CASE NO. 13-40317

IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

THE ARANSAS PROJECT, *Plaintiff-Appellee*

v.

BRYAN SHAW, in his official capacity as Chairman of the Texas Commission on Environmental Quality; BUDDY GARCIA, in his official capacity as Commissioner of the Texas Commission on Environmental Quality; CARLOS RUBINSTEIN, in his official capacity as Commissioner of the Texas Commission on Environmental Quality; MARK VICKERY, in his official capacity as Executive Director of the Texas Commission on Environmental Quality; AL SEGOVIA, in his official capacity as South Texas Watermaster, *Defendants-Appellants*

GUADALUPE-BLANCO RIVER AUTHORITY, TEXAS CHEMICAL ASSOCIATION and SAN ANTONIO RIVER AUTHORITY, *Intervenor Defendants-Appellants*

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS - CORPUS CHRISTI DIVISION

AMICUS CURIAE BRIEF OF TEXAS FARM BUREAU, AMERICAN FARM BUREAU FEDERATION, OKLAHOMA FARM BUREAU LEGAL FOUNDATION, OREGON FARM BUREAU FEDERATION, WYOMING FARM BUREAU FEDERATION, CALIFORNIA FARM BUREAU FEDERATION, MISSISSIPPI FARM BUREAU FEDERATION, AND LOUISIANA FARM BUREAU FEDERATION IN SUPPORT OF APPELLANTS AND IN SUPPORT OF REVERSAL

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APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS,
CORPUS CHRISTI DIVISION
Case No. 2:10-CV-75

CERTIFICATE OF INTERESTED PERSONS

The Farm Bureau adopts the Certificate of Interested Persons as stated in the Joint Brief of Intervenor Defendants-Appellants Guadalupe-Blanco River Authority ("GBRA"), Texas Chemical Council ("TCC") and San Antonio River Authority ("SARA").

/s/ Sydney W. Falk, Jr.
Sydney W. Falk, Jr.

STATEMENT OF COUNSEL FOR AMICUS CURIAE

In accordance with Fed. R. Civ. P. 29.2(d), a*mici curiae* Texas Farm Bureau ("TFB"), American Farm Bureau Federation ("AFBF"), Oklahoma Farm Bureau Legal Foundation ("OFBLF"), Oregon Farm Bureau Federation ("OFBF"), Wyoming Farm Bureau Federation ("WFBF"), California Farm Bureau ("CFBF"), Mississippi Farm Bureau Federation ("MFBF"), and Louisiana Farm Bureau Federation ("LFBF") (collectively "Farm Bureau") state that no party or parties' counsel authored any part of this brief or paid any costs associated with its preparation, and no person other than Farm Bureau, its members or its counsel contributed money that was intended to fund preparing or submitting the brief.

Respectfully submitted,

/s/ Sydney W. Falk, Jr.
Sydney W. Falk, Jr.

STATEMENT REGARDING ORAL ARGUMENT

If the Court allows any other amicus to present argument, *Amicus Curiae* Farm Bureau also wishes to appear and answer the Court's questions.

Respectfully submitted,

/s/ Sydney W. Falk, Jr.
Sydney W. Falk, Jr.

CONSENT OF PARTIES

I hereby certify that counsel for *Amicus Curiae* Farm Bureau conferred with counsel for Plaintiff-Appellee The Aransas Project ("TAP"), and counsel for each of the Appellants, who have consented to the filing of this brief.

Respectfully submitted,

/s/ Sydney W. Falk, Jr.
Sydney W. Falk, Jr.

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ISSUES PRESENTED

1. Whether the district court abused its discretion by admitting and relying on plaintiff TAP's evidence of crane mortality based on an aerial counting survey method that was rejected by the U.S. Fish & Wildlife Service before judgment?

2. Whether the district court was clearly erroneous in finding that State Defendants' alleged failure to have regulated water withdrawals in the Guadalupe and San Antonio Rivers was the proximate cause of "takes" of whooping cranes, based on an attenuated, seven-step chain of causation for which plaintiff TAP's evidence was not conclusive as to every step?

3. Whether this Court should refer a certified question to the Texas Supreme Court: "Whether the TCEQ has authority to modify, limit or otherwise condition existing water rights in order to guarantee freshwater inflows to bays and estuaries, and if so, what is the character of that authority?"

INTEREST OF *AMICI CURIAE*

The *amici curiae* consist of a national organization and seven state organizations, all of which are nonprofit corporations that were formed to advance and protect agricultural interests. Collectively, these organizations represent every type of agricultural crop and commodity in the nation. American Farm Bureau Federation is organized as a federation of fifty independent state Farm Bureaus and the Puerto Rico Farm Bureau and is the nation's largest general farm organization. Texas Farm Bureau has over 483,000 member families across the state. Issues presented in this case directly affect TFB members who hold irrigation water rights in the San Antonio and Guadalupe River Basins, and other TFB members who are domestic and livestock users of water from these rivers. The Oklahoma Farm Bureau Legal Foundation's sole member entity, Oklahoma Farm Bureau, Inc., has about 140,000 member families that operate under a prior appropriation streamwater law system similar to Texas'. California Farm Bureau Federation represents approximately 74,500 members, many of whom divert and use water under state-issued water right permits. Wyoming Farm Bureau Federation has more than 2,700 agricultural members, many of whom rely on water rights granted by the State of Wyoming on a "first in time, first in right" basis like Texas'. Oregon Farm Bureau Federation comprises approximately 7,500 farmer members professionally engaged in agriculture, for many of whom water rights are critical to

maintaining their agricultural operations. Mississippi Farm Bureau Federation comprises more than 190,000 farm families, some of whom own and utilize private lands which rely upon water rights granted by the State of Mississippi. Louisiana Farm Bureau Federation has some 141,710 farm families whose members are concerned about the interaction and possible conflict between the Endangered Species Act and water rights, as whooping cranes are being reintroduced in their state.

These *amici* are concerned about possible precedent established by this case and seek to ensure the original intent and scope of the Endangered Species Act remains intact. The claims of TAP in this case, if recognized, could affect all *amici* and have the potential to apply to virtually every water course or other body of water in the country in which farmers or ranchers have legally recognized rights to withdraw or divert, and use, water for irrigation, livestock or domestic purposes, if that water resource contributes in any way directly or indirectly to a listed species' habitat. Members in these organizations have a direct interest in the issues asserted in this lawsuit.

STATEMENT OF CASE

The Farm Bureau adopts the Statement of the Case that appears in the State Defendants' Appellate Brief.

STATEMENT OF FACTS

The Farm Bureau adopts the Statement of Facts that appears in Intervenor Defendant-Appellants' Brief.

SUMMARY OF ARGUMENT

Two fundamental holdings regarding liability under Section 9 of the Endangered Species Act ("ESA"),[1] the "take" provision, were based on evidence of questionable scientific value: That there were in fact takes of whooping cranes in winter 2008-09, and that inaction by the State Defendants was the proximate cause of those takes. As to both, the district court's analysis and reasoning were flawed, and unsupported by scientifically credible evidence. If either conclusion is incorrect, the district court's judgment must be reversed.

Under the Supreme Court's *Daubert* line of cases,[2] much of that evidence should not have been admitted; and even if admissible, should not have been weighted more heavily than at least equally reliable countervailing evidence proffered by defendants. The district court abused its discretion in too-uncritically accepting plaintiff TAP's experts' evidence regarding crane mortality and causation, and according it too much weight.

The crane-counting aerial survey evidence of Tom Stehn, formerly a United States Fish and Wildlife Service ("FWS") biologist, formed the basis for the

[1] 16 U.S.C. § 1538.

[2] General references to *Daubert* are inclusive of references to *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co, Ltd., v Carmichael*, 526 U.S. 137 (1999), and related cases, that impose a generalized duty on a district court to ensure that scientific evidence meets criteria for admissibility. Farm Bureau adopts the nomenclature of the Intervenor Defendants-Appellants GBRA, TCC and SARA in their principal brief in this appeal ("GBRA Brief"), namely, "xTr.yy" refers to page yy of the transcript of the trial's x-the day, and "D.E. zzz" refers to docket entry zzz.

district court's conclusion that there had been crane mortality – absent which there could not have been any ESA Section 9 takes. Stehn's surveys were inherently unreliable, and the district court abused its discretion in admitting this evidence and relying on it – especially as the sole evidence – to conclude there were takes of the cranes.

For the district court to have credited TAP's multi-step theory of causation, it had to uncritically string together multiple TAP experts' scientific testimony to reach the conclusion that the State Defendants proximately caused a take. But when there are multiple steps in a causation trail, the probability that the end result has been reliably established is the *multiplicative product* of the individual probabilities that each step is correctly characterized. Here, because the evidence relied on by the district court for each causation element was uncertain, cumulatively this evidence was too unreliable and speculative upon which to have predicated a finding of proximate cause. The district court's holding was clearly erroneous.

TAP's underlying theory is that the State Defendants, officials of the Texas Commission on Environmental Quality ("TCEQ"), failed to use their authority to limit withdrawals by water permit holders and exempt domestic and livestock users to guarantee freshwater inflows into Aransas Bay, location of the Aransas National Wildlife Refuge ("ANWR"), a whooping crane habitat. But if, as State Defendants

argued below, they do not possess such authority under Texas law, the district court could not assign proximate causation to them for failing to exercise authority they did not have. Similarly, the relief ordered by the district court – that TCEQ obtain an incidental take permit under ESA Section 10(a) and also promulgate a habitat conservation plan – is impossible to accomplish if TCEQ lacks such authority. The case can, and should be, resolved by the answer to this question. The Farm Bureau's position is that Texas case law unambiguously shows that TCEQ lacks this authority, but Texas cases are not conclusive, at least in the view of TAP and the district court. This Court should therefore certify to the Texas Supreme Court the question whether TCEQ has authority to alter the vested property rights of water permit holders and exempt users to guarantee environmental flows.

ARGUMENT AND AUTHORITY

I. Standard of Review

A. Admissibility of Scientific Evidence: *Daubert*

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court required that expert scientific testimony must be relevant and scientifically reliable to be admissible, and identified factors a court typically should consider in making this determination. *Id*. at 592-95, 597. Rule 702 incorporates the *Daubert* principles:

> If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods; and (3) the witness has applied the principles and methods reliably to the facts of the case.

Rule 702 also "imposes a special obligation upon a trial judge to ensure that any and all expert testimony is reliable." *Rodriguez v. Riddell Sports, Inc*., 242 F.3d 567, 581 (5th Cir. 2001). The five non-exclusive factors to consider when assessing whether a methodology is scientifically reliable are:

> (1) whether the expert's theory can be or has been tested,
>
> (2) whether the theory has been subject to peer review and publication,
>
> (3) the known or potential rate of error of a technique or theory when applied,

> (4) the existence and maintenance of standards and controls, and
>
> (5) the degree to which the technique or theory has been generally accepted in the scientific community.

Daubert, 509 U.S. at 593-94. The "focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." *Id*. at 595.

A district court's decision to admit or exclude scientific evidence is reviewed for abuse of discretion. *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). A trial court abuses its discretion when its ruling is based on an erroneous view of the law or a clearly erroneous assessment of the evidence. *Bocanegra v. Vicmar Services, Inc*., 320 F.3d 581, 584 (5th Cir. 2003). If an abuse of discretion has occurred, the appellate court applies the harmless error doctrine. *Green v. Adm'rs of the Tulane Educ. Fund*, 284 F.3d 642, 660 (5th Cir. 2002).

B. According Weights to Competing Expert Evidence

The trier of fact is not bound by expert testimony and is entitled to weigh the credibility of all witnesses, expert or lay. *Caboni v. General Motors Corp*., 398 F.3d 357, 361 (5th Cir. 2005). Questions relating to the bases and credibility of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility. *See Dixon v. International Harvester Co*., 754 F.2d 573, 580 (5th Cir. 1985).

In some cases, however, the source upon which an expert's opinion relies is of such little weight that it should not be considered. *See*, J. Weinstein & M. Berger, Weinstein's Evidence § 702[1] (1985). "Though courts have afforded experts a wide latitude in picking and choosing the sources on which to base opinions, Rule 703 nonetheless requires courts to examine the reliability of those sources." *Soden v. Freightliner Corp*., 714 F.2d 498, 505 (5th Cir. 1983).

Where there is competing expert testimony, the trier of fact must make credibility determinations and weigh the conflicting evidence in order to decide the likely truth of a matter not itself initially resolvable by common knowledge or lay reasoning. *Osburn v. Anchor Laboratories, Inc*., 825 F.2d 908, 916 (5th Cir. 1987). While an appellate court owes great deference to the findings of the trial court with respect to duly admitted expert testimony, that deference is not unlimited, and the appellate court must determine whether the district court's decision to credit one expert over another is within sound discretion. *Cleveland ex rel. Cleveland v. United States*, 457 F.3d 397, 407-08 (5th Cir. 2006).

II. Takes of Whooping Cranes Were Not Proven

Appellant GBRA has already discussed the flaws in the district court's conclusion that there were in fact takes of whooping cranes at ANWR during the 2008-09 winter. The evidence relied on by the district court came from Tom Stehn, formerly an FWS employee, consisting of results of aerial survey counts of

whooping cranes during the period.[3] Any time he repeatedly did not observe a crane in the home territory he attributed to it or its family group, he concluded it had died.[4] There are manifold inaccuracies in this approach, as discussed in detail by GBRA on brief.[5] Farm Bureau will not repeat those arguments.

As the *Daubert* gatekeeper, the district court should not have considered Stehn's evidence. It lacked the scientific reliability required by *Daubert*: His aerial survey methodology had not been tested or peer-reviewed (despite the district court's characterization that it had);[6] it had no identified statistically rigorous rate of error[7] (and, indeed, Stehn apparently had no understanding of the need for error estimates or even what they are);[8] and it was not a generally accepted procedure.[9] Stehn himself expressed doubts about its accuracy in ordinary times,[10] and in the unusual 2008-09 winter.[11] This evidence should never have been admitted, much less accorded determinative weight in the court's conclusion that takes had occurred.

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[3] D.E. 354 at 70.
[4] *Id*. at 72. FWS has termed this assumption "untenable." See, *infra* fn 33.
[5] GBRA Brief at 24-40.
[6] D.E. 354 at 78.
[7] 3Tr.137-38, 40; *see*, GBRA Brief at 36.
[8] *Id*.
[9] 8Tr.96; GBRA Brief at 32-33.
[10] D123 at 149.
[11] DX130 at TS000140; 3Tr.58; DX28 at 1, 3Tr.51-53; DX132 at 1, 2, 3Tr.69-70; DX6 at 21-22.

A post-trial, pre-judgment report by FWS, Stehn's employer, found his methodology to be inherently untested and unreliable and rejected it.[12] Denying defendant parties' request for a hearing about admitting and considering the FWS report, the district court ignored it and instead credited Stehn's survey evidence to conclude there had been 23 crane deaths.[13] Failure to have considered this report by FWS, directly critical of Stehn's survey methodology, was itself an abuse of discretion, prejudicial,[14] and likely to lead to an erroneous result.

There was tangible evidence only of perhaps four actual crane deaths during the relevant timeframe, attributable to predation and possibly to sickness of individual cranes.[15] Even common sense contradicts the district court's conclusion that there had been 23 deaths, since at least 17 more cranes than Stehn's evidence would have supported showed up at the refuge the next season.[16]

The district court's conclusion that 23 deaths occurred was clearly erroneous, and was based on evidence that should never have been admitted, much less be accorded weight sufficient upon which alone to have concluded those deaths actually occurred. The district court abused its discretion in admitting

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[12] R.7386-7411; available at http://fws.gov/uploadedFiles/FY12_ANWR_WWCAS_Reveiw_01Oct12-508.pdf
[13] R.7822-23.
[14] *See*, GBRA Brief at 37-40.
[15] *Id.* 48-49 (two examples).
[16] *Id.* at 33-35.

Stehn's evidence, in according it controlling weight, and in excluding the FWS Report that rejected Stehn's methodology for future use.

III. There Was No Adequate Demonstration of Proximate Causation

Even assuming arguendo that instances of crane mortality occurred other than the four for which actual physical evidence or observation existed, the district court's attribution of proximate cause to the State Defendants for those deaths was clearly erroneous. TAP was required to have established proximate cause, *see*, *Babbitt v. Sweet Home Chapter*, 515 U.S. 687, 700 n.13 (1995), by evidence establishing causal links to the State Defendants' failures to utilize their presumed authority to guarantee freshwater inflows, that was not remote, contingent, speculative or too indirect. *E.g.*, *Hemi Group, L.L.C. v. City of New York*, 559 U.S. 1, 130 S.Ct. 983, 989 (2010).

As GBRA has discussed in detail on brief,[17] TAP asserted a convoluted, seven-sequential-element chain of causation that had to have occurred for the State Defendants' alleged inactions to have been the proximate cause of any takes.[18] As GBRA describes, the evidence relied on by the district court as to each of those seven causation elements is suspect and the court ignored alternative

[17] *Id*. at 40-57.
[18] *Id*. at 41.

explanations.[19] Those arguments are ably posed by GBRA, and Farm Bureau will not repeat or seek to embellish them here.

Instead, Farm Bureau will show that where there is a multi-element sequence of causation to be established, each element of that chain must be inherently more reliable than merely proved by a preponderance of the evidence, since it is the *cumulative* probability of the total chain being accurate – the multiplicative product of the probabilities of each of the individual elements – that is determinative. In this case, where each of those elements was established by substantially less-than-certain or even particularly reliable evidence, a conclusion that there was proximate causation by State Defendants as alleged cannot stand. The district court abused its discretion and failed in its obligations under *Daubert*.

A. The Likelihood that the District Court's Conclusion of Proximate Causation is Correct is Very Small

It is a truism of probability and statistics that where an outcome depends on multiple occurrences, the probability of that outcome is given by the multiplicative product of the probabilities that each individual event will occur.[20] Thus, given the seven-element chain of causation linking State Defendants' inaction to crane "takes" that was credited by the district court, in order for a final conclusion of proximate causation to be established by a preponderance of the evidence, *i.e.*, be

[19] *Id.* at 43-57.

[20] *See, e.g.*, http://faculty.uncfsu.edu/dwallace/lesson%208.pdf at 2.

more likely than not, the product of the seven elements' individual likelihoods must be at least 51% (0.51).

Illustrations will assist in appreciating how sensitive a final probability is to uncertainties in individual elements. As an example, for a seven-element chain of causation, if each element is certain to a 90% probability, the resulting likelihood that the chain of inference is correct is only 47.83%[21] – *i.e.*, the final inference is *not* established by a preponderance of the evidence. If the probability of the individual elements is less, the likelihood of a correct result decreases rapidly. If each element is only certain to 80%, then the resulting conclusion is established only to a probability of approximately 21%; if each element has a 75% probability, the conclusion is only approximately 13.3% probable; if each element is only 60% likely, the conclusion is only approximately 2.8% probable, *and if each individual element is established only by a bare preponderance of the evidence (51% certain), the conclusion is less than one percent likely* (0.897%).[22] If all elements but one are 95% certain, and the other one is only 25% certain, the resulting likelihood is only about 18.4% certain.[23]

It may be unexpected that the likelihood that a "chain-conclusion" is correct decreases so rapidly because of uncertainties in each element, but this numerical

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[21] $(0.9)^7 = 0.47830$.

[22] $(0.8)^7 = 0.20972$; $(0.75)^7 = 0.13348$; $(0.6)^7 = 0.027994$; $(0.51)^7 = 0.0089741$.

[23] $(0.95)^6 \times 0.25 = 0.18377$. If five elements are each 95% certain and the other two are each only 50% certain, the resulting chain is only about 19% (0.19345) certain.

illustration emphasizes the need for each element in the chain to be established by very reliable and certain evidence. *The district court thus had a duty to insist that TAP's evidence as to each causation element be virtually certain*. Intervenor Defendants-Appellants' contrary evidence regarding each element, if accorded any material weight – even just 10% – effectively negates the court's conclusion. TAP had a very high burden of proof but did not meet it.

Intervenor Defendants-Appellants' experts offered at least as credible alternative explanations as TAP's evidence provided.[24] TAP's evidence, relied on exclusively by the district court, was not certain to the degree required to make the district court's ultimate conclusion credible and likely on even a preponderance of the evidence basis. This Court has previously cautioned against undue reliance on chains of inference. *See, e.g.*, *United States v. Pettigrew*, 77 F.3d 1500, 1521 (5th Cir. 1996); *cf. Davis-Lynch, Inc. v. Moreno*, 667 F.3d 539, 553 (5th Cir. 2012) (chain of suspicions is not evidence). This is an egregious example of disregard of that admonition.

It was an abuse of discretion for the district court to have concluded that proximate causation was established by a preponderance of the evidence. There were simply too many uncertainties in TAP's evidence regarding each element of the chain of causation that TAP's theory of the case required for there to be a

[24] GBRA Brief at 40-57.

material likelihood the State Defendants were the proximate cause of any takes of cranes. The district court's conclusion was clearly erroneous.

B. Another View of the Evidence Relied on by the District Court

Dr. Lee Wilson has conducted a thorough review of the science in the case.[25] Dr. Wilson is an experienced Ph.D. hydrogeologist with significant professional experience with whooping cranes, including in the context of the ESA, and of these whooping cranes and river systems in particular. Dr. Wilson served as the science advisor to the Texas A&M study of the whooping cranes at ANWR, and has direct professional knowledge of the Guadalupe and San Antonio River systems spanning thirty years, including concerning environmental flows.[26] The Critique offers a critical *scientific* assessment of the evidence relied on by the district court, and suggests simple alternative explanations the district court should have – but did not – consider and rule out before reaching its decision in this case.

The purpose of advising the Court of the Critique is to illustrate in another way the failure of the district court to have adequately performed its functions under *Daubert*, and to corroborate the assertion that the probability of proximate causation in this case is too low to credit, since every element of causation in TAP's theory of the case was not established to a virtual certainty. *See*, *Babbitt v.*

[25] Dr. Wilson's analysis ("Critique") is found at the Texas Public Policy Foundation website at http://www.texaspolicy.com/center/energy-environment/reports/analysis-science-whooping-crane-decision.

[26] Dr. Wilson summarizes his credentials and experience at pp. 6-9 of his Critique.

Sweet Home Chapter, 515 U.S. 687, 713-14 (1995) (O'Connor, J., concurring) (causal connection in *Palila v. Hawaii Dep't of Land & Nat. Res.*, 852 F.2d 1106 (9th Cir. 1988), too remote to constitute proximate cause); *id*. at 712-13 (but-for causation not enough). Another purpose is to make the perhaps obvious point that evidence of correlation is not the same as evidence of causation.[27] Finally, the Critique also makes the point that the scientific knowledge related to ANWR issues in this case is not yet well-enough established or understood – meaning that purportedly "scientific" bases on which to conclude who may have caused any takes that may actually have occurred are thin on the ground.

1. Correlation is not causation

Dr. Wilson notes that "[m]any observations correlate only because each is caused by the same something else" or correlate for no reason at all.[28] This is a direct caution to be wary of correlations that appear to explain phenomena, of the very kind the district court accepted from TAP and relied upon. For example, the following graph – which was Defense Exhibit 242 – shows that winter whooping crane populations at ANWR have increased over time, apparently correlating to *increases* in the amount of consumptive water use in the Guadalupe-San Antonio River Basin.[29]

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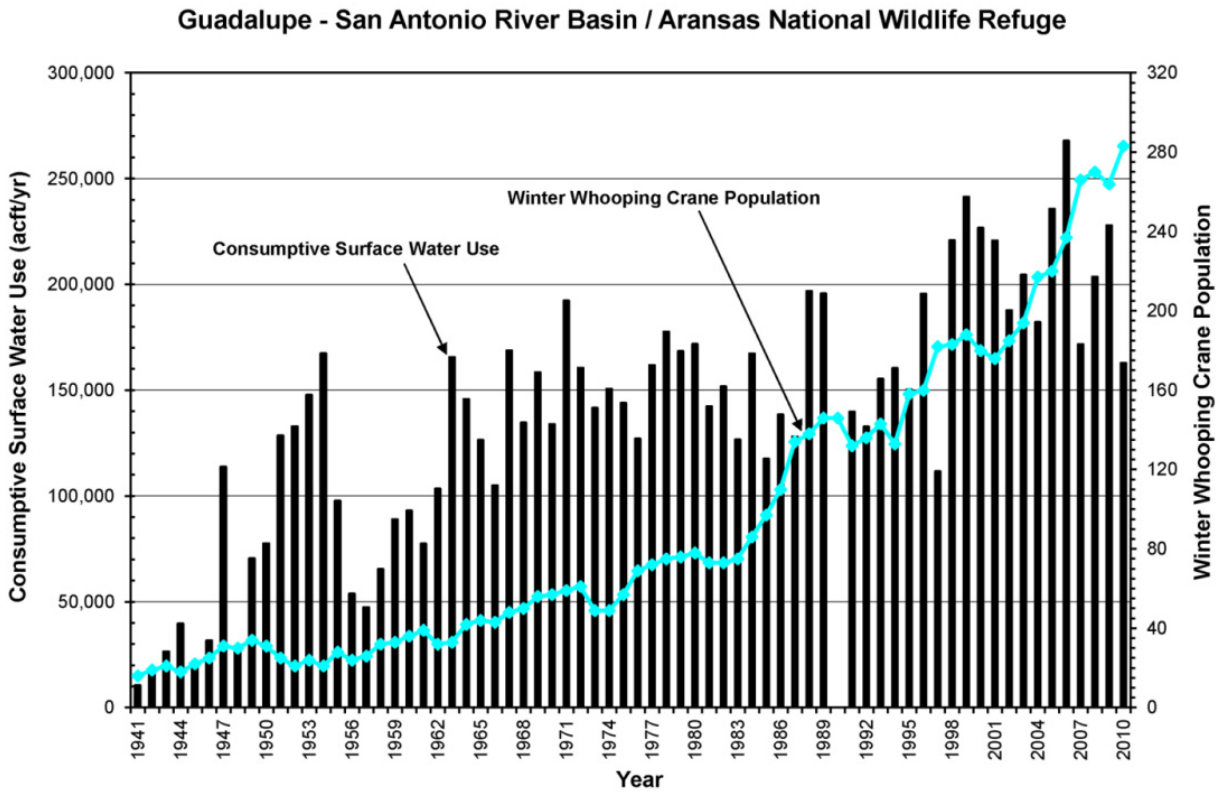
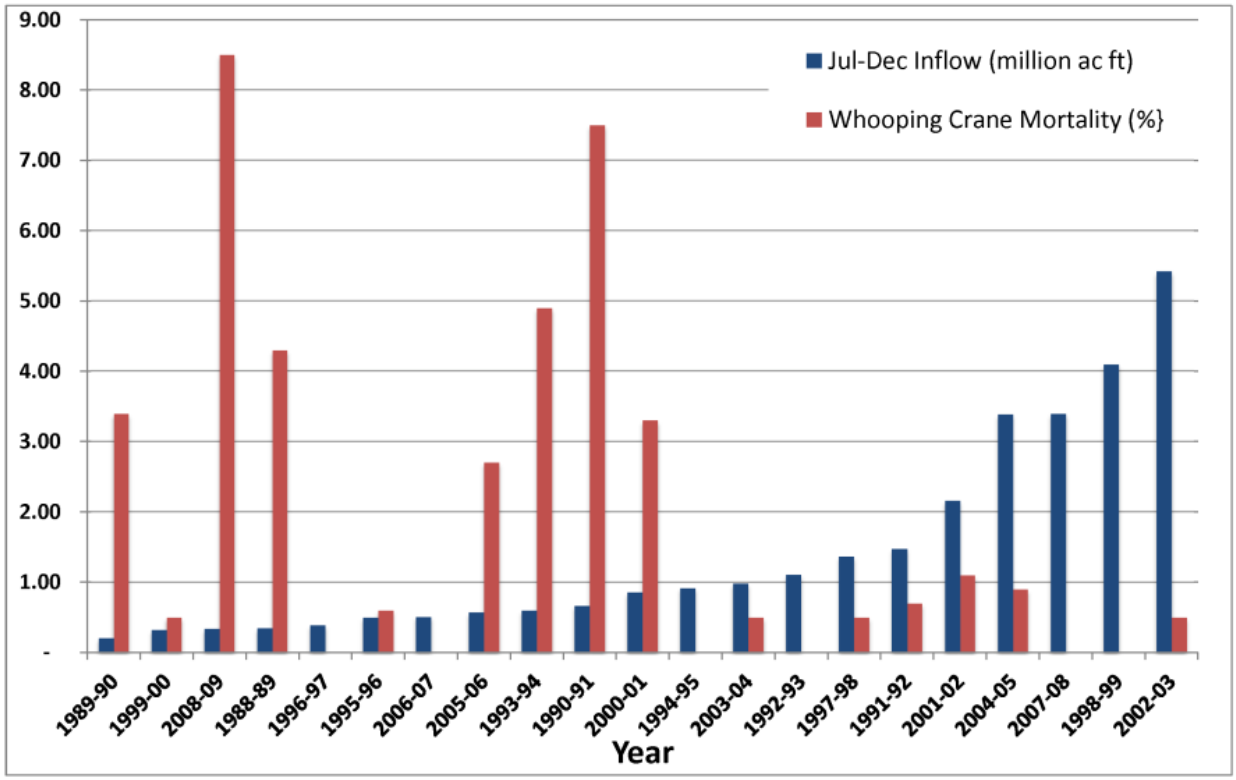
[27] *See, also* GBRA Brief at 42-43.
[28] Critique at 11.
[29] *Id*.



While this graph demonstrates the successful recovery of the crane population at ANWR, it would be a mistake to infer that increased upstream water use has *caused* the increase in crane populations.[30]

Similarly, TAP's expert Dr. Ronald Sass presented a correlation between freshwater inflows at Aransas Bay to mortality estimates for the cranes (97.9% probable), as depicted in the graph below, which was Plaintiff's Exhibit 76.[31]

[30] *Id.*
[31] *Id.* at 10.

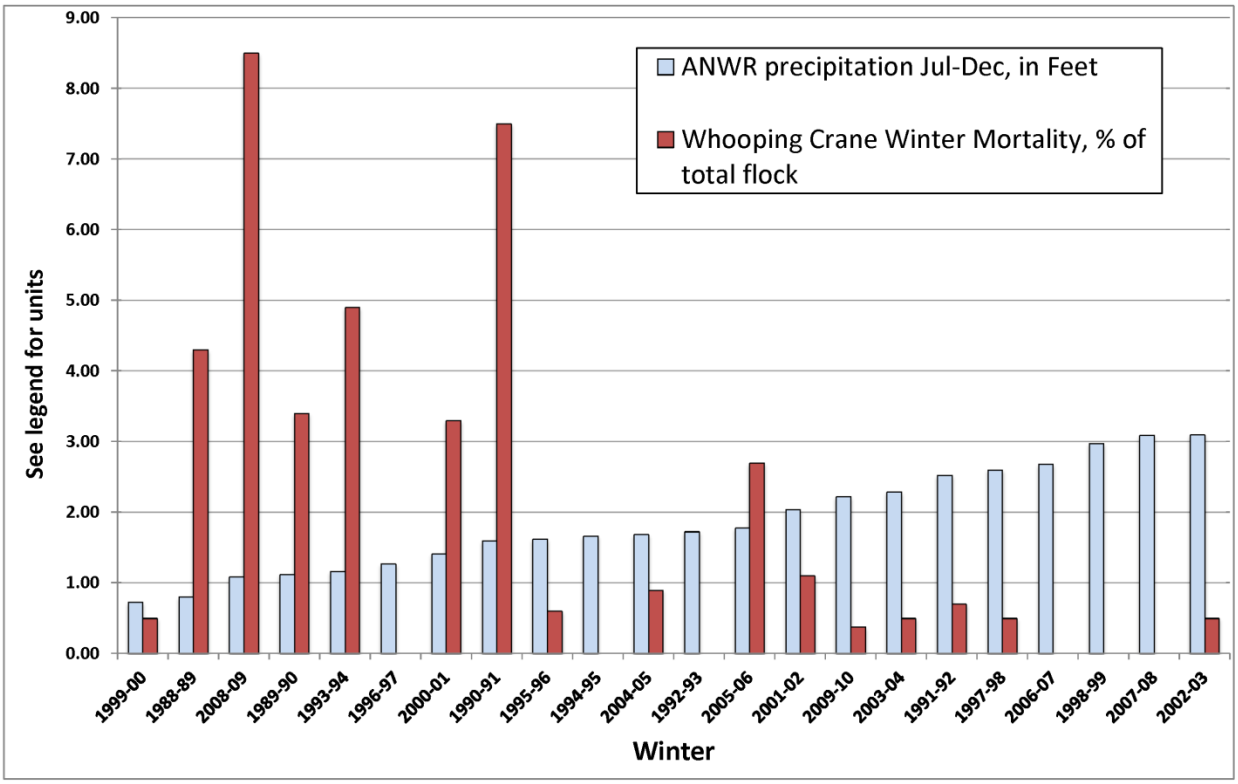


However, Dr. Wilson proposes an equally statistically significant alternative correlation between those same mortality estimates and the (lack of) local rainfall at ANWR (also 97.9% probable).[32] As seen in the graph below, the six seasons of highest crane mortality occur in the eight locally driest years.[33] Lack of local rainfall is at least as likely an explanation for the supposed crane mortality as low inflows.[34]

[32] Significantly, the lack of local rainfall on ANWR is more directly related to conditions in the area than upstream water use and TCEQ's regulation of it, eliminating several steps in the causality chain proposed by TAP and accepted by the district court.

[33] Critique at 12.

[34] *Id*. at 12-13.



Finally, Dr. Wilson implicitly illustrates that correlation statistics can be manipulated, consciously or unconsciously, when he notes that, if both his and Dr. Sass's correlation data are limited to the eight driest years in their data samples (instead of ten), the local rainfall correlation becomes statistically stronger (99.7%), and Dr. Sass's inflow correlation becomes significantly less statistically significant (78.7%).[35]

[35] The sharp decrease in correlation confidence level may illustrate another point. If causation underlies a statistical correlation, it may be expected that considering a data sample more focused in the connection would have a stronger, not a weaker, correlation significance. That the mortality-inflow correlation significance decreases may suggest that underlying causation is not present.

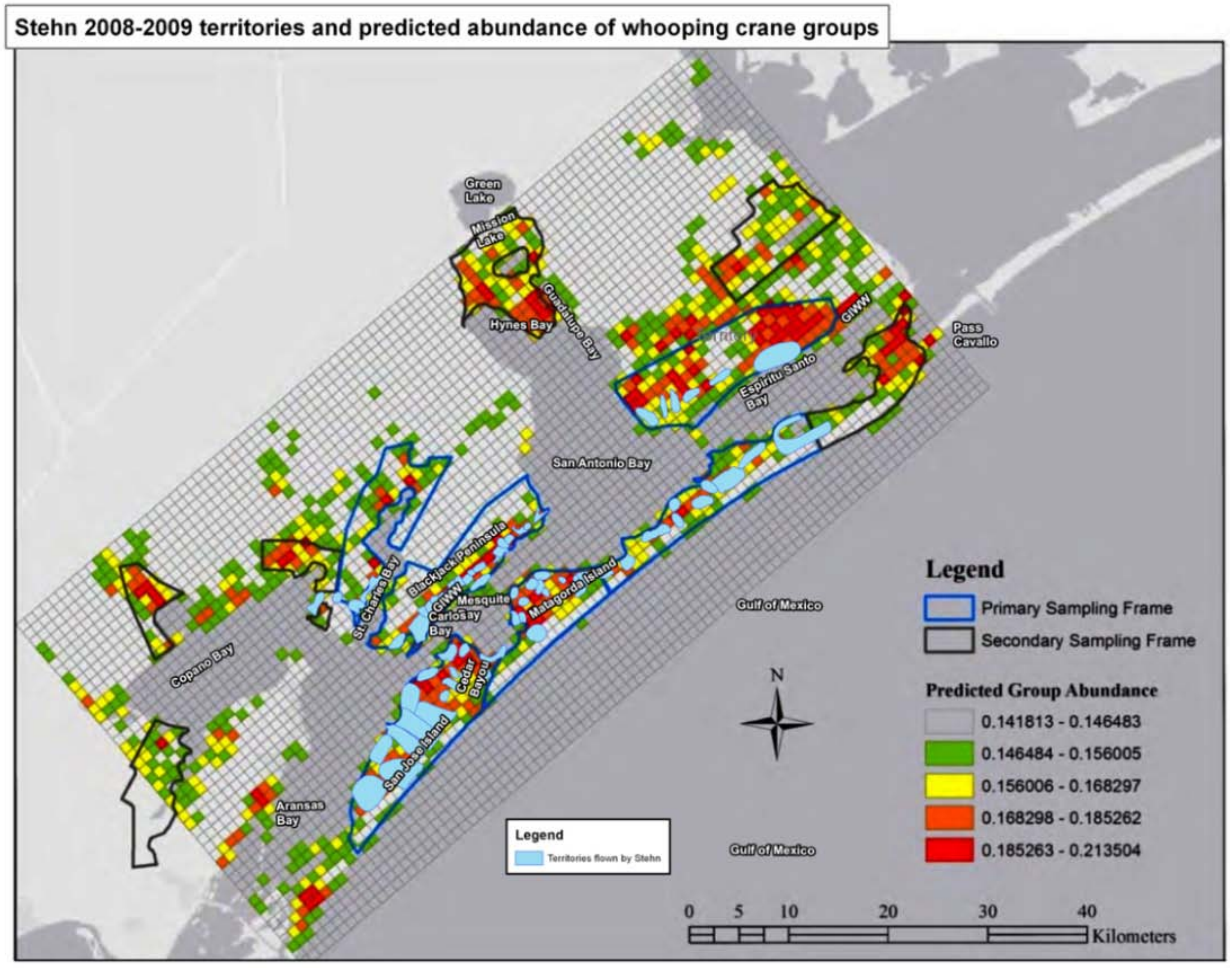
This is important because Dr. Sass's correlation testimony was credited by the district court as establishing that crane mortality had been caused by upstream events – the withdrawals of water by water rights holders.[36]

2. Crane mortality

Stehn's survey was inaccurate

Dr. Wilson discusses the recent FWS report "Aransas-Wood Buffalo Whooping Crane Abundance Survey (2011-2012) (Sept. 24, 2012) ("FWS Report").[37] He makes the important point that recent, more methodical and systematic survey data show crane dispersion in and outside the ANWR habitat is more significant than assumed by Stehn,[38] as shown in this map from the FWS Report as well as the Critique:[39]

[36] D.E. 354 at 109-110.
[37] Found at http://www.fws.gov/uploadedFiles/FY12_ANWR_WWCAS_Review_01OCT12-508.pdf
[38] Critique at 15-16; FWS Report at 9.
[39] FWS Report at 24; Critique at 15.



Stehn's aerial survey covered only a small portion of the area potentially inhabited by whooping cranes. This casts additional doubt on Stehn's survey results for 2008-09 on which the district court relied to conclude there had been 23 crane deaths:

> In effect, FWS has concluded that the prior survey did not extend to important areas where cranes are now known to occur. Most importantly, the Service has concluded that it must do its surveys in a manner that reflects scientific principles and that can achieve results that are statistically robust, and not just survey based on the experience and instinct of the observer as done historically.
>
> ....

> …FWS has studied the crane survey issue with far more intensity than any of the trial witnesses, and they have stated without equivocation that Stehn's core assumption – missing from territory means dead – is untenable.[40]

The return of 17 "dead" cranes

Dr. Wilson also comments on the fact that 17 of the cranes supposedly "taken" based on Stehn's mortality evidence apparently returned to ANWR the following fall.[41] Dr. Wilson suggests that this exact numerical coincidence of numbers creates additional doubt as to the entirety of Stehn's survey methodology.

3. District court's dismissal of Defendants' experts' evidence

Dr. Wilson offers comments from a scientist's viewpoint on the apparently dismissive and even hostile treatment of Intervenor Defendants-Appellants' experts, all of whom were experienced professional scientists with respected credentials.[42]

The district court's conclusions regarding both crane mortality and proximate causation were not harmless error, but determinative of the case, and should not be left standing.

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[40] *Id*. at 16.
[41] *Id*. at 19.
[42] *Id*. at 19-20.

IV. Certifying the Question of TCEQ Authority to Modify or Limit Permitted Water Rights to the Texas Supreme Court

The question of the scope of TCEQ authority to regulate existing water permits or other vested water rights is critical to two elements of this case: The causation issue, and the form of relief that the district court may order. In both instances, Farm Bureau believes that the district court has based its ruling upon an incorrect reading of Texas law.

Federalism has long recognized the *Pullman* principle that a federal court should allow a state to make determinations concerning issues of state law that implicate significant state interests. Consistent with that doctrine, this Court should consider certifying a question to permit the Texas Supreme Court to determine the character and extent of TCEQ authority regarding modification of existing state appropriative water rights.

Based upon its determination that the TCEQ has authority to regulate withdrawals by permitted water rights holders to ensure inflows to the Aransas Bay, the district court found that TCEQ's failure to limit water withdrawals in the Guadalupe and San Antonio River basins caused takes of whooping cranes. The district court's ordered relief is based on this legal conclusion about TCEQ authority. If that conclusion is wrong, the district court's opinion and order must be reversed.

Although Farm Bureau believes the statutory scheme governing TCEQ authority is clear that TCEQ lacks such authority, and although Intervenor Defendants-Appellants and the State Defendants took that position below,[43] the district court disagreed.[44] In this situation, certification of the question to the Texas Supreme Court is appropriate and desirable.[45]

A. The District Court's Opinion and Order

The district court held that the State Defendants' failure to limit withdrawals by existing water right holders in the Guadalupe and San Antonio River basins in order to guarantee sufficient freshwater inflows into Aransas Bay so as not to adversely affect the whooping cranes or their habitat was a proximate cause of takes of whooping cranes. The conclusion that the TCEQ has such authority is a

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[43] *See, e.g.*, Defendants' Rule 12(b)(6) Motion to Dismiss, and Motion for Partial Summary Judgment. D.E. 40 at 1-8; D.E. 214 at 7-13.

[44] State Defendants no longer press this as one of their primary arguments on appeal. The Texas Solicitor General, now representing State Defendants, suggests that water rights "merely absolve the permit holder from state law penalties in taking water," much like a driver's license. Two factors account for this change of emphasis, in Farm Bureau's view. First, the argument that issuing a state permit does not take an endangered species (an argument Farm Bureau completely supports) is clearer without introducing the additional implications and limitations that arise from the fact that state law water rights are vested, constitutionally-protected real property rights. Second, the Solicitor's arguments may be influenced by litigation currently pending in which Texas Farm Bureau challenges TCEQ rules adopted under Texas Water Code § 11.053, arguing that TCEQ lacks authority to exempt preferred junior water users from a "priority call" and must enforce that call in accordance with the priority of all existing water rights. *Texas Farm Bureau v. TCEQ*, No. D-1-GN-12-003937 (filed 12/14/2012), in the 53rd District Court, Travis County, Texas.

[45] As is clear from both Dr. Wilson's critique and GBRA's Brief at 6, the ANWR flock has continued to grow since 2008-09 and will not be jeopardized by the modest delay involved in certification.

cornerstone of the district court's holding. If such authority does not exist, there cannot have been a take by the State Defendants.

B. TCEQ Authority

Under Texas law, a permitted appropriation right that has been put to beneficial use is a vested property right. Texas Water Code § 11.026; *Texas Water Rights Commission v. Wright*¸ 464 S.W.2d 642, 647 (Tex. 1971). Similarly, the riparian rights of "exempt" users to withdraw water for domestic and livestock purposes is a vested property right. *Id*. Integral to these vested rights is the priority doctrine: First in time is first in right. Texas Water Code § 11.027.

The State Defendants repeatedly urged below that there are fundamental limits to the authority of TCEQ to modify, condition or limit existing water withdrawal rights – the substance of which the district court seems simply to have ignored. In particular, TCEQ lacks authority to modify existing permits to limit withdrawals in order to increase flows to bays and estuaries, except to the extent that some junior permits may have conditions permitting such limits to be imposed.[46] The TCEQ's emergency powers to, *e.g.*, curtail withdrawals in times of drought require TCEQ to apply and enforce the seniority system of permitted rights: Permitted water rights may be "temporarily suspend[ed]...in accordance with the priority of water rights established by [Texas Water Code] Section

[46] The Texas scheme of water permitting and water rights is ably and more completely described in the amicus curiae brief of the Texas Water Conservation Association ("TWCA").

11.027." Texas Water Code § 11.053.[47] These statutory emergency power provisions make no mention of limitation to ensure environmental flow needs.

With no direct legal authority for the proposition that the TCEQ had power to ensure freshwater inflows to Aransas Bay, the district court had to find implied authority. The district court relied on TAP's legal "expert," former TCEQ Commissioner Soward, who asserted in conclusory testimony that TCEQ had such power (but identified no direct statutory authority).[48] That the district court resorted to lawyer "expert" witnesses to testify about what the law is in Texas, rather than statutes or caselaw, merely emphasizes the uncertainty some believe exists about TCEQ's authority to curtail withdrawals under permitted appropriation rights.

C. No Texas Case Addresses the Issue

No case from the Texas Supreme Court recognizes TCEQ's power to modify, limit or condition existing water rights for instream flow purposes, including guaranteeing freshwater inflows to bays and estuaries. TAP and the district court reached a contrary conclusion upon very thin authority. The opinion below is based upon conflicting testimony from multiple witnesses regarding

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[47] This provision was not enacted until the 2011 regular Texas legislative session, so it was not in place during 2008-2009 when the alleged takings occurred. Moreover, the drought curtailment rules subsequently enacted by TCEQ pursuant to this statute do not apply to the Guadalupe and San Antonio River basins, which have a watermaster (who is a defendant in this case). *See*, 30 TEX. ADMIN. CODE § 36.1(b)(not applicable to water master area).

[48] D.E. 354 at 38-39.

TCEQ's statutory authority,[49] and a recent statute – Texas Water Code § 11.053 – adopted *after* State Defendants were alleged to have taken endangered cranes. Neither grants this authority to TCEQ.

TAP cited *Texas Natural Resource Conservation Comm'n v. Lakeshore Utility Co.*[50] for the proposition that TCEQ has "whatever powers are reasonably necessary to fulfill its express functions or duties."[51] *Lakeshore Utility*, however, did not involve the exercise of agency powers to alter a vested property right, but only whether refunds of utility rates imposed by the utility without agency approval could be compelled. 164 S.W.2d at 378-79.

The question whether an agency has power to alter vested property rights was addressed in *GTE Southwest, Inc. v. Public Utility Comm'n of Texas*, 10 S.W.3d 7 (Tex. App.–Austin 1999, no pet.). In *GTE*, the court held that the Public Utility Commission ("PUC") exceeded its statutory authority in ordering GTE to share utility lines with competitors, rejecting arguments that the PUC's general authority impliedly gave the agency authority to order GTE to revise its tariff to do so. The court determined that such an exercise by the PUC would constitute a per se taking of GTE's property, and rejected so expansive a view of PUC power. *Id.*

[49] D.E. 354 at 36-42.
[50] 164 S.W.2d 368 (Tex. 2005).
[51] D.E. 227 at 13.

at 12-13. The parallel with this case is obvious, since here vested property rights are also implicated.

These cases, as well as the statutes on their faces, conflict with the district court's conclusions of law that TCEQ has (1) authority to modify existing water rights, and take other actions, to ensure "necessary freshwater inflows reach the Aransas Refuge and the Aransas-Wood Buffalo cranes;"[52] (2) implied power to curtail existing vested water rights under its general powers to protect inflows;[53] (3) refused to issue a water permit to permit freshwater inflow for the protection of the crane habitat;[54] and (4) violated the ESA by not exercising emergency powers to protect the cranes.[55]

D. Certification Could Address a Dispositive Issue

If TCEQ indeed lacks authority to impose the limitations on withdrawals by existing water rights holders necessary to ensure minimum inflows to Aransas Bay, which the district court assumed as an underlying basis for its determination the State actors caused takes of cranes, then the district court's holding that there were takes in 2008-09 by the State Defendants is incorrect as a matter of law. Moreover, if the State Defendants lack such authority, then the relief ordered is incapable of performance.

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[52] D.E. 354 at 37, 38-39.
[53] *Id*. at 116-17.
[54] *Id*. at 42.
[55] *Id*. at 122.

When a federal appellate court is faced with a novel question of state law, *Pullman*-type abstention allows for the question to be put directly to the state's highest court, reducing the delay, cutting the cost, and increasing the assurance of gaining an authoritative response. *Arizonans for Official English v. Arizona*, 520 U.S. 43, 74 (1997). Texas has adopted a procedure for federal appellate courts to certify determinative questions of state law to the Texas Supreme Court. *See* TEX. R. APP. P. 58.

Accordingly, Farm Bureau respectfully suggests that this Court consider certifying the following question to the Texas Supreme Court: "Whether the TCEQ has authority to modify, limit or otherwise condition existing water rights in order to guarantee freshwater inflows to bays and estuaries, and if so, what is the character of that authority?"

CONCLUSION

The ramifications of this case are too significant and important to permit sloppy and incomplete science to justify a patently incorrect result – there were no takes of cranes proven – or to let stand a judicial determination of proximate causation based on such a questionable cumulative evidentiary basis. Both would be very bad precedent. Both were clearly erroneous, and together were determinative of the case: Neither was harmless error. Saving the whooping cranes is an important goal, but they are, in fact, thriving.

This is not a case merely involving private litigants. It is a case with direct and potentially profound consequences for the public, both in Texas and nationwide. If let to stand, this result – approval of the district court's single-minded reliance on what amounts to junk science, as well as of TAP's approach to the case – suing a regulator instead of water users whose water rights are threatened to be limited without their ever having their day in court – could be applied in every water system in Texas; and as an ESA case, might have similar implications for water systems nationwide. The water users, the Defendants, and the citizens of Texas deserve better.

The district court should be reversed, and the case rendered on the grounds that TAP neither showed takes of cranes had in fact occurred, nor, even had there been takes, that the State Defendants were the proximate cause of any such takes. Alternatively, this Court should certify to the Texas Supreme Court the question of whether TCEQ has authority to modify existing vested water rights to guarantee inflows to Aransas Bay.

Respectfully submitted,

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Dated: May 9, 2013

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