

## *Draft Compatibility Determination*

### **Savannah Coastal Refuges Complex Compatibility Determination for Pinckney Island, Savannah, Wassaw, Harris Neck, and Blackbeard Island National Wildlife Refuges**

#### **Use: Global Positioning Systems (GPS) location based recreation (*Geocaching*)**

The following use will be evaluated to determine its compatibility with the Refuge System's mission, and the purpose of the Savannah Coastal Refuges Complex. This Compatibility determination does not include consideration of the use at Tybee or Wolf Island National Wildlife Refuge since they are currently closed to the public.

#### **Refuge Names/(Date Established):**

Blackbeard Island NWR (5 February, 1924)

Savannah NWR (6 April, 1927)

Harris Neck NWR (25 May, 1962)

Wassaw NWR (20 October, 1969)

Pinckney Island NWR (4 December, 1975)

#### **Establishing and Acquisition Authorities:**

- Blackbeard Island NWR : Executive Order 4512
- Savannah NWR: Executive Order 5748 (1927), 5748 (1931), 7391 (1936); purchase with Federal Duck Stamp funds; spoilage rights with Chatham County, GA; 1964 Deed; purchase with Land and Water Conservation Funds
- Harris Neck NWR : 16 U.S.C. 667b; 16 U.S.C. 715d; 16 U.S.C. 3901(b); 100 Stat. 3583 (Federal Land Transfer)
- Wassaw NWR: 1969 Deed of Donation; 16 U.S.C. 715d
- Pinckney Island NWR: 1975 Deed of Donation; 16 U.S.C. 715d

**Refuge Purposes:** Although the Complex has an overriding purpose of providing for the habitat needs of migratory birds, each Refuge within the Complex has a unique purpose and establishing legislation. Those individual purposes are listed below.

- **Blackbeard Island National Wildlife Refuge**  
“...for use as a bird refuge and as an experiment station for acclimatization of certain foreign game birds” (Executive Order 4512, September 20, 1926); and, “for use as an inviolate sanctuary, or for any other management purpose for migratory birds.” (16 U.S.C. 715d, Migratory Bird Conservation Act)
  1. Provide wintering habitat and protection for migratory birds
  2. Provide protection and habitat to promote resident and migratory wildlife diversity

3. Provide protection and management for threatened and endangered plant and animal species (e.g. Loggerhead Sea Turtle, American Alligator, Wood Stork, Piping Plover)
4. Provide environmental education, interpretation, and recreational opportunities to the visiting public

- **Savannah National Wildlife Refuge**

“...as a refuge and breeding ground for birds and wild animals subject to future use in navigation if necessary and to valid existing rights if any” (Executive Order 5748, April 6, 1927); for lands acquired under the Migratory Bird Conservation Act “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” (16 U.S.C. 715d); for lands acquired under the Refuge Recreation Act for, “(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species” (16 U.S.C. 460K); for “the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions” (16 U.S.C. 3901(b), 100 Stat. 3583, Emergency Wetlands Resources Act of 1968); “for the development, advancement, management, conservation, and protection of fish and wildlife resources” (16 U.S.C. 742f(a)(4); and, “for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude” (16 U.S.C. 742f9b)(1), Fish and Wildlife Act of 1956.

1. To utilize Refuge property as “a refuge and breeding ground for native birds and wild animals.”
2. To provide habitat and protection for those species of plants and animals whose survival is threatened or endangered
3. To provide habitat and sanctuary for migratory birds consistent with the objectives of the Atlantic Flyway
4. To maintain and enhance as needed the habitats of all other species of indigenous wildlife and fishery resources
5. To provide opportunities for environmental education, interpretation, and quality wildlife-dependent recreation for the visiting public

- **Harris Neck National Wildlife Refuge**

“...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” (16 U.S.C. 715d, Migratory Bird Act) for the “particular value in carrying out the National Migratory Bird Management Program.” (16 U.S.C. 667b, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes); and, for “the conservation of the wetlands of the Nation in order to maintain the public benefits they

provide and to help fulfill international obligations contained in various treaties and conventions” (16 U.S.C. 3901(b), Emergency Wetlands Resources Act of 1986)

1. Provide habitat and protection for migratory birds
2. Provide protection and habitat to promote resident and migratory wildlife diversity
3. Provide protection and management for threatened and endangered species (e.g., American Alligator and Wood Stork)
4. Provide protection and management necessary to sustain and promote colonial nesting bird populations that use the Refuge
5. To provide opportunities for environmental education, interpretation, and quality wildlife-dependent recreation for the visiting public

- **Wassaw National Wildlife Refuge**

“...for the purpose of creating and fish and wildlife refuge to be maintained as nearly practicable in its natural state.” (Deed of Donation, October 20, 1969); and, “for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Conservation Act)

1. Maintain and protect the coastal maritime forest, marsh, and beach communities
2. Provide habitat for migratory birds, wading, and shorebirds, and native fauna
3. Provide habitat for threatened and endangered species (e.g., Loggerhead Sea Turtles, Wood Storks, Peregrine Falcons, and Piping Plovers)
4. To provide opportunities for environmental education, interpretation, and quality wildlife-dependent recreation for the visiting public

- **Pinckney Island National Wildlife Refuge**

“...as a wildlife refuge and as a nature and forest preserve for aesthetic and conservation purposes, without disturbing the habitat of the plant and animal populations except as such disturbance may be necessary to preserve the use of the real property for the purposes above mentioned.” (Deed of Donation, December 4, 1975); and, “for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (16 U.S.C. 715d, Migratory Bird Conservation Act)

1. To protect and provide habitat for threatened and endangered species
2. To provide and maintain habitat for migratory and resident birds that utilize and or nest annually on the Refuge
3. To provide, enhance, and maintain habitat for native wildlife
4. To provide opportunities for environmental education, interpretation, and quality wildlife-dependent recreation for the visiting public

**National Wildlife Refuge System Mission:**

The mission of the System, as defined by the National Wildlife Refuge System Improvement Act of 1977, is:

*“... to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”*

**Other Applicable Laws, Regulations, and Policies:**

- Antiquities Act of 1906 (34 Stat. 225)
- Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)
- Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)
- Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)
- Criminal Code Provisions of 1940 (18 U.S.C. 41)
- Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; 54 Stat. 250)
- Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)
- Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat. 1119)
- Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)
- Wilderness Act (16 U.S.C. 1131; 78 Stat. 890)
- Land and Water Conservation Fund Act of 1965
- National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)
- National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)
- National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)
- Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)
- Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)
- Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)
- National Wildlife Refuge Regulations (50 CFR Subchapter C; 43 CFR 3101.3-3)
- Emergency Wetlands Resources Act of 1986 (S.B. 740)
- North American Wetlands Conservation Act of 1990
- Food Security Act (Farm Bill) of 1990 as amended (HR 2100)
- The Property Clause of the U.S. Constitution Article IV 3, Clause 2
- The Commerce Clause of the U.S. Constitution Article 1, Section 8
- The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, U.S.C. 668dd)
- Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System, March 25, 1996

- Title 50, Code of Federal Regulations, Parts 25-33
- Archaeological Resources Protection Act of 1979
- Native American Graves Protection and Repatriation Act of 1990

**Description of Proposed Use:**

*Global Positioning Systems (GPS) location based recreation (Geocaching):*

With the availability of consumer-grade GPS units within reach for the general public, “geocaching” is a new and popular game played by using this technology to navigate from location to location. This use would consist of GPS location based recreational geocaching activities that would be created to highlight features of each Refuge of the Savannah Coastal Refuge Complex. Although this use is not a priority public use, it can be used to directly facilitate priority public uses of the Refuge System according to the National Wildlife Refuge Improvement Act of 1997.

The term “geocaching”, coined by the company Groundspeak in the year 2000, is often used interchangeably for the name of any game played with the use of a GPS unit to locate a predetermined site. GPS use to find waypoints are a key function of this form of recreation. Before GPS existed, those who participated in geocaching would use a map and clue to find a site. The activity has gained popularity among hikers and outdoor recreation enthusiasts.

The activity of geocaching can involve using a GPS unit to simply find waypoints marking unique or notable places or locating waypoints with a physical container at certain established coordinates. One type of geocaching used by the website Geocaching.com began in September, 2000 with a world-wide database of waypoints for participants to engage in this recreational game. Geocaching.com players can find the locations of these geocaches online, and, instead of only signing a logbook at the site, they can also log and track their visits on the internet.

Historically, geocaching conducted by the general public, and without permission of Refuge Management, was not appropriate or compatible on National Wildlife Refuges because the use consisted of placement of containers on Refuge lands that did not comply with Federal regulations or Service policies; this included, but was not limited to, leaving behind objects or containers and trade items within the containers (littering) or entering closed areas (trespassing).

The use proposed on Savannah Coastal Refuge Complex would consist of GPS location based recreation that could include container type geocaches that would be created to feature each Refuge of the Complex and listed online at Geocaching.com or GPS based recreational games promoted during public use events or environmental education/interpretive programs. Sites chosen for geocaches would only be within existing public use areas or at existing public use structures such as kiosks, signs, trail markers, or administrative buildings (e.g. visitor centers). Each site would include either a container with only a logbook and a stamp to record a person’s visit, similar to a trail or summit register on a hiking trail, or simply a clue to the

participant. Participants would be restricted from taking or leaving anything from/at the geocache locations.

This proposed use would be for a geocaching program developed and managed by staff and volunteers in areas that are already open to the public for hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation, and would only be located in direct relationship to existing signs, sign posts, kiosks, etc. The sites would be developed within the existing Federal and Refuge specific regulations and policies, and the use has been deemed appropriate under these conditions.

Users will navigate to geocache sites using handheld GPS units, or GPS-enabled smartphones, and engage in existing public use interpretive sites such as trail kiosk, wayside exhibits, interpretive panels and visitor centers. Complex Visitor Service program staff will coordinate volunteers to assist with the use, and only staff or authorized volunteers will be allowed to place new geocaches. Each geocache location will be reviewed and approved by the Project Leader or designee prior to its establishment. Maintenance of the online geocaching game site associated with the Refuge geocache sites would allow Refuge staff to inform potential users about Refuge regulations and immediately remove sites from the list of available geocaches if Law enforcement determines a problem exists if the use persists.

Geocaching can occur on an individual or group basis. To accommodate other users and promote a quality visit to the Refuge, we encourage small group sizes. This will also reduce wildlife disturbance and promote public safety. As the proposed use is monitored, it may be expanded in a similar fashion in an effort to continue to build on self-led education and interpretation opportunities within the public areas of the Refuges.

#### **Availability of Resources:**

Geocaching activities will be conducted in pre-established public use areas such as visitor centers, trails, kiosks and other refuge facilities/administrative sites and therefore do not constitute additional cost for these public activities. A minimal expense may be necessary for some supplies such as containers and outreach materials, and funds for these items may be donated, made available via our friends group (Friends of the Savannah Refuges Complex), or incorporated into the existing budget of the Visitor Services environmental education and interpretive program. All caches and programs will be maintained by volunteers and overseen by Complex Visitor Services staff. Staff will continue to monitor public uses and report, manage, or alter uses as necessary. Additional Law Enforcement is not necessary, as the proposed use would not promote public use activities outside of what already exists at the Refuges.

#### **Anticipated Impacts of the Use:**

Impacts from these activities could include trampling of vegetation, wildlife disturbance, collecting, trespass, littering, and vandalism. To keep negative impacts to wildlife and habitat to

a minimum, GPS location based recreational activities will not be conducted in sensitive or closed areas, and will be restricted to established public use areas with hardened surfaces and existing trails. Monitoring of sites will be the responsibility of assigned volunteers, overseen by Refuge staff. Positive impacts of the use are expected to include increased visitation by visitors participating in GPS location based activities, more exposure to the National Wildlife Refuge program, a better understanding of the objectives and purpose of the Refuges within the Complex, and increased awareness of the mission of the U.S. Fish and Wildlife Service.

Because the proposed use will not allow visitors to take or leave items from the containers, there are no anticipated impact related to 50CFR 27.93, Abandonment of Property or 50 CFR 26.21 General Trespassing. The proposed use will also be limited to existing public use daylight hours, and all visitors will still have to follow the general regulations of the Refuges as they pertain to each trail or public use area (hunt closures, parking restrictions, prescribed fire closures, e.g.).

**Public Review and Comment:**

This draft compatibility determination will be posted at the Refuge Complex headquarters and visitor center, and at Harris Neck NWR headquarters for public review and comment starting on **Monday August 29, 2016** for a period of 12 days ending at close of business on **September 13, 2016**. Additionally, copies of the Draft CD will be made available to the public at the Complex visitor center upon request. A copy of the Draft CD will also be posted on the Refuge website for public comments.

**Determination (check one below):**

- Use is Not Compatible  
 Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Under the following stipulations, we find this use to be compatible:

- Only Refuge staff and designated Refuge volunteers may place a geocache location.
- No geocache shall be created or posted on a public Web site without permission of appropriate Refuge staff.
- Caches and Waymarks may only be placed in existing public use areas such as trails, administrative sites and Refuge facilities open to the public. If there is to be a physical cache, it must only be placed on existing refuge structures including (but not limited to) kiosks, sign posts, and benches.
- Physical caches must never be buried or hung in trees.

- GPS Recreational Activities are restricted to daylight hours, specifically between sunrise and sunset, and/or during business hours if indoors.
- Certain areas of the Refuges may be restricted seasonally to avoid disturbance of breeding or nesting wildlife or to protect sensitive habitat.
- All individuals partaking in geocaching or GPS location based recreational activities must adhere to closures and understand certain areas may not be open year round.
- No physical items shall be placed or left on the Refuge.
- The known presences of a threatened or endangered species will preclude any new use of an area until the Refuge manager determines otherwise.
- Locations for geocaching will be chosen to minimize impacts to wildlife and habitat. We will periodically evaluate sites and programs to access whether objectives are being met and to prevent site degradation.
- If adverse impacts become evident, geocaches may need to be rotated, moved, reduced, or suspended.
- Potential conflicts with other public uses such as hunting will be minimized by using trailhead signs and other media to inform the visitors about currently public use activities as well as whether activities are authorized in specific locations throughout the Refuge.

### **Justifications:**

GPS Recreational Activities provide a fun and educational way for visitors and locals to experience Refuge lands. This innovative outreach program is a great opportunity to expand our educational audience, and invite more visitors to visit their National Wildlife Refuges.

Geocaching, in particular, can reach a new audience that would otherwise overlook our Refuges. Geocaching activities can help motivate citizens of all ages to support and practice wildlife and wild lands stewardship and can have positive outcomes, such as instilling a land preservation ethic in visitors, developing support for the refuge, and lessening vandalism, poaching, and littering. In general, we expect impacts to refuge resources to be negligible or minor because the projected level of use is low and because the use will occur in area of the Refuge already open to the public. For these reasons we believe that GPS location based recreation or geocaching activities would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes for which each Refuge in the Complex was established.

### **References:**

US Fish and Wildlife Service. 2011. Savannah Coastal Refuges Complex Comprehensive Conservation Plan.

US Fish and Wildlife Service. 2008. Wolf Island National Wildlife Refuge Comprehensive Conservation Plan.

“Got the Travel Bug”, August 19, 2009, <https://www.fws.gov/refuges/news/geocaching.html>

“Geocaching: Guidance for High-Tech Adventures”, Refuge Update May/June 2012, [https://www.fws.gov/refuges/refugeupdate/MayJune\\_2012/geocaching.html](https://www.fws.gov/refuges/refugeupdate/MayJune_2012/geocaching.html)

“Geocaching 101”, <https://www.geocaching.com/guide/>

“Geocache Listing Requirements/Guidelines”, <https://www.geocaching.com/about/guidelines.aspx>

<http://www.earthcache.org/>

<http://www.waymarking.com/>

**Approval of Compatibility Determination:**

**Project Leader:** \_\_\_\_\_  
(Signature/Date)

**Regional Compatibility  
Coordinator:** \_\_\_\_\_  
(Signature/Date)

**Refuge Supervisor:** \_\_\_\_\_  
(Signature/Date)

**Regional Chief, National  
Wildlife Refuge System,  
Southeast Region:** \_\_\_\_\_  
(Signature/Date)