Draft Environmental Assessment

Escambia County Delano Street Drainage Improvements

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Escambia County, Florida

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TABLE OF CONTENTS

APPENDICES 5
ACRONYMS AND ABBREVIATIONS 6
1.0 INTRODUCTION 8
2.0 PURPOSE AND NEED 9
3.0 ALTERNATIVES 9
3.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative) 10
3.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures 12
3.3 No Action Alternative 13
3.4 Alternatives Eliminated from Detailed Analysis 13
4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES 14
4.1 Air Quality 22
4.1.1 Existing Environment 22
4.1.2 Environmental Consequences 22
4.2 Noise 23
4.2.1 Existing Environment 23
4.2.2 Environmental Consequences 24
4.3 Geology and Soil 25
4.3.1 Existing Environment 25
4.3.2 Environmental Consequences 26
4.4 Wetlands 27
4.4.1 Existing Environment 27
4.4.2 Environmental Consequences 28
4.5 Surface Water 29
4.5.1 Existing Environment 29
4.5.2 Environmental Consequences 29
4.6 Floodplains 30
4.6.1 Existing Environment 30
4.6.2 Environmental Consequences 31
4.7 Groundwater 32
4.7.1 Existing Environment 32
4.7.2 Environmental Consequences 33

4.8 VEGETATION 34
4.8.1 Existing Environment 34
4.8.2 Environmental Consequences 34
4.9 FISH AND WILDLIFE 35
4.9.1 Existing Environment 35
4.9.2 Environmental Consequences 35
4.10 THREATENED AND ENDANGERED SPECIES 36
4.10.1 Existing Environment 36
4.10.2 Environmental Consequences 37
4.11 CULTURAL RESOURCES 38
4.11.1 Existing Conditions 38
4.11.2 Environmental Consequences 39
4.12 HAZARDOUS MATERIALS AND SOLID WASTES 41
4.12.1 Existing Environment 41
4.12.2 Environmental Consequences 41
4.13 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) 43
4.13.1 Existing Environment 43
4.13.2 Environmental Consequences 44
4.14 UTILITIES 45
4.14.1 Existing Environment 45
4.14.2 Environmental Consequences 45
4.15 LAND USE 46
4.15.1 Existing Environment 46
4.15.2 Environmental Consequences 46
4.16 TRANSPORTATION AND TRAFFIC 47
4.16.1 Existing Environment 47
4.16.2 Environmental Consequences 48
4.17 OCCUPATIONAL HEALTH AND SAFETY 49
4.17.1 Existing Environment 49
4.17.2 Environmental Consequences 49
4.18 SOCIOECONOMICS 50
4.18.1 Existing Environment 50
4.18.2 Environmental Consequences 50
4.19 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN 52
4.19.1 Existing Environment 52

4.19.2 Environmental Consequences 52
5.0 CUMULATIVE IMPACTS 54
6.0 6.0 PUBLIC INVOLVEMENT 55
7.0 AGENCY COORDINATION 55
8.0 LIST OF PREPARERS 56
9.0 REFERENCES 56

APPENDICES

A Delano Street Drainage Area Map

B Project Location and Ground Disturbance Maps

C Wetland Maps

D Flood Insurance Rate Maps (FIRM)

E Executive Order (EO) 11988 8-Step Checklist

F United States Fish and Wildlife Services (USFWS) Consultation and Concurrence Letter

G FEMA's Programmatic Biological Opinion with USFWS, *FEMA-funded repair and replacement of preexisting facilities in Florida*

H Stormwater Pollution Prevention Plan (SWPPP)

I Public Involvement Town Hall Presentation and Public Comments (11/14/2018)

J Online Initial Public Notice (11/7/2019)

K Hydrologic and Hydraulic Study April 2019

L Northwest Florida Water Management District (NWFWMD) Environmental Resource Permit (Permit No. GEN-033-285757-1)

M FDOT Drainage Connection Permit (Permit No. 2019-D-395-00012)

N United States Army Corps of Engineers (USACE) Notice of No Permit Required

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing Material
ACS	American Community Survey
APE	Area of Potential Effects
BMP	Best Management Practices
CBDF	Central Booking and Detention Facility
CEQ	Council of Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CRAS	Cultural Resource Assessment Survey
dBA	A-weighted Decibels
EA	Environmental Assessment
EJSCREEN	Environmental Justice Screening and Mapping Tool
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
ERP	Environmental Resource Permit
FDEM	Florida Division of Emergency Management
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FNAI	Florida Natural Areas Inventory
FWC	Florida Fish and Wildlife Conservation Commission
GHG	Greenhouse Gas
HMGP	Hazard Mitigation Grant Program
IPaC	Information for Planning and Consultation

LBP	Lead Based Paint
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Environmental Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWFWMD	Northwest Florida Water Management District
OSHA	Occupational Safety and Health Administration
SCTL	Soil Cleanup Target Levels
SF	Square Feet
SHPO	State Historic Preservation Officer
SPT	Standard Penetration Test
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act
SWPPP	Stormwater Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

On June 9, 2012, an unnamed storm produced a total rainfall of 13.11 inches in Pensacola, Florida, over the course of 24 hours. The area along Herman Street and L Street, including the Waterfront Rescue Mission and businesses along L Street south of Herman Street, experienced flooding as high as two feet above the finished floor elevations. The basement of the Escambia County Sheriff's Department Central Booking and Detention Facility (CBDF) also experienced substantial flooding due to the storm's discharge overwhelming the basin and pump system. Flooding also occurred in extended areas both east and west of L Street as far south as West Cross Street.

On April 29, 2014, another historic rainfall event took place over the western Florida Panhandle. Widespread flooding produced several sinkholes, scoured and destroyed several roads within the county, and necessitated a multitude of water rescue missions due to the flash flooding. The flooding also may have potentially caused a natural gas leak in the basement of the CBDF, resulting in an explosion that rendered the building a total loss. Parts of Interstate 10, as well as many local roads, were closed due to traffic and emergency access. The rainfall totals were exacerbated by two predominated rounds of storms, estimating a total of 20.47 inches of cumulative rainfall for the City of Pensacola.

On September 16, 2020, Hurricane Sally produced 18 inches of rain within Escambia County, causing additional flooding within the Delano Street Study Area. The flooding in the area caused damages to the Waterfront Rescue Mission and other businesses within the area.

Escambia County and the Delano Street Study Area have also experienced significant impacts from an April 2005 rain event, Hurricane Ivan in 2005, Hurricane Georges in 1998, and Hurricane Frederick in 1979.

Escambia County Board of County Commissioners (the Board) proposes to construct four new dry retention stormwater ponds and to expand and formalize one existing unpermitted wet retention facility within the Delano Street Study Area. Two of the four new ponds will require the acquisition of four vacant commercial lots and two properties that contain an auto repair shop and its offices that will be demolished (Escambia County Board of County Commissioners, 2019).

The Board (applicant) has applied for Hazard Mitigation Grant Program (HMGP) funds from the Federal Emergency Management Agency (FEMA) under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 United States Code (USC) 5121-5207, to modify existing stormwater facilities and infrastructure to increase efficiency and capacity as well as the acquisition of new sites to add to the existing stormwater capacity within the Delano Street Study Area (4177-18-R). In accordance with the Stafford Act, regulations promulgated pursuant thereto and codified in 44 Code of Federal Regulations (CFR) Part 206, and the Florida Division of Emergency Management (FDEM) Mitigation Bureau Non-Federal Representative Memorandum of Agreement (MOA) dated November 14, 2017, FEMA and FDEM are required to analyze the

potential environmental impacts of the Proposed Action prior to making a decision regarding whether to provide funding for the project. FDEM and FEMA have prepared this Environmental Assessment (EA) to analyze the potential environmental impacts of constructing the four new ponds and the expansion and formalization of the existing pond. This EA has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (Public Law 91-190, as amended) and its implementing regulations at 40 CFR part 1500-1508 promulgated by the President's Council on Environmental Quality (CEQ).

Recent changes to the CEQ regulations (40 CFR Part 1500–1508) became effective on September 14, 2020; 85 Fed. R. 43304-76 (July 16, 2020). As stated in 40 CFR Part 1506.13, the new regulations apply to any NEPA process begun after September 14, 2020. This EA substantively commenced prior to that date; therefore, this EA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020, and policies issued by the Department of Homeland Security Directive 023-01, Rev 01, and FEMA Directive 108-1.

2.0 PURPOSE AND NEED

The purpose of the proposed action is to provide the Board the means to adequately reduce flooding risk in the Delano Street Study Area (Appendix A). The need for the proposed action has risen from multiple flood events, including the DR-4177-FL flood event, which significantly flooded residences, businesses, and transit networks, led to the destruction of the CBDF, scoured and destroyed several roads, and led to multiple water rescue missions. The area has experienced multiple flood events, negatively impacting those residing and working in the area. The proposed drainage improvements would reduce the risk of flood loss in the area. The proposed action is consistent with the requirements of HMGP as authorized by Section 404 of the Stafford Act, 42 USC 5170(c), which makes grant funding available, when authorized under a Presidential major disaster declaration, in the areas of the state requested by the Governor to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.

3.0 ALTERNATIVES

Under NEPA, this EA is required to analyze the potential environmental impacts of the Preferred Alternative, No Action Alternative, and reasonable alternatives. Reasonable alternatives are those that meet the purpose of and need for the proposed action, are feasible from a technical and economic standpoint, and meet reasonable screening criteria (selection standards) that are suitable to a particular action. Screening criteria may include requirements or constraints associated with operational, technical, environmental, budgetary, and time factors. Alternatives that are determined not reasonable can be eliminated from detailed analysis in this EA.

During project planning and scoping, the Board conducted an alternatives analysis to identify reasonable alternatives for the proposed drainage improvements. These alternatives were

evaluated to determine if they met the purpose and need, were feasible from a technical and economic standpoint, and met applicable screening criteria. Based on the alternative analysis conducted, two actions were determined reasonable for reducing flood risk: the construction of four new dry retention ponds and the formalization and expansion of one existing pond, including modifications to the existing storm sewer system (Alternative 1 – Preferred Alternative) and acquiring and demolishing at-risk structures in the area (Alternative 2). These alternatives, along with the No Action Alternative, were selected for detailed analysis in this EA.

3.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1, which is the Preferred Alternative, includes the construction of four new dry retention ponds (Herman Pond, CBDF Pond, Fairfield Pond, and the Palafox Pond), the expansion and formalization of the existing Herman Pit, and modification of existing stormwater facilities and infrastructure. Based on the results of a hydrologic and hydraulic study conducted for this alternative, the proposed mitigation is anticipated to protect against a 100-year flood event and provide a reduction in damages. There are 40 structures that are expected to benefit from this project. These include 15 residential structures, 7 offices, 1 restaurant building, 1 school, 6 warehouses, 2 service stations, and 8 retail locations. This alternative would also result in reduced functional downtime and loss of service of roadways within the project area.

The Herman Pond site is a 2.9-acre county-owned parcel located on Herman Street northwest of the intersection with Pace Boulevard (GPS Coordinates: NW 30.4498907, -87.2415701; NE 30.4498553, -87.2402508; SE 30.4490310, -87.2398663; SW 30.4490755, -87.2415980) (Appendix B). The site currently consists primarily of a grassy field with some tree cover. Improvements in this sub-basin would include open ditches in the existing Escambia County right-of-way which would be routed to the new Herman Pond. Herman Pond would have a positive outlet structure located on the northern bank of the pond. The outfall system would connect to the existing stormwater infrastructure on Clay Street and flow east to the Herman Pit in order to preserve historic flow patterns. The new stormwater system would be installed along the length of Q Street beginning at Herman Street, heading south, and ending at Delano Street. Proposed activities also include installation of 18", 24", 30”, and 36" pipes, manholes, mitered end sections, multiple ditch bottom inlets, and ties to existing infrastructure. In addition, improvements to existing shoulder swales and miscellaneous grading, sodding, mailbox relocations, concrete driveways and asphalt driveways, and roadway cut and patch would be necessary for project completion. Driveway portions within the county right-of-way that would be disturbed would be returned to their original conditions to the extent possible, including material and configuration. In cases where the existing driveway is dirt or gravel, the driveway portions within the county right-of-way would be replaced with asphalt.

The CBDF Pond is a 4.7-acre county-owned site located at 1200 West Leonard Street (GPS Coordinates: NW: 30.4424639, -87.2333959; NE: 30.4423722, -87.2318991; SE: 30.4415386, -

87.2319355; SW: 30.4415902, -87.2335051) that previously housed the CBDF. The CBDF has since been demolished and is being rebuilt at a different location using FEMA Public Assistance (PA) funds (PA-04-FL-4177-PW-01006). The site is bordered by West Leonard Street to the south, North H Street to the east, and developed land to the north and west (Appendix B). The CBDF Pond would be hydraulically equalized to the L Street Pond via a combination of new and existing storm sewer pipes. Proposed activities also include clearing and grubbing, excavation, grading, installation of a 36" pipe, sodding, installation of a grate inlet, installation of a mitered end section, removal of existing pipe, and necessary ties to existing infrastructure.

The Fairfield Pond area is a 9.5-acre site located south and west of the county animal shelter along Fairfield Drive (GPS Coordinates: NW: 30.4472819, -87.2329036; NE: 30.4462615, -87.2308243; SE: 30.4457567, -87.2314531; SW: 30.4459856, -87.2329689) (Appendix B). The pond would require the acquisition of four vacant commercial lot parcels. The site currently consists of a grassy field with no tree cover and a section of the paved parking lot. The sub-basin would be connected to the existing Florida Department of Transportation (FDOT) storm sewer system along Fairfield Drive with a proposed smart box. The smart box would consist of a manhole with an internal weir which would route stormwater to Fairfield Pond. In extreme storm events, stormwater would flow over the smart box's internal weir and continue down the existing FDOT storm sewer system to the L Street Pond. Proposed activities also include clearing and grubbing, excavation, grading, installation of a smart box manhole, installation of a 48" pipe, sodding, installation of mitered end sections, and necessary ties to existing infrastructure.

The Palafox Pond is a 4.08-acre proposed pond located along Herman Street starting near the intersection with N Palafox Street and ending near Sycamore Drive (GPS Coordinates: N: 30.4515210, -87.2276153; E: 30.4510429, -87.2274181; S: 30.4493972, -87.2299890; W: 30.4497503, -87.2302265) (Appendix B). The site is densely vegetated vacant land owned by Escambia County. The pond would serve existing FDOT storm sewer systems along Palafox Street with the addition of a proposed smart box. The smart box is a manhole with an internal weir which would primarily route stormwater to the proposed Fairfield Pond. Proposed activities also include clearing and grubbing, excavation, grading, installation of a smart box manhole, installation of a 30" pipe, sodding, installation of a mitered end section, and necessary ties to existing infrastructure.

The Herman Pit is a county-owned site that was a borrow pit established for the construction of Pace Boulevard by FDOT located near the intersection of North Pace Boulevard and West Herman Street (GPS Coordinates: NW: 30.4502868, -87.2391990; NE: 30.4502470, -87.2373956; SE: 30.4488398, -87.2374420; SW: 30.4489898, -87.2392350) (Appendix B). The borrow pit was not designed as a stormwater management facility; however, several acres of stormwater are routed to the pit. The current pit lacks the substantial stormwater capacity for an area of its size due to tree and vegetation cover as well as inefficient and unmaintainable grading. To improve the site and provide the maximum amount of benefit, the pond requires the acquisition and demolition of three commercial structures at 416 and 450 West Herman Street. The pond would be

expanded, resulting in a 5.69-acre pond that would serve Pace Boulevard and adjacent areas. The Herman Pit improvements were originally proposed to include a 6.14-acre pond area, however, geotechnical studies demonstrated poorly draining silty sand soils in the area, limiting the area of the proposed Herman Pit expansion. It was determined that the expansion would only consist of the areas being acquired directly to the west of the pond (416 and 450 West Herman Street) and would result in a 5.69-acre pond. The Herman Pit would remain hydraulically equalized to the L Street Pond via the existing 48” storm sewer along L Street. Proposed activities would also include clearing and grubbing, excavation, grading, installation of manholes, installation of 48" pipe, sodding, installation of mitered end sections, and necessary ties to existing infrastructure.

The L Street Pond is an existing county-owned site located on the southeast corner of Leonard Street and L Street, adjacent to Englewood Park and across the street from the proposed CBDF Pond site (GPS Coordinates: NW: 30.4413022, -87.2348399; NE30.4413022, -87.2345424; SE: 30.4410166, -87.2345543; SW: 30.4410226, -87.2348399) (Appendix B). L Street Pond currently receives stormwater flow from all the sites in the study area before discharging to the existing E Street system. Currently, the L Street pond is connected to the CBDF pond site through a cistern and pumping system that is no longer required since the demolition of the CBDF. This system would be replaced with a gravity flow connection utilizing the existing and proposed infrastructure between the proposed CBDF pond and the L Street Pond. The proposed activities would also include clearing and grubbing, removal of the existing cistern and pump appurtenances, installation of a 30" pipe, sodding, installation of a manhole, installation of a headwall, and necessary ties to existing infrastructure and grades.

3.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Alternative 2 includes the acquisition and demolition of at-risk structures within the Delano Street Study Area. There are over 40 structures within the existing flood-prone area in the Delano Street Study Area, and nearly all buildings were impacted by flooding in the April 2014 event. Alternative 2 includes the identification and prioritization of the most vulnerable structures. Once prioritization has been established, property owners would be contacted and invited to participate in this voluntary program. Site analysis would be conducted at the interested properties to access individual property acquisition and demolition needs and cost estimates. After sites have been established and purchased, structures would then be demolished, construction and demolition debris would be removed, and the parcels would be converted to open space and deed restricted as set forth in FEMA program requirements, as described in 44 CFR 206.434.

Due to the extent of flooding in the study area and property owners’ willingness to participate in this program, Alternative 2 would only provide benefits to select properties, and other infrastructure would remain at risk during storm events.

3.3 No Action Alternative

The No Action Alternative is to maintain existing conditions. The No Action Alternative would not involve the construction of new dry detention ponds, the expansion and formalization of existing stormwater ponds, stormwater infrastructure modifications, the acquisition of parcels, or the demolition of structures. Under the No Action Alternative, the Delano Street Study Area would continue to experience flooding during storm events.

3.4 Alternatives Eliminated from Detailed Analysis

During project planning and scoping, the Board investigated other alternatives, including other locations for potential pond sites, expansion efforts, and stormwater conveyance system improvements in the Kelly Pond Basin area. This process eliminated three pond sites, eliminated one pond's potential expansion, and eliminated stormwater conveyance system improvements in the Kelly Pond Basin area.

The pond sites eliminated from consideration include the Delano Pond, Fairfield Pond 1, and Fairfield Pond 3. The Delano Pond site was eliminated after geotechnical exploration findings determined the soil and groundwater conditions were poorly suited for a conventional dry stormwater pond. The pond was also found to have poor conditions for an effective sand chimney (Niemann & Jacobs, 2018). Fairfield Ponds 1 and 3 were eliminated after testing results indicated that contaminants existed on the sites and that further investigation and remediation may be needed.

L Street Pond was originally proposed to be expanded to roughly 340,000 SF (square feet) with a depth of approximately 11 feet. Geotechnical studies conducted in the area determined soil conditions were marginal to poor for a conventional dry stormwater pond due to waste and debris found during the geotechnical boring. Due to the presence of the debris, the expansion of L Street Pond was eliminated from consideration. Instead, the L Street Pond will be improved with necessary tie-ins to infrastructure and surrounding grades.

The Kelly Pond Basin stormwater conveyance system improvements proposed to extend existing drainage systems in place along Kelly Avenue to run further south and to then turn and run along Truman Avenue. Ditch Bottom Inlets and roadside swales would also be added in the area. All runoff would drain to the Kelly Street Pond. This proposal was eliminated from consideration after studies showed additional stormwater detention would be necessary in order to prevent flooding in other areas of the watershed (HDR Inc., 2006).

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section addresses the Affected Environment (existing conditions) and Environmental Consequences (potential impacts) of the Proposed Action. The following terms are used to describe the magnitude of impacts in this EA:

- No Effect: The action would not cause a detectable change.
- Negligible: The impact would be at the lowest level of detection; the impact would not be significant.
- Minor: The impact would be slight but detectable; the impact would not be significant.
- Moderate: The impact would be readily apparent; the impact would not be significant.
- Major: The impact would be clearly adverse or positive; the impact has the potential to be significant. The significance of adverse and positive impacts is subject to interpretation and should be determined based on the final proposal. In cases of adverse impacts, the impact may be reduced to less than significant by mitigations, design features, and other measures that may be taken.

Table 4-1. Summary of Environmental Consequences

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
Air Quality	**Alternative 1**: *Negligible Impact – Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative:** *No Effect*	Generated fugitive dust would be controlled using standard construction best management practices (BMPs), including watering of exposed surfaces and enclosing or covering stockpiled material.
Noise	**Alternative 1**: *Minor Impact – Not Significant* **Alternative 2**: *Minor Impact – Not Significant* **No Action Alternative**: *No Effect*	All construction and demolition activities would comply with local noise ordinances.
Geology & Soils	**Alternative 1**: *Negligible Impact – Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative:** *No Effect*	Appropriate BMPs and engineering controls would be implemented during construction to prevent and minimize soil erosion and sedimentation, per the Stormwater Pollution Prevention Plan (SWPPP) that would be prepared and implemented. Site cleanup of the lead-contaminated soils at the proposed

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
		Fairfield pond site will be done prior to purchase by the county.
Wetlands	**Alternative 1:** *Minor Positive Impact – Not Significant* **Alternative 2**: *No Effect* **No Action Alternative**: *No Effect*	Escambia County has obtained Northwest Florida Water Management District (NWFWMD) Environmental Resource Permit (ERP) number GEN-033-285757-1 issued February 19, 2019 for activities under Alternative 1.
Surface Water	**Alternative 1:** *Moderate Positive Impact – Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative**: *No Effect*	A SWPPP for Alternative 1 has been developed and outlines the BMPs and engineering controls to prevent and minimize erosion, sedimentation, and pollution impacts on water resources during construction activities. Escambia County has obtained NWFWMD ERP number GEN-033-285757-1, issued February 19, 2019, for activities under Alternative 1. Alternative 2 would also require the creation of a SWPPP related to its project activities if implemented.
Floodplains	**Alternative 1:** *Moderate Positive Impact - Not Significant* **Alternative 2**: *Moderate Positive Impact – Not Significant* **No Action Alternative**: *Minor Impact – Not Significant*	Not applicable
Groundwater	**Alternative 1:** *Minor Impact – Not Significant* **Alternative 2:** *Negligible Impact – Not Significant* **No Action Alternative:** *No Effect*	Appropriate dewatering permits would be obtained prior to dewatering activities.
Vegetation	**Alternative 1:** *Minor Impact – Not Significant* **Alternative 2:** *Negligible Impact – Not Significant* **No Action Alternative**: *No Effect*	Not applicable
Fish and Wildlife	**Alternative 1:** *Negligible Impact – Not Significant* **Alternative 2:** *Negligible Impact – Not Significant*	Not applicable

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
	No Action Alternative: *No Effect*	
Threatened and Endangered Species	**Alternative 1:** *Minor Impact – Not Significant* **Alternative 2:** *Negligible Impact – Not Significant* **No Action Alternative:** *No Effect*	An informal consultation was conducted with USFWS on 07/01/2020 with the following conditions: Eastern Indigo Snake: An eastern indigo snake protection/education plan provided to FEMA by the Service shall be distributed to all construction personnel. The educational material for the plan will consist of a combination of posters and pamphlets. Informational signs should be posted throughout the construction site and along any proposed access road to contain the following information: 1) A description of the eastern indigo snake, its habits, and protection under Federal law; 2) Instructions not to injure, harm, harass or kill this species; 3) If a snake is observed, directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; 4) Telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water and then frozen. If not currently authorized through an Incidental Take Statement in association with a Biological Opinion, only individuals who have been either authorized by a section 10(a)(1)(A) permit issued by the Service, or by the State of Florida through the Florida Fish

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
		and Wildlife Conservation Commission (FWC) for such activities, are permitted to come in contact with an eastern indigo snake. An eastern indigo snake monitoring report shall be submitted to the appropriate Florida Field Office within 60 days of the conclusion of clearing phases. The report shall be submitted whether or not eastern indigo snakes are observed. The report should contain the following information: 1) Any sightings of eastern indigo snakes and 2) Other obligations required by the FWC, as stipulated in the permit Wood Stork: No work shall be conducted within 2,500 feet of a nesting colony site unless approval is provided by the USFWS. The work shall not cause negative impacts to nesting habitat and nearby vegetative cover or vegetation used for nest building. No work shall occur within 2,500 feet of a nesting colony. The work shall not result in wetland loss within a nesting colony site. The work shall not result in negative impacts to the nesting habitat, vegetation cover, or the nearby vegetation used to collect nesting material or for roosting within 2,500 feet of the nesting colony site. Where work results in habitat loss, mitigation shall include restoration or creation ratio of 1:1 like for the wetlands within 2,500 feet of the nesting colony site.

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
		No work shall be conducted during the early segment of nesting season from March 1 to May 30 and all restoration or creation activities shall be concluded prior to the next nesting season. Gopher Tortoise: If gopher tortoises or burrows are found at the project locations and burrows cannot be permanently avoided by 25 feet or more, an appropriate gopher tortoise permit is required.
Cultural Resources	**Alternative 1:** *No Effect to Historic Properties* **Alternative 2**: *No Effect to Historic Properties* **No Action Alternative**: *No Effect to Historic Properties*	Consultation letters were sent to State Historic Preservation Officer (SHPO), Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Miccosukee Tribe of Indians of Florida, Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlocco Tribal Town on May 5, 2020 with the following conditions: 1. If human remains or intact archaeological deposits are uncovered, work in the vicinity of the discovery will stop immediately and all reasonable measures to avoid or minimize harm to the finds will be taken. The applicant will ensure that archaeological discoveries are secured in place, that access to the sensitive area is restricted, and that all reasonable measures are taken to avoid further disturbance of the discoveries. The applicant's contractor will provide immediate notice of such

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
		discoveries to the applicant. The applicant shall contact the Florida Division of Historic Resources and FEMA within 24 hours of the discovery. Work in the vicinity of the discovery may not resume until FEMA has completed consultation with SHPO, Tribes, and other consulting parties as necessary. 2. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Florida Statutes, Section 872.05. 3. Any changes to the approved scope of work will require submission to, and evaluation and approval by, the State and FEMA, prior to initiation of any work, for compliance with Section 106. 4. Offsite fill will come from either a commercial source or privately owned borrow pit where the fill is not obtained by the horizontal expansion of the pre-existing pit. 5. If any human remains or Native American Graves Protection and Repatriation Act items are encountered, work would stop and the Muscogee (Creek) Nation would be consulted with immediately. Concurrence letters were received from SHPO, Muscogee (Creek) Nation, and Seminole Tribe of Florida. The Seminole Tribe of Florida has requested the addition of the following condition: 1. If any archaeological, historical, or burial resources are discovered, the

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
		Seminole Tribe of Florida will be consulted immediately.
Hazardous Materials and Solid Waste	**Alternative 1**: *Moderate Positive Impact –Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative**: *Minor Negative Impact*	Handling, storage, and disposal of hazardous materials and wastes during construction activities, including measures to prevent releases, would be conducted in accordance with all applicable environmental compliance regulations. Under both Alternatives, asbestos-containing materials (ACM) and lead-based paint (LBP) surveys would be conducted prior to potential demolition of any existing structures on the proposed project locations. Any necessary asbestos or LBP abatement in accordance with all applicable plans and regulations. Non-hazardous solid waste generated under both Alternatives 1 and 2 would be disposed of at an offsite landfill, recycled, or reused as appropriate. High concentrations of lead were found in the soil of the L Street pond site which would require proper management and disposal as a hazardous waste.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	**Alternative 1**: *Negligible – Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative**: *No Effect*	Not applicable
Utilities	**Alternative 1**: *Minor Impact – Not Significant* **Alternative 2**: *Minor Impact – Not Significant* **No Action Alternative**: *No Effect*	No outages are expected. To avoid accidental outages, utilities in the area would be located prior to construction and the county would coordinate construction activities with utility companies.
Land Use	**Alternative 1:** *Minor Impact – Not Significant*	Not applicable

Resource	Environmental Consequences	Environmental Protection Measures and Required Permits
	Alternative 2: *Minor Impact – Not Significant* **No Action Alternative**: *No Effect*	
Transportation and Traffic	**Alternative 1**: *Minor Impact – Not Significant* **Alternative 2**: *Minor Impact – Not Significant* **No Action Alternative**: *No Effect*	Escambia County has obtained FDOT drainage connection permit number 2019-D-395-00012 issued on March 15, 2019, for the addition of two smart box manholes to direct stormwater into the Department's existing storm sewer system to the proposed dry retention facilities for Alternative 1. Construction vehicles would use defined haul routes and appropriate road measures would be taken during construction.
Occupational Health and Safety	**Alternative 1:** *Negligible Impact – Not Significant* **Alternative 2**: *Negligible Impact – Not Significant* **No Action Alternative:** *No Effect*	To minimize occupational health and safety risks for Alternatives 1 and 2, workers would wear and use appropriate personal protective equipment and follow all applicable Occupational Safety and Health Administration (OSHA) standards and procedures. A health and safety plan would be developed and implemented. Work areas would be clearly marked with appropriate signage and secured against unauthorized entry. Standard construction traffic control measures would be used to protect workers, residents, and the travelling public.
Socioeconomics	**Alternative 1**: *Minor Positive Impact – Not Significant* **Alternative 2:** *Moderate Negative Impact – Not Significant* **No Action Alternative**: *Moderate Impact – Not significant*	Not applicable
Environmental Justice and Protection of Children	**Alternative 1:** *No effect* **Alternative 2**: *No effect* **No Action Alternative**: *No effect*	Not applicable

4.1 Air Quality

4.1.1 Existing Environment

The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. Areas that meet the air quality standards for the criteria pollutants are designated as being in attainment. Areas that do not meet the air quality standards for one of the criteria pollutants are designated as being in nonattainment for that standard. The county currently is classified as being in attainment for all criteria pollutants stipulated under NAAQS.

Greenhouse gases (GHGs) are emitted by both natural processes and human activities, and their accumulation in the atmosphere regulates temperature. GHGs include carbon dioxide, methane, nitrous oxide, and other compounds. There are no established thresholds or standards for GHGs. However, according to current guidance from the Council on Environmental Quality (CEQ), a quantitative analysis and disclosure of GHG emissions is not warranted unless the proposed action's direct annual emissions would be greater than 25,000 metric tons of carbon dioxide equivalent.

4.1.2 Environmental Consequences

The threshold level for a significant impact on air quality is defined as a violation of an ambient air quality standard or regulatory threshold.

4.1.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, construction of the stormwater detention ponds, expansion of the Herman Pit, demolition of existing structures, and modification of existing stormwater facilities and infrastructure would generate short-term construction equipment exhaust emissions and short-term fugitive dust emissions. These emissions would vary daily, depending on the level and type of work conducted.

Pollutants that would be emitted from the internal combustion engine exhausts of construction vehicles and equipment include certain criteria pollutants, volatile organic compounds (VOCs), and certain GHGs. Annual construction and demolition emissions are expected to be less than the federal *de minimis* thresholds for criterial pollutants and VOCs. Construction and demolition are estimates to generate below 25,000 metric tons of carbon dioxide equivalent, the suggested reference point per current CEQ guidance for quantitative analysis and disclosure of GHG emissions.

Fugitive dust would be generated by construction vehicles and equipment operations on dirt surfaces and by wind action on stockpiled materials. Generated fugitive dust would consist

primarily of nontoxic particulate matter and would be controlled at the sites using BMPs, including watering of exposed surfaces and enclosing or covering stockpiled material.

ACM surveys would be conducted prior to the potential demolition of any existing at-risk structures. Any necessary asbestos abatement would be conducted prior to demolition in accordance with all applicable plans and regulations.

Based on the analysis conducted, Alternative 1 would be a negligible impact on air quality. The impact would not be significant.

4.1.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, demolition of properties within the Delano Street Study Area would generate short-term construction equipment exhaust emissions and short-term fugitive dust emissions. These air emissions would vary daily, depending on the level and type of work conducted.

Pollutants that would be emitted from the internal combustion engine exhausts of construction vehicles and equipment include certain criteria pollutants, VOCs, and certain GHGs. Annual construction and demolition emissions are expected to be less than the federal *de minimis* thresholds for criterial pollutants and VOCs. Construction and demolition are estimated to generate below 25,000 metric tons of carbon dioxide equivalent; the suggested reference point per current CEQ guidance for quantitative analysis and disclosure of GHG emissions.

Fugitive dust would be generated by construction vehicles and equipment operations on dirt surfaces and by wind action on stockpiled materials. Generated fugitive dust would consist primarily of nontoxic particulate matter and would be controlled at the sites using BMPs, including watering of exposed surfaces and enclosing or covering stockpiled material.

Based on the analysis conducted, Alternative 2 would be a negligible impact on air quality. The impact would not be significant.

4.1.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on air quality.

4.2 Noise

4.2.1 Existing Environment

Noise pollution is unwanted sound. Sound levels are measured in decibels (dB). A-weighted sound measures emphasize the frequency range of human hearing and are expressed in terms of A-weighted decibels (dBA). The effects of noise on humans include annoyance, sleep

disturbance, and health impacts. The primary source of ambient noise in the area of the Proposed Action is vehicular traffic.

4.2.2 Environmental Consequences

The threshold level for a significant noise impact is defined as a permanent increase in noise or prolonged periods of nighttime noise in noise-sensitive areas.

4.2.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, construction of the stormwater detention ponds, expansion of the Herman Pit, modification of existing stormwater facilities and infrastructure, and demolition of existing structures would temporarily increase ambient noise levels in and around the sites. The Herman Pond site and improvements to stormwater conveyance associated with the Herman Pond are located adjacent to a residential community, approximately 50 to 100 feet from the nearest residential structures. The Herman Pit is located approximately 600 feet to the east of the nearest residential community. The Palafox Pond site is located approximately 300 feet to the north and northwest of the nearest residential community. The Fairfield Pond site is located approximately 1,000 feet to the northwest of the nearest residential community. The CBDF Pond is located approximately 400 feet west and northwest of the nearest residential communities. The L Street Pond site is located approximately 500 feet east of the nearest residential community.

Based on the data presented in the EPA publication, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* (EPA, 1971), the main phases of outdoor construction typically generate noise levels that range from 78 dBA to 89 dBA, approximately 50 feet from the construction site. Noise levels are estimated to decrease by approximately 6 dBA with every doubling of distance from a noise source. Therefore, construction noise from the Herman Pond is expected to be between approximately 72 and 89 dBA. Construction noise from the CBDF Pond is expected to be approximately 60 to 71 dBA, with the Herman Pit expecting slightly higher levels in the nearest residential communities and the L Street Pond and Herman Pit expecting slightly lower levels in the nearest residential communities. Construction noise from the Fairfield Pond is expected to be less than 65 dBA.

OSHA compares 60 dBA to the sound levels of a normal conversation (at 3 feet away), 70 dBA to be that of classroom chatter, 80 dBA compares to a freight train at 100 feet away, and 90 dBA is comparable to a boiler room. OSHA regulations allow up to eight (8) hours of exposure to 90 dBA for workers. The National Institute for Occupational Safety and Health (NIOSH) recommends that all worker noise exposure should be controlled below 85 dBA for eight (8) hours to minimize hearing loss.

Based on the expected noise levels, activities under Alternative 1 would have minor noise impacts on residential communities, with residential communities near the Herman Pond experiencing the greatest impact. Noise that is audible in the nearest residential communities would be

intermittent, heard only during the daytime, and only over the duration of the project activities within the specific pond sites. Each pond site is anticipated to have a construction length of 90 working days. The impact would not be significant.

4.2.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, demolition of structures within the Delano Street Study Area would temporarily increase ambient noise levels in and around the site. The demolition efforts would occur throughout the area and may occur within residential areas. Each structure would be removed and disposed of within 90 days of acquisition of the parcel by the county.

Based on the data presented for Alternative 1, construction noise within residential areas could expect approximately 78 to 89 dBA within the immediate surrounding areas of the demolitions, with decreasing levels expected further away from the site.

OSHA compares 60 dBA to the sound levels of a normal conversation (at 3 feet away), 70 dBA to be that of classroom chatter, 80 dBA compares to a freight train at 100 feet away, and 90 dBA is comparable to a boiler room. OSHA regulations allow up to eight (8) hours of exposure to 90 dBA for workers. NIOSH recommends that all worker noise exposure should be controlled below 85 dBA for eight (8) hours to minimize hearing loss.

Based on expected noise levels, demolition under Alternative 2 would have only minor noise impacts on residential communities. Noise that is audible in the nearest residential communities would be intermittent, heard only during the daytime, and only over the duration of the demolition of specific properties. All construction conducted under Alternative 2 would comply with local noise ordinances.

Based on the analysis conducted, Alternative 2 would have minor noise-related effects. The impact would not be significant.

4.2.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no noise-related effects.

4.3 Geology and Soil

4.3.1 Existing Environment

According to the Florida Geological Survey, the landform in which the project area is located is considered a Pliocene Citronelle Formation of the Gulf Coastal Plain. The Coastal Plain formations, in general, are composed of clays and sands derived from the older land. The Citronelle formation is the equivalent of a portion of the deposits formerly classified as “Drift,”

"Orange Sand," and "Lafayette." Based on the Soil Survey of Escambia County, Florida (NRCS, 2004), the prevalent soil type in the Delano Street Study Area consists of Troup sand. The map unit is described by the Natural Resources Conservation Service (NRCS) as being very deep, somewhat excessively drained soil. Typically, this soil transitions from a dark grayish brown sand in the surface layer to red sandy loam and sandy clay loam in the subsoil to a depth of 80 inches. The depth to the seasonal high-water table in this soil is more than 6 feet.

Geotechnical reports were conducted within the proposed pond sites by Larry M. Jacobs & Associates in 2018. Their subsurface explorations consist of multiple Standard Penetration Test (SPT) borings with varying drill depths (anywhere from 1 to 40 feet deep). Based on these geotechnical reports and subsurface exploration tests, the project areas are composed primarily of Troup sands. Through the mapping service NEPAssist, accessed on November 6, 2020, it was determined the map unit for all the proposed project areas consists of Ultisols. Due to Ultisols being strongly leached, acidic forest soils with relatively low native fertility, the project areas would not be conducive for prime farmland. Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses.

4.3.2 Environmental Consequences

The threshold level for a significant impact to soils is defined as a substantial loss of soil, or a rating of 160 or higher on the Farmland Conservation Impact Rating Form (AD-1006 Form), which would indicate further consideration for protection under the Farmland Protection Policy Act.

4.3.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, soils within the four new dry retention ponds (Herman Pond, CBDF Pond, Fairfield Pond, and the Palafox Pond) and the expansion of Herman Pit will be excavated, cleared, and grubbed for the installation of necessary perimeter controls before beginning the construction phase. Soil boring tests at the proposed pond locations revealed the soil conditions were marginal to poor for conventional dry stormwater ponds with the bottom of the pond at 15 feet below existing grades. At that depth, five of the six soil borings collected indicated slow draining silty sand at the proposed pond bottom, and these soils would restrict outflow from the pond. Some drainage is possible out of the slightly silty sandy layers in the upper 15 feet of the pond bank, but only two of the six borings indicated the potential for significant outflow. Given these marginal to poor conditions, sand-filled chimneys would be installed in the pond bottom which would connect the pond to the underlying higher permeability sandy layers, thus allowing the pond to drain more efficiently by bypassing the silty sand layers. The topography of the four new dry retention ponds would be altered due to the regrading of the areas. The construction phase would consist of varying levels of ground disturbance at each location (Appendix B). Appropriate BMPs and engineering controls would be implemented during construction to control erosion and trap sediment. Soils on all the properties are not considered prime farmland

and are covered by existing development or have been otherwise disturbed by excavation or filling in the past.

Based on the analysis conducted, Alternative 1 would have a negligible impact on existing geology and soil conditions. The impact on these resources would not be significant.

4.3.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, soils within the footprint of at-risk structures would be disturbed via excavation and the demolition of structures. Ground disturbance would be largely limited to the footprint of the structures and utilities on the properties. The properties acquired would be deed-restricted to open space, limiting future development on the sites.

Based on the limited ground disturbance and the deed restrictions being applied to the properties, Alternative 2 would have a negligible impact on geology and soils. The impact would not be significant.

4.3.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on existing geology and soil conditions.

4.4 Wetlands

4.4.1 Existing Environment

Executive Order (EO) 11990, *Protection of Wetlands*, requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associates with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practical alternative.

The National Wetlands Inventory maps from the USFWS, accessed on November 12, 2019, indicate the Delano Street Study Area contains two designated wetlands (Appendix C). One wetland is the Herman Pit, classified as a Palustrine System with an unconsolidated bottom that is permanently flooded and has been excavated by humans (PUBHx). The other wetland is located directly adjacent to the L Street Pond. This wetland is classified as a Palustrine System that contains scrub-shrub, broad-leaved deciduous vegetation that is seasonally flooded and has been excavated by humans (PSS1Cx).

4.4.2 Environmental Consequences

The threshold level for a significant impact to wetlands would be a violation of state water quality criteria, a violation of federal or state discharge permits, or an unpermitted dredge or fill within the boundary of a jurisdictional water body or wetland.

4.4.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, both designated wetlands fall within the proposed project area. The structures near the Herman Pit would be removed, and the pond would be expanded, increasing the area of the existing wetland. Work within the L Street Pond would include clearing and grubbing, removal of the existing cistern and pump appurtenances, installation of a 30" pipe, sodding, installation of a headwall, and installation of necessary ties to existing infrastructure and grades. These activities near the L Street Pond would allow water to enter the wetland more efficiently from the CBDF Pond. The other activities under Alternative 1 would create four (4) new wetland areas that do not currently exist in the area. These wetlands would be Palustrine Systems, intended to be temporarily flooded, and the areas would be vegetated with sod.

The Board has received a General ERP from the NWFWMD, permit number GEN-033-285757-1, issued February 19, 2019, for activities listed under Alternative 1. The Board has also received a notice from the United States Army Corps of Engineers (USACE) that no permit is required in accordance with Section 10 of the Rivers and Harbors Act of 1899 or in accordance with Section 404 of the Clean Water Act (Attachment N). The USACE also determined the project is not located within navigable waters of the United States for Alternative 1 activities filed under file number SAJ-2019-01345.

Based on the analysis conducted, Alternative 1 would have a minor beneficial impact on wetlands. The impact would not be significant.

4.4.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, demolition activities would occur within developed areas and would not be located within existing wetlands. Demolition activities would be limited to the footprint of the structures and utilities. There would be no filling or dredging within existing wetland areas.

Based on the project locations associated with Alternative 2 being located outside of designated wetlands, Alternative 2 would have no effect on wetlands.

4.4.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on wetlands.

4.5 Surface Water

4.5.1 Existing Environment

There are two existing surface water bodies within the project area, the Herman Pit and the L Street Pond. Florida's ERP program regulates dredging and filling in wetlands and surface waters, as well as activities in uplands that generate stormwater runoff or otherwise alter surface water flows. In Florida, a National Pollutant Discharge Elimination System (NPDES) stormwater construction permit is required from the Florida Department of Environmental Protection (FDEP) for any proposed project that would disturb at least one or more acres of land and those that discharge stormwater to surface waters of the state. As part of this permit, the proponent of the project is required to prepare and implement a SWPPP, which outlines BMPs and engineering controls to be used to prevent and minimize erosion, sedimentation, and pollution during construction.

4.5.2 Environmental Consequences

The threshold level for a significant impact to surface water would be a violation of state water quality criteria, a violation of federal or state discharge permits, or an unpermitted dredge or fill within the boundary of a jurisdictional water body or wetland.

4.5.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the construction of stormwater detention ponds, expansion of the Herman Pit, and modification of existing stormwater facilities and infrastructure would have a direct impact on surface water bodies. A General ERP has been granted for the proposed Alternative 1 activities, under NWFWMD permit number GEN-033-285757-1 (Attachment L), issued February 19, 2019. A SWPPP has also been created for activities covered under Alternative 1, which outlines BMPs and engineering controls that would be used to prevent and minimize erosion, sedimentation, and pollution impacts on water resources during construction activities. The Board would obtain an NPDES stormwater construction permit from FDEP for the proposed activities.

USACE was contacted regarding Alternative 1 project activities under file number SAJ-2019-01345. USACE issued a notice that no permit is required for the proposed activities in accordance with Section 10 of the Rivers and Harbors Act of 1899 and in accordance with Section 404 of the Clean Water Act. USACE has also determined that the project is not located within navigable waters of the United States and will not involve the discharge of dredged or fill material into waters of the United States.

Under Alternative 1, the addition of four new ponds and the expansion of one existing pond would add substantial stormwater storage capacity to the area and provide improvements to the overall stormwater management infrastructure in the area.

Based on the analysis conducted, Alternative 1 would have a moderately positive impact to surface water. The impact would be significant.

4.5.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the demolition of structures would have no direct impact on any surface water body. Demolition activities may require an ERP from the NWFWMD, an NPDES stormwater permit from FDEP, and would need to implement an associated SWPPP for the proposed activities. The SWPPP would outline the BMPs and engineering controls to be used to prevent and minimize erosion, sedimentation, and pollution impacts on water resources during construction activities.

Based on the analysis conducted, Alternative 2 would have a negligible impact on surface water. The impact would not be significant.

4.5.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on surface water.

4.6 Floodplains

4.6.1 Existing Environment

EO 11988, *Floodplain Management,* as implemented in 44 CFR Part 9, requires federal agencies to "avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative."

The 100-year floodplain is the area covered by water in the event of a 100-year flood, which is a flood that has a 1 percent annual chance of being equaled or exceeded in magnitude in any given year. The 500-year floodplain is the area covered by water in the event of a 500-year flood, which is a flood that has a 0.2 percent annual chance of being equaled or exceeded in magnitude in any given year. The 100- and 500-year floodplains are mapped on FEMA Flood Insurance Rate Maps (FIRMs).

Based on the current FEMA FIRM that covers the area of the Proposed Action, no portion of the Delano Street Study Area is located within the 100-year or 500-year floodplain (Appendix D). All sites are identified on the FEMA FIRM as being within Flood Zone X (Unshaded), which is defined

as areas of minimal flood hazard and outside the floodplain. Although the Delano Street Study Area is identified on the FEMA FIRM as within Flood Zone X (Unshaded), FEMA currently considers the site to be within the floodplain based on repetitive flood damage and the extent of flooding experienced at the site during the DR-4177-FL flood event and consequently has performed the 8-step decision-making process in 44 C.F.R. § 9.6(b)(see Appendix E).

4.6.2 Environmental Consequences

The threshold level for a significant impact on floodplains would be an excessive loss of floodplain area with an associated increase in flooding potential.

4.6.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, construction of the stormwater detention ponds, expansion of the Herman Pit, modification of existing stormwater facilities and infrastructure, and demolition of existing structures would have a direct impact on floodplains. Activities under Alternative 1 are designed to reduce the flood stages in the Delano Street Study Area, improve floodplain function and reduce flooding potential on and around the pond sites. The addition of new detention ponds and the expansion of the Herman Pit will expand the capacity of the existing stormwater system to adequately handle water during a storm event and reduce the flood risk to the area.

The Hydrologic and Hydraulic Study conducted for Alternative 1 in April 2019 analyzed the following nine key locations: L Street pond Outfall at H Street, L Street Pond, L Street North of the Escambia County Sheriff's Office, L Street at Fairfield, Herman Street at L Street, Herman Street Pit, M Street at Saint Mary Street, the ditch west of Clerk of the Court building, and the Waterfront Rescue Mission. This analysis shows the actions under Alternative 1 would prevent flooding during a 25-year storm event at five out of nine key locations and would reduce flooding at all nine key locations. The study also showed that the actions would also reduce the frequency of flooding at all locations during all storm events.

Based on the analysis conducted, Alternative 1 would have a moderate positive impact on floodplains. The impact would not be significant. The 8-step decision-making process, as described in 44 CFR Part 9, for projects that have the potential for impacts to or within a floodplain, was completed for the project activities under Alternative 1 (Appendix E).

4.6.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the demolition of structures within the Delano Street Study Area would have a direct impact on the floodplain. Structures removed from the floodplain would reduce occupancy of the floodplain and reduce the risk of flood loss as there will be less investment existing within the floodplain. Properties that would be acquired and demolished would be converted to green space and deed-restricted in accordance with FEMA program requirements pursuant to 44 CFR 206.434 (e).

Based on the analysis conducted, Alternative 2 would have a moderate positive impact on floodplains. The impact would not be significant. The 8-step decision-making process, as described in 44 CFR Part 9, for projects that have the potential for impacts to or within a floodplain was completed for the acquisition and demolition of properties within the Delano Street Study Area (Appendix E).

4.6.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Not constructing the proposed ponds, expanding the Herman Pit, improving the stormwater facility and infrastructure, or acquiring and demolishing structures within the area would allow for continued flooding and property damage in the area due to storm events. The No Action Alternative would also allow for the continued occupancy of the floodplain. Therefore, the No Action Alternative would have a minor negative impact on floodplains. The impact would not be significant.

4.7 Groundwater

4.7.1 Existing Environment

Groundwater elevations in the Delano Street Study Area were measured during the geotechnical investigations conducted in 2018, as discussed in Section 4.3 Geology and Soils. 44 SPT borings were extracted in the area. These investigations found the actual water table to be between 20 and 38 feet below the existing grades and at elevations of between 45 and 55.4 feet below existing grades. Perched water was encountered between 2.5 and 14 feet below existing grade and at elevations between 67 and 73 feet below the existing grades at 15 boring sites. Groundwater and perched groundwater levels are influenced by the amount of local rainfall and changes in site drainage characteristics. Water tables were found to be at or above normal seasonal high-water levels at all boring sites except for boring sites conducted near the Herman Pond site, which was found to be 1 to 2 feet lower than the normal seasonal high groundwater level.

The Delano Street Study Area has two Superfund sites near the project areas. Both Superfund sites have caused contamination of groundwater in the area. The contaminants include arsenic, chloride, fluoride, nitrate/nitrite, radium-226, sulfate creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin. Monitoring of groundwater is ongoing as part of the Superfund site cleanup efforts.

In Escambia County, the primary source of potable water is obtained from the sand and gravel aquifer.

4.7.2 Environmental Consequences

The threshold level for a significant impact to groundwater would be a release of contamination into groundwater that exceeds FDEP standards.

4.7.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the construction of the pond sites will involve clearing and grubbing, excavation, grading, and sodding. During excavation, perched water may be encountered. Any dewatering necessary during construction activities would be conducted using standard methods and would have no effect on groundwater quality or flow. Hazardous materials used and hazardous wastes generated during construction activities would be managed in accordance with applicable environmental compliance regulations to prevent releases to groundwater.

The proposed pond sites for Herman Pond, Palafox Pond, and Fairfield Pond show marginal to poor soil conditions for a conventional dry stormwater pond due to slow draining. For these ponds, a sand chimney would be installed to better facilitate drainage within the pond by bypassing the silty sand layers of the pond.

Based on the analysis conducted, Alternative 1 would have a minor impact on groundwater. The impact would not be significant.

4.7.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of structures would not involve withdrawals from or discharges to groundwater. The soil in the Delano Street Study Area is conducive to the formation of shallow perched water levels due to stormwater infiltration. These areas of perched water may be encountered during certain construction activities. Any dewatering necessary during such construction would be conducted using standard methods and would have no effect on groundwater quality or flow. Hazardous materials used and hazardous wastes generated during construction activities would be managed in accordance with applicable environmental compliance regulations to prevent releases to groundwater.

Based on the analysis conducted, Alternative 2 would have a negligible impact on groundwater. The impact would not be significant.

4.7.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on groundwater.

4.8 Vegetation

4.8.1 Existing Environment

Vegetation on the proposed dry retention pond properties consists primarily of grasses, trees, shrubs, and an overgrowth mix. The vegetation on the more developed properties (the CBDF Pond and L Street Pond proposed sites) consists of grasses.

4.8.2 Environmental Consequences

The threshold level for a significant impact on vegetation is defined by (1) excessive loss or impairment of unique or sensitive vegetative communities, or (2) introduction or spread of exotic plant species.

4.8.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, construction of the new dry retention ponds and expansion and formalization of the Herman Pit, would displace all the existing vegetation on the sites. Existing vegetation on the Herman Pond site consists of 1.42 acres of tree, shrub, and overgrowth mix, which covers about 43% of the site vegetation, the other 48% (1.58 acres) consisting of grasses, and the remaining 8% (0.27 acres) is impervious surfaces. Existing vegetation on the Herman Pit site consists of 3.05 acres of tree, shrub, and overgrowth mix, which covers about 46% of the site vegetation, the other 20% (1.32 acres) consisting of grasses, and the remaining 34% (2.21 acres) is impervious surface. Existing vegetation on the Palafox Pond site consists of 4.25 acres of tree, shrub and overgrowth mix which covers about 86% of the site vegetation with the remaining 14% (0.68 acres) consisting of grasses. Existing vegetation on the Fairfield Pond site consists of 0.2 acres of tree, shrub, and overgrowth mix, which covers about 3% of the site vegetation, 59% (4.14 acres) consisting of grasses and weeds, and the remaining 39% (2.73 acres) is impervious surfaces. Existing vegetation on the CBDF Pond site consists of 3.2 acres of grasses which comprises 100% of the site vegetation. Existing vegetation on the L Street Pond site consists of 0.051 acres of grasses, covering about 46% of the site vegetation, and the remaining 54% consists of 0.059 acres of impervious surfaces. Impervious surfaces found at each site consists of concrete sidewalks, concrete building foundations, existing drainage structures, or asphalt, concrete, and aggregate parking lots and driveways.

The disturbed areas, excluding the pond bottom, would have sod installed for erosion control after construction is completed. The Board would coordinate with the county arborist to preserve trees when practical and coordinate to determine if there are appropriate trees within the county's stock to use around the pond sites when appropriate and practical. Due to the proposed project being a dry retention pond project, the county's Land Development Code regarding the removal of protected trees does not apply.

Based on the analysis conducted, Alternative 1 would have a minor impact on vegetation. The impact would not be significant.

4.8.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of at-risk structures would displace some of the existing vegetation on the sites but are limited to only the vegetation in the immediate vicinity required to be removed in order to demolish the structures.

Based on the analysis conducted, Alternative 2 would have a negligible impact on vegetation. The impact would not be significant.

4.8.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on vegetation.

4.9 Fish and Wildlife

4.9.1 Existing Environment

The proposed action areas currently consist of a grassy field, shrubs, trees, buildings, vacant lots, and one pre-existing pond site, which is surrounded by development. The sites provide low quality habitat for wildlife based on the type and amount of vegetation they contain and their locations within an urban developed area. Wildlife usage of each site is expected to be limited to species adapted to urban settings.

4.9.2 Environmental Consequences

The threshold level for a significant impact to wildlife is designated by (1) a loss of individuals, which negatively affects the regional population of a species, or (2) the take of birds in violation of the Migratory Bird Treaty Act.

4.9.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the construction of new dry retention ponds and expansion and formalization of one existing pond would displace all the existing vegetation on the sites. All of the proposed project sites provide low-quality habitat for wildlife based on the type and amount of vegetation currently on the sites, and the site locations within an urban area. Construction of the proposed dry retention ponds could provide habitat for waterfowl, turtles, frogs, fish, and other types of wildlife typically found in and around ponds; therefore, there would likely be a net increase in wildlife usage of the site under Alternative 1. Noise generated during construction on

sites may temporarily disturb wildlife adapted to urban settings; however, any disturbance experienced by wildlife would be limited to the construction period and is expected to be negligible.

Based on the analysis conducted, Alternative 1 would have a negligible impact on fish and wildlife. The impact would not be significant.

4.9.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of at-risk structures would displace some or all of the existing vegetation on the sites. All of the sites provide low-quality habitat for wildlife because they are developed, contain only a small amount of maintained grass and landscaping vegetation, and are surrounded by development. Noise generated during construction on the sites may temporarily disturb wildlife adapted to urban settings; however, any disturbance experienced by wildlife would be limited to the construction period and is expected to be negligible. After the demolition is complete, properties would be converted to green space. This would likely provide additional habitat for wildlife adapted to urban settings.

Based on the analysis conducted, Alternative 2 would have a negligible impact on fish and wildlife. The impact would not be significant.

4.9.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on fish and wildlife.

4.10 Threatened and Endangered Species

4.10.1 Existing Environment

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, the project was evaluated for the potential occurrences of federally listed threatened and endangered species. The ESA requires any federal agency that funds, authorizes, or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat.

According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) species list, accessed April 17, 2020, there is no designated critical habitat within the project areas. The following species are listed in the county as threatened species: piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), wood stork (*Mycteria americana*), eastern indigo snake (*Drymarchon corais couperi*), and Atlantic sturgeon (*Acipenser oxyrinchus desoti*). The reticulated flatwoods salamander (*Ambystoma bishop*) is listed as

endangered. The gopher tortoise (*Gopherus polyphemus)* is listed as a candidate species under the ESA and is a State-designated threatened species in Florida.

The potential occurrence of threatened or endangered species on or near the project areas was evaluated using the Florida Natural Areas Inventory (FNAI) Biodiversity Matrix Map Server, which is a screening tool that provides data on rate species occurrences in Florida. Based on the FNAI Biodiversity Matrix Map, accessed April 20, 2020, there are no documented occurrences of any federally-listed or state-listed threatened or endangered species on or within one mile of the Delano Street Study Area (FNAI, 2020).

4.10.2 Environmental Consequences

The threshold level for a significant impact on threatened and endangered species is defined by the take of an individual protected under the ESA.

4.10.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the project location includes suitable habitat for the federally threatened Eastern Indigo Snake (*Drymarchon corais couperi*), the state threatened and federal candidate Gopher Tortoise (*Gopherus polyphemus*), and suitable foraging habitat for the federally threatened Wood Stork (*Mycteria americana*).

An informal consultation was conducted with the USFWS to determine the potential impacts Alternative 1 could have on listed threatened and endangered species in the area. It was determined Alternative 1 may affect, but is not likely to adversely affect, the eastern indigo snake, the gopher tortoise, and the wood stork. FEMA received concurrence from the USFWS on these effect determinations in an email dated September 1, 2020 (Appendix F). To protect the eastern indigo snake and wood stork, applicable conservation measures specified under Section 5.0 (Repair of In-Water Structures or Drainage Structures Not Associate with Roads) in FEMA's existing Programmatic Biological Opinion with the USFWS for *FEMA-funded repair and replacement of preexisting facilities in Florida,* dated 11/15/2007, would be implemented for the project. To protect gopher tortoises, appropriate permits would be obtained if required if a tortoise or burrow is found within the project locations and if the burrows cannot be permanently avoided by at least 25 feet or more.

Based on the analysis conducted, Alternative 1 would have a minor impact on threatened and endangered species. The impact would not be significant.

4.10.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Ground disturbance caused by the demolition at the sites associated with Alternative 2 would be limited to the existing structures and immediate vicinity, which do not contain suitable habitats for federally listed species in the area. Noise and construction activity would be elevated during

times when demolition activities are being conducted, which would only be temporary. The acquired and demolished properties would be returned to green space. These spaces may become more suitable habitats for threatened and endangered species in the area.

Based on the analysis conducted, Alternative 2 would have a negligible impact on threatened and endangered species. The impact would not be significant.

4.10.2.3 No Action Alternative

Under the No Action Alternative, no new ponds would be created, the Herman Pit would not be expanded, and no structures would be demolished. Therefore, the No Action Alternative will have no effect on threatened and endangered species.

4.11 Cultural Resources

4.11.1 Existing Conditions

The National Historic Preservation Act of 1966 (NHPA), as amended, requires federal agencies to consider the effects of their undertakings on historic properties. The NHPA created the National Register of Historic Places (NRHP), with criteria to discern cultural resources that are eligible for listing in the NRHP. When NRHP-eligible properties are present, federal agencies must assess the effect of the undertaking and consider ways to minimize or mitigate potential adverse effects.

The Herman Pond site consists of a vacant county-owned parcel of 2.9 acres. The area is primarily a grassy field with some tree cover. Approximately 0.30 acres of the parcel consists of gravel and paved surfaces. The surrounding area is made up of commercial structures and a residential community.

The Herman Pit site consists of an informal drainage pond and three structures on a parcel of land consisting of 6.58 acres. These structures are located at 416 and 450 West Herman Street and are comprised of two office buildings and an automobile repair shop. The office building located at 416 West Herman Street was built in 1984 and is a one-story, 2,588 SF stucco over block building with a slab on grade foundation, gable roof, and attached patio. The office building on 450 West Herman Street was built in 1997 and is an 8,000 SF metal-modular building with a slab on grade foundation and a steel truss/frame roof. The auto repair shop located at 416 West Herman Street was built in 2000 and is a 5,760 metal-modular structure with a slab on grade foundation and a steel truss/frame roof.

The proposed Palafox Pond site consists of a vacant county-owned parcel of 4.08 acres. The area is primarily trees, shrubs, and overgrowth, with approximately 1.32 acres of undeveloped grassy areas. The proposed Fairfield Pond site consists of 7.07 acres and encompasses four separate parcels. The area currently consists of approximately 4.14 acres of undeveloped grassy fields and 2.73 acres of paved areas. Part of the proposed site area was previously a parking lot. The proposed CBDF Pond site consists of a vacant county-owned parcel of 3.2 acres. The site

previously housed the CBDF and was previously demolished and relocated. The proposed L Street Pond consists of a current pond site owned by the county. Existing pond infrastructure was intended to be associated with the CBDF when it was previously located nearby.

The Delano Street Study Area consists of commercial, industrial, residential, and government properties. These properties consist of both developed and vacant properties. A search of the Florida archaeological site files revealed five previously recorded archaeological sites within one mile of the proposed area of potential effect (APE). The APE was included in two previous cultural resource surveys. There are no NRHP listed resources within the Delano Street Study Area. The Environmental Justice Screening and Mapping Tool (EJSCREEN) Survey (ACS) Summary Report, generated on November 9, 2020, estimates that there are 2,340 housing units built before 1950 out of the 10,723 housing units within the Delano Street Study Area with a 1-mile radius buffer.

A Cultural Resource Assessment Survey (CRAS) was conducted at the proposed site of the Herman Pond at the request of the Seminole Tribe of Florida. The CRAS was conducted as a Phase I field survey that consisted of 12 systematic subsurface shovel tests at 25-meter intervals within the footprint of the proposed pond. No archaeological sites or archaeological occurrences were recorded during the survey. The architectural field survey confirmed the absence of historic-aged buildings or structures (those built prior to 1975) within the pond's APE.

4.11.2 Environmental Consequences

The threshold level for significant impacts to cultural resources under NEPA would be those impacts that adversely affect any historic property eligible for or listed in the NRHP under Section 106 or has been identified by a federally recognized tribe as a sacred site.

4.11.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1 would involve the construction of stormwater detention ponds, expansion of the Herman Pit, modification of existing stormwater facilities and infrastructure, and demolition of existing structures. FEMA consulted with the SHPO on its effect determinations for the proposed activities under Alternative 1 via a letter dated May 5, 2020. In this letter, FEMA concluded that no properties listed or considered eligible for listing in the NRHP are located within the APE, resulting in a determination of "No Historic Properties Affected." FEMA specified the following conditions for the treatment of fortuitous finds or unexpected discoveries during ground-disturbing activities within the project area:

- If human remains or intact archaeological deposits are uncovered, work in the vicinity of the discovery will stop immediately and all reasonable measures to avoid or minimize harm to the finds will be taken. The applicant will ensure that archaeological discoveries are secured in place, that access to the sensitive area is restricted, and that all reasonable measures are taken to avoid further disturbance of the discoveries. The applicant's contractor will provide

immediate notice of such discoveries to the applicant. The applicant shall contact the Florida Division of Historic Resources and FEMA within 24 hours of the discovery. Work in the vicinity of the discovery may not resume until FEMA has completed consultation with SHPO, Tribes, and other consulting parties as necessary. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Florida Statutes, Section 872.05.

- Any changes to the approved scope of work will require submission to, and evaluation and approval by, the State and FEMA, prior to initiation of any work, for compliance with Section 106.
- Offsite fill will come from either a commercial source or privately owned borrow pit where the fill is not obtained by the horizontal expansion of the pre-existing pit.

The Florida SHPO concurred with the findings of No Historic Properties Affected in a letter dated June 2, 2020.

FEMA also consulted with the following Tribal Historic Preservation Offices for the following federally recognized tribes on the proposed activities under Alternative 1 via letter dated May 5, 2020: Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Miccosukee Tribe of Indians of Florida, Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, and Thlopthlocco Tribal Town. The Muscogee (Creek) Nation responded the tribe concurs with the determination of no effect to any known historic properties and work should continue as planned unless any human remains or Native American Graves Protection and Repatriation Act (NAGPRA) items are encountered, in which the work should stop, and the Muscogee (Creek) Nation be consulted immediately. The Seminole Tribe of Florida responded with a request for a CRAS for the Herman Pond site, and after the survey was completed and the tribe reviewed the findings of the CRAS report, the Seminole Tribe of Florida determined the tribe had no objections to the project at this time. If any archaeological, historical, or burial resources are discovered, the Seminole Tribe of Florida would be consulted immediately. No other responses were received. Based on the analysis conducted and the conditions required for fortuitous finds or unexpected discoveries, Alternative 1 would have no effect on historic properties.

4.11.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Alternative 2 would involve the acquisition and demolition of properties within the Delano Street Study Area. At this time, individual properties have not been specified for acquisition within this alternative. Individual properties would need to be assessed for qualifications for potential listing within the NRHP and the Florida Master Site File. Any property built over 50 years before the time of demolition would be entered into the Florida Master Site File. There are currently no properties listed in the NRHP within the project area. If Alternative 2 is selected, FEMA would consult with the Florida SHPO on its determination of effect.

Based on the analysis conducted, Alternative 2 would have no effect on historic properties. The impact would not be significant.

4.11.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on historic properties.

4.12 Hazardous Materials and Solid Wastes

4.12.1 Existing Environment

Hazardous materials have been declared hazardous through various regulations, including 40 CFR Parts 302.4 and 355, and 29 CFR Part 1910.1200. Hazardous waste is any solid, liquid, or contained gas waste, which is dangerous or potentially harmful to human health or the environment.

According to the geotechnical reports conducted by Larry M. Jacobs & Associates in 2018, the current condition of the lower area of the proposed L Street pond site consists of soils with a varied percentage of municipal solid waste, including batteries and other domestic types of waste material. The layers that were mostly comprised of municipal solid waste were also encountered in the borings inside the existing pond. In the Phase II Environmental Site Assessment Investigation Report for the Baird Property associated with the proposed Fairfield pond (Cameron-Cole LLC, 2018), laboratory results for the soil samples collected at the site revealed a lead concentration of 5,370 mg/kg (milligrams per kilogram) in the surficial (0 to 6 inch deep) soil sample, which exceeds the Soil Cleanup Target Level (SCTL) for both Residential and Commercial/Industrial Direct Exposure (DE). Due to the high concentrations of lead detected at the site, a Toxicity Characteristic Leaching Procedure (TCLP) analysis was performed on the sample. The TCLP analysis of the sample was 316 mg/L (milligrams per liter), indicating the soil in the vicinity of this sample are considered hazardous by characteristic and would require proper management disposal as a hazardous waste.

4.12.2 Environmental Consequences

The threshold for a significant impact to hazardous material and waste would include a release of hazardous material or waste, or a violation of local, state, or federal regulations pertaining to hazardous material or waste.

4.12.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the SWPPP (Appendix H) provides methods to prevent the discharge of solid materials, including building materials, to waters of the United States. The methods include providing litter control and collection, disposing of all fertilizer and other chemical containers

according to the EPA's standard practices, and disposing of solid materials including building and construction materials using approved disposal methods, which does not include surface waters or wetlands. Procedures would be put in place for the waste disposal, including any sanitary sewer or septic systems encountered associated with the demolished structures. Handling, storage, and disposal of hazardous materials and wastes generated during construction activities, including measures to prevent releases, would be conducted in accordance with all applicable environmental compliance regulations. ACM and LBP surveys would be conducted prior to the potential demolition of any existing structures on the proposed project sites. Any necessary asbestos or LBP abatement would be conducted prior to demolition in accordance with all applicable plans and regulations. Non-hazardous solid waste generated during construction and demolition would be disposed of at an off-site landfill, recycled, or reused as appropriate. The Baird Property associated with the proposed Fairfield pond site would be conditioned upon purchase for the current landowner to clean up the lead-contaminated soils before the county purchases the property.

Based on the analysis conducted, Alternative 1 would have a moderate positive impact on hazardous materials and wastes and solid waste. The impact would not be significant. Remedial action would be required to address the hazardous material and lead contamination in order to proceed with the project.

4.12.2.2 Alterative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of at-risk structures would involve the use of typical construction-related hazardous materials. ACM and LBP surveys would be conducted prior to the potential demolition of any existing at-risk structures. Any necessary asbestos or LBP abatement would be conducted prior to demolition in accordance with all applicable plans and regulations. Handling, storage, and disposal of hazardous materials and wastes during construction activities, including measures to prevent releases, would be conducted in accordance with all applicable environmental compliance regulations. Non-hazardous solid waste generated during construction would be disposed of at an offsite landfill, recycled, or reused as appropriate.

Based on the analysis conducted, Alternative 2 would have a negligible impact on hazardous materials and waste and solid waste. The impact would not be significant.

4.12.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, the demolition of structures, or the cleanup of existing hazardous materials. Therefore, the No Action Alternative would have a minor negative impact on hazardous materials and solid waste as the hazardous materials and solid waste would remain on site.

4.13 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

4.13.1 Existing Environment

Thousands of contaminated sites exist nationally due to hazardous waste being dumped, left out in the open, or otherwise improperly managed and disposed. In response, Congress established CERCLA on December 11, 1980. CERCLA, commonly known as Superfund, was enacted to allow EPA to clean up contaminated sites. The EPA utilizes the National Priorities List (NPL), the list of contaminated sites of national priority, to guide the determination of which sites warrant further investigation.

The proposed Palafox Pond site is located within the boundaries of the Agrico Chemical Company Superfund site, according to the Phase I Environmental Site Assessment performed by Terracon Consultants, Inc. on July 27, 2015 (Born, Nowicki, & Safko, 2015). The Agrico Chemical Company Superfund site was added to the NPL in 1989 because of contaminated soil containing arsenic, fluoride, and lead and groundwater contaminated with arsenic, chloride, fluoride, nitrate/nitrite, radium-226, and sulfate. Contaminated soil removal and replacement with clean soil, and demolition of former residences, occurred previously during Superfund response actions completed between 2008 and 2010. Soil cleanup was performed to commercial/industrial SCTLs, not to residential SCTLs. Consequently, EPA required activities use limitations for the property, including prohibiting its use for residential purposes. In addition, restrictive covenants limit the allowable land uses at the site. Therefore, the residual soil contamination is considered a Controlled Recognized Environmental Condition. Ground water monitoring continues to be conducted at the site.

The Escambia Wood Treating Company Superfund site is located north of the Delano Street Study Area, approximately 1,500 feet northeast of the Herman Pit, and approximately 1,500 feet north of the proposed Palafox Pond at 3910 North Palafox Street, Pensacola, Florida 32505. The Superfund site was added to the NPL in 1994. The site was previously occupied by a company that manufactured treated wood products. Operation of the facility generated wastewater which was stored on-site in impoundments. This practice resulted in creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin-contaminated groundwater and soil. The soil contamination on the site was remediated in 2013 and no longer currently poses a threat to those living and working in the area. Groundwater contamination at the site is not considered a threat to human health and safety because the drinking water is currently supplied by the public water supply. Groundwater remedial action is estimated to start in mid-2021. The site has been restricted to industrial and commercial use.

An EPA designated Brownfield site is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. A Brownfield area is a contiguous area of one or more Brownfield sites.

Brownfield area designations have been applied to the Delano Street Study Area in this historically industrial area of Pensacola. The Delano Street Study Area contains the Palafox Redevelopment Area, the Palafox Corridor Redevelopment Area, and the Midtown BF Redevelopment Area. Based upon available records, the brownfields areas are not considered a specific Recognized Environmental Condition to the site at this time.

4.13.2 Environmental Consequences

The threshold level for significant impact to Superfund sites or Brownfields would be if unsafe exposure may occur, the release of a hazardous substance, pollutants or contaminants cannot be avoided, and/or if institutional and/or engineering controls may be breached.

4.13.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, soil cleanup at the Superfund Palafox Pond site has already occurred and the EPA has limited the property use of the site, which prohibits residential use of the property. Since this site location would be utilized as a dry retention pond, this is within the limits of allowability as this is a non-residential use.

The Escambia Wood Treating Company Superfund Site experienced flooding in 2014 when a City-owned stormwater pond overtopped and flowed into an excavated area of the Superfund site. Emergency repairs were conducted to prevent the flow of water from the City pond to the area. No new ponds or pond expansions would occur within the Superfund site area, but the new and expanded ponds have the potential to reduce flood risk south of the Superfund site.

Based on the analysis conducted, Alternative 1 would have a negligible impact on the Superfund site. The impact would not be significant.

4.13.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of at-risk structures would not occur within the Agrico Chemical Company Superfund site or the Escambia Wood Treating Company Superfund site, as the residential structures within the site have already been removed during cleanup efforts. Only two tracts with two structures remain within the Superfund areas, and the owner of the tracts has opted out of relocation.

Based on the analysis conducted, Alternative 2 would have a negligible impact on the Superfund site. The impact would not be significant.

4.13.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, the demolition of structures,

or the cleanup of existing hazardous materials. Therefore, the No Action Alternative would have no effect on the Superfund site.

4.14 Utilities

4.14.1 Existing Environment

Existing utilities on the properties proposed for acquisition and demolition include electrical power, natural gas, communication, potable water, sanitary sewer, and storm sewer lines and systems. The proposed vacant lot acquisitions have no expected existing utilities.

4.14.2 Environmental Consequences

The threshold level for significant impact to utilities would be an exceedance of the existing utility service capacity.

4.14.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1 is expected to have a minor impact to the current offices leased on the properties, since the structures would need to be acquired and demolished in order to construct the proposed ponds at those sites. There would no longer be any energy, potable water consumption, or domestic wastewater generated at those sites once those facilities are removed from the sites. The new dry retention ponds would not require any utilities.

Under Alternative 1, there is a potential for utility service disruptions during the construction activities. Planned outages would be avoided to the extent possible; if planned outages are necessary, utility customers would be given advanced notice. To avoid accidental outages, utilities in the area would be located prior to construction, and the county would coordinate with utility companies.

Based on the analysis conducted, Alternative 1 would have a minor impact on utilities. The impact would not be significant.

4.14.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Alternative 2 is expected to have a minor impact on associated energy, potable water consumption, and domestic wastewater generation. The acquisition and demolition of at-risk structures would result in permanently ceasing all utilities and consumption in the associated areas.

Under Alternative 2, there would be utility service disruptions during construction activities. Planned outages would be avoided to the extent possible; if planned outages are necessary, utility customers would be given advanced notice. To avoid accidental outages, utilities in the

area would be located prior to construction, and the county would coordinate construction activities with utility companies.

Based on the analysis conducted, Alternative 2 would have a minor impact on utilities. The impact would not be significant.

4.14.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on utilities.

4.15 Land Use

4.15.1 Existing Environment

The proposed Herman Pond site consists of a vacant county-owned parcel of 2.9 acres. The area is primarily a grassy field with some tree cover. Approximately 0.30 acres of the parcel consists of gravel and paved surfaces. The surrounding area is made up of commercial structures and a residential community. The Herman Pit site consists of an informal drainage pond and three structures situated on a 6.58-acre parcel. These structures are located at 416 and 450 West Herman Street and include two office buildings and an automobile repair shop. The proposed Palafox Pond site consists of a vacant county-owned parcel of 4.08 acres. The area is primarily trees and shrubs, with overgrown grassy areas on approximately 1.32 acres of the site. The proposed Fairfield Pond site consists of 7.07 acres and is comprised of four separate parcels. The area consists of approximately 4.14 acres of grassy fields and 2.73 acres of paved areas. Part of the site area was previously a parking lot. The proposed CBDF Pond site consists of a vacant county-owned parcel of 3.2 acres. The site previously housed the CBDF but has since been demolished. The proposed L Street Pond consists of a current pond site owned by the county. Existing pond infrastructure was intended to be associated with the CBDF when it was previously located nearby.

The Delano Street Study Area consists of commercial, industrial, residential, and local government properties. These properties consist of both developed and vacant properties. Based on the Escambia County Zoning Map, accessed October 27, 2020, the land uses throughout the project area are classified as Heavy Commercial and Light Industrial, Public Use, high density and mixed-use, and Heavy and Medium Density Residential areas.

4.15.2 Environmental Consequences

The threshold level for a significant impact on land use is defined as the destruction or displacement of existing or planned land use without providing suitable means to replace or relocate the affected land use.

4.15.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Under Alternative 1, the construction and expansion of ponds is expected to change the current land use classifications from the current designations: public use, high-density mix-use, and heavy commercial and light industrial districts to stormwater management. Alternative 1 would have no effect on the classification of land uses for the properties adjacent to the project sites. The proposed pond sites and stormwater infrastructure improvements would be compatible with the adjacent properties' land uses.

Based on the analysis conducted, Alternative 1 would have a minor impact on land use. The impact would not be significant.

4.15.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the demolition of at-risk structures would change the current land uses from heavy commercial and light industrial, high density and mixed-use, and heavy and medium density residential use to deed restricted open space. The properties obtained and demolished would be converted to green space and deed-restricted in accordance with FEMA program requirements pursuant to 44 CFR 206.434 (e). The acquisition and demolition of at-risk structures would be compatible with the adjacent property land uses.

Based on the analysis conducted, Alternative 2 would have a minor impact on land use. The impact would not be significant.

4.15.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on land use.

4.16 Transportation and Traffic

4.16.1 Existing Environment

The proposed Herman Pond site is located on West Herman Street, northwest of the intersection with Pace Boulevard. The proposed CBDF Pond site is bordered by West Leonard Street to the south, and North H Street to the east. The proposed Fairfield Pond site is located along Fairfield Drive. The proposed Palafox Pond site is bordered by North Palafox Street on the west, Herman Street on the south, and Sycamore Drive on the East. The Herman Pit is located near the intersection of North Pace Boulevard and West Herman Street. The proposed L Street Pond site is located on the southeast corner of Leonard Street and L Street.

4.16.2 Environmental Consequences

The threshold level for a significant impact on transportation would be an elimination of a road without a suitable replacement, a permanent increase in traffic volume in a given area, or an increase in road hazards.

4.16.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1 is expected to have no appreciable effect on overall commuter traffic in the local area because it would have little to no effect on the number of people commuting due to the properties being mostly vacant land. A minor impact may be expected at one of the proposed acquisition properties currently being leased as a business office.

The proposed new dry retention pond sites would temporarily increase traffic near the sites. The overall associated impact on the commuter traffic is expected to be limited as it would be intermittent, localized (limited to defined haul routes), and temporary (limited to the construction period). Traffic control locations would include the following streets: Palafox Street at East Herman Street, Fairfield Drive just west of the Texar intersection, a grid of local streets including Q Street, Delano Street, Town Street, East and West Herman Street, Clay Street, and R Street, Leonard Street, and H street. There are no full road closures expected due to the proposed construction activities. If closures do occur, they would be temporary and alternative means of property access would be made available.

Escambia County has obtained FDOT drainage connection permit number 2019-D-395-00012 (Attachment M), issued on March 15, 2019, for the proposed addition of two smart box manholes to direct stormwater in the Department's existing storm sewer system to the proposed dry retention facilities.

Based on the analysis conducted, Alternative 1 would have a minor impact on transportation and traffic. The impact would not be significant.

4.16.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of structures would considerably decrease commuter traffic because the at-risk structures would be removed from the area. Alternative 2 construction activities would temporarily increase traffic during construction, but after the completion of the project activities, the overall traffic in the area would decrease. The acquired properties would be converted to open space which may limit potential future development in the area, including roads which may have an impact on future FDOT plans.

Based on the analysis conducted, Alternative 2 would have a minor impact on transportation and traffic. The impact would not be significant.

4.16.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on transportation or traffic.

4.17 Occupational Health and Safety

4.17.1 Existing Environment

Occupational health and safety hazards could include chemical agents (for example, asbestos or lead), physical agents (such as noise or vibration), physical hazards (for example, slip, trip, and fall hazards, electricity, or machinery), or biological hazards (such as infectious waste, poisonous plants, ticks, or other hazardous biota). Occupational health and safety concerns could affect workers as well as non-workers near the project sites. County employees and contractors would be responsible for following all applicable OSHA regulations for conducting their work in a manner that does not pose any risk to other workers or the public.

4.17.2 Environmental Consequences

The threshold level for a significant impact on occupational health and safety would be exposure of workers to health and safety hazards without proper protection or creating health and safety hazards that could affect the public.

4.17.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Occupational health and safety hazards under Alternative 1 would include those common to construction and demolition activities, such as loud noise, heavy machinery, debris, electricity, and hazardous materials. To minimize occupational health and safety risks, workers would wear and use appropriate personal protective equipment and follow all applicable OSHA standards and procedures. A health and safety plan would be developed and implemented for the projects. Work areas would be clearly marked with appropriate signage and secured against unauthorized entry. Standard construction traffic control measures would be used to protect workers, residents, and the travelling public. ACM and LBP surveys would be conducted prior to potential demolition of any existing structures on the project location properties. Any necessary asbestos or LBP abatement would be conducted prior to demolition in accordance with all applicable plans and regulations.

Based on the analysis conducted, Alternative 1 would have a negligible impact on occupational health and safety. The impact would not be significant.

4.17.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Occupational health and safety hazards under Alternative 2 would include those common to construction and demolition activities, such as loud noise, heavy machinery, debris, electricity, and hazardous materials used or encountered during work. To minimize occupational health and safety risks, workers would wear and use appropriate personal protective equipment and follow all applicable OSHA standards and procedures. A health and safety plan would be developed and implemented for the project. Work areas would be clearly marked with appropriate signage and secured against unauthorized entry. Standard construction traffic control measures would be used to protect workers, residents, and the traveling public.

Based on the analysis conducted, Alternative 2 would have a negligible impact on occupational health and safety. The impact would not be significant.

4.17.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. Therefore, the No Action Alternative would have no effect on occupational health and safety.

4.18 Socioeconomics

4.18.1 Existing Environment

The U.S. Census Bureau estimated the population of Escambia County to be 297,619 in 2019. Based on ACS 5-year estimates for 2010 to 2014, the median age in the county is 37.2, the total labor force is 152,999, the median household income is $44,883, and the per capita income is $24,014. The EJSCREEN ACS Report for 2013 to 2017 shows that the Delano Street Study Area with a 1-mile buffer has a population of 24,304. The area has 8,897 households, 10,086 people are within the labor force, and the highest percentage of household incomes falls between $25,000 and $50,000.

Historic rainfall events have taken place over the western Florida panhandle area over time, which has caused widespread flooding and produced several sinkholes, scoured and destroyed several roads within the county, and necessitated a multitude of water rescue missions due to flash flooding events. Escambia County has incurred the costs of fixing the roads as well as the loss of service the road closures have caused throughout the area.

4.18.2 Environmental Consequences

The threshold level for a significant impact on socioeconomics would be a substantial change in population, demographics, economic conditions, housing, or public services.

4.18.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1 proposes to demolish three properties located at 416 and 450 West Herman Street, which may have minor impacts on the economy by displacing the businesses currently leasing the building space from the current property owner. However, the associated impacts would be temporary as the businesses would lease other building space in the area.

Under Alternative 1, the construction of the dry retention ponds would eliminate the costs of fixing the roads and loss of service in the proposed project areas. The overall project would decrease flooding for residences, businesses, and transit networks, and the uninterrupted services and roads would have a positive impact on the local economy. Construction work would have a negligible impact on the total labor force and employment in the area due to the minimal number of jobs that would be created.

Based on the analysis conducted, Alternative 1 would have a minor positive impact on socioeconomics. The impact would not be significant.

4.18.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Under Alternative 2, the acquisition and demolition of at-risk structures would have a considerable effect on businesses and residences in the area of the proposed project areas. The businesses and people whose properties would be demolished could be displaced outside of the current area of the community, which may have an appreciable effect on the demographics, the number of persons living in the housing, number of children attending schools, or demand for emergency services (medical, police, and fire-fighting) in the area.

Displacement of residents to outside the Delano Street Study Area and the surrounding community is anticipated due to limited availability of properties for sale or rent in the area for relocation and lack of similar properties to those in the area. The Delano Street Study Area and the surrounding communities have restricted areas from being used for residential purposes as part of Superfund cleanup efforts; this has limited the availability of residential properties in the area.

Businesses that have their properties acquired have the potential to be relocated within the immediate area as there are available commercial and industrial lots currently for sale and rent.

Due to the limit on available funds to Escambia County for acquisition and demolition purposes, the Board is limited in the number of properties it would be able to obtain. The sale of properties is also strictly voluntary by the property owners.

Under Alternative 2, acquisition and demolition of at-risk structures would incur additional costs to the county through the purchase of the properties and through minor negative impacts to the local economy due to the potential displacement of businesses and residents outside of the area.

Based on the analysis conducted, Alternative 2 would have a moderate negative impact on socioeconomics. The impact would not be significant due to the limited funds available for purchasing properties and due to the voluntary nature of the program.

4.18.2.3 No Action Alternative

The No Action Alternative would not involve the construction of new ponds, the expansion of an existing pond, stormwater facility and infrastructure improvements, or the demolition of structures. The No Action Alternative would not eliminate costs incurred due to future flooding events but would not displace businesses or residents. Past flood events have shown that without mitigation actions, the area would likely continue to flood in future storm events. An increase in flooding potential in the area is anticipated with the expectations that climate change could lead to an increase in rainfall. This increase in flooding potential to the area could lead to the loss of improved property and businesses in the area. Therefore, the No Action Alternative would have a minor effect on socioeconomics.

4.19 Environmental Justice and Protection of Children

4.19.1 Existing Environment

On February 11, 1994, the president issued EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. This EO requires federal agencies to address disproportionate environmental and human health impacts from federal actions on minority populations and low-income populations. The President directed all federal agencies to analyze the environmental effects on minority and low-income communities, including human health, social, and economic effects.

Guidelines for the protection of children are specified in EO 13045, *Protection of Children from Environmental Health Risks and Safety Risk* (*Federal Register*, Volume 62, Number 78, April 23, 1997). This EO requires that federal agencies make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children and ensure that policies, programs, and standards address disproportionate risks to children that result from environmental health or safety risks.

The population within the Delano Street Study Area with a one-mile buffer was 24,304, according to the EJSCREEN ACS Estimates, accessed October 26, 2020. The area has a minority population of 73% and a low-income population of 62%, both of which are higher than the State's average of 45% and 36%, respectively. 25% of the population is under the age of seventeen (17).

4.19.2 Environmental Consequences

The threshold level for a significant impact to environmental justice is disproportionately high or adverse human health or environmental effects on minority or low-income populations. The

threshold level for a significant impact on the protection of children is disproportionate environmental health or safety risks to children.

4.19.2.1 Alternative 1 – Construct Four New Dry Retention Ponds and Formalize and Expand One Existing Pond (Preferred Alternative)

Alternative 1 would have minor impacts on the resources most relevant for assessing impacts on the human population, which are air quality, noise, groundwater, surface water, and hazardous materials and waste. The potential impacts Alternative 1 would have on these resources would likely not adversely affect human populations, as the reduction in flood inundation risk would positively impact the human population. Therefore, Alternative 1 would not have disproportionately high or adverse human health or environmental effects on minority or low-income populations. No activity under Alternative 1 would result in disproportionate environmental health or safety risks to children. Based on the analysis conducted, Alternative 1 would have no effect on environmental justice or the protection of children.

4.19.2.2 Alternative 2 – Acquisition and Demolition of At-Risk Structures

Alternative 2 would have minor impacts on the resources most relevant for assessing impacts on the human population, which are air quality, noise, groundwater, surface water, and hazardous materials and waste. The potential impacts this alternative would have on these resources would not adversely affect human populations, as a reduction in flood inundation risk would positively impact the human population. Under Alternative 2, the acquisition of property is strictly voluntary and not anticipated to have a negative impact to residents. Therefore, Alternative 2 would not have disproportionately high or adverse human health or environmental effects on minority or low-income populations. No activity under Alternative 2 would have disproportionate environmental health or safety risks to children. Based on the analysis conducted, Alternative 2 would have no effect on environmental justice or the protection of children.

4.19.2.3 No Action Alternative

The No Action Alternative would have minor impacts on the resources most relevant for assessing impacts on human health. The potential impacts the No Action Alternative would have on these resources would not adversely affect human populations. Therefore, the No Action Alternative would not have disproportionately high or adverse human health or environmental effects on minority or low-income populations. No activity would occur under the No Action Alternative, so there would be no disproportionate environmental health or safety risks to children. Based on the analysis conducted, the No Action Alternative would have no effect on environmental justice or the protection of children; however, the population within the project area would continue to be at risk from flooding.

5.0 CUMULATIVE IMPACTS

Per the CEQ regulations, cumulative impacts refer to the impact on the environment that "results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7). In accordance with NEPA, this EA considered the combined effect of the preferred alternative and other actions occurring or proposed in the vicinity of the proposed project site.

Escambia County has experienced steady population and economic growth over the last few decades. Past and ongoing major actions in the area have been primarily associated with residential and commercial development, development of supporting infrastructures such as roadways and utility systems, Superfund cleanup efforts, and the relocation of the CBDF. The 2030 Escambia County Comprehensive Plan (Escambia County, 2016) presents the county's goals, objectives, policies, and regulations pertaining to growth management. Specific ongoing and foreseeable county projects, as well as information on certain private-sector projects planned in the area, can be found on the county's main website (*www.myescambia.com)*. Anticipated ongoing and future projects within or in the vicinity of the proposed action area include the construction of the new CBDF and various road resurfacing of L Street from Fairfield Drive to Herman Street. Demolition of structures at 416 and 450 West Herman Street and the Delano Street Drainage Improvement Project are also anticipated if Alternative 1 is implemented.

The Delano Street Study Area has shown repetitive susceptibility to flooding from storm events. The proposed project is expected to increase the level of flood protection to reduce risk of flooding to nearby roads, businesses, and residential homes. The project is not expected to increase population sizes in the area due to current residential land use restrictions already in place within the area. However, commercial and industrial development has the potential to increase as a result of this project due to the reduction of the risk of flood loss to property in the area.

It is anticipated that the proposed action will have short-term impacts related to noise, transportation and traffic disruptions, and potential utility disruptions due to the construction activities. However, it is expected the proposed project will not have long-term negative impacts to residential, industrial, or commercial areas or to the environment in the project areas, as the proposed action is intended to protect the existing infrastructure and properties within the area with few changes to the current land use. In consideration of the overall impact of the proposed project in relation to impacts from past, present, and reasonably foreseeable future activities, the proposed action is not expected to have significant adverse cumulative impacts on any resource.

6.0 6.0 PUBLIC INVOLVEMENT

FDEM is the non-federal representative conducting the NEPA analysis for the proposed drainage improvements in the Delano Street Study Area as designated by the FDEM Mitigation Bureau Non-Federal Representative MOA. FEMA is the federal agency providing final approval of the NEPA analysis.

The public notification process for EO 11988 was initiated in 2018 and is now combined with the NEPA public involvement process and documented here in this EA.

The Board has held one town hall meeting that was open to the public on November 14, 2018 to outline general project details and expected improvements. Documents presented and discussed are included in Appendix I. The county has also notified the public through their website project details page (https://myescambia.com/open-government/projects/project-details/delano-drainage-(l-street-herman-leonard-street)) which outlines project details, project status, and provides a link to the project specific public notice.

The Board has also published a project specific public notice to Escambia County's website on November 7, 2019, notifying the public that FEMA may fund actions within the floodplain (Appendix J).

The public will be notified of the availability of this EA for review and comment by posting of the public notice on FEMA's website, Escambia County's website, and the Escambia County Central Office Complex (COC), 3363 West Park Place, Pensacola, FL 32505, and a hard copy of this EA will be made available at 3363 West Park Place, Pensacola, FL 32505 and will be accessible to the public Monday through Friday between 8:00 AM and 4:00 PM. The public comment period ends after 30 days from the date of posting.

7.0 AGENCY COORDINATION

The following agencies and organizations were contacted during the preparation of this EA:

- Alabama-Quassarte Tribal Town of Texas
- Choctaw Nation of Oklahoma
- Florida Division of Historical Resources (SHPO)
- Florida State Clearinghouse
- Jena Band of Choctaw Indians
- Muscogee (Creek) Nation
- Poarch Band of Creek Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Thlopthlocco Tribal Town
- U.S. Army Corps of Engineers, Jacksonville District

- U.S. Fish and Wildlife Service, North Florida Ecological Services Field Office

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Appendices are available for review upon request to FEMA-R4EHP-FLORIDA@fema.dhs.gov.