

# Environmental Consequences Additional Analysis

## Threatened and Endangered Species

### Proposed Action Alternative

Based on review of existing data, preliminary field surveys, the rarity of occurrences, and the use of best management practices (BMPs) documented in Appendix A, Annex N of the 2016 WSLP EIS and described below, CEMVN has determined that the Proposed Action is not likely to adversely affect any of the listed species, bald eagles, or colonial nesting water birds. USFWS guidelines would be utilized during construction of the Proposed Action to avoid any impacts to the species described below, if encountered.

The entire Proposed Action ROW and nearby historic nests were surveyed for colonial nesting waterbirds and bald eagle nests. These surveys include a potential bald eagle's nest in the area, and two potentially active colonial nesting water bird rookeries. There were no observations of active rookeries, active or inactive bald eagle nests, or any colonial waterbirds exhibiting pre-nesting behaviors, such as nest making during any of the surveys (6 total) or subsequent WVA field trips (8 total). Since these surveys have taken place, WSLP Project related activities, as described in the 2016 WSLP EIS and SEA 570, have been occurring. To deter colonial nesting water birds from establishing active nesting colonies in the vicinity, a Nesting Prevention Plan is being developed, in coordination with the USFWS and LDWF. A qualified biologist would continue to monitor the area for active, inactive, and alternate bald eagle nests and colonial waterbird nesting activity within the vicinity of the Proposed Action.

If measures to prevent colonial nesting bird populations are not successful in the area, activities that would occur within 1,000 feet of a colony could be restricted to the non-nesting period, which in this region generally extends from September 1 to February 15, depending on the species present. This restriction would likely pose significant problems to schedules. If waterbird nesting colonies become established in the area, the 1,000 foot buffer must be maintained unless coordination with the USFWS indicates that the buffer zone may be reduced based on the species present or an agreement is reached with USFWS that allows a modified process to be adopted.

During in-water work in areas that potentially support manatees, all personnel associated with the project would be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel would be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

Much of the adjacent area and vicinity is forested wetlands and swamp habitats. ESA, BGEPA, and MBTA trust species could move to adjacent habitats because of indirect and direct impacts to vegetation and water quality associated with the proposed action (See sections 4.2 and 4.6 for more information on these direct and indirect impacts). None of the Proposed Action area or vicinity is critical habitat for the West Indian manatee or the Gulf sturgeon, and those species are thought to visit the vicinity of the Proposed Action only seasonally and infrequently. Therefore, it is not likely that a loss in habitat would affect ESA trust species. Bald eagles and colonial waterbirds frequent the vicinity of the Proposed Action. The alteration of habitat and

subsequent relocation of BGEPA and MBTA trust species as a result of the Proposed Action could have population level impacts if adjacent habitats are at or near carrying capacity in the abundant, adjacent forested wetlands, however, such impacts are not expected. Best management practices, including monitoring, use of recommended buffers, and development of a nesting prevention plan for colonial nesting waterbirds would minimize impacts to bald eagles and colonial waterbirds. Additionally, if CEMVN constructs new habitat in the vicinity to replace the impacted habitat, upon completion of mitigation measures and replacement of the impacted habitat, any impacts to BGEPA and MBTA trust species could be reduced or eliminated. Therefore, it is expected that any relocation of ESA, BGEPA, or MBTA trust species caused by the proposed action would be a minor indirect impact.

## **Cultural Resources**

### **Proposed Action Alternative**

Based on review of existing data and field surveys, there are no significant cultural resources located within the proposed project area. Therefore, the USACE has determined that the Proposed Action would have no direct or indirect adverse impacts on significant historic properties.

Several locations subject to activities associated with the proposed action were surveyed for the 2016 WSLP EIS and were documented in the management summary “Management Summary: Phase I Cultural Resources Survey and Reconnaissance of Alternate C, West Shore Lake Pontchartrain Levees Project, St. John the Baptist and St. Charles Parishes, Louisiana” (Wells et al. 2014, SHPO report 22-4571). The Frenier 1915 Memorial was reported as archaeological site 16SJB69, and is located outside of the project area and would not be impacted by activities associated with the proposed action. The eastern margin of Angelina Plantation (16SJB68) is located on the west side of the proposed project area, and is the only recorded archaeological site directly within the proposed action ROW. The proposed action would be east of the NRHP eligible part of Angelina Plantation. The eastern portion of the project area (the 2018 realignment) near Lake Pontchartrain was surveyed in the first half of 2019 and no cultural resources were reported (Ryan, Hunter, and Wells 2019, SHPO report 22-0571-1). The eastern realignment moves the levee footprint further from the Frenier 1915 Memorial (16SJB69). All other archaeological sites in the vicinity have either been found not eligible or are outside of the immediate project area.

The USACE coordinated with the SHPO and Federally-recognized Tribes with a determination of “*no adverse effect to historic properties*” in a letter dated 13 November 2019. The SHPO concurred with the USACE effects determination in their letter dated 6 January 2020. The Muscogee (Creek) Nation concurred with the USACE effects determination in an email dated 4 December 2019. No other Federally-recognized Indian Tribes responded. The USACE would implement and comply with the stipulations identified in the PA for the West Shore Lake Pontchartrain Hurricane Storm Damage Risk Reduction System as executed on May 16, 2014.

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## **Environmental Justice**

### *Future With-Project Conditions*

*Direct and Indirect Impacts:* There are no direct impacts to EJ communities from the proposed action.

Positive long term benefits would accrue to all communities on the protected side of the flood risk reduction system, regardless of income or race. EJ and non EJ communities would realize long term benefits of the levee system while experiencing short term inconveniences related to construction activities.

Housing along the revised alignment in Mt. Airy, would not be directly impacted by levee construction but would be close enough to construction activities to experience temporary indirect impacts. The communities along this stretch of levee are low-income areas or a community with 20% or more of households living below poverty. These EJ communities may experience minimal short term indirect impacts caused by construction activities, such as noise,

dust and truck traffic transporting materials. Long term direct and indirect adverse impacts are not expected.

Additionally, new access roads are proposed for transporting material to build the levee. These new access roads would not cause direct impacts to EJ communities. Finally, stockpile sites that were assessed in EA#570, Surveys and Borings, are now being considered as potential borrow sites. Potential indirect impacts could occur to housing near a few of the stockpile borrow sites but these would not be high, adverse impacts and could include noise, dust and truck traffic. Traffic control plans would be implemented for all construction-related transportation to minimize impacts to existing traffic patterns and would rely upon use of highways to the extent practicable.

The EJSCREEN tool, developed by EPA, uses environmental and demographic indicators to help identify environmental risks to communities. Several Environmental Indicators, presented in Table 1, are above the 80th percentile in the State or USA, which is according to EPA, the percentile where one could expect environmental concerns. Diesel, Air Toxins Cancer Risk and Respiratory Illness Hazard along with RPM and Hazardous Waste Proximity and Wastewater Discharge Indicator are all above the 80th percentile in the State which reveals an extremely affected community. The Mt. Airy community, as shown in the diagram below, is majority white; however 26 percent of households are below the poverty level. The environmental and demographic data reveals an EJ community that is extremely vulnerable to environmental risks, such as those associated with emissions. Best management practices would be utilized to avoid, reduce, and contain temporary impacts to human health and safety.



Figure 1: Housing near proposed action in Mt. Airy.




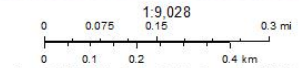
**Table 1: EPA EJSCREEN Mt. Airy Environmental and Demographic Data**

<b>Selected Variables</b>	<b>Value</b>	<b>State Avg</b>	<b>Percentile in State</b>	<b>EPA Region Avg</b>	<b>Percentile in EPA Region</b>	<b>USA Avg</b>	<b>Percentile in USA</b>
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	8.96	9.03	49	9.55	24	9.53	36
Ozone (ppb)	38.9	37.4	62	40.4	37	42.5	24
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	3.55	0.891	98	0.721	95-100th	0.938	95-100th
NATA* Air Toxics Cancer Risk (risk per MM)	100	49	99	42	95-100th	40	95-100th
NATA* Respiratory Hazard Index	2.2	1.9	81	1.8	70-80th	1.8	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	6.3	250	19	320	12	600	12
Lead Paint Indicator (% pre-1960s housing)	0.32	0.21	79	0.18	81	0.29	63
Superfund Proximity (site count/km distance)	0.01	0.067	15	0.07	15	0.12	9
RMP Proximity (facility count/km distance)	3.4	0.88	94	0.8	96	0.72	96
Hazardous Waste Proximity (facility count/km distance)	1.7	0.74	85	0.86	84	4.3	74
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.006	0.49	81	0.38	81	30	77
<b>Demographic Indicators</b>							
Demographic Index	31%	40%	44	44%	35	36%	51
Minority Population	29%	41%	46	51%	30	38%	49
Linguistically Isolated Population	0%	2%	63	6%	35	4%	44
Population with Less Than High School Education	15%	16%	50	17%	54	13%	66
Population under Age 5	6%	7%	48	7%	43	6%	53
Population over Age 64	24%	14%	91	13%	91	14%	88



October 29, 2019

 Digitized Polygon



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 2: Housing near proposed action in Mt. Airy.

**Table 2: EPA EJSCREEN Mt. Airy, near Station 50+00, Environmental and Demographic Data**

Selected Variables	Value	State Avg	Percentile in State	EPA Region Avg	Percentile in EPA Region	USA Avg	Percentile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	8.96	9.03	49	9.55	24	9.53	36
Ozone (ppb)	38.9	37.4	62	40.4	37	42.5	24
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	3.55	0.891	98	0.721	95-100th	0.938	95-100th
NATA* Air Toxics Cancer Risk (risk per MM)	100	49	99	42	95-100th	40	95-100th
NATA* Respiratory Hazard Index	2.2	1.9	81	1.8	70-80th	1.8	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	6.3	250	19	320	12	600	12
Lead Paint Indicator (% pre-1960s housing)	0.32	0.21	79	0.18	81	0.29	63
Superfund Proximity (site count/km distance)	0.01	0.067	15	0.07	15	0.12	9
RMP Proximity (facility count/km distance)	3.4	0.88	94	0.8	96	0.72	96
Hazardous Waste Proximity (facility count/km distance)	1.7	0.74	85	0.86	84	4.3	74
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0058	0.49	81	0.38	81	30	77
<b>Demographic Indicators</b>							
Demographic Index	31%	40%	44	44%	35	36%	51
Minority Population	29%	41%	46	51%	30	38%	49
Linguistically Isolated Population	0%	2%	63	6%	35	4%	44
Population with Less Than High School Education	15%	16%	50	17%	54	13%	66
Population under Age 5	6%	7%	48	7%	43	6%	53
Population over Age 64	24%	14%	91	13%	91	14%	88

\*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

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EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

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