

**ARANSAS NATIONAL WILDLIFE REFUGE**

**White-tailed Deer, Feral Hog, and Waterfowl Hunt Plan**

**November 2012**

**U.S. Fish and Wildlife Service**

**Aransas National Wildlife Refuge  
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## I. INTRODUCTION

Aransas National Wildlife Refuge (Aransas NWR or Refuge) was established by the Federal Property and Administrative Service Act of 1949 (40 U.S.C. 471-535), as amended; Fish and Wildlife Coordination Act of 1934 (16 U.S.C. 661-666c) as amended; Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j Stat. 1119) as amended; the Act of May 19, 1948, Public Law 80-537 (16 U.S.C. 667b-667d; 62 Stat. 240) as amended; and The National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended.

*The purpose of this plan is to provide public hunting opportunities for white-tailed deer, feral hogs and waterfowl on Aransas National Wildlife Refuge. This Hunting Plan precedes the overall Visitor Services Plan for Aransas NWR.*

The Aransas Migratory Waterfowl Refuge was established on December 31, 1937, becoming the 121<sup>st</sup> refuge to be established in NWRs and second in Texas. The Refuge was established to benefit migratory waterfowl along the Central Flyway. The Refuge was renamed Aransas NWR in 1940. Shortly after World War II, when impending extinction of the whooping crane became apparent, biologists realized the significance of Aransas NWR tidal flats as whooping crane wintering grounds. Since then, many proclamations, administrative transfers, and land purchases/donations have occurred through the years, as outlined in Section 1.1 (CCP, 2010). Through these various land acquisitions, the whooping crane's fate and recognition of the Refuge have fused in the public mindset. Today, the Refuge consists of 115,931 acres and comprised of five units (Figure 1) situated in Aransas, Calhoun, and Refugio Counties of Texas. This plan addresses hunting opportunities on three Aransas NWR Units: Blackjack, Matagorda Island (MI), and Tatton Units. Myrtle-Foester Whitmire and Lamar Units are closed to hunting.

Blackjack Unit – originally comprising 47,261 acres and was established on December 31, 1937 by Executive Order 7784, “...as a refuge and breeding ground for migratory birds and other wildlife...” This acquisition was implemented under the authority of the Migratory Bird Conservation Act of 1929 (45 Stat. 1222) which also established the Refuge “...for use as an inviolate sanctuary...for any other management purposes...for migratory birds...” (16 U.S.C. § 715d). This unit, comprised of the Blackjack Peninsula, has a designated Proclamation Boundary or buffer zone, adding an additional 12,934 acres of jurisdiction over open waters surrounding the peninsula for the protection of waterfowl (Presidential Proclamation No. 2314 (1938), and No. 2478 (1941). The Proclamation Boundary (50 CFR, Part 32.8) was established to “...effectuate the purposes of the Migratory Bird Treaty Act of July 3, 1918 ...designated as closed area in or on which hunting, taking, capturing or killing... is hereby prohibited.”

Public hunts on the Blackjack Unit began in 1966, with the introduction of archery hunting for white-tailed deer and feral hog. This provides the visitor with an additional recreational opportunity where hunting opportunities on public lands are limited. In 1968, the refuge added a rifle season and has since been holding annual seasons on the Blackjack unit. We will be maintaining current hunting programs on the Blackjack unit.

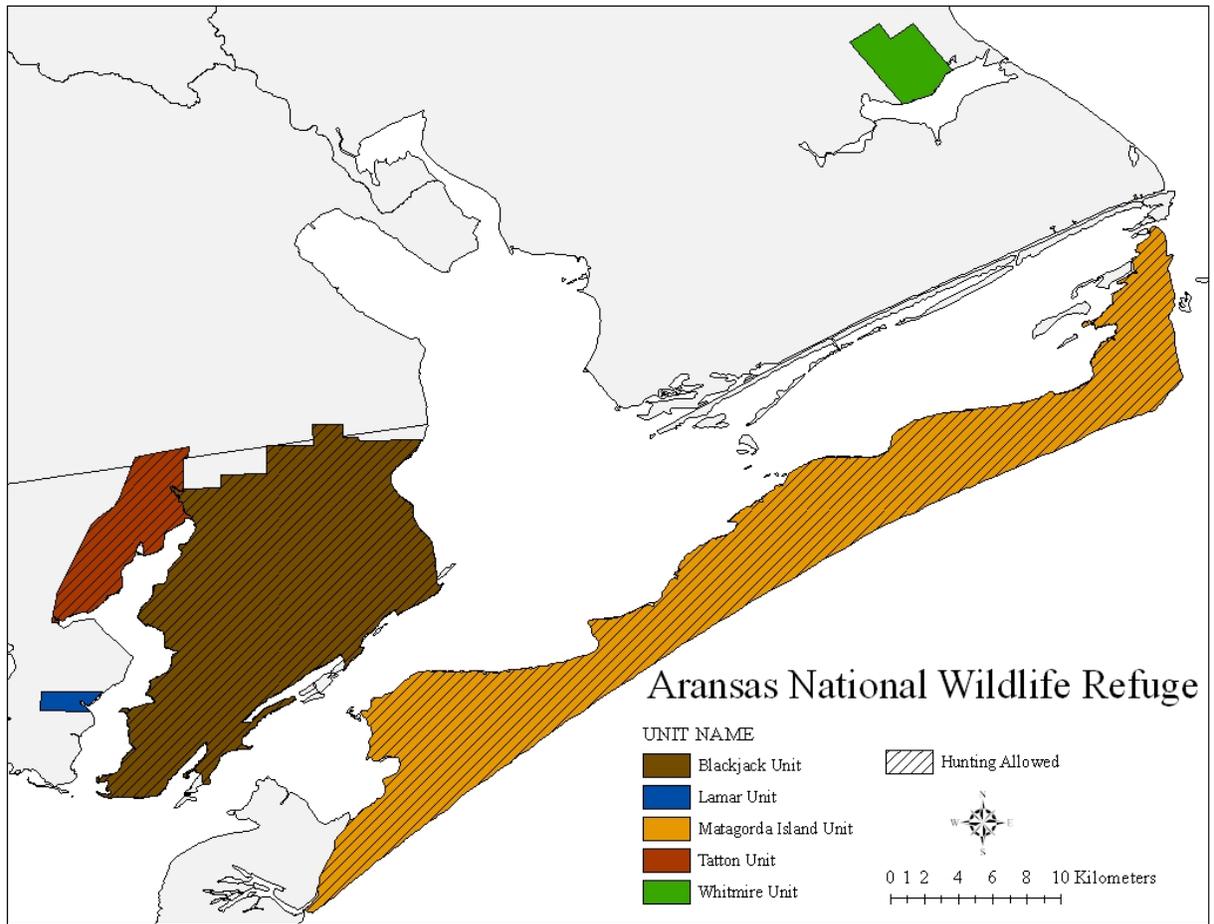


Figure 1. Map of refuge units comprising the Aransas National Wildlife Refuge.

Matagorda Island Unit – the first acquisition was established on December 8, 1982 by administrative transfer of 19,000 acres of Federal lands, from the U.S. Air Force to the Service for “...*wildlife conservation purposes.*” This acquisition was implemented under the authority of “An Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes,” (1948) which also established that the Refuge serves “...*particular value in carrying out the national migratory bird management program...*” (16 U.S.C. § 667b).

A second acquisition was established in November 1988 by purchase of the 11,502 acre Wynn Ranch from The Nature Conservancy of Texas, “...*to preserve the wetlands and associated habitats of this barrier island for all species of wildlife*” – 1989 Land and Water Conservation Fund acquisition document. This acquisition was implemented under the authorities of the: 1) Fish and Wildlife Act of 1956, which also established that the Refuge is “...*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 U.S. Fish and Wildlife Service, in performing its activities and services...*” (16 U.S.C. § 742f(b)(1)); and 2) Endangered Species Act of 1973, which also established that the Refuge serves: “... *to conserve (A) fish or wildlife which are listed as endangered species or threatened species...or (B) plants*” (16 U.S.C. § 1534).

A third acquisition was established on December 8, 2000, by administrative transfer of 15.29 acres and the MI Lighthouse from the U.S. Coast Guard to the Service for “...*wildlife conservation purposes to protect the whooping crane and other endangered species*” – acquisition document dated April 16, 1999. This acquisition was implemented under the authorities of: 1) An Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 1948, which established that the Refuge serves “...*particular value in carrying out the national migratory bird management program...*” (16 U.S.C. § 667b); and 2) the Endangered Species Act of 1973, which established that the Refuge serves “... *to conserve (A) fish or wildlife which are listed as endangered species or threatened species...or (B) plants*” (16 U.S.C. § 1534).

Hunting activities on MI are complex, due to the various management agreements in place. Documented hunting on MI dates back to the early 1940’s, when the U.S. Air Force occupied the northern 28 miles or 19,000 acres of the island as the Matagorda Bombing and Gunnery Range. Records indicate the military conducted recreational hunting for deer, waterfowl, mourning dove, and northern bobwhite. In 1971, the military agreed to let the U. S. Fish and Wildlife Service (USFWS) manage this property for the benefit of whooping cranes. After the installation closed in 1978, the land transferred to USFWS in 1982 for “wildlife conservation purposes” and permanent inclusion in the NWRs. USFWS inherited deer and waterfowl hunting activities previously established by the military. Big game hunting (feral hogs and white-tailed deer) was formally opened and these hunts will continue. The waterfowl hunting continued without the formal opening process. In 1979, 26,166 acres of salt marsh, tidal flats, and gulf beach previously leased by the military returned to the Texas General Land Office (GLO), which manages public coastal lands. Later that year, the Texas State Legislature designated the MI State Park and Wildlife Management Area, comprising most of the same acreage returned to GLO. In an effort to resolve many of the disputes over the management of MI, the USFWS and State of Texas signed a Memorandum of Agreement (MOA) in 1982 (Public Law 98-66) providing for the integrated management of all Federal and State lands on MI through conservation easements. A similar Conservation Easement Agreement (CEA) of 1982 was also

signed. Under these agreements, USFWS became the primary authority for wildlife and habitat management on the entire tract, approximately 43,891 acres, by inclusion of these lands into the Refuge System. Texas Parks and Wildlife Department (TPWD) became the primary authority for supervising public access and use of the area as a park and wildlife management area. As such, TPWD has conducted public use activities on MI, including deer, hog, and waterfowl hunting, since 1984. Both the MOA and CEA were updated as the MOA of 1994 and CEA of 1994, to include the newly acquired southernmost portion of MI and eliminate cattle grazing on the island. Additionally, the name for this all-inclusive entity is MI National Wildlife Refuge and State Natural Area. These new agreements supersede the 1982 agreements and remain in effect until December 2082. For a complete and detailed accounting of events leading to and surrounding these agreements, see the Aransas National Wildlife Refuge Comprehensive Conservation Plan (CCP, 2010).

Tatton Unit – was established in two parts: 1) November 9, 1967 (7,538 acres) and 2) May 15, 1968 (29.9 acres) by donation from Mr. and Mrs. Meredith Tatton of 7,568 acres to the Service for “... *for protecting and enhancing the habitat required by wildlife species present in the area ...*” Deed of Gift Vol. 131: 467-474, September 18, 1967. Additionally, “...*for wildlife refuge purposes...and managed for many wildlife species but... excellent habitat for Attwater’s prairie chicken ...*” – Secretary of the Interior Stewart L. Udall (DOI, Bureau of Sport Fisheries and Wildlife news release dated November 17, 1967). This acquisition was implemented under the authority of the Migratory Bird Conservation Act of 1929 (45 Stat. 1222), as amended, which also established that the Refuge is “...*for use as an inviolate sanctuary ...for any other management purpose...for migratory birds...*” (16 U.S.C. § 715d).

Past hunting activities on the Tatton unit include a white-tailed deer and feral hog youth hunt conducted by TPWD annually from 2004-2009. We will formally open big game hunting on the Tatton unit.

With this plan, which amends the 1982 Aransas NWR Hunt Plan, Aransas NWR proposes opening waterfowl hunting on the northern end of MI Unit, white-tailed deer and feral hog hunting on the Tatton units.

## **II. CONFORMANCE WITH STATUTORY AUTHORITY**

The Refuge Recreation Act of 1962 (16 U.S.C. 460K) authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use. The Refuge Recreation Act requires 1) that any recreational use permitted will not interfere with the primary purpose for which the area was established; and 2) that funds are available for the development, operation, and maintenance of the permitted forms of recreation.

Fundamental to the management of lands within the National Wildlife Refuge System (NWRS) is the NWRS Improvement Act of 1997 (Public Law 105-57), an amendment to the NWRS Administration Act of 1966. The NWRS Improvement Act of 1997 provided a mission for the NWRS and clear standards for its management, use, planning, and growth. It also recognized that wildlife-dependent recreational uses involving hunting, fishing, wildlife observation and photography, and environmental education and interpretation, when determined to be compatible with the mission of the NWRS and purposes of the Refuge, are legitimate and appropriate public

uses of NWRS, are the priority general public uses of NWRS, and shall receive priority consideration in planning and management. The Secretary of Interior may permit hunting on a refuge if it is determined that the use is compatible, however, USFWS's Final Compatibility Policy Pursuant to the Act delegates the responsibility of determining compatibility to the Refuge Manager, with concurrence by the Regional Office Supervisor.

Recreational hunting authorized by the regulations will not interfere with the primary purpose for which Aransas NWR was established. The completion of a Compatibility Determination was the basis for this determination.

### **III. STATEMENT OF OBJECTIVES**

The objectives of big game (deer & feral hog), and waterfowl (ducks, mergansers, and coots) hunting program on Aransas NWR are to provide:

1. The public with a high quality recreational experience on more refuge lands and increase opportunities for hunters, especially for youth.
2. Biological diversity by preserving the natural diversity and variety of biotic communities occurring on Refuge lands and aid in reducing invasive feral hog populations.
3. Wildlife-dependent public recreation as mandated by and according to Service policy.
4. Educate the public and neighboring landowners about effects of overpopulated deer and feral hog herds.

### **IV. ASSESSMENT**

#### **A. Are wildlife populations present in numbers sufficient to sustain optimum population levels for priority refuge objectives other than hunting?**

##### White-tailed Deer

##### Regional Analysis

In the early 1900's there were an estimated 500,000 white-tailed deer in the United States. Unregulated commercial hunting and subsistence hunting threatened to eliminate the white-tailed deer from much of its range. At that time, many state wildlife agencies were formed with the goal of conserving the nation's depleted wildlife resources. Hunting regulations were put into place, and the harvest of antlerless (female) deer was prohibited. The rebound of white-tailed deer populations that followed is considered a wildlife management success story. Today there are over 20 million deer in the United States and numbers are rising (Swihart and DeNicola 1997). Anticipated annual deer harvest on the Refuge and other national wildlife refuges open to deer hunting is an extremely small percentage of the state's annual harvest and just a fraction of the national population. TPWD estimated 13,664 white-tailed deer were harvested in the 13

million-acre Gulf Coast Prairie and Marshes region of the State during the 2010-2011 hunting season (Purvis 2012). This represents 0.001 deer harvested per acre.

#### Local Analysis

Annual trend surveys, conducted by TPWD, estimate the deer herd on MI to be approximately 1000 animals. Data from the last 20 years of deer harvest on the entire Aransas NWR indicate the annual average number of deer harvested from the 115,000 acre refuge was 109 individuals. This represents 0.0009 deer per acre, indicated the harvest rate on the refuge is 10% lower than the rest of the region. The impact of harvest at this rate from the Aransas NWR is negligible within the context of the estimated four million white-tailed deer found in Texas (Graves 2004). The Refuge will continue to support a substantial deer herd that will be at, or above, the habitat's carrying capacity. The timing, duration and anticipated harvest levels of the Refuge's hunt program would not result in adverse impacts to Refuge resources, wildlife populations or the surrounding environment.

#### Feral hog

Habitat competition between the target species and other wildlife has not directly been studied on the Refuge. However, population management of hogs is expected to reduce intra- and interspecies competition within available habitat. Feral hogs compete with native wildlife for food, cover, water, and space. They are highly adaptable, have high reproductive capabilities, and can be found in a wide range of habitat types. Rooting and digging activities negatively impact vegetative communities, soil properties and plant successional patterns (Stevens 2010). Feral hogs are opportunistic omnivores and compete with game and non-game wildlife species for available food resources. Wood and Roark (1980) found oak mast to be one of the more important seasonal food items of feral hogs. Tate (1984) found that feral hogs compete with deer, turkey, sea turtle eggs, waterfowl and other wildlife species for this food resource. Feral hogs can impact ground-nesting species, particularly quail and turkey, through nest destruction and predation. Beach (1993) also found that feral hogs prey on fawns and ground nesting birds.

#### Waterfowl

##### Regional and Local Analysis

Waterfowl migrating in the Central Flyway begin arriving on the Aransas NWR in September, with many remaining throughout the winter. While some birds may use the area only for short periods of time during migration, they are dependent upon the area and its rich food sources. Other birds remain for the winter on and around the Refuge using salt marsh, open bay and freshwater habitats. Waterfowl species commonly observed on the Refuge include Redhead, Lesser Scaup, Bufflehead, Blue-winged Teal, Green-winged Teal, Northern Pintail, Gadwall, American Widgeon, Northern Shoveler, and Mottled Duck.

The hunting of waterfowl in the United States is based upon a thorough regulatory setting process that involves numerous sources of waterfowl population and harvest monitoring data. In 2011, the total breeding duck population estimate was 45.6 million waterfowl, which is 35% higher than the long-term average (USFWS 2012). As a result of the regulatory Annual Harvest Management options, in 2011, Texas hunter's harvested an estimated 1.3 million ducks (USFWS

2012). This is approximately 8.2 percent of the U.S. harvest (15.8 million) and 44.8 percent of the Central Flyway's (2.9 million) estimated waterfowl harvest. Annually Texas Parks and Wildlife sets harvest regulations within the limits set by U.S. Fish and Wildlife Service's Division of Migratory Birds. These regulations will be enforced for waterfowl hunters on the refuge.

## **B. Is there competition for habitat between target species and other wildlife?**

### Feral Hogs

Habitat competition between the target species and other wildlife has not directly been studied on the Refuge. However, population management of hogs is expected to reduce intra- and interspecies competition within available habitat. Feral hogs compete with native wildlife for food, cover, water, and space. They are highly adaptable, have high reproductive capabilities, and can be found in a wide range of habitat types. Rooting and digging activities negatively impact vegetative communities, soil properties and plant successional patterns (Stevens 2010). Feral hogs are opportunistic omnivores and compete with game and non-game wildlife species for available food resources. Wood and Roark (1980) found oak mast to be one of the more important seasonal food items of feral hogs. Tate (1984) found that feral hogs compete with deer, turkey, squirrels, waterfowl and other wildlife species for this food resource. Feral hogs can impact ground-nesting species, particularly quail and turkey, through nest destruction and predation. Beach (1993) also found that feral hogs prey on fawns and ground nesting birds.

### White-tailed Deer

The only other ungulates residing on the refuge are javelina. Javelina do not compete with native animals for resources since their main diet consists of prickly pear cactus and mesquite beans (Taylor and Synatzske, 2008). Therefore, competition between white-tailed and other wildlife and their habitats are not considered a limiting factor.

### Waterfowl

A wide variety of other resident and migratory birds use the freshwater upland ponds on Matagorda Island. Key species using these habitats during waterfowl hunt periods include wading birds, raptors, and shorebirds. Waterfowl may compete with wading birds in disturbance factors and competition for space.

## **C. Are there unacceptable levels of predation by target species on other wildlife?**

Predation levels by feral hogs on other wildlife at Aransas NWR have not been measured. However, feral hogs, which are opportunistic omnivores, can negatively impact quail, turkey, and other native ground-nesting species through nest destruction and predation. Numerous studies (Beach 1993, Taylor 2003, West, et al. 2009, and Stevens 2010) have noted detrimental feral hog impacts on deer fawns, ground nesting birds, and numerous other native species. Additionally, depredation of young sea turtles by feral hogs could potentially threaten recovery efforts for endangered sea turtles, which nest on MI.

## **V. DESCRIPTION OF HUNTING PROGRAM**

### **A. Areas of the Refuge that support targeted species.**

The Refuge possesses a rich mixture of barrier island, coastal upland prairie, and shoreline habitat that supports a diversity of wildlife species along the Texas Gulf Coast. These species, including game and nongame, are important contributors to the overall biodiversity of Aransas NWR. Conservation of migratory birds is often considered the overall connecting theme of the NWRs. Aransas NWR was established primarily for the conservation of migratory birds, protection and preservation of scarce and vulnerable native coastal prairie, and maintenance of natural biological diversity. The Refuge has documented 402 species of birds, 50 species of mammals, 76 species of reptiles and amphibians, and 81 species of fish.

#### Tatton Unit

##### *Upland Grassland Community*

This coastal prairie community occurs on relatively well-drained dark soils and is found on the northern half of the Unit. Transitional areas, such as lowland flats, have developed between the blackland soils and sandy prairie, and in some cases between blackland soils and salt marshes. Proximity and influence of coastal bays and gradual sloping topography helped create these transition zones. Currently, the grassland is composed of seacoast bluestem and silver bluestems, windmill grass, knotroot bristle grass, white tridens, Texas wintergrass, and an assortment of panic grasses. Attwater's prairie chicken once existed in this habitat and the area has been identified as a possible future release site, should an attempt be made to reestablish the species on the Refuge.

##### *Mesquite/Prickly Pear Community*

This community is not common on the Refuge and occurs as an isolated fragment on the Tatton Unit. It is comprised mostly of mesquite, granjeño, blackbrush, agarito, retama, Texas prickly pear, and devil's head cacti on the higher clay loam uplands.

#### Matagorda Island Unit

Matagorda Island is the visible top of an elongated mound of sand, some 30-40 feet thick on top of compacted marine and fluvial sediments. Sandy soils were derived from both the eroded interior of the State and Gulf deposits. Off MI's Gulf shore, the substrate is firm sand and crushed shell, whereas bayside water deepens gradually and the bottom ranges from muddy sand to deep ooze. The island is 38 miles long and varies in width from ¾-mile to about 4-1/2 miles. The Gulf shoreline is smooth and linear whereas, the back side makes up about 80 miles of irregularly shaped bay shoreline. Encompassing 56,668 acres, broad beach habitat, and a prominent sand dune line about 15 feet high, MI is typical of a Gulf barrier island.

##### *Freshwater Community*

Freshwater is available throughout the refuge from a variety of sources, including: windmills, artesian well runoff, rain-filled depressions, and aquifer intercept points that can serve as semi-permanent freshwater sources. During wet years, every swale on the Refuge will be full for weeks.

Specific vegetative mixes will depend on water permanence. More permanent water will develop submerged plants (e.g. hornwort and southern naiad) and floating plants (e.g. duckweed and pondweed). Shoreline emergent plants include: cattail, California and American bulrush, burhead, arrowleaf, and common reed. Bankside trees are typically black willow. Rattlepod, coffee bean, saltmarsh aster, spiny aster, and groundsel may also be present. The edges of temporary pools are generally marked by thick stands of bushy bluestem, switchgrass, button bush, as well as a variety of rushes and sedges. On the barrier flats, floral components include: green algae, wigeongrass, stonewort, seashore paspalum, American bulrush, burhead, cattails, black rush, coffee bean senna, bermuda grass, water hyssop, umbrella pennywort, creeping seedbox, smartweed, and saltcedar.

*Tidal Flat/Pool Community (Salt Marsh Community)*

This habitat type is often called “salt marsh,” though it is not true salt marsh. Along the Texas coast, often shoreline is not regularly flushed by significant tides, but is washed by freshwater drainage. In this scenario, salt marsh dwindles rapidly. The only hint of true salt marsh in our area consists of a long narrow band dominated by smooth cordgrass, a few feet to yards wide, and is not extensive enough to support distinct animal communities. Typically, “salt marsh” refers to the tidal flat community, marking the transition from the upland community to the bay. Within this area lies unique plant and animal communities specially adapted to the winds and tides.

Primary floral components of the Tidal Flat/Pool Community include: smooth cordgrass, maritime saltwort, wigeongrass, shoal grass, saltgrass, seashore dropseed, bushy sea oxeye, sea lavender, camphor daisy, shore grass, Gulf cordgrass, sumpweed, groundsel, mesquite, and Texas prickly pear. Shallow tidal pools that remain, surrounded by vast areas of mud flats, provide tremendous feeding, loafing, and roosting areas for many shorebirds, herons, egrets, cranes, and waterfowl.

**B. Areas to be opened to hunting.**

The 7,000 acre Tatton unit will be opened to deer and feral hog hunting. Matagorda Island Unit will open waterfowl hunting on approximately 500 acres. Designated hunting areas within the Tatton Unit are located in Aransas County; designated hunting areas on MI Unit are located in Calhoun County. Table 1 reveals information on hunts and harvestable species. Maps of unit boundaries and defined hunting areas are shown in Figures 2-7.

Table 1. Areas to be opened for hunting on Aransas National Wildlife Refuge, including hunt types, permits available, and harvestable species for each unit.

New Units (Acres Hunted)	Type of Hunt (Number of Permits Available)	Species
MI (30,000 - all hunts)	Waterfowl (160-180, pending yr) Big Game Rifle (130) Rifle Youth (34)	waterfowl deer and feral hog deer and feral hog
Tatton	Big Game	

(7,000)	Rifle Youth	(10)	deer and feral hog
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Figure 2. Map of Waterfowl Hunting Area on Matagorda Island Unit

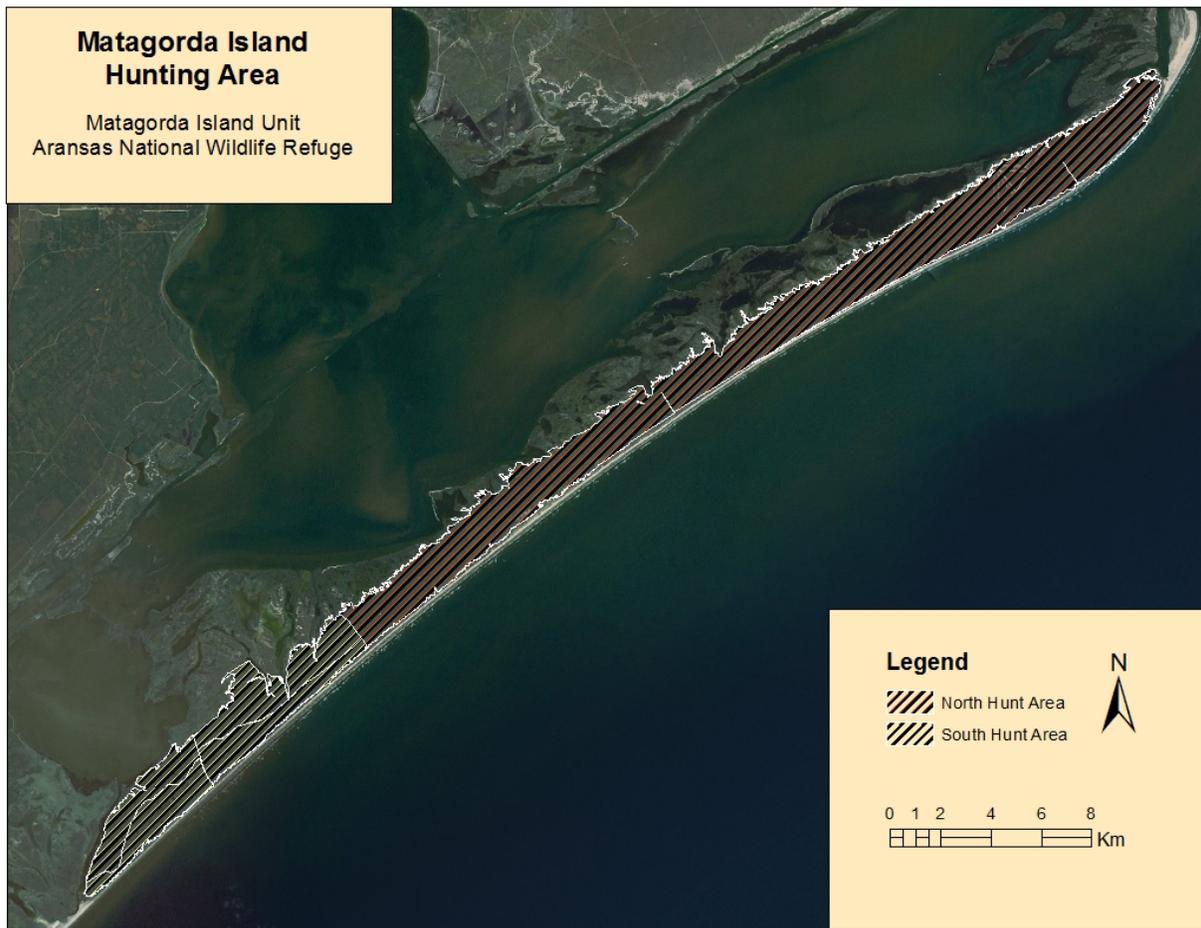


Figure 3. Map of Hunting Units on Matagorda Island Unit.

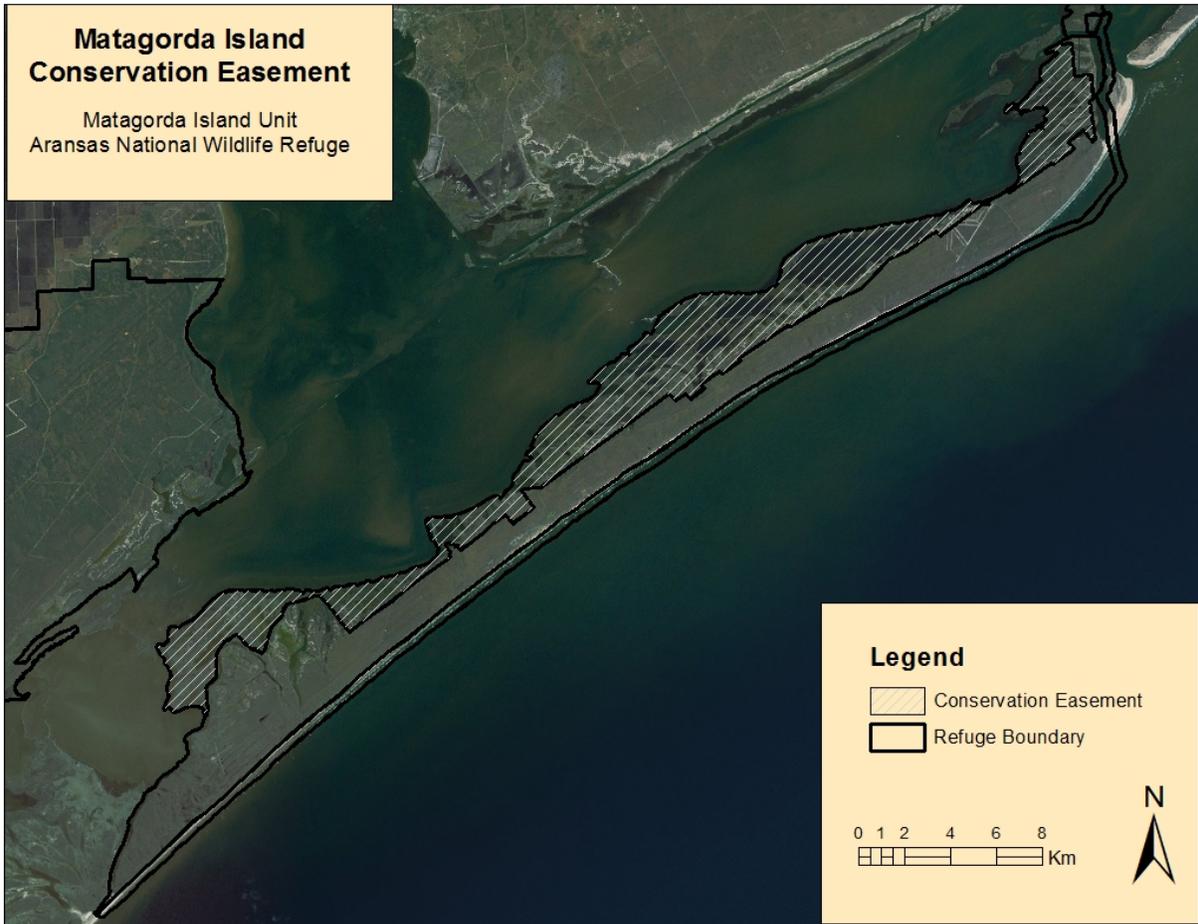


Figure 4. Map of Conservation Easement Area on Matagorda Island Unit

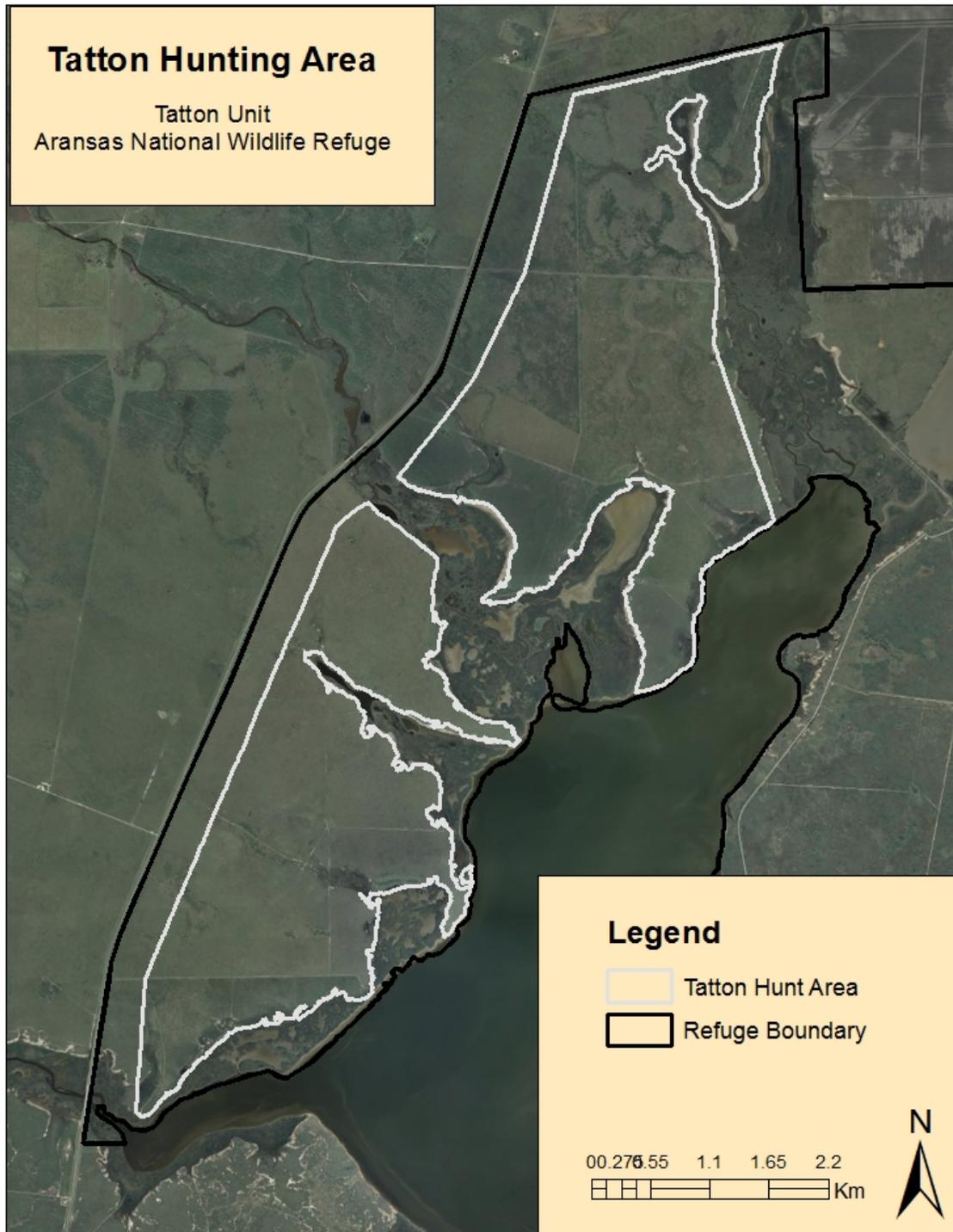


Figure 5. Map of Hunting Area on Tatton Unit

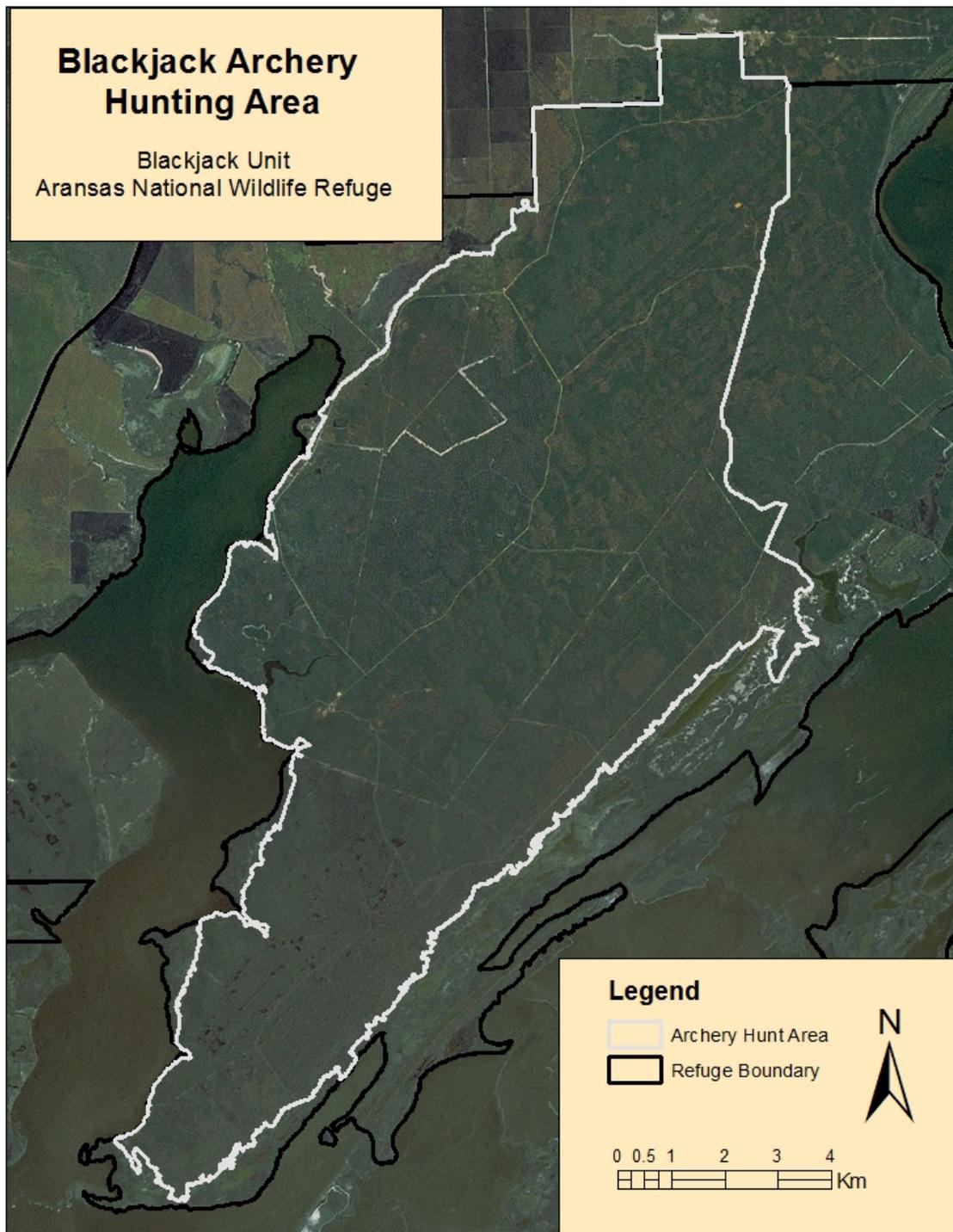


Figure 6. Map of Archery Hunting Area on Blackjack Unit

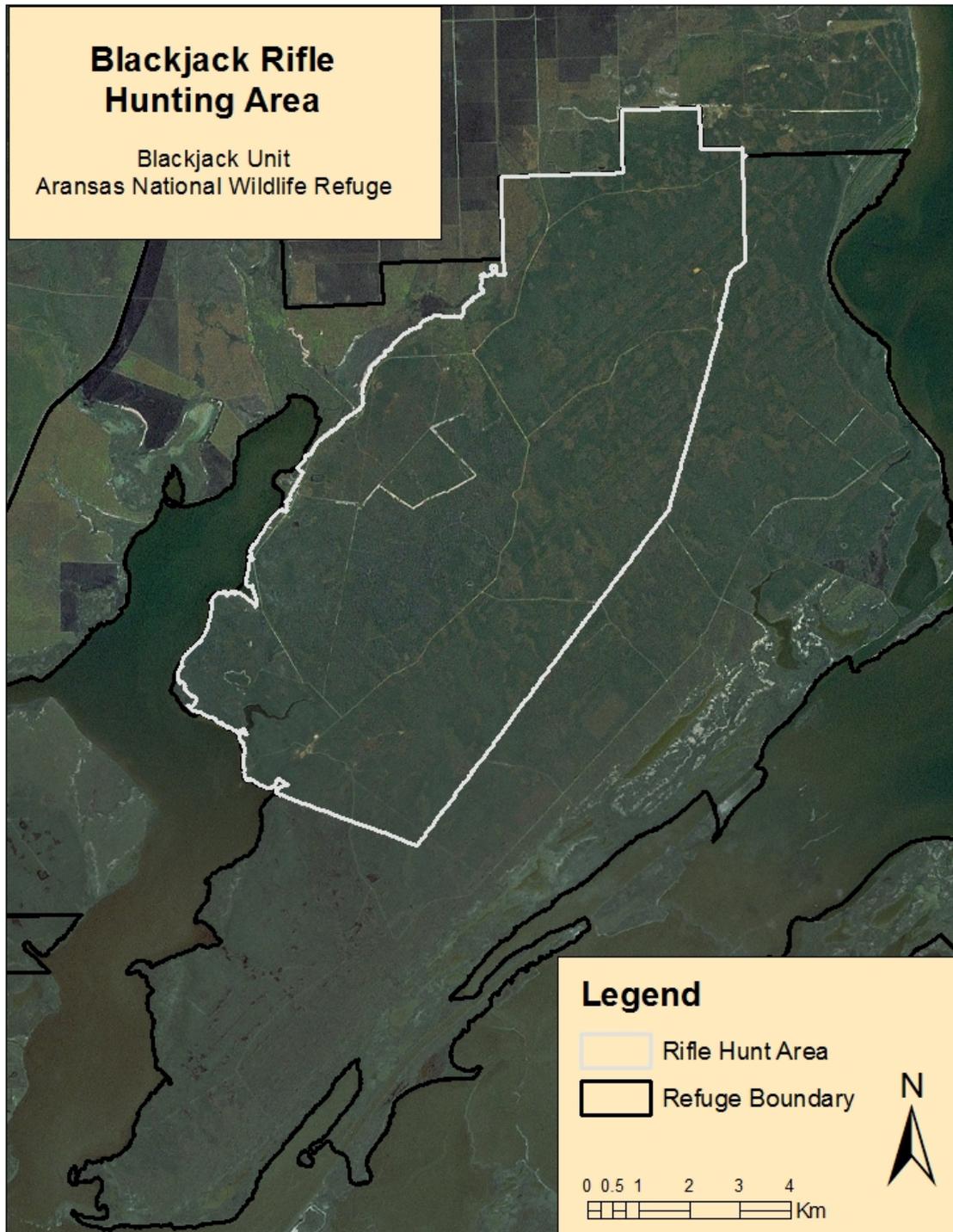


Figure 7. Map of Rifle Hunting Area on Blackjack Unit

As governed by State regulations, waterfowl hunting on the MI Unit is by State annual public hunting permit and state hunting license. Waterfowl hunting is permitted in the interior freshwater ponds only on scheduled dates and times within the south zone waterfowl season. Waterfowl hunting is permitted within the bayside marshes of the conservation easement.

### **C. Species to be taken, hunting periods, and hunting access.**

- Waterfowl hunting on the northern end of MI Unit. Open to Duck, Merganser, and Coot. The hunt will occur at 17 designated upland locations, consist of twelve hunt days during the TPWD regulations south zone waterfowl season. Hunting hours are from morning legal shooting hours until noon, maximum 60 hunters daily, and will be administered by TPWD; TPWD vehicles will transport hunters to and from their designated upland locations.
- White-tailed deer and feral hog youth hunts on Tatton unit. Hosted by USFWS, in partnership with a youth hunting organization (e.g. Texas Wildlife Association) one rifle hunt will occur within the state season limited to 7, preferably first-time youth hunters. Hunters will be selected by lottery and these hunts will take place within the regular hunting season. Take limit will be set at two deer/youth hunter and no limit on feral hogs.

### **D. Justification for the permit, if one is required.**

Permits for all Refuge hunts are required. All permits contain appropriate maps, rules, and regulations pertaining to Refuge use. Names and phone numbers for each hunter are known, thus they could be notified of units closing due to flood, fire, or other natural event that could close the unit to hunting.

### **E. Consultation and Coordination with the State.**

Historically, Aransas NWR and TPWD activities have primarily been conducted independently. However, Aransas NWR managers do consult and coordinate with TPWD on actions that might affect TPWD staff, facilities, or their activities. Safe and successful hunting activities, conducted by both agencies on the MI Unit, are dependent on good communication practices and information sharing. Aransas NWR and TPWD work together to ensure safe and enjoyable recreational hunting opportunities. Hunter participation and harvest data are shared annually and law enforcement officers from both Aransas NWR and TPWD work together to patrol MI Unit, safeguarding hunters, visitors, and both game and nongame species. TPWD has consulted during the CCP process and throughout the development of this hunt plan. TPWD comments have been incorporated into this document.

### **F. Law Enforcement**

Enforcement of Refuge violations normally associated with management of a National Wildlife Refuge is the responsibility of commissioned Refuge Law Enforcement Officers. Other refuge officers, Special Agents, State game wardens, and the local Sheriff's Department often assist the

Aransas NWR full time law enforcement officer.

The following methods are used to control and enforce hunting regulations:

- Refuge and hunt area boundaries will be clearly posted;
- The Refuge will provide a brochure that shows hunt areas;
- Aransas NWR law enforcement staff will randomly check hunters for compliance with Federal and State Laws, as well as Refuge-specific regulations pertinent to hunting, including compatibility stipulations;
- Aransas NWR law enforcement staff will coordinate with TPWD and other law enforcement agencies; and
- Information will be made available at the Aransas NWR Visitor Center and website.

Procedures for obtaining law enforcement assistance are based on legal jurisdiction, pending where the incident occurred. The Aransas NWR law enforcement officer has met with local law enforcement agencies in the three counties that contain Refuge units to develop good working relationships and coordinate appropriate strategies.

## **G. Funding and Staffing Requirements**

Annual hunt administration costs, for Aransas NWR, including salary, equipment, law enforcement, brochures, collection of hunt data and analysis of biological information, etc. totals approximately \$25,000. Aransas NWR funds are used to conduct hunts on the Blackjack Unit and the youth hunts on the south end of MI and the Tatton Unit. Funding specifically for hunts has not been allocated, although funds are available through hunter fees. Incurred salary and other related operational costs for the hunt and operation of the Matagorda Island unit hunts are incurred by TPWD. It is anticipated that funding would continue to be sufficient to continue the hunting program at Aransas NWR in the future.

## **VI. MEASURES TAKEN TO AVOID CONFLICTS WITH OTHER MANAGEMENT ACTIVITIES**

### **A. Biological Conflicts**

#### Endangered/Threatened Species:

Wintering whooping crane populations will not likely be impacted by waterfowl hunting on the MI unit. Limiting waterfowl hunting to only the locations specified, ceasing these activities at noon, excluding geese from allowable take, and providing a full hunter orientation on waterfowl identification are all measures aimed at deterring the accidental take of a whooping crane and minimizing disturbance within whooping crane habitat. However, while disturbance issues have not been fully studied, whooping crane populations have increased in the presence of these hunting practices and no cranes have been taken by Refuge hunters. Waterfowl hunting will take place at many of the same freshwater upland ponds used by whooping cranes. However, waterfowl hunting at upland ponds occurs for only twelve days during the TPWD south zone waterfowl hunting season and hunting activity ceases at noon on the MI Unit. Cranes and other wildlife have ample opportunity to use these ponds undisturbed throughout the rest of the day

and season , with the exception of the twelve specified hunting mornings.

Although Aplomado Falcons and White-tailed hawks are present on the refuge when the proposed hunting would occur, these activities are unlikely to impact them because during fall and winter these species are itinerant foragers with large territories, and therefore are able to avoid human disturbance. Similarly, the highest density of piping and snowy plovers known to occur on the refuge are found on the beach of Matagorda Island where hunting does not occur.

Prescribed Burning – Aransas NWR has an aggressive prescribed burning program. The majority of the burning occurs in the winter to provide suitable habitat for the whooping crane. With limited hunting dates the burns are successfully conducted around these few dates to accomplish the task and still allow the hunting. Other burns occur in the late summer/fall to target running live oak and other tree setback on the grasslands.

## **B. Public Use Conflicts**

Minimal public use conflicts are expected to occur on Aransas NWR during the hunting. On the Tatton Unit, the visitor use area will be closed for a period of two days out of 365 days per year. The hunting occurring on MI will have minimal effect on the other public use activities due to the limiting factor of transportation to the island and while on the island, thus visitation is minimal. Overall, impacts to visitor services/recreation opportunities are considered short-term, minor and local since other parts of the Refuge are available for use by non-hunters (other wildlife-dependent recreation users).

## **C. Administrative Use Conflicts**

No administrative conflicts are known to occur with hunting activities. For many years, the Refuge has planned and provided for deer hunting opportunities. Refuge management sets priorities, allowing visitor services staff sufficient time to administer the hunting program. Currently, the Refuge employs a full-time Refuge Officer. Additional assistance is sought from other refuges, local special agent, or state game wardens, when deemed necessary.

# **VII. CONDUCT OF THE HUNTING PROGRAM**

## **A. Refuge-Specific Hunting Regulations**

Listed below are Refuge-specific regulations that pertain to Aransas NWR, as of the date of this plan.

### **Big Game Hunting**

- We may immediately close the entire refuge or any portion thereof to hunting in the event of the appearance of whooping crane in the hunt area or in order to conduct habitat management practices as required during the available windows ( *i.e.* , prescribed burns, roller chopping, fire breaks)

- For the archery and rifle season, hunters must obtain a refuge permit (name only required) and pay a fee. The hunter must tape the smaller vehicle tag on the driver's side windshield. The hunter must sign the larger permit and possess it at all times while on the refuge.
- We define youth hunters as ages 9–16. A Texas-licensed, adult hunter, age 17 or older who has successfully completed a Hunter Education Training Course, must accompany youth hunters. We exempt those persons born prior to September 2, 1971, from the Hunter Education Training course requirement. We define accompanied as being within normal voice contact. Each adult hunter may supervise only one youth hunter.
- We prohibit the use of dogs to trail game.
- We prohibit possession of alcoholic beverages at any time while hunting.
- We will annually designate bag limits in the refuge hunt brochure.
- We allow archery hunting within the deer season for the county on specified days listed in the refuge hunt brochure.
- We allow firearm hunting within the deer season for the county on specified days listed in the refuge hunt brochure.
- All hunters must check-in and out at the entrance gate at the beginning and end of each hunt and record their harvest if applicable.
- Hunters must clean all harvested game in the field.
- Firearm hunters must wear a total of 400 square inches (2,600 cm<sup>2</sup>) hunter orange including 144 square inches (936 cm<sup>2</sup>) visible in front and 144 square inches visible in rear. Some hunter orange must appear on head gear.
- We prohibit target practice or any nonhunting discharge of firearms.
- We prohibit hunting on or across any part of the refuge road system, or hunting from a vehicle on any refuge road or road right-of-way. Hunters must remain at a minimum of 100 yards (90 m) off any designated refuge road or structure.
- We prohibit hunters using handguns during archery and rifle hunts. Hunters may use bows and arrows only in accordance with State law. We prohibit use of crossbows for hunting unless we issue a Special Use Permit (FWS Form 1383) due to “upper limb” disability. We allow the use of archery equipment and centerfire rifles for hunting in accordance with State law.
- We allow use of portable hunting stands, stalking of game, and still hunting. There is a limit of two portable stands per permitted hunter. A hunter may set up the portable stands during the scouting week but must remove them when the hunter's permit expires. We prohibit hunters from driving nails, spikes, or other objects into trees or hunting from stands secured with objects driven into trees. We prohibit the building of pits and permanent blinds.
- We prohibit hunting with the aid of bait, salt, or any ingestible attractant (see §32.2(h)). We allow sprays and other noningestible attractants.
- We prohibit blocking of gates and roadways (see §27.31(h) of this chapter). We prohibit vehicles operating off-road for any reason. Hunters must park vehicles in such a manner as to not obstruct normal vehicle traffic.
- We allow to the use of only biodegradable flagging tape to mark trails and hunt stand location during the archery and rifle hunts on the refuge. We color-code the flagging tape used each weekend during the rifle hunts. Hunters must use the designated flagging tape

color specified for particular hunt dates. We provide this information on the refuge hunt permit and in refuge regulations sent to permittees. Hunters must remove flagging (see §27.93 of this chapter) at the end of the hunt. The hunter must write his/her last name in black permanent marker on the first piece of flagging tape nearest the adjacent designated roadway.

- We prohibit camping on the Blackjack and Tatton units and allow camping on the MI unit.

## Migratory Bird Hunting

- Hunters must possess and carry a current signed refuge hunting permit while hunting on the refuge.
- Hunters may enter the refuge hunt units no earlier than 4 a.m. Hunting starts at the designated legal shooting time and ends at 12 p.m. (noon). Hunters must leave refuge hunt units by 12:30 p.m.
- Hunters age 17 and under must be under the direct supervision of an adult age 18 or older.
- We only allow shotguns for waterfowl hunting.
- We prohibit pits and permanent blinds. We allow portable blinds or temporary natural vegetation blinds. You must remove all blinds from the refuge daily.
- We only allow vehicular travel on designated roads and in parking areas.
- TPWD personnel must transport hunters to and from their hunting locations.
- All hunters must check in at the MI hunt check station by 5:00 a.m. and will be transported to and from the hunt area by TPWD personnel.
- Dogs accompanying hunters must be under the immediate control of handlers at all times.
- Hunters must remove all decoys, boats, spent shells, marsh chairs, and other equipment from the refuge daily. We prohibit the use of plastic flagging, reflectors, or reflective tape.
- Hunting of geese is prohibited.
- The entire Refuge or any portion thereof may immediately close to hunting in the event of whooping cranes present within the hunt area.

## **B. Anticipated Public Reaction to the Hunting Program**

Based on the comments received during the CCP (2003 & 2009) hunting has already been allowed on Aransas NWR for more than 30 years and little negative public reaction is expected. Hunting is an important economic and recreational use of Texas' natural resources. Some individuals may have concern with waterfowl hunting in areas where whooping cranes may be present.

## **C. Hunter Application, Registration Procedures, and Selection Process**

Information on archery, rifle, and waterfowl hunts is listed below and/or can be downloaded from the Aransas NWR website: [www.fws.gov/southwest/refuges/texas/aransas](http://www.fws.gov/southwest/refuges/texas/aransas).

- a) Youth Hunts (deer and feral hog - Tatton Unit)

In partnership with a youth hunting organization (e.g. Texas Wildlife Association) two rifle hunts will occur within the state season limited to 10, preferably first-time youth hunters. Hunters will be selected by lottery and these hunts will take place within the regular hunting season. Take limit will be set at two deer/youth hunter and no limit on feral hogs. Information on these hunts can be obtained by calling the Visitor Center at 361-286-3559. Aransas NWR hosts these youth hunts and does not play a role in hunter application, registration, or selection processes.

b) Waterfowl Hunt (MI Unit)

TPWD administers the waterfowl hunts through a lottery drawing process. Additional information may be obtained from TPWD publications Public Hunting Lands Map booklet and Texas Waterfowl Digest for season dates, species, and bag limits. Also, information on these hunts may be obtained from the Bay City, Texas Office of TPWD.

#### **D. Media Selection for Announcing and Publicizing the Hunting Program**

The Refuge maintains a mailing list, for news release purposes, to local newspapers, radio, and websites. Special announcements and articles may be released in conjunction with hunting seasons. In addition, information about the hunt will be available at Aransas NWR headquarters or on the Aransas NWR website.

#### **E. General Requirements**

General information regarding hunting and other wildlife-dependent public uses can be obtained at Aransas NWR headquarters at P.O. Box 100, Austwell, TX, 77950 or by calling 361.286.3559. Dates, forms, hunting unit directions, maps, applications, and permit requirements about the hunt will be available on the station website at:

[www.fws.gov/southwest/refuges/texas/aransas](http://www.fws.gov/southwest/refuges/texas/aransas) and at the Refuge Visitor Center.

Information on waterfowl hunting on MI sponsored by TPWD is available at the TPWD office located at 2200 7th Street, 3rd Floor, Bay City, TX 77414 or by calling (979) 323-9669. Dates, maps, and other information about getting to MI are available on their website at:

[http://www.tpwd.state.tx.us/huntwild/hunt/wma/find\\_a\\_wma/list/?id=48](http://www.tpwd.state.tx.us/huntwild/hunt/wma/find_a_wma/list/?id=48).

#### **F. Hunter Requirements**

1. Generally, all hunting will be in accordance with State regulations. Additional Refuge specific regulations will be provided to each hunter annually.
2. License and Permits – All hunters must possess a valid State of Texas hunting license and any State required stamps or tags along with their refuge permit.
3. Reporting Harvest – Hunters will be required to check in and out of the hunt at the Refuge

hunt check station. Harvested game may be inspected by Refuge staff.

4. Hunter Safety Training – Every hunter (including out-of-state hunters) born on or after September 2, 1971, must successfully complete a Hunter Education Training Course. Proof of certification or deferral is required to be on your person while hunting.

## VIII. COMPATIBILITY DETERMINATION

Hunting and all associated program activities proposed in this plan have been found compatible with purposes of the Refuge.

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