APPENDIX B

ENVIRONMENTAL RESOURCES

State of New Jersey
Department of Environmental Protection
Site Remediation Program
Office of Dredging and Sediment Technology
P.O. Box 028
Trenton, NJ 08625
(609) 292-1250
FAX (609) 777-1914

Bradley M. Campbell
Commissioner

October 24, 2002

Mr. Leonard Houston, Chief
Environmental Analysis Branch
Department of the Army, Corps of Engineers
Jacob K. Javits Federal Building
New York, New York 10278-0090

RE: Federal Consistency Determination / Water Quality Certification
File: 0714-02-0005.1
Project: Minish Passaic River Waterfront Park and Historic Area
Contract Area 3

Dear Mr. Houston:

The Office of Dredging and Sediment Technology received your request for a Federal Consistency Determination, as required by Section 307 of the Federal Coastal Zone Management Act, for Construction Contract No. 3 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area. The subject request for federal consistency and Water Quality Certification was submitted on August 28, 2002.

The Minish Park project will create a continuous public waterfront park extending 9,200 linear feet along the Passaic River Waterfront in the City of Newark. This Federal Consistency Determination and Water Quality Certification is issued for Contract No. 3 only. The area of Contract 3 is from the northern extent of the project at Bridge Street to the existing Contract #1 bulkhead, and is referred to on the approved plans as Station 0+00 to Station 20+03. Future phases of the project will require independent determinations as the specific construction plans are developed those future contracts.

Contract 3 involves the construction of approximately 2,000 linear feet of new sheet pile bulkhead. The bulkhead alignment will conform to the location of the existing bulkhead except in the area between Station 14+00 to 20+00. In these areas, filling of the water area outshore of the existing bulkhead is necessary in order to accommodate two combined sewer overflow structures, and to avoid impacting an historic railroad abutment within the project area (located at Station 16+67 to Station 16+82). The construction of the bulkhead will require the removal of approximately 900 cubic yards of sediments from the Passaic River.

Contract 3 also involves the construction of a number of stormwater drainage outfalls. and other stormwater structures along the new bulkhead line.

This project requires the filling of approximately 12,000 square feet of open waters to accommodate the new bulkhead and the above referenced combined sewer overflow structures structures. This fill will be compensated for by the surplus in cut resulting from the reconfigured boat basin under contract 1, and three acres of wetland restoration planned for the south reach of the project.

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0714-02-0005.1

The project is shown on plans submitted to this Office in 23 sheets, titled "Joseph G. Minish Passaic River Waterfront Park and Historic Area Newark, New Jersey – Construction Contract No. 3 Station 0+00 To Station 20+02", dated and prepared by the U.S. Army Engineer District New York.

The Rules on Coastal Zone Management (N.J.A.C. 7:7E) constitute New Jersey's enforceable policies under its federally approved Coastal Zone Management Program. Contract No. 1 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area has been reviewed under the following Rules on Coastal Zone Management: Finfish Migratory Pathways (7:7E-3.5), Navigation Channels (7:7E-3.7), Submerged Infrastructure (7:7E-3.12), Intertidal and Subtidal Shallows (7:7E-3.15), Filled Water's Edge (7:7E-3.23), Historic and Archaeological Resources (7:7E-3.36), special Hazard Areas (7:7E-3.41), Special Urban Areas (7:7E-3.43), New Dredging (7:7E-4.2(g)), Filling (7:7E-4.2(j), Coastal Engineering (7:7E-7.11), Dredged Material Disposal on Land (7:7E-7.12), Water Quality (7:7E-8.4) and Public Access to the Waterfront (7:7E-8.11). Based on the above summary of details of the project as presented in the Federal Consistency Determination request dated August 28, 2002, and in the May 1996 Design Memorandum for this project; **I have determined that Contract No. 3 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area project is consistent with the Rules on Coastal Zone Management and New Jersey's federally approved Coastal Management Program.**

Please be advised, the Corps' contractor shall be responsible to secure an Acceptable Use Determination from the Department of Environmental Protection, Office of Dredging and Sediment Technology for the end use of the decontaminated sediment once the final placement site has been identified. However, based on the preliminary sediment analytical results it appears as though this material will exceed the placement criteria established for the currently operating upland beneficial use sites. Therefore, it is likely that this material will have to go to a solid waste facility licensed to accept this material.

I have also reviewed this project for potential water quality impacts. Provided that the following conditions are met, I have determined that this project is not likely to cause a violation of New Jersey's Surface Water Quality Standards (N.J.A.C. 7:9B-1.1 et seq.). Therefore, this **determination includes the State's Water Quality Certification pursuant to Section 401 of the federal Water Pollution Control Act (33 USC 1251 et seq.) subject to the following conditions:**

1. A "No barge overflow" condition applies to the dredging and transport of any contaminated dredged material.

2. All dredging of contaminated fine-grained material shall be accomplished during low tide on the exposed mud flat. Where this is not possible, silt fences, curtains, or other containment [illegible] Passaic River.

[illegible] of

4. All barges, scows or containers used to transport sediment shall be watertight and tarped during transit.

5. All soil meeting the Non-residential Direct Contact Soil Cleanup Criteria may be used as backfill behind the newly constructed bulkhead. However, that material must be covered with a minimum of six inches of clean soil or crushed stone upon project completion. Separate or more stringent criteria may be applied to the soil on the PSE&G Front Street Coal Gas Site.

6. All workers shall have received requisite training for handling contaminated soil and sediments in accordance with OSHA requirements.

7. Nothing in this approval shall be deemed to in any way affect the responsibilities of PSE&G under their Memorandum of Agreement with the Department dated August 24, 1995 for the remediation of the former PSE&G Front Street Coal Gas Site.

8. The Corps, its contractor and PSE&G shall work cooperatively to develop a contingency plan that outlines what procedures and remedies shall be implemented should petroleum product or coal tar be encountered during construction of this project. Said procedures and remedies shall be designed to prevent discharge of any contamination into the Passaic River. Further, should this level of contamination be encountered during construction, the bulkhead design shall be revisited to determine that it will not interfere with a remedial strategy for the site. The ACOE shall not proceed with work between Station 4+00 to Station 7+00 until such time as the PSE&G interim RAWP is approved in writing, and Waterfront Development Permit #0714-98-0003.1 is modified to reflect said change in the RAWP.

9. A minimum 40-foot wide permanent easement shall be provided along the entire length of bulkhead constructed under this contract reserving that area for the future permanent public promenade and landscaping.

Should you have any questions in this regard, please do not hesitate to contact me at (609) 292-8838.

Sincerely,

Suzanne U. Dietrick, Acting Chief
Office of Dredging and Sediment Technology
Site Remediation Program

C: Joel Pecchioli, Office of Program Coordination
Richard Gimello, Executive Director, NJDOT Office of Maritime Resources
Michael Kenney, SRP, BCM
John Moyle, Bureau of Engineering and Construction

SECTION 00904

FEDERAL CONSISTENCY DETERMINATION/ WATER QUALITY CERTIFICATION

Site Remediation Program
Office of Dredging and Sediment Technology
P.O. Box 028
Trenton, NJ 08625
(609) 292-1250
FAX (609) 777-1914

Mr. Leonard Houston, Chief
Environmental Analysis Branch
Department of the Army, Corps of Engineers
Jacob K. Javits Federal Building
New York, New York 10278-0090

January 28, 2005

RE: Federal Consistency Determination / Water Quality Certification
File: 0000-04-0019.1 CDT 040001
Project: Minish Passaic River Waterfront Park and Historic Area
Contract Area 4 / Project's Tidal Wetlands Mitigation Area

Dear Mr. Houston:

The Office of Dredging and Sediment Technology received your request for a Federal Consistency Determination, as required by Section 307 of the Federal Coastal Zone Management Act, for Construction Contract No. 4 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area. The subject request for federal consistency and Water Quality Certification was submitted on July 19, 2004. Additional information was submitted by the NY District Army Corps of Engineers (NY District) on December 17, 2004 in response to a deficiency letter dated August 13, 2004 from the Department.

Phase I of the Joseph G. Minish Passaic River Waterfront Park and Historic Area project will create a continuous public waterfront park extending 9,200 linear feet along the Passaic River Waterfront in the City of Newark. This Federal Consistency Determination and Water Quality Certification is issued for Contract No. 4 only. The area of Contract 4 is from Newark Penn Station easterly to Brill Street in Newark, NJ and has been designated on the development plans as the construction segment from Station 37 + 10 to Station 92 + 16.26. Previous contract areas 1, 2 and 3 received separate federal consistency determinations from the Department.

Contract 4 involves the construction of approximately 2,300 linear feet of new sheet pile bulkhead (Station 37+10 to 60+00) and the construction of outlet structures and drainage outlets. The project also calls for the re-grading of 3,200 linear feet of riverbank between the Jackson Street Bridge east to Brill Street. The 1.93acre tidal wetland mitigation area will consist of two areas, the Primary Wetland Area (Station 69 +84 to Station 83+36) and the Supplemental Wetland Area (Station 60+00 to Station 68+73). The tidal wetland mitigation area is being constructed to offset the loss of 24, 467.75 square feet (0.56 acres) of open water from the entire project. The mitigation area equates to a ratio of 3.4 :1 for the loss of open water.

This project requires the filling of 10,879.44 square feet of open waters to accommodate the new bulkhead and the above referenced combined sewer overflow structures structures. This contract provides for the creation of 5,480.3 square feet of open water through the re-grading of the shoreline in the area between Jackson Street Bridge and Brill Street. Therefore, the total loss of open water from this contract is 5,399.14 square feet. This loss has been factored into the calculation of the total loss of open water for the entire project as discussed above.

The project is shown on plans consisting of 62 sheets entitled, "Joseph G. Minish Passaic River Waterfront Park and Historic Area Newark, New Jersey – Construction Contract No. 3 Station 37+10 To Station 92+13.59", dated October 28, 2004, and prepared by the U.S. Army Engineer District New York.

The Rules on Coastal Zone Management (N.J.A.C. 7:7E) constitute New Jersey's enforceable policies under its federally approved Coastal Zone Management Program. Contract No. 4 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area has been reviewed under the following Rules on Coastal Zone Management: Finfish Migratory Pathways (7:7E-3.5), Navigation Channels (7:7E-3.7), Submerged Infrastructure (7:7E-3.12), Intertidal and Subtidal Shallows (7:7E-3.15), Filled Water's Edge (7:7E-3.23), Historic and Archaeological Resources (7:7E-3.36), Special Hazard Areas (7:7E-3.41), Special Urban Areas (7:7E-3.43), Mitigation Proposals for Wetlands and Intertidal and Subtidal Shallows (7:7E-3B)New Dredging (7:7E-4.2(g)), Filling (7:7E-4.2(j), Coastal Engineering (7:7E-7.11), Dredged Material Disposal on Land (7:7E-7.12), Water Quality (7:7E-8.4) and Public Access to the Waterfront (7:7E-8.11). Based on the above summary of details of the project as presented in the Federal Consistency Determination request dated July 19, 2004 as amended on December 17, 2004 , and in the May 1996 Design Memorandum for this project; **I have determined that Contract No. 4 of the Joseph G. Minish Passaic River Waterfront Park and Historic Area project is consistent with the Rules on Coastal Zone Management and New Jersey's federally approved Coastal Management Program provided the following conditions are met:**

1. **Prior to construction, the NY District or its designated contract shall provide written notification to the Department of the disposal location for the sediments excavated from the wetland mitigation area and the material removed for the bulkhead construction. Based on the preliminary sediment/soil analytical results, this material exceeds the placement criteria established for the currently operating upland beneficial use sites. Therefore, it is likely that this material will have to go to a solid waste facility licensed to accept this material.**

2. The NY District shall comply with the conditions specified in the attached "Coastal Wetland Mitigation Conditions" as it relates to monitoring and reporting requirements for the mitigation project.

3. Within 6 months from the date of this Federal Consistency Determination, the NY District shall obtain final approval from the Department on the document entitled "Tidal Wetland Mitigation and Restoration Demonstration Study Monitoring Work Plan" (draft dated November 2004) upon completion of coordination of the review of the document with the Lower Passaic River Restoration Study team.

I have also reviewed this project for potential water quality impacts. Provided that the following conditions are met, I have determined that this project is not likely to cause a violation of New Jersey's Surface Water Quality Standards (N.J.A.C. 7:9B-1.1 et seq.). **Therefore, this determination includes the State's Water Quality Certification pursuant to Section 401 of the federal Water Pollution Control Act (33 USC 1251 et seq.) subject to the following conditions:**

1. A "No barge overflow" condition applies to the dredging and transport of any contaminated dredged material.

2. Silt fences, curtains, or other containment features shall be employed to prevent contaminated sediment from entering the Passaic River during the entire project.

3. Dredged material shall be placed deliberately in the barge in order to prevent spillage of material overboard.

4. All barges, scows or containers used to transport sediment shall be watertight and tarped during transit.

5. All workers shall have received requisite training for handling contaminated soil and sediments in accordance with OSHA requirements.

6. Nothing in this approval shall be deemed to in any way affect the responsibilities of PSE&G under their Memorandum of Agreement dated August 12, 1997, and the Interim Remedial Measure Selection Report/Interim Remedial Measure Work Plan dated July 14, 2003 as approved by the Department on October 31, 2003 for the Former Market Street Gas Works Site.

7. The Corps, its contractor and PSE&G shall work cooperatively to develop a contingency plan that outlines what procedures and remedies shall be implemented should petroleum product or coal tar be encountered during construction of this project. Said procedures and remedies shall be designed to prevent discharge of any contamination into the Passaic River. Further, should this level of contamination be encountered during construction, the bulkhead design shall be revisited to determine that it will not interfere with a remedial strategy for the site.

8. A minimum 40-foot wide permanent easement shall be provided along the entire length of bulkhead constructed under this contract reserving that area for the future permanent public promenade and landscaping.

Should you have any questions in this regard, please do not hesitate to contact me at (609) 292-8838.

Sincerely,

Suzanne U. Dietrick, Acting Chief
Office of Dredging and Sediment Technology
Site Remediation Program

Enclosure

C: Lisa Baron, NJDOT Office of Maritime Resources
John Moyle, Bureau of Engineering and Construction
Mike Kenney, SRWM
Virginia Kopkash, LURP
David Bean, ONRR
Lisa Baron, NJDOT, Office of Maritime Resources
Karen Greene, NMFS

Mr. Timothy Kubiak
US Fish and Wildlife Service
New Jersey Field Office
927 N. Main Street Bldg. D
Pleasantville, NJ 08232

Ms. Alice Yeh
US EPA - Region II
290 Broadway, 19th Floor
New York, NY 10007-1866

Ms. Reyhan Mehran
NOAA
290 Broadway, 18th Floor
New York, NY 10007-1866

COASTAL WETLAND MITIGATION CONDITIONS

1. The NY District shall complete and sign a Department approved conservation restriction for the mitigation site. The restriction shall be included on the deed, and recorded in the office of the County Clerk (the Registrar of Deeds and Mortgages in some counties), in the county wherein the lands of the mitigation project are located, within 10 days of approval of the wetland mitigation proposal.

2. The NY District shall notify the Land Use Regulation Program, in writing, at least thirty (30) days in advance of the start of construction of the wetland mitigation project for an on-site pre-construction meeting between the NY District, the contractor, the consultant and the Program.

3. The mitigation designer must be present during critical stages of construction of the mitigation project this includes but is not limited to herbicide applications, sub-grade inspection, final grade inspection, and planting inspection to ensure the intent of the mitigation design and their predicted wetland hydrology is realized in the landscape. Mitigation designs are not static documents and changes may be necessary to ensure success of the project. It shall be the prerogative of the mitigation consultant to make changes to the design should field conditions warrant such action.

4. Immediately following final grading of the site, a disc must be run over the site to eliminate compaction. The mitigation designer must be present to oversee this phase of the project and confirm with the Land Use Regulation Program this activity has occurred prior to planting of the site.

5. Immediately following the final grading of the mitigation site and prior to planting, the NY District shall notify the Land Use Regulation Program for a post-grading construction meeting between the NY District, contractor, consultant and the Land Use Regulation Program. The NY District must give the Program at least thirty (30) days notice prior to the date of this meeting.

6. Within 30 days following the final grading and planting of the mitigation project, the NY District shall submit a final report to the Land Use Regulation Program. The final report shall contain, at a minimum, the following information:

   a. A completed WETLAND MITIGATION PROJECT COMPLETION OF CONSTRUCTION FORM (attached) which certifies that the mitigation project has been constructed as designed and that the proposed area of wetland creation, restoration or enhancement has been accomplished;

   b. As built plans which depict final grade elevations at one foot contours and include a table of the species and quantities of vegetation that were planted including any grasses that may have been used for soil stabilization purposes;

   c. Show on the as-built plans that the boundaries of the wetland mitigation area has been visibly marked with 3 inch white PVC pipe extending 4 feet above

the ground surface. The stakes must remain on the site for the entire monitoring period;

d. Photos of the constructed wetland mitigation project with a photo location map as well as the GPS waypoints in NJ state plane coordinates NAD 1983;

e. To document that the required amount of soil has been placed/replaced over the entire area of the mitigation site, provide a minimum of 6 soil profile descriptions to a depth of 20 inches. The location of each soil profile description should be depicted on the as built plan as well as provide the GPS waypoints in NJ state plane coordinates NAD 1983;

f. The NY District shall post the mitigation area with several permanent signs, which identify the site as a wetland mitigation project and that mowing, cutting, dumping and draining of the property is prohibited; and

g. The sign must also state the name of the site, a contact name and phone number.

7. If the Land Use Regulation Program determines that the mitigation project is not constructed in conformance with the approved plan, the NY District will be notified in writing and will have 60 days to submit a proposal to indicate how the project will be corrected.

8. The NY District shall monitor the mitigation project for 3 full growing seasons after the mitigation project has been constructed. The NY District shall submit monitoring reports to the Land Use Regulation Program no later than December 31st of each monitoring year (All monitoring report must include the standard items identified in the attachment and the information requested below).

9. All monitoring reports will include all the following information:

a. All monitoring reports except the final one must include documentation that it is anticipated, based on field data, that the goals of the wetland mitigation project including the transition area, as stated in the approved wetland mitigation proposal and the permit will be satisfied. If the NY District is finding problems with the mitigation project and does not anticipate the site will be a full success then recommendations on how to rectify the problems must be included in the report with a time frame in which they will be completed;

b. All monitoring reports except the final one must include field data to document that the site is progressing towards 85 percent survival and 85 percent area coverage of mitigation plantings or target hydrophytes (Target hydrophytes are non-invasive native species to the area and similar to ones identified on the mitigation planting plan). If the proposed plant community is a scrub/shrub or forested wetland or wetland buffer the NY District must also demonstrate each year with data that the woody species are thriving, increasing in stem density and height each year. If the field data shows that the mitigation project is

failing to meet the vegetation survival, coverage and health goals, the monitoring report should contain a discussion of steps that will be taken to rectify the problem, including a schedule of implementation;

c. All monitoring reports except the final one must include documentation of any invasive or noxious species (see below for list of species) colonizing the site and how they are being eliminated. The NY District is required to eliminate either through hand-pulling, application of a pesticide or other Land Use Regulation Program approved method any occurrence of an invasive/noxious species on the mitigation site during the monitoring period;

d. All monitoring reports except the final one must include documentation that demonstrates the proposed hydrologic regime as specified in the mitigation proposal appears to be met. If the NY District is finding problems with the mitigation project and does not anticipate the proposed hydrologic regime will be or has not been met then recommendations on how to rectify the problem must be included in the report along with a time frame within which it will be completed;

e. The final monitoring report must include documentation to demonstrate that the goals of the wetland mitigation project including the required wetland buffer, as stated in the approved wetland mitigation proposal and the permit, has been satisfied. Documentation for this report will also include a field wetland delineation of the wetland mitigation project based on techniques as specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989);

f. The final monitoring report must include documentation the site has an 85 percent survival and 85 percent area coverage of the mitigation plantings or target hydrophytes. The NY District must also document that all plant species are healthy and thriving and if the proposed plant community contains trees demonstrate that the trees are at least five feet in height;

g. The final monitoring report must include documentation demonstrating the site is less than 10 percent occupied by invasive or noxious species such as but not limited to *Phalaris arundinacea* (Reed canary grass), *Phragmities australis* (Common reed grass), *Pueraria lobata* (Kudzu), *Typha latifloia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail), *Lythrum salicaria* (Purple loosestrife), *Ailanthus altissima* (Tree-of-heaven), *Berberis thunbergi* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Elaeagnus angustifloia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet) and *Rosa multiforia* (Multiflora rose);

h. The final monitoring report must include documentation that demonstrates that the proposed hydrologic regime as specified in the mitigation proposal, which proves the mitigation site is a wetland has been satisfied. The documentation shall include when appropriate monitoring well data, tide gauge data,

photographs and field observation notes collected throughout the monitoring period; and

10. Once the required monitoring period has expired and the NY District has submitted the final monitoring report, the Land Use Regulation Program will make the finding that the mitigation project is either a success or a failure. This mitigation project will be considered successful if the NY District demonstrates all of the following:

    a. That the goals of the wetland mitigation project including acreage and the required wetland buffer, as stated in the approved wetland mitigation proposal and the permit, has been satisfied. The NY District must submit a field wetland delineation of the wetland mitigation project based on the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) which shows the exact acreage of wetlands in the mitigation area;

    b. The site has an 85 percent survival and 85 percent area coverage of the mitigation plantings or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan. All plant species in the mitigation area are healthy and thriving. All trees are at least five feet in height;

    c. The site is less than 10 percent occupied by invasive or noxious species such as but not limited to *Phalaris arundinacea* (Reed canary grass), *Phragmities australis* (Common reed grass), *Pueraria montana* (Kudzu), *Typha latifloia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail), *Lythrum salicaria* (Purple loosestrife), *Ailanthus altissima* (Tree-of-heaven), *Berberis thunbergi* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Elaeagnus angustifloia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet) and *Rosa multiforia* (Multiflora rose); and,

    d. The proposed hydrologic regime as specified in the mitigation proposal, which proves the mitigation site is a wetland has been satisfied.

11. If the mitigation project is considered a failure, the NY District is required to submit a revised mitigation plan to rectify the wetland mitigation site. The plan shall be submitted within 60 days of receipt of the letter from the Program indicating the wetland mitigation project was a failure. The financial surety, if required, will not be released by the Program until such time that the NY District satisfies the success criteria as stipulated in condition number 15.

12. The NY District shall assume all liability for accomplishing corrective work should the Land Use Regulation Program determine that the compensatory mitigation has not been 100% satisfactory. Remedial work may include re-grading and/or replanting the mitigation site. This responsibility is incumbent upon the NY District until such time that the Land Use Regulation Program makes the finding that the mitigation project is successful.

Federal Interagency Meeting Comment Form

Project: U.S. Army Corps
Minnish Park Project

Commenting Agency: NOAA Fisheries

Project Manager: Melissa Alvarez

Waterway/Location: Passaic River
Newark, Essex Co., NJ

Activity: Bulkhead replacements, back fill, possible riprap

ESSENTIAL FISH HABITAT (EFH)

Project may adversely affect EFH.

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. No in-water work from 3/1 to 6/30 to minimize adverse effects to anadromous fish passage. Anadromous fish such as alewife and blueback herring migrate through the Kill van Kull to upstream spawning areas in the Hackensack and Passaic Rivers. These species are a food source for federally managed species such as bluefish, winter flounder, little skate, winter skate, scup, and summer flounder. An adverse effect on prey species can be considered an adverse effect on EFH.
2. The sediments in the waterway contain elevated levels of a variety of contaminants, best management practices such as the use of turbidity barriers should be used to limit the amount of suspended sediment released into the waterway.
3. Provide compensatory mitigation as appropriate for areas of the river that are filled to during the installation of the bulkhead.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

See EFH CRs above.

ENDANGERED SPECIES ACT

No threatened or endangered species under the jurisdiction of the NMFS are known to occur in the action area. As a result, further coordination with NMFS PRD is not necessary. Should project plans change and alter the basis for determination, or if new species or critical habitat is designated, coordination should be reinitiated.

OTHER

1. Comply with NJDEP permit conditions

SIGNATURE: Karen Greene DATE: 5/16/2014

Proposed Seed Species and Mixtures

Native Seed Mix	Lawn Seed Mix	Temporary Seed Mix
Perennial Wildflowers	tall fescue (*Lolium arundinaceum*)	annual rye grass (*Lolium multiflorum*)
butterfly weed (*Asclepias tuberosa*)	Kentucky bluegrass (*Poa pratensis*)	
zig zag aster (*Aster prenanthoides*)	perennial ryegrass (*Lolium perenne*)	
New England aster (*Aster novae-angliae*)		
indian paintbrush (*Castilleja coccinea*)		
oxeye daisy (*Chrysanthemum leucanth*)		
lance-leaved coreopsis (*Coreopsis lanceolata*)		
hardy ageratum (*Eupatorium coelestinum*)		
ox-eyed sunflower (*Heliopsis helianthoides*)		
perennial lupine (*Lupinus perennis*)		
showy evening primrose (*Oenothera speciosa*)		
beardtongue (*Penstemon digitalis*)		
summer phlox (*Phlox paniculata*)		
black-eyed susan (*Rudbeckia hirta*)		
brown-eyed susan (*Rudbeckia triloba*)		
early goldenrod (*Solidago juncea*)		
Grasses		
little bluestem (*Andropogon scoparius*)		
blaze big bluestem (*Andropogon gerardii*)		
niagra switchgrass (*Panicum virgatum*)		
blackwell side oats grama (*Bouteloua curtipendula*)		
trailway annual rye (*Lolium multiflorum*)		

U.S. Fish and Wildlife Service

Trust Resources List

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

New Jersey Ecological Services Field Office
927 NORTH MAIN STREET, BUILDING D
PLEASANTVILLE, NJ 8232
(609) 646-9310
http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html

Project Name:

Minish Park

U.S. Fish and Wildlife Service

Trust Resources List

Project Location Map:

Project Location Measurements:

Length : 3.6 mi.

Project Counties:

Essex, NJ

Trust Resources List

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-74.1661304 40.7449428, -74.1661289 40.7449431, -74.1661263 40.7449426, -74.1661239 40.7449424, -74.1661227 40.7449418, -74.1661213 40.7449415, -74.1661192 40.7449401, -74.1661169 40.7449389, -74.1661159 40.7449378, -74.1661148 40.744937, -74.1661134 40.7449349, -74.1661118 40.744933, -74.1661114 40.7449317, -74.1661106 40.7449305, -74.1642652 40.7402809, -74.1642647 40.7402794, -74.1639216 40.7391747, -74.1630222 40.736903, -74.1610516 40.7349229, -74.1604112 40.7343729, -74.1588275 40.7337891, -74.1570279 40.733302, -74.1554428 40.7332047, -74.1512379 40.7332697, -74.1512331 40.7332692, -74.1502487 40.7330422, -74.1484089 40.7331394, -74.1475101 40.7334313, -74.1475076 40.733432, -74.1466576 40.733593, -74.1464048 40.7339761, -74.1464006 40.7339807, -74.1463952 40.7339838, -74.1457963 40.7342108, -74.1447681 40.7348601, -74.1447613 40.7348628, -74.1447541 40.7348629, -74.1447473 40.7348604, -74.1447418 40.7348557, -74.1438835 40.7337825, -74.1438801 40.7337761, -74.1438791 40.7337689, -74.1438808 40.7337619, -74.1438849 40.7337559, -74.1438909 40.7337518, -74.1438979 40.73375, -74.1455689 40.7336527, -74.1465104 40.7333284, -74.1465119 40.7333279, -74.1487864 40.7327425, -74.1487912 40.7327419, -74.1517094 40.7327094, -74.1517107 40.7327094, -74.1548007 40.732872, -74.1548062 40.7328731, -74.1553563 40.7330655, -74.1558208 40.7328415, -74.1558295 40.7328395, -74.1573745 40.7328395, -74.1573798 40.7328402, -74.1584527 40.7331329, -74.1584545 40.7331335, -74.1594844 40.7335237, -74.1594853 40.7335241, -74.1603007 40.7338818, -74.1603048 40.7338842, -74.1610336 40.7344363, -74.1621056 40.7350862, -74.1621112 40.7350913, -74.1626679 40.7358375, -74.1632242 40.7363239, -74.163228 40.7363285, -74.1641721 40.7378568, -74.1641728 40.737858, -74.1648594 40.7391587, -74.1648613 40.7391638, -74.1651185 40.7403656, -74.1655901 40.7416649, -74.1655907 40.7416667, -74.1658901 40.7428335, -74.16636 40.7434808, -74.1663622 40.7434848, -74.1669201 40.7448179, -74.1669217 40.744825, -74.1669206 40.7448323, -74.1669169 40.7448386, -74.1669112 40.7448432, -74.1669042 40.7448454, -74.1661317 40.7449429, -74.1661304 40.7449428), (-74.1661421 40.7449014, -74.1668731 40.7448091, -74.1663262 40.7435024, -74.1658555 40.7428539, -74.1658523 40.7428472, -74.1655522 40.7416776, -74.1650804 40.7403779, -74.1650796 40.7403753, -74.1648227 40.7391749, -74.1641377 40.7378772, -74.1631956 40.7363521, -74.1626399 40.7358663, -74.1626371 40.7358632, -74.1620815 40.7351184, -74.1610119 40.73447, -74.1610102 40.7344688, -74.1602825 40.7339175, -74.1594697 40.7335609, -74.1584412 40.7331712, -74.1573718 40.7328795, -74.1558341 40.7328795, -74.1553662 40.7331051, -74.1553586 40.7331071, -74.1553509 40.733106, -74.1547957 40.7329118, -74.1517092 40.7327494, -74.148794 40.7327819, -74.1465227 40.7333665, -74.1455793 40.7336914, -74.145574 40.7336925, -74.1439389 40.7337877, -74.1447618 40.7348167, -74.1457766 40.7341759, -74.1457802 40.7341741, -74.146375 40.7339487, -74.1466289 40.7335639, -74.1466345 40.7335583, -74.1466419 40.7335552, -74.1474989 40.7333929, -74.148399 40.7331006, -74.1484041 40.7330996, -74.1502494 40.7330021, -74.150255 40.7330026, -74.1512397 40.7332297, -74.155443 40.7331647, -74.1554445 40.7331647, -74.1570324 40.7332622, -74.1570364 40.7332629, -74.1588388 40.7337507, -74.1588405 40.7337512, -74.1604284 40.7343366, -74.1604345 40.7343402, -74.1610782 40.734893, -74.1610794 40.7348941, -74.1630535 40.7368777, -74.1630579 40.7368844, -74.1639591 40.7391606, -74.1639596 40.7391621, -74.1643027 40.7402668, -74.1661421 40.7449014)))

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Project Type:

Shoreline / Beach Protection / Renourishment

Endangered Species Act Species List (USFWS Endangered Species Program).

There are no listed species found within the vicinity of your project.

Critical habitats within your project area:

There are no critical habitats within your project area.

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

FWS Migratory Birds (USFWS Migratory Bird Program).

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to:
http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html.

U.S. Fish and Wildlife Service

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To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tool links in the Bird Conservation Tools section at: http://www.fws.gov/migratorybirds/CCMB2.htm.

For information about conservation measures that help avoid or minimize impacts to birds, please visit: http://www.fws.gov/migratorybirds/CCMB2.htm.

Migratory birds of concern that may be affected by your project:
There are **23** birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory bird list of concern will continue to be updated regularly as new and better information is obtained. User feedback is one method of identifying any needed improvements. Therefore, users are encouraged to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list you know does not occur in the specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list). Comments should be sent to the ECOS Help Desk.

Species Name	Bird of Conservation Concern (BCC)	Species Profile	Seasonal Occurrence in Project Area
American Oystercatcher (*Haematopus palliatus*)	Yes	species info	Year-round
American bittern (*Botaurus lentiginosus*)	Yes	species info	Breeding
Bald eagle (*Haliaeetus leucocephalus*)	Yes	species info	Year-round
Black Skimmer (*Rynchops niger*)	Yes	species info	Breeding
Black-billed Cuckoo (*Coccyzus erythropthalmus*)	Yes	species info	Breeding
Blue-winged Warbler (*Vermivora pinus*)	Yes	species info	Breeding
Canada Warbler (*Wilsonia canadensis*)	Yes	species info	Breeding
cerulean warbler (*Dendroica cerulea*)	Yes	species info	Breeding
Fox Sparrow (*Passerella liaca*)	Yes	species info	Wintering

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Golden-Winged Warbler (*Vermivora chrysoptera*)	Yes	species info	Breeding
Hudsonian Godwit (*Limosa haemastica*)	Yes	species info	Migrating
Kentucky Warbler (*Oporornis formosus*)	Yes	species info	Breeding
Least Bittern (*Ixobrychus exilis*)	Yes	species info	Breeding
Pied-billed Grebe (*Podilymbus podiceps*)	Yes	species info	Year-round
Prairie Warbler (*Dendroica discolor*)	Yes	species info	Breeding
Purple Sandpiper (*Calidris maritima*)	Yes	species info	Wintering
Rusty Blackbird (*Euphagus carolinus*)	Yes	species info	Wintering
Saltmarsh Sparrow (*Ammodramus caudacutus*)	Yes	species info	Breeding
Seaside Sparrow (*Ammodramus maritimus*)	Yes	species info	Year-round
Snowy Egret (*Egretta thula*)	Yes	species info	Breeding
Upland Sandpiper (*Bartramia longicauda*)	Yes	species info	Breeding
Wood Thrush (*Hylocichla mustelina*)	Yes	species info	Breeding
Worm eating Warbler (*Helmitheros vermivorum*)	Yes	species info	Breeding

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered

in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

Data Limitations, Exclusions and Precautions

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC is unable to display wetland information at this time.

RECORD OF NON-APPLICABILITY (RONA)

Project Name: Joseph G. Minish Passaic River Waterfront Park & Historic Area - Phase 1
Reference: Equipment list provided by Alicia Gould to Jenine Gallo

Project/Action Point of Contact: David Gentile

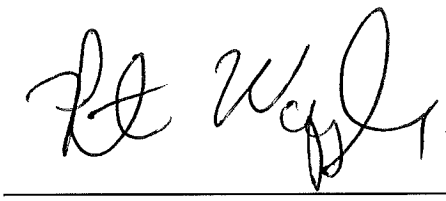
Begin Date: January 2015

End Date: December 2015

1. The project described above has been evaluated for Section 176 of the Clean Air Act. Project related emissions associated with the federal action were estimated to evaluate the applicability of General Conformity regulations (40CFR§93 Subpart B).

2. The requirements of this rule do not apply because the total direct and indirect emissions from this project are significantly less than the 100 tons trigger levels for NO_x, VOC, or CO for each project year (40CFR§93.153(b)(1) & (2)). The estimated total NO_x emissions for the project are 22 tons for 2015. VOC and CO are significantly lower than the NO_x emission estimates as NO_x is the primary mass criteria pollutant from diesel equipment.

3. The project is presumed to conform with the General Conformity requirements and is exempted from Subpart B under 40CFR§93.153(c)(1).



Peter M. Weppler
Chief, Environmental Analysis Branch
Planning Division

U.S. Army Corps of Engineers
Joseph G. Minish Passaic River Waterfront Park & Historic Area - Phase 1
General Conformity Related Emission Estimates
DRAFT

12-Nov-13

Description	Category	Horsepower (approx.)	Load Factor	Hours	hphrs
Asphalt paver, 10.0' (3.1 m) wide, self propelled, w/19' (5.8 m) screed extension, wheel	Other diesel engines	225	0.59	24.61	3,267
Compactor, roller, vibratory, 26.5" (674 mm) wide, 0.8 ton (0.7 mt), double drum, walk-behind	Compactor	250	0.43	31.08	3,341
Compactor, vibroplate, 18" (457 mm) wide x 21.5" (546 mm) plate	Compactor	250	0.43	4.98	535
Crane, hydraulic, self-propelled, rough terrain, 30 ton (27 mt), 80' (24.4 m) boom, 4x4	Crane	225	0.43	70.46	6,817
Crane, hydraulic, self-propelled, yard, 9 ton (8 mt), 44' (13.4 m) boom, 4x4	Crane	225	0.43	9.25	895
Crane, hydraulic, truck mounted, 25 ton (22.7 mt), 80' (24.4 m) boom, 6x4	Off-road truck	225	0.59	28.72	3,813
Crane, hydraulic, truck mounted, 65 ton (59.0 mt), 126' (38.4 m) boom, 8x4	Off-road truck	225	0.59	36.04	4,784
Crane, mechanical, lattice boom, crawler, dragline/clamshell, 0.50 cy (0.4 m3), 17 ton (15 mt), 100' (30.5 m) boom (add bucket)	Crane	225	0.43	12.90	1,248
Crane, mechanical, lattice boom, crawler, dragline/clamshell, 2.5 cy (1.9 m3), 60 ton (54 mt), 50' (15.2 m) boom (add bucket)	Crane	225	0.43	4,909.70	475,013
Cranes, hydraulic, truck mtd, 14 ton, 80' boom, 6x4	Off-road truck	225	0.59	432.24	57,380
Fork lift, yard, 2,500 lb (1,134 kg), 13.5' (4.1m) high, telescoping - straight mast	Forklift	175	0.59	104.00	10,738
Generator set, skid mounted, 125 kw, variable power settings, reconnectible	Generator	175	0.43	2.48	187
Grader, motor, articulated, 135 hp (101 kw), 12' (3.6 m) blade width	Grader	135	0.59	19.58	1,560
Hydraulic excavator, crawler, 11,500 lbs, 0.62 cy bucket, 17'10" max digging depth	Excavator	50	0.59	288.64	8,515
Hydraulic excavator, crawler, 55,000 lb (24,948 kg), 1.50 cy (1.2 m3) bucket, 23.3' (7.1 m) max digging depth	Excavator	300	0.59	45.04	7,972
Hydraulic excavator, crawler, 70,000 lb (31,751 kg), 2.00 cy (1.5 m3) bucket, 21.6' (6.6 m) max digging depth	Excavator	300	0.59	86.96	15,392
Loader, front end, crawler, 1.30 cy (1.0 m3) bucket	Skid Steer Loader	110	0.21	19.58	452
Loader, front end, wheel, 2.60 cy bucket, articulated, 4x4	Rubber tired loader	175	0.59	93.27	9,630
Loader/backhoe, wheel, 0.80 cy (0.6 m3) front end bucket, 9.8' (3.0 m) depth of hoe, 24" (0.61 m) dipper, 4x4	Backhoe	110	0.21	240.45	5,554
Marine equipment, boats & launches, truckable workboat w/pilot house & push knees, inboard, 20.25' x 8' x 3'		1,000	0.50	208.00	104,000
Pile hammer, double acting, diesel, 18,100 ft-lbs (2,502 kgf-m) (add leads & crane)	Crane	225	0.43	2,441.90	236,254
Pile hammer, driver/extractor, vibratory, 80 ton (73 mt) force drive (add leads & crane)	Crane	225	0.43	2,467.80	238,760
Roller, static, self-propelled, pneumatic, 30.00 ton, 78" wide, 8 tire, asphalt compactor	Other diesel engines	250	0.59	93.27	13,757
Roller, static, self-propelled, pneumatic, 9 tires, 14 ton (12.7 mt), 68" (1.7 m) wide	Other diesel engines	150	0.59	24.61	2,178
Roller, vibratory, self-propelled, double drum, smooth, 6 ton (5.4 mt), 66" (1.7 m) wide, asphalt compactor	Other diesel engines	100	0.59	19.58	1,155
Roller, vibratory, self-propelled, double drum, smooth, 2.7 ton (2.5 mt), 47"(3.8 m) wide, asphalt compactor	Other diesel engines	100	0.59	33.20	1,959
Roller, vibratory, towed, single drum, sheepsfoot, 25.5 ton (23.1 mt), 72" (1.8 m) wide, sheepsfoot (add towing unit)	Other diesel engines	250	0.59	6.39	943
Tractor, crawler (dozer), 145 hp, powershift, w/5.60 cy semi-u blade (add attachments)	Dozer	145	0.59	93.27	7,979
Tractor, crawler (dozer), 181-250 hp (135-186 kw), powershift, lgp, w/universal blade	Dozer	250	0.59	182.57	26,929
Tractor, crawler (dozer), 251-300 hp (187-224 kw), powershift, w/universal blade	Dozer	300	0.59	19.58	3,466
Truck, off-highway, rigid frame, 31.7 cy, 41.6 ton, 4x4, rear dump	Off-road truck	400	0.59	917.12	216,440
Truck, off-highway, rigid frame, 78.6 cy, 100 ton, 4x4, rear dump	Off-road truck	1,000	0.59	735.68	434,051
Truck, water, off-highway, 5,000 gal, w/cat 613c tractor	Off-road truck	250	0.59	93.27	13,757
Welder, engine driven, diesel, 300 amp, trailer mounted	Other diesel engines	35	0.59	143.08	2,955
	All non-road equipment hours			**13,939.30**	**1,921,676**
	Approximate non-road emission factor, g/hphr				9.5
	Approximate non-road emissions from the project, tons				**20.1**

JOSEPH G. MINISH
PASSAIC RIVER WATERFRONT PARK AND HISTORIC AREA
PHASE I
Newark, Essex County, NJ
Section 404 (b)(1) Evaluation

I. PROJECT DESCRIPTION

a. Location: Newark, Essex County, New Jersey.

b. General Description: Construction of a bulkhead along the Passaic River from Bridge Street to Jackson Street in Newark, NJ; stabilization of the riverbank with rip-rap from Jackson Street to Brill Street. Grading and seeding of the toe of the slope is planned to occur post construction in areas along the lower reach of the project area. Installation of railings and access ladders along the bulkhead including those sections previously constructed.

c. Authority and Purpose: The Joseph G. Minish Passaic River Waterfront Park and Historic Area Project (Minish Park) was authorized for construction in WRDA of 1990 (Public Law 101-640) as an element of the Passaic River Flood Damage Reduction Project on November 28, 1990, modified in the WRDA of 1992 (Public Law 102-580) by extending the project area, and further modified in the WRDA of 1996 (Public Law 104-303). Following Hurricane Sandy the Minish Park project became eligible for funding under P.L. 113-2, the Disaster Relief Appropriation Act of 2013. The purpose of the project is to provide for improved stream bank protection to prevent erosion and protect the western Passaic River bank from tidal storms.

d. General Description of Fill Material:

1.) Characteristics of Material: The fill along the bulkhead and stream bank stabilization shall be either reused from excavation, if classified safe from contaminants, or will be imported from off site. Any material imported from off-site will match the native soils in the area. Crushed stone will be placed in river below the bottom of the concrete cap.

2.) Quantity of Material: Phase 1 requires approximately 15,498 CY of clean fill.

3.) Source of Material: The fill material will come from an approved source, to be determined by the contractor.

e. Description of the Proposed Discharge Sites:

1.) Location: Project area as described in Ib, above.

2.) Size: The area on the landward side of the proposed bulkhead will be earth filled to an appropriate grade level effectively burying the existing bulkhead in place and will extend at least 40’ landward of the bulkhead along 2,858 linear feet. The stream bank slope will be re-graded,

through cut and fill along 2,658 linear feet. Approximately 12'' of crushed stone will be placed below the concrete cap along 2,858 linear feet of proposed bulkhead.
3.) Type of Site/Habitat: Urban/degraded riverine habitat.

4.) Time and Duration of Disposal: Construction activities are anticipated to commence in spring 2016 and take approximately 12 months.

f. Description of Disposal Method: Land based construction equipment will be used to construct the bulkhead and stream bank stabilization measure.

II. FACTUAL DETERMINATION

a. Physical Substrate Determinations:

1) Substrate Elevation and Slope: In order to accommodate future Phase II and Phase III development, the area adjacent to the bulkhead will have a consistent 1% cross slope pitched towards the bulkhead. The proposed grading throughout all new bulkhead locations will end with 3H:1V slope where the proposed grades meet the existing ground. In order to stabilize the slope along the southern banks of the Passaic River, cut and fill activities shall be carried out at 2.5H:1V slopes. Bottom of the slope shall be at an elevation -2 NGVD and meet the existing bank at the proposed slope. The height of the banks varies from 20', 15' and 10' along the alignment. Portion of the bank proposed with a reno mattress shall be graded with 2H:1V slope. The bottom of the slope shall be at elevation -3 NGVD and shall extended 8' high along the banks. No major impacts are expected.

2) Sediment Type: No major impacts are expected because sediments similar to those present in the placement areas would be utilized.

3) Dredged/Fill Material Movement: All sediment below Mean High Water (MHW) is assumed contaminated for all contract areas and shall be removed from the project area implementing sediment control measures. All sediment will be tested to determine how the soil may be disposed. Finer sediments disruption during construction may occur. Best management practices in the will be employed to contain the sediment to within the Project Area to the greatest extent practicable.

4) Physical Effects on Benthos: Some benthic forms may be smothered by burial. Long-term effects are not anticipated.

5) Other Effects: Not Applicable

6) Actions Taken to Minimize Impacts: Best management practices (BMP) will be implemented during construction. BMP's include:

- Silt fences and appropriate measures would be used to reduce the risks posed by runoff during construction activities These risks include increased

concentrations of suspended solids and turbidity, or contamination in soil or groundwater of the Passaic River;

- Soil excavated for construction would be placed behind sheet bulkheads to prevent direct contact with the Passaic River;

- Silt curtains or other appropriate devices would be used to separate areas to be excavated from the river to reduce the risk of resuspension of sediment and contaminants;

- Locating heavy construction equipment on the slope of the bank near the water would be avoided to the extent possible to reduce potential runoff of soil into the Passaic River.

- Wide track ("low density") construction equipment would be used where possible to reduce the impact of the machinery on the soil and prevent potential runoff.

- Use of coffer dams during in water construction to more effectively control sediment pollution.

b. Water Circulation, Fluctuation and Salinity Determinations:

1) Water, Consider Effects on:

a. Salinity- No effect
b. Water Chemistry- No effects
c. Clarity- Water clarity may be slightly impacted during construction activities; No long-term effect is anticipated.
d. Color- No effect
e. Odor- No effect
f. Taste – No effect
g. Dissolved Gas Levels- No effect
h. Nutrients- No effect
i. Eutrophication- No effect
j. Others as Appropriate- No other adverse impacts are anticipated from the project.

2) Current Patterns and Circulation: TBD

a. Current Patterns and Flow-
b. Velocity-
c. Stratification-
d. Hydrologic Regime-

3) Normal Water Level Fluctuations: TBD

4) Salinity Gradients: Not applicable

5) Actions Taken to Minimize Impacts: TBD

c. Suspended Particulate/Turbidity Determinations:

1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Sites: Suspension of particulates and turbidity levels will increase during the construction of the bulkhead and stream bank stabilization. Impacts are expected to be short term.

2) Effects on Chemical/Physical Properties of the Water Column:

a. Light Penetration- Turbidity during construction activities may temporarily reduce light penetration through the water column within the work area.
b. Dissolved Oxygen- The project may have an insignificant and temporary impact on dissolved oxygen within the immediate work area during construction activities.
c. Toxic Metals and Organics- All sediment below Mean High Water (MHW) are assumed contaminated for all contract areas and shall be removed from the project area. All sediment will be tested to determine how the soil may be disposed. Finer sediments disruption during construction may occur. Best management practices will be employed to contain the sediment to within the Project Area to the greatest extent practicable.
d. Pathogens- The project will not cause any change in pathogen levels as no sewage or animal waste use or treatment is involved.
e. Aesthetics- Temporary short-term increase in turbidity are expected, but the water is naturally turbid within the study area.
f. Others as Appropriate- Not applicable

3) Effects on Biota:

a. Primary Production, Photosynthesis- Not applicable
b. Suspension/ Filter Feeders- Any filter feeding species within the immediate work area could be adversely impacted by the increased sediment and uptake.
c. Sight Feeders- Turbidity during construction activities could negatively impact sight feeding species although it is expected that most of these species will avoid the area during construction. The turbidity will be a temporary condition that will decrease once construction activities cease.

4) Actions Taken to Minimize Impacts: Best management practices (BMP) will be employed to reduce the area that could be impacted by turbidity (see A6).

d. Contaminant Determinations: Widespread contamination exists within the study area and within the broader Lower Passaic River. As such, all sediment below Mean High Water (MHW) are assumed contaminated for all contract areas therefore there is the potential, through excavation and sediment transport, to spread contaminants or expose sediment with higher toxin levels than existing surface material contamination levels. These impacts will be mitigated for through Best Management Practices (see A6). Additionally, all soil removed from this site

encountered in this area are assumed to be contaminated and shall be removed from the project area. All soil will be tested to determine how the soil may be disposed.

e. Aquatic Ecosystem and Organism Determinations:

1) Effects on Plankton: No effect.

2) Effects on Benthos: Any benthic species located within the project area at the time of construction will be removed as a result of excavation or will be buried during fill activities. Because there will not be a significant modification of the substrate, it is expected that recolonization of species similar to those inhabiting the project area prior to construction will occur through recruitment or drift from upstream populations after construction.

3) Effects on Nekton: No effect.

4) Effects on Aquatic Food Web: No effect.

5) Effects on Special Aquatic Sites:

a. Sanctuaries and Refuges Non applicable
b. Wetlands- Non applicable
c. Mudflats- Permanent impacts include loss of benthic habitat in areas in front of the new bulkhead which will be excavated and stabilized with gravel placed in front of the concrete cap and the area on the landward side of the bulkhead which will be earth filled. The footprint of these permanent impacts is minimal (<0.56 acres) and as such no permanent impacts to the Passaic River mudflats within the project area are anticipated.
d. Vegetated Shallows- Non applicable
e. Coral Reefs- Non applicable
f. Riffle and Pool Complexes- Non applicable

6) Threatened and Endangered Species: Based on a review of the U.S. Fish and Wildlife Service IPac planning tool there are 23 migratory birds of concern that may be affected by earth moving activities within the project area. NJ geo-web database review indicated that the tidal rivers, inland bays, and other tidal waters of the project area are considered foraging habitat for Little Blue Heron (*Egretta caerulea*), Glossy Ibis (*Plegadis falcinellus*), and Snowy Egret (*Egretta thula*). American Shad (*Alosa sapidissima),* classified by the State of New Jersey as threatened, is found in the Lower Valley. In addition, there is a potential of Indiana bat, a federal and state endangered species, to occur within the project area due to its proximity to known hibernaculum. Due to the disturbed nature of the project area and the fact that proposed project does not significantly change the existing character of the project area, no impacts to state and federal species will occur. A tree clearing restriction of 1 April through 30 September will be included in the construction specifications as a contingency to protect any potential roosting Indiana bats within the project area.

7) Other Wildlife: Activities such as bulkhead replacement, minor excavation associated with the bulkhead, back fill of bulkhead, and stream bank stabilization will cause short term adverse

affect to EFH. Contaminated silty sediments exist on the river bottom within the project area and construction activities may temporarily affect migrant or resident species. Winter flounder spawning may be affected due to increased turbidity and sedimentation on eggs during the in water construction activities. The project is not expected to have significant adverse long-term impacts on waterfowl, upland birds or mammals in the Project Area.

8) Actions to Minimize Impacts: BMP's will be implemented to mitigate for impacts (see A6). Additionally, compensatory wetland mitigation for impacts to open water/mudflats has been negotiated with NJDEP. Consultation with NOAA- Fisheries has determined that short term affects on EFH should be mitigated with specific conservation recommendations (eg. observation of environmental windows and use of turbidity barriers) that would be included into the construction plan.

f. Proposed Disposal Site Determinations:

1) Mixing Zone: Not applicable

2) Determination of Compliance with Applicable Water Quality Standards: Fill will be clean construction material and will meet water quality standards.

3) Potential Effects on Human Use Characteristic:

a. Municipal and Private Water Supply – Not applicable
b. Recreational and Commercial Fisheries – Not applicable
c. Water Related Recreation- Temporary impacts to water related recreation may occur during construction, no long term impacts will occur. The project will make the area more amenable to future water recreation activities.
d. Aesthetics – The proposed project will not have a significant adverse impact on aesthetics. Due to contaminant issues all soil removed from this site will be removed from the project area.
e. Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves – No adverse effects are anticipated. A MOA with the appropriate resource agencies is in place and site monitoring will be conducted as needed.

g. Determination of Cumulative Effects on the Aquatic Ecosystem: Excavation of contaminated sediment and placement of clean fill will have a beneficial impact on the ecosystem as a whole by adding to the contaminated sediment removal efforts throughout the broader Passaic River Ecosystem. The proposed project would protect the stream banks from erosion with no serious disadvantage to water quality or the aquatic ecosystem. Impacts associated with excavation and placements of clean fill are anticipated to be short-term.

h. Determination of Secondary Effects on the Aquatic Ecosystem: No secondary effects on the aquatic ecosystem are expected from this project.

III. FINDINGS OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

a. No significant adaptation of the Section 404(b)(1) guidelines was made relative to this evaluation.
b. The objective of providing stream bank protection and preventing erosion necessitates the completion of Phase I of the Minish Park Project.
c. The proposed activity will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.
d. The proposed disposal operations will not harm any Federal or state endangered species or its critical habitat under the Endangered Species Act of 1973.
e. The proposed discharge of fill material will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, fish, wildlife, and special aquatic sites. The life stages of aquatic life and other wildlife will not be significantly affected. Significant adverse effects on aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic and economic values are not expected to occur.
f. Appropriate steps to minimize potential adverse impacts of the discharge of fill material include the implementation of an erosion and sediment control plan and judicious engineering practices.