present, activity, estimates of number of nests present, and general vegetation type including digital photographs representing the site; and
  4. topographic maps and ArcView shape files projected in UTM NAD83 Zone 15 to illustrate the location and extent of the colony.

  Please mail survey reports on CD to: Wildlife Diversity Program
  La. Dept. of Wildlife and Fisheries
  P.O. Box 98000
  Baton Rouge, LA 70898-9000

  To minimize disturbance to colonial nesting birds, the following restrictions on activity should be observed:

  --For colonies containing nesting wading birds (i.e., herons, egrets, night-herons, ibis, Roseate Spoonbills, Anhingas, or cormorants), all project activity occurring within 1000' of an active nesting colony should be restricted to the non-nesting period (i.e., September 1 through February 15).

  --For colonies containing nesting gulls, terns, or Black Skimmers, all project activity occurring within 650' (2000' for Brown Pelicans) of an active nesting colony should be restricted to the non-nesting period (i.e., September 16 through April 1).

- The Wildlife Diversity Program (WDP) reports summarize the existing information known at the time of the request regarding the location in question. WDP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. If at any time WDP tracked species are encountered within the project area, please contact our biologist at 225-765-2643.

Other agency notifications

- That a water bottom lease is obtained from the Division of Administration, State Land Office prior to commencement of construction activities.

- If archaeological, historical or other cultural resources are encountered during authorized activities, work shall cease and the permittee shall immediately notify the Division of Archaeology, Louisiana Department of Culture, Recreation, and Tourism (CRT, P. O. Box 44247, Baton Rouge, LA 70804; (225) 342-8200) and OCM (P. O. Box 44487, Baton Rouge, LA 70804-4487; (225) 342-7591). Work may not resume until written approval is obtained from CRT.

- The permittee shall ensure that all sanitary sewage and/or related domestic wastes generated during the subject project activity and at the site, thereafter, as may become necessary shall not be discharged into any of the streams or adjacent waters of the area without authorization from DH and/or DEQ or, in the case of total containment, shall be disposed of in approved sewerage and sewage treatment facilities, as is required by the State Sanitary Code and DEQ regulations. Such opinion as may be served by those comments offered herein shall not be construed to suffice as any more formal approval(s), which may be required of possible sanitary details (i.e. provisions) scheduled to be associated with the subject activity. Such shall generally require that appropriate plans and specifications be submitted to DH for purpose of review and approval prior to any utilization of such provisions.

- Permittee shall obtain all necessary approvals related to air and water quality and the storage and/or disposal of solid or hazardous waste, should one be required, from the LDEQ prior to initiation of construction activities.

- Structures must be marked/lighted in accordance with U. S. Coast Guard regulations.

- With respect to activities located on the Cameron Prairie National Wildlife Refuge, permittee shall coordinate with the USFWS to obtain a special use permit.

OCM specific conditions

- All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.

- As-built drawings and/or plats shall have written on them the date of completion of said activities and shall be submitted to the Louisiana Department of Energy and Natural Resources, Office of Coastal Management, P.O. Box 44487, Baton Rouge, LA 70804-4487 within 30 days following project completion.

- Pipelines authorized by this Coastal Use Permit shall be buried (or jetted or bored) and maintained with a minimum cover of 3' below the mudline of any open water areas or waterbody crossings. Note that maintenance activities necessary to maintain the required 3' of cover over the pipeline may require a new Coastal Use Permit.

- All logs, stumps and other debris encountered during dredging activities shall be removed from the site during or immediately after the activity and disposed of in accordance with all applicable laws and regulations.

- All fill and/or dredged material to be hauled off-site shall be disposed of at a State approved facility.

- All fill material shall be clean and free of contaminants and shall not contain hazardous materials such as asbestos or asbestos residue, shingles, tires, oil/grease residue, exposed rebar, protruding objects, etc.

This concludes the formal review and decision on the proposed coastal use. The Applicant shall perform the use in accordance with the plans and specifications approved by OCM and shall comply with all permit conditions imposed by OCM.