

Appendix C: Correspondence

1. SHPO Concurrence
2. THPOs Correspondence
3. USFWS Concurrence
4. CAFRA/CZM Concurrence



FEMA

12-1499-1 JWR
HPO-F2012-328

June 12, 2012

Mr. Daniel Saunders
Acting Administrator and Deputy State Historic Preservation Officer
New Jersey Department of Environmental Protection
Historic Preservation Office
Mail-code 501-04B
P.O. Box 420
Trenton, NJ 08625-0404

Re: Section 106 Consultation for Department of Homeland Security, FEMA
Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic
County, New Jersey
HMGP NJ 1867

Dear Mr. Saunders:

The Federal Emergency Management Agency (FEMA) has proposed to provide grant funding from its Hazard Mitigation Grant Program (HMGP) to the New Jersey Office of Emergency Management for the City of Absecon, New Jersey for a hazard mitigation improvement project to address the frequent flooding and shore line erosion on Absecon Creek at Faunce Landing Road (see attached vicinity map). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events.

Proposed Project Design:

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The project area has been previous disturbed by ground disturbing activities (such as: utilities, roadways, bulkheads) and storm erosion. The applicant proposes to conduct the construction within the disturbed area to an average depth of 1.5-feet. The restroom facility will not be funded through this grant application.

Due to proposed ground disturbance DHS-FEMA is initiating Section 106 consultation for the proposed enhancements per 36 CFR Part 800.

Resources Consulted:

Online resources such as NJGEO-web and Historic Map Works as well as online topographic maps were referenced. Additional research at the New Jersey State Museum was also conducted.

Archaeological findings:

An archaeological assessment was conducted to determine the Area of Potential Effect (APE)'s sensitivity to below ground archaeological resources (see attached maps for location of APE). To determine the sensitivity, several aspects of the project were analyzed such as the project's proximity to known archaeological resources, waterways, historic properties, the site's environmental characteristics such as soil analysis and the APE's previous ground disturbance activities. Based on the above information and predictive modeling analyses, an assessment can determine if the site has a high, moderate or low sensitivity to both historical and prehistoric archaeological resources.

Proximity to Known Archaeological Resources:

According to NJGEO-web, the APE is located within an archaeological sensitive area (see attached map Historic and Archaeology). Research conducted at the New Jersey State Museum indicated that there are a total of ten known archaeological sites within a two-mile radius of the APE. All of these are prehistoric sites: Pleasantville (28-AT-3), Smith's Landing (28-AT-4), Smith's Landing (28-AT-5), Smith's Landing (28-AT-6), Mt. Pleasant (28-AT-7), Tripician Farm (28-AT-83), Greens at Galloway (28-AT-100), No Name (28-AT-110), No Name (28-AT-111A), No Name (28-AT-111B). The sites are attributed to either an old Indian village site, a large shell heap or a collection of projectile points and jasper flakes.

Proximity to Waterways:

The area surrounding the APE is comprised of various wetlands and Absecon Creek (see attached NJGEO-web map Soils and Wetland). The majority of the APE is directly located in wetlands and also abuts Absecon Creek.

Environmental Factors:

The APE is located within the Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv) (see attached NJGEO-web map Soils and Wetland). This soil tends to be very frequently flooded with a landform of tidal marshes.

Current and Previous Ground Disturbing Activities:

A portion of the area has been previously disturbed for the construction of the current roadways, bulkheads and utilities. Proposed project work is to be constructed within disturbed and undisturbed areas.

Historic Properties and Historic Map Research:

Cursory map research did not produce any historic maps that indicated the area of the APE.

There is one eligible historic district and one listed historic property on the National Register of Historic Places within a one-half mile radius of the APE. The site is the North Shore Road Historic District (1160 feet) and the property is the John Doughty House located at 40 North Shore Road (2300 feet).

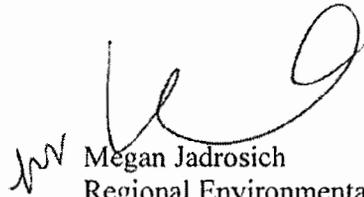
Determination:

The APE is located within close proximity to water and somewhat well drained soils as well as being located in an archaeological sensitive area with ten known archaeological sites and there are historic properties within the APE. The APE has been previously disturbed 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 the distance there will be no effect on the viewshed. Therefore FEMA's finding is that the APE has a low sensitivity to any potential archaeological resources.

DHS-FEMA's determination therefore is that there are No Historic Properties Affected by the proposed undertaking and no conditions are required.

We look forward to your response within 30 days of receipt of this correspondence. If you have any questions, please contact me at 212-680-3635 or via email at Megan.Jadrosich@dhs.gov.

Sincerely,


Megan Jadrosich
Regional Environmental Officer

Enclosures: Maps and photos by applicant

CONCUR

 8/29/12

Daniel D. Saunders
DEPUTY STATE HISTORIC
PRESERVATION OFFICER

DATE



FEMA

January 13, 2015

Mr. Clifford Peacock
President
Delaware Nation
P.O. Box 825
Anadarko, OK 73005

CC: Delaware Nation

Ms. Nekole Alligood, Cultural Preservation Director

Mr. Corey Smith, Cultural Preservation Assistant Director

Mr. Jason Ross, Section 106 Manager

Delaware Tribe of Indians

Eastern Shawnee Tribe of Oklahoma

Shawnee Tribe of Oklahoma

Re: **Grant Name and Number:** Hazard Mitigation Grant Program (HMGP) NJ 1867
Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic
County, New Jersey

Grantee/Subgrantee: New Jersey Office of Emergency Management/City of
Absecon, New Jersey

Undertaking: Hazard mitigation to Absecon Creek, at Faunce Landing Road,
Absecon, Atlantic County, New Jersey (39.425879, -74.488868-center of project)

Determination: No Historic Properties Affected

Dear President Clifford:

The Federal Emergency Management Agency (FEMA) has proposed to provide grant funding from its Hazard Mitigation Grant Program (HMGP) to the New Jersey Office of Emergency Management (Grantee) for the City of Absecon (Subgrantee), New Jersey for a hazard mitigation improvement project to address the frequent flooding and shoreline erosion on Absecon Creek at Faunce Landing Road (Figure 1). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. 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 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.

Due to the ground disturbance associated with the Undertaking for this project, FEMA is initiating Section 106 consultation for the proposed enhancements per 36 CFR Part 800.

Undertaking:

The City is proposing the installation of a stone sill with associated wetland vegetation planting along the shoreline and near the proposed, formal parking area to alleviate flooding and erosion, the installation of a formal, crushed shell parking lot, including low profile bulkheading for flood protection, installation of a timber deck, and construction of a walking path/trail along the route of the existing earthen roadway. The remainder of the roadway shall be vegetated with indigenous coastal vegetation. The project area has been previously disturbed by ground disturbing activities (such as: utilities, roadways, bulkheads) and storm erosion. The applicant proposes to conduct the construction within the disturbed area to an average depth of 1.5 feet (Figure 2).

Area of Potential Effects (APE)

The archaeological APE for the Undertaking is limited to ground disturbance and any staging area(s) associated with this project.

Resources Consulted:

Online resources such as NJGEO-web and Historic Map Works as well as online topographic maps were referenced. Additional research at the New Jersey State Museum was also conducted.

Identification and Evaluation:

Standing Structures:

There is one eligible historic district and one listed historic property on the National Register of Historic Places within a one-half mile radius of the APE. The site is the North Shore Road Historic District (1160 feet) and the property is the John Doughty House located at 40 North Shore Road (2300 feet). While there is an historic district and property in the vicinity, due to the distance there will be no effect on the viewshed.

Archaeological Historic Resources

An archaeological assessment was conducted to determine the Area of Potential Effect (APE)'s sensitivity to below ground archaeological resources. To determine the sensitivity, several aspects of the project were analyzed such as the project's proximity to known archaeological resources, waterways, historic properties, the site's environmental characteristics such as soil analysis and the APE's previous ground disturbance activities. Based on the above information and predictive modeling analyses, an assessment can determine if the site has a high, moderate or low sensitivity to both historical and prehistoric archaeological resources.

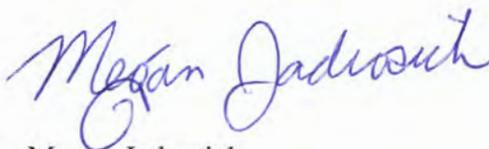
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total of ten known archaeological sites within a two-mile radius of the APE. All of these are prehistoric sites: Pleasantville (28-AT-3), Smith's Landing (28-AT-4), Smith's Landing (28-AT-5), Smith's Landing (28-AT-6), Mt. Pleasant (28-AT-7), Tripician Farm (28-AT-83), Greens at Galloway (28-AT-100), No Name (28-AT-110), No Name (28-AT-111A), No Name (28-AT-111B). The sites are attributed to either: an old Indian village site, a large shell heap or a collection of projectile points and jasper flakes. The area surrounding the APE is comprised of various wetlands and Absecon Creek (see attached NJGEO-web map Soils and Wetland). The majority of the APE is directly located in wetlands and also abuts Absecon Creek. The APE is located within the Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv) (see Figure 3). This soil tends to be very frequently flooded with a landform of tidal marshes. The APE is located within close proximity to water and somewhat well drained soils as well as being located in an archaeological sensitive area with ten known archaeological sites and there are historic properties within the APE, giving the APE a moderate to high sensitivity for archaeological resources, particularly prehistoric resources. However, a portion of the area has been previously disturbed for the construction of the current roadways, bulkheads and utilities. Proposed project work is to be constructed within disturbed and undisturbed areas. cursory map research did not produce any historic maps that indicated the area of the APE, thereby giving the APE a low sensitivity to any archaeological resources.

Assessment of Effects:

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within thirty (30) days. Should you have any questions or need additional information regarding this Undertaking, please contact Kelly M Britt, PhD, RPA, Archaeologist, at kelly.britt@fema.dhs.gov or (212) 680-8816. If practicable, we would appreciate an electronic copy of the concurrence letter be emailed to Ms. Britt.

Sincerely,



Megan Jadrosich
Regional Environmental Officer

MJ/kb

Enclosures: Maps and photos by applicant

Figure 1: Location Map and APE

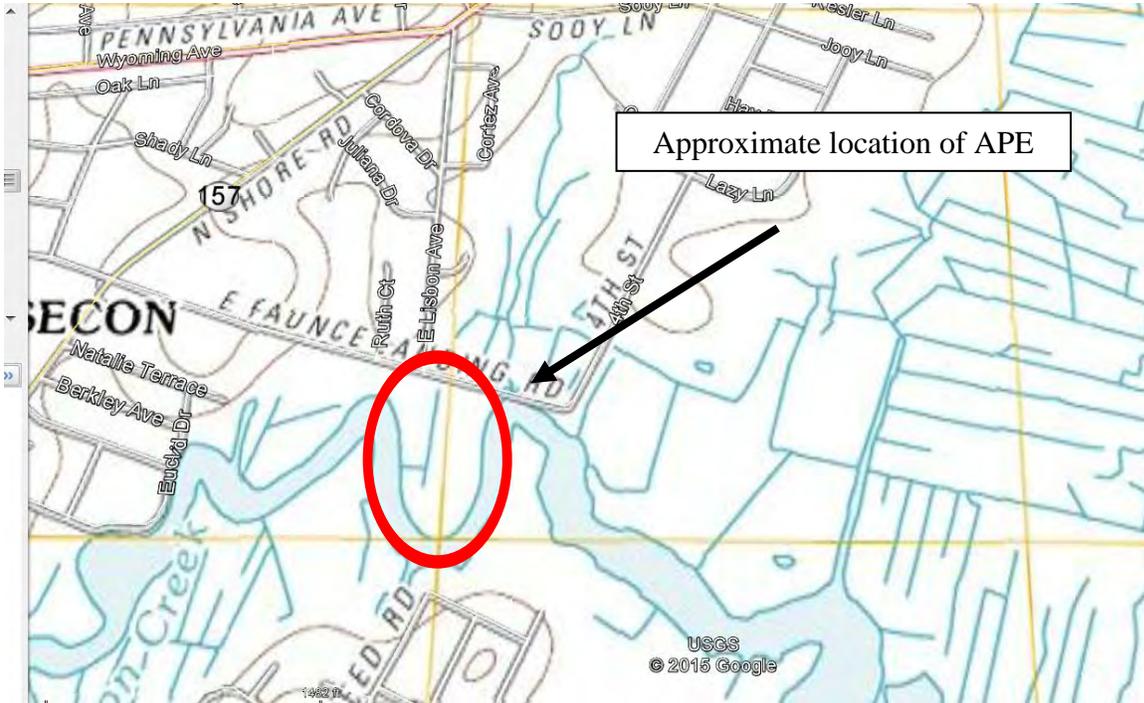
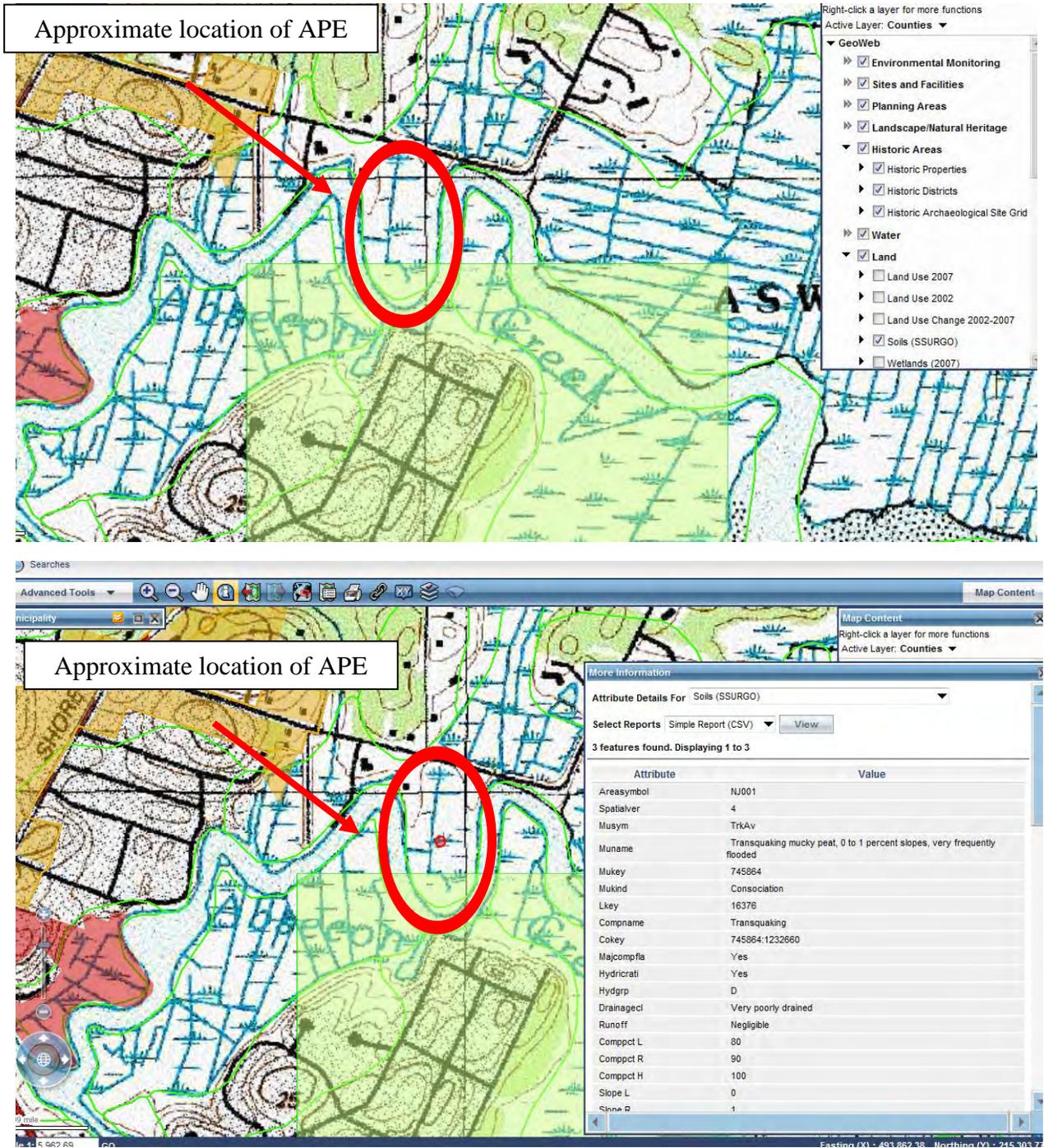


Figure 3: NJ GeoWeb Map





FEMA

January 13, 2015

Mr. Chet Brooks

Chief

Delaware Tribe of Indians

Delaware Tribal Headquarters

170 NE Barbara

Bartlesville, OK 74006

CC: Delaware Tribe of Indians

Ms. Blair Fink, Historic Preservation Representative

Delaware Nation

Eastern Shawnee Tribe of Oklahoma

Shawnee Tribe of Oklahoma

Re: **Grant Name and Number:** Hazard Mitigation Grant Program (HMGP) NJ 1867
Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic
County, New Jersey

Grantee/Subgrantee: New Jersey Office of Emergency Management/City of
Absecon, New Jersey

Undertaking: Hazard mitigation to Absecon Creek, at Faunce Landing Road,
Absecon, Atlantic County, New Jersey (39.425879, -74.488868-center of project)

Determination: No Historic Properties Affected

Dear Chief Brooks:

The Federal Emergency Management Agency (FEMA) has proposed to provide grant funding from its Hazard Mitigation Grant Program (HMGP) to the New Jersey Office of Emergency Management (Grantee) for the City of Absecon (Subgrantee), New Jersey for a hazard mitigation improvement project to address the frequent flooding and shoreline erosion on Absecon Creek at Faunce Landing Road (Figure 1). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. 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 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.

Due to the ground disturbance associated with the Undertaking for this project, FEMA is initiating Section 106 consultation for the proposed enhancements per 36 CFR Part 800.

Undertaking:

The City is proposing the installation of a stone sill with associated wetland vegetation planting along the shoreline and near the proposed, formal parking area to alleviate flooding and erosion, the installation of a formal, crushed shell parking lot, including low profile bulkheading for flood protection, installation of a timber deck, and construction of a walking path/trail along the route of the existing earthen roadway. The remainder of the roadway shall be vegetated with indigenous coastal vegetation. The project area has been previously disturbed by ground disturbing activities (such as: utilities, roadways, bulkheads) and storm erosion. The applicant proposes to conduct the construction within the disturbed area to an average depth of 1.5 feet (Figure 2).

Area of Potential Effects (APE)

The archaeological APE for the Undertaking is limited to ground disturbance and any staging area(s) associated with this project.

Resources Consulted:

Online resources such as NJGEO-web and Historic Map Works as well as online topographic maps were referenced. Additional research at the New Jersey State Museum was also conducted.

Identification and Evaluation:

Standing Structures:

There is one eligible historic district and one listed historic property on the National Register of Historic Places within a one-half mile radius of the APE. The site is the North Shore Road Historic District (1160 feet) and the property is the John Doughty House located at 40 North Shore Road (2300 feet). While there is an historic district and property in the vicinity, due to the distance there will be no effect on the viewshed.

Archaeological Historic Resources

An archaeological assessment was conducted to determine the Area of Potential Effect (APE)'s sensitivity to below ground archaeological resources. To determine the sensitivity, several aspects of the project were analyzed such as the project's proximity to known archaeological resources, waterways, historic properties, the site's environmental characteristics such as soil analysis and the APE's previous ground disturbance activities. Based on the above information and predictive modeling analyses, an assessment can determine if the site has a high, moderate or low sensitivity to both historical and prehistoric archaeological resources.

According to NJGEO-web, the APE is located within an archaeological sensitive area (Figure 3). Research conducted at the New Jersey State Museum indicated that there are a total of ten known archaeological sites within a two-mile radius of the APE. All of these are prehistoric sites: Pleasantville (28-AT-3), Smith's Landing (28-AT-4), Smith's

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Assessment of Effects:

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(1) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within thirty (30) days. Should you have any questions or need additional information regarding this Undertaking, please contact Kelly M Britt, PhD, RPA, Archaeologist, at kelly.britt@fema.dhs.gov or (212) 680-8816. If practicable, we would appreciate an electronic copy of the concurrence letter be emailed to Ms. Britt.

Sincerely,



Megan Jadrosich
Regional Environmental Officer

MJ/kb
Enclosures: Maps and photos by applicant

Figure 1: Location Map and APE

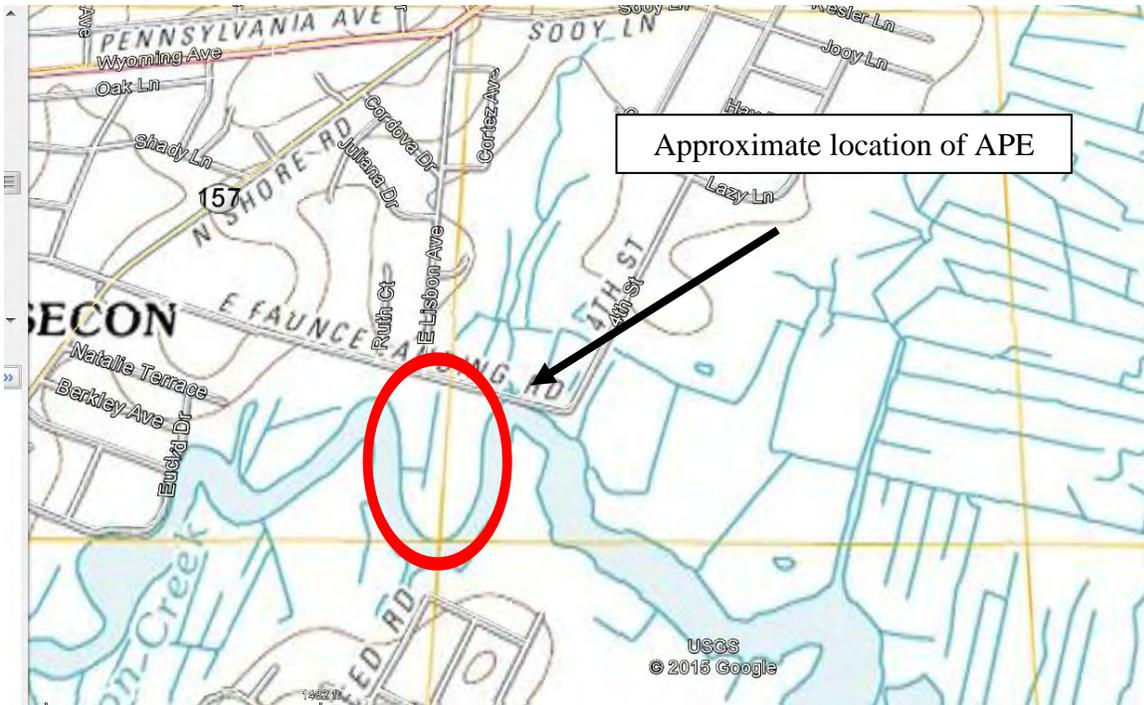
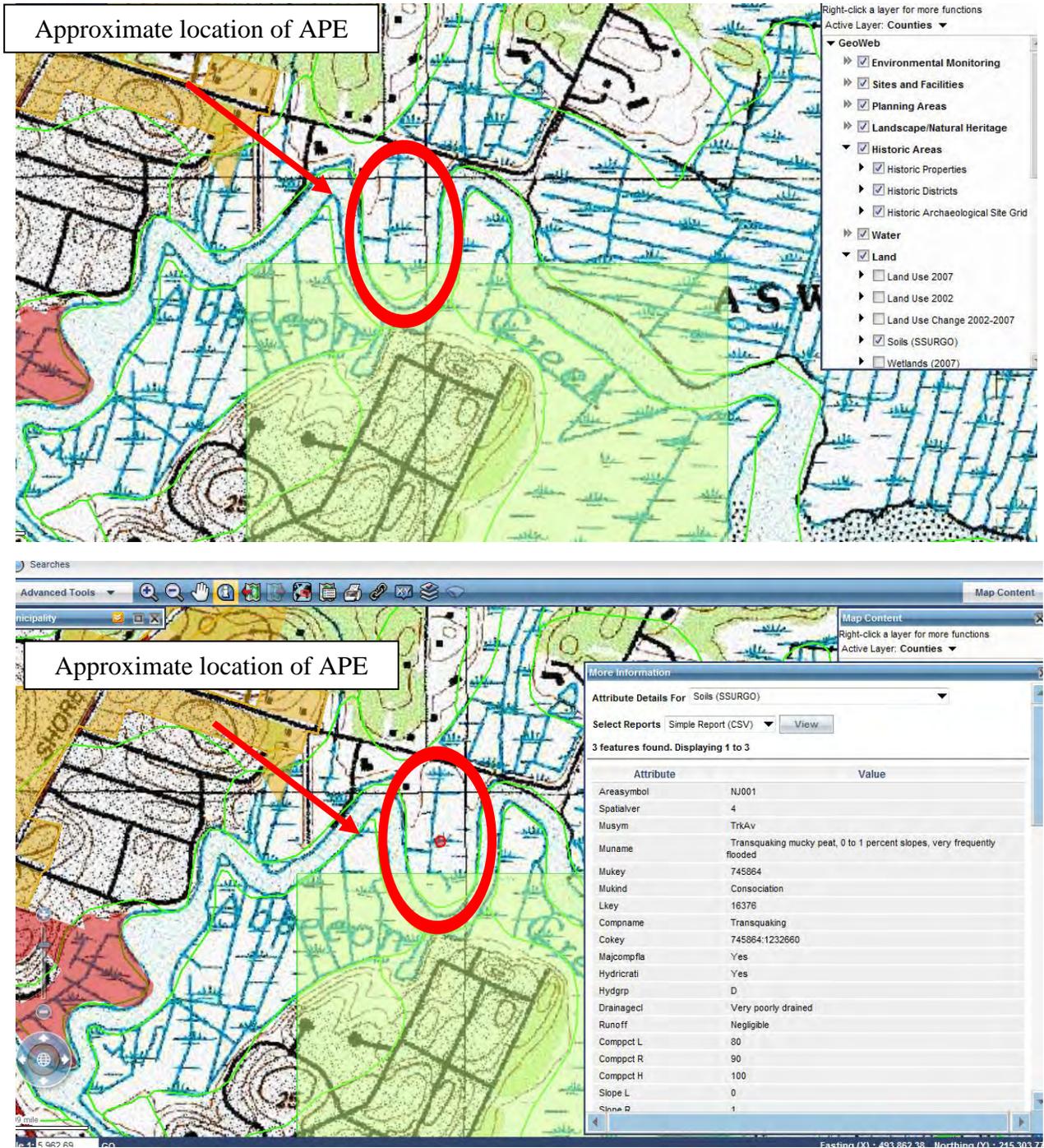


Figure 3: NJ GeoWeb Map





FEMA

January 13, 2015

Ms. Glenna Wallace
Chief
Eastern Shawnee Tribe of Oklahoma
12755 South 795 Road
Wyandote, OK 74370

CC: Eastern Shawnee Tribe of Oklahoma
Ms. Robin Dushane, Cultural Preservation Director and Tribal Historic
Preservation Officer
Delaware Nation
Delaware Tribe of Indians
Shawnee Tribe of Oklahoma

Re: **Grant Name and Number:** Hazard Mitigation Grant Program (HMGP) NJ 1867
Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic
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Grantee/Subgrantee: New Jersey Office of Emergency Management/City of
Absecon, New Jersey
Undertaking: Hazard mitigation to Absecon Creek, at Faunce Landing Road,
Absecon, Atlantic County, New Jersey (39.425879, -74.488868-center of project)
Determination: No Historic Properties Affected

Dear Chief Wallace:

The Federal Emergency Management Agency (FEMA) has proposed to provide grant funding from its Hazard Mitigation Grant Program (HMGP) to the New Jersey Office of Emergency Management (Grantee) for the City of Absecon (Subgrantee), New Jersey for a hazard mitigation improvement project to address the frequent flooding and shoreline erosion on Absecon Creek at Faunce Landing Road (Figure 1). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. 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 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.

Due to the ground disturbance associated with the Undertaking for this project, FEMA is initiating Section 106 consultation for the proposed enhancements per 36 CFR Part 800.

Undertaking:

The City is proposing the installation of a stone sill with associated wetland vegetation planting along the shoreline and near the proposed, formal parking area to alleviate flooding and erosion, the installation of a formal, crushed shell parking lot, including low profile bulkheading for flood protection, installation of a timber deck, and construction of a walking path/trail along the route of the existing earthen roadway. The remainder of the roadway shall be vegetated with indigenous coastal vegetation. The project area has been previously disturbed by ground disturbing activities (such as: utilities, roadways, bulkheads) and storm erosion. The applicant proposes to conduct the construction within the disturbed area to an average depth of 1.5 feet (Figure 2).

Area of Potential Effects (APE)

The archaeological APE for the Undertaking is limited to ground disturbance and any staging area(s) associated with this project.

Resources Consulted:

Online resources such as NJGEO-web and Historic Map Works as well as online topographic maps were referenced. Additional research at the New Jersey State Museum was also conducted.

Identification and Evaluation:

Standing Structures:

There is one eligible historic district and one listed historic property on the National Register of Historic Places within a one-half mile radius of the APE. The site is the North Shore Road Historic District (1160 feet) and the property is the John Doughty House located at 40 North Shore Road (2300 feet). While there is an historic district and property in the vicinity, due to the distance there will be no effect on the viewshed.

Archaeological Historic Resources

An archaeological assessment was conducted to determine the Area of Potential Effect (APE)'s sensitivity to below ground archaeological resources. To determine the sensitivity, several aspects of the project were analyzed such as the project's proximity to known archaeological resources, waterways, historic properties, the site's environmental characteristics such as soil analysis and the APE's previous ground disturbance activities. Based on the above information and predictive modeling analyses, an assessment can determine if the site has a high, moderate or low sensitivity to both historical and prehistoric archaeological resources.

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Assessment of Effects:

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within thirty (30) days. Should you have any questions or need additional information regarding this Undertaking, please contact Kelly M Britt, PhD, RPA, Archaeologist, at kelly.britt@fema.dhs.gov or (212) 680-8816. If practicable, we would appreciate an electronic copy of the concurrence letter be emailed to Ms. Britt.

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Regional Environmental Officer

MJ/kb

Enclosures: Maps and photos by applicant

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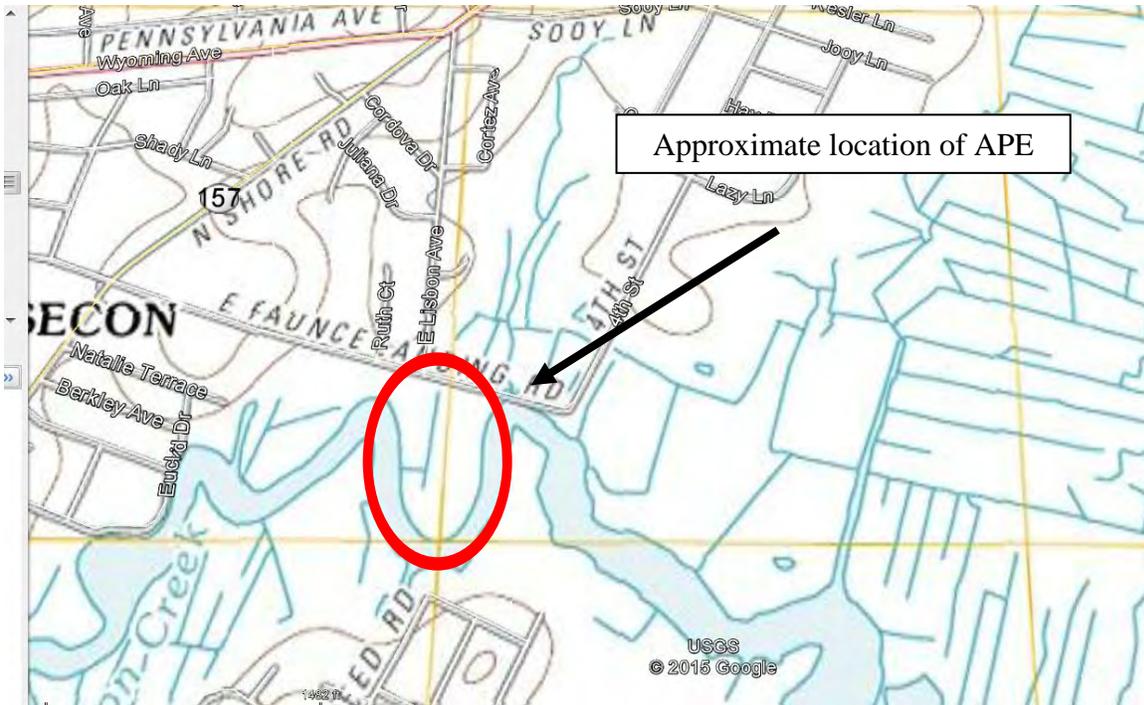
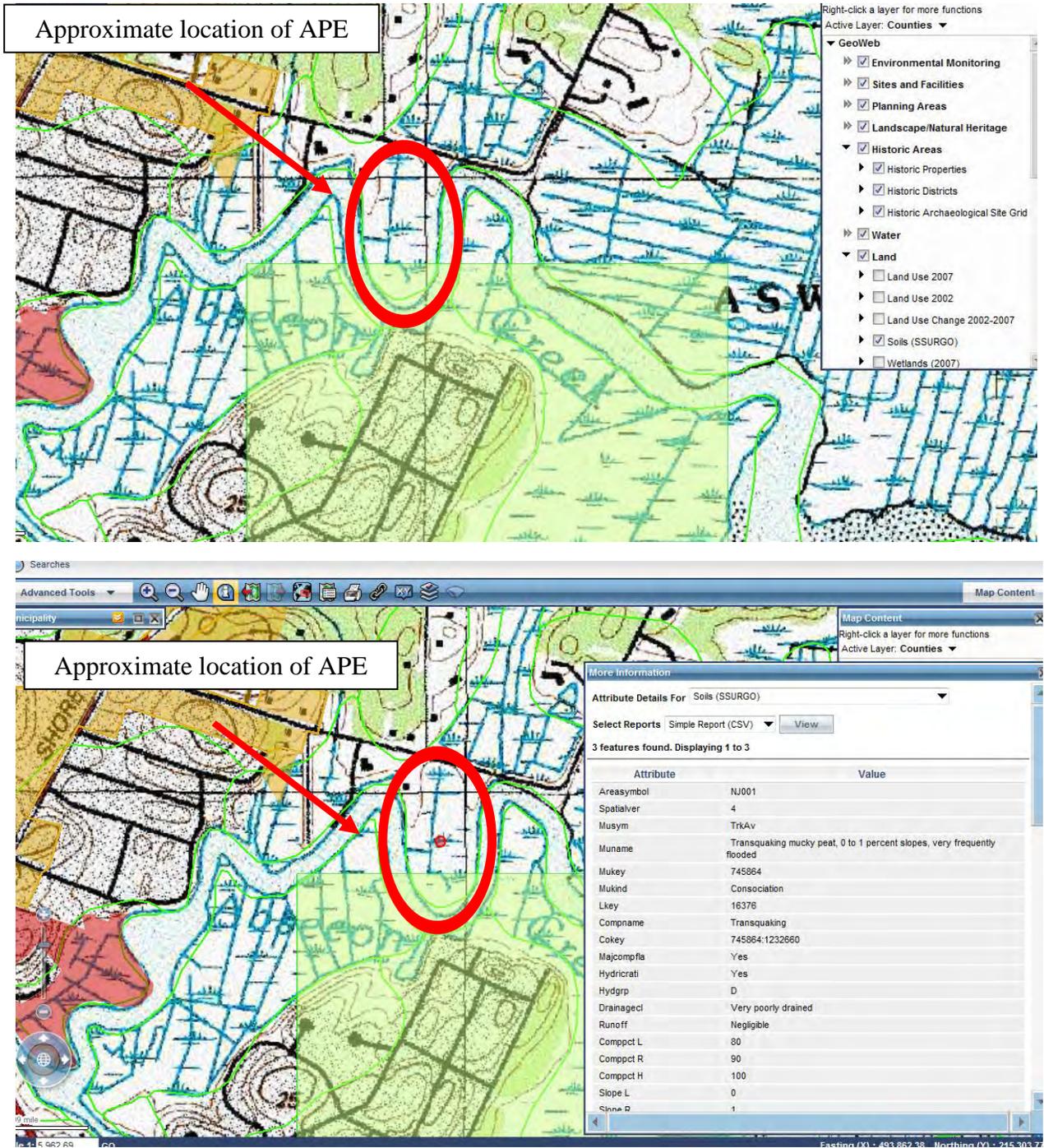


Figure 3: NJ GeoWeb Map





FEMA

January 13, 2015

Mr. Ron Sparkman
Chief
Shawnee Tribe of Oklahoma
P.O. Box 189
Miami, OK 74354

CC: Shawnee Tribe of Oklahoma
Ms. Kim Jumper, Tribal Historic Preservation Officer
Delaware Nation
Delaware Tribe of Indians
Eastern Shawnee Tribe of Oklahoma

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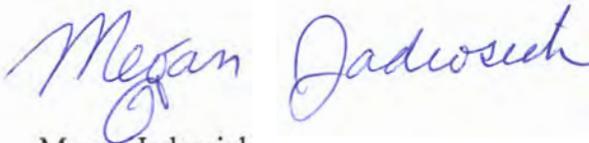
According to NJGEO-web, the APE is located within an archaeological sensitive area (Figure 3). Research conducted at the New Jersey State Museum indicated that there are a total of ten known archaeological sites within a two-mile radius of the APE. All of these are prehistoric sites: Pleasantville (28-AT-3), Smith's Landing (28-AT-4), Smith's Landing (28-AT-5), Smith's Landing (28-AT-6), Mt. Pleasant (28-AT-7), Tripician Farm

(28-AT-83), Greens at Galloway (28-AT-100), No Name (28-AT-110), No Name (28-AT-111A), No Name (28-AT-111B). The sites are attributed to either: an old Indian village site, a large shell heap or a collection of projectile points and jasper flakes. The area surrounding the APE is comprised of various wetlands and Absecon Creek (see attached NJGEO-web map Soils and Wetland). The majority of the APE is directly located in wetlands and also abuts Absecon Creek. The APE is located within the Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv) (see Figure 3). This soil tends to be very frequently flooded with a landform of tidal marshes. The APE is located within close proximity to water and somewhat well drained soils as well as being located in an archaeological sensitive area with ten known archaeological sites and there are historic properties within the APE, giving the APE a moderate to high sensitivity for archaeological resources, particularly prehistoric resources. However, a portion of the area has been previously disturbed for the construction of the current roadways, bulkheads and utilities. Proposed project work is to be constructed within disturbed and undisturbed areas. cursory map research did not produce any historic maps that indicated the area of the APE, thereby giving the APE a low sensitivity to any archaeological resources.

Assessment of Effects:

Based on the aforementioned identification and evaluation, FEMA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, FEMA has determined a finding of **No Historic Properties Affected** for this Undertaking and is submitting this Undertaking to you for your review and comment. FEMA requests your comments within thirty (30) days. Should you have any questions or need additional information regarding this Undertaking, please contact Kelly M Britt, PhD, RPA, Archaeologist, at kelly.britt@fema.dhs.gov or (212) 680-8816. If practicable, we would appreciate an electronic copy of the concurrence letter be emailed to Ms. Britt.

Sincerely,



Megan Jadrosich
Regional Environmental Officer

MJ/kb

Enclosures: Maps and photos by applicant

Figure 1: Location Map and APE

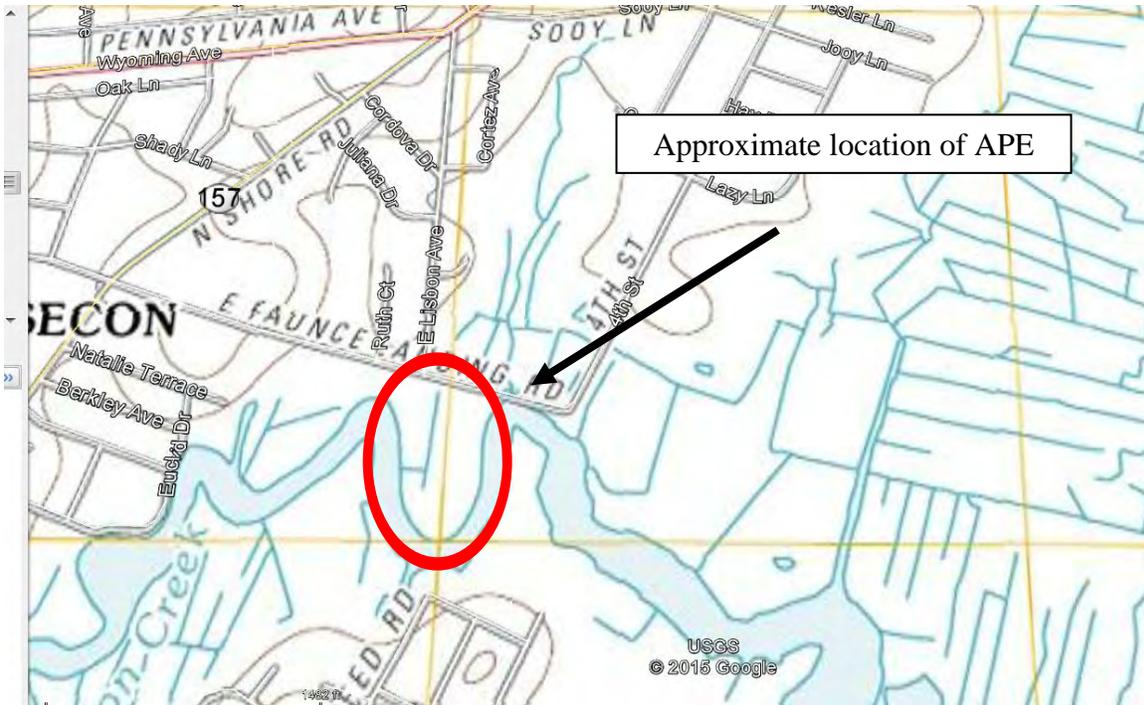


Figure 2: Project Plans

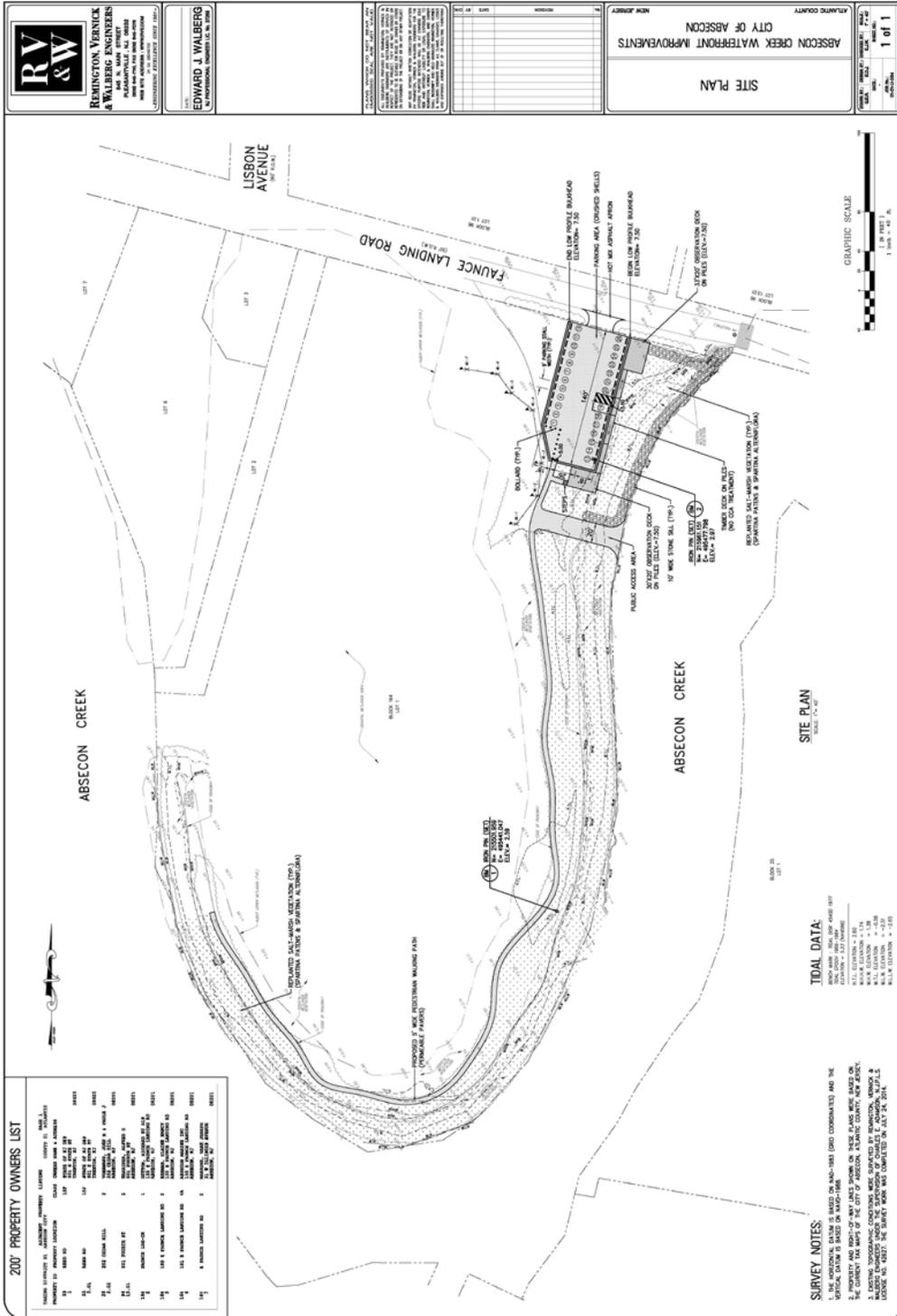
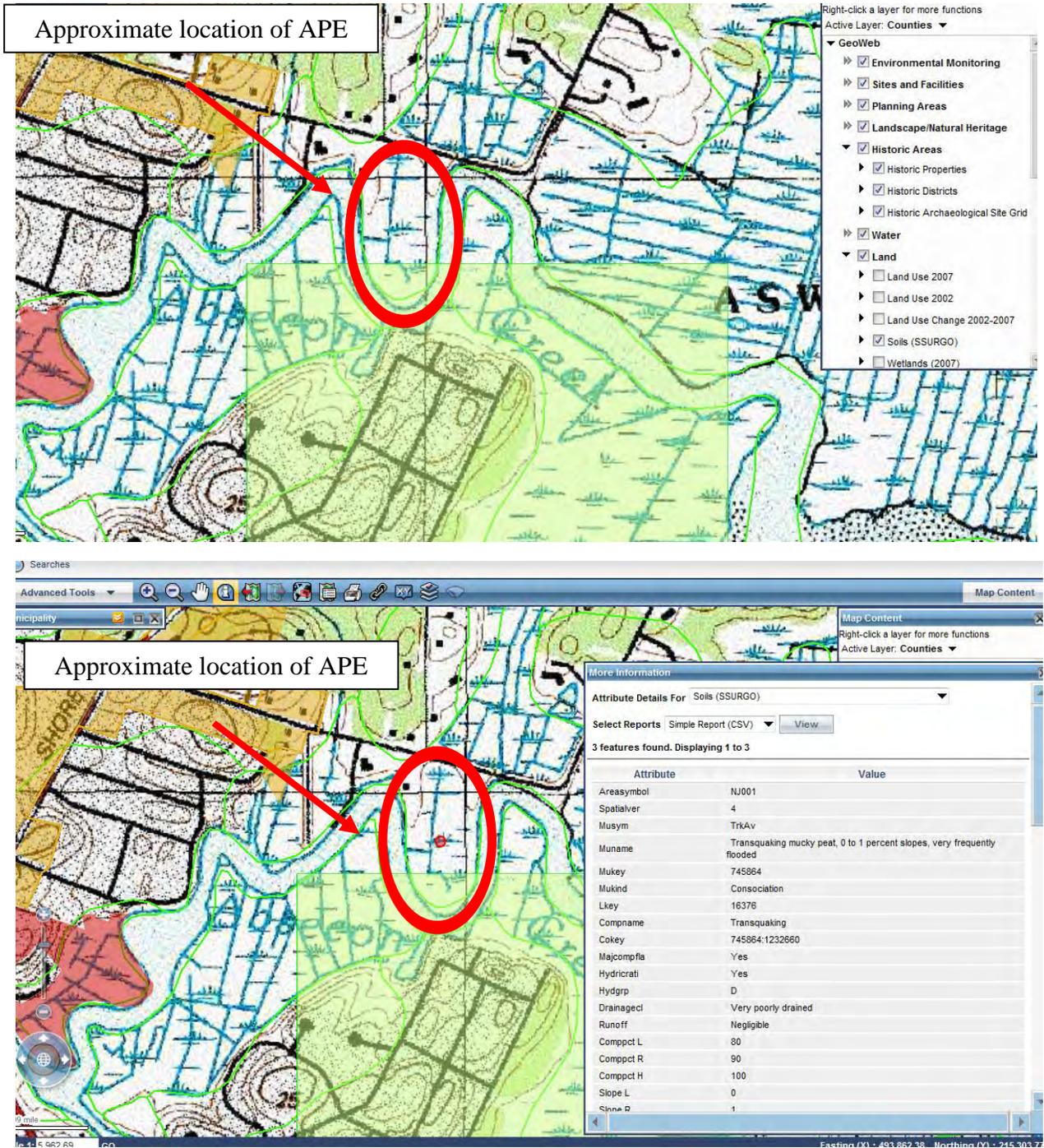


Figure 3: NJ GeoWeb Map





Delaware Tribe Historic Preservation Representatives
Department of Anthropology
Gladfelter Hall
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122
temple@delawaretribe.org

January 19, 2015

U.S. Department of Homeland Security
FEMA, Region II
Attn: Kelly M. Britt
Jacob K. Javits Federal Office Building
Mitigation Division
26 Federal Plaza, 13th Floor
New York, NY 10278

Re: Hazard Mitigation Grant Program (HMGP) NJ 1867 Faunce Landing Road Flood Mitigation Project, Atlantic County

Dear Kelly M. Britt,

Thank you for informing the Delaware Tribe regarding the above referenced project. We are concerned about the close proximity of the project area to resources with cultural or religious significance to the Delaware Tribe. Given the project's location it is our recommendation that you conduct an archaeological field survey that includes subsurface testing in the areas not previously disturbed by buried utilities. After this survey is completed, we would appreciate a copy of the report so that we may reevaluate the project and its potential impact on archaeological and human remains.

Should this project inadvertently uncover an archaeological site and/or human remains, even after an archaeological survey, we request that the project activities be postponed until the appropriate state agencies and the Delaware Tribe are consulted. We appreciate your cooperation. If you have any questions, feel free to contact this office by phone at (609) 220-1047 or by e-mail at temple@delawaretribe.org.

Sincerely,

A handwritten signature in cursive script that reads "Blair Fink".

Blair Fink
Delaware Tribe Historic Preservation Representatives
Department of Anthropology
Gladfelter Hall
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122

From: [Temple University Archaeology](#)
To: [Britt, Kelly](#)
Subject: Re: Absecon Creek #2 Faunce Landing Road
Date: Wednesday, April 01, 2015 6:28:57 PM

Hi Kelly,

Yes, I think if a statement referencing the landscaping and planting activities is included that would work. Thank you!

Best,

Blair Fink
Delaware Tribe Historic Preservation Representative
Department of Anthropology
Gladfelter Hall, Rm. 207
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122
temple@delawaretribe.org
(609) 220-1047

This electronic message contains information from the Delaware Tribe of Indians that may be confidential, privileged or proprietary in nature. The information is intended solely for the specific use of the individual or entity to which this is addressed. If you are not the intended recipient of this message, you are notified that any use, distribution, copying, or disclosure of this communication is strictly prohibited. If you received this message in error, please notify the sender then delete this message.

Britt, Kelly <Kelly.Britt@fema.dhs.gov> , 3/27/2015 9:13 AM:

Thanks for replying Blair. HPO did not request in their response any site visits to the area. We always put a condition on project that requires work to stop if any archaeological resource is uncovered during construction-I'm happy to make that condition more robust if you would like. This is how it usually reads:

If ground disturbing activities occur during construction, 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.

We could add a statement that references this includes the landscaping and planting portion of the project.

What are your thoughts?

Best,
Kelly

Kelly M. Britt, PhD, RPA

Archaeologist

EHP Manager DR-4204 NY

Mitigation Division

Region II

U.S. Department of Homeland Security

26 Federal Plaza, 13th Floor

New York, NY 10278-0002

T: 212-680-8816

F: 212-680-3602

C: 917-587-3866

From: Temple University Archaeology [mailto:temple@delawaretribe.org]

Sent: Thursday, March 26, 2015 9:19 PM

To: Britt, Kelly

Subject: Re: Absecon Creek #2 Faunce Landing Road

Hi Kelly,

Thank you for passing this information on so quickly. It sounds like the ground disturbance will be limited in the high priority area to just the planting for the most part. Because NJDEP also has concerns regarding this area, will there be period site visits to ensure the contractors are staying within areas of previous disturbance?

Best,

Blair Fink

Delaware Tribe Historic Preservation Representative

Department of Anthropology

Gladfelter Hall, Rm. 207

Temple University

1115 W. Polett Walk

Philadelphia, PA 19122

temple@delawaretribe.org

(609) 220-1047

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Britt, Kelly <Kelly.Britt@fema.dhs.gov> , 3/19/2015 9:02 AM:

Hi Blair,

I received some additional information regarding the project we discussed earlier this week regarding plantings, depths of disturbance, staging areas and any grading that might need to occur in that southern portion of the project that is in the sensitive archaeological area:

- 1) *Spartina patens* and *Spartina alterniflora*, planting depth is 6 to 8 inches
- 2) Staging areas will be limited to currently disturbed (dirt) areas
- 3) Very minimal grading will take place for the proposed walkway, the intention is to stabilize the area at its existing elevation.

And was told by the project manager that NJDEP won't let them touch anything green. All the grading work has to be completed using the existing roadway.

Let me know if this assists with your determination and if you need any additional information. I was surprised how quick we got this info back-good sign!

Best,
Kelly

Kelly M. Britt, PhD, RPA

Archaeologist

EHP Manager DR-4204 NY

Mitigation Division

Region II

U.S. Department of Homeland Security

26 Federal Plaza, 13th Floor

New York, NY 10278-0002

T: 212-680-8816

F: 212-680-3602

C: 917-587-3866

From: [Kim Jumper](#)
To: [Britt, Kelly](#)
Subject: RE: Absecon Creek Faunce Landing Road
Date: Tuesday, March 24, 2015 3:50:04 PM

This letter is in response to the above referenced project.

The Shawnee Tribe's Tribal Historic Preservation Department concurs that no known historic properties will be negatively impacted by this project. We have no issues or concerns at this time, but in the event that archaeological materials are encountered during construction, use, or maintenance of this location, please re-notify us at that time as we would like to resume consultation under such a circumstance.

Thank you for giving us the opportunity to comment on this project.

Sincerely,
Kim Jumper, THPO
Shawnee Tribe

From: Britt, Kelly [mailto:Kelly.Britt@fema.dhs.gov]
Sent: Tuesday, March 17, 2015 2:50 PM
To: Kim Jumper
Subject: Absecon Creek Faunce Landing Road

Hi Kim,
I'm emailing regarding the above listed project we mailed to your office for consultation on 1/19/15. I just wanted to follow-up and see if you had any comments or concerns. I've attached a digital version in case for some reason you never received the hard copy. Thank you.
Best,
Kelly

Kelly M. Britt, PhD, RPA
Archaeologist
EHP Manager DR-4204 NY

Mitigation Division
Region II
U.S. Department of Homeland Security
26 Federal Plaza, 13th Floor
New York, NY 10278-0002
T: 212-680-8816

F: 212-680-3602

C: 917-587-3866



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609-646-9310 Fax: 609-646-0352
<http://www.fws.gov/northeast/njfieldoffice>



IN REPLY REFER TO:
12-CPA-0248

BJ Smith, Disaster Response Operations Specialist
U.S. Department of Homeland Security
FEMA Region II
26 Federal Plaza, Room 1307
New York, New York 10278
Barbara.Smith@fema.dhs.gov

JUN 27 2012

Reference: Hazard Mitigation Grant Program, Faunce Landing Road, City of Absecon, Atlantic County, New Jersey

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) ensuring the protection of federally listed endangered and threatened species, the Migratory Bird Treaty Act of 1918 (40 Stat. 755, as amended; 16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e; 48 Stat. 401).

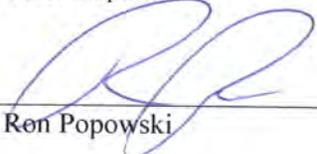
A known occurrence or potential habitat for the following federally listed or candidate species is located on or near the project's impact area. However, the Service concurs that the proposed project is not likely to adversely affect federally listed or candidate species for the reasons listed below.

Species	Basis for Determination
Knieskern's beaked-rush (<i>Rhynchospora knieskernii</i>) (threatened)	Lack of suitable habitat

Except for the above-mentioned species, no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the proposed project's impact area. Therefore, no further consultation pursuant to the ESA is required. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Please refer to this office's web site at <http://www.fws.gov/northeast/njfieldoffice/Endangered/> for further information including federally listed and candidate species lists, procedures for requesting ESA review, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage and Endangered and Nongame Species Programs regarding State-listed and other species of concern.

Reviewing Biologist: 
Carlo Popolizio

Authorizing Supervisor: 
Ren Popowski



FEMA

June 12, 2012

Mr. Ron Popowski
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

RE: Application for Federal Assistance
Hazard Mitigation Grant Program
Faunce Landing Road, Absecon City, Atlantic County, New Jersey
Disaster 1867

Dear Mr. Popowski:

The Department of Homeland Security's Federal Emergency Management Agency (DHS-FEMA), Region II, is completing review of the above referenced application for Federal assistance under the Hazard Mitigation Grant Program. The Endangered Species Act of 1973 requires Federal agencies to determine the effects of their actions on threatened and endangered (T&E) species of fish, wildlife and plants and their critical habitats, and take steps to conserve and protect these species.

Section 7 of the Endangered Species Act directs all Federal agencies to use their existing authorities to conserve threatened and endangered species and, in consultation with the Service, to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat. Therefore, FEMA requests informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Additionally, we request consultation under the Migratory Bird Treaty Act (16 U.S.C. 703, as amended) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) to assist FEMA in determining potential project impacts.

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application. The proposed project location lies within the 100 year flood boundary.

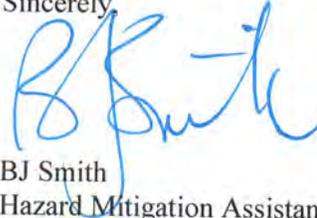
We do not anticipate that the FEMA funding of this project will result in the adverse affects to listed species (Knieskern's Beaked-Rush) provided that the project is adequately screened and reviewed for the potential presence of federally-listed species; and the potential conflicts are resolved via coordination with USFWS prior to project implementation.

Please forward your response to the following address within thirty (30) days. If you have any questions, please contact me at (571) 329-6452 or by email at barbara.smith@fema.dhs.gov or Megan Jadrosich at megan.jadrosich@dhs.gov.

BJ Smith or Megan Jadrosich
Department of Homeland Security
Federal Emergency Management Agency – Region II
26 Federal Plaza, Room 1307
New York, NY 10278

Thank you for your time and consideration on this matter.

Sincerely,



BJ Smith
Hazard Mitigation Assistance Specialist
DHS/FEMA Region II

Enclosures: List of Endangered Species by Municipality
Project Design and Photos
US Geological Survey 7.5 Minute Topo Quad
Wetlands Map
FIRM Map

Dear U.S. Department of Homeland Security
26 Federal Plaza
Room 1307
Mitigation Division-EHP
New York, New York 10278



FEMA

April 30, 2015

Mr. Ron Popowski
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

RE: Application for Federal Assistance
Hazard Mitigation Grant Program
Faunce Landing Road, Absecon City, Atlantic County, New Jersey Disaster 1867
Re-consultation-12-CPA-0248, Original consult dated June 12, 2012

Dear Mr. Popowski:

The Department of Homeland Security's Federal Emergency Management Agency (DHS-FEMA), Region II originally informally consulted with your office in accordance with the Endangered Species Act in a letter dated June 12, 2012 regarding the above referenced application for Federal assistance under the Hazard Mitigation Grant Program. Your office's concurrence letter was dated June 27, 2012 and is enclosed. The project's proposed design was modified since 2012 to incorporate a living shoreline design concept for shoreline stabilization for the majority of the project reach, reduce the length of proposed bulkhead and incorporate use of pervious parking lot and trail materials; hence, the revised design alternative minimizes potential for adverse impacts to the environment and wildlife and fisheries species and habitat associated with this shoreline erosion control and road damage risk reduction project. Thank you to the Service's active participation and guidance to FEMA and the Grantee/Subgrantee stakeholders in the alternative design formulation process to arrive at a design that better balances the project purpose and need with natural resource stewardship and floodplain management.

Since first informally consulting with your office in 2012, the Red Knot and the Northern Long-Eared Bat were listed as threatened and we are re-initiating Section 7 consultation with your office for these two (2) species. Our previous consultation addressed the Kneiskern's Beaked-Rush. Therefore, FEMA requests informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Additionally, we request consultation under the Migratory Bird Treaty Act (16 U.S.C. 703, as amended) and the Service's comments are also welcomed in accordance with the National Environmental Policy Act (42 U.S.C. 4321 et seq.), as FEMA is preparing an Environmental Assessment for the project.

Proposed Project Description:

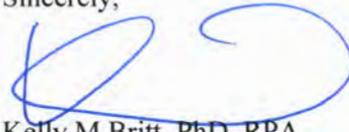
The City is proposing the installation of a stone sill with associated wetland vegetation planting along the shoreline and near the proposed, formal parking area to alleviate flooding and erosion, the installation of a formal, crushed shell parking lot, including low profile bulkheading for flood protection, bollards, installation of a timber deck on piles, two observation decks (one 30' x 20' and one 33' x 20') and construction of a 5' walking path/trail of permeable pavers. The remainder of the roadway shall be vegetated with indigenous coastal vegetation (see attached photos and site drawing).

Findings:

The design changes proposed did not change our earlier finding of not likely to adversely affect the Kneiskern's Beaked-Rush. As the project would not involve any tree removal, FEMA finds that the action would have no effect on the Northern Long-eared bat. The project area supports intertidal habitat and nearshore habitat that is utilized by migratory shorebirds; however, we do not have site-specific information concerning regular use of this area by the red knot. The design modification to incorporate a living shoreline approach with enhanced native plant landscaping with some rock stabilization and minimal bulkhead installation is anticipated to balance shoreline stabilization needs with the estuarine foraging habitat for shorebirds such as herons and egret. Wildlife and migratory birds would be displaced temporarily from the immediate project area during construction due to noise and equipment operation/ground disturbing activities; however, the grantee/subgrantee would be required to avoid take of migratory birds during construction and the area would support foraging habitat post-construction. FEMA finds that the proposed action would not significantly adversely impact migratory birds or migratory bird habitat. FEMA finds that the proposed action may affect but is not likely to adversely affect the listed red knot.

We look forward to your concurrence with these findings and any additional comments you may have for final design planning within thirty days (30) of receipt of this letter. It would be helpful in expediting the grant delivery if your return correspondence was emailed to Kelly.Britt@fema.dhs.gov. If you have any questions, please contact me at (212) 680-8816 or by email or Megan Jadrosich, Regional Environmental Officer at megan.jadrosich@fema.dhs.gov and (212) 680-3635. Thank you for your time and consideration on this matter.

Sincerely,



Kelly M Britt, PhD, RPA
Archaeologist
DHS/FEMA Region II

Enclosures:

Consultation Letters dated June 12, 2012 and Response dated June 26, 2012
Project Design and Photos
US Geological Survey 7.5 Minute Topo Quad

Figure 1: Location Map and APE

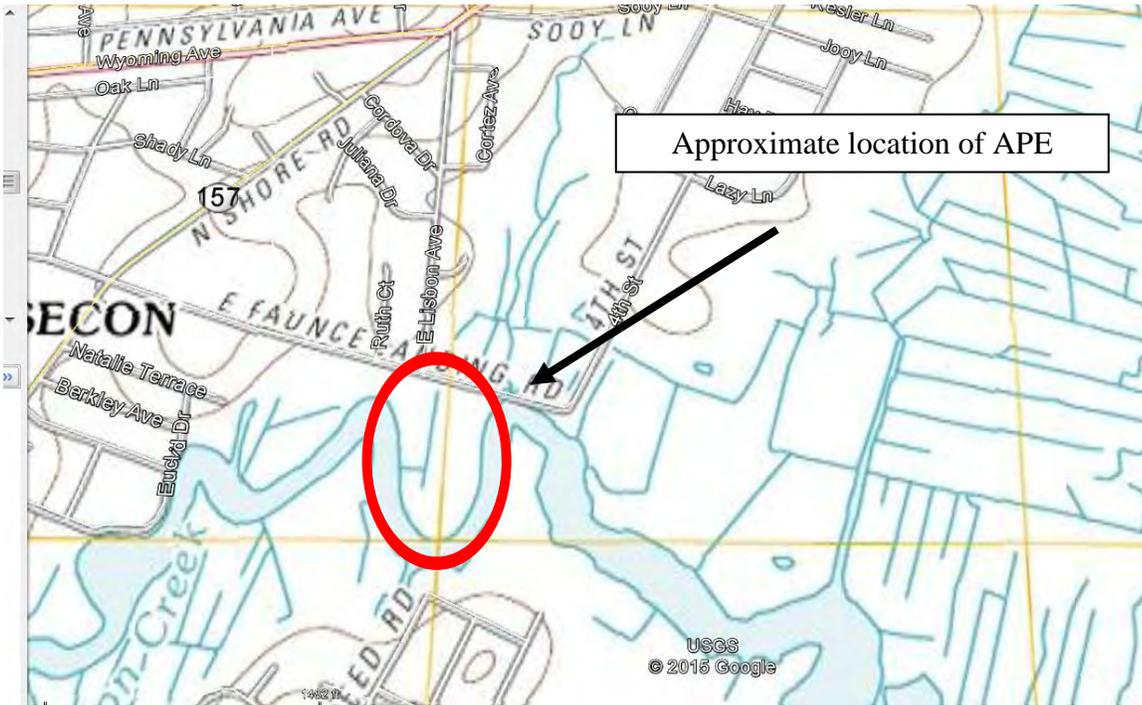
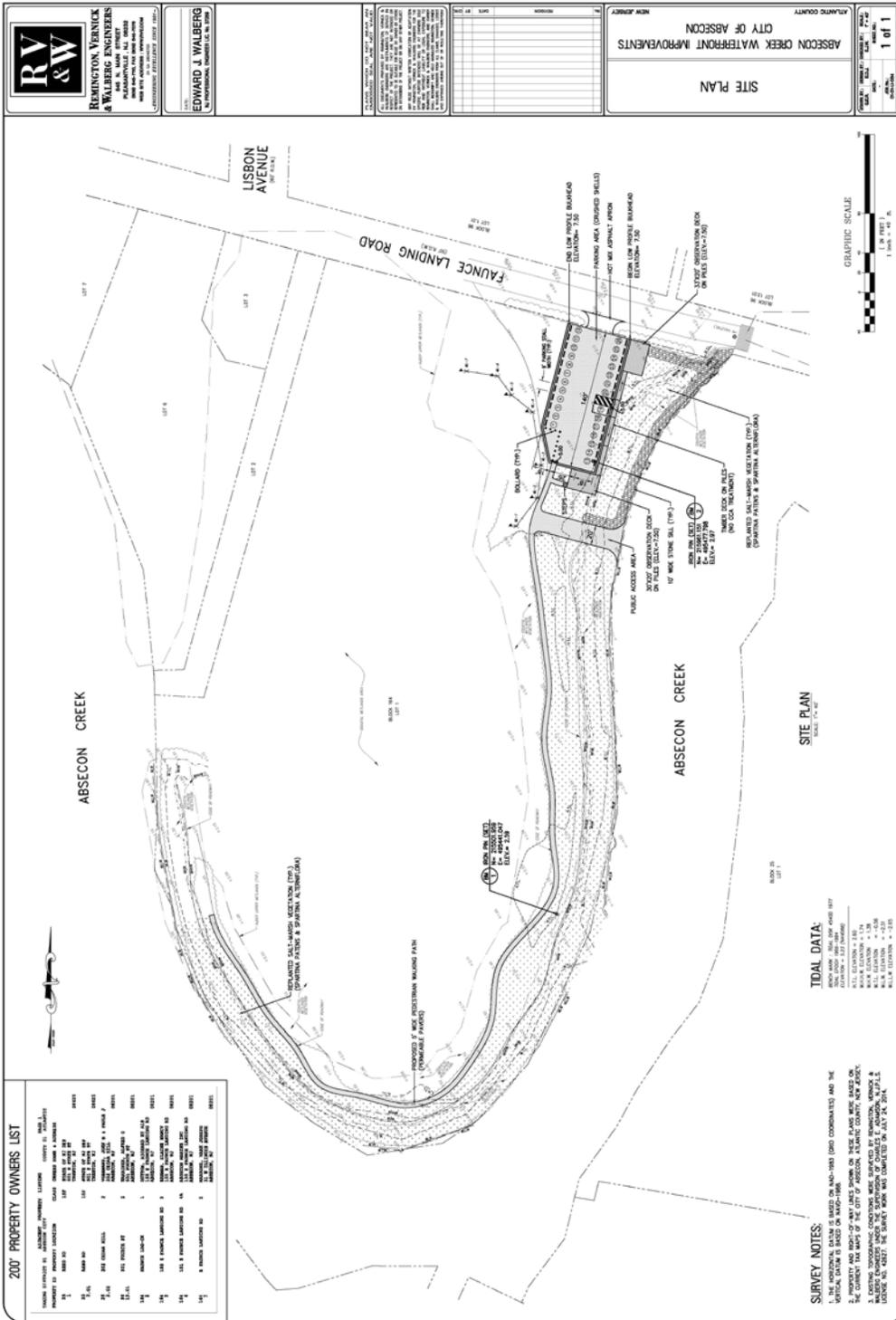


Figure 2: Project Plans





FEMA

June 12, 2012

Mr. Ron Popowski
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

RE: Application for Federal Assistance
Hazard Mitigation Grant Program
Faunce Landing Road, Absecon City, Atlantic County, New Jersey
Disaster 1867

Dear Mr. Popowski:

The Department of Homeland Security's Federal Emergency Management Agency (DHS-FEMA), Region II, is completing review of the above referenced application for Federal assistance under the Hazard Mitigation Grant Program. The Endangered Species Act of 1973 requires Federal agencies to determine the effects of their actions on threatened and endangered (T&E) species of fish, wildlife and plants and their critical habitats, and take steps to conserve and protect these species.

Section 7 of the Endangered Species Act directs all Federal agencies to use their existing authorities to conserve threatened and endangered species and, in consultation with the Service, to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat. Therefore, FEMA requests informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Additionally, we request consultation under the Migratory Bird Treaty Act (16 U.S.C. 703, as amended) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) to assist FEMA in determining potential project impacts.

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application. The proposed project location lies within the 100 year flood boundary.

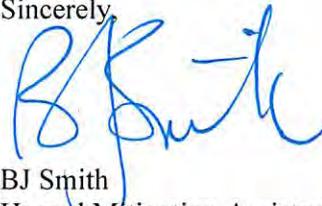
We do not anticipate that the FEMA funding of this project will result in the adverse affects to listed species (Knieskern's Beaked-Rush) provided that the project is adequately screened and reviewed for the potential presence of federally-listed species; and the potential conflicts are resolved via coordination with USFWS prior to project implementation.

Please forward your response to the following address within thirty (30) days. If you have any questions, please contact me at (571) 329-6452 or by email at barbara.smith@fema.dhs.gov or Megan Jadrosich at megan.jadrosich@dhs.gov.

BJ Smith or Megan Jadrosich
Department of Homeland Security
Federal Emergency Management Agency – Region II
26 Federal Plaza, Room 1307
New York, NY 10278

Thank you for your time and consideration on this matter.

Sincerely,



BJ Smith
Hazard Mitigation Assistance Specialist
DHS/FEMA Region II

Enclosures: List of Endangered Species by Municipality
Project Design and Photos
US Geological Survey 7.5 Minute Topo Quad
Wetlands Map
FIRM Map

Federally Listed and Candidate Species Occurrences in New Jersey by County and Municipality

County	Municipality	Bog Turtle (T)	Piping Plover (T)	Indiana Bat (E)	Dwarf Wedgemussel (E)	NE Beach Tiger Beetle (T)	Small Whorled Pogonia (T)	Swamp Pink (T)	Knieskern's Beaked Rush (T)	American Chaffseed (E)	Sensitive Joint-vetch (T)	Seabeach Amaranth (T)	Red Knot (C)	Bog Asphodel (C)	Hirsts' Panic Grass (C)
Federal Listing Status: (E)=Endangered, (T)=Threatened, (C)=Candidate															
E = Extant (present), P = Potential (may be present), H = Historic (may still be present), X = Extirpated (no longer present)															
Extant occurrences of Indiana bat: MA = Maternity (April 1 to Sept. 30), HI = Hibernation															
ATLANTIC	Absecon City								P						
ATLANTIC	Atlantic City		P									E	P		
ATLANTIC	Brigantine City		E									E	E		
ATLANTIC	Buena Borough							P	P						
ATLANTIC	Buena Vista Township							P	P	H				P	
ATLANTIC	Corbin City							P	P						
ATLANTIC	Egg Harbor City							P	H	H				P	
ATLANTIC	Egg Harbor Township	H	E					E	E		H	E	P		
ATLANTIC	Estell Manor City							P	P		H			P	
ATLANTIC	Folsom Borough							P	P	H				P	
ATLANTIC	Galloway Township		E					P	E	H		E	E	E	E
ATLANTIC	Hamilton Township							P	E	H	H			P	
ATLANTIC	Hammonton Town	H						H	E	H				E	
ATLANTIC	Longport Borough		P									P	P		
ATLANTIC	Margate City		P									P	P		
ATLANTIC	Mullica Township							E	E	H				E	
ATLANTIC	Northfield City								P						
ATLANTIC	Pleasantville City							E							
ATLANTIC	Port Republic City							P	H					E	
ATLANTIC	Somers Point City		H												
ATLANTIC	Ventnor City		P									P	P		
ATLANTIC	Weymouth Township							P	P		H			P	
ATLANTIC	Weymouth Township							E	P					P	
BERGEN	Allendale Borough			P											
BERGEN	Alpine Borough	X		P											
BERGEN	Closter Borough			P		X									
BERGEN	Demarest Borough			P											
BERGEN	Emerson Borough			P											
BERGEN	Englewood City			P											
BERGEN	Franklin Lakes Borough			P		X									
BERGEN	Hackensack City	X													
BERGEN	Harrington Park Borough			P											
BERGEN	Haworth Borough			P	X										
BERGEN	Ho-Ho-Kus Borough			P											
BERGEN	Little Ferry Borough			P											
BERGEN	Mahwah Township			P											
BERGEN	Montvale Borough	X		P											
BERGEN	Moonachie Borough			P											
BERGEN	Northvale Borough	X													
BERGEN	Norwood Borough			P											
BERGEN	Oakland Borough			P											
BERGEN	Old Tappan Borough	X		P											
BERGEN	Park Ridge Borough			P											

Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic County, New Jersey (05/2011)



Figure 1

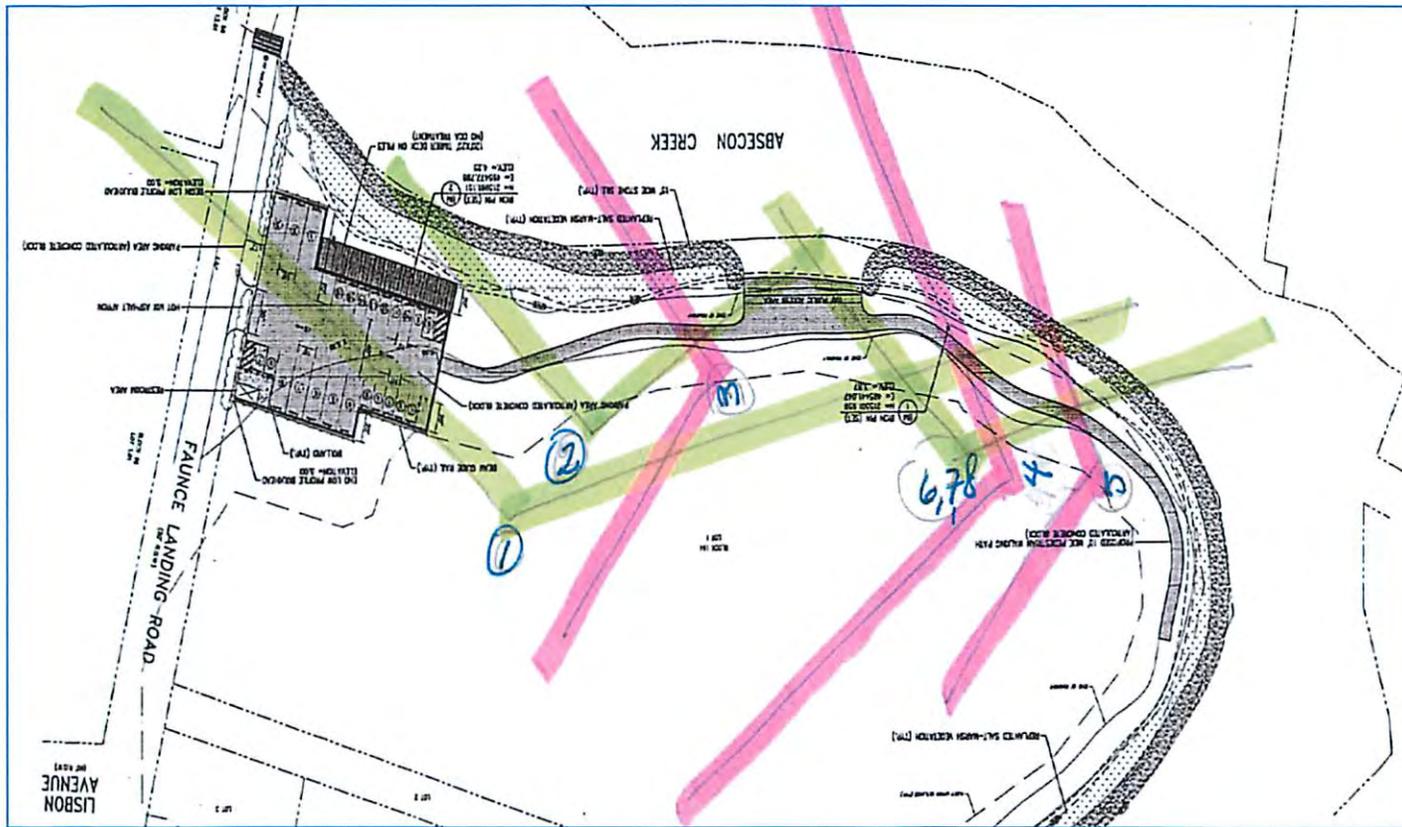




Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

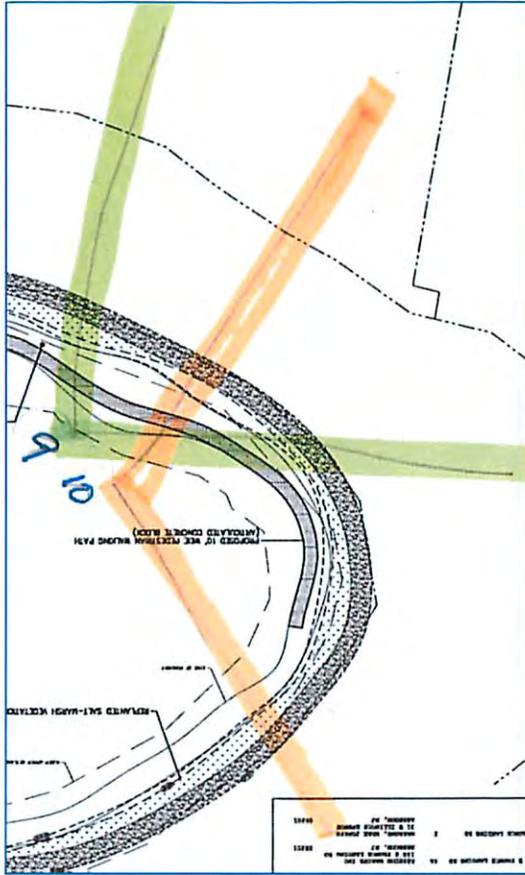


Figure 8



Figure 9



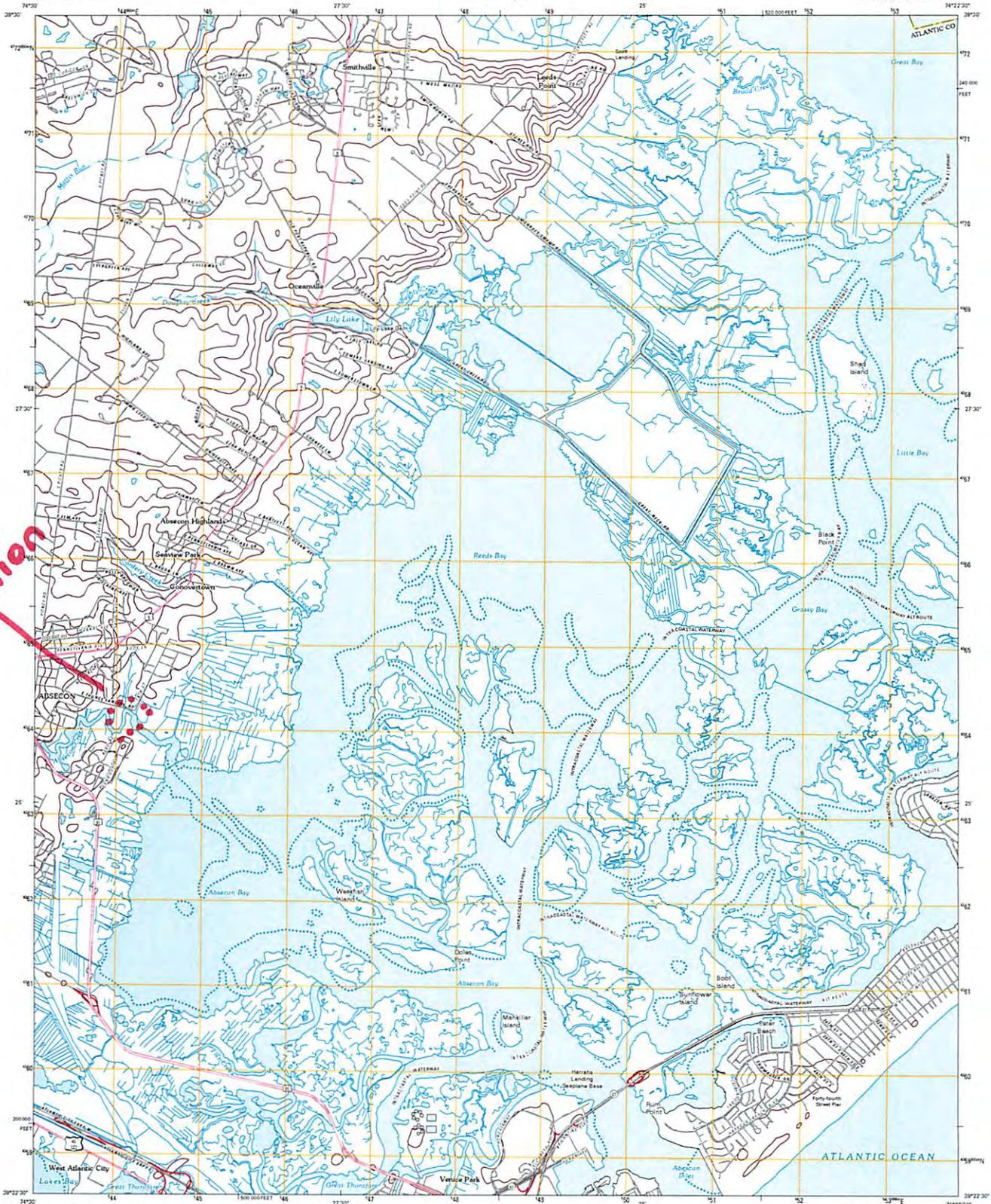
Figure 10



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



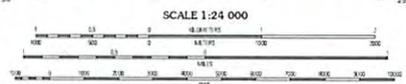
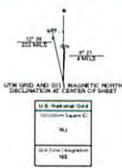
OCEANVILLE QUADRANGLE
NEW JERSEY
7.5-MINUTE SERIES



Project location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000 meter grid. Universal Transverse Mercator, Zone 18S
19 000-foot true New Jersey Coordinate System of 1983

Imagery - State of New Jersey, January 2007 - January 2009
Other Imagery provided by DE, NY, PA
Name - © 2011
Hydrography - National Hydrography Dataset, 2007
Contour Interval - 2005
Boundaries - Census, BLS, DE, USGS, 1972 - 2010



This map was produced in conformance with version 0.5.10
of the USGS On-Line Data Standard.
A metadata file associated with this product is available at version 0.5.10.



ROAD CLASSIFICATION

Interstate Route	State Route
U.S. Route	Local Road
Ramp	BLVD
Structure Name	US Route
	State Route

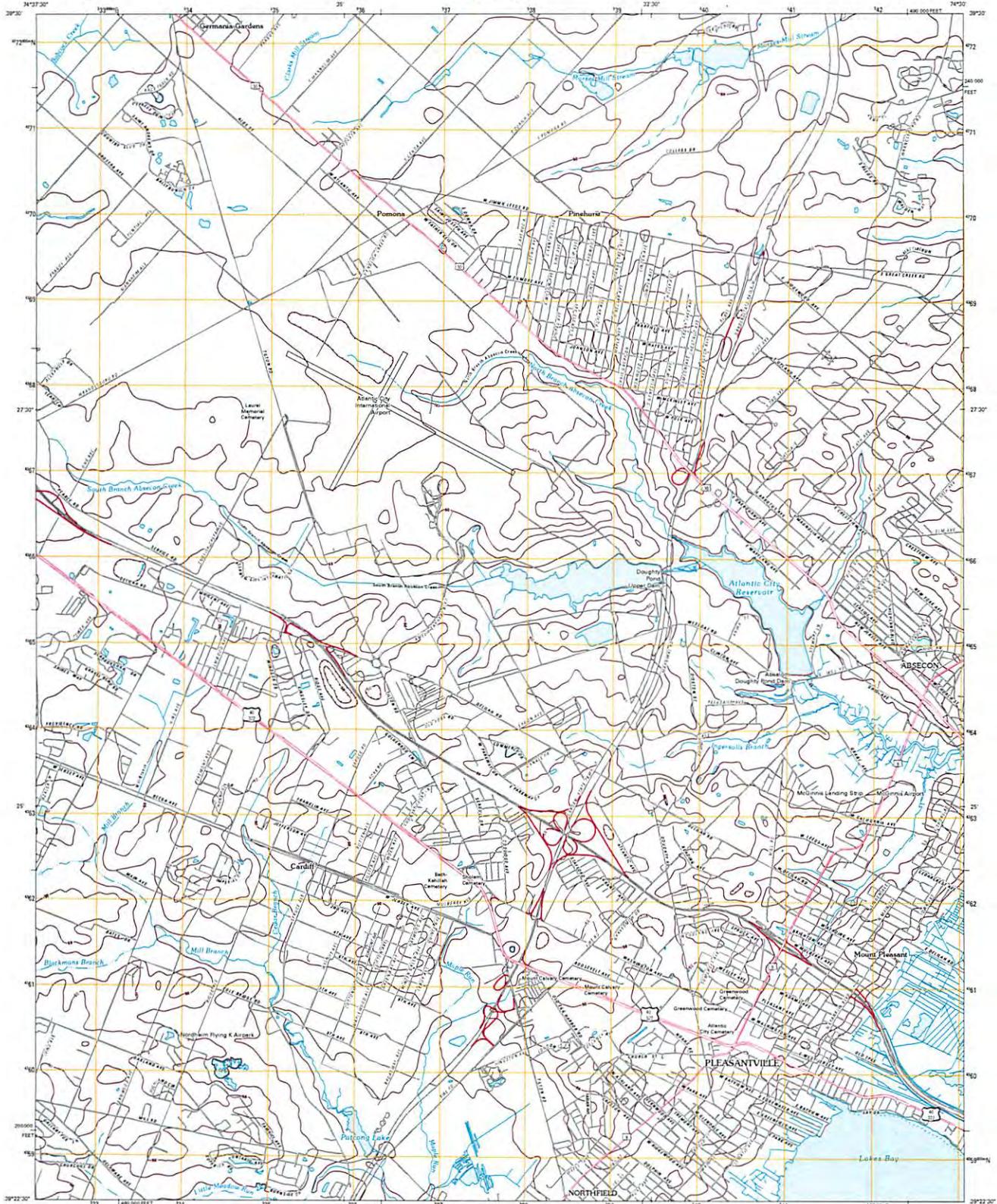
OCEANVILLE, NJ
2011



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

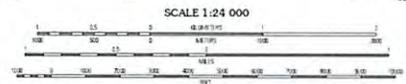
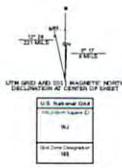


PLEASANTVILLE QUADRANGLE
NEW JERSEY-ATLANTIC CO.
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
North Carolina System of 1985 (NAD83)
1:24,000-scale grid. Universal Transverse Mercator, Zone 18S
20 000-foot (6096-meter) UTM grid. UTM Zone 18S

Imagery: State of New Jersey, January 2007
Other imagery provided by: DLR, PA
Roads: ©2006-2010 Tom Alvo
Shaded: ©2006-2010 Tom Alvo
Hydrography: National Hydrography Dataset, 2005
Contours: National Elevation Dataset, 2005
Boundaries: Census, BIVAC, BK, USGS, 1972-2010

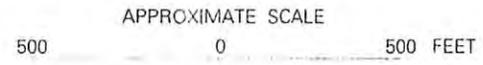
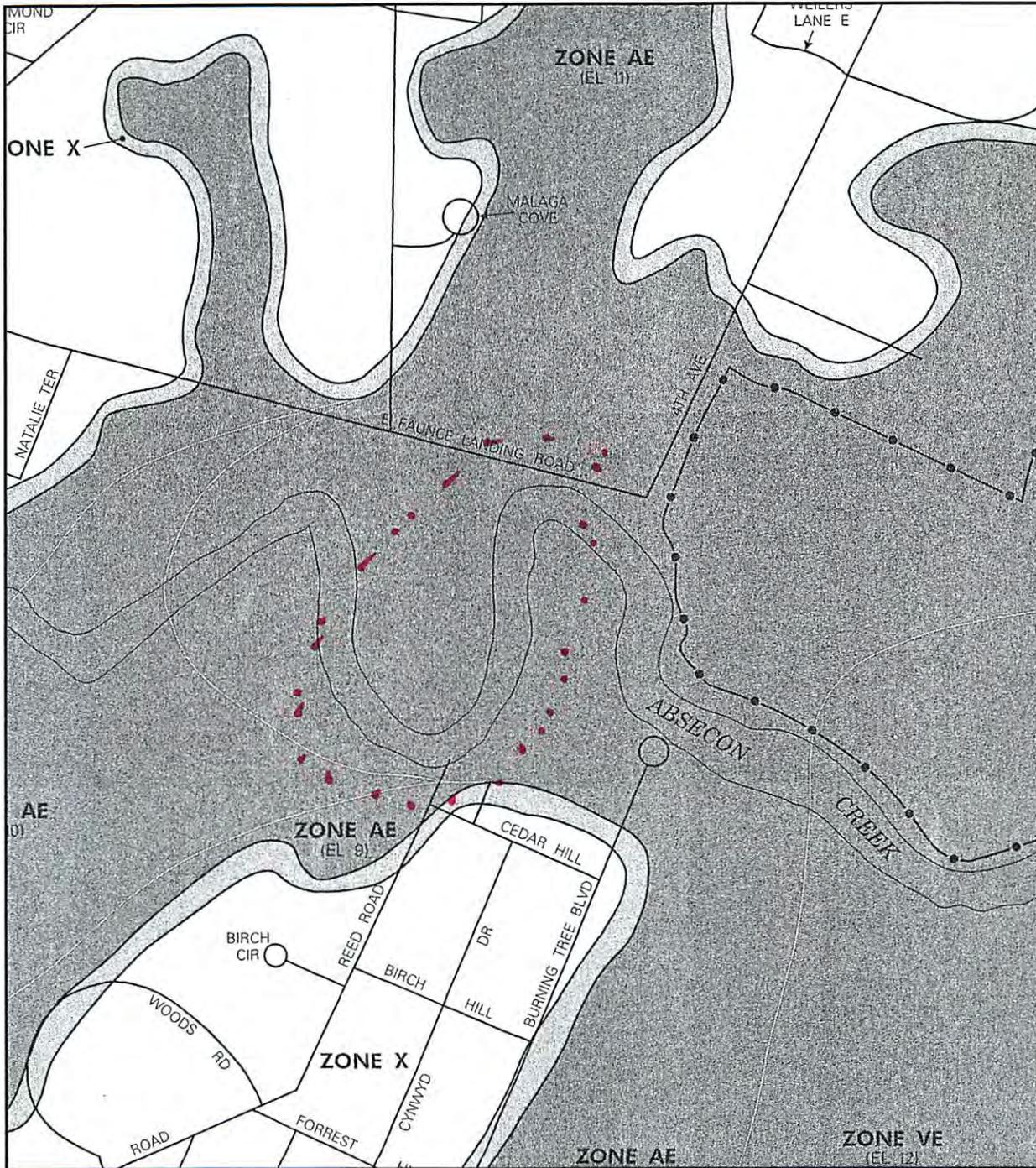


SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1985
This map was produced in conformance with section 8.5.10
of the USGS US Topo Product Standard.
A metadata file associated with this product is available at www.usgs.gov.

SHOREWATER LOCATION		
Bay	Open	Sea
Harbor	Shoal	Coastline
Marina	Channel	Atoll
Canal	Bay	Coastline

ROAD CLASSIFICATION	
Interstate Route	State Route
US Route	Local Road
Trail	RR
Interstate Route	US Route
State Route	State Route

PLEASANTVILLE, NJ
2011



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
ABSECON,
NEW JERSEY
ATLANTIC COUNTY

PANEL 1 OF 3
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY - PANEL NUMBER
340001 0001 C

MAP REVISED:
AUGUST 23, 1999

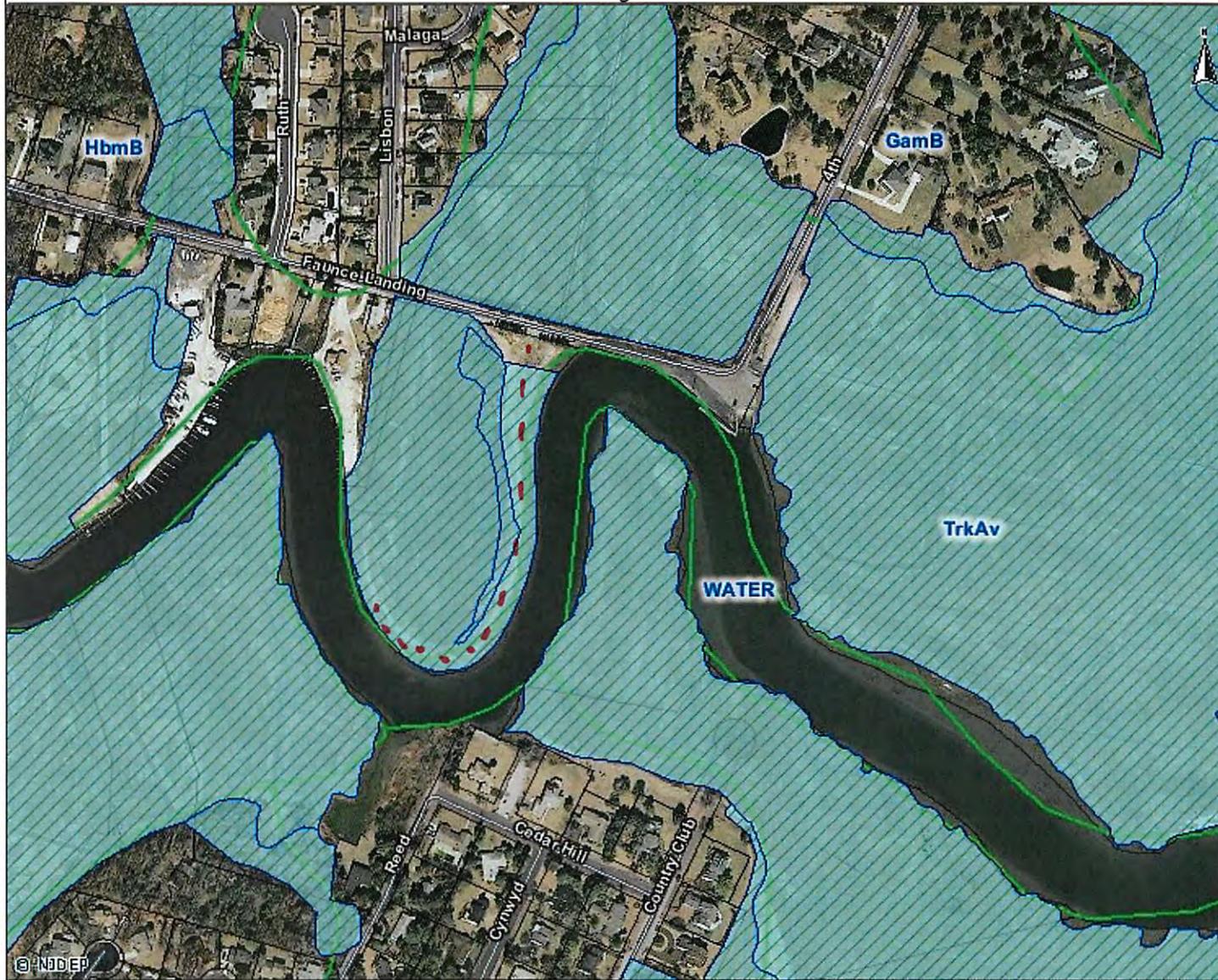


Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Soils and Wetlands

Fauce Landing, Absecon, NJ



Legend

Environmental Data

New Jersey
Parcels Data

Place Names

Counties

Roads (Tele
Atlas)

Major Roads

Toll Road

Interstate

US Highway

State Highway

County 500 Series

County 600 Series

Soils (SSURGO)

Wetlands (2007)

WETLANDS

Mid-Atlantic
States

New Jersey

Other Mid-Atlantic
States

Natural2007

© NIDEP

Map Printed On (2012-06-12 13:11)

0 0.059mi



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609-646-9310 Fax: 609-646-0352
<http://www.fws.gov/northeast/njfieldoffice>



IN REPLY REFER TO:
12-CPA-0248

BJ Smith, Disaster Response Operations Specialist
U.S. Department of Homeland Security
FEMA Region II
26 Federal Plaza, Room 1307
New York, New York 10278
Barbara.Smith@fema.dhs.gov

JUN 27 2012

Reference: Hazard Mitigation Grant Program, Faunce Landing Road, City of Absecon, Atlantic County, New Jersey

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) ensuring the protection of federally listed endangered and threatened species, the Migratory Bird Treaty Act of 1918 (40 Stat. 755, as amended; 16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e; 48 Stat. 401).

A known occurrence or potential habitat for the following federally listed or candidate species is located on or near the project's impact area. However, the Service concurs that the proposed project is not likely to adversely affect federally listed or candidate species for the reasons listed below.

Species	Basis for Determination
Knieskern's beaked-rush (<i>Rhynchospora knieskernii</i>) (threatened)	Lack of suitable habitat

Except for the above-mentioned species, no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the proposed project's impact area. Therefore, no further consultation pursuant to the ESA is required. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Please refer to this office's web site at <http://www.fws.gov/northeast/njfieldoffice/Endangered/> for further information including federally listed and candidate species lists, procedures for requesting ESA review, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage and Endangered and Nongame Species Programs regarding State-listed and other species of concern.

Reviewing Biologist:

Carlo Popolizio

Authorizing Supervisor:

Ren Popowski



FEMA

June 12, 2012

Mr. Ron Popowski
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

RE: Application for Federal Assistance
Hazard Mitigation Grant Program
Faunce Landing Road, Absecon City, Atlantic County, New Jersey
Disaster 1867

Dear Mr. Popowski:

The Department of Homeland Security's Federal Emergency Management Agency (DHS-FEMA), Region II, is completing review of the above referenced application for Federal assistance under the Hazard Mitigation Grant Program. The Endangered Species Act of 1973 requires Federal agencies to determine the effects of their actions on threatened and endangered (T&E) species of fish, wildlife and plants and their critical habitats, and take steps to conserve and protect these species.

Section 7 of the Endangered Species Act directs all Federal agencies to use their existing authorities to conserve threatened and endangered species and, in consultation with the Service, to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat. Therefore, FEMA requests informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Additionally, we request consultation under the Migratory Bird Treaty Act (16 U.S.C. 703, as amended) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) to assist FEMA in determining potential project impacts.

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application. The proposed project location lies within the 100 year flood boundary.

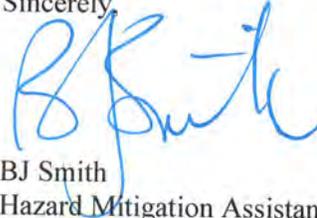
We do not anticipate that the FEMA funding of this project will result in the adverse affects to listed species (Knieskern's Beaked-Rush) provided that the project is adequately screened and reviewed for the potential presence of federally-listed species; and the potential conflicts are resolved via coordination with USFWS prior to project implementation.

Please forward your response to the following address within thirty (30) days. If you have any questions, please contact me at (571) 329-6452 or by email at barbara.smith@fema.dhs.gov or Megan Jadrosich at megan.jadrosich@dhs.gov.

BJ Smith or Megan Jadrosich
Department of Homeland Security
Federal Emergency Management Agency – Region II
26 Federal Plaza, Room 1307
New York, NY 10278

Thank you for your time and consideration on this matter.

Sincerely,



BJ Smith
Hazard Mitigation Assistance Specialist
DHS/FEMA Region II

Enclosures: List of Endangered Species by Municipality
Project Design and Photos
US Geological Survey 7.5 Minute Topo Quad
Wetlands Map
FIRM Map



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

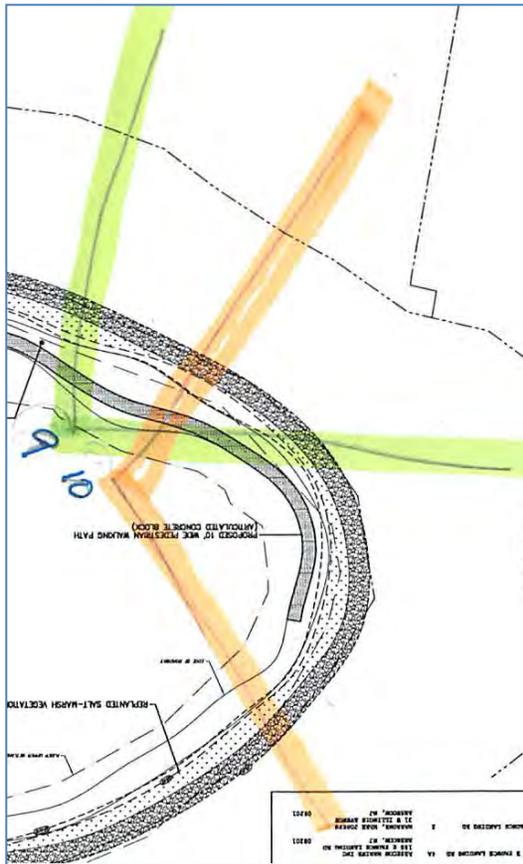


Figure 8



Figure 9



Figure 10



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

Tel: 609-646-9310 Fax: 609-646-0352
<http://www.fws.gov/northeast/njfieldoffice>



IN REPLY REFER TO:
12-CPA-0248a

Dr. Kelly M. Britt, Regional Archeologist
FEMA Region II / Environmental & Historic Preservation
26 Federal Plaza, 13th Floor
New York, New York 10278
Kelly.Britt@fema.dhs.gov

MAY 05 2015

Reference: Faunce Landing Road, Absecon City, Atlantic County, New Jersey – Consultation for red knot (*Calidris canutus rufa*) and northern long-eared bat (*Myotis septentrionalis*)

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) ensuring the protection of federally listed endangered and threatened species, the Migratory Bird Treaty Act of 1918 (40 Stat. 755, as amended; 16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e; 48 Stat. 401).

A known occurrence or potential habitat for the following federally listed or candidate species is located on or near the project's impact area. However, the Service concurs that the proposed project is not likely to adversely affect federally listed or candidate species for the reasons listed below.

Species	Basis for Determination
Red knot (threatened)	All effects are insignificant or discountable
Northern long-eared bat (threatened)	

Except for the above-mentioned species, no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the proposed project's impact area. Therefore, no further consultation pursuant to the ESA is required. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Please refer to this office's web site at <http://www.fws.gov/northeast/njfieldoffice/Endangered/> for further information including federally listed and candidate species lists, procedures for requesting ESA review, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage and Endangered and Nongame Species Programs regarding State-listed and other species of concern.

Reviewing Biologist:

Carlo Popolizio

Authorizing Supervisor:

Ron Popowski

Dear U.S. Department of Homeland Security
26 Federal Plaza
Room 1307
Mitigation Division-EHP
New York, New York 10278



FEMA

April 30, 2015

Mr. Ron Popowski
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232

RE: Application for Federal Assistance
Hazard Mitigation Grant Program
Faunce Landing Road, Absecon City, Atlantic County, New Jersey Disaster 1867
Re-consultation-12-CPA-0248, Original consult dated June 12, 2012

Dear Mr. Popowski:

The Department of Homeland Security's Federal Emergency Management Agency (DHS-FEMA), Region II originally informally consulted with your office in accordance with the Endangered Species Act in a letter dated June 12, 2012 regarding the above referenced application for Federal assistance under the Hazard Mitigation Grant Program. Your office's concurrence letter was dated June 27, 2012 and is enclosed. The project's proposed design was modified since 2012 to incorporate a living shoreline design concept for shoreline stabilization for the majority of the project reach, reduce the length of proposed bulkhead and incorporate use of pervious parking lot and trail materials; hence, the revised design alternative minimizes potential for adverse impacts to the environment and wildlife and fisheries species and habitat associated with this shoreline erosion control and road damage risk reduction project. Thank you to the Service's active participation and guidance to FEMA and the Grantee/Subgrantee stakeholders in the alternative design formulation process to arrive at a design that better balances the project purpose and need with natural resource stewardship and floodplain management.

Since first informally consulting with your office in 2012, the Red Knot and the Northern Long-Eared Bat were listed as threatened and we are re-initiating Section 7 consultation with your office for these two (2) species. Our previous consultation addressed the Kneiskern's Beaked-Rush. Therefore, FEMA requests informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Additionally, we request consultation under the Migratory Bird Treaty Act (16 U.S.C. 703, as amended) and the Service's comments are also welcomed in accordance with the National Environmental Policy Act (42 U.S.C. 4321 et seq.), as FEMA is preparing an Environmental Assessment for the project.

Proposed Project Description:

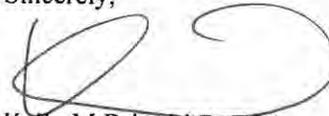
The City is proposing the installation of a stone sill with associated wetland vegetation planting along the shoreline and near the proposed, formal parking area to alleviate flooding and erosion, the installation of a formal, crushed shell parking lot, including low profile bulkheading for flood protection, bollards, installation of a timber deck on piles, two observation decks (one 30' x 20' and one 33' x 20') and construction of a 5' walking path/trail of permeable pavers. The remainder of the roadway shall be vegetated with indigenous coastal vegetation (see attached photos and site drawing).

Findings:

The design changes proposed did not change our earlier finding of not likely to adversely affect the Kneiskern's Beaked-Rush. As the project would not involve any tree removal, FEMA finds that the action would have no effect on the Northern Long-eared bat. The project area supports intertidal habitat and nearshore habitat that is utilized by migratory shorebirds; however, we do not have site-specific information concerning regular use of this area by the red knot. The design modification to incorporate a living shoreline approach with enhanced native plant landscaping with some rock stabilization and minimal bulkhead installation is anticipated to balance shoreline stabilization needs with the estuarine foraging habitat for shorebirds such as herons and egret. Wildlife and migratory birds would be displaced temporarily from the immediate project area during construction due to noise and equipment operation/ground disturbing activities; however, the grantee/subgrantee would be required to avoid take of migratory birds during construction and the area would support foraging habitat post-construction. FEMA finds that the proposed action would not significantly adversely impact migratory birds or migratory bird habitat. FEMA finds that the proposed action may affect but is not likely to adversely affect the listed red knot.

We look forward to your concurrence with these findings and any additional comments you may have for final design planning within thirty days (30) of receipt of this letter. It would be helpful in expediting the grant delivery if your return correspondence was emailed to Kelly.Britt@fema.dhs.gov. If you have any questions, please contact me at (212) 680-8816 or by email or Megan Jadrosich, Regional Environmental Officer at megan.jadrosich@fema.dhs.gov and (212) 680-3635. Thank you for your time and consideration on this matter.

Sincerely,



Kelly M Britt, PhD, RPA
Archaeologist
DHS/FEMA Region II

Enclosures:

Consultation Letters dated June 12, 2012 and Response dated June 26, 2012
Project Design and Photos
US Geological Survey 7.5 Minute Topo Quad



FEMA

June 13, 2012

Mr. Christopher M. Dolphin
Bureau of Coastal Regulation
Department of Environmental Protection
Division of Land Use Regulation
P.O. Box 420
Trenton, New Jersey 08625-0420

SUBJECT: Federal Consistency Determination
FEMA Hazard Mitigation Grant Program
Faunce Landing Road Flood Mitigation Project
Absecon City, Atlantic County, NJ

Dear Mr. Dolphin:

The Federal Emergency Management Agency (FEMA), Region II, is evaluating a proposed Hazard Mitigation federal grant project for Absecon City, Atlantic County, New Jersey. The proposed project is located within the Coastal Area Facility Review Act (CAFRA) zone. A Coastal Zone Consistency Statement as well as project information, maps, designs and photos are enclosed for your office's review.

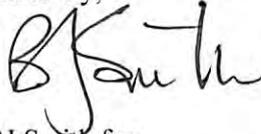
The hazard mitigation project proposes to address the frequent flooding and shore line erosion on Absecon Creek at Faunce Landing Road (see attached vicinity map). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. The project was developed in a partnership between the community and the USFWS Pleasantville Office.

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application.

FEMA has determined that the proposed action is consistent with New Jersey Department of Environmental Protection's (NJDEP) Coastal Zone Management Rules N.J.A.C. 7:7E. The proposed action would not result in significant adverse effects to the special areas as defined in the Coastal Zone Management Rules. FEMA requests a Federal consistency determination from NJDEP's Land Use Regulation Program under Section 307 of the Federal Coastal Zone Management Act (CZMA), 16 U.S.C. 1451 et seq. for the proposed action. The Federal consistency determination needed to award the grant does not eliminate Commercial Township's responsibility to obtain all applicable federal, state and local permits prior to construction implementation, including any necessary permits from NJDEP. FEMA has the capability to approve grants with the condition that all applicable permits will be obtained by the grant applicant prior to construction; therefore, we are seeking a general concurrence from your office in accordance with the CZMA to satisfy our federal agency legal responsibilities prior to grant award.

FEMA looks forward to your office's concurrence with FEMA's federal consistency determination statement for the proposed action. If you have any questions regarding the proposed federal grant project, please do not hesitate to contact me at (212) 680-3635 or Megan.Jadrosich@dhs.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "B. J. Smith". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

BJ Smith for
Megan Jadrosich, PMP
Regional Environmental Officer

Enclosures: CZM Statement, Maps, Designs, and Photographs

CZM Consistency Statement for Faunce Landing Road Flood Mitigation, City of Absecon, Atlantic City, NJ

Statement of Compliance with NJDEP Coastal Zone Management Policies

The proposed flood mitigation project is located in the CAFRA zone and thus, requires approval under the Coastal Area Facility Review Act (CAFRA). Permit decisions under these regulations require review of the project under all applicable Coastal Zone Management Policies.

The Federal consistency determination needed to award a grant does not eliminate the City of Absecon's responsibility to obtain all applicable federal, state and local permits prior to construction implementation, including any necessary permits from NJDEP. FEMA has the capability to approve grants with the condition that all applicable permits will be obtained by the grant applicant prior to construction; therefore, we are seeking a general concurrence from your office in accordance with the CZMA to satisfy our federal agency legal responsibilities prior to grant award.

The Federal Emergency Management Agency (FEMA) has proposed to provide grant funding from its Hazard Mitigation Grant Program (HMGP) to the New Jersey Office of Emergency Management for the City of Absecon, New Jersey for a hazard mitigation improvement project to address the frequent flooding and shore line erosion on Absecon Creek at Faunce Landing Road (see attached vicinity map). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events.

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application.

This low impact design was created by the community in partnership with the USFWS Pleasantville Office and is located near the Turner Avenue and Absecon Boulevard Flood Mitigation project proposal.

N.J.A.C. 7:7E

COASTAL ZONE MANAGEMENT RULES

SUBCHAPTER 3. SPECIAL AREAS

7:7E-3.1 Purpose and scope

(a) Special Areas are areas that are so naturally valuable, important for human use, hazardous, sensitive to impact, or particular in their planning requirements, as to merit focused attention and special management rules. The following addresses compliance with applicable special areas policies.

7:7E-3.2 Shellfish habitat

The project is located near a shellfish habitat.

7:7E-3.3 Surf clam areas

The project is not located near a surf clam area.

7:7E-3.4 Prime fishing areas

Not a prime fishing area.

7:7E-3.5 Finfish migratory pathways

The project is being reviewed by NOAA for Essential Fish Habitat. Concurrence is required prior to grant award.

7:7E-3.6 Submerged vegetation habitat

Unable to observe SAV in the area.

7:7E-3.7 Navigation channels

Construction will not extend into a navigation channel.

7:7E-3.8 Canals

The project is not located in a canal.

7:7E-3.9 Inlets

The project poses minimal affect on the movement of water.

7:7E-3.10 Marina moorings

The project is not in a marina mooring area.

7:7E-3.11 Ports

The project is not located near a port.

7:7E-3.12 Submerged infrastructure routes

The project is not located near a submerged infrastructure route.

7:7E-3.13 Shipwreck and artificial reef habitats

The project is not located near a shipwreck or artificial reef habitat.

7:7E-3.14 Wet borrow pits

The project is not located in or near a wet borrow pit.

7:7E-3.15 Intertidal and subtidal shallows

(b) Development, filling, new dredging or other disturbance is discouraged but may be permitted in accordance with (c), (d), (e), and (f) below and with N.J.A.C. 7:7E-4.2 through 4.22.

Work will be performed in accordance with these regulations and the grantee will be required to obtain all necessary permits.

7:7E-3.16 Dunes

The project is not located in or near a dune area.

7:7E-3.17 Overwash areas

The project is not in an overwash area.

7:7E-3.18 Coastal high hazard areas

The project is not in a coastal high hazard area.

7:7E-3.19 Erosion hazard areas

The project is not located in an erosion hazard area.

7:7E-3.20 Barrier island corridor

The project is not located in a barrier island corridor.

7:7E-3.21 Bay islands

The project is not on a bay island.

7:7E-3.22 Beaches

The project is not on a beach.

7:7E-3.23 Filled water's edge

The proposed project has public use as it is in part reviving a public park.

7:7E-3.24 Existing lagoon edges

The project does not affect existing lagoon edges.

7:7E-3.25 Flood hazard areas

The proposed project is located in the special flood hazard area.

7:7E-3.26 Riparian zones

Portions of the project are located within a riparian zone.

7:7E-3.27 Wetlands

The project is located in a wetland area.

7:7E-3.28 Wetlands buffers

The project may be located in a wetland buffer area.

7:7E-3.29 through 7:7E-3.30 (Reserved)

7:7E-3.31 Coastal bluffs

The project is not located near a coastal bluff.

7:7E-3.32 intermittent stream corridors

The project is not located near an intermittent stream corridor.

7:7E-3.33 Farmland conservation areas

The project is not located near farmland conservation areas.

7:7E-3.34 Steep slopes

The project is not located near a steep slope.

7:7E-3.35 Dry borrow pits

The project is not located near a dry borrow pit.

7:7E-3.36 Historic and archaeological resources

State Historic Preservation Office must also concur with the proposal prior to grant award.

7:7E-3.37 Specimen trees

The project is not located near a specimen tree.

7:7E-3.38 Endangered or threatened wildlife or plant species habitats

Knieskern's Beaked-Rush is listed. USF&W concurrence is required prior to grant award.

7:7E-3.39 Critical wildlife habitats

The project is not in a critical environmental area.

7:7E-3.40 Public open space

Project does not affect public open space.

7:7E-3.41 Special hazard areas

Project is not located near special hazard areas

7:7E-3.42 Excluded Federal lands

Project is not located in excluded federal lands.

7:7E-3.43 Special urban areas

The project is designed to reduce the impact of floodwaters on the built environment therefore creating an economic and social benefit that serves the needs of local residents and neighborhoods.

7:7E-3.44 Pinelands National Reserve and Pinelands Protection Area

Project does not affect Pinelands National Reserve or Pinelands Protection Area.

7:7E-3.45 Hackensack Meadowlands District

The project is not located near the Hackensack Meadowlands District.

7:7E-3.46 Wild and scenic river corridors

The project is not located near a wild and scenic river corridor.

7:7E-3.47 Geodetic control reference marks

The project should not disturb geodetic control reference marks.

7:7E-3.48 Hudson River Waterfront Area

The project is not located near the Hudson River Waterfront Area.

7:7E-3.49 Atlantic City

The project is located near Atlantic City.

7:7E-3.50 Lands and waters subject to public trust rights

The project is not located on lands and waters subject to public trust rights.

SUBCHAPTER 3A. STANDARDS FOR BEACH AND DUNE ACTIVITIES

The project is not located in a beach or dune area.

SUBCHAPTER 3B. INFORMATION REQUIRED IN TIDAL WETLAND AND INTERTIDAL AND SUBTIDAL SHALLOWS MITIGATION PROPOSALS

This is not a wetlands mitigation project.

SUBCHAPTER 3C. STANDARDS FOR CONDUCTING AND REPORTING THE RESULTS OF AN ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITAT IMPACT ASSESSMENT AND/OR ENDANGERED OR THREATENED WILDLIFE SPECIES HABITAT EVALUATION

Knieskern's Beaked-Rush is listed. USF&W concurrence is required prior to grant award.

SUBCHAPTER 4. GENERAL WATER AREAS

The project is not located in a general water area.

SUBCHAPTER 5. REQUIREMENTS FOR IMPERVIOUS COVER AND

VEGETATIVE COVER FOR GENERAL LAND AREAS AND CERTAIN SPECIAL AREAS

The project area is alongside the existing roadway.

SUBCHAPTER 6. GENERAL LOCATION RULES

7:7E-6.2 Basic location rule

(a) A location may be acceptable for development under N.J.A.C. 7:7E-3, 4, 5, 5A, 5B, and 6, but the Department may reject or conditionally approve the proposed development of the location as reasonably necessary to:

- 1. Promote the public health, safety, and welfare;*
- 2. Protect public and private property, wildlife and marine fisheries; and*
- 3. Preserve, protect and enhance the natural environment.*

7:7E-6.2 Basic location rule

(a)(1, 2) The proposed project is expected to reduce flooding and erosion; therefore promoting the public health, safety, and welfare as well as protecting public property.

7:7E-6.3 Secondary impacts

The project is minor in scope and should not be expected to result in secondary impacts.

SUBCHAPTER 7. USE RULES

7:7E-7.1 Purpose and scope

Many types of development seek to locate in the coastal zone. The second stage in the screening process of the Coastal Zone Management rules involves analysis of appropriate uses of coastal resources. Use rules are rules and conditions applicable to particular kinds of development. Use rules do not preempt location rules which restrict development, unless specifically stated. In general, conditions contained in the use rules must be satisfied in addition to the location rules (N.J.A.C. 7:7E-2 through 6), and the resource rules described in the following subchapter (N.J.A.C. 7:7E-8).

The project area is within the existing roadway.

SUBCHAPTER 8. RESOURCE RULES

7:7E-8.1 Purpose and scope

7:7E-8.2 Marine fish and fisheries

The project should have no effect.

7:7E-8.3 (Reserved)

7:7E-8.4 Water Quality

The project should have no effect.

7:7E-8.5 Surface water use

The project should have no effect.

7:7E-8.6 Groundwater use

The project should have no effect.

7:7E-8.7 Stormwater management

The project should have a positive effect.

7:7E-8.8 Vegetation

The project should have a positive effect.

7:7E-8.9 (Reserved)

7:7E-8.10 Air quality

The project should have no effect.

7:7E-8.11 Public trust rights

The project should have no effect.

7:7E-8.12 Scenic Resources and Design

The project should have a positive effect.

7:7E-8.13 Buffers and compatibility of uses

The project should have a positive effect.

7:7E-8.14 Traffic

The project should have no effect.

7:7E-8.15 through 7:7E-8.20 (Reserved)

The project should have no effect.

7:7E-8.21 Subsurface sewage disposal systems

The project should have no effect.

7:7E-8.22 Solid and hazardous waste

The project should have no effect.

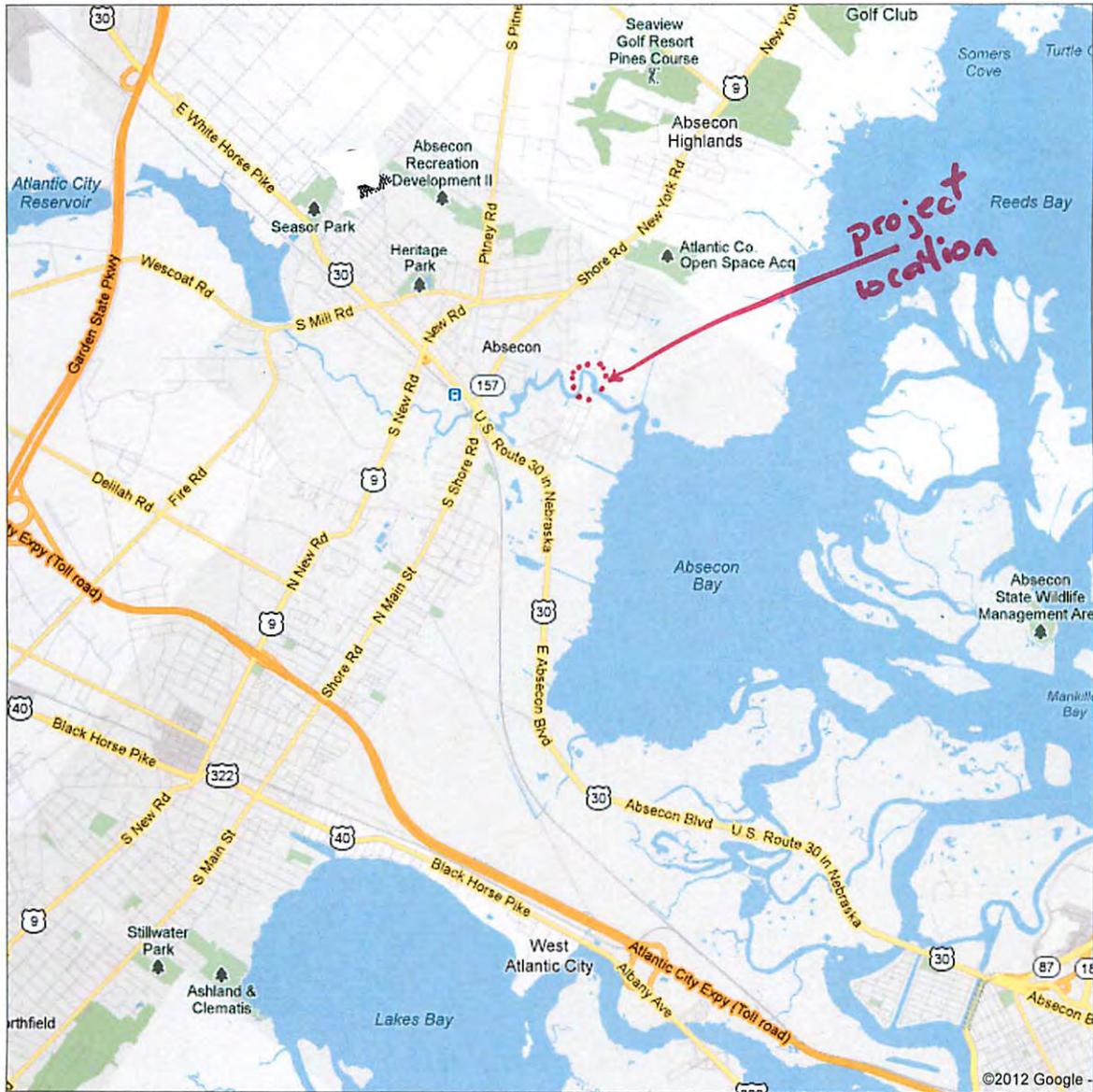
SUBCHAPTER 8A INFORMATION REQUIRED TO DEMONSTRATE COMPLIANCE WITH THE PUBLIC TRUST RIGHTS RULE, N.J.A.C. 7:7E 8.11; CONSERVATION RESTRICTIONS AND PUBLIC ACCESS INSTRUMENTS

Section is not applicable to the project.



Address Morton Ave
Absecon, NJ 08201

Get Google Maps on your phone
Text the word "GMAPS" to 466453

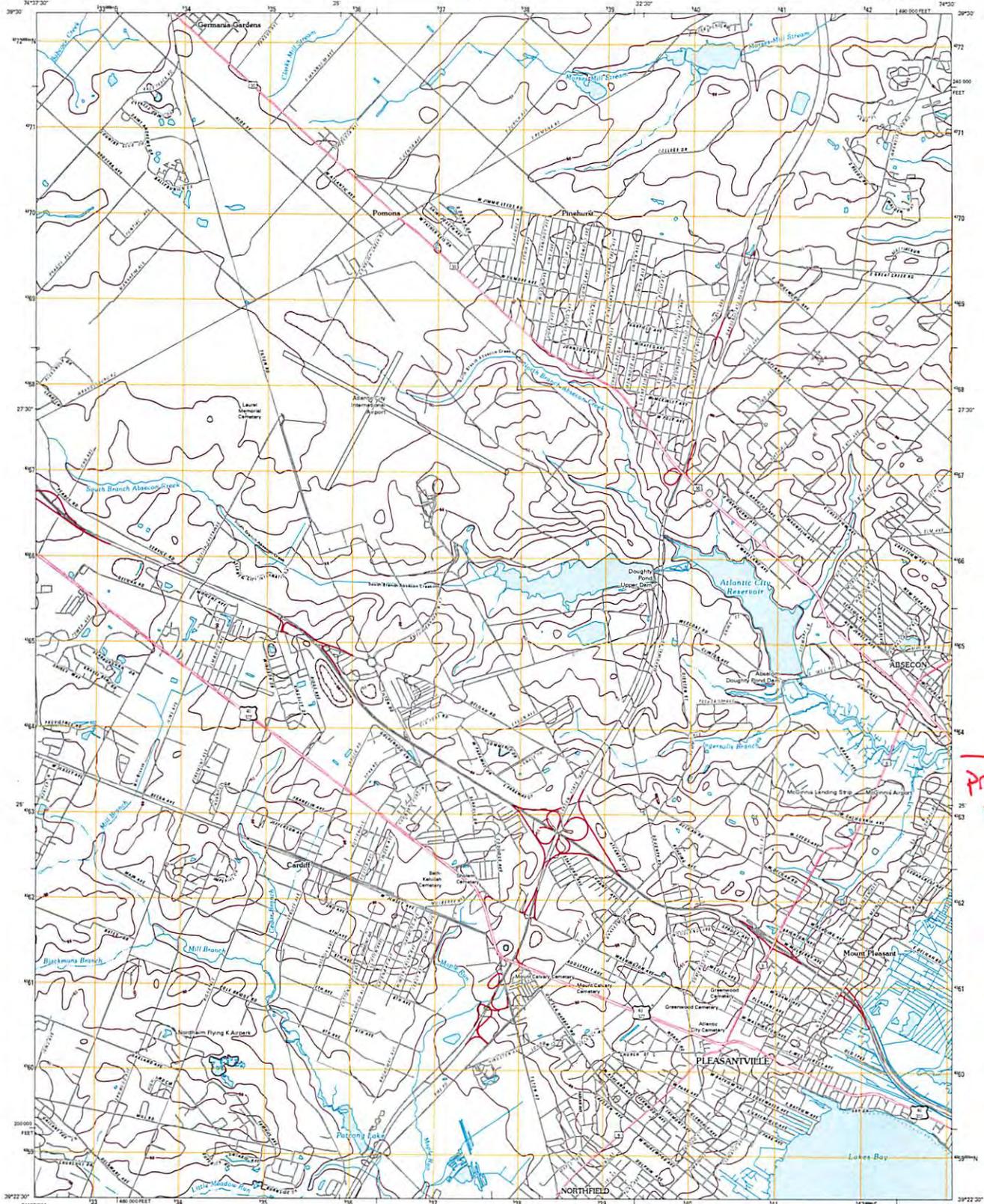




U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



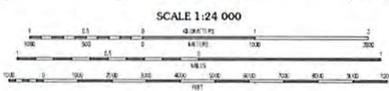
PLEASANTVILLE QUADRANGLE
NEW JERSEY-ATLANTIC CO.
7.5-MINUTE SERIES



Project location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
North Carolina System of 1954 (NAD54) Projection and
1 000-meter grid Universal Transverse Mercator, Zone 18S
US 000000 under New Jersey Coordinate System of 1983

Imagery: State of New Jersey, January 2007
Other Imagery provided by: GE, NY, PA
Roads: ©2006-2010 TomTom
Hydrography: National Hydrography Dataset, 2003
Contours: National Elevation Dataset, 2003
Boundaries: Census, BNA, BC, LSCG, 1972-2010



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1983
This map was produced in accordance with version 8.8.10
of the USGS US Topo Product Standard.
A metadata file associated with this product is draft version 0.5.15.NJ

QUADRANGLE LOCATIONS		
East	Green Bank	New Garden
West	Pomona	Overland
North	Overland	Atlantic City
South	Atlantic City	Atlantic City

ROAD CLASSIFICATION		
Interstate Route	State Route	Local Road
US Route	Level Road	400D
Interstate Park	US Route	State Park

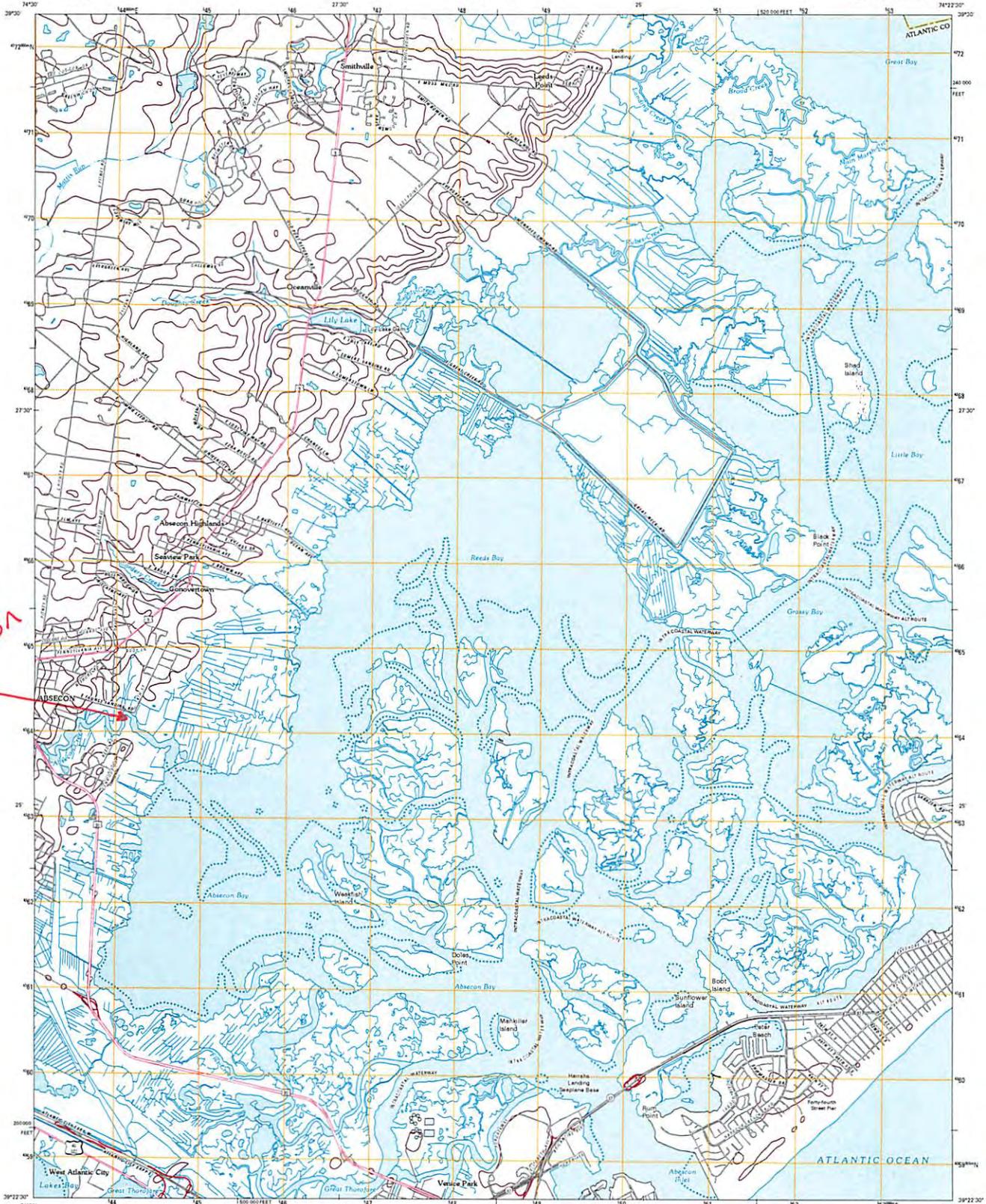
PLEASANTVILLE, NJ
2011



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



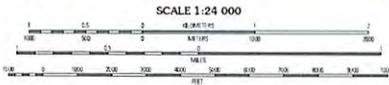
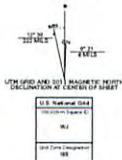
OCEANVILLE QUADRANGLE
NEW JERSEY
7.5-MINUTE SERIES



project location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000 meter grid Universal Transverse Mercator, Zone 18S
18 00000 UTM New Jersey Coordinate System of 1983

Imagery: State of New Jersey, January 2007 - January 2009
Other imagery provided by GIS, NY, PA
Roads: ©2006-2010 Tom Alvo
Name: ©2006-2010 Tom Alvo
Hydrography: National Hydrography Dataset, 2007
Contour: National Geospatial Dataset, 2005
Boundaries: Census, BNA, BIC, USOR, 1972 - 2010



SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1983
This map was produced in accordance with version 8.5.10
of the USGS US Topo Product Standard.
A metadata file associated with this product is at version 0.5.15.NJ

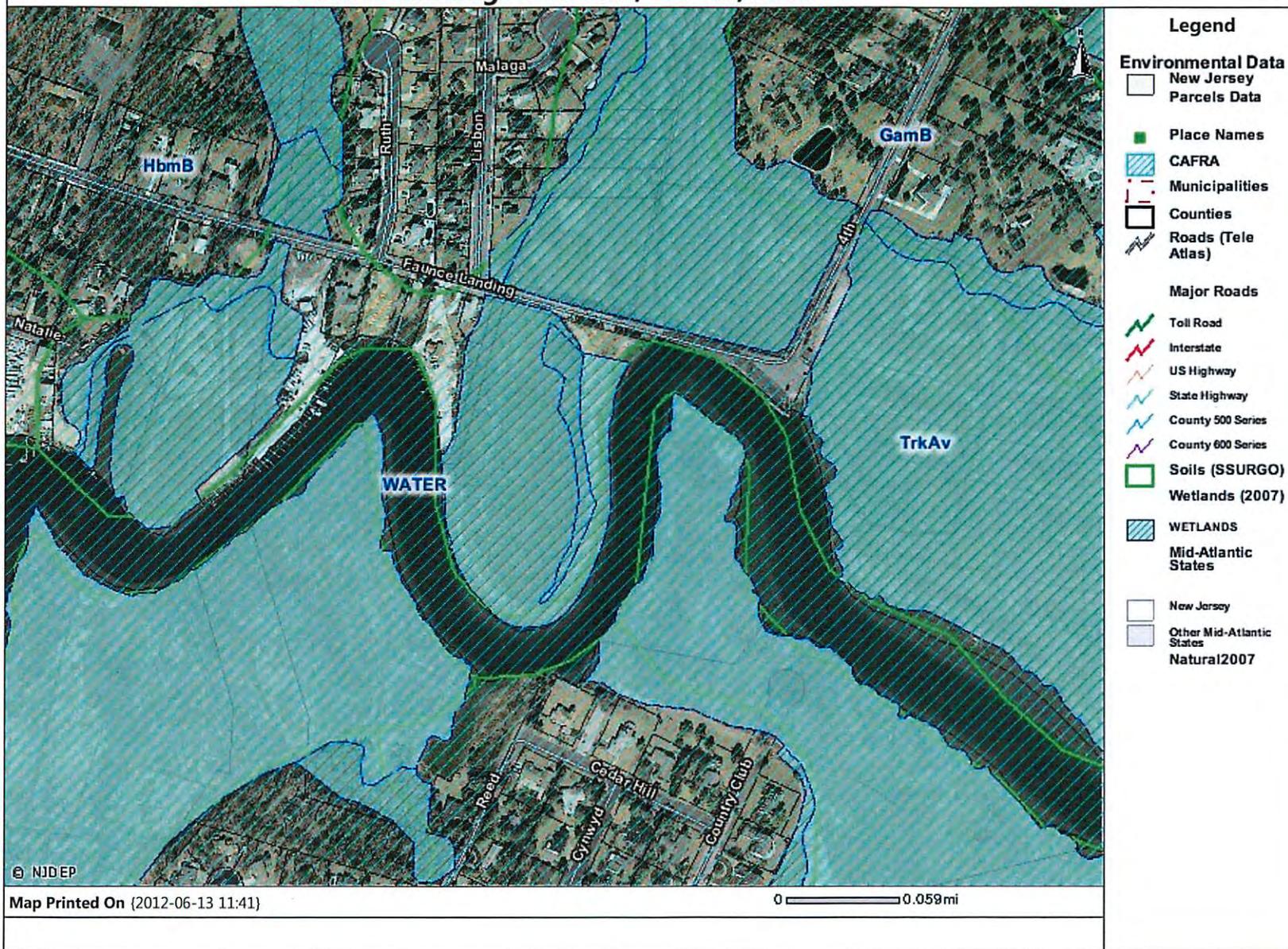


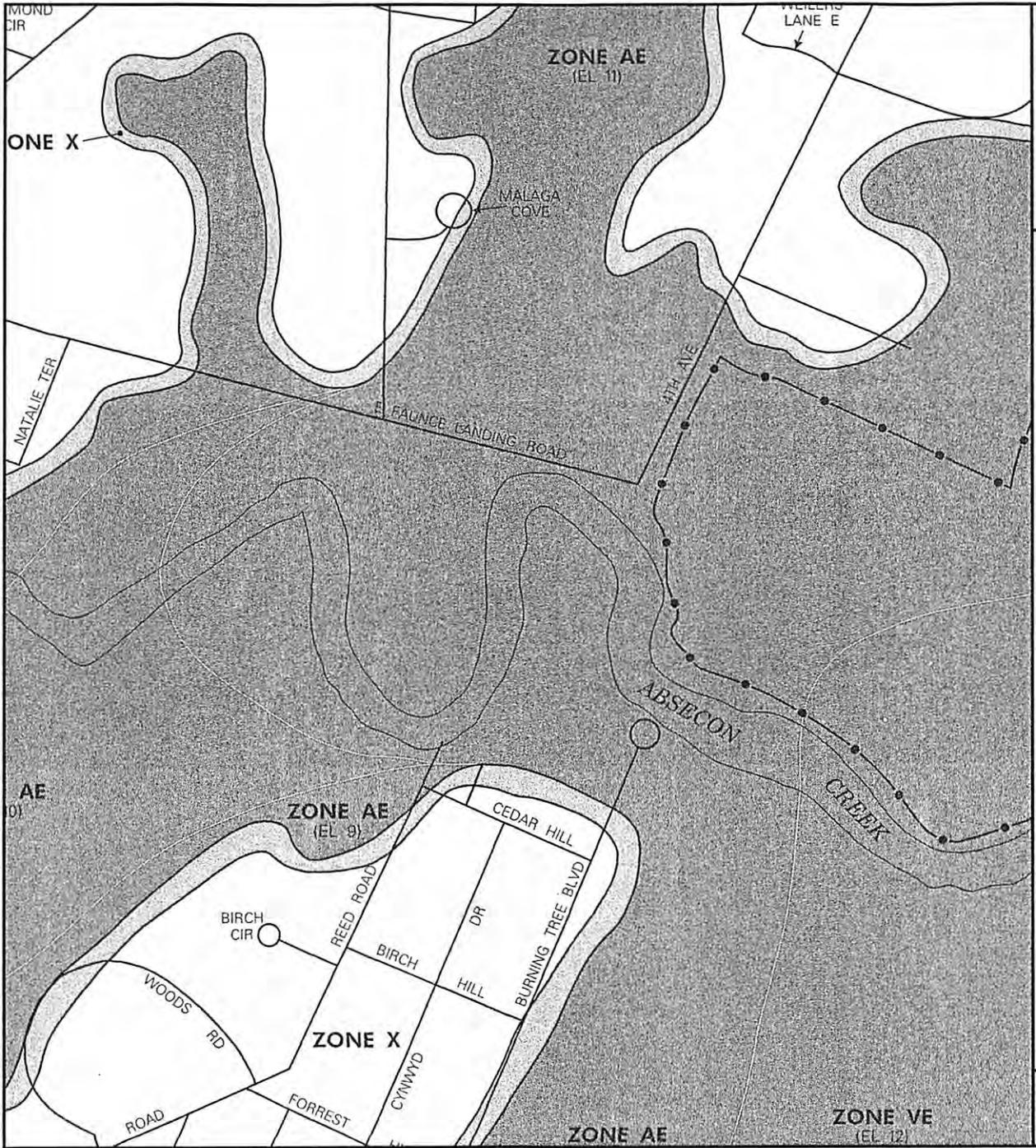
ROAD CLASSIFICATION

Interstate Route	State Route
US Route	Local Road
Ramp	RR
Interstate Path	US Path
	State Path

OCEANVILLE, NJ
2011

Fauce Landing: Wetlands, CAFRA, Soils





APPROXIMATE SCALE
 500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
 FLOOD INSURANCE RATE MAP**

CITY OF
 ABSECON,
 NEW JERSEY
 ATLANTIC COUNTY

PANEL 1 OF 3
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

**COMMUNITY - PANEL NUMBER
 340001 0001 C**

**MAP REVISED:
 AUGUST 23, 1999**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic County, New Jersey (05/2011)



Figure 1

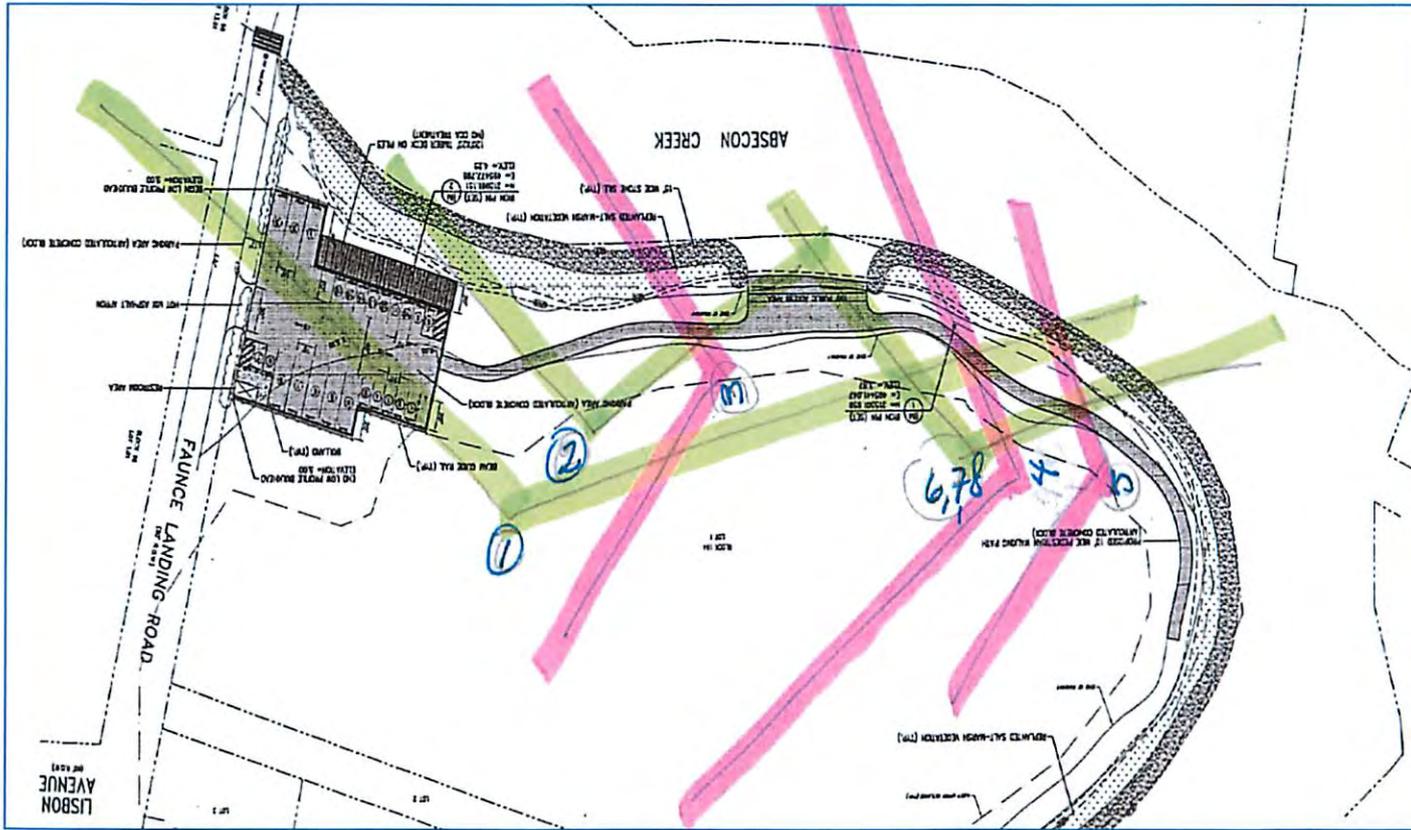




Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

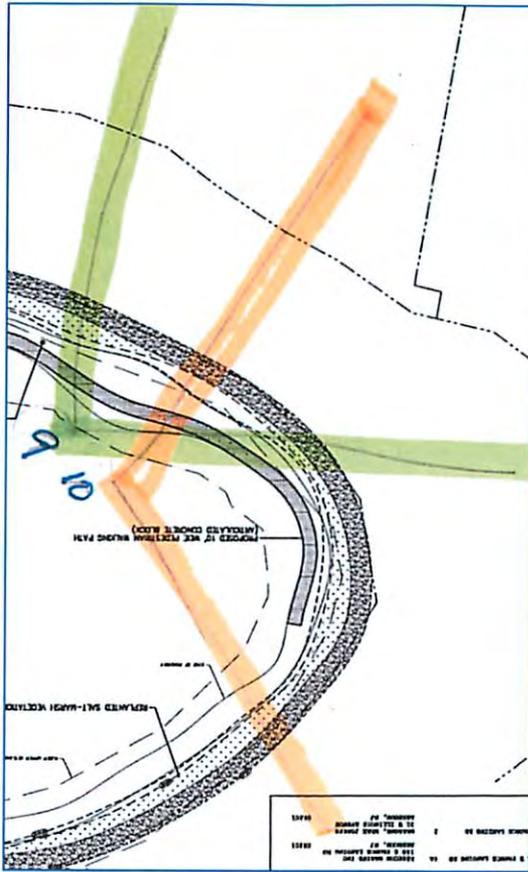


Figure 8



Figure 9



Figure 10

U.S. Department of Homeland Security
Region II
Jacob K. Javits Federal Office Building
Mitigation Division
26 Federal Plaza, Room 1337
New York, NY 10278-0002



April 13, 2015

Mr. Christopher M. Dolphin
Bureau of Coastal Regulation
Department of Environmental Protection
Division of Land Use Regulation
P.O. Box 420
Trenton, New Jersey 08625-0420

SUBJECT: Federal Consistency Determination
FEMA Hazard Mitigation Grant Program
Faunce Landing Road Flood Mitigation Project
Absecon City, Atlantic County, NJ
Grant number: Hazard Mitigation Grant Program (HMGP) NJ 1867
Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic
County, New Jersey

Dear Mr. Dolphin:

The Federal Emergency Management Agency (FEMA), Region II, is evaluating a proposed Hazard Mitigation federal grant project for Absecon City, Atlantic County, New Jersey. The proposed project is located within the Coastal Area Facility Review Act (CAFRA) zone. A Coastal Zone Consistency Statement as well as project information, maps, designs and photos are enclosed for your office's review.

The hazard mitigation project proposes to address the frequent flooding and shore line erosion on Absecon Creek at Faunce Landing Road (see attached vicinity map). Being totally unprotected from the contiguous Absecon Creek, the property encounters severe flooding and erosion even during normal storm events. The project was developed in a partnership between the community and the USFWS Pleasantville Office.

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.

FEMA has determined that the proposed action is consistent with New Jersey Department of Environmental Protection's (NJDEP) Coastal Zone Management Rules N.J.A.C. 7:7E. The proposed action would not result in significant adverse effects to the special areas as defined in the Coastal Zone Management Rules. FEMA requests a Federal consistency determination from NJDEP's Land Use Regulation Program under Section 307 of the Federal Coastal Zone Management Act (CZMA), 16 U.S.C. 1451 et seq. for the proposed action. The Federal consistency determination needed to award the grant does not eliminate the City of Absecon's responsibility to obtain all applicable federal, state and local permits prior to construction implementation, including any necessary permits from NJDEP. FEMA has the capability to approve grants with the condition that all applicable permits will be obtained by the grant applicant prior to construction; therefore, we are seeking a general concurrence from your office in accordance with the CZMA to satisfy our federal agency legal responsibilities prior to grant award.

FEMA looks forward to your office's concurrence with FEMA's federal consistency determination statement for the proposed action. If you have any questions regarding the proposed federal grant project, please do not hesitate to contact me at (212) 680-8816 or kelly.britt@fema.dhs.gov.

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'K' followed by a horizontal line and a large, oval-shaped flourish.

Kelly M Britt, Phd, RPA
Archaeologist, Region II

KMB/kb

Enclosures: CZM Statement, Maps, Designs, and Photographs

Figure 1: Location Map and APE

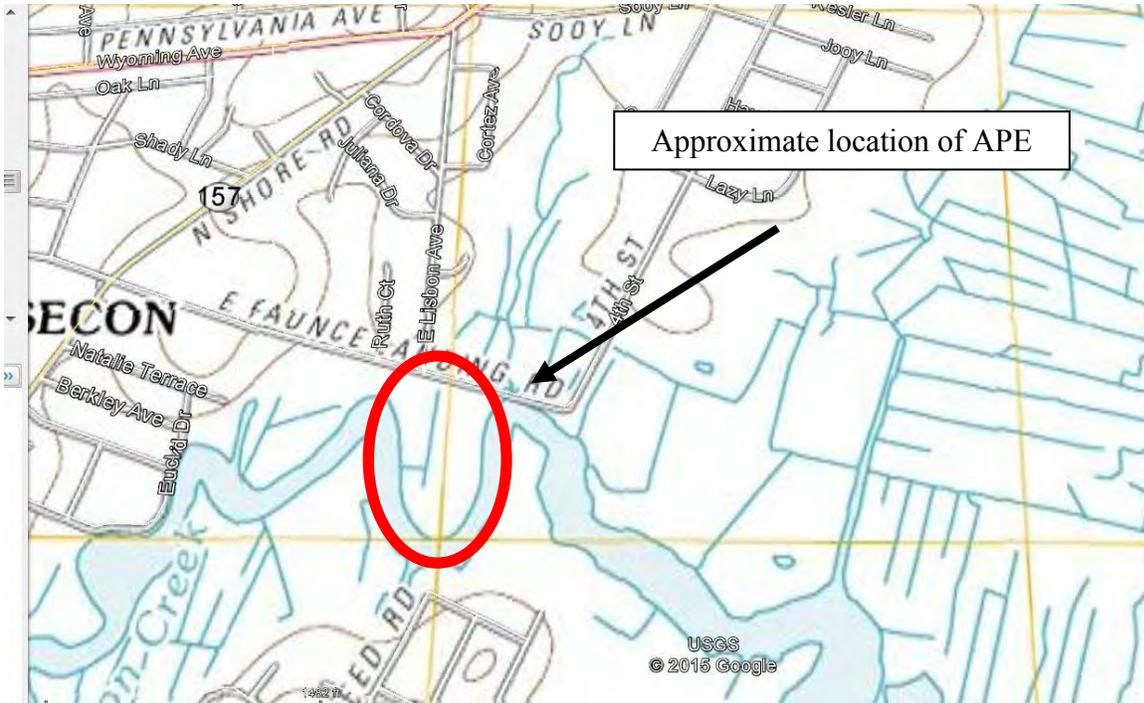
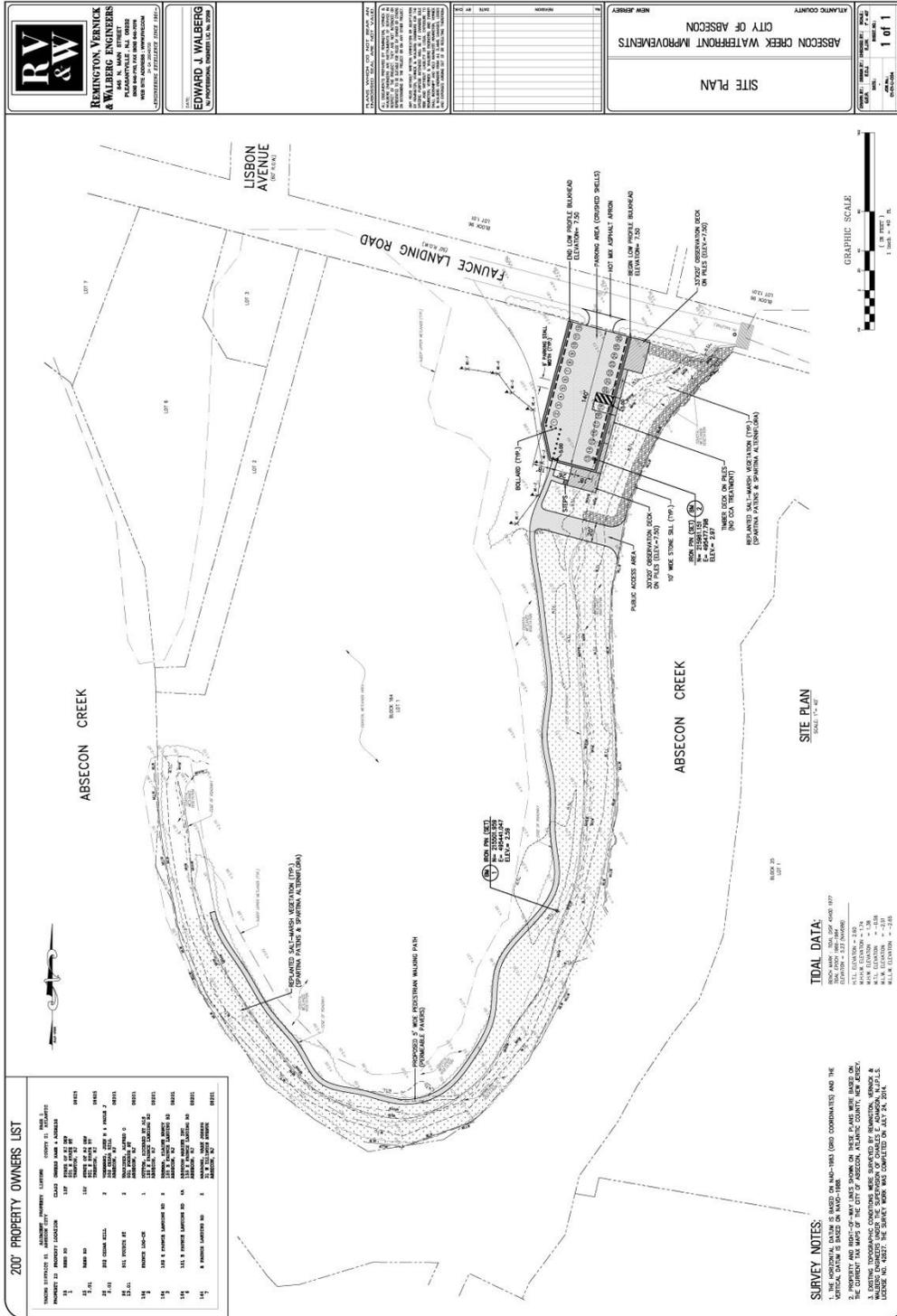


Figure 2: Project Plans





FEMA

May 18, 2015

Ms. Karen Greene
National Marine Fisheries Service
Habitat Conservation Division
74 Magruder Road
Highlands, NJ 07732
karen.greene@noaa.gov

Subject: Request for Project Review
Absecon Creek, East Faunce Landing Road
DR 1867-NJ HMGP
City of Absecon, Atlantic County, New Jersey

Dear Ms. Greene:

In compliance with the National Environmental Policy Act of 1969 (NEPA), the Federal Emergency Management Agency (FEMA) is preparing an Environmental Assessment (EA) for a planned living shoreline stabilization project in the City of Absecon, Atlantic, New Jersey (proposed project). The purpose of the proposed project is to provide storm risk management and flood relief to the low-lying area along the eastern portion of Absecon Creek that experience frequent flooding during storm events. The City has requested funding from FEMA's Hazard Mitigation Grant Program for this project. The section on the south side of Faunce Landing Road, between 4th 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.

Description of Project

The Proposed Action would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a living shoreline design. The proposed project includes the installation of approximately 250 linear feet by ten-foot wide rock sill below the ordinary high water mark (OHWM). Native grasses (*Spartina Patens* and *Spartina Alterniflora*) 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. The project is designed to provide erosion protection up to a 25-year flood event 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 potential implementation of future efforts. Maintenance activities include debris removal, replanting vegetation, addition of sand fill, and ensuring that the organic and structural materials remain in place and continue to stabilize the shoreline.

Vegetation at the Project Site

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. Native grasses (*Spartina Patens* and *Spartina Alerniflora*) are present.

Determination of Effects on Protected Species and Aquatic Resources

An original consultation letter was sent from FEMA in 2012; however, as part of the EA process and because the project has been redesigned since consultation was initiated in 2012 (see enclosed letter), FEMA is updating coordination with NMFS in compliance with the Magnuson-Stevens Fisheries Management Act. FEMA determines that, because the project has been redesigned to include a living shoreline, the proposed project would not cause greater than minimal cumulative adverse effects on Essential Fish Habitat as regulated under the Magnuson-Stevens Fishery Conservation and Management Act. FEMA will condition approval of the grant application with the requirement that all applicable federal, state and local permits are issued prior to initiating work.

The EFH Assessment Worksheet is enclosed. FEMA looks forward to hearing back from your office within 30 days. If practicable, we would appreciate an electronic copy of your office's concurrence be emailed to kelly.britt@fema.dhs.gov. Please contact me at phone (212) 680-8816 or email if you have any questions or require additional information.

Sincerely,

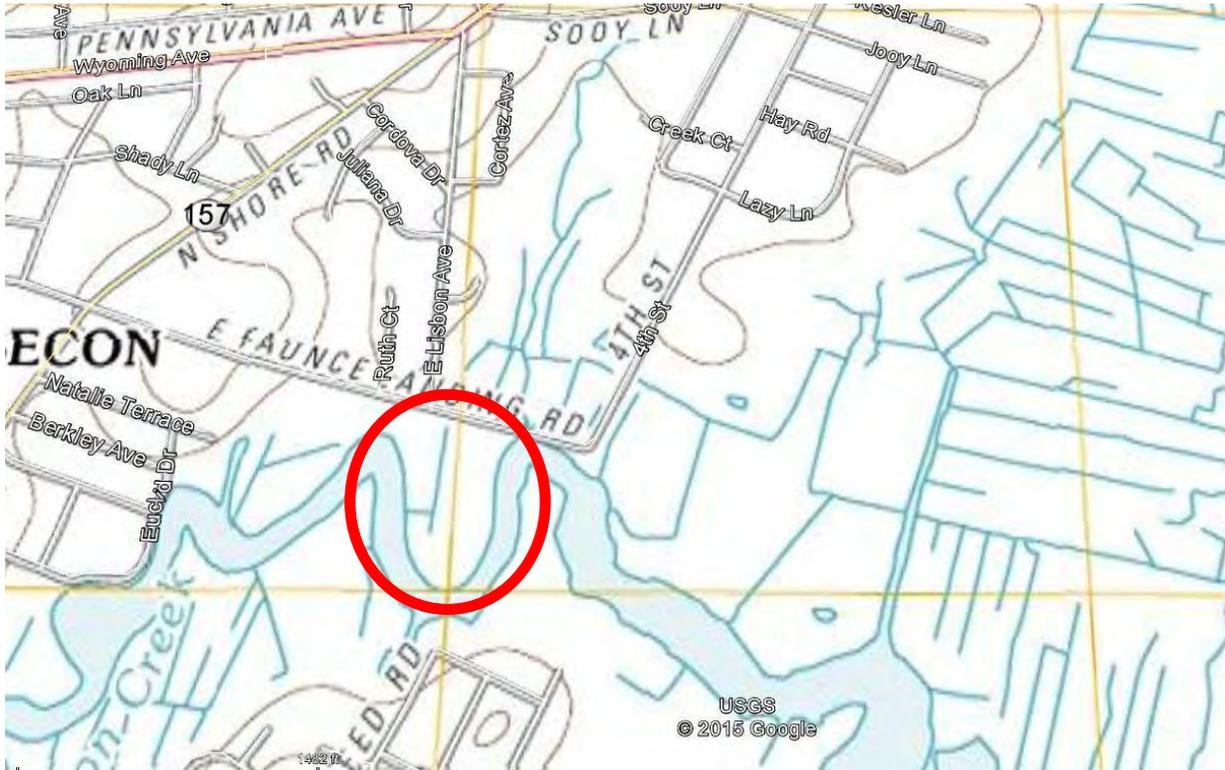


Kelly M Britt, PhD, RPA
Archaeologist, Region II

Enclosures: Site Location Map
 Concept Plan
 NOAA Fisheries service June 12, 2012 letter
 EFH Assessment Worksheet

cc: Barbara J. Smith, FEMA

Site location map



U.S. Department of Homeland Security
Region II
Jacob K. Javits Federal Office Building
Mitigation Division
26 Federal Plaza, Room 1337
New York, NY 10278-0002



FEMA

Date June 12, 2012

Mr. Brian May
Fishery Biologist
Habitat Conservation Division
NOAA Fisheries Service
Sandy Hook Field Office
James J. Howard Marine Sciences Laboratory
74 Magruder Road
Highlands, NJ 07732

Re: FEMA Consultation: Endangered Species Act, Marine Mammal Protection Act and Magnuson-Stevens Fishery Conservation & Management Act
Faunce Landing Flood Mitigation, City of Absecon, Atlantic County, NJ
Hazard Mitigation Grant Program (HMGP)

Dear Mr. May:

The Federal Emergency Management Agency is proposing to provide Hazard Mitigation grant assistance to the City of Absecon in Atlantic County for the prevention of flooding in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 93-288), as amended. The project is located within area designated as Essential Fish Habitat, thus FEMA is contacting you to consult in accordance with the Magnuson-Stevens Fishery Conservation & Management Act.

Project description

The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application.

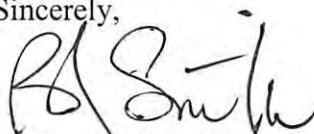
Short assessment form is attached.

FEMA has concluded that the proposed project would not cause greater than minimal cumulative adverse effects on Essential Fish Habitat.

FEMA will condition approval of the grant application with the requirement that all applicable federal, state and local permits are issued prior to initiating work.

We look forward to your office's response within thirty (30) days. If practicable, we would appreciate an electronic copy of your office's concurrence be e-mailed to barbara.smith@fema.dhs.gov and megan.jadrosich@dhs.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "BJ Smith". The signature is written in a cursive, somewhat stylized font.

BJ Smith, MBA CFM
Hazard Mitigation Assistance Specialist
Department of Homeland Security
Federal Emergency Management Agency – Region II
26 Federal Plaza, Room 1307
New York, NY 10278

encl.

EFH Assessment Worksheet for Federal Agencies
Significant Habitats and Habitat Complexes: Mullica River-Great Bay Estuary
FIRM map; CAFRA map
Site photos, design drawings
USGS 7.5 Minute Maps

EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 08/04)

PROJECT NAME: Faunce Landing Flood Mitigation
PROJECT NO: HMGP1867
Applicant: City of Absecon, Atlantic County

DATE: 06/13/2012
LOCATION: West Faunce Landing Road
PREPARER: BJ Smith 212-680-8819

Project Description: Alleviate flooding and erosion at West Faunce Landing Road (see location map).

Work to be completed: The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application.

FEMA Conclusion: The adverse effect on EFH is not substantial.

This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.

Step 1. Use the Habitat Conservation Division EFH webpage, Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest (<http://www.nero.noaa.gov/hcd/index2a.htm>). Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. Attach that list to the worksheet because it will be used in later steps. Make a preliminary determination on the need to conduct an EFH Consultation.

1. INITIAL CONSIDERATIONS		
EFH Designations	Yes	No
Is the action located in or adjacent to EFH designated for eggs?	X	
Is the action located in or adjacent to EFH designated for larvae?	X	
Is the action located in or adjacent to EFH designated for juveniles?	X	
Is the action located in or adjacent to EFH designated for adults?	X	
Is the action located in or adjacent to EFH designated for spawning adults?	X	
If you answered no to all questions above, then EFH consultation is not required -go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet.		

Step 2. In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Please note that, there may be circumstances in which new information must be collected to appropriately

characterize the site and assess impacts.

2. SITE CHARACTERISTICS	
Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	All.
What are the sediment characteristics?	Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv). This soil tends to be very frequently flooded with a landform of tidal marshes.
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so what type, size, characteristics?	Yes. Mullica River – Great Bay Estuary.
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the spatial extent.	Yes.
What is typical salinity and temperature regime/range?	Winter Salinity 31 psu; 42 degrees F Summer Salinity 32 psu; 82 Degrees F
What is the normal frequency of site disturbance, both natural and man-made?	Recreational and commercial boat traffic; Storms
What is the area of proposed impact (work footprint & far afield)?	Localized impact from construction.

Step 3. This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS			
Impacts	Y	N	Description
Nature and duration of activity(s)			The applicant proposes the installation of a stone sill to alleviate flooding and erosion, replanting of salt-marsh vegetation, installation of an articulated concrete block parking area, installation of a 10' wide pedestrian walking path using articulated concrete block, installation of a low profile bulkhead (steel sheet piling) around the perimeter of the articulated concrete block parking area to further alleviate flooding and erosion, installation of a 120' x 20' timber deck on piles (no CCA treatment), installation of beam guide rail, installation of a hot mix asphalt apron at the entrance from Faunce Landing Road, and installation of storm-water management facilities as needed (see attached photos and site drawing). The restroom facility will not be funded through this grant application.
Will benthic community be disturbed?	x		Minor disturbance can be expected during construction.
Will SAV be impacted?	x		Minor impact can be expected during construction.
Will sediments be altered and/or sedimentation rates change?		x	Not expected.
Will turbidity increase?	x		Minor increase during construction.
Will water depth change?		x	No.
Will contaminants be released into sediments or water column?	x		No.
Will tidal flow, currents or wave patterns be altered?		x	No.
Will ambient salinity or temperature regime change?		x	No.

Will water quality be altered?		x	No.
--------------------------------	--	---	-----

Step 4. This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species from the EFH species list (generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage <http://www.nero.noaa.gov/hcd/list.htm> should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT			
Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Eggs	x		
Spawning	x		
Nursery	x		
Forage	x		
Shelter	x		
Will impacts be temporary or permanent?			Temporary
Will compensatory mitigation be used?		x	

Step 5. This section provides the Federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

5. DETERMINATION OF IMPACT		
		Federal Agency's EFH Determination
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: (check the appropriate statement)		There is no adverse effect on EFH EFH Consultation is not required
	x	The adverse effect on EFH is not substantial. This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.
		The adverse effect on EFH is substantial. This is a request for an expanded EFH consultation. A detailed written EFH assessment will be submitted to NMFS expanding upon the impacts revealed in this worksheet.

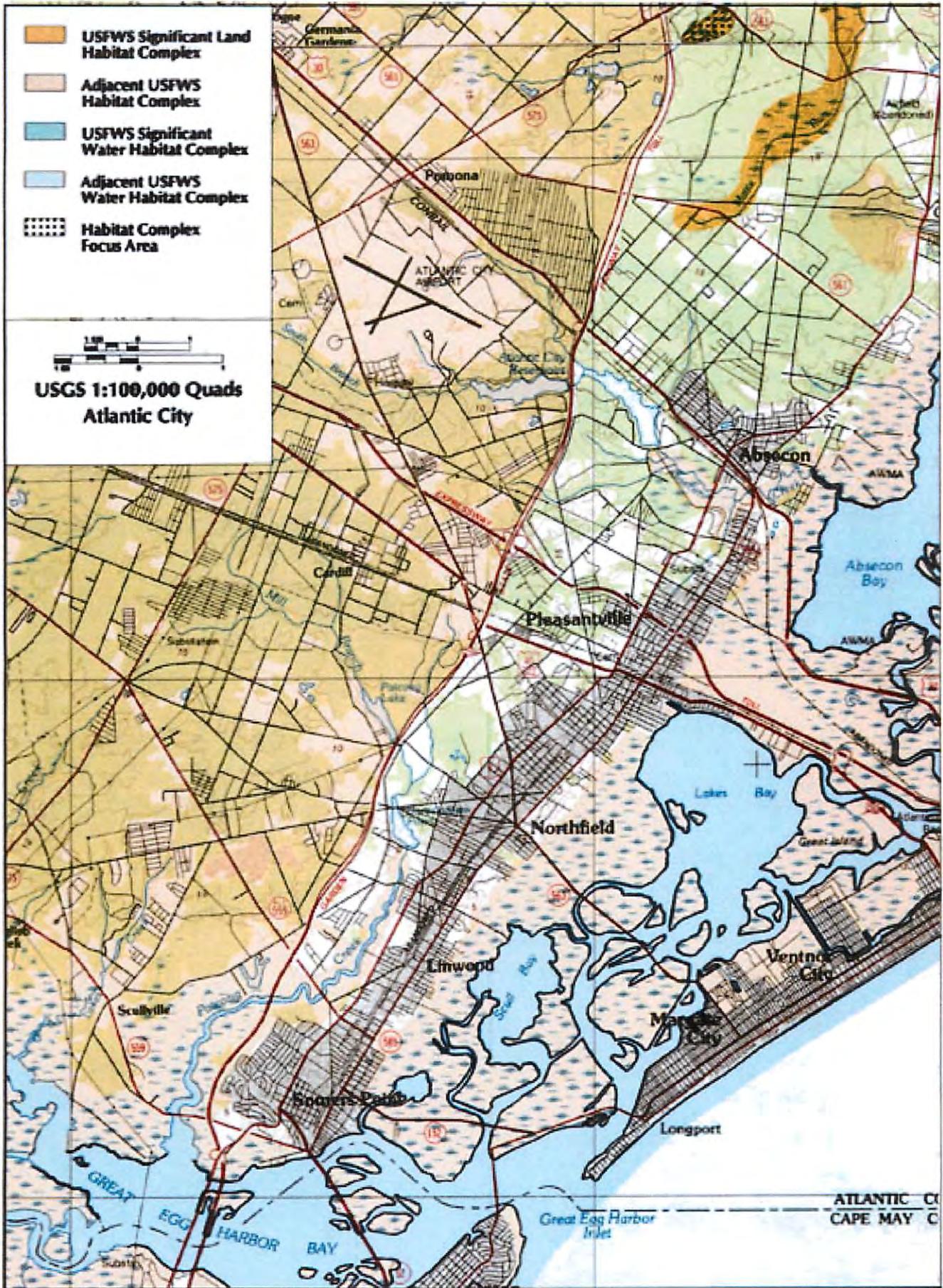
Step 6. Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats. Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT

Species	Eggs	Larvae	Juveniles	Adults
Little Skate (<i>Leucoraja erinacea</i>)			x	x
Winter Skate <i>Leucoraja ocellata</i>)			x	x

See attached.

Mullica River - Great Bay Estuary - Map 1 of 4



**SIGNIFICANT HABITATS AND HABITAT COMPLEXES
OF THE NEW YORK BIGHT WATERSHED**

**Mullica River - Great Bay Estuary
COMPLEX #5**

List of Species of Special Emphasis

Maps

I. SITE NAME: Mullica River - Great Bay Estuary

II. SITE LOCATION: The Mullica River - Great Bay estuary is located in southern New Jersey's Atlantic Coastal Plain in Ocean and Atlantic Counties, about ten miles north of Atlantic City and 140 kilometers (87 miles) south of New York City.

TOWNS: Galloway, Little Egg Harbor, Mullica, Washington

COUNTIES: Ocean, Atlantic

STATE: New Jersey

USGS 7.5 MIN QUADS: Brigantine Inlet, NJ (39074-43), Oceanville, NJ (39074-44), Tuckerton, NJ (39074-53), New Gretna, NJ (39074-54), Green Bank, NJ (39074-55), Egg Harbor City, NJ (39074-56), Oswego Lake, NJ (39074-64), Jenkins, NJ (39074-65), Atsion, NJ (39074-66)

USGS 30 x 60 MIN QUADS: Atlantic City, NJ (39074-A1), Hammonton, NJ (39074-E1)

III. BOUNDARY DESCRIPTION AND JUSTIFICATION: The Mullica River - Great Bay estuary habitat complex encompasses the entire Mullica River - Great Bay estuary and tidal river from its headwater streams to its connection with the New York Bight through Little Egg Inlet. Included are all riverine and estuarine wetlands to the limit of tidal influence of the Mullica River and its tributaries, the open waters of Great Bay and adjacent salt marsh habitat from the mouth of the Mullica River to Little Egg Inlet, and the inlet itself. This nearly pristine estuary provides seasonal or year-round habitat for a variety of anadromous, estuarine, marine, and freshwater fish and shellfish, nesting and migratory waterbirds and raptors, migratory and wintering waterfowl, and rare brackish and freshwater tidal communities and plants. Also included in the habitat complex are several small palustrine (nontidal) wetlands immediately adjacent to the estuary that contain exemplary rare natural communities and plant occurrences. Great Bay is part of the New Jersey backbarrier lagoon system, and the resources here are similar to those found in the Barnegat Bay complex to the north and the Brigantine Bay and Marsh complex to the south. The watershed of the Mullica River in the New Jersey Pinelands is described as part of the New Jersey Pinelands narrative.

IV. OWNERSHIP/PROTECTION/RECOGNITION: All of the underwater lands of this estuary are in state ownership. Most of the salt marshes east of the Garden State Parkway bridge are part of either the E.B. Forsythe National Wildlife Refuge, including the Brigantine Wilderness, managed by the U.S. Fish and Wildlife Service, or the Great Bay Boulevard Wildlife Management Area, including the Great Bay Natural Area, managed by the New Jersey Division of Fish, Game and Wildlife. One smaller salt marsh area, Mystic Island, is owned by the New Jersey Natural Lands Trust. Tidal wetlands inland (west) of the Garden State Parkway are in a mosaic of public and private ownership. State holdings include the Port Republic Wildlife Management Area, Swan Bay Wildlife Management Area, and small portions of the Wharton, Batsto, and Bass River State Forests, including part of the Batsto Natural Area, managed by the New Jersey Division of Lands and Forests. About 75% of the Mullica River watershed is within the Pinelands Management Area and about 50% of the watershed is publicly owned.

The New Jersey Natural Heritage Program recognizes several Priority Sites for Biodiversity within the Mullica River - Great Bay estuary. These sites are listed here along with their biodiversity ranks: the southeastern tip of the Batsto Macrosite (B1 - outstanding biodiversity significance), Little Egg Inlet Macrosite (B2 - very high biodiversity significance), Ballanger Creek (B3 - high biodiversity significance), Clark's Landing Bog (B3), Dan's Island (B3), northeast of Weekstown (B3), Port Republic (B3), Wading River Tidal Marsh (B4 - moderate biodiversity significance), and Turtle Creek (B4).

The Pinelands National Reserve, including portions of the Mullica River, is part of the Atlantic Coastal Plain Biosphere Reserve designated by UNESCO under the Man and Biosphere Program. The entire E.B. Forsythe National Wildlife Refuge has been designated as a Wetlands of International Importance under the Ramsar Convention. The lower Mullica River and Great Bay have been proposed for designation as a National Estuarine Research Reserve for research and education to be managed by the New Jersey Division of Fish, Game and Wildlife and Rutgers University. The U.S. Fish and Wildlife Service has identified the Brigantine/Barnegat wetlands as a priority wetland site under the federal Emergency Wetlands Resources Act of 1986. Brigantine has been designated and mapped as an otherwise protected beach unit pursuant to the federal Coastal Barrier Resources Act, prohibiting incompatible federal financial assistance or flood insurance within the unit. Wetlands are regulated in New Jersey under several state laws, including the Wetlands Act of 1970, the Freshwater Wetland Protection Act, and the New Jersey State Coastal Area Facilities Review Act (CAFRA); these statutes are in addition to federal regulation under Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act of 1977, and various Executive Orders.

V. GENERAL AREA DESCRIPTION: The Mullica River drains a 1,471-square hectare (568-square mile) area in the central Pinelands of southern New Jersey, and is the largest watershed in the Pinelands. Unconsolidated sands of the Outer Coastal Plain underlie the region and support vegetation adapted to edaphic drought and fire regimes on the well-drained soils. The upland vegetation in the watershed is primarily pine-oak and oak-pine forests dominated by pitch pine (*Pinus rigida*) and oaks (*Quercus* spp.), with riparian and lowland forests composed of Atlantic white cedar (*Chamaecyparis thyoides*) and hardwoods. Due to the porous sands in this region, surface water drainage is limited and much of the freshwater input to the estuary is through groundwater flow.

The upper Mullica River drains five major sub-watersheds: the Batsto River, Atsion (upper Mullica) River, Sleeper Branch (Mechesactauxin), Nescochague Creek, and Hammonton Creek. These major watersheds join at the head of tide near the town of Batsto to form the mainstem of the Mullica River. The tidally influenced mainstem from Batsto to the mouth at Great Bay (Deep Point) is about 34 kilometers (21 miles) in length. A number of tributaries enter the mainstem from the north, including Bull Creek, Wading River, and Bass River, with Landing Creek and Nacote Creek from the south. All of these

tributaries are tidally influenced and support tidal marsh communities. Salinities in the Mullica River vary with the semidiurnal (twice-daily) tides and the degree of rainfall, evapotranspiration, and consequent freshwater input. Salt water extends up the mainstem of the Mullica as far as about Lower Bank, 21 kilometers (13 miles) from the head of Great Bay. Salinities above this point are generally less than 1 part per thousand (ppt). Great Bay itself is a polyhaline (high salinity), well-mixed estuary with a yearly salinity range of 14 to 30 ppt within the bay proper. Temperatures of -2 to 30°C (28 to 86°F) and dissolved oxygen values between 2.8 and 11.7 milligrams per liter occur on an annual cycle in the bay.

The majority of this habitat complex is composed of open water and tidal marsh. Great Bay averages about 1.5 meters (5 feet) in depth, and extensive areas of the estuarine substratum are covered with benthic algae and some vascular plants (seagrasses). Eelgrass (*Zostera marina*) beds are an important component of the submerged aquatic vegetation (SAV) community in Great Bay, generally where depths are 1 meter (3.2 feet) or less but, due to the slightly greater depth in Great Bay, these are not as ubiquitous as they are in the Barnegat/Manahawkin/Little Egg system to the north. Extensive areas (1,358 hectares [3,355 acres]) of intertidal sandflats and mudflats occur in the bay, a result of the sediment load from the river and the movement of sand in through Little Egg Inlet. According to National Wetlands Inventory data, these flats represent 22% of the total estuarine system area. Benthos in the bay include hard substrate residents like mussels and barnacles; epibenthic residents, including crabs, amphipods and free-swimming mysids; and benthic infauna residents such as polychaete worms and many crustaceans. Deposit feeders make up the bulk of the benthic biomass and are responsible for consuming the detritus that falls to the bottom from dead and dying plants and animals. These organisms are, in turn, consumed as the food of other demersal (bottom-feeding) species higher on the food chain, such as winter flounder (*Pleuronectes americanus*). The benthic organisms serve an important ecosystem function by recycling nutrients through the bay ecosystem. The transient fish biomass, including winter flounder, bluefish (*Pomatomus saltatrix*), weakfish (*Cynoscion regalis*), summer flounder (*Paralichthys dentatus*), Atlantic menhaden (*Brevoortia tyrannus*), and black sea bass (*Centropristis striata*), exports a substantial portion of the energy of the estuary to the ocean, supporting nearshore fisheries.

The brackish submerged aquatic vegetation in the Mullica River and its tributaries has a greater diversity of vascular plant species than does that of Great Bay, and contains such species as horned pondweed (*Zannichellia palustris*), water celery (*Vallisneria americana*), slender pondweed (*Potamogeton pusillus*), redhead grass (*P. perfoliatus*), widgeon grass (*Ruppia maritima*), and naiad (*Najas flexilis*). In the freshwater tidal reaches, submerged aquatics intersperse with the floating-leaved and emergent plants of the lower tidal marsh that are more characteristic of freshwater communities in the Pinelands, which the Mullica drains, and include ribbonleaf pondweed (*Potamogeton epihydrus*), arrowheads (*Sagittaria latifolia*, *S. englemannia*, and *S. spatulata*), American mannagrass (*Glyceria grandis*), bulrush (*Scirpus* spp.), and other species described below. Macroinvertebrates in the brackish portion of the Mullica at Green Bank are dominated by amphipods (*Gammarus* spp.), but also include mollusks and six orders of aquatic insects dominated by dipterans (flies).

There are 8,987 hectares (22,206 acres) of salt marsh in the estuary, predominantly high marsh dominated by salt-meadow cordgrass (*Spartina patens*), with lesser amounts of salt grass (*Distichlis spicata*) and black grass (*Juncus gerardii*). Low marsh, dominated by smooth cordgrass (*Spartina alterniflora*), occurs in intertidal areas, especially along tidal creeks. Extensive areas of salt marsh occur on both sides of Great Bay and also extend up the Mullica River as far as Lower Bank and along the lower Wading River. A few areas of unditched salt marsh, unusual on the New Jersey coast, occur along the shores of Great Bay. Smaller areas of brackish tidal marsh complex occur adjacent to the Wading River, Bass River, Nacote Creek, Landing Creek, and Mullica River, dominated by narrow-leaved cattail (*Typha angustifolia*), big cordgrass (*Spartina cyosuroides*), common reed (*Phragmites australis*), and Olney three-square bulrush (*Scirpus americanus*). Freshwater intertidal wetlands are found in a few locations in the upper reaches of tidal influence in the Mullica and Wading Rivers. These freshwater tidal wetlands

can be divided into different zones depending on degree of tidal inundation, i.e., the lower tidal zone, exposed only at low tide and consisting of sparsely vegetated intertidal flats with riverbank quillwort (*Isoetes riparia*), bluntscale bulrush (*Scirpus smithii* var. *smithii*), the regionally rare Parker's pipewort (*Eriocaulon parkeri*), stiff arrowhead (*Sagittaria rigida*), grass-leaved arrowhead (*S. graminea*), and Hudson arrowhead (*S. subulata*); a mid-tidal zone with wild rice (*Zizania aquatica*), spatterdock (*Nuphar advena*) pickerelweed (*Pontedaria cordata*), three-square bulrush (*Scirpus pungens*), arrow arum (*Peltandra virginica*), water hemp (*Amaranthus cannabinus*), and dotted smartweed (*Polygonum punctatum*); and an upper tidal zone dominated by cattails (*Typha angustifolia* and *T. glauca*) and a diversity of other species including sensitive fern (*Onoclea sensibilis*), halberd-leaved tearthumb (*Polygonum arifolium*), arrowheads (*Sagittaria* spp.), river bulrush (*Scirpus fluviatilis*), sweet flag (*Acorus calamus*), smooth bur-marigold (*Bidens laevis*), orange jewelweed (*Impatiens capensis*), and rose-mallow (*Hibiscus moscheutos* var. *moscheutos*), as well as the invasive common reed and exotic purple loosestrife (*Lythrum salicaria*). Shrubs include knob-styled dogwood (*Cornus amomum*), buttonbush (*Cephalanthus occidentalis*), and swamp rose (*Rosa palustris*).

The tributaries of the Mullica River, especially the Wading and Batsto Rivers, are the most pristine river systems in the Pinelands and support a diversity of aquatic species, including 350 species of algae, 62 species of aquatic macrophytes, 275 species of macroinvertebrates, and 91 species of fish. Pine barrens streams are characterized by low pH (average of 4.4), low nutrient levels, and high humic acid content that give the water its characteristic brown tea color. The resources of these pine barrens streams are described in more detail in the New Jersey Pinelands narrative, p. 207.

VI. ECOLOGICAL SIGNIFICANCE/UNIQUENESS OF SITE: The Mullica River - Great Bay estuary is a large, relatively pristine, unaltered estuarine system. It is believed to be the cleanest estuary in the corridor from Boston to Washington, D.C., owing in large part to the fact that the majority of the watershed is protected by the Pinelands Management Area, several large federal and state wildlife management areas, and state forests. This productive estuary supports a high diversity of aquatic and terrestrial habitats and species, especially marine and estuarine fisheries populations, colonial nesting waterbird colonies on the salt marsh islands, migrating and wintering waterfowl, rare brackish and freshwater tidal wetland communities, plants, and invertebrates.

There are 118 species of special emphasis in the Mullica River - Great Bay estuary, incorporating 84 species of birds and 21 species of fish, and including the following federally and state-listed species. (Living resources and their habitats are dynamic; therefore, the ecological significance and species information presented here may not be complete or up-to-date. State and federal environmental agencies [see [Appendix III](#) for office contacts] should be consulted for additional information.) Several other state-listed species occur in pine barrens streams and wetlands just inland of the tidal influence (see below and discussion in the [New Jersey Pinelands](#) narrative).

Federally listed endangered

peregrine falcon (*Falco peregrinus*)
bald eagle (*Haliaeetus leucocephalus*)

Federally listed threatened

piping plover (*Charadrius melodus*)
sensitive joint vetch (*Aeschynomene virginica*)

Federal candidate

bog asphodel (*Narthecium americanum*)

Federal species of concern⁽¹⁾

rare skipper (*Problema bulenta*)
 precious underwing (*Catocola p. pretiosa*)
 Lemmer's pinion moth (*Lithophane lemmeri*)
 northern diamondback terrapin (*Malaclemys t. terrapin*)
 New Jersey rush (*Juncus caesariensis*)
 pine barren boneset (*Eupatorium resinsum*)

¹Species of concern listed here include former Category 2 candidates.

State-listed endangered

eastern tiger salamander (*Ambystoma t. tigrinum*)
 northern harrier (*Circus cyaneus*)
 black skimmer (*Rhynchops niger*)
 least tern (*Sterna antillarum*)
 quill-leaf arrowhead (*Sagittaria teres*)
 coast flatsedge (*Cyperus polystachyos* var. *taxensis*)
 Virginia thistle (*Cirsium virginianum*)
 small-headed beaked-rush (*Rhynchospora microcephala*)

State-listed threatened

osprey (*Pandion haliaetus*)
 yellow-crowned night-heron (*Nyctanassa violacea*)

Fish and invertebrate species abundance and distribution in Great Bay are similar to those of the other New Jersey estuaries. Finfish make up an important component of the bay's ecosystem. The bay provides an important nursery area for bluefish, weakfish, menhaden, and spot (*Leiostomas xanthurus*), as well as spawning habitat for winter spawners such as sandlance (*Ammodytes americanus*) and winter flounder and summer spawners like bay anchovy (*Anchoa mitchilli*), silversides (*Menidia* spp.), gobies (*Gobiosoma* spp.), wrasses (*Labridae* spp.), and northern pipefish (*Syngnathus fuscus*). Fisheries investigations were conducted in the 1970's by the New Jersey Department of Environmental Protection to determine the fishery composition and life stages of estuarine fish using this specific bay. Sixty-six species were caught during these studies and, as in the Barnegat system, the catches were dominated by forage species, with bay anchovy and Atlantic silverside (*Menidia menidia*) being very abundant. The top ranked fish by their relative abundance were: bay anchovy, Atlantic silverside, silver perch (*Bairdiella chrysoura*), alewife (*Alosa pseudoharengus*), striped killifish (*Fundulus majalis*), sea herring (*Clupea harengus*), white perch (*Morone americana*), northern puffer (*Sphoeroides maculatus*), oyster toadfish (*Opsanus tau*), and striped anchovy (*Anchoa hepsetus*). Commercial fisheries activities include the harvest of northern quahog (*Mercenaria mercenaria*), blue crab (*Callinectes sapidus*), white perch, winter flounder, and American eel (*Anguilla rostrata*). The bay is an important spawning and nursery area for blue crab. The area between Graveley Point and the Wading River tributaries supports large eastern oyster (*Crassostrea virginica*) beds, many of which are considered extremely productive seed beds.

The saline waters of the Mullica River estuary buffer the acid waters draining the Pinelands, enabling common peripheral fish species intolerant of acid waters to occur. This group of fishes is common in the lower reaches of the Tuckahoe, Maurice, Great Egg Harbor, and Mullica Rivers, and includes golden shiner (*Notemigonus crysoleucas*), spottail shiner (*Notropis hudsonius*), white sucker (*Catostomus commersoni*), white catfish (*Ictalurus catus*), banded killifish (*Fundulus diaphanus*), mummichog (*Fundulus heteroclitus*), fourspine stickleback (*Apeltes quadracus*), threespine stickleback (*Gasterosteus aculeatus*), white perch, pumpkinseed (*Lepomis gibbosus*), and yellow perch (*Perca flavescens*). The

presence of golden shiner, yellow perch, and pumpkinseed generally indicate human intervention, especially in the impoundments, as a result of stocking programs for small game fish and forage for larger predatory fish. The Wading River has never been stocked and supports only native populations. Anadromous fish, including blueback herring (*Alosa aestivalis*), alewife, and striped bass (*Morone saxatilis*), spawn in streams and tributaries of the Mullica River in the Pinelands; the estuary serves as the major thoroughfare in the spring to the upriver sections and as the nursery area for newly-hatched fish. Hickory shad (*Alosa mediocris*), another anadromous species, is present, as is the catadromous American eel. American shad (*Alosa sapidissima*) once spawned in the river, but is no longer found in the drainage. Fish passage, especially upstream migrations, is impeded by obstructions, usually dams, which generally restrict anadromous fish spawning activity to the lower reaches of these rivers.

The coastal salt, brackish, and freshwater marshes in the Mullica River - Great Bay estuary are extremely important to waterfowl, raptors, wading birds, and shorebirds. Small numbers of colonial nesting waterbirds, mostly common tern (*Sterna hirundo*), with lesser numbers of black skimmer, laughing gull (*Larus atricilla*), herring gull (*L. argentatus*), and great black-backed gull (*L. marinus*), nest on the salt marshes and beach bars along the **Great Bay Boulevard Wildlife Management Area** peninsula and islands including **Tow Island, Fish Island, and Seven Islands**. Tow Island is located directly adjacent to Little Egg Inlet and has been an especially important nesting area for black skimmer that forage in the inlet; 200 black skimmers nested on Tow Island in 1995. Least terns have nested on the sandy shoreline of Great Bay Boulevard Wildlife Management Area and, at one time, nested on the Mullica River near the inland extent of tidal influence in Sweetwater. Piping plover have nested on the southern tip of the Great Bay Boulevard Wildlife Management Area and nest on either side of Little Egg Inlet at Holgate and Little Beach Island (see narratives for Barnegat Bay and Brigantine Bay and Marsh Complex). A small heronry occurred on a small upland area on one of the Seven Islands in 1985, with nesting by great egret (*Casmerodius albus*), cattle egret (*Bubulcus ibis*), black-crowned night-heron (*Nycticorax nycticorax*), and glossy ibis (*Plegadis falcinellus*). Yellow-crowned night-heron also occasionally nest in the area. No nesting waders were recorded on either the 1989 or 1995 surveys, however. Other marsh-nesting birds include clapper rails (*Rallus longirostris*), which nest throughout the tidal marshes, and sora (*Porzana carolina*), Virginia rail (*Rallus limicola*), and marsh wren (*Cistothorus palustris*), which breed in the brackish and freshwater tidal marshes along the Mullica and Wading Rivers.

Raptors utilize the tidal marshes for nesting and for foraging throughout the year. Osprey nest on platforms in numerous locations throughout the salt marshes of this system. Northern harriers nest and feed in the salt and brackish marshes. Peregrine falcon nesting towers occur at two Wildlife Management Areas. Bald eagle have recently begun to nest along the Mullica River and roost and forage throughout the year in the tidal portions of the Wading and Mullica Rivers. Other wintering raptors foraging in the marshes include merlin (*Falco columbarius*) and short-eared owl (*Asio flammeus*).

Significant concentrations of migrating and wintering waterfowl occur in the Mullica River - Great Bay estuary, with an average of over 12,000 waterfowl counted on midwinter aerial surveys. The most abundant species observed in the estuary are, in descending order, American black duck (*Anas rubripes*), brant (*Branta bernicla*), greater and lesser scaup (*Aythya marila* and *A. affinis*), mallard (*Anas platyrhynchos*), and bufflehead (*Bucephala albeola*), with lesser numbers of tundra swan (*Cygnus colombianus*), Canada goose (*Branta canadensis*), red-breasted merganser (*Mergus serrator*), common merganser (*M. merganser*), hooded merganser (*Lophodytes cucullatus*), common goldeneye (*Bucephala clangula*), oldsquaw (*Clangula hyemalis*), American wigeon (*Anas americana*), northern pintail (*Anas acuta*), canvasback (*Aythya valisneria*), and green-winged teal (*Anas crecca*). Dabbling ducks and bufflehead are fairly evenly distributed along the shorelines and tidal creeks of the estuary, while diving ducks occur mostly in the more open water areas of Great Bay and sea ducks occur near the inlet. Flocks of tundra swans averaging over 600 and up to as many as 2,500 individuals are found in the Wading River where they feed on the abundant submerged aquatic vegetation. This is one of the largest consistent

wintering concentrations of tundra swans north of Chesapeake Bay. Little Egg Inlet has concentrations of migrating scoters and other seabirds during fall migration, and flocks of oldsquaw in fall and winter. The marine waters of the inlet are an important concentration area for many species of waterfowl during harsh winters when other areas freeze up. Breeding waterfowl in the estuary include American black duck, gadwall (*Anas strepera*), mallard, and Canada goose. The unditched salt marshes in this estuary provide an important larval insect food source for newly hatched-out ducklings, particularly American black duck. The Mullica River is one of the few locations in the state where American black duck breeds in freshwater marshes.

The Atlantic coastal corridor of New Jersey is an important migratory corridor for shorebirds, passerines, waterfowl, and raptors. Shorebirds feed on the sandflats and mudflats of Great Bay, and roost and forage on adjacent salt marshes. Important shorebird concentration areas occur at Great Bay Boulevard Wildlife Management Area (see [Barnegat Bay](#) narrative), Brigantine Beach, and the Brigantine Unit of the E.B. Forsythe National Wildlife Refuge (see [Brigantine Bay and Marsh Complex](#) narrative).

Nearly 90 species of birds were recorded as probable or confirmed breeders in or adjacent to the Mullica River and Great Bay in the first two years of New Jersey's Breeding Bird Atlas. These include marsh-nesting birds mentioned above, as well as songbirds typical of the pine barrens, such as pine warbler (*Dendroica pinus*) and gray catbird (*Dumetella carolinensis*).

Northern diamondback terrapin occur throughout the New Jersey backbarrier estuarine system, including the Great Bay and Mullica River, and likely nest on available sandy uplands adjacent to salt marshes and tidal creeks. Eastern tiger salamanders (*Ambystoma t. tigrinum*), which are not as tolerant of the acidic conditions in the Pinelands as are other salamander species, occur along the edges of tidal marshes near the estuary.

Several rare insect species occur in and adjacent to the estuarine marshes, including rare skipper along **Turtle Creek** and the precious underwing moth and Lemmer's pinion moth along the upper tidal Mullica River. A concentration of rare Lepidoptera (butterflies and moths) occurs just upriver of the tidal influence in the **Batsto** watershed. Historically (1976), the federally listed threatened northeastern beach tiger beetle (*Cicindela d. dorsalis*) occurred on the sandy shoreline of Great Bay Boulevard Wildlife Management Area and, more recently, across the intercoastal waterway at the Holgate Unit of E.B. Forsythe National Wildlife Refuge.

Brackish and, especially, freshwater tidal communities are limited in extent in the New York Bight region and generally contain one or more regionally or globally rare plant species. In the Mullica River - Great Bay estuary, brackish and freshwater tidal communities are where the aquatic communities of the Pinelands interface with typical estuarine species. Rare plants include the federally listed threatened sensitive joint vetch, which has its northernmost known occurrence in the Wading River brackish marsh. The Wading River marshes also support quill-leaf arrowhead and marsh rattlesnake master (*Eryngium aquaticum*). Parker's pipewort occurs in the freshwater or brackish tidal segments of the Bass, Wading, Nacote, and upper Mullica (above Green Bank). Smooth orange milkweed (*Asclepias lanceolata*) occurs in brackish marshes along Turtle Creek. Wooded islands within the marshes are also important sites for rare plants; several islands in the Great Bay Boulevard Wildlife Management Area support Virginia thistle.

Several directly adjacent nontidal wetlands that are considered priority sites for biodiversity by New Jersey Natural Heritage Program have been included in this estuarine habitat complex. Abandoned cranberry bogs on upper **Ballanger Creek** contain two rare plants, marsh rattlesnake master and pine barren boneset. The upper reaches of **Nacote Creek (Port Republic Priority Site)** not only contain rare tidal species such as Parker's pipewort and coast flatsedge, but also include adjacent nontidal wetlands,

Sphagnum bogs, and Atlantic white cedar (*Chamaecyparis thyoides*) swamps along the streams that contain rare plants such as New Jersey rush, bog asphodel, and curly-grass fern (*Schizaea pusilla*) and the rare northern pine snake (*Pituophis m. melanoleucus*). A bog immediately adjacent to **Landing's Creek (Clark's Landing Bog)** contains small-headed beaked-rush.

Pine barrens streams, wetlands, and riparian areas just inland of the tidal areas contain an array of rare species typical of pine barrens wetlands, including pine barrens treefrog (*Hyla andersonii*), northern pine snake, timber rattlesnake (*Crotalus horridus*), southern bog lemming (*Synaptis cooperi*), and barred owl (*Strix varia*); plant species include New Jersey rush, bog asphodel, curly-grass fern, Barratt's sedge (*Carex barrattii*), pale beaked-rush (*Rhynchospora pallida*), federally listed threatened Knieskern's beaked-rush (*Rhynchospora knieskernii*), and pine barren gentian (*Gentiana autumnalis*).

VII. THREATS AND SPECIAL PROBLEMS: Degradation of Great Bay's water quality is primarily caused by nonpoint sources of pollution. The chief nonpoint source is land development and its associated activities, such as septic systems, lawn and garden maintenance, golf course maintenance, and automobile use, all of which increase as the human population in the Pinelands increases. Excessive nutrient loading results in higher levels of phytoplankton growth, high turbidity, and increased macroalgal growth. These eutrophic (high nutrient) conditions tend to shift primary production from eelgrass-dominated to phytoplankton and seaweed-dominated systems. Other factors that cause declines in eelgrass include eelgrass wasting disease, dredging and filling operations, and disturbance by boats. Loss of eelgrass beds may eliminate species by no longer providing them with their specific benthic habitat requirements. Disturbance of waterbird colonies in the bays may reduce habitat suitability and productivity. Gulls are competing for nest sites with terns and skimmers, and are predators on terns and plovers. Invasion by common reed and purple loosestrife has resulted in loss of salt marsh and brackish tidal marshes. Dams limit the extent of spawning habitat for river herrings and other anadromous fish.

Diamondback terrapins are run over by cars on coastal roads as they cross or attempt to nest. They are frequently caught and drowned in crab traps and are sometimes collected for pets or food. Eggs and hatchlings are susceptible to predation by raccoons, foxes, and gulls. Tire tracks left by off-road vehicles can trap turtle hatchlings.

VIII. CONSERVATION RECOMMENDATIONS: In order to maintain the relatively pristine aquatic communities in the Pinelands and the Mullica River estuary, stringent land and water management measures need to be implemented and/or maintained in the Pinelands, including: clustering development; establishing standards for stormwater and sanitary wastes based on ambient physical, chemical, and biological conditions throughout the watershed; encouraging innovative techniques in wastewater management; prohibiting wastewater discharge into pristine surface waters and lakes; discouraging the use of lawn fertilizers, pesticides, and herbicides in the watershed; and preserving the natural riparian and floodplain vegetation along streams and around lakes. Point and nonpoint source pollution into the mainstem and tributaries of the Mullica River should be limited, especially in the upper tributaries such as Hammonton Creek and Nescochague Creek, which pass through urban and agricultural areas.

Disturbances to wintering and nesting bird populations need to be minimized or eliminated entirely, particularly for colonial beach-nesting birds such as least terns and piping plovers. Human intrusions into beach nesting areas during the critical nesting season (April to August) should be prevented using a variety of methods, including protective fencing, posting, warden patrols, and public education. Public education and cooperative approaches with landowners are essential to successful protection of beach

species in this area. When determined to be a problem, as it is at most mainland-connected nesting beaches, predator control and/or removal should be instituted. Those tasks and objectives of the piping plover recovery plan that are applicable to this area should be undertaken, including restoration or enhancement of degraded sites where appropriate.

Important diamondback terrapin nesting sites and foraging areas should be determined and protected through public education and enforcement, and public outreach used to eliminate collection. The use of crab traps in areas of the bay known to support concentrations of diamondback terrapin should be limited. Traps that are used should have terrapin excluder devices on them. The use of off-road vehicles should be limited in diamondback terrapin nesting areas. Predator control should be investigated in terrapin nesting sites.

River herring spawning habitat should be expanded by placing fish passage facilities at dams and other impediments on the tributaries to the Mullica River.

Invasive common reed and exotic purple loosestrife should be controlled where they have invaded brackish and freshwater tidal marshes. The sensitive joint vetch population on the Wading River should be protected, and water quality and quantity of freshwater and brackish tidal habitats maintained to allow for expansion of the population and protection of other rare tidal plants.

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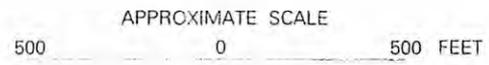
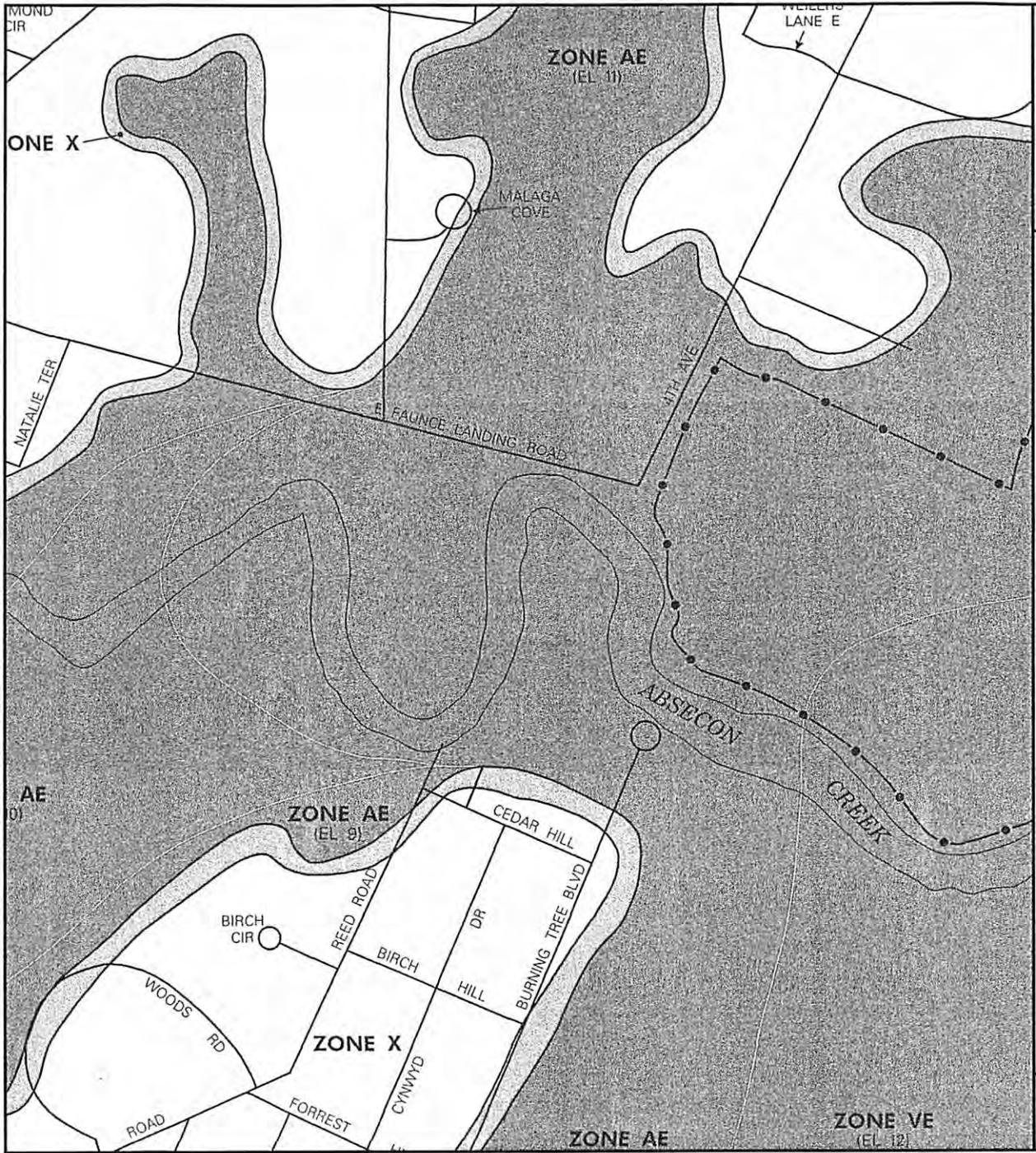
Stone, S.L. T.A. Lowery, J.D. Field, C.D. Williams, D.M. Nelson, S.H. Jury, M.E. Monaco, and L. Andreasen. 1994. Distribution and abundance of fishes and invertebrates in mid-Atlantic estuaries. ELMR Rep. no. 12. National Oceanic and Atmospheric Administration/NOS Strategic Environmental Assessments Division, Silver Spring, MD. 280 p.

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List of Species of Special Emphasis

Maps

Return to [table of contents](#)



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
ABSECON,
NEW JERSEY
ATLANTIC COUNTY

PANEL 1 OF 3
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY - PANEL NUMBER
340001 0001 C

MAP REVISED:
AUGUST 23, 1999



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Fauce Landing: Wetlands, CAFRA, Soils



- ### Legend
- Environmental Data**
- New Jersey Parcels Data
 - Place Names
 - CAFRA
 - Municipalities
 - Counties
 - Roads (Tele Atlas)
- Major Roads**
- Toll Road
 - Interstate
 - US Highway
 - State Highway
 - County 500 Series
 - County 600 Series
- Soils (SSURGO)**
- Wetlands (2007)
- WETLANDS**
- Mid-Atlantic States
- Other Mid-Atlantic States**
- New Jersey
 - Natural2007

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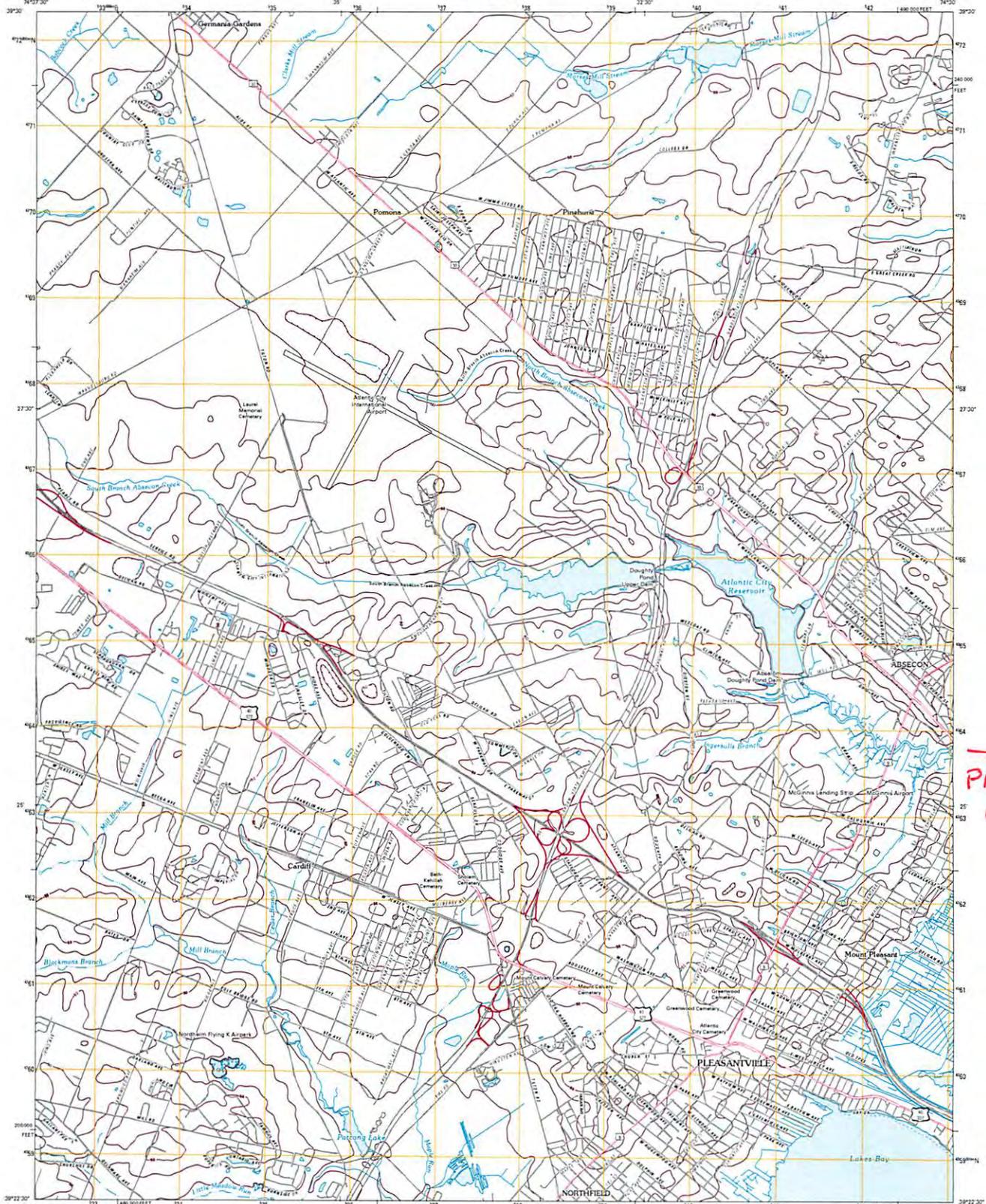
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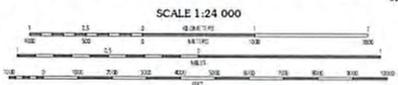
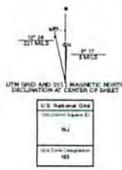
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NEW JERSEY-ATLANTIC CO.
7.5-MINUTE SERIES



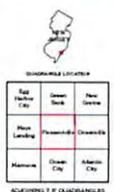
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Project
location

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North Carolina Datum of 1985 (NCD85) Projection and
1:50,000 scale grid. Linear Transverse Mercator, Zone 18S
10 000-foot UTM New Jersey Coordinate System of 1983

Source: State of New Jersey, January 2007
Other imagery provided by GE, NY, PA
Roads: ©2006-2010 TomTom
Hydrography: National Hydrography Dataset, 2007
Contours: National Elevation Dataset, 2002
Boundaries: Census, BNA, BC, USGS, 1972-2010



SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1983
This map was produced in conformance with section 5.5.10
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ROAD CLASSIFICATION

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US Route	Local Road
Tram	RAID
Interstate Route	US Route
	State Route

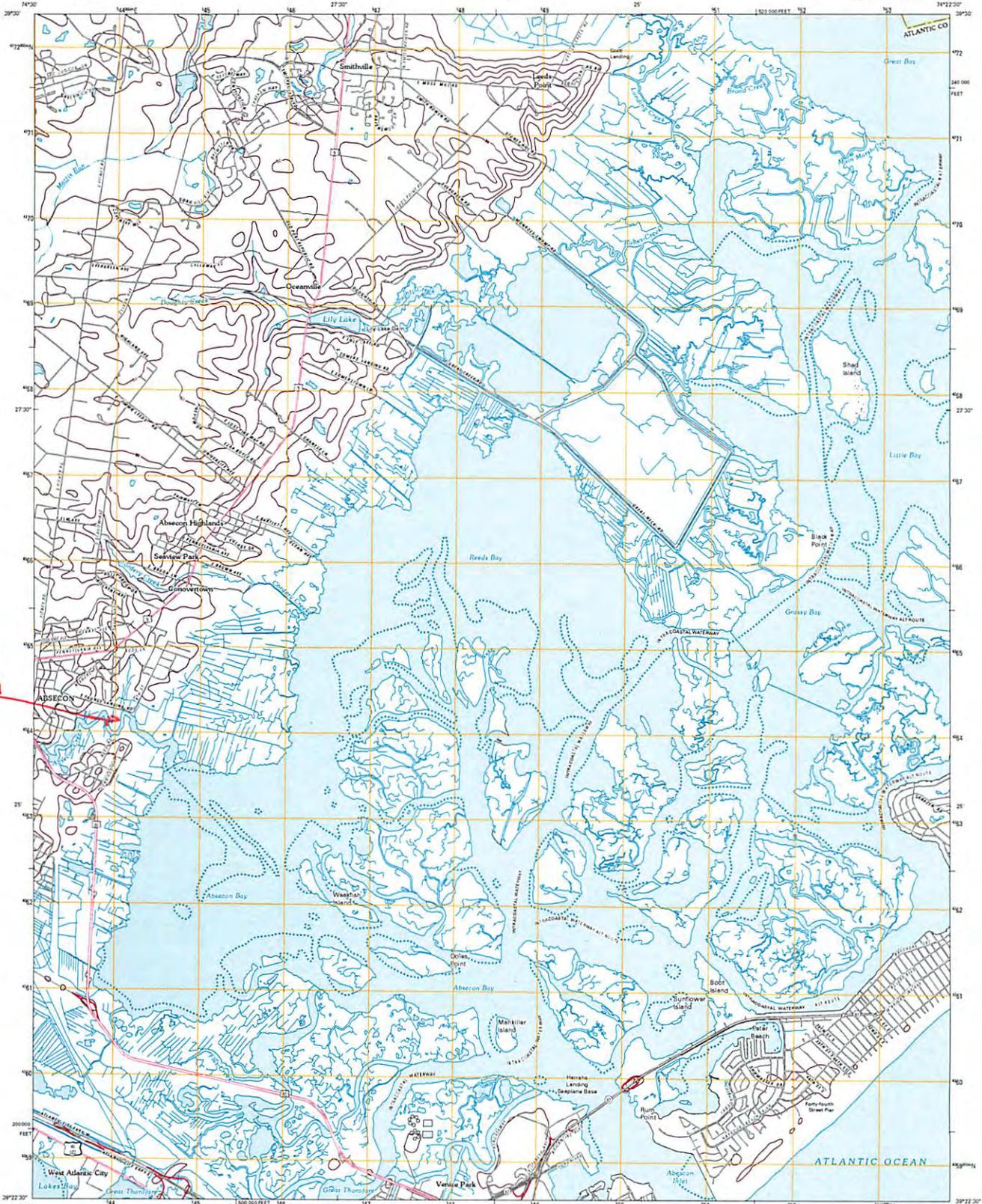
PLEASANTVILLE, NJ
2011



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



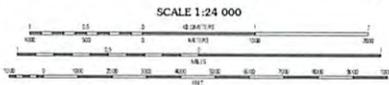
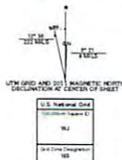
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NEW JERSEY
7.5-MINUTE SERIES



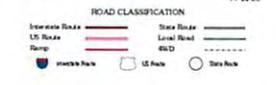
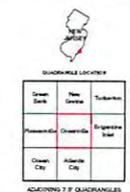
Project location

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18 000,000 UTM Zone 18S using Coordinate System of 1983

Imagery: State of New Jersey, January 2007 - January 2009
Other imagery provided by ESRI, NOAA
Roads: ©2006-2010 Tom Alpa
Names: ©2006-2010 Tom Alpa
Photography: National Photographic Dataset, 2007
Contours: National Elevation Dataset, 2001
Boundaries: Corona, BNA, INC, USGS, 1972-2010



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A metadata file associated with this product is available at version 8.5.15.NJ



OCEANVILLE, NJ
2011

Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic County, New Jersey (05/2011)



Figure 1

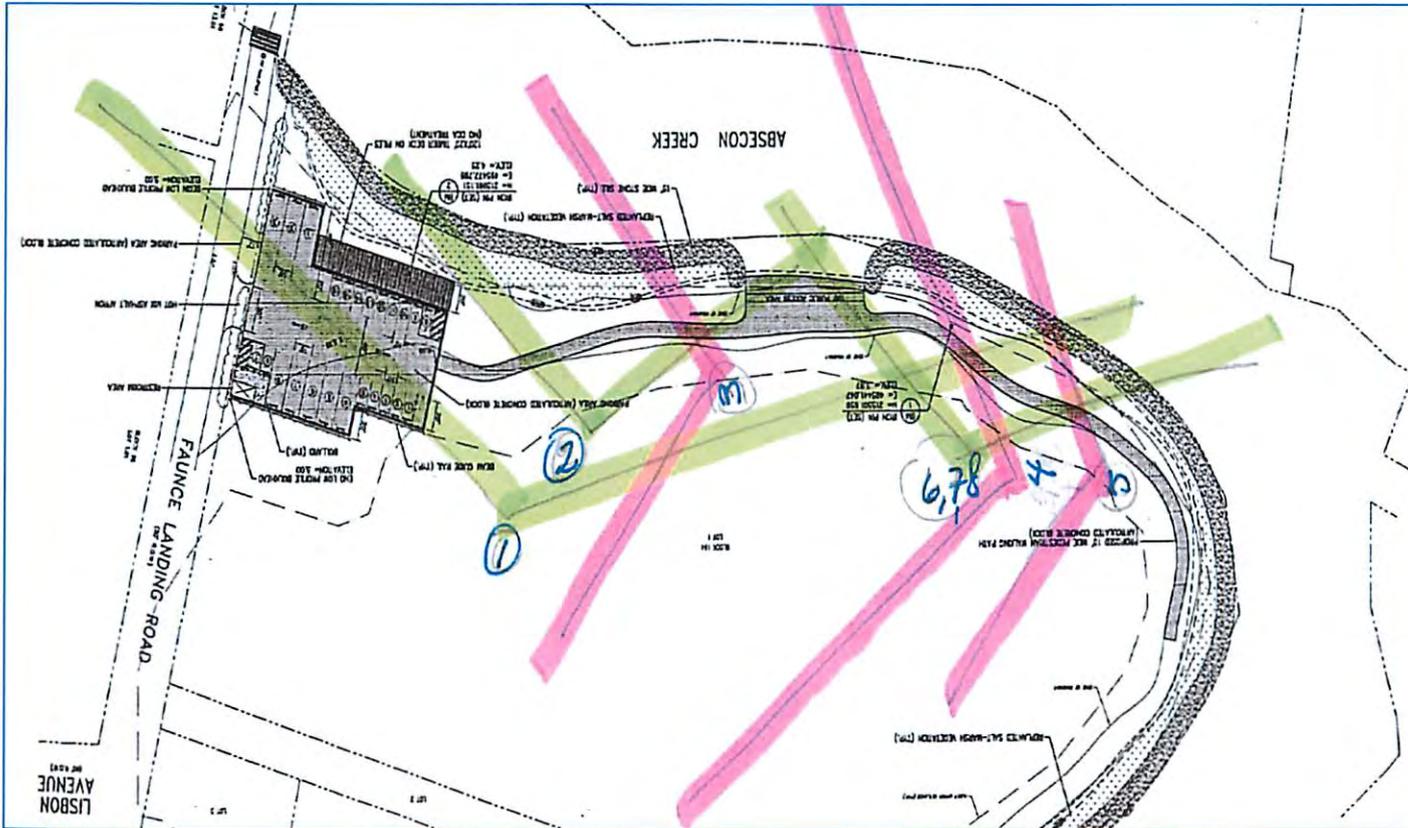




Figure 2



Figure 3



Figure 4

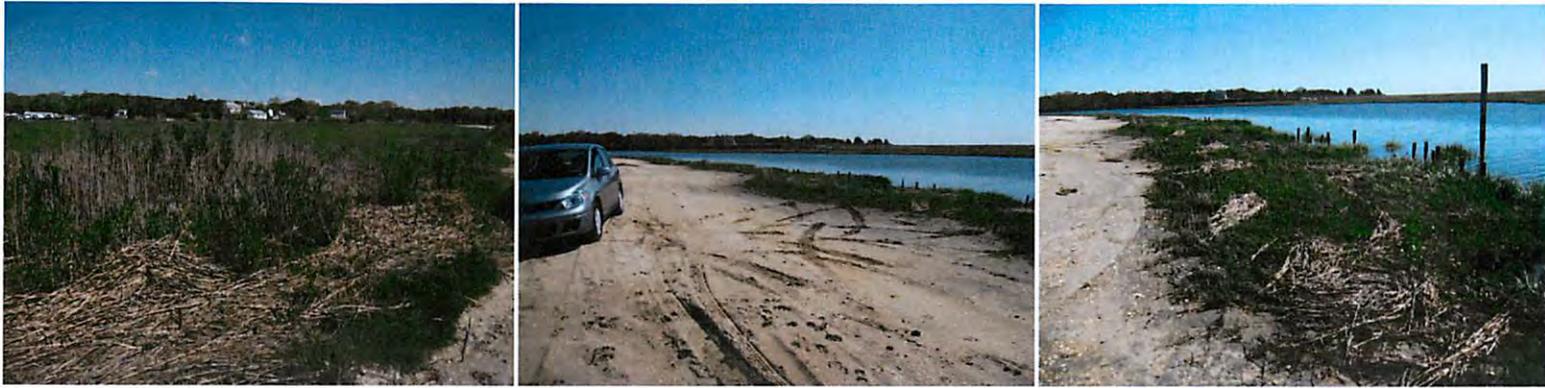


Figure 5



Figure 6



Figure 7

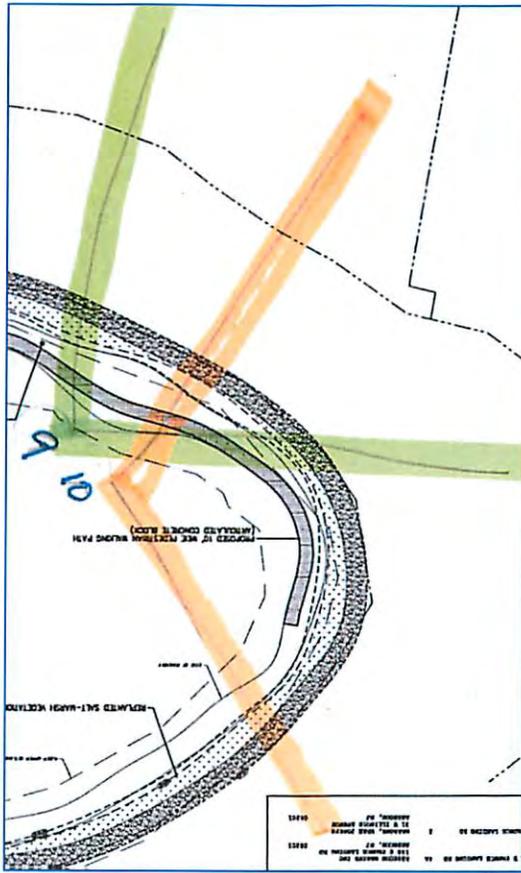


Figure 8



Figure 9



Figure 10

EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 08/04)

PROJECT NAME: Faunce Landing Flood Mitigation **DATE:** 05/18/15
PROJECT NO: HMGP1867 **LOCATION:** West Faunce Landing Road
Applicant: City of Absecon, Atlantic County **PREPARER:** Kelly M Britt 212-680-8816

Project Description: Alleviate flooding and erosion at East Faunce Landing Road (see location map).

Work to be completed: The Proposed Action would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a living shoreline design. 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 Alterniflora*) 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 up to a 25-year flood event 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, addition additional sand fill, and ensuring that the organic and structural materials remain in place and continue to stabilize the shoreline.

FEMA Conclusion: The adverse effect on EFH is not substantial.

This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.

Step 1. Use the Habitat Conservation Division EFH webpage, Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest (<http://www.nero.noaa.gov/hcd/index2a.htm>). Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. Attach that list to the worksheet because it will be used in later steps. Make a preliminary determination on the need to conduct an EFH Consultation.

1. INITIAL CONSIDERATIONS		
EFH Designations	Yes	No
Is the action located in or adjacent to EFH designated for eggs?	X	
Is the action located in or adjacent to EFH designated for larvae?	X	
Is the action located in or adjacent to EFH designated for juveniles?	X	
Is the action located in or adjacent to EFH designated for adults?	X	
Is the action located in or adjacent to EFH designated for spawning adults?	X	
If you answered no to all questions above, then EFH consultation is not required -go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet.		

Step 2. In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Please note that, there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts.

2. SITE CHARACTERISTICS	
Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	All.
What are the sediment characteristics?	Transquaking soil series-Transquaking mucky peat 0-1% slopes (TrkAv). This soil tends to be very frequently flooded with a landform of tidal marshes.
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so what type, size, characteristics?	Yes. Mullica River – Great Bay Estuary.
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the spatial extent.	Yes.
What is typical salinity and temperature regime/range?	Winter Salinity 31 psu; 42 degrees F Summer Salinity 32 psu; 82 Degrees F
What is the normal frequency of site disturbance, both natural and man-made?	Recreational and commercial boat traffic; Storms
What is the area of proposed impact (work footprint & far afield)?	Localized impact from construction.

Step 3. This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS			
Impacts	Y	N	Description
Nature and duration of activity(s)			The Proposed Action would stabilize approximately 1,000 feet of the west bank of Absecon Creek using a living shoreline design. The proposed project will install approximately 250 linear feet by ten-foot wide rock sill below the ordinary high water mark (OHWM). Native grasses (<i>Spartina Patens</i> and <i>Spartina Alerniflora</i>) 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 up to a 25-year flood event 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, addition additional sand fill, and ensuring that the organic and structural materials remain in place and continue to stabilize the shoreline.
Will benthic community be disturbed?	x		Minor disturbance can be expected during construction.
Will SAV be impacted?	x		Minor impact can be expected during construction.
Will sediments be altered and/or sedimentation rates change?		x	Not expected.
Will turbidity increase?	x		Minor increase during construction.

Will water depth change?		x	No.
Will contaminants be released into sediments or water column?	x		No.
Will tidal flow, currents or wave patterns be altered?		x	No.
Will ambient salinity or temperature regime change?		x	No.
Will water quality be altered?		x	No.

Step 4. This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species from the EFH species list (generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage <http://www.nero.noaa.gov/hcd/list.htm> should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT			
Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Eggs	x		
Spawning	x		
Nursery	x		
Forage	x		
Shelter	x		
Will impacts be temporary or permanent?			Temporary
Will compensatory mitigation be used?		x	

Step 5. This section provides the Federal agency’s determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

5. DETERMINATION OF IMPACT		
		Federal Agency’s EFH Determination
<p>Overall degree of adverse effects on EFH (not including compensatory mitigation) will be:</p> <p>(check the appropriate statement)</p>		<p>There is no adverse effect on EFH</p> <p>EFH Consultation is not required</p>
	x	<p>The adverse effect on EFH is not substantial.</p> <p>This is a request for an abbreviated EFH consultation. This worksheet is being submitted to NMFS to satisfy the EFH Assessment requirement.</p>
		<p>The adverse effect on EFH is substantial.</p> <p>This is a request for an expanded EFH consultation. A detailed written EFH assessment will be submitted to NMFS expanding upon the impacts revealed in this worksheet.</p>

Step 6. Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats. Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT

Species	Eggs	Larvae	Juveniles	Adults
Little Skate (<i>Leucoraja erinacea</i>)			x	x
Winter Skate (<i>Leucoraja ocellata</i>)			x	x

See attached.

Mullica River - Great Bay Estuary - Map 1 of 4



**SIGNIFICANT HABITATS AND HABITAT COMPLEXES
OF THE NEW YORK BIGHT WATERSHED**

**Mullica River - Great Bay Estuary
COMPLEX #5**

List of Species of Special Emphasis

Maps

I. SITE NAME: Mullica River - Great Bay Estuary

II. SITE LOCATION: The Mullica River - Great Bay estuary is located in southern New Jersey's Atlantic Coastal Plain in Ocean and Atlantic Counties, about ten miles north of Atlantic City and 140 kilometers (87 miles) south of New York City.

TOWNS: Galloway, Little Egg Harbor, Mullica, Washington

COUNTIES: Ocean, Atlantic

STATE: New Jersey

USGS 7.5 MIN QUADS: Brigantine Inlet, NJ (39074-43), Oceanville, NJ (39074-44), Tuckerton, NJ (39074-53), New Gretna, NJ (39074-54), Green Bank, NJ (39074-55), Egg Harbor City, NJ (39074-56), Oswego Lake, NJ (39074-64), Jenkins, NJ (39074-65), Atsion, NJ (39074-66)

USGS 30 x 60 MIN QUADS: Atlantic City, NJ (39074-A1), Hammonton, NJ (39074-E1)

III. BOUNDARY DESCRIPTION AND JUSTIFICATION: The Mullica River - Great Bay estuary habitat complex encompasses the entire Mullica River - Great Bay estuary and tidal river from its headwater streams to its connection with the New York Bight through Little Egg Inlet. Included are all riverine and estuarine wetlands to the limit of tidal influence of the Mullica River and its tributaries, the open waters of Great Bay and adjacent salt marsh habitat from the mouth of the Mullica River to Little Egg Inlet, and the inlet itself. This nearly pristine estuary provides seasonal or year-round habitat for a variety of anadromous, estuarine, marine, and freshwater fish and shellfish, nesting and migratory waterbirds and raptors, migratory and wintering waterfowl, and rare brackish and freshwater tidal communities and plants. Also included in the habitat complex are several small palustrine (nontidal) wetlands immediately adjacent to the estuary that contain exemplary rare natural communities and plant occurrences. Great Bay is part of the New Jersey backbarrier lagoon system, and the resources here are similar to those found in the Barnegat Bay complex to the north and the Brigantine Bay and Marsh complex to the south. The watershed of the Mullica River in the New Jersey Pinelands is described as part of the New Jersey Pinelands narrative.

IV. OWNERSHIP/PROTECTION/RECOGNITION: All of the underwater lands of this estuary are in state ownership. Most of the salt marshes east of the Garden State Parkway bridge are part of either the E.B. Forsythe National Wildlife Refuge, including the Brigantine Wilderness, managed by the U.S. Fish and Wildlife Service, or the Great Bay Boulevard Wildlife Management Area, including the Great Bay Natural Area, managed by the New Jersey Division of Fish, Game and Wildlife. One smaller salt marsh area, Mystic Island, is owned by the New Jersey Natural Lands Trust. Tidal wetlands inland (west) of the Garden State Parkway are in a mosaic of public and private ownership. State holdings include the Port Republic Wildlife Management Area, Swan Bay Wildlife Management Area, and small portions of the Wharton, Batsto, and Bass River State Forests, including part of the Batsto Natural Area, managed by the New Jersey Division of Lands and Forests. About 75% of the Mullica River watershed is within the Pinelands Management Area and about 50% of the watershed is publicly owned.

The New Jersey Natural Heritage Program recognizes several Priority Sites for Biodiversity within the Mullica River - Great Bay estuary. These sites are listed here along with their biodiversity ranks: the southeastern tip of the Batsto Macrosite (B1 - outstanding biodiversity significance), Little Egg Inlet Macrosite (B2 - very high biodiversity significance), Ballanger Creek (B3 - high biodiversity significance), Clark's Landing Bog (B3), Dan's Island (B3), northeast of Weekstown (B3), Port Republic (B3), Wading River Tidal Marsh (B4 - moderate biodiversity significance), and Turtle Creek (B4).

The Pinelands National Reserve, including portions of the Mullica River, is part of the Atlantic Coastal Plain Biosphere Reserve designated by UNESCO under the Man and Biosphere Program. The entire E.B. Forsythe National Wildlife Refuge has been designated as a Wetlands of International Importance under the Ramsar Convention. The lower Mullica River and Great Bay have been proposed for designation as a National Estuarine Research Reserve for research and education to be managed by the New Jersey Division of Fish, Game and Wildlife and Rutgers University. The U.S. Fish and Wildlife Service has identified the Brigantine/Barnegat wetlands as a priority wetland site under the federal Emergency Wetlands Resources Act of 1986. Brigantine has been designated and mapped as an otherwise protected beach unit pursuant to the federal Coastal Barrier Resources Act, prohibiting incompatible federal financial assistance or flood insurance within the unit. Wetlands are regulated in New Jersey under several state laws, including the Wetlands Act of 1970, the Freshwater Wetland Protection Act, and the New Jersey State Coastal Area Facilities Review Act (CAFRA); these statutes are in addition to federal regulation under Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act of 1977, and various Executive Orders.

V. GENERAL AREA DESCRIPTION: The Mullica River drains a 1,471-square hectare (568-square mile) area in the central Pinelands of southern New Jersey, and is the largest watershed in the Pinelands. Unconsolidated sands of the Outer Coastal Plain underlie the region and support vegetation adapted to edaphic drought and fire regimes on the well-drained soils. The upland vegetation in the watershed is primarily pine-oak and oak-pine forests dominated by pitch pine (*Pinus rigida*) and oaks (*Quercus* spp.), with riparian and lowland forests composed of Atlantic white cedar (*Chamaecyparis thyoides*) and hardwoods. Due to the porous sands in this region, surface water drainage is limited and much of the freshwater input to the estuary is through groundwater flow.

The upper Mullica River drains five major sub-watersheds: the Batsto River, Atsion (upper Mullica) River, Sleeper Branch (Mechesactauxin), Nescochague Creek, and Hammonton Creek. These major watersheds join at the head of tide near the town of Batsto to form the mainstem of the Mullica River. The tidally influenced mainstem from Batsto to the mouth at Great Bay (Deep Point) is about 34 kilometers (21 miles) in length. A number of tributaries enter the mainstem from the north, including Bull Creek, Wading River, and Bass River, with Landing Creek and Nacote Creek from the south. All of these

tributaries are tidally influenced and support tidal marsh communities. Salinities in the Mullica River vary with the semidiurnal (twice-daily) tides and the degree of rainfall, evapotranspiration, and consequent freshwater input. Salt water extends up the mainstem of the Mullica as far as about Lower Bank, 21 kilometers (13 miles) from the head of Great Bay. Salinities above this point are generally less than 1 part per thousand (ppt). Great Bay itself is a polyhaline (high salinity), well-mixed estuary with a yearly salinity range of 14 to 30 ppt within the bay proper. Temperatures of -2 to 30°C (28 to 86°F) and dissolved oxygen values between 2.8 and 11.7 milligrams per liter occur on an annual cycle in the bay.

The majority of this habitat complex is composed of open water and tidal marsh. Great Bay averages about 1.5 meters (5 feet) in depth, and extensive areas of the estuarine substratum are covered with benthic algae and some vascular plants (seagrasses). Eelgrass (*Zostera marina*) beds are an important component of the submerged aquatic vegetation (SAV) community in Great Bay, generally where depths are 1 meter (3.2 feet) or less but, due to the slightly greater depth in Great Bay, these are not as ubiquitous as they are in the Barnegat/Manahawkin/Little Egg system to the north. Extensive areas (1,358 hectares [3,355 acres]) of intertidal sandflats and mudflats occur in the bay, a result of the sediment load from the river and the movement of sand in through Little Egg Inlet. According to National Wetlands Inventory data, these flats represent 22% of the total estuarine system area. Benthos in the bay include hard substrate residents like mussels and barnacles; epibenthic residents, including crabs, amphipods and free-swimming mysids; and benthic infauna residents such as polychaete worms and many crustaceans. Deposit feeders make up the bulk of the benthic biomass and are responsible for consuming the detritus that falls to the bottom from dead and dying plants and animals. These organisms are, in turn, consumed as the food of other demersal (bottom-feeding) species higher on the food chain, such as winter flounder (*Pleuronectes americanus*). The benthic organisms serve an important ecosystem function by recycling nutrients through the bay ecosystem. The transient fish biomass, including winter flounder, bluefish (*Pomatomus saltatrix*), weakfish (*Cynoscion regalis*), summer flounder (*Paralichthys dentatus*), Atlantic menhaden (*Brevoortia tyrannus*), and black sea bass (*Centropristis striata*), exports a substantial portion of the energy of the estuary to the ocean, supporting nearshore fisheries.

The brackish submerged aquatic vegetation in the Mullica River and its tributaries has a greater diversity of vascular plant species than does that of Great Bay, and contains such species as horned pondweed (*Zannichellia palustris*), water celery (*Vallisneria americana*), slender pondweed (*Potamogeton pusillus*), redhead grass (*P. perfoliatus*), widgeon grass (*Ruppia maritima*), and naiad (*Najas flexilis*). In the freshwater tidal reaches, submerged aquatics intersperse with the floating-leaved and emergent plants of the lower tidal marsh that are more characteristic of freshwater communities in the Pinelands, which the Mullica drains, and include ribbonleaf pondweed (*Potamogeton epihydrus*), arrowheads (*Sagittaria latifolia*, *S. englemannia*, and *S. spatulata*), American mannagrass (*Glyceria grandis*), bulrush (*Scirpus* spp.), and other species described below. Macroinvertebrates in the brackish portion of the Mullica at Green Bank are dominated by amphipods (*Gammarus* spp.), but also include mollusks and six orders of aquatic insects dominated by dipterans (flies).

There are 8,987 hectares (22,206 acres) of salt marsh in the estuary, predominantly high marsh dominated by salt-meadow cordgrass (*Spartina patens*), with lesser amounts of salt grass (*Distichlis spicata*) and black grass (*Juncus gerardii*). Low marsh, dominated by smooth cordgrass (*Spartina alterniflora*), occurs in intertidal areas, especially along tidal creeks. Extensive areas of salt marsh occur on both sides of Great Bay and also extend up the Mullica River as far as Lower Bank and along the lower Wading River. A few areas of unditched salt marsh, unusual on the New Jersey coast, occur along the shores of Great Bay. Smaller areas of brackish tidal marsh complex occur adjacent to the Wading River, Bass River, Nacote Creek, Landing Creek, and Mullica River, dominated by narrow-leaved cattail (*Typha angustifolia*), big cordgrass (*Spartina cyosuroides*), common reed (*Phragmites australis*), and Olney three-square bulrush (*Scirpus americanus*). Freshwater intertidal wetlands are found in a few locations in the upper reaches of tidal influence in the Mullica and Wading Rivers. These freshwater tidal wetlands

can be divided into different zones depending on degree of tidal inundation, i.e., the lower tidal zone, exposed only at low tide and consisting of sparsely vegetated intertidal flats with riverbank quillwort (*Isoetes riparia*), bluntscale bulrush (*Scirpus smithii* var. *smithii*), the regionally rare Parker's pipewort (*Eriocaulon parkeri*), stiff arrowhead (*Sagittaria rigida*), grass-leaved arrowhead (*S. graminea*), and Hudson arrowhead (*S. subulata*); a mid-tidal zone with wild rice (*Zizania aquatica*), spatterdock (*Nuphar advena*) pickerelweed (*Pontedaria cordata*), three-square bulrush (*Scirpus pungens*), arrow arum (*Peltandra virginica*), water hemp (*Amaranthus cannabinus*), and dotted smartweed (*Polygonum punctatum*); and an upper tidal zone dominated by cattails (*Typha angustifolia* and *T. glauca*) and a diversity of other species including sensitive fern (*Onoclea sensibilis*), halberd-leaved tearthumb (*Polygonum arifolium*), arrowheads (*Sagittaria* spp.), river bulrush (*Scirpus fluviatilis*), sweet flag (*Acorus calamus*), smooth bur-marigold (*Bidens laevis*), orange jewelweed (*Impatiens capensis*), and rose-mallow (*Hibiscus moscheutos* var. *moscheutos*), as well as the invasive common reed and exotic purple loosestrife (*Lythrum salicaria*). Shrubs include knob-styled dogwood (*Cornus amomum*), buttonbush (*Cephalanthus occidentalis*), and swamp rose (*Rosa palustris*).

The tributaries of the Mullica River, especially the Wading and Batsto Rivers, are the most pristine river systems in the Pinelands and support a diversity of aquatic species, including 350 species of algae, 62 species of aquatic macrophytes, 275 species of macroinvertebrates, and 91 species of fish. Pine barrens streams are characterized by low pH (average of 4.4), low nutrient levels, and high humic acid content that give the water its characteristic brown tea color. The resources of these pine barrens streams are described in more detail in the New Jersey Pinelands narrative, p. 207.

VI. ECOLOGICAL SIGNIFICANCE/UNIQUENESS OF SITE: The Mullica River - Great Bay estuary is a large, relatively pristine, unaltered estuarine system. It is believed to be the cleanest estuary in the corridor from Boston to Washington, D.C., owing in large part to the fact that the majority of the watershed is protected by the Pinelands Management Area, several large federal and state wildlife management areas, and state forests. This productive estuary supports a high diversity of aquatic and terrestrial habitats and species, especially marine and estuarine fisheries populations, colonial nesting waterbird colonies on the salt marsh islands, migrating and wintering waterfowl, rare brackish and freshwater tidal wetland communities, plants, and invertebrates.

There are 118 species of special emphasis in the Mullica River - Great Bay estuary, incorporating 84 species of birds and 21 species of fish, and including the following federally and state-listed species. (Living resources and their habitats are dynamic; therefore, the ecological significance and species information presented here may not be complete or up-to-date. State and federal environmental agencies [see [Appendix III](#) for office contacts] should be consulted for additional information.) Several other state-listed species occur in pine barrens streams and wetlands just inland of the tidal influence (see below and discussion in the [New Jersey Pinelands](#) narrative).

Federally listed endangered

peregrine falcon (*Falco peregrinus*)
bald eagle (*Haliaeetus leucocephalus*)

Federally listed threatened

piping plover (*Charadrius melodus*)
sensitive joint vetch (*Aeschynomene virginica*)

Federal candidate

bog asphodel (*Narthecium americanum*)

Federal species of concern⁽¹⁾

rare skipper (*Problema bulenta*)
 precious underwing (*Catocola p. pretiosa*)
 Lemmer's pinion moth (*Lithophane lemmeri*)
 northern diamondback terrapin (*Malaclemys t. terrapin*)
 New Jersey rush (*Juncus caesariensis*)
 pine barren boneset (*Eupatorium resinsum*)

¹Species of concern listed here include former Category 2 candidates.

State-listed endangered

eastern tiger salamander (*Ambystoma t. tigrinum*)
 northern harrier (*Circus cyaneus*)
 black skimmer (*Rhynchops niger*)
 least tern (*Sterna antillarum*)
 quill-leaf arrowhead (*Sagittaria teres*)
 coast flatsedge (*Cyperus polystachyos* var. *taxensis*)
 Virginia thistle (*Cirsium virginianum*)
 small-headed beaked-rush (*Rhynchospora microcephala*)

State-listed threatened

osprey (*Pandion haliaetus*)
 yellow-crowned night-heron (*Nyctanassa violacea*)

Fish and invertebrate species abundance and distribution in Great Bay are similar to those of the other New Jersey estuaries. Finfish make up an important component of the bay's ecosystem. The bay provides an important nursery area for bluefish, weakfish, menhaden, and spot (*Leiostomas xanthurus*), as well as spawning habitat for winter spawners such as sandlance (*Ammodytes americanus*) and winter flounder and summer spawners like bay anchovy (*Anchoa mitchilli*), silversides (*Menidia* spp.), gobies (*Gobiosoma* spp.), wrasses (*Labridae* spp.), and northern pipefish (*Syngnathus fuscus*). Fisheries investigations were conducted in the 1970's by the New Jersey Department of Environmental Protection to determine the fishery composition and life stages of estuarine fish using this specific bay. Sixty-six species were caught during these studies and, as in the Barnegat system, the catches were dominated by forage species, with bay anchovy and Atlantic silverside (*Menidia menidia*) being very abundant. The top ranked fish by their relative abundance were: bay anchovy, Atlantic silverside, silver perch (*Bairdiella chrysoura*), alewife (*Alosa pseudoharengus*), striped killifish (*Fundulus majalis*), sea herring (*Clupea harengus*), white perch (*Morone americana*), northern puffer (*Sphoeroides maculatus*), oyster toadfish (*Opsanus tau*), and striped anchovy (*Anchoa hepsetus*). Commercial fisheries activities include the harvest of northern quahog (*Mercenaria mercenaria*), blue crab (*Callinectes sapidus*), white perch, winter flounder, and American eel (*Anguilla rostrata*). The bay is an important spawning and nursery area for blue crab. The area between Graveley Point and the Wading River tributaries supports large eastern oyster (*Crassostrea virginica*) beds, many of which are considered extremely productive seed beds.

The saline waters of the Mullica River estuary buffer the acid waters draining the Pinelands, enabling common peripheral fish species intolerant of acid waters to occur. This group of fishes is common in the lower reaches of the Tuckahoe, Maurice, Great Egg Harbor, and Mullica Rivers, and includes golden shiner (*Notemigonus crysoleucas*), spottail shiner (*Notropis hudsonius*), white sucker (*Catostomus commersoni*), white catfish (*Ictalurus catus*), banded killifish (*Fundulus diaphanus*), mummichog (*Fundulus heteroclitus*), fourspine stickleback (*Apeltes quadracus*), threespine stickleback (*Gasterosteus aculeatus*), white perch, pumpkinseed (*Lepomis gibbosus*), and yellow perch (*Perca flavescens*). The

presence of golden shiner, yellow perch, and pumpkinseed generally indicate human intervention, especially in the impoundments, as a result of stocking programs for small game fish and forage for larger predatory fish. The Wading River has never been stocked and supports only native populations. Anadromous fish, including blueback herring (*Alosa aestivalis*), alewife, and striped bass (*Morone saxatilis*), spawn in streams and tributaries of the Mullica River in the Pinelands; the estuary serves as the major thoroughfare in the spring to the upriver sections and as the nursery area for newly-hatched fish. Hickory shad (*Alosa mediocris*), another anadromous species, is present, as is the catadromous American eel. American shad (*Alosa sapidissima*) once spawned in the river, but is no longer found in the drainage. Fish passage, especially upstream migrations, is impeded by obstructions, usually dams, which generally restrict anadromous fish spawning activity to the lower reaches of these rivers.

The coastal salt, brackish, and freshwater marshes in the Mullica River - Great Bay estuary are extremely important to waterfowl, raptors, wading birds, and shorebirds. Small numbers of colonial nesting waterbirds, mostly common tern (*Sterna hirundo*), with lesser numbers of black skimmer, laughing gull (*Larus atricilla*), herring gull (*L. argentatus*), and great black-backed gull (*L. marinus*), nest on the salt marshes and beach bars along the **Great Bay Boulevard Wildlife Management Area** peninsula and islands including **Tow Island, Fish Island, and Seven Islands**. Tow Island is located directly adjacent to Little Egg Inlet and has been an especially important nesting area for black skimmer that forage in the inlet; 200 black skimmers nested on Tow Island in 1995. Least terns have nested on the sandy shoreline of Great Bay Boulevard Wildlife Management Area and, at one time, nested on the Mullica River near the inland extent of tidal influence in Sweetwater. Piping plover have nested on the southern tip of the Great Bay Boulevard Wildlife Management Area and nest on either side of Little Egg Inlet at Holgate and Little Beach Island (see narratives for Barnegat Bay and Brigantine Bay and Marsh Complex). A small heronry occurred on a small upland area on one of the Seven Islands in 1985, with nesting by great egret (*Casmerodius albus*), cattle egret (*Bubulcus ibis*), black-crowned night-heron (*Nycticorax nycticorax*), and glossy ibis (*Plegadis falcinellus*). Yellow-crowned night-heron also occasionally nest in the area. No nesting waders were recorded on either the 1989 or 1995 surveys, however. Other marsh-nesting birds include clapper rails (*Rallus longirostris*), which nest throughout the tidal marshes, and sora (*Porzana carolina*), Virginia rail (*Rallus limicola*), and marsh wren (*Cistothorus palustris*), which breed in the brackish and freshwater tidal marshes along the Mullica and Wading Rivers.

Raptors utilize the tidal marshes for nesting and for foraging throughout the year. Osprey nest on platforms in numerous locations throughout the salt marshes of this system. Northern harriers nest and feed in the salt and brackish marshes. Peregrine falcon nesting towers occur at two Wildlife Management Areas. Bald eagle have recently begun to nest along the Mullica River and roost and forage throughout the year in the tidal portions of the Wading and Mullica Rivers. Other wintering raptors foraging in the marshes include merlin (*Falco columbarius*) and short-eared owl (*Asio flammeus*).

Significant concentrations of migrating and wintering waterfowl occur in the Mullica River - Great Bay estuary, with an average of over 12,000 waterfowl counted on midwinter aerial surveys. The most abundant species observed in the estuary are, in descending order, American black duck (*Anas rubripes*), brant (*Branta bernicla*), greater and lesser scaup (*Aythya marila* and *A. affinis*), mallard (*Anas platyrhynchos*), and bufflehead (*Bucephala albeola*), with lesser numbers of tundra swan (*Cygnus colombianus*), Canada goose (*Branta canadensis*), red-breasted merganser (*Mergus serrator*), common merganser (*M. merganser*), hooded merganser (*Lophodytes cucullatus*), common goldeneye (*Bucephala clangula*), oldsquaw (*Clangula hyemalis*), American wigeon (*Anas americana*), northern pintail (*Anas acuta*), canvasback (*Aythya valisneria*), and green-winged teal (*Anas crecca*). Dabbling ducks and bufflehead are fairly evenly distributed along the shorelines and tidal creeks of the estuary, while diving ducks occur mostly in the more open water areas of Great Bay and sea ducks occur near the inlet. Flocks of tundra swans averaging over 600 and up to as many as 2,500 individuals are found in the Wading River where they feed on the abundant submerged aquatic vegetation. This is one of the largest consistent

wintering concentrations of tundra swans north of Chesapeake Bay. Little Egg Inlet has concentrations of migrating scoters and other seabirds during fall migration, and flocks of oldsquaw in fall and winter. The marine waters of the inlet are an important concentration area for many species of waterfowl during harsh winters when other areas freeze up. Breeding waterfowl in the estuary include American black duck, gadwall (*Anas strepera*), mallard, and Canada goose. The unditched salt marshes in this estuary provide an important larval insect food source for newly hatched-out ducklings, particularly American black duck. The Mullica River is one of the few locations in the state where American black duck breeds in freshwater marshes.

The Atlantic coastal corridor of New Jersey is an important migratory corridor for shorebirds, passerines, waterfowl, and raptors. Shorebirds feed on the sandflats and mudflats of Great Bay, and roost and forage on adjacent salt marshes. Important shorebird concentration areas occur at Great Bay Boulevard Wildlife Management Area (see Barnegat Bay narrative), Brigantine Beach, and the Brigantine Unit of the E.B. Forsythe National Wildlife Refuge (see Brigantine Bay and Marsh Complex narrative).

Nearly 90 species of birds were recorded as probable or confirmed breeders in or adjacent to the Mullica River and Great Bay in the first two years of New Jersey's Breeding Bird Atlas. These include marsh-nesting birds mentioned above, as well as songbirds typical of the pine barrens, such as pine warbler (*Dendroica pinus*) and gray catbird (*Dumetella carolinensis*).

Northern diamondback terrapin occur throughout the New Jersey backbarrier estuarine system, including the Great Bay and Mullica River, and likely nest on available sandy uplands adjacent to salt marshes and tidal creeks. Eastern tiger salamanders (*Ambystoma t. tigrinum*), which are not as tolerant of the acidic conditions in the Pinelands as are other salamander species, occur along the edges of tidal marshes near the estuary.

Several rare insect species occur in and adjacent to the estuarine marshes, including rare skipper along **Turtle Creek** and the precious underwing moth and Lemmer's pinion moth along the upper tidal Mullica River. A concentration of rare Lepidoptera (butterflies and moths) occurs just upriver of the tidal influence in the **Batsto** watershed. Historically (1976), the federally listed threatened northeastern beach tiger beetle (*Cicindela d. dorsalis*) occurred on the sandy shoreline of Great Bay Boulevard Wildlife Management Area and, more recently, across the intercoastal waterway at the Holgate Unit of E.B. Forsythe National Wildlife Refuge.

Brackish and, especially, freshwater tidal communities are limited in extent in the New York Bight region and generally contain one or more regionally or globally rare plant species. In the Mullica River - Great Bay estuary, brackish and freshwater tidal communities are where the aquatic communities of the Pinelands interface with typical estuarine species. Rare plants include the federally listed threatened sensitive joint vetch, which has its northernmost known occurrence in the Wading River brackish marsh. The Wading River marshes also support quill-leaf arrowhead and marsh rattlesnake master (*Eryngium aquaticum*). Parker's pipewort occurs in the freshwater or brackish tidal segments of the Bass, Wading, Nacote, and upper Mullica (above Green Bank). Smooth orange milkweed (*Asclepias lanceolata*) occurs in brackish marshes along Turtle Creek. Wooded islands within the marshes are also important sites for rare plants; several islands in the Great Bay Boulevard Wildlife Management Area support Virginia thistle.

Several directly adjacent nontidal wetlands that are considered priority sites for biodiversity by New Jersey Natural Heritage Program have been included in this estuarine habitat complex. Abandoned cranberry bogs on upper **Ballanger Creek** contain two rare plants, marsh rattlesnake master and pine barren boneset. The upper reaches of **Nacote Creek (Port Republic Priority Site)** not only contain rare tidal species such as Parker's pipewort and coast flatsedge, but also include adjacent nontidal wetlands,

Sphagnum bogs, and Atlantic white cedar (*Chamaecyparis thyoides*) swamps along the streams that contain rare plants such as New Jersey rush, bog asphodel, and curly-grass fern (*Schizaea pusilla*) and the rare northern pine snake (*Pituophis m. melanoleucus*). A bog immediately adjacent to **Landing's Creek (Clark's Landing Bog)** contains small-headed beaked-rush.

Pine barrens streams, wetlands, and riparian areas just inland of the tidal areas contain an array of rare species typical of pine barrens wetlands, including pine barrens treefrog (*Hyla andersonii*), northern pine snake, timber rattlesnake (*Crotalus horridus*), southern bog lemming (*Synaptis cooperi*), and barred owl (*Strix varia*); plant species include New Jersey rush, bog asphodel, curly-grass fern, Barratt's sedge (*Carex barrattii*), pale beaked-rush (*Rhynchospora pallida*), federally listed threatened Knieskern's beaked-rush (*Rhynchospora knieskernii*), and pine barren gentian (*Gentiana autumnalis*).

VII. THREATS AND SPECIAL PROBLEMS: Degradation of Great Bay's water quality is primarily caused by nonpoint sources of pollution. The chief nonpoint source is land development and its associated activities, such as septic systems, lawn and garden maintenance, golf course maintenance, and automobile use, all of which increase as the human population in the Pinelands increases. Excessive nutrient loading results in higher levels of phytoplankton growth, high turbidity, and increased macroalgal growth. These eutrophic (high nutrient) conditions tend to shift primary production from eelgrass-dominated to phytoplankton and seaweed-dominated systems. Other factors that cause declines in eelgrass include eelgrass wasting disease, dredging and filling operations, and disturbance by boats. Loss of eelgrass beds may eliminate species by no longer providing them with their specific benthic habitat requirements. Disturbance of waterbird colonies in the bays may reduce habitat suitability and productivity. Gulls are competing for nest sites with terns and skimmers, and are predators on terns and plovers. Invasion by common reed and purple loosestrife has resulted in loss of salt marsh and brackish tidal marshes. Dams limit the extent of spawning habitat for river herrings and other anadromous fish.

Diamondback terrapins are run over by cars on coastal roads as they cross or attempt to nest. They are frequently caught and drowned in crab traps and are sometimes collected for pets or food. Eggs and hatchlings are susceptible to predation by raccoons, foxes, and gulls. Tire tracks left by off-road vehicles can trap turtle hatchlings.

VIII. CONSERVATION RECOMMENDATIONS: In order to maintain the relatively pristine aquatic communities in the Pinelands and the Mullica River estuary, stringent land and water management measures need to be implemented and/or maintained in the Pinelands, including: clustering development; establishing standards for stormwater and sanitary wastes based on ambient physical, chemical, and biological conditions throughout the watershed; encouraging innovative techniques in wastewater management; prohibiting wastewater discharge into pristine surface waters and lakes; discouraging the use of lawn fertilizers, pesticides, and herbicides in the watershed; and preserving the natural riparian and floodplain vegetation along streams and around lakes. Point and nonpoint source pollution into the mainstem and tributaries of the Mullica River should be limited, especially in the upper tributaries such as Hammonton Creek and Nescochague Creek, which pass through urban and agricultural areas.

Disturbances to wintering and nesting bird populations need to be minimized or eliminated entirely, particularly for colonial beach-nesting birds such as least terns and piping plovers. Human intrusions into beach nesting areas during the critical nesting season (April to August) should be prevented using a variety of methods, including protective fencing, posting, warden patrols, and public education. Public education and cooperative approaches with landowners are essential to successful protection of beach

species in this area. When determined to be a problem, as it is at most mainland-connected nesting beaches, predator control and/or removal should be instituted. Those tasks and objectives of the piping plover recovery plan that are applicable to this area should be undertaken, including restoration or enhancement of degraded sites where appropriate.

Important diamondback terrapin nesting sites and foraging areas should be determined and protected through public education and enforcement, and public outreach used to eliminate collection. The use of crab traps in areas of the bay known to support concentrations of diamondback terrapin should be limited. Traps that are used should have terrapin excluder devices on them. The use of off-road vehicles should be limited in diamondback terrapin nesting areas. Predator control should be investigated in terrapin nesting sites.

River herring spawning habitat should be expanded by placing fish passage facilities at dams and other impediments on the tributaries to the Mullica River.

Invasive common reed and exotic purple loosestrife should be controlled where they have invaded brackish and freshwater tidal marshes. The sensitive joint vetch population on the Wading River should be protected, and water quality and quantity of freshwater and brackish tidal habitats maintained to allow for expansion of the population and protection of other rare tidal plants.

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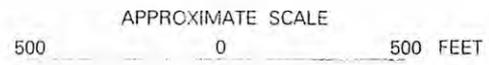
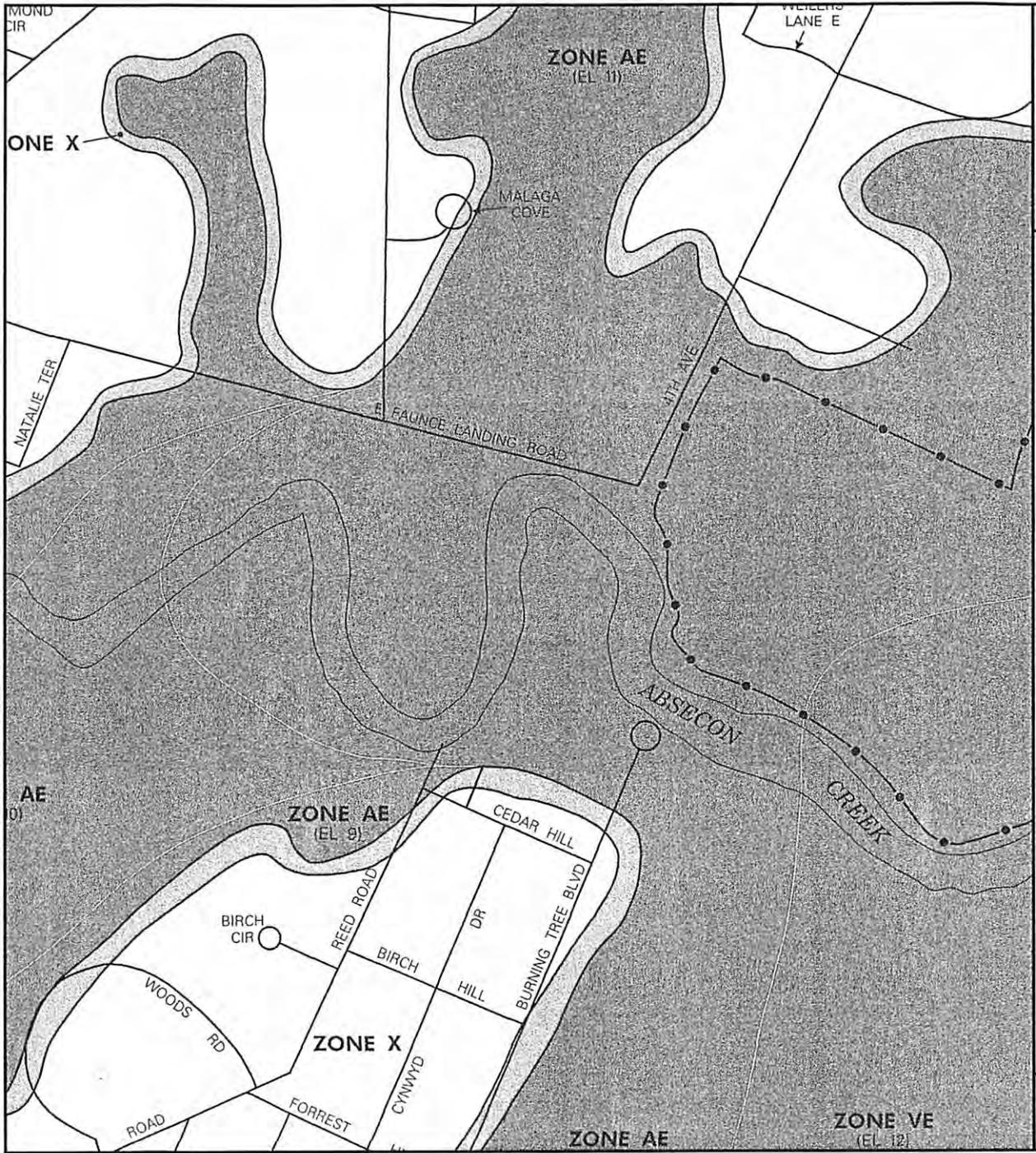
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List of Species of Special Emphasis

Maps

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NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
ABSECON,
NEW JERSEY
ATLANTIC COUNTY

PANEL 1 OF 3
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY - PANEL NUMBER
340001 0001 C

MAP REVISED:
AUGUST 23, 1999



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Fauce Landing: Wetlands, CAFRA, Soils



- ### Legend
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- Soils (SSURGO)**
- Wetlands (2007)
- WETLANDS**
- Mid-Atlantic States
- Other Mid-Atlantic States**
- New Jersey
 - Other Mid-Atlantic States
- Natural2007

© NJDEP

Map Printed On (2012-06-13 11:41)

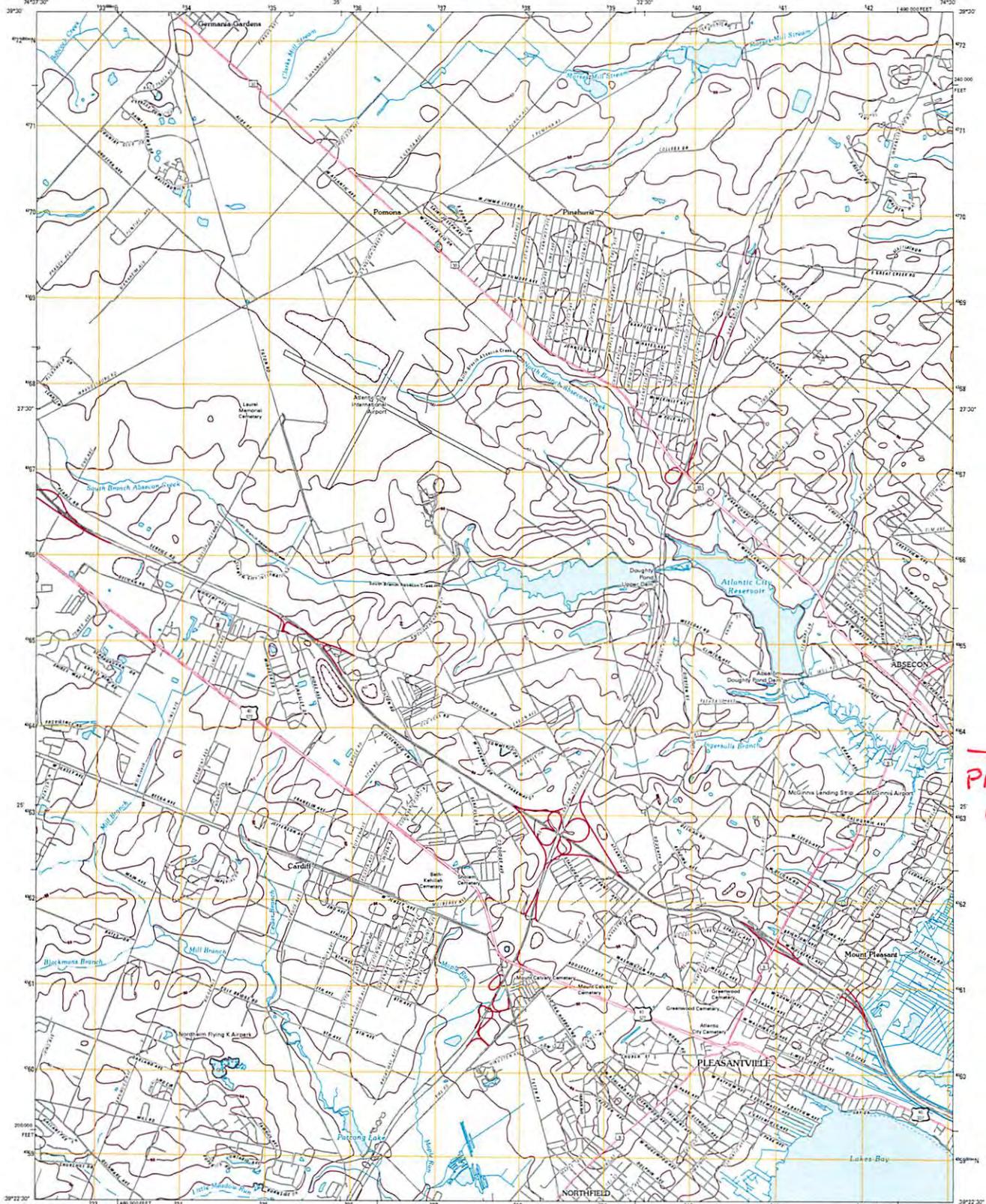
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U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



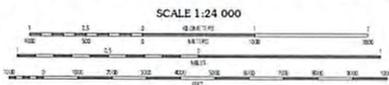
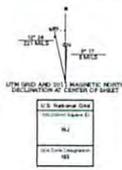
PLEASANTVILLE QUADRANGLE
NEW JERSEY-ATLANTIC CO.
7.5-MINUTE SERIES



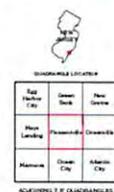
→ Project location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
North Carolina Datum of 1960 (NCD60)
1:50,000 scale grid. Linear Transverse Mercator, Zone 18S
10 000-foot UTM New Jersey Coordinate System of 1983

Source: State of New Jersey, January 2007
Other imagery provided by GE, NY, PA
Roads: ©2006-2010 TomTom
Hydrography: National Hydrography Dataset, 2007
Contours: National Elevation Dataset, 2002
Boundaries: Census, BNA, BC, USGS, 1972-2010



This map was produced in conformance with section 5.1.10 of the USGS US Topo Product Standard.
A metadata file associated with this product is available at www.usgs.gov.



ROAD CLASSIFICATION

Interstate Route	State Route
US Route	Local Road
Trail	RAVD
Interstate Route	US Route
State Route	State Route

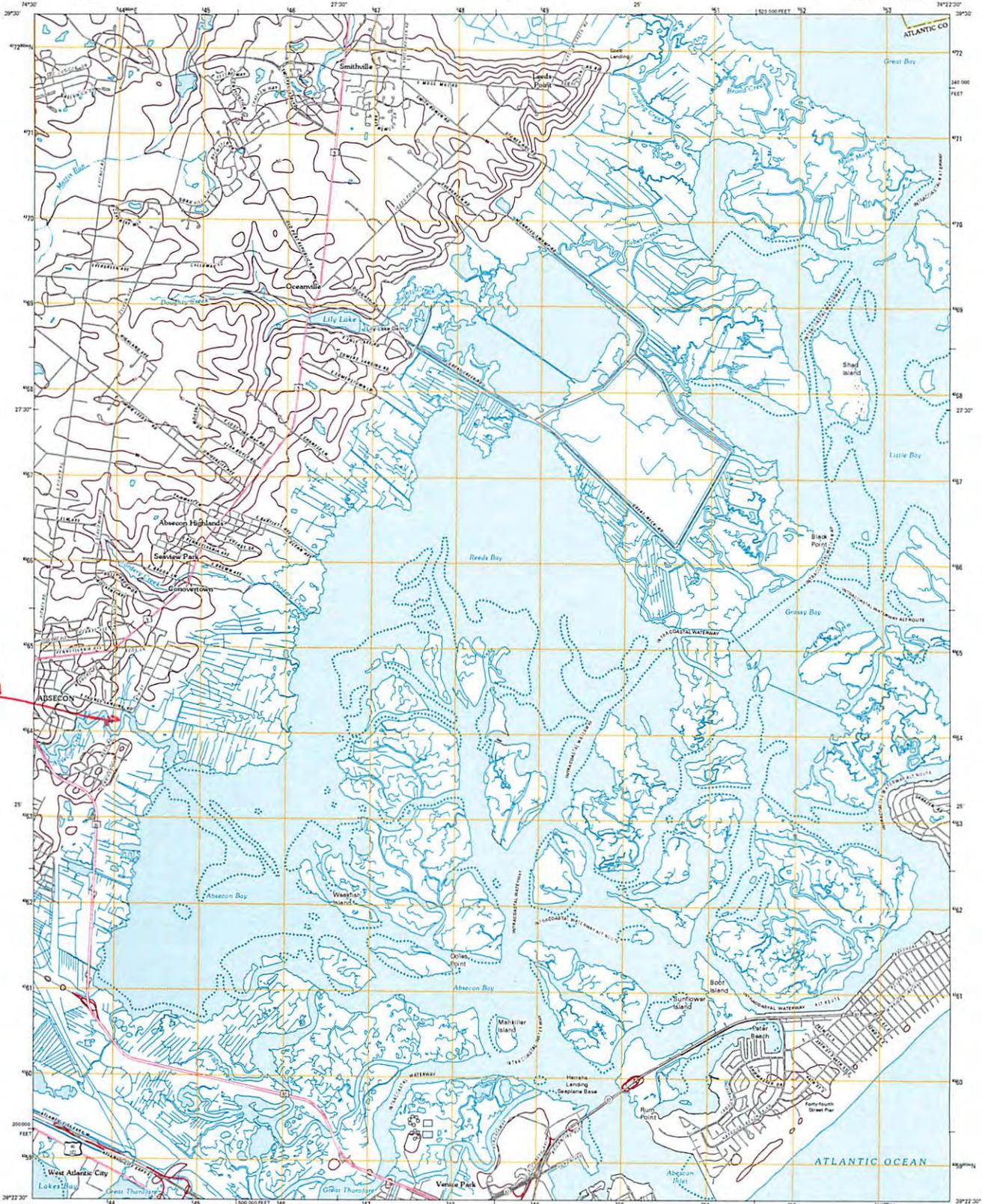
PLEASANTVILLE, NJ
2011



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



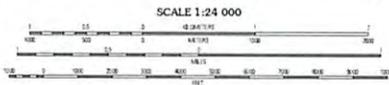
OCEANVILLE QUADRANGLE
NEW JERSEY
7.5-MINUTE SERIES



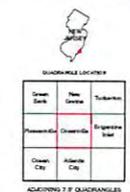
Project location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
Spatial Reference System of 1983 (SR83) Projection and
1:000,000 scale grid. Universal Transverse Mercator, Zone 18S
18 000,000 UTM Zone 18S using Coordinate System of 1983

Imagery: State of New Jersey, January 2007 - January 2009
Other imagery provided by ESRI, NOAA
Roads: ©2006-2010 Tom Alpa
Names: ©2006-2010 Tom Alpa
Photography: National Photographic Dataset, 2007
Contours: National Elevation Dataset, 2002
Boundaries: Corona, BNA, INC, USGS, 1972-2010



This map was produced in conformance with version 8.5.10
of the USGS US Topo Product Standard.
A metadata file associated with this product is available at version 8.5.15.NJ



ROAD CLASSIFICATION

Interstate Route	State Route
US Route	Local Road
Route	4WD
Interstate Route	US Route
State Route	State Route

OCEANVILLE, NJ
2011

Faunce Landing Road Flood Mitigation Project, City of Absecon, Atlantic County, New Jersey (05/2011)



Figure 1

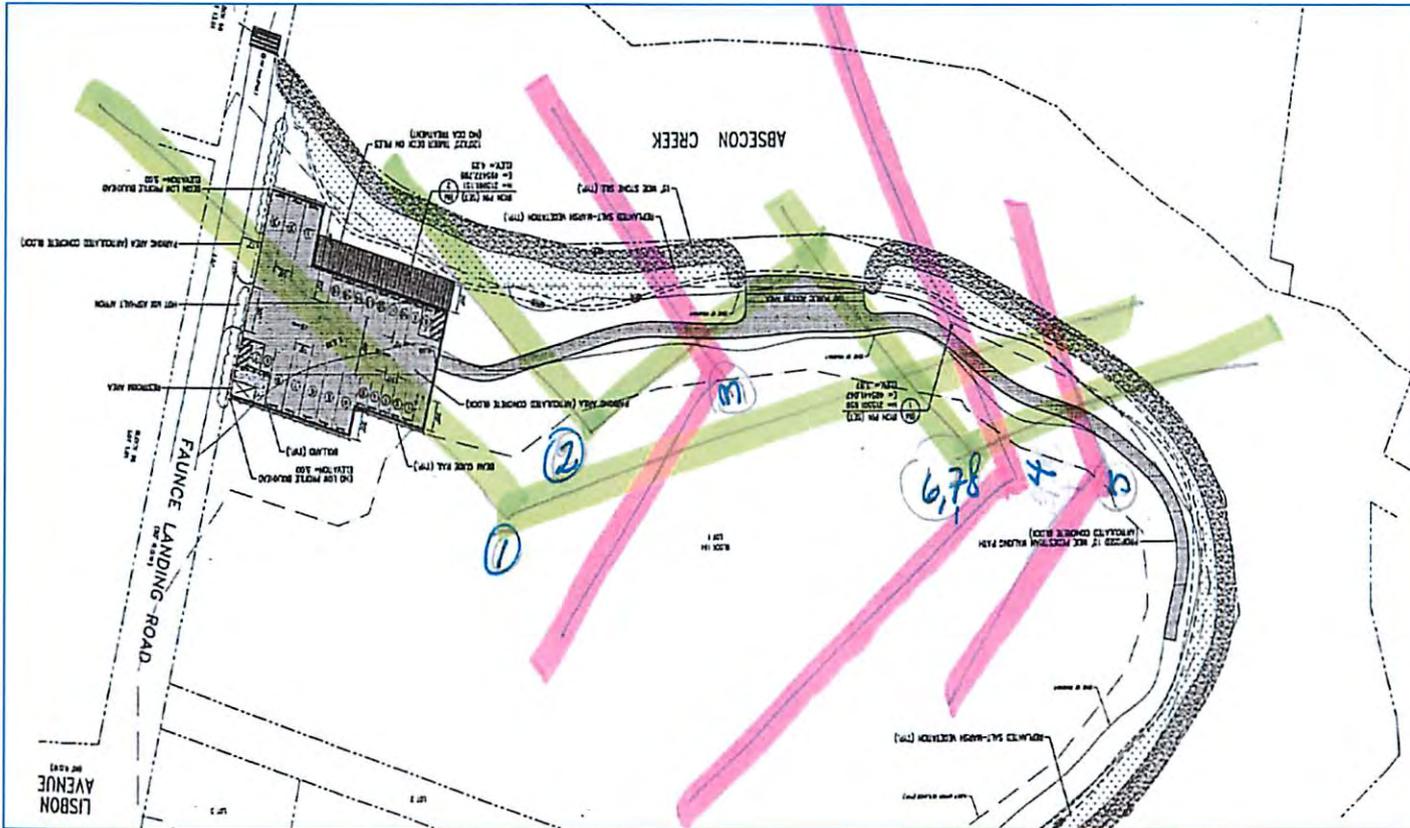




Figure 2



Figure 3



Figure 4

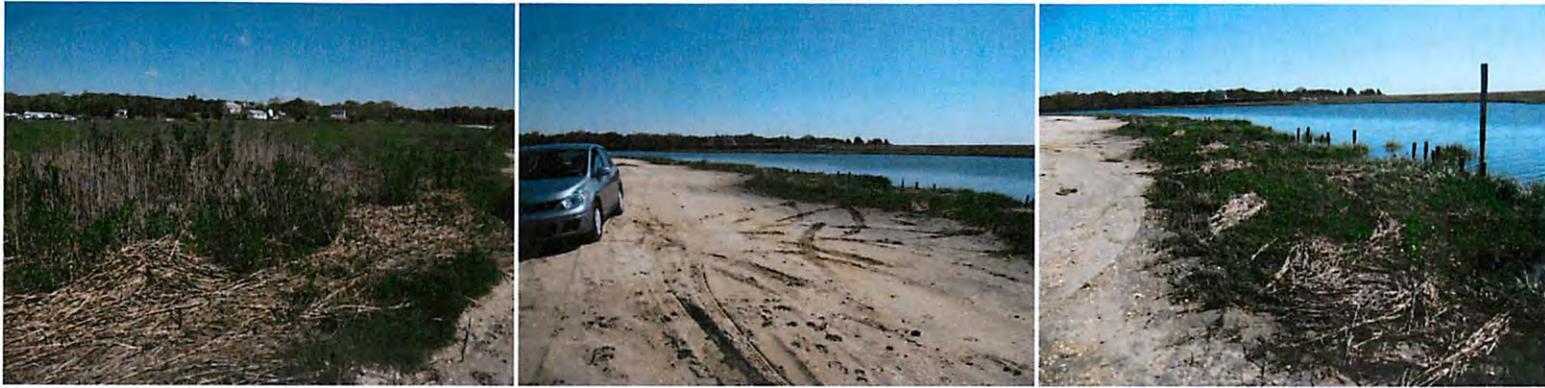


Figure 5



Figure 6



Figure 7

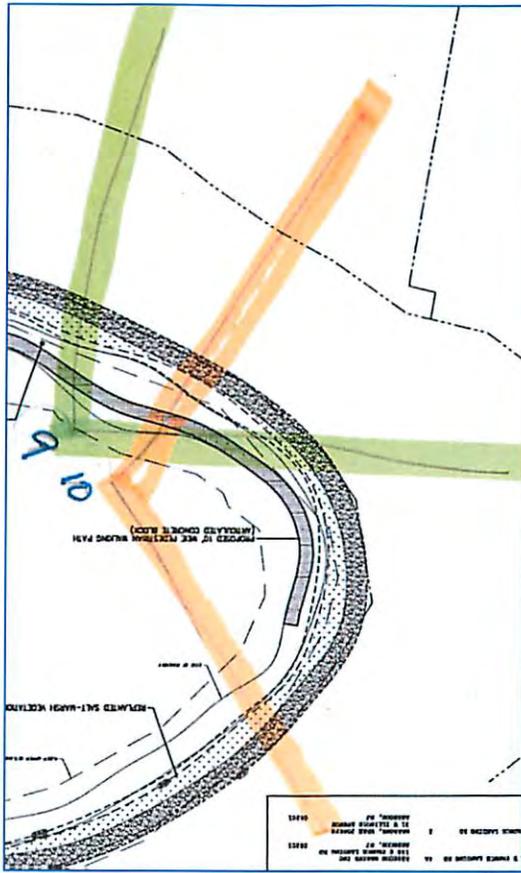


Figure 8



Figure 9



Figure 10

Federal Interagency Comment Form

FEMA

APPLICANT: Absecon, City of
Absecon Creek, East Faunce Landing Road
Hazard Mitigation Grant Program

APPL. NUMBER: DR 1867-NJ-HMGP

Commenting Agency: NOAA Fisheries

Project Manager: Kelly Britt/Jonathan (Zach) Deluane

Waterway/Location: Absecon Creek
City of Absecon, Atlantic County, NJ

Activity: Living shoreline stabilization project

ESSENTIAL FISH HABITAT (EFH)

Project may adversely affect EFH. Impacts are expected to be temporary and minimal.

ESSENTIAL FISH HABITAT CONSERVATION RECOMMENDATIONS (Note: EFH CRs require a response from the federal action agency within 30 days of receipt or 10 days before a permit is issued if CRs are not included as a special condition of the permit).

1. 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.

SIGNATURE: Karen Greene DATE: 06/15/15