



2. Whooping Cranes, magnificent birds, face extinction. More than half of all known adults and their young live in the flock that winters in Aransas National Wildlife Refuge (in Texas) and summers in Wood Buffalo National Park (in Canada). Only 263 birds remain. Last winter in Texas, 23 birds died, representing a loss of 8.5% of the wintering flock.

3. These deaths directly reflect the lack of sufficient freshwater flowing to San Antonio-Aransas Bay system. The Cranes need freshwater to drink, and to support two essential food sources – the wolfberry and, perhaps most importantly, for protein, the blue crab. Some Cranes literally face winter starvation, including the young whose own parents will push them away from feeding areas in a desperate effort to save their own lives.

4. This litigation alleges that Defendants – the three TCEQ Commissioners, the TCEQ Executive Director and the South Texas Watermaster of the TCEQ – in their roles to regulate water uses and flows, harmed and harassed the Whooping Cranes last winter in Aransas County, Texas, thereby violating Section 9 of the federal Endangered Species Act (“ESA”) by causing a “take” of this already endangered species.

5. This litigation further alleges that, unless Defendants alter these practices, such harm and harassment in all likelihood will again occur, possibly leading to even more severe harm than occurred during the winter of 2008-2009, which is the worst on record. Indeed, with increasing water use in the Guadalupe basin, the Cranes face an existential threat – lack of freshwater could mean, literally, that they face extinction. Federal law forbids any such “take”, actual or threatened, even if Defendants did not intend or even did not want their actions to cause harm. As far as Plaintiff is aware, none of the Defendants have taken any action to reduce this existential threat to Whooping Cranes well known to be caused by lack of freshwater.

6. Members of plaintiff – The Aransas Project – include numerous groups and businesses representing diverse interests and activities. They have a direct interest in the Whooping Crane and the ecological health of San Antonio, Carlos, Mesquite and Aransas Bays in their own right, as well as through their members.

7. Among these groups are the International Crane Foundation, Aransas County, the City of Rockport, the Town of Fulton, the Aransas County Navigation District, the Coastal Bend Guides Association, Rockport Birding and Kayak Adventures, Casterline Fishing Company, the Aransas Bird and Nature Club, the Aransas County Republican Party, the Aransas County Democratic Club, the American Bird Conservancy, the Coastal Bend Audubon Society, the Houston Audubon Society, the Travis Audubon Society, The Whooping Crane Conservation Alliance, the Texas Conservation Alliance, the Matagorda Bay Foundation, the Galveston Bay Conservation and Preservation Association, Environment Texas, Anthony's By the Sea, the Crane House, Durham and Associates, Hamilton A/C, Electric and Plumbing, Key Allegro Properties LLC, Pelican Rentals, MasterPlan Design, and James Fox Guide Service. These groups and over 200 individual members can be found at the web site of the Aransas Project at <http://www.thearansasproject.org>.

8. In this litigation, The Aransas Project is seeking injunctive relief to compel TCEQ officials to take appropriate steps to protect the wintering Whooping Crane from the negative impacts of water withdrawals from the Guadalupe and San Antonio River systems. Such steps could include, for example, creation of a Habitat Conservation Plan for the Whooping Crane pursuant to Section 10 of the ESA, compilation of a comprehensive and thorough inventory of all water withdrawals from the Guadalupe and San Antonio River systems, and identification of a process to reduce freshwater withdrawals during times of drought and low flow in order to

maintain flows into the San Antonio-Aransas Bay system, sufficient to prevent harm and harassment to the Whooping Cranes. It may also be appropriate to establish a special master to oversee this process.

## **II. JURISDICTION AND VENUE**

9. This Court has jurisdiction and the authority to grant the relief requested pursuant to 16 U.S.C. §§ 1540(c) & (g) (ESA), 28 U.S.C. § 1331 (federal question), and 28 U.S.C. § 2201 *et seq.* (Declaratory Judgment Act).

10. Plaintiff has satisfied the jurisdictional requirements for bringing this suit. Under 16 U.S.C. § 1540(g)(2)(A)(i), Plaintiff notified all Defendants of their violations of the ESA and of Plaintiff's intent to sue for those violations by certified letter sent on December 7, 2009 ("Notice Letter"), attached as Exhibit 1. Defendants Shaw, Garcia, Rubinstein, Vickery, and Segovia and/or their authorized agents received the Notice Letter on December 9, 2009.

11. Plaintiff also gave notice of its intent to sue by sending the Notice Letter, on December 7, 2009, to Ken Salazar, Secretary of the Interior, and Sam Hamilton, Director of the United States Fish and Wildlife Service ("FWS"), which was received on December 14, 2009.

12. More than sixty days have passed since the Notice Letter was served and the violations complained of in the Notice Letter are continuing and reasonably likely to continue to occur. The named Defendants have not taken any actions to remedy or prevent continued violations of the Act. The Secretary of the Interior has not commenced an action to impose a penalty pursuant to 16 U.S.C. § 1540(a) and the United States has not taken any action to prevent continued violations of the Act.

13. Venue is appropriate in the Corpus Christi Division of the Southern District of Texas under the ESA, 16 U.S.C. § 1540(g)(3)(A), because alleged violations have occurred and will occur in this district. Venue is also appropriate in this district under 28 U.S.C. § 1391(b).

### III. PARTIES

14. Plaintiff, The Aransas Project (“TAP”) is suing on behalf of itself and its members to protect one of the Nation’s most unique and important ecological assets – the Whooping Crane. 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. 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. TAP, as a non-profit corporation with principal place of business in Aransas County, Texas, has members who are injured by Defendants’ violations of the ESA.

15. Defendant Bryan Shaw is sued in his official capacity as TCEQ Chairman. Defendant Shaw, through his actions at the TCEQ, regulates water diversion activities through the review and approval of water permits, and the rules, regulations and policies governing them. Defendant Shaw has a duty to ensure the water diversion activities authorized are consistent with applicable laws and regulations, including the ESA, and that authorization of such activities does not cause a “take” of species protected by the ESA.

16. Defendants Buddy Garcia and Carlos Rubinstein are sued in their official capacity as TCEQ Commissioners. Defendants Garcia and Rubinstein, through their actions at the TCEQ, regulate water diversion activities through the review and approval of water permits, and the rules, regulations and policies governing them. Defendants Garcia and Rubinstein have a duty to ensure the water diversion activities authorized are consistent with applicable laws and regulations, including the ESA, and that authorization of such activities does not cause a “take” of species protected by the ESA.

17. Defendant Mark Vickery is sued in his official capacity as TCEQ Executive Director. Defendant Vickery, through his actions at the TCEQ, regulates water diversion activities through the review and approval of water permits, and the rules, regulations and policies governing them. Defendant Vickery has a duty to ensure the water diversion activities authorized are consistent with applicable laws and regulations, including the ESA, and that authorization of such activities does not cause a “take” of species protected by the ESA.

18. Defendant Al Segovia is sued in his official capacity as the South Texas Watermaster, a TCEQ employee. Defendant Segovia, through his actions as the South Texas Water Master, regulates water diversion activities through the review and approval of each intended water diversion activity. Defendant Segovia has a duty to ensure the water diversion activities authorized are consistent with applicable laws and regulations, including the ESA, and that authorization of such activities does not cause a “take” of species protected by the ESA.

#### **IV. THE STATUTORY BACKGROUND**

19. Congress enacted the Endangered Species Act, 16 U.S.C. § 1531 *et seq.*, “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved... [and] to provide a program for the conservation of such endangered species and threatened species....” 16 U.S.C. § 1531(b).

20. Before a species receives critical protection under the ESA, FWS must list the species as either “threatened” or “endangered.” 16 U.S.C. § 1533. An “endangered species” is one that is “in danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). A “threatened species” is one that is “likely to become an endangered species within the foreseeable future through all or a significant portion of its range.” 16 U.S.C. § 1532(20).

21. Under the ESA, 16 U.S.C. § 1538(a)(1)(B), it is illegal to engage in any activity that “takes” an endangered species. The ESA’s take prohibition applies to all listed species, including the Whooping Crane. 50 C.F.R. § 17.31; 55 Fed. Reg. 26114 (June 26, 1990).

22. Congress intended to define “take” in the “broadest possible manner to include every conceivable way” in which any person could harm or kill fish or wildlife. S. Rep. No. 307, 93rd Cong., 1st Sess. 1, reprinted in 1973 U.S. Code Cong. & Admin. News 2989, 2995.

23. The term “take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(18).

24. The term “harm” includes “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.” 50 C.F.R. § 17.3.

25. The term “harass” means “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.” 50 C.F.R. § 17.3.

26. The U.S. Supreme Court has upheld the definitions of “harm” and “harass”. *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995).

27. The ESA forbids “takes” by all “persons,” including any “officer, employee, agent, department, or instrumentality of ... any State.” 16 U.S.C. § 1532(13).

28. In the ESA, Congress recognized that sometimes otherwise lawful activities can cause a take of a listed species. 16 U.S.C. § 1539. This is known as an ‘incidental take.’

29. In some circumstances, Congress authorized those persons responsible for the take to seek an Incidental Take Permit. 16 U.S.C. § 1539(a). The Incidental Take Permit is

issued by FWS after development and submission of a Habitat Conservation Plan (“HCP”) which must be approved by FWS. The HCP must include conservation measures designed to minimize and mitigate the impacts of taking species listed under the Act. 16 U.S.C. § 1539(a)(2)(A)(ii). In the absence of an Incidental Take Permit, the ESA forbids each and every take.

30. The ESA expressly authorizes citizens to sue and seek an injunction against any “person” alleged to be responsible for a take, or otherwise in violation of the ESA, including any governmental instrumentality or agency. 16 U.S.C. § 1540(g)(1).

31. As the U.S. Supreme Court has held, Congress has accorded the protection of endangered species the highest of priorities, so courts do not have the discretion to withhold injunctive relief where it is necessary to prevent an imminent and likely violation of the ESA. *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978).

32. A Court must issue an injunction if a plaintiff establishes by a preponderance of the evidence that there is “a reasonably certain threat of imminent harm to a protected species.” *Defenders of Wildlife v. Bernal*, 204 F.3d 920, 925 (9th Cir. 2000).

## **V. BACKGROUND FACTS**

33. The Whooping Crane (*Grus americana*), a graceful and stately bird that can stand nearly six feet tall, captures the attention of all. While this species is limited in range to North America, other cranes exist abroad and, with migration routes crossing borders, they have been called international ambassadors of goodwill and symbols of peace. They are also referred to as ambassadors of water because their survival worldwide is so often intertwined with water issues and wetlands. In this sense the Whooping Crane faces threats common to other crane species, because without freshwater to maintain their already diminishing wetlands habitat, they will die.

34. The flock of Whooping Cranes that is the subject of this litigation is the Aransas-Wood Buffalo flock, so-named because they winter at the Aransas National Wildlife Refuge (“ANWR” or “Refuge”) in Aransas County, Texas and breed in Canada’s Wood Buffalo National Park during the summer.

35. The Aransas-Wood Buffalo flock of Cranes is the only natural population that both migrates and survives on its own.

36. No more than approximately 500 Whooping Cranes exist worldwide, including those in zoos or otherwise in captivity.

37. After decades of federal protection in this country and Canada, the Aransas-Wood Buffalo flock stood at an all-time high of 270 in the spring of 2008, more than half of all birds worldwide.

38. A year later, fifty-seven birds had died, a staggering loss of 21.4% of the flock.

39. Twenty-three of these deaths occurred here in Texas (8.5% of the flock).

40. After this mortality, the following nesting season (2009) resulted in abnormally low productivity.

41. A critical reason the Cranes are dying is because not enough freshwater is flowing into the San Antonio Bay ecosystem and those habitats connected to it, including the Carlos, Mesquite and Aransas bay ecosystems and the adjacent marshes.

42. This reduction in freshwater inflow affects the Cranes in three crucial ways: it reduces the availability of blue crabs, their most important food source; it reduces the abundance of wolfberry fruit, another important food source; and it reduces the availability of drinkable water.

43. In good years, with sufficient water, most foraging occurs in the brackish bays, marshes, and salt flats on the edge of the mainland and on barrier islands. When necessary, Cranes fly to upland sites in search of freshwater to drink or to find foods such as acorns, snails, crayfish and insects, and then return to the marshes to roost.

44. When freshwater inflows fall too low, the Cranes have to fly further, forage longer, and expend more energy.

45. When critical food is scarce in their territory, Cranes often respond by abandoning their own juvenile and forcing it to try to fend for itself.

46. Malnutrition, emaciation and susceptibility to disease and predation, especially of the juveniles, all resulted in the mortality witnessed in 2008 - 2009.

47. The plight of the Cranes at Aransas has captured the attention of international, national and local groups, who have joined The Aransas Project to protect the Cranes.

48. The named Defendants are responsible for the management of the surface freshwater resource that the Cranes rely on.

49. Not enough freshwater flowed into the San Antonio bay ecosystem and the Aransas marshes during 2008-2009 because of Defendants' actions and inactions.

50. Defendants took no action to avoid harm, harassment and illegal takes of Cranes, and are unlikely to do so in the future.

51. This is actionable under the Endangered Species Act, even if there is no intent to cause the take.

**A. Whooping Crane Biology and Conservation Status**

52. The Whooping Crane is a flagship species for the North American wildlife conservation movement, symbolizing the struggle for survival that characterizes endangered species worldwide.

53. This Crane is a large white bird with black wing tips and a red crown and is the largest American bird, standing approximately six feet in height.

54. In their native habitat in the flat marsh adjacent to the San Antonio, Copano, Aransas, Espiritu Santo, Carlos and Mesquite Bays in Aransas County, Texas, these birds are simply magnificent. The pairs hunt crabs in the marsh ponds, and when successful in breeding are joined by a single orange-tinted juvenile that relies on its parents in its early journey through life.

55. Due to its charisma and aura, the Whooping Crane is often used as a cornerstone species in educational materials associated with endangered species.

56. In the United States, the Whooping Crane was listed as threatened with extinction in 1967, 32 Fed. Reg. 4001 (Mar. 11, 1967), and as endangered in 1970, 35 Fed. Reg. 16047 (Oct. 13, 1970). Both of these listings were “grandfathered” into the Endangered Species Act of 1973. 16 U.S.C. § 1531, *et seq.*, 87 Stat. 884.

57. The Aransas National Wildlife Refuge originally comprising 47,261 acres was established on December 31, 1937 by Executive Order 7784.

58. Critical Habitat was designated in 1978 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).

59. This Designated Critical Habitat includes the Aransas National Wildlife Refuge and the Blackjack Peninsula, and extensive portions of San Antonio, Espiritu Santo Carlos, and Mesquite Bays, Matagorda Island, St. Charles Bay and Lamar Peninsula.

60. 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.

61. Historic population declines resulted from habitat destruction, shooting, and displacement by human activities.

**B. The 2008-2009 Whooping Crane Mortality Event is Unprecedented**

62. 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.

63. Between 1950 and 1986, a total of only 26 Whooping Cranes were lost on the wintering grounds in Texas.

64. That thirty-six year total is dwarfed by the catastrophe of 23 Cranes lost during the winter of 2008-2009 in Texas.

65. 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 2008-2009 winter.

66. 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 that year.

67. The 2009 breeding season in Canada was also bad, with a lower than average productivity rate of only 22 young fledged from 62 nests, roughly half the productivity of the previous summer season. This illustrates the difficulties Cranes experience in breeding.

68. The FWS census of February 2010 estimates the flock size at 244 adults and 19 juveniles, for a total of 263.

69. At least one juvenile already has died during the 2009-10 season in Texas.

70. In short, the past few years have been a very bad time for the Whooping Crane.

**C. Cause of Crane Mortality**

71. Food resources were very poor throughout the 2008-2009 winter. The fall wolfberry crop was far below average, and blue crabs were scarce from December through March.

72. The lack of food directly caused the high winter mortality.

73. When critical food is scarce in their territory, Cranes often respond by abandoning their own juvenile and leaving it to fend for itself.

74. Malnutrition, emaciation and susceptibility to disease and predation, especially of the juveniles, all result in the mortality that was witnessed.

75. Bay and marsh salinities were high throughout the season so that Cranes were forced to fly to freshwater to drink, with flight using an estimated 19 times more energy than a Crane at rest.

76. The much reduced birthrate and fledgling survival at Wood Buffalo may also be due to the birds arriving in Canada in an extremely weakened condition.

77. The FWS became so concerned about the food shortage for the Cranes that it began a program of supplemental feeding using game feeders dispersing whole kernel corn during the latter stages of the winter of 2008-2009.

78. The supplemental feeding appears to have been helpful to the Cranes by reducing the energy stress they were under from the shortage of natural foods.

79. In spite of these extraordinary efforts by FWS, unprecedented numbers of Cranes still died.

**D. TCEQ's Role**

80. The primary cause of this massive Crane mortality was the failure of the Defendants to ensure sufficient freshwater inflows into the San Antonio Bay estuary and the bay ecosystems and marshes adjacent to the Refuge.

81. For many decades the Defendant TCEQ Commissioners have issued permits to use water in the Guadalupe and San Antonio River basins and have overseen the diversion of water under those permits as well as from exemptions from permitting created under Texas law.

82. All Defendants have allowed these diversions to be maintained, and water used, without consideration of the need of the Whooping Crane for freshwater inflows to the San Antonio-Aransas Bay system, and without consideration of the overall health of the bay and estuary ecosystem upon which the Whooping Crane depends.

83. Defendants continue to allow the use of water from the San Antonio and Guadalupe River systems and ignore the issue of environmental flows and protection of the Whooping Crane during its oversight of these existing permitted and unpermitted diversions.

84. The water resources of the Guadalupe and San Antonio river basins are at the same time over-allocated and mismanaged by Defendants.

85. Although the drought during 2008-2009 would have caused naturally low freshwater inflows, these flows have been further and significantly reduced by the activities the Defendants authorize and oversee.

86. Defendants have acted, and failed to act, regarding water uses, with complete disregard to the requirements of the Whooping Crane in violation of the ESA.

**E. Low Freshwater Inflows Cause High Bay Salinity**

87. Most freshwater inflows to San Antonio Bay come from the Guadalupe and San Antonio Rivers, which join approximately 10 miles before entering San Antonio Bay on the Texas coast.

88. Historically, the Guadalupe and San Antonio Rivers have supplied over 79% of the total freshwater inflows into this estuary. The gauged areas of the Guadalupe River alone accounted for 57% of the total freshwater inflows into the estuary.

89. Freshwater inflows play a vital role in sustaining the estuarine ecosystem, mixing with seawater to create brackish conditions, that is, water with salinity less than that in the Gulf of Mexico, which is about 32 parts per thousand (ppt).

90. Many commercially and recreationally important species rely on the lower salinity conditions of estuaries for at least some portion of their life cycle.

91. 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.

92. Excessive salinity, beyond an organism's zone of tolerance, can impair its ability to maintain osmotic balance and trigger metabolic stresses.

93. Freshwater inflows also transport beneficial sediments and nutrients into the bay.

94. 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.

95. In addition to causing increased salinity, reduced freshwater inflows reduce mixing and stratification of the water column, and allow salt water to penetrate further into the bay, bringing marine predators, parasites and diseases.

96. During wet years, there generally is plenty of water for all water permits users and still adequate freshwater is left to flow into the bay.

97. It is during the drier years that the over-allocation and mismanagement by TCEQ officials becomes particularly harmful to Cranes.

98. During 2008-2009 freshwater flows into San Antonio Bay fell to record low levels.

99. These abnormally low flow rates were evident throughout 2008 and most of 2009, and flows only increased after the rains of October 2009.

100. As a result, measured salinity levels in the bay remained very high for well over a year, starting in July 2008, continuing through the 2008-2009 wintering season, and reaching a high of over 40 ppt near the Aransas National Wildlife Refuge in summer, 2009.

101. In non-drought years, bay salinity is much lower, with higher salinities limited to just a few months duration.

102. Lower bay salinity for the majority of the year is much more favorable to higher blue crab and wolfberry productivity.

103. Existing water diversion activities on the Guadalupe and San Antonio River Basins significantly alter the salinity of the San Antonio Bay system.

104. Potential future full use of existing permits will result in additional reductions in freshwater flows.

105. The salinity of San Antonio, Carlos, Mesquite and Espiritu Santo Bays where the Whooping Cranes spend the winter will continue to be significantly worsened from the natural conditions due to these water diversion activities.

106. During low inflow conditions, the current water diversions and Defendants' management practices have a significant adverse impact, increasing the salinity of the bay system generally as well as those portions of San Antonio, Espiritu Santo, Carlos and Mesquite Bays that are Designated Critical Habitat under the ESA.

107. The TCEQ does not maintain or possess an accounting of all withdrawals from the Guadalupe and San Antonio River systems due to the existence of an exemption from permitting for riparian domestic and livestock use.

108. Water withdrawals from the Guadalupe and San Antonio Rivers during the drought of 2008 and 2009 were much greater than is indicated in official records of such withdrawals maintained by the TCEQ.

**F. Low Inflows Reduce Abundance of Blue Crabs to the Detriment of the Whooping Crane**

109. The major source of food for the Whooping Cranes at Aransas is the blue crab.

110. Studies have shown a strong correlation between the blue crab population and freshwater inflows.

111. In a year of normal crab abundance, Cranes can consume 7-8 crabs per hour (80 crabs per day), totaling 80-90% of their diet.

112. In contrast, during years of low blue crab abundance, Cranes consume an average of only three crabs per hour (about 35 crabs per day).

113. 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 far less foraging effort.

114. In the eight-year period from 1993-2001, the USFWS conducted surveys that roughly estimated the number of blue crabs available to Whooping Cranes.

115. Two winters (1993-94 and 2000-01) had lower than normal numbers of crabs.

116. During those winters, seven and six Whooping Cranes died respectively.

117. In the six other winters with normal numbers of crabs, zero to one Crane died.

118. In 2009, FWS reported 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 ... ever observed for the Cranes at Aransas, with some birds looking thin and with disheveled plumage.”

**G. Low Inflows Reduce Abundance of Wolfberries to the Detriment of Whooping Cranes**

119. In addition to increasing salinity in the bays, reduced freshwater inflows result in an increased salinity in the marshes that provide habitat for the Cranes.

120. During low flows when bay salinity is high, marsh salinity is higher still.

121. Extended periods of increased salinity can result in negative effects on the estuarine marsh plants, particularly wolfberries. 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.

122. Wolfberries serve as an important food source for the Cranes, especially in November and December when the Cranes first arrive at Aransas.

123. With measured bay salinities remaining above 25 ppt from August 2008 through August 2009, the salinity of the Aransas marshes was also very high for this extended period.

124. The conditions of 2008 resulted in very low production of wolfberry fruit in the Refuge and surrounding marshes during the 2008-2009 winter.

125. The conditions of 2009 resulted in low production of wolfberry fruit in the Refuge and surrounding marshes during the 2009-2010 winter.

**H. Low Inflows Reduce the Availability of Drinkable Water to the Detriment of Whooping Cranes**

126. For water to be drinkable by Cranes, it must be less than 23 ppt salinity.

127. Usually the Cranes drink the water in the marsh.

128. When the water in the bay or in the ponds of the coastal marsh rises above 23 ppt, the Cranes must fly to other sources of freshwater in order to drink.

129. These flights use up energy, reduce time available for foraging or resting, and potentially make the Cranes more vulnerable to predation in the uplands.

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

130. The health and welfare of the Whooping Crane is inextricably tied to freshwater inflows, bay salinity and the water management practices of the Defendants.

131. The federal government through the FWS and in cooperation with counterparts in Canada has published the Whooping Crane Recovery Plan (3d. Revision, March, 2007) which confirms the relationship between bay salinity levels and blue crab catch rates.

132. The Recovery Plan identifies 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.

133. In this Recovery Plan ensuring freshwater inflows is “priority 1” in the implementation schedule and vital to the recovery of the species.

134. Between 1988 and 2009, years in which higher Crane mortality was observed were always characterized by low inflows from the Guadalupe and San Antonio Rivers.

135. 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 freshwater.

136. Low freshwater inflows result in increased bay salinity, and reduced bay productivity.

137. The reduced availability of preferred and more nutritious food sources in the marshes (*i.e.* blue crabs) cause the Cranes to alter their feeding behavior and seek out less optimal foods.

138. Cranes expend more energy searching for other food sources and more frequently have to fly to upland areas in search of food and freshwater.

139. Cranes therefore must fly further, forage longer and end up with less nutritional food.

140. This situation results in the Cranes experiencing a negative energy balance, which if maintained over a longer period, results in malnutrition, weight loss and emaciation.

141. Malnutrition, weight loss and emaciation can lead to increased Crane mortality due to predation and disease.

142. Creating conditions that result in malnutrition, weight loss and emaciation of Cranes is harm and harassment.

143. 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.

**J. State Regulatory Mechanisms Harm and Harass Whooping Cranes**

144. The Defendants regulate water diversion and use in Texas and control the appropriation, transfer and use of water by permits (including emergency curtailments).

145. The Defendant TCEQ Commissioners formally authorize some water diversion and use by issuing to the holder a Certificate of Adjudication or a Water Right Permit, which contains the limits, a priority date, and any special or unique conditions associated with its use.

146. TCEQ also allows withdrawals for riparian domestic and livestock use, of up to 200 acre-feet per year without any permit, the so-called “exempt” withdrawal.

147. There is no record keeping associated with these so-called “exempt” water withdrawals.

148. Defendant Commissioners have the ability to set policies regarding the acceptance and processing of water permits and the oversight of both exempt and permitted withdrawals.

149. Defendant Vickery and his employees accept and process water permit applications, conduct administrative and technical reviews, issue the draft permit, propose regulations and have continuing oversight over all permits approved by the TCEQ.

150. Defendant Segovia is appointed by the TCEQ to administer the Guadalupe and San Antonio River (among others) water use. Although he has some authority to allocate the water among permit holders and exempt users to ensure that the use of water does not exceed certain limits, TCEQ does not ever take into account the needs of Whooping Cranes.

151. There is a causal relationship between the regulatory program administered by Defendants regarding water diversion and water use on the San Antonio and Guadalupe Rivers and the plight of the Whooping Crane.

152. Decisions by Defendants determine river flows and salinity, which affect the ability of the estuary ecosystems to produce the food required by the Cranes.

153. As a result food sources are directly and negatively impacted by the management and oversight of water permits by Defendants.

154. The actions of Defendants 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.

155. Defendants have not sought or obtained any Incidental Take Permits covering Whooping Cranes from USFWS.

156. Defendants have not proposed or promulgated regulations that would avoid prohibited takes.

157. Defendant TCEQ Commissioners have not instructed their employees, the Watermaster, the existing water permit holders or any other person to undertake steps to avoid prohibited takes of Cranes.

158. Defendants approve water diversions and uses that harm and harass Whooping Cranes.

159. Defendants are likely to continue approving water diversions and uses that harm and harass Whooping Cranes.

160. No existing state process, regarding existing permits or exempt uses, in which any Defendant is a participant in fact adequately or fully considers the freshwater inflows required by the San Antonio Bay to maintain resources important to prevent takes of the Whooping Crane.

161. TCEQ does participate in a process to evaluate future freshwater flows pursuant to state Senate Bill 3. The enabling legislation for Senate Bill 3 specifically prohibits TCEQ and anyone else from using this process to reduce or otherwise modify existing diversions and uses of water, whether permitted or exempt. *See* Section 1.27 of Acts 2007, 80th Leg., ch 1430. Thus the Senate Bill 3 process cannot protect Cranes from low freshwater flows such as already have occurred.

162. Although the South Central Texas Regional Water Planning Group (“Region L”) engages in regional water planning activities pursuant to state Senate Bill 1, it has no authority to limit water diversion or use with respect to permitted or exempt withdrawals and no authority to ensure freshwater flows needed for the Whooping Cranes. Thus the Senate Bill 1 process cannot protect Cranes from low freshwater flows such as already have occurred.

163. The Edwards Aquifer Recovery Implementation Plan and its proposed Habitat Conservation Plan do not control or regulate surface water diversion activities whether permitted or exempt.

164. Whatever authority Defendants have, they have never exercised it to protect Whooping Cranes.

165. Defendants have systematically failed to protect, and failed to prevent takes of the Whooping Cranes.

166. No existing state process will remedy or avoid the harm, harassment and takes of Whooping Cranes described above, nor redress the injuries suffered by Plaintiff and its members.

**K. Commercial water suppliers and others seek to use TCEQ’s deficient and flawed regulatory scheme to accelerate commitments for and overdraw freshwater in the Guadalupe River basin**

167. After the record Crane mortality of 2008-2009, the largest commercial water supplier in the Basin, the Guadalupe-Blanco River Authority (“GBRA”), submitted a new water permit application for 189,000 acre-feet of water per year to be diverted from the Guadalupe and sold to upper basin users.

168. After the Plaintiff’s Notice of Intent to Sue letter was made public, the GBRA responded to the threatened litigation by renewing a long-term commitment to provide 75,000 acre-feet of water annually from an existing water permit to Exelon Corporation for a new nuclear power plant proposed in the lower basin.

169. If the Exelon plant is eventually constructed, the additional 75,000 acre-feet of diverted water will significantly increase the likelihood of future takes of Cranes.

170. Defendants have done nothing and have no plans to do anything to prevent the takes that will result from the use of the water by Exelon.

171. The situation with Exelon water permit underscores the point that the TCEQ officials have taken no action and have no plan for preventing continued excessive use of water within the Guadalupe and San Antonio River systems to the detriment of the Whooping Crane.

172. Only the intervention of the Federal Court imposing the protections afforded by the Endangered Species Act will avoid a continuing “take” of the Whooping Crane.

## **VI. CAUSES OF ACTION**

173. Plaintiff incorporates by reference the foregoing pleadings in each count below.

### ***Count I: Declaratory Relief***

174. Plaintiff and Defendants have an actual, substantial, legal controversy concerning the force of the Endangered Species Act, important aspects of which are detailed above.

175. 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. 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.

176. All Defendants are persons subject to the ESA take provision, 16 U.S.C. § 1538(a), and subject to the ESA citizen suit provisions, 16 U.S.C. § 1540(g).

177. Defendants do not hold an incidental take permit or enjoy any other exemption authorizing take of Whooping Cranes.

178. Water diversion activities from rivers that flow into bays affecting Whooping Cranes cannot lawfully proceed without obtaining Defendants' review and approval and without complying with any restrictions imposed by Defendants as part of that review and approval.

179. Defendants' review and approval is a proximate cause of the water diversions activities from rivers that flow into bays affecting Whooping Cranes that, due to lack of needed restrictions, already have resulted in a take of the endangered Whooping Cranes, and are likely in the future to cause additional takes, all in violation of the ESA.

180. Defendants have promulgated regulations and authorized activities that enable the take of Whooping Cranes in violation of federal law.

181. TCEQ regulations or state laws that purport to authorize violations of Section 9 of the ESA, 16 U.S.C. § 1538, are preempted by federal law and are invalid under the Supremacy Clause of the United States Constitution.

182. To stop the on-going violation of federal law, Plaintiff seeks a judicial declaration of Defendants' obligations under the ESA pursuant to 28 U.S.C. § 2201 & 2202.

***Count II: Defendants Authorized Activities that Resulted in Crane  
Takes Without an Incidental Take Permit***

183. The Crane mortality of the 2008-2009 winter, due to actions and inactions of Defendants, constitutes a "take" of an endangered species and therefore a violation of Section 9 of the Endangered Species Act.

184. During the same time period, the significant modification of suitable Crane habitat, including designated critical habitat, constitutes a 'harm' under the ESA because it significantly impaired essential Crane behavioral patterns.

185. These takes occurred as a proximate result of TCEQ officials' authorization and implementation of water permits, and is thus prohibited by the ESA unless the TCEQ officials have a permit allowing the take.

186. Throughout the drought period of 2008-2009 the Defendants continued to allow water permit holders and exempt users to divert and consume water from the Guadalupe and San Antonio River basins.

187. These diversions reduced the freshwater inflows into San Antonio Bay, which, during the drought period of 2008-2009, resulted in longer periods of very high salinities than would have been the case had these diversions not occurred.

188. There is a direct link of causation between the activities of the Defendants and the prohibited takes of Cranes.

189. Therefore the activities of the Defendants have violated and continue to violate Section 9 of the ESA.

190. No permit authorized an incidental take by any Defendant.

191. Unless enjoined by the Court, Defendants will continue taking Whooping Cranes in violation of Section 9 of the ESA, 16 U.S.C. § 1538, by approving water diversions that authorize other persons to harm or harass Whooping Cranes.

***Count III: Defendants Continue to Authorize Activities that are Reasonably Certain to Cause Significant Habitat Modification and Therefore Harm and Harass Cranes Without an Incidental Take Permit***

192. Water diversions authorized by the Defendants have a dramatic impact on salinity levels in the bay.

193. During periods of drought or low flows, diversions of water from the river will result in increased salinity in the bay.

194. 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.

195. High bay salinity causes reduced abundance and availability of blue crabs, potentially reduced availability of wolfberries and reduced availability of nearby suitable drinking water.

196. 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.

197. No permit authorizes an incidental take by any Defendant.

198. Therefore the activities of the Defendants have violated and continue to violate Section 9 of the ESA.

199. Unless enjoined by the Court, Defendants will continue taking Whooping Cranes in violation of Section 9 of the ESA, 16 U.S.C. § 1538, by approving water diversions that authorize other persons to harm or harass Whooping Cranes in the manner described above.

***Count IV: Future Takes of Whooping Cranes are Reasonably Foreseeable and Must be Enjoined Under the ESA***

200. The Defendants' current water permit regulations and practices not only have failed to avoid prohibited takes of Cranes, they are highly likely to cause future takes.

201. The future use of existing water permits and exemptions, especially when drought occurs – as it inevitably will – likely will result in impacts much more severe than those exhibited during the 2008-2009 wintering season.

202. No existing state process will ensure sufficient freshwater flow to avoid takes of Cranes.

203. No existing state process will remedy or avoid the harm, harassment and takes of Whooping Cranes described above, nor redress the injuries suffered by Plaintiff and its members.

204. It is reasonably foreseeable that future use of existing water permits and exemptions authorized by Defendants will result in additional prohibited takes of Whooping Cranes unless and until such activities are enjoined.

205. Water use activities authorized by Defendants are so likely to result in prohibited takes of Whooping Cranes that they must be enjoined under the ESA.

## **VII. STANDING**

206. Plaintiff TAP has standing to bring this case. TAP's mission is the research, development and publication of proposals to protect the Whooping Cranes, other endangered and threatened species, and the health of streams and estuaries in the Aransas, Texas area, including but not limited to Aransas, St. Charles, Copano, Port, Mission, Carlos, Mesquite, San Antonio and Espiritu Santo Bays and the Guadalupe, San Antonio, Aransas and Mission Rivers. These activities include monitoring and protecting endangered and threatened species such as the endangered Whooping Crane; increasing public awareness and understanding of environmental issues in the Aransas, Texas area, such as the role and importance of freshwater inflows to the bays and estuaries, through media and other educational programs; participating in common law or statutory based litigation designed to further these activities; researching and publishing information about these issues to inform the public; and reviewing and commenting upon existing practices which impact these issues. This litigation is germane to TAP's mission.

207. Many TAP members are active birders and devote substantial time and effort to observing the Whooping Crane and other birds in their natural habitat. Organizations that are

members of TAP hold or sponsor field trips to the Aransas National Wildlife Refuge and adjacent areas of San Antonio estuary to accommodate their members and customers interests in observing and photographing Whooping Cranes and other wildlife in their natural habitat. TAP and its member organizations also sponsor educational and scientific research activities that involve the study of Whooping Cranes and other wildlife in their natural habitat. Members of TAP reside and work in the Aransas area, and for some their livelihood depends in large part upon the Cranes, and the livelihood of others depends upon healthy and productive estuaries and bays. TAP and its members intend to continue all of these activities in the future. Aesthetic, recreational, economic, professional, and other interests of TAP and its members in observing, photographing, studying, protecting and otherwise enjoying Whooping Cranes and other wildlife in their natural habitat are impaired by the destruction and alteration of Whooping Crane habitat, and the harm and harassment to Whooping Cranes resulting from Defendants' violations of the ESA. The relief sought in this lawsuit can redress the injuries to these interests.

208. TAP members include (among others):

a. Al and Diane Johnson, who own and operate the Crane House, St. Charles Bay, Aransas Co., Texas (<http://www.cranehouseretreat.com>). The Crane House borders the Lamar Unit of the Aransas National Wildlife Refuge and is a favored location for artists, writers, birders and photographers. Each year during Crane season (Nov-Apr) their business rents space to birdwatchers and others visiting Aransas specifically to see the Whooping Cranes. The Johnsons and their guests regularly see Cranes on the property itself, as well as on the adjacent Refuge lands. The Johnsons have placed 634 acres in a conservation easement, and actively manage their land for Cranes and other wildlife. The Johnsons provided supplemental sources of freshwater during the drought specifically for

the Cranes. The Johnsons' economic future will be seriously harmed if the Crane population declines.

b. Mr. Tommy Moore captains the 'Skimmer', a tour boat that takes visitors to see the wildlife in and around the Refuge. Mr. Moore conducts bird watching boat tours throughout the year, but his busiest time is during the Whooping Crane season (<http://www.whoopingcranetours.com>). Mr. Moore's boat will take approximately 4000 paying visitors to see the Cranes each season. Each visitor will spend at least \$125 each during their visit, including accommodation, boat trip, food and other expenses, all benefiting Mr. Moore, other businesses and the local economy. It is estimated that Mr. Moore's visitors contribute \$500,000 to the local economy each year. Mr. Moore will suffer considerable loss of business and economic harm if the Crane population declines. Mr. Moore is himself a birdwatcher and will suffer additional harm if he is unable to view the Cranes during his trips.

c. Aransas County is a corporate and political body created pursuant to Art. IX, Section 1 of the Texas Constitution. In their Regular Meeting of October 12, 2009, the Commissioners Court of Aransas County voted unanimously to become a member of TAP. Aransas County is proud to be the home of the Aransas National Wildlife Refuge and the Whooping Cranes. The County has a significant economic interest in the welfare of the Cranes. Tourism brought in \$97.2 million to the County's economy in 2008. The County and the local cities each recover 1% of the state sales tax which contributes significantly to the local budgets. The County estimates that for each \$100 in tax revenue, \$26 comes from tourists, many of whom visit specifically for the Cranes. It is estimated that the 70-80,000 visitors that come to the Refuge each year contribute some \$5 million

to the local economy each year. Aransas County itself, and citizens residing there, whose interest the County represents, are injured by Defendants' violations of the ESA.

d. Aransas Bird & Nature Club ("ABNC") is a local, grass-roots organization dedicated to the effort of improving our stewardship of the natural world entrusted to our care, with a special interest in ornithology. The ABNC accomplishes this goal by increasing local awareness of the natural world with monthly meetings and field trips for its members and the public to observe birds and other wildlife including the highlight of Whooping Cranes, by fostering birding with the community, and providing a positive force to protect birds and preserve habitat. In addition, ABNC assists other local and national organizations in conservation efforts. The ABNC is a membership organization and has members who are injured by Defendants' violations of the ESA. Debra Corpora is president of the ABNC, has a house in Aransas County, and she has a strong recreational interest in the birds and other wildlife of the area. She has observed the Cranes at Aransas and has plans to visit the Refuge again.

e. International Crane Foundation ("ICF") is an organization that works worldwide to conserve Cranes and the wetland and grassland ecosystems on which they depend. ICF is dedicated to providing experience, knowledge, and inspiration to involve people in resolving threats to these ecosystems. ICF staff and members travel worldwide to see all species of Cranes, including Whooping Cranes, and to promote their conservation. ICF is a membership organization and has members who are injured by Defendants' violations of the ESA.

209. As described above, Plaintiff TAP and its members have suffered injury to their economic, environmental, and recreational interests uniquely entwined with the endangered

Whooping Crane, the San Antonio Bay and surrounding wetlands, as well as other birds and animals living in, travel through, and otherwise using this unique habitat.

### VIII. PRAYER

**WHEREFORE**, Plaintiff respectfully requests that this Court grant the following relief:

A. Declare that Defendants Shaw, Garcia, Rubinstein, Vickery and Segovia violated Section 9 of the ESA, 16 U.S.C. § 1538, between 2008 and 2009 by actions and inactions that allow persons to conduct water diversion activities that caused the death of many endangered Whooping Cranes;

B. Declare that Defendants Shaw, Garcia, Rubinstein, Vickery and Segovia are violating Section 9 of the ESA, 16 U.S.C. § 1538, by issuing water permits and authorizing water diversions that allow persons to conduct water diversion activities even when those activities (1) result in significant modification and destruction of Whooping Crane habitat which actually injures or kills Whooping Cranes by significantly impairing their essential behavioral and feeding patterns, and (2) harass Whooping Cranes to such an extent as to significantly disrupt their normal behavioral and feeding patterns;

C. Declare that water diversion regulations promulgated by Defendants Shaw, Garcia, Rubinstein and Vickery are preempted by federal law and are invalid under the Supremacy Clause of the United States Constitution when they purport to authorize water diversions even when those activities (1) result in significant modification and destruction of Whooping Crane habitat which actually injures or kills Whooping Cranes by significantly impairing their essential behavioral and feeding patterns, and (2) harass Whooping Cranes to such an extent as to significantly disrupt their normal behavioral and feeding patterns;

D. Enjoin Defendants and their employees and agents from approving or allowing water diversion activities that destroy or alter Whooping Crane habitat until the State provides

reasonable assurances that State-authorized water diversion activities will not take Whooping Cranes in violation of the ESA;

E. Enjoin Defendants and their employees and agents from approving or processing new or pending water permits absent sufficient assurances that future water diversion activities will not take Whooping Cranes in violation of the ESA;

F. Order Defendants to compile an inventory of all water withdrawals under the livestock and domestic use exemption and to develop a process for a complete accounting of all water withdrawals from the Guadalupe and San Antonio River systems;

G. Order Defendants 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 sufficient to protect Whooping Cranes and their vital habitat, which may include reduction of existing water uses or addition of special conditions to existing permits;

H. Order Defendants to develop an approved Habitat Conservation Plan for the San Antonio and Guadalupe River basins and San Antonio Bay, including provisions to reduce all withdrawals during low flow conditions to such an extent necessary to prevent harm and harassment of the Aransas-Buffalo Wood Whooping Crane flock;

I. Appoint a Special Master to oversee the development of the plans, studies and activities necessary to implement this order;

J. Maintain jurisdiction and oversight over this matter until the Habitat Conservation Plan is approved and implemented and an Incidental Take Permit is issued by USFWS;

K. Award Plaintiff its costs and reasonable attorneys' fees, including expert witness fees, as authorized by the ESA, 16 U.S.C. § 1540(g)(4); and

L. Award such other relief as this Court deems just and appropriate.

