

Environmental Assessment Sidney GreenPlain Project Delaware County, New York

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APPENDIX A: DOCUMENTS

- Document A: Proposed Seed Mix and Planting List
- Document B: Sidney GreenPlain 8-Step Narrative

APPENDIX B: CORRESPONDENCE

- Correspondence A – FEMA to USFWS Informal Consultation, October 25, 2017
- Correspondence B – USFWS To FEMA Concurrence, January 17, 2018
- Correspondence C – FEMA to SHPO letter, June 7, 2017
- Correspondence D – SHPO response to FEMA consultation letter and Phase 1 Work Plan,
June 30, 2017
- Correspondence E – SHPO response to the management summary for the geophysical survey
on March 14, 2018

Correspondence F – FEMA to SHPO consultation with Phase II Archeological Report results,
March 3, 2020

Correspondence G – SHPO response to updated project plans and FEMA letter, March 20,
2020.

Correspondence H – Stockbridge-Munsee Tribe response to FEMA consultation, 3/20/2020

Correspondence I – Oneida Tribe response to FEMA consultation, 6/16/2020

Correspondence J – FEMA response to SHPO's RFI questions, September 2, 2020

Correspondence K – SHPO concurrence with FEMA's findings of No Adverse Effect to
Historic Properties with Conditions, September 4, 2020

LIST OF ACRONYMS

APE	Area of Potential Effects
BFE	Base Flood Elevation
CEQ	Council on Environmental Quality
BMP	Best Management Practice
CFR	Code of Federal Regulations
dBA	A-Weighted Decibels
EA	Environmental Assessment
EO	Executive Order
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
GOSR	Governor’s Office of Storm Recovery
HMGP	Hazard Mitigation Grants Program
IPaC	Information for Planning and Consultation
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NRHP	National Register of Historic Places
NY	New York state route
NYS	New York State
NYRCR	New York Rising Community Reconstruction
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSHPO	New York State Historic Preservation Office
SPDES	State Pollution Discharge Elimination System
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

On October 29, 2012, Hurricane Sandy caused storm damage to several areas across the State of New York. On October 30, 2012, President Barack Obama declared Hurricane Sandy a major disaster. The declaration authorized the United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide assistance to the State of New York per federal disaster declaration DR-4085-NY. The Village of Sidney (subrecipient) has applied to the FEMA Hazard Mitigation Grant Program (HMGP) for funding of the Sidney GreenPlain Project in accordance with Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. §§ 5121-5207), as amended; the Sandy Recovery Improvement Act of 2013; and the accompanying Disaster Relief Appropriations Act of 2013. The New York State Division of Homeland Security and Emergency Services is the applicant partner.

FEMA prepared this Environmental Assessment (EA) in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and the Regulations for Implementation of the National Environmental Policy Act (40 Code of Federal Regulations [CFR] Parts 1500 to 1508). The purpose of the EA is to analyze the potential environmental impacts of the Proposed Action and alternatives, including a No Action alternative, and to determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI). In accordance with the above referenced regulations and FEMA Directive 108-1 and FEMA Instruction 108-1-1, NEPA implementing procedures, FEMA is required, during decision making, to fully evaluate and consider the environmental consequences of major federal actions it funds or undertakes.

Recent changes to the President's Council on Environmental Quality (CEQ) regulations implementing NEPA became effective on September 14, 2020 (85 Fed. R. 43304-76 (July 16, 2020)). As stated in 40 CFR § 1506.13, the new regulations apply to any NEPA process begun after September 14, 2020. This EA substantively commenced prior to that date; therefore, this EA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020, and procedures adopted pursuant to Department of Homeland Security Directive 023-01, Rev. 01, and FEMA Directive 108-1.

2.0 PURPOSE AND NEED

Section 404 of the Stafford Act authorizes FEMA to provide funding to eligible grant applicants for activities with the purpose of reducing or eliminating risks to life and property from hazards and their effects. The purpose of the Proposed Action is to reduce the level and duration of flood events that endanger life and property in neighborhoods in the Village of Sidney affected by flooding on Weir Creek and the Susquehanna River.

The need for this project is indicated by the history of flooding and the resulting flood damage sustained by homes, businesses, and infrastructure within the Village of Sidney, as discussed in detail in Section 3. Sidney was founded on the floodplain at the confluence of the Susquehanna River and the Unadilla River, on the wide flat lands then called the Sidney Plains. The majority of the village is built within the 100-year floodplain. The New York State Route (NY) 8 bridge constricts the flow of the Susquehanna and Unadilla Rivers and the NY 8 elevated roadway creates a barrier that blocks flood waters from entering the area west of NY 8, resulting in flood waters inundating the area east of NY 8. Furthermore, climate change is increasing the frequency and intensity of precipitation events in the northeast, resulting in increased flooding events (U.S. Environmental Protection Agency [USEPA] 2016). Thus, flooding in the project area would likely increase in frequency and duration. These flood risk conditions must be addressed with comprehensive, cost effective solutions that increase resilience to climate change (FEMA 2017).

3.0 BACKGROUND

The Village of Sidney, at latitude/longitude 42.308175°, -75.396465°, is situated on the south side of the Susquehanna River, at the confluence of the Susquehanna and Unadilla Rivers, within the Upper Susquehanna Watershed in the foothills of the Catskill Mountains. The village is in the northwest corner of Delaware County, New York, abutting both Chenango and Otsego Counties. The village is at the junction of NY 8, NY 7, and Interstate 88.

A widespread flood occurred in 1936, causing extensive damage, from which the village subsequently recovered. After 70 years with minimal flooding, Sidney was inundated by a serious flood in 2006. In the last week of June 2006, a storm front stalled over the region for a week and dropped a record-breaking 8 to 14 inches of rain over the upper Susquehanna Basin. The nearest U.S. Geological Survey stream gauges 4 miles upstream on the Susquehanna River at Unadilla and 5 miles downstream at Bainbridge recorded river levels that exceeded previous records by more than 1 foot at Unadilla and by just under 4 feet at Bainbridge (Susquehanna River Basin Commission 2007). The flooding damaged roads and highways, critical infrastructure, 489 homes, and many nonresidential buildings including the Sidney Police Station, Sidney Fire Department, the Civic Center, Amphenol Aerospace, and Keith Clark Park. Flooding also forced the closure of roads and highways including Interstate 88. Downtown Sidney and many neighborhoods were evacuated, the largest employer was closed for months, and emergency response was complicated by flooding of the main fire station, police station, and emergency medical technician headquarters.

In August 2011, Hurricane Irene brought 4 to 6 inches of rain to the village, and in September 2011, Tropical Storm Lee brought another 8 to 12 inches. Flash flooding from Weir Creek and flooding from the Susquehanna River caused flood damage and loss of use to 162 homes, critical infrastructure, and many nonresidential buildings including, for the second time in 5 years, the Sidney Police Station, Sidney Fire Department, the Civic Center, Amphenol Aerospace, and Keith Clark Park. Residents were evacuated as floodwaters washed out roads and culverts and flooded over 400 homes and businesses. Village officials estimated that the 2011 storms flooded at least 422 buildings. Areas unaffected by floodwaters were without power because of flooding of the substations.

The New York Rising Community Reconstruction (NYRCR) Program was announced by Governor Cuomo in April 2013. It is a planning and implementation process that was established to provide rebuilding and resiliency assistance to communities severely damaged by Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy. NYRCR Communities, such as the one created in Sidney, were led by an NYRCR Planning Committee composed of local residents, business owners, and civic leaders. Throughout the planning process, planning committees were supported by staff from the Governor's Office of Storm Recovery (GOSR), the NYS Department of State, and the New York State Department of Transportation (NYSDOT) (GOSR 2014).

Building on its successful community engagement strategy, the Sidney Planning Committee prepared a vision statement to guide implementation of the NYRCCR Plan (Village of Sidney 2013). The vision statement was reviewed at community workshops. The vision statement builds on the overlapping Long-Term Community Recovery Plan, developed with state funding during the months immediately after Hurricanes Irene and Lee. The alternatives evaluated in this EA were a product of that planning process. Additionally, the Village is implementing the Sidney Buyout Project, which aims to acquire and demolish properties at high risk of flooding within the village. This ongoing project is independent of the Proposed Action and is described in more detail in Section 5.19.

4.0 ALTERNATIVES

This section describes the No Action alternative, the Proposed Action, and alternatives that were considered but dismissed from further evaluation in this EA. Alternatives are evaluated for their ability to address purpose and need, hazard mitigation goals, engineering constraints, environmental impacts, land availability, and resilience and restoration goals.

4.1 Alternative 1: No Action Alternative

The No Action alternative is included to describe potential future conditions if no action is taken to reduce flood hazards. Under the No Action alternative, the subrecipient would not have FEMA funds for comprehensive hazard mitigation or flood risk management. Under the No Action alternative, there would be no reduction in the levels and durations of flooding events from Weir Creek and the Susquehanna River that endanger life and property in the village.

4.2 Alternative 2: Proposed Action

The Village of Sidney proposes to implement a green infrastructure system (GreenPlain) that provides additional flood storage and mitigation for storm events that influence the Susquehanna River and Weir Creek. The Proposed Action would restore and expand the floodplain forest along the Susquehanna River banks to an approximately 17-acre riparian and wetland area and 15-acre open herbaceous meadow within the project area. The subrecipient would construct flood relief culverts underneath NY 8 to allow for better movement of floodwaters. Within the Camp Street neighborhood, the subrecipient would remove and regrade Railroad Avenue and portions of Camp Street to create open space. Acquisition and demolition of structures is not part of the Proposed Action.

The project area is divided into three distinct mitigation areas: Community Foundation Land (32 acres in total), open space west of NY 8 (35 acres in total), and a portion of the Camp Street neighborhood (approximately 20 acres) (see **Figure 4-1**). The wetland and riparian restoration work would be on the Community Foundation Land, which is currently primarily agricultural land used for growing corn. Proposed culverts under NY 8 would direct flows to the open space area west of the highway; no grading is proposed in this area. Flood modeling shows that there would be no change in the base flood elevation in this downstream area and there would be no impact on the Sidney Industrial Park, which is already located on slightly elevated ground. The Proposed Action would add a total of 1 million cubic feet of flood storage and would reduce flooding at more than 300 residential properties and over 24 commercial properties in the Village of Sidney and Town of Unadilla, and would reduce the frequency at which public infrastructure is inundated.

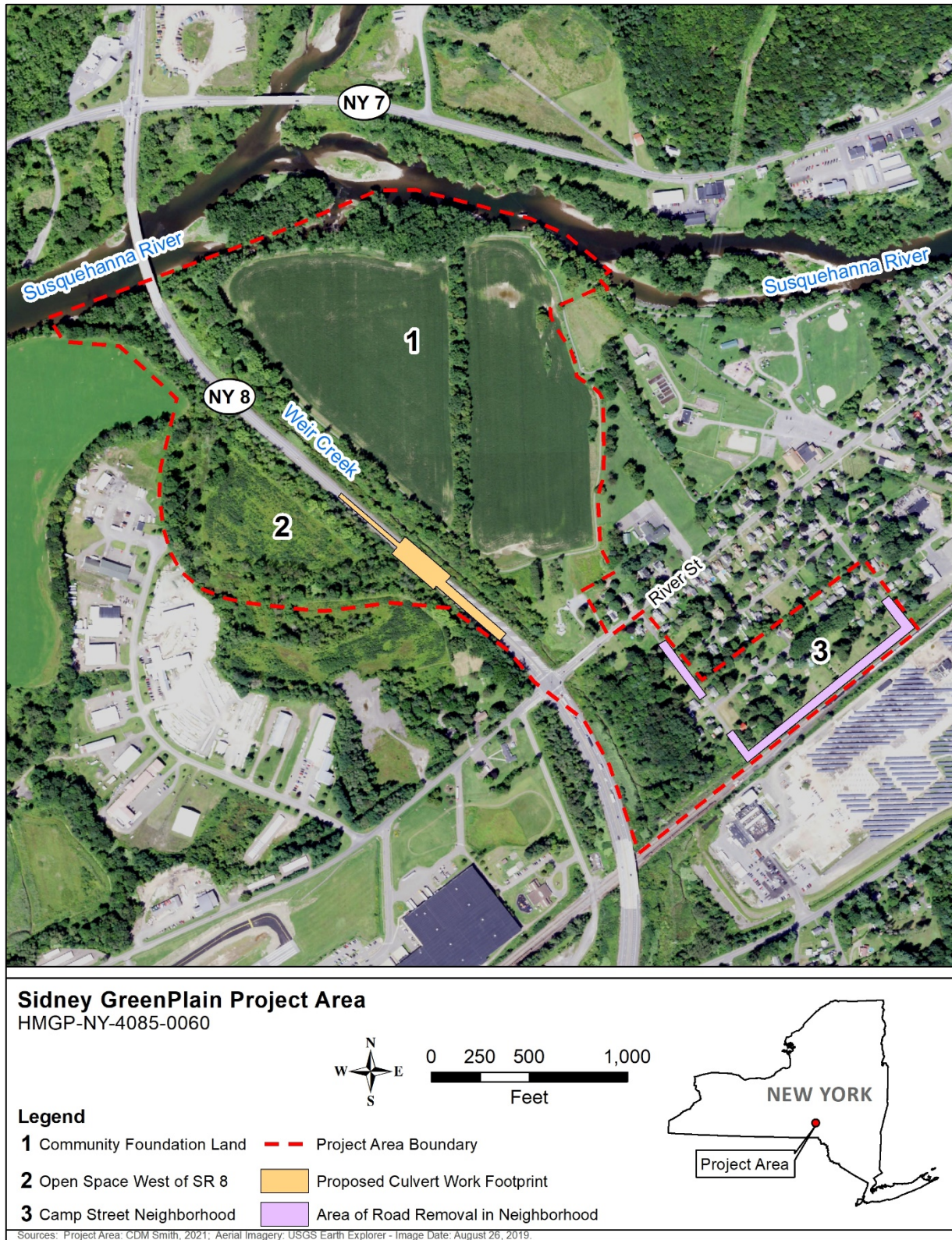


Figure 4-1. Project Area

4.2.1 Wetland and Riparian Restoration

The GreenPlain's mitigation areas would provide additional flood storage by creating a series of meandering channels that connect to larger depressed storage areas. The design proposes the creation of a series of wetlands and ponds that would help slow and clean the runoff from Weir Creek. Floodwaters come from Weir Creek, which drains a large portion of the south side of Sidney and from the Susquehanna River, which has a watershed of more than 16,000 square miles. This restored, reclaimed, and constructed wetland and pond complex would help reduce the rate of runoff coming from Weir Creek, helping to reduce floodwaters that reach the Susquehanna River and, ultimately, downstream. Grading to create the channels and wetlands would require the use of heavy equipment and personnel vehicles (wheeled and tracked combustion engine vehicles 50 tons or less). Restoration work would excavate up to a maximum of 6 feet deep. The GreenPlain would take approximately 1 year to construct.

The subrecipient would plant a variety of native shrubs and trees, and native seed mixes would be distributed throughout the site based on different habitat zones, such as emergent wetland, riparian, and upland. Habitat zones would be based on the final elevation and the expected duration of flooding during storms. Tree and shrub species, such as speckled alder (*Alnus incana*) and swamp rose (*Rosa palustris*), would be planted in wetland and riparian areas, and species such as silky dogwood (*Cornus amomum*) and sweet fern (*Comptonia peregrina*) would be planted in upland areas. Wetland seed mixes would include plant species such as fox sedge (*Carex vulpinoidea*) and hop sedge (*Carex lupuliformis*), which would be distributed in wetland and riparian areas. A conservation/wildlife seed mix consisting of species such as big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), and switchgrass (*Panicum virgatum*) would be dispersed in upland and riparian buffer areas. See **Appendix A**, Document A for a draft native plant and seed mix that would be used for site restoration. The subrecipient would retain some existing trees and large shrubs within the project area.

The subrecipient would conduct planting during dry conditions when the ground is not frozen with broadcast seeding after other planting is completed. All seeded areas would be hydromulched with a tackifier or covered with an erosion control blanket to reduce erosion and hold the seeds in place until they can germinate. The subrecipient would reapply topsoil and seed to any areas that fail to establish plant cover following the initial seeding application. To avoid impacting the site, the 15-acre archaeologically sensitive area in the Community Foundation Land would be planted with grasses and maintained as a native herbaceous meadow by mowing the area twice a year.

The subrecipient will implement a maintenance plan that includes maintenance of the plantings. After the first year, maintenance might include replacing vegetation, preventing erosion, and maintaining proper functions of the floodplain.

4.2.2 Culvert Construction

The subrecipient would install five precast concrete box culverts underneath NY 8, approximately 950 feet northwest of the intersection of NY 8 and River Street (**Figure 4-1**). Floodwater would be conveyed through the culverts from east to west to better connect the Community Foundation Land and the open space area. Water would only flow through the culverts during overbank flooding events. The culverts would be approximately 19 feet wide, 10 feet high, and 51 feet long. Excavation to install the culverts would be a maximum of 12 to 15 feet deep. The total length of roadway reconstruction would be approximately 255 feet and would match the existing alignment of NY 8. Culvert construction would require the use of heavy (wheeled and tracked combustion engine vehicles 50 tons or more) equipment such as excavators, bulldozers, dump trucks.

During construction, the subrecipient would install, backfill, and pave the culverts in sections to keep a portion of the roadway (i.e., two travel lanes) open to vehicles at all times. The subrecipient would repave roads and restore striping, and post-construction, traffic would be returned to its original alignment. Culvert construction is expected to last about 2 to 3 months.

4.2.3 Camp Street Neighborhood Road and Utility Removal

The subrecipient would remove pavement and curbing from Railroad Avenue and portions of Camp Street and recycle or dispose of it at a licensed facility according to industry-standards. Existing subsurface materials would be retained to protect underground utilities and maintain vehicular access for maintenance and management of those utilities. The subrecipient would place topsoil to cover the subsurface materials, grade to match surrounding topography and seed the area with a low- or no-mow grass mix. Ground disturbance associated with these activities would be a maximum of 3 feet and utilities would not be decommissioned. The Proposed Action would not include the acquisition and demolition of homes in the Camp Street Neighborhood. The subrecipient would coordinate final designs for this project component with the Sidney Buyout Program, which is described in Section 5.19.

4.2.4 Access and Construction Staging

The majority of the project area would be accessed from River Street and NY 8. Internal haul roads may need to be constructed for access within the Community Foundation Land. Staging areas would occur within the project boundaries. A stabilized construction entrance would be installed for each off-road staging area to prevent mud, sand, and silt from being tracked out onto public roadways.

4.3 Alternatives Considered and Dismissed

In addition to the two alternatives outlined above, there were five alternatives that were considered and dismissed from further evaluation. Alternatives discussed here are not included in the affected environment analysis.

4.3.1 Alternative 3: Floodwall/Berm

The U.S. Army Corps of Engineers (USACE) prepared several reports assessing flooding and potential flood management options in the project area vicinity. In 2010, USACE completed a comprehensive assessment titled *Flood Risk Management Analysis, Village of Sidney, Delaware County, New York* (USACE 2010). In this analysis, a floodwall or "berm" alternative was evaluated for potential flood protection in Sidney. This alternative involved constructing a levee/floodwall combination along the Susquehanna River. A combination levee and floodwall was necessary because there are areas where space constraints would prevent construction of a levee. Floodwalls are typically more expensive but can fit into narrower areas than levees that depend on a wide base for stability. The study evaluated levee/floodwall designs that would provide protection against the effective 100-year flood elevation, plus 3 feet of freeboard.

USACE concluded that "while the structures would protect the 100-year floodplain, the cost is high with unknown benefits." Disadvantages include impacts on properties, wetlands, and aesthetics, and expensive annual operation and maintenance costs (USACE 2010). The alternative was not carried forward because of these feasibility issues and the uncertainty that it would meet the purpose and need for the project.

4.3.2 Elevate Structures

The subrecipient considered raising flood-prone structures to an elevation above the BFE. A number of structures in the village are already part of an acquisition and demolition program that removes flood-prone structures from high risk areas. If the remaining residences were elevated so that their lowest finished floor elevation was at or above the BFE, it would require modification of approximately 160 residential structures. This would not include commercial and institutional properties or one of the village firehouses—a critical facility. Assuming that each structure would need to be raised 6 feet on average, the cost for this alternative would be approximately \$4,800,000. This alternative would not change the BFE to a significant degree, as there would still be obstructions in the floodplain from the structural components below each structure. This alternative also would not reduce the impact of flooding on commercial or institutional properties in the Main Street Area, or on the village firehouse, police station, or wastewater treatment facility. In addition, because the area has a large population of elderly residents and access to the residential areas would still be limited after flood events, this approach could trap residents in their homes for extended periods. The subrecipient dismissed this alternative because it would not meet the purpose and need for the project.

4.3.3 Bridge Modification

USACE evaluated an alternative to modify the NY 8 Bridge and the Main Street Bridge (USACE 2010). Under this alternative, the Main Street Bridge deck would be raised and the channel capacity would be increased. This alternative would reduce flood elevations upstream of the bridge by 0.4 feet (approximately 5 inches). The alternative would have major adverse impacts on fish

habitat and wetlands. Changes to the NY 8 Bridge would also reduce flood elevations by 0.4 feet by modifying bridge dimensions and channel geometry. Under this alternative, the bridge embankments would be reduced, the bridge deck would be increased to 800 feet long, and the channel would be excavated into a concrete channel to increase velocity and capacity. This alternative was dismissed because of feasibility and cost constraints, and the potential adverse environmental impacts.

4.3.4 Unadilla River Diversion

USACE developed an alternative that evaluated a diversion of the Unadilla River to eliminate flows from that source that contribute to flood hazards in Sidney (USACE 2010). This alternative would reduce flood elevations by 0.8 feet (approximately 9.5 inches) and would “represent a major reduction in flows at the existing confluence” with an estimated reduction from 55,000 cubic feet per second (cfs) to 30,000 cfs. The project would permanently impact properties, fish habitat, and wetlands. The river would be diverted into a new channel, approximately 4,500 feet long. The new channel would be excavated and restored to similar channel dimensions as the current channel. A new 700-foot floodwall would be installed to divert water into the channel. One new bridge on NY 8 would be constructed and the NY 7 Bridge would be modified. The cost in 2010 was estimated at between \$7 and \$12 million, and USACE concluded that “the project does not reduce the 100-year flood elevation enough to justify costs.” This project was dismissed because it would not meet the purpose and need for the project.

4.3.5 Additional Variations on the Project Design

An additional 13 variations of the GreenPlain project design were considered and presented for public feedback. These variations included a mixture of mainstem and floodplain culvert improvements, GreenPlain restoration, additional areas of excavation, abutment removal, and Unadilla River restoration work. The variations were eliminated for a variety of technical feasibility reasons.

4.4 Summary of Alternatives

Seven alternatives were considered by the subrecipient for the Sidney GreenPlain project. Of the alternatives considered, five were dismissed from further consideration. Alternatives were primarily dismissed because they would not fully meet the purpose and need for the project and for a variety of feasibility concerns. The remaining alternatives evaluated in this EA are:

- 1) No Action alternative
- 2) Proposed Action: GreenPlain Mitigation

Section 5 evaluates the potential environmental impacts of the No Action alternative and the Proposed Action. Section 9.0, Summary of Impacts, summarizes the potential impacts evaluated.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section describes the environment potentially affected by the alternatives, evaluates potential environmental impacts, and recommends measures to avoid or reduce those impacts. When possible, quantitative information is provided to establish potential impacts, and the potential impacts are evaluated qualitatively based on the criteria listed in **Table 5.1**.

Table 5.1. Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
No Impact	The resource would not be affected and there would be no impact.
Negligible	Changes are expected to be nondetectable, but if detected, the impacts would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse impacts.
Moderate	Changes to the resource would be measurable and have either localized or regional-scale impacts. Impacts would be within or below regulatory standards, but historical conditions would be altered temporarily. Mitigation measures would be necessary, and the measures would reduce any potential adverse impacts.
Major	Changes to the resource would be readily measurable and would have substantial consequences on regional levels. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse impacts would be required to reduce impacts, though long-term changes to the resource would be expected.

5.1 Resources Not Affected and Not Considered Further

The following resources would not be affected by either the No Action alternative or the Proposed Action because they do not exist in the project area or the alternatives would have no impact on the resource (**Table 5.2**). These resources have been removed from further consideration in this EA.

Table 5.2. Eliminated Resource Topics

Topic	Reason
Seismicity	Executive Order (EO) 12699 requires that federal preparedness and mitigation activities include the development and promulgation of specifications, building standards, design criteria, and construction practices to achieve appropriate earthquake resistance for new structures. Seismic hazards are very low in Delaware County (USGS 2014) and no new structures would be created under the alternatives, so EO 12699 would not apply.
Farmland Soils	The project area is entirely within the boundaries of the Village of Sidney; thus, it is “already committed to urban uses” and would not be considered farmland under the Farmland Protection Policy Act (7 CFR 658.2[a])).
Sole Source Aquifers	The Village of Sidney is not over a sole source aquifer (USEPA 2020). Therefore, review under Section 1424(e) of the Safe Drinking Water Act governing sole source aquifers is not required.
Wild and Scenic Rivers	There are no wild and scenic rivers within or near the project area. The closest wild and scenic river is the Upper Delaware River in New York, approximately 30 miles south of the project area (National Wild and Scenic Rivers 2020).
Coastal Resources	This project area is not in the Coastal Zone Boundary designated by the State of New York (New York Department of State, Office of Planning and Development 2016) or within a Coastal Barrier Resources Unit (USFWS 2019).
Essential Fish Habitat	The project area is not within or near coastal or brackish waters. The Proposed Action and alternatives would not have any impact on essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.
Visual and Aesthetic Resources	The project area is not within an area of particular scenic value and the historic district has been previously altered by the removal of houses from the floodplain. The Proposed Action and alternatives would have no effect on visual resources.

5.2 Geology, Topography, and Soils

5.2.1 Existing Conditions

Based on information from the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil surveys, bedrock is expected to be greater than 80 inches (6.7 feet) below grade in much of the project area (NRCS 2021). During a geotechnical survey of the area proposed for culvert construction, two soil borings encountered an upper layer of fill consisting of a mixture of sand and gravel with varying amounts of sandy/silty clay. Beneath this fill, a layer of sand and

silt extends approximately 16 feet below the existing ground surface, with layers of silt, sand, and gravel underlying this layer.

The overall project area is relatively level with a gentle slope to the north toward the Susquehanna River. The elevation ranges from approximately 1,000 feet above mean sea level along the western boundary of the project area to approximately 978 feet along the Susquehanna River (SWCA 2017a). Slopes in the project area range from 2 to 8 percent.

The majority of the project area, approximately 82 percent, is classified as Unadilla silt loam and approximately 10 percent of the project area is classified as Wenonah silt loam (NRCS 2021). Unadilla silt loam comprises mainly silt and very fine sand and is classified as well drained. Wenonah soils are floodplain soils that are classified as well drained, with negligible to medium potential for surface runoff. A minimal amount of the project area contains soils that are classified as poorly drained or highly disturbed.

5.2.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, the risk of flooding would not be reduced. Flood events are likely to be temporary and generally would not last long enough to alter soil properties. However, floodwaters would continue to cause soil erosion and the deposition of debris and sediments on the ground surface that could physically damage soil and smother and kill vegetation (Soil Science of American and American Society of Agronomy n.d.). Loss of vegetation from flooding would contribute to erosion in the flooded area. Thus, the No Action alternative would have long-term minor to major adverse impacts on soils in the project area vicinity, depending on the extent and duration of flooding.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Excavation during implementation of the Proposed Action would be a maximum of 6 feet deep for restoration work, 12 to 15 feet deep for culvert construction, and 3 feet deep for road decommissioning. Thus, excavation has the potential for minor, short-term adverse impacts on bedrock.

The Proposed Action would also have minor, short-term adverse impacts on soils and topography from earth-disturbing activities, such as excavation and grading, to create wetland and riparian areas, construct culverts, and remove infrastructure in the Camp Street neighborhood. Construction would be temporary, and the subrecipient would implement the following best management practices (BMP) to reduce the risk of soil erosion during construction:

- Place silt fence or other erosion control barriers around all areas of exposed slopes to control soil erosion during and after construction.
- Prior to grading, install sediment or other erosion control barriers in key areas. Erosion blankets may be installed, if needed.

- Install erosion control bio-nets in any area graded steeper than a three to one slope.
- Monitor and inspect vehicular access points at the same frequency as erosion control features to ensure that deposits of sand, silt, or other material are not being deposited on public roadways. Immediately clean up significant deposits and replace tracking pads.

The Proposed Action would have long-term moderate benefits on soils from the reduced risk of flooding in the project area and vicinity, and the planting of wetland and riparian vegetation that are adapted to submerged conditions. Wetland plants reduce soil erosion by holding soil in place during floods with their roots, absorbing wave energy and breaking up the flow of water (USEPA n.d.).

5.3 Air Quality

The Clean Air Act of 1970 (42 U.S.C. 7401–7661 [2009]) is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. The act authorized USEPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The NAAQS include standards for six criteria air pollutants: lead, nitrogen dioxide, ozone, carbon monoxide, sulfur dioxide, and particulate matter. Particulate matter includes both particulates less than 10 micrometers in diameter and fine particulates less than 2.5 micrometers in diameter. Areas where the monitored concentration of a criteria pollutant exceeds the applicable NAAQS are designated as being in nonattainment of the standards; while areas where the monitored concentration of a criteria pollutant is below the standard are classified as being in attainment. Maintenance areas are those where air quality has exceeded the standards in the past, but that are currently in compliance with the NAAQS.

Federally funded actions in nonattainment and maintenance areas are subject to USEPA conformity regulations (40 CFR Parts 51 and 93), which ensure that emissions of air pollutants from planned federally funded activities would not affect the state's ability to meet the NAAQS. Section 176(c) of the Clean Air Act requires that federally funded projects conform to the purpose of the state implementation plan, meaning that federally funded activities would not cause any violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone.

Under the general conformity regulations, a general conformity determination for federal actions is required for each criteria pollutant or precursor in nonattainment or maintenance areas where the proposed action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed de minimis rates for that pollutant.

5.3.1 Existing Conditions

According to USEPA's Green Book, Delaware County, New York is not within a nonattainment or maintenance area for any criteria pollutant (USEPA 2021).

5.3.2 Potential Impacts and proposed Mitigation

Alternative 1: No Action

No construction would occur under the No Action alternative. Therefore, this alternative would have no short- or long-term adverse impacts on air quality.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would have minor short-term impacts on air quality from equipment and vehicle use. Emissions from on-site construction equipment, on-road construction-related vehicles, and dust-generating construction activities have the potential to affect air quality. Additionally, there may be vehicular delays because of the temporary detour for culvert construction, as discussed further in Section 5.15. Vehicular delays and congestion would also increase vehicle emissions. Gasoline engines produce relatively high levels of carbon monoxide. Because USEPA mandates the use of ultra-low sulfur diesel fuel for all highway and nonroad diesel engines, sulfur dioxide emitted from the Proposed Action's construction activities would have negligible impacts. Dust generated by construction activities is a source of particulate matter. Therefore, particulate matter and carbon monoxide are the primary air pollutants of concern for construction activities. Restoration work would take approximately 1 year and culvert construction approximately 2 to 3 months to complete; thus, vehicle and equipment use in the project area would be temporary and localized. Vehicles and equipment would be kept running as little as possible and areas of exposed soils would be covered or wetted to reduce fugitive dust. Because the project area is not located within a nonattainment or maintenance area, general conformity and *de minimis* thresholds would not apply. FEMA anticipates no long-term impacts on air quality from implementation of the Proposed Action.

5.4 Climate

Climate change refers to changes in the Earth's climate caused by a general warming of the atmosphere. Its primary cause is emissions of greenhouse gases, including carbon dioxide and methane. Climate change is capable of affecting species distribution, temperature fluctuations, and weather patterns. CEQ's *Final NEPA Guidance on Consideration of Greenhouse Gas Emissions and the Effects on Climate Change* suggests that quantitative analysis should be done if an action would release more than 25,000 metric tons of greenhouse gases per year (CEQ 2016).

5.4.1 Existing Conditions

The temperature in Bainbridge, New York, which is approximately 5.5 miles southwest of Sidney, ranges from an average low of 11 degrees Fahrenheit in January to an average high of 81 degrees Fahrenheit in July (U.S. Climate Data 2020). The area receives an average of approximately 40.6 inches of precipitation annually, which falls throughout the year, with the highest precipitation levels occurring in early summer and lowest in winter (U.S. Climate Data 2020).

The climate in the northeastern United States is changing. Between 1895 and 2011, temperatures increased in the region by almost 2 degrees Fahrenheit, and temperatures are projected to increase by 4.5 degrees to 10 degrees Fahrenheit by the 2080s. The total amount of precipitation and frequency of heavy precipitation events has also increased; between 1958 and 2012, the northeast experienced a more than 70 percent increase in the amount of rainfall measured during heavy precipitation events. U.S. Global Change Research Program projections indicate that precipitation will continue to increase, especially in the winter and spring seasons (USEPA 2016).

5.4.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

No construction would occur under the No Action alternative. Therefore, this alternative would have no short- or long-term adverse impacts on climate.

As described above, climate change is expected to increase the frequency and intensity of precipitation events in the northeast, resulting in increased flooding events. Thus, flooding in the project area would be expected to increase in frequency and duration and the No Action alternative would not effectively protect against the effects of climate change.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would result in temporary greenhouse gas emissions from construction activities and use of vehicles and equipment with diesel and gasoline engines. Construction equipment emissions would be temporary and would not increase greenhouse gases to the extent that the Proposed Action would contribute to regional climate change. Thus, the Proposed Action would have short-term negligible impacts on climate.

No long-term impacts on climate are anticipated because the Proposed Action would not be a source of long-term greenhouse gas emissions. The Proposed Action would increase the Village of Sidney's resilience to impacts of climate change, particularly increased precipitation events, by creating wetlands and riparian areas that provide increased flood storage. Thus, the Proposed Action would result in minor long-term beneficial impacts by increasing the Village's resilience to climate change impacts.

5.5 Water Quality

The Clean Water Act of 1977, as amended, regulates discharge of pollutants into water with sections falling under the jurisdiction of USACE and USEPA. Section 404 of the act establishes USACE permit requirements for discharging dredged or fill materials into waters of the United States and traditional navigable waterways. Under the National Pollution Discharge Elimination System (NPDES), USEPA regulates both point and nonpoint pollutant sources including stormwater and stormwater runoff. Activities that disturb 1 acre of ground or more are required to apply for a NPDES permit, called a State Pollution Discharge Elimination System (SPDES) through the New York Department of Environmental Conservation, as authorized by USEPA.

5.5.1 Existing Conditions

The project area is in the Upper Susquehanna Watershed, in hydrologic unit code 02050101, and lies just to the south of the Susquehanna River. Stormwater runoff in the project area flows north toward the Susquehanna River or toward Weir Creek, depending on the location within the project area. Regionally, the Susquehanna River flows from the northeast to the southwest. The New York State Department of Environmental Conservation (NYSDEC) has classified the Susquehanna River as a Class B protected waterbody, not suitable for drinking water but suitable for fishing and primary contact activities (NYSDEC 2009a). Weir Creek runs along the east side of NY 8. Neither of these waterbodies are listed as impaired in the project area by the Proposed Final 2018 New York State 303(d) list (NYSDEC 2020). There is also an unnamed Class C perennial stream that flows along the southern border of the project area and then along the west side of NY 8. Watercourses and wetlands in and near the project area are shown in **Figure 5-1**.

5.5.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action Alternative would not reduce the risk of flooding and floodwaters would continue to cause erosion and pollute surface waters with sediments and debris. NY 8 would continue to create a barrier for flood waters from entering the area west of NY 8, resulting in flood waters inundating the area east of NY 8 and causing erosion along the streambanks of Weir Creek and the eastern streambank of the Susquehanna River. Thus, the No Action alternative would have a minor to moderate long-term adverse impact on water quality depending on the duration and scale of flooding.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would have minor short-term adverse impacts on water quality from construction-related activities. The most common pollutant to surface waters from construction sites is sediment and turbidity; however, metals, trash and debris, nutrients, organic matter, pesticides, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and other toxic organics can also be construction-derived pollutants (USEPA 2009). Activities would be temporary and the subrecipient would use erosion control BMPs, as listed in Section 5.2.2. The Proposed Action would not create new discharge points or sources of pollution to surface waters. The subrecipient would manage construction activities to prevent pollutants from entering stormwater runoff, and thus, from entering surface waters in compliance with the NYSDEC Stormwater SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). The subrecipient would implement a stormwater pollution prevention plan prior to construction, in accordance with the general permit for construction activity.

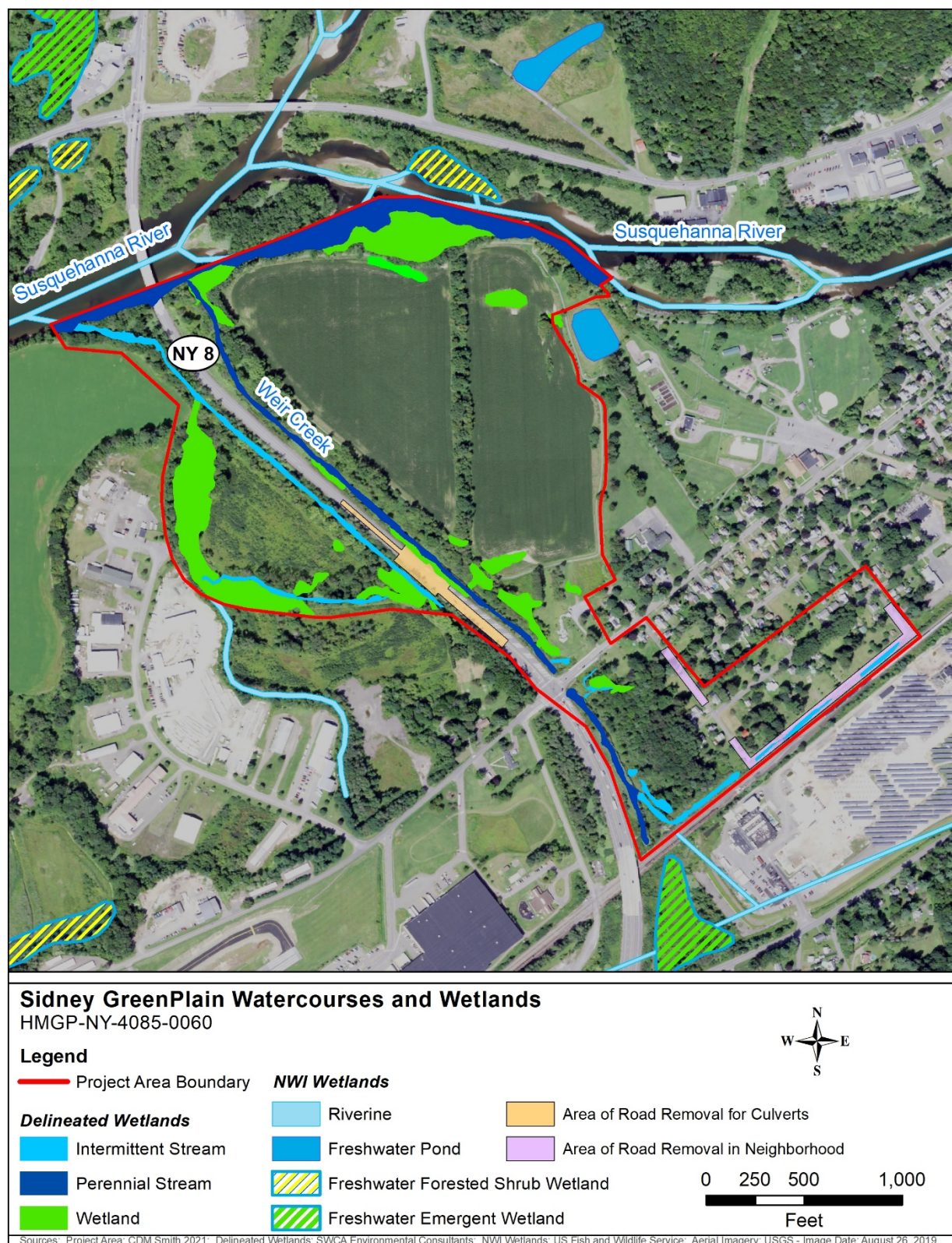


Figure 5-1. Project Area Watercourses and Wetlands

The Proposed Action would have moderate long-term beneficial impacts on water quality by converting disturbed areas, such as impervious surfaces and agricultural lands, into wetlands. The conversion of agricultural fields to wetlands and impervious surfaces to open space would reduce the amount of stormwater runoff into the Susquehanna River and Weir Creek, which could have beneficial impacts on groundwater recharge and surface water quality. As water passes through wetlands, as much as 90 percent of the sediments present in stormwater runoff may be removed (Vermont Department of Environmental Conservation 2021). Wetlands intercept and filter surface runoff before it reaches open water by removing or retaining inorganic nutrients, reducing suspended sediments, and processing organic wastes. Wetlands also provide the conditions needed for the removal of excess nitrogen and phosphorus, which are harmful to humans and animals through processes such as denitrification (USEPA n.d.; Evans et al. 1996). The proposed culverts would not have a long-term impact on water quality. However, the culverts would have long-term benefits on water quality by allowing flood waters to spread into the open space west of NY 8, thus slowing runoff and reducing erosion along the Susquehanna streambank east of NY 8 and the Wier Creek streambank.

5.6 Wetlands

Wetlands provide many benefits for the human and natural environment, including food and habitat for fish and wildlife, improvement of localized water quality, flood storage, and river and streambank erosion control, as discussed throughout Section 5 of this EA (USEPA n.d.).

EO 11990 Protection of Wetlands requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Each federal agency shall take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. FEMA uses the eight-step decision-making process to evaluate potential effects on and mitigate effects to wetlands, in compliance with EO 11990 and 44 C.F.R. Part 9. USACE and NYSDEC regulate activities within wetlands in the state of New York. Section 404 of the Clean Water Act regulates the discharge of fill into Waters of the United States, including wetlands. Article 24 of the NYS Environmental Conservation Law regulates activities in freshwater wetlands.

5.6.1 Existing Conditions

The USFWS National Wetland Inventory maps and NYSDEC wetland maps do not show any wetlands within the project area. However, in June and July 2017, SWCA Environmental Consultants completed a wetland delineation of the project area; a total of twenty-two separate wetlands were delineated in the project area. Wetland locations within and around the project area are shown in **Figure 5-1**. The wetlands that are located within the project area are classified as palustrine (freshwater) and are defined by their dominant vegetation layer (emergent, scrub-shrub, or forested). According to the delineation, there were ten palustrine emergent wetlands

encompassing approximately 1.06 acres, two palustrine scrub-shrub wetlands encompassing approximately 0.37 acres, four palustrine forested wetlands encompassing approximately 3.32 acres, and six wetlands containing two or more dominant vegetation layers and encompassing approximately 5.79 acres, for a total of 10.54 acres of wetlands within the project area (SWCA 2017b).

5.6.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action Alternative would not fill or alter existing wetlands. There would be no change in the acreage of wetlands in the project area. The Flood waters would continue to inundate existing wetlands. Small floods (e.g., 10-year recurrence interval floods) may benefit wetland functions while large floods (e.g., greater than 100-year recurrence interval) may adversely impact wetland functions (Talbot et al. 2018). Because the No Action Alternative would not alter the existing flood regime, there would be no change in the impact of flooding on existing wetlands within the project area. Thus, the No Action alternative would have no impact on wetlands.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would have negligible short-term adverse impacts on approximately 0.25 acres of wetlands from sloping the temporary detour for culvert construction. The temporary roadway would consist of asphalt, subbase, and highway embankment material. Prior to the start of construction, the subrecipient would verify and mark the boundaries of wetland areas and trees to be preserved; no disturbance would occur within these areas. Geotextile bedding would be placed over the ground before the temporary fill is placed to ensure that the fill can be easily removed. Wetland soils would be stockpiled to use later for restoration. As soon as possible after construction, the temporary roadway fill would be removed, and existing grades re-established with the stockpiled wetland soil. Wetland seed mix would be planted over the disturbed area. FEMA anticipates the Proposed Action would have moderate long-term benefits on wetlands by converting approximately 17 acres of agricultural lands into functioning wetlands for a total of over 27 acres of functioning wetlands across the project area. The increase in wetland acreage would be a moderate long-term beneficial impact on wetlands. Wetlands reduce the adverse impacts of flooding by providing flood storage, moderating the erosive force of floodwaters, and providing a place for sediments and debris carried by floodwater to settle. The Proposed Action would increase these benefits by increasing the acreage of wetlands in the floodplain. The 8-step decision making process on wetlands is included in **Appendix A, Document B**. USEPA

5.7 Floodplain

EO 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the short- and long- and short-term impacts associated with the occupancy and modification of floodplains and avoid direct or indirect support of development within the floodplain whenever there is a practicable alternative. Each federal agency must provide leadership and take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare;

and restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities. FEMA uses an eight-step decision-making process to evaluate potential effects on and mitigate effects to floodplains in compliance with EO 11988 and 44 C.F.R. Part 9

FEMA uses the 1-percent floodplain as the minimal area for floodplain impact evaluation. FEMA defines a 1-percent-annual-chance floodplain (i.e., 100-year floodplain) as an area subject to inundation from a flood that has a 1-percent chance of being equaled or exceeded in any given year. The elevation of the surface water resulting from a flood that has a 1-percent chance of equaling or exceeding that level in any given year is known as the BFE.

5.7.1 Existing Conditions

The project area is in FEMA flood Zones AE and A, with the majority of the project areas within the 100-year floodplain and a portion within the 500-year floodplain (**Figure 5-2**). The northern portion of the project area along the Susquehanna River is in the regulatory floodway. The project area falls within the following four FEMA Flood Insurance Rate Map panels that were all effective June 19, 2012: 36025C0234D, 36025C0233D, 36025C0241D, and 36025C0242D.

According to the Sidney Reconstruction Plan, FEMA has classified over 200 properties in the village as “repetitive loss” properties. A repetitive loss structure is defined by FEMA as a flood-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978. Unless the repetitive loss structure is elevated to FEMA standards, the flood insurance premiums of these structures may dramatically increase (NYRCR Sidney Planning Committee 2014).

5.7.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, flooding would continue to impact the village and cause loss of life and property, as discussed in more detail in Section 5.17. As discussed in Section 5.5, continued flooding would cause erosion and deposit sediments and debris into nearby surface waters, thus impacting water quality. Therefore, the No Action alternative would have a minor to major long-term adverse impacts on people and property within the floodplain as well as on natural floodplain functions depending on the extent and duration of flooding.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Construction of the Proposed Action would result in a negligible short-term adverse impact on the 100-year floodplain because construction activities could result in accidental releases of hazardous waste from previously unknown underground sources or minor leaks from construction equipment, and ground disturbance could cause sediment to run off into nearby waterbodies, including the Susquehanna River and Weir Creek. As discussed in Section 5.5, the subrecipient would implement a stormwater pollution prevention plan prior to construction in accordance with the general permit for construction activity. The subrecipient would also implement erosion and

sediment-control measures, as detailed in Section 5.2.2. Therefore, there would no more than negligible short-term impacts on the floodplain from construction.

The Proposed Action would add a total of approximately 1 million cubic feet of flood storage and reduce the BFE in the area by 2 to 2.5 inches in the Camp Creek neighborhood, 2 inches near Gilbert Street, approximately 1 inch at Main Street, and 0.5 inches in the upstream area near the intersection of Sheep Pen Road and NY 7. The Proposed Action would reduce flooding at more than 300 residential properties and over 24 commercial properties in the Village of Sidney and Town of Unadilla, and would reduce the frequency and duration at which public infrastructure is inundated. The culverts under NY 8 would allow some floodwaters to flow under NY 8, and the change in downstream flood elevations would meet the Village's Flood Damage Prevention Ordinance following construction. Modeled flow rates and water surface elevations would not affect downstream communities and there would be no rise in the floodway. By reducing the BFE, the extent of the 100-year floodplain would also be reduced; therefore, there would be a lower risk of flood impacts on some people and property. A lower BFE may also result in a shorter duration of flooding in areas that still flood. The increased floodplain capacity combined with the planting of trees and wetland vegetation would slow and distribute the force of floodwaters over the floodplain, reducing downstream erosion. Thus, the Proposed Action would have moderate long-term benefits on flood protection and natural floodplain functions and values in the project area and vicinity.

FEMA completed the eight-step checklist for the Proposed Action, and it is included in **Appendix A, Document B** of this EA.

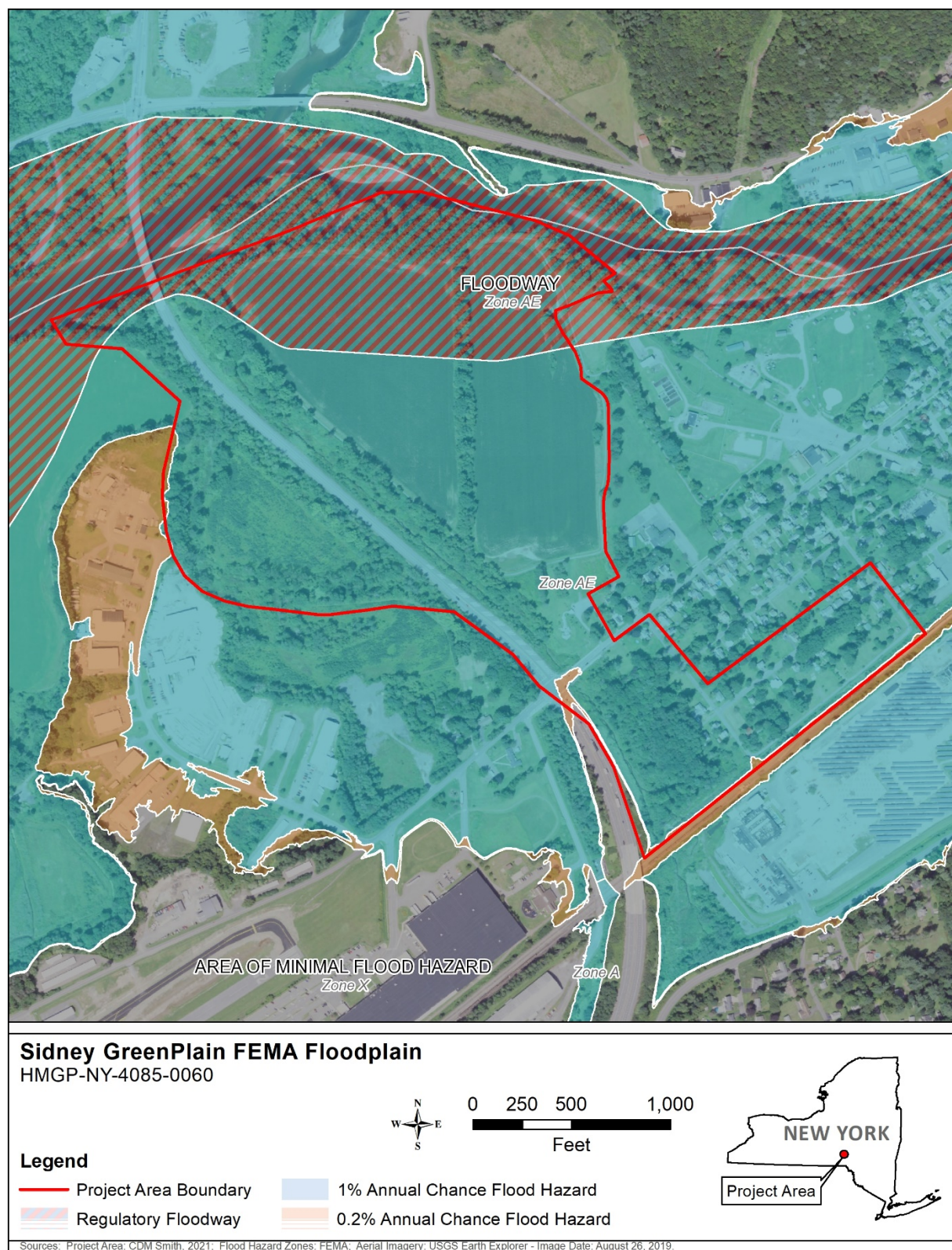


Figure 5-2. Project Area Floodplains

5.8 Vegetation

EO 13112, Invasive Species, requires federal agencies, to the extent practicable, prevent the introduction of invasive species and provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. Invasive species generally prefer disturbed habitats and usually possess high dispersal abilities, enabling them to out-compete native species.

5.8.1 Existing Conditions

The project area is in the Glaciated Low Plateau of the Northern Appalachian Plateau ecoregion. Predominant vegetation includes Appalachian Oak Forest, which is dominated by white oak (*Quercus alba*) and red oak (*Quercus rubra*). Existing conditions have been highly modified by agriculture and development.

The project area is currently composed of a mixture of active and fallow agricultural land, mature deciduous woodlands, and wetlands in the Community Foundation Land; agricultural lands, mature woodlands and wetlands in the open space west of NY 8; and woodlands and residential properties with their associated driveways, lawns, and landscaping in the Camp Street neighborhood. The vegetation in the wetland areas includes silver maple (*Acer saccharinum*), Japanese knotweed (*Reynoutria japonica*), Ostrich fern (*Matteucia struthiopteris*), jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), and skunk cabbage (*Symplocarpus foetidus*) in the palustrine forested wetlands. Common vegetation in the palustrine scrub-shrub wetlands included silky dogwood (*Cornus amomum*), red-osier dogwood (*Cornus sericea*), elderberry, and glossy buckthorn (*Frangula alnus*). The palustrine emergent wetlands in the project area includes soft rush (*Juncus effuses*), sensitive fern, goldenrods, sedges, and reed canary grass (*Phalaris arundinacea*). Additional wetland vegetation is detailed in the Wetland Delineation Report (SWCA 2017b).

Invasive plants are capable of altering an area's diversity for both plant and animal life by dominating areas where they have become established and crowding out native vegetation (NRCS n.d.). Invasive plant species currently known to be present within the project area include multiflora rose (*Rosa multiflora*), glossy buckthorn, Japanese knotweed, Japanese barberry (*Barberis thunbergia*), oriental bittersweet (*Celastrus orbiculatus*), and reed canary grass. The prevalence of invasive species present varies from small stands interspersed with other vegetation to large monoculture stands.

Invasive animal species can also be detrimental to vegetation. Ash trees are at risk of infestation from the emerald ash borer. Adult emerald ash borers lay eggs on the bark of ash trees. When the eggs hatch, the larvae bore into the bark and feed on the transportation tissues of the tree. This, in effect, girdles the tree by disrupting the movement of nutrients and water within the tree, causing the tree to die (North Carolina Forest Service 2017).

5.8.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, flood waters would continue to cause soil erosion and the deposition of debris and sediments on the ground surface that could physically damage soil and smother and kill vegetation. This could lead to the introduction and expansion of invasive species that thrive in newly disturbed areas (Lozon and MacIsaac 1997). Continued erosion and inundation of upland vegetation under the No Action alternative could have minor to moderate long-term adverse impacts on vegetation within and around the project area.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Within the Community Foundation Land, the Proposed Action would convert mostly agricultural land to approximately 17 acres of wetlands and 15 acres of native upland meadow. The conversion would remove approximately 0.6 acres of the mature trees in the buffer strip between two agricultural fields. Mature trees in the upland meadow area would not be removed. Thus, the Proposed Action would have minor short-term impacts on vegetation from construction-related activities and vegetation removal in the Community Foundation Land, culvert related construction activities, and construction activities in the Camp Street neighborhood.

Under the Proposed Action, the subrecipient would plant native seed mixes and implement a maintenance plan to allow native species to become predominant and invasive species to be controlled on-site. Native seed mixes would be designed for the different habitat zones expected to be created in the project area (i.e., emergent wetland, riparian, riparian buffer, and upland). Wetland and riparian seed mixes would contain species that can survive submerged conditions and hold soil in place with their roots, thereby reducing erosion during floods (USEPA n.d.). Proposed plant species are listed in **Appendix A, Document A**. Converting farmlands to wetlands would benefit vegetation by reducing opportunities for invasive species to become established in disturbed areas such as the edges of fields (Dix et al. 2009). In the long term, the Proposed Action would have moderate benefits on vegetation because invasive species would be controlled throughout the site and a variety of native shrubs and trees would be planted in areas that are currently agricultural lands.

After the project is implemented, the subrecipient would monitor and maintain revegetated areas to assess plant health, vigor, and establishment as well as footholds by invasive plant species. Typically, the monitoring period lasts approximately 5 years; however, the exact length of the monitoring period for this project would be decided by the NYSDEC and other jurisdictional regulatory agencies pursuant to the Freshwater Wetlands Enforcement Policy (NYSDEC 1992). Invasive species would be controlled as needed throughout the project area by licensed applicators in accordance with 6 New York Codes, Rules, and Regulations Part 327 as well as additional local, state, and federal regulations. Exact herbicide applications would be based on site location, targeted species, and jurisdictional constraints for wetland resource areas.

5.9 Wildlife and Fish

The Migratory Bird Treaty Act of 1918, as amended, provides protection for migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions except under the terms of a valid permit issued pursuant to federal regulations. All native birds are protected by the Migratory Bird Treaty Act. The Bald and Golden Eagle Protection Act of 1940 prohibits the take, possession, sale, or other harmful action of any gold or bald eagle, alive or dead, including any part, nest, or egg (16 U.S.C. § 668(a)).

5.9.1 Existing Conditions

The Northern Appalachian Plateau ecoregion hosts a variety of wildlife. Typical wildlife in the ecoregion includes black bears (*Ursus americanus*), bobcats (*Lynx rufus*), fishers (*Pekania pennanti*), and red-shouldered hawks (*Buteo lineatus*). Wildlife communities within the project area consist of urban-adapted generalist species that can live in semi disturbed, altered habitat. Examples of these species include raccoons (*Procyon lotor*), striped skunks (*Mephitis mephitis*), chipmunks (*Tamias striatus*), squirrels (*Sciuridae* sp.), whitetail deer (*Odocoileus virginianus*), rabbits (*Sylvilagus floridanus*), and passerine birds. The project area consists of a mixture of agricultural lands, mature woodlands, wetlands, road infrastructure, and residential developments in the Camp Street neighborhood, and is adjacent industrial uses. The subrecipient conducted a wildlife survey in 2017 and observed no eagle nests in the project area. The Proposed Action occurs within the Atlantic Flyway.

The project area includes rare species habitat mapped by the New York Natural Heritage Program for the eastern hellbender (*Cryptobranchus alleganiensis*), which is a state-listed species of special concern. Eastern hellbenders have been observed near the project area. Eastern hellbender habitat includes swift, unpolluted rivers, and streams containing riffles, large flat rocks, and logs. The Susquehanna River along the northern edge of the project area has the potential to contain habitat to support the eastern hellbender.

The Susquehanna River and Weir Creek support fish and shellfish habitat. Common fish that can be found in the Susquehanna River include small mouth bass (*Micropterus dolomieu*), walleye (*Sander vitreus*), bluegill (*Lepomis macrochirus*), and channel catfish (*Ictalurus punctatus*). Weir Creek supports smaller fish such as fallfish (*Semotilus corporalis*) and creek chubs (*Semotilus* sp.).

5.9.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, flooding and erosion would continue to cause sedimentation and debris to enter the waterbodies, which may intermittently have a minor long-term adverse impact on aquatic species. Additionally, flood waters may deposit debris and sediment on the ground surface that could physically damage soil and smother and kill vegetation, which would result in a minor long-term adverse impact on wildlife.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would have minor short-term adverse impacts on fish and wildlife habitat from construction-related activities in the Community Foundation Land, the location of the proposed culverts, and the Camp Street neighborhood. There would be no grading or major construction activities in the open space west of NY 8. Vegetation removal would occur outside of the migratory bird nesting season and erosion control measures would be implemented to limit erosion, sedimentation, and pollutant runoff. The subrecipient would implement a 660 foot buffer around any bald eagle nest, if a nest is built in or near the project area. With the BMPs to protect surface waters, there would be negligible potential for impacts on fish, shellfish, and the eastern hellbender during construction of the Proposed Action. Construction-related noise disturbances would be short-term and similar to nearby farming, highway, and other human activities.

In the long term, converting agricultural lands to wetlands, riparian areas, and upland meadows would have moderate beneficial impacts on migratory birds, wildlife, and fish and aquatic species. Numerous species of birds and mammals rely on wetlands for food, water, and shelter, especially while migrating and breeding. Wetlands provide important habitat for many migratory birds including waterfowl. Wetlands are among the most productive ecosystems in the world; the combination of shallow water, high levels of inorganic nutrients, and high rates of primary productivity is ideal for the development of organisms that form the bottom of the food web including insects, mollusks, and crustaceans. The creation of wetlands will increase the availability of lower food web species such as reptiles, amphibians, and invertebrates that inhabit wetlands (Cornell Lab of Ornithology 2019). The creation of wetlands, riparian areas, and uplands would also be beneficial to amphibian species that need these various habitats for separate life-cycle stages. Many amphibians need wetlands for breeding, egg deposition, and early life-cycle development before they can migrate to upland habitats as adults (USEPA n.d.). The Proposed Action would also have beneficial impacts on aquatic species in Weir Creek and the Susquehanna River by filtering out sediments and pollutants from stormwater runoff before it reaches the waterbodies, as described in Section 5.5.

In the long term, the open space area west of NY 8 would experience increased inundation during flood events because the culverts would allow more floodwater to flow into the open space storage area before being directed into the river channel, which could have negligible temporary adverse impacts on wildlife habitat.

In the Camp Street neighborhood, paved areas would be converted into open space, and herbaceous, shrub, tree, and riparian plant species would be planted. This would provide habitat for migratory bird and wildlife species in the area.

5.10 Threatened and Endangered Species

The Endangered Species Act of 1973 provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The act requires federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the

continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The act also prohibits any action that causes a “take” of any listed species of endangered fish or wildlife. The term “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

Critical habitat, as defined in the Endangered Species Act, is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

In addition to the federal Endangered Species Act, the NYS Endangered Species Act (ECL Article 11 0535) prohibits the take, importation, transportation, possession or sale of state endangered, threatened and special concern species, except under license or permit from the department.

5.10.1 Existing Conditions

2018 Findings and Consultation – FEMA staff conducted a database search in 2018 for all federally designated threatened or endangered species, candidate species, and otherwise protected species through the USFWS Information for Planning and Consultation (IPaC) online tool. The 2018 IPaC report listed dwarf wedgemussel (*Alasmidonta heterodon*) (endangered) and northern long-eared bat (*Myotis septentrionalis*) (threatened) as having the potential to occur in the action area. Dwarf wedgemussel is found in a variety of stream and river habitats, and the Susquehanna River and Weir Creek likely provide suitable habitat for dwarf wedgemussel. Suitable habitat for northern long-eared bat was observed within the project area during the wildlife habitat assessment. There are no designated critical habitats at this location. FEMA consulted with USFWS via mailed letter in October 2017. In January 2018, USFWS concurred with FEMA's finding that the Proposed Action may affect, but is not likely to adversely affect, northern long-eared bat.

2021 Findings – In February 2021, CDM Smith conducted a search through IPaC for all federally designated threatened, endangered, or proposed species. The IPaC report did not list any threatened or endangered species as having the potential to occur in the project area. There is no designated critical habitat at this location.

5.10.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, the risk of flooding would not be reduced and erosion, deposition of debris and sediments, and loss of vegetation would continue. Thus, continued flooding could have a minor long-term adverse impact on listed species. This adverse effect may have already occurred because the potential for listed species to occur in the vicinity appears to be changing.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Of the disturbances that would occur in association with the Proposed Action, noise from activity generated by heavy equipment is expected to have the farthest reaching effects on listed species.

For this project, the action area consists of a 500-foot buffer around the Community Foundation Land. At this distance, noise from construction activities would be dissipated to that of the ambient noise level for the area.

2017 to 2018 Findings and Consultation – Dwarf wedgemussel was identified as having the potential to occur near the project site. FEMA reviewed potential impacts from the project on dwarf wedgemussel and determined that the project would have “no effect”, or no impact, on the mussel. On January 17, 2018, USFWS concurred with the determination that the project would have no impact on the dwarf wedgemussel (see **Appendix B**). The range of northern long-eared bat encompasses all of New York State; the bat roosts in mature trees with loose bark. Because the project area includes stands of mature trees that would be removed outside of the roosting and breeding season for the bats, FEMA determined that the project “may affect, but is not likely to adversely affect” northern long-eared bat. On January 17, 2018, USFWS concurred with that determination (see **Appendix B**). Based on consultation with USFWS, the subrecipient would implement the following avoidance and minimization measure to protect listed species:

- Removal of trees greater than 3 inches diameter breast height would take place between November 1 and March 31. FEMA would reinitiate consultation with the U.S. Fish and Wildlife Service (USFWS) should tree removal be planned from April 1 to October 31.

With implementation of this measure, the Proposed Action would have a negligible short-term adverse impact on northern long-eared bats.

2021 Findings – Because dwarf wedgemussel and northern long-eared bat are no longer believed to be present in or near the project area, there would be no impact on federally listed threatened and endangered species. No further consultation is required. The subrecipient would still implement the avoidance and minimization measures for tree removal, as outlined above, and erosion, as outlined in Section 5.2.2, because these measures also serve to avoid impacts on migratory birds, aquatic species, and water quality.

5.11 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended, requires that activities using federal funds be reviewed to consider potential effects on historic properties that are listed in or may be eligible for listing in the National Register of Historic Places (NRHP). Cultural resources include prehistoric or historic archeology sites, historic standing structures, historic districts, objects, artifacts, cultural properties of historic or traditional significance—referred to as Traditional Cultural Properties that may have religious or cultural significance to federally recognized Indian Tribes—or other physical evidence of human activity considered to be important to culture, subculture, or community for scientific, traditional, religious, or other reasons.

Only those cultural resources determined to be potentially significant under the National Historic Preservation Act (NHPA) are subject to protection from adverse impacts resulting from an

undertaking. To be considered significant, a cultural resource must meet one or more of the criteria established by the National Park Service that would make that resource eligible for inclusion in the NRHP, as found at 36 C.F.R. Part 60. The term “eligible for inclusion in the NRHP” includes all properties that meet the NRHP listing criteria. Sites not yet evaluated may be considered potentially eligible for inclusion in the NRHP and, as such, are afforded the same regulatory consideration as nominated properties. Pursuant to 36 CFR 800.4(a)(1), the area of potential effect (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect cultural resources. Within the APE, FEMA evaluated potential impacts on both above- and belowground structures and prehistoric or historic archaeological resources.

5.11.1 Existing Conditions

In accordance with Section 106 of the NHPA, FEMA initiated consultation with the New York State Historic Preservation Office (NYSHPO) on June 17, 2017. The NYSHPO concurred with FEMA's findings of No Adverse Effect to Historic Properties with Conditions on September 4, 2020. FEMA submitted a consultation package including information on the Proposed Action, archaeological survey, and determination of effect to the following tribal nations requesting their concurrence. The Stockbridge-Munsee Tribe concurred with FEMA's determination on March 20, 2020, and the Oneida Tribe concurred with FEMA's findings on June 16, 2020. Copies of consultation correspondence with the NYSHPO and tribal nations are included in **Appendix B**.

Architectural Resources

The APE for architectural resources includes the limits of the entire parcel over the three distinct mitigation areas, including the Community Foundation Land, the Camp Street neighborhood, and the open space west of NY 8. The APE is within the westernmost portion of the Sidney National Register Historic District. The Community Foundation Land resides within the Prehistoric period of the historic district, and the APE in this area consists of agricultural farmland. There are no aboveground structures in this location. The area west of NY 8 is not within the historic district. The Camp Street neighborhood is within the historic district. The portion of the Camp Street neighborhood within the APE for this project has already had the structures removed under other grants and programs.

Archaeological Resources

The APE for archaeology includes the area where physical ground disturbance would occur as a result of the Proposed Action; the Camp Street neighborhood was previously evaluated under NYSHPO #15PR00723. FEMA required a Phase IA/IB Archaeological Investigation within the APE in summer 2017, and a Phase II Archeological investigation in January 2020.

The Phase IA/IB survey was required to determine the presence and/or absence of previously undocumented cultural resources within the project area and to identify the current condition and horizontal boundaries of previously recorded Native American archaeological sites within the APE. The Phase I survey included a combination of background research, surface surveys, and shovel (t-Test) and auger testing within the project site. Minimal excavation was conducted within

the site boundaries and limited cultural material was collected to respect the recommendations of consulting tribes and limit redundant data, as artifacts were recovered from prior investigations in the early 1990s. Additional work was recommended at archaeologically sensitive sites, including the Kowalczyk precontact site, identified in the APE. The Kowalczyk site was the most important site discovered within the APE. This site shows evidence of occupation during the Late Woodland period, which is largely demarcated in the archaeological record by the presence of unique pottery and large village sites.

The Phase II archaeological survey designed a site-specific methodology for the archaeologically sensitive sites, including the Kowalczyk precontact site, based on the background research and the results of the Phase I survey. The field methodology was designed to identify and assess the horizontal and vertical limits of the cultural deposits, to ensure the necessary data was collected to determine the boundaries, and to further sample the deposits identified during the Phase I survey. The archaeologists conducting the field work followed guidance provided in the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The Kowalczyk site was tested with a combination of geophysical survey, test unit excavation, and mechanical excavation. Fieldwork at the other sites consisted of close interval shovel testing. The surveys confirmed the presence of archaeological resources within the project area.

5.11.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action Alternative would not reduce the risk of flooding, which would continue to impact historic structures in the floodplain. Erosion from flooding could expose shallow archaeological deposits. Thus, the No Action alternative could have a minor to moderate long-term adverse impact on historic resources.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Architectural – The Proposed Action would have no visual impacts on the built environment and would not result in physical direct or indirect effects to structures or the Sidney National Register Historic District. The structures within the project area in the Camp Street neighborhood were previously removed following consultation with the NYSHPO. Thus, the Proposed Action would have no impact on historic structures.

Archaeological – The Proposed Action was redesigned to avoid archaeologically sensitive areas within the project area. Sensitive areas would be stabilized and preserved with shallow-rooted plantings. Given the high sensitivity of the APE overall, archaeological monitoring during construction would be required. Specifically, the following measures would be implemented to protect the archaeologically sensitive area within the Community Foundation Land:

- The archaeologically sensitive area would be avoided by all construction activities. The area would be planted with grasses. Yearly maintenance would be conducted to avoid the establishment of woody plants.
- An archaeological monitor with stop-work authority would be present during construction. The monitor would oversee all ground disturbing activities within 100 feet of the archaeologically sensitive area. An archaeological monitoring plan and final archaeological monitoring report will be prepared. All project correspondence and reporting would come through FEMA and be submitted to the State Historic Preservation Office (SHPO) and Tribal Nations for concurrence. No construction would occur prior to FEMA and SHPO concurrence on the archaeological monitoring plan.

With the redesign of the project and the condition to monitor during construction, FEMA has determined that the Proposed Action would result in No Adverse Effect to Historic Properties with Conditions.

Therefore, the Proposed Action would have no impact on cultural resources, including architectural and archaeological resources.

5.12 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires agencies to identify and address disproportionately high and adverse human health or environmental effects its activities may have on minority or low-income populations. This environmental justice analysis is focused at the census block group level. The local area included in this analysis is where project-related impacts would occur, potentially causing an adverse and disproportionately high effect on neighboring minority and low-income populations. Minority or low-income census block groups are defined as meeting either or both of the following criteria:

- Census block group contains 50 percent or more minority persons or 25 percent or more low-income persons
- Percentage of minority or low-income persons in any census block group is more than 10 percent greater than the average of the surrounding village

5.12.1 Existing Conditions

According to USEPA's EJSCREEN (Version 2020), the population of the Village of Sidney and the census block group (360259704005) that encompasses the project area is predominantly Caucasian, 91 percent and 83 percent, for the village and census block group respectively. Approximately 45 percent of Sidney residents live below the poverty level (USEPA 2021) and the median household income is approximately \$26,029 (U.S. Census Bureau, 2015–2019 American Community Survey 5-Year Estimates). The census block group that encompasses the project area is considered to contain a low income community as the population below the poverty line is

greater than 25 percent. The low income population of block group 360259704005 is 55 percent of the total population of the block group (USEPA 2021).

5.12.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not reduce the risk of flooding. During a flood, the population of Sidney, including low-income populations, may experience safety risks and damage to loss of property or assets. Low-income populations could be disproportionately and adversely affected by a flood event because of their limited resources to recover from losses. Therefore, minor to moderate long-term adverse impacts may occur on low-income populations in the project vicinity, depending on the scale, intensity, and location of flooding.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Temporary and localized impacts from implementation of the Proposed Action, such as construction noise, would impact those proximate to the work location, including low-income residents. However, these effects would not disproportionately impact low-income residents as these short-term effects would affect all residents near project activities. Therefore, the Proposed Action would have minor short-term adverse impacts on low-income populations but no disproportionately high and adverse impacts on these populations. The project would not cause any residential or business displacements, or long-term impacts from noise, air quality, or traffic. The benefits of reduced risk of flooding would be applicable to the entire population of Sidney, including low-income populations. Thus, the Proposed Action would have a minor to moderate long-term beneficial impact on low-income populations.

5.13 Land Use and Planning

NEPA directs federal agencies to ensure their actions are consistent with state and local plans. Zoning in Delaware County is established and regulated by the incorporated villages, cities, and towns within the county. Regulations that govern land use planning in New York State require that towns and villages prepare and adopt a comprehensive plan and that all land use regulations be in accordance with the adopted plan.

5.13.1 Existing Conditions

The project area is currently a mixture of mature woodlands, active and fallow agricultural fields, wetlands, and mixed residential and commercial development. In addition, the project area includes a portion of a local park that contains a walking path, interpretive signs, and a recently constructed monument at the intersection of NY 8 and River Street. NY 8 passes through the project area.

The current land uses of the Community Foundation Land are an agricultural field, a veteran's memorial park, and a recreational walking path. The current land use of the open space west of

NY 8 is also agricultural fields and the area is otherwise undeveloped. Current land use of the Camp Street neighborhood is residential.

FEMA considered the Village of Sidney, Sidney Center, and Delaware County land use policies and plans regarding mitigation of flood risk as part of this assessment. In light of recent flooding events, these municipalities have been revising land use codes to incorporate requirements for flood and storm mitigation measures along shorelines and riverbanks. Since the 2006 regional flooding event, the Village of Sidney has been actively pursuing land use and policy changes to improve the flood protection and resilience of its community. The conversion of land to open space and wetland/riparian habitat reflects these changing land use policies prohibiting redevelopment in the areas that are most prone to storm damage.

Because of Tropical Storm Lee and the 2006 and 2011 floods, the setting of the riverside neighborhoods has eroded in recent years. Many properties within these neighbors have either been bought out under acquisition programs or abandoned because property owners did not have the resources to fix flood-damaged properties.

5.13.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, no short-term impacts on land use and planning would occur. However, no comprehensive green infrastructure system would be implemented to reduce the risk of flooding in the Village of Sidney. Lands would not be restricted to open space nor converted to wetlands. Without this land conversion, the Village of Sidney would not fulfill land use and policy requirements to improve the flood protection and prohibit redevelopment in areas most prone to storm damage. Therefore, the No Action alternative would result in minor long-term adverse impacts on land use and planning.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The Proposed Action would not have short-term impacts on land use or local zoning. The Proposed Action would convert land within the floodplain in storm-inundated areas to wetlands on the Community Foundation Land and to open space in a portion of the Camp Street neighborhood in perpetuity. Once all targeted lands are converted, much of the resulting open space would be contiguous and therefore compatible with the surrounding land uses. The Proposed Action would not require any changes to existing land use designations as the land would revert to open space.

The Proposed Action is consistent with regional and local plans, particularly with regard to flood mitigation and conserving and creating open space. The conversion to open space land use is compatible with the visual character and qualities of each subarea. Creating wetlands and open space under the Proposed Action would provide greater protection to residential land uses during flood events by providing new flood storage capacity in the floodplain and reducing flood hazards throughout the village. The Proposed Action would result in minor long-term beneficial impacts on land use and planning.

5.14 Noise

The Noise Control Act of 1972 required USEPA to create a set of noise criteria. In response, USEPA published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* in 1974, which explains the impact of noise on humans. The USEPA report found that keeping the maximum 24-hour average noise level below 70 A-weighted decibels (dBA) would protect the majority of people from hearing loss. USEPA recommends an outdoor average noise level of 55 dBA to prevent interference with daily human activities, such as sleeping, working, and recreation. According to published lists of noise sources, sound levels, and their effects, sound causes pain starting at approximately 120 to 125 dBA (depending on the individual) and can cause immediate irreparable damage at 140 dBA. The Occupational Safety and Health Administration has adopted a standard of 140 dBA for maximum impulse noise exposure.

5.14.1 Existing Conditions

Sounds that disrupt normal activities or otherwise diminish the quality of the environment are considered noise. Noise events that occur during the night (10 p.m. to 7 a.m.) are more annoying than those that occur during normal waking hours (7 a.m. to 10 p.m.). Assessment of noise impacts includes the proximity of the Proposed Action to sensitive receptors. A sensitive receptor is defined as an area of frequent human use that would benefit from a lowered noise level. Typical sensitive receptors include residences, schools, churches, hospitals, nursing homes, and libraries.

The ambient noise level near the project site is typical for a residential/rural area. Most of the land near the project area comprises open fields, residential areas, and wooded areas. Sensitive receptors include residences in the Camp Street and River Street neighborhoods and nearby parks and recreation areas. The project area is within approximately 300 feet of several residences and is adjacent to the Sidney Veteran's Memorial Park.

5.14.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

No construction would occur under the No Action alternative. Therefore, this alternative would have no short- or long-term adverse noise impacts.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

Construction activities, including the excavation and installation of culverts and the associated roadway reconstruction, grading and excavation to create the channels and wetlands, and road removal in the Camp Street neighborhood, could cause temporary increases in noise levels. Temporary increases in noise levels owing to construction activities would be minimized through compliance with local noise ordinances, including time-of-day work limitations. During construction, all equipment would be required to operate with mufflers. Construction activities would be temporary, conducted during daytime hours, and abide by all applicable state and local

noise regulations, including Article VIII, Section 154-14 of the Village of Sidney Code Manual (Village of Sidney 2012). As such, there would be minor short-term adverse noise impacts. There would be no long-term impacts related to noise from implementation of the Proposed Action.

5.15 Transportation

5.15.1 Existing Conditions

The Village of Sidney is accessible from Interstate 88 and NY 8. The segment of NY 8 in the project area has an average annual daily traffic count of 7,015 vehicles per day (NYSDOT 2021). Several local roadways fall within the project area, including River Street, Railroad Avenue, and Camp Street. River Street, the most travelled of the local roads in the project area, has an average annual daily traffic count of 3,529 vehicles per day (NYSDOT 2019).

5.15.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, no modifications would be made to NY 8, Camp Street, or Railroad Avenue. Roads and culverts in the project area would continue to be flooded and potentially experience washouts during flood events, resulting in residents and emergency responders being unable to access critical infrastructure. Therefore, the No Action alternative would result in minor long-term adverse impacts on transportation.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

As described in Section 4.2.4, the project area would be accessed through River Street and from NY 8. There may be a need to make internal haul roads for work on the Community Foundation Land, but the majority of the project area can be accessed via existing roads. The Proposed Action would include work zone traffic control modifications to NY 8 during construction of the culverts. Traffic controls would be coordinated with NYSDOT, in consultation with local communities, to minimize disruption to community traffic. The village would develop work zone traffic control plans that NYSDOT would review and the village would obtain all necessary permits. Two lanes of traffic would be maintained by moving the two lanes to one side of the NY 8 right-of-way. Traffic would be protected from the construction zone by a temporary concrete barrier. While traffic is temporarily shifted, the first stage of the culverts would be installed, backfilled, and paved. The temporary travel lanes would then be removed, traffic would be shifted to the approximately 255 feet newly constructed portion of road, and the remaining portion of the precast concrete box culverts would be installed. Road paving and striping would be restored, and traffic would be returned to its original alignment. FEMA anticipates construction of the culverts to last about 2 to 3 months.

The village anticipates vehicular delays during peak periods when the work zone traffic control plan is in place. There would be close coordination between the contractor, the subrecipient, and NYSDOT to give advanced notice to motorists of when and where construction would take place.

As a result of construction worker and vehicular activity associated with the Proposed Action, there would be vehicular trips generated where the work zone traffic control is in place. The additional traffic generated by construction workers and construction truck trips is not anticipated to noticeably increase vehicular delays and would not have the potential for significant transportation impacts. However, in combination with the work zone traffic control plan, there would be the potential for short-term, minor adverse traffic impacts on the segment of NY 8 in the project area. No long-term impacts on transportation would occur.

Within the portion of the Camp Street neighborhood, the entirety of Railroad Avenue and portions of Camp Street would be removed and regraded to create open space. This would result in a permanent change to the roadway, traffic, and pedestrian patterns. Although the Proposed Action would result in a permanent change to Camp Street and Railroad Avenue, there would be minor long-term beneficial impacts on traffic and transportation from the Proposed Action from the reduced likelihood of road washouts and closures because of flooding.

5.16 Public Services and Utilities

Regulatory requirements and policies that affect the design, use, and the forecasted use of utilities in Delaware County include the State's Smart Growth Public Infrastructure Policy Act, the Delaware County Public Health ordinance, and local zoning regulations.

5.16.1 Existing Conditions

The project area is in a developed urban area and is served by major utilities and infrastructure including electric, natural gas, and water and sewer lines. The New York State Electric and Gas Corporation is the public utility company that provides electricity and natural gas service to the project area. The Village of Sidney Water Department serves the project area.

During the 2011 flood event, the New York State Electric and Gas Corporation terminated power for 2 days, resulting in the shutdown of the water well supply for the Village of Sidney. A boil water order was set to ensure supply from Pine Hill Reservoir was safe for human consumption. Numerous water services in the flooded areas had to be turned off, but the overall water supply was not disrupted. Similar actions were taken during the 2006 flood event (Village of Sidney 2019).

5.16.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not mitigate the recurring flooding experienced within the Village of Sidney, and thus, public utility infrastructure would continue to experience service interruptions during future flood events. Therefore, the No Action alternative would have minor to moderate long-term adverse impacts on utilities.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

No utilities would be disrupted or relocated during construction of the Community Foundation Area, road removal in the Camp Street Neighborhood, or the culvert installation under NY 8. Several utilities in the Camp Street Neighborhood may be isolated with valves and other shut-off mechanisms to segregate sections of water and sanitary pipes that would no longer supply utility services due to the residential buyout programs purchase and demolition of properties and the remaining vacant lots. During road removal, the existing subsurface materials will remain to provide protection to underground utilities and maintain vehicular access for maintenance and management of those utilities. There would be no short-term adverse impacts on utilities.

The Proposed Action would have a minor long-term beneficial impact on utility infrastructure because it would reduce the risk of flooding, and therefore provide increased service reliability during storm events.

5.17 Public Health and Safety

EO 13045, Protection of Children from Environmental Health Risks and Safety Risks; the Department of Homeland Security National Response Framework (January 2008; updated October 2019); and New York State Department of Health public and human health standards protect vulnerable populations from risk and harm to the physical environments in which they live. Public health and safety is also related to accessibility to police, fire, and medical services, and the response times for those providers to reach people in need.

5.17.1 Existing Conditions

The Village of Sidney Police Department and various agencies within Delaware County are responsible for the general protection of public health and safety near the project area. The Village of Sidney Fire Department provides fire protection services to the project area. The Delaware County Division of Emergency Services provides education and coordinates with fire and emergency medical responders.

Previous flooding events in the Village of Sidney damaged critical infrastructure, including the Sidney Police Station and the Sidney Fire Department, complicating emergency response.

5.17.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, it is likely that the police and fire stations and the emergency medical technicians' headquarters would continue to experience flooding, impacting the ability of these service providers to respond in a timely manner. As discussed in Section 3.0, the police station, main fire station, and emergency medical technician headquarters were flooded in both the 2006 and 2011 flood events. In addition, roadway flooding may impact emergency response times, potentially leading to loss of life and property. As such, the No Action alternative would have a

minor long-term adverse impact on the community's public health and safety because emergency response providers, residents, and businesses would remain vulnerable within the floodplain.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

All construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions, to minimize risks to safety and human health. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Administration regulations. The subrecipient would put up appropriate signage and barriers prior to construction activities to alert pedestrians and motorists of project activities. Most of the project work is located off-road and in an area that is not normally accessible to the public. Portions of the farm loop walking trail along the edge of the Community Foundation Land would be removed during construction. The farm loop trail would be reconnected and reconstructed as part of the Proposed Action. As noted in Section 5.15, Transportation, the village would make arrangements to ensure continued function of NY 8 and maintain emergency access through the work zone. With these measures in place, construction activities associated with the Proposed Action would result in minor short-term adverse impacts on public health and safety.

The Proposed Action would benefit public health and safety of the Village of Sidney. The Proposed Action would reduce risk of flooding and reduce the likelihood of damage to critical infrastructure and impeded emergency response. Critical services, such as fire, police, and first responders, would experience improved accessibility and emergency response times as fewer roadways would be flooded or flooded to a lesser depth and duration. The Proposed Action would have a minor long-term beneficial impact on public health and safety.

5.18 Hazardous Materials

USEPA defines hazardous waste as any solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that pose a substantial present or potential hazard to human health and the environment (USEPA 2005). Hazardous materials and wastes are regulated under a variety of federal and state laws, including 40 CFR Part 260, the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 et seq.); Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.); Solid Waste Act; Toxic Substances Control Act; and Clean Air Act of 1970 (42 U.S.C. 7401 et seq.). Evaluations of hazardous substances and wastes must consider whether any hazardous material would be generated by the proposed activity and/or already exists at or in the general vicinity of the site (40 CFR 312.10). If hazardous materials are discovered, they must be handled by properly permitted entities. The New York Department of Labor permits entities for asbestos waste abatement, and NYSDEC issues permits for transportation and disposal of hazardous waste.

5.18.1 Existing Conditions

SWCA consultants prepared a Phase I Environmental Site Assessment for the project area in 2017. The assessment revealed evidence of several Recognized Environmental Conditions in connection with the project area. A summary of the findings are as follows:

On-site Recognized Environmental Conditions include:

- Petroleum storage of #2 fuel oil in an underground storage tank at the Elks Lodge property (104 River Street)
- Abandoned residential buildings with fuel oil storage or automotive repair garage structures or floor drains
- Underground volatile organic compound plume from the upgradient Amphenol Corporation property
- Amphenol former lagoon pipeline across the project area
- Oil sheen on the surface water along Railroad Avenue
- 55-gallon drum and dump site identified along the NY 8 corridor on eastern side of the open space west of NY 8

Off-site Recognized Environmental Conditions include:

- Former print shop abutting the western boundary of the project area and possible floor drain
- Bulk petroleum storage to the west of the project area and associated historical spills
- Former wastewater impoundment for Amphenol Corporation, located east of the northern portion of the site

Residential lots in the Camp Street neighborhood were impacted by heating oil releases during recent flood events and have been remediated by the village.

The documented release of chlorinated volatile organic compounds to soil and groundwater from Amphenol Aerospace on a site adjacent to the Community Foundation Land, and the regulatory requirement for ongoing post-closure monitoring activities represents a controlled Recognized Environment Condition.

5.18.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

No construction would occur under the No Action alternative; therefore, there would be no impacts related to hazardous materials either from the use of construction equipment or from the exposure of contaminated materials through ground-disturbing activities. Thus, the No Action Alternative would have no short-term adverse impacts related to hazardous materials. Contaminated materials in the project area could be disturbed during a flood event if facilities containing hazardous materials are damaged or if ground is eroded exposing hazardous materials. The No Action Alternative would have minor long-term adverse impacts related to hazardous materials.

Alternative 2: Proposed Action – GreenPlain Mitigation Areas

The subrecipient would ensure that all equipment and project activities adhere to state and local regulations to reduce the risk of hazardous leaks and spills. Any spills during construction would be contained and cleaned. Maintenance activities would require the use of herbicides, which would be applied by licensed applicators according to strict standards for wetland resource areas. Thus, there would be a negligible contamination threat from vehicle and equipment use.

The Proposed Action could pose a risk to the environment and human health of on-site workers and nearby residents as hazardous materials could be encountered through direct, contact or inhalation during ground-disturbing activities. If Recognized Environmental Conditions or other hazardous materials are encountered in any part of the project area, the village would implement precautions and procedures to safely identify, manage, and dispose of hazardous materials in accordance with applicable local, state, and federal regulations. The Proposed Action would not increase the overall risk of exposure to hazardous materials known to already exist in the environment. As such, the Proposed Action could have minor, short-term adverse impacts related to hazardous materials and minor long-term beneficial impacts.

5.19 Cumulative Impacts

This EA considers the overall cumulative impact of the Proposed Action and other actions that are related in terms of time or proximity. While consideration of cumulative effects is no longer required under regulations as of September 14, 2020, this EA substantively commenced prior to this date; therefore, this EA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020. Cumulative effects represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time” (40 C.F.R. 1508.7 pre-2020). In the context of evaluating the scope of a proposed action, direct, indirect, and cumulative effects must be considered.

In addition to NEPA, other statutes require federal agencies to consider cumulative effects. These include the Clean Water Act Section 404(b)(1) guidelines, the regulations implementing the conformity provisions of the CAA, the regulations implementing Section 106 of the NHPA, and the regulations implementing Section 7 of the ESA.

Independent of the Proposed Action, multiple projects are ongoing or planned within and near the Village of Sidney. These construction projects are described in more detail below.

Sidney Buyout Project – FEMA, GOSR, Delaware County, and the Village of Sidney are currently implementing an acquisition and elevation project in the village. Only individual property owners in the Village’s Historic North End Neighborhood would receive assistance to elevate their homes in their original locations or have them acquired and demolished. In addition, the project would

fund the acquisition and demolition only of identified properties in the Camp Street neighborhood and two properties in Sidney Center by Delaware County. Though the total number of properties to be acquired and demolished is yet to be determined, it is estimated that approximately 60 homes would be acquired and demolished as part of the Sidney Buyout Project. Participation in the acquisition and demolition is voluntary; Delaware County is not using its power of eminent domain to force any homeowner to sell their property. After properties are acquired, the County is demolishing structures and appurtenances, removing foundations, filling basements with clean suitable fill, and regrading and seeding the properties. After demolition and site reclamation, properties are turned over to the Village of Sidney to maintain as open space in accordance with FEMA HMGP requirements.

The Sidney Peckham Dam Project – The Sidney Peckham Dam project is currently underway. Peckham Reservoir Dam is approximately 1 mile northwest of the center of the Village of Sidney, on Peckham Brook in Chenango County. The Village of Sidney owns 100 acres of land around Peckham Reservoir, which serves as a primary drinking water source for the village and does not have a flood control function. The NYSDEC Bureau of Dam Safety classifies Peckham Reservoir Dam as a Class C (high hazard) dam. This project includes (1) breaching the Peckham Dam earthen embankment, (2) replacing two river crossings with new high-density polyethylene pipe to be installed by directional drilling methods approximately 15 feet below the Unadilla River and the Susquehanna River, near Keith Clark Park, and (3) developing a new groundwater source for the village to replace Peckham Reservoir as a backup water supply source. The Peckham Dam project would affect the Unadilla River and any flooding from this river would peak and recede before the larger rivers, such as the Susquehanna River, experience peak flood flows. In addition, the Unadilla River confluence with the Susquehanna River is at the downstream end of the project area and would not affect the hydraulic function of the Proposed Action (personal comm PlaceAlliance 2021).

5.19.1 Conclusion

The projects described above, in combination with the Proposed Action, may have short-term minor cumulative construction-related impacts, particularly in the Camp Street neighborhood where the project areas for the Proposed Action and Sidney Buyout Program overlap. However, it is unlikely that there would be significant cumulative impacts because in most cases there would be temporal separation between project activities. Additionally, there would be spatial separation between the Proposed Action activities occurring outside of the Camp Street Neighborhood and the cumulative projects mentioned above. The buyout program would result in long-term net beneficial impacts and would complement the Proposed Action by reducing the potential for flood damage to structures. Therefore, there would be long-term cumulative beneficial impact from the Sidney Buyout project and the Proposed Action. The Sidney Peckham Dam project is not expected to impact the Proposed Action.

6.0 PERMITS, CONSULTATION, AND PROJECT CONDITIONS

The village is responsible for obtaining all applicable federal, state, and local permits, and other authorizations for project implementation. Any substantive change to the approved scope of work would require reevaluation by FEMA for compliance with NEPA and other laws and EOs. The following permits, consultations, and conditions are required or have been completed for the Proposed Action.

6.1 Federal

The Endangered Species Act, Section 7 consultation with USFWS was completed for the project in 2018 (**Appendix B**). Conditions include:

- Removal of trees greater than 3 inches diameter breast height would take place between November 1 and March 31. FEMA would reinitiate consultation with USFWS should tree removal be planned from April 1 to October 31.

The NHPA Section 106 consultation with NYSHPO and tribal nations (**Appendix B**) was completed for the project in 2020. Conditions include:

- The archaeologically sensitive area would be avoided by all construction activities. The area would be planted with grasses. Yearly maintenance would be conducted to avoid the establishment of woody plants.
- An archaeological monitor with stop-work authority would be present during construction. The monitor would oversee all ground disturbing activities within 100 feet of the archaeologically sensitive area. An archaeological monitoring plan and final archaeological monitoring report will be prepared. All project correspondence and reporting would come through FEMA and be submitted to NYSHPO and tribal nations for concurrence. No construction would occur prior to FEMA and NYSHPO concurrence on the archaeological monitoring plan.

A USACE Section 404 of the Clean Water Act Permit would likely be required. The subrecipient would be required to coordinate with USACE to determine the required permit authorization needed.

6.2 State

The following state permits would be required for the Proposed Action:

- SPDES General Permit for Stormwater Discharges from Construction Activity/Stormwater Pollution Prevention Plan from NYSDEC
- NYSDOT Highway Work Permit

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

7.1 Agency and Tribal Coordination

FEMA consulted with the Delaware Nation, Delaware Tribe of Indians, Stockbridge-Munsee Community, and Oneida Indian Nations was initiated on June 5, 2017. The Stockbridge-Munsee Tribe concurred with FEMA's determination on March 20, 2020, and the Oneida Tribe concurred with FEMA's findings on June 16, 2020. FEMA completed consultation with NYSHPO on September 4, 2020.

On January 17, 2018, FEMA completed informal consultation with USFWS for dwarf wedgemussel and northern long-eared bat. **Appendix B** provides a copy of all agency and tribal correspondence.

7.2 Public Involvement

The Sidney GreenPlain project has included an extensive public engagement process. The project was initiated in 2012 with a multiday design workshop in the village, including a public visioning workshop, focus group discussions with local stakeholders and state and local regulatory officials, and a session for public and key stakeholders to offer input on project designs. In February 2018, the project design team met with the Village of Sidney Board and the public to present project designs and answer questions. In April 2018, the project team hosted a Public Archaeology Day to provide an opportunity for the general public to meet on-site at the Community Foundation Land and learn about the archaeological investigations conducted for the project. Another remote engagement event for the project is anticipated for spring 2021.

This EA will be made available for agency and public review and comment for a period of 30 days. The public information process will include a public notice with information about the Proposed Action in the *The Reporter*. The EA will also be available for download at www.villageofsidney.org. A hard copy of the EA will be available for review at Village's Town Hall (21 Liberty Street, Sidney, NY 13838).

Interested parties may request an electronic copy of the EA by emailing FEMA at FEMAR2COMMENT@fema.dhs.gov. This EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will take into consideration any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation. The public is invited to submit written comments via email or mail to:

FEMA Region II – DR-4085-NY
26 Federal Plaza
New York, NY 10278
Attn: Sidney GreenPlain EA Comments

If no substantive comments are received from the public and/or agency reviewers, the EA will be adopted as final and FEMA will issue a FONSI. If FEMA receives substantive comments, FEMA will evaluate and address comments before determining whether to issue a FONSI or to revise the EA for additional public comment.

8.0 LIST OF PREPARERS

FEMA Region II
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Fairfax, VA 22030

9.0 SUMMARY OF IMPACTS

Table 9.1 provides a summary of the potential environmental impacts from implementation of the No Action alternative and the Proposed Action.

Table 9.1. Summary of Impacts Table

Section	Area of Evaluation	Alternative 1: No Action	Alternative 2: Proposed Action
5.2	Topography and Soils	Long-term minor to major adverse impact	Minor short-term adverse impact; long-term moderate benefit
5.3	Air Quality	No short- or long-term adverse impacts	Minor short-term adverse impact; no long-term impact
5.4	Climate	No short- or long-term adverse impacts	Short-term negligible impact; no long-term effect
5.5	Water Quality	Minor to moderate long-term impact	Minor short-term adverse impact; moderate long-term beneficial impact
5.6	Wetlands	No impact	Negligible short-term adverse impact; moderate long-term benefit
5.7	Floodplains	Minor to major long-term adverse impact	Negligible short-term adverse impact; moderate long-term benefit
5.8	Vegetation	Minor to moderate long-term adverse impact	Minor short-term adverse impact; moderate long-term beneficial impact
5.9	Wildlife and Fish	Minor long-term adverse impact	Minor short-term adverse impact; moderate long-term beneficial impact; negligible temporary adverse impact on wildlife habitat in the open space area west of NY 8
5.10	Threatened and Endangered Species and Critical Habitats	Minor long-term adverse impact (depending on listed species present at time of work)	<u>2018 Findings and Consultation</u> – short-term negligible adverse impact on northern long-eared bats; no impact on dwarf wedgemussel <u>2021 Findings</u> – no impact on listed species

Section	Area of Evaluation	Alternative 1: No Action	Alternative 2: Proposed Action
5.11	Cultural Resources	Minor to moderate long-term adverse impact	No impact
5.13	Environmental Justice	Minor to moderate long-term adverse impacts	Minor short-term adverse impact but no disproportionately high and adverse impact; minor to moderate long-term benefit
5.14	Land Use and Planning	No short-term impact; minor long-term adverse impact	No short-term impact; minor long-term beneficial impacts
5.15	Noise	No short- or long-term adverse impacts	Minor short-term adverse impact; no long-term impact
5.16	Transportation	Minor long-term adverse impact	Minor short-term adverse impact; minor long-term beneficial impacts
5.17	Public Services and Utilities	Minor to moderate long-term adverse impact	No short-term adverse impact; minor long-term beneficial impacts
5.28	Public Health and Safety	Minor long-term adverse impact	Minor short-term adverse impact; minor long-term beneficial impact
5.19	Hazardous Materials	No short-term adverse impact; minor long-term adverse impact	Minor short-term adverse impact; minor long-term beneficial impact

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Appendix A

Documents

Proposed Seed Mixes

Conservation/Wildlife Seed Mix	
Common Name	Scientific Name
Big Bluestem	<i>Andropogon gerardii</i>
Little Bluestem	<i>Schizachyrium scoparium</i>
Switchgrass	<i>Panicum virgatum</i>
Fox Sedge	<i>Carex vulpinoidea</i>
Silky Wild Rye	<i>Elymus villosus</i>
Common Milkweed	<i>Asclepias syriaca</i>
Deertongue	<i>Panicum clandestinum</i>
Pennsylvania Smartweed	<i>Polygonum pensylvanicum</i>
Partridge Pea	<i>Chamaecrista fasciculata</i>
Silky Smooth Aster	<i>Aster laevis</i>
Nodding Bur-Marigold	<i>Bidens cernua</i>
Flat-top Aster	<i>Aster umbellatus</i>

Wet Seed Mix	
Common Name	Scientific Name
Fox Sedge	<i>Carex vulpinoidea</i>
Hop Sedge	<i>Carex lupulina</i>
Water Plantain	<i>Alisma plantago-aquatica</i>
Nodding Bur Marigold	<i>Bidens cernua</i>
Lurid Sedge	<i>Carex lurida</i>
Soft Rush	<i>Juncus effusus</i>
Grass-leaved Goldenrod	<i>Solidago graminifolia</i>
Bearded Sedge	<i>Carex comosa</i>
Fringed Sedge	<i>Carex crinita</i>
Boneset	<i>Eupatorium perfoliatum</i>
Flat-top Aster	<i>Aster umbellatus</i>
Hard-stem Bulrush	<i>Scirpus acutus</i>
Green Bulrush	<i>Scirpus atrovirens</i>
Woolgrass	<i>Scirpus cyperinus</i>
Spotted Joe Pye Weed	<i>Eupatorium maculatum</i>
Blue Vervain	<i>Verbena hasata</i>
Ditch Stonecrop	<i>Penthorum sedoides</i>

Proposed Plant Lists

Landscape Area # 1 Wetland/Emergent	
Common Name	Scientific Name
Speckled Alder	<i>Alnus incana</i> spp. <i>rugosa</i>
Swamp Rose	<i>Rosa palustris</i>
Red-osier Dogwood	<i>Cornus sericea</i>
Wild Raisin	<i>Viburnum cassinoides</i>
Common Elderberry	<i>Sambucus nigra</i> spp. <i>canadensis</i>
Winterberry Holly	<i>Ilex verticillata</i>
Sweetgale	<i>Myrica gale</i>
Pussy Willow	<i>Salix discolor</i>
Water Plantain	<i>Alisma subcordatum</i>
Swamp Aster	<i>Symphyotrichum puniceum</i>
Turtlehead	<i>Chelone glabra</i>
Joe-Pye Weed	<i>Eupatorium maculatum</i>
Blue Flag Iris	<i>Iris versicolor</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Soft Rush	<i>Juncus effusus</i>
Tussock Sedge	<i>Carex stricta</i>
Wet Seed Mix	

Landscape Area #2 Wetland/Riparian Areas	
Common Name	Scientific Name
Silver Maple	<i>Acer saccharinum</i>
Red Maple	<i>Acer rubrum</i>
Black Gum	<i>Nyssa sylvatica</i>
Swamp White Oak	<i>Quercus bicolor</i>
Red Oak	<i>Quercus rubra</i>
Gray Birch	<i>Betula populifolia</i>
Black Willow	<i>Salix nigra</i>
Sycamore	<i>Plantanus occidentalis</i>
Cottonwood	<i>Populus deltoides</i>
Speckled Alder	<i>Alnus incana</i> spp. <i>rugosa</i>
Swamp Rose	<i>Rosa palustris</i>
Red-osier Dogwood	<i>Cornus sericea</i>
Wild Raisin	<i>Viburnum cassinoides</i>
Common Elderberry	<i>Sambucus nigra</i> spp. <i>canadensis</i>
Winterberry Holly	<i>Ilex verticillata</i>
Highbush Blueberry	<i>Vaccinium corymbosum</i>
Buttonbush	<i>Cephalanthus occidentalis</i>

Landscape Area #2 Wetland/Riparian Areas	
Common Name	Scientific Name
Water Plantain	<i>Alisma subcordatum</i>
Swamp Aster	<i>Symphyotrichum puniceum</i>
Turtlehead	<i>Chelone glabra</i>
Joe-Pye Weed	<i>Eupatorium maculatum</i>
Blue Flag Iris	<i>Iris versicolor</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Soft Rush	<i>Juncus effusus</i>
Tussosck Sedge	<i>Carex stricta</i>
Conservation/Wildlife Seed Mix	

Landscape Area #3 Riparian Buffer Areas	
Common Name	Scientific Name
Sycamore	<i>Plantanus occidentalis</i>
Red Maple	<i>Acer rubrum</i>
Black Gum	<i>Nyssa sylvatica</i>
Pin Oak	<i>Quercus palustris</i>
Red Oak	<i>Quercus rubra</i>
Gray Birch	<i>Betula populifolia</i>
Quaking Aspen	<i>Populus tremuloides</i>
Gray Dogwood	<i>Cornus racemosa</i>
Sweet Pepperbush	<i>Clethra alnifolia</i>
Spicebush	<i>Linderea benzoin</i>
American Cranberry	<i>Viburnum trilobum</i>
Common Elderberry	<i>Sambucus nigra spp. canadensis</i>
Winterberry Holly	<i>Ilex verticillata</i>
Sweetgale	<i>Myrica gale</i>
Witch Hazel	<i>Hammemelis virginiana</i>
Pussy Willow	<i>Salix discolor</i>
Red-osier Dogwood	<i>Cornus sericea</i>
Wet Seed Mix	
Conservation/Wildlife Seed Mix	

Landscape Area #3 Upland Areas	
Common Name	Scientific Name
Northern Arrowwood	<i>Veburnum dentatum</i>
Nannyberry	<i>Viburnum lentago</i>
American Cranberry	<i>Viburnum trilobum</i>
Silky Dogwood	<i>Cornus amomum</i>

Landscape Area #3 Upland Areas	
Common Name	Scientific Name
Gray Dogwood	<i>Cornus racemosa</i>
Sweet Fern	<i>Comptonia peregrina</i>
Meadowsweet	<i>Spiraea latifolia</i>
Shadblow	<i>Amelanchier canadensis</i>
Common Spicebush	<i>Lindera benzoin</i>
Conservation/Wildlife Seed Mix	

Landscape Area #4 Riparian Buffer Areas	
Common Name	Scientific Name
White Pine	<i>Pinus strobus</i>
Yellow Birch	<i>Betula alleghaniensis</i>
Gray Birch	<i>Betula populifolia</i>
Red Oak	<i>Quercus rubra</i>
White Oak	<i>Quercus alba</i>
Sugar Maple	<i>Acer Saccharum</i>
Black Cherry	<i>Prunus serotina</i>
Northern Arrowwood	<i>Viburnum dentatum</i>
Nannyberry	<i>Viburnum lentago</i>
American Cranberrybush	<i>Viburnum trilobum</i>
Silky Dogwood	<i>Cornus amomum</i>
Gray Dogwood	<i>Cornum Racemosa</i>
Sweet Fern Comptonia peregrina	
Meadowsweet	<i>Spiraea latifolia</i>
Shadblow	<i>Amelanchier canadensis</i>
Common Spicebush	<i>Lindera benzoin</i>
Conservation/Wildlife Seed Mix	

Sidney GreenPlain Project
Village of Sidney, Delaware County, New York
HMGP Project #4085-0060

FEMA 4085-DR-NY

Executive Order 11988 – FLOODPLAIN MANAGEMENT
Executive Order 11990 – WETLAND PROTECTION

8-STEP PROCESS SUMMARY

Date: 09/14/2021

Prepared By: Douglas V. Winkler, CFM, Lead Environmental Protection Specialist

Project: The Village of Sidney proposes to implement a green infrastructure system (GreenPlain) that provides additional flood storage and mitigation for storm events that influence the Susquehanna River and Weir Creek. The Proposed Action would restore and expand the floodplain forest along the Susquehanna River banks to an approximately 17-acre riparian and wetland area and 15-acre open herbaceous meadow within the project area. The subrecipient would construct flood relief culverts underneath State Route 8 to allow for better movement of floodwaters. Within the Camp Street neighborhood, the subrecipient would remove and regrade Railroad Avenue and portions of Camp Street would be removed and regraded to create open space.

STEP 1 - Determine whether the proposed actions are located in a wetland and or the 100-year floodplain (500-year floodplain for critical action [44 CFR 9.4]) or whether they have the potential to affect or be affected by a floodplain or a wetland (44 CFR 9.7).

X The project site is located in relation to the floodplains as mapped by:

The project area falls within the following four FEMA Flood Insurance Rate Map panels that all became effective June 19, 2012: 36025C0234D, 36025C0233D, 36025C0241D, and 36025C0242D. The project area is in FEMA flood Zones AE and A, with most of the project areas within the 100-year floodplain and a portion within the 500-year floodplain. The northern portion of the project area along the Susquehanna River is in the regulatory floodway.

X The Project is located in the wetland as identified by:

A review of the National Wetlands Inventory (NWI) Map and NYSDEC wetland mapping do not show any wetlands within the project area. However, a wetland delineation of the project area was conducted in June and July of 2017 for the subrecipient. Twenty-two separate wetlands were

delineated in the project area. The wetlands located within the project area were classified as palustrine (freshwater) and are defined by their dominant vegetation layer (emergent, scrub-shrub, or forested). According to the delineation, there were ten palustrine emergent wetlands encompassing approximately 1.06 acres, two palustrine scrub-shrub wetlands encompassing approximately 0.37 acres, four palustrine forested wetlands encompassing approximately 3.32 acres, and six wetlands containing two or more dominant vegetation layers and encompassing approximately 5.79 acres within the project area.

STEP 2 - Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland and involve the affected and interested public in the decision-making process (see 44 CFR 9.8).

 Not applicable - Project is not located in a floodplain or wetland.

 X Applicable - Notice will be or has been provided by:

A Cumulative Initial Public Notice was published in the New York Post 12/14/2012. An additional public notice will be provided in the public comment period for the Environmental Assessment for this project.

STEP 3 - Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions, and the “No Action” option) [see 44 CFR 9.9]. If a practicable alternative exists outside of the floodplain or wetland, FEMA must locate the action at the alternative site.

 Not applicable – Project is not located in a floodplain or in a wetland.

 X Applicable – Alternative identified in the EA Document or as described below:

Alternative 1: No Action – Under the No Action alternative the project area would remain in its current state and additional resiliency measures would not be implemented. This area of the Village of Sidney would remain vulnerable to storm events.

Alternative 2: Proposed Action – The project is divided into three distinct mitigation areas: Community Foundation Land, open space west of State Route 8, and a portion of the Camp Street neighborhood. The wetland and riparian restoration work would be in the Community Foundation Land, which is currently primarily agricultural land used for growing corn. Proposed culverts under State Route 8 would direct flows to the open space area west of the highway; no grading is proposed in this area. Flood modeling shows that there would be no change in the base flood elevation in this downstream area and there would be no impact on the Sidney Industrial Park, which is already located on slightly elevated ground. The Proposed Action would add a total of one million cubic feet of flood storage and reduce the base flood elevation (BFE) in the Camp Creek

neighborhood, the Upper Village, and in the upstream area near the intersection of Sheep Pen Road and State Route 7.

The purpose of the Proposed Action is to reduce the level and duration of flood events that endanger life and property in neighborhoods in the Village of Sidney affected by flooding on Weir Creek and the Susquehanna River. Therefore, no practicable alternative exists for this project outside the floodplain and wetlands.

Alternatives Considered and Dismissed – In addition to the two alternatives above, there were five alternatives that were considered and dismissed from further evaluation. These include a floodwall or "berm" alternative, elevating structures, modifying the State Route 8 and Main Street Bridges, diversion of the Unadilla River, and variations of the GreenPlain Proposed Action project design. These alternatives were dismissed due to a variety of technical feasibility reasons or because they would not meet the purpose and need for the project.

STEP 4 - Identify the full range of potential direct or indirect impacts occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).

 Not applicable – Project is not located in a floodplain or in a wetland.

 X Applicable – Alternative identified in the EA document or as described below:

Alternative 2: Proposed Action – In the long term, the Proposed Action would have moderate benefits on flood protection and natural floodplain functions and values in the project area and vicinity. There is anticipated to be negligible short-term adverse impact from construction activities, but moderate long-term benefit to wetlands. Similarly, there is expected to be minor short-term adverse impact, but moderate long-term beneficial impact on water quality.

For other resources related to floodplains and wetlands, there is expected to be minor short-term adverse impact on vegetation from construction but moderate long-term beneficial impact on vegetation in both the Community Foundation Land and Camp Street neighborhood. No effect on vegetation is anticipated in the open space west of State Route 8. The Proposed Action would have minor short-term impacts on fish and wildlife habitat from construction-related activities in the Community Foundation Land, the location of the proposed culverts, and the Camp Street neighborhood. In the long term, converting agricultural lands to wetlands, riparian areas, and upland meadows would have moderate positive impacts on migratory birds, wildlife, and fish and aquatic species. No effect is expected on listed Threatened and Endangered Species or Critical Habitats.

STEP 5 - Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).

_____ Not applicable – Project is not located in a floodplain or in a wetland.

X Applicable – Mitigation measures identified in the EA document or as described below:

The GreenPlain's mitigation areas would provide additional flood storage by creating a series of meandering channels that connect to larger depressed storage areas. The design proposes the creation of a series of wetlands and ponds that would help slow and clean the runoff from Weir Creek. This restored, reclaimed, and constructed wetland and pond complex would help reduce the rate of runoff coming from Weir Creek, helping to reduce floodwaters that reach the Susquehanna River and, ultimately, downstream. Tree and shrub species, such as speckled alder (*Alnus incana*) and swamp rose (*Rosa palustris*), would be planted in wetland and riparian areas, and species such as silky dogwood (*Cornus amomum*) and sweet fern (*Comptonia peregrina*) would be planted in upland areas. Wetland seed mixes would include plant species such as fox sedge (*Carex vulpinoidea*) and hop sedge (*Carex lupuliformis*), which would be distributed in wetland and riparian areas. A conservation/wildlife seed mix consisting of species such as big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), and switchgrass (*Panicum virgatum*) would be dispersed in upland and riparian buffer areas.

The following measures would be implemented during construction to reduce impacts related to erosion and sedimentation and to protect water quality:

- Silt fence or other erosion control barriers would be placed around all areas of exposed slopes to control soil erosion during and after construction.
- Prior to grading, sediment or other erosion control barriers would be installed in key areas. Erosion blankets may be installed, if needed.
- Erosion control bio-nets would be installed in any area graded steeper than a three to one slope.
- Vehicular access points would be monitored and inspected at the same frequency as erosion control features to ensure that deposits of sand, silt, or other material are not being deposited on public roadways. Significant deposits would be cleaned up immediately and tracking pads replaced.

The Proposed Action would not create new discharge points or sources of pollution to surface waters. Stormwater runoff during construction would be regulated by the NYSDEC General Permit for Stormwater Discharges from Construction Activity. Construction activities would be managed to prevent pollutants from entering stormwater runoff and thus from entering surface waters. A stormwater pollution prevention plan would be required prior to construction, in accordance with the general permit for construction activity.

STEP 6 - Re-evaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values, and second, if alternatives preliminarily rejected at Step #3 are practicable in light of the information gained in Steps #4 and #5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.

☐ Not applicable – Project is not located in a floodplain or in a wetland.

☒ Applicable – Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain.

STEP 7 - Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).

☐ Not applicable – Project is not located in a floodplain or in a wetland.

☒ Applicable – Finding is or will be prepared as described below:

A Cumulative Initial Public Notice was published in the New York Post 12/14/2012. An additional public notice will be provided in the public comment period for the Environmental Assessment for this project.

STEP 8 - Review the implementation and post-implementation phases of the proposed action to ensure the requirements of the Order are fully implemented. Oversight responsibility shall be integrated into the existing process.

☐ Not applicable – Project is not located in a floodplain or in a wetland.

☒ Applicable – Approval is conditioned on review of implementation and post-implementation phases to ensure compliance with the order(s).

The implementation and post-implementation phase of the proposed action will be reviewed to ensure that the requirement(s) stated in 44 CFR 9.11 are fully implemented.

Appendix B

Correspondence



FEMA

October 25, 2017

Mr. David A. Stilwell
Field Supervisor
United States Department of the Interior
Fish and Wildlife Service
3817 Luker Rd.
Cortland, NY 13045

Subject: Village of Sidney, Sidney GreenPlain, FEMA-4085-DR HMGP-NY-2499

Dear Mr. Stilwell:

The Village of Sidney has applied for financial assistance from the U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), for the restoration of 134 acres of the floodplain and creation of a wetland, stream, and pond complex for flood storage and water quality improvement in Delaware County, New York. FEMA is proposing to fund the project through the Hazard Mitigation Grant Program.

The project consists of three distinct but contiguous areas shown in the attached map and are as follows:

1. Neighborhood (Global Match Acquisition/Buyout)/Camp Street Mitigation Area; Bordered by NY-8, River Street, Colegrove Street, and the D&H Railroad tracks, latitude/longitude: 42.310156, -75.400326
2. Sidney Community Foundation Mitigation Area; Bordered by NY-8, River Street, and the Susquehanna River, latitude/longitude: 42.313623, -75.407369
3. Industrial Park Mitigation Area; Bordered by NY-8, River Street, and industrial facilities on Winkler Road, latitude/longitude: 42.310727, -75.409054

The northern long-eared bat (*Myotis septentrionalis*) is listed as a federally threatened species and the dwarf wedgemussel (*Alasmodonta heterodon*) is listed as a federally endangered species that may occur in the proposed project location and may be affected by the proposed project according to the US Fish & Wildlife Service, New York Ecological Services Field Office (as requested by FEMA through the ECOS-IPaC system on July 26, 2017). According to USFWS, no critical habitat has been designated for these species within the proposed project area.

In accordance with Section 7 of the Endangered Species Act, FEMA is requesting USFWS concurrence on its determination of impacts to threatened and endangered species that may be present near the proposed project's action areas. Please see the attached scope of work with impact determinations, site location maps, conceptual site plans, and renderings for review and comment.

Should you have any questions or require additional information, please contact Christina Gray at (202) 765-9108 or by email at marychristina.gray@fema.dhs.gov.

Mr. David A. Stilwell
Fish and Wildlife Service
Delaware County, Sidney GreenPlain
FEMA-4085-DR HMGP-NY-2499
October 23, 2017

Sincerely,

**BROCK A
GIORDANO**

Digitally signed by BROCK A GIORDANO
DN: c=US, o=U.S. Government, ou=Department
of Homeland Security, ou=FEMA, ou=People,
cn=BROCK A GIORDANO,
0.9.2342.19200300.100.1.1=0296759531.FEMA
Date: 2017.10.25 11:14:42 -04'00'

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II
Mitigation Division/EHP
(347) 574-1467 iPhone
Email: brock.giordano@fema.dhs.gov

BG/cm

Attachments:
Scope of Work/Determinations

Figures:

1. Project Area Map
2. Conceptual Site Design
3. Cross Section Showing the Susquehanna River
4. Sidney GreenPlain Rendering
5. Sidney GreenPlain Location and Regional Map

Scope of Work

While still in the design and engineering phase, the proposed scope of work for the Village of Sidney GreenPlain project entails the re-creation of a wetland consisting of a series of ponds and channels and floodplain forest that would provide an additional 22.8 million cubic feet of flood storage and other ecosystem services as green infrastructure. It would also help slow and filter the runoff from Weir Creek, which drains a large portion of the south side of Sidney, and the Susquehanna River. The restored wetland habitat would incorporate small “braided” channels within the creek that would slow the water moving through the system, allowing sediment to drop out of the water and build up the natural stream bed.

The Sidney GreenPlain project is one of three projects currently under review for the area, the others being the Peckham Dam removal and property buyouts and elevations in the Village. The proposed area of impact for the Sidney GreenPlain overlaps with that of the Sidney Global Match Acquisition project entailing home buyouts and elevations, which was previously reviewed by USFWS. The current primary land use for the proposed project site is agricultural. Final plans for Sidney GreenPlain will in part be determined based on home elevation and buyouts under the Global Match Acquisition project. If the neighborhood mitigation area cannot be part of the wetland restoration due to low resident opt-in numbers for home buyouts in the western portion of the site, and elevations or buyouts in the eastern portion of the site, then tributaries may need to be constructed to divert overflow runoff. Diverted runoff may be directed towards waterbodies such as Youngs Pond (latitude/longitude: 42.278486, -75.320663). The runoff would be partially treated by the constructed wetlands after flowing through the other two green infrastructure mitigation areas proposed for Sidney GreenPlain. In combination with the removal of the Peckham Dam, there may be impacts to area hydrology and receiving waterways and waterbodies that require further study.

Determinations

Northern Long-eared Bat (*Myotis septentrionalis*, Threatened)

The northern-long-eared bat range covers the entirety of New York State. During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances, constant temperatures, and high humidity with no air currents. Specific areas where they hibernate have very high humidity, so much so that droplets of water are often seen on their fur. Within hibernacula, surveyors find them in small crevices or cracks, often with only the nose and ears visible.

Potential for Project Related Effects for Northern Long-eared Bat

The proposed project impacts a total estimated area of 134 acres. The immediate and surrounding impacted area consists of mostly agricultural, residential, undeveloped land with tree cover and waterways. Tree removal remains an unknown variable at this point in project design, however, some degree of tree removal is anticipated. Per review of the 2017 New York Natural Heritage Program data, there were no hibernacula identified in or near the project site. Although the forest land and wetlands present in the project area have potential to meet the

Mr. David A. Stilwell
Fish and Wildlife Service
Delaware County, Sidney GreenPlain
FEMA-4085-DR HMGP-NY-2499
October 23, 2017

northern long-eared bat habitat requirements, the project has no anticipated long-term adverse impact on the habitat. Most of the land affected has been previously disturbed.

The scope of work for the Sidney GreenPlain project includes tree planting. Tree species that produce bark with large flakes separating from the main stem are particularly suitable for roosting bats and generally provide more valuable roosting habitat than trees with smoother bark. Tree planting is a major component of the floodplain re-creation design plan. Tree species that would provide preferred roosting for bats that are proposed as part of project include silver maple (*Acer saccharinum*), sugar maple (*Acer saccharum*), American sycamore (*Plantanus occidentalis*), swamp white oak (*Quercus bicolor*) and white oak (*Quercus alba*). The 134 acre project area currently includes residential and industrial areas as well as areas that are in cultivation that would be converted to wetland and forested habitats and conserved as open space. Overall, there will be a net increase of wetlands with the installation of the pond and channel system, forested floodplain and trees including species suitable for roosting bats (Figure 4)

If trees greater than 3" DBH are removed it could affect potentially suitable northern long-eared bat roosting habitat. However, tree removal will take place between November 1 and March 31, well outside the roosting season. Substantial forested land adjacent to the project impact area will provide dispersal sites to bats that might be in the area and temporarily disturbed. FEMA will reinitiate consultation should tree removal be planned from April 1 to October 31.

Effect Determination for Northern Long-eared Bat

NLAA: The proposed project will not result in removal of any known northern long-eared bat roost trees and the location is not in the vicinity of known bat hibernacula. FEMA has determined that any project-related effects to this species are insignificant or ultimately positive and is therefore requesting the U.S Fish and Wildlife Service concurrence with a 'Not Likely to Adversely Affect' determination.

Dwarf Wedgemussel (*Alasmidonta heterodon*, Endangered)

Suitable dwarf wedgemussel habitat is characterized by muddy sand or gravel benthic zones of freshwater creeks and rivers of varying sizes with slow to moderate current and good water quality. Dense populations have been found below mills and beaver dams. Their known New York distribution is in the Delaware River Watershed. The dwarf wedgemussel depends on small, bottom-dwelling host fish for dispersal during the glochidia stage of the life cycle. Potential hosts such as the tessellated darter are tolerant of low water quality, however foraging may be impacted by turbidity. Darter eggs are particularly sensitive to changes in water temperature and chemistry and may be affected by construction activities. Mussel glochidia are generally species-specific and will only live if they find the correct host (NYSDECⁱ).

Potential for Project Related Effects for Dwarf Wedgemussel

Per review of the 2017 New York Natural Heritage Program data, there were no dwarf wedgemussel populations present in the waterbodies affected by the proposed project. The watershed is not considered part of the Delaware River watershed and therefore out of range of existing populations.

Mr. David A. Stilwell
Fish and Wildlife Service
Delaware County, Sidney GreenPlain
FEMA-4085-DR HMGP-NY-2499
October 23, 2017

Effect Determination for Dwarf Wedgemussel

No Effect: FEMA is requesting the U.S Fish and Wildlife Service concurrence with a “No Effect” determination.

Summary

FEMA has determined that the project activities referenced above will have little to no effect on the two federally listed species for Delaware County. FEMA has made a *Not Likely to Adversely Affect* determination for the northern long-eared bat, and a *No Effect* determination for the dwarf wedgemussel; concurrence is requested for a determination that the proposed project will have *Not Likely to Adversely Affect* to the northern long-eared bat and its habitat and *No Effect* for the dwarf wedgemussel and its habitat.

Figure 1: Sidney GreenPlain Location and Regional Map

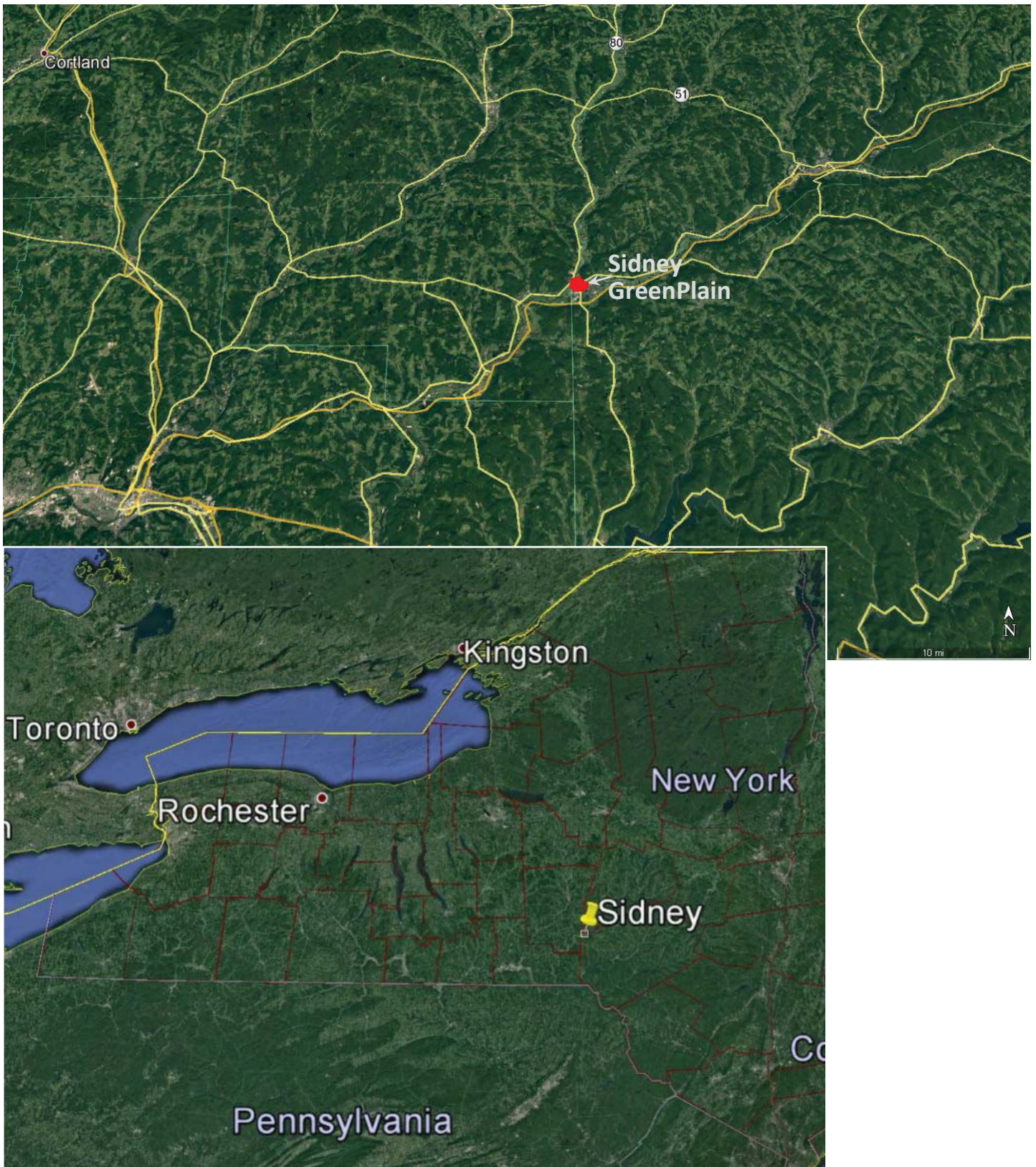


Figure 2: Project Area Map

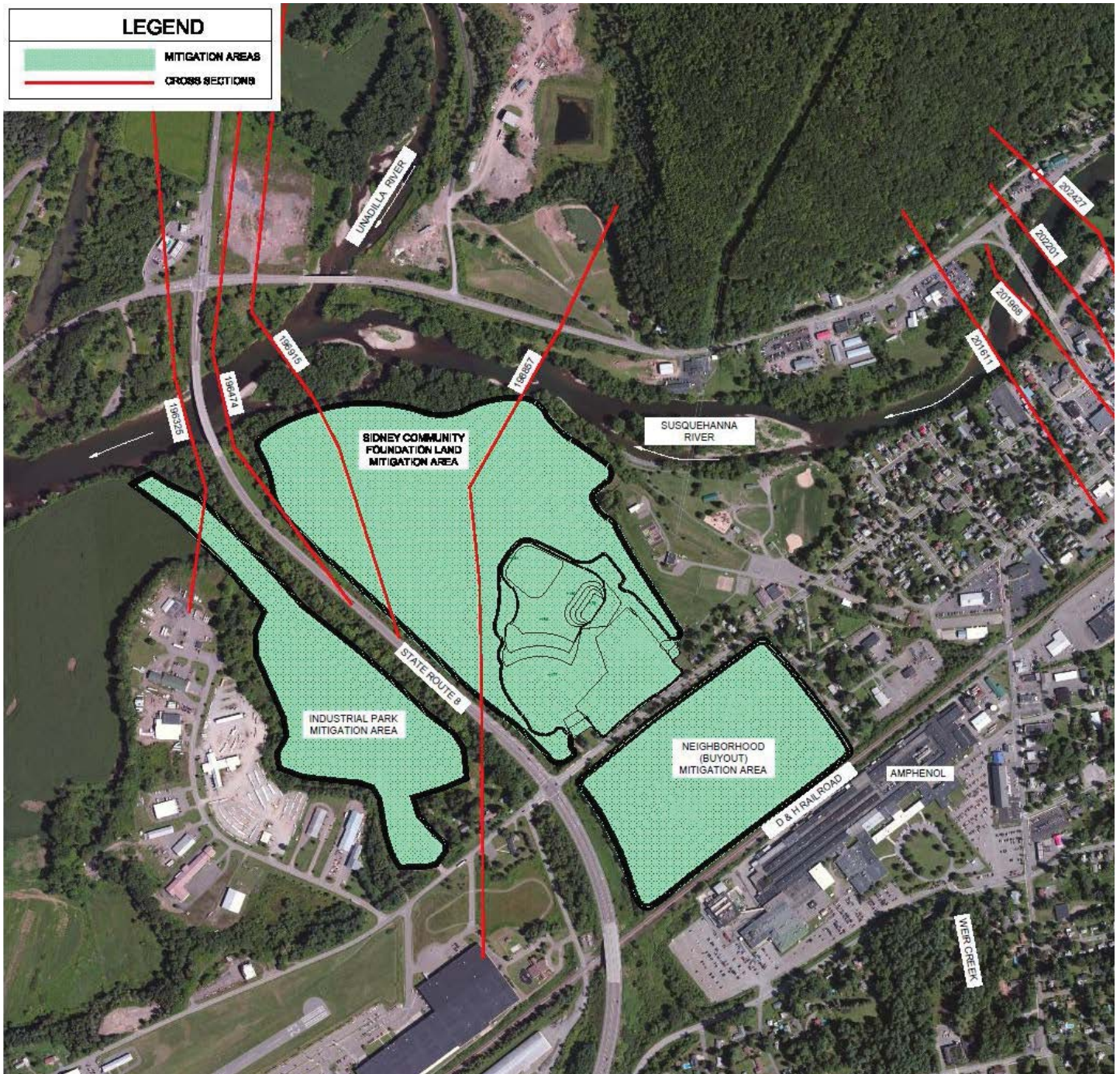


Figure 3: Conceptual Site Design from the Sidney NY Rising Community Reconstruction Plan



Figure 4: Cross Section Showing the Susquehanna River

Sidney | NY Rising Community Reconstruction Plan

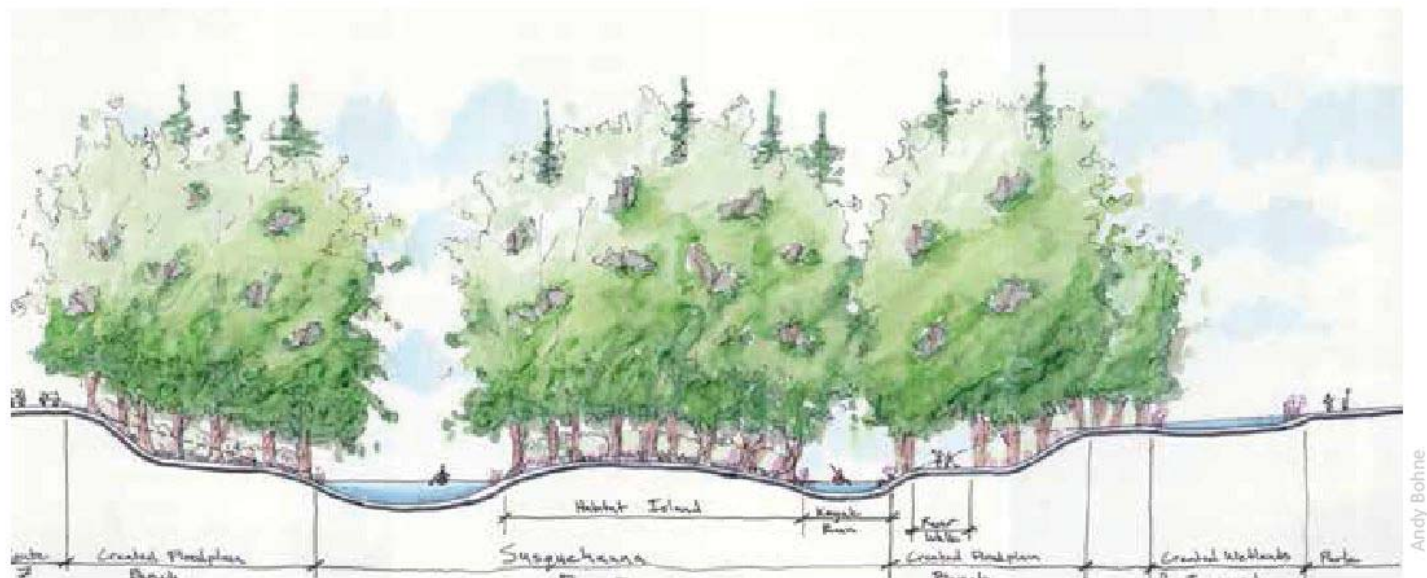


Figure 5: Sidney GreenPlain Rendering from the NY Rising Community Reconstruction Plan



ⁱ NYSDEC Dwarf Wedgemussel Fact Sheet <http://www.dec.ny.gov/animals/42253.html>



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045



January 17, 2018

Brock A. Giordano, EHP Supervisor
FEMA Region II
Mitigation Division/EHP
26 Federal Plaza, Suite 1307
New York, NY 10278

Dear Mr. Giordano:

This responds to your October 25, 2017, letter regarding the restoration of 134 acres of the floodplain and creation of a wetland, stream, and pond complex for flood storage and water quality improvement in the Town of Sidney, Delaware County, NY.

As you are aware, Federal agencies have responsibilities under section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to consult with the U.S. Fish and Wildlife Service (Service) regarding projects that may affect federally listed species or designated critical habitat, and confer with the Service regarding projects that are likely to jeopardize federally proposed species and/or adversely modify proposed critical habitat.

We understand that FEMA staff reviewed our website and two federally listed species were identified for consideration. FEMA has determined the project will result in no effects to the federally listed endangered dwarf wedgemussel (*Alasmidonta heterodon*). We agree, as this species is unlikely to occur in this area.

FEMA has also determined that the project may affect, but is not likely to adversely affect the federally listed threatened northern long-eared bat (*Myotis septentrionalis*). Given the project location, small amount of tree removal, and conservation measure to conduct all tree removal between November 1 and March 31, we concur with your determination.

No further coordination or consultation under the ESA is required with the Service at this time. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. 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, we recommend that you check our

website regularly to ensure that listed species presence/absence information for the proposed project is current.*

Any new information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

We would also like to compliment FEMA on the project as a whole. This appears to be a great example of working with local communities to address flooding issues as well as natural resources and public amenities. We encourage you to coordinate with our Partners for Fish and Wildlife staff if you have any technical assistance needs when finalizing restoration design plans.

As you are aware, the eastern hellbender (*Cryptobranchus alleganiensis*) is known to occur in the Susquehanna River in this area. While there are currently no plans for in-water work, if you would like to incorporate any hellbender habitat restoration components into the project, please contact Ms. Noelle Rayman-Metcalf of this office.

Thank you for coordinating with us. We appreciate the opportunity to review this project. If you require additional information or assistance please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this Program should reference project file 173102.

Sincerely,

A handwritten signature in black ink, appearing to read "David A. Stilwell". The signature is fluid and cursive, with the first name "David" being more prominent.

David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at:
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

cc: NYSDEC, Stamford, NY (Permits)



FEMA

June 6, 2017

Michael F. Lynch, P.E. AIA
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Project Number: FEMA-DR-4085-NY, Hurricane Sandy, HMGP 4085-0060/ NY-2499

Recipient/Sub-Recipient: NYS Division of Homeland Security and Emergency Services/ Village of Sidney

Undertaking: Development of the Sidney GreenPlain

Location: Village of Sidney, New York, (42.312743, -75.404987)

Dear Mr. Lynch:

This letter serves as consultation pursuant to Section 106 of the National Historic Preservation Act for the undertaking identified above. The Federal Emergency Management Agency (FEMA) will be providing funds authorized thru the 404 Hazard Mitigation Grant Program (HMGP) in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended.

The purpose of this letter is to initiate the Section 106 process with the New York State Historic Preservation Office (SHPO). The project has a high potential for encountering Native American and historic-period archaeological sites. This letter provides an overview of the scope of work, assessment of archaeological sensitivity, as well as the archaeological work plan for carrying out the combined Phase IA/IB archeological survey. This letter includes an attached Sidney Green Plain Cultural Resources Phase I Scope of work prepared by SWCA.

Project Information

FEMA will be providing funds from the Hazard Mitigation Grant Program authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 404, P.L. 93-288, as amended, in response to the major Disaster Declaration for FEMA-4085-DR-NY, declared October, 30, 2015, as amended.

The Village of Sidney is located in Delaware County at the foothills of the Catskill Mountains and the convergence of the Susquehanna and Unadilla Rivers (42.312743, -75.404987). The Village proposes to use sustainable green infrastructure practices to mitigate flooding along the two water systems by creating a 140-acre GreenPlain. The Sidney GreenPlain will redevelop vacated neighborhoods into a high-capacity floodplain capable of handling millions of gallons of floodwater with a series of "pocket wetlands" offering additional storage volume upstream from the village center.

The Sidney GreenPlain Undertaking is part of the larger New York Rising Community Reconstruction (NYRCR) Plan to create more resilient communities throughout the State of New York and is in the area

of the FEMA 1650-DR-NY Peckham Dam Repairs/Sidney Water System Improvements project. The consultation herein is specifically for the FEMA 4085-DR-NY HMGP funded Sidney GreenPlain project. The GreenPlain will be located west of the village center and is bounded by the Susquehanna River to the north, Winkler Road to the west, River Street and the Amphenol Aerospace complex to the south and Keith Clark Park to the east. The project location is bisected by the NY-8 state highway.

Description of Undertaking:

This Undertaking is still in the conceptual stage of design as engineering studies are carried out. At this time, the proposal illustrates four distinct mitigation areas that create a contiguous, 140-acre flood mitigation system (*see Map Index, Figures 1 & 2*). The four mitigation areas are designed to provide additional compensatory storage for floodwaters associated with the Susquehanna River and Weir Creek by creating a series of channels that connect to larger depressed storage areas. Mitigation along the Weir Creek will help restore its ability to carry floodwater (conveyance capacity) and reduce flash flooding through the incorporation of small channels within the creek-bed (*see Map Index, Figure 3*). This portion of the project will provide an additional 12 million cubic feet of floodwater storage within the floodplain. The conceptual design also proposes to create a series of wetlands and ponds to help slow and clean the runoff coming from under an adjacent railroad track, as well as drain a large portion of the south side of Sidney. This restored wetland, stream and pond complex will limit the rate of runoff coming from the south side of the railroad tracks, reducing the volume of flood waters reaching the Susquehanna River and flowing downstream at one time (*see Map Index, Figure 2*). Collectively, these measures will enhance the health of Weir Creek and its ability to handle larger storm events by slowing the Creek's flow, thereby reducing the amount of soils and sediments that wash into the Susquehanna River.

Area of Potential Effects

The Area of Potential Effects (APE) includes the limits of physical ground disturbance that will be impacted as a result of the Undertaking. FEMA's Undertaking includes the entire 140-acre parcel of land located west of the village center, bounded by the Susquehanna River to the north, Winkler Road to the west, River Street and the Amphenol Aerospace complex to the south and Keith Clark Park to the east (*see Map Index, Figure 1*). At the time of this consultation, exact ground disturbance depths are unknown.

Evaluation of Architectural Impact

In a previous, separate project consultation related to the acquisition and demolition of structures within the project APE (15PR00723), your office (SHPO) determined that there would be an adverse effect to the Sidney Historic District (NR# 13000679). This new GreenPlain Undertaking, related to the development of the flood-mitigating GreenPlain, may have further effects to properties considered eligible for or listed to the National Register of Historic Places. Once a detailed SOW is presented, FEMA will assess the project location for further impacts. Should any National Register of Historic Places (NRHP) eligible or potentially eligible above-ground resources be affected, additional consultation with your office will be conducted in accordance with Section 106 of the National Historic Preservation Act (*see Map Index, Figure 8*).

Evaluation of Archaeological Impact

The Sidney GreenPlain project area is a mix of open, undeveloped fields to the north, residential neighborhoods to the southeast, and commercial/industrial development to the south and west. It is also located near multiple fresh water sources including the Susquehanna and Unadilla Rivers and Weir Creek, which is a suitable location for Native American habitation. Archaeological sensitivity for the Undertaking was assessed reviewing the NYS Cultural Resources Information System (NYS CRIS) for known historic properties, archaeologically sensitive zones, previous cultural resources surveys, and known archaeological sites, as well as historic aeriels (historicaeriels.com), historic maps (historicmapworks.com), and soil data (websoilsurvey.nrcs). In addition, archaeological sensitivity and the potential preservation of any such archaeological resources that may exist is assessed using predictive site modeling for prehistoric and

historic archaeological resources, degree and location of historical disturbance, and the degree of disturbance associated with the development of the present-day site.

Previously reported archaeological sites provide an overview of the types of sites that may be present in the project area. Research conducted using the NYS CRIS revealed eleven (11) reported archaeological sites within approximately one mile of the project and four (4) are located within the project APE (*see Map Index, Figure 6*). The Wells Sites Site (02540.000002) was identified as part of the Public Archaeology Facility survey for the Village of Sidney Water Improvement project. It is loosely characterized as a Middle Owasco period site and is associated with the entry point for the Susquehanna River (42.314194, -75.400794). The site is located at the existing recreation park on the northeast corner of the project area. Early plans for the Undertaking show this location will remain a park with an additional connection to the existing Susquehanna River Park network.

The Kowalczyk Precontact Site (02540.000373) was identified in 2012 by Hartgen Archaeological Associates, Inc., and is a contributing component to the NRHP-listed Sidney Historical District. Shovel test pits (STPs) and backhoe trenches were completed to assess the significance of the site. Overall, information on the site is limited in CRIS, but artifacts identified during the subsurface testing were found predominantly on the second terrace and were attributed to an early, Late Woodland occupation (Owasco tradition). In addition, features were encountered that appeared to be cooking and storage pits, as well as evidence of a possible palisade. This is the only NRHP listed site within the project APE.

The Wessels Site (02540.000215) and Clum Site (02540.000213) were recorded concurrently and are located to the west of the Kowalczyk site in similar topographic settings. Very little information is recorded regarding the presence of known cultural resources, but stratified archaeological occupations primarily date to the Middle and Late Woodland periods. The Clum Site was identified as being the potential location of a habitation site, though no materials were identified on the inventory form submitted to SHPO. At this time in the conceptual planning stage, neither site location is projected to include built infrastructure, however floodplain mitigation measures such as channeling or wetland reservoirs may be placed in either location.

These four site's (and those within one mile of the APE) proximity to fresh water sources suggests that Native American peoples congregated at the Susquehanna River flats near its confluence with the Unadilla. Majority are located in undeveloped green spaces which are deemed as archaeologically sensitive due to their topography and lack of widespread surficial disturbance. Additionally, a review of CRIS identified seven (7) previous surveys within approximately 1.5 miles of the Project (*see Map Index, Figure 7*). All sites that were recorded in the area were determined to have little to no significance and no further work was recommended.

An additional 28 archaeological sites, identified as Museum Sites on NYS CRIS, are also recorded within one mile of the APE (*see Map Index, Figure 6*). Museum sites provide the mapped location of archaeological sites recorded in the early-20th century by local collectors and pioneering archaeologists. Unfortunately, little information on these site's attributes is known, including their level preservation. However, their recorded locations provide direct evidence of the presence of Native American habitation from long and/or short term settlement.

The project location is also sensitive for historic archaeology resources as illustrated by the Beers 1869 map (*see Map Index, Figure 6*). The map identifies the presence of structures that may reflect Sidney's development from an agricultural center in the first half of the 19th century to its growth with the arrival of the Albany & Susquehanna railroad in the 1860s and 1870s.

Summary of Findings and Requirements for Archaeological Survey

In summation, the project area is located within archaeologically sensitive areas with the potential to yield Native American and historic archaeological resources. This is based on proximity to marine resources, the probability of intact soils in these areas, and definitive evidence of Native American habitation in the project vicinity. This is also evidenced through one (1) NRHP-listed and three (3) undetermined prehistoric sites located directly within the project APE. Additionally, map-documented structures located in portions of the project area indicate historic sensitivity in less disturbed areas. The portions of the project that consist of modern and commercial development located in USDA mapped Urban Land (Ur) have been significantly modified, rendering these locations less likely to preserve and/or contain significant historic and/or Native American archaeological deposits (*see Map Index, Figures 9-13*).

The Village of Sidney has contracted SWCA Environmental Consultants (SWCA) as their cultural resource management firm. Based upon the high level of archaeological sensitivity, SWCA recommends a combined Phase IA/IB study be completed before the finalization of the project SOW. FEMA concurs with SWCA's work plan (see attached *SWCA Sidney Green Plain Cultural Resources Phase I Scope*). The goal of the field survey will be to identify any previously undocumented cultural resources within the project area, as well as identify the current condition and horizontal boundaries of the previously recorded sites within the APE. The archaeological survey will include a combined Phase IA/IB field survey consisting of a systematic walk-over survey of the entire project APE and archaeological shovel testing in known locations of previously recorded archaeological sites, as well as positive surface finds. Additional shovel testing will be implemented in areas which typically yield archaeological resources based on topography and site characteristics at the discretion of the qualified archaeologist. All work will be conducted by consultants who meet the Secretary of Interior (SOI) qualifications for archaeology.

At the completion of the Phase IA/IB archaeological survey, a report detailing the survey and findings will be produced for review and comment. The report will also include recommendations for further work if intact archaeological/cultural resources are yielded. FEMA will transmit the final report to the State Historic Preservation Office (SHPO) and consulting Tribal Nations for review and comment. FEMA will then submit the determination of the findings consultation to SHPO and the Tribal Nations for concurrence which will include recommendations for future studies (if applicable).

Should the archaeological survey discover human remains, or what is suspected to be human remains, during the course of the archaeological fieldwork (or any excavation for the project), all excavation activities in the vicinity of the discovery shall immediately stop and the discovery location shall be secured and protected from damage and disturbance. The person or persons encountering such properties or effects shall immediately contact local law enforcement and the county coroner/medical examiner in addition to FEMA. FEMA will then immediately notify the Tribal Nations and consult with the necessary parties to determine the appropriate course of action from that point forward in accordance with the requirements of 36 CFR §800.13(b)(3). No excavation shall continue within the identified areas until all parties have agreed on the procedures to move forward.

Determination of Effect

Based on the information presented above, FEMA has determined that archaeological sensitivity within the projects APE is high. As a result, a combined Phase IA/IB archaeological survey is required in order to determine the presence and/or absence of any previously undocumented cultural resources within the project area, as well as identify the current condition and horizontal boundaries of the previously recorded Native American archaeological sites located within the APE. FEMA concurs with the archaeological work plan prepared by SWCA for carrying out the combined Phase IA/IB archaeological survey (see attachment). FEMA will submit the final report and any further recommendations to you at the end of the archaeological survey for review and comment.

We respectfully request your response and/or any comments within thirty (30) calendar days. If you have any questions or require any additional information, please contact archaeologist Brock Giordano at brock.giordano@fema.dhs.gov or by phone at 347-574-1467.

Sincerely,

**BROCK A
GIORDANO**

Digitally signed by BROCK A GIORDANO
DN: c=US, o=U.S. Government, ou=Department
of Homeland Security, ou=FEMA, ou=People,
cn=BROCK A GIORDANO,
0.9.2342.19200300.100.1.1=0296759531.FEMA
Date: 2017.06.05 13:49:56 -0400

Brock Giordano, RPA
EHP Supervisor, NY Sandy
DR-4085-NY

BG/lo

cc: Rick Lord, NYS Division of Homeland Security & Emergency Services
Seth T. Mitchell, Cultural Resources Team Lead – Pittsburgh, SWCA Environmental Consultants

Enclosures: Map Index_SidneyGreenPlain
SWCA Sidney Green Plain Cultural Resources Phase I Scope



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

June 30, 2017

James Zwolak
FEMA
26 Federal Plaza, Suite 1307
New York, NY 10278

Re: FEMA/ DHSES/ HMGP 4085-0060/ NY-2499
Development of the Sidney GreenPlain
Village of Sidney/ Delaware County
17PR03813

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Title 54, Section 306108 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/ Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Archeology: the SHPO concurs with the revised Phase I archaeological work plan (SWCA, 8 June 2017).

Above-ground Cultural resources: the SHPO concurs with the FEMA letter dated June 6, 2017 that "once a detailed SOW is presented, FEMA will assess the project location for further impacts. Should any National Register of Historic Places (NRHP) eligible or potentially eligible above-ground resources be affected, additional consultation with your office will be conducted in accordance with Section 106 of the National Historic Preservation Act".

If I can be of further assistance, contact me at (518) 268-2187 or Larry.moss@parks.ny.gov

Sincerely,

Larry K Moss, Historic Preservation Technical Specialist
CC: Brock Giordano
Rick Lord, DHSES
Seth Mitchell, SWCA

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

March 14, 2018

Mr. James Zwolak
FEMA
26 Federal Plaza
Suite 1307
New York, NY 10278

Re: FEMA
FEMA- Sidney Green Plain
17PR03813
HMGP 4085-0060/ NY-2499

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

SHPO has reviewed the following submission for this project –

Management Summary for the Geophysical Survey, Sidney Green Plain Project, Delaware County, New York (SWCA, 22 February 2018).

We concur with its conclusions and recommended further work.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit

Phone: 518-268-2175

e-mail: philip.perazio@parks.ny.gov

via e-mail only

cc: Brock Giordano, FEMA
Rick Lord, DHSES
Seth Mitchell, SWCA

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com



U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

March 3, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Project Number: FEMA-DR-4085-NY-0060/2499
Recipient/Sub-Recipient: NYS DHSES/Village of Sidney
Location: Village of Sidney, New York, (42.312743, -75.404987)
Undertaking: Development of the Sidney Green Plain
SHPO ID: 17PR03813

Dear Mr. Mackay:

This is continuing consultation pursuant to Section 106 of the National Historic Preservation Act for the Undertaking identified above. The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Hazard Mitigation Grant Program (HMGP) in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended.

This letter provides FEMA's determination of effects and presents the results of the Phase II archaeological testing and recommendations of avoidance of the archaeological sites.

Project Information

The Village of Sidney is located in Delaware County at the foothills of the Catskill Mountains and the convergence of the Susquehanna and Unadilla Rivers. The Village proposes to use sustainable green infrastructure practices to mitigate flooding along the two water systems by creating a 180+/- acre Green Plain. The Sidney Green Plain will redevelop vacated neighborhoods and agricultural fields into a high-capacity floodplain capable of handling millions of gallons of floodwater with a series of "pocket wetlands" offering additional storage volume upstream from the village center. The project incorporates acquisition areas (the *Camp Street Neighborhood*) undertaken by FEMA and GOSR/HUD as part of the 2014 application for the acquisition and demolition of 134 structures in the Village of Sidney (SHPO #15PR00723).

Description of Undertaking:

Since the original consultation for this project began in 2017, the proposed Undertaking has undergone substantial modifications to the design. These changes were centered around the results of the Phase IB and Phase II archaeological investigations as well as buyout constraints in the Camp Street Neighborhood. Additional changes include the culvert design within the State Route 8 corridor.

Three distinct mitigation areas are located within the Sidney Green Plain project area. They consist of the Community Foundation Land (current farmland), the Camp Street Neighborhood, and open space west of State Route 8.

The Community Foundation Land

The Community Foundation land is approximately 70-acre parcel owned by the Village of Sidney. The Susquehanna River delineates the northern boundary of the area with nearly 2,000-feet of river frontage. To the east is both the Village's wastewater treatment plant and Keith Clark Park, a multi-use recreation field. To the south is mostly residential homes fronting River Street bookended to the east by The Elks and to the west the Village War Memorial Park. Weir Creek, a perennial tributary stream to the Susquehanna River and State Route 8, define the western limits of the area.

The proposed design includes converting the agriculture land into a restored floodable wetland complex that would help to slow, store, and treat water through this proposed large-scale green infrastructure project. The floodplain forest along the banks of the Susquehanna would be restored and expanded to a 35-acre riparian corridor, providing essential riparian functions and critical habitat. The 54-acre wetland complex would allow floodwaters a place dissipate and relieve pressure from the State Route 8 Bridge which constricts the flow of the Susquehanna and Unadilla Rivers and is compounded by the elevated State Route 8 which during flood conditions functions as a barrier detrimental to the Village of Sidney. Flood relief culverts/bridges will be installed along State Route 8 to allow for more flood water to pass through the current impediment and reduce the volume of water that is held back during high flow flood conditions.

Camp Street Neighborhood

The Camp Street Neighborhood is located between Camp Street and Colgrove Street with River Street as the northern limit and Railroad Avenue as the southern limit. It also includes Winegard Street and Oak Avenue, including the sections west of Colgrove Street. The houses in this neighborhood have experienced repetitive flooding and are eligible to participate in a HUD/GOSR buyout program that is being administered by the Delaware County Planning Department. The buyout program is a result of the 2014 application for the acquisition and demolition of 135 structures in the Delaware County, 134 of which are located within the Village of Sidney areas (the Camp Street Neighborhood).

The proposed design is contingent on the success of the buyout program. The intent is to be able to close as many entire streets as possible and to relocate all of the residents of the Camp Street Neighborhood out of future harm's way that is inevitable. At a minimum, bought out properties will be converted to green open space and as much road and infrastructure within the area will be removed. The intent is to use the area for additional created wetlands that will help alleviate flooding from Weir Creek and relieve flooding downstream. This area will also be planted with native vegetation.

Open Space West of State Route 8

The open space west of State Route 8 consists of approximately 35 acres of open space owned by both the Village and the Delaware County Industrial Development Agency. There is an intermittent stream that runs along the west side of State Route 8 and is a tributary to the Susquehanna River. There is also a wetland complex that hugs the northeast limits of the elevated industrial park along Winkler Road with "fingers" that spread out through the southern area of the parcel towards River Street. The Delaware County Industrial Development Agency is currently filling-in approximately four acres fronting River Streets and one driveway east of Winkler Road, where the elevated industrial park is located.

The proposed flood relief culverts/bridges will only be activated during significant flooding events. Any flood water will be conveyed under State Route 8 from east to west. The proposed design will enhance and expand the existing wetland complex to provide additional flood storage. There would be restoration work

done to the intermittent stream to help manage the additional flow of water and help direct the flow to the Susquehanna River. The elevated industrial park adjacent to this area to the west has experienced flooding in the past and while the proposed design conveys more floodwater in this direction, the design team is exploring all options to mitigate for any potential negative impacts and we are paying close attention to the flood modeling and are still waiting for the preferred flood relief design to be approved by NY DOT for the work under State Route 8.

Area of Potential Effects

The Area of Potential Effects (APE) includes the limits of the entire 180-acre parcel over the three distinct areas including the Community Foundation Land (current farmland), the Camp Street Neighborhood, and open space west of State Route 8. The APE for archaeology includes the physical ground disturbance that will be impacted as a result of the Undertaking. (The Camp Street Neighborhood was previously evaluated under SHPO #15PR00723.)

Evaluation of Architectural Significance

The Sidney Green Plain project area is located within the 419.27-acre boundary of the Sidney Historic District. The Sidney Historic District is significant under National Register of Historic Places (NRHP) Criteria A, C and D in the areas of settlement, transportation, industry, architecture and Native American archaeology. The period of significance extends from 850BC-1400-AD; 1985-1963. The extent of the NRHP boundaries is indicative of the long period of significance across the town listed as: *Prehistoric period, ca. 850 BC- 1400AD; Early Settlement and Revolutionary War period, ca. 1772-1784; Sustained Settlement and Early Village, 1784-1860; Railroad Boom, ca. 1866-1888; Village Incorporation and Early Industrialization, 1888-1925; Prospect Hill Cemetery; Industrial Rebirth and the Second World War, 1925-1963; and Post-1963.*

While the NRHP historic district boundary includes a large portion of the town, the APE resides only in the eastern limits of the district within the *Prehistoric period (within the Community Foundation Land APE)* and the *Post-1963* areas (within the *Camp Street Neighborhood*).

The Community Foundation Land

The Community Foundation Land proposed design includes converting the agriculture land into restored wetlands. This area resides within the *Prehistoric period* of the historic district and APE consists of agricultural farmland. There are no above ground structures proposed in this location as part of the Undertaking. Any physical impacts within this area are only related to archaeological resources (discussed below).

Camp Street Neighborhood

The Undertaking, engineered wetlands, within the *Camp Street Neighborhood* resides within the *Post-1963* area of the historic district. The Camp Street Neighborhood was reviewed in previous project consultation related to the acquisition and demolition of structures (15PR00723) that resulted in Adverse Effect to Historic Properties. The project resulted in a Programmatic Agreement and identified treatment measures. The current Undertaking will utilize the project's green space and as result will not result in additional impacts to properties within the boundaries of the Camp Street Neighborhood. To the south of the Camp Street Neighborhood, the NRHP nomination (*Post-1963*) identifies Amphenol Aerospace, Inc. as part of the district boundaries. This plant was demolished in 2018-2019.

Open Space West of State Route 8

The area west of State Route 8 includes open space agricultural fields. Commercial buildings are located to the southwest of the boundary. The Undertaking in this area consists of engineered wetlands and culverts beneath the Route 8 ROW.

Summary

Overall, the APE proposed is located within the western most portion of the Sidney National Register Historic District. The Undertaking includes converting agricultural fields into green infrastructure. The Undertaking will have no visual impacts and will not result in direct and/or indirect effects to the surrounding built environment.

Evaluation of Archaeological Impact

SWCA conducted a Phase II investigation of the Kowalczyk site and additional work at the Green Plain 1, Green Plain 2, Green Plain 3, and Green Plain 4 sites (*Phase II Archaeological Evaluation for the Proposed Sidney Green Plain Project, Delaware County, New York*, January 2020, prepared by SWCA). The additional work at the Green Plain 1, Green Plain 2, Green Plain 3, and Green Plain 4 sites did not result in the identification of significant data, and as such, no further work is recommended at these four sites.

Phase II investigations at the Kowalczyk site were primarily focused on the site core, which was identified during the Phase I as containing a high density of artifacts on the surface. Test unit and mechanical excavation identified a corresponding high density of material culture below surface, as well as intact cultural features related to the pre-contact occupation of the site. Analysis indicated that these features retained a high degree of structure, as well as contained significant data related to the Late Woodland period. It is recommended that the site core be completely avoided by all construction activities and any ground disturbance within the larger site area that was delineated during the Phase I be archaeologically monitored. FEMA concurs with this assessment.

From the original conceptual design to present the design has undergone significant changes. The proposed design has been subsequently redesigned to avoid the Kowalczyk site creating a buffer area. Based on the results of the Phase II investigation, the entirety of the site core, and large portions of the site containing a low-density of artifacts will be avoided by all construction activities. Additionally, the tree line in the center of the site will be incorporated into final project design. In order to stabilize and preserve the archaeological deposits present at the Kowalczyk site with the change in surrounding land use, the area will be planted with grasses chosen to avoid deep root penetration and in line with the overall ecological make-up of the project. Yearly maintenance will be performed on this area to avoid the establishment of woody plants that could potentially impact archaeological deposits through bioturbation.

Furthermore, an archaeological monitor will be present during construction of the project, with stop work authority. Prior to construction, a site monitoring plan will be developed outlining the role of the archaeological monitor as well as the necessary procedures that will be in place if archeological deposits and/or human interments are identified during construction. Based on the final design, the archaeological monitor will oversee all ground disturbing activities within 100 feet of the cultural resource area indicated on the Landscape Plan: Overall (see Appendix J, Phase II report).

In summary, the archaeological investigation identified further details regarding the Kowalczyk site, and the project design evolved to take into account the cultural resources identified within the project area. The final design of the project does not adversely effect the Kowalczyk site and monitoring of ground disturbing activities within proximity to the site ensures construction accounts for the culturally sensitive nature of the area.

Determination of Effect


The Sidney Green Plain project is located within the western most portion of the Sidney National Register Historic District. The Undertaking includes converting agricultural fields into green infrastructure. In regard to historic architectural resources, the Undertaking will have no visual impacts and will not result in physical direct and/or indirect effects to the surrounding built environment and/or the Sidney National Register Historic District.

The Phase II archaeological report at the Kowalczyk site revealed a high density of material culture below surface, as well as intact cultural features related to the pre-contact occupation of the site. Based on the intact nature of the NRHP-eligible site, a redesign of the Undertaking was completed whereby avoiding the site and capping it to stabilize and preserve the area with shallow rooted plantings. Given the high sensitivity of the APE, archaeological monitoring during construction is required during construction.

Therefore, FEMA has determined that the Undertaking will be **No Adverse Effect to Historic Properties with Conditions**. The condition includes archaeological monitoring during construction. As part of this condition, an archaeological monitoring plan and a final archaeological monitoring report are required. As Lead Federal agency, all project correspondence and reporting shall come through FEMA and submitted to SHPO and Tribal Nations for concurrence. No construction may begin prior to FEMA and SHPO concurrence on the archaeological monitoring plan. FEMA will work with the recipient (DHSES) and subrecipient (Village of Sidney) on meeting these conditions.

We request your response and/or any comments within thirty (30) calendar days. If you have any questions or require any additional information, please contact archaeologist Brock Giordano at brock.giordano@fema.dhs.gov or by phone at 347-574-1467.

Sincerely,

**BROCK A
GIORDANO**  Digitally signed by
BROCK A GIORDANO
Date: 2020.03.03
08:26:38 -05'00'

Brock Giordano, RPA
EHP Supervisor, NY Sandy
DR-4085-NY

BG/jz

cc: Brad Stevens, NYS Division of Homeland Security & Emergency Services
Stephanie Couture, NYS Division of Homeland Security & Emergency Services
Jonathan R. Libbon, SWCA Environmental Consultants

Enc: Phase II Archaeological Evaluation for the Proposed Sidney Green Plain Project, Delaware County,
New York, January 2020 (prepared by SWCA).



ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 20, 2020

James Zwolak
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA
Sidney Green Plain
Sidney, Delaware County
17PR03813

Dear Mr. Zwolak:

Thank you for your ongoing consultation with the New York State Historic Preservation Office (SHPO). We have reviewed the provided documentation in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

We have reviewed the updated project plans and letter dated March 3, 2020. The undertaking proposes to redevelop a vacated neighborhood and agricultural areas within and adjacent to the State and National Register listed Sidney Historic District, using green infrastructure practices. We note that the vacated, Camp Street Neighborhood was previously reviewed under consultation project number 15PR00723.

Based upon our review, the technical review unit has no concerns with the effects of this undertaking on above ground, architectural resources. Please note, that our Archaeology unit has an outstanding request for information that must be fulfilled before an effect finding can be issued.

If you have any questions, I can be reached at 518-268-2187.

Sincerely,

A handwritten signature in black ink, appearing to read "DR", with a stylized flourish extending from the end.

Derek Rohde
Historic Site Restoration Coordinator
e-mail: derek.rohde@parks.ny.gov

via e-mail only

Cc: B. Stevens, B. Giordano, J. Libbon, S. Mitchell, S. Couture

From: [Giordano, Brock](#)
To: [Andrew Bohne](#); [Jonathan Libbon](#)
Cc: [Hilton, Ashley](#); [Neipert, Jeanine \(DHSES\)](#); [Zwolak, James](#)
Subject: Sidney Greenplain - Stockbridge-Munsee Tribal Historic Preservation Office
Date: Friday, March 20, 2020 12:29:29 PM

Hi all,

We received concurrence from Stockbridge-Munsee Tribal Historic Preservation Office. Below are their comments. The requirements are the same they had for the Phase IB/II.

*"Thank you for requesting comments from the Stockbridge-Munsee Tribal Historic Preservation Office. Having reviewed the Phase II findings and associated Sidney Green Plain Project documents, the Stockbridge-Munsee Community **Concurs** with FEMA on its determination **No Adverse Effect to Historic Properties with Conditions**. We have no issues with the avoidance plan put in place and concur with the need for an archaeological monitor. We would like some clarity.*

- Will SWCA be serving as archaeological monitor during construction phase? Once a suitable monitoring plan has been agreed upon and is in place, the Stockbridge-Munsee ask to be informed at least one week in advance should we decide to have a tribal monitor present or to schedule a site visit.*
- Include the Stockbridge-Munsee Community Inadvertent Discovery Policy with Monitoring plan."*

We will put this in the monitoring plan when needed. Of course the monitoring plan will need to be submitted to SHPO and Tribes. We are still waiting on SHPO and other Tribal Nations as well.

We also learned they are shutting down through April due to COVID.

Thank you,
Brock

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*



Zwolak, James

Subject: FW: Sidney Greenplain - Phase II archaeological report

From: Jesse Bergevin <jbergevin@oneida-nation.org>

Sent: Tuesday, June 16, 2020 3:53 PM

To: Giordano, Brock <brock.giordano@fema.dhs.gov>

Subject: RE: Sidney Greenplain - Phase II archaeological report

VIA E-MAIL brock.giordano@fema.dhs.gov

Mr. Brock Giordano
Federal Emergency Management Agency

Dear Mr. Giordano,

On March 3, 2020, the Oneida Indian Nation (the "Nation") received an email and documentation from the Federal Emergency Management Agency (FEMA) regarding the most recent archaeological studies for DR-4085 Hurricane Sandy, HMGP Village of Sidney Greenplain Project (the "Project") in the Village of Sidney, Delaware County.

The Nation concurs with FEMA's determination of No Effect to Historic Properties with Conditions, as described in the March 3 letter to the Nation regarding the Project.

If you have any questions, please call me at (315) 829-8463.

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [mailto:brock.giordano@fema.dhs.gov]
Sent: Tuesday, March 03, 2020 1:46 PM
To: Jesse Bergevin
Subject: RE: Sidney Greenplain - Phase II archaeological report

Dear Jesse,

I hope things are well. Please find attached FEMA's continuing consultation for the DR-4085 Hurricane Sandy, HMGP Village of Sidney Greenplain project. The Village proposes to use sustainable green infrastructure practices to mitigate flooding along the two water systems by creating a 180+/- acre Green Plain. Since originally consulting on this project, the design has been modified in order to create a buffer area around the identified Kowalczyk site.

In summary, the Phase II archaeological report at the Kowalczyk site releveled a high density of material culture below surface, as well as intact cultural features related to the Native American occupation of the site. Based on the intact nature of the NRHP-eligible site, a redesign of the Undertaking was completed whereby avoiding the site and capping it to stabilize and preserve the area with shallow rooted plantings. Given the high sensitivity of the APE, archaeological monitoring during construction is required during construction.

This letter provides FEMA's determination of effects and presents the results of the Phase II archaeological testing and recommendations of avoidance of the archaeological sites. This email includes the Phase II archaeological study (attached).

Please let me know if you have any questions or require additional information.

Sincerely,

Brock Giordano

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*



From: Jesse Bergevin <jbergevin@oneida-nation.org>
Sent: Wednesday, March 21, 2018 11:06 AM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: Sidney Greenplain - Geophysical Management Report

Brock,

I have no comments regarding the report or Phase II approach. I will hopefully be able to come out during the Phase II work. Are there any dates you plan to be in the area for it?

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [mailto:brock.giordano@fema.dhs.gov]
Sent: Tuesday, March 20, 2018 8:10 AM
To: Jesse Bergevin
Subject: RE: Sidney Greenplain - Geophysical Management Report

Dear Jesse,

I am following up on the geophysical report and Phase II approach. Following the Phase II work plan we are also notifying all parties with 10 days advanced notice of the work to begin. They are looking to begin the Phase II archaeological work the week of April 9.

Please let me know if you have any questions at all.

Thank you again,
Brock

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*
(212) 720-9563 desk



From: Giordano, Brock
Sent: Monday, March 05, 2018 3:23 PM
To: 'Jesse Bergevin' <jbergevin@oneida-nation.org>
Subject: Sidney Greenplain - Geophysical Management Report

Dear Jesse,

Please find attached for your review the Management Summary for the Geophysical Survey, Sidney Green Plain Project, Delaware County, New York.

Please let me know if you have any questions. In accordance with the Phase II work plan we will notify at least 10 days prior to field work beginning.

Sincerely,

Brock

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*
(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Wednesday, November 29, 2017 3:43 PM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: Phase II Arch Work Sidney GreenPlain, to begin week of December 10

Brock,

Thank you for the update. As interesting as geophysical studies can be, I may wait until the archaeological part of the Phase II before heading out into the cold. If we do get a warm spell, like we have had the last couple days, I may reconsider and head out that way. Either way I will let you know once we get to December 10.

Also, if you think you may make it up during this, let me know. If it is feasible I would make the trip out there. I always find the in-field discussions with everyone out there to be pretty productive.

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Wednesday, November 29, 2017 3:16 PM
To: Jesse Bergevin
Subject: Phase II Arch Work Sidney GreenPlain, to begin week of December 10

Good afternoon Jesse,

Thank you again for all your coordination. In accordance with the Phase II work plan this email is to notify you that SWCA is planning on beginning the Phase II work beginning the week of December 10, 2017. The Phase II work is going to begin with the geophysical work only at this time. No archaeological testing is anticipated until the completion of the geophysical work. The geophysical work will take roughly 1-2 weeks.

If you will be going to the site please let me know and I would ask that you contact SWCA director and PI archaeologist Seth Mitchell @ 717.881.2665.

Any questions at all or coordination with Seth and his team please let me know.

Thank you again,
Brock

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*
(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Friday, November 03, 2017 4:03 PM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: Phase II Arch Work Plan-FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Please find attached a letter regarding the Phase II Archaeological Work Plan.

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Thursday, October 19, 2017 5:03 PM
To: Jesse Bergevin

Subject: Phase II Arch Work Plan-FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Good afternoon Jesse,

Please find attached for your review and comment the Phase II Archaeological Work Plan for Sidney Green Plain.

Please let me know if you have any questions and thank you again for your continued coordination for this project. I hope the scope addresses your requests. If there is anything missing or of course anything additional please let me know and we will address them.

Thank you again,
Brock

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*

(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]

Sent: Tuesday, October 10, 2017 2:50 PM

To: Giordano, Brock <brock.giordano@fema.dhs.gov>

Subject: RE: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

I will put you on my schedule for Thursday between at 2 pm.

Thank you,

Jesse Bergevin | Historic Resources Specialist

Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662

jbergevin@oneida-nation.org | www.oneidaindiannation.com

315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]

Sent: Tuesday, October 10, 2017 2:46 PM

To: Jesse Bergevin

Subject: RE: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Hi Jesse,

Great. Thank you.

Thursday between 2:00-3:00 would work or Friday the same time 2:00-3:00. Would any of those work for you?

Thank you again,
Brock

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*

(212) 720-9563 desk



FEMA

From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]

Sent: Tuesday, October 10, 2017 2:42 PM

To: Giordano, Brock <brock.giordano@fema.dhs.gov>

Subject: RE: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

I would be available Thursday or Friday to discuss this. Is there a time that is good for you?

Thank you,

Jesse Bergevin | Historic Resources Specialist

Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662

jbergevin@oneida-nation.org | www.oneidaindiannation.com

315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]

Sent: Tuesday, October 03, 2017 3:40 PM

To: Jesse Bergevin

Subject: RE: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Good afternoon Jesse,

We are working with SWCA on the Phase II archaeological work plan. Before submitting I was wondering if you had anything in particular would like to talk over that we can begin to incorporate.

Please let me know if you have any time, perhaps this week, to discuss.

I appreciate your continued coordination.

Thank you,

Brock

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*

(212) 720-9563 desk



FEMA

From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Wednesday, September 06, 2017 1:05 PM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Thank you for the continued updates for this project. The Oneida Indian Nation has no addition comments to offer at this time.

I look forward to reviewing the Phase II work plans, once they become available, and to discussing this project more with you at that time.

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Thursday, August 17, 2017 3:34 PM
To: Jesse Bergevin
Subject: FEMA Continuing Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Dear Jesse:

Please find attached FEMA's continuing consultation submission package for the Sidney Green Plain project. The submission includes the results of Phase IA/IB Archaeological testing report. The attached report summarizes the background research for the project, outlines the methodology used, presents the results of the Phase IA/IB archaeological investigations and provides management recommendations for each of the sites located during the field investigations.

The Phase IB investigation identified the following:

- Several "stray finds" with limited potential to yield educational value;
- Relocated the Wessels Site;
- Relocated the Kowalczyk Site; and
- Recorded three (3) additional sites within the project area:
 - Green Plain 1site,
 - Green Plain 2 site, and
 - Green Plain 3 site (*see Map Index, Figure 10*).

As noted within, the project design and overall scope is still in the developmental stage. Results of the Phase IA/IB have confirmed the presence of Native American occupation throughout the project area. FEMA concurs with SWCA's *Phase IA/IB Archaeological Investigation for the Proposed Sidney Green Plain Project, Delaware County, New York* report and its recommendation for further Phase II archaeological investigation to determine the extents and boundaries of the identified cultural resources within the project APE. The Phase II is recommended to determine the extent of the site both vertical and horizontal limits/boundaries and assess the National Register eligibility of the identified resources. The information gained from the archaeological investigations will be used to inform the project details in order consider alternatives to avoid, minimize, or mitigate affects associated with one or all of the identified sites within the project

area. As a result, a Phase II work plan will be developed to address the additional recommendations proposed. FEMA will submit the Phase II work plan for review and comment prior to commencement of additional archaeological testing.

After you have had an opportunity to review the project materials please let me know if you have any questions or would like to discuss any project details.

Thank you again for your continued coordination.

Sincerely,

Brock Giordano

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*

(212) 720-9563 desk



FEMA

From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]

Sent: Tuesday, June 27, 2017 1:00 PM

To: Giordano, Brock <brock.giordano@fema.dhs.gov>

Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Please find attached a letter regarding this project.

Look forward to discussing this further with you tomorrow.

Thank you,

Jesse Bergevin | Historic Resources Specialist

Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662

jbergevin@oneida-nation.org | www.oneidaindiannation.com

315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]

Sent: Tuesday, June 27, 2017 11:47 AM

To: Jesse Bergevin

Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Hi Jesse,

Yes, that's great. Please call my cell (347) 574-1467.

Thank you again,
Brock

BROCK GIORDANO, RPA

EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II

(347) 574-1467 iphone*
(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Tuesday, June 27, 2017 11:45 AM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Can I call you, just in case I don't make it back from the field in time?

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Tuesday, June 27, 2017 11:43 AM
To: Jesse Bergevin
Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Hi Jesse,

Yes, thank you. Should I call the number below or is it easier for me to set up a conference line. Whatever works for you.

Thank you again,
Brock

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*
(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Tuesday, June 27, 2017 11:28 AM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Would tomorrow at 12 work for you?

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Tuesday, June 27, 2017 8:49 AM
To: Jesse Bergevin
Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Good morning Jesse,

Thank you for getting back to us in regards to this project. I absolutely have time and appreciate it. Below are some times I have open. Please let me know if any of these work. If not, please let me know what works for you and I will schedule accordingly.

Tuesday: 11:00-2:00
Wednesday: 9:00 – 10:30; 12:00-2:00
Thursday: 9:00 – 1:00
Friday: 9:00-11:00

Thank you again and look forward to speaking with you,

Brock

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)
FEMA Region II
(347) 574-1467 iphone*
(212) 720-9563 desk



From: Jesse Bergevin [<mailto:jbergevin@oneida-nation.org>]
Sent: Monday, June 26, 2017 5:57 PM
To: Giordano, Brock <brock.giordano@fema.dhs.gov>
Subject: RE: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Brock,

Would you have some time this week to discuss this project?

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org | www.oneidaindiannation.com
315.829.8463 Office | 315.829.8473 Fax

From: Giordano, Brock [<mailto:brock.giordano@fema.dhs.gov>]
Sent: Monday, June 05, 2017 9:58 AM
To: Jesse Bergevin
Cc: Giordano, Brock
Subject: FEMA Consultation - Sidney GreenPlain, Village of Sidney, Delaware Cty, NY

Dear Ms. Bergevin:

Please find attached the Section 106 (of the National Historic Preservation Act) consultation request for ground disturbance within your Area of Interest for the FEMA HMGP Village of Sidney, Sidney Greenplain project. The project is still in the conceptual stage of design as engineering studies are carried out. At this time, the proposal illustrates four distinct mitigation areas that create a contiguous, 140-acre flood mitigation system. In summary, the project area is located within archaeologically sensitive areas with the potential to yield Native American and historic archaeological resources. As such, FEMA has requested an archaeological survey of the project's Area of Potential Effects (APE). The goal of the field survey is to identify any previously undocumented cultural resources within the project area, as well as identify the current condition and horizontal boundaries of the previously recorded sites within the APE. The archaeological survey will include a combined Phase IA/IB field survey consisting of a systematic walk-over survey of the entire project APE and archaeological shovel testing in known locations of previously recorded archaeological sites, as well as positive surface finds. Additional shovel testing will be implemented in areas which typically yield archaeological resources based on topography and site characteristics at the discretion of the qualified archaeologist. All work will be conducted by consultants who meet the Secretary of Interior (SOI) qualifications for archaeology. Please see attached consultation with all the project and reporting details at this time.

Please contact me with any questions or comments at any time. I am happy to discuss the project details and recommendations for archaeological survey.

Sincerely,

Brock Giordano

BROCK GIORDANO, RPA
EHP Supervisor (NY Sandy, DR-4085)

FEMA Region II
Mitigation Division/EHP
One World Trade, Suite 53
New York, NY 10007
(347) 574-1467 iphone*
(212) 720-9563 desk
Email: brock.giordano@fema.dhs.gov

Mailing Address
26 Federal Plaza, 13th Floor
New York, NY 10278-0002





U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA Region II
One World Trade Center
285 Fulton Street
New York, New York 10007

FEMA

September 2, 2020

R. Daniel Mackay
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Project Number: FEMA-DR-4085-NY-0060/2499
Recipient/Sub-Recipient: NYS DHSES/Village of Sidney
Location: Village of Sidney, New York, (42.312743, -75.404987)
Undertaking: Development of the Sidney Green Plain
SHPO ID: 17PR03813

Dear Mr. Mackay:

This is continuing consultation pursuant to Section 106 of the National Historic Preservation Act for the Undertaking identified above. The Federal Emergency Management Agency (FEMA) will be providing funds authorized through the Hazard Mitigation Grant Program (HMGP) in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended.

This letter provides FEMA's response to SHPO's request for information stated: *"Please provide information regarding the Wessels Site (02540.000215). Is it to be avoided? If not, then further investigation is needed in order to assess its National Register eligibility."*


The Wessels Site will be avoided by all project related construction activities. The site is located on private land, west of New York Route 8. It is outside the area that will be converted into green infrastructure, so will not be directly impacted by the proposed project. Since the completion of the Phase IB, the private property owner has made it clear that he and his land will not be part of this project. The nearest culvert that will be installed to move water underneath New York Route 8 is located 800 feet away from the site. Additionally, due to cultural resource concerns associated with the Kowalczyk site, an archaeological monitor will be present to supervise all ground disturbance during the construction of the project.

The results of the Phase II archaeological investigation resulted in a FEMA determination that the Undertaking will be No Adverse Effect to Historic Properties with Conditions (FEMA letter dated March 3, 2020). The condition includes archaeological monitoring during construction. No construction may begin prior to FEMA and SHPO concurrence on the Archaeological Monitoring Plan. As part of this notification, the avoidance of the Wessels Site will also be detailed in the Archaeological Monitoring Plan.

If you have any questions or require any additional information, please contact archaeologist Brock Giordano at brock.giordano@fema.dhs.gov or by phone at 347-574-1467.

Sincerely,

**BROCK A
GIORDANO**

 Digitally signed by BROCK A
GIORDANO
Date: 2020.09.02 13:28:02
-04'00'

Brock Giordano, RPA
FEMA EHP Supervisor, NY Sandy
DR-4085-NY

BG/jz

cc: Stephanie Couture, NYS Division of Homeland Security & Emergency Services
Jonathan R. Libbon, SWCA Environmental Consultants



**Parks, Recreation,
and Historic Preservation**

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 04, 2020

Mr. James Zwolak
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA
FEMA- Sidney Green Plain
Village of Sidney, Delaware County, NY
17PR03813
HMGP 4085-0060/ NY-2499

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

SHPO has reviewed additional information provided by FEMA (Giordano, 3 March 2020 and 2 September 2020). Based on this and previously submitted materials, we concur with FEMA's determination that the proposed undertaking will have No Adverse Effect to Historic Properties with Conditions. Please submit the Archaeological Monitoring Plan for review and comment prior to the start of construction.

If you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, reading "Philip A. Perazio".

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit

Phone: 518-268-2175

e-mail: philip.perazio@parks.ny.gov

via e-mail only

cc: Brock Giordano, FEMA
Jonathan Libbon and Seth Mitchell, SWCA
Stephanie Couture and Brad Stevens, DHSES



**Parks, Recreation,
and Historic Preservation**

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 04, 2020

Mr. James Zwolak
FEMA
285 Fulton Street
New York, NY 10007

Re: FEMA
FEMA- Sidney Green Plain
Village of Sidney, Delaware County, NY
17PR03813
HMGP 4085-0060/ NY-2499

Dear Mr. Zwolak:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

SHPO has reviewed additional information provided by FEMA (Giordano, 3 March 2020 and 2 September 2020). Based on this and previously submitted materials, we concur with FEMA's determination that the proposed undertaking will have No Adverse Effect to Historic Properties with Conditions. Please submit the Archaeological Monitoring Plan for review and comment prior to the start of construction.

If you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, reading "Philip A. Perazio".

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit

Phone: 518-268-2175

e-mail: philip.perazio@parks.ny.gov

via e-mail only

cc: Brock Giordano, FEMA
Jonathan Libbon and Seth Mitchell, SWCA
Stephanie Couture and Brad Stevens, DHSES