

# BLACKBURN CARTER

A Professional Corporation - Lawyers

4709 Austin Street, Houston, Texas 77004  
Telephone (713) 524-1012 ♦ Telefax (713) 524-5165

www.blackburncarter.com

JAMES B. BLACKBURN, JR.

MARY W. CARTER

CHARLES W. IRVINE

ADAM M. FRIEDMAN

MCNAUGHTON A. DUSON

JAMES B. BLACKBURN, JR.  
Sender's E-Mail: jbb@blackburncarter.com

December 7, 2009

*U.S. Certified Mail/RRR:*  
Bryan W. Shaw, Ph.D., Chairman  
Texas Commission on Environmental  
Quality, MC 100  
P.O. Box 13087  
Austin, TX 78711-3087

*U.S. Certified Mail/RRR:*  
Buddy Garcia, Commissioner  
Texas Commission on Environmental  
Quality, MC 100  
P.O. Box 13087  
Austin, TX 78711-3087

*U.S. Certified Mail/RRR:*  
Carlos Rubinstein, Commissioner  
Texas Commission on Environmental  
Quality, MC 100  
P.O. Box 13087  
Austin, TX 78711-3087

*U.S. Certified Mail/RRR:*  
Mark R. Vickery, P.G., Executive Director  
Texas Commission on Environmental  
Quality, MC 109  
P.O. Box 13087  
Austin, TX 78711-3087

*U.S. Certified Mail/RRR:*  
Al Segovia, South Texas Watermaster  
14250 Judson Road  
San Antonio, TX 78233-4480

*U.S. Certified Mail/RRR:*  
Sam D. Hamilton, Director  
Fish and Wildlife Service  
1849 C St., N.W.  
Washington, D.C. 20240

*U.S. Certified Mail/RRR:*  
Ken Salazar, Secretary of Interior  
U.S. Department of the Interior  
1849 C Street, N.W.  
Washington, DC 20240

*U.S. Certified Mail/RRR:*  
Eric H. Holder Jr., Attorney General  
U.S. Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, DC 20530

*U.S. Certified Mail/RRR:*  
Greg Abbott, Texas Attorney General  
Office of the Attorney General  
PO Box 12548  
Austin, TX 78711-2548

**Re: NOTICE OF INTENT TO SUE FOR VIOLATIONS OF SECTION 9 OF THE FEDERAL  
ENDANGERED SPECIES ACT FOR ILLEGAL TAKES OF WHOOPING CRANES AT ARANSAS  
NATIONAL WILDLIFE REFUGE, TEXAS**

Dear Chairman Shaw and other Public Officials:

This letter is written on behalf of The Aransas Project ("TAP") to inform you of violations of the Endangered Species Act, 16 U.S.C. § 1531, *et seq.* ("ESA") arising from the impact of surface water permits issued by the Texas Commission on Environmental Quality ("TCEQ") by and through its officials, and to request that you take immediate action to remedy these violations. This letter is provided to you pursuant to the 60-day notice requirement of the ESA's citizen suit

provision. 16 U.S.C. § 1540(g)(2). The activities described in this notice violate the take provisions of the ESA. If they are not curtailed, The Aransas Project intends to commence a civil action against Chairman Shaw, Commissioner Garcia, Commissioner Rubenstein, Director Vickery, and Mr. Segovia and other responsible state employees, acting in their official capacity, for violations of Section 9 of the ESA. 16 U.S.C. § 1538(a)(1)(B).

## I. NOTICING PARTY

The Aransas Project is a non-profit corporation with offices in Texas. TAP is dedicated to the research, development and publication of proposals to protect the health of the streams and estuaries in and around the San Antonio-Aransas Bay system, including monitoring and taking legal action to protect the ecology of the region, including endangered and threatened species such as the whooping crane. Members include organizations, businesses and individuals dedicated to the protection and preservation of the whooping cranes and the natural resources of the region as well as commercial entities receiving all or part of their economic livelihood from whooping crane-related activities.

The Aransas Project's mailing address is P.O Box 1839, Rockport, TX, 78381-1839. TAP can also be contacted through Jim Blackburn, Counsel, 4709 Austin Street, Houston, Texas 77004, phone number 713-524-1012 and fax number 713-524-5165.

## II. STATUTORY FRAMEWORK

Section 9 of the ESA specifically prohibits the "take" of an endangered species, 16 U.S.C. § 1538(a)(1)(B). "Take" is broadly defined to include harassing, harming, pursuing, wounding or killing such species, 16 U.S.C. § 1532(19). The term "harm" is further defined to include "significant habitat modification or degradation where it ... injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. § 17.3 "Harass" includes any "act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering." *Id.* The ESA's legislative history supports "the broadest possible" reading of "take." *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687, 704-05 (1995). "Take" includes direct as well as indirect harm and need not be purposeful. *Id.* at 704; *see also National Wildlife Federation v. Burlington Northern Railroad*, 23 F.3d 1508, 1512 (9th Cir. 1994).

The take prohibition applies to any "person," 16 U.S.C. § 1538(a)(1), including state agencies and/or state officials in their official capacity, 16 U.S.C. § 1532(13). The ESA further makes it unlawful for any person, including state agencies and/or state officials, to "cause to be committed" the take of a species. 16 U.S.C. § 1538(g). Violations of Section 9 are enforceable under the ESA's citizen-suit provision. 16 U.S.C. § 1540(g).

Courts have repeatedly held that government actions authorizing third parties to engage in harmful actions can constitute an illegal taking under Section 9 of the ESA. *See Strahan v. Cox*, 127 F.3d 155, 158, 163-64 (1st Cir. 1997), *cert. denied*, 525 U.S. 830 (1998) (state agency official caused taking of the endangered Right whale because it "licensed commercial fishing operations to use gillnets and lobster pots in specifically the manner that is likely to result in violation of [the ESA]"); *Animal Protection Institute v. Holsten*, 541 F. Supp. 2d 1073 (D. Minn, 2008) (finding that state agency official violated Section 9 by issuing trapping permits and

having a regulatory program that did not prevent incidental takes of Canadian lynx); *Defenders of Wildlife v. Administrator, Env'tl. Protection Agency*, 882 F.2d 1294, 1300-01 (8th Cir. 1989) (federal agency caused takes of endangered Black-footed ferret through its “decision to register pesticides” even though other persons actually distributed or used the pesticides); *Loggerhead Turtle v. City Council of Volusia County*, 148 F.3d 1231, 1253 (11th Cir. 1998) (county’s inadequate regulation of beachfront artificial light sources may constitute a taking of sea turtles in violation of the ESA).

The ESA authorizes private enforcement of the take prohibition through a broad citizen suit provision. “[A]ny person may commence a civil suit on his own behalf to enjoin any person, including ... any ... governmental instrumentality or agency ... who is alleged to be in violation of any provision of [the ESA].” U.S.C. § 1540(g). A plaintiff may seek to enjoin both present activities that constitute an ongoing take and future activities that are reasonably likely to result in a take. *See National Wildlife Fed’n v. Burlington Northern Railroad*, 23 F.3d at 1511.

The ESA provides that the Secretary of the Interior (“Secretary”) may permit the take of endangered and threatened species under some circumstances. Section 10(a)(1)(A) provides that the Secretary may issue permits “for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant to subsection (j) [of the ESA].” 16 U.S.C. § 1539(a)(1)(A). Section 10(a)(1)(B) provides that the Secretary may permit “any taking otherwise prohibited by [Section 9(a)(1)(B) of the ESA] if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.” 16 U.S.C. § 1539(a)(1)(B).

### III. SUMMARY OF THE CLAIM

In this 60-day Notice of Intent to Sue, TAP sets out the basis for the claim that the water rights permit program administered by TCEQ officials has reduced freshwater inflows to the San Antonio-Aransas Bay complex to the extent that significant habitat modification and/or degradation has occurred. The marsh-estuary habitats used by the whooping crane are made more saline and for longer periods. As a result, the marsh-estuary ecosystem is less productive and the natural food sources of the crane become scarce. This habitat modification and/or degradation injures wildlife by significantly impairing essential behavioral patterns of the whooping crane, including feeding and watering (*i.e.*, causing harm). 50 C.F.R. § 17.3. Similarly, TAP alleges that the actions of TCEQ officials reduced freshwater inflows to the extent that the likelihood of injury to the whooping cranes increased by disturbing them to such an extent as to significantly disrupt normal behavior patterns which include feeding and watering (*i.e.*, causing harassment). 50 C.F.R. § 17.3. TAP is alleging in this Notice of Intent to Sue that the permit program and its oversight by TCEQ officials constituted harm and harassment during the 2008-2009 wintering season and is reasonably likely to continue to cause harm and harassment in the future, all in violation of the “take” provisions of the federal Endangered Species Act. It is the goal of TAP to seek a court order (1) requiring a full accounting of all existing water uses on the Guadalupe and San Antonio River systems, (2) require the development of a Habitat Conservation Plan to identify the mechanism by which TCEQ will adjust existing permits on these two river systems in order to protect the whooping crane and (3) whatever other relief TAP requests or the federal court deems appropriate.

## IV. FACTUAL BACKGROUND

### A. The Whooping Crane

The whooping crane (*Grus americana*) is a flagship species for the North American wildlife conservation movement, symbolizing the struggle for survival that characterizes endangered species worldwide. It is a large, distinctive, and photogenic bird, popular with the public and the media, and it is often used as a cornerstone species in educational materials associated with endangered species.

In the United States, the whooping crane was listed as threatened with extinction in 1967 and endangered in 1970; both listings were “grandfathered” into the Endangered Species Act of 1973. Subsequently in 1978, Critical Habitat was designated for the crane’s winter habitat at Aransas. *Determination of Critical Habitat for the Whooping Crane*, 43 Fed. Reg. 20938, 20942 (final notice, May 15, 1978). This Critical Habitat includes the Aransas National Wildlife Refuge and the Blackjack Peninsula, and extensive portions of San Antonio Bay, Espiritu Santo Bay, Matagorda Island, St Charles Bay and Lamar Peninsula.

Whooping cranes occur only in North America. They currently exist in the wild at 3 locations and in captivity at 9 sites. The August 2008 total wild population was estimated at 389. This includes: 266 individuals in the only self-sustaining population, the Aransas-Wood Buffalo National Park Population that nests in Wood Buffalo National Park and adjacent areas in Canada and winters in coastal marshes of the Aransas National Wildlife Refuge (“ANWR”) and surroundings in Texas; 30 captive-raised individuals released in an effort to establish a non-migratory Florida Population in central Florida; and 93 individuals introduced between 2001 and 2008 that migrate between Wisconsin and Florida in an eastern migratory population.

The whooping crane breeds, migrates, winters, and forages in a variety of habitats, including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields. The Aransas-Wood Buffalo Population migrates during both spring and fall through a relatively narrow (80-300 km wide) corridor between Aransas and Wood Buffalo.

The cranes’ winter diet consists predominately of animal foods, especially blue crabs, along with the fruit of the wolfberry plant. Most foraging occurs in the brackish bays, marshes, and salt flats on the edge of the mainland and on barrier islands. Occasionally, cranes fly to upland sites in search of fresh water to drink or to find foods such as acorns, snails, crayfish and insects, and then return to the marshes to roost.

The Aransas-Wood Buffalo Population reached a low of only sixteen birds in the winter of 1941-1942, and numbered under 35 birds over the next two decades. Historic population declines resulted from habitat destruction, shooting, and displacement by human activities. Current threats include limited genetics of the population, loss and degradation of migration stopover habitat, construction of additional power lines, degradation of coastal ecosystems, threat of chemical spills in Texas, as well as the reduced inflows described herein.

A complete census of the Aransas-Wood Buffalo Population can only be done during the 5-6 months the flock is on the wintering grounds. Aerial counts have provided an annual census starting in 1950 of how many whooping cranes arrive at Aransas in the fall and how many depart

in the spring. Between 1950 and 1986, a total of 26 whooping cranes were lost on the wintering grounds. This thirty-six year total is rivaled by the 23 cranes lost during the winter of 2008-2009.

### **B. The 2008-09 Whooping Crane Mortality Event is Unprecedented**

The Aransas-Wood Buffalo Population suffered unprecedented mortality while at Aransas this last winter. According to Tom Stehn, Whooping Crane Coordinator, USFWS, the flock size declined from a peak of 270 to 247 individuals (a loss of 23 birds) by the end of the 2008-2009 wintering season. Of the 38 juveniles, only 22 survived the 2008-09 winter. When added to the 34 birds that left Texas in spring 2008 and failed to return in the wintering season 2008-2009, 21.4% of the flock (57 birds) was lost during the last 12 months. Further, a below-average reproduction year in Canada resulted in only 22 fledged chicks from 62 nests, roughly half the productivity of the previous summer season. In short, the past 18 months has been a very bad time for the whooping crane.

According to the USFWS's Tom Stehn:

“Food resources were considered to be very poor throughout the 2008-09 winter. The fall wolfberry crop was way below average, and blue crabs were scarce from December through March. ... The lack of food was believed to be directly related to the high winter mortality. Additionally, salinities were high throughout the season so that cranes were forced to fly to fresh water to drink, with flight using an estimated 19 times more energy than a crane at rest.”

Tom Stehn, Whooping Crane Coordinator, USFWS, *Whooping Crane Recovery Activities, October, 2008 – October 2009*, at 4-5 (Oct. 2009). USFWS became so concerned about the food shortage at Aransas that it began a program of supplemental feeding using game feeders dispersing whole kernel corn. *Id.* at 5. “The supplemental feeding was not a cure-all, but we believe it helped some cranes reduce the energy stress they were under from the shortage of natural foods.” *Id.* at 5-6. The USFWS has circulated a draft Environmental Assessment (“EA”) for the supplemental feeding program. The EA states that the fall 2009 conditions at the refuge have not improved despite the recent rainfall, and surveys show that blue crabs and wolfberries are expected to be in short supply. USFWS staff intend to begin supplemental feeding again this winter.

Based upon our studies, we believe that the primary cause of this massive crane mortality is the failure of the TCEQ officials to ensure sufficient freshwater inflows into the San Antonio Bay estuary and the marshes of the Aransas NWR. For many decades the TCEQ's officials have issued water rights in the Guadalupe River basin. The TCEQ's officials have allowed those rights to be maintained and used without consideration of the need of the whooping crane for freshwater inflows to San Antonio Bay, and without consideration of the overall health of the bay ecosystem upon which the whooping crane is dependent. At the time of the writing of this letter, TCEQ officials continue to allow the use of water from the San Antonio and Guadalupe River systems and ignore the issue of environmental flows during its oversight of these existing permits. The water resources of the Guadalupe and San Antonio river basins are at the same time over-allocated and mismanaged.

Although the drought would have caused naturally low freshwater inflows, these flows have been further and significantly reduced by the activities the TCEQ officials authorize and oversee.

This regulatory program has been implemented with complete disregard to the requirements of the whooping crane in violation of the Endangered Species Act.

### **C. Low Freshwater Inflows Cause High Bay Salinity**

The majority of the freshwater inflows to San Antonio Bay come from the Guadalupe and San Antonio Rivers. Historically, the Guadalupe and San Antonio Rivers have supplied over 79.6% of the total freshwater inflows into this estuary. The gauged areas of the Guadalupe River alone accounted for 56.9% of the total freshwater inflows into the estuary.

The Guadalupe River originates in the southern edge of the Edwards Plateau. The Upper Guadalupe is shallow, with swift flows, receiving inputs from many minor tributaries that flow intermittently following rainfall events. The San Antonio River originates within the San Antonio city limits, on the northern edge of the South Texas Brushlands, and flows in a southeasterly direction. The San Antonio River joins the Guadalupe River approximately 10 miles before entering San Antonio Bay on the Texas coast. The Bay has fresher areas near the Guadalupe River mouth (Mission Lake, Guadalupe Bay, Hynes Bay), and high salinity areas in Espiritu Santo Bay near Pass Cavallo, one of the major bay-Gulf of Mexico passes.

Freshwater inflows play a vital role in sustaining the estuarine ecosystem. A primary role of freshwater inflows is the mixing with seawater to create brackish conditions typical of most bays and estuaries. Many commercially and recreationally important species rely on the lower salinity conditions of estuaries for at least some portion of their life cycle. To deal with the salinity variability, all estuarine organisms have a range of salinity concentrations that they can tolerate based on their ability to regulate concentrations of internal body salts relative to environmental salinity. Salinity regimes that extend beyond this zone of tolerance can impair an organism's ability to maintain osmotic balance triggering metabolic stresses. Freshwater inflows also transport beneficial sediments and nutrients into the bay. As a result of these and many other interactions, the amount and timing of freshwater inflows have huge impacts on the productivity and overall health of the bay. Reduced inflows cause increased salinity, reduced mixing and stratification of the water column, and allow salt water to penetrate further into the bay bringing marine predators, parasites and diseases

From 1941 to 1987, the bay received an average of 2.3 million acre-feet of inflow annually. During wet years, there generally is plenty of water for all users and still adequate freshwater is left to flow into the bay. It is during the dry years that the over-allocation and mismanagement by TCEQ officials becomes evident. The recent drought conditions in central Texas lasted over 18 months, and were nearly as bad as the so-called record drought of 1954–56. For example, in San Antonio, 2008 was the driest year on record since 1871, with only 42% of the average annual rainfall. Similarly, at Victoria, 2008 was the fifth driest year on record since 1900, with only 69% of the average annual rainfall. Summer 2009 freshwater flows into the bay fell to record low levels (*e.g.* 324 cfs at Tivoli on August 18). These abnormally low flow rates have been evident since the winter of 2008 and flows only increased after the rains of October 2009. As a result, measured salinity levels in the bay remained above 20 parts per thousand (“ppt”) for well over a year, starting in July 2008 (Figure 1.) and reaching a high of over 35 ppt near the Aransas National Wildlife Refuge in summer, 2009. In non-drought years, bay salinity ranges from just above zero up to 30 ppt, with the high salinities limited to just a few months duration.

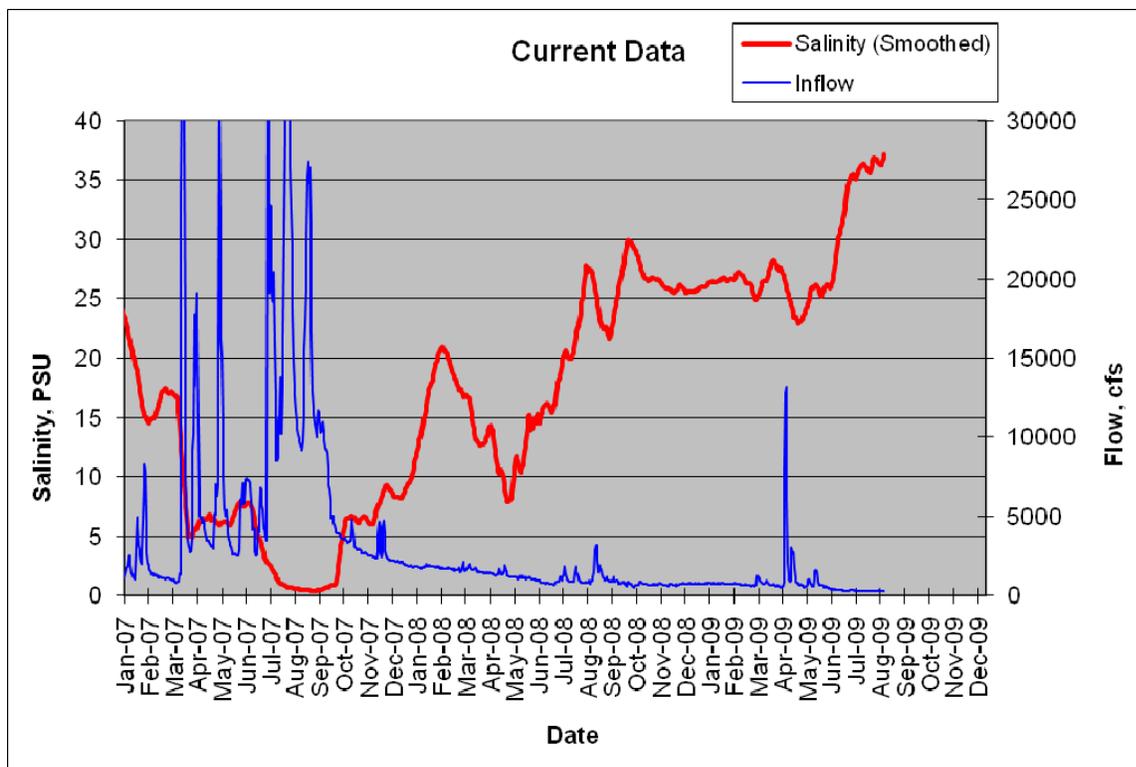


Figure 1: Measured freshwater inflow and salinity data from 2007-2009.

The Aransas Project has undertaken a study of the impacts of water use in the Guadalupe and San Antonio River Basins on salinity levels in the estuary. In this study, our consultant used water availability models (employing standard models and data) to determine available freshwater inflows under different scenarios, and then input the inflow data into a State of Texas-approved model to predict salinity gradients in the bay. The model was run with three scenarios: natural conditions, existing uses, and potential future use of all existing permitted rights. In other words, only the full use of existing water use permits was considered. The proposed or pending permit applications for surface water withdrawals for the Mid-Basin/Gonzales project and 189,000 acre feet at the Guadalupe River salt water barrier were not considered.

TAP's studies show that potential future use of existing permits will result in annual reductions on the order of 100,000 acre feet per year from current conditions or a total reduction from natural flows of almost half a million acre feet. As a result, the salinity of San Antonio, Carlos, Mesquite and Espiritu Santo Bays where the whooping cranes spend the winter will be significantly changed from the natural conditions. Table 1 sets out the changes in these bays associated with three different scenarios – natural conditions, existing use and full use of existing water rights. The impact of these scenarios is summarized for several target species based on their preferred salinities during certain key periods as set out by Texas Parks and Wildlife. Table 1 clearly shows a dramatic decline in the percentage of these bays with salinities suitable for a variety of species including the Blue crab which is a major part of the food chain of the whooping crane. Not only does this chart show a decline in the percentage of the bay that is suitable under existing uses, it also shows a significant decline as the full use of all existing permits is realized. In other words, the situation is bad and will get worse if all water rights currently issued are fully used.

Target Species	Preferred Salinity (ppt)	Occurrence	% of Bay for Scenario		
			Natural Conditions	Existing Use	Full Use of Existing Rights
White Shrimp	5 - 10	Jul - Dec	7.0%	2.0%	0.6%
Blue Crab	5 - 15	Jan - Jun	20.4%	14.1%	6.7%
Brown Shrimp	10 - 20	Apr - Sep	11.3%	3.8%	1.4%
Gulf Menhaden	5 - 10, 15 - 20	Feb - Jul	17.2%	9.7%	4.4%
Atlantic Croaker	5 - 20	Jan - Dec	13.7%	8.0%	3.7%
Bay Anchovy	20 - 25	Jan - Dec	13.7%	8.0%	3.7%
Pinfish	25 - 30	Jun - Nov	7.2%	2.0%	0.8%

Table 1: Change in % area of San Antonio, Espiritu Santo, Mission and Carlos Bays suitable for various bay species under natural flows, existing usage and full future usage of all currently permitted water rights.

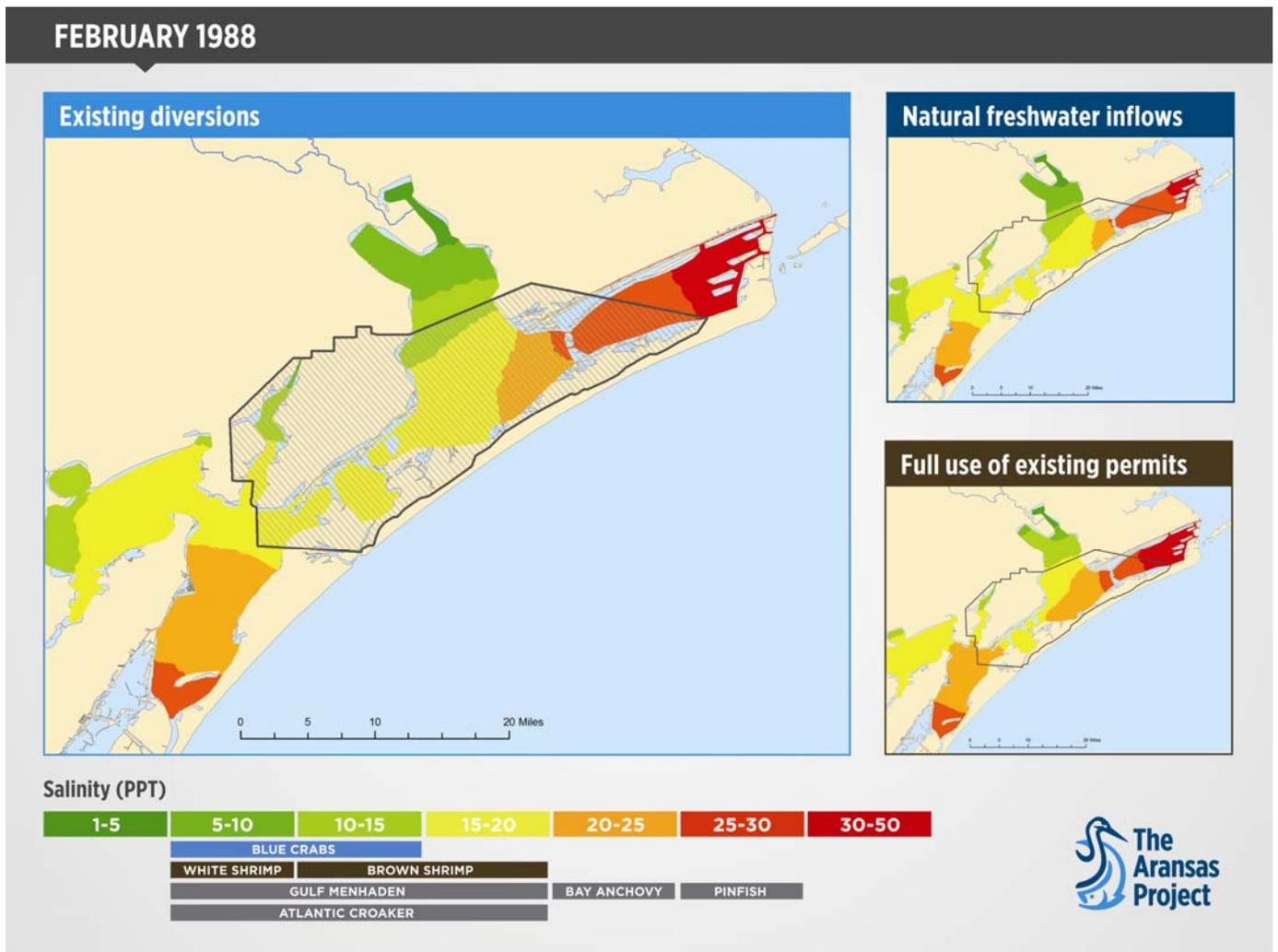


Figure 2.: Salinity changes in San Antonio, Espiritu Santo, Carlos and Mesquite Bays under natural conditions, existing uses and proposed full use of existing permits under 1989 flow conditions

Figure 2 shows a graphical representation of the salinity changes predicted by the model results for one of the monthly runs using the three scenarios (in this case February 1989, a period with similar low flow conditions to the 2008-2009 winter season and for which appropriate modeling data is available). The areas shown in color are various portions of the San Antonio-Aransas Bay complex and the colors correspond to predicted salinity levels for the three different scenarios – natural, existing use and full future use of all existing permits. The cross-hatched area is the Designated Critical Habitat of the whooping crane. As can be seen, there are significant differences in the salinity of the Designated Critical Habitat as well as in the entire bay system from scenario to scenario. These results (which are summarized in Table 1) show that during low inflow conditions, the current water diversions and TCEQ management practices have a significant impact upon the salinity of the bay system generally as well as upon the Designated Critical Habitat. TAP will continue to update these studies as better information becomes available.

#### **D. High Bay Salinity Reduces Abundance of Blue Crabs to the Detriment of the Whooping Crane**

It has long been understood that the major source of food for the whooping cranes at Aransas is the blue crab. In a year of high crab abundance, cranes can consume 7-8 crabs per hour (80 crabs per day), totaling 80-90% of their diet. In contrast, during years of low blue crab abundance, cranes consume an average of only three crabs per hour (about 35 crabs per day). Although the cranes are somewhat versatile, and can and do switch to alternate food sources when blue crabs are scarce, the other food sources are inferior because blue crabs provide more protein and fat for less foraging effort. It is also known that blue crabs are sensitive to salinity levels, and prefer salinities between 5 and 15 ppt. The crabs are known to migrate away from areas when the salinity surpasses these levels, creating a causal effect between higher salinity and a relative scarcity of crabs.

Studies have shown a strong correlation between the blue crab population and increased freshwater inflows. TPWD data suggests that water inflows greater than 1.3 million acre-feet annually results in low enough salinities in the estuary to produce high numbers of blue crabs. In San Antonio Bay, the years with the highest blue crab harvests all had inflows greater than 3 million acre-feet.

In the eight-year period from 1993-2001, the Fish and Wildlife Service (“USFWS”) conducted surveys that roughly estimated the number of blue crabs available to whooping cranes. Two winters (1993-94 and 2000-01) had lower than normal numbers of crabs. During those winters, seven and six whooping cranes died respectively. In the six other winters with normal numbers of crabs, zero to one crane died.

This winter, Tom Stehn of the USFWS observed that “A blue crab count done on April 1st found zero crabs in the marsh.... Overall, these continue to be some of the worst conditions I have ever observed for the cranes at Aransas, with some birds looking thin and with disheveled plumage.”

#### **E. High Salinity Reduces Abundance of Wolfberries to the Detriment of Whooping Cranes**

Extended periods of increased salinity can result in negative effects on the estuarine marsh plant community structure and composition. Wolfberries in the Aransas marshes can serve as an

important food source for the cranes, especially in the months of November and December when the cranes first arrive at Aransas. Increased salt marsh salinity is negatively correlated with abundance of wolfberries, because high salinities in late summer during the leafing period lead to reduced fruit production. In the absence of local rainfall, it is generally understood that when bay salinity is high, marsh salinity is somewhat higher still. With measured bay salinities remaining above 25 ppt from August 2008 through August 2009, and with practically no rainfall, the salinity of the Aransas salt marshes was very high for this extended period. The conditions of 2008 resulted in very low production of wolfberry fruit. Although there has been some rainfall in the fall of 2009, conditions in the marshes are similar to the previous year. Observer reports from Aransas indicate low to moderate abundance of wolfberry flowers and fruit in the fall of 2009 just as the cranes arrive for the winter.

**F. High Salinity Reduces the Availability of Drinkable Water, and Causes Takes of Whooping Cranes**

Yet another important relationship exists between the cranes and bay salinity. Cranes require that the water they drink be less than 23 ppt salinity. Usually the cranes drink the water in the marsh. However, when the water in the bay or in the ponds of the coastal marsh rises above 23 ppt, the cranes must fly to sources of freshwater in order to drink. These flights use up energy, reduce time available for foraging or resting, and could potentially make the cranes more vulnerable to predation in the uplands.

**G. The Health, Survival and Recovery of the Cranes is Directly Related to the Freshwater Inflows Regulated and Controlled by TCEQ Officials**

In the ways described above, among others, the health and welfare of the whooping crane is inextricably tied to bay salinity and the water management practices of TCEQ officials. The Whooping Crane Recovery Plan (3d. Revision, March, 2007) confirms the relationship between bay salinity levels and blue crab catch rates. The Recovery Plan identifies other impacts from low inflows and drought conditions including prolonged food shortage, lack of suitable nearby drinking water, drought-increased susceptibility to predation and disease, and possibly increased mortality during migration due to malnutrition. Therefore the Recovery Plan identifies that ensuring freshwater inflows is “priority 1” in the implementation schedule and vital to the recovery of the species.

Between 1988 and 2009, years in which higher crane mortality was observed were always characterized by low inflows from the Guadalupe River. (Figure 3). A crane response to low river flow (*i.e.* high salinity) is one of excess stress due to a number of ecological factors including food availability and the necessity to travel for fresh water. Weakened cranes may be more vulnerable to disease and predation. The cranes’ stressed condition does not necessarily lead to death but may also be manifested as lack of sufficient body fat and protein that will be exhibited during the spring migration and subsequent poor reproductive behavior. For example, following the poor blue crab winter of 1993-94, 37% of the known adult pairs (17 out of 46) failed to nest following their return to Canada. This was unusual since normally just about all pairs attempt to nest annually.

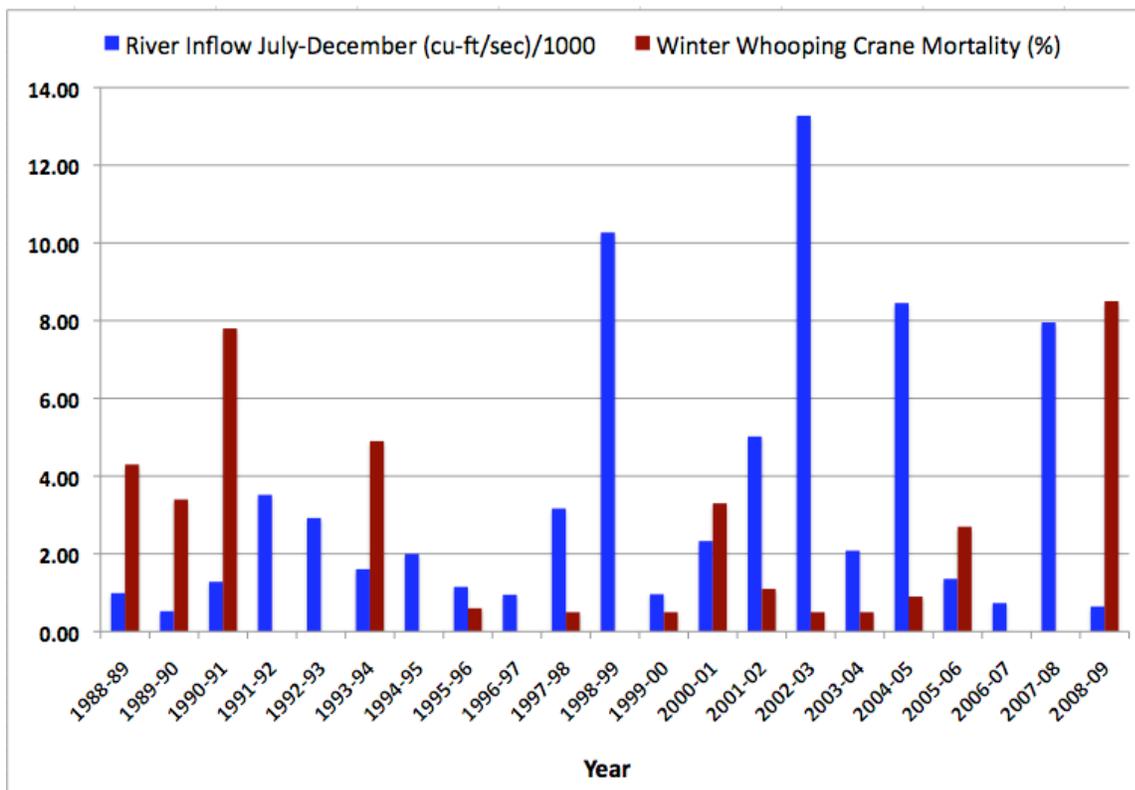


Figure 3: Graph of Guadalupe-San Antonio River flows into the San Antonio Bay during the period July through December and whooping crane winter mortality from 1988-2009. Mortality data (% of flock) from Tom Stehn, USFWS.

#### H. State Regulatory Mechanisms Harm and Harass Whooping Cranes

The State of Texas owns the water in its public waterways. The right to divert and use water from a waterway is known as a “water right”. The TCEQ officials named in this letter regulate water rights in Texas and control the appropriation, transfer and use of such rights (including emergency curtailments). The TCEQ Commissioners formally recognize a water right by issuing to the holder a Certificate of Adjudication or a Water Right Permit, which contains the limits of that right, its priority date, and any special or unique conditions associated with its use. The South Texas Watermaster is appointed by the TCEQ to administer the Guadalupe and San Antonio Rivers (among others), to enforce the regulatory scheme, and to apportion the water among the water rights holders to ensure that the more senior rights holders downstream obtain their water. Under State law, the Watermaster has the ability to curtail water rights in response to unique conditions.

The evidence is overwhelming that there is a causal relationship between the regulatory program administered by TCEQ officials regarding water rights and water use on the San Antonio and Guadalupe Rivers and the plight of the whooping crane. Decisions by the regulators determine river flows and salinity which affect the ability of the estuary ecosystems to produce the food required by the cranes. As a result food sources are directly and negatively impacted by the management and oversight of water rights by TCEQ officials. The actions of the Commissioners, the Executive Director and the Watermaster allow water to be taken during times of low flows when the impacts of these programs most directly affect the food and water sources of the whooping crane. The TCEQ officials have not sought or obtained any incidental take permits from USFWS that would allow takes of this protected species. The TCEQ officials have not

proposed or promulgated regulations that would avoid prohibited takes. The TCEQ officials have not instructed their employees, the Watermaster, the existing water rights permit holders or any other person to undertake steps to avoid prohibited takes of cranes.

## V. VIOLATIONS OF THE ESA SECTION 9

Section 9 of the ESA prohibits the “taking” of any endangered species. 16 U.S.C. § 1538(a)(1)(B). “‘Take’ is defined in ... the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.” S. Rep. No. 307, 93d Cong., 1st Sess. (1973), reprinted in 1973 U.S.C.A.A.N. 2989, 2995. Taking includes the concepts of “harm” and “harassment.” 16 U.S.C. § 1532(19). Harm may occur through significant habitat modification that actually kills or injures a protected species by impairing essential behavior patterns, including breeding, feeding or sheltering. 50 C.F.R. § 17.3; *Babbitt v. Sweet Home Chap. of Communities for a Greater Oregon*, 515 U.S. 687, 691 (1995). Harassment may occur through an act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering. 50 C.F.R. § 17.3.

### A. TCEQ Officials Authorized Activities that Resulted in Crane Takes Without an Incidental Take Permit

The crane mortality of the 2008-09 winter described above constitutes a “take” of an endangered species and therefore a violation of Section 9 of the Endangered Species Act. Additionally, during the same time period, the significant modification of suitable crane habitat, including designated critical habitat, constitutes a ‘harm’ because it significantly impaired essential crane behavioral patterns. These takes occurred as a proximate result of TCEQ officials’ authorization and implementation of their water rights permit scheme, and is thus prohibited by the ESA unless the TCEQ officials have a permit allowing the take. Throughout the drought period of 2008-09 the TCEQ officials continued to allow water rights holders to divert and consume water from the Guadalupe and San Antonio River basins. These diversions reduced the freshwater inflows into San Antonio Bay, which, during the drought period of 2008-09, resulted in longer periods of very high salinities than would have been the case had these diversions not occurred. As explained above, there is a direct link of causation between the activities of the TCEQ officials and the prohibited takes of cranes. Therefore the activities of the TCEQ Commissioners, the Executive Director and the Watermaster have violated and continue to violate Section 9 of the ESA.

### B. TCEQ Officials Continue to Authorize Activities that are Reasonably Certain to Cause Significant Habitat Modification and Therefore Harm and Harass Cranes Without an Incidental Take Permit

The Aransas Project has developed information, data and models to show that water diversions authorized by the TCEQ officials have a dramatic impact on salinity levels in the bay (*e.g.* Figure 2). During periods of drought or low flows, diversions of water from the river will result in increased salinity in the bay. As described above, significant alterations to the ecosystem of the bay and marshes are caused by extended periods of high salinity levels beyond that which would result under natural conditions. High bay salinity causes reduced abundance of blue crabs, potentially reduced availability of wolfberries and reduced availability of nearby suitable drinking water. These impacts are significant modifications of the habitat used by cranes,

including designated critical habitat, and are therefore a 'take' because they harm and harass the protected species. 50 C.F.R. § 17.3. No permit authorizes an incidental take by the TCEQ or the Watermaster. Therefore the activities of the TCEQ officials and the Watermaster have violated and continue to violate Section 9 of the ESA.

**C. Future Take of Whooping Cranes is Reasonably Foreseeable and May be Enjoined Under the ESA**

The TCEQ officials' current water rights regulations and practices fail to avoid prohibited takes of cranes. It is the position of TAP that full use of existing water rights may result in impacts much more severe than those exhibited during the 2008-2009 wintering season. Water Conservation and Drought Contingency Plans that may be required of water rights permittees by TCEQ officials and which may be implemented during droughts are currently unrelated to the freshwater inflow requirements of the whooping cranes. These plans will therefore also do nothing to avoid prohibited takes. The SB3 environmental flows study for the San Antonio Bay cannot by law address existing water rights. Therefore, it is reasonably foreseeable that future use of existing water rights authorized by TCEQ officials will result in additional prohibited takes of whooping cranes unless and until such activities are enjoined.

Activities authorized by TCEQ officials that are reasonably likely to result in prohibited take of whooping cranes may be enjoined under the ESA. *See United States v. Town of Plymouth*, 6 F.Supp.2d 81, 91 (D. Mass. 1998) (preliminary injunction issued against township which authorized off-road vehicles on a beach that was habitat for threatened piping plovers); *Defenders of Wildlife v. Administrator, Env'tl. Protection Agency*, 668 F.Supp. at 1356-1357, *aff'd* 882 F.3d 1294 (enjoining the EPA from continuing its registration of strychnine until it could do so without illegally taking protected species of wildlife).

**VI. CONCLUSION**

TAP is claiming by this Notice of Intent that the TCEQ Commissioners, the TCEQ Executive Director and the South Texas Watermaster have violated and continue to violate Section 9 of the ESA. Pursuant to the citizen suit provision of the ESA, 16 U.S.C. §§ 1540(g)(1)(A) and (2)(A), TAP is providing you with sixty days notice of our intention to commence a civil action to challenge the foregoing violations of law and any violations that may occur after service of this notice letter, and to seek their remediation in a court of law.

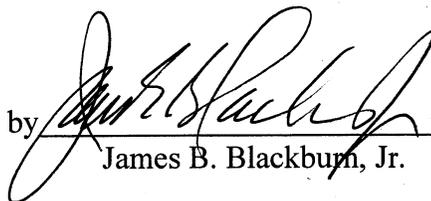
In the litigation, The Aransas Project will seek an injunction barring TCEQ officials from approving new water rights permits involving the San Antonio and Guadalupe River basins until TCEQ officials and the Watermaster provide reasonable assurances that State-authorized activities will not harm or harass whooping cranes. The Aransas Project will also seek an injunction ordering TCEQ officials to develop a Habitat Conservation Plan for the San Antonio and Guadalupe River basins and San Antonio Bay, including provisions to control the allocation of already approved (*e.g.*, existing) water rights permits in the rivers so that a minimum of 1.3 million ac ft/year flow past the Guadalupe River gauge at Tivoli. The Aransas Project will ask the court to order TCEQ officials to conduct a thorough analysis of all permitted and exempt withdrawals and develop a binding plan for water development and water use in the San Antonio and Guadalupe River basins which may include reallocation of existing water use rights or addition of special conditions to existing permits. The Aransas Project will request that the court appoint a special master to oversee TCEQ's implementation and compliance with its orders.

Finally, The Aransas Project will seek a declaratory judgment that State water rights laws and regulations that cause harm to critical habitat or the take of cranes are inconsistent with the requirements of ESA, are preempted by federal law, and are invalid under the Supremacy Clause of the United States Constitution.

We are hopeful that the TCEQ officials and the Watermaster will take all necessary measures to avoid the unauthorized future taking of cranes, and that their representatives will contact us prior to the commencement of legal action to discuss obligations and alternatives under the ESA. If you have any questions about the issues raised in this letter, please feel free to contact me at any time.

Sincerely,

BLACKBURN CARTER, P.C.

by  \_\_\_\_\_  
James B. Blackburn, Jr.

c: Governor Rick Perry  
Office of the Governor  
P.O. Box 12428  
Austin, TX 78711-2428

Carter Smith, Executive Director  
Texas Parks & Wildlife  
Department  
4200 Smith School Road  
Austin, TX 78744

The Honourable Jim Prentice  
Minister of the Environment  
Les Terrasses de la Chaudière  
10 Wellington Street, 28<sup>th</sup> Floor  
Gatineau, Quebec K1A 0H3  
Canada

L'Oreal Stepney, Deputy Director  
Office of Water  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087

Benjamin Tuggle, Southwest  
Regional Director  
Office of the Regional Director  
U.S. Fish & Wildlife Service  
P.O. Box 1306  
Albuquerque, NM 87103-1306

Dan Alonso  
Aransas National Wildlife Refuge  
P.O. Box 100  
Austwell, TX 77950-0100

Tom Stehn  
Aransas National Wildlife Refuge  
P.O. Box 100  
Austwell, TX 77950-0100