Proposal to Request Funding from the Virginia Aquatic Resources Trust Fund (VARTF)

MJ-1 Rivanna River (Lamb)

Date Submitted to the Corps: February 27, 2014

1. OBJECTIVES

The Nature Conservancy (the Conservancy) has prepared this request from the VARTF to expand the wetland mitigation area on the MJ-1 Rivanna River (Lamb) project site. The project is located along the North and South Forks of the Rivanna River in Albemarle County, Virginia (HUC 02080204). In 2001, 2003, and 2007, the IRT approved funding for wetland restoration, stream restoration/enhancement, and buffer restoration on the 154-acre Lamb property. The project included placing a conservation easement on the tract which allowed light agricultural activities to occur within three small fields totaling 24.36 acres. Proposed mitigation activities included 20 acres of wetland restoration, stream restoration of 1,866 linear feet of an unnamed tributary of North Fork Rivanna River, enhancement of 1,373 linear feet of a second tributary, 20.37 acres of buffer preservation and 69.42 acres of planting which provides buffer restoration on the Rivanna River, the stream restoration and enhancement reaches, and the wetland restoration area. Through these activities, the Conservancy expects to generate up to 29.26 NTW credits. With the current prospectus, the Conservancy is proposing to restore an additional 15.23 acres of wetland buffer through planting in an agricultural field located in the center of the property adjacent to the wetland restoration area. This additional activity is expected to generate 2.91 credits, bringing the total for the MJ-1 project to 32.18 NTW credits. This prospectus details the additional wetland buffer restoration that is being proposed at this time.

Contact/Project Specifics:

TNC Contact:	Karen Johnson Mitigation Program Manager 530 E. Main St. Suite 800 Richmond, VA 23219 804-644-5800 x116 Karen_johnson@tnc.org
TNC Project Name:	Rivanna River (Lamb)
VARTF Tracking Number:	MJ-1
Project Type:	Wetland Buffer Restoration
Locality/County:	Albemarle County
HUC:	02080204
Basin:	Middle James River
Geographic Coordinates:	78°26’21.5’’W 38°04’43.2’’N
Property Owner:	Mr. and Mrs. Stephen L. Levine 1601 Bentivar Farm Road Charlottesville, VA 22911 434-973-5795 slevine@virginia.edu
Total Project Area Protected:	15.23 acres
Wetland Buffer Restoration:	15.23 acres

2. SITE SELECTION

A. The 154-acre Rivanna River (Lamb) property (Property) contains approximately 3,648 linear feet of frontage on the North Fork Rivanna River and 2,550 linear feet of frontage on the South Fork Rivanna River and two unnamed tributaries of the North Fork Rivanna River. The project contains previously restored wetlands, upland buffers, and stream restoration/enhancement areas. Through this prospectus, the Conservancy proposes to provide 15.23 acres of additional wetland buffer along the southeastern side of the wetland restoration area. Please refer to Attachment F – VARTF Offsite Mitigation Checklist and Attachment G – Norfolk District Prospectus Checklist for additional information.

B. Description of Property. The 154-acre Property is located off of Bentivar Farm Road just south of Polo Grounds Road Road (State Highway 653) and north of the City of Charlottesville, Virginia. The Property is owned by Mr. and Mrs. Steven L. Levine and is zoned RA, Rural Areas. The Property is situated at the confluence of the North and South Forks of the Rivanna River. The Property is comprised of areas of mature forest as well as forested, scrub/shrub and emergent wetlands and forested uplands created through prior restoration efforts. The property also contains several agricultural fields used primarily for the production of hay. The area that is the subject of this prospectus is a 15.23-acre agricultural field located in the center of the property adjacent to the wetland restoration area. Prior to wetland restoration, the property was used entirely for agriculture, and site hydrology had been altered through tile drains and ditching. Wetland restoration activities included plugging the primary ditch outlet and crushing the tile drains. One of the prior tile drains bisected the field proposed for additional buffer planting. Riverview loam soil series underlies the field, and consists of very deep, well drained, moderately permeable soils of floodplains. Runoff on these well drained soils is slow and soil flooding occurs for short periods in winter and early spring.

C. Description of Wetlands. The field proposed for restoration is located adjacent to the wetland restoration area. Wetland restoration activities were initiated in 2002 and completed in 2005, and are expected to generate up to 27.4 acres of surface and groundwater fed palustrine forested, scrub-shrub, and emergent wetlands. A jurisdictional determination of "waters of the US" will be completed on the project in Year 10 (2014).

D. Description of Buffers. Previous buffer restoration activities included planting of 69.42 acres of native hardwoods in 2009. Approximately 20.37 acres of existing woodlands were preserved. The buffer restoration and preservation activities provide for a 250-foot buffer along the North Fork (right bank) and South Fork (left bank) of the Rivanna River, a 200-foot buffer on the stream restoration and enhancement tributaries and an over 200-foot buffer on the wetland restoration area, except in areas where the wetland restoration area is located in close proximity to the agricultural field in the center of the property. The planted woody species are thriving and the buffer areas are also becoming densely vegetated with native volunteer woody species. The 15.23-acre field proposed for planting is within the 100-foot buffer of the wetland restoration area, and will provide for a wider buffer on the southeast side of the restoration area as well as permanent protection of this buffer. In addition, invasive field grasses, primarily Johnson grass (*Sorghum halepense*), are prevalent within the field, and managing the invasives and converting the field to forest will remove a seed source for invasives in the surrounding wetland and buffer restoration areas.

E. Natural Heritage Resources. The 154-acre Property is located upstream from an unnamed tributary of Rivanna River stream conservation unit (rank B4). The Property is situated at the confluence of the North and South Fork of the Rivanna River which is known or believed to contain the endangered James Spineymussel (*Pleurobema collina*). A Bald Eagle (*Haliaeetus*

leucocephalus) nest has been observed along the North Fork Rivanna River along the eastern portion of the Property. The Property is also within 3 miles of 4 element occurrences as indicated in the table below. Natural heritage resources are also shown on Attachment A – Map 1. The T/E Coordination Package is included as Attachment H.

Group Name	Common Name	Scientific Name	Global Rank	State Rank	Site Name
Vascular Plant	Bradley's Spleenwort	*Asplenium bradleyi*	G4	S2	General
	Speckled Alder	*Alnus incana ssp. rugosa*	G5/T5	S2	General
Invertebrate Animal	Green Floater	*Lasmigona subviridis*	G3	S2	General
Aquatic Natural Community	Rivanna First Order Stream		G3	S3	

F. Compensation Planning Framework. The North Fork Rivanna River and South Fork Rivanna River are identified as portfolio stream reaches in the Conservancy's Compensation Planning Framework. Complete descriptions of these conservation targets and the threats facing them can be found in Exhibit A of the program instrument (www.nature.org/vartf).

G. Protected Lands. The 154-acre Property is currently protected by a conservation easement held by the Conservancy. The conservation easement permits the production of hay within the 15.23-acre field proposed for buffer restoration. Additional restrictions will be placed on the field to prohibit future agricultural use. The property to the east is protected by an easement held by Albemarle County. Protected lands in the vicinity of the Property are shown on Attachment A – Map 1. Adjacent properties are comprised of forest, farmland, and residential development and are zoned for agricultural and planned development use.

H. Cultural Resources. Restoration activities on the property were previously permitted (NW-27-02-H0159-75) and coordinated with the IRT (additional funds request in 2007). No cultural resource concerns were raised during those approvals.

3. GOAL

The goal of the proposed mitigation site is to establish a permanently protected and functioning wetland system that will serve to replace the functional values of permitted wetland impacts within the service area through wetland buffer restoration. The mitigation activities will provide a suitable forested buffer on existing restored wetlands. In doing so, the mitigation site will satisfy a portion of the existing and future mitigation needs within the authorized service area. These restoration activities are proposed to generate approximately 2.91 wetland credits which will be used to satisfy a portion of existing liabilities in the Middle James River Basin.

4. MITIGATION WORK PLAN

A. The Conservancy has an approved Mitigation Banking Instrument (MBI) developed in accorance with the "Compensatory Mitigation for Losses of Aquatic Resources: Final Rule, 33 CFR 332". Complete information regarding the program instrument and supporting documents can be found at www.nature.org/vartf.

B. This project is submitted as an additional mitigation site under that existing MBI. Terms and specifics related to bank operation are outlined in the MBI. This proposal will only address site specific details.

C. Mitigation Activities Description. Mitigation activities will entail invasive species management and planting with native trees and shrubs within a 15.23-acre field, to extend the existing forested buffer on the southeastern side of the previously constructed wetland restoration area. Additional restrictions will be placed on the field to prohibit agricultural use. Restoration activities will provide for 5.39 acres within the 200' buffer and 9.84 acres outside the 200' buffer. The proposed mitigation activities are shown in Attachment B – Map 2 and Attachment C – Map 3. Photographs of the proposed restoration field are included in Attachment E.

In order to control the invasive field grasses within buffer restoration area, a treatment plan will be implemented. Prior to planting, the open field areas will be treated with a cool season grass specific herbicide. Following planting, invasive grass species will be chemically treated and overseeded with native herbaceous seed mix as needed. The buffer will be planted with bare root seedlings at a density of 538 trees/acre, for a total of approximately 8,200 stems. Planting will occur in the dormant season. The plantings used will be native species common to the area, which are suitable for growth in local riparian conditions and from areas within the same or adjacent USDA Plant Hardiness Zone or NRCS Land Resource Region as the project site. Bare root seedlings will be at least 18 inches tall, and 4' Tubex treeshelters and 3' x 3' VisPore mats may be installed on all of the seedlings. The site will be monitored for up to 10 years to ensure success of the plantings.

5. DETERMINATION OF CREDITS.

A. Restoration of the field on the Property will provide 15.23 acres of wetland buffer restoration. In addition, 1.76 acres of the wetland restoration area currently has a buffer of less than 100 feet due to the presence of the agricultural field within the buffer. The IRT has indicated that credit for this portion of the wetland restoration area could not be realized because of the lack of suitable buffer. This project will provide buffer restoration and protection necessary to realize the full wetland restoration credit at the site.

B. The table below indicates the estimated compensation credit potential for this phase of the project. All acreages and buffer widths were estimated with Arcview GIS. Values will be finalized during delineation of the site which will be completed following Year 10 (2014) monitoring of the wetland restoration area.

Estimated Mitigation Credit Potential

WETLAND MITIGATION CREDIT COMPOSITION

Proposed mitigation activity	Acres	Proposed Credit
Wetland Restoration (Ac)	1.76	1.76
Riparian Areas – Planting/Re-Establishment (Ac)	15.23 acres	1.01
5% Conservation Easement		0.14
Sum		**2.91**
Percent of credits involving preservation only		0%

C. Existing Watershed Liability. This project addresses existing mitigation needs within the Middle James River Basin. At present, the VARTF has a total mitigation liability for wetlands of 37.40 credits with 20.45 acres of restoration needed to meet no net loss. Two projects have been approved to address these liabilities – MJ-1 and MJ-3. MJ-1 is a restoration and preservation project proposed to generate 29.26 credits. MJ-3 is a preservation project which closed in 2009 and generated 9 credits. Collectively, and including the proposed additional activities at MJ-1, these sites are proposed to yield 27.40 NNL credits and 41.20 total NTW credits, meeting both no net loss and total mitigation liability.

6. GEOGRAPHIC SERVICE AREA

The proposed geographic service area for this mitigation site shall be consistent with Federal Banking Guidance and the Code of Virginia. For purposes of this site, the proposed service area includes the primary HUC 02080204 (portions of Albemarle, Greene, Fluvanna, and Louisa counties, and the City of Charlottesville), the adjoining HUC 02080203 (Nelson and Amherst County, and portions of Albemarle, Fluvanna, Appomattox, Bedford, Buckingham, Cumberland, and Campbell counties, and the cities of Lynchburg), and the adjoining HUC 02080205 (portions of Fluvanna, Buckingham, Cumberland, Powhatan, Chesterfield, Henrico, Goochland, and a portion of the City of Richmond). The service area is shown in Attachment D – Map 4.

7. USE/TRACKING OF MITIGATION SITE CREDITS

A. Decisions related to applicability, in-kind vs. out-of-kind mitigation, and compensation requirements will be made as part of individual permit decisions.

B. Decisions related to credit purchase from the mitigation site will be made in accordance with the Federal Banking Guidance and the existing Virginia Aquatic Resources Trust Fund Banking Instrument. Availability will be determined by achievement of goals and objectives of the mitigation site.

i. Wetland credits will be determined using the wetland credit calculator and will be released through the schedule of credit availability outlined in the mitigation bank instrument template.
ii. Limited use of the Mitigation Site for impacts outside of the service area will be considered and may be approved by the IRT on individual case-by-case basis.

C. Tracking of credits released, withdrawn, and available will be provided on a Mitigation Site ledger, available for review on RIBITS. Project-specific summaries will be provided in the Trust Fund Annual Report and on the Virginia Aquatic Resources Trust Fund website (www.nature.org/vartf).

8. SITE PROTECTION INSTRUMENT

The entire 154-acre Property, which is owned by Mr. and Mrs. Steven L. Levine, is under conservation easement held by the Conservancy. Additional restrictions will be placed on the field to prohibit further agricultural use and protect the buffer area in accordance with mitigation standards.

9. MAINTENANCE PLAN

The Conservancy will inspect plantings during each monitoring event to assess whether corrective action is needed to ensure achievement of success criteria. The Conservancy will describe any corrective actions required or implemented in each year's monitoring report.

10. PERFORMANCE STANDARDS

Performance standards will be detailed in the site development plan, will generally follow the standards outlined in the MBI template and will be subject to approval by the IRT.

11. MONITORING REQUIREMENTS

Monitoring requirements will be detailed in the site development plan, will generally follow the standards outlined in the MBI template and will be subject to approval by the IRT.

12. LONG-TERM MANAGEMENT PLAN

The conservation easement terms will be stewarded by the easement holder. The Conservancy, or an approved third party, will serve as the long-term steward for this phase of the mitigation site. The Long-Term Management Plan will be detailed in the site development plan, will generally follow the standards outlined in the MBI template, and will be subject to approval by the IRT.

13. ADAPTIVE MANAGEMENT PLAN

TNC will work with the Corps, DEQ, and the IRT to determine if modifications are necessary should unforeseen circumstances occur that impact the site.

14. FINANCIAL ASSURANCES

A. The Conservancy has included 20% of the planting costs and additional funds for invasive species management to be used as contingency funds for this project to ensure the success of the planting.

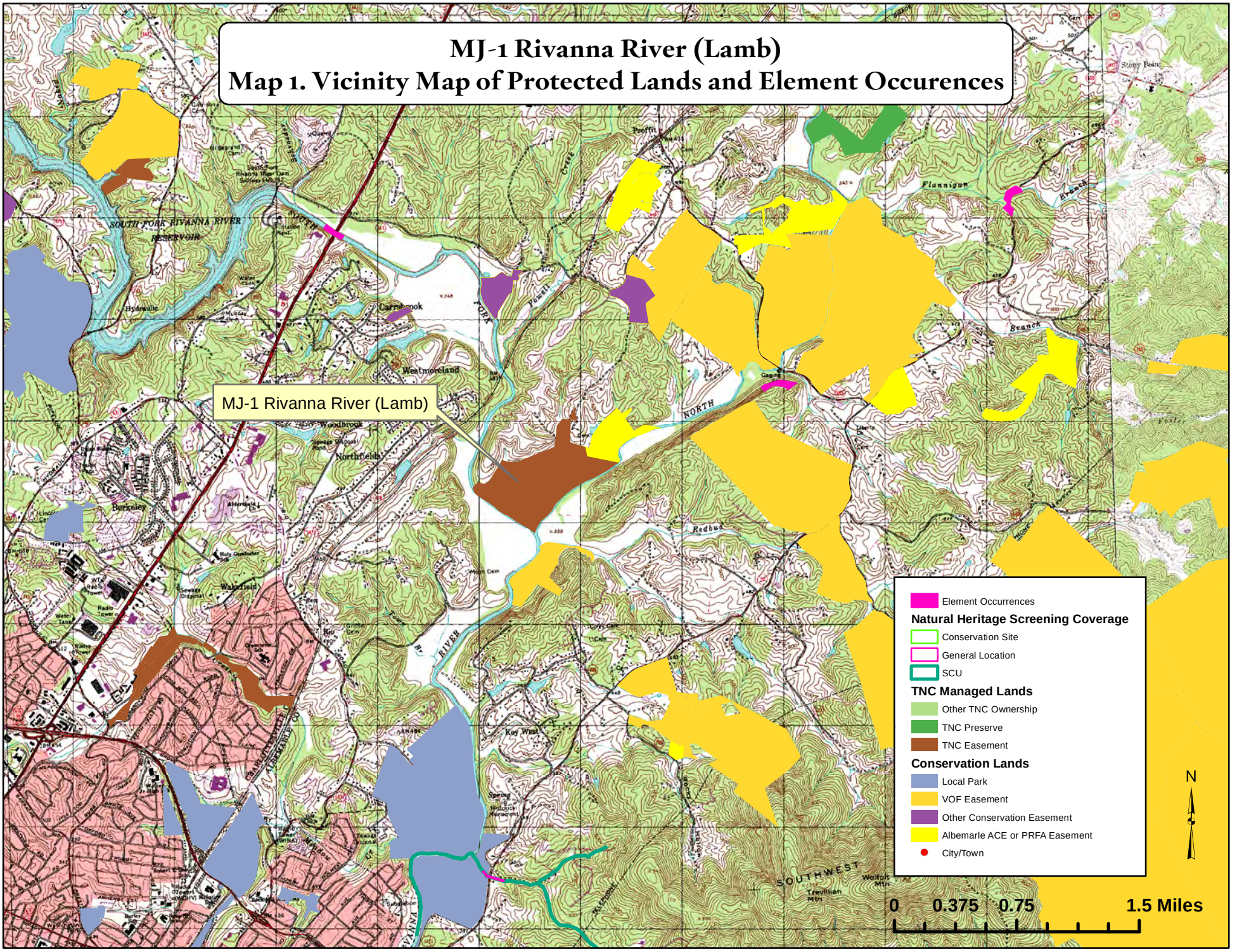
B. The balance of the Fund serves as sufficient financial assurance for project success.

ATTACHMENTS:

Attachment A. Map 1 – Property Vicinity Map of Protected Lands and Element Occurrences
Attachment B. Map 2 – Mitigation Area – Aerial View
Attachment C. Map 3 – Mitigation Area – Topographic View
Attachment D. Map 4 – Service Area
Attachment E. Property Photographs
Attachment F. VARTF Offsite Mitigation Checklist
Attachment G. Norfolk District Prospectus Checklist
Attachment H. T/E Coordination Package

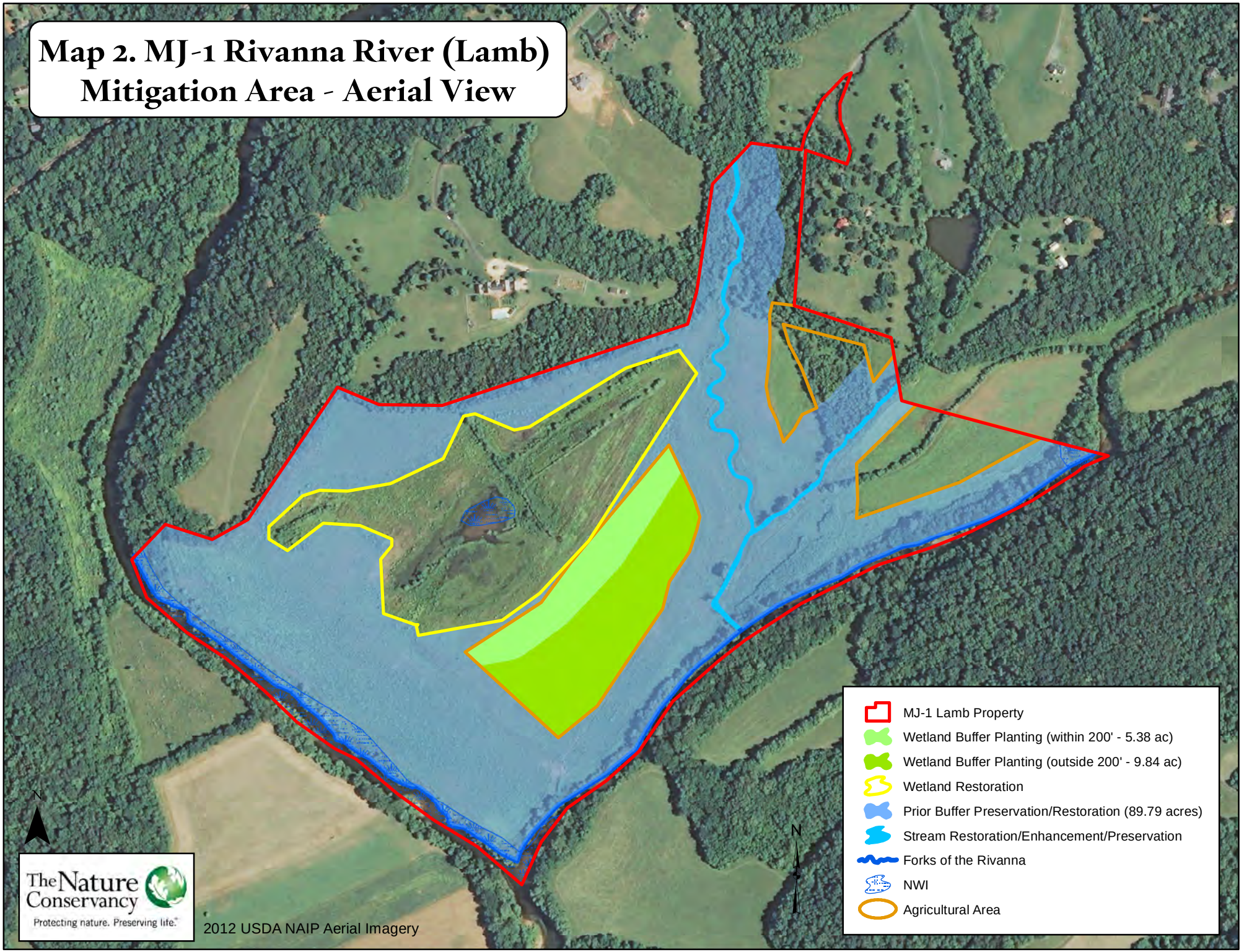
Attachment A
Map 1 – Property Vicinity Map of Protected Lands and Element Occurrences

MJ-1 Rivanna River (Lamb)
Map 1. Vicinity Map of Protected Lands and Element Occurences



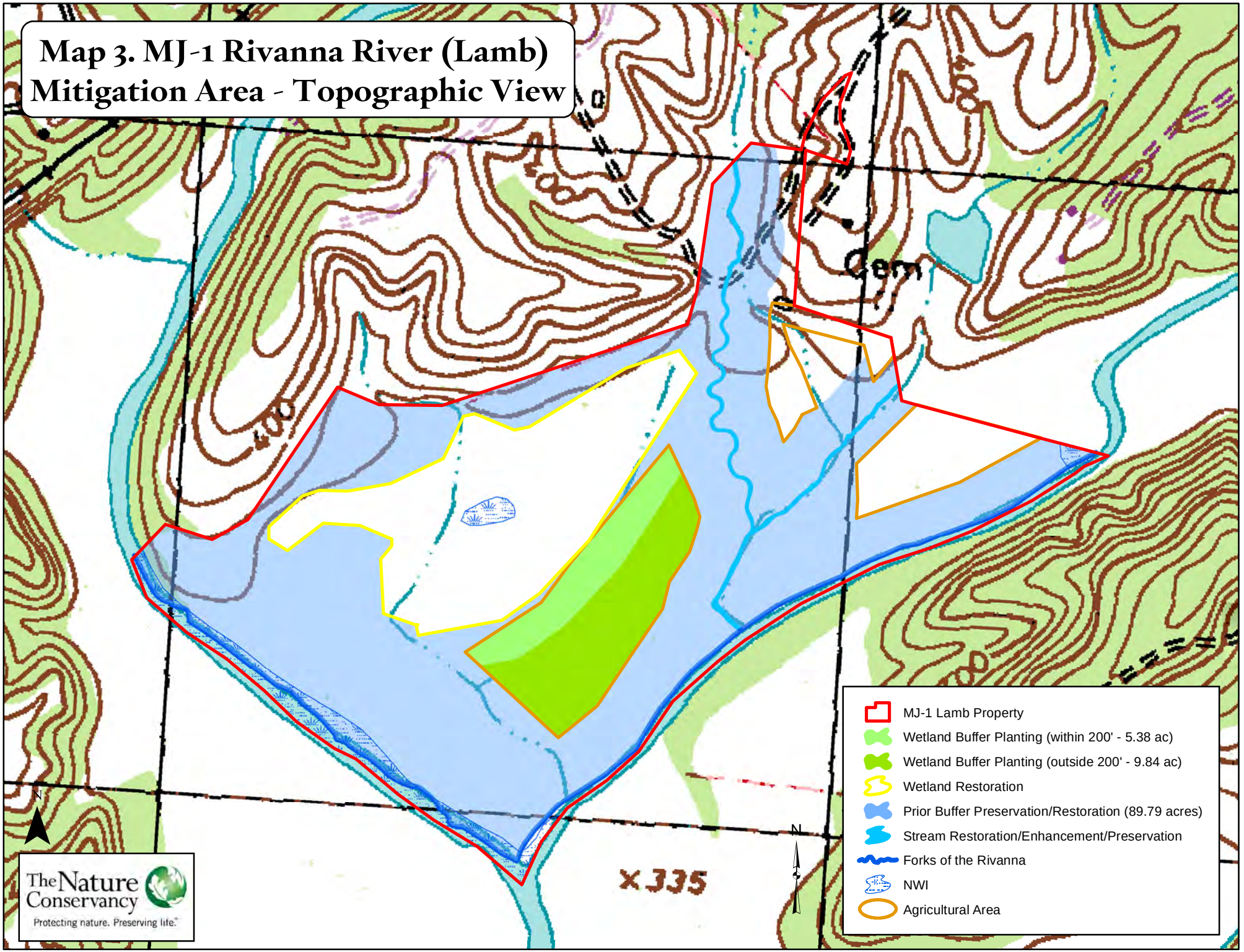
Attachment B
Map 2 – Mitigation Area – Aerial View

Map 2. MJ-1 Rivanna River (Lamb) Mitigation Area - Aerial View



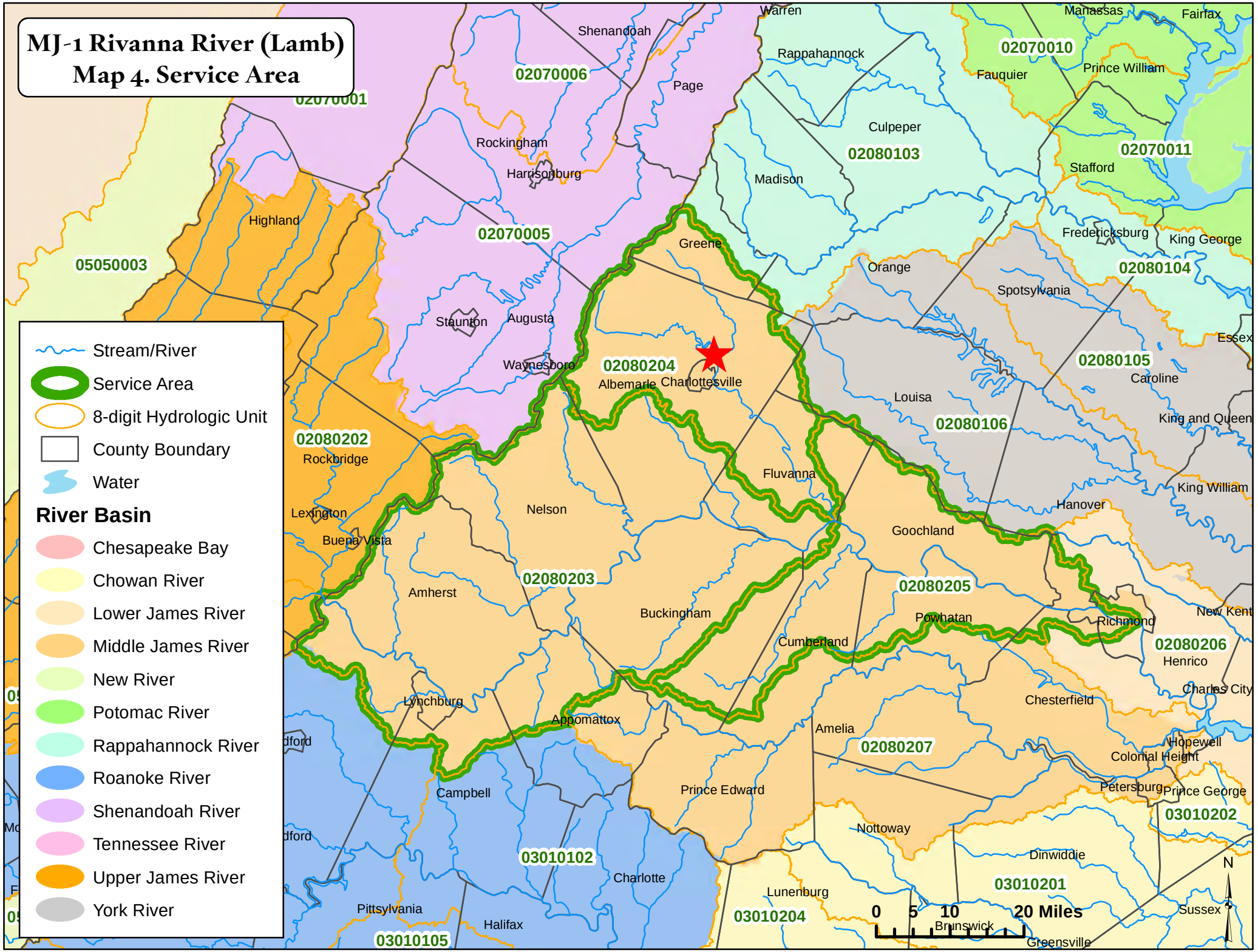
Attachment C
Map 3 – Mitigation Area – Topographic View

Map 3. MJ-1 Rivanna River (Lamb) Mitigation Area - Topographic View



Attachment D
Map 4 – Service Area

MJ-1 Rivanna River (Lamb)
Map 4. Service Area



Attachment E
Property Photographs

MJ-1 Rivanna River (Lamb)

Field Photographs

September 2011 – Facing south from existing wetland buffer restoration (Plot WB-12)

June 2012 – Facing west from existing stream buffer along North Fork Rivanna River

Attachment F
VARTF Offsite Mitigation Checklist

TNC Off-site Mitigation Location Guidelines Checklist

A. General regulatory requirements and practices:

1. Project within same 8 digit HUC as impact: Yes _x_ No ____
2. Project within same physiographic province as impact: Yes __x__ No _____
3. Project within an adjoining HUC in same river basin Yes _x__ No ____
4. Project outside of this area Yes ___ No _x__ (If "Yes" then provide documentation that no suitable sites are available in area)
5. Mitigation is in-kind: Yes _x__ No ____

B. Evaluate & Document whether project meets the following criteria:

1. Wetland restoration: Yes ___ No __x_
2. Wetland creation: Yes ____ No _x__
3. Wetland Preservation Yes ___ No _x_ Is the preservation area exemplary and/or under threat? Yes ____ No ___
4. Stream restoration/enhancement: Yes ___ No _x__
5. Stream Preservation: Yes ___ No _x_ Is the preservation area exemplary and/or under threat? Yes ____ No ___
6. Mitigation sites contiguous or connected to other aquatic areas Yes _x_ No ___
7. Current, planned, or foreseeable activities upstream or upgradient of project that may adversely affect mitigation project: Yes ____ No _x__ Uncertain ___
8. Is there an existing or proposed development upstream of, upslope of, or adjacent to the mitigation project? Yes ___ No _x_ Uncertain ____
9. Are there areas upstream of, upslope of, or adjacent to the mitigation project that are zoned or identified for future development in the comprehensive plan, long-range plan, or zoning overlay? Yes __ No _x_
10. Does proposed riparian buffer protection provide greater protection than state or local requirements? Yes _x_ No ___ The protection of the buffer is not greater than state or local requirements because the property is already protected by a conservation easement and there are adequate buffers on wetlands according to state and local requirements. However, the quality of the buffer will be greater than what is required by local and state regulations since land use within the buffer will change from agricultural to forest.

    Is proposed riparian buffer a minimum of 100 feet wide on each side of the channel? Yes _x_ No ___
11. Are there any easements, liens, rights of way, reserved timber or mineral rights on project site or adjoining lands? Yes ____ No _x_ If Yes, describe _____
12. Is mitigation site consistent with local planning requirements? Yes _x_ No ___ Describe The property is zoned RA, Rural Areas. Albemarle County guiding principles for Rural Areas include a focus on agricultural and forestry resources, land preservation, land

conservation, water supply resources, natural resources, and historical, archeological and cultural resources.

13. Describe order(s) of streams on project site. The field proposed for planting does not contain any streams.

14. Is recordation of a third party conservation easement proposed for the project? Yes _x__ No ___ If No, please explain _____ A conservation easement held by the Nature Conservancy is currently in place and will be modified to place additional restrictions on the field to be planted.

C. Does the project satisfy one or more of the following criteria? If the answer is "Yes" then describe.

1. Does it abut or adjoin an existing reserve or conservation area or create or contribute to a corridor linking existing reserves, conservation areas, or large aquatic systems? Yes _x__ No ___ The project adjoins wetland, wetland buffer and stream buffer mitigation areas on the property and helps connect forested corridors along the Rivanna River.

2. Does it conserve or restore habitat for one or more state or federal-listed species, including critical habitat or Threatened/Endangered Species Waters? Yes _x__ No ___ The project will provide additional forested buffer benefits to the Rivanna River, which may contain the federally and state endangered James spinymussel (*Pleurobema collina*).

3. Does it conserve or restore habitat for species identified as rare by DCR- Division of Natural Heritage or Species of Greatest Conservation Need in the Virginia Wildlife Action Plan? Yes _x__ No ____ James spineymusssel is identified as rare by DCR and is listed as a Species of Greatest Conservation Need in the Virginia Wildlife Action Plan.

4. Does it conserve or restore aquatic resources or buffers areas identified by DCR- Division of Natural Heritage as rare or imperiled natural communities? Yes __x__ No ____ The project restores upland buffers for aquatic resources identified downstream by DCR which provide habitat for one or more rare aquatic plants or animals (Unnamed Tributary of Rivanna River).

5. Does it contribute to improved water quality for identified/designated impaired waters? Yes __x_ No ____ The South Fork and North Fork Rivanna River as well as the Rivanna River are listed as impaired 303d waters.

6. Does it remove barriers to fish passage in areas identified by VDGIF as meriting improvement? Yes ____ No _x__ Describe _____

7. Does it restore, enhance, preserve aquatic resources and/or riparian areas identified as meriting conservation in an approved watershed management plan or conservation plan? Yes _x_ No ____ The project would preserve riparian areas along Rivanna River which has been identified in "The Nature Conservancy's Watershed Approach to Compensation Planning for the Virginia Aquatic Resources Trust Fund" – Exhibit A of the VARTF Program Instrument..

8. Does it conserve/restore the entire watershed upstream of the project site? Yes ____ No _x__ Describe _____

9. Does it remediate inputs of substantial amounts of sediments or remove other pollutants to downstream waters? Yes ____ No __x_ Describe _____

10. Does it conserve or restore areas designated by VDGIF as wild trout streams or Anadromous

Fish Use Areas? Yes ____ No _x__ Describe_____

11. Does it follow the objectives and prioritization strategy of the compensation planning framework? Yes _x__ No ____ Describe _____ See page 40-44 of "The Nature Conservancy's Watershed Approach to Compensation Planning for the Virginia Aquatic Resources Trust Fund" – Exhibit A of the VARTF Program Instrument.

Attachment G
Norfolk District Prospectus Checklist

MJ-1 Rivanna River (Lamb)

Norfolk District Prospectus Checklist [per 33CFR 332.8(d)(2)]

October 2009

☒ 1) Contact information (name, address, telephone number, email address, etc.) for the Sponsor, the land owner and the agent.

☒ 2) Indicate whether the sponsor owns the land or is acquiring an interest in the proposed bank sites (fee simple acquisition, easement, etc).

3) Identify the objectives of the proposed mitigation bank.
- ☒ a) Identify the method(s) of proposed compensation (wetland creation/restoration, stream restoration/enhancement, preservation, etc.) that will be provided.
- ☒ b) Identify an estimated amount (acres/linear footage) of each compensation type that will be provided.
- ☒ c) Identify the aquatic functions to be restored/enhanced (water quality improvement, flood storage, wildlife habitat, etc.).

4) Describe how the bank will be established.
- ☒ a) Summarize the work intended to accomplish site activities.
- ☒ b) Describe how the proposed work will meet identified goals and objectives.
- ☒ c) Provide a vicinity map (USGS topographic map).
- ☒ d) Provide a current aerial photograph identifying the area to be included within the bank limits.
- ☒ e) Provide a conceptual development plan showing the proposed work.

5) Identify the proposed service area.
- ☒ a) Provide a map identifying the proposed service area of the bank.
- ☒ b) Provide a rationale for determining the limits of the proposed service area.

6) Identify the general need for and technical feasibility of the proposed mitigation bank.
- ☒ a) Identify any watershed plans the mitigation project would accommodate.
- ☒ b) Identify any regional or local benefits derived from the bank.
- ☒ c) Identify any potential threats to the bank site or resource type the bank intends to provide and/or protect.
- ☒ d) Discuss the proposed construction work required to develop the bank and its feasibility.

7) Describe the ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources/functions.
- ☒ a) Summarize current site conditions including land use, vegetation, hydrology, and soils (forested, row-cropped, pasture, ditched and drained wetland, previously channelized streams, etc). Pictures are helpful.
- ☒ b) If known, include information on rare or T/E species, historic properties, impaired waters (303(d) streams), etc.
- ☒ c) Identify any known encumbrances (mortgages, liens, rights-of-way, servitudes, easements, etc.) on the property.

- ☒ d) Identify previous land uses of the site and adjacent properties.
- ☒ e) Identify current zoning and any existing and/or proposed development adjacent to the bank site.
- ☒ f) Identify current zoning of the bank site.
- ☒ g) Summarize the historical hydrology of the site.
- ☒ h) Indicate whether a jurisdictional determination of "waters of the U.S." has been made by the Corps. This will be needed to support development of an MBI and mitigation plan
- ☒ i) Identify which of the Virginia Off-site Mitigation Location Guidelines are met by the proposal and how they were met.

8) Identify the proposed future ownership arrangements and long-term management strategy for the proposed mitigation bank.
   - ☒ a) Identify the proposed long-term management strategy.
   - ☒ b) Identify the likely party that would be responsible for long-term management.
   - ☒ c) Identify the proposed site protection instrument that would be utilized and the likely responsible parties.

☒ 9) Summarize the qualifications of the sponsor to successfully complete the type of mitigation project proposed. Including information describing past actions undertaken by the sponsor that demonstrate experience in the restoration, creation, preservation, or enhancement of aquatic resources.

10) Assurance of sufficient water rights and/or hydrological influences on the site to support the long-term sustainability of the mitigation bank.
   - ☒ a) Describe any existing hydrologic disturbances on and adjacent to the site.
   - ☒ b) Identify any temporary or long-term structural management requirements (levees, weirs, culverts, etc.) needed to assure hydrologic/vegetative restoration.
   - ☒ c) Describe generally (a water budget is not required at this point):
     - ☒ i. Water source(s) and losses (precipitation, surface runoff, groundwater, stream, tidal, etc.)
     - ☒ ii. Hydroperiod (seasonal depth, duration, and timing of inundation and/or saturation)
     - ☒ iii. Approximate contributing drainage area (map and size).

☒ 11) Names and mailing addresses of all adjacent property owners (APOs). If there are more than 3 APOs, mailing labels should be provided with the prospectus.

Attachment H
T/E Coordination Package

Species Conclusions Table

MJ-1 Rivanna River (Lamb)

1/21/2014

Species/Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Species Info / Habitat Description	Notes / Determination
James Spineymussel (*Pleurobema collina*)	Species listed wherever found. This species is known or believed to occur in Ablemarle County.	n/a	Suitable habitat for this species include free-flowing streams with a variety of flow regimes. The James spinymussel is found in a variety of substrates that are free from silt. Like other freshwater mussels, this species is a filter feeder.	
Eagles (*Haliaeetus leucocephalus*)				
Eagle Nests	A bald eagle nest was observed in 2013 along the North Fork Rivanna River.	n/a		
Eagle Concentration Areas				
Critical Habitat				
Other (other species not listed above or required coordination for NOAA, DCR, & VDGIF)				

U.S. Fish and Wildlife Service

Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

Virginia Ecological Services Field Office
6669 SHORT LANE
GLOUCESTER, VA 23061
(804) 693-6694
http://www.fws.gov/northeast/virginiafield/

Project Name:

MJ-1 Rivanna River (Lamb)

U.S. Fish and Wildlife Service

Natural Resources of Concern

Project Location Map:

Project Counties:

Albemarle, VA

U.S. Fish and Wildlife Service

Natural Resources of Concern

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-78.4431922 38.0804102, -78.4412431 38.0802366, -78.437286 38.0815295, -78.4372351 38.0817345, -78.4371723 38.0833665, -78.4362642 38.0839568, -78.4356409 38.0838723, -78.4353366 38.0845745, -78.4351215 38.0847932, -78.4349072 38.0849412, -78.4349586 38.0846076, -78.4349533 38.0843948, -78.4347045 38.0839926, -78.4347316 38.0838273, -78.4354623 38.0840933, -78.4356177 38.0820164, -78.4339869 38.081508, -78.4339011 38.0806297, -78.4309828 38.0801061, -78.431412 38.0793292, -78.4351456 38.0779441, -78.4364331 38.0774036, -78.4378064 38.0761537, -78.4389651 38.0752416, -78.4396517 38.0742618, -78.4447372 38.0768631, -78.4460032 38.0775725, -78.4463465 38.0784509, -78.4460686 38.0783495, -78.4452522 38.0783495, -78.4445881 38.0788562, -78.4437941 38.0796332, -78.4431922 38.0804102)))

Project Type:

Land - Restoration / Enhancement

Endangered Species Act Species List (USFWS Endangered Species Program).

There are a total of **1** threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

Species that should be considered in an effects analysis for your project:

Clams	Status		Has Critical Habitat	Contact
James spinymussel (*Pleurobema collina*) Population: Entire	Endangered	species info		Virginia Ecological Services Field Office

Critical habitats within your project area:

There are no critical habitats within your project area.

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

U.S. Fish and Wildlife Service

Natural Resources of Concern

FWS Migratory Birds (USFWS Migratory Bird Program).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668). The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

Migratory bird information is not available for your project location.

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

The following wetlands intersect your project area:

Wetland Types	NWI Classification Code	Approximate Acres
Riverine	R2UBH	3640.521059
Freshwater Emergent Wetland	PEM1A	0.568299