Appendix I

Floodplain Management & Wetlands Protection – Decision-making Summary
Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands) require Federal agencies “to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplains/wetlands and to avoid direct or indirect support of floodplains/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 Decision Making Process is to be applied to the Wellsburg Fire Hall project located in the Village of Wellsburg, Chemung County that proposes to relocate the volunteer fire hall (hereinafter referred to as the Project), which experienced damage as a result of flooding, from its current site to another site that would be more resistant to future flood related loss and damage. The fire hall houses equipment, vehicles, and/or office space for fire, police, and emergency medical services. The proposed Wellsburg Fire Hall meets the definition of a critical action (facility):

- According to 44 CFR Part 9.4: The minimum floodplain of concern for critical actions is the 500-year floodplain, i.e., critical action floodplain. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities: (c) Such as emergency operation centers.
- According to 44 CFR Part 9.7(a)(1): The base floodplain, FEMA shall substitute the 500-year floodplain for the base floodplain where the action being proposed involves a critical action
- According to 44 CFR Part 9.9(d)(2): For critical actions, FEMA shall not locate the proposed action in the 500-year floodplain if a practicable alternative exists

Since 1972, Wellsburg Fire Hall sustained damage from three flood events prior to the damage received resulting from Tropical Storm Lee in 2011 (i.e., received damage from four separate declared disasters). FEMA considered 44 CFR Part 9.9, Analysis and reevaluation of practicable alternatives, and determined that relocating the repetitively damaged facility to a site above the 500-year floodplain elevation is a practicable alternative. The grantee for the proposed project is the New York State Office of Emergency Management, and the sub-grantee is the Village of Wellsburg.

The sub-grantee seeks FEMA funding to relocate the fire hall to another site to return facilities to pre-disaster conditions. The steps in this decision making process are steps 1, 2, 3, 4, 5, 6, 7, and 8 per 44 CFR Part 9.5(d), as follows:

**Step 1 Determine if the proposed action is located in or affects the Floodplain or Wetland.**

The sub-grantee prefers to relocate the proposed Wellsburg Fire Hall to a site located within special flood hazard areas of the 100-year floodplain (Zone AE), the regulated floodway (V
Zone), and within the 500-year floodplain (Shaded Zone X), as illustrated on the National Flood Insurance Program’s (NFIP) Flood Insurance Rate Map (FIRM), Community-Panel Number 36015C0263F effective November 2010, as follows:

Figure 1: The proposed Wellsburg Fire Hall site (red circle) is located within the 100-year floodplain (blue dots), the regulated floodway “V” Zone (blue dots with white lines), and the 500-year floodplain (black dots) at the fringe by the main street. Source: FEMA Map Service.

The proposed project area is not mapped by U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), thus no further wetland analysis is required.

Figure 2: The proposed Wellsburg Fire Hall site (red circle) is not located in or impact a wetland. Source: USFWS National Wetlands Inventory Mapper.

Step 2 Early public notice (Preliminary Notice).

A cumulative public notice for the disaster was published in the New York Press Service newspapers 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” will be incorporated on an action by action basis and this (October 10, 2011 notice) may be the only public notice concerning these actions. In addition, a project specific notice for the environmental assessment will be published in the local newspaper. The public notice will invite comments within 15 days of the date of the notice.

**Step 3 Identify and evaluate alternatives to locating in the base floodplain.**

44 CFR Part 9.9(b) requires FEMA to “identify and evaluate practicable alternatives to carrying out a proposed action in floodplains or wetlands.” Three alternatives are identified to carry out the proposed action within the floodplain or wetlands, these include:

1) Alternative sites outside the floodplain or wetland;
2) Alternative actions which serve essentially the same purpose as the proposed action, but which have less potential to affect or be affected by the floodplain or wetlands; and
3) No Action. The floodplain and wetland site itself must be a practicable location in light of the factors set out in this section (below).

44 CFR Part 9.9(c) analyzes the following factors to consider in determining practicable alternatives:

1) the natural environment (topography, habitat, hazards, etc.);
2) social concerns (aesthetics, historical and cultural values, land patterns, etc.);
3) economic aspects (cost of space, construction, services and relocation);
4) legal constraints (deeds, leases, etc.)

The sub-grantee determined that, the No Action Alternative, to repair the existing facility at the existing site was not practicable due to repetitive flood damage and loss of emergency services during flood events. The sub-grantee provided FEMA with an analysis of two alternative sites that were considered for possible relocation of the fire hall. The two sites considered include:

1) Site 1 (i.e., Alternative Site) is located outside/above the 100-year floodplain and partially above the 500-year floodplain, fill materials would be added to elevate site above the 500-year floodplain

2) Site 2 (i.e., Alternative Action Site) is located within the 100-year floodplain and regulatory floodway; fill materials would be added to elevate above the 500-year floodplain. Given the availability of fill and other site considerations enumerated herein, this is the sub-grantee’s preferred alternative.

Site 1): The sub-grantee proposes to relocate the fire hall to a site the sub-grantee owns. The site is 1.8 acres and part of a larger 4.5 acre parcel. The 1.8/4.5 acre parcel is currently an undeveloped manicured parcel located in a mixed use neighborhood which also includes a large baseball field. The site is completely above the 100-year floodplain. Approximately half of the site is located above the 500-year floodplain and the other half located in the 500-year floodplain (Shaded Zone X). The sub-grantee would add an estimated depth of two to eight feet of fill materials to elevate the site entirely above the 500-year floodplain.
The sub-grantee dismissed the site they proposed due to concerns that the site they selected was inadequate to meet their needs. First, the sub-grantee is apprehensive that if the undeveloped site they proposed is used for the fire hall, then the community may lose future tax revenue if the vacant site is ever commercially developed. Second, the sub-grantee stated that the proposed site is located on a secondary road, which is consistent with most Village of Wellsburg roads, would hinder the ingress and egress of larger vehicles. Third, the size of the site they proposed would hinder the fire hall’s future expansion. Relocating the fire hall to this site is not the sub-grantee’s preferred location for the fire hall. However, this action does meet the criteria as a practicable alternative because it achieves the project’s proposed purpose.

Site 2): The sub-grantee proposes to relocate the fire hall to a 5.3 acre site located within the 100-year floodplain along Bentley Creek. Since the fire hall is a critical facility; according to 44 CFR 9.9(d)(2): FEMA shall not locate the proposed action in the 500-year floodplain if a practicable alternative exists. The sub-grantee proposes to add an estimated 15,000 cubic yards of fill materials (4,050 tons of fill), at depths of 10 to 15 feet, to elevate the sloping site above the 500-year floodplain. The sub-grantee prefers this site because it is located on a primary road, the road allows for easier ingress and egress for larger vehicles to and from site, and the site has room for future facility expansion. Relocating the fire hall to this site and adding fill material to elevate the site above the 500-year floodplain is the sub-grantee’s preferred action. The action meets the criteria as a practicable alternative because it achieves the project’s proposed purpose.

FEMA and the grantee/sub-grantee have determined that the No Action Alternative is not a practicable alternative because it does not meet the needs of the proposed project purpose. FEMA has determined that Site 1 serves the proposed project purpose above the 100-year floodplain and partially above the 500-year floodplain when fill is added to elevate site above 500-year floodplain. FEMA has determined that Site 2 also serves essentially the same purpose, when fill materials are added to elevate the site above the 500-year floodplain. Since, this is a critical facility and both sites need fill materials to be elevated above the 500-year floodplain, FEMA has determined that both sites are practicable.

The sub-grantee prefers Site 2 because they believe that this site best suits the short-term and long-term interests of the community. From a natural, social, economic, and legal perspective, relocating the fire hall to Site 2 is a practicable alternative because:

- The site will be elevated in excess of the 500-year floodplain in accordance with 44 CFR 9.7(a)(1), the NFIP requirements, as well as local and state floodplain management laws, regulations and building codes
- The site is within the legal control of the Village of Wellsburg
- The site is located on a primary road which is easier for ingress and egress to site
- There would be no potential for loss of future tax revenue if commercial development occurs

**Step 4 Identify impacts of the proposed action associated with occupancy or modification of the floodplain.**
The sub-grantee’s proposed project would modify the floodplain and encroach upon the regulated floodway and Bentley Creek. The project proposes to add approximately 15,000 cubic yards of fill materials (roughly 200ft X 200ft X 10ft) to elevate, reshape, and compact the sloping site 10 feet to 15 feet above its present elevations. According to the Hunt Engineering hydrology and hydraulic study, the proposed project would not adversely impact the natural habitat values or other functions of the floodplain. The proposed project is not anticipated to induce additional flooding on any other downstream or upstream homes and properties because the project is unrelated to stream flow. The proposed project would invest Federal and non-Federal monies to relocate the existing fire hall within the 100-year floodplain to another location within the 100-year floodplain that would be elevated on fill above the 500-year floodplain, thus reducing the potential risk of loss and damage to future flood events. The proposed project allows for reliable emergency services during flood events. The Federal investment in this relocation project may promote direct and indirect floodplain development for new uses beyond this project. The continued risk, and enhanced risk to Federal investment due to the fire hall relocation will be minimized to the extent practicable as described below in Step 5.

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

In order to comply with EO 11988 and the NFIP, FEMA must minimize potential harm to lives and the investment at risk from the base flood. Since the fire hall is a critical action/facility the minimum floodplain is the 500-year floodplain. Elevation of the fire hall above the 500-year floodplain would help minimize threats to life and property. The preliminary design plans also indicate that the elevation of the ingress/egress would be at or above the 500-year floodplain. According to the Hunt Engineering hydrology and hydraulic study, the proposed project would not adversely impact the natural habitat and beneficial values or other functions of the floodplain. Site erosion and sedimentation control plans will be required, along with dust control, and other best management practices for construction that will avoid and minimize potential temporary impacts to the human environment.

**Step 6 Re-evaluate the proposed action.**

One practicable alternative was identified for locating the project above of the 100-year floodplain. However, this is a critical facility which needs to be above the 500-year floodplain. Taking “No Action” to relocate the fire hall is not an acceptable alternative, as the project purpose and need to replace the function of flood-damaged facility for emergency services within the community would not be fulfilled. The flood damage risks to life and property have been minimized to the extent practicable via the proposed elevated fire hall above the 500-year floodplain. Since Site 1 and Site 2 both need to be elevated above the 500-year floodplain, both sites were determined to be practicable alternatives. The sub-grantee provided sound reasons why they prefer Site 2 instead of Site 1. Elevating Site 2 is a sufficient action to meet the 44 CFR Part 9.9 “practicable alternative” requirement to relocate a critical facility above the 500-year floodplain. Therefore, FEMA will conduct an environmental assessment to evaluate the potential impacts that the proposed relocation of the Wellsburg Fire Hall to Site 2 would incur.
Step 7 Findings and Public Explanation (Final Notification).

After evaluating alternatives, including impacts and minimization opportunities, it is FEMA’s consideration (determination) that the Site 2 is a practicable alternative to locate the proposed project. The sub-grantee prefers Site 2 because of economic factors that have been added into the decision-making process. This Eight-Step Review will become part of the environmental assessment documentation when it is finalized in accordance with the National Environmental Policy Act.

Step 8 Implement the action

The project will be constructed in accordance with the proposed scope of work, and the incorporation and adherence to the floodplain impact minimization measures described in Step 5 will be conditions of the Federal grant. The sub-grantee is responsible for review of the final building plans and will need to assure compliance with all applicable codes and standards. The sub-grantee will need to obtain all required building and site development permits, such as a State Pollutant Discharge Elimination System permit pursuant to New York State Environmental Conservation Law, as a condition of the Federal grant, to preserve the floodplain environment, and to minimize risk and harm to life and property.