Environmental Assessment
Community Development Block Grant - Disaster Recovery
Hazard Mitigation Grant Program
Global Match Acquisition & Elevation

Village of Sidney and Sidney Center
Delaware County, New York
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Table of Contents

1.0 Introduction 1
2.0 Purpose and Need 2
3.0 Background 2
4.0 Alternatives 4
4.1 Alternatives Considered in this EA 5
4.1.1 No Action Alternative 5
4.1.2 Proposed Action 6
4.2 Alternatives Considered and Dismissed from Further Analysis in this EA 7
4.2.1 Home Re-Location Alternative 7
4.2.2 Acquisition and Demolition Alternative 7
4.2.3 Elevation Alternative 8
4.2.4 Infrastructure Alternatives 9
5.0 Affected Environment and Environmental Consequences 11
5.1 Topography, Soils, and Geology 14
5.1.1 Existing Conditions 14
5.1.2 Potential Impacts and Proposed Mitigation 15
5.2 Land Use and Zoning 16
5.2.1 Existing Conditions 16
5.2.2 Potential Impacts and Proposed Mitigation 17
5.3 Water Resources and Water Quality 18
5.3.1 Existing Conditions 19
5.3.2 Potential Impacts and Proposed Mitigation 19
5.4 Wetlands 20
5.4.1 Existing Conditions 20
5.4.2 Potential Impacts and Proposed Mitigation 20
5.5 Floodplains 21
5.5.1 Existing Conditions 21
5.5.2 Potential Impacts and Proposed Mitigation 21
5.6 Vegetation 21

5.6.1 Existing Conditions 21
5.6.2 Potential Impacts and Proposed Mitigation 22
5.7 Wildlife and Fisheries Habitat 22
5.7.1 Existing Conditions 22
5.7.2 Potential Impacts and Proposed Mitigation 23
5.8 Threatened and Endangered Species and Critical Habitat 23
5.8.1 Existing Conditions 24
5.8.2 Potential Impacts and Proposed Mitigation 24
5.9 Cultural Resources 25
5.9.1 Existing Conditions 25
5.9.2 Potential Impacts and Proposed Mitigation 25
5.10 Aesthetics and Visual Resources 26
5.10.1 Existing Conditions 26
5.10.2 Potential Impacts and Proposed Mitigation 27
5.11 Socioeconomic Resources 27
5.11.1 Existing Conditions 27
5.11.2 Potential Impacts and Proposed Mitigation 28
5.12 Environmental Justice 30
5.12.1 Existing Conditions 30
5.12.2 Potential Impacts and Proposed Mitigation 31
5.13 Air Quality 31
5.13.1 Existing Conditions 31
5.13.2 Potential Impacts and Proposed Mitigation 31
5.14 Contaminated Materials 32
5.14.1 Existing Conditions 32
5.14.2 Potential Impacts and Proposed Mitigation 32
5.15 Noise 33
5.15.1 Existing Conditions 34
5.15.2 Potential Impacts and Proposed Mitigation 34
5.16 Traffic 35
5.16.1 Existing Conditions 35

5.16.2 Potential Environmental Impacts 35
5.17 Infrastructure 35
5.17.1 Existing Conditions 35
5.17.2 Potential Impacts and Proposed Mitigation 36
5.18 Public Health and Safety 36
5.18.1 Existing Conditions 36
5.18.2 Potential Impacts and Proposed Mitigation 36
5.19 Climate Change 36
5.19.1 Existing Conditions 37
5.19.2 Potential Impacts and Proposed Mitigation 37
5.20 Cumulative Impacts 38
6.0 Permits and Project Conditions 42
7.0 Public Involvement 44
8.0 Conclusion 50
9.0 List of Preparers 50
10.0 References 51

LIST OF TABLES

Table 1 Summary of Potential Environmental Impacts and Mitigation 12

LIST OF APPENDICES

Appendix A **Project Figures, Maps, and Plans**
Appendix B **Correspondence**
Appendix C **SEQRA Environmental Evaluation**
Appendix D **Floodplain Management Plan Eight-Step Review Process**
Appendix E **Programmatic Agreement**
Appendix F **Environmental Review Record**
Appendix G **Public Comments**

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
AD	Area of Disturbance
amsl	Above Mean Sea Level
APE	Area of Potential Effect

AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BFE	Base Flood Elevation
BMP	Best Management Practices
CAA	Clean Air Act
CDBG-DR	Community Development Block Grant – Disaster Recovery
CDC	Centers for Disease Control and Prevention
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
dBA	Decibels
DHSES	New York State Department of Homeland Security and Emergency Services
DRP	Data Recovery Plan
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
EO	Executive Order
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPMS	Floodplain Management Services
FPPA	Farmland Protection Policy Act
GOSR	Governor's Office of Storm Recovery
HMGP	Hazard Mitigation Grant Program
HUD	United States Department of Housing and Urban Development
IMPLAN	Impact Analysis for Planning
IPaC	Information for Planning and Conservation
IPCC	Intergovernmental Panel on Climate Change
Ldn	Day Night Noise Level
Leq	Equivalent Noise Level
LTCR	Long Term Community Recovery Plan
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NASS	National Agricultural Statistics Service
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHP	Natural Heritage Program
NLEB	Northern Long-Eared Bat
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRE	National Register Eligible

NRHP	National Register of Historic Places
NRL	National Register Listed
NWI	National Wetlands Inventory
NYCDEP	New York City Department of Environmental Preservation
NYNHP	New York Natural Heritage Program
NYRCR	New York Rising Community Reconstruction
NYS	New York State
NYSBC	New York State Building Code
NYSDEC	New York State Department of Environmental Conservation
NYSDHSES	New York State Division of Homeland Security and Emergency Services
NYSECL	New York State Environmental Conservation Law
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation
OSHA	Occupational Safety and Health Administration
PAF	Public Archaeology Facility
PM	Particulate Matter
QEP	Qualified Environmental Professional
RCRA	Resource Conservation and Recovery Act
RRP	Repair, Renovation, and Painting
SCO	Soil Cleanup Objectives
SEQRA	State Environmental Quality Review Act
SF	Square Foot
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SPDES	State Pollutant Discharge Elimination System
SPL	Sound Pressure Level
SVOC	Semi-Volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Office
TSP	Total Suspended Particulate
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile Organic Compounds
WBDG	Whole Building Design Guide
WEG	Wind Erodibility Group

1.0 Introduction

Delaware County, herein referred to as the "Subgrantee", has submitted a Hazard Mitigation Grant Program (HMGP) application to the U.S. Department of Homeland Security-Federal Emergency Management Agency (FEMA) for the elevation or acquisition and demolition of 136 residential structures, 134 of which are located in the Village of Sidney and 2 of which are located in Sidney Center (the "Proposed Action"). If approved, New York State (State) proposes to cover 100% of the cost associated with the Proposed Action with Community Development Block Grant—Disaster Recovery (CDBG-DR) funds. Based on an agreement between the State and FEMA, CDBG-DR funding will be credited toward the 25% non-federal matching share required under HMGP. This "Global Match Strategy" will capitalize on the portfolio of projects managed by the Governor's Office of Storm Recovery (GOSR) that meet HMGP match requirements, and in so doing identified projects eligible for both CDBG-DR and HMGP funds that create programmatic, policy, and administrative efficiencies for the State's recovery from Hurricane Irene and Tropical Storm Lee.

The Proposed Action would entail a combination of elevating structures located within the Special Flood Hazard Area and acquiring and demolishing structures located in high-risk areas within the Special Flood Hazard Area, all of which were damaged due to flooding. Hurricane Irene and Tropical Storm Lee were declared major disasters by President Barack H. Obama on August 31, 2011 and September 13, 2011, respectively, and subsequently amended (FEMA 4020-DR-NY and FEMA 4031-DR-NY). In the wake of Hurricane Irene and Tropical Storm Lee, along with other disasters that occurred nationwide in 2011, Congress appropriated funding in the Federal Fiscal Year 2011-2012 (FY 11-12) Budget for the Housing and Urban Development (HUD) Community Development Block Grant—Disaster Recovery (CDBG-DR) program. Section 239 of Public Law 112-55 (the Appropriations Act) enacted on November 18, 2011, appropriated $400 million through the CDBG-DR program to address necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing in disaster-impacted Counties. On April 16, 2012, HUD published Federal Register Notice 5628-N-01, which established the requirements and processes for $71,654,116 in Federal CDBG-DR aid to the State. Under the CDBG-DR program, the State has established a number of individual programs to provide assistance for housing, economic development, resilience and retrofit, community planning and redevelopment, and public infrastructure. In addition, the State has created a matching program that utilizes CDBG-DR funds to cover the local matching requirement for several Federal funding sources, including HMGP.

HMGP, as administered by the New York State Department of Homeland Security and Emergency Services (DHSES) in cooperation with FEMA, is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (the Stafford Act), Title 42, United States Code (U.S.C.) 5170c, and implementing regulations at 44 CFR 206 subpart N. It provides grants to eligible applicants to implement long-term hazard mitigation measures that reduce the risk of loss of life and property from future disasters. Eligible risk reduction activities include property acquisition and structure demolition for purposes of open space, as well as elevation of structures in the floodplain.

As a federal agency, FEMA is required to evaluate the potential environmental impacts of its Proposed Actions and alternatives to Proposed Actions, in order to make an informed decision in

defining a proposed project for implementation. As "responsible entity" for HUD under 24 CFR 58.4, GOSR shares these National Environmental Policy Act (NEPA) of 1969 responsibilities. FEMA and GOSR must consider and incorporate, to the extent practicable, measures to avoid, minimize or mitigate adverse impacts to the human environment. The environmental analysis is conducted in compliance with NEPA, the President's Council on Environmental Quality (CEQ) regulations implementing NEPA at 40 Code of Federal Regulation (CFR) Parts 1500-1508, FEMA's regulations at 44 CFR Part 10, and HUD's regulations at 24 CFR Part 58. FEMA and GOSR complete environmental reviews for projects prior to grant approval.

For the purposes of this NEPA environmental review, HUD/GOSR is serving as the Lead Agency and FEMA is serving as a Cooperating Agency. This Environmental Assessment (EA) serves as documentation of GOSR's and FEMA's analysis of the potential environmental impacts of the Proposed Action, including analysis of project alternatives and identification of impact minimization measures. The document serves as written communication of the environmental evaluation for public and interested party comment. Public involvement is a component of NEPA to inform an agency's determination of whether to prepare an Environmental Impact Statement (EIS) or issue a Finding of No Significant Impact (FONSI).

2.0 Purpose and Need

FEMA's Hazard Mitigation Grant Program provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the Hazard Mitigation Grant Program (HMGP) is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. HUD's Community Development Block Grant – Disaster Recovery (CDBG-DR) program provides grants to rebuild areas affected by Presidentially declared disasters. The purpose of the CDBG-DR program is to assist rebuilding and recovery efforts in communities and neighborhoods that have limited resources to allocate to such programs.

The purpose of FEMA, HUD, and GOSR involvement in the Sidney Global Match Acquisition and Elevation program is to leverage these programs (HMGP and CBDG-DR) in order to reduce the loss of life and property and to assist in the rebuilding and recovery efforts in the community.

The Village of Sidney and Sidney Center are seeking assistance from these programs to implement mitigation measures to reduce the risks of loss of life and property due to storms. The need for this project is due to the significant flood damage sustained to homes in the Village of Sidney and Sidney Center as a result of Tropical Storm Lee, as well as a significant flooding event in 2006 (DR-1650). As demonstrated by past storm events, residential structures in the floodplain are vulnerable to on-going flooding events. Implementation of the proposed mitigation measures is intended to reduce the risks to structures in the floodplain and to bring the community into greater compliance with NFIP standards.

3.0 Background

Flooding in Sidney from Tropical Storm Lee began on September 7, 2011, in the form of flash flooding of the smaller streams and tributaries. Flooding was especially severe along Weir Creek, which runs steeply down through the hillside neighborhoods south of the railroad and flows under Delaware Avenue. Weir Creek's natural channel had previously been altered to

make a 90-degree turn west and flooding overwhelmed the channel. The flooding of Weir Creek and other tributaries washed out roads and culverts, as well as flooded more than 400 homes and businesses.

The Susquehanna River overflowed its banks when the tributaries began to drain and overwhelmed the Susquehanna's main stem. According to the NY Rising Community Reconstruction (NYRCR) Sidney – NY Rising Community Reconstruction Plan ("Sidney Reconstruction Plan"), "this occurred in part because of a narrowing of the river over time, with more than 50% of the river's conveyance capacity lost because of sediment and deposited debris. The quantity of water overwhelmed the valleys and infrastructure, creating a series of pinch points at NY State Route 8 and the Main Street Bridge that did not allow the water to drain through to the river's flood plain." The Susquehanna River crested on September 11, 2011, but was slow to recede leaving some areas under water for as much as a week.[1]

In Sidney, village officials estimated that at least 422 buildings were flooded. One-hundred percent of the buildings in the 100-year floodplain (262 properties, housing approximately 1,200 residents) and 60% of the properties in the 500-year floodplain flooded (167 properties and approximately 900 residents).[2]

The geographic scope for the Proposed Action is the Village of Sidney and Sidney Center, both of which are located in the Town of Sidney, in the northwest corner of Delaware County, NY, in the foothills of the Catskill Mountains. They are bounded by Chenango County to the west, Otsego County to the north, the Towns of Masonville and Walton to the south, and the Town of Franklin to the east. The Village of Sidney is situated on the south side of the Susquehanna River, at its confluence with the mouth of the Unadilla River (See Appendix A, Figures A-1 and A-2). The portion of the Village most affected by the 2006 flooding event and Tropical Storm Lee were those properties located in the 100-year floodplain (see Appendix A, Figure A-3). In particular, the neighborhood bounded by NYS Route 8 to the west, the railroad tracks to the south, and the Susquehanna River to the north and east were particularly affected by the flooding. These areas, as well as three additional properties south of the railroad tracks and two properties in Sidney Center are included in the Proposed Action for elevation or acquisition and demolition (see Appendix A, Figure A-2). All except the two properties in Sidney Center are located within the Village of Sidney National Register Historic District.

In addition to preparation of the Sidney Reconstruction Plan, the NY Rising Community Reconstruction Program created the NYRCR Sidney Planning Committee to establish a democratic, bottom-up approach to rebuilding the Sidney community in a resilient manner. The NYRCR Sidney Planning Committee engaged the public through open Committee Meetings, public workshops, open houses and neighborhood workshops. The outreach process built on the overlapping NYS Long Term Community Recovery Plan (LTCR Plan), which included a 3-day design workshop, multiple public events, interviews, and focus groups. In January 2014, a public outreach event in support of the NYRCR Plan gathered over 150 residents from the most

[1] NYRCR Sidney – NY Rising Community Reconstruction Plan, March 2014
[2] NYRCR Sidney – NY Rising Community Reconstruction Plan, March 2014

vulnerable riverfront neighborhood. The Village met with more than 60 families, confirming their interest in relocation to a safe new neighborhood. Working with GOSR, the Village hosted an open house and over 50 families applied for housing assistance or buyouts.[3]

Sidney's participation in the NYRCR Program offers access to up to $3 million in Community Development Block Grant Disaster Recovery funds to help implement its vision for a resilient future. As part of the NYRCR program, Sidney is pursuing new approaches, especially best practices in green infrastructure to keep residents safe. The NYRCR-Sidney Planning Committee selected 20 proposed and featured recovery projects. The projects are directly linked to the strategies and cover the entire range of Recovery Support Functions of the National Disaster Recovery Framework. Some of these projects, including the Riverlea Housing project and the Sidney "GreenPlain," assume that homeowners in the most flood-prone areas of the Village of Sidney would be eligible for acquisition and demolition assistance and would relocate to flood-safe areas.

The initial project application to the CDBG-DR program proposed to acquire and demolish all 136 properties within the project area, many of which are located in the Sidney Historic District. As a result of the Section 106 review, discussed in Section 5.9 of this EA, and after consulting with residents of the Village of Sidney, Delaware County and GOSR revised the project application to include the option of funding elevations for homeowners in a portion of the Project Area. Delaware County is currently modifying the scope of work in the HMGP application to include both the elevation and acquisition and demolition options available to homeowners. The acquisition and demolition of homes within the Sidney Historic District has been determined to be an Adverse Effect on cultural resources. As a result, this EA and the Programmatic Agreement discussed in Section 5.9 of this EA have been executed and filed with the Advisory Council on Historic Preservation (ACHP) in an effort to mitigate that adverse effect.

This EA may be further amended should applicants withdraw or be withdrawn from the program and substitute applicants or supplemental applicants be added within the project area boundary. Should such a re-evaluation occur, the property list attached to the NHPA Section 106 Programmatic Agreement entered into by the parties must be amended accordingly.

4.0 Alternatives

NEPA requires the analysis of practicable alternatives as part of the environmental review process for the Proposed Action. Inclusion of a No Action Alternative in the environmental analysis and documentation is required under NEPA. The No Action Alternative is used to evaluate the effects of not providing federal financial assistance for the project, thus providing a "without project" benchmark against which "action alternatives" may be evaluated. After consideration of the following alternatives, GOSR and FEMA have determined that the best practicable alternative is the Proposed Action. The alternative actions considered are as follows:

[3] NYRCR Sidney – NY Rising Community Reconstruction Plan, March 2014

4.1 Alternatives Considered in this EA

4.1.1 No Action Alternative

Under the No Action alternative, the funding for the proposed elevation or acquisition and demolition of the 134 Village of Sidney, and two Sidney Center, residential properties in high flood risk areas of the project area would not be authorized. There would be no elevation or purchase of properties.

Homeowners would not relocate outside of the high flood risk areas. The storm attenuation characteristics of the floodplain would not be improved, as such, the community located in the floodplain would be at continued risk of flood damage. Under the No Action alternative, the flood damaged and destroyed residential properties would remain under their current ownership and at their current elevations.

The homeowners would be responsible for the repair and rehabilitation of their properties. The homeowners may apply for other programs for financial assistance in the repair and rehabilitation of their properties that were damaged or destroyed by the storms. While these assistance programs include financial support and requirements for resiliency upgrades for the individual properties that would reduce the potential damage from future storms, these homeowners and their properties would continue to be susceptible to future flooding and other damage resulting from future storm events due to their location in the flood area. The communities' storm attenuation characteristics would remain the same.

The extreme risk neighborhoods in the Village's 500- and 100-year floodplains have deteriorated physically and lost value since 2006. Between those properties in the various buyout programs, and those vacant or abandoned, some Sidney residential streets are largely empty and raise serious concerns for long-term viability. The homes in this neighborhood sell for far less than their pre-storm value, and this trend is expected to continue.[4]

Without any financial assistance, depending on motivations of owners and their willingness and/or ability to access resources to repair and upgrade homes and properties, there is potential that repairs would be limited, not completed to current building codes, and would not include resiliency measures (e.g., elevating their homes), leaving their properties more vulnerable to future flooding conditions. Therefore, the No Action alternative would not address GOSR's need to reduce the potential for loss of life and property during future storm events.

Overall, the No Action alternative would be less consistent with local land use, zoning, and public policy objectives than the Proposed Action. Compared with the Proposed Action, it would have the potential for adverse impacts to economic conditions, community character, and cultural and visual resources. Similar to the Proposed Action, the No Action Alternative would not be anticipated to result in potential impacts to natural resources, water resources, air quality, energy consumption, noise, or hazardous materials.

[4] NYRCR Sidney – NY Rising Community Reconstruction Plan, March 2014

4.1.2 Proposed Action

Under the Proposed Action, individual property owners in the Village of Sidney would either be given assistance to elevate their homes or their homes would be acquired and demolished. Participation in the elevation and acquisition and demolition programs would be voluntary.

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. This assistance would include financial support and requirements for resiliency upgrades to the individual properties that would reduce the potential damage from future storms. As part of the Proposed Action, homes would be elevated so that their lowest floor was at least two feet above the Base Flood Elevation (BFE). The elevation area is identified as those properties east of approximately 70 River Street (see Appendix A, Figure A-4). Participation in the elevation program would be voluntary. Although the total number of properties to be elevated is yet to be determined, it is estimated based on community input and preliminary interest that at least 35 homes and as many as 74 homes would be elevated as part of the Proposed Action. Properties in this area are given the option of elevation as they are located in the oldest portion of the Village of Sidney Historic District and are the least prone to flooding among those properties within the 100-year floodplain. This area is also nearer to the Village's existing commercial corridor along Main Street. Under the Proposed Action, GOSR would provide up to 100% of the cost of the HMGP-approved elevation as a part of its global match financing strategy.

In addition, the Proposed Action would fund the acquisition and demolition of properties in the Camp Street Neighborhood west of approximately 70 River Street in the Village of Sidney (see Appendix A, Figure A-4) 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 Proposed Action. The Village of Sidney properties proposed for acquisition and demolition are located in the areas most susceptible to flooding, and are not located within the older portion of the Village of Sidney Historic District. In addition, elevations in this area are constrained by the presence of the Sidney Municipal Airport and potential environmental contamination from a plume associated with the nearby Amphenol property.[5]

Participation in the acquisition and demolition program would be voluntary. Delaware County would not use its power of eminent domain to force any homeowner to sell their property. After acquisition, the County would demolish all structures (including walkways, paved driveways, and patios), foundations would be removed, and clean suitable fill would be brought in to fill the basements. Topsoil would then be placed over the sites, and they would be re-graded and seeded in a manner consistent with limiting site disturbance. The scope of work does not specifically include tree or shrub removal; however, minimal incidental removal of woody vegetation may be necessary for equipment access or as a result of the vegetation's close proximity to the foundation of the structure to be demolished. After demolition and site reclamation, the

[5] NYSDEC Environmental Site Remediation Database Site Code 413018

properties would be turned over to the Village of Sidney and Sidney Center to maintain as open space. All open space compatible uses would be in accordance with FEMA requirements under the HMGP requirements set forth in 44 CFR Part 80.

In the Proposed Action, the acquired property on which homes were demolished would remain in Village of Sidney or Town of Sidney (for the Sidney Center properties) ownership, and may be used for passive recreation or other uses that require minimal site improvement and investment. The Sidney Reconstruction Plan recommends the development of a 140-acre "GreenPlain" to transform vacated neighborhoods into a high-capacity, green infrastructure floodplain that would handle millions of gallons of floodwater and use natural areas to improve water quality. While this use would conform to the land use restrictions prescribed for the Camp Street Neighborhood acquisition and demolition properties, the review of this potential future project would be evaluated under NEPA at such time that the scope of the project has been more fully formulated. Additionally, future uses of deed-restricted land would require approval by the FEMA Regional Administrator.

4.2 Alternatives Considered and Dismissed from Further Analysis in this EA

4.2.1 Home Re-Location Alternative

Under this alternative, homes with enough structural integrity to endure relocation would be detached from their foundations, lifted onto mobilized platforms, and relocated to a new site outside of the floodplain. The new site would be appropriately excavated and/or graded, footers would be placed, and new foundations capable of receiving the re-located structure would be constructed. Re-located homes would be placed onto their new foundation and secured. This alternative requires new site work and ground disturbing activities, potential extension of infrastructure such as water, sewer and electric connections, and also requires willing homeowners to purchase property to receive the structure prior to re-locating their home.

The Village of Sidney is exploring the possibility of annexing land outside the current village boundaries for the construction of new homes and/or for the relocation of existing flood-prone structures. Some Sidney property owners have expressed interest in relocating their homes rather than having them acquired and demolished or elevated. However, a relocation site with required infrastructure is currently not available. Should such a site become available in the future, properties that have not been demolished might be candidates for relocation. If state and/or federal funding is available in the future to support development of a new site and to relocate structures, additional state and federal environmental reviews would be undertaken at that time. This EA does not address, but also does not preclude, the future possibility of individual property owners removing houses or other structures from their properties acquired by Delaware County and relocating them to new sites through another grant program or funding mechanism.

4.2.2 Acquisition and Demolition Alternative

The acquisition and demolition alternative (without offering the elevation option - "Proposed Action" would fund the purchase of the identified 134 properties in the Village of Sidney and two properties in Sidney Center (see Appendix A, Figure A-2) by Delaware County. Participation in the acquisition and demolition program would be voluntary. Delaware County would not use its power of eminent domain to force any homeowner to sell their property. After

acquisition, the County would demolish all structures (including walkways, paved driveways, and patios), foundations would be removed, and clean suitable fill would be brought in to fill the basements. Topsoil would then be placed over the sites, and they would be re-graded and seeded in a manner consistent with limiting site disturbance. The scope of work does not specifically include tree or shrub removal; however, minimal incidental removal of woody vegetation may be necessary for equipment access or as a result of the vegetation's close proximity to the foundation of the structure to be demolished. After demolition and site reclamation, the properties would be turned over to the Village of Sidney and Sidney Center to maintain as open space. All open space compatible uses would be in accordance with FEMA requirements under the HMGP requirements.

As part of this alternative, the acquired property where the homes were demolished would remain in Village of Sidney and Sidney Center ownership, and may be used for passive recreation or other uses that require minimal site improvement and investment. The Sidney Reconstruction Plan recommends the development of a 140-acre "GreenPlain" to transform vacated neighborhoods into a high-capacity, green infrastructure floodplain that would handle millions of gallons of floodwater and use natural areas to improve water quality. While this use would conform to the land use restrictions prescribed by this alternative, the review of this potential future project would be evaluated under NEPA at such time that the scope of the project has been more fully formulated. Additionally, future uses of deed-restricted land would require approval by the FEMA Regional Administrator.

4.2.3 Elevation Alternative

Under this alternative, all individual property owners within the project area would receive assistance to elevate their homes in their original locations and would not be eligible to receive acquisition and demolition assistance. The elevation assistance would include financial support and requirements for resiliency upgrades to identified individual properties that would reduce the potential damage from future storms. Under this alternative, homes would be elevated so that their lowest floor was at least two feet above the Base Flood Elevation.

After the 2011 floods, Delaware County retained an engineering firm to evaluate the feasibility of elevating 45 homes in anticipation of seeking grant funding. The results of the analysis indicated homes would need to be elevated an additional two to as much as 6.5 feet, at costs estimated between $29,000 and $87,000. It was also determined that some homes were not suitable for elevation due to existing deficiencies in structural integrity. Further analysis indicated that some of the homes within the identified project area would require elevation of greater than 8 feet, which would decrease accessibility of homes. Given the aging population in Delaware County, this is particularly undesirable for some residents.

In addition, approximately 10 homes within the Project Area are located within the Sidney Municipal Airport Runway Protection Zone. Pursuant to 24 CFR Part 51D, it is HUD's general policy to apply standards to prevent incompatible development around civil airports and military airfields. HUD-assisted construction or major rehabilitation of any property located in a Runway Protection Zone is prohibited for a project to be frequently used or occupied by people. As such, HUD regulations would preclude the elevation of the homes located within the Sidney Municipal Airport Runway Protection Zone (see Appendix A, Figure A-5).

This alternative would not provide significant community resiliency as many homes in those areas most at risk of flooding would continue to be susceptible to flooding, and first responders and public works employees would still be required to remain on call before, during, and after flood events.

A public information session was held on September 24, 2015, in which homeowners indicated that elevation may be preferable for some homeowners outside of the most at-risk flood hazard area but that elevation is not suitable for all homeowners in the project area. The partial interest in homeowner elevation was confirmed through subsequent meetings with individual homeowners. Given the structural, accessibility, Airport Runway Protection Zone, and first responder concerns in conjunction with homeowner preference, it was concluded that elevation of all homes within the project area is not a suitable alternative. However, elevation of some homes, as proposed in the Proposed Action, addresses many of these concerns and responds to homeowner preferences.

4.2.4 Infrastructure Alternatives

After flooding in 2006, the Planning Division of the U.S. Army Corps of Engineers (USACE) Baltimore District initiated a flood risk analysis of the Village of Sidney as part of its Floodplain Management Services (FPMS) Program. The FPMS Program is authorized by Section 206 of the Flood Control Act of 1960, as amended, and provides technical services and planning guidance to federal and non-federal entities on floods and floodplain issues.

The study analyzed the flooding problem in two areas of the Village: (1) the area north of the D&H Railroad, which is subject to flooding from the Susquehanna River ("the Susquehanna Area"); and (2) the "Weir Creek (Amphenol Area)" south of the D&H Railroad, which is subject to flooding from Weir Creek. Most of the properties proposed for acquisition/demolition are located in the Susquehanna Area, which is the focus of this section of the EA.

The USACE evaluated a variety of flood risk reduction alternatives in an attempt to identify measures that would mitigate future flooding from the 1% annual chance (100-year) flood. Hydraulic modelling was used to estimate changes in 100-year flood elevation that might result from each alternative. General cost estimates were developed based on other similar projects. Detailed engineering and Benefit-Cost Analyses were not part of the study scope of work.[6]

The following alternatives were evaluated for the Susquehanna Area:

- **Levee/floodwall system**. This alternative would require the construction of a levee/floodwall system 8,500 feet in length, with an average height of 10 feet, and an average base width of 60 feet for the levee and 12-15 feet for the floodwall. In order to function, this alternative would require installation of a flap gate for Weir Creek; flap gate and check valve for the Sidney Wastewater Treatment Plant; a closure structure for

[6] "Flood Risk Management Analysis, Village of Sidney, Delaware County, NY" August 2010, prepared by U.S. Army Corps of Engineers Baltimore District.

the Main Street Bridge; acquisition of approximately 20 properties; four pump stations; and removal of vegetation to create a 15-foot vegetative-free zone on either side.

The levee/floodwall alternative was the only alternative to significantly reduce flooding in Sidney. However, flooding would increase slightly across the river in Unadilla Township (approximately 0.5 feet increase for a 100-year flood.) The estimated cost of this alternative is between $35 to $50 million, which does not take into account the cost of purchasing and transporting earthen materials for the levee should soil tests determine that local geology is not suitable for the levee structure. Environmental concerns include removal of hundreds of trees along the Susquehanna, increased flood levels in Unadilla, wetlands impacts, and aesthetics. Approximately 20 properties would need to be acquired. Operating and maintenance costs are high for this alternative.

- **Increasing hydraulic capacity under the State Route 8 Bridge**. This alternative would increase flow capacity of the Susquehanna at a point of constriction. This would require installation of two additional piers to increase the bridge deck and girder length. The existing embankment would be excavated to make room for the new deck. In addition, channelization of the river would be required. This alternative would reduce 100-year flood elevations upstream of the bridge between 0.3 and 0.5 feet which is insufficient to reduce significant flood damages in Sidney. Environmental concerns include impacts to wetlands, disturbance of some plant and animal species. Approximately 80 buildings would need to be removed. The cost of this alternative was not estimated.

- **Diversion of the Unadilla River Channel**. This alternative would divert the Unadilla River from its current confluence with the Susquehanna just upstream of the State Route 8 Bridge to an old channel downstream of the bridge. The project design would include a 700 ft. long floodwall, one new bridge, one bridge enlargement, a few property buyouts, and dredging an old oxbow channel. Diversion of the river would reduce 100-year flood elevations by an average of 0.6 feet, which is insufficient to reduce flood damages to most structures in Sidney. The cost would be between $15 million and $25 million, not including the floodwall component or a new bridge that would be needed. Environmental concerns include impacts to wetlands and fish habitat.

- **Channelization/dredging of the Susquehanna**. This would require dredging and channelization from a point about 400 feet upstream of the Main Street Bridge to a point 1,400 feet downstream of the Route 8 Bridge, a distance of about 7,500 feet. The goal would be to decrease flood elevations by increasing channel capacity and velocity. Two large islands and several sand bars would be removed and concrete would be used to line the channel under the Main Street and State Route 8 bridges to prevent erosion around the abutments. Wing walls would be installed upstream and downstream of the bridge.

  This alternative would result in a decrease in the 100-year flood elevation by an average of 0.8 feet, which is insufficient to significantly reduce flood damages in Sidney. The cost of this alternative was estimated at between $12 and $14 million. Environmental concerns include impacts to wetlands and fish and wildlife habitat and removal of large trees. Downstream impacts were not evaluated in detail. It's possible this alternative would have an adverse effect on downstream communities due to the increased flows and

velocity. Approximately 80 buildings would need to be removed.

- **Main Street Bridge improvements**. This alternative involves increasing the hydraulic capacity of the bridge to reduce flood elevations caused by backwater flooding upstream. The bridge opening would be increased horizontally and vertically to expand capacity. A permanent trapezoidal channel would be created similar to the one for the channelization alternative. In addition, the bridge deck would be raised approximately two feet. Improvements to the Main Street Bridge provide minimal reduction in the 100-year flood elevation (0.0 to 0.1 ft. decrease). Costs were not estimated due to the minimal benefits of this alternative.

The overall conclusion of the USACE study was that the levee/floodwall alternative would be the only feasible alternative that would eliminate flooding during a 100-year storm event for the portion of the Village of Sidney upstream of the Route 8 Bridge. However, this would be extremely expensive to construct, would have high operating and maintenance costs, would have environmental impacts, and would cause a slight increase in flooding in Unadilla Township. Environmental impacts would include impacts to hundreds of trees along the Susquehanna River, significant ground disturbance in an archeologically sensitive area, and potential wetlands impacts. This alternative would also require land acquisition, as approximately 20 homes are in close proximity to the proposed floodwall alignment. Detailed findings can be found in the 2010 Flood Risk Management Analysis report by USACE. As such, the report recommended that whether or not a flood risk reduction project would be constructed, property owners should purchase flood insurance, and the community should prepare and implement flood evacuation plans, and adopt sound land-use management practices within the floodplain. This conclusion formed the basis of the Village of Sidney's subsequent flood mitigation strategies developed under the NY Rising Program.

5.0 Affected Environment and Environmental Consequences

Potential environmental impacts and proposed mitigation measures associated with the No Action Alternative and the Proposed Action are presented in the following sections and are summarized in **Table 1** on Page 12.

Table 1 Summary of Potential Environmental Impacts and Mitigation

Resource	**Potential Impacts No Action Alternative**	**Potential Impacts Proposed Action**	**Agency/ Permits**	**Mitigation**
Topography, Geology and Soils	No impact.	No impact.		
Land Use and Zoning	Existing residential uses within the Project Area may deteriorate over time resulting in a "gap-tooth effect" as the area would continue to be susceptible to flooding.	The Proposed Action would change the land use character for some properties from residential to open space. However, this is not considered an adverse impact.		
Water Resources and Water Quality	No impact.	No impact.	NYSDEC SPDES General Permit NYCDEP	Compliance with SWPPP and SPDES.
Wetlands	No impact.	No impact.		
Floodplains	Residential structures would continue to exist within an extreme risk area within the floodplain.	Positive impact as a result of elevating structures to at least 2 feet above the BFE and removing other structures from the extreme risk area within the 100-year floodplain and creating additional pervious surfaces for the absorption of flood waters.		
Vegetation	No impact.	Positive impact as a result of the planting of native species in the footprint of demolished homes once clean suitable fill is brought in and site is graded.		Native plant species would be selected for landscape plantings to the extent practicable in accordance with EO13112.
Wildlife and Fisheries Habitat	No impact.	No impact.		
Threatened and Endangered Species and Critical Habitat	No impact.	No impact. Tree removal is not anticipated, however, if site conditions require tree removal, any tree removal must take place between October 1st and March 31st, or otherwise the tree would be examined by a qualified biologist to determine if removal would have adverse effect on long-eared bats.	USFWS/NYSDEC/NHP	
Cultural Resources	Adverse impact may result from continued exposure to flood hazards and deterioration.	Adverse impact to historic properties from demolition within the Village of Sidney Historic District. Programmatic Agreement with SHPO, Native American Tribes, New York State Division of Homeland Security and Emergency Services, and Delaware County filed with the ACHP on December 24, 2015.	NYSHPO/THPO	Photo Recordation and preservation or certain character defining features of each home.
Aesthetic and Visual Resources	Existing residential uses within the Project Area may deteriorate over time resulting in a "gap-tooth effect" as the area would continue to be susceptible to flooding.	The transition of portions of the neighborhood from residential to open space may have temporary aesthetic impacts on the acquisition and demolition portion of the Project Area. However, the long term use of the acquisition and demolition portion of the Project Area as open space is anticipated to be visually pleasing.		
Socioeconomic Resources	Potential adverse impact associated with continued flood losses in high risk areas.	Short-term positive impact with construction and demolition activities, potential negative long term impacts associated with a decreased tax base within the Village of Sidney.		
Environmental Justice	No impact.	No impact.		
Air Quality	No impact.	Temporary dust and emissions due to construction; no long-term impact to air quality.		Best management practices.
Contaminated Materials	No impact.	No impact.	NYSDEC	Best management practices.

Noise	No impact.	Temporary construction noise; no long-term impact.		Compliance with local ordinances and best management practices.
Traffic	No impact.	Short-term impact, no long-term impact expected.		Compliance with local ordinances related to operations on the construction site.
Infrastructure	No impact.	No impact.	NYSDEC/DOH	Compliance with state and local regulations.
Public Health and Safety	Adverse impact associated with continued residential occupation of high hazard area.	Positive impact to the Village and community from the removal of residents from hazardous high-risk area and elevation of other residents above the BFE.	NYSDOH	Compliance with Federal, State, and local safety standards and codes.
Climate Change	No impact to climate change, but as extreme weather events become more commonplace, would not protect residents in high-risk areas.	No impact to climate change, but as extreme weather events become more commonplace, would serve as an adaptive strategy that would help the Village avoid future catastrophic loss that would result from continued residential occupation of the floodway.		
Cumulative Impacts	No cumulative adverse impact concerns.	No adverse cumulative impacts. Positive cumulative benefit to the community with the other actions in the Village including other projects to be funded by the State of New York involving the creation of additional housing within the Village of Sidney.		

5.1 Topography, Soils, and Geology

5.1.1 Existing Conditions

Topography

The 134 Village of Sidney properties associated with the Proposed Action are located just south of the Susquehanna River, and just east of Weir Creek (see Appendix A, Figure A-1). The 2 Sidney Center properties are located adjacent to and just east of an unnamed Class C stream that is a tributary to Carrs Creek (a tributary to the Susquehanna River). The Area of Disturbance is approximately 13.4 to 17.8[7] acres of the 44.5 acre project site.

The topography of the Village of Sidney, which lies in the floodplain of the Susquehanna River, is generally flat with a gentle slope towards the river. On the north side of the Susquehanna River, the elevation rises to 1,900 ft. above mean sea level (amsl). South of the Village of Sidney, and on the south side of Interstate 88, the elevation rises to 1,800 ft. amsl. Sidney Center is located at the bottom of a small river valley, bounded by hills ranging in elevation from 1,700 ft. amsl to the east and 1,900 ft. amsl to the west (see Appendix A, Figure A-6).[8]

Soils

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) operates the Web Soil Survey (http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx), which includes the soils of Delaware County.

Village of Sidney

Based on soil survey findings, the majority of soils within the area of disturbance for the Proposed Action are characterized as having 0 to 3% slopes. The soil types within this area include: Chenango gravelly silt loam (ChA); Chenango gravelly silt loam (ChB); Chenango gravelly silt loam (ChE); Fluvaquents-Udifluvents complex (Ff); Udorthents, graded (Ud); Unadilla silt loam (Un), Urban land (Ur), and Wenonah silt loam (Wg). Of these soils, Chenango gravelly silt loam (A and B), Unadilla silt loam, and Wenonah silt loam (Wg), are considered prime farmland soils. The majority of the Project Site is comprised of Unadilla silt loam (Un) and Urban land (Ur).

Sidney Center

Based on soil survey findings, all of the soils within the Sidney Center portion of the Proposed Action are characterized as having 0 to 3% slopes. The soil types within this area include: Tunkhannock and Chenango soils, fan (TtA), which comprises 6.3% of the site; and Wenonah silt loam (Wg), which comprises 93.7% of the site. Both of these soil types are considered prime farmland soils.

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[7] Estimate based on Village of Sidney Zoning, which permits a maximum lot coverage of 30% or 40% in residential zoning districts.
[8] USGS topographic maps

Geology
Executive Order (EO) 12699 requires federal agencies assisting in the financing, through federal grants or loans, or guaranteeing the financing, through loan or mortgage insurance programs, of newly constructed buildings to initiate measures to assure appropriate consideration of seismic safety (WBDG, 1990).

The 2014 U.S. Geological Survey (USGS) National Seismic Hazard Maps display earthquake ground motions for various probability levels across the United States and are applied in seismic provisions of building codes, insurance rate structures, risk assessments, and other public policy. These maps indicate that the Project Sites are located in a low risk area. Bedrock in the area of the Project Site is greater than 80 inches below grade according to the above-referenced Soil Survey.

5.1.2 Potential Impacts and Proposed Mitigation

No Action Alternative
The No Action Alternative would have no impacts to topography, geology or soils.

Proposed Action
With the appropriate short term Best Management Practices (BMPs) and, if required a Stormwater Pollution Prevention Plan (SWPPP), in place, the elevation and demolition of homes and regrading of properties proposed in the Proposed Action Alternative would have no impacts on topography, geology or soils.

Topography
Elevation of selected properties would have no effect on topography.

For those acquisition and demolition properties, after acquisition, the County would demolish all structures (including walkways, paved driveways, and patios), fill any basements, re-grade, place topsoil over the sites, and seed with a native seed mix in a manner consistent with limiting site disturbance. After demolition and site reclamation, the properties would be turned over to the Village of Sidney to maintain as open space. Because these properties are already developed, no significant changes to slope are anticipated. Sites would be graded to direct stormwater runoff towards open space areas and away from existing roadways and other impervious surfaces.

Soils
There would be no long-term effect to soils as a result of elevation of selected properties. The homes proposed for acquisition and demolition are located within floodplain areas that are subject to erosion and loss of soil from storm activity. Properties would be graded and revegetated following demolition activities to prevent erosion.

However, during construction associated with both elevation and demolition, there would be a short-term increase in the potential for erosion from site disturbance. Short-term BMPs, such as silt fence and erosion prevention, would be implemented to mitigate erosion where highly erodible soils are present, if required by permit or agency discretion (see Soil Erosion Conditions for Approval). Since the elevation or demolition of 134 structures in the Village of Sidney would involve more than one acre of disturbance as defined by NYSDEC, a SWPPP pursuant to NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit

No. GP-0-15-002) would be implemented on-site during construction to reduce the potential for erosion. State and local permitting requirements would incorporate BMPs (erosion blanketing, phasing, and sequencing of construction) to eliminate erosion impacts for program locations that require excavation or soil modification. Demolition and incidental grading would be carried out in a manner to avoid the discharge of fill in accordance with the Clean Water Act during demolition. Work in areas of soils with high wind erosion potential may have to be scheduled only during calm weather conditions or include additional watering and other dust suppression mitigation methods. However, the above mentioned soil survey indicates that soils within the Project Area are categorized as having a wind erodibility group of 5 and 6, which indicates that they are moderately susceptible to wind erosion.[9]

Acquisition and demolition would return the land to open space, for which soil suitability issues would be minimal. BMPs, including silt fences, would be employed for stabilization from potential erosion during the revegetation process.

The Farmland Protection Policy Act (FPPA) requires federal agencies to minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural use and to assess potential conversion of farmland to developed property. The elevation or acquisition and demolition of residential properties in an urbanized area do not involve the conversion of prime agricultural soils to a nonagricultural use. As such, the FPPA would not be applicable to the Proposed Action Alternative, and no impacts to farmland are anticipated.

Geology
The elevation of residences involves the elevation of existing structures on their existing footprints. The acquisition and demolition of residences involves the removal of existing structures and the conversion of parcels to open space. As such, EO 12699 does not apply to the Proposed Action Alternative.

5.2 Land Use and Zoning

5.2.1 Existing Conditions

The Village of Sidney portion of the Project Area is bounded by the Susquehanna River to the north, a commercial area and railroad tracks to the southwest, single family residential to the southeast, and farmland to the east.

The western portion of the Project Area within the Village of Sidney is characterized by single family homes on approximately ¼-acre lots. The majority of the Project Area is zoned "Residential District: One & Two Family Residential and Other Uses" (R-2). There are also some institutional uses typical of a residential area, such as schools, public parks, and churches, interspersed between the residences in this area. Most of the homes are contributing to the Village of Sidney Historic District.

[9] According to the USDA, a wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

The western portion of the Project Area is separated from the eastern portion by Main Street, which is characterized by two to three story commercial/retail buildings with office and residential uses on the second and third floors. Main Street is zoned "Commercial District: Residential and Commercial Uses, Street Level Store Fronts Restricted to Commercial Use" (B1-A), and the blocks immediately surrounding Main Street are zoned "Commercial District: Residential and Commercial Uses" (B-1). These commercial/retail buildings form a unified street wall, with some alleys connecting to surface parking lots in the rear of the buildings.

The eastern portion of the Project Area is similarly characterized by single-family homes on ¼-acre lots, also zoned R-2. Many of these homes are also contributing to the Sidney Historic District.

The Sidney Center portion of the Project Site is located in a small hamlet surrounded by hills rising to an elevation of 1900 feet. Structures within this hamlet are characterized by single family homes on ¼-acre lots. There are some commercial uses along Main Street, particularly on the north end. The two homes within the Project Site are single family residences of a similar age and character to nearby homes. The lots on the north side of Depot Street, across from these residences, are currently vacant.

The Village of Sidney, Sidney Center, and Delaware County land use policies and plans regarding mitigation of flood risk have been considered as part of this assessment. In light of recent flooding events, municipalities have been revising building codes to incorporate requirements for flood and storm mitigation measures along the shore and riverbanks. The Village of Sidney has been actively pursuing land use and policy changes to improve the flood protection and resiliency of its community since 2006, when a regional flooding event caused substantial damage to the community. The demolition of homes in accordance with FEMA's acquisition/demolition program reflects these changing land use policies by prohibiting redevelopment of properties in the areas most prone to storm damage.

The Sidney Reconstruction Plan, which included extensive public outreach and involvement, serves as a master planning document for the Village of Sidney. It expresses the community's long-term goals for land use, development, community resources, and resiliency. According to the Sidney Reconstruction Plan, the character of the riverside neighborhoods has eroded in recent years due to Tropical Storm Lee, as well as the 2006 flood. A substantial number of properties within these neighborhoods have already been bought out under previous programs, and other units have been abandoned because property owners did not have the resources to repair flood-damaged properties. This has left these neighborhoods with a "gap tooth effect." The Sidney Reconstruction Plan reported that FEMA has classified over 200 properties in the floodplain as "repetitive loss," meaning that flood insurance may increase dramatically unless a homeowner elevates their home to FEMA standards. This classification could lead to increasing rates of foreclosure in the high-risk neighborhoods, thus exacerbating the decline of community character.

5.2.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not change the local zoning. However, existing residential uses within the Project Area may deteriorate over time, as the area would continue to be

susceptible to flooding.

Proposed Action

The Proposed Action Alternative would preserve at least 35 and as many as 74 residences within the floodplain by elevating the structures at least two feet above the BFE and would convert approximately 60 existing residential properties within the floodplain in storm-impacted areas to open space in perpetuity. Under this Alternative, a permanent covenant or comparable restriction would be placed on the continued use of demolished properties to preserve the floodplain from future development. Once all targeted properties are converted, much of the resulting open space would be contiguous and, therefore, compatible with the surrounding land uses. Acquisition and demolition would not require any changes to existing zoning designations as the land would revert to publicly owned vacant land. It is anticipated that Delaware County would transfer the ownership of the vacant land to the Village and Town of Sidney. As Village/Town owned land it would be immune from local zoning regulations.

The appropriate permits for all elevation and demolition activities would be obtained. Acquisition and demolition would create new open space within the Village of Sidney and Sidney Center, primarily in low-lying areas prone to flooding from the Susquehanna River and its tributaries. The Proposed Action Alternative conforms to all of the regional and local plans, particularly with regard to flood mitigation and conserving and creating open space. The conversion of a portion of the Project Area to open space land use and reduction in housing density is compatible with the visual character and quality of the acquisition and demolition area. Creating the open space would establish a larger buffer between the areas identified with potential for future flooding and residential uses.

The approximated 35 to 74 residences that would be elevated as part of the Proposed Action are located in the oldest portion of the Village of Sidney Historic District and are nearer to the Village's existing commercial corridor along Main Street. As a result, elevating these properties rather than demolishing them would help maintain the historic character of the Village and provide support to the commercial corridor.

5.3 Water Resources and Water Quality

Congress enacted the Federal Water Pollution Control Act in 1948, which was reorganized and expanded in 1972 and became known as the Clean Water Act (CWA) in 1977, as amended. The CWA regulates discharge of pollutants into water with sections falling under the jurisdiction of the U.S Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA). Section 404 of the CWA establishes the USACE permit requirements for discharging dredged or fill materials into Waters of the United States, traditional navigable waterways, and/or wetlands subject to federal jurisdiction. Under the National Pollutant Discharge Elimination System (NPDES), the EPA regulates both point sources and non-point sources of pollutants, including certain stormwater runoff. In New York, EPA has delegated this NPDES permitting authority to New York State to be administered by the Department of Environmental Conservation (NYSDEC) under the State Pollution Discharge Elimination System (SPDES). Activities that disturb one (1) acre of ground or more are required to apply for a SPDES permit, administered in New York State through the NYSDEC.

5.3.1 Existing Conditions

The 134 Village of Sidney properties associated with the Proposed Action are located just south of the Susquehanna River, and just east of Weir Creek (See Appendix A, Figure A-2). The 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 has classified Weir Creek as a Class C stream, which can support fishing, but is not suitable for primary contact activities or drinking water. The two Sidney Center properties are located adjacent to and just east of an unnamed Class C stream that is a tributary to Carrs Creek (a tributary to the Susquehanna River).

The Village of Sidney and Sidney Center are not located over a sole source aquifer. Therefore, review under the Section 1424(e) of the Safe Drinking Water Act governing Sole Source Aquifers is not required.

There are no Wild and Scenic Rivers within the Village of Sidney or Sidney Center, as designated by the U.S. Department of the Interior, and no Wild, Scenic, or Recreational Rivers, as designated by the NYSDEC.

5.3.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact water resources and water quality.

Proposed Action

The Proposed Action Alternative would have no impact to surface water quality of the Susquehanna River, Weir Creek, or the unnamed tributary to Carrs Creek. Disturbances to either watercourse's bed or banks are not proposed. There are no proposed discharges to these surface waters.

Stormwater discharges during construction would be regulated by the NYSDEC Stormwater SPDES General Permit. Stormwater would be controlled to prevent pollutants from entering the off-site surface water. Since the elevation or demolition of 134 structures in the Village of Sidney would involve more than one acre of disturbance as defined by NYSDEC, a SWPPP pursuant to NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002) would be implemented on-site during demolition to reduce the potential for erosion. These regulations prohibit or strictly limit the volume and quality of stormwater discharges to protect water quality in surface waters on and off the Project Site. The SPDES permit would ensure that stormwater runoff from construction sites related to the Proposed Action Alternative is controlled through best management practices, and would prevent stormwater runoff from polluting Weir Creek or the Susquehanna River.

As noted above, the properties associated with the Proposed Action Alternative comprise 44.5 acres, of which approximately 13.4 to 17.8 acres would be disturbed during either elevation or demolition. The County would create, implement and maintain erosion and sedimentation control measures to prevent deposition of sediment and eroded soil in on-site and off-site wetlands and waters. Soil compaction would be controlled by minimizing project activities in vegetated areas, including lawns. The demolition of two structures in Sidney Center would involve less than one acre of ground disturbance. However, BMPs would be employed to ensure

that stormwater runoff from the demolition sites is controlled.

Overall, the removal of approximately 60 existing residential buildings and associated impervious surfaces and conversion to open space would reduce the amount of stormwater runoff, and could have a beneficial impact on groundwater recharge. Elevation of at least 35 and as many as 74 existing structures would have no impact on the quantity or quality of stormwater runoff in the area.

5.4 Wetlands

EO 11990 "Wetlands Protection" requires that federal agencies take actions to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the beneficial effects of wetlands. Compliance with this EO is ensured through the process of identifying whether the action would be located within or would potentially affect federally-regulated wetlands (USFWS, 2013). Federal regulation of wetlands is under the jurisdiction of the USACE. Federal actions within wetlands require the federal agency to conduct an Eight-Step Review Process. This process, like NEPA, requires the evaluation of alternatives prior to funding the action. FEMA's regulations for conducting the Eight-Step Review process are contained in 44 CFR Part 9.5 and 9.6. HUD's regulations for conducting the Eight-Step Review process are contained in 24 CFR Part 55. NYSDEC also regulates and protects freshwater wetlands as defined by NYS Environmental Conservation Law (NYSECL) Article 24 and Tidal Wetlands under Article 25. Documentation of the Eight-Step review process can be found in Appendix D.

5.4.1 Existing Conditions

The project sites have been evaluated for the presence of wetlands. Based on a review of the project sites on NYSDEC's "Environmental Resource Mapper" website (*http://www.dec.ny.gov/imsmaps/ERM/viewer.htm*), and the U.S. Fish and Wildlife Services' (USFWS) National Wetland Inventory (NWI) "Wetlands Mapper" website (*http://www.fws.gov/wetlands/data/mapper.HTML*), there are no state or federally regulated wetlands mapped within the Project Area.

According to the USDA Web Soil Survey, there are some small areas of hydric soils are mapped in the Project Area, including Chenango gravelly silt loam (ChA), Chenango gravelly silt loam (ChB), Fluvaquents-Udifluvents complex (Ff), Tunkhannock and Chenango soils (TtA), and Wenonah silt loam (Wg). These areas are primarily found adjacent to the Susquehanna River, Weir Creek, and the unnamed tributary to Carrs Creek. The majority of the homes within the Village of Sidney portion of the Project Site are located on non-hydric soils. However, the two homes in Sidney Center are located entirely within mapped hydric soil groups Tunkhannock and Chenango soils (TtA) and Wenonah silt loam (Wg).

5.4.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action alternative would not impact state or federal wetlands.

Proposed Action

The Proposed Action Alternative would not impact state or federal wetlands.

5.5 Floodplains

EO 11988 "Floodplain Management" requires that federal agencies avoid funding activities that directly or indirectly support occupancy, modification or development of the 100-year floodplain whenever there are practicable alternatives. FEMA uses Flood Insurance Rate Maps (FIRM) to identify floodplains and flood risks for the NFIP. Federal actions within the 100-year floodplain, or 500-year floodplain for critical actions, require the federal agency to conduct an Eight-Step Review process. This process, like NEPA, requires the evaluation of alternatives prior to funding the action. FEMA's regulations for conducting the Eight-Step Review process are contained in 44 CFR Part 9.5 and HUD's regulations for conducting the Eight-Step Review are contained in 24 CFR Section 55.20.

5.5.1 Existing Conditions

According to the National Flood Hazard Layer published February 17, 2015, the parcels are located in Zones AE and X and are within the 100-year and 500-year floodplains (see Appendix A, Figure A-3).

5.5.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would allow for the continued residential occupation of the high-risk areas of the floodplain in the Village of Sidney and Sidney Center. This continued occupation would likely place residents in physical danger, and would likely result in further property damage during future storm events.

Proposed Action

The Proposed Action Alternative would reduce risk of future flood damage to the residential properties elevated or acquired, and reduce the chance that an occupant of such a property faces physical danger resulting from floodwaters. The Proposed Action Alternative would also remove impervious surfaces on acquired properties and allow for greater infiltration and reduced stormwater runoff. Overall, the Proposed Action Alternative would have a beneficial impact on flood protection.

5.6 Vegetation

5.6.1 Existing Conditions

The Project Area is currently composed of residential properties and associated driveways, patios, lawns and landscaping. Native vegetation has been previously disturbed by development. There are no significant vegetation or habitat areas within the Project Area.

As of May 2015, The Town and Village of Sidney are located within the Severe Risk Area of the Unadilla Quarantine Boundary for Emerald Ash Borer (EAB) (*Agrilus planipennis*).[10] Portions of the Village of Sidney and Sidney Center are located in the Infested Core Area, while

[10] http://www.dec.ny.gov/docs/lands_forests_pdf/eabquarmay2015.pdf (accessed 1/7/16)

the entire project area is located within the Severe Risk Area. It is important to note that EAB Quarantine Boundaries are subject to revision per annual updates and thus these conditions may change.

5.6.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action alternative would not impact vegetation.

Proposed Action

The Proposed Action Alternative would restore disturbed areas of the acquired and demolished sites with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of the Project Site. The acquired properties would be maintained by the Village of Sidney and Sidney Center, and would be mowed periodically. There would be no change to vegetation on properties to be elevated in place.

Should any removal and disposal of vegetative debris be necessary, disposal methods would adhere to the EAB Quarantine Protocol pursuant to NYS Department of Agriculture and Markets Law Sections 18, 164, and 167; and CFR Title 7 Parts 300-399.

5.7 Wildlife and Fisheries Habitat

The Migratory Bird Treaty Act (MBTA) of 1918 provides a program for the conservation of migratory birds that fly through lands of the United States. The lead Federal agency for implementing the MBTA is the United States Fish and Wildlife Service (USFWS). The law requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any migratory birds or result in the destruction or adverse modification of designated critical habitat of such species.

As an inland site, the Proposed Action would have no effect on Essential Fish Habitat (EFH), which is protected by the Magnuson-Stevens Fishery Conservation and Management Act, the primary law governing marine fisheries management in United States federal waters

5.7.1 Existing Conditions

Terrestrial

The Project Area is categorized as a residential neighborhood with maintained lawn areas and residential landscaping. It does not support any sensitive landscape features such as wetlands, streams or water bodies. Habitat areas within the Project Area support the types of species accustomed to living in developed areas, such as raccoons, skunks, chipmunks, squirrels, sparrows, wild turkey, whitetail deer, rabbits and passerine birds. The Proposed Action takes place within the Atlantic Flyway, but there is no sensitive migratory bird habitat at the site.

As discussed above, the Project Area is located in close proximity to the Susquehanna River, Weir Creek, and an unnamed tributary to Carrs Creek. However, the Proposed Action would not involve direct disturbance to any of these waterbodies.

Aquatic

The Susquehanna River and its tributaries support freshwater fish and shellfish habitat. However, the Proposed Action is not located in or near Essential Fish Habitat; as such, further review

under the Magnuson-Stevens Fishery Conservation and Management Act is not required. The Carrs Creek tributary is classified by NYSDEC a Class C stream, and is suitable fish habitat, but does not support trout or trout spawning.

5.7.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action alternative would not impact wildlife, birds (including sensitive migratory bird habitat) or fisheries habitat.

Proposed Action

The Proposed Action Alternative would have no impact on wildlife, birds, and fisheries habitat. As noted, the Project Area is comprised of residential development. This Alternative would restore disturbed areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of properties to be acquired and demolished.

GOSR and FEMA determined that the Proposed Action Alternative would have no significant adverse impact on migratory birds or their habitat (see correspondence in Appendix B). It is anticipated that passerine birds would temporarily leave the area during construction and demolition due to noise and disturbance. There is a small likelihood that a nest in a structure to be demolished or in vegetation to be incidentally removed could be disturbed; however, the residential backyard habitat is not sensitive priority habitat. The conversion of the acquired and demolished properties to deed-restricted open space would provide long-term benefits for migratory bird habitat. Elevation of properties would have no effect on habitat.

A SWPPP and BMPs would be employed during elevation, demolition, and site restoration activities to ensure that stormwater runoff would not contaminate the Susquehanna River, Weir Creek, or the unnamed stream.

The Proposed Action Alternative involves the elevation or acquisition and demolition of existing residential structures and appurtenances, with minimal grading and revegetation to reestablish acquired and demolished properties. In accordance with Migratory Bird Treaty Act, GOSR and FEMA have determined that there would be no significant adverse impact to migratory bird habitat and no take of migratory bird species associated with the Proposed Action Alternative.

5.8 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead Federal agencies for implementing ESA are the United States Fish and Wildlife Service (USFWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). The law 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 law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife.

5.8.1 Existing Conditions

The Proposed Action was reviewed on January 23, 2015 using the USFWS Information for Planning and Conservation (IPaC) website (*http://ecos.fws.gov/ipac/*). Endangered species identified as being in the project area include the clam species dwarf wedgemussel (*Alasmidonta heterodon*) and the threatened mammal species, the northern long-eared Bat (*Myotis septentrionalis*).

There are currently no known maternity roost trees or hibernacula known to be occupied by northern long-eared bats within ¼-mile of the project locations' boundaries. However, the proposed Project Area serves as potential summer roosting habitat for the northern long-eared bat.

According to NY Natural Heritage Program (NYNHP) consultation dated September 4, 2014 (see Appendix B), the NYNHP database has no records of state or federal endangered, threatened, or rare species being found in residential buildings in New York State. Furthermore, the elevation or acquisition and demolition of a property in itself would not impact endangered, threatened, and/or rare species or their habitats.

The NYNHP "Nature Explorer" website (*http://www.dec.ny.gov/natureexplorer/app/*) identifies bald eagles as being present in Delaware County. Bald eagle (*Haliaeetus leucocephalus*) habitat and breeding sites have been found within 1.5 miles of the Project Area in neighboring Chenango County. However, the backyard habitats of the Project Area do not provide habitat for the eagle, and vegetation removal is anticipated to be minimal.

5.8.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action alternative would not affect endangered, threatened, or rare species or any critical habitat.

Proposed Action

Based upon the review of federal and state sources, GOSR and FEMA have found that the Proposed Action Alternative would not adversely affect endangered, threatened or rare species, including the dwarf wedgemussel (*Alasmidonta heterodon*), northern long-eared bat (*Myotis septentrionalis*), or any critical habitat. In accordance with Bald and Golden Eagle Protection Act, GOSR and FEMA have determined that this alternative would have no impact on the bald eagle.

Pursuant to Section 7 of ESA, GOSR and FEMA found that the Proposed Action Alternative would have no effect on the endangered dwarf wedgemussel, as no habitat for this species is within the residential Project Area. The Action involves no in-stream work and no discharge to streams.

GOSR and FEMA determined that the Proposed Action Alternative may affect, but is not likely to adversely affect, the northern long-eared bat. The scope of work does not specifically include tree removal, but some incidental tree removal may be necessary to provide access to buildings to be demolished. The scope of work does include removal of housing structures that may be vacant and could become viable habitat for bats. The USFWS has concurred with this determination regarding the in a letter dated April 3, 2015 (see Appendix B). An updated

consultation letter was sent to USFWS on November 20, 2015 (see Appendix B). Confirmation of continued concurrence from USFWS was assumed, as an updated concurrence letter from USFWS was not received.

5.9 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 Code of Federal Regulations (CFR) Part 800 requires federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on federal projects that would have an effect on historic properties. These actions must take place prior to the expenditure of federal funds. Historic properties include districts, buildings, structures, objects, landscapes, archaeological sites and traditional cultural properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

5.9.1 Existing Conditions

The Village of Sidney portion of the Proposed Action is entirely within the Sidney Historic District, which is listed on the State and National Register of Historic Places. 134 of the 136 properties are located within the boundaries of the Sidney Historic District. Of the 134 properties within the Sidney Historic District, 117 are contributing, 5 are non-contributing, and 12 are vacant lots that are also non-contributing to that district. The Area of Potential Effect (APE) is identified as the Sidney Historic District.

5.9.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact cultural resources.

Proposed Action

Per the Criteria of Adverse Effect (36 CFR 800.5(a)(1)), an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Since the Proposed Action Alternative includes, partially, the acquisition and demolition of historic structures, it would meet the Criteria of Adverse Effect. The extent of adverse effect would be mitigated partially in the Proposed Action Alternative through elevation of at least 35 and as many as 74 homes rather than acquisition and demolition of all homes within the Project Area.

GOSR and FEMA have consulted with the State Historic Preservation Officer (SHPO) and appropriate Consulting Parties (Oneida Indian Nation and Sidney Historical Association) to determine whether they concur with the determination of adverse effect. Once concurrence was established, the SHPO and other Consulting Parties were consulted to seek agreement on ways to avoid or reduce the adverse effect.

Agreement upon the selected mitigation measures to be implemented was effectuated through a Programmatic Agreement between the New York State Housing Trust Fund, the SHPO, FEMA, DHSES, and Delaware County. The Advisory Council on Historic Preservation (ACHP) was invited to participate in consultation on the Programmatic Agreement but chose not to participate

in the consultation pursuant to 36 C.F.R. § 800.6(a)(1)(iii). Programmatic Agreements are used when effects on historic properties are similar and repetitive, such as those proposed under the Proposed Action Alternative; or when effects on historic properties cannot be fully determined before approval of an undertaking, among other reasons. All correspondence can be found in Appendix B.

Initially, the Programmatic Agreement was drafted to evaluate the alternative in which all participating properties within the project area were acquired and demolished. Based on comments received during the Section 106 consultation process indicating opposition to the demolition of certain historic structures, the concurring parties of the Programmatic Agreement held a meeting with residents at the Sidney Central School on September 24, 2015 and the Proposed Action was identified as a preferable alternative. Many residents preferred the opportunity to elevate their homes, particularly those properties east of approximately 70 River Street, while the other identified properties would still receive acquisition and demolition assistance. Such homeowner preferences were confirmed through meetings with individual homeowners, which are ongoing.

In order to mitigate the adverse effect associated with acquisition and demolition or elevation of greater than four (4) feet of some properties, the Programmatic Agreement stipulates architectural salvage and recordation treatment measures to be implemented prior to any demolition activities. Treatment measures are to include documentation, recordation, design review, and salvage of architectural features. A complete listing of the required treatment measures is included in Appendix 4 of the Programmatic Agreement, included in Appendix E of this document.

The Programmatic Agreement has been signed and executed by the concurring parties. The final Programmatic Agreement was filed with ACHP on December 24, 2015 (see Appendix E).

5.10 Aesthetics and Visual Resources

5.10.1 Existing Conditions

The majority of the Project Area is located within the Village of Sidney Historic District, which is listed on the State and National Register of Historic Places. 134 of the 136 properties are located within the boundaries of the Sidney Historic District. Of the 134 properties within the Sidney Historic District, 117 are contributing, 5 are non-contributing, and 12 are vacant lots that are also non-contributing to that district.

The Village of Sidney portion of the Project Area is bounded by the Susquehanna River to the north, a commercial area and railroad tracks to the southwest, single family residential to the southeast, and farmland to the east. The western portion of the Project Area within the Village of Sidney is characterized by single family homes on approximately ¼-acre lots. There are some institutional uses typical of a residential area, such as schools, public parks, and churches, interspersed within the residences in this area. Most of these homes are contributing to the Village of Sidney Historic District. This area is separated from the eastern portion of the Project Area by Main Street, which is characterized by two to three story commercial/retail buildings with office and residential uses on the second and third floors. These commercial/retail buildings form a unified street wall, with some alleys connecting to surface parking lots in the rear of the

buildings. The eastern portion of the Project Area is similarly characterized by single-family homes on ¼ acre lots. Many of these homes are also contributing to the Sidney Historic District.

The Sidney Center portion of the Project Site is located in a small hamlet surrounded by hills rising to an elevation of 1900 feet. Structures within this hamlet are characterized by single family homes on ¼ acre lots. There are some commercial uses along Main Street, particularly on the north end. The two homes within the Project Site are single family residences of a similar age and character to nearby homes. The lots on the north side of Depot Street across from these residences are currently vacant.

5.10.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not directly affect aesthetic resources. However, long term disinvestment in the neighborhood due to continued flooding could lead to a deterioration of community character.

Proposed Action

The Proposed Action Alternative would have an effect on the aesthetic quality of the Village of Sidney Historic District, as the Proposed Action would acquire and demolish approximately 60 properties within the Sidney Historic District and elevate at least 35 and as many as 74 properties within the District. The demolition of structures would irreversibly affect the visual character of the Village of Sidney Historic District.

However, the Proposed Action Alternative would reestablish a portion of the Project Area as public open space, which has its own beneficial visual and aesthetic qualities. Furthermore, by elevating at least 35 and as many as 74 homes in the eastern portion of the Sidney Historic District, some of the oldest, most historic homes and the associated aesthetic and visual character would be preserved.

5.11 Socioeconomic Resources

5.11.1 Existing Conditions

The U.S. Census Bureau indicates the population within the Town of Sidney (which encompasses the Village of Sidney and Sidney Center) was 5,774 persons in 2010, down from 6,109 in 2000. This is consistent with the population decline in Delaware County as a whole, which was 47,980 in 2010, a decrease from 48,055 in 2000. The Village of Sidney also declined from 4,068 in 2000 to 3,900 in 2010.

The total number of households located within the Town of Sidney was approximately 2,520 in 2010. At that time, 1,543 (or 61.2%) of households in the Town of Sidney were classified as family households, meaning those living together are related. The remaining households were classified as non-family households or those with individuals who cohabitate but are unrelated, such as roommates. The average household size in the Town was 2.28 persons in 2010, while average family size was 2.83 persons.

The total number of households located within the Village of Sidney was approximately 1,697 in 2010. At that time, 1,005 (or 59.2%) of households in the Village of Sidney were classified as

family households, meaning those living together are related. The remaining households were classified as non-family households or those with individuals who cohabitate but are unrelated, such as roommates. The average household size in the Village was 2.28 persons in 2010, while the average family size was 2.90 persons.

The US Census 2009-2013 American Community Survey 5-Year Estimates of median annual household income for the Village of Sidney was $35,213, the Town of Sidney was $40,672, and Delaware County was estimated to be $44,470. Approximately 17.5% of individuals in the Village and 12.2% of individuals in the Town are estimated to be below the poverty level. Of individuals within Delaware County, 14.2% are estimated to be below the poverty level.

The Project Site includes 134 properties in the Village of Sidney and two properties in Sidney Center, located in the Town of Sidney outside the Village; all are single family detached housing units. Village of Sidney representatives have stated that the vast majority of the Village homes are currently occupied. The 134 properties represent approximately 6.8% of the total Village housing stock (1,960 units) and 12.1% of the 1,108 single family detached housing units in the Village. The two housing units that in Sidney Center represent 0.8% of the total Town of Sidney housing stock (2,520 units) and 0.12% of the Town's 1,693 single family detached housing units.

According to the US Census 2009-2013 American Community Survey 5-Year Estimates, 7.6% of the Village of Sidney, and 11.6 % of the Town of Sidney housing stock is vacant. According to the Multiple Listing Service (MLS), as of April 29, 2015, approximately 85 homes were listed for sale in the Town of Sidney, of which 65 were located in the Village of Sidney.

In 2014, the Village of Sidney had an annual operating budget of $3,495,604, and annual real property tax revenues of $2,388,854. In 2014 the 134 properties in the Project Site in the Village of Sidney generated approximately $112,261 in real property tax revenue, representing 4.7% of the total real property tax revenue for the Village. In 2014, these properties also generated approximately $40,704 in Delaware County taxes, $24,490 in Town and Highway taxes, and $87,371 in Sidney Central School District taxes. The two properties in Sidney Center generated approximately $579 in Delaware County taxes, $354 in Town and Highway taxes, and $1,334 in Sidney Central School District taxes in 2014. In total, the real property taxes for the properties associated with the Proposed Action represent approximately 0.14% of the Delaware County real property tax revenue, 2.6% of the Town and Highway real property tax revenue, and 1.5% of the Sidney Central School District real property tax revenue annually.

5.11.2 Potential Impacts and Proposed Mitigation

No Action Alternative

Under the No Action Alternative, homeowners would not relocate outside of the high flood risk areas. The storm attenuation characteristics of the community would not be improved. Under the No Action alternative, the flood damaged and destroyed residential properties would remain under their current ownership.

The homeowners would be responsible for the repair and rehabilitation of their properties. The homeowners may apply for other programs for financial assistance in the repair and rehabilitation of their properties that were damaged or destroyed by the storms. While these assistance programs include financial support and requirements for resiliency upgrades for the

individual properties that would reduce the potential damage from future storms, these homeowners and their properties would continue to be susceptible to future flooding and other damage resulting from future storm events due to their location in the flood area. The communities' storm attenuation characteristics would remain the same.

Without any financial assistance, depending on motivations of owners and their willingness and/or ability to access resources to repair and upgrade homes and properties, there is potential that repairs may be limited, may not be completed to current building codes, and may not include resiliency measures (e.g., elevating their homes), leaving their properties more vulnerable to future flooding conditions. In the future with the No Action Alternative, homes may not be upgraded to protect from the potential damage from future storms and would be at continued risk of future flood damage. As stated previously, the extreme risk neighborhoods in the Village's 500- and 100-year floodplains have deteriorated physically and lost value since 2006. If homes are not protected from future storms, they would be more vulnerable in future storms and they could continue to deteriorate, which could have a blighting effect on the Village. Therefore, the No Action alternative could have an adverse socioeconomic impact.

Proposed Action

In the Proposed Action, individual property owners in the Village's Historic North End Neighborhood would receive assistance to elevate their homes in their original locations. This assistance would include financial support and requirements for resiliency upgrades to the individual properties that would reduce the potential damage from future storms. As part of the Proposed Action, it is estimated for the purposes of this evaluation that approximately 74 homes would be elevated so that their lowest floor was at least two feet above the Base Flood Elevation. These properties are located in the oldest portion of the Village of Sidney Historic District, and are contiguous to the Village's existing commercial corridor along Main Street.

In the Proposed Action, at least 35 and as many as 74 households would remain in the Village's Historic North End Neighborhood and would continue to purchase goods and services, including food and beverage, household items and services, apparel, healthcare, and transportation. This continued spending power would support businesses in the local area and throughout Delaware County. Based on the median household income in the Village of Sidney and Bureau of Labor Statistics Census Consumer Expenditure Survey data, the total after-tax household income for these estimated approximate 74 households is an estimated $2.57 million.

The economic benefits that would result from $2.57 million in household expenditures were estimated using the IMPLAN (Impact Analysis for PLANning) economic model.[11]

[11] The IMPLAN model was originally developed by the United States Department of Agriculture Forest Service in 1979 and was subsequently privatized by the Minnesota IMPLAN Group (MIG). The model uses the most recent economic data from sources such as the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics, and the U.S. Census Bureau to predict effects on the local economy from direct changes in spending. This analysis is based on the 2013 model for Delaware County, New York. Using IMPLAN terminology, economic impacts are broken into three components: direct, indirect, and induced. Direct effects represent the initial benefits to the economy that would be generated from the household expenditures that would remain in the Village. Indirect

Based on the IMPLAN economic model, it is estimated that the household expenditures would support 14 direct, indirect, and induced full- and part-time jobs in Delaware County. Total direct, indirect, and induced employee compensation resulting from the household expenditures is estimated at $298,400 annually. The total effect on the Delaware County economy from the household expenditures, measured as economic output or demand, is estimated at approximately $1.76 million annually. Given the close proximity of the estimated approximate 74 households to businesses in the Village, it is expected that the Village would capture a portion of estimated economic benefits resulting from household spending.

In addition, the Proposed Action would fund the purchase of approximately 60 properties in the Camp Street Neighborhood and two properties in Sidney Center by Delaware County. These properties are located in the areas most susceptible to flooding, and are not located within the older portion of the Village of Sidney Historic District. After demolition and site reclamation, the properties would be turned over to the Village of Sidney and Town of Sidney (for Sidney Center properties) to maintain as open space.

With the acquisition and demolition of approximately 60 homes, local businesses may experience some level of reduced demand for products and services. Based on the methodology described above, expenditure potential for these approximately 60 households in the Village is estimated at $2.15 million. Businesses in the Village would be less likely to capture a portion of this expenditure potential with the acquisition and demolition of approximately 60 homes, as these households could relocate further from the Village's commercial corridor along Main Street.

5.12 Environmental Justice

Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," guides federal agencies to "make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations" (EPA, 1994).

5.12.1 Existing Conditions

According to 2010 US Census, the population of the Town of Sidney is predominantly Caucasian (96.4%). Approximately 12.2% of Town residents live below the poverty level. The project location is not identified as an Environmental Justice community. According to the NYSDEC (*http://www.dec.ny.gov/docs/permits_ej_operations_pdf/delawareej.pdf*), a portion of the Village of Sidney contains a potential environmental justice area. However, this site is not within the Project Area.

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effects represent the benefits generated by industries purchasing from other industries as a result of the household expenditures. Induced effects represent the impacts caused by increased income in a region. Direct and indirect effects generate more worker income by increasing employment and/or salaries in certain industries. Households spend some of this additional income on local goods and services, such as food and drink, recreation, and medical services. Benefits generated by these household expenditures are quantified as induced effects.

5.12.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not have disproportionately high or adverse impacts on human health and human environment of minority or low-income populations.

Proposed Action

The Proposed Action Alternative would not have disproportionately high or adverse impacts on human health and human environment of minority or low-income populations.

5.13 Air Quality

The Clean Air Act (CAA) of 1963 (amended 1970, 1977 and 1990) requires each state to attain and maintain specified air quality standards. National Ambient Air Quality Standards (NAAQS) have been promulgated by the federal government and by NYS for carbon monoxide (CO), nitrogen dioxide (NO2), total suspended particulate (TSP), sulfur dioxide (SO2) and lead (Pb). The New York standards are generally the same as the federal standards for these pollutants. Primary air quality standards are set to protect human health and secondary standards are set to protect human welfare. The EPA is presently implementing the 2008 ozone standards as required by the Clean Air Act and meeting these standards would provide important public and environmental health benefits.

5.13.1 Existing Conditions

The Proposed Action is located in Delaware County, which is not within the most recent nonattainment or maintenance area for inhalable particulate matter (PM2.5) or 8-hour ozone as of April 23, 2015.[12] Therefore, a conformity assessment is not warranted.

5.13.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not affect air quality.

Proposed Action

Construction activities as a result of the Proposed Action Alternative may result in temporary increases in emissions from on-site equipment, construction-related vehicles and non-road engines, and fugitive dust. However, all activities under the Proposed Action Alternative would comply with applicable federal, state, and local laws and regulations regarding construction emissions, as discussed in the project description. Overall, construction activities would occur at scattered sites under the Proposed Action Alternative, and air pollutant concentration increments from construction activities are highly localized, i.e., almost entirely due to construction activity in close proximity to receptor locations and not due to cumulative impacts from the larger area.

The Proposed Action Alternative would result in a temporary minor impact to air quality due to construction activities; no long-term impacts are anticipated. Construction activities on the

[12] EPA air quality attainment status determinations are frequently updated. The most recent determinations are announced in the Federal Register and updated in the Code of Federal Regulations.

project site may have a potential impact on the local air quality through the generation of fugitive dust or airborne dust. Fugitive dust is generated during ground breaking and excavation activities. Emissions from diesel construction vehicles are also a potential source of air pollution. The use of BMPs would help minimize dust and vehicle emissions. Occupational Safety and Health Administration (OSHA) standards would be followed to preserve public health of construction workers and nearby residences.

5.14 Contaminated Materials

5.14.1 Existing Conditions

HUD policy requires that the proposed site and adjacent areas be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants of the property.

According to the EPA, Delaware County is located in Radon Zone 1, where predicted average indoor radon screening level greater than 4 pCi/L (picocuries per liter). However, radon testing and mitigation measures would not be necessary for structures to be acquired for demolition as no housing would be constructed or reoccupied. In the case of elevations, post elevation radon testing should be performed, and homes with measurements exceeding 4 pCi/L should be evaluated to determine the appropriate intervention.

5.14.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact or be impacted by contaminated materials.

Proposed Action

The Proposed Action Alternative would include elevation or demolition of structures constructed prior to 1978. As such, structures to be modified or demolished may include lead-based paint and materials containing asbestos. All solid waste materials would be managed and transported in accordance with the state's solid and hazardous waste rules. Program activities would conform to Part 56 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the NYS Department of Labor (12 NYCRR Part 56); the National Emission Standard for Asbestos—Standard for demolition and renovation (40 CFR Part 61.145); National Emission Standard for Asbestos—Standard for waste disposal for manufacturing, fabricating, demolition, and spraying operations (40 CFR Part 61.150); EPA Repair, Renovation, and Painting (RRP) Rule (40 CFR 745.80 Subpart E), HUD's lead-based paint regulations in 24 CFR Part 35 Subparts A, B, H, J, and R, and HUD "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing." The Guidelines complement regulations that have been issued by HUD, the EPA, and the Occupational Safety and Health Administration (OSHA), and policies from the Centers for Disease Control and Prevention (CDC). In general, these regulations apply to housing constructed prior to 1978.

All activities must comply with applicable federal, state, and local laws and regulations regarding lead-based paint, including but not limited to, EPA Repair, Renovation, and Painting (RRP) Rule (40 CFR 745.80 Subpart E), HUD's lead-based paint regulations in 24 CFR Part 35 Subparts A, B, H, J, and R, HUD "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. The Guidelines complement regulations that have been issued by HUD, the U.S. Environmental Protection Agency (EPA), and the Occupational Safety and

Health Administration (OSHA), and policies from the Centers for Disease Control and Prevention (CDC). In general, these regulations apply to housing constructed prior to 1978.

Prior to demolition or disturbance of building materials for elevation, an asbestos survey would be prepared by a Qualified Environmental Professional (QEP) for each property to determine the presence or absence of asbestos containing materials. Based on the findings of the asbestos survey, remediation would be conducted prior to demolition or elevation in accordance with all applicable city, state, and federal regulations. Any remediation would be appropriately scheduled and coordinated with any demolition, elevation, and/or redevelopment activities.

For homes to be elevated where painted surfaces will be disturbed, a Lead-Based Paint risk assessment will be carried out by a QEP if painted surfaces are to be disturbed by the elevation work. If lead hazards are discovered, they must be remediated by a QEP prior to grant closeout.

When the target residential property is on or within 3,000 feet of a potentially hazardous site, a QEP would determine if the potential hazard requires remediation. If remediation is required, it would be appropriately scheduled and coordinated with any demolition or elevation activities. There may be some residential properties with improper storage and excessive accumulation of toxic substances (i.e. petroleum products, pesticides, cleaning substances). Initial site inspection of residential properties may document the presence of abandoned and otherwise non-working vehicles with the potential for leakage of toxic materials. Barrels or tanks with petroleum products or other potentially toxic substances may be identified. Remediation activities may include the purging of lines, tanks, and equipment containing hazardous chemicals, gasses, or flammable materials. If tank removal is required, tanks would be excavated, soil would be removed, and soil samples would be taken prior to closure. Air monitoring equipment may be used to determine if any hazardous conditions remain. Demolition and elevation activities would adhere to dust suppression and personal protective gear to minimize exposure to lead paint.

Mold can also have an adverse effect on human health and is a very common problem in houses that have been flooded. Some situations would require extra precautions to limit the distribution of airborne mold spores during demolition or elevation.

5.15 Noise

Sound pressure level (SPL) is used to measure the magnitude of sound and is expressed in decibels (dB or dBA), with the threshold of human hearing defined as 0 dBA. The SPL increases logarithmically, so that when the intensity of a sound is increased by a factor of 10, its SPL rises by 10 dB, while a 100-fold increase in the intensity of a sound increases the SPL by 20 dB.

Equivalent noise level (Leq) is the average of sound energy over time, so that one sound occurring for two minutes would have the same Leq of a sound twice as loud occurring for one minute. The day night noise level (Ldn) is based on the Leq, and is used to measure the average sound impacts for the purpose of guidance for compatible land use. It weights the impact of sound as it is perceived at night against the impact of the same sound heard during the day. This is done by adding 10 dBA to all noise levels measured between 10:00 pm and 7:00 am. For instance, the sound of a car on a rural highway may have an SPL of 50 dBA when measured from the front porch of a house. If the measurement were taken at night, a value of 60 dBA would be recorded and incorporated into the 24-hour Ldn.

Leq and Ldn are useful measures when they are used to determine levels of constant or regular sounds (such as road traffic or noise from a ventilation system). However, neither represents the sound level as it is perceived during a discrete event, such as a fire siren or other impulse noise. They are averages that express the equivalent SPL over a given period of time. Because the decibel scale is logarithmic, louder sounds (higher SPL) are weighted more heavily; however, loud infrequent noises (such as fire sirens) with short durations do not significantly increase Leq or Ldn over the course of a day.

The Noise Control Act of 1972 required the EPA to create a set of noise criteria. In response, the EPA 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 EPA report found that keeping the maximum 24-hour Ldn value below 70 dBA would protect the majority of people from hearing loss. The EPA recommends an outdoor Ldn of 55 dBA. 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. OSHA has adopted a standard of 140 dBA for maximum impulse noise exposure.

5.15.1 Existing Conditions

The ambient noise level in the vicinity of the project site is typical for a residential/rural area. Most of the land in the vicinity of the Project Area is comprised of residential development. Temporary increases in noise levels due to demolition activities would be minimized through compliance with local noise ordinances, including time-of-day work limitations and construction of temporary noise barriers. During demolition, GOSR would ensure that all equipment would operate with mufflers.

Noise regulations under 24 CFR Part 51 Subpart B do not apply to disaster recovery programs which meet the definition under Part 51.101(a)(3), which states, "[t]he policy does not apply to research demonstration projects which do not result in new construction or reconstruction, flood insurance, interstate land sales registration, or any action or emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster."

5.15.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact ambient noise levels.

Proposed Action

Construction activities associated with elevation, demolition and re-grading at selected properties could cause temporary increases in noise levels. Temporary increases in noise levels would be mitigated by compliance with local noise ordinances. HUD has determined that its Part 51 noise regulations are not applicable to a disaster recovery program which meets the definition of 24 CFR Part 51.101(a)(3) for emergency assistance under disaster provisions or appropriations provided to save lives, protect property, protect public health and safety, and remove debris and wreckage, or provide assistance that has the effect of restoring facilities substantially as they existed prior to the disaster. The Proposed Action provides disaster

assistance for the purpose of saving lives and protecting property, public health, and public safety. However, the Proposed Action would comply with all applicable local noise regulations, including hours of operation.

5.16 Traffic

5.16.1 Existing Conditions

The Village of Sidney and Sidney Center are accessible from Interstate 88 and NYS Route 8. Exit 9 on Interstate 88 provides access to the Village of Sidney, and Exit 10 provides access to Sidney Center. Interstate 88 has an average daily total of 5,408 eastbound and 5,390 westbound trips.[13]

NYS Route 8 is classified by NYS as a Rural Principal Arterial road. Through the Project Area is four-lanes (two north and two south), with an average daily total volume of 7,319 trips (3,660 north and 3,659 south).[14]

Within the Project Area, the main roads include West Main Street and County Highway 23/East Main Street. West Main Street has an average daily total volume of 1,413 eastbound and 1,582 westbound.[15] County Highway 23/East Main Street has an average daily total volume of 1,441 eastbound and 1,404 westbound.[16]

5.16.2 Potential Environmental Impacts

No Action Alternative

The No Action Alternative would not impact traffic volume, as existing levels of service and traffic volumes are anticipated to remain the same.

Proposed Action

A short-term impact to traffic would be anticipated during the construction period associated with elevation, demolition and, site restoration of properties. The presence of construction and delivery vehicles is unavoidable; however, this impact would be short lived and all site construction activities would comply with local ordinances that relate to operations on a construction site.

No long-term impacts to traffic are anticipated as a result of the Proposed Action Alternative.

5.17 Infrastructure

5.17.1 Existing Conditions

The Project Area is located in the Village of Sidney and Sidney Center. The 134 properties within the Village are served by Village water and sewer services. The two Sidney Center properties have individual wells and septic systems.

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[13] http://ftp.dot.ny.gov/tdv/YR2009/R09/93_Delaware/93_0043.pdf (accessed 5/25/15)
[14] http://ftp.dot.ny.gov/tdv/YR2012/R09/93_DELAWARE/93_0122_VOL_10-2012.pdf (accessed 5/25/15)
[15] http://ftp.dot.ny.gov/tdv/YR2011/R09/93_Delaware/93_2010.pdf (accessed 5/25/15)
[16] http://ftp.dot.ny.gov/tdv/YR2011/R09/93_Delaware/93_2000.pdf (accessed 5/25/15)

5.17.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact existing infrastructure.

Proposed Action

The Proposed Action Alternative would involve the acquisition and demolition of approximately 60 existing residential structures within the Village of Sidney, most of which are currently occupied. As such, the Proposed Action would reduce existing demand on the Village's water and sewer infrastructure. Water and sewer lines to the acquired and demolished properties would be capped and existing wells and septic systems at the two properties to be acquired and demolished in Sidney Center would be abandoned in accordance with all applicable regulations. Point of use connections to existing homes to be elevated may require minor modification to accommodate added structural elevation. There would be no change to existing water or sewer demand as a result of the elevation of at least 35 and as many as 74 homes in the Village of Sidney.

5.18 Public Health and Safety

5.18.1 Existing Conditions

The Village of Sidney and Sidney Center's public health and safety was negatively impacted by Tropical Storm Lee. The homes within the floodplain experienced extensive flood damage, which threatened life and safety.

5.18.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The no-action alternative would have an adverse impact to the community's public health and safety because residents would remain vulnerable within the floodplain.

Proposed Action

The overall public health and safety of the Village of Sidney and Sidney Center would be positively impacted by the Proposed Action Alternative. The elevation of at least 35 and as many as 74 properties within the Project Area would reduce the risk to life and safety associated with residential flooding. The acquisition and demolition of approximately 60 properties within the Project Area would result in fewer residents in the areas most susceptible to future flood hazards and contribute to natural storm attenuation characteristics.

5.19 Climate Change

Executive Order 13653, Preparing the United States for the Impacts of Climate Change, signed in 2013, sets standards to prepare the United States for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience. Under this EO, FEMA and HUD are required to consider climate change risks and vulnerabilities, and when feasible, implement climate change preparedness in federally-funded projects.

According to EPA, climate change "…refers to any significant change in the measures of climate lasting for an extended period of time" (EPA 2014). Observed trends include higher temperatures, changing rain and snow patterns, more droughts, warmer oceans, rising sea level, stronger storms, increased ocean acidity, shrinking sea ice, and thawing permafrost (EPA 2014).

This is dubbed "abrupt climate change" which occurs over decades and distinguishes it from natural variability that occurs gradually over centuries or millennia. The EPA identifies and regulates human actions that may affect climate change. Embodied energy measures sustainability by accounting for the energy used by structures or to create materials. Another measure of sustainability is life-cycle or cradle-to-grave analysis, which accounts for the extraction, manufacture, distribution, use, and disposal of materials. While resources exist to quantify embodied energy and life cycle analysis, no such calculations were required to be prepared by the Subgrantee for the options presented in this EA.

5.19.1 Existing Conditions

Climate change could potentially increase temperatures in the northeast United States; could potentially cause more severe weather incidents to occur; and could potentially cause sea levels to rise.

Climate change impacts relevant to the Proposed Action are summarized below. Broader discussion of climate change impacts can be found in the following documents and are incorporated here by reference, as recommended by CEQ:

- Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC 2013)
- Third National Climate Assessment (United States Global Change Research Program 2014)

While climate change impacts many aspects of the climate, resulting in myriad secondary effects, the effects most relevant to the Proposed Action's planning efforts are an increase in temperatures in the northeast United States; the potential to cause more severe weather incidents to occur; and a projected rise in mean sea levels.

Under existing conditions, the homes within the project area use energy, and induce energy use by associated with the production of materials and construction required for rebuilding efforts after flooding events. This energy use results in both direct and indirect greenhouse gas emissions.

5.19.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action alternative does not provide for flood damage risk reduction and other hazard mitigation measures; therefore, the facility would be subject to greater risk of damage and operational disruption in the future. The risks would increase over time due to anticipated storm frequency increases and sea level rise associated with climate change. Existing energy use would not change.

Proposed Action

The Proposed Action Alternative would provide for flood damage risk reduction that are relevant to climate change; through the demolition of flood-prone structures, the creation of open space, and restoration of floodplain functions. Likewise, structure elevations will reduce the risk of future damages caused by increasingly severe storm events. Though the Proposed Action would result in a short-term increase in energy use and emissions from construction equipment, the Proposed Action would result in improved long-term climate preparedness and resilience.

5.20 Cumulative Impacts

In accordance with NEPA, this EA considers the overall cumulative impact of the Proposed Action and other actions that are related in terms of time or proximity. According to the Council of Environmental Quality (CEQ) regulations, cumulative impacts represent the "impact on the environment which results from the incremental impacts 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 impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

This section examines the Proposed Action as well as other actions occurring or proposed in the vicinity of the proposed project. The combined effects of these actions are evaluated to determine if they could result in any cumulative impacts.

The Sidney Reconstruction Plan identifies several future projects that the Village would like to undertake to mitigate loss of life and property during future storm events, as well as create a more stable and resilient community. Two of these projects, the Riverlea Housing Project and the Sidney GreenPlain, if developed, would have cumulative impacts with the Proposed Action. Additionally, these potential future projects would be tiered and implemented separately from one another.

The Riverlea Housing project would seek to relocate existing area residents to safer locations within the community. This proposed project contemplates a 165-lot development on a 165 acre parcel that would be annexed to the Village of Sidney. The Riverlea Housing project, which has independent utility from the acquisition/demolition program, would be evaluated under a separate NEPA review once the project has been more fully formulated.

The Sidney Reconstruction Plan also contemplates the possible future development of a "GreenPlain" which would incorporate some parcels associated with the Proposed Action. The 140-acre Sidney GreenPlain would be designed to provide additional flood storage for both the Susquehanna River and Weir Creek by creating a series of meandering channels that connect to larger vegetated storage areas. With or without the Proposed Action, the GreenPlain could move forward. However, in the absence of the Proposed Action, it would likely involve a smaller area. The cumulative impact of the GreenPlain and the Proposed Action would be the reduction of loss of life and property damage during future storm events, as well as enhanced flood protection. The review of the potential future GreenPlain project would be evaluated under NEPA at such time that the scope of the project has been more fully formulated. The acquisition/demolition of homes under the Proposed Action has independent utility from the GreenPlain, thus justifying independent NEPA reviews for these complementary projects.

Additionally, there are potential regional projects currently proposed which would include breaching of dams on tributary waterways and establishment of alternative drinking water sources. Careful study of system-level hydrodynamic effects associated with such a project would be required. Understanding of the cumulative impact of this type of project and the Proposed Action will continue to evolve as further project information becomes available.

5.20.1 Flood Risk

Many of the properties encompassed by the Proposed Action are older, and therefore were not built to current standards and codes. In some areas, flood information was not available, not applicable at the time, or not taken into account when these homes were built. The areas which experienced flood damage from the recent storms are at risk of flooding in future storms. Climate change poses an increasing risk of flooding as sea levels rise and storms become more intense.

Flood risk maps have been and are being revised to account for the projected increasing flooding due to climate change. Building codes have been and are being changed to reflect these changes in flood risk.

The Proposed Action would result in the elevation of at least 35 and as many as 74 homes to an elevation of at least two feet above the BFE and the acquisition and demolition of approximately 60 homes, thereby greatly reducing the risk of flood damage within the Project Area. For acquisition properties, after demolition of the structures, basements, and foundations, any holes from the removed foundation would be filled, topsoil would be placed, and the sites would be re-graded and seeded in a manner consistent with limiting site disturbance. After demolition and site reclamation, Delaware County would transfer ownership of the Village parcels to the Village of Sidney to maintain as open spaces. All open space compatible uses would be in accordance with FEMA requirements under the HMGP requirements described above. The program would create open space for flood attenuation, which would mitigate the future flood risk for nearby neighborhoods.

The Sidney Reconstruction Plan identifies several village neighborhoods that are at extreme risk of flooding. These include River Street at Division and at Oak Avenue, the Sherman Avenue and Adams Street neighborhood, and the Willow and Liberty Street neighborhood. As identified in Appendix A, Figure A-2, the majority of the properties within these neighborhoods are included in the Proposed Action.

5.20.2 Land Use and Community Character

Land use policies have been changing regarding development along the shore and banks of waterways. Sidney land use policies and plans regarding mitigation of flood risk have been considered as part of this assessment. In light of recent flooding events, municipalities have been revising building codes to incorporate requirements for flood and storm mitigation measures along the shore and riverbanks. Sidney has been actively pursuing land use and policy changes to improve the flood protection and resiliency of its community since 2006, when a regional flooding event caused substantial damage to the community. The elevation or acquisition and demolition of these homes reflects these changing land use policies by improving the resiliency of homes to remain and by removing some homes from flood hazard areas and prohibiting redevelopment of properties in the areas most prone to storm damage.

According to the Sidney Reconstruction Plan, the character of the riverside neighborhoods has eroded in recent years due to Tropical Storm Lee, as well as the 2006 flood. A substantial number of properties within these neighborhoods have already been bought out under previous programs, and other units have been abandoned because property owners did not have the resources to fix flood-damaged properties. This has left these neighborhoods with a “gap tooth effect.” The Sidney Reconstruction Plan reported that FEMA has classified over 200 properties

in the floodplain as "repetitive loss," meaning that flood insurance may increase dramatically unless a homeowner elevates their home to FEMA standards. This classification could lead to increasing rates of foreclosure in the high-risk neighborhoods, thus exacerbating the decline of community character.

The Proposed Action, which would seek voluntary elevations or acquisition/demolitions of the remaining properties, would provide options to community members for risk reduction. Homes to be elevated would remain in place, contributing to continuity in land use and community character while reducing the risk of repetitive flood losses. The acquisition and demolition of other properties by Delaware County would enable the future development of a portion of the neighborhood for use as community greenspace, as well as flood protection. The Sidney Reconstruction Plan contemplates the development of a "GreenPlain" for this location. However, the review of this potential future project will be evaluated under NEPA at such time that the scope of the project has been more fully formulated. The acquisition/demolition of homes under the Proposed Action has independent utility from the GreenPlain, thus justifying independent NEPA reviews for these complementary projects.

Other programs currently being developed by the Sidney community and GOSR, such as the Riverlea Housing project, would seek to relocate existing residents to safer locations within the community. The Riverlea Housing project will also be evaluated under a separate NEPA review. This project's different location, timing, and independent utility regardless of whether either the Proposed Action or GreenPlain are ever approved also permits independent NEPA reviews.

As such, while the Proposed Action would transform a neighborhood, significant adverse impacts to community character are not anticipated.

5.20.3 Historic Resources

Standing Structures: The Proposed Action would permit the elevation or acquisition and demolition of 117 of properties that contribute to the Sidney National Register Historic District. An additional 25 properties contributing to the historic district were approved for demolition in 2014 in accordance with FEMA's HMGP, and one was approved for elevation. Furthermore, it is possible that other homeowners within the historic district will take advantage of the HMGP in the future and choose the acquisition/demolition or elevation of their homes. As such, the cumulative effects of the acquisition/demolition of residences could result in a gradual degradation of the historic district that rises to the level of extraordinary circumstance under 44 CFR § 10.8(d)(3)(i) as an action with *a greater scope or size than normally experienced for a particular category of action.*

The Sidney Historic District encompasses the northern half of the Village of Sidney or about 420 acres. It was determined eligible for the National Register of Historic Places September 4, 2013 after the flooding events described above allowing the owners of the properties to take advantage of tax credits available if repairs are done in accordance with the Secretary of the Interior Standards for Rehabilitation. The boundaries include 912 buildings that contribute to the character of the district and largely encompass the developed portions of the Village's 1888 incorporation limits. Under the Proposed Action, approximately 13 percent of the Historic District would be demolished or elevated, or approximately 15.5 percent when including the additional 25 properties that were slated for demolition as the result of the earlier HMGP project.

The elevation or removal of these properties from the historic district would significantly impact the cohesive character of the district over time, particularly in those areas where the majority of the properties are located including northeast of the railroad, between the railroad and the Susquehanna River, from Camp Street in the south to Clinton Street in the north. The fact that the scope of work for this project allows for elevation of properties in the Village's historic North End Neighborhood mitigates some of the adverse impact to the district by allowing those residences to remain in place. Maintaining these buildings, albeit elevated, is important to the historic character of the Historic District as some of the oldest residences in the Village are located in this neighborhood.

To date, the tax credits made available to the owners of the properties as a result of the designation of the district has not sparked a great deal of interest in rehabilitation of the at-risk properties. It is likely that if these properties continue to be inundated by floods, that the character of the district in these areas will continue to erode, with or without the acquisition/demolition through HMGP. As a result, while the cumulative effects of the Proposed Action result in an Adverse Effect to Historic Properties, this EA and the Section 106 process has provided the opportunity to consider ways to avoid, minimize and mitigate the potential adverse effects.

Archaeological Resources: The Village of Sidney has a high sensitivity for archaeological resources. The Proposed Action itself will have little if any impact on them given the nature of the scope of work and the low impact stipulations put in place to protect them through the Section 106 process. However, when considered in conjunction with the GreenPlain project, there is the potential for impacts to archaeological resources. The extent is unknown but it depends upon the degree of the re-grading and channeling activities and the amount of archaeological resources in the Project Area. However, due to the independent utility of the GreenPlain project, these potential impacts would be further analyzed during the NEPA review of that project should it move forward.

5.20.4 Construction Impacts

While there is the potential for a cumulative impact from the generation of construction debris from the elevation or demolition of a great number of homes through the Proposed Action, most of the impact would be mitigated. Strict requirements for the disposal of debris are in place to prevent, to the extent possible, any negative impacts to the environment. The handling and disposal of demolition and construction debris, control of storm water runoff, and noise impacts resulting from the Proposed Action in Sidney would be in accordance with all local, state, and federal regulations as part of the acceptance of assistance funding.

5.20.5 Growth Inducement

The Proposed Action involves purchasing approximately 60 storm-damaged residential properties, securing the sites, and demolishing and clearing existing structures. While the Proposed Action would partially displace existing neighborhoods, it is anticipated that these residents would relocate elsewhere in the community, or perhaps the region. Furthermore, the Proposed Action would elevate at least 35 and as many as 74 homes in their original locations, thereby maintaining a large portion of the neighborhood and its residents.

As such, the Proposed Action is not anticipated to substantially alter regional growth patterns, change residential settlement patterns, displace any public or publicly funded community

facilities, or significantly affect growth in employment centers. Therefore, the Proposed Action would not be expected to generate significant secondary or induced effects, or induce any significant development activity that would otherwise not occur in the region or study area.

5.20.6 Summary

Elevation and acquisition/demolition actions undertaken by the described Proposed Action would result in the elevation or removal of existing residential structures in extreme risk areas, including some that have been identified as "repetitive loss". After considering the alternatives, FEMA and GOSR have determined that there is no practicable alternative other than to proceed with the proposed program. The individual actions undertaken by the described Proposed Action would result in fewer residents in the areas most susceptible to future flood hazards and contribute to the communities' storm attenuation characteristics.

While the Proposed Action is anticipated to result in an adverse effect to historic properties, the benefits of the Proposed Action outweigh the anticipated impacts.

6.0 Permits and Project Conditions

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

1. Buildings must be elevated in accordance with state/local building code and be in compliance with the flood damage prevention local law; generally, at a minimum, buildings should have their lowest floor elevated above the base flood elevation, as identified under the community's Flood Insurance Rate Maps incorporating best available data with appropriate freeboard.
2. Any proposed construction in the floodplain will need to be coordinated with the local floodplain administrator and must comply with Federal, state, and local floodplain laws and regulations.
3. The Subgrantee shall be responsible to complete the SEQRA process and local land-use reviews in accordance with state and local regulations.
4. Excavated soil and waste materials will be managed and disposed of in accordance with applicable federal, state and local regulations.
5. The Subgrantee shall be responsible to comply with the NYSDEC State Pollutant Discharge Elimination System (SPDES) permit for stormwater discharge from construction activity or other applicable SPDES permit, in accordance with NYSECL. If the NYSDEC General Permit for Stormwater Discharges is determined to cover the Proposed Action, the Subgrantee shall provide DHSES/FEMA a copy of the Stormwater Pollution Prevention Plan (SWPPP) and a copy of the Notice of Intent Form at grant project close-out or other time identified by DHSES/FEMA per grant administrative documentation guidance requirements.

If an individual SPDES permit is determined to be required, the Subgrantee shall provide a copy of the obtained permit, as well as supporting SWPPP to DHSES/FEMA at grant project close-out or other times identified by DHSES/FEMA per grant administrative documentation guidance requirements. For more information regarding SPDES, visit the following website: http://www.dec.ny.gov/chemical/43133.html. It is expected that the Subgrantee and its construction contractor(s) will conduct construction utilizing best management practices to limit noise, dust and sedimentation, and erosion during construction.

6. The Subgrantee shall be responsible to comply with all applicable state and local noise regulations, including all hours of operation, and the use of muffling equipment where feasible to reduce noise associated with construction and demolition activities.
7. In the event that unmarked graves, burials, human remains or archaeological deposits are uncovered, the Subgrantee and its contractors will immediately halt construction activities in the vicinity of the discovery, secure the site and take reasonable measures to avoid or minimize harm to the finds. The Subgrantee will inform the DHSES, SHPO and FEMA immediately. FEMA would then notify the Delaware Tribe of Indians, the St. Regis Mohawk Tribe, Oneida Indian Nation, and the Stockbridge Munsee Band of Mohicans. The Subgrantee must secure all archaeological findings and shall restrict access to the area. Work in sensitive areas may not resume until consultations are completed or until an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards determines the extent and historical significance of the discovery. Work may not resume at or around the delineated archaeological deposit until the Subgrantee is notified by DHSES.
8. The disconnection of any water supply or sanitary sewer connection shall be coordinated with the Delaware County Health Department, the New York State Department of Health, and/or the Village of Sidney.
9. The project area serves as potential summer roosting habitat for the threatened Northern long-eared bat (*Myotis septentrionalis*). The following conditions shall apply:
    a. Avoid cutting or destroying trees within 150 feet of known, occupied maternity roost trees during the pup season (June 1-July 31) for the Northern long-eared bat;
    b. Any bat colonies observed in structures to be demolished shall be reported to FEMA, HUD & USFWS. If bats (of any species) are using a structure (e.g., residences, barns or other outbuildings) as a roost, demolition of the structure will be performed outside of the June 1-July 31 bat pup season, unless there are human health or safety concerns associated with the structure; and
    c. Limit removal of existing vegetation, such as woody shrubs and trees, to conserve habitat for bats, migratory birds and other wildlife.
10. To minimize impact to bird nests, woody vegetation removal shall be scheduled outside of March 15 to July 31, if practicable.
11. Occupational Safety and Health Administration (OSHA) standards shall be followed during construction to avoid adverse impacts to worker health and safety.
12. Any woody tree and shrub material to be removed for the Proposed Action is required to be chipped on site to chips of less than one inch in two dimensions or must not be transported whole outside the community. In order to comply with EO 13112 Invasive Species, the

Subgrantee is referred to the NYSDEC website (http://www.dec.ny.gov/animals/47761.html), Federal regulations at 7 CFR Part 301 (http://www.gpo.gov/fdsys/granule/CFR-2011-title7-vol5/CFR-2011-title7-vol5-part301) and state regulations at 1 NYCRR Part 141 (http://www.agriculture.ny.gov/PI/eab/Part_141.pdf) for guidance and updates to the regulations.

13. It is recommended that the Subgrantee restore disturbed construction areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of project area. It is recommended that disturbed soil areas be planted with native plant material, as soon as practicable after exposure, to avoid or minimize growth of undesired and potentially invasive plant species that can potentially take hold without competition of native plant materials. Local landscape plant nurseries and soil conservation offices can assist with identification of suitable native plants for site location type. The following websites may also be useful to identification of native plant material for the Proposed Action site:

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

7.0 Public Involvement

In accordance with NEPA, a draft Environmental Assessment (EA) was released for a 15-day public review and comment period. Availability of the document for comment was advertised in the *Tri-Town News* on February 11, 2016. A hard copy of the EA was be made available for review at the Civic Center Building, 21 Liberty St # 1, Sidney, NY 13838. An electronic copy of the EA was available for download from the FEMA website at http://www.fema.gov/resource-document-library and the GOSR website at http://stormrecovery.ny.gov/environmental-docs. The public was invited to submit written comments by mail to Thomas King, Assistant General Counsel and Certifying Officer, Governor's Office of Storm Recovery, 99 Washington Avenue, Suite 1224, Albany, NY 12260; by email to NYSCDBG_DR_ER@nyshcr.org; or by telephone at (518) 473-0015, Monday through Friday, 9:00 a.m. to 5:00 p.m. During the public review and comment period, comments from two individuals were received. Responses to these comments are provided in Appendix G, "Public Comments."

This EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action. The NEPA evaluation resulted in the identification of no unmitigated significant impacts to the human environment. Obtaining and implementing permit requirements along with appropriate best management practices would avoid or minimize potential adverse effects of the Proposed Action to below the level of a significant impact. FEMA will be signing a Finding of No Significant Impact for the Proposed Action in March 2016.

Copies of the EA will be sent to:

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8.0 Conclusion

GOSR and FEMA through NEPA have found that the Proposed Action Alternative, which involves the elevation or acquisition and demolition of up to 134 structures in the Village of Sidney, and two structures in Sidney Center, would not significantly adversely impact the human environment. It is estimated that at least 35 and as many as 74 homes in the Village of Sidney would be elevated in place and that approximately 60 homes in the Village of Sidney and two homes in Sidney Center would be acquired and demolished. The estimated numbers of homes to be elevated or acquired and demolished are preliminary and may be subject to change. During construction associated with elevation or demolition of homes, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated. Short-term impacts would be mitigated utilizing BMPs, such as silt fences, proper equipment maintenance, and appropriate signage. Environmental impacts of elevation or demolition activities would also be minimized per adherence to the required Stormwater Pollution Prevention Plan (SWPPP) and conditions of issued permits. In the event that contamination is encountered during construction, it would be handled and disposed of properly and in compliance with applicable regulations. Adverse effects to cultural resources are to be mitigated in accordance with the requirements set forth in the Programmatic Agreement (Appendix E).

9.0 List of Preparers

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