

James River Tidal Fresh Important Bird Area Fact Sheet

Location: Prince George, Chesterfield, Henrico, Charles City Counties, Hopewell City

Total Size : 47,841 ha (118,167 acres)

Elevation: 0-58 m (0-190 feet)

Site Description: The tidal fresh reach of the James River includes extensive forested wetlands and pristine shorelines embedded within a predominantly rural landscape. The area is near the site of the first European colonization and the uplands have been cultivated for 400 years. Many historic plantations still remain intact and represent important lands for conservation. The area has the distinction of being the only major tributary of the Chesapeake Bay region where all three (Bald Eagle, Osprey, Great Blue Heron) of the large piscivorous bird species went extinct during the DDT era likely due to the additional impact of the contaminant kepone that was released into the waterway. The area now contains extensive natural habitats intermingled with industrial complexes and is experiencing increasing pressure for residential development.

Protection: A strategically significant portion of the James River Tidal Fresh Important Bird Area is owned and protected to meet conservation, management, and educational objectives. Important conservation lands include James River National Wildlife Refuge, Presquile National Wildlife Refuge, Kittiwan Wildlife Management Area and Dutch Gap Conservation Area. The Rice Center owned by the Virginia Commonwealth University is dedicated to environmental research and education. Many corporate and private holdings within the area are managed for wildlife.

Double-crested Cormorants



Birds: The tidal fresh reach of the James River supports the densest fish-eating bird assemblage in Virginia. The area supports large and growing populations of breeding Bald Eagles, migrant Bald Eagles, breeding Ospreys, breeding Great Blue Herons, and breeding Double-crested Cormorants. The area is one of the most important locations for Bald Eagles in eastern North America. The area contains extensive forested wetlands that support significant populations of Prothonotary Warblers, Yellow-throated Vireos, and other species within the habitat suite. Surrounding uplands are composed of rural farmlands that support some of the largest grassland bird populations in the coastal plain of Virginia.

Conservation and Threats: Three primary threats are currently of concern including 1) contaminants within the fishery used by piscivorous birds, 2) conversion of open land to residential, and 3) expansion of recreational boating access to sensitive portions of the river. This portion of the river has a history of contaminant problems that led to the decline of all fish-eating birds within the lower James River. 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. The urban centers of Richmond, Williamsburg, Hopewell and Petersburg have begun to coalesce and impact the rural lands surrounding this area. 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 Hopewell and Brandon supports one of the largest 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.

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: 9/28/06

II. Site Details	
SITE NAME: James River Tidal Fresh	
CITY,TOWN,COUNTY: Prince George, Chesterfield, Henricho, Charles City Counties, Hopewell City	AREA: 47841 (circle one) acres, sq. miles., hectares
ELEVATION: Minimum 0 (circle one) feet, meters	ELEVATION: Maximum 58 feet, meters
COORDINATES (at site center) Latitude 37° 19' 50"	Longitude: -77° 11' 57"

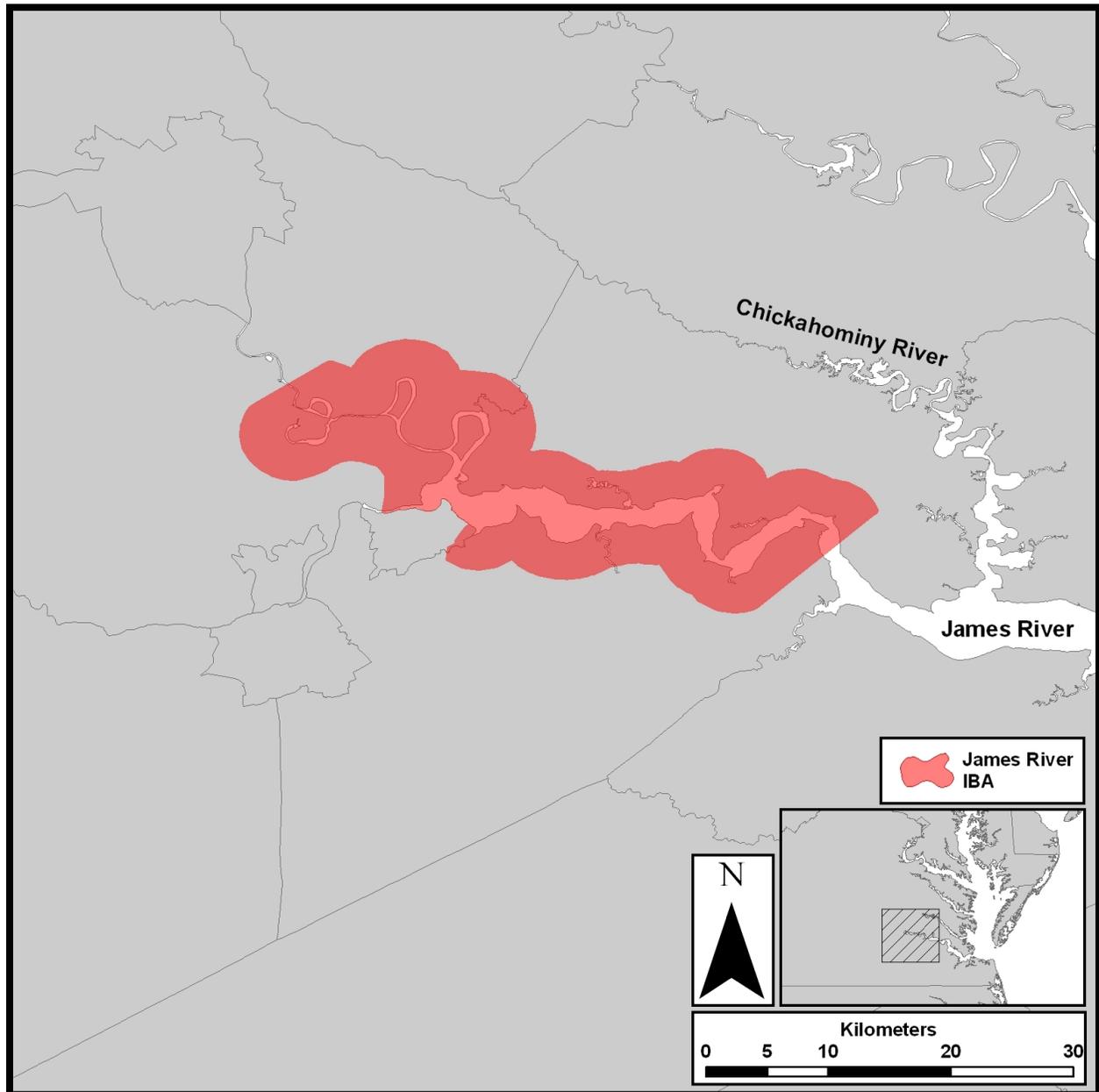
Ownership: (Circle One) **federal, state, private**, international waters, communal, religious group, mixed, other

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
National Park Service**

Virginia Department of Game and Inland Fisheries
Virginia Commonwealth University
Chesterfield County
Henrico County
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			
Peregrine Falcon	Spring	2005			1 ^a	B	G	1
Loggerhead Shrike	Summer	1998			1 ^b (2)	B	M	2
Loggerhead Shrike	Winter	1991			3 ^c (3)	I	Un	3
American Black Duck	Summer	1995			5 ^d (5)	B	M	4
Bald Eagle (breeding)	Spring	2006			42 ^e (30)	B	G	5
Bald Eagle (summer)	Summer	2006			287 ^f (100)	I	G	6, 7, 8
Bald Eagle (winter)	Winter	1999			110 ^g (100)	I	G	9
King Rail	Summer	1997			<4 ^h (30)	B	Un	
Least Bittern	Summer				? ⁱ (20)			
Northern Harrier	Summer	1996			1 ^j	B	G	10
Northern Harrier	Winter	2002			27 ^k (?)	I	Un	11
Barn Owl	Summer	1997			6 ^l (5)	B	M	12
American Woodcock	Summer				? ^m (50)			
Red-headed Woodpecker	Winter	1998			20 ⁿ (60)	I	Un	13

Rusty Blackbird	Winter	1991							I	Un	14
Whip-poor-will	Summer			U ^p (500)							
Northern Bobwhite	Summer			U ^q (100)							
Wood Thrush	Summer			C ^r (1000)							15, 16
Prothonotary Warbler	Summer						524 ^f (430)				17, 18
Worm-eating Warbler	Summer			U ^t (100)							
Prairie Warbler	Summer			C ^u (500)							
Louisiana Waterthrush	Summer			U ^v (200)							
Kentucky Warbler	Summer			R ^w (200)							
Eastern Meadowlark	Summer			C ^x (200)							
Grasshopper Sparrow	Summer			C ^y (200)							
Field Sparrow	Summer			C ^z (200)							
Osprey	Summer	2006					178 ^{aa}		B	G	19,20
Colonial Species											
Cliff Swallow	Summer	2005					1036 ^{bb}		B	G	21, 22
Bank Swallow	Summer	1995					53 ^{cc}		B	G	23
Great Blue Heron	Spring	2003					688 ^{dd}		B	G	24
Great Egret	Spring	2003					24 ^{ee}		B	G	24
Double-cr Cormorant	Summer	2003					267 ^{ff}		B	G	24, 25

^aSingle nesting pair on bridge represents 5% of Virginia breeding population.

^bLast known nesting pair in coastal plain. Population has declined precipitously. Area represents recent stronghold for species in physiographic area.

^cLast stronghold for wintering birds in coastal plain.

^dScattered pairs nest in offshore duck blinds. Population has not been fully assessed.

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

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

^gOver-wintering migrants from Northeast. Several communal roosts.

^hSpecies occurs, habitat is very limited locations. Population has not been assessed.

ⁱSpecies occurs within the area in very limited numbers. No population estimate has been attempted.

^jPair observed on Curles Neck Farm and on Fort Lee in recent years. Rare breeder on Coastal Plain.

- ^kChristmas count represents small fraction of overall area. Common wintering bird. Regular on Hopewell Christmas Count.
- ^lPairs have historically nested on the large plantations in farm structures and on the James in offshore duck blinds. Update on status is needed.
- ^mExtensive habitat for this species within the area. Area likely meets population threshold. No population estimate.
- ⁿArea almost certainly meets population threshold. No population estimate has been attempted in broader area.
- ^oArea very likely to meet population threshold. Regular on Hopewell Christmas Count. No population estimate for broader area.
- ^pArea not likely to meet population threshold. Species is regular breeder. No population estimate has been made.
- ^qArea may meet population threshold. Species has declined dramatically. No population estimate is available.
- ^rArea may make population threshold. Two studies covering small fraction of area suggest large population. No overall population estimate.
- ^sExtensive habitat for this species within area. Population has been bolstered by large nest box program. No population estimate for entire area but population threshold is met.
- ^tOccurs widely throughout area but no population estimate available. Not likely to meet population threshold.
- ^uCommon breeder throughout area but no population estimate available. Area likely meets population threshold.
- ^vUncommon breeder throughout area but no population estimate available. Area not likely to meet population threshold.
- ^wUncommon breeder throughout area but no population estimate available. Area not likely to meet population threshold.
- ^xExtensive habitat throughout area for this species. No population estimate available but likely in the thousands.
- ^yExtensive habitat throughout area for this species. No population estimate available but likely in the thousands.
- ^zCommon breeder throughout area but no population estimate available. Area likely to meet population threshold.
- ^{aa}Area supports one of the fastest growing populations in Chesapeake Bay. Increased from 73 pairs in 1995 to 178 in 2006.
- ^{bb}Area supports largest known colony in state. Population is expanding in coastal plain.
- ^{cc}Area supports one of last remaining colonies in natural shoreline in coastal Virginia. Population is declining in coastal plain.
- ^{dd}Area supports several colonies including 7% of state population.
- ^{ee}Area supports an increasing population mixed in with Great Blue Heron colonies.
- ^{ff}Area supports first breeding colony in the state. Area accounts for 25% of state population.

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., Padgett, S. M., M. A. Byrd, and E. C. Long. 2005. Virginia Peregrine Falcon monitoring and management program: Year 2005 report. Center for Conservation Biology Technical Report Series, CCBTR-05-09. College of William and Mary, Williamsburg, VA. 12 pp.
2. Watts, B. D. and E. R. Scholle. 1999. Observations of nesting Loggerhead Shrikes in Prince George County. *The Raven* 72:50-52.
3. Kain, T. 1992. Virginia Christmas Bird Counts – 1991-1992 season. *The Raven* 63:35-66.
4. Watts, B. D. A survey of duck blinds for nesting birds within the Chesapeake Bay. Unpublished data.
5. 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.
6. Watts, B. D. and M. U. Watts. Survey of the James River Bald Eagle Concentration Area. Unpublished data.
7. Watts, B. D. and M. A. Byrd. 1999. Expansion of the James River Bald Eagle concentration Area. *The Raven*. 70:18-23.
8. Watts, B. D. and D. M. Whalen. 1997. Interactions between Eagles and Humans in the James River Bald Eagle Concentration Area. Center for Conservation Biology Technical Report, CCBTR-97-02. College of William and Mary, Williamsburg, VA. 81pp.
9. Watts, B. D. and M. D. Wilson. A survey of the James River Bald Eagle Concentration Area during winter. Unpublished data.
10. Watts, B. D. and S. J. Rottenborn. 2002. Status of breeding Northern Harriers in coastal Virginia. *The Raven* 72:153-157.
11. Kain, T. 2003. Virginia Christmas Bird Counts: 2002-2003 season. *The Raven* 74:18-63.
12. 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.
13. Kain, T. 1999. Virginia Christmas Bird Counts: 1998-1999 season. *The Raven* 70:53-86.

15. Watts, B. D. 1999. An investigation of the breeding-bird community within the Fort Lee Army Installation. Center for Conservation Biology Technical Report Series, CCBTR-99-04. College of William and Mary, Williamsburg, VA. 39pp.
16. Wilson, M. D. 2006. Avian survey of the Virginia Commonwealth University Rice Center. Center for Conservation Biology Technical Report Series, CCBTR-06-02. College of William and Mary, Williamsburg, VA 39 pp.
17. 2004 prothonotary warbler banding data for Deep Bottom Park(Four-mile Creek) and Presquile NWR were collected under the supervision of Dr. Charles R. Blem, Dept. of Biology at VCU, federal master bander permit #9925. Data collected April-August 2004.
18. 2004 prothonotary warbler banding data for Dutch Gap Conservation Area were collected by Dr. Robert J. Reilly, Dept. of Economics at VCU, federal master bander permit # 22751. Data collected April-August 2004.
19. Watts, B. D., M. A. Byrd, and M. U. Watts. 2004. Status and distribution of breeding Ospreys in the Chesapeake Bay: 1995-1996. *Journal of Raptor Research* 38:47-54.
20. Watts, B. D. and M. U. Watts. Survey of the James River Osprey population. Unpublished data.
21. 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.
22. Williams, B., B. D. Watts, and M. A. Byrd. A census of a Cliff Swallow colony on the Benjamin Harrison Bridge. *The Raven*, In press.
23. Watts, B. D., M. U. Watts, and M. A. Byrd. Survey of Chesapeake Bay for Bank-nesting birds. Unpublished Data.
24. 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.
25. Watts, B. D. and D. S. Bradshaw. 1996. Population expansion by Double-crested Cormorants in Virginia. *The Raven* 67:75-78.

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	18768 ha
		Various oaks, red maple, ashes, hickories	
		Bald cypress	
2.	Row Crops Idle Grassland	Corn, soy beans, cotton	11873 ha
		Various grass species	
3.	Forested Wetlands	Bald cypress	4343 ha
		Red maple	
4.	Tidal Fresh Marshes	<i>Peltandra</i>	848 ha
		Wild rice	

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Site Name: James 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	9%	
	Agriculture 2. Grasslands (pasture, hay)	Major	Minor	Unknown	16%	
X	Fisheries/aquaculture	Major	Minor	Unknown		
X	Forestry	Major	Minor	Unknown		
X	Hunting	Major	Minor	Unknown		
	Military	Major	Minor	Unknown		Limited boat training
X	Nature Conservation / research	Major	Minor	Unknown	12%	
	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	8%	
	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	
H	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)	
L	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	

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: James River National Wildlife Refuge – U.S. Fish and Wildlife Service	
Designation:	Area: circle one: hectares, acres, sq. miles 1173.1
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 1173.1

2. Name of protected area: Presquile National Wildlife Refuge – U.S. Fish and Wildlife Service	
Designation:	Area: circle one: hectares , acres, sq. miles 527.9
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 527.9

3. Name of protected area: Dutch Gap Conservation Area – Chesterfield County	
Designation:	Area: circle one: hectares , acres, sq. miles 224.3
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 224.3

4. Name of protected area: VCU Rice Center – Virginia Commonwealth University	
Designation:	Area: circle one: hectares , acres, sq. miles 136.4
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 136.4

5. Name of protected area: Kittiwan Wildlife Management Area – Virginia Department of Game and Inland Fisheries	
Designation:	Area: circle one: hectares , acres, sq. miles

	118.7
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 118.7

6. Name of protected area: Brown-Williamson Chesterfield Park – Chesterfield County	
Designation:	Area: circle one: hectares , acres, sq. miles 104.5
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 104.5

7. Name of protected area: Harrison Lake National Fish Hatchery – U.S. Fish and Wildlife Service	
Designation:	Area: circle one: hectares , acres, sq. miles 44.2
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 44.2

8. Name of protected area: Richmond National Battlefield Park – National Park Service	
Designation:	Area: circle one: hectares , acres, sq. miles 26.3
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 26.3

8. Name of protected area: Deep Bottom County Park – Henricho County	
Designation:	Area: circle one: hectares , acres, sq. miles 25.4
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 25.4

8. Name of protected area: Petersburg National Battlefield – National Park Service	
Designation:	Area: circle one: hectares , acres, sq. miles 3.4
Relationship: Circle one Protected area contains IBA, Is adjacent to IBA, Is contained by IBA, Overlaps with IBA ,	Overlap: circle one: hectares , acres, sq. miles

IX. Text Summary

Use the following space for additional descriptions of site details.

General Site Description: The tidal fresh reach of the James River included in this IBA extends from Brandon just above the mouth of the Chickahominy River to just above Dutch Gap. This portion of the James supports the densest piscivorous bird community in Virginia. The area supports large and growing populations of breeding Bald Eagles, migrant Bald Eagles, breeding Ospreys, breeding Great Blue Herons, and breeding Double-crested Cormorants. The area is one of the most significant Bald Eagle areas along the Atlantic Coast. The area also contains extensive forested wetlands that support significant populations of Prothonotary Warblers, Yellow-throated Vireos, and other species within the habitat suite. Surrounding uplands are composed of rural farmlands that support some of the largest grassland bird populations in the coastal plain.

General Ornithological Information: The lower James River and surrounding lands has been the focus of bird surveys and research primarily since the early 1960s when Bald Eagle breeding surveys were initiated. Surveys of colonial waterbirds have been conducted since the mid-1970s. Work with migrant Bald Eagles was initiated in the early 1980s including the identification of communal roosts and investigation of eagle-human interactions. Barn Owl management and research was also conducted in the 1980s. A large, long-term research project investigating the breeding ecology of the Prothonotary Warbler was also initiated during the 1980s. A systematic survey of exposed banks, duck blinds, and Osprey was conducted in 1995. Surveys of birds within refuge and other conservation lands have been conducted in recent years. 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 James 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, National Park Service, Virginia Department of Game and Inland Fisheries, Virginia Commonwealth University, Chesterfield County and Henrico County.

Threats: Three primary threats are currently of concern including 1) contaminants within the fishery used by piscivorous birds, 2) conversion of open land to residential, and 3) expansion of recreational boating access to sensitive portions of the river. This portion of the river has a history of contaminant problems that led to the decline of all fish-eating birds within the lower James River. 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. The urban centers of Richmond, Williamsburg, Hopewell and Petersburg have begun to coalesce and impact the rural lands surrounding this area. 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 Hopewell and Brandon supports one of the largest 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.