

Rappahannock River Tidal Fresh Important Bird Area Fact Sheet

Location: Essex, Richmond, Caroline, King George, Westmoreland Counties **Total Size :** 50,931 ha (125,800 acres)
Elevation: 0-66 m (0-217 feet)

Site Description: Compared to all other major tributaries of the Chesapeake Bay, the reach of the Rappahannock River between Tappahannock and Port Royal remains the most pristine. The waterway supports extensive forested wetlands and pristine shorelines embedded within a predominantly rural landscape. Uplands have a wide range of topographic features that result in a high diversity of habitats within a relatively small area. These areas are used for agriculture, forestry, and a growing ornamental nursery industry. Several large farms and historic plantations remain intact. In recent years, the U.S. Fish and Wildlife Service has made the area a focus for acquisition. Surrounding uplands are composed of rural farmlands that support some of the largest grassland bird populations in the Coastal Plain.

Protection: A growing and important portion of the area is owned and managed for conservation purposes. In recent years the area has become an acquisition target for both the U.S. Fish and Wildlife Service and The Nature Conservancy. The relatively new Rappahannock River Valley National Wildlife Refuge has been very successful in protecting strategically important tracts within the area. The Virginia Department of Game and Inland Fisheries manages Lands End for wintering waterfowl. In addition, many private landowners are progressive in managing their lands for conservation benefit.

Birds: The tidal fresh reach of the Rappahannock River supports the only known breeding population of Coastal Plain Swamp Sparrows in Virginia. The status and geographic extent of this population continues to be a topic of interest to the conservation community. The area supports the densest breeding population of Bald Eagles in Virginia and one of the largest summer and winter concentration areas in eastern North America. The waterway is a significant area for waterfowl during the winter months. Forested wetlands support breeding neotropical migrants such as the Prothonotary Warbler and Yellow-throated Vireo and winter roosts of blackbirds including the Rusty Blackbird. Surrounding fallow open lands support one of the largest grassland bird communities within coastal Virginia.

Coastal Swamp Sparrow nest



Conservation and Threats: Four primary threats are currently of concern including 1) conversion of open land to residential, 2) expansion of recreational boating access to

sensitive portions of the river, 3) contaminants within the fishery used by piscivorous birds, and 4) continued expansion of phragmites into sensitive marsh habitats. The urban centers of Fredericksburg and Tappahannock are expanding and expected to place pressure on the rural lands within this area in the future. Waterfront property is particularly vulnerable to future development. Since many of the species that depend on this area are sensitive to development, further development remains a concern. The reach of the river between Tappahannock and Port Royal supports one of the largest winter and summer concentrations of migrant Bald Eagles in eastern North America. These birds have been shown to be very sensitive to boating activity. Increases in boating activity and the number of boat access points within this stretch will negatively impact migrant eagles. Because of the position of these birds within the food web, they will always be vulnerable to new contaminants entering the system. Dispersal of the invasive plant phragmites from the large source population on Hoskins Creek threatens the integrity of pristine marshes throughout the system.

Important Bird Areas of Virginia

IBA Nomination Form

The Important Bird Area (IBA) program is an international effort to identify, conserve, and monitor a network of sites that provide essential habitat for bird populations. BirdLife International began the IBA program in Europe in 1985. Since that time, BirdLife partners in more than 100 countries have joined together to build the global IBA network. Audubon, the BirdLife Partner in the U.S. has been working since 1995 to identify and conserve hundreds of IBAs all across the United States.

For more information, visit: <http://www.audubon.org/bird/iba/index.html>

Or contact Aimee Weldon, the Virginia IBA Coordinator

P.O. Box 1089, Ashland, VA 23005 aweldon@audubon.org 804-370-3528

Additional copies of the Nomination Form may be downloaded from www.virginia-iba.org

Thank you for your interest in the Important Bird Areas Program. Please tell us about the areas that you think may meet the criteria by completing as much of this form as possible. Detailed instructions for fields requiring clarification may be found in the **INSTRUCTIONS FOR COMPLETION OF IBA NOMINATION FORM**. It is important that the data and information about the sites are recorded in a standard format, so that they may be accurately evaluated.

I. Nominator Information	
YOUR NAME: Bryan D. Watts	PHONE: (757) 221-2247
AFFILIATION(if any) Center for Conservation Biology College of William and Mary	EMAIL: bdwatt@wm.edu
ADDRESS: PO Box 8795	
ZIP CITY, STATE, Williamsburg, VA 23187-8795	DATE: 11/27/06

II. Site Details	
SITE NAME: Rappahannock River Tidal Fresh	
CITY,TOWN,COUNTY: Essex, Richmond, Caroline, King George, Westmoreland Counties	AREA: 50,931 (circle one) acres, sq. miles., hectares
ELEVATION: Minimum 0 (circle one) feet, meters	ELEVATION: Maximum 66.2 feet, meters
COORDINATES (at site center) Latitude 38° 04' 07"	Longitude: -79° 59' 55"

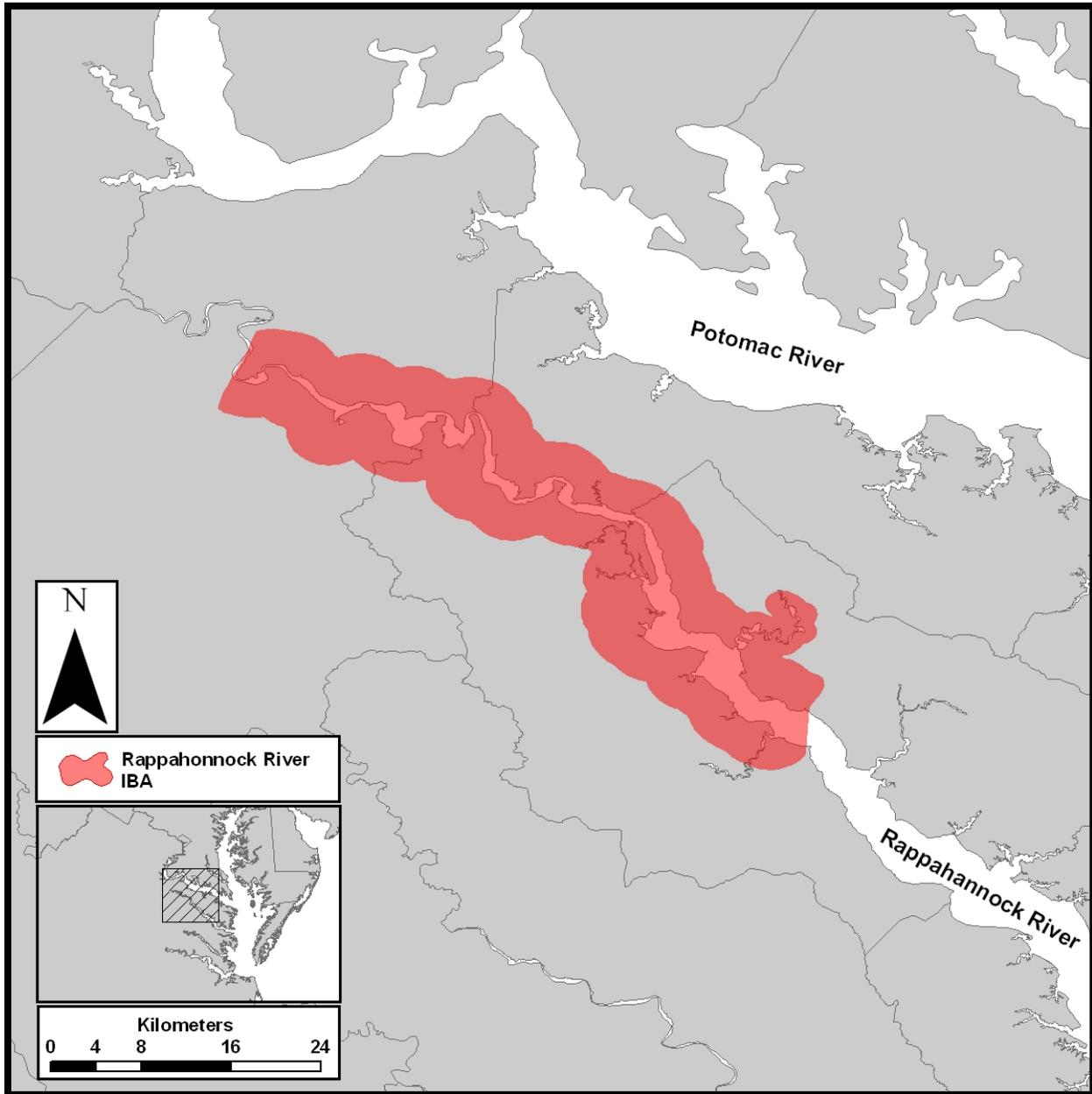
Ownership: (Circle One) **federal**, state, **private**, international waters, communal, religious group, mixed, other

Ownership Details: (List owners. If "other" ownership, please describe. If the property is privately owned, please provide contact information and specify if owner is aware of nomination)

**United States Fish and Wildlife Service
United States Department of Defense**

Virginia Department of Game and Inland Fisheries
The Nature Conservancy
Many private holdings

Road Directions to site (or location /distance to nearest town) Please include a map if convenient.



III A. Species List and Population Data

List the species of significance. Provide all other information at your disposal (note: Types of Birds Counted is required). Each record should represent a count at the site in a given year. **Please use the following codes when completing this chart.**

1. **Relative Abundance:** Abundant = A, Common = C, Frequent = F, Uncommon = U, Rare = R, Not available = NA
2. **Count:** For all species, enter either **Density** (# per unit of area), please specify ha, acres, sq. mi. or **Max #**. **Max #** is the highest # observed on one visit in a given season. Total season counts may be entered for migrating raptors only.
3. **Types of Birds Counted:** Individuals = I, Breeding Pairs = B, Adults only = A, Males only = M, Females only = F, Nests = N
4. **Reliability/Data quality:** Good = G, Medium = M, Poor = P, Unknown = Un
5. **Source:** Enter the number of the source in this box, and list corresponding details of the sources in Source Details (IIIB) section. Sources may include published reports, surveys, personal observations or field notes.

() values represent population thresholds per the Virginia IBA instructions.

Species Name	Season Month/Day of Observation	Year of Observation	Relative Abundance	Counts		Types of Birds Counted	Reliability /Data Quality	Source
				All Groups	Migrating Raptors Only			
				Density # / ___ area or Max # / visit	Total Season Count			
Coastal Swamp Sp	Summer	2005			47^a (all)	B	G	1
Swainson's Warbler	Summer	2003			1^b (20)	B	Un	2
American Black Duck	Summer	1995			5^c (5)	B	M	3
Bald Eagle (breeding)	Spring	2006			63^d (30)	B	G	4
Bald Eagle (summer)	Summer	2006			232^e (100)	I	G	5, 6
Bald Eagle (winter)	Winter	2005			383^f (100)	I	G	6, 7, 8
King Rail	Summer	2005			2^g (30)	B	Un	9
Least Bittern	Summer	2005			3^h (20)	B	Un	9
Barn Owl	Summer Yr-round	1997			6ⁱ (5)	B	M	3, 10
American Woodcock	Summer	2002-2005			8^j (50)	I	M	9
Seaside Sparrow	Summer	2002			13^k (500)	B	G	9
Red-hded Woodpecker	Winter	2003-2006			13^l (60)	I	Un	9
Rusty Blackbird	Winter	2005			1600^m (200)	I	Un	9

Whip-poor-will	Summer		U ⁿ (500)				
Northern Bobwhite	Summer		U ^o (100)				
Wood Thrush	Summer		C ^p (1000)				
Prothonotary Warbler	Summer		U ^q (430)				
Worm-eating Warbler	Summer		U ^r (100)				
Prairie Warbler	Summer		C ^s (500)				
Louisiana Waterthrush	Summer		U ^t (200)				
Kentucky Warbler	Summer		R ^u (200)				
Eastern Meadowlark	Summer		C ^v (200)				
Grasshopper Sparrow	Summer		C ^w (200)				
Field Sparrow	Summer		C ^x (200)				
Colonial Species							
Cliff Swallow	Summer	1995		2 ^y	B	G	12
Great Blue Heron	Spring	2003		261 ^z	B	G	13

^aOnly known Virginia breeding population. Singing males detected on Otterburn Marsh, Mulberry Point Marsh, and Island Farm Marsh (a tract of the Rappahannock River Valley NWR). May be more widespread.

^bSingle individual detected during breeding bird survey on Hutchinson Tract of the Rappahannock River Valley NWR. May be part of a larger, undocumented breeding population.

^cBreeding documented in offshore duck blinds. Species likely breeds in scattered marsh locations based on observations of adults and young during breeding season. Observed in upper Cat Point Creek, Garland Creek, Island Farm Marsh (tract of RRVNWR)

^dArea accounts for nearly 10% of state population. Breeding population increasing. Site supports one of the densest breeding populations in the mid-Atlantic.

^eOver-summering migrants from Southeast. Numerous communal roosts. Site represents one of the most important summer concentrations in Eastern North America.

^fOver-wintering migrants from Northeast. Largest winter concentration area known for Virginia. Several communal roosts.

^gSpecies breeds within appropriate marsh habitat in lower portion of IBA. Surveys conducted along portions of Catpoint Creek only. Broader population not assessed. Population likely exceeds threshold.

^hSpecies breeds within appropriate marsh habitat in lower portion of IBA. Surveys conducted along portions of Catpoint Creek only. Broader population not assessed. Population likely exceeds threshold.

ⁱSpecies breeds in offshore duck blinds, within farm buildings, in cavity within river bank (Fones Cliffs), and nest boxes (eggs in box at Tayloe). Enough pairs known to meet criteria but no systematic survey for area attempted.

^jExtensive habitat for this species within the area. Area likely meets population threshold. No population estimate available.

- ^kSpecies breeds on eastern edge of IBA in Island Farm Marsh a tract of the Rappahannock River Valley NWR. No systematic survey of population available but does not reach threshold.
- ^lSpecies breeds throughout area in appropriate habitat. Area likely meets threshold. No systematic survey or population estimate available.
- ^mArea very likely to meet population threshold. Species winters in area and roosts in forested wetlands. No population estimate for broader area.
- ⁿArea not likely to meet population threshold. Species is regular breeder. No population estimate has been made.
- ^oArea likely to meet population threshold. Species has declined. No population estimate is available.
- ^pArea may reach population threshold. No overall population estimate.
- ^qSpecies breeds in forested wetlands but does not likely reach population threshold. No overall population estimate.
- ^rSpecies breeds in dry forests but does not likely reach population threshold. No overall population estimate.
- ^sSpecies common along marsh edges, shrublands, and regenerating pinelands and likely reaches population threshold. No overall population estimate.
- ^tSpecies breeds along forested ravines. May reach population threshold. No overall population estimate.
- ^uSpecies breeds in low forests but does not likely reach population threshold. No overall population estimate.
- ^vSpecies is common breeder and habitat is extensive. Population almost certainly meets threshold.
- ^wSpecies is common breeder and habitat is extensive. Population almost certainly meets threshold.
- ^xSpecies is common breeder and habitat is extensive. Population almost certainly meets threshold.
- ^ySmall colony documented on Mount Landing Creek bridge.
- ^zSeveral relatively small colony located within area.

III B. Source Details

Detail the sources of data noted in the “Species List and Population Data” (III A) Section. If additional space is needed, you may attach copies of this form to the nomination.

1. Watts, B. D., M. D. Wilson, F. M. Smith, B. J. Paxton, and B. Williams. Breeding range extension of the Coastal Plain Swamp Sparrow. Manuscript submitted to the Wilson Bulletin.
2. Singing bird detected during breeding bird survey (Sandy Spencer, pers comm.)
3. Watts, B. D. A survey of duck blinds for nesting birds within the Chesapeake Bay. Unpublished data.
4. Watts, B. D. and M. A. Byrd. 2006. Virginia Bald Eagle nest and productivity survey: Year 2006 report. Center for Conservation Biology Technical Report Series, CCBTR-06-11. College of William and Mary, Williamsburg, VA 31 pp.
5. Watts, B. D. 1998. Investigation of bald eagles within the Rappahannock River Concentration Area. Center for Conservation Biology Technical Report, CCBTR-98-02. College of William and Mary, Williamsburg, VA. 65pp.
6. Portlock, W. S. 1994. Rappahannock River bald eagles. *The Raven*. 65:38-43.
7. Watts, B. D. 2006. Biological Assessment for Bald Eagle Route 624 Bridge Replacement, Cat Point Creek. Center for Conservation Biology Technical Report Series, CCBTR-06-04. College of William and Mary, Williamsburg, VA. 37 pp.
8. Winter Bald Eagle survey of Rappahannock River Concentration Area (Jeff Cooper, Sandy Spencer, Bill Portlock).
9. Spencer, S. 2002-2005. Survey of habitats within various tracts of Rappahannock River Valley National Wildlife Refuge and surroundings. Unpublished Data maintained at refuge office.
10. Watts, B. D. and D. M. Whalen. 2005. An evaluation of nest box use by Common Barn Owls in Virginia. *The Raven* 75:71-77.
11. Spencer, S. and M. Wilson. 2005. Observations on Island Farm Marsh. Unpublished Data.
12. Watts, B. D., M. A. Byrd, and M. U. Watts. 1996. Status and distribution of Cliff Swallows in coastal Virginia. *The Raven* 67:21-24.
13. Watts, B. D. 2004. Status and distribution of colonial waterbirds in coastal Virginia: 2003 breeding season. CCBTR-04-06. Center for Conservation Biology, College of William and Mary, Williamsburg, VA 25 pp.

IV. IBA Criteria

Proposed State Level Criteria – Mark all that apply
 See Instruction IV for **Explanations of Criteria**.

Code	State Definition	Mark all criteria that apply
D 1.	Endangered, threatened, or vulnerable species: The site sustains a breeding or non-breeding population of one or more bird species, sub-species, or isolated populations that is/are endangered, threatened or vulnerable to extirpation.	Yes
D 3.	The site contains a significant suite of species associated with a habitat type that is representative, rare, or threatened in Virginia.	Yes
D 4.	The site contains a significant concentration of one or more species during the breeding season, winter, or during migration.	Yes

V. Habitat Details

See Instruction V for **List of Habitats** at both levels below.

	Major vegetation community types	Predominant plant species	Cover %
1.	Mixed Forest	Loblolly pine	18843 ha
		Various oaks, red maple, ashes, hickories	
2.	Row Crops Idle Grassland	Corn, soy beans, cotton	17767 ha
		Various grass species	
3.	Forested Wetlands	Red maple	2747 ha
4.	Oligohaline, Tidal Fresh Marshes	<i>Peltandra</i>	2263 ha
		Wild rice	

		<i>Spartina cynosuroides</i>	

Site Name: Rappahannock River Tidal Fresh

VI. Land Use

See Instruction VI for description of **Land Uses**. Mark each land use at the site, circle its predominance, and (if known) provide an estimate of the percent cover at the site currently devoted to the land use. You may enter brief notes to clarify some land uses. Detailed explanations of land uses should be reported in Text Summary, section IX.

Check Here	Land Use	Predominance			Cover %	Notes
		Major	Minor	Unknown		
X	Agriculture 1. Row crops, small grains	Major	Minor	Unknown		
X	Agriculture 2. Grasslands (pasture, hay)	Major	Minor	Unknown		
X	Fisheries/aquaculture	Major	Minor	Unknown		
X	Forestry	Major	Minor	Unknown		
X	Hunting	Major	Minor	Unknown		
	Military	Major	Minor	Unknown		
X	Nature Conservation / research	Major	Minor	Unknown		
	Not utilized	Major	Minor	Unknown		
	Other	Major	Minor	Unknown		
X	Tourism / recreation	Major	Minor	Unknown		
	Unknown	Major	Minor	Unknown		
X	Urban / industrial / transport	Major	Minor	Unknown		
	Water management	Major	Minor	Unknown		

VII. Threats

See Instruction VII for description of **Threat Codes**. Indicate all threats and the relative level of the threat by entering (L) Low, (M) Medium, (H) high, (U) Unknown in front of all that apply. You may enter notes to clarify some threats. However, detailed explanations of threats should be reported in Text Summary, section IX.

Enter L,M,H,U	Threat	Notes
L	Abandonment/land management reduction	
L	Agricultural expansion/intensification	
L	Aquaculture/fisheries	Contamination of fisheries (prey base)
L	Burning of vegetation	
L	Dam/dyke/barrage construction/operations	
M	Disturbance to birds	Boating activity
L	Draining wetlands	
L	Dredging/canal building (irrigation)	
L	Filling wetlands	
L	Forest grazing (by native or domestic herbivores)	
M	Groundwater extraction	
M	Industrialization/urbanization	Residential development
M	Infrastructure (roads, power lines, cell towers, etc.)	Residential development
L	Intensified forest management (please elaborate)	
L	Isolation/fragmentation	
M	Mineral/oil/peat extraction	Sand mining

M	Natural events	Erosion of tidal fresh marshes
M	Nonnative (exotic) animal/plant introduction	Expansion of exotics
L	Other	
L	Pesticide application (non-agricultural)	
L	Plantation forestry (Afforestation) on previously open land	
L	Recreation/tourism	
L	Unsustainable exploitation of birds	

Site Name: Rappahannock River Tidal Fresh

VIII. Protected Areas

Complete only if this site contains or abuts protected area(s)!

Enter name and descriptions of protected areas contained within or adjacent to this site.

See **Instruction VIII**

1. Name of protected area: Rappahannock River Valley River National Wildlife Refuge – U.S. Fish and Wildlife Service		
Designation:	Area:	circle one: hectares, acres, sq. miles
Relationship: Circle one Protected area contains IBA, Is adjacent to IBA, Is contained by IBA, Overlaps with IBA , Unknown	Overlap:	circle one: hectares , acres, sq. miles 2288.5

2. Name of protected area: Fort A.P. Hill		
Designation:	Area:	circle one: hectares, acres, sq. miles
Relationship: Circle one Protected area contains IBA, Is adjacent to IBA, Is contained by IBA, Overlaps with IBA , Unknown	Overlap:	circle one: hectares , acres, sq. miles 2083.8

3. Name of protected area: Vorhees Nature Preserve - TNC		
Designation:	Area:	circle one: hectares , acres, sq. miles 298.9
Relationship: Circle one Protected area contains IBA, Is adjacent to IBA, Is contained by IBA , Overlaps with IBA, Unknown	Overlap:	circle one: hectares , acres, sq. miles 298.9

2. Name of protected area: Lands End – Virginia Department of Game & Inland Fisheries		
Designation:	Area:	circle one: hectares , acres, sq. miles 180.3
Relationship: Circle one	Overlap:	circle one: hectares , acres, sq.

Protected area contains IBA, Is adjacent to IBA, Is contained by IBA, Overlaps with IBA, Unknown	miles 180.3
--	-----------------------

IX. Text Summary

Use the following space for additional descriptions of site details.

General Site Description: The tidal fresh reach of the Rappahannock River included in this IBA extends from the mouth of Little Carter Creek just below the Tappahannock Bridge to Cleve Marsh just above Port Royal. This portion of the Rappahannock supports one of the largest winter and summer concentrations of Bald Eagles in Eastern North America and one of the densest breeding populations in Virginia. The river also supports growing populations of breeding Ospreys and Great Blue Herons. The only known population of the Coastal Swamp Sparrow in Virginia breeds within this area. The river supports extensive forested wetlands that support breeding Prothonotary Warblers, wintering Rusty Blackbirds, and many associated species. Surrounding uplands are composed of rural farmlands that support some of the largest grassland bird populations in the Coastal Plain.

General Ornithological Information: The tidal fresh reach of the Rappahannock River and surrounding lands has been the focus of bird surveys and research primarily since the 1980s. Surveys of colonial waterbirds have been conducted since the early 1980s. Work with summer migrant Bald Eagles was initiated in the mid 1980s including the identification of communal roosts and investigation of eagle-human interactions. Work with wintering Bald Eagles was initiated during this same period and has intensified in recent years. A systematic survey of exposed banks, duck blinds, and Osprey was conducted in 1995. Surveys of grassland and marsh birds within the National Wildlife Refuge have been conducted in recent years. A study of Bald Eagle diet and chick growth was conducted in 2002-2004. A preliminary study of Coastal Swamp Sparrows was initiated in 2005. A study of the Osprey population was initiated in 2006. Although many studies have been conducted within this area, population estimates for several species of conservation concern have not been produced.

Research / conservation projects: A large number of research and conservation projects have been conducted within this area over the past few decades.

Habitat / Land Use: The delineated area includes most of the tidal fresh reach of the Rappahannock River, associated emergent and forested wetlands, and the surrounding rural landscape that includes extensive farmland and mixed forest. Landuse is primarily farming with an increasing component of residential and urban development.

Other Flora / Fauna:

Protected Areas: An important portion of the area is owned and protected to meet conservation, management, and educational objectives. Holders include the U.S. Fish and Wildlife Service, U.S. Department of Defense, the Virginia Department of Game and Inland Fisheries, and The Nature Conservancy.

Threats: Four primary threats are currently of concern including 1) conversion of open land to residential, 2) expansion of recreational boating access to sensitive portions of the river, 3)

contaminants within the fishery used by piscivorous birds, and 4) continued expansion of phragmites into sensitive marsh habitats. The urban centers of Fredericksburg and Tappahannock are expanding and expected to place pressure on the rural lands within this area in the future. Waterfront property is particularly vulnerable to future development. Since many of the species that depend on this area are sensitive to development, caution is warranted. The reach of the river between Tappahannock and Port Royal supports one of the largest winter and summer concentrations of migrant Bald Eagles in eastern North America. These birds have been shown to be very sensitive to boating activity. Increases in boating activity and the number of boat access points within this stretch will negatively impact migrant eagles. Because of the position of these birds within the food web, they will always be vulnerable to new contaminants entering the system. Due to the role that this location plays in the ecology of Bald Eagle populations along the entire Atlantic Coast, vigilance is warranted. Dispersal of the exotic phragmites from the large source population on Hoskins Creek into surrounding pristine marshes continues to be of concern.