

# BRADNER PRESERVE, RICHMOND RICHMOND RURAL PRESERVATION LAND TRUST BASELINE DOCUMENTATION REPORT



PREPARED BY APPLIED BIO-SYSTEMS, INC.  
MARCH, 2011  
FOR THE RICHMOND RURAL PRESERVATION LAND TRUST

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RICHMOND RURAL PRESERVATION LAND TRUST

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## BRADNER PRESERVE BASELINE DOCUMENT DRAFT

### 1. Land Info:

**Current Landowner:** Richmond Rural Preservation Land Trust (RRPLT)

**Property Name:** "Bradner Preserve"

**Municipality:** Richmond

**County:** Washington

**State:** Rhode Island

**Plat / Lot Information:** Lot 13 of Richmond Tax Assessor's Plat 02E (Figure 1)

#### *Owner information*

The Richmond Rural Preservation Land Trust is the fee owner of the property described as that parcel of land containing approximately sixty-three (63) acres of land on the southerly side of Hoxsie Road and the westerly side of Gardner Road, in the Town of Richmond. The RRPLT is a municipal organization established by ordinance in the charter of the Town of Richmond. The Land Trust acquired the "Bradner" property in November of 2000 as a donation from Mr. Bradner.

#### **Mission**

The mission of the Richmond Rural Preservation Land Trust is to identify, preserve, and protect open space within the Town of Richmond in perpetuity; to maintain the Town's rural character and ecological assets; and to act as responsible stewards of land acquired or placed in conservation easement.

#### **Goals**

1. Preserve agricultural land, open spaces, fresh water wetlands, adjoining uplands, wildlife habitats and groundwater recharge areas
2. Identify and protect vital areas with the cooperation of private and governmental organizations
3. Provide public access to acquired lands for various passive activities including biking, hiking, and fishing
4. Actively steward the land trust properties through monitoring and management

#### *Parcel Data*

Parcel Name is the Bradner Preserve and the property is located at the intersection of Hoxsie Road and Gardner Road, Richmond, RI (Map 02E Lot 13). The parcel is 63.02 acres in size and is comprised of various habitats including decid-

uous hardwoods, coniferous woods, riverine habitat including the Glen Rock Brook and an interesting rock outcrop and erratic (refer to Figure 2 for aerial photo). The parcel has frontage on Hoxsie Road and Gardner Road where the gravel parking lot is located.

## Land

The property is conserved and protected from development in perpetuity. A Stewardship Management Plan is under development. It consists of woods and wetlands with a walking trail that leads from the gravel parking lot on Gardner Road into the property. At this time the walking trail is not well maintained or well marked. A narrow wooden bridge leads the trail through the wetland to the western uplands. A well used ATV track was observed within the parcel. This is leading to some deterioration of herbaceous and shrub vegetation. Currently, plans are before RIDEM – Office of Water Resources, Permitting to upgrade two bridges, one over Glen Rock Brook. Residential lots are located on the north bordering Hoxsie Road and to the east bordering Gardner Road. A subdivision, Camelot Estates, is located to south. Note that Camelot Estates has a proposal before the Town of Richmond to develop Phase III of Camelot Estates. The property to the west is mostly deciduous forest.

A storm drain capturing storm water runoff from Gardiner Road outflows onto the Bradner Preserve property from an outfall pipe situated under the gravel parking lot. This is creating an Area Subject to Storm Flowage (ASSF) channel leading easterly down slope into wetland that is located in the interior of the parcel. The drainage channel is creating erosion of the slope and existing walking trail and this drainage may need to be addressed in the future.

Conservation Easement Name: N/A

Conservation Easement Information: N/A

The owner of the parcel is Richmond Rural Preservation Land Trust and it is recorded in Book 0137/ Page 0558 on 11/10/2000.

## Land Use History

It appears that much of the parcel was once used as a pasture based on the number of old, large wolf trees, large Norway spruce trees, and stone walls located throughout the parcel.

## 2. Purpose of Protection or Use – Open Space

## 3. Property Description

### *Boundaries*

The boundaries of the property were established by a survey by George B. Dupont recorded in the land evidence records of the Town of Richmond on October 19, 1993. The property was partially re-surveyed by Jackson Surveying in 2010 to re-establish certain boundary markers and permit the creation of hiking trails. During the site inspection performed on October 5, 2010 by Applied Bio-Systems, Inc. and Andy Webb, Vice Chair of the Richmond Rural Preservation Land Trust; we found the majority of the survey markers located along the perimeter points on the property boundary. The majority of points are photo documented and were demarcated in the field. (Refer to Figure 3 for copy of reduced survey plan).

### *Topography*

The property contains irregular glacial topography with erratics and stream valley. See attached USGS Topographic Map Figure 4.

### *Soils*

The Soil Survey of Rhode Island (Rector, 1981, Sheet 104) classifies the majority of the parcel as having (ChC) soils. Refer to Figure 5. The following 7 soil classification units are within the parcel:

Canton and Charlton fine sandy loams (CeC): These gently sloping to sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface, and rock outcrops cover up to 10 percent. Areas are irregular in shape and mostly range from 3 to 250 acres. The mapped acreage of this unit is approximately 50 percent Canton soils, 30 percent Charlton soils, and 20 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Canton and Charlton very stony fine sandy loams (ChC): These sloping, well drained soils are on side slopes of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface. Areas are irregular in shape and mostly range from 15 to 250 acres. The mapped acreage of the unit is approximately 60 percent Canton soils, 30 percent Charlton soils, and 10 percent other soils. The areas of this unit consist of Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

Canton and Charlton very stony fine sandy loams (ChB): These gently sloping, well drained soils are on side slopes and crests of glacial upland hills and ridges. Stones and boulders cover 2 to 10 percent of the surface. Areas are irregular in shape and mostly range from 10 to 150 acres. The mapped acreage of this unit is approximately 60 percent Canton soils, 30 percent Charlton soils, and 10 percent other soils. The areas of this unit consist of either Canton soils or Charlton soils or both. The soils were mapped together because they have no major differences in use and management.

These Canton-Charlton soils are unsuitable for cultivated crops due to the large stones and rock outcrops. The soils are suitable for woodland wildlife habitat. The soils are too dry for wetland wildlife habitat and the stoniness limits the suitability of habitat for openland wildlife habitat.

Enfield silt loam (EfB): This nearly level, well drained soil is on terraces and outwash plains. Areas are irregular in shape and mostly range from 2 to 50 acres. Included with this soil in mapping are small areas of excessively drained Hinckley soils, somewhat excessively drained Merrimac soils, well drained Agawam and Bridgehampton soils, and moderately well drained Tisbury soils. Also included are small areas of soils that have slopes of more than 8 percent. Included areas make up about 10 percent of this map unit.

This soil is suitable for farming. It is suitable for trees and wooded wildlife and openland wildlife species. It is too dry for openland wildlife habitat.

Narragansett very stony silt loam (NbB): This nearly level to gently sloping, well drained soil is on crests and side slopes of glacial till uplands. Areas are irregular in shape and mostly range from 5 to 200 acres. Stones and boulders cover 2 to 10 percent of the surface of the soil. Included with this soil in mapping are small areas of well drained Canton, Charlton and Bridgehampton soils and moderately well drained Wapping, Scio, and Wood-bridge soils. Also included are small areas of soils that have slopes of more than 8 percent and small areas of soils that do not have stones or boulders on the surface. Included areas make up about 10 percent of this map unit.

This soil is unsuitable for cultivated crops. It is well suited for trees and woodland wildlife habitat. It is poorly suited to openland wildlife habitat and is too dry to provide wetland wildlife habitat.

Ridgebury, Whitman, and Leicester extremely stony fine sandy loams (Rf): These nearly level, poorly drained and very poorly drained soils are along drainageways and in depressions in glacial till uplands. Stones and boulders cover 10 to 35 percent of the surface of the unit. Slopes range from 0 to 3 percent but are dominantly less than 2 percent. Areas are long and narrow and range mostly from 10 to 150 acres. The mapped acreage of this unit is about 30 percent Ridgebury soils, 30 percent Whitman soils, 20 percent Leicester soils, and 20 percent other soils. The areas of this unit consist of Ridgebury soils, Whitman

soils, or Leicester soils or of all three soils. The soils were mapped together because they have no major differences in use and management.

The soil is suited to trees. The main limitation is wetness; tree windthrow is common and the use of equipment is limited during wet seasons. The majority of these soils are wetland and require special permitting from RIDEM before any alterations are allowed. Available water capacity is moderate and runoff is slow to medium.

Woodbridge very stony fine sandy loam, 0 to 8 percent slopes (WoB): This nearly level to gently sloping, moderately well drained soil is on side slopes and crests of upland hills and drumlins. Areas are irregular in shape and range mostly from 5 to 100 acres. Stones and boulders cover 2 to 10 percent of the surface area. Included with this soil in mapping are small areas of well drained Paxton soils, moderately well drained Sutton soils, and poorly drained Ridgebury soils. Also included are areas of soils that have slopes of more than 8 percent and small areas of soils in drainageways. Included areas make up about 10 percent of this map unit.

This soil unit is suited to woodland wildlife habitat. It is poorly suited to openland wildlife habitat or wetland wildlife habitat. This soil is not suited to cultivated crops because the stones and boulders on the surface severely hinder the use of farming equipment. It is poorly suited for wetland wildlife habitat. Other limitations include a slow to very slow permeability in the substratum, the high water table and stones and boulders on the surface.

#### *Agricultural Values / Open Space Values / Landscape*

No agricultural land is located within the parcel or directly abutting parcel. (Refer to Figure 6). Property identified as "Local open space – public access prohibited" is also located across the street according to the RIDEM – environmental geographic data viewer. The majority of residential lots are identified as being of low-medium residential density. However, the majority of surrounding land is identified as deciduous forest or mixed forest.

#### *Wetlands/Rivers/Streams*

Much of the parcel would be considered wetland habitat and the Glen Rock Brook and another unnamed stream meanders throughout the property.

#### *Water Resources*

**The parcel is entirely within the Pawcatuck River & Tributaries Subbasin RI0008039RI0008039R-09 Glen Rock Brook. Richmond, South Kingstown B COLD(c). Class B\* - These waters are designated for fish and wildlife**

habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. Refer to Figure 8 Sub Basin Map.

### *Flora and Fauna*

One flora and fauna survey was conducted during the site walk performed on October 5, 2010. Wildlife species were observed by vocalizations, sight and tracks / sign. This survey should not be regarded as a complete inventory of the property. During this survey a few wildlife species were noted including: blue jay, golden crowned kinglet, cuckoo species, red-bellied woodpecker and others. Additional wildlife surveys at different times of the year will be required to achieve a more representative listing of wildlife species present within the site. The Rhode Island Natural Heritage Program has not documented any Endangered or Threatened species within the property. Refer to Figure 9.

The property provides valuable habitat for many species of wildlife that were not observed during our inspection. Other species are expected to utilize the wetland and upland areas throughout the year. These species of wildlife include game and non-game species, which may be either obligate or facultative, and which may be permanent residents, seasonal or transient in nature. The Glen Rock Brook serves as a valuable travel corridor for obligate wetland species connecting wildlife habitats. The river appears to be more intermittent in nature and therefore it probably does not provide adequate habitat for fish species and larger aquatic mammals. The wetlands and riverine habitat serve as a nesting site, feeding site, resting site, nursery and/or brood rearing site, escape cover, and seasonal breeding, migration, and overwintering habitat for wildlife.

A vegetative survey was also conducted during the baseline survey on October 5, 2010. The forested habitats are comprised dominantly of red oak (*Quercus rubrum*), red maple (*Acer rubrum*), white oak (*Quercus alba*), white pine (*Pinus strobus*) and swamp tupelo (*Nyssa sylvatica*). The understory throughout much of the wooded upland habitats was primarily open with sparse vegetation. Within the wetland areas, the woods were dense with cinnamon fern (*Osmunda cinnamomea*) and sweet pepperbush (*Clethra alnifolia*). Other vegetative habitats present within the property consist of rock outcrop, white pine forest and riverine habitats. Refer to Figure 10 for entire observed vegetative species list.

### *Rare, Endangered and / or Threatened Plant Animal Species*

No known rare, endangered and / or threatened plant or animal species exist within the property. However, the RIDEM Environmental Resource Map identifies the parcel and its surrounding habitats as within a large Natural Heritage Area for rare species. It is likely that rare plant and / or animal species exist within the property because of the proximity to other rare species as well as ade-



quate natural, pristine habitat. Additional site inspections during different seasons of the year would be required to document presence or absence of endangered and threatened species. Refer to Figure 11.

#### *Invasive Vegetative Species*

No particularly invasive vegetative species were observed during our inspection. It is likely, however, that as the woods age that the many smaller white pine saplings observed may begin to transform the deciduous woods to a pine forest in the years to come.

#### *Historic, Educational, Recreational, & Scenic Values*

The property contains many stone walls and several wolf trees which leave evidence from the past of possibly a former farm or pasture. The large Norway spruce trees within the property were probably once planted as landscape trees.

#### *Roads and Trails*

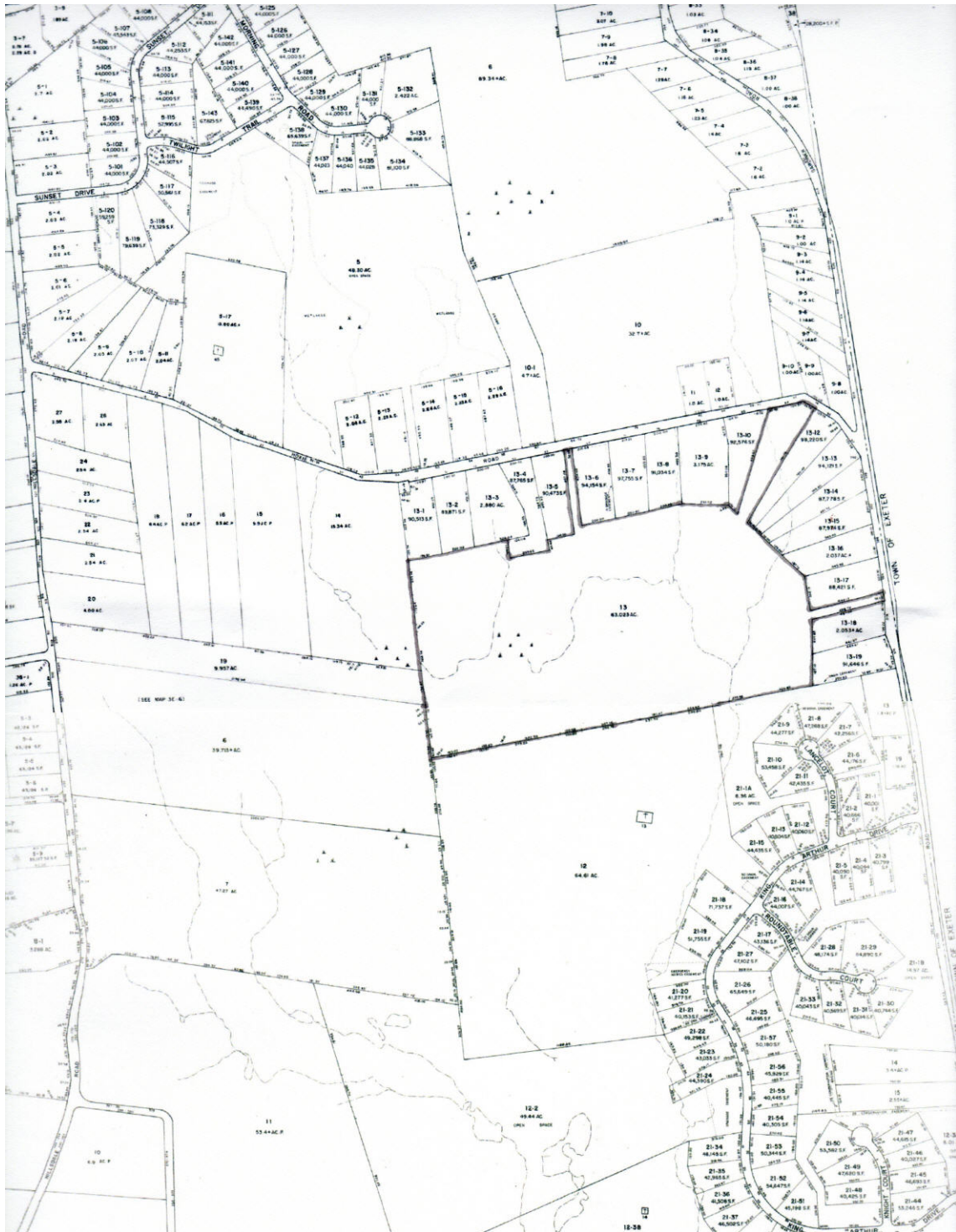
An extensive trail system already exists on the site. A small public access lot has been constructed on Gardner Road. A significant ATV encroachment problem presently exists on the site.

#### *Structures/Human disturbance/Alterations*

There are no buildings or structures located within the parcel. Only two dilapidated trail bridges are located on the property. One over Glen Rock Brook and another one over the unnamed stream in the northeast corner of the parcel.

# FIGURE 1

## Town of Richmond Tax Assessor's Plat Map 02E

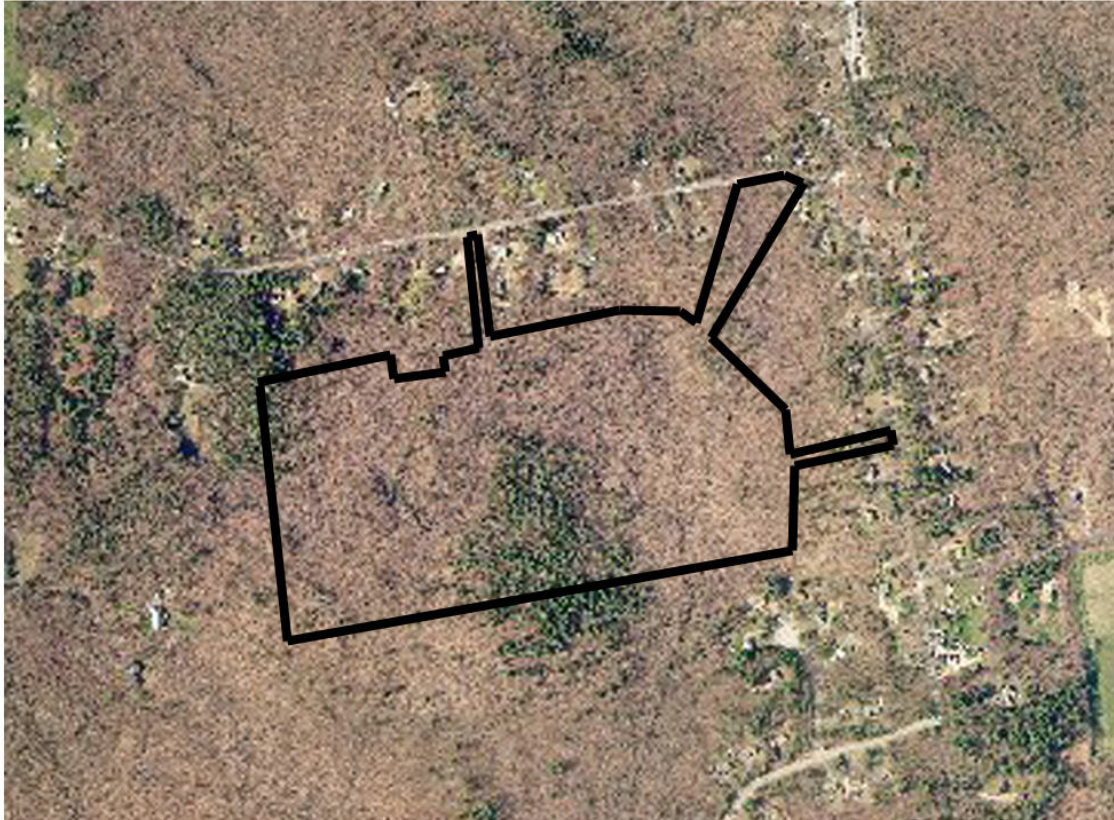


## FIGURE 2

Survey Plan of Tax Assessor's Map 02E and Lot 13  
To be placed here

## FIGURE 3

PHOTO DOCUMENTATION LOCATION MAP  
BRADNER PROPERTY  
RICHMOND RURAL PRESERVATION LAND TRUST  
RICHMOND, RI



Base Layer Map from RIDEM website <http://www.dem.ri.gov/maps/index.htm#G>  
Geographic Data Viewer Environmental Resource Map spring 2008 aerial photo

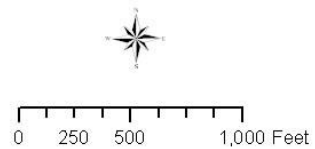




FIGURE 4

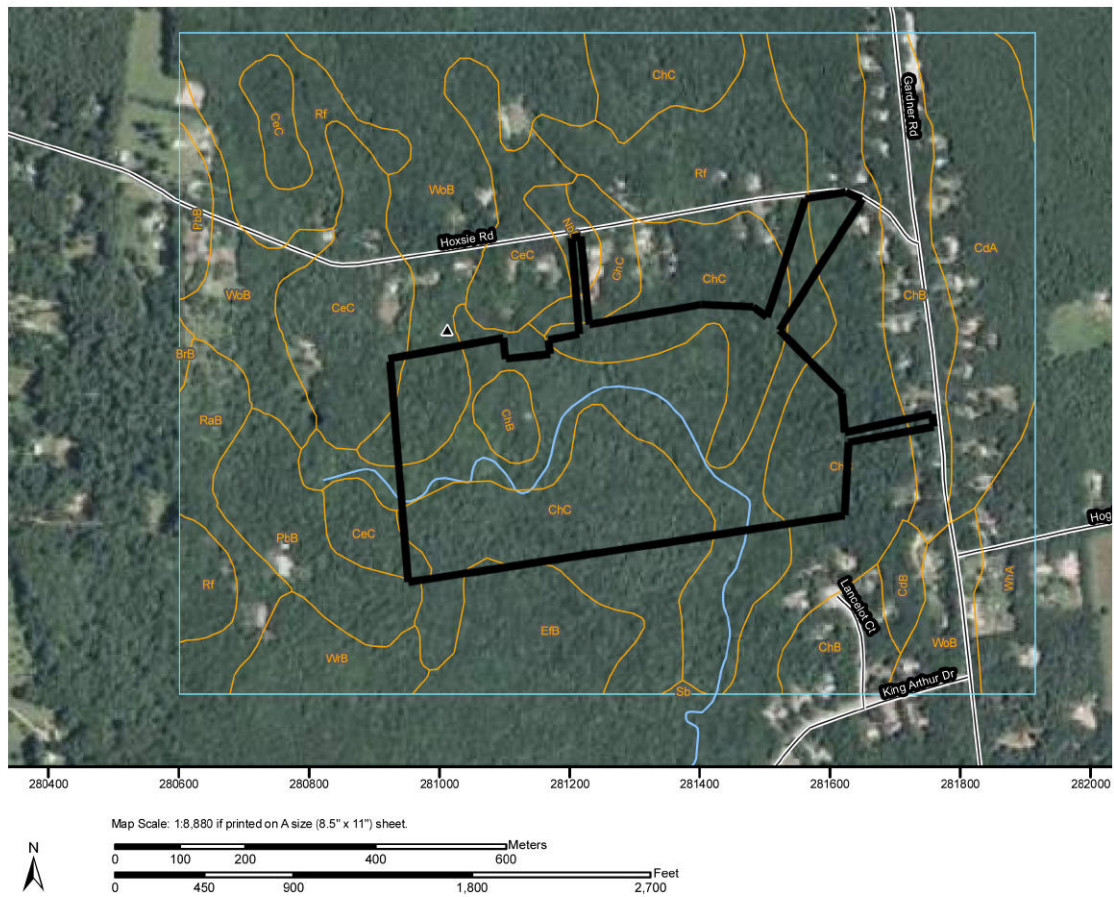
USGS TOPOGRAPHIC Map  
Bradner Property, Richmond Rural Preservation land Trust  
Richmond, RI



Base Layer Map from RIDEM website <http://www.dem.ri.gov/maps/index.htm#G>  
Geographic Data Viewer Environmental Resource Map

FIGURE 5

SOILS MAP  
BRADNER PROPERTY  
RICHMOND RURAL PRESERVATION LAND TRUST  
RICHMOND, RI



Base layer map generated from: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>



FIGURE 6

Open Space Location Map  
Bradner Property, Richmond Rural Preservation Land Trust  
Richmond, Rhode Island

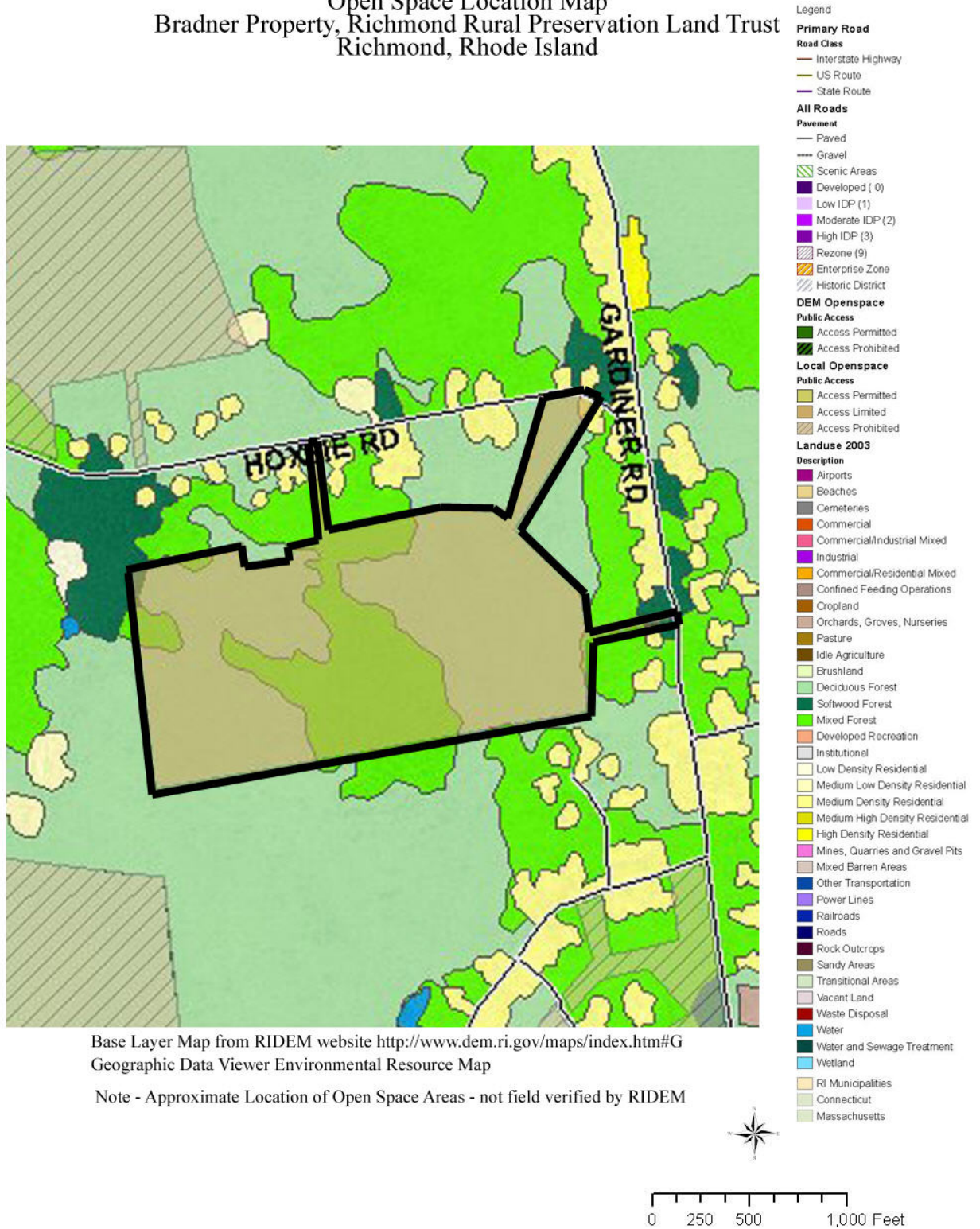


FIGURE 7

Wetlands Location Map  
Bradner Property, Richmond Rural Preservation Land Trust  
Richmond, Rhode Island



Base Layer Map from RIDEM website <http://www.dem.ri.gov/maps/index.htm#G>  
Geographic Data Viewer Environmental Resource Map

Note - Approximate Location of Wetlands - not verified by RIDEM

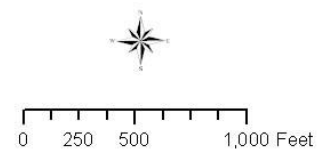




FIGURE 8

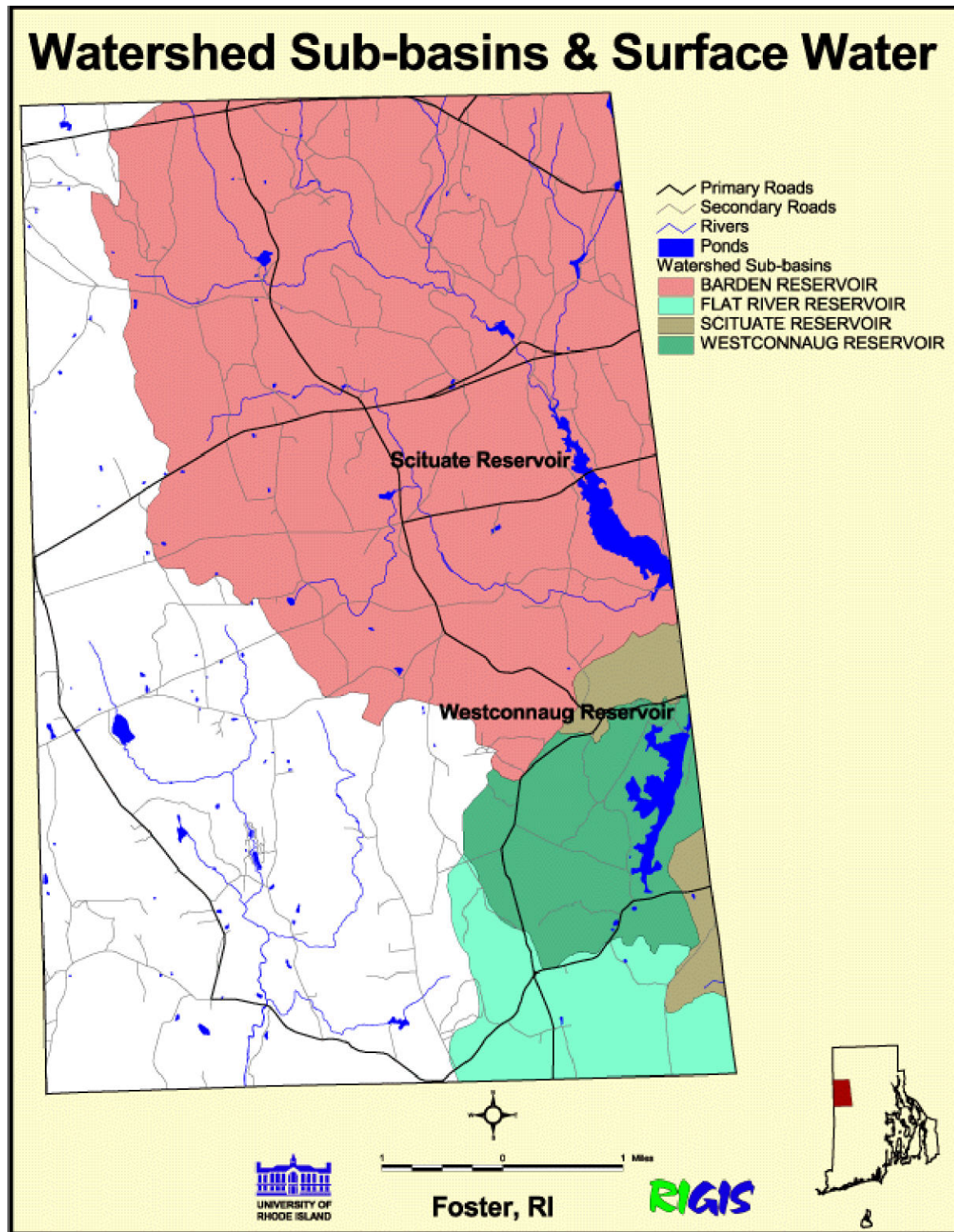


FIGURE 9

[illegible]

EXPECTED WILDLIFE SPECIES (THESE WERE NOT OBSERVED)				
american goldfinch				
barred owl				
black and white warbler				
common grackle				
dark eyed junco				
eastern phoebe				
eastern wood pewee				
gray catbird				
great crested flycatcher				
great horned owl				
hairy woodpecker				
northern cardinal				
pileated woodpecker				
red-eyed vireo				
red-shouldered hawk				
red-tailed hawk				
ruby throated hummingbird				
rufous sided towhee				
scarlet tanager				
sharp-shinned hawk				
white-throated sparrow				
wild turkey				
wood thrush				
coyote				
eastern gray squirrel				
fisher				
gray fox				
opossum				
raccoon				
red fox				
short-tailed weasel				
striped skunk				
northern gray tree frog				
red-backed salamander				
spotted salamander				
spring peeper				
wood frog				

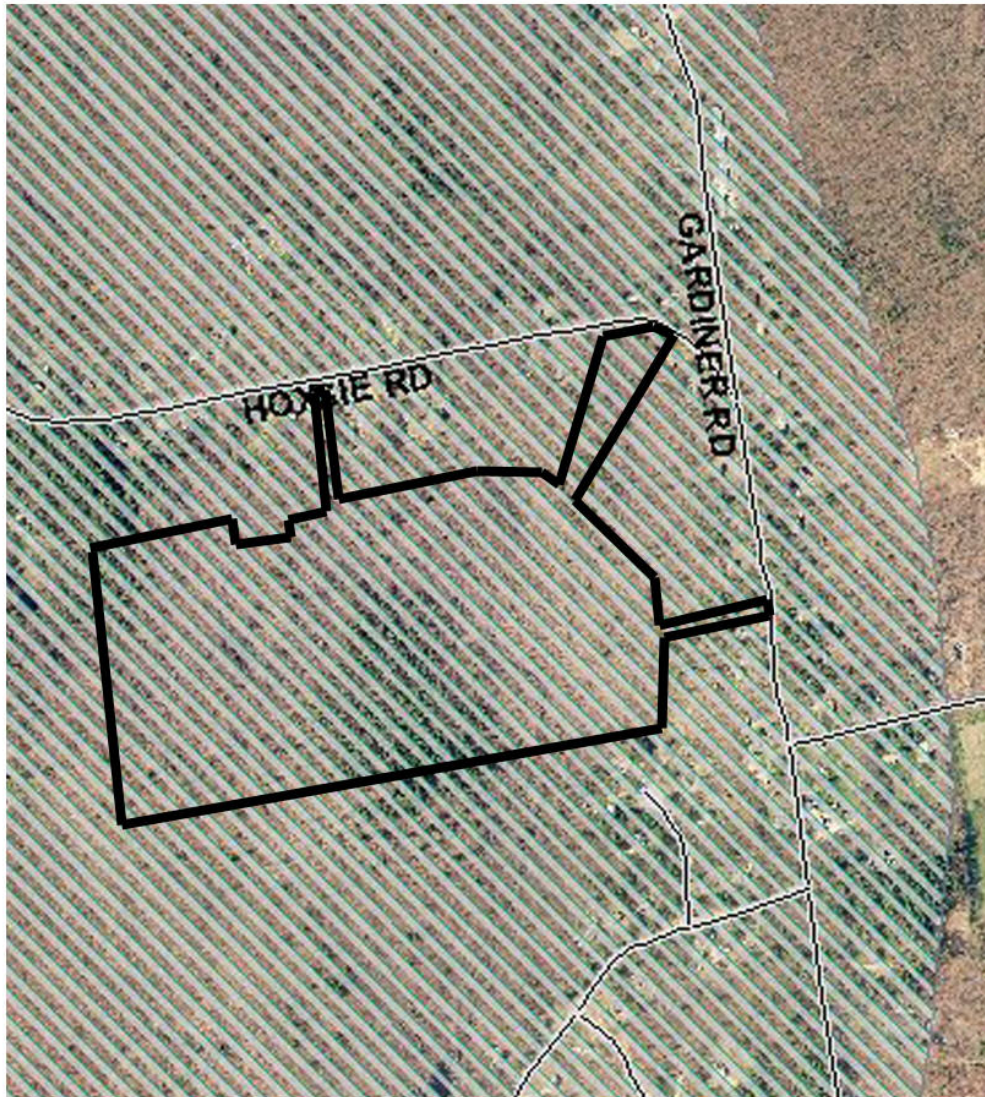
FIGURE10

RICHMOND RURAL PRESERVATION LAND TRUST									
BRADNER PROPERTY - GARDNER ROAD									
AP 02E, LOT 013-000									
Vegetation Baseline									
by Applied Bio-Systems, Inc.									
VEGETATION									
10/5/2010									
deciduous woods									
riverine / wetland									
rock outcrop									
pine woods									
Trees/shrubs									
American beech ( <i>Fagus grandifolia</i> )									
American chestnut ( <i>Castanea dentata</i> )									
american witchhazel ( <i>Hamamelis virginiana</i> L.)									
black birch ( <i>Betula nigra</i> )									
large tooth aspen ( <i>Populus grandidentata</i> )									
Norway spruce ( <i>Picea abies</i> )									
red maple ( <i>Acer rubrum</i> )									
red oak ( <i>Quercus rubrum</i> )									
swamp tupelo ( <i>Nyssa sylvatica</i> )									
white oak ( <i>Quercus alba</i> )									
white pine ( <i>Pinus strobus</i> )									
winterberry ( <i>Ilex verticillata</i> )									
yellow birch ( <i>Betula alleghaniensis</i> )									
Herbaceous / woody vines									
black huckleberry ( <i>Gaylussacia baccata</i> )									
cinnamon fern ( <i>Osmunda cinnamomea</i> )									
creeping jenny ( )									
green brier ( <i>smilax grandifolia</i> )									
hayscented fern ( <i>Dennstaedtia</i> Bernh. )									
New York fern ( <i>Thelypteris noveboracensis</i> )									
partidgeberry ( <i>Mitchella repens</i> L. )									
royal fern ( <i>Osmunda regalis</i> )									
Rubus sp.									
sphagnum moss ( <i>Sphagnum</i> sp.)									
striped wintergreen ( <i>Chimaphila maculata</i> )									
sweet pepperbush ( <i>Clethra alnifolia</i> )									
tall meadow -rue ( <i>Thalictrum</i> sp.)									
white aster ( )									
whorled loosestrife ( <i>Lysimachia</i> sp.)									



FIGURE 11

Natural Heritage Area - Rare Species Map  
Bradner Property, Richmond Rural Preservation Land Trust  
Richmond, Rhode Island



Base Layer Map from RIDEM website <http://www.dem.ri.gov/maps/index.htm#G>  
Geographic Data Viewer Environmental Resource Map

Note - Approximate Location of Rare Species Habitat Areas - not field verified by RIDEM

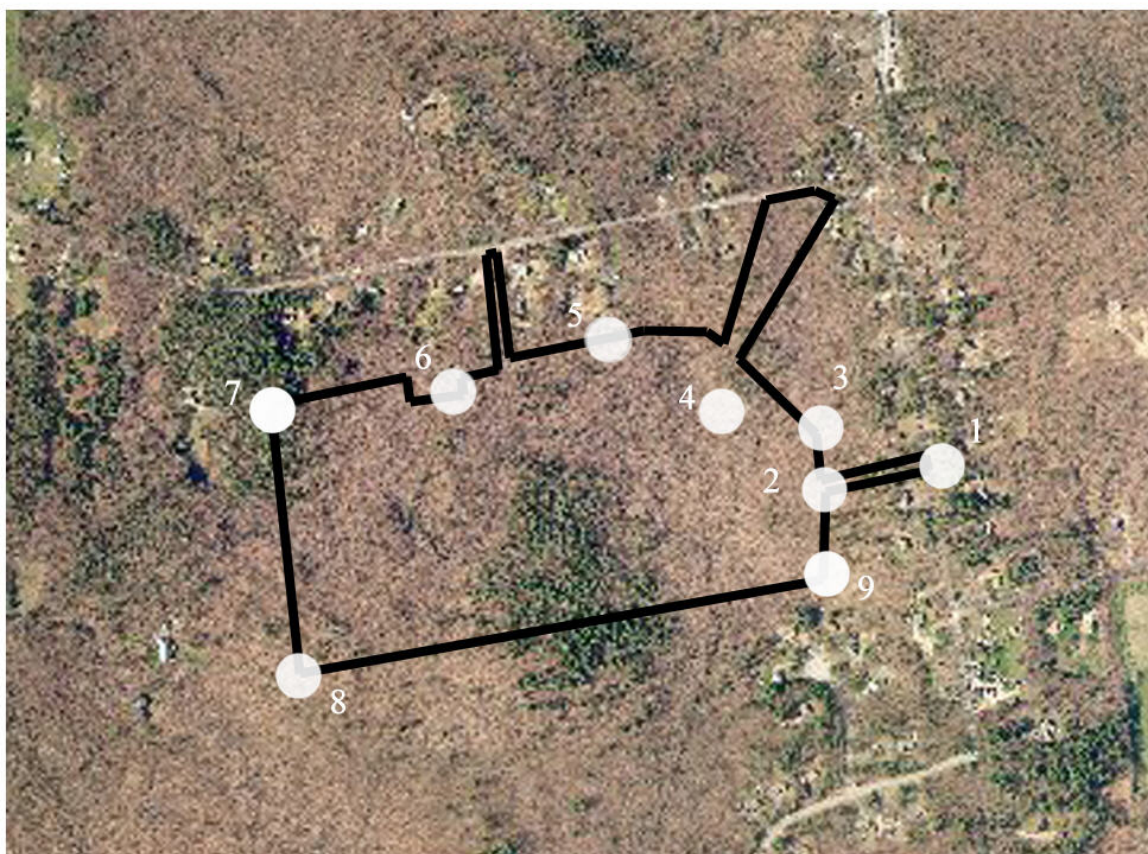


0 250 500 1,000 Feet

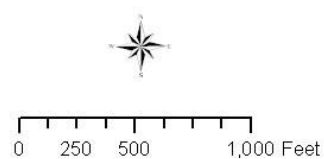


FIGURE 12

PHOTO DOCUMENTATION LOCATION MAP  
BRADNER PROPERTY  
RICHMOND RURAL PRESERVATION LAND TRUST  
RICHMOND, RI



Base Layer Map from RIDEM website <http://www.dem.ri.gov/maps/index.htm#G>  
Geographic Data Viewer Environmental Resource Map spring 2008 aerial photo





## FIGURE 13

### PHOTO POINT LOCATIONS ALL PHOTOS TAKEN OCTOBER 4, 2010



Photo #1 Point 1 - looking west from Gardner Road Parking area



Photo #2 Point 2 - looking west at property bound stake



Photo #3 Point 3 - looking north at eastern property line



Photo # 4 Point 4 - looking north on existing trail





Photo #5 Point 5 - Looking south at property stake. This sign had been recently vandalized



Photo # 6 Point 5 - Looking west at well used ATV trail



Photo # 7 Point 5 - additional view looking east



Photo #8 Point 6 - looking north at property bound





Photo #9 Point 7 - looking north at the northwest property bound survey flag.



Photo # 10 Point 8 - looking west at the southwest property bound.



Photo # 11 Point 9 - looking southeast at the southeast corner property bound



Phot # 12 Large rock feature within center of parcel





Photo # 13 Emergent area of wetland within riverine wetland habitat along western area of parcel - possible location for Future trail / bridge.



Photo # 14 Point along western property line where active ATV trail is allowing access into



Photo # 15 Rock polypody habitat along rock outcrop in parcel



Photo # 16 Photo Point 6 - Large wolf tree along stone wall

## FIGURE 14

Photo Point Description Sheet  
Bradner Property, Richmond Land Trust  
Richmond, RI

Photo No.	Photo Point	Photo Description
1	1	Looking west from Gardner Road Parking Area
2	2	Looking west at Property bound stake along property mid-eastern boundary
3	3	Looking north at eastern property line
4	4	Looking north at existing trail marker midway eastern half parcel
5	5	Looking south at property stake along northern boundary.
6	5	Looking west at property stake along northern boundary.
7	5	Looking east at property stake along northern boundary.
8	6	Looking north at northern property line about midway along northern line.
9	7	Looking north at the northwest property bound survey flag.
10	8	Looking west at the southwest property bound marker.
11	9	Looking southeast at the southeast property bound marker.
12	n/a	large rock within center of parcel not located on map.
13	n/a	riverine wetland western side of parcel not located on map.
14	n/a	western property line ATV trail not located on map
15	n/a	rock polypody habitat on rock outcrop not located on map.
16	n/a	large wolf tree not located on map.

**Rebecca L. McCue**  
**Senior Wetlands Biologist**

## **EDUCATION**

**Bachelor of Science in Wildlife Biology and Management**  
University of Rhode Island, Kingston RI, May 1995

## **MEMBERSHIPS**

Rhode Island Association of Wetland Scientists  
Rhode Island Wild Plant Society  
Rhode Island Natural History Survey

## **PROFESSIONAL REGISTRATIONS**

Wetland Scientist – Rhode Island Association of Wetland Scientists

## **BACKGROUND**

As Senior Wetlands Biologist, Ms. McCue has worked on a variety of projects with Applied Bio-Systems, Inc. Ms. McCue has worked with Applied Bio-Systems, Inc. since 1997 and has assisted numerous private and state clients in her role as Wetlands Biologist. These clients were provided with a wide array of ecological services including Wetland Delineations, Wildlife and Vegetation Inventories, Soils Analysis, Aerial Photo Interpretations, Wetland Functions / Values Assessment, Project Impact Assessment, Contractor Monitoring, and Environmental Permitting for RIDEM, CRMC, MADEP and the U.S. Army Corps of Engineers. Prior to Applied Bio-Systems, Inc., Ms. McCue held a variety of positions working in the environmental field. These positions included working as a field biologist for the Loon Preservation Committee in Moultonborough, New Hampshire; a Research Assistant for the National Biological Service in Tallulah, Louisiana; and a Wildlife Technician working as a Volunteer for the US Fish and Wildlife Service in Coleharbour, North Dakota.

## **SPECIAL EXPERTISE**

- Wetland Delineation for State and Federal Permitting
- Wildlife Inventories and Habitat Assessments
  - Bird Vocalizations, Mist-netting capture techniques, Small-mammal traps, Amphibian Chorus counts, Vegetative Transects, Submerged Aquatic Vegetation Surveys, Soils Analysis, benthic sampling (river and stream)
- State and Federal Environmental Permitting with RIDEM, CRMC and USACE
- Aerial Photo Interpretations
- Wetlands Functions / Values Assessments
- Contractor Monitoring
- Project Impact Assessment
- Coordination with USACE, RIDEM and CRMC



# APPLIED BIO-SYSTEMS, Inc.

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**Linda A. Steere**  
**President and Principal Wetlands Biologist**

## **EDUCATION**

### **Bachelor of Science in Zoology**

University of Rhode Island, Kingston RI, June 1971

### **Masters of Animal Science**

University of Rhode Island, June 1978

## **MEMBERSHIPS**

Association of State Wetland Managers  
Rhode Island Association of Wetland Scientists  
Rhode Island Wild Plant Society  
Rhode Island Natural History Survey  
Society of Wetland Scientists

## **PROFESSIONAL REGISTRATIONS**

Wetland Scientist – Rhode Island Association of Wetland Scientists  
Soil Scientist – The Society of Soil Scientists of Southern New England

## **PUBLICATIONS**

*Sod removal and replacement tried in tidal marsh restoration*, Chumra, G. and Steere, L.; Restoration and Management Notes, 1981, 1:1:22.

*Tidal marsh sod replacement trial: Progress Report*, Steere, L.; Restoration and Management Notes, 1982, 1:2:124.

*Review of Freshwater Wetlands: A Guide to Common Indicator Plants of the Northeast* by D. W. McGee, Steere, L.; Restoration and Management Notes, 1982, 1:2:169.

## **BACKGROUND**

Ms. Steere has over 29 years of experience in the field of wetland ecology, permitting and regulatory requirements. Her educational background at the University of Rhode Island is in Wildlife Biology. She obtained an MS in Animal Science (Wildlife Management) and then furthered her education with coursework to become a registered Soils Scientist. She has a strong background in regulatory permitting spending over six years as a Wildlife Biologist for the RI Department of Management – Division of Fish and Wildlife as well as staff Biologist to the CRMC. She left RIDEM in 1986 to start her present firm, Applied Bio-Systems, Inc., in order to provide environmental consulting services to state, local and private clients.



## **SPECIAL EXPERTISE**

- Project Management and Coordination
- Wetland Delineation for State and Federal Permitting
- Wildlife Inventories and Habitat Assessments
  - Bird Vocalizations, Mist-netting capture techniques, small-mammal traps, Amphibian Chorus counts, Vegetative Transects, Submerged Aquatic Vegetation Surveys, Soils Analysis, benthic sampling (river and stream)
- State and Federal Environmental Permitting with RIDEM, CRMC and USACE
- Aerial Photo Interpretations
- Wetlands Functions / Values Assessments
- Contractor Monitoring
- Project Impact Assessment
- Coordination with USACE, RIDEM and CRMC
- Prior experience designing a marine science program for Seascope, an education program for grades 3-8 sponsored by the Marine Advisory Program at the University of Rhode Island