Pete & Pam Wright's Proposed Home Construction
Middlesex County, Virginia

Incidental Take of Bald Eagles

HABITAT CONSERVATION PLAN

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EXECUTIVE SUMMARY

The applicants, Peter W. D. Wright and Pamela Darr Wright, are purchasing a 4.5 acre tract of land on Stingray Point, Chesapeake Bay, near Deltaville, in Middlesex County, Virginia. This land is divided into 28 lots and 11 home sites. Mr. and Ms. Wright plan to re-divide the land into 3 home sites and build a single-family home on one of these sites.

In 2001, a pair of bald eagles built a nest in a tree on this land. The bald eagle (*Haliaeetus leucocephalus*) is listed as a threatened species under the Endangered Species Act (ESA) of 1973, as amended, (16 U. S. C. § 1531 *et. seq*.), the Bald and Golden Eagle Protection Act of 1940 (BGEPA), as amended (16 U.S.C. § 668 *et. seq*.), and the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 701 *et. seq*.)

The U. S. Fish and Wildlife Service (Service) determined that home construction and associated human occupancy activities are likely to disturb the nesting bald eagles and result in an "incidental take" under the statutes. An "incidental take" includes a disturbance to land adjacent to an eagle nest, whether the nest is in active use or is unoccupied. An "incidental take" without benefit of an "Incidental Take Permit," is a violation of law.

Therefore, Mr. and Ms. Wright are applying for an Incidental Take Permit (ITP) in accordance with Section 10(a)(1)(B) of the Endangered Species Act to avoid such a violation. They submitted a permit application form and the fee for the permit. The permit application requires that applicants submit a Habitat Conservation Plan (HCP) as part of their application. This Habitat Conservation Plan provides the required documentation for a Section 10(a)(1)(B) permit as mandated by Section 10 of the ESA.

Mr. and Ms. Wright understand that the Service will not refer the incidental take of any bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 668 *et. seq*.) or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. § 668 *et. seq*.), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

The Service determined that this project is suitable for a low-effect Habitat Conservation Plan (HCP). This low-effect HCP is designed to minimize and mitigate for the possible take of bald eagles that may result from project, to the maximum extent practicable.

I.
INTRODUCTION

A. BACKGROUND

The coastal plain of Virginia has a long history of occupancy by and legal protections of bald eagles. Bald eagles are protected by the Migratory Bird Treaty Act, 16 U.S.C. §703, *et seq.*, and the Bald and Golden Eagle Protection Act, 16 U.S.C. §668. In 1967, the bald eagle was designated as "endangered" under the predecessor to the current Endangered Species Act (ESA), see 32 Fed. Reg. 4001.

By the late 1960's, because of the widespread use of DDT that caused the eggshells to become extremely thin, the bald eagle population plummeted. At one point, there were only 32 pairs of breeding eagles in Virginia. [1] In 1972, the Environmental Protection Agency banned DDT.

In the July 6, 1999 Federal Register (discussed in more depth later), it was reported that:

> The pesticide DDT came into widespread use after World War II. DDT ingested through the eagle's diet of fish, waterfowl, gulls and other prey resulted in eggshell thinning. As a result, many eggs broke when incubated by the parent, while other suffered embryonic mortality and failed to hatch. By the early 1960's, ... population numbers plummeted. In response to human health risks associated with DDT, it was banned from use in 1972. Reductions in DDT levels in freshwater fish over time have coincided with a steady increase in bald eagle numbers.[2]

After the ban on DTT,[3] Virginia experienced a significant increase in numbers of nesting eagle pairs, increased productivity, and expanded distribution. In 1995, because of the "significant increase in nesting pairs, increased productivity and expanded distribution," U. S. Fish and Wildlife Service reclassified the bald eagle from "endangered" to "threatened."[4] Virginia had 151 active nests that produced 220 young in that year.

On July 2, 1999, President Clinton announced, "The bald eagle is now back from the brink of extinction, thriving in virtually every state of the union."[5]

On July 6, 1999, because the species had recovered, the Service published the "Proposed Rule to Remove the Bald Eagle in the Lower 48 States from the List of Endangered and Threatened Wildlife." The ***Proposed Rule to Delist*** is located in the Federal Register, Volume 64, No. 128, beginning at page 36454 continuing through 36464. The first page is cited as "64 FR 36454."

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[1] "Virginia Bald Eagle Population Soars," Center for Conservation Biology, July 17, 2001. Internet URL: http://fsweb.wm.edu/ccb/news/7.01/pressreleases_eaglesurvey_pdf

[2] 64 FR 36460

[3] "Bald Eagle Announcement", National Wilderness Institute, July 2, 1999. Internet URL: http://www.nwi.org/PressReleases/2July99.html

[4] 64 FR 36456 and 60 FR 36000

[5] "The Bald Eagle is Back! President Clinton Announces Proposal to Remove Our National Symbol from Endangered Species List" News Release, July 2, 1999. Web: www.fws.gov/r9extaff/eaglejuly2.html

[Note: All portions of text marked in **bold** were emphasized by the Wrights, unless otherwise noted.] The ***Proposed Rule to Delist*** reports:

> We, the Fish and Wildlife Service (the Service) propose to remove the bald eagle (*Haliaeetus leucocephalus*) from the List of Endangered and Threatened Wildlife in the lower 48 States of the United States. We propose this action because the available data indicate that this **species has recovered**.[6]
> . . .
> [T]he bald eagle's population growth has exceeded most of the goals established in the various plans[7] . . . the current nesting population in the lower 48 States constitutes more than a tenfold increase from the known population level in 1963[8] . . . The **bald eagle population has essentially doubled every 7 to 8 years during the past 30 years**.[9]
> . . .
> Since 1990, occupied breeding areas for the bald eagle have doubled in the Chesapeake Recovery Region . . . This indicates that **adequate habitat is still available** for an increasing population of bald eagles, despite land development pressures.[10]
> . . .
> Nesting and wintering habitats are both critical to the continued survival of the bald eagle. Based on increasing population trends, neither nesting nor wintering habitats appear to be limiting, and there are **no indications that availability of these habitats will limit the bald eagle population in the near future**.[11]

According to Rob Gordon, Executive Director of the National Wilderness Institute, the bald eagle recovered because of the ban on DDT, not because of the Endangered Species Act. He explained:

> Wildlife biologists attribute the eagle's recovery primarily to the ban on DDT that occurred in 1972, before the Endangered Species Act was passed. The eagle is proving to be a tough, adaptable bird that is dramatically increasing in numbers not only in the countryside, but in suburban and even urban areas.[12]

In September 1999, the Alliance for the Chesapeake Bay reported:

> Dramatic evidence of the eagle's turnaround can be found on the lower James River, where biologists counted 106 eagles in two hours on a recent boat trip. No eagles could be found along the James 20 years ago."[13]

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[6] 64 FR 36454
[7] 64 FR 36456
[8] 64 FR 36457
[9] 64 FR 36457
[10] 64 FR 36457
[11] 64 FR 36458
[12] "Bald Eagle Announcement", National Wilderness Institute, July 2, 1999. Internet URL: www.nwi.org/PressReleases/2July99.html
[13] "Virginia wildlife researchers oppose taking bald eagle off endangered species list," *Bay Journal*, Vol. 9, No. 6, September 1999. Internet URL: www.bayjournal.com/99-09/NATION.HTM

By the fall of 2000, bald eagles were nesting in the Washington D. C. area near the heavily traveled Wilson Bridge[14] and within the city limits of Washington, D. C. These eagles have caused some scientists to question earlier held beliefs. On August 10, 2000, the *Washington Post* reported:

> A bald eagle hatched this year in a Southeast Washington tree, marking the first time in a half-century that the national symbol has nested in the nation's capital and challenging the notion that the birds do not settle near people.
>
> . . .
>
> Wildlife officials are thrilled, because eagles have a reputation for being fussy about where they live.
>
> . . .
>
> The D.C. pair, though, is among a growing number of bald eagles challenging scientists' long-held belief that the species demand pristine living places away from people. Scientists are debating whether the urban birds are exceptions or proof that bald eagles are more adaptable than thought.
>
> . . .
>
> There are so many eagles in suburban Florida, including some in backyards, that state biologists are studying how they compare with birds in wilder areas.
>
> . . .
>
> From their perch, 80 feet high in an oak tree, these eagles have a view of the Washington Monument and the National Cathedral.[15]

[14] "Endangered Wilson Bridge," *Washington Times*, October 9, 2000

[15] "Eagle-Eyed Discovery - Surprise Hatching Marks First Sighting of Species in District Since 1940s" by D'Vera Cohn, Washington Post staff writer, *Washington Post*, August 10, 2000, Page B1

In 2001, the Alliance for the Chesapeake Bay reported that the Chesapeake Bay Basin had 618 active nests that produced 908 young. (Figure 1).

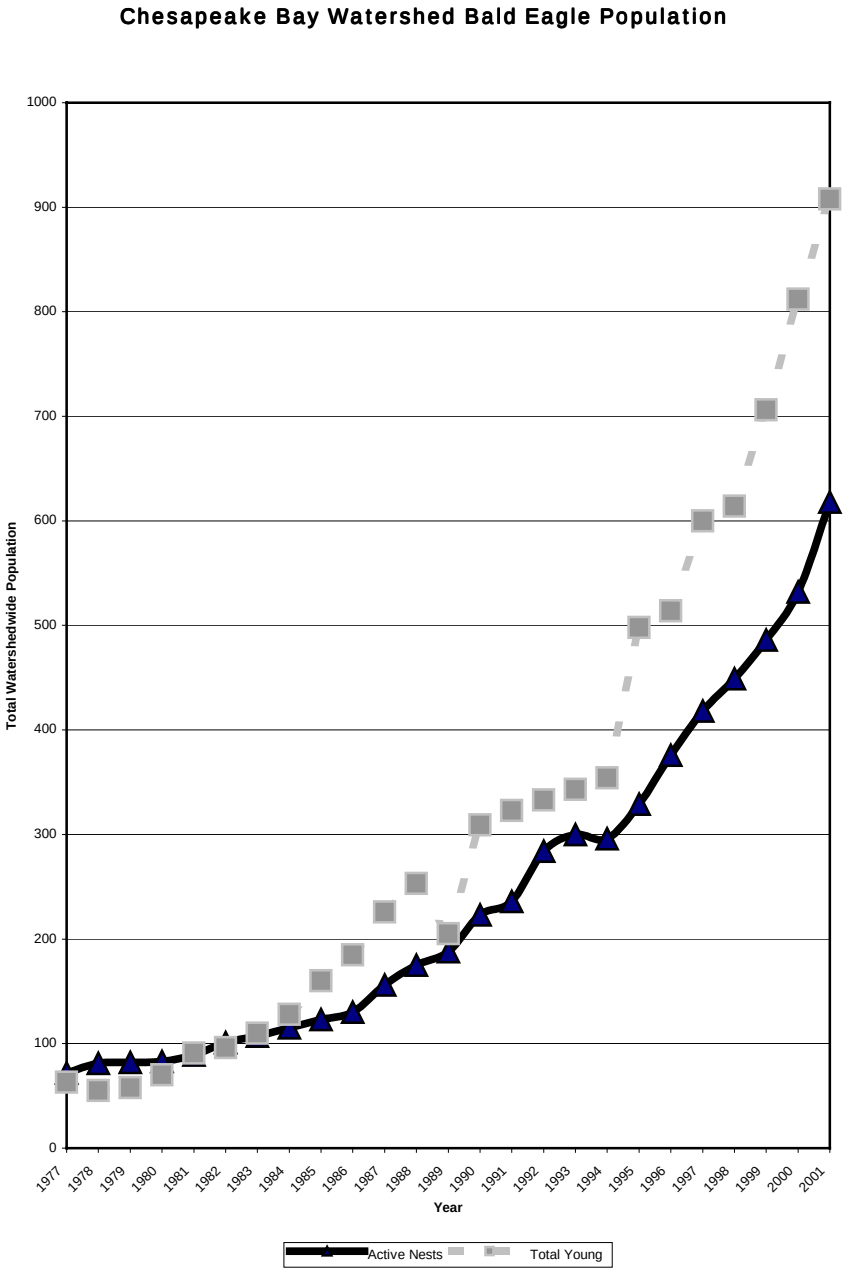

Figure 1. Chesapeake Bay Watershed Bald Eagle Population, 2001

Figure 1 shows the increase in bald eagle nests and young between 1977 and 2001.[16] The dark solid line with triangles represents the increasing number of active nests. The lighter line with squares represents the total number of young eagles.

[16] Source: "Bald Eagles and the Chesapeake Bay," Alliance for the Chesapeake Bay, 2001

In 2002, bald eagles were found nesting in a tree near the site of a 1.2 million square foot Wal-Mart distribution center in St. Lucie, Florida.

> An increasing number of bald eagles in Florida are making their homes in suburban – instead of rural – settings. In fact, some bald eagles seem to prefer nesting close to houses and development. About 10 percent of Florida's more than 1,100 bald eagle territories are in suburban areas, the U. S. Fish and Wildlife Service reports.
> . . .
> Eagles are moving in and taking territories where people are trying to build . . . It's become a more common occurrence over the past 15 years." The pair nesting north of the Wal-Mart site seem especially resilient. "We now realize that people and eagles can co-exist," he said.[17]

B. RECENT HISTORY OF ENVIRONMENT

In 1996, the previous owner clear-cut the land, and removed most trees, shrubs, and vegetation. The land is open field with a few scattered trees. (See Figure 2; see also photographs in Appendix B.)

Figure 2: View of land from Harromore Avenue.

[17] "Wal-Mart Plans to Share Nest; Protect Eagles, Build Distribution Center," *Fort Pierce Tribune*, November 25, 2002

In 1997, the previous owner installed gravel roads at Piankatank Avenue and Fourth Street as shown on the old subdivision plat, and divided the 28 lots into 11 building lots with septic permits. (See Appendix A for a map of the subdivision with 28 lots and 11 homesites.)

1. Recent History of Bald Eagles on Stingray Point

In 1999, a pair of bald eagles built a nest at the intersection of State Route (SR) 33 (General Puller Highway) and SR 654 (Gillim Road). Across the road from the nest is Stingray Harbor Marina, a facility with 240 slips that is open year round. The nest tree blew down in the spring of 2000. The pair did not produce young that year.[18] Figure 3 is an aerial photograph of Stingray Point Marina.

Figure 3. Aerial photograph of Stingray Harbor Marina.

In 2001, the eagles built a nest approximately one-quarter mile southeast of the earlier nest. At that time, a two-story house was under construction approximately 375 feet away from the selected nest tree. While the construction crew did exterior work on the roof and house, they watched as the eagles built this nest. The nest tree is 10-15 feet from Piankatank Avenue, a gravel road that bisects the property. (See Appendix A, Maps) Five other houses are within 350 to 400 feet of the nest.

In 2001, bald eagle nest MI-01-01 in Middlesex County was identified by the Center for Conservation Biology during their annual aerial survey. Nest MI-01-01 was first active in 2001.

[18] Source: Aerial surveys of eagle nests by Center for Conservation Biology; personal communication with Jeffrey Cooper, wildlife biologist, Virginia Department of Game and Inland Fisheries.

The pair produced two young in 2001 and two young in 2002.[19] This pair continues to roost in a tree near their original nest tree across the road from Stingray Harbor Marina, adjacent to SR 33 and Gillim Road. (See Appendix A for Maps, Appendix B for Photos.)

2. Description of Stingray Point Property

The property consists of 4.5 acres that was clear-cut in 1996. Approximately 80 percent of the land is open field. A few scattered pine trees border a narrow gravel road that bisects the property. The eagle nest is in one of these trees. (See Appendix A for Maps, Appendix B for Photos.)

Thirty-four houses on the northeast side of Stingray Lake are within one-quarter mile of the nest tree. Fourteen houses on the southwest side of Stingray Lake are within one-quarter mile of the nest tree. Six houses are within 350 to 400 feet of the nest. The eagles have a clear line of sight to most of these houses and will have a clear line of sight to the house proposed by the applicants. (See Appendix A for maps, Appendix B for photographs)

C. APPLICABLE LAW

The purpose of the Endangered Species Act of 1973 is to restore endangered and threatened animals and plants to the point where they are again viable, self-sustaining components of their ecosystems.[20] An "endangered" species is one that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become endangered in the foreseeable future.[21]

Section 9 of the Endangered Species Act of 1973, as amended (ESA), prohibits the "take" of any fish or wildlife species listed under the ESA as *endangered*. Pursuant to the Federal regulations, take of fish or wildlife species listed as *threatened* is also prohibited, unless otherwise specifically authorized by regulation. Take, as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Incidental take is defined as take that is "incidental to, and not the purpose of, carrying out an otherwise lawful activity."[22]

In the 1982 Amendments to the ESA, Congress established a provision in Section 10 that allows for the "incidental take" of endangered and threatened species by non-Federal entities. "Incidental take" is defined as take that is "incidental to, and not for the purpose of, the carrying out of an otherwise lawful activity."[23]

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[19] Source: Aerial surveys of eagle nests by Center for Conservation Biology; personal communication with Jeffrey Cooper, wildlife biologist, Virginia Department of Game and Inland Fisheries
[20] 64 FR 36455
[21] U.S. Fish & Wildlife Service, Listing a Species as Threatened or Endangered (2001)
[22] ***Handbook***, page 1-1
[23] ***Handbook***, page 1-1

Section 10(a)(2)(A) of the ESA requires an applicant for an Incidental Take Permit to submit a conservation plan that specifies, among other things, the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts.[24]

> Congress intended this process to reduce conflicts between listed species and economic development activities, and to provide a framework that would encourage "creative partnerships" between the public and private sectors and state, municipal, and Federal agencies in the interests of endangered and threatened species and habitat conservation (H.R. Re. No. 97-835, 97th Congress, Second Session).[25]
>
> . . .
>
> Because the process applies to a wide variety of projects and activities, the Services declined to promulgate exhaustive, 'cookbook' regulations . . . detailing every possible element that could be required in conservation plans . . . it is the Service policy to promote 'flexibility and ingenuity' in working with permit applicants and developing HCPs under the section 10 process.[26]

Virginia's Endangered Species Act (§29.1-563 et. seq.) provides that VDGIF is the state regulatory authority over federally or state listed endangered or threatened fish and wildlife in the Commonwealth. The Act authorizes the Board of Game and Inland Fisheries to adopt the federal list of endangered and threatened species. Implementing regulations passed pursuant to this authority (4 VAC 15-20-130 through 140) further define "take" and other terms similarly to the federal Endangered Species Act.[27]

II.
BIOLOGICAL RESOURCES

A. LOCATION

The project site is located on Stingray Point, a peninsula between the Rappahannock and Piankatank Rivers, on the Chesapeake Bay. Stingray Point is 2.5 miles east of Deltaville, in Middlesex County, Virginia.

[24] ***Handbook***, page 1-2
[25] ***Handbook***, page 1-2
[26] ***Handbook***, page 1-3
[27] "Bald Eagle Protection Guidelines for Virginia," Joint Publication of the U. S. Fish and Wildlife Service and Virginia Department of Game and Inland Fisheries, May 15, 2000

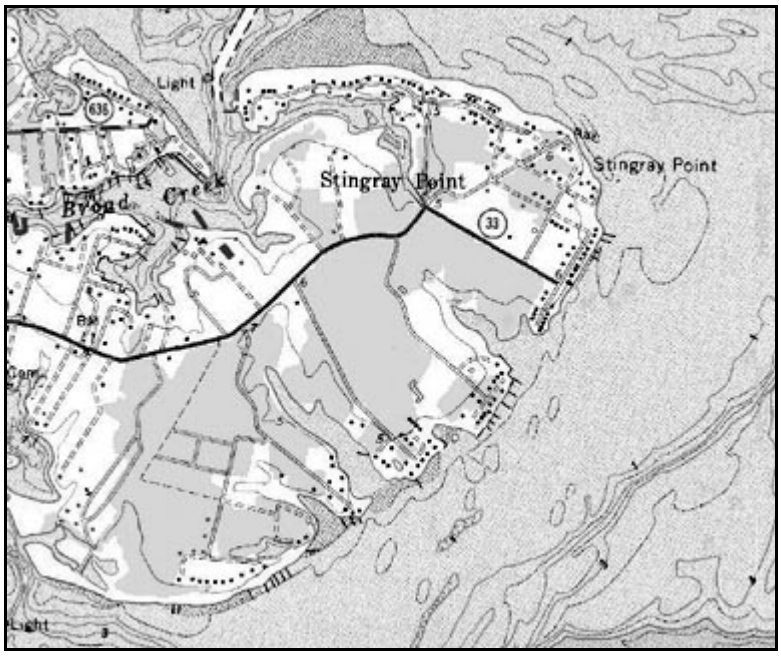

Figure 4. Topographical Map, Stingray Point, Virginia.

Figure 4 is a topographical map of the Stingray Point area. The entrance to the property is 500 feet from the end of State Route 33.

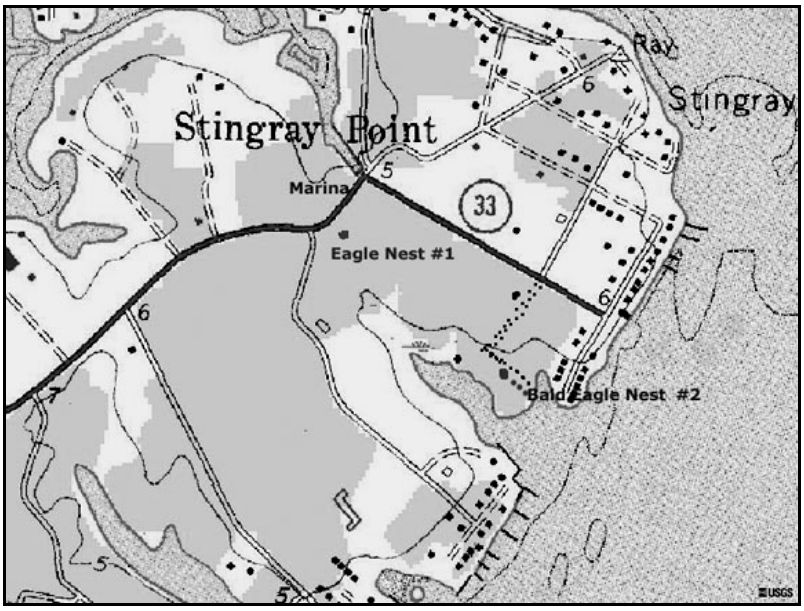

Figure 5. Topographical Map of project area on Stingray Point, Virginia.

Figure 5 is a topographical map that shows the site in relation to State Route 33. Eagle Nest #1 and Eagle Nest #2 are marked. The Marina is located between the words “Stingray” and “Point.”

The northeastern edge of the property fronts on State Route 33. The northern edge is adjacent to Fourth Street. The south edge borders Stingray Lake, a small shallow cove and marsh. (See Appendix A for Maps)

More than forty houses are located within one-quarter mile of the nest tree, to the north, northeast, east and southeast across the "pond" and south across Stingray Lake. There is a clear line of sight from the nest to these houses. Five houses are within 350 to 400 feet of the nest. (See Appendix A for Maps, Appendix B for Photographs.)

In 2001 and 2002, approximately 20 acres of land across Stingray Lake were cleared, involving extensive use of heavy equipment and burning less than 750 feet from the eagles' nest. Despite these disruptions during the 2002 season, the eagles continued to use the nest and produced two young.

B. LAND USE

The property is part of an old subdivision recorded before Middlesex County implemented any zoning regulations. These 28 lots are "grandfathered" and can be sold as separate individual parcels. Two years ago, a two-story house was built on one single lot. This house was under construction when the eagles began construction of the nest that is the subject of this HCP.

C. VEGETATION

The landscape of the project area is open field, with a few scattered pine trees along one side.

D. WETLANDS

Approximately 50 percent of the property is subject to wetlands jurisdiction under Section 404 of the Clean Water Act. The property includes a large shallow detention pond. (See Appendix A for maps of the subdivision with wetlands areas delineated.)

E. GEOLOGY/SOILS

The Soil Survey of Middlesex County shows the upland areas as containing Eunola loam and Lumbee silt loam, and the pond area as Pocaty muck. Lumbee silt loam and Pocaty muck are listed as hydric soils. Onsite soil evaluations show that the Lumbee silt loam is confined to the immediate road front and water front areas. A Woodstown fine sandy loam extends through the center of the property. It is in this area that the sewage disposal systems were approved.

F. CULTURAL RESOURCES

The site includes no properties or archeological sites listed by the Virginia Department of Historic Resources.[28]

[28] See Appendix D for correspondence with the State Historic Preservation Officer.

G. SENSITIVE SPECIES

1. Northeastern Beach Tiger Beetle

The northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*), Federally listed as threatened, is known near the project area. Since the shoreline property is protected by stone rip-rap and does not contain sandy beaches (there is water access, but not in tiger beetle habitat), the proposed action will have no effect on the northeastern beach tiger beetle or any other Federally listed species.

2. Bald Eagle

[**NOTE**: Unless otherwise noted, the information in this section is taken from the "**Proposed Rule To Remove the Bald Eagle in the Lower 48 States From the List of Endangered and Threatened Wildlife"** published by the U. S. Fish & Wildlife Service in the July 6, 1999 issue of the Federal Register beginning at 64 FR 36454. References to the Proposed Rule are identified as ***Proposed Rule to Delist.***]

On July 12, 1995 the bald eagle population in the Chesapeake Bay was reclassified from endangered to threatened due to increasing numbers and range expansion.[29]

On July 6, 1999, the Service proposed to remove the bald eagle from the endangered species list in the lower 48 states.[30]

The Chesapeake Bay Recovery Region encompasses a portion of Virginia east of the Blue Ridge Mountains, Delaware, Maryland, the eastern half of Pennsylvania, the panhandle of West Virginia, and the southern two-thirds of New Jersey.[31]

In the Chesapeake Bay Recovery Region, the delisting goal is to sustain a nesting population of 300 to 400 pairs "with an average productivity of 1.1 young per active nest over 5 years and permanent protection of sufficient nesting habitat to support this nesting population and enough roosting and foraging habitat to support population levels commensurate with increases throughout the Atlantic coastal area."[32]

a. Species Description

[**NOTE**: The information in this section is from the ***Proposed Rule to Delist***.]

The bald eagle, *Haliaeetus leucocephalus*, is well known as our Nation's symbol. Its large and powerful appearance is distinguished by its white head and tail contrasting against its dark brown body.[33]

[29] 64 FR 36456
[30] 64 FR 36454
[31] 64 FR 36455
[32] 64 FR 36457
[33] 64 FR 36454

Haliaeetus leucocephalus (literally, sea eagle with a white head) is the only species of sea eagle native to North America.[34]

The bald eagle is a bird of aquatic ecosystems. It frequents estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats. Fish is the major component of its diet, but waterfowl, seagulls, and carrion are also eaten.[35]

b. Life History/Population Dynamics

[**NOTE:** Unless noted with specific citations, the life history and population information is also taken from the ***Proposed Rule To Delist*** which cites USFWS recovery plans and Gerrard and Bortolotti (1988) as references and the "Bald Eagle Protection Guidelines for Virginia."]

The ***Proposed Rule to Delist*** reports that

> Bald eagles usually nest in trees near water. . . Nest sites are usually in large trees along shorelines in relatively remote areas that are free of disturbance. The trees must be sturdy and open to support a nest that is often 5 feet wide and 3 feet deep.[36]
>
> It is presumed that once they mate, the bond is long-term, though documentation is limited. If one mate dies or disappears, the other will accept a new partner. . .[37]
>
> The fledgling bald eagle is generally dark brown except the underwing linings which are primarily white. Between fledging and adulthood, the bald eagle's appearance changes with feather replacement each summer. . . The bald eagle's distinctive white head and tail are not apparent until the bird fully matures, at 4 to 5 years of age.[38]

A bald eagle nest is relatively inconsequential from a biological perspective since a pair can construct a nest in less than a week. It is not uncommon for nests to be blown from trees by storms, after which the resident pairs typically nest on the same sites, often in the same trees. Eagles are most vulnerable to disturbance early in the nesting period, i.e. during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle).[39]

According to the "***Bald Eagle Protection Guidelines for Virginia***" prepared by U. S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries:

> In Virginia, adult bald eagles typically remain on or near their breeding territories year round. Nest building and repair begins as early as November and peaks in mid-winter, but may occur during any month of the year. Courtship flights and related mating behavior

[34] 64 FR 36454
[35] 64 FR 36454
[36] 64 FR 36454
[37] 64 FR 36454
[38] 64 FR 36454-36455
[39] U. S. Fish & Wildlife, "Habitat Management Guidelines for the Bald Eagle in the Southeast Region," 3rd Revision, January, 1987, page 1.

> are most frequently observed during January and February, and eggs are usually laid between mid-January and late March. Most eggs hatch between early March and early May and eaglets stay in the nest for 11 to 12 weeks after hatching. Most young are capable of sustained flight by mid-July, but remain dependent on the parents and stay in the general vicinity of the nest for several more weeks.[40]

Researchers report that Virginia bald eagles have a 27 percent annual nest relocation rate.[41]

In a 1993 study, researchers reported on bald eagle responses to development activities in the Chesapeake Bay:

> The effects of development activities on nesting bald eagles depend on the distance of the activities from the nest, the view the eagles have of the activities, and the time of year the development occurs. Other factors that may contribute include the previous nesting history of the eagles, the birds' previous experiences with humans, the availability of alternative nest sites, and the amount of development in the area.[42]
> . . .
> This tolerance is further illustrated by a pair of bald eagles in Charles County, Maryland, that established a nesting territory on a golf course. The pair built a nest in a row of trees adjacent to the greens of the eighth and tenth fairways. The nest was 30 feet from the greens. Despite more than 2,000 rounds of gold played each year, the pair has successfully raised young there for the past three years.
> …
> Distance effects and tolerances of nesting pairs to human activities may be quite different for pairs that select nesting territories after development occurred compared to those pairs for which the habitat was altered after nest site selection. **Pairs which select a nest site close to development . . . do so fully aware of the pre-existing condition and thus may exhibit greater tolerance to human activity** than an established pair which is subsequently subjected to development activities. [43]

c. Status and Distribution

[**NOTE**: The ***Proposed Rule to Delist*** describes the range and repopulation of bald eagles throughout North America.]

> The bald eagle ranges throughout much of North America, nesting on both coasts from Florida to Baja California, Mexico in the south, and from Labrador to the western Aleutian Islands, Alaska in the north. [44]

[40] "Bald Eagle Protection Guidelines for Virginia," Joint Publication of the U. S. Fish and Wildlife Service and Virginia Department of Game and Inland Fisheries, May 15, 2000
[41] Annual Report 2000, Center for Conservation Biology, page 2.
[42] Therres, G. D., M. Byrd, D. Bradshaw. 1993. "Effects of Development on Nesting Bald Eagles: Case Studies from the Chesapeake Bay", *Trans. 58th N.A. Wildl. & Natur. Resour. Conf.*, page 66
[43] Therres, et. al., 1993, page 67
[44] 64 FR 36454

> Though once endangered, the bald eagle population in the lower 48 States has increased considerably in recent years. Regional bald eagle populations in the northwest, Great Lakes, Chesapeake Bay, and Florida have **increased 5-fold in the past 20 years**. Bald eagles are now repopulating areas throughout much of the species' historic range that were unoccupied only a few years ago.[45]

The ***Proposed Rule to Delist*** reports that bald eagle population growth has been impressive and has exceeded most of the goals.

> Breeding and productivity surveys have been conducted annually on a State by State basis since the early 1980s.[46]
> . . .
> Since the development and implementation of the recovery plans, the bald eagle's **population growth has exceeded most of the goals established** in the various plans . . . The current nesting population in the lower 48 States constitutes **more than a tenfold increase** from the known population level in 1963. We estimate that the breeding population exceeded 5,748 occupied breeding areas in 1998. The **bald eagle population has essentially doubled every 7 to 8 years during the past 30 years**.[47]

The ***Proposed Rule to Delist*** provides specific information about the ***Chesapeake Recovery Region,*** noting that the population increase is greater than in any other recovery region and that adequate habitat is still available for the increasing numbers of bald eagles.

> *Delisting Goals:* Sustain 300-400 pairs with an average productivity of 1.1 young per active nest over 5 years with permanent protection of sufficient habitat to support this nesting population and enough roosting and foraging habitat to support population levels commensurate with increases throughout the Atlantic coastal area.[48]
>
> *Achievements:* Numeric delisting goals were met in 1996 with more than 300 occupied breeding areas estimated since 1992 and average productivity of 1.1 young per occupied breeding area. In 1998, 538 occupied breeding areas were estimated with an average productivity of 1.21. Habitat protection work continues.[49]

The ***Proposed Rule to Delist*** reports that adequate habitat is still available, despite an increasing eagle population and land development pressures.

> Protecting bald eagle habitat remains a concern in the Chesapeake Recovery Region . . . However, since 1990, **occupied breeding areas for the bald eagle have doubled** in the Chesapeake Recovery Region. This **increase is greater than that found in any other**

[45] 64 FR 36454
[46] 64 FR 36456
[47] 64 FR 36456-7
[48] 64 FR 36457
[49] 64 FR 36457

> **recovery region**. This indicates that **adequate habitat is still available for an increasing population of bald eagles despite land development pressures**.[50]

According to the Center for Conservation Biology, recovery is due to the 1972 ban on pesticides:

> Widespread use of persistent pesticides for crop management in the region resulted in a dramatic population decline over a 30-40 year period. By the late 1960's, the Virginia bald eagle population had been decimated by eggshell thinning and associated low productivity. Concern for populations across North America prompted the elevation of the bald eagle to the federal list of endangered species and led to a national effort to restore historic populations. Since the nationwide ban on most persistent pesticides in 1972, the Virginia population has experienced a dramatic recovery. The number of breeding pairs has increased from an estimated low of approximately 32 pairs in the 1960's to 331 pairs in 2001.[51]

III.
PURPOSE, PROJECT DESCRIPTION & ACTIVITIES COVERED BY PERMIT

The purpose of this HCP is to minimize and/or avoid adverse impacts to the bald eagle and contribute to the species' long-term survival, while allowing otherwise lawful activities to proceed. This HCP proposes a plan for the construction of single-family homes that optimizes the likelihood that bald eagles will return to this nest site, or another nest site in the same territory, and produce and fledge young.

The permit would authorize incidental take of one pair of bald eagles associated with the construction of one single-family home in 2003, followed by two homes in subsequent years. The impact is limited to one pair of eagles and a small area of habitat near the nest tree. Disturbances from home construction may cause the adult birds to leave their present nest and nest elsewhere. If building is limited to non-nesting times of year (July 15 to December 15), the project should not result in direct take of either adult or young eagles.

Mr. and Ms. Wright propose to modify the current subdivision plan of 28 lots and 11 home sites and reduce the number of home sites to 3. This reduction from 11 home sites will substantially reduce the market value of the subject property. Mr. and Ms. Wright propose to construct one house within 150 feet of the nest. Two houses may be constructed within 250 feet from the nest in the future.

[50] 64 FR 36457
[51] "Virginia Bald Eagle Population Soars", News Release, July 17, 2001 http://fsweb.wm.edu/ccb/news/7.01/pressreleases_eaglesurvey_pdf.pdf

Figure 6. Photograph of site with houses in background.

Figure 6 is a photograph of the open field condition of the home site with several houses on Chesapeake Avenue clearly visible. Mr. and Ms. Wright propose to begin construction on the single-family house in this open field on July 16, 2003. Construction on two other single-family homes would begin no sooner than July 16, 2004 (i.e., one year later). Exterior construction on any house will be completed before the beginning of the nesting season on December 15 of any year.

The footprint for each home will be approximately 1500 square feet. Mr. and Ms. Wright's home will be two stories. No sheds or other structures are planned. Access to the houses will be through gravel driveways. (See Appendix A, Maps)

IV.
POTENTIAL BIOLOGICAL IMPACTS

A. TAKE

This project's impacts are limited to a single pair of eagles. If building is limited to the non-breeding times of the year (July 15 to December 15), the project should not result in direct take of either adult or young eagles. Impacts are limited to approximately 1,500 square feet of habitat near the present eagle nest where Mr. and Ms. Wright plan to build the house.

It is speculation to predict whether this pair will remain if another house is built within 300 feet of their nest tree, within a clear line of sight. Proximity, removal of vegetative buffers, density of human development, and tolerance of human activity appear to be factors in the disturbance of eagles.

This pair of eagles has demonstrated a high tolerance for human activity, including home construction, vehicular traffic, sailboat and powerboat activity, lot clearing, heavy equipment, and the activities of families who live in more than 40 houses within one-quarter mile of the nest tree. This pair built one nest less than 100 feet from a heavily traveled road, within clear view of a busy marina. The pair built their present nest at the same time a two-story house was under construction less than 400 feet away.

The Service believes that construction of the proposed house is likely to result in the eagles vacating this nest and constructing another nest in the same territory, which would result in a "take" of the eagle. At present, the eagle remains listed under Federal law as "threatened" although this is subject to change. "Take" may be indirect because of impacts to habitats that support the eagle, or from direct though incidental taking.

Existing evergreen vegetation (hollies, pines, etc.) will provide protective screening from human activities that occur closer to ground level. Impacts associated with construction activities (i.e., heavy equipment, power equipment, etc.) are expected. Indirect effects may result from outside activities on the property, including activities associated with habitation.

B. CUMULATIVE IMPACTS

Cumulative impacts include a small loss of habitat at the home site and human activity associated with the home.

Since Critical Habitat has not been designated for the bald eagle, no Critical Habitat is affected by this project.

V.
HABITAT CONSERVATION PLAN:
MEASURES TO AVOID, MINIMIZE, MITIGATE, AND MONITOR

A. GOALS OF HABITAT CONSERVATION PLAN

The goals of this low-impact HCP are to avoid, minimize, mitigate, and monitor incidental take of this pair of bald eagles that may result from construction of a single-family home and to restore the land to more appropriate state.

Because applicants need to place a modest home, septic system, well, and driveway on the property, they propose measures to minimize and mitigate impacts to the bald eagles to the maximum extent practicable. These measures include conducting construction and occupancy activities in an environmentally sensitive manner, and restoring habitat to promote conservation of the species.

[**NOTE**: Unless otherwise noted, the following information is taken directly from the ***Habitat Conservation Planning Handbook*** (1996) published jointly by the U.S. Fish and Wildlife Service and National Marine Fisheries Service and the ***2000 Addendum to the Handbook***. Each page in the ***Handbook*** is identified by the chapter number, followed by the page number. For example, page 1-8, refers to chapter one, page 8. This convention is followed in the references cited below. The ***Handbook*** and ***Addendum*** are referred to as the ***Handbook***.]

The Service determined that Mr. and Ms. Wright's HCP is suitable for a low-effect HCP which is described in the ***Handbook*** as follows:

> **Low-Effect HCPs** – Those involving:
> (1) minor or negligible effects on Federally listed, proposed, or candidate species and their habitats covered under the HCP; and
> (2) minor or negligible effects on other environmental values or resources. Low-effect incidental take permits are those permits that, despite their authorization of some small level of incidental take, individually and cumulatively have a minor or negligible effect on the species covered in the HCP. [52]

B. MEASURES TO AVOID, REDUCE, RECTIFY & MINIMIZE

Mr. and Ms. Wright will avoid impacts by implement time-of-year limits on exterior construction activities, Construction will be limited to that which is necessary to construct the residence and will not be initiated during the eagle's breeding /nesting season (between December 15 and July 15 of any year).

Mr. and Ms. Wright will minimize and reduce impacts by eliminating 8 home sites, a reduction of 75 percent, which will result in a corresponding reduction in human activity.

Mr. and Ms. Wright will minimize and reduce impacts of vehicular and human traffic by eliminating Piankatank Avenue, the road that passes less than 15 feet from the nest tree. (See Maps in Appendix)

Mr. and Mrs. Wright will avoid and minimize impacts by constructing one home as far south of the nest as possible, while also complying with mandatory setback requirements. Two other homes will be located north and northeast of the nest tree. (See Maps in Appendix)

Mr. and Ms. Wright will reduce and minimize impacts by retaining existing vegetative buffers and shoreline vegetation, including large diameter perching and roosting trees.

Mr. and Ms. Wright will rectify and reduce impacts by restoring vegetative buffers and planting native evergreen shrubbery, i.e. hollies and wax myrtle.

[52] ***Handbook***, page 1-8

Mr. and Ms. Wright will reduce and minimize impacts by ensuring that any lighting is low-level, low-intensity lighting. Applicants will not install mercury vapor lights or other similar bright lights and, by restrictive covenant, will prohibit such lights on the other two home sites.

C. MEASURES TO MITIGATE

[**NOTE**: The following information about mitigation, examples, mitigation for small-scale, low-effect projects, and consistency in mitigation standards is taken directly from the 1996 ***Habitat Conservation Planning Handbook*** and ***2000 Addendum,*** both again referred to as simply the ***Handbook***.]

Chapter 3 of the ***Handbook*** provides information about mitigation programs and standards:

> **3. <u>Mitigation Programs & Standards</u>**.
>
> Mitigation programs under HCPs and section 10 permits are as varied as the projects they address . . . Mitigation programs should be based on sound biological rationale; they should also be practicable and commensurate with the impacts they address.
> . . .
> Mitigation actions under HCPs usually take one of the following forms:
> (1) avoiding the impact (the extent practicable);
> (2) minimizing the impact;
> (3) rectifying the impact;
> (4) reducing or eliminating the impact over time; or
> (5) compensating for the impact.
>
> For example, project effects can be (1) avoided by relocating project facilities within the project area; (2) minimized through timing restrictions and buffer zones; (3) rectified by restoration and revegetation of disturbed project activities; (4) reduced or eliminated over time by proper management, monitoring, and adaptive management; and (5) compensated by habitat restoration or protection at on onsite or offsite location.[53]

Chapter 3 of the ***Handbook*** also discusses mitigation for **small-scale, low-effect projects** such as this subject property:

> **e. Mitigation for Small-Scale, Low-Effect Projects**
>
> It is important that methods be established by state and Federal wildlife agencies and other organizations that . . . make convenient mitigation strategies accessible to low-effect HCPs. For example, it is often difficult for an individual to locate and acquire a few acres of mitigation habitat, since lands are usually sold by the lot or in large segments. A good way to accommodate this problem is to establish mitigation fund accounts that accumulate funds until relatively large-scale acquisitions can be effected [see above, Section B.3(c)] Habitat banks are another good way to handle this situation.

[53] ***Handbook***, page 3-19

> Avoid requiring permittees to meet habitat mitigation requirements without a practical accessible means of meeting that requirement. In general, flexibility is needed in addressing the unique circumstances often associated with small landowners and small-scale, low-effect HCPs.[54]

The ***Handbook*** explains the importance of consistency in mitigation standards. The Service underlined one sentence of the ***Handbook*** for emphasis:

> **f. Consistency in Mitigation Standards**
>
> Mitigation measures required by individual FWS or NMFS offices should be as possible for the same species.
>
> . . .
>
> The Service should not apply inconsistent mitigation policies for the same species, unless differences are based on biological or other good reasons and are clearly explained. Consistent mitigation strategies help streamline the HCP development process – especially for smaller HCPs – by providing readily available standards which applicants can adopt in their HCPs.[55]

[54] ***Handbook***, page 3-23
[55] ***Handbook***, page 3-23

Mr. and Ms. Wright used information from other low-effect HCPs and HCPs for bald eagles in the Chesapeake Bay Region to design their HCP (see Figure 2).

Date / Permit	Name / State - FR /	Description / Purpose	Mitigation	Duration
10/22/96 PRT-816732	Nick Gross/ Snow Construction Osceola, FL 61 FR 36391	Residential development: 30 houses on 12 acres.	Phased construction within 250-foot buffer zone; limitations on activities within buffer zone during nesting season. Off-site mitigation: **Payment of $25,000 ($833. per house)** to Florida Bald Eagle Conservation Fund held by National Fish & Wildlife Foundation.	Unknown
5/21/01 TE039993-0	Pinsto, inc. / Lake Wylie Gaston County, NC 66 FR 18493	Residential development: 12 lots on 13.7 acres; low-effect HCP; categorical exclusion from NEPA	Time of year restrictions on construction activities during nesting season. Developer to set aside 2 sites (2.6 acres and 0.5 acres). Off-site mitigation: **Payment of $1,200. ($100. per lot)** to Carolina Raptor Center for eagle rehabilitation and education.	4 years
05/30/01 TE034491-0	Crescent Resources, LLC Southpointe Subdivision, NC 66 FR 15739	Multipurpose: 11,700 acre residential development and timber harvest over 20 years on Lake James in Burke and McDowell counties	Time of year restrictions during nesting season, limitations on vegetation removal. Mitigation: Developer to provide 6 nest sites, each with 300-foot buffer zone (approximately 6.5 acres) for a total of 38.5 acres. Each nest site will include at least one large pine tree.	50 years
09/21/01 TE041642-0	Gunston Manor Fairfax, VA 66 FR 32959	Single family residence: 0.49 acres (21,000 sq. foot lot); low-effect HCP; ; categorical exclusion from NEPA	Time of year restrictions on construction; measures to minimize impacts to habitat. Off-site mitigation: None by owner. Unidentified 3rd party to **pay for 2 artificial nests** to be placed within 750' of nest.	30 years

Figure 7. Bald Eagle Habitat Conservation Plans

In HCPs for bald eagles, mitigation funding has ranged from $833.33 per lot (Gross/Snow Construction, 1996), to $100.00 per lot (Pinsto, Inc., 2001), to $0 (Gunston Manor, 2001). (See Figure 7)

Appropriate eagle nesting habitat exists at the headwaters of Stingray Lake. Mr. and Mr. and Ms. Wright have two undeveloped lots at the headwaters of Stingray Lake (Lots 414 and 415) near the old nest and adjacent to the flyway between the old nest and the present nest. These lots are undeveloped with no roads or vehicular access, and include mature trees and vegetative buffers. The nearest house is approximately 750 feet away from the lots.

Mrs. Wright will provide these two lots as a conservation easement.

OR

In the alternative, Mr. and Ms. Wright will provide mitigation funding in the amount of $500.00 for each of the 3 home sites, a total of $1,500.00. The recipient of such funds will be a source recommended by Jeffrey Cooper, Wildlife Biologist and Raptor Specialist, Virginia Department of Game and Inland Fisheries (VDGIF), or his designee, for the purpose of acquisition and management of bald eagle habitat.

D. MONITORING AND REPORTING

Monitoring and reporting of endangered and threatened species is the responsibility of the applicant, to the extent that the Service deems it necessary for determining whether the applicant is complying with these terms and conditions.

Accurate information on this eagle pair is available from two reliable, independent sources. The Virginia Department of Game and Inland Fisheries (VDGIF) and the College of William and Mary's Center for Conservation Biology provide annual aerial bald eagle surveys for all major river drainages within Virginia's coastal plain. State biologists collect and provide productivity data to the Service, including eagle nests in the Stingray Point vicinity.

If aerial surveys are discontinued, applicants will contact the Virginia Department of Game and Inland Fisheries Virginia (VDGIF) on or about the 15th of each month, from mid-January to mid-May, and will provide information about incubation and young eagles until it is determined by the VDGIF that it is no longer necessary to provide such information.

This HCP does not require or provide for any right of entry or access by the government or volunteer organizations over private land. The Service has determined that a more formalized monitoring and reporting structure is not necessary at this site as long as aerial surveys continue. If aerial surveys are discontinued, the Service or their designated representative will be allowed to inspect the nest on the Wright's property up to twice annually (typically March and May).

VI.
UNFORSEEN CIRCUMSTANCES/HCP AMENDMENTS

Mr. and Ms. Wright and the Service acknowledge that circumstances may arise that were not anticipated when this Habitat Conservation Plan was developed and that may affect the eagles. This HCP incorporates provisions of the "No Surprises" Assurances[56] as promulgated by the U. S. Fish and Wildlife Service. No additional mitigation for the effects of the proposed project upon bald eagles shall be required by the applicant, provided that the terms of this HCP have been properly implemented.

For this HCP, foreseeable changed circumstances are damage to the conservation area caused by fire, other natural disaster, or trespassers, or the listing of a new species inhabiting the site. In the

[56] 65 FR 35243

case of fire, other natural disaster, or trespassers, the permittee will address these events, in consultation with the USFWS, to minimize and mitigate impacts on the conservation area to the degree practicable.

If a new species not covered by the HCP is listed under the Act during the term of this Section 10 permit, the Section 10 permit will be reevaluated by the USFWS. The covered activities may be modified, as necessary to ensure that the activities covered under the HCP are not likely to jeopardize or result in the take or adverse modification of any designated critical habitat of the newly listed species.

The permittee shall implement the modifications to the HCP as necessary to comply with law or shall seek an amendment to the ITP. If an unforeseen circumstance occurs that may endanger the eagles, the Wrights or future landowners will call the Service's Virginia Field Office at 804-693-6694 or VDGIF at 540–899–4169. The Handbook explains that such unforeseen circumstances do occur and need to be anticipated in this document.

> . . . if unforeseen circumstances occur during the life of an HCP, the FWS and NMFS will not require additional lands, additional funds, or additional restrictions on lands or other natural resources released for development or use, from any permittee, who in good faith, is adequately implementing or has implemented an approved HCP. Once a permit has been issued and its terms are being complied with, the permittee may remain secure regarding the agreed upon cost of mitigation, because no additional mitigation land, funding, or land use restrictions will be requested by the Services. The policy also protects the permittee from any other forms of additional mitigation, except where extraordinary circumstances exist.[57]

In the event that this eagle pair continues to use the current nest tree or any other nest tree in the adjacent woods, the restrictions of the ITP will remain in effect.

Should the pair abandon the nest tree for a period of three consecutive years, the Service and VDGIF will consider the eagle nest site to be abandoned and no longer subject to ESA restrictions. The Service may then re-evaluate the minimization and mitigation measures to determine whether to amend the ITP and the HCP, in accordance with USFWS regulations. In the event that the Service and VDGIF jointly determine, in writing, that the eagle nest has been abandoned, the conservation restrictions may be removed.

VII.
FUNDING

One conservation planning requirement is that sufficient funding be available to implement the HCP. Peter Wright and Pamela Wright are committed to provide the necessary funding to support the mitigation as outlined in this Habitat Conservation Plan.

At the election of the Service, applicants will either be responsible for securing a conservation easement for the aforementioned two lots.

[57] Handbook, page 3-29

OR

In the alternative, Mr. and Ms. Wright will provide mitigation funding in the amount of $500.00 for each of the 3 home sites, a total of $1,500.00. The recipient of such funds will be a source recommended by Jeffrey Cooper, Wildlife Biologist and Raptor Specialist, Virginia Department of Game and Inland Fisheries (VDGIF), or his designee, for the purpose of acquisition and management of bald eagle habitat.

The Service does not anticipate that there will be a need for longer-term mitigation funding for this small-scale, low-effect HCP.

VIII.
ALTERNATIVES

ALTERNATIVE 1: The No Action Alternative

Under the No-Action Alternative, the property would remain in its existing field condition of 28 lots for 11 home sites. This alternative would avoid all take of bald eagles and no ITP permit would be necessary. However, the purpose of acquiring the land by the applicant is to build a home as described herein. Therefore, this alternative would not satisfy the needs and purpose of the project and may result in a taking of the Wright's property, mandating substantial renumeration to them.

Failing to proceed with an HCP and an ITP means there is no assurance for permanent protection of as much vegetative buffer as possible as long as the pair continue to occupy the territory, no facilitation of the possible relocation of the pair to another eagle nest site in a more protected location, and no protection for the applicants and or future homeowners from a possible Section 9 violation.

ALTERNATIVE 2: Proposed Action - HCP Implementation and Issuance of the ITP

Under Alternative 2, the Service would issue a Section 10(a)(1)(B) ITP for the take of bald eagles resulting from the construction and occupancy of the houses. The proposed HCP includes time of year restrictions on construction activities, measures to minimize impacts to on-site bald eagle habitat, protection of vegetative buffers, and restoration of habitat by planting native evergreens on site, and monitoring the status of the eagles.

In addition to minimization measures, at the election of the Service, the applicants will either:

> Be responsible for securing a conservation easement for lots 414 and 415 of the subject property.
>
> **OR**

Provide mitigation funding in the amount of $500.00 for each of the 3 home sites, a total of $1,500.00. The recipient of such funds will be a source recommended by Jeffrey Cooper, Wildlife Biologist and Raptor Specialist, Virginia Department of Game and Inland Fisheries (VDGIF), or his designee, for the purpose of acquisition and management of bald eagle habitat.

The Service does not anticipate that there will be a need for longer-term mitigation funding for this small-scale, low-effect HCP.

Under Alternative 2, the Service will not refer the incidental take of any bald eagle (*Haliaeetus leucocephalus*) for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C., Section 703-712) or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C., Section 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

IX.
CONCLUSION

This project involves construction of a single-family house on a parcel of land located on Stingray Point, near Deltaville, Middlesex County, Virginia. Applicants request an incidental take permit in order to construct a single-family residence, septic system, well, and driveway. In subsequent years, the Wrights may sell two lots in the same parcel. There is a bald eagle nest on this land.

The eagles that built the nests on Stingray Point are tolerant of human habitation activities. They built one nest adjacent to State Route 33 and a busy marina. After this nest blew down, they built another nest adjacent to a two-story house that was under construction approximately 375 feet away. Five houses are within 350 to 400 feet of this nest. More than 40 houses are within one-quarter mile of the nest.

Mr. and Ms. Wright will take measures to avoid, reduce, rectify, and minimize the effects of home construction on the eagles. Mr. and Ms. Wright do not request to clear land, move earth or cut trees.

To advise the public about this project and facilitate access to this Habitat Conservation Plan and attachments, the HCP and supporting documents are available on the Wrightslaw web site at www.wrightslaw.com/hcp/hcp.htm

By submitting this application and receiving an incidental take permit pursuant to Section 10(a)(1)(B) of the Endangered Species Act, the landowner/permittee agrees that he/she owns the lands indicated in this application, or has sufficient authority or rights over these lands to implement the measures of the Habitat Conservation Plan. Further, upon receipt of the incidental take permit, the permittee signing Form 3-200 will conduct the activities as specified in the Habitat Conservation Plan and implementation agreement according to the terms and conditions, of the permit and supporting documents.

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APPENDICES

Appendix A: Maps

Appendix B: Photographs

Appendix C: Bald Eagle Protection Guidelines for Virginia

Appendix D: State Historic Preservation Officer (SHPO) correspondence