

APPENDIX H

Eight-Step Decision Making Process

**Essex County Department of Public Works
FEMA-4020-DR-NY PW 07632
Lobdell Lane Bridge Replacement
Executive Order 11988 - Floodplain Management
Executive Order 11990 - Wetland Management
Eight-Step Decision Making Process**

Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands) require Federal agencies “to avoid to the extent possible the long term and the short term adverse impacts associated with the occupancy and modification of the floodplain/wetland development wherever there is a practicable alternative.” FEMA’s implementing regulations are contained in 44 CFR Part 9, which includes an Eight-Step Decision Making Process for compliance with this part.

This Eight-Step Review Decision Making Process is applied to the replacement of the Lobdell Lane Bridge along the Boquet River in the Town of Elizabethtown, Essex County, New York. The Town of Elizabethtown experienced storm damage and flooding from Hurricane Irene which occurred from August 26 to September 5, 2011. President Barack Obama declared the incident a major disaster on August 31, 2011 and was subsequently amended. The Recipient for the proposed public assistance project is the NYS Division of Homeland Security and Emergency Services (NYS DHSES). The Subrecipient for the proposed public assistance project is the Essex County Department of Public Works. The Lobdell Lane Bridge Replacement Project purpose and function is to provide safe crossing of the Boquet River and minimize future damage to the structure. The new replacement bridge would replace the existing bridge that was damaged during the heavy rains and flooding experienced during Hurricane Irene. A temporary bridge was placed on the existing alignment following the bridge failure. The new bridge would re-establish permanent safe access for local homes, private property and first responders. The Lobdell Lane Bridge would be replaced with a new permanent single lane steel truss bridge built at an elevation higher than the established 100 year floodplain.

STEP 1 Determine if the proposed action is located in, affects or may be affected by the floodplain or wetland.

The project is located at 44.18941, -73.61406 and is within the 100-year floodplain, as illustrated on the National Flood Insurance Program Flood Insurance Rate Map (FIRM) 3613880016B, dated January 20, 1993. The project is partially located in the floodway of the Boquet River in the Town of Elizabethtown, Essex County, NY. The determined Base Flood Elevation (BFE) at the facility site is 552.7 (NGVD 1929). These elevations have been determined at the Lobdell Lane and Boquet River intersection.

The 2011 event is the flood of record, as discussed in the U.S. Geological Survey (USGS)/ Department of Interior, Floods 2011 in New York State, Scientific Investigation Report 2014-5058. The Boquet River drains with a watershed area of approximately 52 square miles upstream from the project site. The Drainage Area generally consists of steep, mountainous forest land with roadways. The USGS gauge station number 04276200 is located on the Boquet River at New Russia, NY, upstream from the project site.

Based on a wetlands review of the Lobdell Lane site for the presence of freshwater wetland using the U.S. Fish and Wildlife Service National Wetland Inventory website; freshwater forested/shrub wetlands are mapped immediately upstream and downstream of the site and have the potential be affected by construction activity at the site. Further wetland analysis will ensue.

STEP 2 Early public notice (Preliminary Notice)

A cumulative public notice for this disaster was published by the New York Press Service beginning on October 10, 2011. As indicated in the notice, “projects and activities may adversely affect historic property, floodplains or wetlands, or may result in continuing vulnerability to damage by flooding. However, certain measures to mitigate the effects of future flooding or other hazards may be included in the work.” The notice also states that “mitigation measures” would be incorporated on an action by action basis and this notice may be the only public notice concerning these actions. In addition, a project specific notice integrated with the Notice of Availability of the National Environmental Policy Act (NEPA) Environmental Assessment (EA) would be published in the local newspapers.

STEP 3 Identify and evaluate alternatives to locating in the base floodplain and wetland

The Alternatives analyzed in further detail in the EA included a No Action Alternative and Proposed Action Alternative. The EA also discussed Alternatives Considered and Dismissed in Section 4.1.3. A brief summary of the three categories of alternatives is the following:

No Action Alternative - The No Action Alternative would not provide any Federal funding to the project and the temporary bridge would remain in place. The temporary bridge is not designed for long-term permanent use; therefore, leaving the temporary bridge in place would not assure travelers of the Lobdell Lane Bridge safe and permanent access across the Boquet River. The No Action Alternative would not address the proposed project’s purpose and need.

Proposed Action Alternative – Subrecipient would construct a permanent bridge at the existing alignment. This bridge would be a permanent single lane steel truss bridge with concrete deck. The bridge abutments would be cast-in-place concrete structures with either pile-supported or spread footings, as recommended by the geotechnical engineer, and would include wingwalls to contain the fill soils at the ends of the approach roadway embankments. Steel sheet pile scour protection would be provided at the west abutment and wingwalls. In order to carry out the permanent fix a temporary bridge and detour would be needed during construction. This structure would be a single-lane pre-fabricated steel truss bridge. Temporary stone-filled timber crib abutments with concrete bearing pads below the bridge bearings would be provided near the top of the existing streambanks. All work for both the permanent and temporary bridges would be subject to all applicable permitting.

Alternatives Considered and Dismissed - This alternative involves relocating the permanent bridge approximately 385 feet northeast. This location would significantly improve the sight distance of vehicles. However, this alternative was dismissed due to concerns from landowners. Implementation of this alternative would require eminent domain proceedings.

STEP 4 Identify impacts of the proposed action associated with occupancy or modification of the floodplain and wetland.

The Proposed Action Alternative would have beneficial floodplain management and wetland impacts. The proposed alternative would provide flood damage risk reduction at above the 100- year flood elevation for the rebuilding of the bridge. While the bridge abutments would remain in the floodplain, the superstructure of the replacement bridge would be two feet above the 100-year floodplain. The span of both bridges would be wider than the original bridge to improve river flows and reduce sediment transport. The permanent bridge would be more resilient with structural

reinforcements and would have less risk of failing. Thus ensuring the function it provides to the surrounding community in the future.

Design of the temporary access road and bridge will take into account wetland locations and avoid grading or filling within any delineated wetland to the extent possible. Best management practices (BMPs) such as silt fencing would be used to avoid impacts to any wetlands that may be caused by construction runoff, and the temporary road would include underlain geotextile to facilitate restoration of the site following construction.

The project would not adversely impact natural habitat values or other functions of the floodplain and wetland because the site is already developed. The proposed project would not promote further floodplain and wetland development. The proposed project is not anticipated to induce flooding on any other downstream or upstream property as the proposed project would replace the inundated and destroyed bridge that met the pre-disaster functions with minor mitigation measures. All work for both the permanent and temporary bridges would be subject to all applicable permitting.

STEP 5 Design or modify the proposed action to minimize threats to life and property and preserve its natural and beneficial floodplain and values

To comply with EO 11988 and EO 11990 and the National Flood Insurance Program, the project repair and planned mitigation measures would follow “Good Construction Practices” and “Codes and Standards” as to minimize the risk of future flood and wetlands damage at the existing site. This is a reasonable minimization measure because it protects the investment in the floodplain and wetland and minimizes threats to life and property. The minimization measures would have no effect on natural and beneficial floodplain and wetland values.

These minimization and mitigation measures would be incorporated (as permit conditions) to avoid impacts to the natural environment including any necessary conditions to avoid impacts to fish passage. The proposed alternative would have a positive impact on water resources and water quality, as the larger bridge span (i.e., larger opening) would lower stream velocity and decrease sediment transport. The replacement bridge would provide permanently stabilized slopes and reestablish safe access for local homes, private land and first responders. The replacement would also restore safe, reliable and permanent passage across the Boquet River to Lobdell Lane. The completed bridge would meet all state, local and federal codes and regulations for public health and safety. Furthermore, emergency vehicles (fire trucks, ambulances etc.) would have safe, reliable access to Lobdell Lane.

STEP 6 Re-evaluate the proposed action.

The No Action Alternative would have no direct and indirect effects on floodplain and wetland occupancy. This alternative would result in the continued use of a facility within the floodplain and wetland.

The Proposed Action Alternative would result in no significant impacts to the floodplain and wetland as rebuilding the bridge to pre-disaster function and service would not significantly affect the floodplain and wetland. This alternative would have a positive impact on water resources and water quality as a larger bridge span would lower stream velocity and decrease sediment transport. Furthermore, the temporary effects of the Proposed Action Alternative on the wildlife and fisheries habitat would be minimal. The design plans show 19 trees of 4” diameter at breast height (DBH) or larger would be removed from the construction site with an estimated 20,000 to 25,000 square feet of vegetation would be affected, causing minimum impact. Therefore, this evaluation has resulted FEMA’s decision to proceed with the replacement in the existing floodplain/wetland location.

STEP 7 Findings and Public Explanation (Final Notification)

After evaluating alternatives, including impacts and minimization opportunities, FEMA in conjunction with Recipient and Subrecipient determined that the proposed project is the most practical alternative. FEMA determines that there is no practicable alternative to locating the proposed project within the 100-year floodplain given that bridges are functionally dependent on their location. FEMA's determination is documented in this summary. This Eight-Step Review as part of the project's Environmental Assessment (EA) will be made available for public review and comment with a project specific public notice. The Final Public Notice will be integrated with the anticipated Finding of No Significant Impact statement for the EA.

STEP 8 Implement the action

The project would be constructed in accordance with the proposed scope of work including "Good Construction Practices" and "Codes and Standards" and adherence to the floodplain/wetland impact-minimization measures described in Step 5, which would be conditions of the federal grant. The Subrecipient is responsible for the review of the final project plans and would assure compliance with all applicable local, state and federal laws. The Subrecipient would obtain all required building and site development permits and as a condition of the federal grant, to preserve the floodplain and environment and minimize risk to life and property.