US Army Corps of Engineers®
Buffalo District

SCOPING INFORMATION

Blanchard River Watershed Study
Section 441, Water Resources Development Act of 1999

December 10, 2012

U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3199

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TABLES

FIGURES

1.0 INTRODUCTION

The National Environmental Policy Act (NEPA) directs Federal agencies to initiate "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action." The U.S. Army Corps of Engineers (USACE)-Buffalo District has prepared this scoping information to elicit public and agency concerns and comments, clearly define the environmental issues and alternatives that should be examined, and identify any Federal, state and local requirements that may need to be addressed in this study regarding the options for flood risk management and possible ecosystem restoration along the Blanchard River in the City of Findlay (Hancock County) and the Village of Ottawa (Putnam County), Ohio.

2.0 PURPOSE AND NEED FOR THE PROJECT

2.1 Overview

The Blanchard River Watershed is a sub-area of the western Lake Erie Basin in northwestern Ohio and covers 771 square miles (1,967 square kilometers), with 343 square miles (888 square kilometers) occurring upstream of Findlay. The study area includes the watershed boundaries of the Blanchard River within Putnam, Hancock, Seneca, Allen, Hardin and Wyandot Counties (Figure 1). The Blanchard River Watershed drains directly to the Auglaize River and eventually to the Maumee River and Lake Erie.

The City of Findlay is located approximately 50 miles (80 kilometers) south of Toledo and approximately 50 river miles upstream of the confluence of the Blanchard and Auglaze Rivers. The population estimate for Findlay, Ohio from the 2010 census included 41,202 residents. The City of Findlay is the Hancock County seat and an important regional business center, including the headquarters of several large corporations. The Village of Ottawa, Ohio occurs approximately 65 miles (105 kilometers) southwest of Toledo, Ohio. The population estimate for the Village of Ottawa from the 2010 census included 4,460 residents.

The Blanchard River Watershed is prone to frequent flooding with significant flood damages repeatedly occurring at Findlay and Ottawa. The repetitive flooding and associated damages is what prompted the study authorization in 1999.

2.2 Need for Action

The purpose of this study is to investigate the best options for minimizing or eliminating future flood damages in the vicinity of the City of Findlay and the Village of Ottawa as a result of flooding events within the Blanchard River Watershed. The Blanchard River has reached or exceeded major flood stage 23 times since 1913. Of these, nine have occurred since 1990. For events between 1990 and 2012, five are among the top ten stages ever recorded, three have peaked at more than three feet over

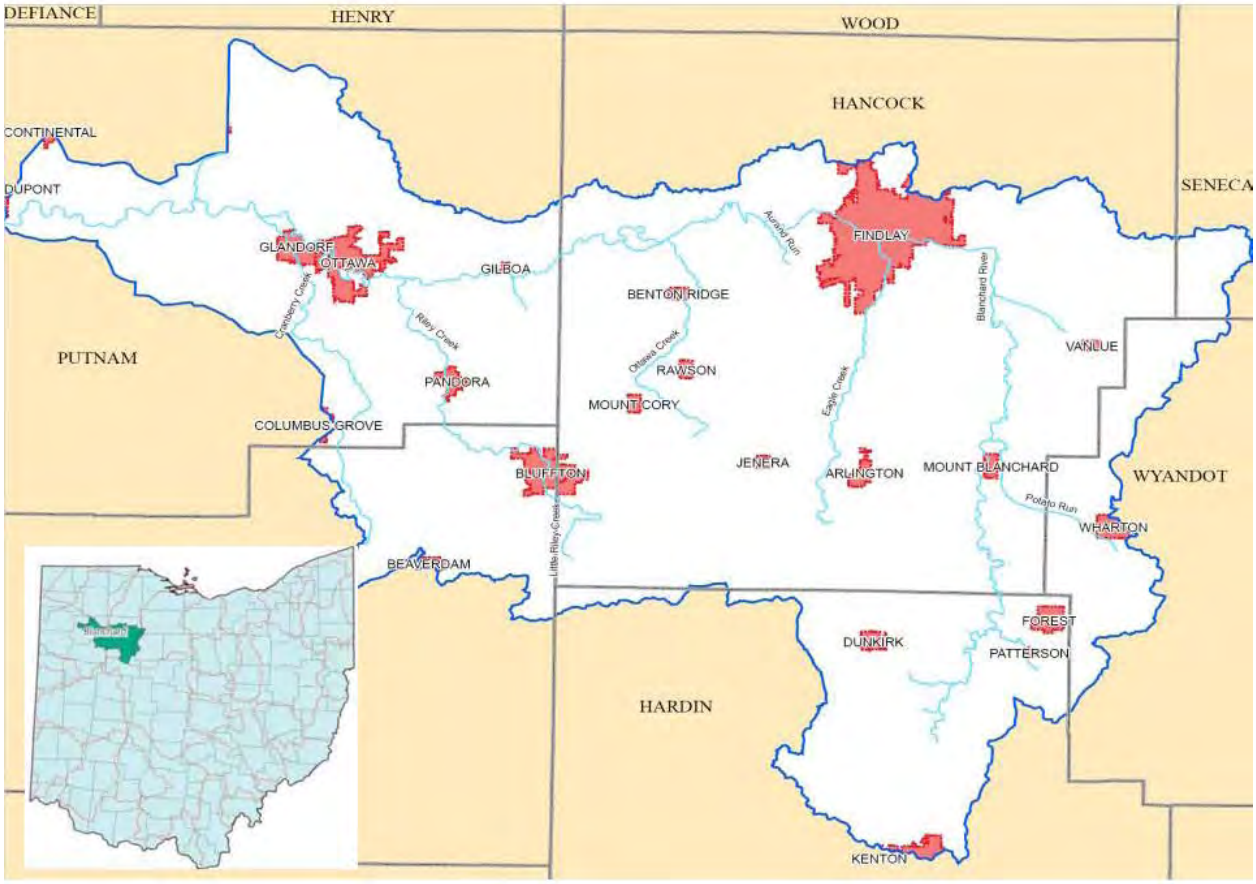

Figure 1. Blanchard River Watershed and location of the City of Findlay and the Village of Ottawa, Ohio. (Sources Blanchard River Watershed Assessment, 2009).

major flood stage, and one (the August 2007 event) reached a peak flood stage only 0.04 feet less than the peak stage ever recorded in 1913. Damages during the August 2007 event alone were estimated by the Northwest Ohio Flood Mitigation Partnership to be roughly $60 million in the Findlay area and $20 million in the Ottawa area.

2.3 Proposed Project

The main goal of this study is to identify feasible flood risk management options for the Blanchard River watershed, including:

- Reduce flood risk and flood damages in the City of Findlay and Village of Ottawa, Ohio. Overall annual damages and the frequency of road closures should be significantly reduced.
- Restore riparian wetland habitat along the Blanchard River and other applicable areas in conjunction with other flood risk management measures.
- Provide recreational opportunities and enhanced connection to the river in conjunction with other project measures.

2.4 Study Authority

The Water Resources Development Act of 1999 (WRDA 99) provides authorization for this study under Section 441 – Western Lake Erie Basin, Ohio, Indiana and Michigan. It states:

" (a) IN GENERAL.—The Secretary shall conduct a study to develop measures to improve flood control, navigation, water quality, recreation, and fish and wildlife habitat in a comprehensive manner in the western Lake Erie basin, Ohio, Indiana, and Michigan, including watersheds of the Maumee, Ottawa, and Portage Rivers.; (b) COOPERATION.—In carrying out the study, the Secretary shall— (1) cooperate with interested Federal, State, and local agencies and nongovernmental organizations; and (2) consider all relevant programs of the agencies.

3.0 ALTERNATIVE PLANS

The USACE Buffalo District initiated a Feasibility Study and prepared an Interim Feasibility Scoping Report in December 2011. It describes existing conditions and expected future without project conditions for the Blanchard River watershed including the City of Findlay and Village of Ottawa, and documents the preliminary screening of measures leading to alternatives identified for further study in the planning process.

3.1 Alternatives Considered

Under USACE regulations, water resource studies typically cover a 50-year study period of analysis to evaluate benefits, costs and other impacts for projects under consideration. It is USACE planning policy to consider practicable and relevant alternative measures, including a no action alternative. While the preferred alternative has not yet been established, the alternative plans considered during the study will consist of an array of structural and nonstructural measures within the Blanchard River watershed and in particular the City of Findlay and Village of Ottawa. Structural measures may include, but are not limited to, channel realignment/diversion, levees and floodwall creation, culvert modification, and the creation of flood storage areas, including wetlands, bermed containment areas, and water detention areas/reservoirs. Nonstructural measures may include, but not be limited to, elevating existing buildings, relocation or acquisition of flood-prone structures, and wet and dry floodproofing. A total of nine alternative plans have been identified which includes evaluation of a no action plan. Four of the alternatives are located within Findlay, Ohio, and four are located within Ottawa, Ohio. Additional areas have been identified downstream in Ottawa that may provide suitable sites for ecosystem restoration or mitigation for the eight alternatives (Figure 2). A brief summary of the alternative plans are listed below.

a. *Plan 1 (No Action*). Under the no action alternative, it is assumed that no measures would be employed to address flooding events within the Blanchard River Watershed. The human population is expected to increase over the 50-year study period, leading to subsequent increases in housing development within the project area. These increases in population and development may result in an increase in peak flood discharges and more severe and frequent flood damages.

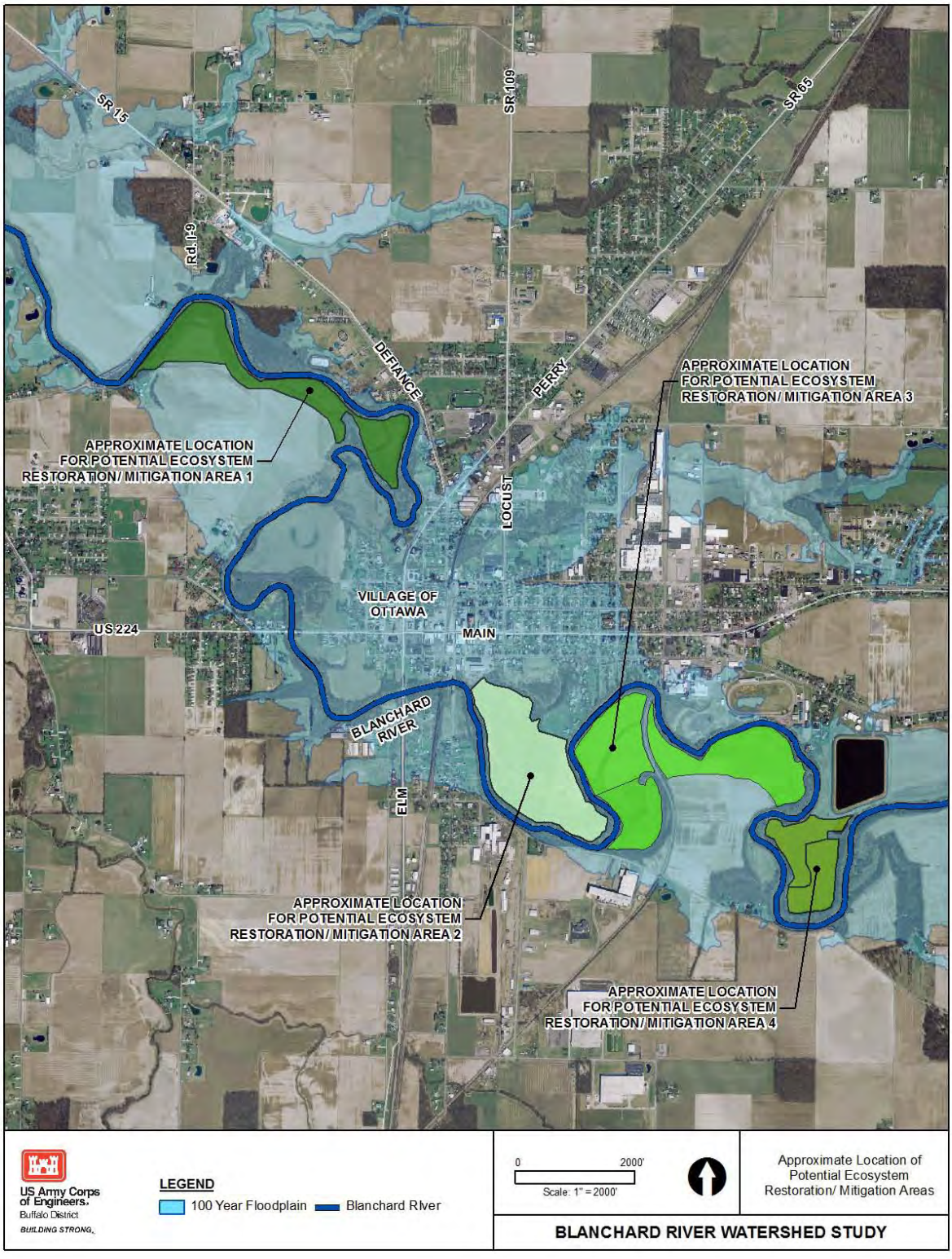

Figure 2. Approximate locations of potential ecosystem restoration/mitigation areas in Ottawa, OH.

b. *Plan 2 (F1).* **Westward Diversion of Eagle Creek Flow to Downstream of Findlay, Modification of Norfolk-Southern Railroad Bridge, Building Acquisition, and Off-Line Storage Areas.** Two Westward Diversion channel alignments have been identified. Alignment 1 includes a diversion along the current path of the existing Aurand Run channel, while Alignment 2 is located in farmland to the south and west of Aurand Run, generally along the path of a valley in the subsurface rock (Figure 3). The plans include diversion control structures on Eagle Creek to allow low flows to continue downstream in Eagle Creek, while flows up to the 100-year flooding event are directed to the diversion channel. The diversion control structures include an inline earthen dam, a low flow outlet, diversion outlets, and a concrete spillway. Flood flow is directed from the current channel to the diversion outlets through trapezoidal channels. Alignment 1 includes a proposed diversion channel that is approximately 7.7 miles long with a 40 foot bottom width and a 15 foot depth (minimum). Alignment 2 includes a proposed diversion channel that is approximately 9.3 miles long with 45-80 foot bottom widths and a depth of around 14 feet (varies). Both Plans include raising and widening of the Norfolk and Southern Bridge across the Blanchard River, and acquisition of several structures currently obstructing the floodway upstream of the Norfolk and Southern Bridge.

   In order to minimize increased flood damages downstream of Findlay, several floodwater storage areas between Findlay and Ottawa are included adjacent to the Blanchard River (Figure 4). Earthen berms will keep existing low lying areas free from flooding until the water surface elevations in the Blanchard River overtop the overflow structures lined with riprap that are constructed within the berm, thus allowing flood waters to enter the storage areas. As river levels recede the stored water will then slowly drain back into the river via gated outlet pipes.

c. *Plan 3 (F2).* **Westward Diversion of Eagle Creek Flow to Downstream of Findlay, Modification of Norfolk-Southern Bridge Combined with the Blanchard to Lye Diversion Cutoff and Non-Structural Mitigation of Induced Flooding Upstream of Lye Creek.** The construction of an earthen levee across the existing floodwater flow path from the Blanchard River to Lye Creek was evaluated and combined with Plan F1 (Figure 5). The embankment is approximately 9,800 feet long with an average height of about five feet and a top width of ten feet. The alignment extends north to south, and crosses both Township Road 173 and County Road 205. To meet the necessary grade for the levee, Township Road 173 may need to be raised approximately two feet and CR 205 may need to be raised approximately six feet. Temporary access roads will be needed on both sides of County Road 205 to provide access for equipment and vehicles during construction. In order to mitigate for anticipated higher increased flow in the Blanchard River upstream of its confluence with Lye Creek, structures in these areas are being evaluated for non-structural protection (acquisition, elevation, or flood proofing). The diversion cutoff levee may isolate approximately 110 acres of farmland between the levee and the Blanchard River. Use of this area could be explored and be made part of the plan as it may provide a suitable site for ecosystem restoration or mitigation of potential wetland impacts by the project.

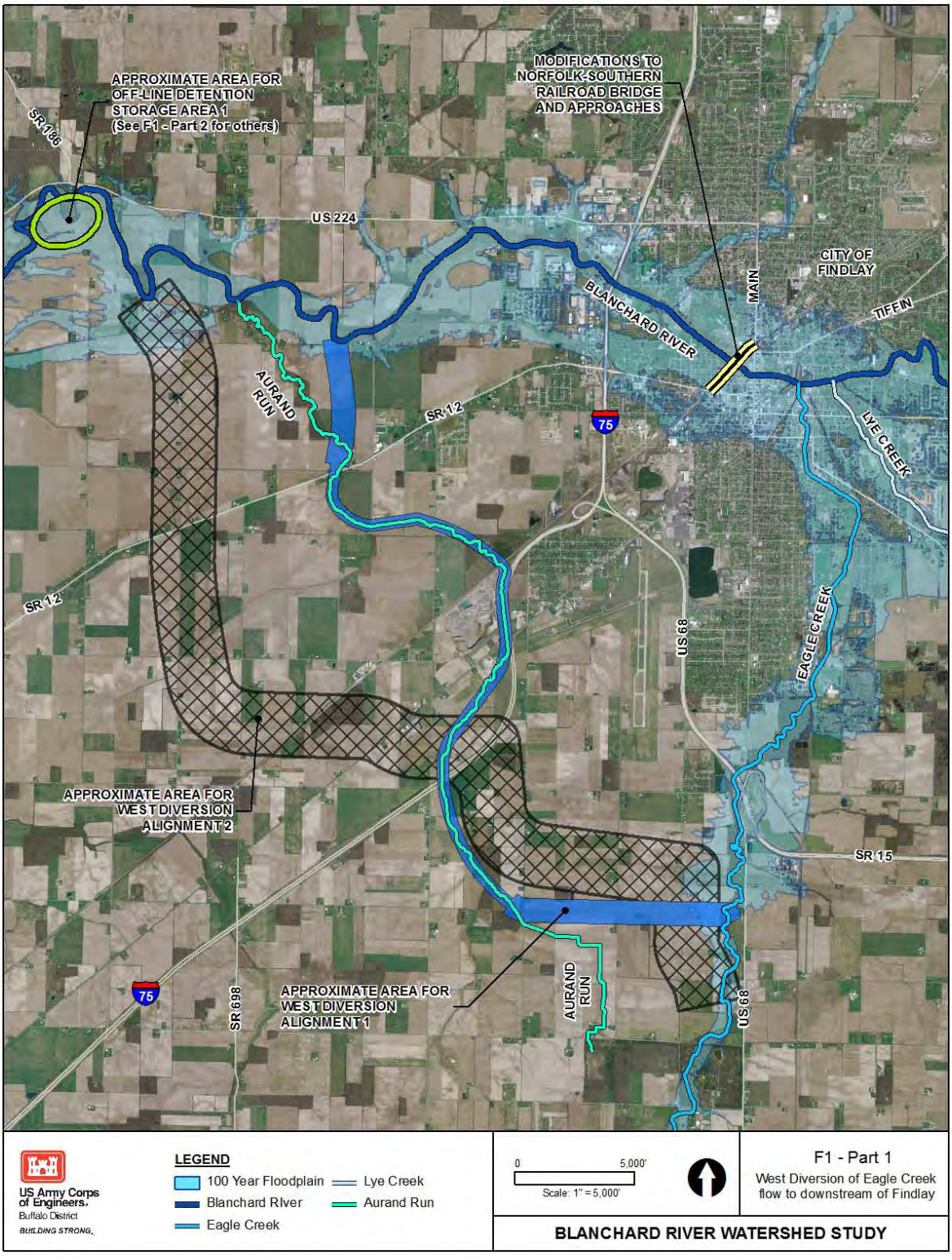

Figure 3. Alternative Plan F1 – Part 1. Approximate location of two different alignments for Diversion of Eagle Creek flow to the west downstream of Findlay.

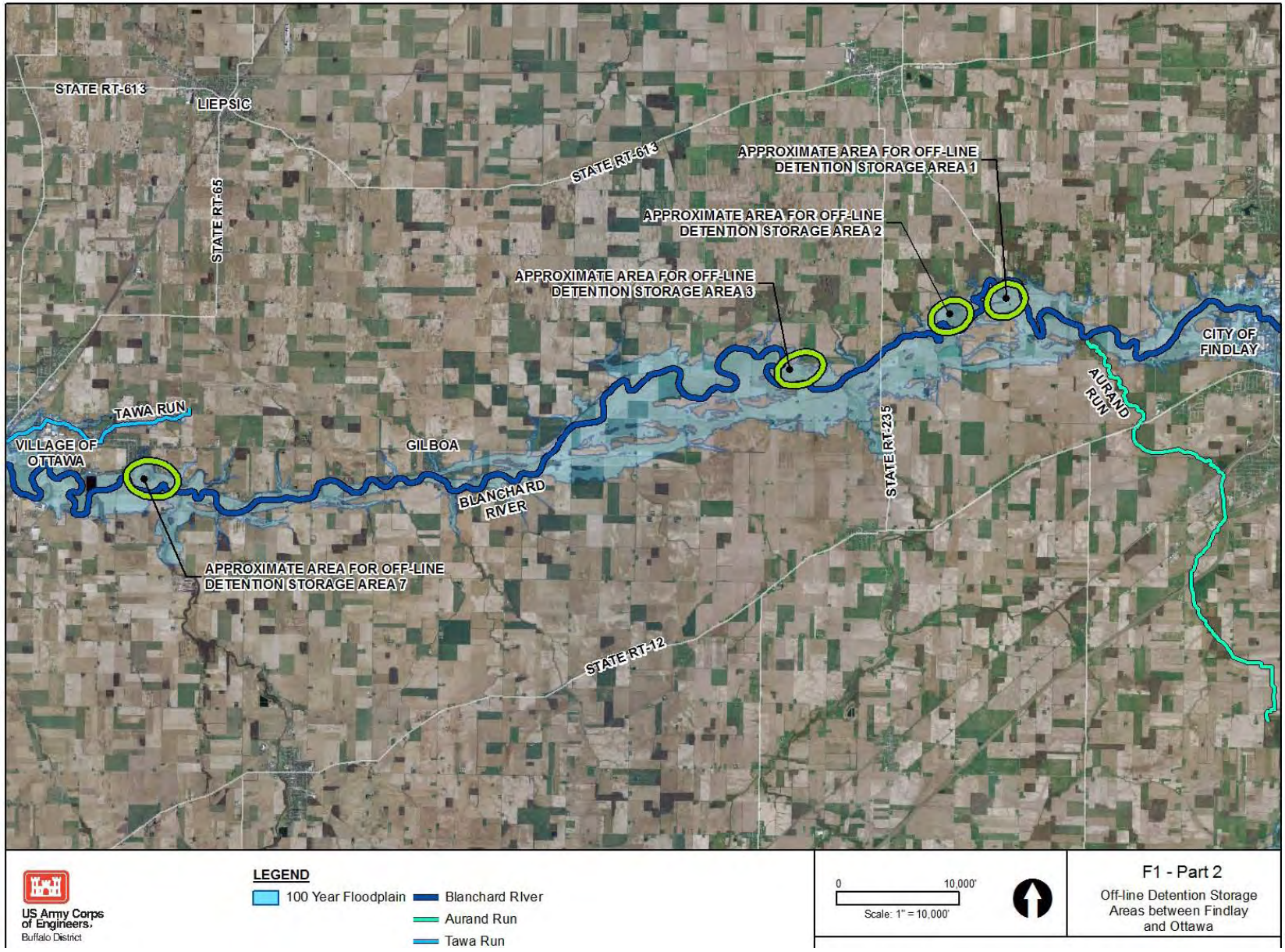

Figure 4. Alternative Plan F1 – Part 2. Approximate locations of off-line detention storage areas between Findlay, OH and Ottawa, OH.

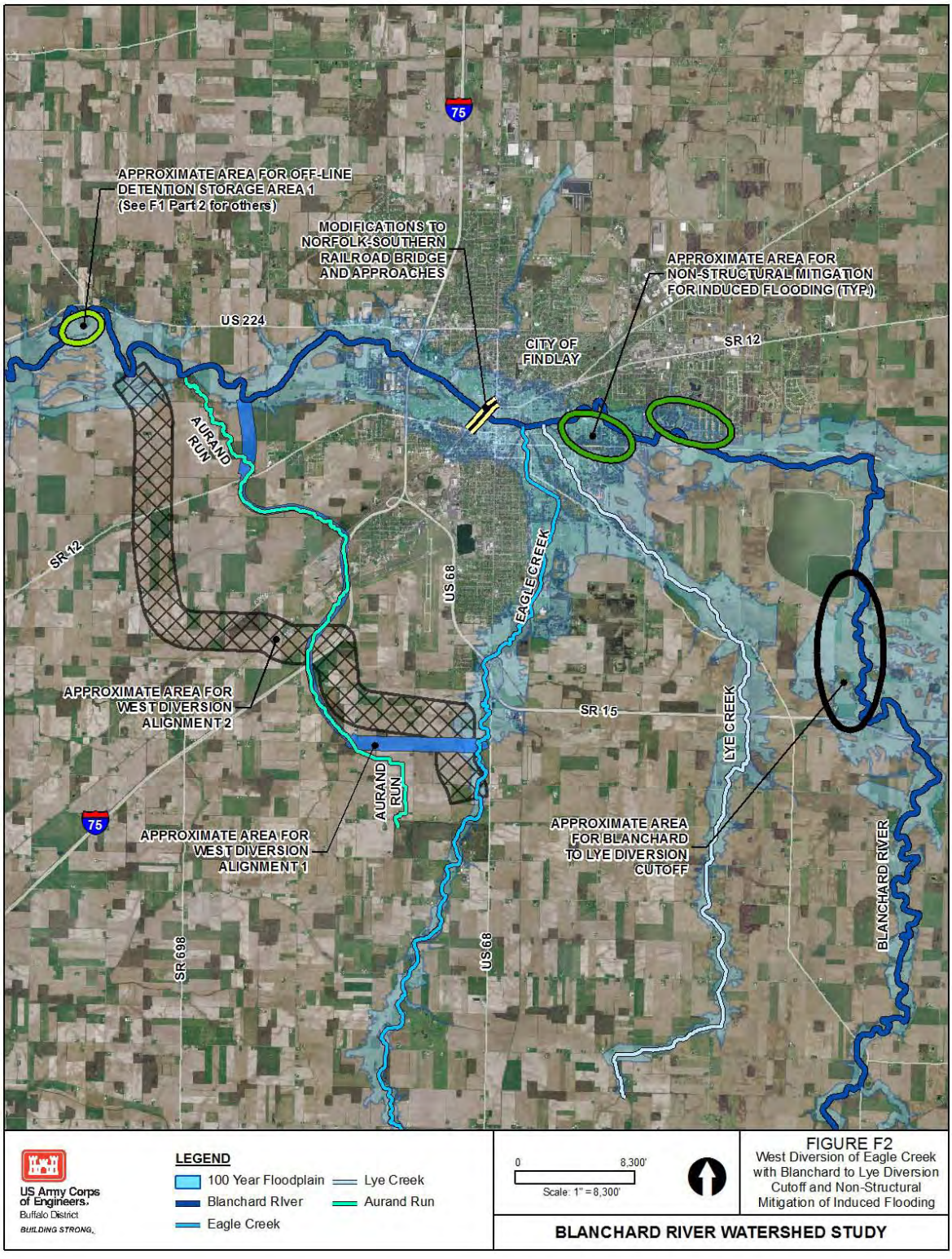

Figure 5. Alternative Plan F2. West Diversion of Eagle Creek with Blanchard to Lye Diversion Cutoff and Non-structural Mitigation of induced flooding.

d. Plan 4 (F3). **Eagle Creek In-line Detention Combined with the Blanchard to Lye Diversion Cutoff and Non-Structural Mitigation of Induced Flooding Above Lye Creek**. The features of Plan F3 incorporate a dry detention structure at Eagle Creek located at County Road 45 combined with the Blanchard to Lye diversion cutoff and non-structural mitigation of induced flooding above Lye Creek from Plan F2 (Figure 6). The proposed dam location offers the greatest amount of flood storage capacity on Eagle Creek due to slope and topography. It would measure approximately 4,240 feet long, 25 feet wide (top width), with 3:1(horizontal:vertical) side slopes, a maximum height of approximately 26 feet, and will not maintain any permanent pool of water. The proposed roller compacted concrete spillway would be approximately 500 feet long, 18 feet tall, and have a 66 foot long stilling basin intended to safely pass flows exceeding the dam storage capacity.

e. Plan 5 (F4). **Combined Structural/ Non-Structural.** The various structural plans for Findlay (F1, F2, and F3) can address a portion of the flood risk in the community. Non-structural options may also be incorporated into any of these structural alternatives (beyond those to address induced flooding) to provide a greater level of flood protection. This could be in the form of building retrofits, removal, elevating buildings, flood proofing, ringwalls, and buyouts (acquisition) of structures that would still be affected by flooding after structural features are in place (Figure 7). The evaluation of building elevation, flood-proofing, or ringwalls was based on providing protection to the 100 year flood event, plus one foot. The specific structural features to be included will be based on the evaluation and comparison of the structural plans discussed above. The non-structural features will be developed and analyzed for buildings in the 5 year, 10 year, and 25 year floodplains that would remain after construction of the structural features. The evaluation identifies potentially feasible non-structural approaches for each structure, and selects the most effective but least cost approach.

f. Plan 6 (O1). **Modification of the I-9 Bridge Embankment.** The I-9 Bridge downstream of Ottawa has a high embankment that runs parallel to the Blanchard River for several hundred feet on the north side of the river (Figure 8). Removing a portion of this embankment will restore flow to the floodway on the right overbank and will reduce upstream flood elevations.

g. Plan 7 (O2). **Modification of the I-9 Bridge Embankment Combined with Non-Structural Plans.** The modification of the I-9 embankment contained in Plan O1 addresses a limited portion of the existing flood problem. This plan would provide more extensive flood protection in Ottawa through building retrofits, buyouts (acquisition), removal of affected structures, elevating buildings, flood proofing, and ringwalls which would provide protection to the 100 year flood event, plus one foot. The non-structural risk management features will be developed and analyzed for buildings in the 5 year, 10 year, 25 year, and 100 year floodplains that would remain after construction of the structural features (Figure 9). The evaluation identifies potentially feasible non-structural approaches for each structure, and selects the most effective but least cost approach for comparing different plans.

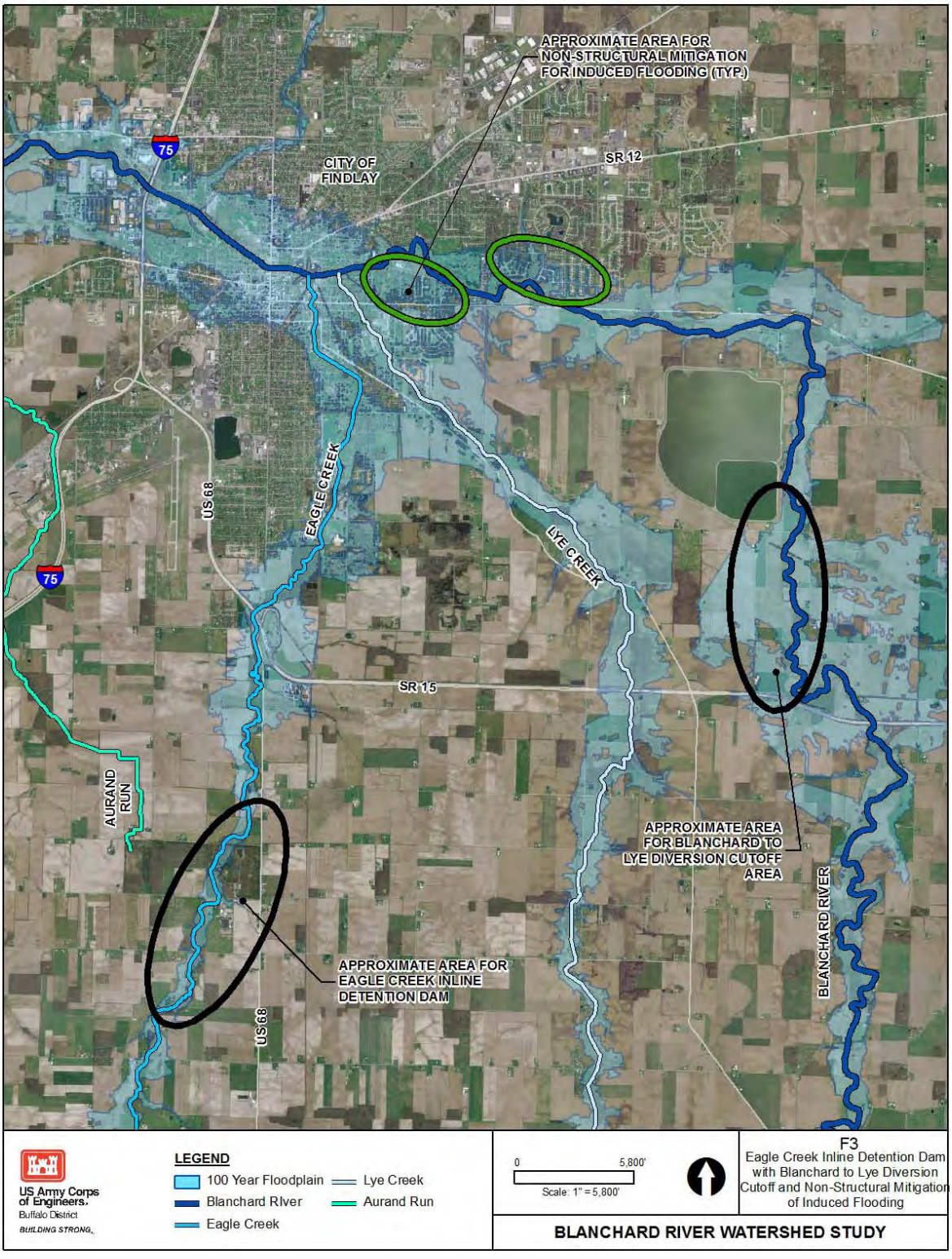

Figure 6. Alternative Plan F3. Eagle Creek In-line Detention with Blanchard to Lye Diversion Cutoff and Non-structural mitigation of induced flooding.

Building elevation in progress

Building elevation complete

Ringwall protection

Building acquisition and removal from floodplain

Three Non-structural Measures:

- 5, 10, 25-year floodplains
- Design Level of Protection: 100-year modeled flood level + 1' freeboard
- Considered building elevation, floodproofing, ringwalls, rebuilding, and acquisition

Selection Process

- Identify feasible treatments for each structure and assign costs
- Select least-cost feasible treatment

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Examples of Nonstructural Measures

BLANCHARD RIVER WATERSHED STUDY

Figure 7. Examples of Non-structural measures.

Figure 8. Alternative Plan O1. Modification of I-9 Bridge Embankment located west and downstream of Village of Ottawa, OH.

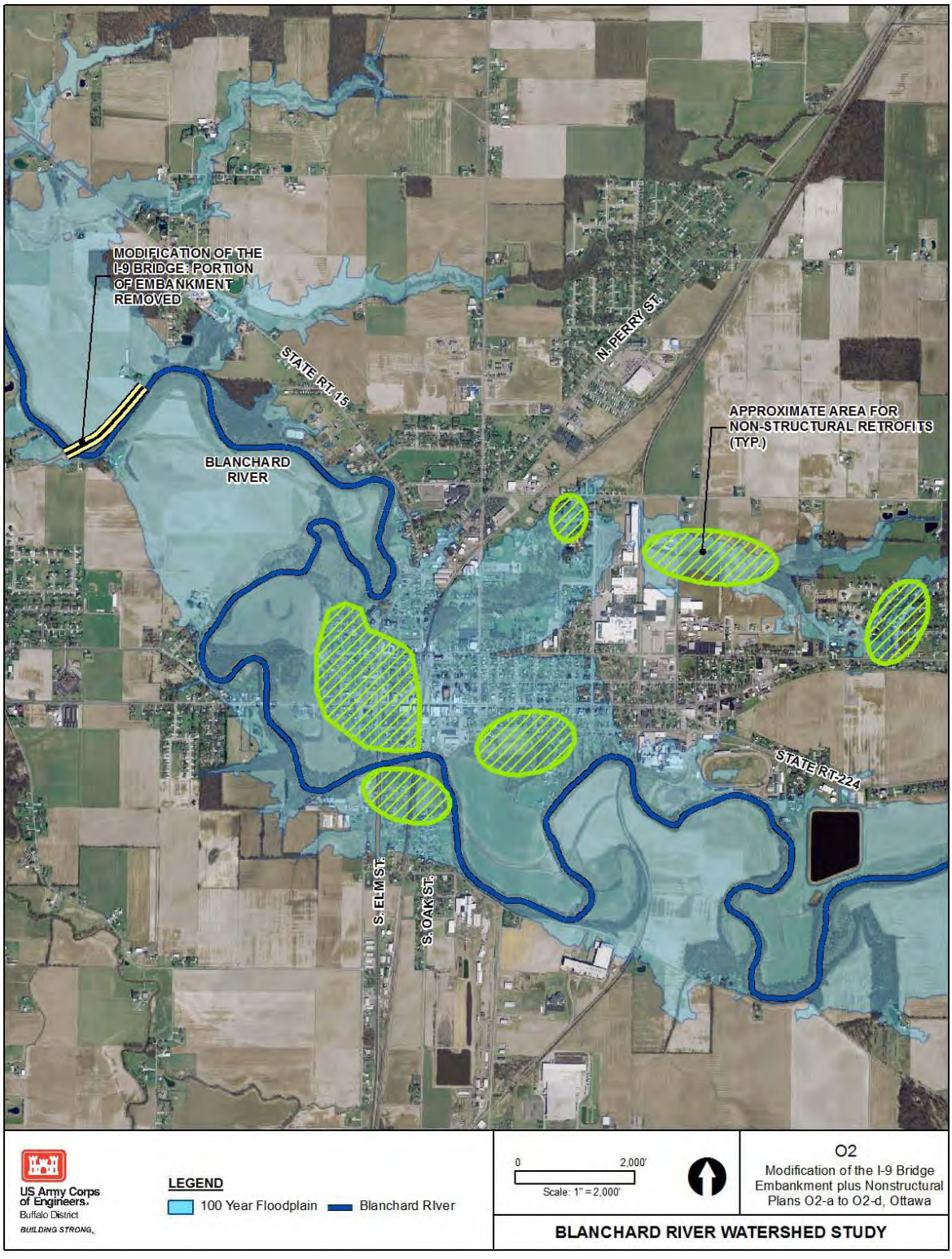

Figure 9. Alternative Plan O2. Modification of the I-9 bridge embankment plus approximate locations of where non-structural measures are being investigated. Additional areas not indicated above may also qualify for non-structural investigation.

h. Plan 8 (O3). **Modification of the I-9 Bridge Embankment Combined with Off-Line Storage at Locations between Findlay and Ottawa**. In order to reduce peak flows reaching Ottawa, consideration is given to the construction of low level berms (average height of 10 feet) around a portion of some low-lying fields between Findlay and Ottawa to create temporary floodwater detention areas. Initially, eight potential locations were identified and the four locations shown in Figure 10 were selected as the most effective. The proposed structures would keep the low lying areas free from flooding until the water surface elevations on the Blanchard River reach the proposed weir elevations on these berms. Blanchard River flows would then overtop the overflow structures lined with riprap that are within the berm and enter the storage areas, which would then drain back into the Blanchard River via the same outlet structures. The weir elevations are currently selected to overtop during the 10 to 25 year flood events.

i. *Plan 9 (O4).* **Modification of the I-9 Bridge Embankment Combined with Channel Diversion in Ottawa**. Plan O4 includes modification of the I-9 embankment and incorporates additional conveyance capacity through a new short diversion channel (Figure 11). The proposed channel realignment is located downstream of the Elm Street Bridge and is approximately 0.75 miles long, 20 feet wide, and 24 feet deep (average), with 2.5:1 side slopes. Normal flows will be maintained in the existing Blanchard River channel and flood flows will be directed into the diversion channel. The area adjacent to the Blanchard River channel and to the east of the diversion channel is one of the areas in Ottawa that may be suitable for ecosystem restoration or wetland mitigation.

4.0 PUBLIC PARTICIPATION AND INTERAGENCY COORDINATION

Throughout the scoping process, stakeholders and interested parties are invited to provide comment on this study. Potential social, economic and environmental benefits and adverse impacts that would result from each alternative plan selected for detailed analysis will be addressed in future documentation. Interested parties are welcome to contact USACE-Buffalo District to discuss their views and recommendations regarding this study. Four public scoping meetings concerning this project are taking place in December, 2012, which include:
(1) December 10, 2012 at 6:30 p.m. – 8:30 p.m. at the Ottawa-Glandorf High School Auditorium, 630 Glendale Ave. Ottawa, OH;
(2) December 11, 2012 at 9:00 a.m. – 11:00 a.m. at the Putnam County Educational Service Center, 124 Putnam Parkway, Ottawa, OH;
(3) December 11, 2012 at 7:00 p.m. – 9:00 p.m. at the Findlay High School Auditorium, 1200 Broad Avenue, Findlay, OH; and,
(4) December 12, 2012 at 9:00 a.m. – 11:00 a.m. at the Hancock County Agricultural Service Center, 7868 County Road 140, Findlay, OH.

Comments from those attending the meetings will be accepted either at those meetings or by mail/email until the close of this scoping period on January 11, 2012.

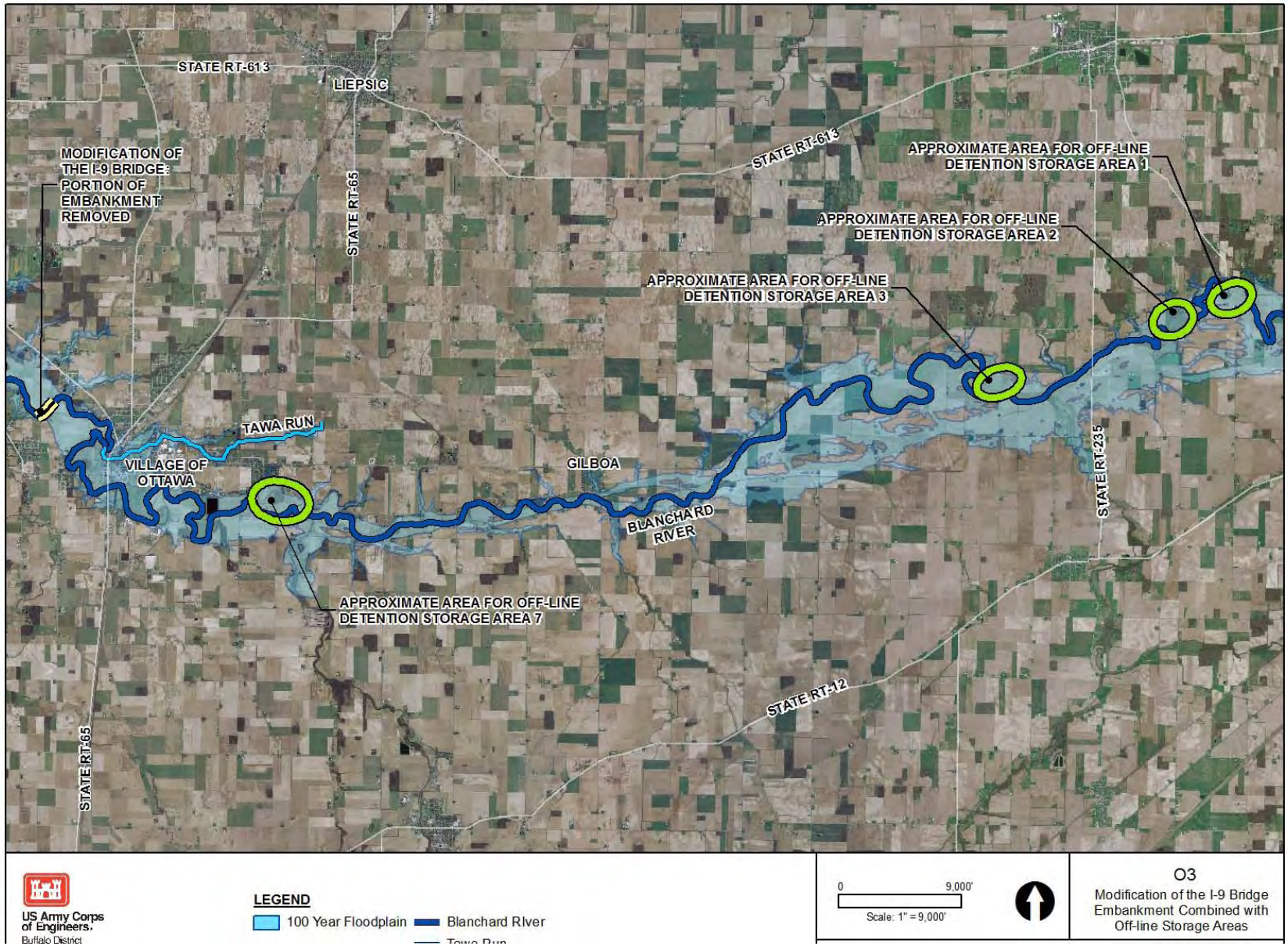

Figure 10. Alternative Plan O3. Modification of I-9 Embankment combined with off-line storage areas between Findlay, OH and Ottawa, OH.

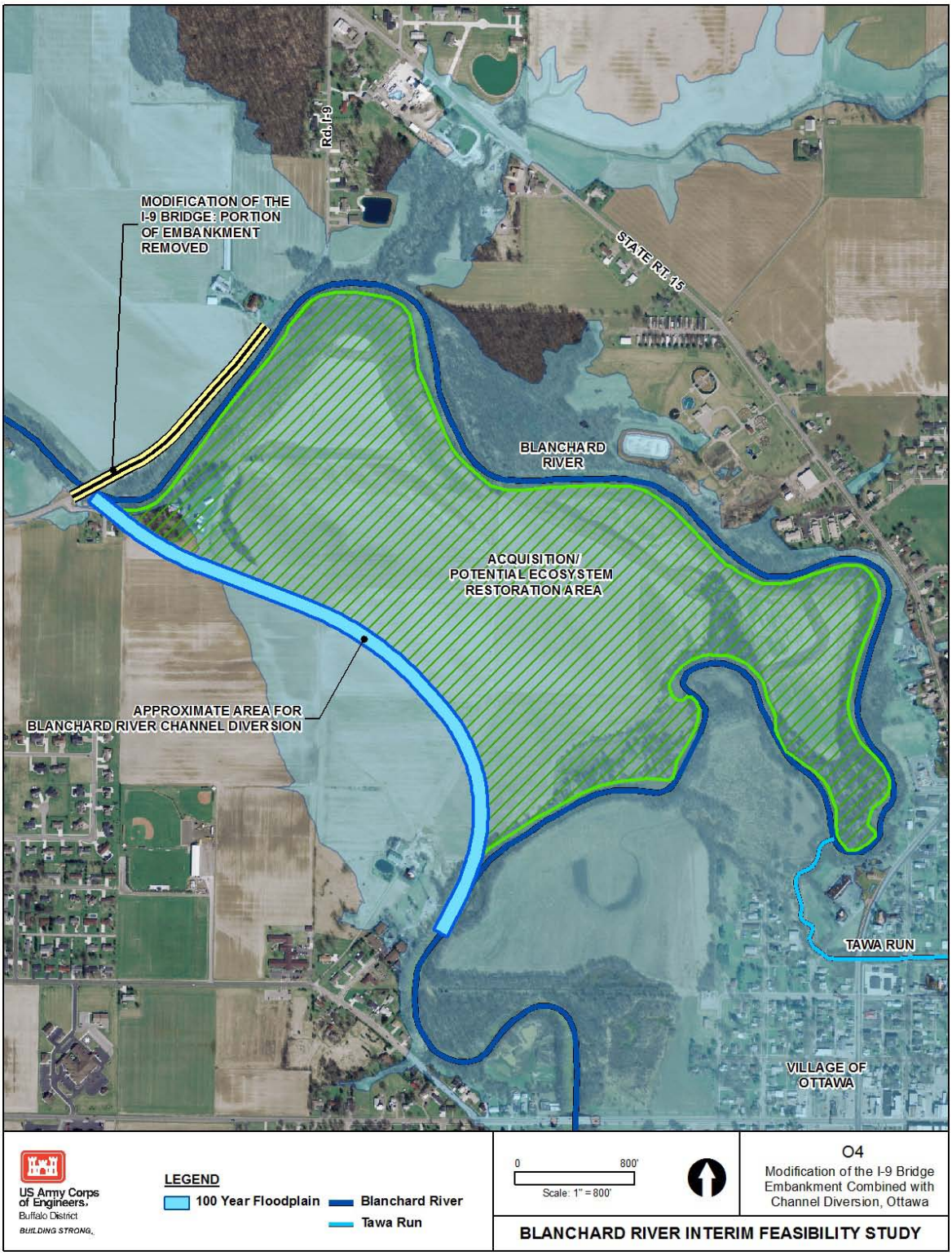

Figure 11. Alternative Plan O4. Modification of the I-9 Bridge embankment combined with Channel Diversion in Ottawa, OH.

5.0 IMPACT ASSESSMENT

In accordance with Section 102(2(c) of the NEPA of 1969, as amended, and other applicable agency implementing regulations, an environmental impact statement (EIS) will be prepared for this study and a Notice of Intent to prepare this EIS was published in the Federal Register on November 28, 2012. This EIS will inform decision makers and the public of reasonable alternatives to reduce the risk of loss of life and property damage from flooding in these areas and that would also avoid or minimize adverse impacts and/or enhance the quality of the human environment. The feasibility study and EIS will be consistent with sound engineering practices and will be drafted concurrently with actions to achieve compliance with other applicable Federal environmental compliance requirements and consistent with State and local plans. Future conditions with the no action alternative and any potential impacts associated with the preferred alternative will be assessed in relation to several parameters, including but not necessarily limited to the following social, economic and environmental categories:

- Fish and Wildlife Resources
- Water Quality
- Dredged/Excavated Material Management
- Geology and Soils
- Contaminated Materials
- Air Quality
- Noise
- Recreation
- Historic Properties
- Property Values and Tax Revenues
- Employment
- Community Cohesion and Growth
- Transportation
- Public Facilities and Services
- Aesthetics
- Environmental Justice

6.0 COMPLIANCE WITH ENVIRONMENTAL PROTECTION STATUTES

Federal environmental protection statutes that will be addressed are listed below, with additional potentially applicable public laws, executive orders, and policies listed in Table 1:

- *National Environmental Policy Act (NEPA)*. In accordance with the Council on Environmental Quality's "Regulations for Implementing the Procedural Provisions of the NEPA of 1969" (40 CFR 1500-1508) and Engineer Regulation 200-2-2 (Procedures for Implementing NEPA), USACE-Buffalo District will assess the potential environmental effects of the study alternatives on the quality of the human environment. Using a systematic and interdisciplinary approach, an assessment will be made of the potential environmental impacts (including cumulative impacts) for each plan as determined by comparing the with- and without-project conditions.

- *Clean Water Act.* If the recommended plan involves the placement of dredged or fill material into waters of the United States, USACE-Buffalo District will evaluate the discharge in accordance with the Clean Water Act Section 404(b)(1) Guidelines. Water quality and related information used in this evaluation will provide documentation to demonstrate that the recommended plan is in compliance with this Act. A Section 404(a) Public Notice will be circulated and an opportunity to request a public hearing will be afforded to all potentially

affected parties. Section 401 Water Quality Certification for the discharge would be requested from the Ohio Environmental Protection Agency (OEPA).

Under Section 402 of the Act, if the recommended plan disturbs greater than one acre of ground surface, then USACE-Buffalo District would develop a Stormwater Pollution Prevention Plan and submit it along with a Notice of Intent to the OEPA for coverage under their State Pollutant Discharge Elimination System general permit for construction activities.

- *Endangered Species Act*. In accordance with Section 7 of this Act, USACE-Buffalo District is requesting information from the U.S. Fish and Wildlife Service (USFWS) on any listed or proposed species, or designated or proposed critical habitat that may be present in the project area. If this consultation with USFWS identifies any such species or critical habitat, then USACE-Buffalo District will conduct a biological assessment to determine the proposed project's effect on these species or critical habitat.

  The Blanchard River drainage supports 33 state-listed species, including 20 plants, seven invertebrates, four birds, and two reptiles. According to the USFWS, there are six Federally-listed species and/or their respective habitats within the Blanchard River Watershed. Of these, one is a mammal (Indiana bat, *Myotis sodalis*, endangered), two are invertebrates (clubshell, *Pleurobema clava* [extirpated] and rayed bean, *Villosa fabalis*, both endangered), two are reptiles (copperbelly watersnake, *Nerodia erythrogaster neglecta*, threatened, and eastern massasauga rattlesnake, *Sistrurus catenatus catenatus*, candidate), and one is a bird (bald eagle, *Haliaeetus leucocephalus*, species of concern). The USACE has been in early consultation with the USFWS, OEPA, and Ohio Department of Natural Resources (ODNR) regarding this project since 2010 to obtain their guidance and input as early in the study process as possible. None of these species would be expected to be affected by the proposed project.

- *National Historic Preservation Act.* Under Section 106 of this Act, this scoping document initiates consultation with the National Park Service and local historic preservation organizations, and provides additional information for continuing consultation with the Ohio Historic Preservation Office. Since this study may affect resources and important sites located within the ancestral homelands of several Indian Nations, this scoping information has also been sent to them along with a separate letter inviting them to consult on this project.

  In compliance with Section 106 of the National Historic Preservation Act and 36 Code of Federal Regulations Part 800 (Protection of Historic Properties) and under contract with the study's non-Federal sponsor (Hancock County), the Mannick & Smith Group, Inc. has initiated the identification phase for the study's area of potential effects (APE) which are shown in Figures 12 through 14. Copies of the reports for these areas have been provided to the Ohio Historic Preservation Office and potentially interested Indian Nations.

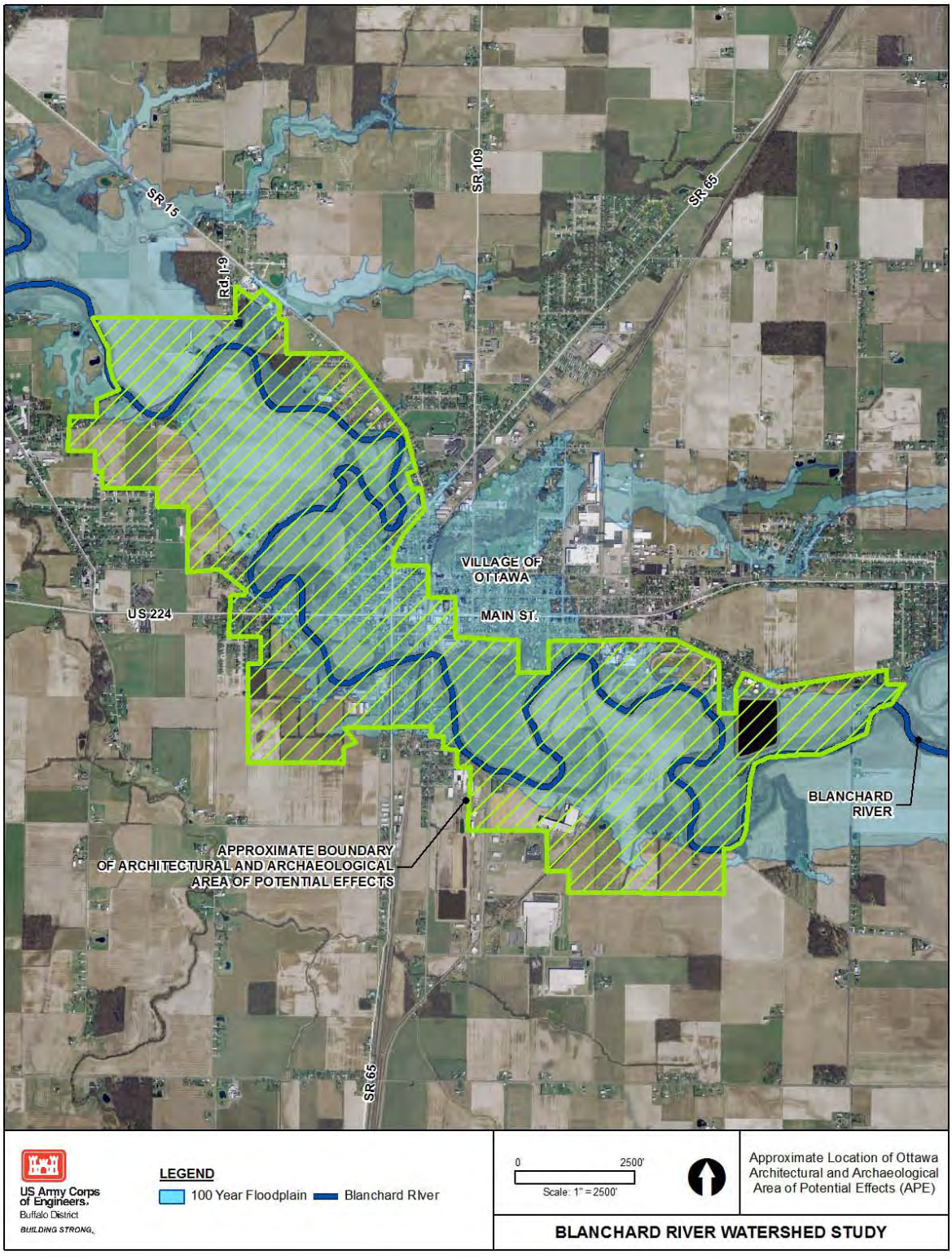

Figure 12. Approximate location of combined Ottawa architectural and archaeological area of potential effects (APE).

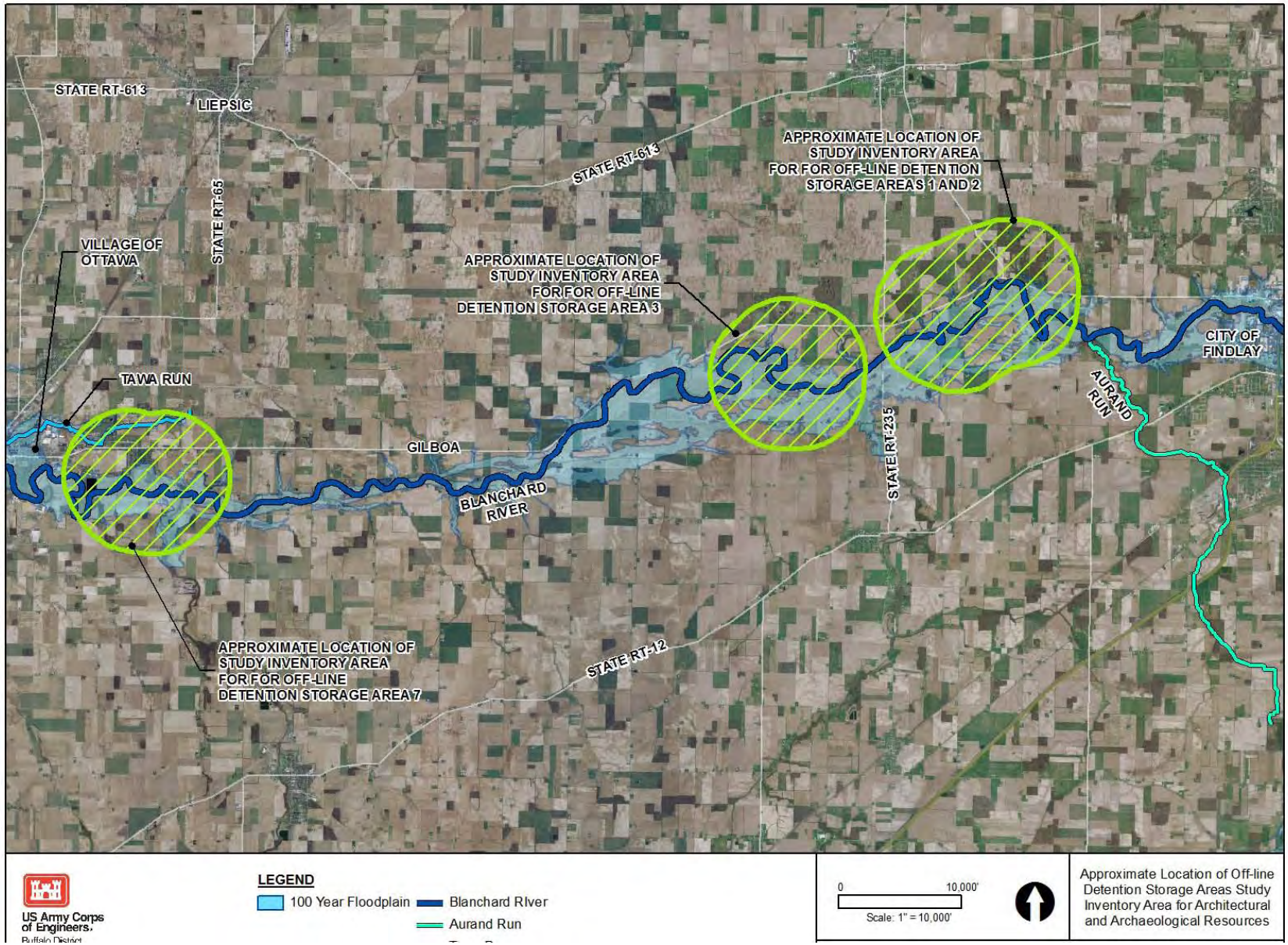

Figure 13. Approximate location of off-line detention combined APE for architectural and archaeological resources.

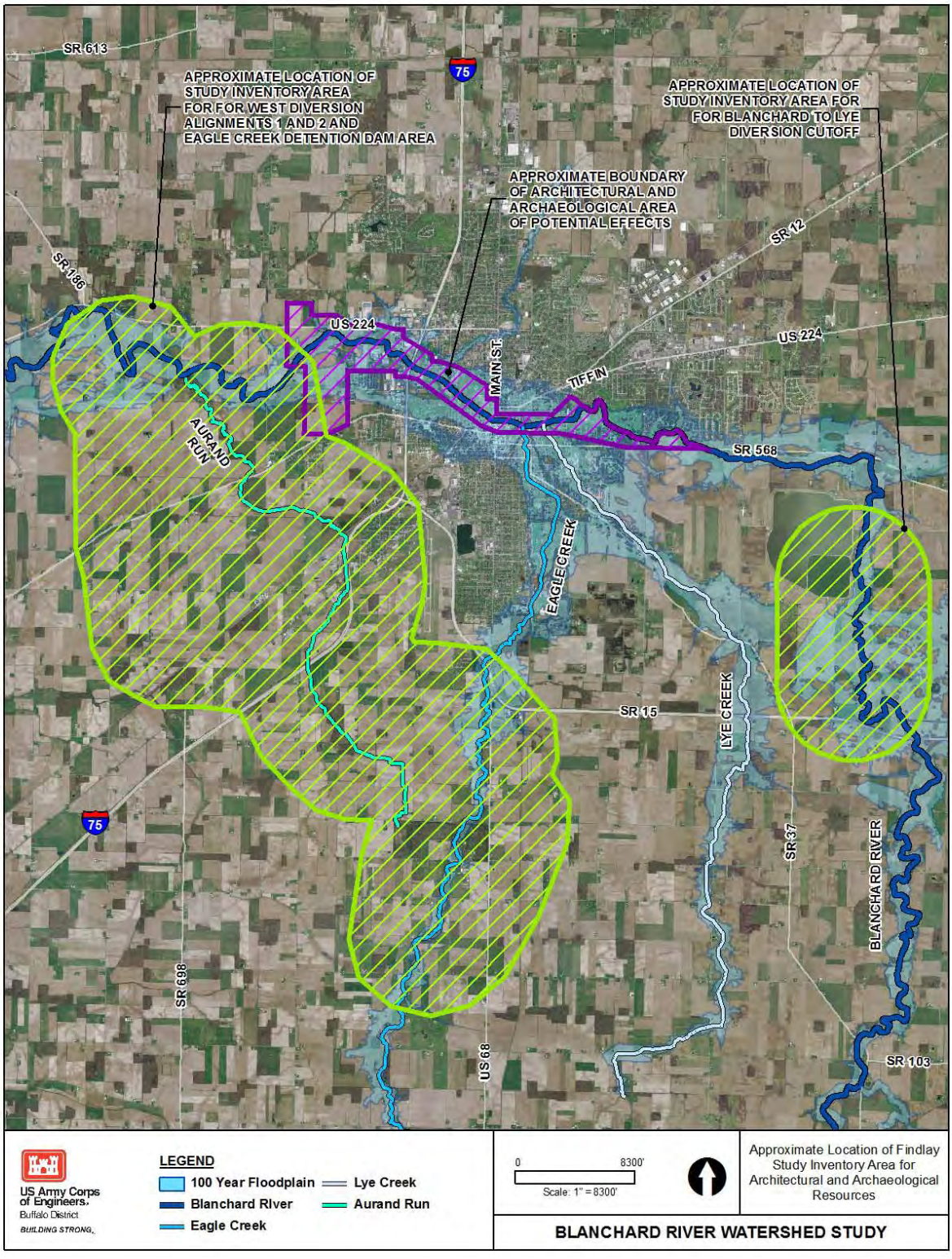

Figure 14. Approximate location of Findlay combined architectural and archaeological APE.

Historic properties identified to date in the area of potential effects (APE) include:

Ottawa

A total of two National Register Sites (NR), 52 Ohio Historic Inventory architectural sites (OHI, and three Ohio Archaeological Inventory (OAI) sites exist within the Area of Potential Effects for measures considered in Ottawa to manage flood risks (Figure 12). Most of the architectural sites are associated within the Village of Ottawa while the archaeological sites are located along the Blanchard River floodplain. One archaeological site is located within the approximate location of the diversion channel being considered in Ottawa. Additional Phase II investigations will be required if this measure is included in the final flood risk management recommended plan.

Off-line Storage Areas (located between Findlay and Ottawa)

No National Register sites exist within the four (4) proposed Off-line Storage Area APE's (Figure 13). However, three architectural sites and 36 archaeological sites were identified for these areas in the Ohio Historic Inventory (OHI) and Ohio Archaeological Inventory (OAI), respectively. . In addition, five sites listed in Mills' Archaeological Atlas of Ohio (1914) are situated within the inventory boundaries. The Mills listed sites are considered approximate and additional archaeological investigations will be required to determine location and significance. Phase I investigations will be completed if the Off-line Storage Areas are included in the recommended Plan.

Findlay

Information on cultural resources is based upon completed Phase I Cultural Resource Survey's within the APE, as well as on an inventory of areas for measures that were added since the earlier Phase I investigations were completed (Figure 14). A total of five National Register Sites were identified, with one consisting of the Findlay Historic District located in downtown Findlay along Main Street. Additional cultural resources consist of a total of 62 sites listed on the Ohio Historic Inventory (mostly associated within the City of Findlay) and another 20 sites included in the Ohio Archaeological Inventory (OAI). Additional Phase I investigations and coordination with the Ohio Historic Preservation Office will be required.

Table 1. Summary of historic properties or potentially eligible properties identified to date within the Blanchard River Watershed Study APE.

Project Area	National Register Sites (NRDOE)[5]	Ohio Historic Inventory (OHI) Structures - Architecture	Ohio Archaeological Inventory (OAI) Sites [6]
Ottawa [1]	2 (0)	52	3
Off-line Storage Areas [2]	0 (0)	3	36
Findlay [1][3][4]	5 (0)	62	20

(1) Based on designated Area of Potential Effects (APE) from original Phase I Cultural Survey completed when Levee/Walls were under consideration.

(2) Based on Inventory Area (1 mile study area around proposed locations)

(3) Includes Findlay Historic District

(4) Based on Modified Inventory Area (Original was done at 2 mile study area around proposed project locations but went with estimated 1 mile)

(5) NRDOE = National Register Determination of Eligibility

(6) Excludes Mills sites but addressed in narrative

7.0 POINT OF CONTACT

Interested parties are encouraged to contact the USACE-Buffalo District Project Team with any comments regarding the Blanchard River Watershed Study. Questions or requests for additional information may be directed to:

Buffalo District Project Team

Telephone No.:800-833-6390
E-mail: Blanchard.NEPA@usace.army.mil

Please review the study information and present any comments in writing within thirty (30) days to the attention of the Buffalo District Project Team to the email address listed above or at the following address:

U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199

Thank you for your interest and review of this project.

Table 2. Federal Environmental Protection Laws, Executive Orders, and Policies.

1. PUBLIC LAWS

a. American Folklife Preservation Act, P.L. 94-201; 20 U.S.C. 2101, *et seq.*
b. American Indian Religious Freedom Act, P.L. 95-341, 42 U.S.C. 1996, *et seq.*
c. Anadromous Fish Conservation Act, P.L. 89-304; 16 U.S.C. 757, *et seq.*
d. Antiquities Act of 1906, P.L. 59-209; 16 U.S.C. 431, *et seq.*
e. Archaeological and Historic Preservation Act, P.L. 93-291; 16 U.S.C. 469, *et seq.* (Also known as the Reservoir Salvage Act of 1960, as amended; P.L. 93-291, as amended; the Moss-Bennett Act; and the Preservation of Historic and Archaeological Data Act of 1974.)
f. Archaeological Resources Protection Act, P.L. 96-95 as amended, 16 U.S.C. 470aa, *et seq.*
g. Bald Eagle Protection Act; 16 U.S.C. 668.
h. Clean Air Act, as amended; P.L. 91-604; 42 U.S.C. 1857h-7, *et seq.*
i. Clean Water Act, P.L. 92-500; 33 U.S.C. 1251, *et seq.* (Also known as the Federal Water Pollution Control Act; and P.L. 92-500, as amended.)
j. Coastal Zone Management Act of 1972, as amended, P.L. 92-583; 16 U.S.C. 1451, *et seq.*
k. Comprehensive Environmental Response, Compensation, and Liability Act, P.L. 96-510, 42 U.S.C. 9601, *et seq.*
l. Endangered Species Act of 1973, as amended, P.L. 93-205; 16 U.S.C. 1531, *et seq.*
m. Energy Independence and Security Act, P.L. 110-140, 42 **U.S.C**. 15821, *et seq.*
n. Energy Policy Act, P.L. 109-58, 42 **USC** 13201, *et seq.*
o. Estuary Protection Act, P.L. 90-454; 16 U.S.C. 1221, *et seq.*
p. Farmland Protection Policy Act, P.L. 97-98, 7 U.S.C. 4201, *et seq.*
q. Federal Environmental Pesticide Control Act, P.L. 92-516; 7 U.S.C. 136.
r. Federal Water Project Recreation Act, as amended, P.L. 89-72; 16 U.S.C. 460-1(12), *et seq.*
s. Fish and Wildlife Coordination Act of 1958, as amended, P.L. 85-624; 16 U.S.C. 661, *et seq.*
t. Historic Sites Act of 1935, as amended, P.L. 74-292; 16 U.S.C. 461, *et seq.*
u. Land and Water Conservation Fund Act, P.L. 88-578; 16 U.S.C. 460/-460/-11, *et seq.*
v. Migratory Bird Conservation Act of 1928; 16 U.S.C. 715.
w. Migratory Bird Treaty Act of 1918; 16 U.S.C. 703, *et seq.*
x. National Environmental Policy Act of 1969, as amended, P.L. 91-190; 42 U.S.C. 4321, *et seq.*
y. National Historic Preservation Act of 1966, as amended, P.L. 89-655; 16 U.S.C. 470a, *et seq.*
z. Native American Graves Protection and Repatriation Act, P.L. 101-601, 25 U.S.C. 3001, *et seq.*
aa. Native American Religious Freedom Act, P.L. 95-341; 42 U.S.C. 1996, *et seq.*
bb. Noise Control Act, P.L. 92-574, 42 U.S.C. 4901, *et seq.*
cc. Resource Conservation and Recovery Act of 1976, P.L. 94-580; 7 U.S.C. 1010, *et seq.*
dd. River and Harbor Act of 1899, 33 U.S.C. 403, *et seq.* (also known as the Refuse Act of 1899)
ee. Toxic Substances Control Act, P.L. 94-469; 15 U.S.C. 2601, *et seq.*
ff. Watershed Protection and Flood Prevention Act, as amended, P.L. 83-566; 16 U.S.C. 1001, *et seq.*
gg. Wild and Scenic Rivers Act, as amended, P.L. 90-542; 16 U.S.C. 1271, *et seq.*

2. EXECUTIVE ORDERS

a. Executive Order 11593, *Protection and Enhancement of the Cultural Environment,* May 13, 1979
b. Executive Order 11988, *Floodplain Management*, May 24, 1977
c. Executive Order 11990, *Protection of Wetlands*, May 24, 1977
d. Executive Order 11514, *Protection and Enhancement of Environmental Quality*, March 5, 1970, as amended by Executive Order 11991, May 24, 1977
e. Executive Order 12088, *Federal Compliance with Pollution Control Standards*, October 13, 1978
f. Executive Order 12372, *Intergovernmental Review of Federal Programs*, July 14, 1982
g. Executive Order 12580, *Superfund Implementation*, January 23, 1987
h. Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*, August 3, 1993
i. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994
j. Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, April 21, 1997
k. Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, January 10, 2001
l. Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, January 24, 2007
m. Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, October 5, 2009

3. OTHER FEDERAL POLICIES

a. Council on Environmental Quality Memorandum of August 11, 1980: Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act
b. Council on Environmental Quality Memorandum of August 10, 1980: Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the National InventoryMigratory Bird Treaties and other international agreements listed in the Endangered Species Act of 1973, as amended, Section 2(a)(4)