

MONTANA—PM<sub>2.5</sub>  
[24-hour NAAQS]

Designated area	Designation for the 1997 NAAQS <sup>a</sup>		Designation for the 2006 NAAQS <sup>a</sup>	
	Date <sup>1</sup>	Type	Date <sup>2</sup>	Type
Statewide:				
Ravalli County		Unclassifiable/Attainment		Unclassifiable/Attainment.

■ 5. In § 81.343, the “Tennessee—PM<sub>2.5</sub> (24-hour NAAQS)” table is amended by removing the designated area

“Knoxville, TN” and adding in its place “Knoxville-Sevierville-La Follette, TN” to read as follows:

§ 81.343 Tennessee.

\* \* \* \* \*

TENNESSEE—PM<sub>2.5</sub>  
[24-hour NAAQS]

Designated area	Designation for the 1997 NAAQS <sup>a</sup>		Designation for the 2006 NAAQS <sup>a</sup>	
	Date <sup>1</sup>	Type	Date <sup>2</sup>	Type
Knoxville-Sevierville-La Follette, TN.				

[FR Doc. 2011–2269 Filed 2–2–11; 8:45 am]  
BILLING CODE 6560–50–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2010–0057; 92220–1113–0000–C3]

RIN 1018–AX23

Endangered and Threatened Wildlife and Plants; Establishment of a Nonessential Experimental Population of Endangered Whooping Cranes in Southwestern Louisiana

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), will reintroduce whooping cranes (*Grus americana*) into historic habitat in southwestern Louisiana with the intent to establish a nonmigratory flock. We are designating this reintroduced population as a nonessential experimental population (NEP) under section 10(j) of the Endangered Species Act of 1973 (ESA), as amended. The geographic boundary of the NEP includes the entire State of Louisiana. The objectives of the reintroduction are: to advance recovery of the endangered

whooping crane; to implement a primary recovery action; to further assess the suitability of Louisiana as whooping crane habitat; and to evaluate the merit of releasing captive-reared whooping cranes, conditioned for wild release, as a technique for establishing a self-sustaining, nonmigratory population. The only natural wild population of whooping cranes remains vulnerable to extirpation through a natural catastrophe or contaminant spill, due primarily to its limited wintering distribution along the Texas gulf coast. If successful, this action will result in the establishment of an additional self-sustaining population, and contribute toward the recovery of the species. No conflicts are envisioned between the whooping crane’s reintroduction and any existing or anticipated Federal, State, Tribal, local government, or private actions such as agriculture-aquaculture-livestock practices, oil/gas exploration and extraction, pesticide application, water management, construction, recreation, trapping, or hunting.

DATES: This rule is effective February 3, 2011.

ADDRESSES: The complete administrative file for this rule is available for inspection, by appointment, during normal business hours at the Jacksonville Field Office, U.S. Fish and Wildlife Service, 7915 Baymeadows Way, Suite 200, Jacksonville, FL 32256–7517.

FOR FURTHER INFORMATION CONTACT: Bill Brooks, Jacksonville Field Office, U.S. Fish and Wildlife Service (904–731–3136, facsimile 904–731–3045), or Deborah Fuller, Lafayette Field Office, U.S. Fish and Wildlife Service (337–291–3100; facsimile 337–291–3139).

SUPPLEMENTARY INFORMATION:

Background

Previous Federal Actions

The whooping crane (*Grus americana*) was listed as an endangered species on March 11, 1967 (32 FR 4001). We have previously designated NEPs for whooping cranes in Florida (58 FR 5647, January 22, 1993); the Rocky Mountains (62 FR 38932, July 21, 1997); and the Eastern United States (66 FR 33903, June 26, 2001). On August 19, 2010, we proposed designating Louisiana as a NEP to reintroduce a nonmigratory population in southwestern Louisiana (75 FR 51223). See also “Recovery Efforts” below.

Legislative

Congress made significant changes to the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 *et seq.*), with the addition in 1982 of section 10(j), which provides for the designation of specific reintroduced populations of listed species as “experimental populations.” Under the ESA, species listed as endangered or threatened are afforded protection largely through the prohibitions of section 9 and the

requirements of section 7 and corresponding implementing regulations.

Section 7 of the ESA outlines the procedures for Federal interagency cooperation to conserve Federally listed species and protect designated critical habitats. Under Section 7(a)(1), all Federal agencies are mandated to determine how to use their existing authorities to further the purposes of the ESA to aid in recovering listed species. Section 7(a)(2) states that Federal agencies will, in consultation with the Service, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the ESA does not affect activities undertaken on private lands unless they are authorized, funded, or carried out by a Federal agency.

Under section 10(j), the Secretary of the Department of the Interior can designate reintroduced populations established outside the species' current range, but within its historical range, as "experimental." Section 10(j) is designed to increase our flexibility in managing an experimental population by allowing us to treat the population as threatened, regardless of the species' designation elsewhere in its range. A threatened designation allows us discretion in devising management programs and special regulations for such a population. Section 9 of the ESA prohibits the take of endangered species. "Take" is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Section 4(d) of the ESA allows us to adopt whatever regulations are necessary and advisable to provide for the conservation of a threatened species. When we promulgate a section 10(j) rule for a species, the general regulations that extend most section 9 prohibitions to threatened species do not apply as the 10(j) rule contains the prohibitions and exemptions necessary and appropriate to conserve that species.

Based on the best available information, we must determine whether experimental populations are "essential" or "nonessential" to the continued existence of the species. Both an experimental population that is essential to the survival of the species and an experimental population that is not essential to the survival of the species are treated as a threatened species. However, for section 7 interagency cooperation purposes, if a nonessential experimental population ("NEP") is located outside of a National

Wildlife Refuge or National Park, it is treated as a species proposed for listing.

For the purposes of section 7 of the ESA, in situations where an NEP is located within a National Wildlife Refuge or National Park, the NEP is treated as threatened, and all provisions of ESA section 7, including section 7(a)(1) and the consultation requirements of section 7(a)(2), apply.

When NEPs are located outside a National Wildlife Refuge or National Park Service unit, we treat the population as proposed for listing, and only two provisions of section 7 apply—section 7(a)(1) and section 7(a)(4). In these instances, NEPs provide additional flexibility because Federal agencies are not required to consult with us under section 7(a)(2). Section 7(a)(4) requires Federal agencies to confer (rather than consult) with the Service on actions that are likely to jeopardize the continued existence of a species proposed to be listed. The results of a conference are in the form of conservation recommendations that are optional as the agencies carry out, fund, or authorize activities. However, since an NEP is not essential to the continued existence of the species, it is very unlikely that we would ever determine jeopardy for a project impacting a species within an NEP. Regulations for NEPs may be developed to be more compatible with routine human activities in the reintroduction area.

Individuals used to establish an experimental population may come from a donor population, provided their removal is not likely to jeopardize the continued existence of the species, and appropriate permits are issued in accordance with our regulations (50 CFR 17.22) prior to their removal. We will ensure, through our section 10 permitting authority and the section 7 consultation process, that the use of individuals from donor populations for release is not likely to jeopardize the continued existence of the species in the wild.

#### *Biological Information*

The whooping crane is a member of the family Gruidae (cranes). It is the tallest bird in North America; males approach 1.5 meters (m) (5 feet (ft)) tall. In captivity, adult males average 7.3 kilograms (kg) (16 pounds (lb)) and females 6.4 kg (14 lbs). Adult plumage is snowy white except for black primary feathers, black or grayish alulae, sparse black bristly feathers on the carmine (red) crown and malar region (side of the head), and a dark gray-black wedge-shaped patch on the nape.

Adults are potentially long-lived. Current estimates suggest a maximum longevity in the wild of 32 years (Stehn, USFWS, 2010 pers comm.). Captive individuals are known to have survived 27 to 40 years. Mating is characterized as perennially monogamous (remaining paired for multiple years); however, new pair bonds can be formed following death or other interruptions in the pair bond. Fertile eggs are occasionally produced at age 3 years but more typically at age 4. Experienced pairs may not breed every year, especially when habitat conditions are poor. Whooping cranes ordinarily lay two eggs. They will renest if their first clutch is destroyed or lost before mid-incubation (Erickson and Derrickson 1981, p. 108; Kuyt 1981, p. 123). Although two eggs are laid, whooping crane pairs infrequently fledge two chicks (Canadian Wildlife Service and U.S. Fish and Wildlife Service 2007, p. 6). Approximately one of every four hatched chicks survives to reach the wintering grounds (U.S. Fish and Wildlife Service 1994, p. 14).

The whooping crane once occurred from the Arctic Sea to the high plateau of central Mexico, and from Utah east to New Jersey, South Carolina, and Florida (Allen 1952, p. 1; Nesbitt 1982, p. 151). In the 19th century, the principal breeding range extended from central Illinois northwest through northern Iowa, western Minnesota, northeastern North Dakota, southern Manitoba, and Saskatchewan to the vicinity of Edmonton, Alberta. There was also a nonmigratory population breeding in coastal Louisiana (Allen 1952, p. 28; Gomez 1992, p. 19).

Banks (1978, p. 1) derived estimates that there were 500 to 700 whooping cranes in 1870. By 1941, the migratory population contained only 16 individuals. The whooping crane population decline between these two estimates was a consequence of hunting and specimen collection, human disturbance, and conversion of the primary nesting habitat to hay, pastureland, and grain production (Allen 1952, p. 28; Erickson and Derrickson 1981, p. 108).

Allen (1952, pp. 18–40, 94) described several historical migration routes. One of the most important led from the principal nesting grounds in Iowa, Illinois, Minnesota, North Dakota, and Manitoba to coastal Louisiana. Other historic Gulf coast wintering locations included Mobile Bay in Alabama, and Bay St. Louis in Mississippi. A route from the nesting grounds in North Dakota and the Canadian Provinces went southward to the wintering areas of Texas and the Rio Grande Delta

region of Mexico. Another migration route crossed the Appalachians to the Atlantic Coast.

Gomez (1992, p. 19) summarized the literary references regarding whooping cranes in southwestern Louisiana. This summary included Olmsted's mention of an "immense white crane" on the prairies of Louisiana (1861, p. 31), Nelson (1929, pp. 146–147) reporting on wintering whooping cranes near Pecan Island, and McIlhenny (1938, p. 670) describing the small flock of resident cranes at Avery Island and speculating on the reasons for the species' decline. Simons (1937, p. 220) included a photograph; Allen (1950, pp. 194–195) and Van Pelt (1950, p. 22) recounted the capture of the last member of the Louisiana nonmigratory flock. Allen's whooping crane monograph (1952) is the main source on whooping crane ecology in southwest Louisiana.

Records from more interior areas include the Montgomery, Alabama, area; Crocketts Bluff on the White River, and a site near Corning in Arkansas; Missouri sites in Jackson County near Kansas City, in Lawrence County near Corning, southwest of Springfield in Audrain County, and near St. Louis; and Kentucky sites near Louisville and Hickman. It is unknown whether these records represent wintering locations, remnants of a nonmigratory population, or wandering birds.

#### *Status of Current Populations*

Whooping cranes currently exist in three wild populations and within a captive breeding population at 12 locations. The first population, and the only self-sustaining natural wild population, nests in the Northwest Territories and adjacent areas of Alberta, Canada, primarily within the boundaries of Wood Buffalo National Park. These birds winter along the central Texas Gulf of Mexico coast at Aransas National Wildlife Refuge (NWR) and adjacent areas (referred to later as the Aransas-Wood Buffalo population, or AWBP). From their nesting areas in Canada, these cranes migrate southeasterly through Alberta, Saskatchewan, and eastern Manitoba, stopping in southern Saskatchewan for several weeks in fall migration before continuing migration into the United States. They migrate through the Great Plains States of eastern Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas. The winter habitat extends 50 kilometers (km) (31 miles) along the Texas coast, from San Jose Island and Lamar Peninsula on the south to Welder Point and Matagorda Island on the north, and consists of estuarine marshes, shallow

bays, and tidal flats (Allen 1952, p. 127; Blankinship 1976, p. 384). Their spring migration is more rapid, and they simply reverse the route followed in fall. The AWBP flock is recovering from a population low of 15 or 16 birds in 1941. The natural AWBP flock was estimated to be around 500–700 individuals around 1870 and in 1944 it numbered 18 birds. This notable decline in numbers was due in large part to human related impacts like hunting and wetland loss. Through extensive protection and recovery efforts, the AWBP flock has slowly increased over time. In 2005, the population had 220 individuals. The population continues to grow with 247 cranes observed in the spring of 2009 and 263 in the spring of 2010. With 46 chicks fledging from a record high of 74 nests in August 2010, the flock size could reach a record level of around 285 whooping cranes in the spring of 2011.

The second population, the Florida Nonmigratory Population, is found in the Kissimmee Prairie area of central Florida (*see* Recovery Efforts section for further details on this population and the Eastern Migratory Population). Between 1993 and 2004, 289 captive-born, isolation-reared whooping cranes were released into Osceola, Lake, and Polk Counties in an effort to establish this nonmigratory flock. The last releases took place in the winter of 2004–2005. As of November 2010, only 21 individuals were being monitored, which included 8 pairs. Since the first nest attempt in 1999, there have been a total of 81 nest attempts, from which 37 chicks hatched and only 11 chicks successfully fledged. Problems with survival and reproduction, both of which have been complicated by drought, are the factors that led to the 2009 decision not to release additional whooping cranes into this population.

The third population of wild whooping cranes is referred to as the Eastern Migratory Population (EMP). The EMP has been established through reintroduction, and, with the November 2010 addition of 11 released whooping cranes, the population numbers 105 individuals. During the 2010 spring breeding season, all early nests of the season were abandoned, as have all first nests during the previous years. There were 12 nesting pairs in 2010; 5 of those pairs hatched 7 chicks, 2 pairs successfully fledged a chick. Nesting failure is currently the EMP's foremost concern. There is compelling evidence of a correlation between the presence of biting insects and nesting failure, suggesting that biting insects may play a role in nest abandonment (Stehn, USFWS, 2009 pers. com.).

The whooping crane also occurs in a captive-breeding population. The whooping crane captive-breeding program, initiated in 1967, has been very successful. The Service and the Canadian Wildlife Service began taking eggs from the nests of the wild population (AWBP) in 1967, and raising the resulting young in captivity. Between 1967 and 1998, program officials took 242 eggs from the wild to captive sites. Birds raised from those eggs form the nucleus of the captive flock (USFWS 2007, p. C–2). The captive-breeding population is now kept at five captive-breeding centers: Patuxent Wildlife Research Center in Patuxent, Maryland; the International Crane Foundation in Baraboo, Wisconsin; the Devonian Wildlife Conservation Center, Calgary Zoo, in Alberta, Canada; the Audubon Species Survival Center in New Orleans, Louisiana; and the San Antonio Zoo, Texas. The total captive population as of January 2010 stands near 150 birds in the captive-breeding centers and at other locations for display (Calgary Zoo in Alberta, Canada; Lowery Park Zoo in Tampa, Florida; Homosassa Springs State Wildlife Park in Homosassa, Florida; Jacksonville Zoo and Gardens in Jacksonville, Florida; Audubon Zoo in New Orleans, Louisiana; Milwaukee Zoo in Milwaukee, Wisconsin; and Sylvan Heights Waterfowl Park in Scotland Neck, North Carolina).

Whooping cranes adhere to ancestral breeding areas, migratory routes, and wintering grounds, leaving little possibility of pioneering into new regions. The only wild, self-sustaining breeding population can be expected to continue utilizing its current nesting location with little likelihood of expansion, except on a local geographic scale. The wintering area is expected to expand slowly north and south from Aransas along the Gulf Coast. This population remains vulnerable to extirpation from a natural catastrophe, a red tide outbreak, a contaminant spill, and sea level rise due primarily to its limited wintering distribution along the Gulf Intracoastal Waterway of the Texas coast. This waterway experiences some of the heaviest barge traffic of any waterway in the world. Much of the shipping tonnage is petrochemical products. An accidental spill could destroy whooping cranes, their habitat, and/or their food resources. With the only wild breeding population (AWBP) being vulnerable, it is urgent that additional wild self-sustaining populations be established.

There have been three reintroduction projects to date. Reintroduction using cross-fostering with sandhill cranes

(*Grus canadensis*) in the Rocky Mountains occurred during the period 1973–1988, and was discontinued due to excessive mortality and failure of the birds to pair and breed. No cranes remain in this population. The Florida nonmigratory population numbers 21 birds (9 males, 12 females). Only two pairs attempted to breed during the 2009 drought, and one pair fledged a chick. In 2010, there were nine nests and one pair fledged a chick. Currently, the EMP numbers 105 whooping cranes. Twelve pairs nested in 2010 and two pairs fledged a chick.

#### Recovery Efforts

The first recovery plan developed by the Whooping Crane Recovery Team (Recovery Team) was approved January 23, 1980. The first revision was approved on December 23, 1986; the second revision on February 11, 1994; and the third revision on May 29, 2007 (viewable at <http://www.fws.gov/ endangered/>). The short-term goal of the recovery plan, as revised, is to reclassify the whooping crane from endangered to threatened status. The criteria for attaining this reclassification goal are: (1) Achieving a population level of 40 nesting pairs in the AWBP; and (2) establishing two additional, separate, and self-sustaining populations consisting of 25 nesting pairs each. These new populations may be migratory or nonmigratory. If only one additional wild self-sustaining population is reestablished, then the AWBP must reach 100 nesting pairs and the new population must consist of 30 nesting pairs. If the establishment of two additional wild self-sustaining populations is not successful, then the AWBP must be self-sustaining and remain above 250 nesting pairs for reclassification to occur. The recovery plan recommends that these goals should be attained for 10 consecutive years before the species is reclassified to threatened.

In 1985, the Director-General of the Canadian Wildlife Service and the Director of the Service signed a memorandum of understanding (MOU) entitled “Conservation of the Whooping Crane Related to Coordinated Management Activities.” The MOU was revised and signed again in 1990, 1995, and 2001. It discusses disposition of birds and eggs, postmortem analysis, population restoration and objectives, new population sites, international management, recovery plans, consultation, and coordination. All captive whooping cranes and their future progeny are jointly owned by the Service and the Canadian Wildlife

Service. Consequently, both nations are involved in recovery decisions.

#### Reintroductions

In early 1984, pursuant to the Recovery Plan goals and the recommendation of the Recovery Team, potential whooping crane release areas were selected in the eastern United States. By 1988, the Recovery Team recognized that cross-fostering with sandhill cranes was not working to establish a migratory population in the Rocky Mountains. The term “cross-fostering” refers to the foster rearing of the whooping crane chicks by another species, the sandhill crane. The possibility of inappropriate sexual imprinting associated with cross-fostering, and the lack of a proven technique for establishing a migratory flock, influenced the Recovery Team to favor establishing a nonmigratory flock.

Studies of whooping cranes (Drewien and Bizeau 1977, pp. 201–218) and greater sandhill cranes (Nesbitt 1988, p. 44) have shown that, for these species, knowing when and where to migrate is learned rather than innate behavior. Captive-reared whooping cranes released in Florida were expected to develop a sedentary population. In summer 1988, the Recovery Team selected Kissimmee Prairie in central Florida as the area most suitable to establish a self-sustaining population. In 1993, the Florida Fish and Wildlife Conservation Commission (FWC) (formerly the Florida Game and Freshwater Fish Commission) began releasing chicks from the captive-breeding population in an attempt to establish a resident, nonmigratory flock. Eggs laid at the captive-breeding facilities were sent to the Patuxent Wildlife Research Center to be hatched and reared in isolation. The chicks were brought to Florida in the fall where they were “gentle released,” a technique that involves a protracted period of acclimation in a specially constructed release pen followed by a gradual transition to life on their own in the wild. This release methodology has helped to establish a wild resident nonmigratory flock of whooping cranes in central Florida.

In 1996, the Recovery Team decided to investigate the potential for another reintroduction site in the eastern United States, with the intent of establishing an additional migratory population as the third flock to meet recovery goals. Following a study of potential wintering sites (Cannon 1998, pp. 1–19), the Recovery Team selected the Chassahowitzka NWR/St. Martin’s Marsh Aquatic Preserve in Florida as the top wintering site for a new

migratory flock of whooping cranes. A detailed analysis was presented at the Recovery Team meeting in September 1999 (Cannon 1999, pp. 1–38), and the Recovery Team then recommended that releases for an EMP target central Wisconsin at Necedah NWR as the core breeding area, with the wintering site along the Gulf coast of Florida at the Chassahowitzka NWR.

In January 2001, the Recovery Team met at the Audubon Center for Research on Endangered Species in Belle Chasse, Louisiana. Highlights of the meeting included genetic management recommendations for the captive flock, an overflight of crane habitat in southwestern Louisiana, including the White Lake and Marsh Island areas, and the recommendation to proceed with a migratory reintroduction of whooping cranes in the eastern United States. Following the Recovery Team meeting, the Louisiana Crane Working Group was formed to help with research and information needed to assess the potential for releasing whooping cranes in Louisiana.

In the spring of 2001, eggs laid at the captive-breeding facilities were sent to the Patuxent Wildlife Research Center to be hatched and reared in the spring. The chicks were brought to the Necedah NWR in central Wisconsin in the early summer and were trained to fly behind ultralight aircraft by Operation Migration. In the fall of 2001, the Whooping Crane Eastern Partnership’s (WCEP) first historic whooping crane migration led by ultralights from central Wisconsin to the central Gulf coast of Florida was completed by Operation Migration. This release methodology has established a wild migrating flock of whooping cranes, with a core breeding/summering area at Necedah NWR in central Wisconsin and a primary wintering area in west-central Florida (Pasco and Citrus Counties and Paynes Prairie in Alachua County). Portions of this population also winter at Hiwassee Wildlife Refuge in central Tennessee, Wheeler NWR in northern Alabama, and the Ashpoo, Combahee, and South Edisto Basin (ACE Basin) in coastal South Carolina. Since 2005, additional captive chicks reared at the International Crane Foundation have been released directly into groups of older whooping cranes in central Wisconsin prior to the fall to follow older cranes during migration.

In 2004, the Florida FWC and the Recovery Team made the decision to postpone additional releases in the Florida nonmigratory flock. Between 1993 and 2004, program members released 289 captive-reared birds in an attempt to establish a Florida

nonmigratory flock. Problems with survival and reproduction, both of which have been complicated by drought, were considered major challenges for this flock. The Florida FWC postponed releases to focus their resources to study these issues.

In 2005, two members of the Recovery Team met with the Louisiana Department of Wildlife and Fisheries (DWF) and the Louisiana Crane Working Group to develop a plan to investigate the feasibility of a whooping crane reintroduction in Louisiana. In February 2007, a Recovery Team meeting was held in Lafayette, Louisiana, to assess the status of whooping crane recovery efforts. This meeting included updates and recovery action recommendations for the AWBP, Florida, and EMP populations. In addition, the Recovery Team also came to Louisiana to further evaluate the interest in releasing whooping cranes in Louisiana. A preliminary assessment of the habitat for a resident nonmigratory flock and wintering habitat for a migratory flock was conducted during field visits to White Lake and Marsh Island. The Recovery Team endorsed a plan that could lead to a reintroduction of whooping cranes in Louisiana. The Recovery Team recommended that the Louisiana Cooperative Fish and Wildlife Research Unit of the U.S. Geological Survey conduct a habitat assessment and food availability study at White Lake as a potential release area for a nonmigratory population and Marsh Island as a potential wintering area for a migratory flock of whooping cranes. Additional research on sandhill crane migration patterns for cranes that winter in Louisiana was also recommended. The Recovery Team also requested the Whooping Crane Health Advisory Team prepare a report on the potential health risks if whooping cranes reintroduced into Louisiana were to mix with cranes in the AWBP.

In 2008, scientists from Florida FWC and major project partners conducted a workshop to assess the current status and potential for success of establishing the resident nonmigratory population of whooping cranes in Florida. The Recovery Team used the workshop findings and other considerations, and in 2009 recommended there be no further releases into the Florida flock. The water regimes produced by periodic droughts in Florida make it extremely unlikely that reproduction in wild-hatched Florida whooping cranes will ever achieve production rates adequate for success. The Florida FWC continues to study and monitor the remaining nonmigratory whooping cranes to gather

information that may prove valuable for future recovery efforts.

Nesting failure is currently the foremost concern with the EMP. WCEP's nest monitoring efforts and additional studies in 2009 and 2010 have provided compelling but inconclusive evidence of the presence of biting insects at the nests as a contributing factor to nest abandonment.

In August of 2009, the Service met with the Louisiana DWF to discuss establishing a possible resident nonmigratory population of whooping cranes in Louisiana. In April 2010, the U.S. representatives of the Recovery Team met with Louisiana DWF at the White Lake Wetlands Conservation Area (WLWCA) to discuss the proposed reintroduction in southwestern Louisiana. This meeting included an aerial overflight of southwestern Louisiana and an airboat tour of the potential crane habitat and release area at the WLWCA. In a June 17, 2010, letter to the Louisiana DWF, the Recovery Team endorsed a reintroduction of nonmigratory whooping cranes into their historic range at White Lake, Louisiana.

#### *Objectives of the Reintroduction*

The objectives of this reintroduction into Louisiana are to: (1) Advance recovery of the endangered whooping crane; (2) implement a primary recovery action for the whooping crane; (3) further assess the suitability of southwestern Louisiana as whooping crane habitat; and (4) evaluate the suitability of releasing captive and parent-reared whooping cranes, conditioned for wild release, as a technique for establishing a self-sustaining, nonmigratory population. Information on survival of released birds, movements, behavior, causes of losses, reproductive success, and other data will be gathered throughout the project. This reintroduction project's progress will be evaluated annually.

The likelihood of the releases resulting in a self-sustaining population is believed to be good. Whooping cranes historically occurred in Louisiana in both a resident nonmigratory flock and a migratory flock that wintered in Louisiana. The White Lake area is the location where whooping cranes were historically documented raising young in Louisiana (Gomez 1992, p. 20). The minimum goal for numbers of cranes to be released annually is based on the research of Griffith *et al.* (1989, pp. 477–480). If results of this initial planned release are favorable, releases will be continued with the goal of releasing up to 30 whooping cranes annually for about 10 years. For a long-lived species

like the whooping crane, continuing releases for a number of years increases the likelihood of reaching a population level that can persist under fluctuating environmental conditions. The rearing and release techniques to be used have proven successful in releasing whooping cranes into Florida and supplementing the wild population of the endangered Mississippi sandhill crane (*Grus canadensis pulla*).

We may select additional release sites later during the efforts to reintroduce nonmigratory whooping cranes to Louisiana to reduce the risk of catastrophic loss of the population. Additional release sites could also increase the potential breeding range in Louisiana. Multiple release areas may increase the opportunity for successful pairing, because females tend to disperse from their natal site when searching for a mate. Males, however, have a stronger homing tendency toward establishing their nesting territory near the natal area (Drewien *et al.* 1983, p. 9). When captive-reared birds are released at a wild location, the birds may view the release site as a natal area. If they do, females would likely disperse away from the release area in their search for a mate. Therefore, it may be advantageous to have several release sites to provide a broader distribution of territorial males. As a result, it is possible that we will pursue future releases at additional sites. These additional sites would be selected based on the observed dispersal patterns of birds from the initial releases.

The Louisiana DWF discussed this proposed experimental population with the Mississippi Flyway Council. The Service discussed this proposed experimental population with the Central Flyway Council. During that discussion, the Texas Parks and Wildlife Department representative expressed interest in having counties in Texas included as part of the area for this proposed nonessential experimental population, in order to avoid possible closures of waterfowl hunting if whooping cranes from the proposed experimental population were to wander into the area. However, this regulation does not include any Texas counties because the Service believes that the winter range expansion of the endangered AWBP along the Texas Gulf Coast is an essential aspect of achieving recovery of the species and that it would be a rare event for a Louisiana nonmigratory whooping crane to disperse into east Texas. The Service and Louisiana DWF coordinated with the Mississippi, Central, and Atlantic Flyway Councils and adjacent State wildlife agencies by sending them the

proposed rule during the public comment period and by contacting the Texas Parks and Wildlife Department to obtain additional input on the potential reintroduction of a nonmigratory whooping crane population in southwestern Louisiana. The Louisiana DWF also made presentations and facilitated discussions with numerous organizations and potentially affected interest groups and government representatives in southwestern Louisiana.

In addition, Louisiana DWF and the Service coordinated, both formally and informally, with constituents related to the nonmigratory NEP. All were asked to provide comments on this proposed rule.

An extensive sharing of information about the effort to reintroduce a nonmigratory flock to Louisiana and the species itself, via educational efforts targeted toward the public throughout the NEP area, will enhance public awareness of this species and its reintroduction. We will encourage the public to cooperate with the Service and Louisiana DWF in attempts to maintain and protect whooping cranes in the release area.

#### *Reintroduction Protocol*

We will conduct an initial gentle-release of juvenile whooping cranes in the WLWCA in Vermilion Parish, Louisiana. These birds will be captive or parent-reared at one of the captive-rearing facilities, then transferred to facilities at the Louisiana release site and conditioned for wild release to increase post-release survival (Zwank and Wilson 1987, p. 166; Ellis *et al.* 1992b, p. 147; Nesbitt *et al.* 2001, p. 62) and adaptability to wild foods. Before release, the cranes will be banded for identification purposes. At the time of release, they will be tagged with radio and/or GPS solar-powered satellite transmitters at release, so that they can be monitored to discern movements, habitat use, other behavior, and survival rate. Numbers of birds available for release will depend on production at captive-propagation facilities and the future need for additional releases into the EMP. The Species Survival Center in New Orleans has received Federal funding to construct additional whooping crane breeding pens so that additional whooping crane eggs produced for release can come from Louisiana.

Captive-reared cranes are conditioned for wild release by being reared in isolation from humans, by use of conspecific role models (puppets), and by exercising with animal care personnel in crane costumes to avoid

imprinting on humans (Horwich 1989, pp. 380–384; Ellis *et al.* 1992a, pp. 137–138; Urbanek and Bookhout 1992, pp. 122–123). This technique has been used to establish a population of nonmigratory whooping cranes in Florida (Nesbitt *et al.* 2001, pp. 62–63). This technique has also been successful in supplementing the population of endangered nonmigratory Mississippi sandhill cranes in Mississippi (Zwank and Wilson 1987, p. 165; Ellis *et al.* 1992b, p. 147). Facilities for captive maintenance of the birds will be modeled after facilities at the Patuxent Wildlife Research Center and the International Crane Foundation and will conform to standards set forth in the Animal Welfare Act regulations (9 CFR) and Louisiana Wildlife Code. To further ensure the well-being of birds in captivity and their suitability for release to the wild, facilities will incorporate features of their natural environment (*e.g.*, feeding, loafing, and roosting habitat) to the extent possible. The gentle release-conditioning pens will be similar to those used successfully to release whooping cranes in the Florida and EMP populations, as well as release of Mississippi sandhill cranes. Pens help young, naive birds acclimate to their surroundings, provide a degree of protection against predation, and facilitate supplementing food resources if needed. Pre-release conditioning will occur at facilities near the release site.

Since migration is a learned rather than an innate behavior, captive-reared whooping cranes released in Louisiana will likely adhere to their release area rather than disperse into new regions. There have been 289 whooping cranes released and 11 fledged in Florida between 1993 and 2010, with a current population of 21. Sixteen Florida nonmigratory whooping cranes have been documented in five States other than Florida; seven returned to the reintroduction area within 7 months, and nine were not seen again (Folk *et al.* 2008, pp. 7–12). These dispersals generally occurred in spring and summer during times of severe drought.

#### *Reintroduced Population*

In 2001, we designated the State of Louisiana as part of the Eastern Migratory Population NEP geographic area where whooping cranes within the NEP boundary are nonessential experimental. With this regulation, we clarify that the reintroduced nonmigratory flock of whooping cranes in southwestern Louisiana are also considered a NEP according to the provisions of section 10(j) of the ESA. This designation is justified, because no adverse effects to extant wild or captive

whooping crane populations will result from release of progeny from the captive flock. We also have a reasonable expectation that the reintroduction effort into Louisiana will result in the successful establishment of a self-sustaining, resident, nonmigratory flock, which will contribute to the recovery of the species. The special rule is expected to ensure that this reintroduction is compatible with current or planned human activities in the release area.

We have concluded that this experimental population of nonmigratory birds is not essential to the continued existence of the whooping crane for the following reasons:

(a) The AWBP and the captive populations currently are the primary species populations. With approximately 150 birds in captivity at 12 discrete sites (5 main facilities and 7 other locations), and approximately 250 birds in the AWBP, the experimental population is not essential to the continued existence of the species. The species has been protected against the threat of extinction from a single catastrophic event by gradual recovery of the AWBP and by an increase in the numbers and management of the cranes at the captive sites.

(b) The primary repository of genetic diversity for the species is the approximately 400 wild and captive whooping cranes mentioned in (a) above. The birds selected for reintroduction purposes will be as genetically redundant as possible with the captive population; hence, any loss of reintroduced animals in this experiment will not significantly impact the goal of preserving maximum genetic diversity in the species.

(c) Any birds lost during the reintroduction attempt can be replaced through captive breeding. This illustrates the potential of the captive flock to replace individual birds that are released in reintroduction efforts. Levels of production are expected to be sufficient to support both this reintroduction and continued releases into the EMP. Production from the extant captive flock, with approximately 30 juveniles available annually, is already large enough to support wild releases.

The hazards and uncertainties of the reintroduction experiment are substantial, but a decision not to attempt to utilize the existing captive-breeding potential to establish an additional, wild, self-sustaining population would be equally hazardous to survival of the species in the wild. The AWBP could be lost as the result of a catastrophic event or a contaminant

spill on the wintering grounds; such a loss would necessitate management efforts to establish an additional wild population. The recovery plan identifies the need for three self-sustaining wild populations—consisting of 40 nesting pairs in the AWBP and 2 additional, separate and self-sustaining populations consisting of 25 nesting pairs each—to be in existence before the whooping crane can be considered for reclassification to threatened status.

Due to the survival and reproductive issues faced by the Florida Nonmigratory Population, it is extremely unlikely that reproduction in wild-hatched Florida whooping cranes will ever achieve production rates adequate for success. If reproductive issues can be overcome, the EMP has the potential to become the second self-sustaining wild population needed to move toward recovery. Establishing a Louisiana nonmigratory flock as the third population has become a recovery priority. Whooping cranes historically occurred in Louisiana in both a resident nonmigratory flock and a migratory flock that wintered in Louisiana. The release area, White Lake, is the location where whooping cranes were historically documented raising young in Louisiana (Gomez 1992, p. 20). If this reintroduction effort is successful, conservation of the species will have been furthered considerably by establishing another self-sustaining population in currently unoccupied habitat. Because establishment of other populations has not yet been entirely successful, establishing a Louisiana nonmigratory flock will also demonstrate that captive-reared cranes can be used to establish a nonmigratory wild population.

#### *Location of Reintroduced Population*

##### Release Area

The release site, WLWCA, encompasses part of the area historically occupied by a nonmigratory breeding population of whooping cranes (Allen 1952, p. 30; Gomez 1992, p. 19). The WLWCA (formerly known as the Standolind Tract), located in Vermilion Parish, was owned and managed by BP America Production White Lake (BPWL) until 2002, when BPWL donated the property to the State of Louisiana. At that time a cooperative Endeavor Agreement between the State of Louisiana and White Lake Preservation Inc., was executed for management of the property. In 2005, according to the terms of that agreement, the Louisiana DWF received total control for management of this area. BP retained the mineral rights to WLWCA.

The WLWCA is located within the Mermentau Basin, along the north shore of White Lake, in southwestern Louisiana. Natural drainage within the basin has been interrupted by manmade features. The major source of hydrological change in this basin has been the conversion of two estuarine lakes (Grand and White Lakes) into freshwater reservoirs for agricultural (rice) irrigation in the surrounding areas. There are several large areas of public ownership in the general vicinity. The WLWCA is located approximately 11 km (7 mi) north of the State-owned Rockefeller Wildlife Refuge and Game Preserve (30,773 hectares (76,042 acres)) and approximately 32 km (20 mi) east of Cameron Prairie NWR (3,893 ha (9,621 ac)). The area north of WLWCA is primarily used for agriculture, although it was historically the panicum (paille fine) freshwater marshes that Allen (1952, p. 30) reported as being used by whooping cranes. Nonagricultural areas surrounding WLWCA consist of brackish to intermediate marshes, privately owned and primarily used for waterfowl hunting.

WLWCA comprises approximately 28,722 contiguous ha (70,970 ac) and is divided into several management units. Approximately 7,690 ha (19,000 ac) are in agricultural use, primarily in the northeastern portion (Management Units A and F), and the rest of the area is wetlands. The wetland portions are nearly bisected by Florence Canal (Gomez 1992, p. 21). Approximately 12,100 ha (29,900 ac) east of Florence Canal (Management Unit B) consist of maidencane (*Panicum hemitomon*) marsh, and water levels are passively managed. The wetland areas west of Florence Canal (Management Units E and C) were formerly a sawgrass (*Cladium jamaicense*) marsh (until a die-off in the late 1950s) and now consist of bulltongue (*Sagittaria sp.*) (Gomez 1992, p. 21). Water levels are actively managed using pumps on approximately 1,944 ha (4,805 ac) (Unit C).

The release site (Unit C—inadvertently labeled as “Unit E” in the proposed rule) consists of approximately 1,944 ha (4,805 ac) of wetlands on which the Louisiana DWF actively manages water level using pumps and weirs. Water level management consists of providing habitat for wintering waterfowl and other migratory bird species by gradual flooding in the fall, with the deepest water (0.61 to 0.76 m (2 to 2.5 ft)) generally occurring at the western end. The area is kept flooded for approximately 6 weeks and then drawn

down in the spring. Louisiana DWF will manage this unit to benefit both waterfowl and whooping cranes. Louisiana DWF has also recently received a grant for a habitat restoration project for a 900-ac area adjacent to Unit C; the area will be managed specifically for whooping cranes. Boat traffic occurs in the Florence Canal (the eastern border of this unit). Limited controlled waterfowl hunting occurs on the WLWCA. Occasional controlled nonconsumptive activities (e.g., boating) periodically occur within Unit C in the spring and summer. The Louisiana DWF has facilities adjacent to WLWCA where monitoring personnel would be housed.

Section 10(j) of the ESA requires that an experimental population be geographically separate from other populations of the same species. The NEP area already identified in the eastern United States for the EMP (66 FR 33903) includes Louisiana. The NEP area for the nonmigratory whooping cranes released in this reintroduction project is the State of Louisiana. The expectation is that most whooping cranes will be concentrated within wetlands at and nearby the proposed release site in Vermilion Parish. Long-term dispersal within the Louisiana nonmigratory NEP area may include areas in Acadia, Calcasieu, Cameron, Jefferson Davis, and Lafayette Parishes. The fresh water marshes and wetlands of southwestern Louisiana are expected to receive occasional use by the cranes and may be used in the event of future population expansion. However, any whooping crane found within Louisiana will be considered part of the nonessential experimental population. Although experience has shown that most birds show an affinity to the release area after gentle release, it is impossible to predict where individual whooping cranes may disperse following release within the project area. A vast majority of the whooping cranes released within Florida stayed within the NEP. Since 1993, of the 300 individuals that have been released or fledged in the wild in the Florida nonmigratory population, 16 have been documented outside of Florida; 7 returned to the reintroduction area within 7 months, and 9 were not seen again. One pair is known to have traveled to Illinois and Michigan during the severe drought of 2000 and a second pair dispersed to Virginia, but surviving members of the pairs returned to the core reintroduction area in Florida. These dispersals generally occurred during the spring and summer, during times of severe drought. Designation of the Louisiana nonmigratory NEP allows

for the possible occurrence of cranes in a larger area of Louisiana.

Released whooping cranes might wander into the eastern counties of Texas adjacent to the expected dispersal area and outside the Louisiana NEP area. We believe the frequency of such movements is likely to be very low. Any whooping cranes that leave the Louisiana NEP area but remain in the eastern United States NEP will still be considered as experimental nonessential. Any whooping crane that leaves the Louisiana and eastern United States NEP areas will be considered endangered. In the rare event of a whooping crane moving outside the Louisiana and EMP NEP areas, including those that move into eastern Texas, attempts will be made to capture and return them to the appropriate area if removal is requested by the State which they enter or if a reasonable possibility exists for contact with the AWBP.

Birds from the AWBP flock have never been observed in Louisiana, and have rarely been observed in any of the States within the eastern United States NEP area, except as a result of an extreme weather event. They are not expected to be found in the Louisiana NEP. Prior to adoption of this rule, any whooping cranes from the AWBP flock that crossed into Louisiana would have been considered part of the EMP NEP and would have been subject to a reduced level of protection. Since no AWBP birds have been shown to move into Louisiana, we have not found this to have an adverse impact on the natural wild flock. Any whooping cranes that occur within the LA NEP area will be considered part of the NEP, and will be subject to the protective measures in place for the NEP. We have not found this situation to have an adverse impact to the AWBP.

Whooping cranes released in southwestern Louisiana are not expected to interact with the AWBP flock along the Texas coast, as Aransas NWR is approximately 482 km (285 miles) southwest of the release area. However, if the Recovery Team considers having EMP whooping cranes winter in Louisiana, some interaction between EMP migratory and Louisiana nonmigratory cranes would be expected to occur. The possibility that individual birds from either flock would acquire either migratory or nonmigratory behavior through association, especially if pairs form between members of the different populations, is not likely. Research with sandhill cranes in Florida has shown that migratory and nonmigratory populations mix during winter and yet maintain their own

migratory and nonmigratory behaviors. The same holds true for whooping cranes. Individuals of the Florida nonmigratory population and the EMP have associated during the winter; however, the two flocks have remained discrete and each represents a separate population as specified in the Recovery Plan (Canadian Wildlife Service and USFWS 2007, p. xii). As such, while the levels of protection are the same, the two populations may be managed differently.

#### Management

##### a. Monitoring

Whooping cranes will be intensively monitored by Louisiana DWF and other personnel prior to and after release. The birds will be observed daily while they are in the gentle-release/conditioning pen.

To ensure that we know the localities of the released birds, each crane will be equipped with a legband-mounted radio transmitter and/or a solar-powered GPS satellite transmitter. Subsequent to being gently released, the birds will be monitored regularly to assess movements and dispersal from the area of the release pen. Whooping cranes will be checked regularly for mortality or indications of disease (listlessness, social exclusion, flightlessness, or obvious weakness). Social behavior (e.g., pair formation, dominance, cohort loyalty) and habitat use will also be evaluated.

A voucher blood serum sample will be taken for each crane prior to its arrival in Louisiana. A second sample will be taken just prior to release. Any time a bird is handled after release into the wild (e.g., when recaptured to replace transmitters), samples may be taken to monitor disease exposure, contaminant exposure, and physiological condition. One year after release, if possible, all surviving whooping cranes may be captured and an evaluation made of their exposure to disease/parasites/contaminants through blood, fecal, and other sampling regimens. If preliminary results are favorable, the releases will be continued annually, with the goal of releasing up to 30 birds per year for about 10 years and then evaluating the success of the recovery effort.

##### b. Disease/Parasite Considerations

A possible disease concern has been the probable presence of Infectious Bursal Disease (IBD) in the Central Flyway. Progress has been made on determining whether IBD is likely to affect whooping cranes. An IBD-like virus was isolated from an AWBP

juvenile whooping crane that died at Aransas in February 2009. The U.S. Geological Survey's National Wildlife Health Center is studying this virus to classify it more precisely. Blood samples from sandhill cranes collected on the Platte River, Nebraska, in March 2009 found that 12 of 19 had antibodies to IBD. It appears that sandhill cranes and whooping cranes have been exposed to IBD in the Central Flyway, and that whooping cranes are likely not seriously affected by IBD. Thus, it is unlikely that the reintroduction of whooping cranes into Louisiana poses any significant risk to the AWBP whooping cranes in regard to transfer of IBD.

Both sandhill and whooping cranes are also known to be vulnerable, in part or all of their natural range, to avian herpes (inclusion body disease), avian cholera, acute and chronic mycotoxicosis, eastern equine encephalitis (EEE), and avian tuberculosis. Additionally, *Eimeria* spp., *Haemoproteus* spp., *Leucocytozoon* spp., avian pox, and *Hexamita* spp. have been identified as debilitating or lethal factors in wild or pre-release captive populations.

A group of crane veterinarians and disease specialists have developed protocols for pre-release and pre-transfer health screening for birds selected for release to prevent introduction of diseases and parasites. Exposure to disease and parasites will be evaluated through blood, serum, and fecal analysis of any individual crane handled post-release or at the regular monitoring interval. Remedial action will be taken to return to good health any sick individuals taken into captivity. Sick birds will be held in special facilities and their health and treatment monitored by veterinarians. Special attention will be given to EEE, because an outbreak at the Patuxent Wildlife Research Center in 1984 killed 7 of 39 whooping cranes present there. After the outbreak, the equine EEE vaccine has been used on captive cranes. In 1989, EEE was documented in sentinel bobwhite quail and sandhill cranes at the Patuxent Wildlife Research Center. No whooping cranes became ill, and it appears the vaccine may provide protection. EEE is present in Louisiana, so the released birds may be vaccinated. Other encephalitis diseases have not been documented as occurring or causing morbidity or mortality in cranes.

When appropriate, other avian species may be used to assess the prevalence of certain disease factors. This could mean using sentinel turkeys for ascertaining exposure probability to encephalitis or



evaluating a species with similar food habits for susceptibility to chronic mycotoxicosis.

#### c. Genetic Considerations

The ultimate genetic goal of the reintroduction program is to establish wild reintroduced populations that possess the maximum level of genetic diversity available from the captive population. The Service will continue to use genetic information and advances in conservation biology to effectively manage flock genetics. The Service and Louisiana DWF will adopt and implement a genetics management plan for the LA NEP. Ensuring balanced sex ratios and genetics will assist the Louisiana Nonmigratory Population in getting an early start on success. To the extent practicable, the plan will also take into account the release histories of the different lineages and their success as wild whooping cranes.

#### d. Mortality

Although efforts will be made to minimize mortality, some will inevitably occur as captive-reared birds adapt to the wild. Potential predators of adult and young whooping cranes include bobcats, coyotes, bald eagles, and alligators. Red fox, owls, and raccoons are also potential predators of young cranes. Collisions with power lines and fences are known hazards to wild whooping cranes. If whooping cranes begin regular use of areas traversed by power lines or fences, the Service and Louisiana DWF will consider placing markers on the obstacles to reduce the probability of collisions.

Recently released whooping cranes will need protection from natural sources of mortality (predators, disease, and inadequate foods) and from human-caused sources of mortality. Natural mortality will be reduced through pre-release conditioning, gentle release, supplemental feeding for a post-release period, vaccination, and predator control. Predator control conditioning will include teaching young cranes the habit of roosting in standing water. Predation by bobcats has been a significant source of mortality in the Eastern Migratory and Florida nonmigratory flocks, and teaching appropriate roosting behavior to young birds will help to reduce losses to coyotes and bobcats. We will minimize human-caused mortality through a number of measures such as: (a) Placing whooping cranes in an area with low human population density and relatively low development; (b) working with and educating landowners, land managers, developers, and

recreationalists to develop means for conducting their existing and planned activities in a manner that is compatible with whooping crane recovery; and (c) conferring with developers on proposed actions and providing recommendations that will reduce any likely adverse impacts to the cranes. As mentioned above in "Monitoring," the whooping cranes will be closely monitored as the reintroduction effort progresses. We will work closely with Louisiana DWF and local landowners in monitoring and evaluating the reintroduction effort and in adaptively managing any human-caused mortality issues that arise.

#### e. Special Handling

Service employees, Louisiana DWF employees, and their agents are authorized to relocate whooping cranes to avoid conflict with human activities; relocate whooping cranes that have moved outside the appropriate release area or the NEP area when removal is necessary or requested; relocate whooping cranes within the NEP area to improve survival and recovery prospects; and aid cranes that are sick, injured, or otherwise in need of special care. If a whooping crane is determined to be unfit to remain in the wild, it will be returned to captivity. Service employees, Louisiana DWF, and their agents are authorized to salvage dead whooping cranes.

#### f. Potential Conflicts

In the central and western United States, conflicts have resulted from the hunting of migratory birds in areas utilized by whooping cranes, particularly the hunting of sandhill cranes and snow geese (*Chen cerulescens*), because novice hunters may have difficulty distinguishing whooping cranes from those species. During the past 10 years, three crane mortalities have been documented incidental to hunting activities. In Louisiana, snow geese are hunted; however, sandhill cranes are not. Accidental shooting of a whooping crane in this experimental population occurring in the course of otherwise lawful hunting activity is exempt from take restrictions under the ESA in this special regulation. Applicable Federal penalties under the Migratory Bird Treaty Act and/or State penalties, however, may still apply. There will be no Federally mandated hunting area or season closures or season modifications for the purpose of protecting whooping cranes in the nonmigratory flock. We will minimize mortality due to accidental shootings by providing educational opportunities and information to hunters to assist them in

distinguishing whooping cranes from other legal game species.

The bulk of traditional hunting in the WLWCA release area has been for waterfowl and migratory bird species, turkey (*Meleagris gallopavo*), deer (*Odocoileus virginianus*), and small game. Conflict with traditional hunting in the release area is not anticipated. Access to some limited areas at release sites and at times when whooping cranes might be particularly vulnerable to human disturbance (*i.e.*, at occupied nesting areas) may be temporarily restricted. Any temporary restricted access to areas for these purposes will be of the minimum size and duration necessary for protection of the NEP cranes, and will be closely coordinated with the Service and at the discretion of Louisiana DWF. Any such access restrictions will not require Federal closure of hunting areas or seasons.

The Louisiana DWF will maintain its management authorities regarding the whooping crane. It is not directed by this rule to take any specific actions to provide any special protective measures, nor is it prevented from imposing restrictions under State law, such as protective designations, and area closures. Louisiana DWF has indicated that it would not propose hunting restrictions or closures related to game species because of the whooping crane reintroduction.

Overall, the presence of whooping cranes is not expected to result in constraints on hunting of wildlife or to affect economic gain landowners might receive from hunting leases. The potential exists for future hunting seasons to be established for other migratory birds that are not currently hunted in Louisiana. This action will not prevent the establishment of future hunting seasons approved for other migratory bird species by the Central and Mississippi Flyway Councils.

The principal activities on private property adjacent to the release area are agriculture, aquaculture, oil and gas exploration and extraction, water level management as part of coastal restoration projects, and recreation. Use of these private properties by whooping cranes will not preclude such uses.

Offshore oil exploration and extraction activities, as well as the Deepwater Horizon/MC252 Oil Spill and cleanup, have not affected the release area. The release area is in a fresh to brackish marsh system. The WLWCA is also located over 200 miles from the Deepwater Horizon oil spill release site and 17 miles north of the Gulf of Mexico shoreline. Additionally, there are multiple physical barriers to stop crude oil from entering WLWCA,

such as the Gulf of Mexico beach rim, levees, water control structures, locks, and spill control equipment. The nearest location that was affected by the spill was Marsh Island, which is 45 miles (72 km) away. The special regulation accompanying this rule only authorizes take of the whooping crane in the NEP area when the take is accidental and incidental to an otherwise lawful activity. Inland oil and gas exploration and extraction activities associated with mineral rights will continue to be managed by existing Federal and State environmental rules and regulations. As described earlier, migration is a learned behavior in whooping cranes, and we do not anticipate that released birds will disperse to areas close to the coastline. We will be monitoring the locations of the birds via transmitter to ensure the health and safety of each individual.

An additional issue identified as a possible conflict is the potential for crop depredation. There is evidence that some sandhill cranes have caused losses of emerging corn in Wisconsin (Blackwell *et al.*, 2001, p. 67) and Florida. It is possible that whooping cranes could engage in this type of behavior on planted crops in Louisiana as well. However, whooping cranes are socially less gregarious than sandhill cranes, and tend to restrict the bulk of their foraging activities to wetland areas. Therefore, they are believed to be less likely to cause significant crop depredations.

Whooping cranes are known to use ranchlands and pasture, but with no known impacts to cattle operation practices. Among the primary sandhill and whooping crane habitats in Florida are ranchlands and pastures associated with cattle operations (Nesbitt and Williams, 1990, p. 95). AWBP whooping cranes are also known to utilize the cattle ranchlands adjacent to Aransas National Wildlife Refuge as wintering habitat (Canadian Wildlife Service and USFWS 2007, p. 14). We do not anticipate that the presence of whooping cranes on ranchlands or pastures in Louisiana would cause any impacts to cattle operations.

Like other wading bird species, whooping cranes will forage along lake and pond edges, and may forage along the edges of ponds used for crawfish production, but this is not likely to cause significant stock depredations on crawfish. However, water levels of crawfish ponds are lowered at certain times for management purposes. Lowering of water depths, called drawdowns, do attract large numbers of wading birds as aquatic organisms become concentrated and vulnerable to

depredation during the lower water depths. If such depredations occur due to whooping cranes, they can be minimized through use of bird-scaring devices and other techniques. Therefore, we do not expect that whooping cranes will pose a significant threat of stock depredation to crawfish. Another concern is that whooping cranes may choose to nest in an area with an ongoing crawfish operation. If whooping cranes nest in such a situation, it would indicate that those birds have acclimated to those activities and it is anticipated that the activities would not likely impact a nesting attempt.

If whooping cranes use national wildlife refuges in Louisiana, the management programs on the refuges will continue as identified in the individual refuges' approved comprehensive conservation plans, step-down management plans, and annual work plans, and via customary and traditional accouterments. Activities of existing mineral rights owners, which include exploration, mining, marketing, and production, will continue to be managed by the Service in accordance with existing refuge special-use permit conditions currently used for the protection of migratory birds. All other mineral operations will further be managed in accordance with approved Comprehensive Conservation Plans.

Under the existing rules currently in place for the protection of all fish and wildlife, including the numerous wading birds and other migratory birds in the Louisiana coastal zone, mineral exploration and extraction activities on private and/or State-owned lands can continue without additional impacts from the presence of reintroduced birds. Whooping cranes, like other wading birds, will flush due to close proximity of helicopters or airboats. Current practices by private, State, and Federal land managers will minimize unnecessary harassment of all wildlife during such activities.

This reintroduction effort will gentle-release captive-born, isolation-reared whooping crane chicks at WLWCA in Vermilion Parish in an attempt to establish a resident nonmigratory population of whooping cranes in Louisiana. It will be difficult to predict which specific sites will be utilized by the birds, and some cranes may use habitats with which they have no previous experience. Whooping cranes that appear in undesirable locations will be considered for relocation by capture and/or hazing of the birds. Possible conflicts with hunting, recreation, agriculture, aquaculture, oil and gas exploration/extraction, and water

management interests within the release area will be minimized through an extensive public education program.

### Summary of Comments and Recommendations

In the August 19, 2010, proposed rule (75 FR 51223), we requested comments or recommendations concerning any aspect of the proposal and the accompanying draft Environmental Assessment (EA) that might contribute to development of the final decision on the proposed rule. A 60-day comment period was provided. We sent copies of the rule and other informational materials about the project to State and Federal agencies, Congressional representatives, Tribes, Flyway Councils, conservation groups, hunting groups, and numerous private citizens who may be affected or had expressed an interest in receiving further information on the project. In accordance with our policy on peer review, published on July 1, 1994 (59 FR 34270), we also provided copies of this proposed rule to three or more appropriate independent reviewers.

*Changes resulting from public comments:* As the result of comments received, we have changed several sections of the preamble in this final rule to update information, add new information, and clarify important points. However, we are not making any changes to the text for 50 CFR 17.84(h) from what we had published in our proposed rule of August 19, 2010 (75 FR 51223).

We held two public hearings to receive comments on the proposed rule. One hearing was held at the Gueydan Community Center, Gueydan, Vermilion Parish, Louisiana, the largest community (population 1,591) nearest to the proposed release site. The second hearing was held at the Louisiana Department of Wildlife and Fisheries Headquarters in Baton Rouge, Louisiana. We received 19 comments on the proposed rule at the public hearings and 19 written comments on the proposed rule and/or the draft EA. We also received 23,210 electronic mail form letters from the membership of a conservation organization; 9 of those responses included additional personal comments. Overall, comments came from individuals, conservation organizations, a hunting/conservation organization, a private corporation, and a State wildlife agency. Peer review included a State agency avian biologist and two independent avian experts. No comments expressed direct opposition to the proposal. Comments included support for the proposal to designate a nonessential experimental population;

support with concerns; support with concerns and recommendations; and indirect opposition with recommendations for delay due to perceived Deepwater Horizon/MC252 oil spill effects. Analysis of the comments revealed 12 issues that are identified and discussed below. These 12 issues also covered the personal comments found in 9 of the 23,210 form letters.

*Issue 1:* Two commenters indirectly opposed releases and recommended delay, and many others expressed concern, regarding the negative impacts that the Deepwater Horizon/MC252 oil spill may have had on coastal Louisiana and the WLWCA, and potential impacts to whooping cranes released into southwestern Louisiana.

*Our Response:* The Deepwater Horizon/MC252 Oil Spill has not had a direct effect on the release site, WLWCA, or the surrounding habitats in southwestern Louisiana. The release area is inland, and is buffered from the coast by more than 15 miles (24 km) of the Chenier plain, as well as ridges and coastal marshes. Two small segments of shoreline approximately 30 to 45 miles (48 to 72 km) to the southeast experienced light oiling (on Marsh Island and on adjacent western shore) during the oil spill. As of November 5, the nearest coastal areas with residual oiling are located on the eastern edge of Atchafalaya Bay in St. Mary and Terrebonne Parishes, approximately 78 miles (125 km) or farther away from the WLWCA. Therefore, the Service has determined that the Deepwater Horizon/MC252 Oil Spill will likely have no effects on the whooping cranes reintroduced into southwestern Louisiana. For monitoring purposes, released birds will be fitted with tracking devices as to determine their locations. If we determine that birds enter sites or situations that would be harmful to them, we will work to relocate the bird out of harm's way. We also will be monitoring the health of birds through a variety of methods (blood samples, observation, retrieval and necropsy of any dead birds, *etc.*) so that we will be able to detect any unexpected effects on the health of the birds. We will be monitoring habitat suitability and prey availability as well.

*Issue 2:* The Service should pursue the reintroduction of a migratory population of whooping cranes that winters at Marsh Island and should also consider using Marsh Island and other refuges in southwestern Louisiana as a release site for the nonmigratory population.

*Our Response:* The current proposal for reintroduction in southwestern

Louisiana reflects the most recent recommendation of the Recovery Team (June 17, 2010, letter from the Service to Louisiana DWF). This recommendation was reached after careful consideration of all factors likely to influence the reestablishment of another self-sustaining flock of whooping cranes needed to contribute toward recovery of the species. Some of these factors are discussed within the "Background" section in this rule. Factors supporting the WLWCA include the presence of suitable breeding habitat and food resources, over 405,000 hectares (1 million acres) of wetlands in the area, many large tracts of publicly managed lands in the area, geographic separation from the existing natural wild flock, support from the public, and the State of Louisiana's willingness to take on the leadership role and desire to restore a piece of the natural heritage of Louisiana.

Some aspects of a reintroduction of a migratory population that would winter at Marsh Island hold promise, and the area will remain under consideration for a future reintroduction when conditions are more favorable for the effort. These aspects are outlined in the EA along with the issues that will need to be addressed before such a reintroduction can be pursued. Marsh Island has many of the characteristics that would make for a good release area: A large area of pristine estuarine habitat, little to no pressure from humans, and no bobcats or coyotes. However, Marsh Island lacks the most important habitat characteristic needed for a nonmigratory population of whooping cranes, namely large areas of freshwater marshes that will support nesting whooping cranes. To date, whooping cranes are known only to nest in freshwater marshes. In the Objectives of the Reintroduction section of the rule, we specifically indicate that to facilitate a successful reintroduction, other release sites may be considered in southwestern Louisiana.

*Issue 3:* One commenter expressed concern regarding the genetics of the whooping cranes to be released into Louisiana. Specifically, genetic lineages that are more successful in captivity might well have traits that will make them less successful in the wild.

*Our Response:* As stated in the 2007 Whooping Crane Recovery Plan, the Service will continue to use genetic information and advances in conservation biology to effectively manage flock genetics in accordance with the whooping crane recovery plan. As the commenter has recommended, the Service and Louisiana DWF will adopt and implement a genetics management plan for the LA NEP. The

ultimate genetic goal of this project is to establish a wild reintroduced population that possesses the maximum level of genetic diversity available from the captive population. Ensuring balanced sex ratios and genetics will assist the population in getting an early start on success for the Louisiana Nonmigratory Population. The plan will also take into account the release histories of the different lineages and their success as wild whooping cranes.

*Issue 4:* Several commenters expressed concern about hunting and recommended hunter education.

*Our Response:* We agree that hunter education is an important component of this process. Because of the perception of government restrictions associated with endangered species, the relaxation of take prohibitions as part of the 10(j) designation of an experimental nonessential population has been very important in gaining public support for whooping crane reintroductions. A key factor of the rule gaining support from the hunting community is that accidental shooting of a whooping crane in this experimental population occurring in the course of a lawful hunting activity is exempt from take restrictions under the ESA in this special regulation. However, applicable Federal penalties under the Migratory Bird Treaty Act and/or State penalties may still apply. Further, the intentional take of a whooping crane is still subject to the full applicable penalties of the ESA.

The Service is working with Louisiana DWF to develop hunter educational materials designed to minimize the likelihood of accidental shooting of whooping cranes, develop outreach materials to assist in distinguishing whooping cranes from legal game species, and develop appropriate messages for target audiences. The Service will also assist Louisiana DWF in working with land managers and land owners of the properties used by whooping cranes and in distributing information to land managers, land owners, partners, and stakeholders to keep them informed of whooping crane presence and movements.

*Issue 5:* Commenters were also concerned about forage availability. Specifically, they were concerned whether the current water management regimes at the reintroduction site were suitable to ensure the availability of blue crab and other estuarine food prey items.

*Our Response:* The availability of blue crabs (*Callinectes sapidus*) and other estuarine prey items as forage at the WLWCA was not a factor when we

decided upon the release location. The historic nonmigratory whooping crane population was dependent upon the freshwater marshes and wet prairie. The project is targeting freshwater, as whooping cranes are known only to nest in fresh water wetlands. The Florida NonMigratory Population reintroduction targeted the freshwater wetlands and prairies of central Florida. In that flock, productivity was correlated with rainfall and wetland water levels. The Eastern Migratory Population reintroduction targeted estuarine wetlands as wintering habitat in an effort to mimic ecology of the wild AWBP (wintering in estuarine habitat at the Aransas NWR and feeding predominantly on blue crabs). However, after a decade of releasing birds into this population, virtually all of the whooping cranes depend upon freshwater wetlands, including wintering habitat. There has been very little use of Florida's coastal salt marsh as wintering habitat. Whooping cranes in the Eastern Migratory Population and Florida NonMigratory Population have had no issues with finding adequate forage in freshwater wetlands systems. Furthermore, even though White Lake has changed from the 1940s brackish/fresh system to a predominantly fresh system, the area maintains a steady population of blue crab (*Callinectes sapidus*), white shrimp (*Litopenaeus setiferus*), largemouth bass (*Micropterus salmoides*), and other aquatic species that are projected to remain steady to the year 2050 (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation Restoration Authority 1999, pp. 11–13). Other water-dependent birds with diet preferences similar to those of whooping cranes are abundant in the release area. The main point is that whooping cranes are generalists, are quite adaptive, and will utilize the food sources that are available.

*Issue 6:* Several commenters expressed concern with changes in the hydrologic management of the WLWCA and the Mermentau Basin as a freshwater impoundment since the last resident whooping crane population was present, and questioned if the habitat would support/sustain a population of nonmigratory whooping cranes. It was also recommended that the Service and the U.S. Army Corps of Engineers update the Mermentau Basin management plan to restore the estuarine environment of White Lake.

*Our Response:* As discussed previously, the Louisiana DWF has indicated that it will develop a water management regime for the WLWCA

that will benefit both waterfowl and whooping cranes. Water management in the Mermentau Basin has primarily been controlled since the early 1950s through two control structures operated by the U.S. Army Corps of Engineers. There has been a shift in habitat types from the predominately brackish-to-fresh marshes of the 1940s to the predominantly fresh marsh found today (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation Restoration Authority 1999, pp. 11–13). However, as previously discussed in our response to Issue 5, we believe this habitat will support a whooping crane population. The Service is actively involved in coastal restoration and protection throughout Louisiana via our participation on the Coastal Wetlands Planning, Protection, and Restoration Act of 1990 (CWPPRA) Task Force. The CWPPRA program provides Federal grants to acquire, restore, and enhance wetlands of coastal States and was one of the first programs with Federal funds dedicated exclusively to the long-term restoration of coastal habitat (104 Stat. 4779). Two other restoration plans being implemented in coastal Louisiana are the Louisiana Coastal Area Ecosystem Restoration Plan (LCA) and Louisiana's Comprehensive Master Plan for a Sustainable Coast (State Master Plan). The LCA, administered by the U.S. Army Corps of Engineers with State cost-share assistance, focuses on the protection of coastal wetlands. In addition, Louisiana's Coastal Impact Assistance Program (CIAP) also provides funding for wetland restoration. The State Master Plan serves as Louisiana's overarching document to guide hurricane protection and coastal restoration efforts in the State. We will continue to work with the CWPPRA Task Force and the State of Louisiana to address wetland restoration in the Mermentau Basin and throughout Louisiana.

*Issue 7:* Several comments raised concern about contaminant risks, specifically mercury, and water quality issues for the release area.

*Our Response:* The Service recognizes that exposure of wildlife to mercury, agricultural chemicals, and other contaminants is a concern, not only in Louisiana, but across the entire southeastern United States. Furthermore, there are few places in the world where these contaminants are not found, because they can be transported atmospherically as well as through waterways and food chains. One of the initial, critical questions the Service examined was whether the proposed release site currently supported a

healthy population of aquatic and terrestrial wildlife, especially fish-eating birds. Such bird species are at a similar risk in regard to contaminant exposure because of their level in the food chain and their longevity, both of which contribute to exposure and bioaccumulation of contaminants, and also because their life history and physiology are comparable with that of whooping cranes. Our review concluded that there were indeed an abundance and a wide diversity of terrestrial and aquatic species that have been sustained at the release site. We believe based on this review that reintroduced birds will not be threatened by contaminants; however, in an effort to reduce our uncertainty about the potential risks, ground-truth our assumptions, and adopt a contingency plan, the Service will undertake three actions. First, we will initiate a review of the available information on contaminants in watersheds, and the potential pathways into the release site. Second, we will collaborate with current efforts that are examining the forage base at the release site to obtain samples for potential chemical analysis. We will seek funding to have selected samples analyzed for contaminants of concern, which will be identified during our review of available information. We anticipate that mercury, as well as a few selected agricultural chemicals, will likely be included in that analysis. Third, all whooping cranes will be fitted with tracking transmitters, which will allow us to monitor where they forage and enable us to sample from known foraging areas. The transmitters will also enable us to determine if the cranes move to an unsafe area, at which point they would be captured and relocated, and if one should die, we would be able to recover the body and determine the cause of death. We will also be conducting periodic health checks on the population, and the health screening will include contamination assessment from blood and feathers and other samples. Health examinations and mortality events will provide additional important data for implementing adaptive management strategies if determined to be appropriate.

*Issue 8:* What are the plans to protect the whooping cranes during a hurricane?

*Our Response:* There are always risks involved with any reintroduction effort. Hurricanes are a natural event that affected the historic resident population that occurred in coastal Louisiana, and hurricanes are an anticipated and accepted risk for this reintroduction project. The frequency, intensity, and location of hurricanes are hard to

predict. Like all resident bird populations that occur in coastal Louisiana, the whooping cranes will be left to their innate instincts to survive the effects of a hurricane if one comes ashore near the release site. To the extent practicable, attempts to capture and move young naive birds may be considered. Lightning has also been identified as a cause of mortality in the Florida Nonmigratory Population. Like hurricanes, there are no management tools to reduce this type of risk to whooping cranes.

The Louisiana DWF is deploying tracking devices on the whooping cranes to monitor the health, well being, and success of the reintroduction. The whooping cranes will likely disperse during hurricanes, storm surge events, and possibly during droughts. Locating those refugia and evaluating their suitability will be important, as will identifying the overall dispersal of cranes.

*Issue 9:* One commenter asked us to address the effects of climate change on the reintroduction.

*Our Response:* Precise impacts of climate change to the coastal habitats of Louisiana are difficult to predict with any certitude. The release site is far enough from the coast that sea-level rise and associated loss of habitat are not expected to be issues for the reintroduction in the foreseeable future. Effects of climate change on environmental conditions, including levels of precipitation and hurricane intensity, are uncertain. How climate change might impact the ecosystems required by whooping cranes, including changes in plant communities, invasive species, and disease, is also hard to predict. The whooping crane reintroduction will have to use adaptive management to the extent practicable to respond to long-term changing conditions.

As climate change disrupts ecological processes, southwest Louisiana is likely to experience significant changes in its physical and biological resources. Regional Climate Science Centers are being established by the U.S. Geological Survey and the Department of the Interior (DOI) within the United States. These centers will provide scientific information, tools, and techniques needed to manage land, water, wildlife, and cultural resources in the face of climate change. The USGS and the DOI centers will also work closely with a network of Landscape Conservation Cooperatives in which Federal, State (including the State of Louisiana), Tribal, and other managers and scientists will develop conservation, adaptation, and mitigation strategies for

dealing with the impacts of climate change (U.S. Geological Survey 2010) (USFWS 2009).

*Issue 10:* In order to decrease the likelihood of take, best management practices should be adopted for each of the land use activities where potential concerns or issues could arise.

*Our Response:* In the first year of the project, the Service will develop a Whooping Crane Best Management Practices (BMPs) document. This document will include a compilation of existing BMPs and Conservation Recommendations. We will also develop new BMPs as needed to address needs specific for Louisiana. As recommended, we will work toward developing BMPs for the land use activities identified in this rule (oil/gas exploration and extraction, aquaculture/agriculture/livestock practices, water management, construction, restoration, recreation, and hunting). For example, oil/gas exploration and extraction are not a new issue for whooping cranes. The Aransas NWR has active oil/gas activities on and near the refuge and we will draw from their experience on these matters. The Service will also work with Louisiana DWF to develop a Whooping Crane Conservation and Management for Landowners document to assist interested landowners and land managers in contributing to whooping crane conservation and recovery.

*Issue 11:* One commenter commented that the Service should confer with the U.S. Department of Agriculture's Wildlife Services regarding its management of coyotes, blackbirds, aquatic rodents, pigeons, starlings and sparrows in Louisiana.

*Our Response:* Section 7(a)(4) requires Federal agencies to confer (rather than consult) with the Service on actions that are likely to jeopardize the continued existence of a species proposed to be listed. The results of a conference are in the form of conservation recommendations that are optional as the agencies carry out, fund, or authorize activities. The Service will confer with Wildlife Services to ensure that wildlife management activities will minimize negative impacts to whooping cranes in Louisiana. The Service will also confer with all other Federal agencies regarding Federal activities that may impact conservation of whooping cranes.

*Issue 12:* At the Central Flyway Council meeting and in a comment letter, the Texas Parks and Wildlife Department suggested that the proposed NEP be expanded to include 16 Texas counties. In the comment letter, Texas Parks and Wildlife Department indicated support for the approach the

Service would employ if a stray whooping crane for the reintroduced nonmigratory flock moved into Texas.

*Our Response:* The Service cannot expand the NEP area to include counties in Texas that will be needed by the AWBP to reach recovery. The winter habitat and migration corridor of the AWBP, the only natural wild whooping crane population, runs north from the Central Texas coast up to the Northwest Territories in Canada. With no delisting target set, and studies indicating the AWBP whooping cranes will have to extend northward up the Texas coast to nearly Freeport to meet the criteria for reclassification to threatened status, the Service believes that the marshes along the Texas coast all the way to the Louisiana border will someday be occupied by whooping cranes if the species is ever to be numerous enough to delist. Therefore, we believe habitat along the Texas coast and in the referenced counties is important to the AWBP whooping cranes and the continued progression of their recovery.

The Service intends to use the maximum management flexibility possible to avoid and/or minimize any disruption of human activities caused by Louisiana whooping cranes that might stray into Texas, and will attempt to catch these stray birds and return them to Louisiana if they cannot be managed in a manner satisfactory to Texas. In addition, we will continue to work closely with our State agency partners in both Louisiana and Texas as explained in this rule and our special regulation.

#### **Required Determinations**

##### *Regulatory Planning and Review (E.O. 12866)*

The Office of Management and Budget (OMB) has determined that this rule is not significant under Executive Order 12866 (E.O. 12866). OMB bases its determination upon the following four criteria:

(a) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(b) Whether the rule will create inconsistencies with other Federal agencies' actions.

(c) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(d) Whether the rule raises novel legal or policy issues.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996; 5 U.S.C. 801 *et seq.*), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare, and make available for public comment, a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. We certify that this rule would not have a significant economic effect on a substantial number of small entities. The following discussion explains our rationale.

The area affected by this rule includes the State of Louisiana. Because NEP designation does not establish substantial new regulation of activities, we do not expect this rule to have any significant effect on recreational, agricultural, or development activities. Although the entire NEP boundary encompasses a large area, the section of the NEP area where we anticipate the establishment of an experimental population of nonmigratory whooping cranes is mainly public land owned by the State of Louisiana. Because of the regulatory flexibility for Federal agency actions provided by the NEP designation and the exemption for incidental take in the special rule, we do not expect this rule to have significant effects on any activities within Tribal, Federal, State, or private lands within the NEP.

On national wildlife refuges and units of the National Park System within the NEP, Federal action agencies are required to consult with us, under section 7(a)(2) of the ESA, on any of their activities that may affect the whooping crane. In portions of the NEP outside of National Wildlife Refuge System and National Park Service lands, in regard to section 7(a)(2), the population is treated as proposed for listing and Federal action agencies are not required to consult on their activities. Section 7(a)(4) requires Federal agencies to confer (rather than

consult) with the Service on actions that are likely to jeopardize the continued existence of a proposed species. But because the NEP is, by definition, not essential to the continued existence of the species, conferring will likely never be required for the whooping crane population within the NEP area. Furthermore, the results of a conference are advisory in nature and do not restrict agencies from carrying out, funding, or authorizing activities.

In addition, section 7(a)(1) requires Federal agencies to use their authorities to carry out programs to further the conservation of listed species, and this requirement will apply on any lands within the NEP area. As a result, and in accordance with these regulations, some modifications to proposed Federal actions within the NEP area may occur to benefit the whooping crane, but we do not expect projects to be halted or substantially modified as a result of these regulations.

The principal activities on private property near the expected reestablishment area in the NEP are agriculture, ranching, oil and gas exploration and extraction, and recreation. The presence of whooping cranes would likely not affect the use of lands for these purposes, because there would be no new or additional economic or regulatory restrictions imposed upon States, non-Federal entities, or members of the public due to the presence of whooping cranes. Therefore, this rulemaking is not expected to have any significant adverse impacts to recreation, agriculture, oil and gas exploration or extraction, or any development activities.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

(1) This rule will not “significantly or uniquely” affect small governments. We have determined and certify pursuant to the Unfunded Mandates Reform Act, 2 U.S.C. 1502 *et seq.*, that this rulemaking will not impose a cost of \$100 million or more in any given year on local or State governments or private entities. A Small Government Agency Plan is not required. Small governments will not be affected because the NEP designation will not place additional requirements on any city, county, or other local municipality.

(2) This rule will not produce a Federal mandate of \$100 million or greater in any year (*i.e.*, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act). This NEP designation for whooping crane

would not impose any additional management or protection requirements on the States or other entities.

*Takings (E.O. 12630)*

In accordance with Executive Order 12630, the rule does not have significant takings implications. This rule allows for the taking of reintroduced whooping cranes when such take is incidental to an otherwise legal activity, such as recreation (*e.g.*, fishing, boating, wading, or swimming), agriculture, oil and gas exploration and extraction, and other activities that are in accordance with Federal, State, and local laws and regulations. Therefore, we do not believe the reintroduction of whooping cranes conflicts with existing human activities, hinders uses of private and public lands, or hinders subsurface mineral rights, such as oil and gas exploration and extraction, within the NEP area.

A takings implication assessment is not required because this rule: (1) Will not effectively compel a property owner to suffer a physical invasion of property, and (2) will not deny all economically beneficial or productive use of the land or aquatic resources. This rule will substantially advance a legitimate government interest (conservation and recovery of a listed bird species), and will not present a barrier to all reasonable and expected beneficial use of private property.

*Federalism (E.O. 13132)*

In accordance with Executive Order 13132, we have considered whether this rule has significant Federalism effects and have determined that a Federalism assessment is not required. This rule will not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government. In keeping with Department of the Interior policy, we requested information from and coordinated development of this rule with the affected resource agencies in Louisiana. Achieving the recovery goals for this species will contribute to its eventual delisting and return to State management. No intrusion on State policy or administration is expected, roles or responsibilities of Federal or State governments will not change, and fiscal capacity will not be substantially directly affected.

The special rule operates to maintain the existing relationship between the State and the Federal Government and is being undertaken in coordination with the State of Louisiana. We have cooperated with Louisiana DWF in the

preparation of this rule. Therefore, this rule does not have significant Federalism effects or implications to warrant the preparation of a Federalism assessment pursuant to the provisions of Executive Order 13132.

*Civil Justice Reform*

In accordance with Executive Order 12988 (February 7, 1996; 61 FR 4729), the Office of the Solicitor has determined that this rule will not unduly burden the judicial system and will meet the requirements of sections (3)(a) and (3)(b)(2) of the Order.

*Paperwork Reduction Act*

Office of Management and Budget (OMB) regulations at 5 CFR 1320, which implement provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), require that Federal agencies obtain approval from OMB before collecting information from the public. This rule does not include any new collections of information that require approval by OMB under the Paperwork Reduction Act. OMB has approved our collection of information associated with reporting the taking of experimental populations and assigned control number 1018-0095, which expires March 31, 2011. We may not collect or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act*

We have prepared an environmental assessment as defined by the National Environmental Policy Act of 1969, 42 U.S.C. 4321 *et seq.* It is available from the Jacksonville Field Office (*see ADDRESSES*).

*Government-to-Government Relationship With Tribes*

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and the Department of the Interior Manual Chapter 512 DM 2, we have considered

possible effects on and have notified the Native American Tribes within the NEP. They have been advised through verbal and written contact, including informational mailings from the Service. If future activities resulting from this rule may affect Tribal resources, a Plan of Cooperation will be developed with the affected Tribe or Tribes.

*Energy Supply, Distribution, or Use (E.O. 13211)*

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule is not expected to significantly affect energy supplies, distribution, and use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

*Effective Date*

We find good cause under the Administrative Procedure Act (5 U.S.C. 553(d)(3)) to make this rule effective upon publication. The prompt release of 11 currently available captive-reared young-of-the-year (9-10 months) whooping cranes is necessary because: (1) In the south, February is the natural time of the year that nonmigratory whooping cranes may begin a new reproduction effort, which results in the juveniles from the previous year to disperse. Thus, late winter is an optimum time for juvenile whooping cranes to start to become adapted to life in the wild on their own; (2) the young cranes become less suitable for wild release if they are held in captivity for too long; (3) there will be a reduced predator risk for the release cohort during the late winter because alligators are less active; and (4) the Aransas Wood Buffalo population of whooping cranes, the only remaining natural population of whooping cranes in North America, remains very endangered. In order to try to achieve recovery as expeditiously as possible, it is important to conduct reintroduction efforts as soon

as possible, before a possible catastrophe might hit the Aransas Wood Buffalo flock. Moreover, we expect no conflicts to occur from the reintroduction of whooping cranes as set forth in this rule to any existing or anticipated Federal, State, Tribal, or local government or private actions, including those pertaining to agriculture, aquaculture, livestock production, oil or gas exploration and extraction, pesticide application, water management, construction, recreation, trapping, or hunting.

**References Cited**

A complete list of all references cited in this rule is available upon request from the Jacksonville Field Office (*see FOR FURTHER INFORMATION CONTACT*).

**Authors**

The principal authors of this rule are Bill Brooks, of the Jacksonville, Florida, Field Office; and Deborah Fuller, of the Lafayette, Louisiana, Field Office (*see FOR FURTHER INFORMATION CONTACT*).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Regulation Promulgation**

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—[AMENDED]**

- 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

- 2. Amend § 17.11(h) by revising the existing entry for "Crane, whooping" under "BIRDS" to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*	*	*
BIRDS							
*	*	*	*	*	*	*	*
Crane, whooping.	<i>Grus americana</i> .	Canada, U.S.A. (Rocky Mountains east to Carolinas), Mexico.	Entire, except where listed as an experimental population.	E .....	1,3 .....	17.95(b) .....	NA.
Do .....	Do .....	Do .....	U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY).	XN .....	487, 621, 710, 785.	NA .....	17.84(h).
*	*	*	*	*	*	*	*

\* \* \* \* \*

■ 3. Amend § 17.84 by revising paragraph (h) to read as follows:

**§ 17.84 Special rules—vertebrates.**

\* \* \* \* \*

(h) Whooping crane (*Grus americana*).

(1) The whooping crane populations identified in paragraphs (h)(9)(i) through (iv) of this section are nonessential experimental populations (NEPs) as defined in § 17.80.

(i) The only natural extant population of whooping cranes, known as the Aransas/Wood Buffalo National Park population, occurs well west of the Mississippi River. This population nests in the Northwest Territories and adjacent areas of Alberta, Canada, primarily within the boundaries of the Wood Buffalo National Park, and winters along the Central Texas Gulf of Mexico coast at Aransas National Wildlife Refuge.

(ii) No natural populations of whooping cranes are likely to come into contact with the NEPs set forth in paragraphs (h)(9)(i) through (iv) of this section. Whooping cranes adhere to ancestral breeding grounds, leaving little possibility that individuals from the extant Aransas/Wood Buffalo National Park population will stray into the NEPs. Studies of whooping cranes have shown that migration is a learned rather than an innate behavior.

(2) No person may take this species in the wild in the experimental population areas, except when such take is accidental and incidental to an otherwise lawful activity, or as provided in paragraphs (h)(3) and (4) of this section. Examples of otherwise lawful activities include, but are not limited to, oil and gas exploration and extraction, aquacultural practices, agricultural practices, pesticide application, water management, construction, recreation,

trapping, or hunting, when such activities are in full compliance with all applicable laws and regulations.

(3) Any person with a valid permit issued by the Fish and Wildlife Service (Service) under § 17.32 may take whooping cranes in the wild in the experimental population areas for educational purposes, scientific purposes, the enhancement of propagation or survival of the species, and other conservation purposes consistent with the ESA and in accordance with applicable State fish and wildlife conservation laws and regulations.

(4) Any employee or agent of the Service or State wildlife agency who is designated for such purposes, when acting in the course of official duties, may take a whooping crane in the wild in the experimental population areas if such action is necessary to:

(i) Relocate a whooping crane to avoid conflict with human activities;

(ii) Relocate a whooping crane that has moved outside any of the areas identified in paragraphs (h)(9)(i) through (iv) of this section, when removal is necessary or requested and is authorized by a valid permit under § 17.22;

(iii) Relocate whooping cranes within the experimental population areas to improve survival and recovery prospects;

(iv) Relocate whooping cranes from the experimental population areas into captivity;

(v) Aid a sick, injured, or orphaned whooping crane; or

(vi) Dispose of a dead specimen or salvage a dead specimen that may be useful for scientific study.

(5) Any taking pursuant to paragraphs (h)(3) and (4) of this section must be immediately reported to the National Whooping Crane Coordinator, U.S. Fish

and Wildlife Service, P.O. Box 100, Austwell, TX 77950 (Phone: 361-286-3559), who, in conjunction with his counterpart in the Canadian Wildlife Service, will determine the disposition of any live or dead specimens.

(6) No person shall possess, sell, deliver, carry, transport, ship, import, or export by any means whatsoever, any such species from the experimental populations taken in violation of these regulations or in violation of applicable State fish and wildlife laws or regulations or the Endangered Species Act.

(7) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed any offense defined in paragraphs (h)(2) through (6) of this section.

(8) The Service will not mandate any closure of areas, including National Wildlife Refuges, during hunting or conservation order seasons, or closure or modification of hunting or conservation order seasons, in the following situations:

(i) For the purpose of avoiding take of whooping cranes in the NEPs identified in paragraphs (h)(9)(i) through (iv) of this section;

(ii) If a clearly marked whooping crane from the NEPs identified in paragraphs (h)(9)(i) through (iv) of this section wanders outside the designated NEP areas. In this situation, the Service will attempt to capture the stray bird and return it to the appropriate area if removal is requested by the State.

(9) All whooping cranes found in the wild within the boundaries listed in paragraphs (h)(9)(i) through (iv) of this section will be considered nonessential experimental animals. Geographic areas the nonessential experimental populations may inhabit are within the historic range of the whooping crane in



the United States and include the following:

(i) The entire State of Florida (the Kissimmee Prairie NEP). The reintroduction site is the Kissimmee Prairie portions of Polk, Osceola, Highlands, and Okeechobee Counties. The experimental population released at Kissimmee Prairie is expected to remain mostly within the prairie region of central Florida.

(ii) The States of Colorado, Idaho, New Mexico, and Utah, and the western half of the State of Wyoming (the Rocky Mountain NEP).

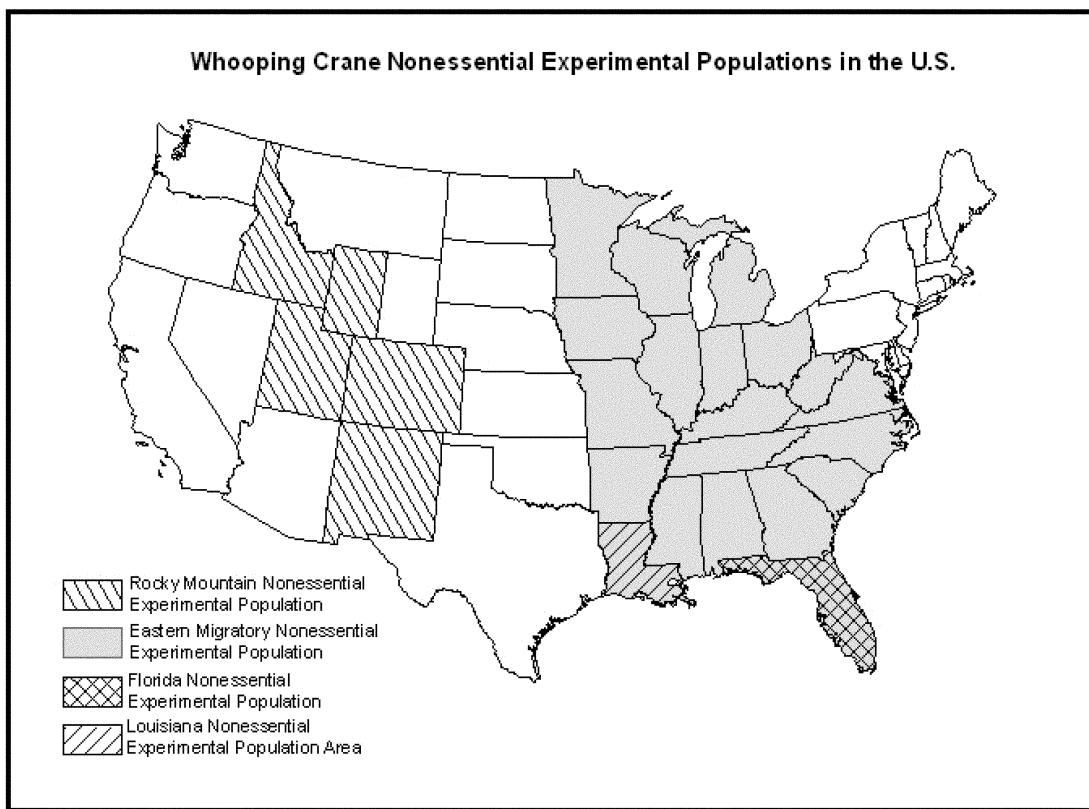
(iii) That portion of the eastern contiguous United States that includes the States of Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa,

Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, North Carolina, Ohio, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin (the Eastern Migratory NEP). Whooping cranes within this population are expected to occur mostly within the States of Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Georgia, and Florida. The additional States included within the experimental population area are those expected to receive occasional use by the cranes, or which may be used as breeding or wintering areas in the event of future population expansion.

(iv) The entire State of Louisiana (the Louisiana Nonmigratory NEP). The reintroduction site is the White Lake Wetlands Conservation Area of

southwestern Louisiana in Vermilion Parish. Current information indicates that White Lake is the historic location of a resident nonmigratory population of whooping cranes that bred and reared young in Louisiana. Whooping cranes within this nonmigratory population are expected to occur mostly within the White Lake Wetlands Conservation Area and the nearby wetlands in Vermilion Parish. The marshes and wetlands of southwestern Louisiana are expected to receive occasional use by the cranes and may be used in the event of future population expansion.

(v) A map of all NEP areas in the United States for whooping cranes follows:



**BILLING CODE 4310-55-C**

(10) The reintroduced populations will be monitored during the duration of the projects by the use of radio telemetry and other appropriate measures. Any animal that is determined to be sick, injured, or otherwise in need of special care will be recaptured to the extent possible by Service and/or State wildlife personnel or their designated agent and given

appropriate care. Such animals will be released back to the wild as soon as possible, unless physical or behavioral problems make it necessary to return them to a captive-breeding facility.

(11) The Service will reevaluate the status of the experimental populations periodically to determine future management needs. This review will take into account the reproductive success and movement patterns of the

individuals released within the experimental population areas.

\* \* \* \* \*

Dated: January 26, 2011.

**Jane Lyder,**  
*Acting Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 2011-2367 Filed 2-2-11; 8:45 am]

**BILLING CODE 4310-55-P**