

Environmental Assessment

# Absecon Creek Waterfront Shore Protection Improvements

City of Absecon, NJ

HMGP 1867-0010

*August 2015*

U.S. Department of Homeland Security  
Federal Emergency Management Agency  
Region II, 26 Federal Plaza, NY, NY 10278



**FEMA**

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## Sample List of Acronyms and Abbreviations (for NJ)

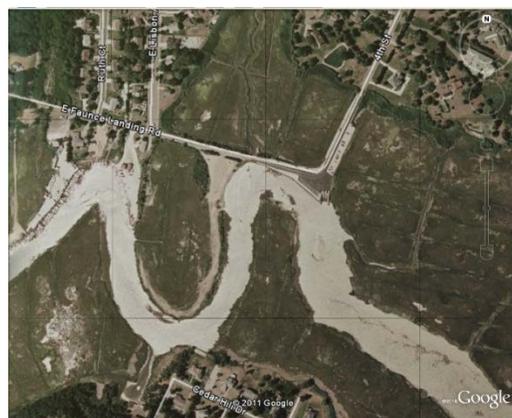
ASTM	American Society of Testing & Materials
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMP	Coastal Management Program
CZMA	Coastal Zone Management Act
DHS	Department of Homeland Security
EA	Environmental Assessment
EIS	Environmental Impact Statement
E.O.	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FRS	Facility Registration System
HMGP	Hazard Mitigation Grant Program
MSL	Mean Sea Level
NAVD88	North American Vertical Datum 1988
NEPA	National Environmental Policy Act
NGVD29	National Geodetic Vertical Datum of 1929
NHPA	National Historic Preservation Act
NJDEP	New Jersey Department of Environmental Protection
NJOEM	New Jersey Office of Emergency Management
NJSHPO	New Jersey State Historic Preservation Office
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	National Resource Conservation Service
RCRA	Resource Conservation and Recovery Act
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service

## 1.0 INTRODUCTION

The City of Absecon has applied for Federal Funding from the Department of Homeland Security, Federal Emergency Management Administration's (DHS-FEMA) Hazard Mitigation Grant Program (HMGP) to construct waterfront shore protection improvements located on the south side of Faunce Landing Road between the intersections of East Lisbon Avenue and 4<sup>th</sup> Street (Appendix A). The City of Absecon has applied as the sub-grantee for financial assistance, the State of New Jersey serves as the grantee (NJOEM) of the proposed funding. The proposed project is referenced under application number HMGP 1867-0010.

The City of Absecon is located in Atlantic County to the east of Atlantic City. It is situated on Absecon Creek, a tidal creek stemming from Absecon Bay. The city covers 7.3 square miles of land and water with a population of over 8,400. Absecon Creek is within Watershed Management Area 15, which also includes Great Egg Harbor River, Tuckahoe River and Patcong Creek. The project site is situated less than one mile from the mouth at Absecon Bay.

DHS-FEMA is required as a federal agency to evaluate the potential environmental impacts of its proposed action, and alternatives to the proposed action, in order to make an informed decision in defining a proposed project for implementation. FEMA must consider and incorporate, to the extent practicable, measures to avoid, minimize or mitigate adverse impacts to the human environment. The environmental analysis is conducted in compliance with the National Environmental Policy Act (NEPA), and its implementing regulations of 40 Code of Federal Regulations (CFR) Parts 1500-1508 and FEMA's regulations at 44 CFR Part 10. FEMA evaluates financial assistance projects prior to grant approval. This Environmental Assessment serves as documentation of FEMA's analysis of the potential environmental impacts of the proposed waterfront shore protection construction project, including analysis of project alternatives, and identification of impact minimization measures. The document serves as written communication of the environmental evaluation for public and interested party comment. Public involvement is a component of NEPA to inform an agency's determination of whether to prepare an Environmental Impact Statement (EIS) or issue a Finding of No Significant Impact (FONSI).



## **2.0 PURPOSE AND NEED**

The objective of FEMA's Hazard Mitigation Grant Program (HMGP) is to fund mitigation planning and projects to eligible States, Territories, and federally recognized Tribal governments. HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The grant program is administered by DHS-FEMA to reduce overall risks to vulnerable populations and structures, while also reducing reliance on recovery funding from disasters. The purpose of the grant program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

The purpose of the proposed project is to reduce vulnerabilities to the shoreline of Absecon Creek and East Faunce Landing Road from flood hazards and bank erosion in particular. Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. This action is needed because closure or failure of the roadway would increase travel time for residents and emergency vehicles. By providing shore protection at the subject property, the City will address a significant flood and erosion hazard while improving the safety and function of the adjacent boat ramp facility, thereby building upon recent Federal and State investments made in the surrounding infrastructure.

## **3.0 BACKGROUND INFORMATION**

The section on the south side of Faunce Landing Road, between 4<sup>th</sup> Avenue and East Libson Avenue, is registered in the Atlantic County Flood Hazard Inventory for critical flooding. The City of Absecon proposes shore protection improvements to address frequent flooding and erosion along Absecon Creek at Block 164, Lot 1. The subject property is owned by the City of Absecon and currently used as parking associated with the adjacent boat ramp facility and as a small boat launch. Historically the area was used as a marina for mooring small boats. Being totally unprotected from the contiguous Absecon Creek, this property encounters frequent flooding and erosion from coastal storm events.

Over the past nine years, the City of Absecon has made substantial improvements to the nearby hardened boat ramp facility and surrounding areas. In the summer of 2006, a deteriorating timber bulkhead along Faunce Landing Road to the east was replaced with new steel sheet piling funded by the NJDEP Bureau of Coastal Engineering and the Division of Fish and Wildlife. Under the Fiscal Years 2007 and 2008 NJDOT Municipal Aid Program, portions of Faunce Landing Road and Fourth Avenue were reconstructed to accommodate the new bulkhead, improve parking and traffic flow, enhance pedestrian safety, and alleviate flooding.

## **4.0 DESCRIPTION OF THE ALTERNATIVES CONSIDERED**

This section discusses the Proposed Action to which FEMA funding would contribute, the No Action Alternative, and another alternative that was considered and dismissed.

### **4.1 No Action Alternative**

Under the No Action Alternative, FEMA would not provide funding to reduce flood hazards by preventing further erosion of the bank adjacent to Faunce Landing Road. The affected portion of Faunce Landing Road would continue to be at risk from flooding and associated shoreline erosion, and eventually the roadway may need to be repaired.

### **4.2 Proposed Action Alternative**

The Proposed Action would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a living shoreline design. “Shorelines are often stabilized with hardened structures, such as bulkheads, revetment, and concrete seawalls. Ironically, these structures often increase the rate of coastal erosion, remove the ability of the shoreline to carry out natural processes, and provide little habitat for estuarine species. National Oceanic and Atmospheric Agency (NOAA) is working to implement a more natural bank stabilization technique called ‘living shorelines.’ This approach uses plants, sand, and limited use of rock to provide shoreline protection and maintain valuable habitat” (NOAA 2013). The proposed project will install approximately 250 linear feet by ten-foot wide rock sill below the ordinary high water mark (OHWM). Native grasses (*Spartina Patens* and *Spartina Alerniflora*) will be planted behind the rock sill to allow for fish habitat, as well as balance of the shoreline (approximately 750 feet) with native grasses and shrubs to allow for fish and wildlife habitat leaving a five-foot wide pedestrian walkway built with permeable pavers where the old sand road exists. In addition, the proposed action includes the installation of a formal, crushed shell parking lot (approximately 8,680 square-feet), including low profile bulkheading for flood protection, as well as the installation of two timber decks, both approximately 660 square-feet. Bollards will also be installed in the crushed shell parking lot. Work would be performed by volunteers, city employees and private contractors. The project is designed to provide erosion protection and would require limited maintenance to repair displaced rock sill since there is no threat to dislocate from present location. The rock sill includes two segments allowing for a natural boat launch access for small craft. The majority of the maintenance will focus around the green infrastructure which includes scientific monitoring of restored habitat to gather information on the success of the project for the purpose of improving the construction and implementation of future efforts. Maintenance activities include debris removal, replanting vegetation, additional sand fill, and ensuring that the organic and structural materials remain in place and continue to stabilize the shoreline (Appendix A).

#### **Access and staging**

Access to the project area would be via the existing sand road (approximately 900 feet) historically used as access to a marina (which no longer exists). After streambank protection is complete, the access road would be narrowed by planting native vegetation allowing for a pedestrian walkway. The staging area (approximately 7,000 square feet) would be located adjacent to the project area on the current sand parking and launch area and would be accessed via the existing sand road. The staging area would not affect any natural vegetation.

### **4.3 Alternatives Considered and Dismissed from Further Analysis in this EA**

The City of Absecon considered the installation of steel sheet piling around the perimeter of the parking area to alleviate flooding and erosion, the construction of a paved parking area, the construction of a pedestrian path with vegetative slope stabilization to alleviate erosion and the installation of stormwater management facilities. This alternative was dismissed due to the invasive nature of the work on the wetland and in-water resources. Through the alternative analysis process, the Subgrantee revised the original design from a hard shoreline approach to the Proposed Action Alternative, a living shoreline approach.

Table 1 Summary of Potential Environmental Impacts and Mitigation

<b>Resource</b>	<b>Potential Impacts <i>No Action Alternative</i></b>	<b>Potential Impacts <i>Proposed Action Alternative</i></b>	<b>Agency Coordination Permits</b>	<b>Mitigation</b>
Topography, Geology and Soils	No Impact.	Minor temporary impacts from disturbance of soils during construction. Beneficial impacts from living shoreline.	NJDEP, USACE, NOAA, USFWS	Best management practices and compliance with permit conditions.
Land Use and Zoning	No impact.	No impact. Consistent with Atlantic County Comprehensive Plan.	N/A	N/A
Contaminated Materials	No Impact.	No impact with conditions.	N/A	Best management practices.
Air Quality	No Impact.	Temporary minor impact during construction; no long term impact.	N/A	Best management practices.
Water Resources and Water Quality	Negative Impact during flood event.	Short term minor impact. Long-term water quality improvement during flooding events.	NJDEP; USACE; NOAA; USFWS	Compliance with best management practices and permits.
Wetlands	Negative Impact during flood event.	Short-term negative impact during construction; positive long term impact.	NJDEP, USACE	Comply with all permit conditions. Restore all wetland and other riparian corridor habitat through replanting of native woody species and native plant seed material, as appropriate.
Floodplains	Negative Impact during flood event.	Short-term negative impact during construction; positive long-term benefit of flood damage risk reduction for community.	Local Floodplain Administrator	The City of Absecon is required to ensure no net increase in the base flood elevation as a result of placing fill in the floodway, as part of its floodplain permitting.
Coastal Resources	Negative impacts over time and during flood event.	Short-term minor impacts during construction.	NJDEP	Prior to construction, the City must apply for and receive any required CAFRA, wetlands, or Waterfront Development Individual Permits.
Vegetation	No Impact.	Temporary negative impact to riparian corridor vegetation during construction. Long term beneficial impacts.	N/A	Project plans include planting native species.
Wildlife and Fisheries Habitat	No Impact.	No significant impact. Permanent and temporary disturbance to riparian corridor habitat.	NOAA	Avoid in-water work (placement of rock and fill materials below the high tide line) from 3/1 to 6/30 to minimize impacts to anadromous fish migration.
Threatened and Endangered Species	No Impact.	No impact.	USFWS	N/A
Cultural Resources	No Impact.	No impact.	NJHPO/THPOs, Federally-recognized Indian Tribes	Applicant will monitor ground disturbance during construction and planting for archeological resources.
Visual Resources	No Impact.	No Impact.	N/A	N/A
Socioeconomic Resources	Potential negative impacts.	Positive Impact.	N/A	N/A
Environmental Justice	No Impact.	No Impact.	N/A	N/A
Noise	No Impact.	Short-term negative impact during construction; no long term impact.	N/A	Applicant should follow local and state ordinances limiting heavy machinery use to the hours 7:00 am to 6:00 pm weekdays, and 9:00 am and 6:00 pm on weekends and holidays as noted in the State of New Jersey Model Code Ordinance for Stationary Sources and the State of New Jersey Model Code Ordinance for Mobile Sources
Traffic	Negative Impact during flood event.	Short-term negative impact during construction; positive long-term impact.	N/A	Crossing and installing in County Right-of-Way
Infrastructure	No Impact.	No impact.	N/A	N/A
Public Health and Safety	Potential negative impact from future flood damage.	Positive impact.	N/A	N/A
Climate Change	No impact.	No Impact.	N/A	N/A
Cumulative Impacts	No cumulative impacts.	Beneficial cumulative impacts.	N/A	N/A

## 5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Table 1 summarizes potential impacts of the No Action and Proposed Action alternatives. The following sections provide a more detailed description of the affected environment and potential environmental impacts of the No Action and Proposed Action alternatives.

For each resource category, the impact analysis follows the same general approach. When possible, quantitative information is provided to establish impacts. Qualitatively, these impacts will be measured based on the criteria below.

### 5.1 Topography, Soils and Geology

#### 5.1.1 Existing Conditions

##### *Topography*

Absecon is located approximately 25 feet amsl and is comprised of an area of 5.72 square miles of land and approximately 1.9 square miles of water. The project area is a linear landform primarily comprised of historic fill and tidal marshes with a tributary of Absecon Creek running south through the project area. The project is located north of the Absecon Creek that flows eastward into Absecon Bay and then into the Atlantic Ocean and just south of East Faunce Landing Road. The area can be found on Oceanville United States Geological Survey (USGS) Quadrangle Map, 2014. Latitude (North) 39.425879, Longitude (West) -74.488868 of the center of project.

##### *Soils*

The area of potential effect (APE) is located within the Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv) (NRCS 2013). This soil tends to be very frequently flooded with a landform of tidal marshes and is vulnerable to accelerated erosion caused by disturbance during flooding. According to NJ-GeoWeb, the majority of the project area is comprised of historic fill, with the center portion comprised of saline marsh wetlands with an Absecon Creek tributary running south. The soil survey indicates a 0 inch depth to water table within the project area.

The Farmland Protection Policy Act (7 U.S.C. 4201 et seq.) requires Federal agencies to minimize the extent to which their programs contribute to the unnecessary conversion of prime farmland, unique farmland, and land of statewide or local importance to non-agricultural uses. There are “farmlands of statewide importance” and “farmlands of unique importance” designated in the project area (NRCS 2013). The project is located in an Urban Area on the 2010 census map; therefore, the project area is not defined as prime or protected farmland in accordance with 7 CFR Part 658.2(a), and the action does not require an impact conversion rating form for Farmland Protection Policy Act compliance.

##### *Geology*

The State of New Jersey can be divided into four geologic regions known as physiographic provinces, which have distinctive rocks and landforms. The regions are Valley and Ridge, Highlands, Piedmont, and Coastal Plain. The project area is located in the Coastal Plain Region. The sediments of this region range in age from Cretaceous to Miocene (135 to 5.3 million years old) and dip toward the coast extending

beneath the Atlantic Ocean to the edge of the Continental Shelf. The sediments thicken toward the south in the Coastal Plain Province from a feathered edge along the northwestern margin to approximately 4,500 feet near Atlantic City to a maximum of more than 40,000 feet in the area of the Baltimore Canyon Trough, 50 miles offshore from Atlantic City. The sediments consist of layers of sand, silt and clay deposited alternately in deltaic and marine environments as sea level during Cretaceous and Tertiary time. The topography of the Coastal Plain generally is flat to very gently undulating (NJDEP 1999).

### **5.1.2 Potential Impacts and Proposed Mitigation**

#### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to stabilize the creek bank adjacent to East Faunce Landing Road. Previous bank armoring projects have modified natural fluvial geomorphologic processes, including channel migration. The effects of such modifications to geology and geomorphology would continue. Erosion due to flooding would continue in the project area.

#### *Proposed Action Alternative*

There would be minor short-term impacts to soils in the project area due to use of heavy equipment. Planting vegetation behind the rock sill would help anchor the underlying soil. Direct and indirect effects to soil productivity, stability, and infiltration capacity would be negligible. Adherence to Best Management Practices (BMPs) and applicable permit conditions from NJDEP, USACE, NOAA and USFWS would be followed during construction and this would minimize potential adverse effects from soil erosion; this includes installation of temporary erosion and sediment control measures such as sediment curtains. There would be no impacts to prime or unique farmlands, as there are none in the project area. Beneficial impacts utilizing a living shoreline approach include: stabilization of the shoreline, protection of surrounding riparian and intertidal environment, improvement of water quality via filtration of upland run-off, and creation of habitat for aquatic and terrestrial species.

## 5.2 Land Use and Zoning

### 5.2.1 Existing Conditions

The project area, located on Block 164 Lot 1, is owned by the City of Absecon and currently utilized for parking associated with the adjacent boat ramp facility. The area appears to be in a transition zone between residential and recreation areas and listed as wetlands zoned Marine Commercial (C3). Properties to the north are zoned Moderate Density Residential (R2) and to the south as Conservation-Recreation District (CR) (Absecon Municipal Zoning Boundaries Atlantic County, NJ Map).

### 5.2.2 Potential Impacts and Proposed Mitigation

#### *No Action Alternative*

The No Action Alternative would not impact land use or local zoning.

#### *Proposed Action Alternative*

The proposed Action Alternative would not change or impact land use and zoning. The proposed project would be consistent with the existing site usage.

## 5.3 Contaminated Materials

### 5.3.1 Existing Conditions

There is one New Jersey Environmental Management System site at 160 East Faunce Landing Road in the northeastern portion of the project area. According to NJ-GeoWeb and EPA NEPAassist, there are three known groundwater contamination areas within one-mile of the project area, all located on East Absecon Boulevard, southeast of the project area. These known areas include: Amerco Real Estate Co “UHaul”, Fisca Oil Station #63, and Safety Bus Service. Two of the three locations can be found south of Absecon Creek and the Amerco Real Estate Co “UHaul” can be found north of the creek.

### 5.3.2 Potential Impacts and Proposed Mitigation

#### *No Action Alternative*

The No Action Alternative would not impact contaminated materials. No evidence of significant contamination to site structures, soils, or surface/groundwater from hazardous materials has been identified.

#### *Proposed Action Alternative*

The Proposed Action Alternative would not impact or be impacted by contaminated materials. The continued land use of this site would not adversely impact the risk to the human environment from contaminated materials and the proposed mitigation measures may prevent future contamination resulting from damages sustained in floods and storms. However, if hidden and/or unknown hazardous materials are discovered during excavation and/or construction activities, testing and/or remediation may be necessary. Best Management Practices (BMPs) should be implemented in the event that petroleum or other hazard materials leaks during construction. These practices include requiring all contractors to keep materials on hand to control and contain a petroleum spill. All spills are required to be reported to NJDEP. Contractors are responsible for ensuring responsible action on the part of construction personnel.

## 5.4 Air Quality

The Federal Clean Air Act (CAA) of 1963 (amended 1970, 1977 and 1990) requires each state to attain and maintain specified air quality standards. National Ambient Air Quality Standards (NAAQS) have been promulgated by the Federal government for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), total suspended particulate (TSP), sulfur dioxide (SO<sub>2</sub>) and lead (Pb). Primary air quality standards are set to protect human health and secondary standards are set to protect human welfare. The EPA implements 2008 ozone standards as required by the CAA and meets the standards to provide public environmental health benefits. If an area does not meet the established standards for one or more pollutants, it is designated as a non-attainment area.

### 5.4.1 Existing Conditions

As identified on the EPA NEPAassist, the proposed project is located in non-attainment areas for Ozone 8-Hour 1997 and 2008 standard.

### 5.4.2 Potential Impacts and Proposed Mitigation

#### *No Action Alternative*

The No Action Alternative would not impact air quality.

#### *Proposed Action Alternative*

The Proposed Action Alternative would result in a temporary minor impact to air quality due to construction activities, however, no long-term impacts are anticipated. Construction activities on the project site may have a potential to impact the local air quality through the generation of fugitive dust or airborne dust. Fugitive dust is generated during ground breaking and excavation activities, which are minimal for the Proposed Action Alternative. Emissions from diesel construction vehicles are also a potential source of air pollution. The use of BMPs would help minimize dust and vehicle emissions. Occupational Safety and Health Administration (OSHA) standards would be followed to preserve public health of construction workers and occupants using the project area. Construction emissions would be below de minimis levels of all National Ambient Air Quality Standards (NAAQS) for Ozone, PM, and Lead under the provisions of the Clean Air Act (CAA). FEMA has determined that, due to the minimal and temporary nature of the emissions, a general conformity analysis is not required.

## 5.5 Water Resources and Quality

### 5.5.1 Existing Conditions

The Atlantic Drainage study basin includes Absecon Creek and two tributaries of Patcong Creek. This 133-km<sup>2</sup> study basin drains portions of Atlantic County and a small area of Cape May County. Developed land is the dominant altered-land use, covering 24% of the study basin (Pinelands Commission 2005). The creek is shallow and approximately 180 feet wide at the project area. According to NOAA Nautical Chart number 12316: “The controlling mid-channel depth at mean lower low water from the mouth of the creek to Absecon highway bridge was reported to be 5.5 feet” (October 1999). Portions of the banks along this stretch of Absecon Creek have been previously armored with steel sheeting and wood bulkheads.

Section 303(d) of the Clean Water Act establishes requirements for States and Tribal Nations to identify and prioritize water bodies that do not meet water quality standards. This section of Absecon Creek is in

EPA watershed HUC14 02040302000538; Impaired Waters Line NJ02040302020040-01 (EPA MyWATERS Mapper). The water type is listed as freshwater lake (3.82 acres) and river (17.3 miles). It is used for aquatic life and fish consumption. The cause of the impairment is mercury in fish tissue (low priority) and dissolved oxygen (medium priority). The source is from agriculture, municipal point source discharges, urban runoff/storm sewers, and atmospheric deposition – toxics [303(d) list 07/02/2012].

### **5.5.2 Potential Impacts and Proposed Mitigation**

#### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. Localized changes to Absecon Creek’s channel alignment and its floodplains would range from minor to major, depending on the severity of a flood event and subsequent bank erosion. Continued incremental bank erosion could damage and close the road, limiting access for residents and recreationalists. Impacts on wetlands would occur in the project area. Water quality conditions could worsen as a result of no action.

#### *Proposed Action Alternative*

Short-term water quality impacts from sedimentation during construction would be minor, as implementing BMPs per permit conditions, such as silt fencing and other erosion and sediment control devices, would minimize release of sediments into Absecon Creek. The project would require permits and approvals from NJDEP, NOAA, USFWS and USACE. Staging areas for construction equipment and supplies would be located approximately 20 feet away from the creek on the flat area that is currently used for parking.

The City of Absecon is required to ensure no net increase in the base flood elevation as a result of placing fill in the floodway, as part of its floodplain permitting. Native trees and vegetation would be planted along the bank to provide greater long-term stability and reduce sedimentation from flood-related erosion. This will result in long-term positive effects on water quality during flooding events. Long-term negative impacts to surface water and floodplains would be minor to negligible, so long as the County complies with the No-Rise provisions, a required project condition, as described in Section Six of this EA.

## **5.6 Wetlands**

Executive Order (EO) 11990 “Wetlands Protection” requires that Federal agencies take actions to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the beneficial effects of wetlands. Compliance with this EO is insured through the process of identifying whether the action would be located within or would potentially affect Federally-regulated wetlands (USFWS, 2013). Federal regulation of wetlands is under the jurisdiction of the USACE. Federal actions within wetlands require the Federal agency to conduct an Eight-Step Review Process. This process, like NEPA, requires the evaluation of alternatives prior to funding the action. FEMA’s regulations for conducting the Eight-Step Review process are contained in 44 CFR Part 9.5. NJDEP also regulates and protects freshwater wetlands as defined by New Jersey State Act 13:9B. The Eight-Step Review Documentation for this project can be found in Appendix D.

### **5.6.1 Existing Conditions**

The National Wetland Inventory shows wetlands in the project area (USFWS 2013) (Appendix B). These features are regulated as Waters of the United States.

According to NJ-GeoWeb, the project area is located within a saline marsh and herbaceous wetlands area, which is classified as estuarine and marine wetland, an emergent persistent estuarine intertidal, which irregularly floods and is partially drained/ditched (E2EM1Pd) according to USFWS National Wetlands Inventory.

### **5.6.2 Potential Impacts and Proposed Mitigation**

#### *No Action Alternative*

The No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would have a potential negative impact on wetlands during a flooding or storm event with increased erosion and loss of wetlands.

#### *Proposed Action Alternative*

The Proposed Action Alternative would have a minor temporary negative impact during construction activities; however, for the long term would provide stability and a positive impact to the project wetlands and surrounding environment with the replanting of native plant species. The proposed project would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a Living Shoreline design. The proposed project would install about 250 feet of rock sill below the ordinary high water mark and plant native grasses behind the rock sill to allow for fish habitat, then plant the balance of the shoreline with native grasses and shrubs to allow for fish and wildlife habitat leaving a pedestrian walkway where the old sand road exists. The applicant will apply for, and comply with the conditions of, all required permits from USACE and NJDEP.

## **5.7 Floodplains**

### **5.7.1 Existing Conditions**

EO 11988 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 and indirect support of floodplain development wherever there is a practicable alternative. Furthermore, Atlantic County regulates its floodplain and floodway through its National Flood Insurance Program (NFIP) floodplain ordinance.

According to the National Flood Insurance Program's Flood Insurance Rate Map (Community Panel Number 3400010001C dated August 23, 1989), the proposed project area is located in the Special Flood Hazard Area (SFHA), the 100-year floodplain designated as Zone AE with a base flood elevation of 8 feet NGVD29 (Appendix B). The post-Sandy Preliminary Flood Maps serve as the Best Available Data for the proposed location, and indicate the project area is located in Zone VE with a base flood elevation of 12 feet NAVD88 (dated 1/30/2015)(Appendix B). Per FEMA's regulations at 44 CFR 9.11(d)(1)(i), there shall be no new construction in a V Zone except for a functionally dependent use or to facilitate open space use. Shoreline protection improvements fit the definition of functionally dependent, as it requires a location near water to perform its intended purpose. As noted above, portions of the natural floodplain and banks along this stretch of Absecon Creek have been previously armored. Federal funding requires compliance with Executive Orders 11988 Floodplain Management and 11990 Wetlands Protection. The Executive Orders (EO) and regulation 44 CFR Part 9 require FEMA, and its grantees and sub-grantees, to evaluate all practicable alternatives for location of facilities outside the SFHA. If location outside the SFHA is not practicable, FEMA, and its grantees and sub-grantees, must evaluate mitigation measures to

reduce the impact of the structure on/by the floodplain. The Eight-Step Review Documentation for this project can be found in Appendix D.

Public notice regarding the Executive Orders is given by the notice for this Environmental Assessment.

### **5.7.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

The No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would have a potential negative impact on floodplains during a flooding or storm event with increased erosion.

#### *Proposed Action Alternative*

The Proposed Action Alternative would have a minor temporary negative impact during construction activities, however, for the long term would provide stability and a positive impact to the floodplain and surrounding environment with the replanting of native plant species. The proposed project would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a Living Shoreline design. The proposed project would install about 250 feet of rock sill below the ordinary high water mark and plant native grasses behind the rock sill to allow for fish habitat, then plant the balance of the shoreline with native grasses and shrubs to allow for fish and wildlife habitat leaving a pedestrian walkway where the old sand road exists. The City of Absecon is required to ensure no net increase in the base flood elevation as a result of placing fill in the floodway, as part of its floodplain permitting.

## **5.8 Coastal Resources**

The Coastal Area Facility Review Act of 1973 (CAFRA) established the CAFRA zone, as the bounds of CAFRA regulation. Certain activities undertaken within the CAFRA zone are regulated by the Division of Land Use Regulation (NJDEP 2013). The proposed project area lies within the CAFRA zone. Possible activities regulated are Subchapter 3 Special Areas: shellfish habitat, submerged vegetation habitat, finfish migratory pathway, navigation channels, intertidal and subtidal shallows, filled waters' edge, flood hazard area, riparian zone, wetlands, wetlands buffers, historic and archeological resources, and endangered or threatened wildlife or plant species habitats, special urban areas, Atlantic City, lands and waters subject to public trust rights; Subchapter 5 Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas; Subchapter 6 General Location Rules: basic location rule and secondary impacts; and Subchapter 8: Resource Rules.

### **5.8.1 Existing Conditions**

The project area lies within the designated coastal zone. Due to current conditions within project area, bank erosion and repetitive coastal flooding have occurred during flooding and storm events.

### **5.8.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. Localized changes to Absecon Creek's shoreline in the project area would range from minor to major, depending on the severity of a flood event and subsequent bank erosion. Continued incremental bank erosion could damage and close the road, limiting access for residents and recreationalists. Impacts on

coastal resources would occur in the project area. Coastal resource conditions could worsen as a result of no action.

### *Proposed Action Alternative*

Short-term adverse water quality impacts from sedimentation during construction would be minor, as implementing BMPs per permit conditions, such as silt fencing and other erosion and sediment control devices, would minimize release of sediments into Absecon Creek. The project would require permits and approvals from NJDEP, NOAA, USFWS and USACE. Staging areas for construction equipment and supplies would be located approximately 20 feet away from the creek on the flat area that is currently used for parking.

Under Subchapter 6, General Location Rules a location may be acceptable for development as reasonably necessary to promote the public health, safety and welfare; protect public and private property, wildlife and marine fisheries; and preserve, protect and enhance the natural environment. The proposed project was designed with the assistance of the American Littoral Society, NJDEP, NOAA, USFWS and USACE to ensure a beneficial result meeting these conditions. The result was a Scope of Work that included a living shoreline, including a low profile bulkhead, a parking area comprised of crushed shells, a stone sill with replanted salt-marsh vegetation such as *Sparten Patens* and *Sparten Alterniflora* behind sill, a public access area and walkway comprised of permeable pavers and two observation decks built on piles.

A CAFRA Consistency Statement Request was first requested based on the original Scope of Work in June 2012 to the NJ DEP Bureau of Coastal Regulation. A second request for a Consistency Statement was sent to NJ DEP Bureau of Coastal Regulation on April 13, 2015 with the newly proposed living shoreline Scope of Work proposal. In a letter dated May 26, 2015, NJDEP concurred with FEMA's consistency determination, with the following condition:

Prior to construction, the City must apply for and receive CAFRA and Waterfront Development Individual Permits. In addition, if work is proposed in mapped coastal wetlands then a Coastal Wetlands permit will be necessary. If work is proposed in unmapped coastal wetlands or Freshwater Wetlands then the appropriate Freshwater Wetlands permit will be necessary.

## **5.9 Vegetation**

### **5.9.1 Existing Conditions**

The banks of Absecon Creek in the project area are characterized by low shrub, sea grass, shoreline grasses and sand. An old road bed adjacent to the shoreline would be used to access the project area. The road is currently used by the public. A parking area used by citizens of the city for parking and to launch small boats will be used for the staging area. All vegetation will be fenced off to avoid/minimize damage.

### **5.9.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

The No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would have no direct impact on vegetation. Potential erosion during a flood event could potentially adversely affect vegetation.

### *Proposed Action Alternative*

The Proposed Action Alternative would have a temporary negative impact to the riparian corridor during construction. However, Proposed Action Alternative also includes the re-planting of native plant species for salt-marsh vegetation such as *Spartina Patens* and *Spartina Alterniflora*, thereby reducing the temporary negative impact and creating a beneficial long-term impact to the area's vegetation.

## **5.10 Wildlife and Fisheries Habitat**

### **5.10.1 Existing Conditions**

The Migratory Bird Treaty Act of 1918, as amended, provides Federal protections for migratory birds, their nests, eggs, and body parts from harm, sale, or other injurious actions. The act includes a "no take" provision. The U.S. Fish and Wildlife Service (USFWS) Office of Migratory Bird Management maintains a list of migratory birds (50 CFR 10.13). The project area is in the North Atlantic Migratory Flyway and provides habitat for a variety of migratory birds, including songbirds and birds of prey. Migratory birds likely use this stretch of the creek and may perch, nest and feed in the shrubs that grow along the bank.

The Magnuson-Steven Fisheries Conservation and Management Act (MSA) provides for the conservation and management of the nation's fishery resources through the preparation and implementation of fishery management plans (FMPs). One of the required provisions of FMPs specifies that essential fish habitat (EFH) be identified and described for the fishery, adverse fishing impacts on EFH be minimized to the extent practicable, and other actions to conserve and enhance EFH be identified. The MSA also mandates that NOAA Fisheries coordinate with and provide information to federal agencies to further the conservation and enhancement of EFH. Federal agencies must consult with NOAA Fisheries on any action that might adversely affect EFH. When NOAA Fisheries finds that a federal or state action would adversely affect EFH, it is required to provide conservation recommendations.

### **5.10.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

The No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would not directly impact wildlife, birds (including sensitive migratory bird habitat), or essential fisheries habitat. However, if the existing area is not mitigated, there is potential impact such as erosion to wetlands and habitats from storm and flooding events.

#### *Proposed Action Alternative*

The Proposed Action Alternative would not have a significant impact on wildlife or birds, including sensitive migratory bird habitat. USFWS concurred with FEMA's determination that the proposed action alternative would not have an adverse effect on threatened or endangered species. The temporary removal of vegetation during construction activities will temporarily disturb the riparian habitat that provides shelter and some shade cover/foraging habitat for aquatic species and other wildlife. The noise and activity of construction would temporarily displace passerine birds and small mammals in the project vicinity. The project may adversely affect EFH, however impacts are expected to be temporary and minimal. NOAA responded to FEMA's EFH consultation on 6/15/2015 and included the following conservation recommendation: "*Avoid in-water work (placement of rock and fill materials below the high tide line) from 3/1 to 6/30 to minimize impacts to anadromous fish migration. Planting can occur at any time.*" Additionally, sedimentation could temporarily adversely impact the creek waters and habitat for

aquatic species, thus BMPs and requirements from permits will be used to avoid or minimize sedimentation and erosion into the Creek. New habitats for non-listed wildlife and migratory birds would be created in the project area by replanting native vegetation, particularly along the old road bed. An increase in the amount of riparian vegetation would have a beneficial effect for wildlife. Generally, streams with healthy riparian vegetation communities may be harmed ecologically from the addition of riprap or armoring structures. See Section 5.11 for consultation with USFWS and Appendix C for related correspondence with USFWS and NOAA.

## **5.11 Threatened and Endangered Species and Critical Habitat**

### **5.11.1 Existing Conditions**

The Endangered Species Act (ESA) established a program to conserve, protect, and restore threatened and endangered species and their habitats. Section 7 of the ESA (50 CFR 401) requires Federal agencies to ensure their actions do not jeopardize the continued existence of listed species and do not result in adverse modification to designated critical habitat.

The USFWS was originally consulted in June 2012 for potential ESA species in Atlantic County. There is potential for one federally listed threatened species to exist within The City of Absecon: the Knieskern's Beaked-Rush (USFWS 2013). "A semi-perennial member of the sedge family, Knieskern's beaked-rush is a grass-like plant that grows 0.6 to 24 inches tall and is distinguished from other species by its fruit (achene). Fruiting typically occurs from July to September. Knieskern's beaked-rush is found only in (endemic to) New Jersey. An obligate wetland species, Knieskern's beaked-rush occurs in early successional wetland habitats, often on bog-iron substrates adjacent to slow-moving streams in the Pinelands region" (USFWS 2013).

FEMA determined and the USFWS concurred that the activity is not likely to adversely affect the Knieskern's Beaked-Rush. The basis for this determination is the lack of suitable habitat in the project area (Appendix C).

FEMA re-initiated informal consultation with USFWS in April 2015 for the Northern Long-eared Bat and the Red Knot. Since the project does not require any tree removal FEMA determined that the Proposed Action Alternative would have no effect on the Northern Long-eared Bat. In addition, the Proposed Action Alternative supports intertidal habitat and nearshore habitat that is utilized by migratory shorebirds and the living shoreline approach enhances native plant landscaping with some rock stabilization which is anticipated to balance shoreline stabilization needs with the estuarine foraging habitat for shorebirds. The grantee/subgrantee would be required to avoid take of migratory birds during construction and the area would support foraging habitat post-construction. Therefore FEMA determined the Proposed Action Alternative would not significantly adversely impact migratory birds or migratory bird habitat including the Red Knot (Appendix C).

### **5.11.2 Potential Impact and Proposed Mitigation**

#### ***No Action Alternative***

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. Vegetation would likely be removed by erosion and flooding. Some wildlife habitat could also be

removed if riparian vegetation is washed away. Any adverse impacts to vegetation and wildlife resources, including protected species, are anticipated to be minor.

### *Proposed Action Alternative*

No land would be cleared for staging and project access. The proposed access and staging areas have previously been disturbed and are not vegetated. No trees would be removed. Vegetative plantings, including native grasses such as *Spartina Patens* and *Spartina Alterniflora*, are incorporated into the proposed living shoreline site design. These native plantings would result in a permanent, long-term net gain of native and riparian buffer vegetation. Enhancing the riparian buffer with plantings would locally improve the wildlife habitat along the banks of the creek in the long-term.

## **5.12 Cultural Resources**

### **5.12.1 Existing Conditions**

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800 requires Federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation an opportunity to comment on Federal projects that would have an effect on historic properties. These actions must take place prior to the expenditure of Federal funds. Historic properties include districts, buildings, structures, objects and sites (including landscapes, archaeological sites and traditional cultural properties) that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

### **General History of Area**

The history of southern New Jersey dates back to the Archaic Period (approximately 8000-2000 BC). Information on Archaic sites have been gathered from surface-collections to full archeological excavations. Most of the known Archaic sites occur along streams or waterways where exploitation of natural resources could be pursued. The observed correlation of known site locations to certain environmental settings gives a measure of predictability to patterns and site distribution. Stratigraphic evidence indicates that many sites were used repeatedly by a variety of pre-contact populations (Mounier, undated).

Prior to the European settlement of southern New Jersey beginning in 1600, “the Lenape Confederation is said to have extended from the headwaters of the Hudson to the headwaters of the Potomac and included the Mohican and Nanticoke. Divided into three main dialect groups based upon geography, with the Munsee in the northern part of the homeland and the closely related Unami and Unalachtigo in the central and southern regions, the Lenape were dispersed into various related sub-tribes and bands made up of numerous self-sufficient villages along waterways... During a brief 1524 encounter, Giovanni de Verrazano remarked that the shores of the Land of the Lenape were densely populated” (Norwood, 2007). It is believed the term Absecon is derived from the Lenape word Absegami, which means bay or little water (Citytowninfo.com accessed 5/15/15).

By the American Revolution in 1776, Absecon was a bustling seaport with shipbuilding as the primary industry of the area. By 1777 the Friendship Saltworks, was established and salt-making usurped

shipbuilding as the biggest business of the area. In 1872, Absecon was chartered as a town, and in 1902 was incorporated as a city (Lurie, Mappen, and Siegel 2004).

### Identification of Historic Properties

The Proposed Action would take place in a developed, rural setting. In accordance with Section 106, FEMA has determined the Area of Potential Effects (APE) for archeological resources for the Proposed Action as limited to the area of ground disturbance and any staging area(s) associated with this project. All proposed improvement activities would occur within this APE. The APE for above-ground resources for the Proposed Action is an expanded 0.1-mile radius from the APE for archeological resources.

FEMA consulted with the New Jersey Historic Preservation Office (NJHPO) in June 2012 for the project. Based on research on NJGeo-Web, Historic Map Works ([www.historicmapworks.com](http://www.historicmapworks.com)), online topographic maps, and information from the New Jersey State Museum as well as predictive modeling analyses, the Proposed Action Alternative is located within close proximity to water and somewhat well drained soils, and in an archeological sensitive area. However, the project area has been previously disturbed by ground disturbing activities and the proposed project plans to conduct the construction within this disturbed area. While there is an historic district and property in the vicinity, due to their distance from the APE there will be no effect on these properties or their viewshed. Therefore FEMA made a No Historic Properties Affected determination and NJHPO concurred in June 2012 (see Appendix C).

In addition, as part of Section 106 process, FEMA consulted with Federally Recognized Tribal Tribes that include the Delaware Nation, the Delaware Tribe of Indians, the Eastern Shawnee Tribe of Oklahoma and the Shawnee Tribe of Oklahoma. These Tribes all have a cultural affiliation with the project area. Consultation letters were sent out to Tribes on 1/14/15. The Delaware Tribe of Indians and Shawnee Tribe of Oklahoma responded. The Shawnee Tribe of Oklahoma concurred with FEMA's finding of No Historic Properties Affected and have no issues or concerns at this time. They requested that in the event unanticipated archeological materials are encountered during construction or maintenance, they be notified and would like to resume consultation at that time. The Delaware Tribe of Indians were concerned about the close proximity of the project area to resources with cultural or religious significance to the Delaware Tribe and suggested a Phase I Archeological Survey. After additional information was gathered about the nature of the construction and the depth of planting of native grasses for this project (6-8 inches), a condition was placed on the project that states:

If ground disturbing activities occur during construction, landscaping and planting, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

With this condition, on April 1, 2015 in email correspondence, the Delaware Tribe of Indians concurred with FEMA's finding of No Historic Properties Affected for this project (see Appendix C). Follow-up with the Delaware Nation or the Eastern Shawnee Tribe of Oklahoma was conducted by FEMA via email on 3/17/15, but no response was received.

## **5.12.2 Potential Impact and Proposed Mitigation**

### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion to the shoreline and road. If erosion continues, the existing Faunce Landing Road would eventually be undermined and require repair or replacement. Because no Federal activity would occur, Section 106 would not apply.

### *Proposed Action*

The APE of the proposed action is located within close proximity to water and somewhat well drained soils; it is generally located in an archeologically sensitive area with known archeological sites, in addition to historic properties and a historic district. However, the APE has been previously modified by ground disturbing activities and the proposed project plans to conduct the construction within the disturbed area. While there is an historic district and property in the vicinity, due to their distance from the APE, there will be no effect on these properties or their viewshed. FEMA determined and NJHPO, The Shawnee Tribe of Oklahoma and the Delaware Tribe of Indians with conditions concurred (Appendix C) that No Historic Properties are Affected by the Proposed Action Alternative.

## **5.13 Aesthetics and Visual Resources**

### **5.13.1 Existing Conditions**

The project site consists of a dirt parking lot and pedestrian walkway, former bulkhead timbers and natural wetlands comprised of natural grasses and fauna. Evidence of shoreline erosion is present next to the dirt walkway that leads around the bend in Absecon Creek. Absecon Creek is undeveloped with the exception of the new bulkhead bridge and boat launch.

### **5.13.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

The No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would not affect the aesthetics of the project area.

#### *Proposed Action Alternative*

The proposed Action Alternative would not significantly impact the aesthetics within the project area. The Proposed Action Alternative consists of a living shoreline initiative including the planting of native grasses, a crushed shell parking lot, a stone sill and timber observation deck, all keeping in character with the natural surroundings of the area.

## **5.14 Socioeconomic Resources**

### **5.14.1 Existing Conditions**

According to the US Census Bureau website, the 2013 population for the City of Absecon included an estimated 8,401 people and 3,118 households (2009-2013). The median household income in the city was \$61,633 (2009-2013). The per capita income for the city was \$29,295 (2013 dollars). About 8.2% of the population was below the poverty line (US Census Bureau 2013).

According to the 2013 census, Atlantic County's population is approximately 275,209 for 2014, with an estimated 101,091 households (2009-2013). The median income for a household in the county was \$54,235 (2009-2013). The per capita income for the county was approximately \$27,391 (2013 dollars). About 14.4% of the population was below the poverty line (US Census 2013).

#### **5.14.2 Potential Impact and Proposed Mitigation**

##### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. This may have adverse impacts to the socioeconomic resources of the immediate area because it leaves the area susceptible to the threat of flooding and loss of use of East Faunce Landing Road during storms and high tides.

##### *Proposed Action Alternative*

The Proposed Action Alternative would have a positive impact on the City of Absecon and the immediate area by ensuring the health and safety of the community served by providing mitigation measures to reduce flooding to the region. A small amount of construction and landscaping employment opportunities will also be created during the period of construction, which can also have a positive impact on the local economy.

### **5.15 Environmental Justice**

EO 12898, Environmental Justice, directs Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations resulting from Federal programs, policies, and activities. Socioeconomic and demographic data for residents in the project vicinity were studied to determine if the Proposed Action would have disproportionate impacts on minority or low-income persons.

#### **5.15.1 Existing Conditions**

According to the 2013 US Census, the population of the City of Absecon is comprised of 43.5% minority populations and approximately 8.2% of the population is below the poverty line. A review of the EPA research site, NEPAassist, shows 20-30% of the population (by Census blockgroup) in the project area is minority, and 0-10% of the population (by Census tract) in the project area is below the poverty level (NEPAassist 2013).

#### **5.15.2 Potential Impact and Proposed Mitigation**

##### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. No disproportionately high and adverse effects would occur.

##### *Proposed Action Alternative*

As the proposed shore protection measures would have a beneficial effect for the whole community, there are no disproportionate adverse impacts on minority or low-income populations.

## 5.16 Noise

The Noise Control Act of 1972 required the EPA to create a set of noise criteria. In response, the EPA published *Information On Levels of Environmental Noise Requisite To Protect Public Health and Welfare With An Adequate Margin of Safety* in 1944 that explains the impact of noise on humans.

The EPA report found that keeping the maximum 24-hour day night noise level (Ldn) value below 70 decibels (dBA) would protect the majority of people from hearing loss. The EPA recommends an outdoor Ldn of 55 dBA. According to published lists of noise sources, sound levels and their effects, sound causes pain starting at approximately 120-125 dBA (depending on the individual) and can cause immediate irreparable damage at 140 dBA. The Occupational Safety and Health Administration (OSHA) has adopted a standard of 140 dBA for maximum impulse noise exposure.

### 5.16.1 Existing Conditions

Per the New Jersey DEP, who is authorized by the noise Control Act of 1971 to promulgate codes, rules and ordinances related to the control of noise, all New Jersey municipalities are required to have municipal noise ordinances that are identical to the posted Model Local Noise Control Ordinance, which was last updated in 2010. Local municipalities may adopt more stringent codes than the state; however, The City of Absecon has deferred to the State Code Model for their local ordinance. This ordinance applies to the control of sound to protect the public health, welfare, safety, and quality of life.

### 5.16.2 Potential Impact and Proposed Mitigation

#### *No Action Alternative*

The No Action Alternative would not impact ambient noise levels.

#### *Proposed Action Alternative*

The Proposed Action Alternative would have a temporary impact to ambient noise level during construction. However, no long-term impacts are expected. Avoidance of construction related noise impacts can be mitigated by implementing a typical work-day schedule, such as limiting heavy machinery use to the hours 7:00 am to 6:00 pm weekdays, and 9:00 am and 6:00 pm on weekends and holidays as noted in the State of New Jersey Model Code Ordinance for Stationary Sources and the State of New Jersey Model Code Ordinance for Mobile Sources (see <http://www.nj.gov/dep/enforcement/docs/noise-ord.pdf> for copy of code). In addition, all motorized equipment used in construction and demolition activity needs to be operated with a muffler and/or sound reduction device. Maximum permissible A-weighted sound levels measured outdoors for a public service facility cannot extend beyond 65 dB during a 24-hour period.

## 5.17 Traffic

### 5.17.1 Existing Conditions

East Faunce Landing Road is located in a developed rural setting on the eastern most portion of the City of Absecon. The road runs east-west and ends approximately less than 500 feet to the east of the project area and intersects with Fourth Street, which runs north-south. This area of the City of Absecon is not populated and consists of tidal wetlands that border the Absecon Creek to the south. The project area is unprotected from Absecon Creek and encounters severe flooding and erosion during normal storm events.

## **5.17.2 Potential Impact and Proposed Mitigation**

### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion, there would continue to be a negative impact on traffic during flood, storm and high tide events.

### *Proposed Action Alternative*

With the Proposed Action Alternative, traffic would be temporarily impacted during construction for construction activities; however this impact should be minimal since staging areas for machinery will take place on the existing parking lot on the property and minimum construction activities will be conducted in the street or Right-of-Way. The low-profile bulkhead and living shoreline design for this project will assist in alleviating the flooding and erosion that take place during storm events, and future road damage and road closures will be reduced.

## **5.18 Infrastructure**

### **5.18.1 Existing Conditions**

The project location is within a developed rural section of the City of Absecon directly south of East Faunce Landing Road. The closest sewer system is located to the west of the project site and above-ground electrical utilities are located on East Faunce Landing Road. Over the past five years, the City of Absecon has made several improvements to the boat ramp facility and surrounding area including the replacement of a deteriorating timber bulkhead with new steel sheet piling along Faunce Landing Road in 2006. In addition, portions of Faunce Landing Road and Fourth Avenue were recently reconstructed to accommodate a new bulkhead to improve parking and traffic flow as well as help alleviate flooding and provide a safer environment for pedestrians.

### **5.18.2 Potential Impact and Proposed Mitigation**

#### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion and would not directly impact existing infrastructure.

#### *Proposed Action Alternative*

The Proposed Action Alternative would not have an impact on the existing infrastructure.

## **5.19 Public Health and Safety**

### **5.19.1 Existing Conditions**

Over the past five years, the City of Absecon has made several improvements to the boat ramp facility and surrounding area including the replacement of a deteriorating timber bulkhead with new steel sheet piling along Faunce Landing Road in 2006. In addition, portions of Faunce Landing Road and Fourth Avenue were recently reconstructed to accommodate a new bulkhead to improve parking and traffic flow as well as help alleviate flooding and provide a safer place for pedestrians.

## 5.19.2 Potential Impact and Proposed Mitigation

### *No Action Alternative*

Under the No Action Alternative, FEMA would not provide funding to reduce flood-related erosion. The area would continue to flood during storm events, directly impacting the community's safety and well-being.

### *Proposed Action Alternative*

The Proposed Action Alternative would have a positive and beneficial impact on the overall community public health and safety. Creating a bulkhead that would help alleviate flooding of East Faunce Landing Creek and the immediate area is a positive impact for the community's public health and safety. It will prevent flooding impacts to the road, and will allow traffic and emergency vehicles to operate effectively. The project will improve traffic flow, enhance pedestrian safety and alleviate flooding. In addition, the project area is a public space for the community and with the use of a living shoreline technique and creation of a public walkway, the public can access the area for recreational activities in a safe environment that is beneficial to their overall health.

## 5.20 Climate Change

### 5.20.1 Existing Conditions

According to NOAA, Absecon City is in New Jersey's Central Climate Zone. The areas in this zone have between 30 and 40 days with temperatures above 90 degrees Fahrenheit. Average annual precipitation is about 40 inches along the south east coast. Snow may fall from about November 15 to April 15 with an average of 10-15 inches in the extreme south (NOAA 2013). In addition, climate change could increase temperatures in the northeast United States which could in turn cause more severe weather to occur and could cause sea levels to rise.

### 5.20.2 Potential Impacts and Proposed Mitigation

#### *No Action Alternative*

The No Action Alternative will not affect climate change nor would it provide for flood damage risk reduction for the area. Therefore the area and East Faunce Landing Road would be at a greater risk of damage and erosion with each impacting storm. In addition, this would put both environmental and public health standards at risk with the potential flood-related incidents and releases which would increase over time due to anticipated storm and rainfall frequency increases associated with climate change.

#### *Proposed Action Alternative*

The Council on Environmental Quality (CEQ) has recently released guidance on how Federal agencies should consider climate change in their action decision-making. The suggested threshold whereby quantitative analysis should be done in NEPA documents is for an action to release over 25,000 metric tons of greenhouse gases per year (CEQ 2010). Given the nature and small scale of the Proposed Action Alternative, and its lack of greenhouse gas releases, no detailed analysis was completed because it would not meet the above threshold. The proposed action alternative would not affect climate change.

## 5.21 Cumulative Impacts

The CEQ regulations for implementing NEPA require an assessment of cumulative effects during the decision-making process for Federal projects. Cumulative effects are defined as “the impact on the environment which 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” (40 CFR 1508.7).

Cumulative effects were determined by combining the effects of these alternatives with other past, present, and reasonably foreseeable future actions. To address these impacts, this section examines FEMA and non-FEMA actions occurring or proposed in the vicinity of the proposed project.

Over the past five years, the City of Absecon has made several improvements to the boat ramp facility and surrounding area including the replacement of a deteriorating timber bulkhead with a new steel sheet piling along Faunce Landing Road in 2006. In addition, portions of East Faunce Landing Road and Fourth Avenue were recently reconstructed to accommodate a new bulkhead to improve parking and traffic flow as well as help alleviate flooding and provide a safer place for pedestrians.

The combination of these past projects and the detailed Proposed Action Alternative in this assessment would not cumulatively have a significant adverse impact on the human environment, particularly since the Proposed Action Alternative is implementing a living shoreline initiative. Therefore, it is expected that the implementation of the Proposed Action Alternative in association with other projects and construction activities that have already occurred will have an overall positive impact on human health and the environment as compared to the No Action Alternative. Thereby, the Proposed Project Alternative will limit future risk of damages to the area and human environment and/or enhance operations of the facility.

## 6.0 PERMITS AND PROJECT CONDITIONS

Absecon, NJ is responsible for obtaining all applicable permits for project implementation prior to construction, and to adhere to permit conditions. The proposed Waterfront Shore Protection Improvement will require permitting, and associated or separate floodplain management permit/authorizations. It is expected that the sub-grantee and its construction contractor(s) will conduct construction utilizing best management practices to limit noise, dust and sedimentation and erosion during construction.

Any substantive change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other laws and executive orders. The sub-grantee must also adhere to the following conditions during project implementation:

1. Excavated soil and waste materials will be managed and disposed of in accordance with applicable local, state and federal regulations. If contaminated materials are discovered during construction activities, the work will cease until the appropriate procedures and permits are implemented.
2. If construction or planting activities disturb archaeological artifacts (e.g., old bricks, ceramic pieces, historic bottle glass or cans, coins, beads, stones in the form of tools [arrow heads], pieces of crude clay pottery, etc.), archaeological features (e.g., grave markers, house foundations, cisterns, etc.) or human remains, the grantee and sub-grantee will ensure to the fullest extent

possible that the Contractor immediately stops work in the vicinity of the discovery, secure the site, and take reasonable measures to avoid or minimize harm to the finds. The Sub-grantee will immediately contact FEMA, NJOEM, and NJHPO. FEMA will consult with any THPOs, Federally-recognized Indian Tribe, or appropriate stakeholders. Construction work cannot resume until FEMA completes consultation and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act and other applicable Federal and State regulations.

3. Prior to construction, the City must apply for and receive any required CAFRA, wetlands, or Waterfront Development Individual Permits.
4. The City shall avoid in-water work (placement of rock and fill materials below the high tide line) from 3/1 to 6/30 to minimize impacts to anadromous fish migration. Planting can occur at any time.
5. The City of Absecon is required to ensure no net increase in the base flood elevation as a result of placing fill in the floodway, as part of its floodplain permitting.

## 7.0 PUBLIC INVOLVEMENT

During project development, staff from the City of Absecon and FEMA conducted site visits with representatives from the NJDEP, USFWS, NOAA, and USACE to discuss the merits of the proposed project. During preparation of this EA, the SHPO was contacted for comment. In accordance with NEPA, this Environmental Assessment (EA) Report will be released for a 30-day public review and comment period. Availability of the document for comment will be advertised by the City of Absecon in the Press of Atlantic City, Pleasantville, NJ.

A hard copy of the EA will be made available for review at the Absecon Public Library located at 305 New Jersey Ave, Absecon, NJ 08201. An electronic copy of the EA is available for download from the FEMA website at [www.fema.gov/plan/ehp/envdocuments/ea-region2.shtm](http://www.fema.gov/plan/ehp/envdocuments/ea-region2.shtm).

The public is invited to submit written comments by mail to FEMA Region II, Hazard Mitigation Assistance Branch, RM1337F, 26 Federal Plaza, NY, NY 10278 or via email to [FEMAR2COMMENT@fema.dhs.gov](mailto:FEMAR2COMMENT@fema.dhs.gov). If no substantive comments are received from the public and/or agency reviewers the EA will be adopted as final and a Finding of No Significant Impact will be issued by FEMA. If substantive comments are received, FEMA will evaluate and address comments as part of Final Environmental Assessment documentation.

The following will receive a copy of the EA:

City of Absecon  
Absecon Public Library  
305 New Jersey Ave, Absecon, NJ 08201

The following will receive notification of the EA's availability:

Mr. Chris Dolphin  
Bureau of Coastal Regulation  
New Jersey Dept. of Environmental Protection

Division of Land Use Regulation  
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## **8.0 CONCLUSION**

FEMA, through the NEPA process, has found that the Proposed Action to stabilize approximately 1,000 feet of the west bank of Absecon Creek using a living shoreline design is a practicable alternative that would not significantly adversely impact the human environment.

During the construction period, short-term minor impacts to soils, water quality, vegetation, wildlife and fisheries habitat, air quality, noise and traffic would be anticipated. Short-term impacts would be mitigated using BMPs, such as silt fences, proper equipment maintenance, and appropriate signage and long-term impacts will be mitigated by the use of living shoreline construction techniques and the planting of native grasses and plants. The environmental impacts as a result of the shoreline protection installation would be outweighed by the long-term positive benefits that the Proposed Action would provide the residents and natural environment.

## 9.0 LIST OF PREPARERS

Hazard Mitigation Assistance and Environmental and Historic Preservation  
DHS FEMA Region 2  
26 Federal Plaza, 13<sup>th</sup> Floor  
New York, NY 10278

## 10.0 REFERENCES

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