

**FLOODPLAIN 8-STEP PROCESS IN ACCORDANCE WITH
EXECUTIVE ORDER 11988: FLOODPLAIN MANAGEMENT**

New York State Governor's Office of Storm Recovery
Johnson City Water Treatment Plant Resiliency Improvements

Johnson City, Broome County, NY

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The Village of Johnson City is requesting funding from the New York State Governor's Office of Storm Recovery (GOSR) for the "Johnson City Water Treatment Plant Resiliency Improvements" project ("Proposed Action"), located in Johnson City, Broome County, New York (see **Figure 1**). GOSR is conducting an environmental review of the Proposed Action on behalf of the State of New York as the recipient of Community Development Block Grant - Disaster Recovery ("CDBG-DR") funds from the U.S. Department of Housing and Urban Development under 42 U.S.C. § 5304(g) and 79 Fed. Reg. 62,182 (Oct. 16, 2014).

The Proposed Action involves the construction of a new administration and operations building for an existing water treatment plant. The Proposed Action would include the demolition of an existing storage building and the slab on grade construction of a new administration and operations building at a more elevated location within the existing water treatment plant site. The new building would contain office space, administrative space, an operations room, a meter room, an employee locker room, and a mechanical and electrical room. The new building will have storage capacity to replace what will be lost in the building to be torn down. Flood-proofing is also proposed for the three existing well houses by way of sealing existing wall penetrations and masonry and flood proofing of the well house doors.

During Tropical Storm Lee, the levee system surrounding the Village of Johnson City's water treatment plant overtopped for the first time, leading to structural damage to the water treatment plant and inundation of individual well houses. The Village of Johnson City's water treatment plant administrative offices and potable water well houses are at risk of repeated flooding unless relocated or provided with additional resiliency measures. The Proposed Action would protect the water supply and administration and operations buildings for the Village of Johnson City and three other adjacent areas. It would reduce the risk of the Village's service district losing access to water for general consumption and firefighting purposes. Improvements to public infrastructure would increase community resilience in the face of future storms and flooding, thereby ensuring protection of the Village of Johnson City's assets and the safety of its citizens. Based on available information and preliminary plans, upgrading the Village's water treatment plant and flood proofing well houses would enhance their resiliency and ensure the continuous operational reliability during floods.

Step ONE: Determine whether the action is located in a 100-year floodplain (or a 500-year floodplain for critical actions) or wetland.

The Proposed Action is located within a FEMA Special Flood Hazard Area, with a portion of the site located within the 100-year floodplain and remainder of the site located within the 500-year floodplain, as indicated in FIRM panel 3600560025B, effective on 11/21/1980 (see **Figure 2**). The project site is approximately 1.2 acres in size. GOSR considers the Proposed Action a critical action, as it would reduce the risk of the Village's service district losing access to water for general consumption and firefighting purposes.

This project is (a) new construction and (b) does not meet any of the exemptions in 24 CFR 55.12, therefore, E.O. 19988 applies. An evaluation of direct and indirect impacts associated with construction within a floodplain is required. This analysis considers impacts to flood levels, flood risk, or the flow of flood waters in the project area or to surrounding areas.

Step TWO: Notify the public for early review of the proposal and involve the affected and interested public in the decision making process.

A public notice describing the project was published in the Binghamton Press & Sun-Bulletin, the local and regional paper, on October 23, 2015. The notice targeted citizens who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment. As required by regulation, the notice also included the name, proposed location and description of the activity, and the HUD official or responsible entity contact for information as well as the location and hours of the office at which a full description of the proposed action can be viewed. A copy of the published notification is attached hereto. The required 15 calendar days were allowed for public comment. No comments were received during the 15 calendar days following publication.

Step THREE: Identify and evaluate practicable alternatives.

After consideration of the following alternatives, GOSR has determined the best practicable alternative is the Proposed Action. The alternative actions considered are as follows: (1) No Action, (2) Utilization of existing sites with backup wells and (3) The purchase of property offsite to locate the project outside of the Floodplain.

No Action Alternative

Under the No Action alternative, conditions of the environment would remain unchanged and the utilization of an outdated administration and operations building for an existing water treatment plant within the same elevation as the 2011 storm of record would continue. Under the No-Action alternative, the construction of the new administration and operations building for the water treatment plant and the flood-proofing of the existing well houses would not occur. Under the No-Action alternative, the water treatment plant administrative offices and potable water well houses would be at risk of repeated flooding. There would be continued risk of the Village's service district losing access to water for general consumption and firefighting purposes that protect the safety of Johnson City's assets and its citizens.

Alternative

There are currently three backup wells by which an administration and operations building would ideally be placed, but there is not sufficient area for the operations and maintenance to be located at those sites due to space constraints. Thus, situating the building here would prove to be insufficient.

Locate the Project Offsite, Outside of the Floodplain

Alternatives involving locating the project outside of the floodplain were considered and rejected because this would not meet the project purpose of protecting the water supply and protection of the water treatment plant facilities. The offsite locations that were considered did not have sufficient space to accommodate the proposed project, or proximity to existing water treatment plant operations. The administration and operations building and well operations need to be located within the same site for the water treatment plant to function efficiently. Therefore, the site for the proposed new administration and operations building at the existing water treatment plant site is the most appropriate location. Further, the new administration and operations building will be constructed above the 2011 flood of record which will increase resiliency for future storms and flooding.

Step FOUR: Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.

The Proposed Action would not result in significant adverse impacts to floodplains and seeks to provide flood mitigation benefits to critical infrastructure. The Proposed Action would allow for the decommissioning of the current water treatment facilities and the rebuilding of a facility in a more resilient way by locating the development of a new administration and operations building above the floodplain, which would provide crucial administrative and operational functions necessary to maintain effective water supply service.

The development footprint of the Proposed Action would not result in an increase in impervious cover, as all structures would be located within the existing development footprint. No significant land development, neighborhood, socioeconomic, natural resources, or other direct, indirect or cumulative impacts would result from the proposed project. As discussed above, the Proposed Action seeks to mitigate this risk of repeated flooding of the water treatment plant administrative offices and potable water well houses during extreme weather events. The Proposed Action also seeks to mitigate the risk of the Village's service district losing access to water for general consumption and firefighting purposes by improving resiliency with flood proofing measures and the elevation of a newly constructed facility. Therefore, the Proposed Action would not result in a net increase of flood levels, flood risk, or the flow of flood waters on the project site or surrounding areas. Per the existing NYSDEC bulk storage permit for the site, the facility includes a 550-galon, above-ground storage tank with secondary containment sufficient to hold the full contents of the tank plus additional contents in the event of present rainwater.

Step FIVE: Where practicable, design or modify the proposed action to minimize the potential adverse impacts to lives, property, and natural values within the floodplain and to restore, and preserve the values of the floodplain.

During the design process, the Project engineer would be asked to support measures that protect the improvements from future storms and accommodate resilience into infrastructure design. The new administration and operations building would be constructed at a more elevated location within the existing water treatment plant site and flood-proofing of the three existing well houses is also proposed. The proposed improvements to public infrastructure would increase community resilience in the face of future storms and flooding, thereby ensuring protection of the Village of Johnson City's assets and the safety of its citizens.

Step SIX: Re-evaluate the Proposed Action.

Despite being located in a 500-year floodplain, the Proposed Action would be designed to minimize effects on floodplain values and seeks to provide resiliency and flood mitigation benefits by improving the health and safety associated with a protected water supply in the community.

GOSR has reevaluated the proposed action and determined that the Proposed Action is still practicable in light of its potential exposure to flood hazards in the floodplain. There is no practicable alternative to the Proposed Action. The No Action alternative is not practicable because it would provide no additional resiliency or flood mitigation benefit to meet the project purpose and need and the water treatment plant administrative offices and potable water well houses would remain at risk of repeated flooding. The onsite alternative is not considered practicable because there is not enough area for the building to operate sufficiently. Finally, an alternative to purchase property offsite to locate the project outside of the floodplain was considered and rejected because it would not remedy the problem of inefficient functionality of the administration and operations building and well operations as they need to be located within the same site for the water treatment plant to properly function. The offsite locations that were considered also did not have sufficient space to accommodate the proposed project.

Step SEVEN: Issue Findings and a Public Explanation.

It is the determination by GOSR that there is no practicable alternative to locating the Proposed Action in the flood zone and the proposed Village of Johnson City's Water Treatment Plant Resiliency Improvements project is the preferred alternative. This is due to: 1) the need to prevent repeated flooding of the administration and operations building and well operations; 2) the project purpose of protecting water supply and the associated flood proofing resiliency benefits that would improve the safety of Johnson City's citizens and assets; 3) the need to construct an economically feasible and efficient project; and 4) the ability to mitigate risk and minimize impacts on public safety, water quality, and floodplain values.

Among the numerous benefits of the Proposed Action, these include protection of water supply by constructing a new water treatment plant at a more elevated location within the existing water treatment plant site, which would ensure protection of the Village's assets and the safety of its citizens by reducing the risk of the Village's service district losing access to water for general consumption and firefighting purposes and increase community resilience in the face of future

storms and flooding. Resulting flood mitigation and resiliency benefits include increasing the function of well houses against flooding with the implementation of flood proofing measures.

A 7-day “Notice for Final Public Review of a Proposed Activity in a 500-Year Floodplain” was published in the Binghamton Press & Sun-Bulletin, the local and regional paper, on November 11, 2015. The 7-day period expires on November 18, 2015. The notice targeted citizens who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment. The notice was also sent to the following federal and state agencies on November 11, 2015: The US Federal Emergency Management Agency (FEMA) -Region 2, US Environmental Protection Agency (EPA) - Region 2, US Fish & Wildlife Service – New York Field Office, US Army Corps of Engineers (USACE) NY District Office, US Department of Housing and Urban Development (HUD) - Region 2, New York State Department of Environmental Conservation (NYS DEC) - Region 7, New York State Office of Parks, Recreation & Historic Preservation (OPRHP), State Office of Historic Preservation (SHPO), New York State Environmental Facilities Corporation, New York State Division of Homeland Security and Emergency Services (DSHES), and State Office of Emergency Management. The notice was also sent to the following local agencies on November 11, 2015: Broome County Health Department, Broome County Department of Public Works, and Broome County Department of Planning and Economic Development. A copy of the published notification is attached hereto.

Step EIGHT: Implement the Proposed Action.

GOSR will ensure that this plan, as modified and described above, is executed and necessary language will be included in all agreements with participating parties. Further, GOSR will see that all mitigation measures as prescribed in the following reviews are completed: National Environmental Policy Act (NEPA) review in accordance with 24 CFR Part 58 and a New York State Environmental Quality Review Act (SEQR) review in accordance with 6 NYCRR Part 617. Lastly, GOSR will take an active role in monitoring the construction process to ensure no unnecessary impacts occur nor unnecessary risks are taken.