

FEMA
FINDING OF NO SIGNIFICANT IMPACT
BINGHAMTON-JOHNSON CITY JOINT SEWAGE TREATMENT PLANT
COMPREHENSIVE FLOOD DAMAGE RISK REDUCTION PROJECT
TOWN OF VESTAL, BROOME COUNTY, NEW YORK
4031-DR-NY

BACKGROUND

The Binghamton-Johnson City Joint Sewage Treatment Plant (BJCJSTP)(Subgrantee or Plant) requested Federal financial assistance from the U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), to construct flood barrier walls around the BJCJSTP and install dewatering measures within the flood barrier walls to prevent flooding from the adjacent Susquehanna River and interior flooding from influent flow overwhelming the BJCJSTP. As a result of damages from high winds, rains, and flooding associated with Tropical Storm Lee during the incident period from September 7, 2011 through September 11, 2011, the President issued a major disaster declaration 4031-DR-NY that enabled FEMA to provide Public Assistance grant funds to assist the Grantee (New York State Division of Homeland Security and Emergency Services (NYS DHSES)) and eligible Subgrantees in their recovery from the disaster. The Subgrantee's proposed project has been determined to be an eligible grant project in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, (Public Law 93-288, as amended, 42 U.S.C. 5121 et seq.). The FEMA project worksheet reference number for the proposed project is project worksheet number 4031-DR-NY PW#02504.

FEMA evaluated two alternatives in the Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA): 1) No Action: no federal funding would be provided, and the Subgrantee would conduct required repairs under non-Federal funding sources and not pursue additional hazard mitigation measures, and 2) Proposed Action: federal funding would be provided to construct flood barrier walls around the Plant and implement dewatering measures within the flood barrier walls. The No Action alternative has been rejected because it would subject the community to future risk of service disruptions, would create potential adverse public health and safety impacts and would not address flood damage risk reduction. The Proposed Action would allow the Plant to remain in limited operation during a flood disaster, return to full operation following a flood, and would incorporate flood damage risk reduction features to enhance the resilience of the facility. Other alternatives such as full and partial facility relocation and floodproofing of individual facility components were considered but dismissed from full analysis due to cost and/or engineering feasibility constraints.

PROJECT DESCRIPTION

The Subgrantee proposes to construct flood barrier walls around the existing facility and implement dewatering measures within the proposed flood barrier walls. The 500-year elevation in the project area is 842.9 feet (NAVD 1988). Risk reduction to at/above the 500-year elevation is targeted for the critical action project in accordance with Executive Order 11988 Floodplain Management and implementing regulations at 44 CFR Part 9. The Subgrantee proposes a design elevation of 845 feet (NAVD 1988) for the floodwall, accommodating freeboard above the design flood elevation. The majority of the floodwall design utilizes a reinforced concrete inverted T-type floodwall. Typical wall sections include sheet piling and stone fill (rip rap). A partial depth steel sheet piling cut-off wall would be installed behind the base foundation heel along the river to help control groundwater seepage rates and to provide scour protection. Some areas of the site would be integrally protected by existing reinforced concrete structures modified as required to

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withstand the hydraulic forces sustained during a flood event, as part of a separate, non-FEMA funded project. The flood barrier wall would be constructed in 3 locations: 1) Susquehanna River T-Wall Floodwall: 1,058.68 feet (includes one 12 foot wide vehicular flood gate); 2) Fuller Hollow Creek T-Wall Floodwall: 79.00 feet (no flood gates proposed); and 3) Vestal Road T-Wall Floodwall: 288.83 feet (includes one 52 foot wide roadway flood gate). The facility will also use four stormwater effluent pump systems consisting of twin centrifugal pumps (100 horsepower [HP], 100HP, 5 HP, and 150 HP for Pump Stations 1, 2, 3 & 4, respectively) to allow stormwater to be pumped from within the walls. The pump station construction includes two new discharge outfalls at the Susquehanna River and one discharge outfall in Fuller Creek.

NEPA COORDINATION

An EA was prepared with the Subgrantee's participation to assess the proposed project's impacts on the human environment in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing NEPA (40 CFR Parts 1500-1508), and FEMA regulations for environmental consideration pertaining to NEPA compliance at 44 CFR Part 10. An Eight-Step Decision-Making Process in accordance with Executive Order (EO) 11988 Floodplain Management and 11990 Wetlands Protection and 44 CFR Part 9 was incorporated into the EA to inform alternative analysis and determination of the practicable alternative to incorporate flood damage risk reduction measures at the facility.

The project would adversely impact riparian corridor habitat, including wetland habitat; however, it was determined that it was not practicable to avoid those natural resource areas and that the overall environmental and public benefits of the proposed action would outweigh minor wetland and riparian corridor habitat permanent and temporary disturbances. The project would have a beneficial effect on flood damage risk reduction for the facility's infrastructure and the operational resilience of the facility. The potential future releases of wastewater during flooding events would also be minimized due to the proposed structural floodproofing measures. It was determined that relocation of the critical facility outside the 500-year floodplain was not a practicable alternative for the critical action; and the risk of continued floodplain occupancy would be minimized to the extent practicable and is outweighed by the public benefits of the proposed action. During construction of the proposed facility, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated. Short-term impacts would be mitigated utilizing best management practices, such as silt fences, proper equipment maintenance and appropriate signage. Environmental impacts of construction would also be minimized per adherence to the required Stormwater Pollution Prevention Plan (SWPPP), adherence to invasive insect quarantine protocols and compliance with building permit requirements.

A public notice was issued in the *Binghamton Press & Sun Bulletin* newspaper on April 15, 2015, to notify the public of the thirty-day public review and comment period. The EA was posted to the FEMA website and a hard copy of the EA were made available for public review at the Town of Vestal Town Hall (Town Clerk's Office), 605 Vestal Pkwy W, Vestal, NY 13850; at the City of Binghamton City Hall, 38 Hawley Street, Binghamton, NY 13901, and at the Town of Johnson

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City Town Hall, 243 Main Street, Johnson City, NY 13790. No substantive comments were received during the public review & comment period. The EA is adopted as final with issuance of this Finding of No Significant Impact statement and construction implementation may proceed in conformance with grant conditions presented herein.

CONDITIONS

The Subgrantee is responsible to obtain all applicable Federal, state, and local permits for project implementation prior to construction, and to adhere to all permit conditions. The Subgrantee has already completed a New York State Environmental Quality Review Act (SEQRA) documentation process, which includes the forms provided in *Appendix C* of the EA. Any substantive change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other laws and executive orders. The Subgrantee must also adhere to the following conditions during project implementation. Failure to comply with these conditions may jeopardize Federal funds:

1. The Proposed Action is to floodproof the facility through installation of a floodwall with a design elevation at/above the 500-year floodplain elevation utilizing the Best Available Data (Preliminary FIRM dated February 5, 2010) consistent with the National Flood Insurance Program (NFIP) and in accordance with 44 CFR Part 9. The Subgrantee must submit a floodproofing certification to the Grantee/FEMA prior to or at project closeout for the proposed project consistent with 44 CFR § 65.10.
2. The Subgrantee must coordinate with the local floodplain administrator or code enforcement official prior to taking actions within regulated floodplain areas and must comply with Federal, state, and local floodplain laws, regulations and codes/ordinances. The Subgrantee shall submit a copy of the obtained floodplain management permit to NYSDHSES/FEMA prior to or with final closeout grant paperwork for the public assistance grant.
3. Excavated soil and waste materials will be managed and disposed of in accordance with applicable Federal, state, and local regulations.
4. The Subgrantee shall be responsible to comply with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) permit for stormwater discharge from construction activity or other applicable SPDES permit, in accordance with NYS Environmental Conservation Law. If the NYSDEC General Permit for Stormwater Discharges is determined to cover the proposed action, the Subgrantee shall provide NYSDHSES/FEMA a copy of the Stormwater Pollution Prevention Plan (SWPPP) and a copy of the Notice of Intent Form at grant project close-out or other time identified by NYSDHSES/FEMA per grant administrative documentation guidance requirements. If an individual SPDES permit is determined to be required, the Subgrantee shall provide a copy of the obtained permit, as well as supporting SWPPP to NYSDHSES/FEMA at grant project close-out or other times identified by NYSDHSES/FEMA per grant administrative documentation guidance requirements. For more information regarding SPDES, visit the following website: <http://www.dec.ny.gov/chemical/43133.html>. It is expected that

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the Subgrantee and its construction contractor(s) will conduct construction utilizing best management practices to limit sedimentation and erosion during construction. Turbidity barriers will be used for sedimentation control for construction work conducted directly adjacent to the Susquehanna River or Fuller Hollow Creek.

5. In the event that unmarked graves, burials, human remains, or archaeological deposits are uncovered, the Subgrantee will immediately stop construction activities in the vicinity of the discovery, and take all reasonable measures to avoid or minimize harm to the property until FEMA has completed consultation with the State Historic Preservation Officer (SHPO), Participating Tribes, and any other consulting parties. As soon as possible, the Subgrantee will contact: local law enforcement and the county coroner/medical examiner (for human remains), NYS DHSES, SHPO, and FEMA. FEMA will immediately coordinate with the SHPO, notify Participating Tribe(s)/Nation(s) and any other consulting parties that may have an interest in the discovery, and consult to evaluate the discovery for National Register eligibility. FEMA will consult with the consulting parties in accordance with the review process outlined in Stipulation II, Project Review, of FEMA's New York Statewide Programmatic Agreement executed on November 24, 2014 to develop a mutually agreeable action plan with timeframes to identify the discovery, take into account the effects of the Undertaking, resolve adverse effects if necessary, and ensure compliance with applicable Federal and State statutes. In cases where discovered human remains are determined to be American Indian, FEMA shall consult with the appropriate Tribal representatives and SHPO. In addition, FEMA shall follow the guidelines outlined in the Advisory Council on Historic Preservation (ACHP) *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (2007). FEMA will coordinate with DHSES and the Subgrantee regarding any needed modification to the scope of work for the Undertaking necessary to implement recommendations of the consultation and facilitate proceeding with the Undertaking.
6. The United States Army Corps of Engineers (USACE) may require a permit for the proposed project. The work may be authorized by a general permit (i.e., nationwide permit). The Subgrantee shall be responsible for obtaining all necessary permits and complying with all conditions of the permit including but not limited to notification and signature requirements to insure validation of permits. The project may likely require an Article 15 permit from NYSDEC for stream disturbance, excavation and fill in navigable waters and freshwater wetlands. The Subgrantee shall submit copies of all obtained permits and/or notifications to the Grantee/FEMA at or prior to final closeout of the public assistance grant. The Subgrantee shall include a brief narrative with close-out submission to explain the permits obtained and/or complied with for the proposed project.
7. Occupational Safety and Health Administration (OSHA) standards must be followed during construction to avoid adverse impacts to worker health and safety. It is also expected that the Subgrantee and its construction contractor(s) will conduct construction utilizing best management practices to limit noise, dust, and other worker hazards.
8. The proposed project area serves as potential summer roosting habitat for the Northern long-eared bat (*Myotis septentrionalis*), a species on the federal threatened and endangered species list. Pursuant to section 7(a)(4) of the Endangered Species Act (ESA) and implementing

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regulations at 50 CFR § 402.02 and 50 CFR § 402.10, FEMA determined that the proposed action would not be likely to jeopardize the species, or destroy or adversely modify proposed critical habitat. The Subgrantee shall avoid cutting or destroying known, occupied maternity roost trees during the pup season (June 1-July 31) for the Northern long-eared bat and preferably schedule tree removal during October 1-March 31st to adhere to the conservation window that FEMA consulted with USFWS about prior to the proposed rule that was issued by USFWS on January 16, 2015. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, the Grantee and Subgrantee are recommended to check the USFWS website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current. The U.S. Fish & Wildlife Service (USFWS) New York Field Office website provides general information about species. The Information, Planning and Conservation System (IPaC) website can be utilized for site specific information. If the Grantee/Subgrantee has any questions concerning this conservation measure, please feel free to contact FEMA Region 2 at 212.680.3600. Additional general information about the Northern long-eared bat is available at: www.fws.gov/Midwest/endangered/mammals/nlba/index.html. Please include a brief narrative in the project closeout submission that explains the timing (dates of duration) when mature trees were removed.

9. The Subgrantee (and its contractors) must not conduct construction actions within 660 feet of a known Bald Eagle nest from late October through late August.
10. Broome County is currently identified as a quarantine zone for the invasive insect Emerald Ash Borer (EAB). Since this is an EAB quarantine county, any woody tree and shrub material to be removed for the proposed action is required to be chipped on site to chips of less than one inch in two dimensions and must not be transported whole outside the community in order to adhere with EO 13112 Invasive Species, Federal regulations at 7 CFR Parts 301.53-1 through 301.53-9 and state regulations at 1 NYCRR Part 141. Invasive insects can devastate the forests of the northeast and it is recommended that communities in the northeast treat or handle wood materials in place to minimize the spread of these non-native insects. For more information concerning this environmental stewardship requirement, visit U.S. Department of Agriculture- Animal and Plant Health Inspection, New York State Department of Agriculture and Markets, and other websites concerning EAB:
 - www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/
 - www.agriculture.ny.gov/PI/eab.html
 - www.nyis.info/?action=news_detail&event_id=306

Please include a brief narrative in the project closeout submission that explains how the quarantine protocol was adhered to for tree removal activities.

11. Existing site woody vegetation should be maintained to the extent practicable. Trees to be preserved should be flagged or otherwise delineated for protection during construction. Trees to be preserved that are greater than 3" diameter-at-breast-height should be protected with standard tree protection structures (i.e., fencing) during construction operations. The Subgrantee must replant disturbed riparian and wetland habitat areas with native shrub species

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and/or native seed material, as practicable. Bioengineering stakes such of red osier dogwood and native willow species are options for replanting areas of proposed riprap. It is recommended for all other undeveloped site areas that the Subgrantee restore disturbed construction areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance the environmental habitat quality of project area. It is recommended that disturbed soil areas be planted with native plant material, as soon as practicable after exposure, to avoid or minimize growth of undesired and potentially invasive plant species that can potentially take hold without competition of native plant material. Local landscape plant nurseries and soil conservation offices can assist with identification of suitable native plants for site location type. The following websites may also be useful to identification of native plant material for the proposed project site:

- <http://plants.usda.gov/java/>
- www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/plants/
- www.fs.fed.us/wildflowers/nativeplantmaterials/rightmaterials.shtml

For bioengineering design information visit: www.dec.ny.gov/permits/50534.html or <http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17553.wba>.

As knotweed is found on the site and may need to be removed for the proposed project, the Subgrantee must follow protocols to avoid or minimize the spread of this invasive plant. The plant should not be mowed or weed-trimmed and plant debris should be properly bagged and disposed of for removal. For more information, visit www.nyis.info/index.php?action=invasive_detail&id=43.

12. It is recommended that the design and construction implementation adhere to the USACE ETL 1110-2-583 (2014) *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*.
13. If the Grantee and Subgrantee obtain site fill for construction, the fill must be from a permitted commercial supplier or locally municipally owned soil/gravel borrow area permitted for mining/excavation as fill material. If the Grantee and/or Subgrantee plan to obtain soil or gravel from a non-commercial source or site that is not permitted, the details of the proposed source location must be submitted to FEMA for approval as a scope of work change prior to construction implementation. FEMA would need to conduct a federal agency environmental and historic preservation compliance review of non-permitted/non-commercial sources prior to construction implementation. The environmental concerns would be potential impacts to cultural resources or habitat areas at an excavation site not previously reviewed, permitted and otherwise cleared for use as a borrow area.
14. Equipment and materials staging must be sited on impervious cover (i.e. parking lot). If the Subgrantee proposes to stage equipment and materials off-property, the staging location should be coordinated with NYSDHSES/FEMA to ensure that the staging would not adversely impact natural and cultural resources. The Subgrantee should also develop a contingency plan for construction implementation to move equipment and materials, as practicable, in the event of a flood during phases of an incomplete floodwall structure.
15. Subgrantee shall not initiate construction activities until fifteen (15) days after the date that the Finding of No Significant Impact (FONSI) has been signed as "APPROVED."

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FINDINGS

In accordance with NEPA and 44 CFR Part 10, FEMA determined that the proposed action will have no significant adverse impact on the quality of the human environment. As a result of this Finding of No Significant Impact (FONSI), an Environmental Impact Statement will not be prepared, and the proposed project as described in the EA may proceed. This FONSI serves as the final public notice for the proposed project.

APPROVED

May 21, 2015

Approved and Signed by:

Katherine Zeringue
Acting, Regional Environmental Officer
Federal Emergency Management Agency, Region II