

## **Reintroduction of Whooping Cranes to Southwest Louisiana, Phase 2**

A proposal for SWG Funding

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## **BACKGROUND AND PROJECT NEED**

Fifteen species of cranes occur throughout the world. Two of these fifteen species occur in North America. Both the sandhill crane (*Grus canadensis*) and the whooping crane (*Grus americana*) had extensive historic North American ranges. Both have suffered population losses with the whooping crane numbers in much greater peril. Due to this decline, whooping cranes were first given the federal status of an endangered species on March 11, 1967. As of March 2013 approximately 600 individuals exist in both the wild and captivity.

As Robert Porter Allen stated in 1952, “like the bird itself, the range of the whooping crane is big and impressive”. Historically, these birds ranged from the Arctic Sea to the high plateau of central Mexico, and from Utah east to New Jersey, South Carolina, and Florida (Allen 1952, Nesbitt 1982, USFWS 2001). The principal historic breeding range stretched across central North America from central Alberta through southern Saskatchewan and Manitoba, northeastern North Dakota, western Minnesota, southern Wisconsin, northern Iowa, and northern Illinois (Allen 1952). Allen (1952) believed the whooping cranes principal wintering range was the tall grass prairies, in southwestern Louisiana, along the Gulf Coast of Texas, and in northeastern Mexico near the Rio Grande Delta (CWS and USFWS 2007). Other significant wintering areas were the interior tablelands in western Texas and the high plateaus of central Mexico (CWS and USFWS 2007). Non-migratory populations were found in coastal Louisiana, and possibly in other portions of the southeastern United States (Nesbitt 1982, Gomez 1992, USFWS 1994).

Additionally, Allen (1952) described several historic migration routes. He stated that one of the most important migration routes led from the principal nesting grounds in Iowa, Illinois, Minnesota, North Dakota, and Manitoba to coastal Louisiana. Another route went from Texas and the Rio Grande Delta region of Mexico northward to nesting grounds in North Dakota and the Canadian provinces (USFWS 2001).

Whooping cranes first appeared in fossil records from the early Pleistocene (Allen 1952) and probably were most abundant during that two-million-year epoch (USFWS 2001). Despite its perseverance during this harsh era, whooping crane population numbers have not been able to withstand the test of modern human practices. The species has earned listing as endangered due to hunting, specimen collection, human disturbance, and conversion of the primary nesting habitat to hay, pastureland, and grain production (Allen 1952, Erickson and Derrickson 1981, USFWS 2001).

Banks (1978), through the use of two independent techniques of population estimation, derived estimates of 500 to 700 whooping cranes in 1870. However, by May 1939, the non-migratory population of whooping cranes in Louisiana was found to be only 13 and by 1941, the national migratory population contained only 15 individuals (Banks 1978).

Whooping cranes historically used the marshes and ridges that comprise southwest Louisiana’s Chenier Plain, as well as the uplands of Pleistocene prairie terrace to its north. The marshes and prairies that comprise the crane’s former range in Louisiana are located between latitudes 29.5° N and 30.5° N and longitudes 92° W and 94° W. Within this area, whooping cranes used three major habitats: tallgrass prairie, freshwater marsh, and brackish/saltwater marsh. These zones parallel the coast and extend from the prairie terrace uplands southward to the Gulf of Mexico (Fig.1). Louisiana supported both resident and migratory crane populations which favored different habitats. Migratory cranes wintered on the tallgrass prairies and in the brackish and saltwater marshes near the coast, whereas a resident flock nested in the isolated freshwater marsh north of the White Lake Wetlands Conservation Area (WLWCA - Fig.2) in the eastern Chenier Plain’s Vermilion Parish (Allen 1952, Gomez 1992).

The rapid growth of the rice industry during the late 1880's brought increasing pressure upon these birds, both from human encroachment and habitat loss. The last record of whooping cranes on the Louisiana prairies occurred in 1918, when a farmer shot 12 of the birds that were feeding on rice near his thresher (Allen 1952, Gomez 1992).

Human encroachment also contributed to the whooping cranes decline south of the prairies, where smaller numbers of wintering cranes utilized the saltwater and brackish marshes until the 1940's. Prices of muskrat pelts rose to more than \$1 each in the 1920's, luring thousands of trappers into coastal wetlands. As trapping and hunting activity increased, crane numbers steadily declined (Allen 1952).

Presence of a resident whooping crane population was confirmed in May 1939, in the remote marshes north of the WLWCA, by biologist John Lynch. Lynch's aerial survey discovered 13 whooping cranes, two of which were "young of the year, about one-third grown" (Lynch 1984).

Both natural and human factors contributed to the decline of whooping cranes in the wetlands north of the WLWCA. In 1929-1930, the Intercoastal Waterway sliced through the region, opening a path through previously inaccessible marshes (Gomez 1992). The thirteen cranes that existed when Lynch surveyed the area in 1939 were scattered by a hurricane on 7 August 1940. Only six cranes returned to the WLWCA marshes after the storm. Of the seven lost birds, six were presumed shot and one with a crippled wing was captured in a rice field in Evangeline Parish in 1940. This individual bird was donated to the New Orleans Audubon Park Zoo in 1941. Until her death in 1965, the famous "Josephine" distinguished herself as the only breeding female whooping crane in captivity (McNulty 1966, Gomez, 1992).

The White Lake flock continued to decline by one bird each year until 1945, when two birds remained. By 1947, only a single crane survived. On 11 March 1950, a party that included Lynch and Allen chased the lone crane by helicopter and captured it. Named "Mac" in honor of the helicopter pilot, Louisiana's last wild whooping crane was taken to Aransas NWR, where it died 6 months later (McNulty 1966, Doughty, 1989, Gomez, 1992).

The whooping crane is still vulnerable to extinction in the wild. The crane adheres to ancestral breeding areas, migration routes, and wintering grounds, leaving little possibility of pioneering into new regions. The existing wild populations can be expected to continue utilizing their present habitats with little likelihood of expansion, except locally. In their restricted winter distribution, whooping cranes are vulnerable to annihilation by catastrophic events like a hurricane, red tide, or a contaminant spill which would destroy their habitat, eradicate their food resources, or kill the birds directly as a result of toxins. The vulnerability of these birds in the wild illustrates the need for additional self-sustaining wild populations which are separate from the existing wild birds (USFWS 2001).

The southwest corner of Louisiana was once part of this species winter range and was until the mid-twentieth century the home of the United States' only resident whooping crane population. Not surprisingly, this portion of Louisiana has been repeatedly suggested as a candidate site for whooping crane reintroduction (Gomez 2001).

In 2010, the Louisiana Department of Wildlife and Fisheries determined that the reintroduction of whooping cranes was a critical priority for the state, and formally identified it as an emerging issue (see attached letter dated June 21, 2010 to Diana Swan, United States Fish and Wildlife Service, as well as the approval letter dated July 22, 2010). Subsequently, a State Wildlife Grant (T-93) was

funded to begin reintroduction efforts at the White Lake WCA.

Starting in February 2011 with the transfer and release of ten captive reared juvenile whooping cranes to begin a resident flock, Louisiana once again became home, at least during part of the year (i.e. the sandhill crane population is migratory), to both species of North American cranes. Whooping cranes had been absent from the state since 1950 but in just two short years there are already more whooping cranes living in the state than the total that were alive in 1942. Progress is being made but the road to recovery is long and slow and the effort to restore the whooping crane to Louisiana has just begun.

## **PROJECT PERIOD**

December 1, 2013 – November 31, 2016

## **OBJECTIVES**

The following section defines LDWF's objective of establishing a resident whooping crane population in southwest Louisiana. This section also defines the population goals and survival parameters expected to achieve that objective. LDWF's long term goals for the Southwest Louisiana Population (SWLP) have been based on objectives for down listing of the species. These goals have been outlined in the USFWS Whooping Crane International Recovery Plan (Canadian Wildlife Service and U.S. Fish & Wildlife Service 2007). We drew explicitly from PART II of the Recovery Plan (p.35-58) in setting population goals. Short term goals are based on past experience, both positive and negative, of previous release efforts in Florida (Folk et al. 2008).

### **Project (3-year) Objectives:**

- Maintain a full time Research Associate through LSU to lead the habitat research portion of the project
- Continue releasing at least one new cohort, of up to 22 cranes, each year using the soft release technique
- Evaluate and possibly implement other release methodologies for adult and/or juvenile cranes
- Continue assessing crane dispersal, habitat use, mortality, reproduction and behavior of cranes related to recovery plan success
- Provide periodic presentations of progress and findings to various LDWF boards and committees, and to the public as necessary to maintain project support
- Develop guiding documents for present and future success of the whooping crane recovery program, as it relates to the Louisiana population

**Overall (Long-term) Objective:** To establish a self-sustaining whooping crane population on and around the WLWCA in Southwest Louisiana. A self-sustaining population is defined as a flock with **130 individuals and 30 nesting pairs** that survive for **10 years** without any additional restocking.

### **Short term goals**

#### **Annual Releases**

The short term goal of the Louisiana reintroduction will be achieving acceptable first year survival rates of individual cohorts. First year survival rates could be low, especially in the early attempts of

the soft release method in Louisiana. There are potentially many major challenges in achieving high first year survival rates due to predation, power line strikes, and disease (Nesbitt et. al. 2001). We will draw from the experience of past reintroduction efforts in an attempt to achieve the highest survival rates possible. However, many of these challenges will be unforeseen and unique to the geographic region. These causes of mortality can only be addressed as we encounter them. We expect to gain experience with the release of each cohort and increase survival in subsequent years.

Unfortunately the survival of the first cohort of birds released in SW Louisiana was poor and below expectations, likely caused by a number of different factors. Delays in the approval and publication of the NEP rule resulted in birds that were several months older than preferred when they were finally transferred and released. In addition, shortly after their arrival Louisiana suffered a terrible drought that severely impacted the marsh where the birds were released. Several birds were lost outright to natural mortality and one additional bird was found ill and eventually had to be euthanized. At least two, as well as possibly a third bird, were shot and killed by juvenile offenders, bringing the survival rate down to only 30% at one year after release for the initial cohort.

The second and third cohorts were transferred to Louisiana at a younger and more suitable age and have so far shown much higher rates of survival. At one year after release 75% of the 2011 cohort was still alive and at just three months post release the 2012 cohort survival is similar to the survival rate of the 2011 cohort; this rate is 12% higher than the survival rate of the 2010 cohort for the same time period. Hopefully with younger birds and better habitat conditions, as well as an extensive education and outreach campaign aimed at preventing shooting incidents, these higher rates of survival will continue with future releases.

## **Long Term Goals**

Long term success of this population will only ultimately be achieved as part of the more important goal of down listing the species in North America. The Aransas-Wood Buffalo population (AWBP) is the only remaining natural population of whooping cranes in the world. Down listing of the species is contingent on achievement of population goals for the AWBP and the establishment of one or more new self-sustaining populations in North America. The Whooping Crane Eastern Partnership (WCEP) which has established an eastern migratory population (EMP) of whooping cranes is still ongoing but has run into significant problems with the birds reproducing and it is unclear if this project will ultimately succeed. The Louisiana population is now the second ongoing reintroduction effort and while many aspects of the project appear to be going well it is simply too early to determine if this effort will ultimately succeed. Because whooping cranes are slow to reach sexual maturity it will take several more years before reproductive success can be accessed.

For SWLP population goals we have selected Alternative Criterion 1A of the International Recovery Plan. **The following excerpt is from the International Recovery Plan:**

**Alternative Criterion 1A – If only one additional wild self-sustaining population is reestablished, then the AWBP must reach 400 individuals (i.e. 100 productive pairs), and the new population must remain above 120 individuals (i.e. 30 productive pairs). Both populations must be self-sustaining for a decade at the designated levels before down listing could occur. This alternative is based on the principle that with the reestablishment of only one additional population separate from the AWBP, then crane numbers must be higher in both populations than if there are three distinct populations (CWS AND USFWS 2007).**

We chose this criterion with a higher population goal because it allows for down listing independent of the success of any other reintroduction efforts. After the 2007 revision of the recovery plan was

completed a more detailed analysis of age structure for AWBP showed that pairs must be multiplied by 4.3 to estimate total flock size (Per. com Tom Stehn). This data suggest a flock with 30 nesting pairs would contain closer to 130 individuals. Because of this recent analysis, we increased the total flock size from 120 to 130 to err on the side of caution.

### **Recruitment**

Perhaps the more important and much greater challenge will be achieving minimal recruitment levels (Folk et al 2008). As with any reintroduction we can only consider our efforts successful if the population reproduces on its own (Folk et al. 2008). Reproduction rates will have to eventually reach that of the AWBP. Again many different unforeseen factors may cause low reproductive rates. Each factor affecting recruitment can only be addressed as we encounter it. Experience will be gained and each factor will be addressed as we encounter it but this will take many years due to the slow maturation of the birds as well as the low reproductive rate. Currently the majority of the population is still too young to reproduce and the current sex ratio of the population will leave some females without a mate even once they reach sexual maturity. Most likely this will simply result in a delay in those lone females beginning to reproduce. The three cohorts released so far have all been skewed towards females and the mortality rate has been fairly evenly balanced between males and females leaving the population slightly unbalanced in favor of females. Unfortunately there is nothing that can be done to allocate eggs containing male embryos to the project and very little that can be done to shift chicks around between various release projects once they hatch and begin to be reared with different techniques. However, over time the sex ratio is likely to become more evenly balanced.

### **LOCATION OF WORK**

The first release site is located in Vermilion Parish (lat. 29.828865, long. -92.552900) on the WLWCA (Fig.3). Although the location has been used for all three cohorts so far, other locations may be used for future releases. The long term success of the SWLP may depend on spreading the release of individual cohorts over several sites, thereby spreading the entire flock across a more diverse region. Spreading the population across a broader range of habitats will better protect against a stochastic event such as drought, flooding, or hurricane (Folk et al. 2005). Northern portions of Vermilion and Cameron Parishes have many government and privately owned wetlands that may serve as suitable release sites for future cohorts.

To date all released birds have eventually left the WLWCA with most birds moving north into the historic area of the Cajun Prairie that is now dominated by rice and crawfish aquaculture. While released birds have visited 13 different parishes and three different states outside of LA (TX, AR, & MS), they have mainly settled in and used six parishes (Fig 4). This dispersal could be due to the extreme drought and flooding conditions that made the WLWCA marsh unsuitable for the birds in two out of the three years or it could be actual preferences demonstrated by the birds. It remains to be seen if this type of dispersal will continue in future years with additional cohorts. It is also unclear if the birds will attempt to nest in the agricultural landscape they have dispersed into or if they will return to the marsh near the release site when they are ready to nest. Again, this will take several more years to determine since the majority of the birds in the population are still too young to reproduce.

### **APPROACH**

#### **Release Methodology**

Three cohorts of 10, 16, and 14 birds respectively have been released since February 2011 using the soft/gentle release method at the pen site in the WLWCA. We hope for similar or even higher numbers of birds in future cohorts; however, the number of chicks available for us to release is dependent upon captive production as well as allocation decisions made by the WCRT each year.

Each cohort of birds is initially held in the top-netted pen for several weeks to allow them to acclimate to their new environment (Nagendran 1996). This also gives project staff a chance to place the permanent bands and transmitters on the birds and ensure the birds adjust to these as well. While in the top-netted pen the birds are provided with food and checked daily to ensure they are healthy and adapting to their new environment. Once released into the open pen, food is provided for at least six additional weeks to allow the birds to slowly continue their transition to becoming wild and independent birds. For the first two weeks after being released, in addition to daytime checks, evening checks and observations are conducted to document (1) where the birds choose to roost at night and (2) to encourage them back into the pen if they are alone or in an unsafe location outside of the pen. After those initial two weeks, checks and observations are only done during the day and interactions between the costumed caretakers and the birds is decreased. Eventually the feeders are allowed to run out of food and are removed from the pen. Thereafter, the birds are then completely on their own.

### **Soft Release Pen**

The original release pen was designed and constructed very well, and thus, has required little maintenance in the ensuing years. However, the smaller top-netted pen contained within the main 1.5 acre pen was expanded from 70 to 100 feet in diameter prior to the arrival of the second, larger cohort of birds.

As a result of all the released whooping cranes dispersing away from the pen site and the WLWCA the original release pen has been used for the next two cohorts of birds and will likely be used again for additional cohorts in the future. If a large number of older whooping cranes return to the WLWCA, or if in the future a cohort of birds does not disperse away from the area, a second release pen may be needed at a separate location.

### **Predator Control**

Prior to the arrival of the first cohort in February 2011 several trail cameras were placed in locations near the pen and along the levee next to the pen. The purpose was to document predators that were in the area and see if predator traffic changed after the arrival of the birds. Both coyotes and bobcats were seen on these cameras before and after the arrival of the birds but sightings and evidence of them were fairly rare. In coordination with the USDA, several traps were set along the levee while the first cohort of birds was at the pen site. However, no predators were caught and no cranes were predated while at the pen site. We have continued the use of trail cameras for the second and third cohorts to document predators in the vicinity of the release pen, but no further trapping has been conducted and will only be done on an as needed basis in the future.

### **Health Protocols**

Each bird is examined upon arrival by LDWF's staff veterinarian who is in regular contact with project staff as health issues arise. LDWF has also developed relationships with both the Audubon Center for Research of Endangered Species (ACRES) and the LSU veterinary school to assist in treatment and care of injured or sick whooping cranes. Cranes are monitored and observed closely while they remain at the pen site and fecal samples are periodically collected to test for parasites with

treatment being provided if warranted. Once the birds are on their own, cases will be handled on an individual basis as they arise. Finally, exams will be conducted and medical samples collected when birds are caught for replacement of a transmitter or if there is ever a need to move or relocate a bird.

In the event of a crane death, the carcass will be sent to the USGS National Wildlife Health Center (NWHC) in Madison, Wisconsin for necropsy. In cases where there are very small amounts of remains recovered they will likely not be sent to the NWHC but instead examined by LDWF's staff veterinarian.

## **Research**

### **Pen Monitoring**

Two blinds were installed on the levee southeast of the release pen in order to (1) observe the birds and (2) store items needed for daily work at the pen. While in the top-netted pen, the birds are checked daily and behavior observations are conducted three times per week. Once released into the open pen, the behavior observations and daily checks continue but evening checks are also conducted during the first two weeks. Checks and visits are coordinated to minimize disturbance; except for the two weeks when evening observations are conducted, there is generally a single visit to the pen each day.

### **Tracking and Monitoring**

GPS satellite transmitters are attached to the leg of each whooping crane and are used to monitor their movements and locations as well as help document mortality. A slightly smaller transmitter from a different company was used starting with the second cohort of cranes and the programming was adjusted for download of data every second day instead of every third day. This change has facilitated quicker investigation and recovery of dead birds when mortality events have occurred. Additionally, starting with the 2011 cohort of cranes, approximately half of the birds received a second VHF transmitter that allows real time tracking and observation of the birds, which allows us to correlate the behavior of the birds with the habitat at their location.

Visual observations of Louisiana whooping cranes are not able to occur as frequently as originally planned due to the sometimes remote marsh locations of the birds or the need to obtain permission to access lands owned by private citizens. However data from the GPS transmitters is monitored continuously and visual observations are obtained several times a month or more frequently if a problem develops or is suspected.

### **Data Collection and Habitat Characterization**

**The following data will be collected for current and future cohorts of whooping cranes following release:**

- Time activity budget data on whooping cranes at the pen site – both while in the top-netted pen and once released into the open pen and surrounding marsh.
- Time activity budget data on fully released and independent whooping cranes throughout the annual cycle.
- Hazards encountered by whooping cranes, including causes of mortality when a mortality event occurs if those factors can be determined.
- Disturbance factors potentially affecting whooping cranes.



- Evidence of pair formation, establishment of territories, and nesting and reproductive efforts.

Additionally, GIS maps will be developed documenting the weekly locations of the released whooping cranes, and habitat use will be characterized for the whooping cranes, including both diurnal habitat use and the documentation of roosting locations.

## **EXPECTED RESULTS AND BENEFITS**

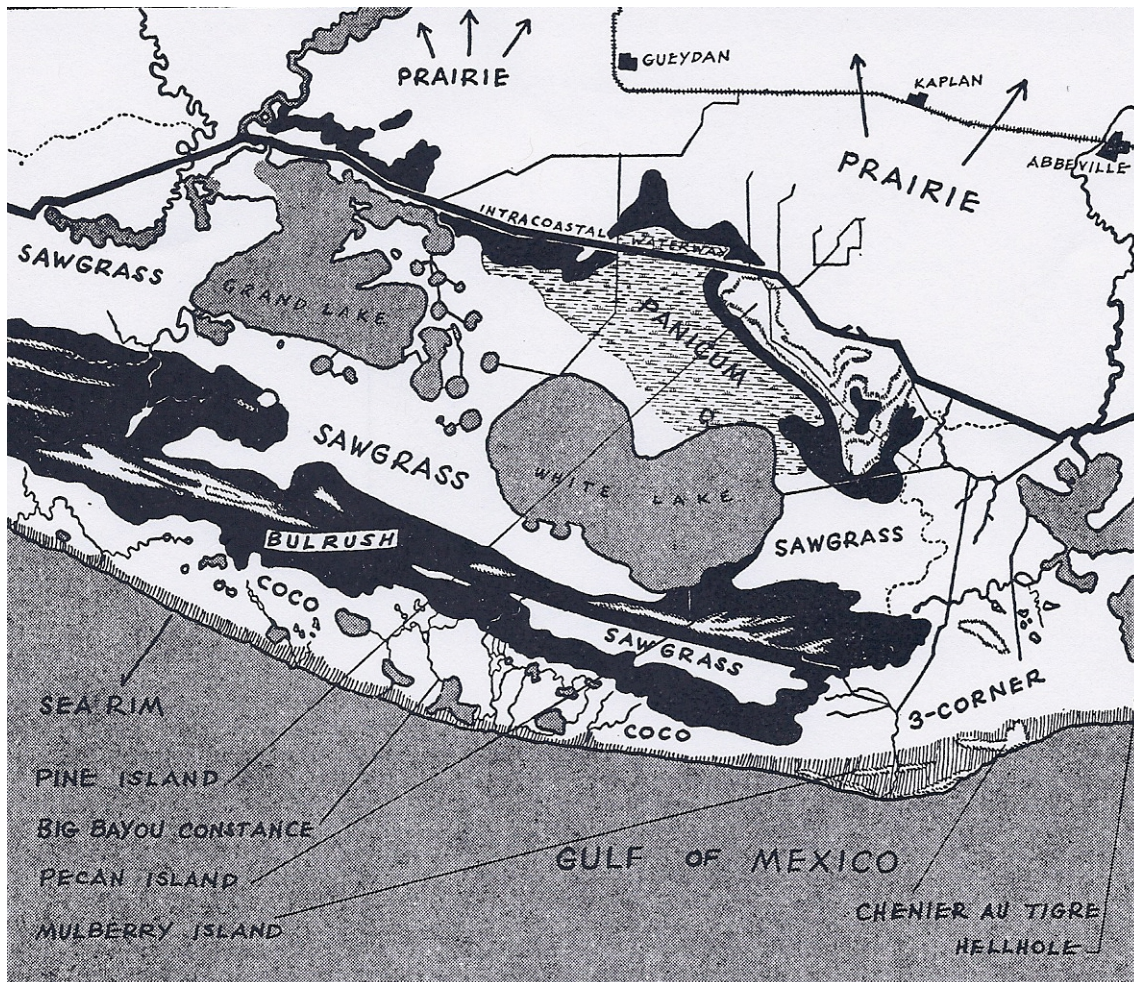
1. Document reestablishment of the whooping crane in Southwest Louisiana through applied science and the continued annual release of additional cohorts of juvenile whooping cranes.
2. Implement a program that will establish a nonessential population of whooping cranes in Southwest Louisiana without affecting the present activities of Louisiana residents.
3. Establish a reproducing flock of whooping cranes in Southwest Louisiana to improve the probability of the species survival and eventually help lead to the down-listing of the whooping crane.
4. Collect data on habitat use, dispersal patterns, behavior, and causes of mortality each year to inform future cohort releases.
5. Provide education and outreach to inform the public and increase awareness of the challenges facing whooping cranes and maintain public support for this effort in Louisiana.

## **Literature Cited**

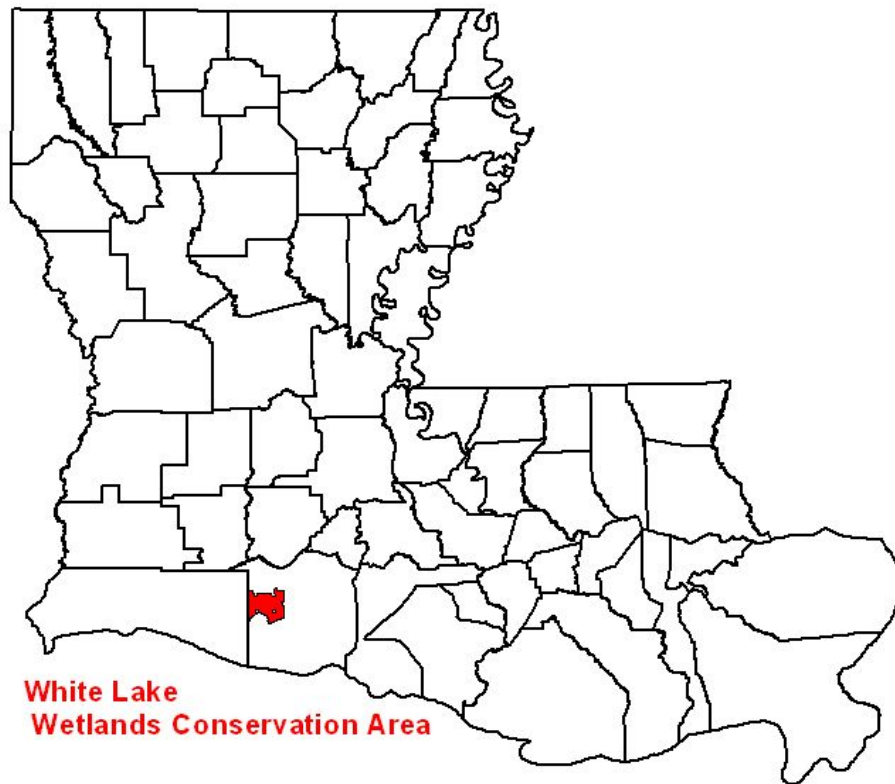
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Figure 1. Habitats Historically Used by Whooping Cranes in Southwest Louisiana (Allen 1952).



**Figure 2. Location of White Lake Wetlands Conservation Area Vermilion Parish, Louisiana.**



**Figure 3. Whooping Crane Release Site Located Within White Lake Wetlands Conservation Area Vermilion Parish, Louisiana.**

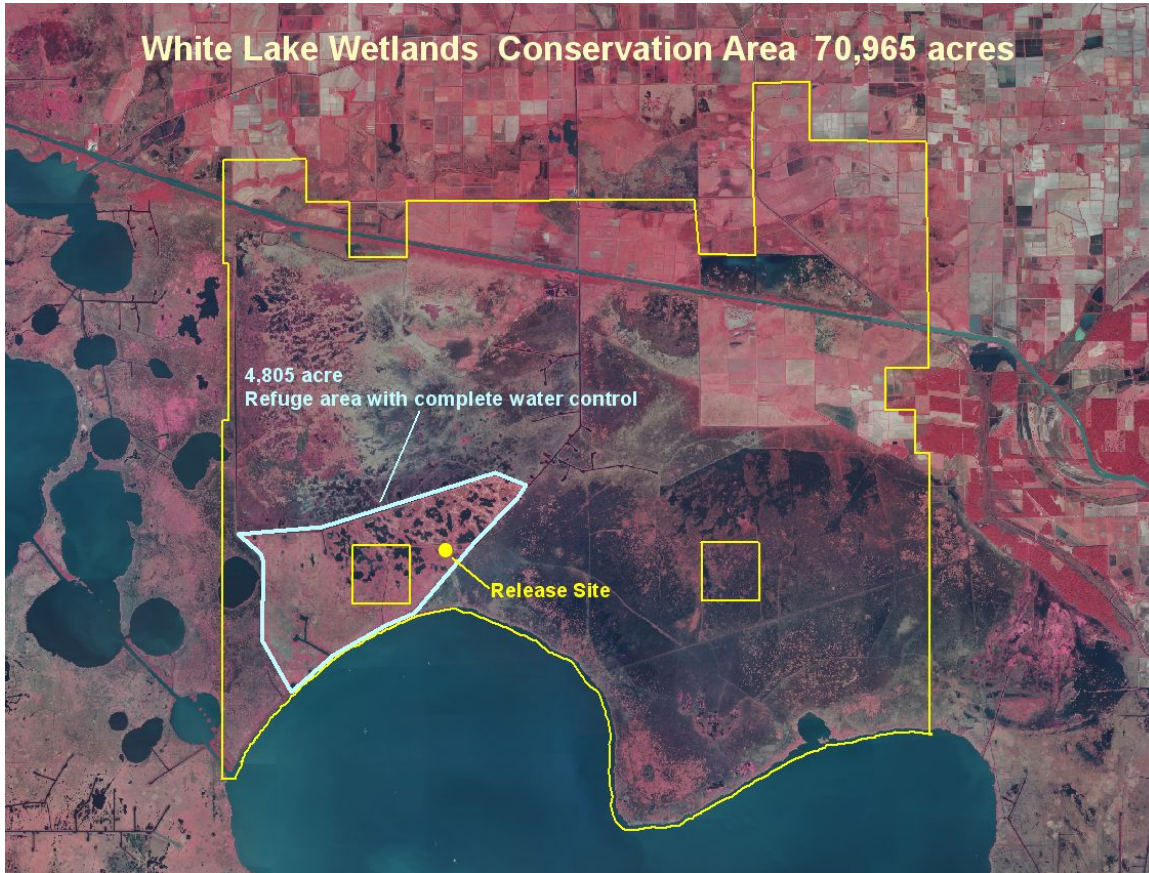
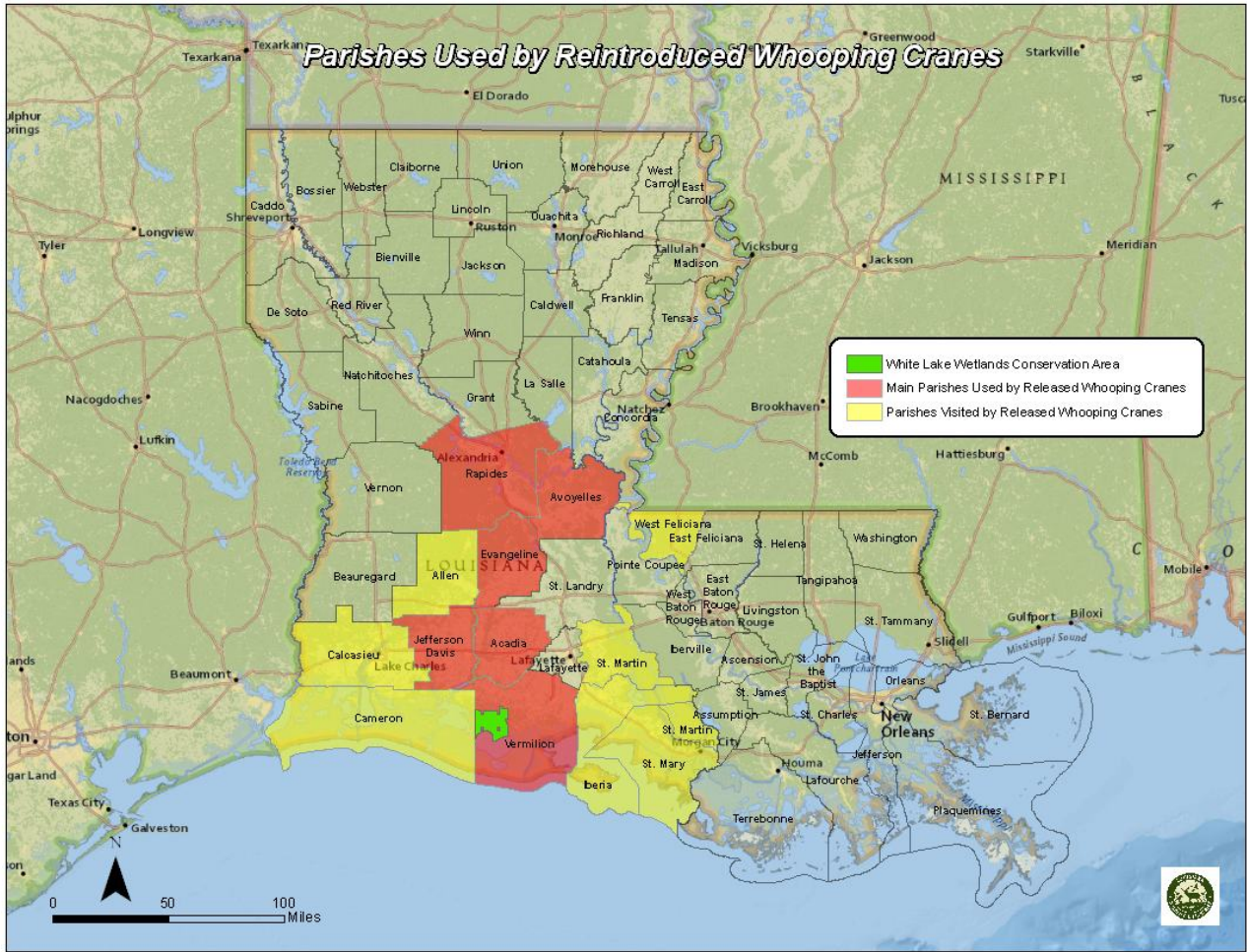


Figure 4. Parishes Used by Whooping Cranes Reintroduced to Southwest Louisiana.



## WHOOPING CRANE PROGRAM PROPOSED SWG BUDGET 2013-2015

Whooping Crane Budget 2013-2015									
	12/1/13-6/30/14			7/1/14-6/30/15			Total		
	SWG	LSU AgCenter	LDWF	SWG	LSU AgCenter	LDWF	SWG	LSU AgCenter	LDWF
<b>Personnel</b>	\$26,684			\$45,672			\$72,356		
Salary - Research Associate									
Fringe @ 40%	\$10,674			\$18,269			\$28,943		
LDWF Staff Salary/Fringe	\$5,471			\$9,847			\$15,318		
Unrecovered and Contributed Indirect Costs @42% MTDC	\$21,150			\$33,155			\$54,305		
<b>Travel</b>									
Training and Meetings	\$3,000			\$5,000			\$8,000		
<b>Supplies</b>	\$10,000			\$10,000			\$20,000		
							SWG = \$129,299 (65%)		
							Match = \$69,623 (35%)		
							Total = \$198,922		

## **BUDGET JUSTIFICATION**

The Research Associate will be supervised by Dr. Sammy King and will be responsible for implementing research activities on reintroduced whooping cranes. Associated duties will include (either conducting or coordinating with the team): 1) downloading of GPS locations; 2) Developing weekly maps of locations; 3) Identifying and locating whooping cranes that may be injured or dead; 4) Identifying and contacting landowners where whooping cranes are located; 5) Collecting field data; 6) Entering and reviewing field data; 7) Assisting in report, proposal, and grant writing; 8) Assisting in the development and evaluation of data collection protocols; 9) Assisting in public education activities; 10) Assisting in donor and partner tours of the whooping crane project; and other miscellaneous items.

Salary was based on the range of salaries for LSU Research Associates and to make the salary comparable to LDWF biologist on the project.

Travel includes PI and/or RA visits to Recovery Team meetings, professional scientific meetings, public education presentations, training for the PI and/or RA, and overnight trips necessary for field data collection.

Supplies might include fuel, cameras, optics, waders, crane food, laptop, GPS, and other miscellaneous supplies.

LSU would provide match in unrecovered indirect.



## Attachment 1. Critical Priority Letter

June 21, 2010

Diana Swan  
Fish and Wildlife Biologist  
U.S.F.W.S., Federal Assistance Division  
1875 Century Blvd., Ste. 240  
Atlanta, GA 30345

RE: Whooping Crane Reintroduction as an Emerging Issue in Louisiana

Dear Ms. Swan:

The Louisiana Wildlife Action Plan (WAP) was submitted for approval to the National Advisory Acceptance Team and subsequently approved in December 2005. Since then, a significant issue affecting one of our Species of Conservation Concern has developed that is not fully represented within the document. The Louisiana Department of Wildlife and Fisheries (LDWF) has determined that the reintroduction of Whooping Cranes is a critical priority. Some factors that have contributed to this emerging situation include:

1. The Whooping Crane Recovery Plan calls for multiple subpopulations as a means to qualify for down listing. The Florida Nonessential Experimental Population (NEP) is not exhibiting reproductive success sufficient to maintain that population. The U.S. Fish and Wildlife Service recovery team is proposing Louisiana as the site of an additional NEP subpopulation. Louisiana still has available a substantial intact wetland habitat base. This emerging situation has advanced the Louisiana reintroduction to the critical priority status qualifying for use of State Wildlife Grant (SWG) funds.
2. The eastern migratory flock is also not reproducing sufficiently due to nest abandonment.
3. The Whooping Crane Recovery Team endorsed habitat suitability studies of White Lake Wetlands Conservation Area and Marsh Island Refuge to determine if Louisiana would be an appropriate site for reintroduction of Whooping Cranes. It is important to note that Louisiana historically supported resident and wintering populations of Whooping Cranes and that the last known location of a wild resident flock of Whooping Cranes was in Vermilion Parish, near the White Lake Wetlands Conservation Area.
4. In recent years, an individual Whooping Crane was spotted among a flock of Sandhill Cranes at an undisclosed location in Louisiana.
5. Preliminary evidence gathered since 2008 as part of SWG grant T-55 "Reintroduction of Whooping Cranes to Louisiana: Habitat Evaluation of White Lake" indicates that the White Lake Wetlands Conservation Area contains suitable forage and nesting habitat for Whooping Cranes.

With approval from the U.S. Fish and Wildlife Service, we would incorporate the reintroduction of Whooping Cranes into Louisiana as a critical priority issue. This designation will allow LDWF and interested partners to address the issue and monitor the effectiveness of the anticipated conservation action, allowing adaptive research and management in the future.

Finally, Louisiana is committed to incorporating this new priority within the next version of its Wildlife Action Plan, if it remains an emerging or critical issue.

The professional staff of LDWF looks forward to working with you to ensure the success of the State's Wildlife Action Plan and this new critical priority. If you have any questions, please do not hesitate to contact Mr. Robert Love of our Coastal & Nongame Resources Division at 225-765-2811 or [blove@wlf.la.gov](mailto:blove@wlf.la.gov).

Sincerely,

Jimmy L. Anthony  
Assistant Secretary

## Attachment 2. Critical Priority Approval Letter



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
1875 Century Boulevard  
Atlanta, Georgia 30345

**JUL 22 2010**

IN REPLY REFER TO:  
FWS/R4/MS - FA

Mr. Robert Barham, Secretary  
Department of Wildlife and Fisheries  
Post Office Box 98000  
Baton Rouge, Louisiana 70898-9000

Dear Mr. Barham:

We have received your letter dated 21 June 2010, informing us of an emerging issue that has arisen in Louisiana since the approval by the USFWS of your Wildlife Action Plan, regarding the reintroduction of the extirpated Whooping Crane. Thank you for notifying us of this new environmental issue affecting a species of greatest conservation need in your state.

We approve of your intention to incorporate this issue into your list of funding priorities already identified within your Plan, so as to be able to solicit proposals that address this conservation need. As you know, per the USFWS memo "2007 Administrative Guidelines for State Wildlife Grants" Section X (H), we will expect the following information to be included within all grant applications dealing with this emerging issue:

"However, within the grant application or amendment, the State must fully describe the emerging or crisis situation and indicate if funds must be reallocated from efforts already underway, identify the species or habitats that will benefit from the proposed action, and commit to monitoring the effectiveness of the proposed conservation action so future management activities can be appropriately adapted. Finally, the state must commit to incorporating this new priority within the next version of its Strategy, if it remains an emerging or critical issue."

As noted in your letter, Louisiana has committed to incorporating this new priority within the next version of its Wildlife Action Plan, if this remains an emerging or critical issue. As per the USFWS 2007 "Guidance for Wildlife Action Plan (Comprehensive Wildlife Conservation Strategy) Review and Revisions" States must review and revise their Plans on or before October 1, 2015, or the date specified in their original, approved Plan.

Please contact me at (404) 679-4154 or Ms. Diana Swan at (404) 679-7058, if you have any questions.

Sincerely yours,

Michael L. Piccirilli  
Chief - Federal Assistance

**RECEIVED**

**JUL 26 2010**

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OFFICE OF THE SECRETARY