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This article presents a detailed analysis of the history and development of interbasin transfer law and policy in Texas. The article follows the droughts of record and the subsequent legislation that followed, as well as exploring case studies in interbasin transfers. Finally, the authors offer ideas and solutions that set aside some of the fear and confusion surrounding the movement of water across basins.

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In 1990, the Environmental and Natural Resources Law Section of the State Bar of Texas reached an agreement with a student group at The University of Texas School of Law for the students to coproduce the Journal as the Texas Environmental Law Journal. The students' involvement began with the summer issue of 1990.

Anyone interested in submitting a manuscript for publication should contact either the Solicitation Editor or the Editor-in-Chief of the Journal as listed on the facing page. Manuscripts for publication must be typed double-spaced with footnotes placed at the end of the manuscripts as endnotes. Manuscripts must be provided electronically in MS Word. (PC-compatible floppy disks are appreciated).

FROM THE EDITORS

Dear Readers,

Welcome to Issue Number Three of the 2005-06 publication year!

In this issue, Todd Votteler, Kathy Alexander Martin and the late Joe Moore present a detailed article about the development of interbasin transfer law and policy in Texas. The article follows the droughts of record and the subsequent legislation that followed, as well as exploring case studies in interbasin transfers. Finally, the authors offer ideas and solutions that set aside some of the fear and confusion surrounding the movement of water across basins.

Christine Toriz, a 2005 graduate of Texas Tech University School of Law, and former member of the Texas Tech Law Review, writes our student note. Christine examines the 5th Circuit's decision in *GDF Realty Investments, Ltd. v. Norton* and its impact on the interplay between the Endangered Species Act and the United States Supreme Court's modern Commerce Clause jurisprudence.

Enjoy Issue Number Three, and we look forward to shortly bringing you the final issue of Volume 36!

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THE EVOLUTION OF SURFACE WATER INTERBASIN TRANSFER POLICY IN TEXAS: VIABLE OPTIONS FOR FUTURE WATER, WATER GRABS, OR JUST PIPE DREAMS?

BY TODD VOTTELER, KATHY ALEXANDER AND THE LATE JOE MOORE

I. INTRODUCTION

Percival Lowell, astronomer and wealthy gentleman, studied Mars extensively during the late 1800s and early 1900s using the great reflector telescope of Arizona's Flagstaff Observatory.¹ In the course of his observations, Lowell, like other astronomers of his day, sketched images of what he perceived to be canals created to bring water from the Martian polar ice caps across dry landscapes to oases and other areas of what he thought was a dying desert planet. As Lowell explained in 1895, "[t]o account for these phenomena, the explanation that at once suggests itself is, that a direct transference of water takes place over the face of the planet, and that the canals are so many waterways."² Alas, Lowell's imagination was more fertile than the frozen, arid plains of Mars upon which he gazed. Back in Texas, it would only be a few years later, in 1900, when the first interbasin transfer was authorized allowing 168,000 acre-feet of surface water from the Colorado River Basin for use in the Lavaca River Basin.³

Yet even after 100 years of interbasin transfers in Texas, the existence of canals and pipelines transferring surface water across portions of the state seems almost as alien to much of the populace of Texas as the Martian "canals" appeared to Lowell. The premise appears to be simple—transport available surface water to the areas that need it. However, the reality is much more complex. The possibility of the movement of large volumes of water from wetter areas of the state to drier ones, like an unwanted invasion from a distant world, has become a matter of fear and confusion for the citizenry of the basins of origin in Texas. This article attempts to remove some of the fear and confusion by shining a light on the development of Texas interbasin transfer policy. The history of this policy

is examined and information regarding current and future interbasin transfers is provided.⁴

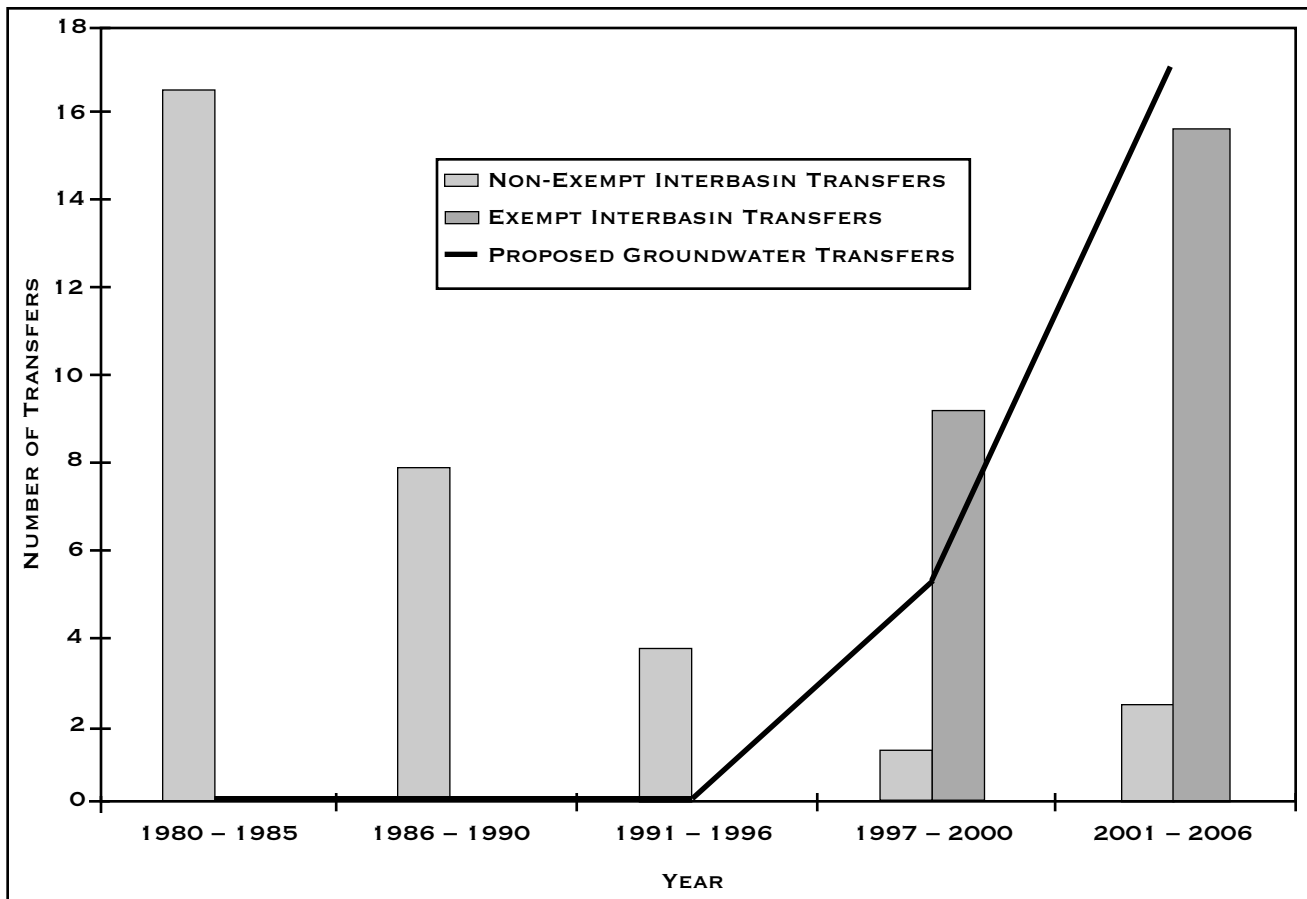
A. WHAT IS AN INTERBASIN TRANSFER OF WATER IN TEXAS?

The sources of water in Texas do not always align with its population. The greatest amount of water is found in the east, especially the Sabine and Sulphur basins. These areas are sparsely populated. For these reasons, interbasin transfers (IBTs) – or the movement of water from one river basin to another river basin – have historically been an important way to provide water throughout Texas.⁵

An interbasin transfer, or transbasin diversion, is an artificial withdrawal of water from one drainage basin, the basin of origin, to another, the receiving basin, for a beneficial use.⁶ The Texas Commission on Environmental Quality (TCEQ), the state agency responsible for water rights administration in Texas, does not specifically define "interbasin transfer," but infers that it is the transfer of state-owned water (surface water) from one river basin to another.⁷ The Texas Water Development Board (TWDB), the water-planning agency for the State of Texas, designates river basins, for the purposes of the interbasin transfer provisions of the TCEQ rules, pursuant to Section 16.051(c) of the Texas Water Code.⁸ As interpreted under the Texas Administrative Code, an interbasin transfer applies only to surface water, thus excluding groundwater transfers from the rules applicable to surface water transfers.⁹

Generally, two types of transfers are used. Open transfer systems that use canals, reservoirs, and rivers, and closed transfer systems that use pipelines and tunnels. East Texas is often considered

FIGURE 1. COMPARISON OF INTERBASIN TRANSFERS OF SURFACE WATER AND GROUNDWATER EXPORT



the source for interbasin transfers, because rainfall rates are highest, and the topography is best suited for dam construction. However, Appendix A lists numerous interbasin transfers where the basin of origin is in the western half of the state, such as Lake Meredith in the Panhandle.

B. INTERBASIN TRANSFERS:

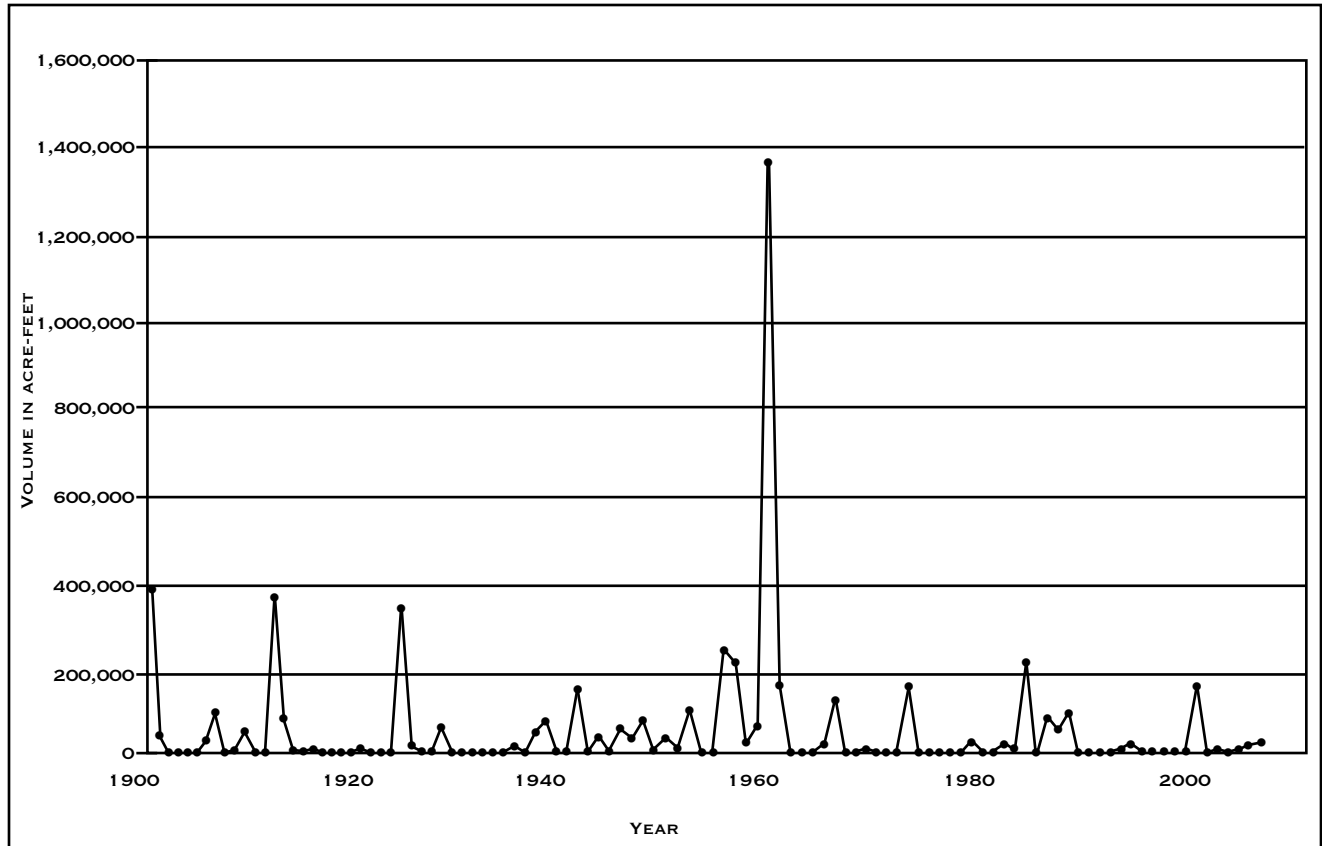
ADVANTAGES AND DISADVANTAGES

Diverted water supports economic development through municipal use, irrigation, industrial use, and power generation. The TWDB lists potential benefits for interbasin transfers: avoiding the time, expense, and environmental impacts of constructing new reservoirs in water short areas that are near basins with surpluses, providing for emergency needs during droughts when local supplies may be unavailable, and increasing the flexibility to meet instream flow needs by making water available from multiple basins.¹⁰ These advantages focus on the planning flexibility offered by interbasin transfers for managing surface water across large geographic

areas, which exhibit significantly different hydrologic conditions. With regard to groundwater, Appendix B lists proposed groundwater supply projects, and projects that are in various stages of implementation, since 1980. As Figure 1 indicates, the majority of these groundwater projects came into play after Senate Bill 1 placed additional restrictions on surface water interbasin transfers in 1997.

However, interbasin transfers can have adverse social and environmental consequences such as the loss of return flows needed by appropriators in the basin of origin, water quality issues, the potential for the introduction of undesirable non-native species and pathogens, and unmet needs for human and environmental uses in the basin of origin. Evidence from worldwide environmental studies suggests that interbasin transfers may cause significant impacts on ecosystems due to alterations of streamflows and freshwater inflows to bays and estuaries, changes in water quality, habitat modification, and the introduction of non-native aquatic organisms.¹¹

FIGURE 2. VOLUME OF WATER AUTHORIZED FOR INTERBASIN TRANSFER BASED ON THE PRIORITY DATE OF THE WATER



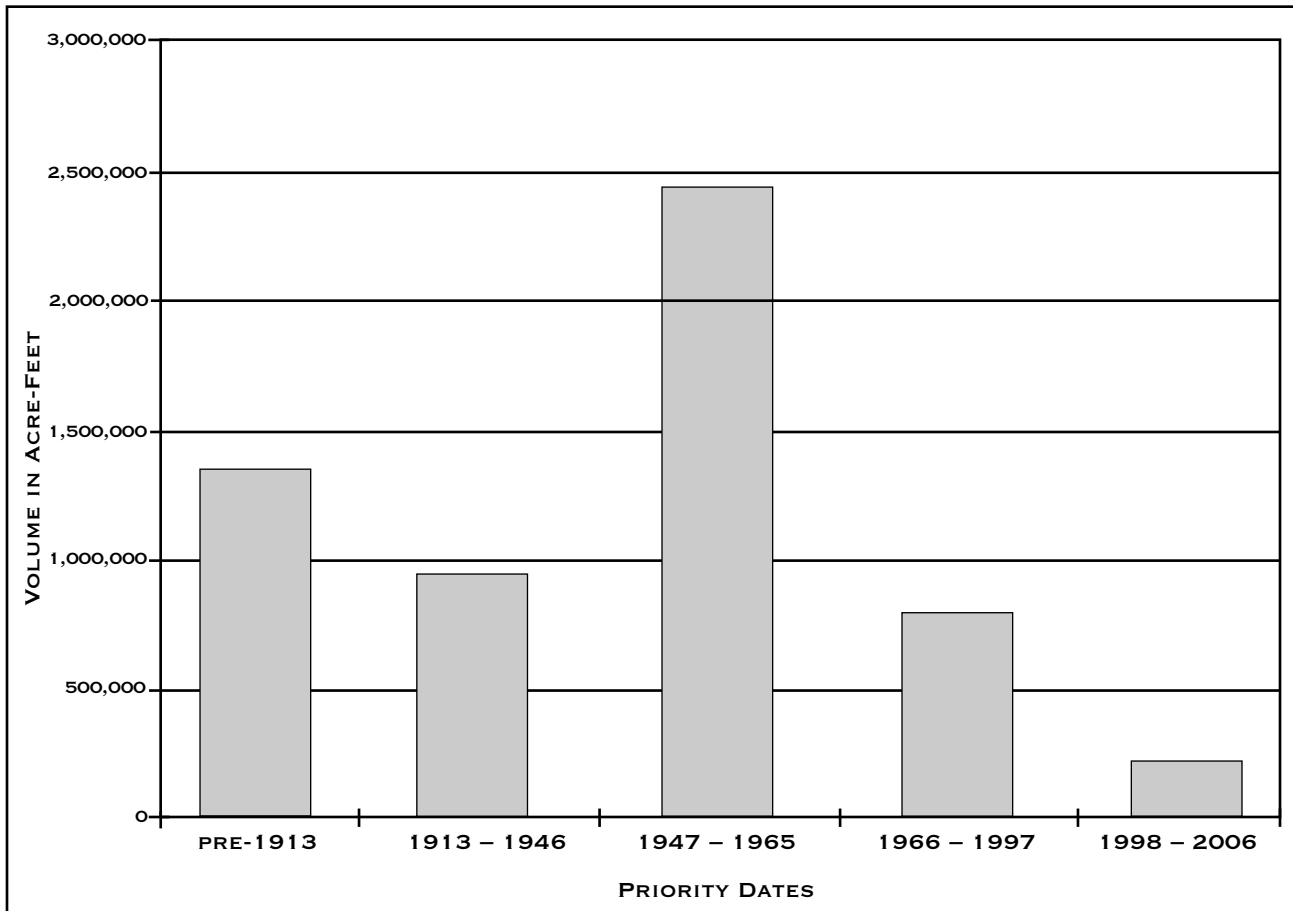
The potential for introduction of non-native species is significant when major drainage basins are involved, particularly when the two basins contain significantly different types of aquatic ecosystems. Open transfer systems have a higher potential for causing significant environmental impacts because of the lack of checks to prevent the introduction, dispersal, and establishment of non-native aquatic species.¹² On the other hand, the design of closed systems can more easily reduce potential impacts that the introduction of non-native species cause.¹³ Often, the most economically feasible option for interbasin transfer projects is to discharge the transferred water into a stream in the receiving basin and use the bed and banks of that stream to transport the water to its point of use. This option may reduce the need for costly pipelines.

Today, in Texas, surface water may be considered for an interbasin transfer if it is generally projected to be available in a basin for the next fifty years.¹⁴ Nonetheless, proposals to transfer water

from one river basin to another generate conflict. The conflicts are transboundary water disputes, or conflicts between differing systems of water law arising when different political jurisdictions share a common source of water.

Two types of transboundary disputes are particularly relevant to interbasin transfers. The first type is the sequential power dispute, which is a dispute between political jurisdictions over water that flows from one political jurisdiction to another.¹⁵ The jurisdiction from which the water flows can come into conflict with the jurisdiction into which the water flows often because of the diminishing quantity or quality of water. The second type is the exclusionary power dispute, a dispute over the movement of water across boundaries as articles of commerce that involve government's ability to give preferences to, or discriminate among, users. In an exclusionary power dispute, the government regulates the users, instead of the resource.¹⁶

FIGURE 3. VOLUME OF WATER AUTHORIZED FOR INTERBASIN TRANSFER BASED ON THE PRIORITY DATE OF THE WATER AND ACCUMULATED FOR PERIODS



II. CHRONOLOGY: INTERBASIN TRANSFER LAW FROM 1900 TO 1946

How many interbasin transfers are in Texas? The answer is "it depends." The number of interbasin transfers depends on whether the discussion is on raw water, treated water, or both. The number also depends on whether a municipality's diversion of surface water from one basin for use within a portion of the municipality's service area in another basin constitutes an interbasin transfer.¹⁷ Furthermore, the result changes if the use of surface water for irrigation on coastal lands located within one or more river basins (and coastal basins) constitutes an interbasin transfer. Excluding the Rio Grande, currently thirty water permits, authorizing forty-five interbasin transfers, do not expressly mention the interbasin transfer, even though the authorized

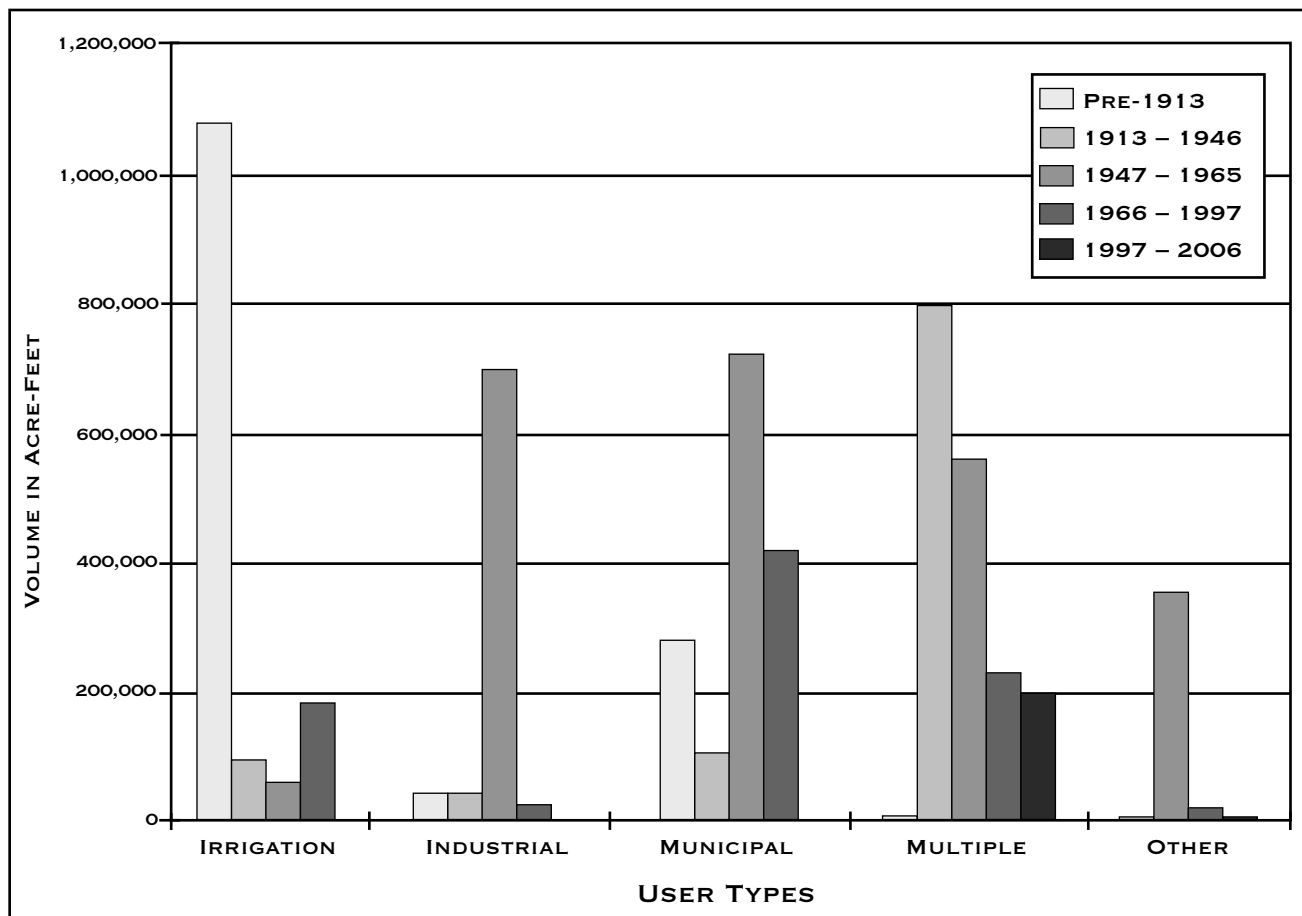
place of use is in another basin.¹⁸ These forty-five interbasin transfers include rights that authorize discharge of return flows into another basin. Excluding the Rio Grande, across the state, 103 water rights authorize 156 separate interbasin transfers.¹⁹

Figure 2 depicts the amount of water authorized for interbasin transfer based on the priority date of the water. Figure 3 depicts the volume of interbasin transfers based on the priority date of the water accumulated for periods that are divided into the following categories; pre-1913 (certified filings), 1913-1946 (post 1913 Burgess - Glasscock Act and pre Drought of Record), 1947-1965 (Drought of Record and pre-1965 Planning Act), 1966-1997 (post-1965 Planning Act, post 1967 Water Rights Adjudication Act, and pre Senate Bill 1) and 1998-2006 (post Senate Bill 1).²⁰

A. INTERBASIN TRANSFER LAW

Although interbasin transfers in Texas have existed since 1900, the statutory basis for interbasin

FIGURE 4. INTERBASIN TRANSFERS BY YEAR AND USE TYPE



transfers derives from the Burgess – Glasscock Act or 1913 Irrigation Act (1913 Act).²¹ The 1913 Act was the precursor for many of the provisions found in the current Texas Water Code. Specifically, the major changes brought by the 1913 Act were prior appropriation applied statewide—all unappropriated waters in the state were the property of the State, preexisting riparian rights were preserved but riparian rights did not apply to lands acquired from the State after 1895, and a Board of Water Engineers was established to administer a statewide water permitting system.²²

The 1913 Act prohibited diversions from one watershed to another “to the prejudice of any person or property situated within the watershed from which such water is proposed to be taken or diverted,” and required a permit for any interbasin transfer.²³ The “terrific floods during 1913 and 1914” revealed the shortcomings of a 1904 amendment allowing the creation of districts with limited taxing authority and provided the impetus for a 1917 constitutional

amendment.²⁴ The current authority for a state agency to manage water within Texas derives from a constitutional amendment that the Legislature proposed and the voters of Texas adopted in an election on August 21, 1917.²⁵

The 1917 amendment removed the limits on indebtedness for the districts.²⁶ Article 16, Section 59, provides that “the Legislature shall pass all such laws as may be appropriate ... [to] the declared public rights and duties ... [for] the conservation and development of ... the control, storing, preservation and distribution of its storm and flood waters, the waters of its rivers and streams ... [.]”²⁷ Although the amendment includes words such as “conservation” and “preservation,” it is clear that the intent of the amendment was to conserve and preserve water for use in water supply. The Texas Constitution does contain a stated limitation upon the “distribution” of the state’s waters. The 1917 constitutional amendment, replaced and repealed the 1913 Act, yet

it retained the essential features of the 1913 Act as it related to interbasin transfers.

B. INTERBASIN TRANSFERS: 1900-1946

Early interbasin transfers in Texas generally authorized water for irrigation use. Figure 4 depicts interbasin transfers by year and use type.²⁸ These early transfers were based on certified filings made pursuant to a series of statutes, specifically the Acts of 1889, 1895, and 1913.²⁹ Prior to 1913, the prospective water user specified the diversion amount (or the intent to construct works for the appropriation of water), the place of use and/or the lands to be irrigated, and the counties in which those lands were located. Because of the absence of statutory requirements for interbasin transfers, the original certified filings did not expressly mention the transfer of water from one watershed to another. Furthermore, the certificates of adjudication, based on these certified filings, and issued pursuant to the Water Rights Adjudication Act of 1967,³⁰ reflected this absence by detailing only the counties in which water could be used. An exception is the authorization issued to the City of Austin, based on Certified Filing 330, which authorizes the transfer of treated water out of the Colorado River Basin for municipal use in areas outside the Colorado River Basin.³¹

From 1913 to 1946, most interbasin transfer water was authorized for municipal and industrial use. As with the pre-1913 interbasin transfers, many of the authorizations in this period did not expressly state that the authorization was an interbasin transfer. However, it can be inferred that these permits allow interbasin transfers by analyzing the authorized places of use in one or more counties that straddle basin boundaries. Because of the large volume authorized to the City of Austin by the City's Certificate of Adjudication 14-5471 with a 1913 priority date, it appears that authorizations for municipal use declined during the period from 1913 to 1946 (Figure 4); however, much of the municipal water authorized for interbasin transfer during this period was also authorized for either industrial or industrial and irrigation use.

III. THE DROUGHT OF RECORD

INSPIRES A NEW GENERATION OF

INTERBASIN TRANSFERS: 1947-1997

A. THE DROUGHT OF RECORD

Drought, a normal, recurrent feature for nearly all climatic regimes, has fostered a desire to move water in Texas from places of availability to places of need.³² As the most damaging of all weather related natural hazards, drought has been the primary motivation for the creation of an ever-evolving system of water regulation and management across the United States.³³ In contrast to other weather events, typified by sudden onset and immediate consequences, "... droughts materialize so slowly and the effects are so long delayed that the damage is usually done by the time it is realized that a drought is being experienced."³⁴

A review of droughts from 1931 to 1985 by the Texas Water Commission found that a three-month drought is likely to occur in at least one Texas climatic region every nine months.³⁵ In Texas, a drought is more likely to occur than a six month period of average to above average precipitation.³⁶ Droughts lasting six months or longer are likely once every sixteen months, and yearlong droughts are likely once every thirty-three months.³⁷

The "Drought of Record," or "Drought of the 1950s," is typically referenced as the catalyst for comprehensive water planning in the State of Texas. According to the Geological Survey (now known as the United States Geological Survey) "...Texas had the greatest precipitation deficiencies in the Nation during the 1947 - 1957 drought."³⁸ Although the drought was underway in portions of Texas by 1947, the onset of the drought occurred in other areas of the state in the 1950s. The late Robert L. Lowry, Jr., a consulting surface water hydrologist for Texas Board of Water Engineers (TBWE, which was combined into the Texas Water Development Board) studied droughts in Texas for the period 1889-1957 and found that Texas experienced a number of drought periods extending from one to four years in duration.

In terms of the effect of this drought on municipal supplies, Lowry reported that a number of municipalities used emergency sources, rationed

water, hauled water, or otherwise supplemented their supplies.³⁹ A number of municipal water supply reservoirs also experienced drastic reductions in storage.⁴⁰ The Red Bluff Water Power Control District near Pecos experienced a 100% shortage in irrigation supplies in 1953.⁴¹ Hydroelectric power generation was affected in operations dependant on floodwaters with related reservoir storage with reductions ranging from twenty-five percent to fifty percent of pre-drought generation.⁴² Lowry also notes that in the Guadalupe River, "...reductions in energy production are directly related to reductions in spring flow...during the drought."⁴³ Comal Springs, the largest complex of springs west of the Mississippi River, ceased to flow for 144 days in 1956.⁴⁴ By the end of 1956, about ninety-four percent of Texas' 254 counties were classified as disaster areas.⁴⁵ Regionally, other droughts have exceeded the 1950s drought in duration and severity, yet statewide the 1947 - 1957 drought retains the title as the Drought of Record.

B. FEDERAL PLANNING IN TEXAS FROM THE 1940S THROUGH THE 1960S

Federal surface water planning and development activities in Texas have historically proceeded under the auspices of three U.S. government agencies: The United States Army Corps of Engineers (USACE) in the Department of the Army under the Department of Defense, the Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service) in the Department of Agriculture, and the Bureau of Reclamation (USBR) in the Department of the Interior. While the USACE has U.S. constitutional jurisdiction over navigation projects and statutory responsibility for water supply and flood control, the USBR has primary statutory responsibility for developing and constructing federal irrigation projects, which in recent years have included water supply. The NRCS constructs flood retardation and sediment retention reservoirs, which may contain limited water supply (not to exceed 5,000 acre-feet of storage) in cooperation with landowners and local soil and water conservation districts. While the USACE operates throughout all of the states, USBR's geographic jurisdiction is limited to the twelve western contiguous states, including only that portion of Texas west of the 100th meridian.⁴⁶ Thus, Texas has often been a battleground among the three construction

agencies (USACE, USBR, and NRCS), with all three vying for the support of local entities interested in securing federal financial assistance for water supply projects.

USBR began the first federal effort at planning the development of Texas surface water resources in 1949 with "[r]esults ... summarized in 'Water Supply and the Texas Economy, January 1953, ... published as Senate Document No. 57, 83rd Congress, 1st Session."⁴⁷ The USBR Report "included construction of a large water supply canal from the Sabine River to the Lower Rio Grande Valley, together with related reservoirs and other facilities."⁴⁸

In 1958, Senator Lyndon B. Johnson amended a bill authorizing the Cordell Hull Dam and Reservoir in Tennessee to include the creation of the United States Study Commission for the Neches, Trinity, Brazos, Colorado, Guadalupe, San Antonio, Nueces, and San Jacinto River Basins, and intervening areas.⁴⁹ In his comments in the Congressional Record, Senator Johnson noted:

We need to make our inland rivers navigable. We need to control floods and contain floodwaters, for future use. We need to prepare for the vastly increased demand for water that will come with continued industrial growth. There is so much that needs to be done, and so much that can be realized if we do these things, that it is a wonder all of us are not staggering under the alternating emotional extremes of dejection and elation ...[.] The Study Commission to be created by Senate bill 4266 is not intended to, and will not be, a substitute for any existing federal, State, or local water agency. It will aid and abet—it will not supplant—our board of water engineers and the concerned river authorities.⁵⁰

Among the study commission's goals and objectives was the creation of a plan to meet projected water needs "insofar as that objective may be practicable."⁵¹ The plan was intended as a framework "that will be compatible with the best interests of the State of Texas and the Nation."⁵² Most importantly, the goals of the Commission did not include creation of a plan that provided for involuntary transfer of water from one river basin to another.⁵³

While admitting that “[c]hanges in the economy and in national goals make it impossible to look ahead 50 years with any accuracy, ... the Commission selected two specific years in the future, 1975 and 2010 ...[.]”⁵⁴ “Copies of the three-volume proposed report were transmitted by the Board of Water Engineers to seven State agencies and nineteen river authorities and conservation districts...[and the Board] met with representatives of the State agencies and held seventeen separate informal conferences with representatives of river authorities and conservation districts to obtain ... views and comments ...[.]”⁵⁵ Several entities responded. One resolution from East Texas Chamber of Commerce, headquartered in Longview, transmitted December 4, 1961, stated the Chamber “reiterates its previous position that it is unalterably opposed at this time to large scale proposals and plans for the involuntary diversion of water from East Texas to other areas of the state such as that proposed in ... [this report] ... or to the designation of any East Texas water as ‘surplus’.”⁵⁶

The Guadalupe-Blanco River Authority, in a letter dated November 12, 1961, responded that it “takes exception to ... the implication that the Guadalupe Basin will have water supplies surplus to 2010 needs within its dependant area ... [and stated it is] ... opposed to plans for diverting water outside the service area of the Authority ...[.]”⁵⁷ A report attached to the letter from the Authority’s consulting engineering firm warned “once any form of authorization is given by the Federal Government pursuant to the report, that the inevitable result would be Federal control of the water resources in the basins and with a probable extension of such control to the Sabine River Basin in the east ...[.]”⁵⁸ The TBWE objected that “[t]he proposed report does not provide data to demonstrate that a need for additional agricultural production presently exists...” and that the plan “...would require the State of Texas to reserve for the aqueduct a large portion of the surface-water resources of Eastern Texas, and withhold this reserved water from other development.” While recognizing that “transbasin diversion of water is an accomplished fact in Texas, and under certain limitations is provided for in Texas statutes, [t]he Board does not approve of the reservation of a major supply of water at this time for a project of undetermined feasibility to supply a need which does not exist, and which may not exist for generations.”⁵⁹

Minimal evidence exists to indicate that the comments substantially influenced the Commis-

sion’s final report. Stating its reported “[w]ater requirements for municipalities, industries and irrigation in each segment of the study area have been projected 50 years,” it concluded that “[w]ater is available to supply ... [these] ... needs.”⁶⁰ The Commission report recognized the “novel and very different economic, political, and legal problems” inherent in proposals for interbasin transfer of water and declared that public policy required meeting the requirements of both the originating and receiving basins and that this requirement was “in the interest of the best utilization of available resources.”⁶¹ The Commission report also concluded that interbasin transfers of water should not constitute a permanent demand against supplies in the basin of origin and that users in the receiving basin should make provisions to replace water temporarily available to them because of the transfer.⁶²

Three major water plans, encompassing most of the state, were completed in 1949 (study published in 1953), 1962, and 1964 under legislation adopted by the United States Congress.⁶³ All of these plans proposed the interbasin transfer of surface water. The 1962 plan included agreements between the Study Commissioners for the Departments of Agriculture, Army, and the Interior, as to which entity would be responsible for construction of proposed projects, and the state agencies agreed to this division.⁶⁴

“[U]nder the general authority of the Federal Reclamation Laws (Act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof or supplementary thereto) ... [the U.S. Bureau of Reclamation] transmitted [a report on January 24, 1964] as the basis for securing Congressional approval of the project plan and authorization of the Interbasin Canal and associated reservoirs and irrigation units.”⁶⁵ Claiming that “the investigation on which this report is based were started in 1955,” the USBR gave two primary objectives “(1) formulation of a physical plan acceptable to the State of Texas ... and (2) completion of a report on features of that plan that would be appropriate for construction under the Federal Reclamation Laws.” The Texas Basins Project covered about two-thirds of Texas, and supplying 1,487,000 acre-feet per year for municipal and industrial water use and 1,365,000 acre-feet per year for irrigation “[t]he Interbasin Canal would divert stream flow and yields of associated project and non-project reservoirs in the Sabine Neches, Trinity, Lavaca-Navidad, and Guadalupe-San Antonio River Basins that otherwise would waste into the Gulf of Mexico.”⁶⁶

C. IBTS AND IBT PLANS AND STUDIES FROM 1947-1965

At the same time that the federal entities were developing plans to meet Texas' future water needs, interbasin transfer projects continued to be proposed and authorized. During the period between 1947 and 1965, (during and immediately following the Drought of Record), the total amount of water authorized for interbasin transfer exceeded the total amount in any other period (Figure 3). As Figure 4 indicates, the amount of interbasin transfer water authorized for municipal use during this period exceeded the amount authorized during any other period, including the decades after passage of the 1965 Texas planning statute.

These transfers did not proceed without conflict. For example, after the Drought of Record, Lake Livingston, impounding Trinity River water in the lower basin, was a controversial strategy proposed for supplying current and future needs of the City of Houston in the San Jacinto River Basin. The Trinity River Authority (TRA), pursuant to a requirement of its enabling statute, prepared a Master Plan for the Trinity Basin that included Lake Livingston, creating a potential conflict between water users in the two basins:

TRA and its Master Plan became the vehicle of the Trinity basin interests to ensure that the lake did not damage their interests in the river. The result was that the TRA became a partner with the city of Houston in the development of the lake, which became Lake Livingston, and many assurances were incorporated into its operation to provide water to the mid- and lower- Trinity basin and protect upstream supplies as well.⁶⁷

This agreement resulted in authorization to use water from Lake Livingston being issued to both the TRA and the City of Houston to serve future needs in the Trinity River Basin and the San Jacinto Basin, respectively.

D. THE STATE WATER PLANS

Responding to the fear of a repeat of the Drought of Record or the consequences of extensive flooding, several water plans covering all, or substantially all, of the surface water available within the state were generated after 1957. The various state agencies fully developed and formally adopted

five plans between 1961 and 2002. The TWDB produced, but never continued to the final stages of approval, a 1977 draft comprehensive Texas Water Plan.⁶⁸ The TWDB adopted and published two abbreviated plans- in 1990 and 1992.⁶⁹

In May 1961, the TBWE prepared A Plan for Meeting the 1980 Water Requirements of Texas. The objective of the plan was "to determine the location and amount of future water needs and to show how these needs may be supplied."⁷⁰ However, the report did not reference objections to transfers of water from one river basin to another in its enumeration of water supply requirements and how they are, or will be, supplied, via interbasin deliveries. The report noted the various geographical sources of water and the destination of its final use. Of particular interest, were the comments made on supplying Houston and San Antonio: "[t]he Lower Trinity River Basin "will supply industrial water to the Houston industrial complex ..." in the San Jacinto River Basin⁷¹ and "[s]upplying a part of the San Antonio water needs from the Guadalupe River Basin may be possible ...[.]"⁷²

Controversy over interbasin transfers of surface water arose again in the 1965 Legislative Session, during consideration of the water resource-planning act of that date, and a constitutional amendment to expand the purposes of use for the Water Development Fund. The proposals were the subject of intense political, protectionist maneuvering by interested parties, split both along geographic lines and between rural and urban interests. When the Senate bill reached the House, further discussion ensued relating to how to protect rural interests in water rich areas from "water grabs" to meet future needs of growing metropolitan areas.

Despite attempts at compromise between the geographical factions, several weeks passed before the legislators reached an agreement. By May 20, 1965, conference committees were meeting to work out differences between House and Senate versions of the planning legislation. East Texas representatives were threatening to torpedo Senate Joint Resolution 19 in an effort to ensure that basin of origin protections were included in the planning statutes.⁷³ Eventually, after meeting with Governor Connally, the conference committee reached agreements incorporating protection for basins of origin into both planning and financing of state water projects.⁷⁴ Professor Corwin Johnson described the basin of origin protection language as a "product of sectional

conflict” and that “[S]ections well-endowed with water were large enough and powerful enough to get preferences for themselves written into the law.”⁷⁵

E. INTERBASIN TRANSFERS FACED HURDLES BEFORE SENATE BILL 1

After the record drought of the 1950s, the voters added Article 3, Section 49-c, to the Texas Constitution creating the Texas Water Development Fund, with the TWDB responsible for the administration of the fund.⁷⁶ Faced with repeated droughts and the prospect of federal domination of water resource development in Texas, Texas voters added Article 3, Section 49-d to the Texas Constitution in 1967, specifically to allow the TWDB to use the Texas Water Development Fund for “acquiring and developing storage facilities, and any system of works necessary for the filtration, treatment and transportation of water or wastewater, or for any one or more of such purposes or methods.”⁷⁷ This language gave the State, via the TWDB, greater influence in water development in an attempt to keep pace with the USACE and the USBR. The intent of the amendment was to encourage development of water resources.⁷⁸ Moreover, the amendment does contain a limitation on interbasin transfers.⁷⁹

Legislation passed in 1965 reflected the constitutional language and controlled the TWDB’s use of interbasin transfers in water planning.⁸⁰ However, some commentators still considered this limitation too restrictive.⁸¹ The loss of reservoir sites to other land uses or the underdevelopment of those sites (because local or regional interests could not finance reservoirs at optimum size), as well as the fear of federal preemption of reservoir sites, provided the impetus for authorizing the State to construct reservoirs and other water facilities or own storage space in reservoirs that others constructed.⁸²

A 1985 constitutional amendment authorizing the creation of special funds “[F]or or in aid of water conservation, water development, water quality enhancement, flood control, drainage, subsidence control, recharge, chloride control, agricultural soil and water conservation, desalinization or any combination of these purposes...” included the same protection as the 1965 amendment, for the basins of origin.⁸³ “Money deposited in a special fund under this section may not be used to finance or aid any project that contemplates or results in the removal from the basin of origin of any surface water necessary to supply the reasonably foreseeable water

requirements for the next ensuing 50-year period within the river basin of origin, except on a temporary, interim basis.”⁸⁴ The statutory provision in the 1965 planning statute, which protected the basins of origins, was repealed effective September 1, 1991.⁸⁵ However, the limitation on the use of these funds remains intact.

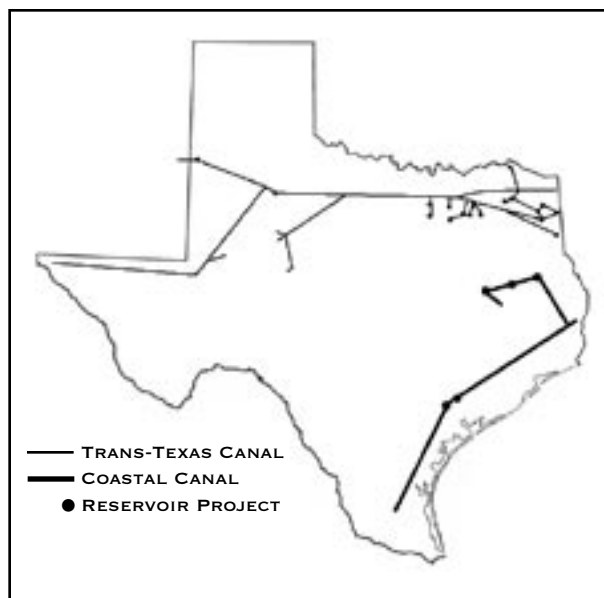
The combined intent of the 1965 constitutional and statutory language was to protect the water needs of the citizens of basins of origin in two ways. First, the State was prevented from constructing or owning storage in a river basin to the detriment of water-dependent economic development of the basin of origin for fifty years into the future. Secondly, the TWDB could not plan surface water redistribution to deprive basins of origin of water supplies necessary to meet their water needs for the next fifty years. Because the legislative intent was to periodically revise the statewide water plan, the fifty-year restriction constituted a rolling limitation extending indefinitely into the future as each subsequent fifty-year plan developed. Removal of the statutory language in 1991 eliminated this requirement for basins of origin.

The 1968 Water Plan, the first adopted after enactment of the 1965 planning statute, recognized that “[b]y far the bulk of the water resources remaining available for development in Texas is found in the East Texas river basins ... [b]y contrast, large future water needs will be felt in areas to the west and southwest, several hundred miles distant....”⁸⁶ To re-allocate water resources to meet demands in areas of the state with insufficient water resources, the 1968 plan proposed a massive series of interbasin transfers known as the Texas Water System.

The Texas Water System comprises the dams, reservoirs, pumping plants, conduits, and other facilities, which will be necessary to manage an imported water supply and the water resources of basins with interim or long term surpluses to meet intrabasin needs and to make the surpluses available for conveyance to areas of deficiency elsewhere in the state.⁸⁷

The Texas Water System’s Trans-Texas Division included conveyance of 10,034,000 acre-feet per year of water originating in Northeast Texas basins such as the Cypress, Red, Sulphur, and Sabine and transported through the Trans-Texas Canal for

**FIGURE 5. 1968 STATE WATER PLAN
PROPOSED MAJOR CONVEYANCES**



Dallas, North Central Texas, the High Plains, the Trans Pecos, El Paso, and New Mexico. The Coastal Division planned for 4,845,000 acre-feet of water from the Neches, Lower Trinity, Guadalupe, and San Antonio River Basins to supply water for municipal, industrial, irrigation, bay and estuary augmentation, and wildlife requirements from the Sabine River to the Lower Rio Grande Valley.⁸⁸ The Texas Water System (Figure 5) also contemplated an Eastern Division, which included works to move water imported from out of state into the Trans-Texas and Coastal Division Systems.⁸⁹

Designated as the Gulf Basins Project, the U.S. Bureau of Reclamation proposed a canal from Beaumont to Corpus Christi and into the Rio Grande Valley, collecting river flows to meet coastal needs and increased irrigation in the Valley and Coastal Bend areas. This canal came to be known as “Burleigh’s Ditch” in honor of Harry P. Burleigh of the Austin USBR office.⁹⁰ The 1968 Texas Water Plan is probably the most extensive and ambitious water supply plan ever seriously considered for Texas. The plan consisted of two significant elements: (1) the Trans-Texas Division allocating 7.5 million acre-feet to West Texas for irrigation; 1 million acre-feet for municipal and industrial use, and 1.5 million acre-feet to New Mexico, for a total of 10 million acre-feet; and (2) the Coastal Division allocating 1.8 million

acre-feet for irrigation, 0.5 million acre-feet for municipal and industrial use, and 2.5 million acre-feet for fish, wildlife, and freshwater inflows to Texas bays and estuaries, for a total of 4.8 million acre-feet.⁹¹ Of the 14.8 million acre-feet to be transported in the two divisions, 12 to 13 million acre-feet were required from the Mississippi River, with only 1.8 – 2.8 million acre-feet coming from interbasin transfers within Texas.⁹²

For the 1968 Texas Water Plan to proceed, an amendment to the Texas Constitution was necessary for the State to finance its share of the project. The constitutional amendment failed during a statewide election by some 6,600 votes on August 6, 1969. Despite this setback, residents and the political leadership of the Texas High Plains continued to advocate the development of a water supply to replace the anticipated depletion of the Ogallala Aquifer.⁹³ The Public Works Appropriation Act of 1967 authorized the USBR, the USACE, and the Mississippi River Commission to analyze a project to divert water from the Mississippi River to West Texas and Eastern New Mexico.⁹⁴ With regard to the \$20.49 billion project the final report concluded that “nevertheless the disparity between primary benefits and costs is so great that there is no reasonable prospect that any other plan for transporting Mississippi River water to west Texas and eastern New Mexico would have a favorable ratio of primary benefits to costs.”⁹⁵

F. CITY OF SAN ANTONIO V. TEXAS WATER COMMISSION

In an historic ruling in 1966 relating to Canyon Reservoir, the Supreme Court of Texas recognized the separate designations of the Guadalupe River Basin and San Antonio River Basin, and the requirement for an interbasin transfer permit to move water between any two river basins in Texas. The ruling instituted a balancing process that survives today.

[W]e have also concluded that as to any water in the originating basin found to be in excess of that amount required to protect existing rights, the Legislature intended that the Commission should, in a balancing process, take into consideration future benefits and detriments expected to result from a proposed trans-basin diversion and that there would be “prejudice” only if the ben-

efits from the diversion were outweighed by the detriments to the originating basin.⁹⁶

The Texas Supreme Court interpreted the fifty-year water planning limitation to limit the planning function of the TWDB, not the Texas Water Commission.⁹⁷ Therefore, the TWC was not required to study the “fifty-year reasonably foreseeable needs” for the basin of origin before deciding to grant or deny an interbasin transfer application.⁹⁸

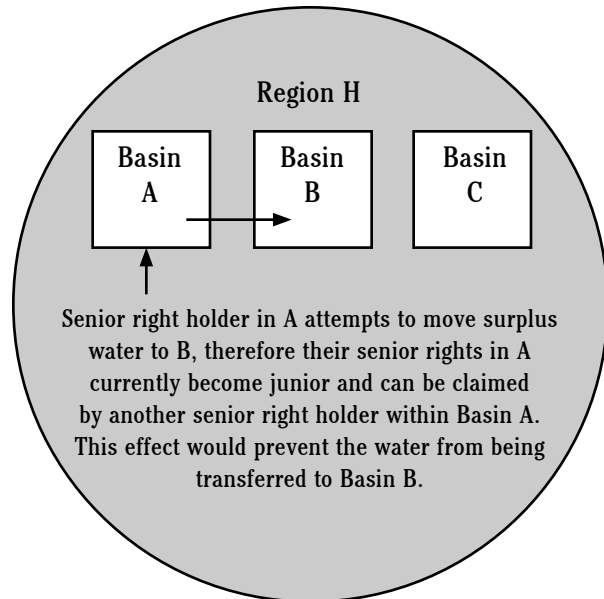
IV. INTERBASIN TRANSFERS AFTER SENATE BILL 1: 1998-PRESENT

A. SENATE BILL 1 AND THE NEW ERA OF WATER PLANNING

Senate Bill 1 substantially changed the requirements for applications for interbasin transfers in a number of areas. Since the passage of Senate Bill 1, notice of an interbasin transfer application must be given to all water right holders, county judges, and mayors of cities with populations greater than 1,000, and all groundwater districts in the basin of origin as well as each state senator in both basins.⁹⁹ Prior to taking action on an interbasin transfer application, the TCEQ must hold a public meeting in both the basin of origin and the receiving basin.¹⁰⁰ The applicant must include the contract price of the water, proposed users, uses, the costs of the project, and the effect on ratepayers.¹⁰¹

In considering whether to grant an application for interbasin transfer of water, the TCEQ must examine the effects of the proposed transfer by considering needs in both the basin of origin and the receiving basin, elements of the applicable Regional Water Plan that detail feasible and practicable alternatives to the transfer, conservation of water, and beneficial use.¹⁰² The TCEQ must also evaluate the impacts of the transfer on the economy and environment of both basins and any proposed mitigation of these impacts.¹⁰³ The TCEQ can grant the application only if the detriments to the basin of origin are less than the benefits to the receiving basin - the balancing test established in *City of San Antonio v. Texas Water Commission*.¹⁰⁴

**FIGURE 6. JUNIOR WATER RIGHTS
DIAGRAM**



B. INTERBASIN TRANSFERS FACE A HIGHER BURDEN

Even as Senate Bill 1 became law, concerns about its impact on future interbasin transfers were raising questions. During a joint hearing by the House and Senate Natural Resources Committees on the passage of Senate Bill 1, Professor Moore expressed concerns about the draft legislation that the Legislature ultimately adopted with few changes.¹⁰⁵

In 1997, the Senate Bill 1 water planning statute modified the Texas Water Code making the waters rights associated with interbasin transfers junior in priority to all other water rights in the basin of origin.¹⁰⁶ In 2004, the TWDB has observed that since the passage of Senate Bill 1, the impact of the junior priority for potential interbasin transfers has resulted in only one new IBT.¹⁰⁷ The TWDB cites the issue of junior priority as making IBTs an unreliable water supply.¹⁰⁸ The TWDB also notes that, historically, the TCEQ and its predecessor agencies have been inconsistent in the assignment of priority dates to interbasin transfer requests.¹⁰⁹ The reaction to Section 11.085(s) has been favorable in some basins of origin and unfavorable in potential receiving basins that look to interbasin transfers as one way to meet the projected demands identified through the regional water planning process that Senate Bill 1 created.¹¹⁰

The potential for such an interruptible water supply is not acceptable for highly populated municipalities and heavy industrial areas, as noted by the Greater Houston Partnership in 2004.¹¹¹ Currently, the rule of “first in time, first in rights” exists for surface water in Texas,¹¹² and thus, during a time of drought, the junior interbasin transfer rights will not get water because senior right holders in the basin of origin may use up all of the available water.

One commentator anticipates that the junior water rights provision will reduce the interest in interbasin transfers by those outside of the basin of origin, allows water to remain “locked up” in basins where the resources are unlikely to be developed; and finally, arguably results in a “taking” by the Legislature that may be unconstitutional.¹¹³ The potential for rendering surface water diversions impractical because of the junior water rights provision has, at the very least, discouraged new interbasin transfers as the 2004 TWDB memo noted (Figure 1).

However, it has encouraged an explosion in large-scale proposals for groundwater transfer (see Appendix B). As Figure 1 indicates, after the passage of Senate Bill 1, permit applications for the use of water now classified as non-exempt surface water interbasin transfers have diminished, while interbasin basin transfers classified as exempt and proposed groundwater transfers have accelerated. However, it should be noted that the annual total number of interbasin transfers recorded prior to 1997 include what we would classify as exempt and non-exempt today. Appendix B also includes groundwater projects that range in size up to the 500,000 acre-feet per year, like the development project that American PureTex has proposed.¹¹⁴

After the adoption of the junior water rights provision in Senate Bill 1, the bill’s author in the Senate, Chairman Buster Brown, noted the potential for Senate Bill 1 to accelerate the development of groundwater to meet municipal, commercial, and industrial water needs.¹¹⁵ “As a result of that provision, the pressure has now moved to groundwater,” Brown, former chairman of the Senate Natural Resources Committee, said at a Texas Farm Bureau legislative Conference.¹¹⁶

So the people who are in need of water are seeking it. And, those people who are in the business of moving water are turning to

acquisition of land to get the rights to the water below the surface to market that water. Therein comes the next problem. How do the people who are dependent upon that water for their living, keep that water from being moved to another part of the state? When you start setting artificial obstacles in the path of a normal development, which is a water market, then you cause different things to happen that are not expected.¹¹⁷

Representative Robert Puente of San Antonio offered similar sentiments regarding the junior rights provision, lamenting, “[i]t put a tremendous, tremendous amount of pressure on groundwater ... since we cannot get interbasin transfers anymore, we are looking at groundwater supplies.¹¹⁸

C. BASIN DELINEATION PLAYS A ROLE IN WHETHER A TRANSFER IS AN INTERBASIN TRANSFER: IS TRANSFERRING SURFACE WATER FROM THE GUADALUPE RIVER WATERSHED TO THE SAN ANTONIO RIVER WATERSHED AN INTERBASIN TRANSFER?

While Senate Bill 1 places many requirements upon potential physical interbasin transfers, these burdens are also placed upon transfers that the TWDB classifies as interbasin transfers, but in which the water is proposed to be moved within watersheds that are physically within the same river basin. Surprisingly, the number of Texas river basins has varied over the last 100 years even though no major physical alterations of the rivers have occurred to account for this variation. For example, a joint state and federal report in 1958 delineated eleven basins, while the first state water plan in 1961 reported fifteen basins.¹¹⁹

On May 10, 2001, the Guadalupe-Blanco River Authority (GBRA), the San Antonio Water System (SAWS), and the San Antonio River Authority (SARA) signed an agreement to bring large amounts of surface water to the San Antonio area.¹²⁰ The Lower Guadalupe Water Supply Project (LGWSP), known as option SCTN-16c in the 2001 South Central Texas Regional Water Planning Group (Region L) water plan, was a conjunctive use water management strategy that diverted surface water from the short segment of the Guadalupe River downstream

of the confluence of the Guadalupe and San Antonio Rivers near Tivoli, Texas, along with lesser amounts of groundwater from the Gulf Coast Aquifer.¹²¹ The surface water was scheduled to reach San Antonio beginning in 2010, relieving some of the demand on the Edwards Aquifer, thereby providing the City of San Antonio with a supplemental supply of surface water, as well as some protection for the springflow from Comal and San Marcos Springs, instream flows, and bay and estuary inflows for San Antonio Bay.¹²²

The surface water would have come primarily from existing water rights.¹²³ Approximately, the project would have diverted 70,000 acre-feet of existing surface water.¹²⁴ This diversion would have given San Antonio a large surface water supply in the short-run, while allowing the region to develop a long-term water supply utilizing sources such as desalination, which in the future could have used the same pipeline for delivery to San Antonio. The requirements for new interbasin transfers under Senate Bill 1, including the junior water rights provision, do not apply to the transfer of desalinated seawater across river basins.

Despite the fact that the San Antonio River merges with the larger Guadalupe, and is therefore, in the same physical basin, the TCEQ might have eventually declared the project an interbasin transfer because the TWDB considers the rivers as separate basins for management purposes.¹²⁵ In the 2002 State Water Plan, the LGWSP was presented as both an interbasin transfer and not an interbasin transfer.¹²⁶ The TWDB commented that “the [Region L] plan is in error in its representation of the Lower Guadalupe River Diversions as a non [interbasin transfers].”¹²⁷ A review of documents from the USGS and the TWDB (and its predecessors) shows that the Guadalupe River and San Antonio River are alternately shown as being in the same basin and separate basins. While one of the first references for separate basins is a 1937 USGS report, the 1961 State Water Plan also shows the basins as separate.¹²⁸ However, a 1939 USGS report shows the San Antonio River as part of the Guadalupe River Basin.¹²⁹ If the TCEQ considered the Lower Guadalupe Supply Project an interbasin transfer, an interbasin transfer permit would be required from the TCEQ and would have reduced the reliability of the surface water rights proposed for use in the LGWSP.¹³⁰

An interbasin transfer designation would have made the senior water rights identified for the project junior for the purposes of their use in San Antonio. In 2004, the TWDB staff recommended that the Texas Legislature eliminate the artificial distinction between the Guadalupe and San Antonio Rivers.¹³¹ However, the Legislature did not follow through on the recommendation of the TWDB staff, and on August 16, 2005, the SAWS Board of Directors officially withdrew from the LGWSP.¹³² In a letter beforehand to Representative Carter Casteel explaining the discontinuation of SAWS’s participation in the project, SAWS Chairman James M. Mayor cited the junior water rights provision as one of the primary reasons for the decision.¹³³

D. EXEMPT INTERBASIN TRANSFERS

Even though most interbasin transfers must meet an increased burden under the Senate Bill 1 requirements, Senate Bill 1 also amended Section 11.085 of the Texas Water Code to exempt certain interbasin transfers from all of the new requirements.¹³⁴ With the exception of subsection (a), the provisions of Section 11.085 do not apply to a transfer of less than 3,000 acre-feet per year from the same permit, certified filing, or certificate of adjudication, an emergency transfer of water, a transfer from a basin to its adjoining coastal basin, or a “transfer from a basin to a county or municipality or the municipality’s retail service area that is partially within the basin for use in that part of the county or municipality and the municipality’s retail service area not within the basin.”¹³⁵ The idea that these sorts of transfers should be given some preference is not new; they have been implicitly authorized since Texas began regulating diversion and storage of water.

In a 1959 speech, John McCall, while discussing Texas river flows that terminate in the Gulf of Mexico, notes that “[i]n all of these instances the watershed near the mouth of the river is very narrow and frequently there is not enough land near the mouth to afford an adequate market for available water. Hence, to avoid the waste of water it is natural that some of it be diverted to an adjoining watershed or to certain parts of the Gulf Coast that are not in a river watershed.”¹³⁶ One effect of separating the coastal basins is felt during the determination of both availability and need during the planning process. The coastal areas often include “major met-

ropolitan and industrial areas” with “greater needs and limited availability.”¹³⁷ If the coastal areas are excluded from the major river basins, more water becomes available in those basins for both diversion to the coastal areas and diversion to other basins.¹³⁸

An interesting, and perhaps unintended, consequence of Section 11.085(v) is the application of this section of the statute in relation to the amount of water authorized for exempt interbasin transfers. In the past, interbasin transfers were typically granted for the amount of water that could actually be used in the receiving basin, and under the current statute, non-exempt interbasin transfer applications must provide “[a] statement of each general category of proposed use of the water to be transferred and a detailed description of the proposed uses and users under each category.”¹³⁹

For exempt interbasin transfers, the applicant can request that the interbasin transfer apply to the water right’s total authorized diversion amount, even if not all of the water can be used to fill an identified need in the receiving basin.¹⁴⁰ A conservation review, including assessment of consistency with the State and Regional Water Plans, is not required for these applications.¹⁴¹

Since the passage of Senate Bill 1, the TCEQ has approved twenty-four exempt interbasin transfers while approving only three nonexempt transfers.¹⁴² Figure 1 illustrates the decline in the number of non-exempt transfers and the rise in the number of exempt transfers. This dichotomy would seem to contradict the assertion that the junior provision has the practical effect of preventing all interbasin transfers of water, but is instead designed to prevent specific transfers.

E. PROPOSED INTERBASIN TRANSFERS FROM 2002 STATE AND 2006 REGIONAL WATER PLANS

Appendix C shows the location of existing interbasin transfers in Texas. Appendix D shows the location of proposed interbasin transfers in Water for Texas–2002. In 2001, four of the sixteen water planning regions recommended major interbasin transfers that would generate additional surface water supplies of 2,444,000 acre-feet by 2050.¹⁴³ The proposed transfers include transfer of both groundwater and surface water.¹⁴⁴ Some of the proposed major surface water transfers would be considered a

new appropriation of water and the junior provisions of Senate Bill 1 would not apply, as a new appropriation of water, the transferred water would be junior anyway.¹⁴⁵ One strategy included in the 2002 Plan is the “Voluntary East Texas Surface Water Transfers.”¹⁴⁶ Due to an expected supply shortfall by 2050 in Regions G and H not expected to be met from construction of additional storage reservoirs, the TWDB suggested the use of uncommitted East Texas water that would not be needed in the near future.¹⁴⁷ The TWDB proposed that the transfer of water from sources in the Neches River Basin (the Lower Neches Valley Authority and Lake Eastex) and the Sabine River Basin (Sabine River Authority, Toledo Bend Reservoir) be crafted to meet local needs and to provide compensation for the originating basins.¹⁴⁸ These proposed transfers would be subject to the new requirements for interbasin transfers, including the junior provision. Additionally, any of these transfers would have to mitigate for effects on the Sabine Lake bay and estuary system, identified as a concern in the East Texas Plan.¹⁴⁹

The 2006 Adopted Regional Water Plans propose a number of interbasin transfers as strategies to meet the needs of populations that are expected to double in some areas over the next fifty years. Region C, which includes the Dallas-Fort Worth Metroplex and surrounding communities, recommends a number of strategies that would require authorizations for interbasin transfers.¹⁵⁰ Of Region C’s fifteen recommended strategies, ten require interbasin transfer authorizations. Of those ten, two already have authorization for interbasin transfers; six would require a new authorization, but would be junior because they are new appropriations of water. One Region C strategy is to import water from Oklahoma.

Whether the final strategy (transfer of water from Toledo Bend Reservoir) requires that the water right becomes junior depends on whether the strategy contemplates interbasin transfer of currently authorized water from Toledo Bend, or whether the strategy contemplates use of water potentially authorized under an amendment application for additional firm yield currently pending at the TCEQ.¹⁵¹ If the strategy contemplates the latter, the water would be junior because it is a new appropriation of water.

Despite the passage of Senate Bill 1, and increased protections for basins of origin, conflicts between basins of origin and receiving basins still

exist. One example is the debate over the proposed Marvin Nichols Reservoir, located in the Sulphur River Basin and recommended as a water supply strategy for the Dallas Metroplex area in the Trinity River Basin.¹⁵² Two of the sixteen Regional Water Plans developed under Senate Bill 1 contain conflicting recommendations over this reservoir and the potential interbasin transfer of its water. Region C recommends the construction of the reservoir as a strategy to meet future water needs, while Region D opposes the inclusion of this strategy. The Region D Plan states, “[i]t is the position of the North East Texas Regional Water Planning Group that Marvin Nichols 1 Reservoir should not be included in any 2006 regional plan as a water management strategy and should not be included in the 2007 State Water Plan as a water management strategy.”¹⁵³ As the TWDB has yet to complete the 2007 State Water Plan, resolution of the conflict between the two regions is unknown at this time.

The 2006 Plan for Region H recommends several interbasin transfers, noting that Region H’s dependency upon the interbasin transfer of water. The Region H Plan also notes that reliability of the transferred water is dependant on the priority date and that transfers from a basin to its adjoining coastal basin are not considered an interbasin transfer.¹⁵⁴ This latter statement is inconsistent with the provisions of Section 11.085(v) of the Texas Water Code, which exempt interbasin transfers from a basin to its adjoining coastal basin from some permitting requirements, but still requires a permit for those transfers.¹⁵⁵

Two of the potentially non-exempt transfers proposed in the Region H Plan are the transfer of Trinity River water from the City of Houston to Gulf Coast Water Authority (Galveston County) in the San Jacinto-Brazos Coastal Basin, and the transfer of unused Trinity River Authority (TRA) supplies in Lake Livingston (Trinity River Basin) for use in Harris County. Because the San Jacinto Brazos Coastal Basin is not an adjacent coastal basin to the Trinity River, Region H notes that the transfer to Gulf Coast Water Authority could be subject to the junior provisions.¹⁵⁶ Although not identified as an interbasin transfer in the Region H Plan, the TRA’s authorization in Lake Livingston allows only for interbasin transfer to the TRA’s service area in the San Jacinto and Neches River Basins and the Trinity-Neches Coastal Basin.¹⁵⁷ The list of authorized counties in

TRA’s service area, as detailed in the amended certificate, does not include Harris County in the San Jacinto River Basin. This water (200,000 acre-feet) may also be subject to the junior provisions.

V. IS THERE A FEDERAL ROLE

LOOMING IN TEXAS INTERBASIN

TRANSFERS?

A. SPORHASE V. NEBRASKA

Adversely affected parties may challenge unduly burdensome limitations on an interbasin transfer of surface water, specifically for industrial and agricultural purposes, under the Commerce Clause. In 1982, the U.S. Supreme Court held that the reciprocity requirement of Nebraska statutory restriction on withdrawal of groundwater from any well within Nebraska intended for use in adjoining state violated the Commerce Clause by imposing impermissible burden on interstate commerce.¹⁵⁸ The Court stated that the multi-state character of the Ogallala Aquifer confirmed the view that the federal government has a significant interest in conservation as well as in the fair allocation of this diminishing resource.¹⁵⁹ Furthermore, the Court found that Nebraska groundwater is an article of commerce and holding otherwise would eliminate Congress’ power to legislate in the area.¹⁶⁰

While the dispute in this case related to the use of groundwater pumped in Nebraska to land owned in Colorado, the stated conclusion may easily be extended to water from Texas’ interstate rivers—the Rio Grande, the Pecos, the Canadian, the Red, the Sulfur, Cypress Creek and the Sabine. The interstate character of agricultural water use is clearly stated; little may be required to extend the application to industrial use. Because municipal water supply is commingled with water for industrial facilities, extension of the interstate reach is also probable.

Additionally, all Texas’ intrastate rivers flow into coastal waters of the Gulf of Mexico, affecting the productivity of fish, shellfish and wildlife, all of which enter interstate commerce. Read expansively, the Court’s decision may apply to all waters within a state that contribute to interstate commerce through, for example, the production of agricultural products sold across state lines. Thus, a challenger of severe

restrictions might establish a connection between those restrictions and the burden on interstate commerce.

B. MICCOSUKEE TRIBE V. SOUTH FLORIDA MANAGEMENT DISTRICT, CATSKILLS MOUNTAIN CHAPTER OF TROUT UNLIMITED V. CITY OF NEW YORK, AND FRIENDS OF THE EVERGLADES V. SOUTH FLORIDA WATER MANAGEMENT DISTRICT

While state law has historically been the domain of interbasin transfer regulation in Texas, developments with regard to the Federal Clean Water Act (CWA) in New York and Florida suggest that federal regulation may be looming. The Catskill Mountains Chapter of Trout Unlimited (Catskill) sued the City of New York (City) on March 31, 2000 alleging that the City's use of Shandaken Tunnel (Tunnel) without a permit violated the CWA.¹⁶¹ The City uses the Tunnel as part of its water management system that delivers drinking water to New York City and the surrounding area.¹⁶² Catskill alleged that the diversion was a discharge of pollutants in the form of suspended solids, turbidity, and heat into Esopus Creek.¹⁶³

In *Catskill I*, the court of appeals determined that a State Pollutant Discharge Elimination System (SPDES) permit was necessary for this point source discharge and remanded the case back to the district court for further proceedings.¹⁶⁴ On remand, the U.S. District Court issued an order requiring New York State Department of Environmental Conservation (NYSDEC) to make a determination on New York City Department of Environmental Protection's (NYCDEP) application for a SPDES permit.¹⁶⁵ In addition, the district court imposed a fine of over \$5,000,000 for unreasonable delay in filing an application for a permit.¹⁶⁶ The NYCDEP appealed the district court's ruling, asserting that the water quality impacts from local government transfers of untreated, natural water do not require National Pollutant Discharge Elimination System (NPDES) permits.¹⁶⁷ In its most recent decision on the case, the Second Circuit upheld its earlier decision that the discharge requires a NPDES permit. However, the court remanded the case once again to the district court for a recalculation of the amount of damages.¹⁶⁸

A similar case that could ultimately result in a federal role in intrastate interbasin transfers is *Miccosukee Tribe v. South Florida Water Management*

District.¹⁶⁹ The issue in this case is whether a pumping station in South Florida must obtain a NPDES permit to pump storm water runoff into the Florida Everglades through a pipe that would constitute a point source.¹⁷⁰ The Florida Miccosukee Indian Tribe argued that an NPDES permit is needed to protect the wetlands from runoff that may contain contaminants from agriculture areas such as phosphorus from fertilizers.¹⁷¹

The South Florida Water Management District (SFWMD), which operates the pumping station, disagreed, explained that the pumping operation is not the actual source of the pollutants, and that it is only transferring water from one side of a levee to another.¹⁷² Therefore, the management district argued that although it conveys the water, it is not a discharger of polluted water subject to regulation under the CWA.¹⁷³ In 2003, the Eleventh Circuit Court of Appeals upheld a district court ruling in favor of the Miccosukee Tribe, holding that the pumping operators needed an NPDES permit because they were piping water with various pollutants into the Everglades.¹⁷⁴ The SFWMD appealed the court of appeals decision to the Supreme Court.¹⁷⁵

A Supreme Court decision favoring the tribe could have set in motion a ripple effect, with implications to water managers throughout the nation, especially in western states where moving water to supply urban and other needs is a common practice. A broad court decision for the tribal position could add expense and complications to the process of transferring water. The Attorney General for the State of Colorado summarized the concern that the *Miccosukee* case has created in the West in an *amicus* brief filed with the Supreme Court: "At risk ... is the continued ability to divert freely water from one basin for delivery in another basin in order to meet municipal, agricultural, and industrial demands."¹⁷⁶ Colorado is particularly concerned that NPDES permits could be required to transfer Colorado River water, which is naturally high in salinity and sediments, to receiving bodies.¹⁷⁷

In an opinion delivered by Justice Sandra Day O'Connor, the Supreme Court remanded the case to the district court to consider whether the water conservation area and the canal used to transport the water are distinct.¹⁷⁸ The Court explained that the point source does not to be the original source of the pollutant; rather it need only convey the pollutant to navigable waters.¹⁷⁹

The Supreme Court rejected the water district's argument that the CWA covers a point source only when pollutants originate from that source, not when pollutants originating elsewhere pass through the point source.¹⁸⁰ If the district court decides the two are not distinct, then the water district will not need an NPDES permit.¹⁸¹ A third case has also been filed in Florida, *Friends of the Everglades vs. South Florida Water Management District*, (*Friends*) and is analogous to the *Miccosukee* case.¹⁸²

Because of the *Catskill*, *Miccosukee*, and *Friends* cases, the U.S. Environmental Protection Agency (EPA) issued an agency interpretation on whether the movement of pollutants by a water transfer from one navigable water to a separate one is the "addition" of a pollutant requiring an NPDES permit.¹⁸³ According to the EPA, several provisions of the CWA indicate Congress' intent that the states regulate these transfers outside of the federal NPDES program.¹⁸⁴

VI. CONCLUSIONS

Who wins and who loses, with regard to interbasin transfers in Texas? Historically, a significant portion of the state's population has not chosen to settle and live in those regions in East Texas where water is most abundant. The availability of water has not produced unusually rapid growth in the immediate vicinities of reservoirs with surpluses. People tend to congregate where jobs and a wide range of possible life styles are available. The survival and growth of Texas' major population centers—Dallas, Fort Worth, Houston, and San Antonio—as well as other concentrations of people, such as El Paso, Lubbock, and Corpus Christi, require these cities to seek water from sources outside their immediate geographic areas.

The possibility of water shortages during droughts less severe than the Drought of Record, potentially affecting supplies for Dallas-Fort Worth, Houston, and San Antonio, has been known for at least forty years and has not reduced the populations in these areas. Without access to available supplies of surface water in other basins, these major cities will be pitted against their smaller neighbors in the competition for water. The limited political and financial resources of these smaller neighbors cannot match the ability of the major cities to compete for finite regional surface and groundwater

resources over the long-term. Although safeguards prevent water-rich areas from becoming water-short areas for new interbasin transfers, existing interbasin transfers should also be cognizant of this issue. Additionally, the least expensive source of additional water for the major cities of Texas is increasingly less likely to be the source that balances the needs of the environment with human needs. The State's approach should be even-handed in these matters and benefit the public as a whole.

Water, like food, clothing, energy, building materials, and practically everything else used within cities, must be obtained from outside of cities. However, when it comes to water, the reaction is often emotional, which transcends cultures, and this does not occur with the free exchange of other commodities. A study of Chinese water transfers indicated, the concerns felt in many basins of origin across Texas are not unique: "public sentiment, for whatever reasons, often seems to be strongly against water exports and this concern, not surprisingly, is reflected in the political process. This may perhaps be explained by the 'water is different' syndrome and in all probability is unlikely to change in the near future."¹⁸⁵

A total of six million acre-feet of surface water has been authorized for transfer from one basin to another in Texas (Appendix A), although the actual amount being transferred is much less. According to the Texas Water Development Board in 1997, 20-25% of total surface water use in Texas was supplied through interbasin transfers, primarily to major metropolitan areas.¹⁸⁶ Therefore, the existing water needs of many Texans are not met without at least the current diversions of surface water from one basin to another.

Senate Bill 1 has created impediments to many potential new surface water interbasin transfers thereby resulting in growing pressures to make up for the lack of access to surface water by transfers of groundwater. In response to this pressure, groundwater policy is undergoing a rapid evolution. Meanwhile, because of the recommendation of projects involving interbasin transfers in Water for Texas-2002, instream flow and bay and estuary inflow policy is undergoing its own rapid evolution, progressing from the days when such flows were characterized by as "unused" or "waste."

While 1900 - 1985 could be described as the period of water development in Texas, 1985 to the present may be described as the period of water

reallocation (Appendix E). The major differences between the two eras are the decline in funding for new supplies of water, the shift in water once used for agriculture to municipal and industrial water use, and the rise of the environmental movement. The regional concerns regarding the transport of surface water, (and now more frequently groundwater) across the state are persistent. However, even as funding for the development of new water supplies has waned, interbasin transfers of surface water are likely to continue to play a role in water supply in Texas. How great a role interbasin transfers play will be dependent upon the degree of interregional cooperation within Texas on water issues, the growing concentration of political power in urban areas, and of course, money. Ultimately, it is the return of cyclical drought to Texas, which will decide how interbasin transfer policy continues to evolve.

VII. APPENDICES

A. DETAILS OF APPROVED INTERBASIN TRANSFERS IN TEXAS

B. MAJOR TEXAS GROUNDWATER TRANSFER PROJECTS AND PROPOSED PROJECTS OVER 10,000 ACRE-FEET/YR

C. MAP OF EXISTING INTERBASIN TRANSFERS IN TEXAS

D. MAP OF PROPOSED INTERBASIN TRANSFERS IN TEXAS

E. CHRONOLOGY OF EVENTS REGARDING TEXAS INTERBASIN TRANSFERS

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*The late Joe G. Moore, Jr. served as Distinguished Professor in the Department of Biology, Texas State University—San Marcos. Among his other professional accomplishments Professor Moore served as Executive Director of the Texas Water Development Board (1965 – 1968), Chairman of the Texas Water Quality Board (1965 – 1968), Commissioner of the Federal Water Pollution Control Administration (1968 – 1969), Program Director of the National Commission on Water Quality (1973 – 1976), and Monitor of the lawsuit involving endangered species and groundwater withdrawals in the Edwards Aquifer, *Sierra Club v. Bruce Babbitt, et al* (1994 – 1996). Professor Moore passed away shortly after drafting part of his contribution to this article. The remainder of his contribution is taken from excerpts from his March 6, 1997 statement on Senate Bill 1 and House Bill 5 of the 75th Texas Legislature before the Senate and House Natural Resources Committees.*

APPENDIX A: DETAILS OF APPROVED INTERBASIN TRANSFERS IN TEXAS

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
3782	Canadian River Municipal Water Authority	CANADIAN	Lake Meredith	Red, Brazos, Colorado	151,200	1956	municipal/ industrial
3985	City of Lubbock	CANADIAN	Lake Meredith	Brazos	22,910	1983	industrial/ irrigation
4301	Greater Texoma Utility Authority	RED	Lake Texoma	Trinity, Sabine	25,000	2006	multiple
4898	Red River Authority of Texas	RED	Lake Texoma	Trinity	2,000	1974	multiple
4899	Red River Authority of Texas	RED	Lake Texoma	Trinity	250	1967	municipal
4881	City of Gainesville	RED	Fish Creek	Trinity	4,500 3,240	1962 2006	municipal
4940	City of Paris	RED	Pat Mayse Lake	Sulphur	21,115	1964	municipal/ industrial
4943	City of Paris	RED	Lake Crook	Sulphur	12,000	1922	municipal
4961	City of Texarkana	RED	Bringle Lake	Sulphur	2,220	1928	municipal
5003	North Texas Municipal Water District	RED	Lake Texoma	Sabine, Trinity	84,000	1985	municipal
5144	City of Wichita Falls	RED	Lake Kickapoo	Brazos	1,120	1984	municipal
5145	City of Megargel	RED	Megargel Creek Lake	Brazos	70	1962	municipal
5146	City of Olney	RED	Olney Lake, Lake Cooper	Brazos	450 810 35	1935 1953 1980	municipal municipal irrigation
5211	MacKenzie Municipal Water Authority	RED	Lake MacKenzie	Brazos	2,600	1982	municipal/ industrial

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
4797	Sulphur River Municipal Water District (Upper Trinity Regional Water District)	SULPHUR	Lake Chapman	Trinity	16,106	1965	municipal/ industrial
	North Texas Municipal Water District			Sabine, Trinity	3,214	1965	municipal
4798	North Texas Municipal Water District	SULPHUR	Lake Chapman	Sabine, Trinity	54,000	1965	municipal
4799	City of Irving	SULPHUR	Lake Chapman	Trinity	54,000	1965	municipal/ industrial
4811	Sulphur Springs Water District	SULPHUR	Lake Sulphur Springs	Sabine	2,000	1951	municipal
					7,800	1968	municipal/ industrial
4836	City of Texarkana	SULPHUR	Lake Wright Patman	Cypress	9,000	1981	municipal/ industrial
				Red	11,500	1981	municipal/ industrial
4560	Franklin County Water District	CYPRESS	Lake Cypress Springs	Sulphur, Sabine	4,000	1970	municipal
					173	1980	
					2,012	1980	
					2,200	1980	
			1,000	1966			
4590	Northeast Texas Municipal Water District	CYPRESS	Lake O' the Pines	Sabine	20,000	1957	municipal/ industrial
4614	City of Marshall	CYPRESS	Cypress Creek	Sabine	7,558	1947	municipal/ industrial
					8,442	1956	municipal/ industrial
4658	Sabine River Authority of Texas	SABINE	Sabine River	Neches	80,000	1958	municipal/ industrial

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
4662	Sabine River Authority of Texas	SABINE	Sabine River	Neches	30,000	1946	multiple
4669	Sabine River Authority of Texas	SABINE	Lake Fork	Trinity	120,000	1983	municipal
					5,048	1992	
4670	Sabine River Authority of Texas	SABINE	Lake Tawakoni	Trinity	207,765	1955	municipal
				Sulphur	8,396	1986	
				Trinity	20,000	1986	
4693	City of Van	SABINE	Van Lake	Neches	150	1949	municipal
					250	1976	
4724	Hide-Away-Lake Club	SABINE		Neches	180	1970	irrigation
					179.42	1994	
3254	Upper Neches River Municipal Water Authority	NECHES	Lake Palestine	Sabine, Trinity	114,337	1972	municipal/ industrial
					18,000	1983	
3256	Athens Municipal Water Authority	NECHES	Lake Athens	Trinity	8,500	1955	municipal
3879	Texaco	NECHES	Neches River	Neches-Trinity	12,900	1982	industrial
4404	City of Center	NECHES		Sabine	Authorizes return flows to Sabine River Basin		
4411	Lower Neches Valley Authority	NECHES	Sam Rayburn Reservoir, Neches River and Pine Island Bayou	Neches-Trinity	219,252	1913	irrigation
					107,108		
4415	City of Beaumont	NECHES	Neches River	Neches-Trinity	820,000	1963	multiple
					6,570	1915	municipal
					49,897	1925	
4228	Angelina and Neches River Authority	NECHES	Lake Columbia	Sabine	2,200	1985	municipal

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
4853	City of Tyler	NECHES	Lake Tyler	Sabine	40,325	1947	municipal/ industrial
2319	City of Saint Jo	TRINITY	Elm Fork Trinity River	Red	330	1957	municipal
3356	City of Weatherford	TRINITY	Lake Weatherford	Brazos	5,220	1954	municipal/ industrial
4248	Trinity River Authority	TRINITY	Lake Livingston	Neches, Neches-Trinity, San Jacinto	351,600	1959	industrial/ irrigation
4261	City of Houston	TRINITY	Lake Livingston	Trinity-San Jacinto, San Jacinto, Neches-Trinity, San Jacinto-Brazos	31,600	1913	industrial
					13,400		irrigation
					28,000	1959	industrial
					444,000		municipal
					458,800		industrial
10,000	municipal						
4279	Chambers-Liberty Counties Navigation District	TRINITY	Trinity River Lake Anahuac, Trinity River	Neches-Trinity	36,667	1906	irrigation
					36,667		
					36,666	1914	
5271	San Jacinto River Authority	TRINITY	Trinity River	Neches-Trinity Trinity- San Jacinto San Jacinto	7,500	1917	irrigation
					20,000	1926	
					17,500	1929	
					11,000	1936	
5809	San Jacinto River Authority	SAN JACINTO	San Jacinto River	Neches-Trinity Trinity-San Jacinto	2,500	1929	irrigation
					14,944	2004	municipal/ industrial

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
5169	Brazos River Authority	SAN JACINTO-BRAZOS	Oyster and Jones Creek	San Jacinto, Brazos	12,000	1948	multiple
5338	Texas Department of Corrections	SAN JACINTO-BRAZOS	Oyster Creek	Brazos	300	1985	irrigation
2925	TWDB, City of Houston, Brazos River Authority	BRAZOS	Allen's Creek Reservoir	San Jacinto, San Jacinto-Brazos	99,650	1999	multiple
2971	City of Lampasas	BRAZOS	Sulphur Creek	Colorado	180	1986	municipal
5155	Brazos River Authority	BRAZOS	Possum Kingdom Reservoir	Trinity	5,240	1986	municipal
5156	Brazos River Authority	BRAZOS	Lake Granbury	Trinity	2,600 17,400	1986	municipal
5167	Brazos River Authority	BRAZOS	Brazos River	San Jacinto-Brazos	200,000	Non-priority	municipal/ industrial
5168	Gulf Coast Water Authority	BRAZOS	Brazos River	San Jacinto-Brazos	99,932	1926	multiple
5171	Brazos River Authority	BRAZOS	Brazos River	San Jacinto-Brazos	75,000 50,000	1939 1950	multiple municipal/ industrial
5287	Bi-Stone Municipal Water Supply District	BRAZOS	Lake Mexia	Trinity	2,952	1957	municipal
5291	City of Teague	BRAZOS	Teague City Lake	San Jacinto-Brazos	605	1952	municipal
5322	Chocolate Bayou Water Company	BRAZOS	Brazos River	San Jacinto, San Jacinto-Brazos	40,000 40,000 75,000	1929 1955 1983	irrigation

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
5328	Dow Chemical Company	BRAZOS	Brazos River	San Jacinto-Brazos	20,000	1929	industrial
					150,000	1942	municipal/ industrial
5366	Brazosport Water Authority	BRAZOS	Brazos River	San Jacinto-Brazos, Brazos-Colorado	110,000	1960	industrial
					3,136	1976	municipal
1002	Colorado River Municipal Water District	COLORADO	Lake J.B. Thomas	Brazos	30,000	1946	multiple
1031	City of Sweetwater	COLORADO	Oak Creek Reservoir	Brazos	9,328	1949	municipal/ industrial
1660	City of Clyde	COLORADO	Lake Clyde	Brazos	200	1985	municipal
3676	Colorado River Municipal Water District	COLORADO	O.H. Ivie Reservoir	Brazos	15,000	1978	municipal
4007	City of Cedar Park	COLORADO	Lake Travis	Brazos	18,000	1938	municipal
5434	City of Corpus Christi	COLORADO	Colorado River	Brazos-Colorado, Colorado-Lavaca, Lavaca Colorado-Lavaca, Lavaca, San Antonio, Nueces, Lavaca-Guadalupe, San Antonio-Nueces, Nueces-Rio Grande	133,000	1900	multiple
					35,000		
5437	Lower Colorado River Authority and STPNOC	COLORADO	Colorado River	Colorado-Lavaca	102,000	1974	industrial
5471	City of Austin	COLORADO	Lake Austin	Brazos, Guadalupe	249,000	1913	municipal
			Town Lake		22,403	1914	

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
5475	Lower Colorado River Authority	COLORADO	Eagle Lake	Brazos-Colorado, Colorado-Lavaca	52,500	1901	irrigation
					78,750	1987	
5476	Lower Colorado River Authority	COLORADO	Colorado River	Brazos-Colorado, Colorado-Lavaca	228,570	1900	irrigation
					33,930	1987	
5477	Lower Colorado River Authority	COLORADO	Colorado River	Brazos-Colorado, Colorado-Lavaca	110,000	1907	irrigation
5677	Lower Colorado River Authority	COLORADO	Lake Travis	Brazos	6,400	1938	municipal
5715	Lower Colorado River Authority	COLORADO	Colorado River (Loma Reservoir)	Brazos	476	1938	municipal
5730	Brazos River Authority	COLORADO	Colorado River and Lake Travis	Brazos	25,000	1938	multiple
3978	J.H. Robinson	LAVACA	Lavaca River	Lavaca-Guadalupe	1,800	1983	irrigation
2095	Lavaca Navidad River Authority	LAVACA	Lake Texana	San Antonio, Nueces, San Antonio-Nueces, Nueces-Rio Grande	46,518	1972	municipal
					7,500	2003	multiple
5584	County of Jackson	LAVACA and LAVACA-GUADALUPE	Lavaca River, Garcitas Creek, Venado Creek, Dry Creek	Lavaca, Lavaca-Guadalupe	2	1997	industrial
2074	Guadalupe-Blanco River Authority	GUADALUPE	Canyon Lake	Colorado, Colorado-Lavaca, Lavaca, Lavaca-Guadalupe, San Antonio, San Antonio-Nueces	62,900	1956	multiple
					57,100	1999	
3606	Gulf Oil Chemicals	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	9,676	1978	industrial
3860	City of Victoria	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	260	1951	municipal

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
3861	E.I. Du Pont de Nemours and Company	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	60,000	1948	industrial
3863	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca, Lavaca-Guadalupe, San Antonio, San Antonio-Nueces	3,000	1951	irrigation
4276	Del Williams	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	272	1985	industrial
5012	Joe D. Hawes	GUADALUPE	Elm Bayou	San Antonio	140	1985	industrial
5173	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	2,500	1941	industrial/ irrigation
5174	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	1,870	1944	industrial/ irrigation
5175	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	940	1951	industrial/ irrigation
5176	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	9,944	1951	multiple
5177	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	42,615	1944	multiple
					8,632	1948	irrigation
5178	Guadalupe-Blanco River Authority	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	106,000	1952	multiple
5466	City of Victoria	GUADALUPE	Guadalupe River	Lavaca-Guadalupe	20,000	1993	municipal
2130	BMA WCID	SAN ANTONIO	Medina Lake	Nueces	65,830	1910	irrigation
2131	BMA WCID	SAN ANTONIO	Medina Lake	Nueces	2,000	1912	irrigation
5489	Jess Womack	SAN ANTONIO	Elm Bayou	Guadalupe	750	1994	wetland

WR	OWNER	BASIN FROM	SOURCE	BASIN TO	AMOUNT	PRIORITY	USE
2466	Nueces County WCID #3	NUECES	Nueces River	Nueces-Rio Grande	8,606	1909	municipal/ irrigation
					2,940	1921	
2464	City of Corpus Christi	NUECES	Lake Corpus Christi	Nueces-Rio Grande	675	1913	municipal
					4,054	1914	municipal
4092	City of Taft	NUECES	Taft Drainage Ditch	San Antonio-Nueces	300,026	1925	municipal/ industrial
5736	City of Corpus Christi	NUECES	Nueces River	San Antonio-Nueces	600	1983	irrigation
					8,000	2001	wetland

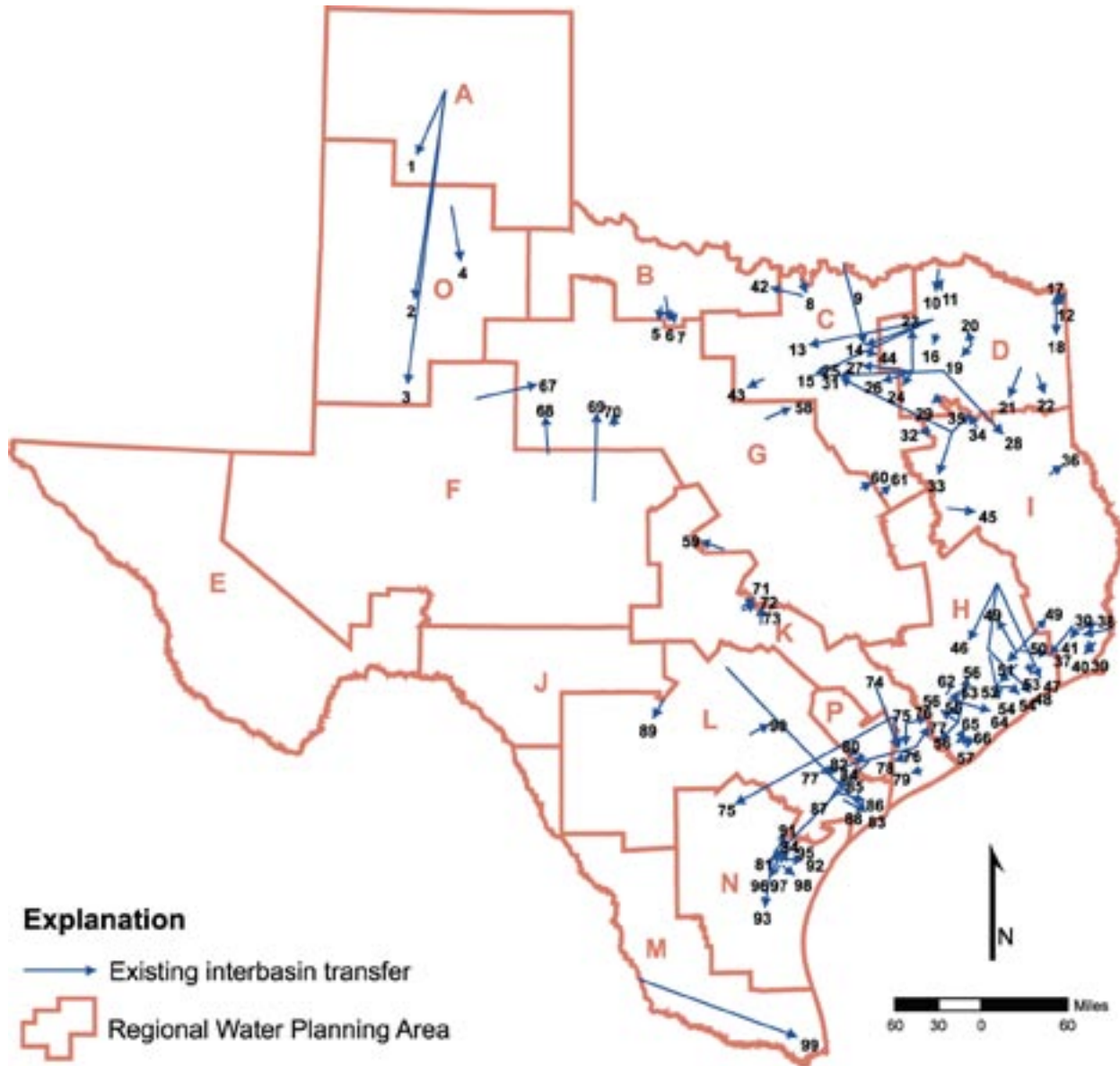
1. The owner of the water right is the owner listed on the authorizations as available December 31, 2004.
2. Some use types may have changed as a result of amendments granted after SB1 1997.
3. It should be noted that many water rights include authorization for interbasin transfer where the amount to be transferred is not specified. If the amount was not specified in the water right, it was assumed that the entire amount would be transferred.
4. This table does not include 9 of the 11 water rights owned by the Brazos River Authority that are authorized to release water to be diverted downstream for subsequent interbasin transfer pursuant to the System Operations Order.

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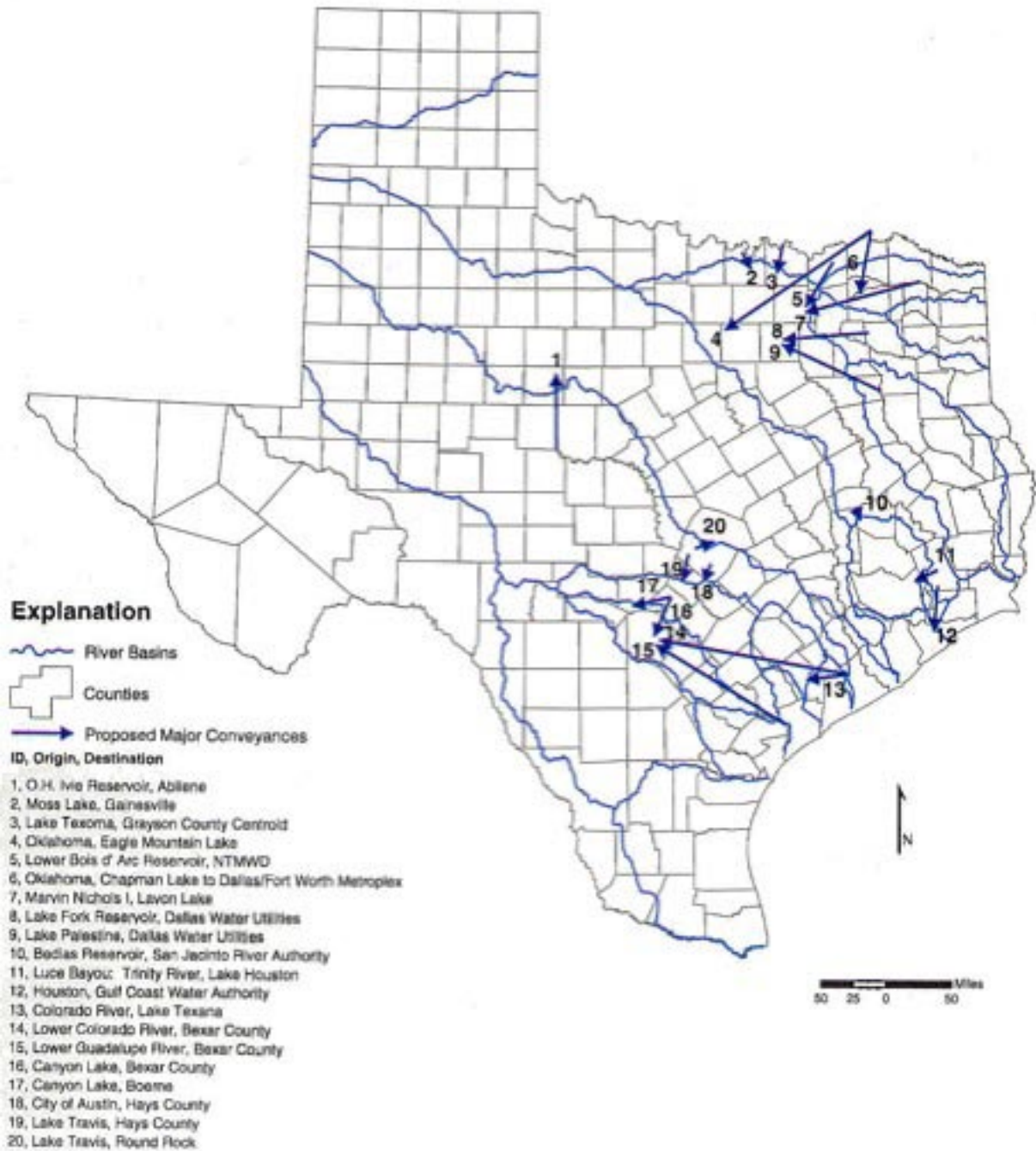
**APPENDIX B: MAJOR TEXAS GROUNDWATER TRANSFER PROJECTS AND PROPOSED
PROJECTS OVER 3,000 ACRE-FEET/YR (POTENTIAL DESTINATION OR END USER,
VOLUMES AND INITIATION DATE FOR PROJECT ARE NOTED IF AVAILABLE)**

1. Mesa Water, Inc. transfer from Ogallala Aquifer in Roberts County to El Paso, San Antonio, or Dallas - 200,000 acre-feet per year (acft/yr) (1999).
2. City of Amarillo from Ogallala Aquifer in Roberts County (1999).
3. Layne Water Development from Burleson, Lee and Milam Counties - 31,000 – 50,000 acft/yr (2003, started with Metropolitan Water Company in 1999).
4. Alcoa and San Antonio Water System (SAWS) from Simsboro Aquifer (a unit of Carrizo-Wilcox Aquifer) in Bastrop, Lee and Milam Counties to Bexar County – 90,000 acft/yr. (1999).
5. Schertz-Seguin Local Government Corporation transfer to Guadalupe County from Guadalupe and Gonzales County from the Carrizo-Wilcox Aquifer – eventually 25,000 acft/yr (1999).
6. Edwards Aquifer in Uvalde County transfer to the SAWS in Bexar County – 80,000 acft/yr (2001).
7. Grass Valley Partners in Eastern Kinney County transfer from Edwards Aquifer to Bexar County or Laredo – 30,000 acft/yr (2001).
8. Native Valley Alliance (via WaterTexas) Edwards – Edwards-Trinity Aquifer transfer from Kinney County to San Antonio, Laredo, or Eagle Pass - 31,000 to 45,000 acft/yr originally, but now 20,000 acft/yr (2001).
9. American PureTex Water Corp from Brazos River Alluvium in Austin, Colorado, and Wharton Counties to Houston and San Antonio – 500,000 acft/yr, although information the company website previously indicated that the total could be 784,000 acft/yr (2002).
10. Brazos Valley Water Alliance from Simsboro Aquifer in Milam, Burleson, Robertson and Brazos Counties – 100,000 acft/yr (2002).
11. Magellan Water Company from Carrizo-Wilcox Aquifer to Williamson County - amount unspecified (2002).
12. Rio Nuevo from West Texas Bolsons beneath General Land Office lands in Far West Texas - 50,000 acft/yr (2002).
13. El Paso Water Utilities from Capitan Reef Aquifer in Hudspeth County - 15,000 acft/yr (2003).
14. Goliad Sands Ltd. from Refugio and Bee Counties to San Patricio County – 11,200 acft/yr (2003).
15. Sustainable Water Resources LLC (formerly WaterTexas) from Simsboro portion of Carrizo-Wilcox Aquifer north of Interstate Highway (IH) 10 and east of IH 35 to the IH 35 and State Highway 130 corridors – at least 30,000 acft/yr (2003).
16. Dell Valley Water Rights Owners from Bone Spring-Victorio Peak Aquifer to El Paso Water Utilities – 63,000 acft/yr (2004).
17. Texas Mountain Canyon Water Association from “Hovey Trough” southwest of Fort Stockton - 41,000 to 110,000 acft/yr (2004).
18. Hays-Caldwell Carrizo Water Supply Project consisting of Cities of San Marcos, Kyle, Lockhart and the Canyon Regional Water Authority from the Carrizo-Wilcox Aquifer in Gonzales, Guadalupe, Bastrop and Fayette Counties – 30,000 acft/yr (2004).
19. Canadian River Municipal Water Authority to Amarillo, Lubbock and other cities in the Panhandle – 50,000 acft/yr (pre-1999, project online in 2001, more water purchased in 2005).
20. SAWS from Carrizo-Wilcox Aquifer in Wilson County to Bexar County – 11,000 acft/yr (2005).
21. SAWS from Carrizo-Wilcox Aquifer in Gonzales County to Bexar County – 30,000 acft/yr (2005).
22. SAWS brackish groundwater desalination of the Carrizo-Wilcox and Edwards Aquifer in Atascosa County - 10,000 acft/yr (2005).

APPENDIX C: 2002 MAP OF EXISTING INTERBASIN TRANSFERS AND REGIONAL WATER PLANNING AREAS IN TEXAS



APPENDIX D: WATER FOR TEXAS 2002: PROPOSED INTERBASIN TRANSFERS



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APPENDIX E: CHRONOLOGY OF EVENTS REGARDING INTERBASIN TRANSFERS

- 1900 First interbasin transfer occurs when 168,000 acre-feet/year is transferred from the Colorado River Basin to the Lavaca River Basin
- 1904 Constitutional amendment authorizes public development of water resources
- 1913 Burgess Glasscock Act recognizes interbasin transfers of water
- 1917 Constitutional amendment makes conservation and development of natural resources a public right and duty
- 1949 U.S. Bureau of Reclamation (USBR) began the first federal effort to plan development of Texas water resources
- 1953 “Water Supply and the Texas Economy” published by the USBR as a result of a 1949 study, recommended construction of a water supply canal from the Sabine River to the Lower Rio Grande Valley
- 1947 – 1957 Statewide Drought of Record
- 1955 Due to favorable reception of “Water Supply and the Texas Economy”, the USBR begins an investigation to formulate a plan acceptable to Texas and identify features of the plan that could be constructed under federal reclamation laws (Texas Basins Project)
- 1957 Texas Water Development Board (TWDB) created, constitutional amendment authorizes TWDB to administer Water Development Fund
- 1958 Senator Lyndon Johnson creates the United States Study Commission
- 1961 U.S. Study Commission draft report published, water rich areas oppose transfers to water poor areas
- 1961 TWDB publishes A Plan for Meeting the 1980 Water Requirements of Texas
- 1962 U.S. Study Commission Plan adopted, included interbasin transfers
- 1964 Texas Basins Project study completed, included interbasin transfers
- 1965 State water planning bill and constitutional amendment increasing Water Development Fund passed both included 50 year protection for basins of origin (SJR No. 19, 59th Regular Session of the Texas Legislature)
- 1966 City of San Antonio vs. Texas Water Commission, Texas Supreme Court addressed transbasin diversions (interbasin transfers) and created a balancing test
- 1966 Voters approve constitutional amendment to increase Water Development Fund including the limitation on Interbasin transfers
- 1967 Water Rights Adjudication Act passed

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- 1968 TWDB publishes The Texas Water Plan that includes massive interbasin transfers through the Texas Water System
- 1977 TWDB water plan published but not adopted
- 1982 Sporhase v. Nebraska, state imposed restrictions on interbasin transfers could be invalid based on the Commerce Clause of the U.S. Constitution
- 1984 TWDB publishes Water for Texas, a Comprehensive Plan for the Future
- 1985 Constitutional amendment adding a Water Development Special Fund, included 50 year protection for basins of origin
- 1990 TWDB publishes Water for Texas, Today and Tomorrow
- 1991 Legislation passed removing 50-year protection for basins of origin from the planning statute
- 1992 TWDB publishes Water for Texas, Today and Tomorrow, Recommendations for the 1992 Update of the Texas Water Plan
- 1992 – 1998 TWDB begins Trans-Texas Water Program “to identify the most cost-effective and environmentally sensitive strategies for meeting the current and future water needs of Southeast, South-Central, and West-Central Texas”
- 1997 TWDB publishes Water for Texas, the last plan compiled solely by the TWDB
- Senate Bill 1 passes significantly increasing the requirements for interbasin transfer applications and adding the junior water rights provision
- 1999 – 2005 Numerous attempts to repeal or modify junior water rights provision through the Texas Legislature
- 2000 – 2005 Federal litigation in Florida and New York seek to require Clean Water Act Sec. 402 National Pollution Discharge Elimination System (NPDES) permits for water transfers
- 2001 Guadalupe – Blanco River Authority (GBRA), San Antonio Water System (SAWS), San Antonio River Authority (SARA) sign agreement to bring Guadalupe River water to San Antonio through the Lower Guadalupe Water Supply Project (LGWSP)
- Regional Water Plans based on Senate Bill 1 published
- TWDB publishes Water for Texas 2002 compiling the 2001 Regional Water Plans into a statewide plan
- 2004 Conflict between Regional planning groups over interbasin transfers from East Texas to Dallas Metroplex
- 2005 SAWS withdrawal from LGWSP, in part because of issues relating to whether or not the project contemplated an interbasin transfer
- 2005 Second round of draft regional water plans completed

ENDNOTES

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- 2 *Id.* at 42.
- 3 GEO-MARINE, INC., FINAL REPORT: POTENTIAL AQUATIC ECOLOGICAL IMPACTS OF INTERBASIN WATER TRANSFERS IN THE SOUTHEAST, WEST-CENTRAL, AND SOUTH-CENTRAL STUDY AREAS at p. II-3 (1996). (Prepared for the Texas Water Development Board, Texas Parks and Wildlife Department, Texas Natural Resource Conservation Commission, and the U.S. Army Corps of Engineers)(herinafter GEO-MARINE, INC.).
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- 6 GEO-MARINE, INC., *see supra* note 3, at II-2.
- 7 30 TEX. ADMIN. CODE § 295.13 (West 2005) (Interbasin Transfers)(herinafter Interbasin Rules).
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- 9 *See* Interbasin Rules, *supra* note 7.
- 10 TEXAS WATER DEVELOPMENT BOARD, WATER FOR TEXAS, 14 Trans-Texas Water Program. Questions and Answers Trans-Texas Water Program (1996).
- 11 GEO-MARINE, INC., *supra* note 3, at xix.
- 12 *Id.* at xxviii.
- 13 *Id.*
- 14 *See* TEXAS WATER DEVELOPMENT BOARD, WATER FOR TEXAS 2002 13 (2002).
- 15 OLEN PAUL MATTHEWS, JUDICIAL RESOLUTION OF TRANSBOUNDARY WATER CONFLICTS, 30 WATER RESOURCES BULLETIN No. 3, 375-383 (June 1994).
- 16 *Id.*
- 17 *See* TEX. WATER CODE ANN. § 11.085(v) (Vernon 2005).
- 18 Tex. Comm'n Env'tl. Quality, Water Rights Permitting Section http://www.tceq.state.tx.us/permitting/water_supply/water_rights/permits.html (last visited Aug. 31, 2006) (herinafter TCEQ Water Rights Website). Information regarding the numbers of interbasin transfers and the specific authorizations is based on a compilation of all permits authorizing interbasin transfers. This same information is also contained in an excel spreadsheet created and maintained by the TCEQ.
- 19 These numbers include 11 rights owned by the Brazos River Authority (BRA) that authorize use in the San Jacinto-Brazos Coastal Basin of Brazos River water released from BRA's system reservoirs. The diversion from the Brazos River of a specified maximum amount of released water from all system reservoirs is then authorized under a separate certificate.
- 20 KATHY ALEXANDER MARTIN, TEX. COMM'N ON ENVTL. QUALITY, WATER SUPPLY DIVISION. The figures presented in this paper are based on a database created by Kathy Alexander Martin using the TCEQ spreadsheet referenced *supra* note 18. It should be noted that the 1913 Act included provisions that allowed for existing water users to record a certified filing for one year after the date of the act (which was later extended another year). Therefore, water amounts included in the pre-certified filing category include some with priority dates subsequent to 1913, but based on certified filings. These figures do not include 4,209,000 acre-feet of water authorized for municipal and industrial use by Certificate of Adjudication 11-5334, as amended. The authorized diversion points for this water right, owned by Dow Chemical Company, lie on a bay of the Gulf of Mexico and even though the amendment, granted in 2004 authorizes use of the water in two basins and two coastal basins, this is not considered an interbasin transfer of water because the bay is not part of a defined river basin.
- 21 Act of April 9, 1913, 33rd Leg., R.S., ch. 171, 1913 Tex. Gen. Laws 358, *amended by* Act of June 19, 1997, 75th Leg., R.S., ch. 1010, § 2.08, 1997 Tex. Gen. Laws 3621.
- 22 *Id.*
- 23 *Id.*
- 24 TEX. CONST. art. XVI, § 59 interp. commentary (Vernon 2003).
- 25 TEX. CONST. art. XVI, § 59.
- 26 *Id.*
- 27 *Id.*
- 28 The volume of water by use type was based on the actual use of the water when the interbasin transfer was authorized. After the passage of Senate Bill 1 of 1997,

- some water rights were amended to authorize multiple uses of the authorized amount of water. For purposes of this analysis, any authorization for multiple purposes of use that included municipal use as a purpose of use was included in the category "multiple." The category "other" includes water authorized for irrigation and industrial use and for wetland enhancement. *See also supra* note 20 for a discussion of how certified filings were counted for purposes of this analysis.
- 29 Act of March 19, 1889, 21st Leg., ch. 88, 1889 Tex. Gen. Laws 100; Act of March 9, 1895, 24th Leg., ch. 21, Tex. Gen. Laws 21; Act of April 9, 1913, 33th Leg., ch. 171, Tex. Gen. Laws 358.
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- 33 FELIX KOGAN, ADVANCES IN USING NOAA POLAR-ORBITING SATELLITES FOR GLOBAL DROUGHT WATCH, 7 DROUGHT NETWORK NEWS no. 3, 15-20 (1995); *See also* G.O.P Obasi, *WMO's role in the International Decade for Natural Disaster Reduction*, 75 BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY 1661 (1994).
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- 35 ROBERT RIGGIO, GEORGE BOMAR & THOMAS LARKIN, TEXAS DROUGHT: ITS RECENT HISTORY 58 (Texas Water Commission 1987).
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- 37 *Id.*
- 38 R.L. NACE & E.J. PLUHOWSKI, DROUGHT OF THE 1950's WITH SPECIAL REFERENCE TO THE MIDCONTINENT 81, Geological Survey Water-Supply Paper 1084, (Geological Survey, United States Department of the Interior, United States Government Printing Office 1965).
- 39 *See* LOWRY, *supra* note 34 at 46-48. (Data collected from the State Health Department is included in Tables 11, 12 and 14).
- 40 *See* LOWRY, *supra* note 34 at 42. (Table 9, figures based on a comparison of maximum storage preceding the drought to the minimum storage after the drought. For example, storage in Bridgeport/Eagle Mountain was reduced 87%, Possum Kingdom 61% and Lakes Travis and Buchanan 62%).
- 41 *See* LOWRY, *supra* note 34 at 49.
- 42 *Id.* at 49-50.
- 43 *Id.* at 53.
- 44 TODD H. VOTTELER, WATER FROM A STONE: THE LIMITS OF THE SUSTAINABLE DEVELOPMENT OF THE TEXAS EDWARDS AQUIFER (May 2000) (unpublished Ph.D. Dissertation, Southwest Texas State University) (on file with author).
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- 48 *Id.* at 2-3.
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- 50 85 CONG. REC. S14,18061 (daily ed. Mon. Aug. 18, 1958) (Statement of Senator Johnson).
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- 54 U.S. STUDY COMMISSION, A REPORT TO THE PRESIDENT AND TO THE CONGRESS, Report of the Commissioner, Part I, 5 (1961).
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- 67 TRINITY RIVER AUTHORITY OF TEXAS, TRINITY RIVER BASIN MASTER PLAN 10 (2003).
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- 72 *Id.* at 26.
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- 75 CORWIN W. JOHNSON, TRANSBASIN DIVERSIONS. The University of Texas School of Law, Water Law Conference at 117 (1966).
- 76 TEX. CONST. art. III, § 49-c.
- 77 TEX. CONST. art. III, § 49-d.
- 78 *See id.*
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- 82 Statement by Joe G. Moore, Jr., Concerning Senate Bill 1 and House Bill 5, 75th Legislature, Regular Session, (on file with authors), March 6, 1997, pp. at 3-4. Professor Moore was intimately involved in negotiating the 1965 constitutional and statutory language in both the Senate and the House.
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- 90 Joe G. Moore, Jr., *Texas Water Resource Policy and Planning, 1965–2000* at 8, Conference, *Water for Texas: 2000 & Beyond* (2000).
- 91 TEXAS WATER DEVELOPMENT BOARD. THE TEXAS WATER PLAN I-9 through I-14 (1968); Joe G. Moore, Jr., *Texas Water Resource Policy and Planning, 1965–2000* at 11-12, Conference, *Water for Texas: 2000 & Beyond* (2000) (hereinafter Moore).
- 92 *See Moore, supra* note 91 at 12.
- 93 *See id.* at 13.
- 94 *See id.* at 13.
- 95 *See id.* at 13; BUREAU OF RECLAMATION, U.S. DEPARTMENT OF THE INTERIOR, WEST TEXAS AND EASTERN NEW MEXICO IMPORT PROJECT: EXECUTIVE SUMMARY 154, 156 (1973).
- 96 *City of San Antonio v. Texas Water Comm'n*, 407 S.W.2d 752, 758 (Tex. 1966).
- 97 *Id.* at 757.
- 98 *See id.* at 759.
- 99 TEX. WATER CODE ANN. § 11.085(f) (Vernon 2005).
- 100 TEX. WATER CODE ANN. § 11.085(d) (Vernon 2005).
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- 102 TEX. WATER CODE ANN. § 11.085(k)(1), (k)(2)(A-D) (Vernon 2005).
- 103 TEX. WATER CODE ANN. § 11.085 (k)(2)(E), (k)(2)(F)-(k)(3) (Vernon 2005); *see also*, Resource Economics, Inc., *Third Party Compensation for Interbasin Transfers of Water in Texas: Alternatives for Funding and Payment* (1999) *available at* http://www.twdb.state.tx.us/RWPG/rpgm_rpts/98483269.pdf.
- 104 *See* TEX WATER CODE ANN § 11.085(l) (Vernon 2005) (codification of the balancing test of *City of San Antonio v. Texas Water Commission*).
- 105 Statement by Joe G. Moore, Jr., Concerning Senate Bill 1 and House Bill 5, 75th Legislature, Regular Session, (on file with authors), March 6, 1997, p. 10-11.
- In the proposed amendment to Section 11.085 [Senate Bill 1] . . . the procedural and substantive requirements for interbasin transfers are so detailed . . . as to prevent or substantially restrict any such transfer. Almost certainly, any early applications for significant transfers will be in the courts for five to 10 years at a minimum. The factors to be considered by the Texas Natural Resource Conservation Commission [TCEQ] surpass those contained for environmental impact statements under the National Environmental Policy Act. For any transfers into, or out of, the interior river basins such as the Neches, Trinity, Brazos, Colorado, Guadalupe - Blanco, San Antonio and Nueces, the analysis encompasses massive stretches of geography and major metropolitan centers. Meeting these requirements will substantially enrich lawyers and consultants in a plethora of specializations just to generate the reports to comply with the analyses required. Double or multiple sets of lawyers and experts to represent those who favor, and those who oppose, the proposed transfer will create mountains of testimony if any applicant has the money and the fortitude to initiate the process.
- 106 TEX. WATER CODE ANN. § 11.085 (s-t) (Vernon Supp. 2005).
- 107 *See Schwartz & Millican Memo, supra* note 5.
- [P]rior to passage of Senate Bill 1 (S.B. 1) there were 155 approved interbasin transfer (IBT) permits. Since then, only one new IBT has been approved. This reduction is often attributed to S.B. 1's more stringent IBT review standards coupled with its imposition of junior priority dates on all but a limited number of exempt IBT amendments ... The issue of priority is of importance because Texas uses a "first in time first in right," or prior appropriation doctrine for surface water allocation. This doctrine gives the person with the earliest priority date the right to call on the use of the water first. Thus all water rights granted before the IBT have a right to use the water first. The junior priority provision ... *may* impact a water right holder seeking to amend an existing water right to add an IBT, since the junior priority provisions means the IBT could not obtain the priority date of the original right.

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- 116 *Id.*
- 117 *Id.* at 2.
- 118 *Id.* at 2.
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- 124 *Id.*
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- 129 C.E ELLSWORTH, SUMMARY OF RECORDS OF SURFACE WATERS OF TEXAS, 1898-1937 116, 125 (U.S. Geological Survey 1939).
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- 131 *See* Schwartz & Millican Memo, *supra* note 5 at 3. (The memorandum stated that TWDB staff recommends TWDB acknowledge the hydrologic unity of the two basins, and be supportive of any change).
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- 133 Letter from James M. Mayor, Chairman San Antonio Water System Board of Trustees, to Carter Casteel, Member Texas House of Representatives, District 73 at 2 (July 20, 2005).
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- 138 *Id.*
- 139 TEX. WATER CODE ANN. § 11.085(b)(2) (Vernon Supp. 2005).
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- 143 *See* WATER FOR TEXAS, *supra* note 14 at 73.
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- 156 *See* Region H Plan, *supra* note 154. (Appendix B to Chapter 4-Water Management Strategies. Region H Water Management Strategy Analysis Technical Memorandum. Strategy Title: Houston to Gulf Coast Water Authority Transfer, p. 4B7-1.)
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- 161 *Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York (Catskills II)*, 451 F.3d 77, 78 (2d Cir. 2006).
- 162 *Id.*
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- 166 *Catskills II*, 451 F. 3d 77 at 80.
- 167 *Id.*
- 168 *Id.* at 89.
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- 170 *Id.* at 98-99.
- 171 *Id.* at 99.
- 172 *Id.*
- 173 *Id.* at 103.
- 174 *Id.*
- 175 *Id.* at 104.
- 176 *Id.* at 108.
- 177 *Id.*
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- 179 *Id.* at 105.
- 180 *Id.* at 104.
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- 183 Memorandum from Ann R. Klee & Benjamin H. Grumbles, Agency Interpretation on Applicability of Section 402 of the Clean Water Act to Water Transfers, U.S. Environmental Protection Agency (2005).
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STUDENT NOTE

**THE ENDANGERED SPECIES ACT
“IN DANGER OF EXTINCTION”:
A CLOSE LOOK AT
GDF REALTY INVESTMENTS, LTD. V. NORTON
UNDER THE COMMERCE CLAUSE**

BY CHRISTINE TORIZ

I. INTRODUCTION

The Endangered Species Act (ESA)¹ rests on Congress's authority under Article I, Section 8 of the Constitution, “[t]o regulate commerce with foreign nations, and among the several states...[.]”² In *GDF Realty Investments v. Norton*,³ the Fifth Circuit upheld the application of the ESA to six species of subterranean insects and arachnids, none of which, the court determined, has any known commercial value and that exist solely within a small cluster of caves near Austin, Texas.⁴ Can the *GDF Realty* decision be reconciled with the Supreme Court's modern Commerce Clause jurisprudence? Although *GDF Realty* court admits individual species do not possess commercial value, the court upholds the ESA because the aggregation of all those species forms an essential part to a general “economic” regulatory scheme whereby individual instances of noncommercial value are *de minimis*.⁵ However, this rationale stands on shaky ground since the Fifth Circuit is essentially applying an aggregation of activities that previous Commerce Clause jurisprudence indicates must be of an individual economic nature.⁶

A close consideration of Commerce Clause challenges to the ESA among different Circuits reveals a disturbing split of interpretation regarding the permissible extension of the Commerce Clause's federal reach into state areas of regulation.⁷ Furthermore, a close review of those cases reveals an alarming disunity of judges within the Circuits.⁸ *GDF Realty* provided an excellent opportunity for the Supreme Court to clear the muddied waters of the ESA's Commerce Clause divided jurisprudence. However, the Supreme Court denied certiorari on

June 13, 2005.⁹ Although the Supreme Court decided not to rule on the ESA's Commerce Clause dispute, undoubtedly this issue will again present itself to the Supreme Court.¹⁰

An evaluation of the modern Commerce Clause analysis demonstrates two trends. First, under both *United States v. Lopez*¹¹ and *United States v. Morrison*,¹² the activity to be regulated should be economic in nature.¹³ Second, recent Commerce Clause cases indicate the unwillingness of courts to allow regulations that impede on areas of traditional state sovereignty, including land use regulation.¹⁴ This note will demonstrate that the lower courts' widely differing rationales for upholding the ESA simply do not withstand the modern Commerce Clause jurisprudence.¹⁵ Admittedly, federal species conservation is important. However, this worthy goal should fall under another source of constitutional authority.¹⁶

II. ENDANGERED SPECIES ACT

A. PREDECESSORS TO THE 1973 ENDANGERED SPECIES ACT

The conservation of biological diversity contains both the diversity of species and the genetic diversity of ecosystems.¹⁷ Thus, protection of biodiversity poses fundamental challenges as to the methods and extent of protections.¹⁸ Surprisingly, protection of the wildlife was a consideration of federal regulation during the early history of the nation, when humans struggled to make an existence from the land.¹⁹ In 1900, Congress made its first step toward federal regulation and protection of endangered species by passing the Lacey Act.²⁰ Congressional

debates revealed Congress was concerned about the near extinction of certain birds, specifically passenger pigeons.²¹ However, the Lacey Act demonstrates the early *limited* federal authority over wildlife, by restricting only interstate commerce involving animals, particularly, birds, destroyed in violation of state law.²²

Another example of the historically limited federal authority concerning wildlife regulation was Congress's reliance on its treaty power instead of its Commerce Clause authority to regulate endangered wildlife.²³ Congress enacted the Migratory Bird Treaty Act of 1918 to implement a United States treaty with Canada protecting migratory birds.²⁴ The Supreme Court in *Missouri v. Holland*²⁵ upheld the Migratory Bird Treaty Act "as a necessary and proper exercise of Congress's treaty power" citing the national interest of preserving wildlife.²⁶ "More importantly, [*Missouri v. Holland*] forcefully rejected the contention that the doctrine of state ownership of wildlife barred the federal wildlife regulation, and it invited the question of what further sources of federal power might be used in developing a body of federal wildlife law."²⁷

The Endangered Species Preservation Act of 1966²⁸ (the "1966 Act") authorized the Secretary of Interior to "carry out a program in the United States of conserving, protecting, restoring and propagating selected species of native fish and wildlife that are threatened with extinction."²⁹ The basic purpose of the 1966 Act was to compile a list of endangered species and the creation of the National Wildlife Refuge System, which protected endangered animals in the System.³⁰ The source of authority for the 1966 Act was from then-existing laws for land acquisition and the property clause, which allows for regulation of federally controlled land. Congress also utilized its spending authority to encourage other agencies to cooperate in the conservation of species.³¹ The 1966 Act, while a significant first step in wildlife protection, was considerably limited in actual ability to regulate states.³² Not only did the 1966 Act fail to mandate habitat protection, but at that time a dispute arose about whether the federal government had the authority to regulate federal lands under the property clause.³³ Furthermore, outside this controversy surrounding the property clause, one commentator points out that a "majority of endangered or threatened species . . . are located on non-federal land" that the states regulates and which would be completely outside the control of the 1966 Act.³⁴

Similarly, the Endangered Species Conservation Act of 1969³⁵ (the "1969 Act") did not provide a significant step towards actual preservation of endangered species.³⁶ The most important goal of the 1969 Act was the international aspect of species preservation whereby Congress authorized the Secretary of Interior to promulgate a list of fish and wildlife "threatened with worldwide extinction."³⁷ The 1969 Act expanded the Lacey Act previous definition to include amphibians, reptiles, and invertebrates.³⁸ Also, the emphasis towards the international convention of binding conservation resulted in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).³⁹ Of importance, however, is the 1969 Act's dependence on the Commerce Clause as a basis of authority to prohibit the importation of animals listed as threatened by worldwide extinction.⁴⁰

Finally, the Endangered Species Act of 1973 repealed the 1966 Act and the 1969 Act,⁴¹ becoming "the cornerstone of U.S. efforts to conserve biological diversity."⁴² The ESA expanded the 1966 Act and the 1969 Act by enlarging the definition of "endangered species" to include "threatened species" and expanding the reach of federal regulation to federal, state, local, or private land.⁴³ Thus, as the federal government regulates an area of state power, property, the basis for authority under the Commerce Clause, must withstand the recent Supreme Court's limitations. However, a discussion of the ESA's purpose and statutory framework is necessary to understand the far-reaching provisions of federal authority.

B. PURPOSE

The ESA boldly declares its purpose that endangered species "are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people"⁴⁴ and thus the ESA provides "a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved...[.]"⁴⁵ One court noted that "[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost."⁴⁶

The evidence proves that "the ESA's legislative history reflects that Congress enacted the ESA in an effort to ensure the continued availability of genetic resources for scientific endeavors and to preserve biodiversity for the national economy."⁴⁷ The House Report states:

As we homogenize the habitats in which these plants and animals evolved, and as we increase the pressure for products that they are in a position to supply we threaten their – and our own – genetic heritage. The value of this genetic heritage is, quite literally incalculable . . . From the most narrow possible point of view, it is in the best interests of mankind to minimize the losses of genetic variations. The reason is simple: they are potential resources. They are keys to puzzles which we cannot solve, and may provide answers to questions which we have not yet learned to ask.⁴⁸

The Senate report regarding the ESA also demonstrates the legislative intent to preserve genetic variations for general economic reasons.⁴⁹ The Senate Report indicates that “businessmen may profit from the trading and marketing of [a] species for an indefinite number of years, where otherwise it would have been completely eliminated from commercial channels in a very brief span of time.”⁵⁰ The Report provides specific areas of potential economic importance, “[s]ince each living species and subspecies has developed in a unique way to adapt itself to the difficulty of living in the world’s environment, as a species is lost, its distinctive gene material, which may subsequently prove invaluable to mankind in improving domestic animals or increasing resistance to disease or environmental contaminant, is also irretrievably lost.”⁵¹

However, this legislative history touches the heart of the controversy between Circuits. Did Congress focus on the effect of commercial activities or on the possible commercial value of the species themselves? Although arguments can be made for the effect of commercial activities, the legislative history emphasizes the distinctive value of genetic diversity within a species.⁵²

C. STATUTORY FRAMEWORK

Essential to the ESA’s conservation program are three fundamental units: endangered species, threatened species, and critical habitats.⁵³ The two groups of protected species extend beyond true species and subspecies to include distinct populations for animals.⁵⁴ One author argues the 1978 Amendment, under political pressure, further limited animals to vertebrate species in order to “decrease the number of listed taxa.”⁵⁵ However,

Victoria Sutton argues that the ESA’s deliberate categorical exemption of plants demonstrates Congress’s recognition of states’ traditional authority regulating land use within their individual state.⁵⁶ Plants, more than animals, are connected to the actual land.⁵⁷

“Endangered species” is defined as “any species which is in danger of extinction throughout all or a significant portion of its range.”⁵⁸ “Threatened species” includes “any species which is likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range.”⁵⁹ The ESA protects both endangered and threatened species by prohibitions in the act.⁶⁰ Finally, “critical habitat” is defined at those areas essential to the conservation of the species, even if some or all of those areas fall outside the space the species currently occupies.⁶¹

Section 4 of the Act requires the Secretary of the Interior to utilize “the best scientific and commercial data available”⁶² in order to list all endangered and threatened species to fall under the protection of the ESA if either natural or manmade factors threaten its existence.⁶³ After a species is listed, recovery plans are created.⁶⁴ If and when recovery occurs, the federal government loses its authority to protect the species, and authority over the species reverts to the states.⁶⁵ Section 7 requires all federal agencies to “insure that any action authorized, funded, or carried out by them” “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species.”⁶⁶

Section 9 of the Act regulates individualized, private conduct by prohibiting the sale, import, export, or transportation of any species listed under Section 4 of the ESA.⁶⁷ Additionally, section 9 makes it unlawful for any person to “take” any endangered animal species.⁶⁸ “Take” is broadly defined as meaning to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.”⁶⁹ This section is the most controversial of the ESA because it regulates private conduct within a state.⁷⁰ The 1975 regulations further expanded the scope of harm to include “environmental modification or degradation.”⁷¹ As a result, private land use activities such as grazing, logging, filling ponds, and land clearing now fall under the ESA.⁷² Finally, Section 11 provides for civil and criminal penalties for violations of the ESA.⁷³ The Attorney General is also

authorized to seek injunctive relief for violations of the ESA.⁷⁴

III. THE DIVERSITY OF SPECIES

AND THE ECONOMIC VALUE

THEREOF

“By economic measure alone, the diversity of species is one of Earth’s most important resources. It is also the least utilized.”⁷⁵ Biologist Edward O. Wilson has estimated the number of recognized species to be between 1.5 and 1.7 million.⁷⁶ Insects compose a large number and parasites alone entail one third of the recognized organisms.⁷⁷ Bacteria remain the “black hole” of unexplored organisms yet to be classified.⁷⁸ One scientist, attempting to determine the number of species on earth, commented, “Unlike essentially all other scientific disciplines, conservation biology is a science with a time limit, with the clock ticking faster as the human population continues to increase.”⁷⁹ Why do we (or at least some of us) care about the conservation of diversity? Rather, the question should be why *should* we care about the conservation of diversity among species?

Wilson lists several reasons: (1) manmade depletion of natural environments restricts the “evolution” mechanisms of replacing extinct species; (2) higher productivity and ability to withstand environmental stress exists with a greater number of species within an ecosystem; (3) diversity of an ecosystem cleanses our water, manufactures the air we breathe, and cleanses our water; (4) “wild species are the source of new pharmaceuticals, crops, fibers, and other products that help sustain our lives;” and finally, (5) a moral obligation to preserve our planet.⁸⁰

Specifically, our vast knowledge and use of pharmaceuticals and technological advances developed from reliance on wild and natural products.⁸¹ According to one statistic, “[o]ne in every ten plant species contains compounds with some anticancer activity.”⁸² Another scientific article explains, mostly through statistical data, the importance of tropical rain forests for the development of pharmaceutical drugs.⁸³ “Tropical medicinal genetic resources may contribute to pharmaceuticals and health services in three ways: (1) they may be used directly as phar-

maceuticals (plant extracts and products); (2) they may serve as templates for chemical synthesis of related medicinal compounds, and (3) they may be used as investigative, evaluative, or other research tools in the drug development and testing process.”⁸⁴ This article provides an amazing list of drugs specifically derived from tropical plant species.⁸⁵

A specific example of a natural plant used for massive commercial medical remedies includes the rosy periwinkle from the West Indies used to treat Hodgkin’s disease, a type of cancer and leukemia.⁸⁶ Another example includes the Indian serpentine root used to relieve schizophrenia and hypertension.⁸⁷ Aspirin was derived from meadowsweet’s salicylic acid.⁸⁸ Cocaine is used as a local anesthetic, “but it has served as a blueprint for the laboratory synthesis of a large number of specialized anesthetics that are more stable and less toxic and addictive than the natural product.”⁸⁹ These remedies are not restricted to just plants. Saliva from vampire bats aids in preventing heart attacks by opening arteries faster than standard remedies, while also restricting activity to the area of the clot.⁹⁰ Leach saliva, containing hirudin, has been isolated and applied to a number of maladies.⁹¹

Although the Fifth Circuit in *GDF Realty* upheld the application of the ESA to six species of subterranean insects and arachnids,⁹² the court determined that none of those species has any known commercial value and exist solely within a small cluster of caves near Austin, Texas.⁹³ The court reasoned that “[t]here is no market for [the insects and arachnids]; any future market is conjecture.”⁹⁴ Scientific literature contradicts this assertion by arguing that the known commercial use may be discovered in the future.⁹⁵ Relying on the previous examples of pharmaceutical development from wild plants, it is not hard to argue in the future insects may provide the backbone for technological advancements.⁹⁶ However, *GDF Realty* indicates that an analysis of future markets for these insects and arachnids is too tenuous.⁹⁷

Also, scientific commentary on insects and arachnids demonstrate a detailed and intricate connection between the fractal nature of the plant surfaces and the size of the insect living on them.⁹⁸ Whether future courts hold that economic value alone for the insects does not exist, the habitat and ecosystem for valuable plants does include insects.⁹⁹ Another scientist predicts that the world would not last long without insects or invertebrates for the

reason that the insects process most of the dead vegetation and return its nutrients to the plants to keep the . . . forests alive.”¹⁰⁰

IV. MODERN COMMERCE CLAUSE

JURISPRUDENCE

A. EXPANSION OF THE COMMERCE CLAUSE: THE PRE-LOPEZ CASES

Prior to *United States v. Lopez* in 1995,¹⁰¹ the Supreme Court maintained an expansive view of the Commerce Clause. Beginning with the 1824 landmark case *Gibbons v. Ogden*,¹⁰² the Supreme Court affirmed Congress’s plenary power over interstate commerce and navigation, limited only by the Constitution.¹⁰³ The remaining areas of intrastate commerce were left to the states under the Tenth Amendment.¹⁰⁴ The Tenth Amendment provides, “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”¹⁰⁵ These police powers include the “immense mass of legislation, which embraces everything within the territory of a State, not surrendered to the general government: all which can be most advantageously exercised by the States themselves.”¹⁰⁶ Thus, the federal authority of the government was limited to those grants of power specifically described in the Constitution, while the rest was left to the states.¹⁰⁷

*Wickard v. Filburn*¹⁰⁸ expanded the Commerce Clause jurisprudence by holding wheat grown on an individual farm and consumed for that farm’s domestic use substantially affects the interstate market since the individuals’ action are viewed as aggregated with other individuals’ actions.¹⁰⁹ However, *Wickard* fails to delineate just what intrastate activities are aggregated to form a substantial impact.¹¹⁰ *United States v. Darby*,¹¹¹ although later overruled, held underage employees’ manufacturing goods later shipped in interstate commerce affected interstate commerce.¹¹² The outermost limit of the expansion of the Commerce Clause includes the Mann Act, an Act regulating the transport of individuals across state lines even though this area regulated state areas of police power.¹¹³

Another major shift towards the expansive nature of the Commerce Clause was *Heart of Atlanta v. United States*.¹¹⁴ In this case, the Supreme Court con-

sidered the magnitude of the aggregate effects upon the economy, both quantitatively and qualitatively.¹¹⁵ Segregation and discrimination in transient accommodations was held to substantially affect interstate commerce.¹¹⁶ Even though this case considered a moral question, it did not detract from the analysis. The companion case, *Katzenbach v. McClung*,¹¹⁷ also concluded activities such as buying out-of-state food substantially affected interstate commerce under a rational basis standard.¹¹⁸ The Supreme Court reasoned that in the aggregate, the establishments in *Katzenbach* and *Heart of Atlanta* affected interstate commerce.¹¹⁹

As the civil rights cases of *Heart of Atlanta* and *Katzenbach* demonstrated, the Commerce Clause expansively interpreted what activity substantially affected interstate commerce.¹²⁰ During this expansion of the Commerce Clause, Congress enacted environmental statutes such as the ESA.¹²¹ At the time of their enactment, reliance upon the Commerce Clause did not pose any constitutional dilemmas. However, both *Lopez* and *Morrison* imposed significant limitations on Congress’s authority under the Commerce Clause.¹²² The Supreme Court has not examined environmental statutes, such as the ESA, under the limited Commerce Clause analysis.

Finally, *Hodel v. Virginia Surface Mining and Reclamation Association*¹²³ demonstrates an example of permissible federal regulation of purely intrastate activities.¹²⁴ In *Hodel*, the intrastate activities consisted of environmental protections regulating mining activities under the Surface Mining Control and Reclamation Act of 1977.¹²⁵ The Court seemed concerned that in the absence of any federal standard, states would race to the bottom by lowering state environmental standards in order to attract businesses to their state.¹²⁶ This rationale applies to the ESA in that states’ failure to protect endangered or threatened species adequately for fear of negative economic competition justifies federal intervention under the ESA.¹²⁷ However, the Supreme Court decided *Hodel* before *Lopez* and *Morrison* so this rationale must hold weight under their limitations of the Commerce Clause analysis.¹²⁸

B. LIMITATIONS UNDER THE COMMERCE CLAUSE: UNITED STATES V. LOPEZ

The 1995 Supreme Court decision in *United States v. Lopez*¹²⁹ held a federal statute to be unconstitutional as exceeding Congress’s authority under

the Commerce Clause.¹³⁰ This decision was the first time in generations (specifically, since 1936) that the Supreme Court held a federal statute to be unconstitutional under the Commerce Clause.¹³¹ In *Lopez*, the Court examined the Gun-Free School Zones Act of 1990, which deemed possession of a gun within a school zone a criminal offense.¹³² This act exceeded Commerce Clause authority because “the activity was primarily non-economic, it had little direct relationship to interstate commerce, and because regulation of intrastate crime was largely a state or local function.”¹³³

Chief Justice Rehnquist, writing for the majority, framed his arguments within the federalism dual system of federal and state powers, limiting the federal reach of power into state’s police powers.¹³⁴ Justice Kennedy’s concurring opinion more clearly articulates the federalism concerns under *Lopez*.¹³⁵ The governments, state and federal, perform a valuable check, providing political responsibility.¹³⁶ “Federalism serves to assign political responsibility, not to obscure it. Were the Federal Government to take over the regulation of entire areas of traditional state concern, areas having nothing to do with the regulation of commercial activities, the boundaries between the spheres of federal and state authority would blur and political responsibility would become illusory.”¹³⁷

With these principles of federalism in mind, Chief Justice Rehnquist stated that Congress may regulate three broad areas under the Commerce Clause.¹³⁸ First, Congress may regulate “the use of the channels of interstate commerce.”¹³⁹ Second, Congress’s Commerce Clause authority includes “the instrumentalities of interstate commerce, or persons or things in interstate commerce.”¹⁴⁰ Third, Congress is empowered to regulate “those activities having a substantial relation to interstate commerce . . . i.e., those activities that substantially affect interstate commerce.”¹⁴¹

The third area of regulation, activities substantially affecting interstate commerce, narrows the reach of the Commerce Clause authority.¹⁴² *Lopez* provides four factors to consider whether the activity substantially affects interstate commerce.¹⁴³ First, the regulated activity should be commercial in nature standing alone or as “an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated.”¹⁴⁴ Second, a jurisdictional element providing an additional nexus

with interstate commerce ensuring the targeted activity affects interstate commerce.¹⁴⁵ Congress can maintain the constitutionality upon including “a jurisdictional element which would ensure, through case-by-case inquiry, that the [regulated activity] in question affects interstate commerce.”¹⁴⁶ Third, “congressional findings regarding the effects upon interstate commerce” are a part of a constitutional evaluation.¹⁴⁷ Fourth, the connection between a regulated activity and interstate commerce must not be tenuous.¹⁴⁸ Finally, the courts should consider whether the particular activity is a traditional area of state power.¹⁴⁹

In application, *Lopez* concluded that gun possession failed the third prong of an activity substantially affecting interstate commerce “because it was neither a commercial activity in itself nor an essential ingredient for a primarily interstate economic activity.”¹⁵⁰ The gun possession statute in question was not “an essential part of a larger regulation of economic activity.”¹⁵¹ The legislative history made only generalized conclusions about violent crime’s impact on interstate commerce.¹⁵² Furthermore, the court thought it important that areas of school regulation are within the general police power authority of the states.¹⁵³

Justice Breyer, in his dissenting opinion, disagreed with the majority’s conclusion about what type of activity should be considered.¹⁵⁴ Specifically, Justice Breyer disagreed with the majority’s distinction between commercial and noncommercial transactions.¹⁵⁵ The dissent relied upon the vast precedent of cases, particularly *Wickard v. Filburn*, in which individual activity multiplied by aggregation is a threat to interstate commerce.¹⁵⁶

C. ECONOMIC LIMITATION: UNITED STATES V. MORRISON

In *United States v. Morrison*,¹⁵⁷ the Court followed *Lopez*, striking down a provision of the Violence Against Women Act providing civil damages remedy for victims of gender-motivated crimes under the Commerce Clause.¹⁵⁸ Although congressional findings indicated violence against women decreased national productivity, the Court rejected this argument.¹⁵⁹ Instead, under the *Lopez*’s third prong of substantial activity, the Court held Congress may not “regulate noneconomic, violent criminal conduct based solely on that conduct’s aggregate effect on interstate commerce.”¹⁶⁰ The aggregation of noneconomic activity, unlike the pre-*Lopez* cases,

was no longer acceptable.¹⁶¹ However, the Court did not adopt a hard and fast rule.¹⁶² “While we need not adopt a categorical rule against aggregating the effects of noneconomic activity in order to decide these cases, thus far . . . our cases have upheld Commerce Clause regulation of intrastate activity only where that activity is economic in nature.”¹⁶³ Thus, while not conclusive, this statement is indicative of the Court’s likely determination of future Commerce Clause challenges.

The Court in *Morrison*, as in *Lopez*, expressed strong reservations about federal regulation of an area of traditional state power.¹⁶⁴ Crime control in the majority’s viewpoint was an essential area of state power.¹⁶⁵ “[W]e can think of no better example of the police power, which the Founders denied the National Government and reposed in the States, than the suppression of violent crime and vindication of its victims.”¹⁶⁶

D. THE DEGREE OF ACTIVITY: *UNITED STATES V. OLIN*

The Eleventh Circuit held in *United States v. Olin*¹⁶⁷ that the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) was a constitutional exercise of Congress’s authority under the Commerce Clause.¹⁶⁸ This Commerce Clause challenge held a statute can still be constitutional under *Lopez* even without a jurisdictional clause if it regulates a class of activities—here disposal of hazardous waste—that substantially affects interstate commerce.¹⁶⁹ *Olin* found on-site waste disposal substantially affected interstate commerce because the substantial costs in handling wastes and agricultural losses.¹⁷⁰ Although the objection was raised that disposal activities alone are not economic in nature, the proper question involved “the degree to which activity affects interstate commerce.”¹⁷¹ In conclusion, *Olin*’s actions were held to be of an economic character because of his “market advantage” over chemical companies that do not have on-site disposal options.¹⁷²

E. PRECISE OBJECT VERSUS ACTIVITY AFFECTING COMMERCE: *SOLID WASTE AGENCY OF NORTH COOK COUNTY V. UNITED STATES ARMY CORPS OF ENGINEERS*

Another important case in the Commerce Clause jurisprudence is *Solid Waste Agency of North Cook County v. United States Army Corps of*

Engineers (SWANCC).¹⁷³ In *SWANCC*, the Supreme Court held that the Clean Water Act’s jurisdiction reaching “isolated” wetlands violated the Commerce Clause because the wetlands were not connected or adjacent to navigable water.¹⁷⁴ *SWANCC* could have considered three areas, the migratory birds, the commercial activities motivating the filling of the land, or the wetlands themselves.¹⁷⁵ The Court focused on the wetlands as the object substantially affecting interstate commerce.¹⁷⁶ One commentator notes that the *SWANCC* decision failed to specify what is the central object of the statute—its regulatory targets or its beneficiaries.¹⁷⁷ It is clear that the Court did consider the purpose of the statute, which involved conservation of the wetlands and not the commercial activity being regulated.¹⁷⁸ Absent the statutory interpretation, would the existence of migratory birds be enough to pass Commerce Clause analysis?¹⁷⁹ The Court in *SWANCC* is unclear, but indicates this argument would “raise significant constitutional questions. For example, we would have to evaluate the precise object or activity that, in the aggregate, substantially affects interstate commerce.”¹⁸⁰

Even though the Court based its holding in *SWANCC* on statutory interpretation, the Court provided a useful indication of how it would decide other Commerce Clause cases.¹⁸¹ In dicta, the Court indicates federal regulation of isolated wetlands would also infringe on the state and local government’s traditional exclusive jurisdiction.¹⁸² “Permitting respondents to claim federal jurisdiction over ponds and mudflats falling within the ‘Migratory Bird Rule’ would result in significant impingement of the States’ traditional and primary power over land and water use.”¹⁸³

V. COMMERCE CLAUSE

CHALLENGES TO THE ENDANGERED

SPECIES ACT

Since *Lopez* and *Morrison*, several Commerce Clause challenges to the constitutionality of the ESA have been brought in the lower courts. Although all courts have upheld the ESA under the Commerce Clause, the rationales differ widely among circuits.¹⁸⁴ Both the more recent challenges in *GDF Realty and Rancho Viejo v. Norton (Viejo)*¹⁸⁵ rely expansively on earlier decisions, *National Association of Home*

*Builders v. Babbitt (NAHB)*¹⁸⁶ in the D.C. Circuit, and *Gibbs v. Babbitt*¹⁸⁷ in the Fourth Circuit. Thus, this section will discuss those cases as well.¹⁸⁸ Two general interpretations appear in these cases. One discusses whether the activity itself or the conduct involved substantially affects interstate commerce. The other interpretation analyzes whether the species itself has any commercial value.

A. THE ACTIVITY CONNECTION TO INTERSTATE COMMERCE: NATIONAL ASSOCIATION OF HOME BUILDERS V. BABBITT

NAHB upheld the constitutionality of the ESA under the Commerce Clause analysis set forth by *Lopez*.¹⁸⁹ This case is of particular importance because the insect in question resides only within California, and therefore, does not travel between the states.¹⁹⁰ The Delhi Sands Flower-Loving Fly (“the Fly”) became the center of a dispute in California when San Bernadino County wanted to build a hospital and power plant on the flies’ eight mile contained habitat.¹⁹¹ Particularly, the construction of an intersection forced the Fish and Wildlife Service (FWS) to inform the County that the “expansion of the intersection as planned would likely lead to a ‘taking’ of the Fly in violation of ESA section 9(a).”¹⁹² The following lawsuit resulted with the County challenging the constitutionality of the ESA under *Lopez*’s interpretation of the Commerce Clause.¹⁹³ The first argument the County makes is “the federal government does not have the authority to regulate the use of non-federal lands in order to protect a Fly, which is found only within a single state.”¹⁹⁴ Secondly, the County argues “the Constitution of the United States does not grant the federal government the authority to regulate wildlife, nor does it authorize federal regulation of nonfederal lands.”¹⁹⁵

Judge Wald and Judge Henderson constituted the majority in *NAHB*, coming to the same conclusion but completely disagreeing on how the ESA remains constitutional under *Lopez*.¹⁹⁶ Judge Wald’s opinion and Judge Henderson’s opinion concede the second prong of *Lopez* is not applicable; no instrumentalities are present.¹⁹⁷ Judge Wald resolves the constitutionality of the ESA under the channels of interstate commerce and the substantial effects of interstate commerce.¹⁹⁸ Under the channels of interstate commerce analysis, Judge Wald relies exclusively on the authority to keep the channels of interstate commerce from immoral activities.¹⁹⁹

“[T]he authority of Congress to keep the channels of interstate commerce free from immoral and injurious use has been frequently sustained, and is no longer open to question.”²⁰⁰ This freedom from immoral and injurious uses authority is based on the civil rights cases and *United States v. Darby*.²⁰¹ The majority opinion finds these cases authoritative under *Lopez*.²⁰² However, as the dissenting opinion by Judge Sentelle argues, this reliance on the “supporting analysis of *Darby* and *Heart of Atlanta* is far off the mark.”²⁰³ Judge Henderson in her concurrence agrees with the dissent on this issue and indicates that in *Darby* and the civil rights cases “the object of regulation was necessarily connected the movement of persons and things interstate and could not be characterized as regulation of the channels of commerce.”²⁰⁴ The Delhi Sands Flower-Loving Fly is inapposite to those cases since the Fly does not move out of the state or move by through the actions of humans.²⁰⁵

Second, Judge Wald, under the substantial effects analysis, concludes that the activity being aggregated to determine if it substantially affects interstate commerce can be either commercial or noncommercial.²⁰⁶ It is no surprise commentators have argued Judge Wald’s approach to evaluating noncommercial effects is more similar to the dissenting opinions in *Lopez* than the majority opinion.²⁰⁷ Furthermore, after the D.C. Circuit decided *NAHB* in 1997, the Supreme Court decided *Morrison* and *SWANCC* in 2000 and in 2001 respectively.²⁰⁸ *Morrison*’s dicta indicated that consideration of the economic value of the activity should be a part of the analysis.²⁰⁹ *SWANCC* demonstrated that the Supreme Court’s reluctance to interfere with states’ traditional area of regulations such as property and land use regulations.²¹⁰

Also, Judge Wald argues further, *NAHB* allegedly differs from *Lopez* in that the ESA’s legislative history indicates “the value of preserving genetic diversity and the potential for future commerce related to that diversity . . .” whereas *Lopez*’s legislative history did not contain any congressional findings.²¹¹ At last we reach the real crux of the debate regarding the ESA’s constitutionality. Judge Wald considers evaluating the value of a single species, admitting “it is impossible to calculate the exact impact that the loss of the option value of a single species might have on interstate commerce.”²¹² Rather, her argument is based on aggregating the activity; here development of a hospital, a com-

mercial activity, and determining whether that activity results in a substantial effect on interstate commerce.²¹³ Here, the extinction of species results in commercial actors' deprivation of an "important natural resource—biodiversity."²¹⁴ The concurrence also observes, "the Department's protection of flies regulates and substantially affects commercial development activity."²¹⁵ The dissenting opinion argues this rationale inverts the third prong of *Lopez* to expand what *Lopez* intended to limit.²¹⁶ "[I]nstead of being limited to activities that substantially affect commerce, Congress may also regulate anything that is affected by commerce."²¹⁷

Judge Henderson also rejects this biodiversity argument by agreeing with the dissent that reliance on "an uncertain potential medical or economic value" demonstrates the impossibility of calculating the value of species' extinction.²¹⁸ However, Judge Henderson posits a similar argument in which the interconnectedness of the ecosystem is reason alone for one missing piece to substantially affect interstate commerce.²¹⁹ Again, this ecosystem argument fails to fit the nexus to the Commerce Clause for the same reasons the biodiversity argument failed.²²⁰ The dissent notably points out the Commerce Clause gives Congress the authority to regulate commerce, not the ecosystem.²²¹

Finally, Judge Wald argues destruction of species is similar to the destruction of farmland in *Hodel*.²²² In that opinion, the Court used the principle that Congress may act to prevent interstate competition that has a destructive effect.²²³ Judge Wald argues the prevention of destructive interstate competition, resulting in a race-to-the-bottom among the states can be applied to the ESA.²²⁴ However, the Supreme Court decided cases such as *Darby* and *Hodel* when the Court's vast expansion of the Commerce Clause was at its zenith. Discussion of *Lopez* and *Morrison* is conspicuously absent in the majority's analysis of destructive interstate competition regarding a traditionally regulated area of state concern.²²⁵ Although the race-to-the-bottom argument is valid, it remains essentially one of the policy reasons for finding whether an activity substantially affects interstate commerce; a race-to-the-bottom exists when Congress does not regulate an activity which substantially affects interstate commerce.

B. THE SPECIES CONNECTION TO INTERSTATE COMMERCE: *GIBBS V. BABBITT*

In another close two-to-one decision, the Fourth Circuit in *Gibbs v. Babbitt*²²⁶ upheld the constitutionality of the ESA under the Commerce Clause.²²⁷ The red wolves in eastern North Carolina populated 75 wolves.²²⁸ As a result, the Fish & Wildlife Service placed the red wolves on the endangered list of the ESA.²²⁹ Private landowners and municipalities brought suit since about half of the wolves resided on private property.²³⁰

The majority opinion found the killing of red wolves would substantially affect interstate commerce under the third *Lopez* test.²³¹ *Gibbs* clearly indicates that the activity itself must be commercial in nature.²³² "[R]egulations have been upheld when the regulated activities 'arise out of or are connected with a commercial transaction, which view in the aggregate, substantially affects interstate commerce.'"²³³ The court found a "direct" relationship between the red wolf and interstate commerce in three specific areas.²³⁴ They include tourism, scientific research, and the value of their pelts.²³⁵ Also, indirectly, the taking of red wolves is related to protection of livestock and agricultural products passing through interstate commerce.²³⁶

One commentator argues that *Gibbs* may "only justify protecting species having some economic value in interstate commerce and may not support congressional authority over the numerous other endangered species that have no current economic worth."²³⁷ *Gibbs* also directly contradicts *NAHB* on the point of congressional findings.²³⁸ *NAHB* states that ESA's congressional findings indicate "the value of preserving genetic diversity and the potential for future commerce related to that diversity . . ."²³⁹ While *Gibbs*, on the other hand, finds "there are no formal congressional findings that the ESA affects interstate commerce."²⁴⁰

C. THE ACTIVITY CONNECTION TO INTERSTATE COMMERCE SECOND TIME AROUND: *RANCHO VIEJO V. NORTON*

Six years after deciding *NAHB*, the D.C. Circuit, in *Rancho Viejo v. Norton*,²⁴¹ again upheld the ESA under the Commerce Clause²⁴² under almost the exact factual circumstances as *NAHB*. In 1994, the arroyo toad was listed as an endangered species.²⁴³ This toad's scattered habitat was located in southern

California where 76% of its approximate habitat has already been destroyed.²⁴⁴ The toads limit their range to “shallow, sandy, or gravelly pools along streams” and 1.2 miles upland from those streams.²⁴⁵ So, like *NAHB*, this species is solely restricted to one state.²⁴⁶

Rancho Viejo is a residential development company that sought to transport soil to fill land around Keys Creek for further development.²⁴⁷ However, the FWS determined this “filling” would illegally harm the toad under the ESA.²⁴⁸ The developers commenced this lawsuit as a result.²⁴⁹

The D.C. Circuit’s analysis consists of two parts.²⁵⁰ The first part compares *Viejo* to *NAHB* and whether *Viejo* passes constitutional muster under *Lopez*.²⁵¹ The second part then determines if *NAHB* is still good law in light of the Supreme Court decisions *Morrison* and *SWANCC* decided since *NAHB*.²⁵²

Under the first section of analysis, the court determined that *Viejo*, like *NAHB*, passes the four *Lopez* facts under the substantial affects third prong.²⁵³ Of importance, *Viejo* did not rely on the biodiversity or ecosystem arguments presented by Judge Wald and Judge Henderson in *NAHB*, but instead, highlighted the economic nature of the regulated activity.²⁵⁴ In *Viejo*, the regulated activity was residential construction and development, which they concluded was of a commercial nature.²⁵⁵ Perhaps, the court in *Viejo* recognizing *NAHB*’s tenuous connection between the ecosystem/biodiversity and commerce, argued what it considered the stronger or more correct argument of the underlying activity being regulated.²⁵⁶ *Viejo* specifically states, “the ESA regulates takings, not toads . . . the proper inquiry is whether the challenge is to ‘a regulation of activity that substantially affects interstate commerce.’”²⁵⁷ This holding is based on reliance upon *SWANCC*.²⁵⁸ “*SWANCC* declares that which is required is an evaluation of ‘the precise object or activity that, in the aggregate, substantially affects interstate commerce.’”²⁵⁹

These arguments regarding the underlying activity overlap with the second part of *Viejo*.²⁶⁰ *Viejo* concludes that the issue passes *Morrison* because both the conduct and the actor involve commercial and economic activities.²⁶¹ Furthermore, the ESA is, under *Morrison*, a “truly national” concern and not a general regulation of land use.²⁶² However, *Viejo*’s reliance on *SWANCC*’s phrase “object or activity” is misguided.²⁶³

Under *Viejo*’s analysis, the federal government may regulate a non-commercial activity in an area of traditional state regulation under the Commerce Clause as long as the actor’s conduct is commercial or the actor himself is a commercial entity.²⁶⁴ Under the federalist limitations of *Lopez* and *Morrison* and the inability to reach individual, noncommercial actors, this approach cannot be acceptable under Commerce Clause jurisprudence.²⁶⁵ *GDF Realty*, as seen in the next section, recognizes the fallacy of this argument and disregards it.²⁶⁶

D. THE SPECIES CONNECTION TO INTERSTATE COMMERCE SECOND TIME AROUND: *GDF REALTY INVESTMENTS V. NORTON*

Private landowners and GDF Realty Investments, Ltd., in Travis County, Texas, owned a parcel of land that contained a number of caves, created by water percolating through the top layer to the aquifer underneath.²⁶⁷ They have attempted to develop the land and caves commercially, which included installing water lines for the dedication to the City of Austin.²⁶⁸ However, within the cluster of caves existed six extraordinary species of arachnids, beetles and insects, some of which do not have eyes.²⁶⁹ The FWS listed all six of these species because the development caused a danger to their habitat and the already limited habitat would result in a “take” under the ESA.²⁷⁰ The resulting lawsuit followed.²⁷¹

The District Court upheld the “takes” under the ESA, relying on the conduct of the actors and the commercial development related to interstate commerce.²⁷² The Fifth Circuit, began its analysis with a recitation of the federalist issue at hand and a reminder of the recent limitations upon the Commerce Clause.²⁷³ That having been stated, the Court focused on the importance of a “general regulatory scheme bearing a substantial relation to commerce.”²⁷⁴ This emphasis was influential in the Fifth Circuit’s decision, *United States v. Ho*²⁷⁵ prior to *GDF Realty*. However, *Ho* involved an aggregation of commercial activity, which also happened to involve activities driven by commercial considerations.²⁷⁶ Thus, the Fifth Circuit in *GDF Realty* disagrees with the District Court’s rationale of considering the plaintiffs’ commercial motivation.²⁷⁷

Next, the court considers the direct relationship and substantial effect of Cave Species upon interstate commerce.²⁷⁸ The FWS argues the Cave Species promote scientific research and possible future

medical breakthroughs.²⁷⁹ However, the Fifth Circuit considers their arguments too attenuated and hypothetical to be of any merit.²⁸⁰ Unlike *Gibbs*, tourists did not seek out the Cave Species.²⁸¹ The conclusion is clear: “Cave Species takes are neither economic nor commercial. There is no market for them; any future market is conjecture. If the speculative future medicinal benefit from the Cave Species makes their regulation commercial, then almost anything would be.”²⁸²

But, as the introduction points out, *GDF Realty* finds a general economic regulatory scheme despite the noncommercial value of the species.²⁸³ The Fifth Circuit concluded that the “ESA is an economic regulatory scheme; the regulation of intrastate takes of the Cave Species is an essential part of it. Therefore, Cave Species takes may be aggregated with all other ESA takes.”²⁸⁴ Under this analysis, a comprehensive economic regulatory scheme must actually exist within the ESA.²⁸⁵ The court found the economic regulatory scheme existed through congressional findings and legislative history.²⁸⁶ One commentator concluded, “[i]n other words, the Commerce Clause justified federal regulation to protect all endangered species even if the protection of any single species might not be an adequate justification.”²⁸⁷ The court in *GDF Realty* held that “the link between species loss and a substantial commercial effect is not attenuated” by relying on the “interdependent web” of the species to other species, including commercial and noncommercial species.²⁸⁸ As stated by Judge Dennis in his concurring opinion, “[t]he interrelationship of commercial and non-commercial species is so complicated, intertwined, and not yet fully understood that Congress acted rationally in seeking to protect all endangered or threatened species from extinction or harm.”²⁸⁹

Thus, *GDF Realty* relies upon *Lopez*’s language stating that a general economic regulatory scheme may bear a substantial relation to commerce even if individual instances are *de minimis*.²⁹⁰ *GDF Realty* then implies that *de minimis* individual instances include non-economic instances, such as the taking of Cave Species, that do not have any known commercial value.²⁹¹ The Cave Species’ noncommercial nature essentially does not matter because it is a part of a general economic regulatory scheme.²⁹² When all the endangered species are aggregated together, if their genetic diversity is lost when their “interdependent web” is threatened, then potential future developments in medicine and technologies

are also lost.²⁹³ The “ESA is an economic regulatory scheme; the regulation of intrastate takes of the Cave Species is an essential part of it. Therefore, Cave Species takes may be aggregated with all other ESA takes.”²⁹⁴

GDF Realty’s rationale has several flaws. Textually, the section providing the rule for general regulatory schemes is taken out of context.²⁹⁵ *GDF Realty* states that *Lopez* approves of *Wirtz*’s standard.²⁹⁶ *Wirtz*’s standard is then outlined: “where a general regulatory scheme bears a substantial relation to commerce, the *de minimis* character of individual instances arising under that statute is of no consequence.”²⁹⁷ However, this text in *Lopez* discussing the *Wirtz* case’s *de minimis* individual instances is actually the small impact of *Wickard*’s wheat farmer consuming his own wheat, which specifically involved commercial activity.²⁹⁸ The Fifth Circuit seems to gloss over the requirement that nonetheless, the individual activity must be economic nature as in *Wickard*.²⁹⁹ *Lopez* states, “[e]ven *Wickard*, which is perhaps the most far reaching example of Commerce Clause authority over intrastate activity, involved economic activity in away that the possession of a gun in a school zone does not.”³⁰⁰ *Morrison* also held Congress may not “regulate noneconomic, violent criminal conduct based solely on that conduct’s aggregate effect on interstate commerce.”³⁰¹ One author questions whether the aggregation in *GDF Realty* of noneconomic aggregation is appropriate merely because it falls in an economic scheme.³⁰² And, another critic points of the circular reasoning in *GDF Realty*: “[i]n order to fit intrastate endangered species within a ‘national solution,’ *GDF Realty* had to perform a *Wickard*-like aggregation of ‘takes’ of all intrastate species similarly situated to the Cave Bug ‘in order to arrive at a sum effect on interstate commerce that is, post-aggregation, substantial.’”³⁰³

Furthermore, the general regulatory scheme cannot exist just because Congress in their enactment stated the regulatory scheme is economic in nature or purpose.³⁰⁴ “[S]imply because Congress may conclude that a particular activity substantially affects interstate commerce does not necessarily make it so.”³⁰⁵ *Lopez* limited Congress’s power to regulations that actually do affect interstate commerce.³⁰⁶ The three prong landmark Commerce Clause test set forth in *Lopez* does just that purpose—it determines if the regulation substantially affects interstate commerce.³⁰⁷ Within that three pronged analysis are fac-

tors such as the congressional findings and purpose of the statute.³⁰⁸ Thus, *GDF Realty* rationales simply do not fall within *Lopez*, *Morrison*, and *SWANCC*. Under the modern Commerce Clause jurisprudence, Congress is limited to those regulations that have an economic connection to interstate commerce, preserving those areas over which states exert traditional police powers to the states. In conclusion, other sources of congressional authority for the federal protection of wildlife should be considered.

VI. SOLUTIONS

Given the potential extinction of the ESA, alternate sources of congressional authority for the federal protection of wildlife should be proposed. This next section discusses the alternative constitutional schemes to protect the environment as well as alternate equitable solutions.

The treaty clause may provide an alternate constitutional source of power for federal regulation of the environment. The Supremacy Clause of Article VI states: "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land."³⁰⁹ Treaties may preempt state law or allow Congress to enact legislation that preempts state law.³¹⁰ The treaty clause's superior power over state regulations makes this source an effective alternative for federal authority for environmental regulation.³¹¹ *Missouri v. Holland* held that Congress may legislate in order to implement a treaty that it could not otherwise legislate under the limited powers of the Tenth Amendment.³¹² In that case, "[t]o the extent that the United States can validly make treaties, the people and the States have delegated their power to the National Government and the Tenth Amendment is no barrier."³¹³ However, the Senate must ratify with a two-thirds vote any constitutional treaties that the President signs.³¹⁴

The ESA does mention international concerns and supporters of the treaty clause rely on such provisions as a basis for the constitutionality of the ESA³¹⁵ "[T]he United States has pledged itself as a sovereign state in the international community to conserve . . . various species."³¹⁶ Also, another ESA goal involves conservation plans "which meet national and international standards."³¹⁷ To this end,

over seven treaties and conventions are actually listed in the ESA.³¹⁸

Reliance upon the treaty power may prove ineffective for those nonmigratory species that "migrate" solely within borders of the United States because the treaty power supports only those international treaties listed in the ESA.³¹⁹ The Western Convention's broad and far-reaching goals extend to the migratory wildlife in general.³²⁰ Critics of relying on the treaty clause insist its authority is even more offensive than the ESA's authority under the Commerce Clause.³²¹ One critic argues the treaties named do not pertain to the entire ESA, international agreements are not sufficiently related to ESA regulations, and the treaty power still impinges upon the federalist principles as seen under the Commerce Clause.³²²

Another provision from the Constitution worth mentioning is the Property Clause. Article IV of the Constitution grants Congress the "Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging the United States."³²³ This provision allows the federal government authority to protect federal lands, such as banning hunting.³²⁴ *Kleppe v. New Mexico* upheld the constitutionality of a federal statute protecting unclaimed horses and burros on public lands, requiring private landowners to return federally claimed animals straying onto their lands.³²⁵ However, as seen, the federal authority is limited to federal lands. Animals and plants obviously do not know any boundaries between state and federal lands, demonstrating the limited effect up the property clause.

Customary international law rests on the consent of the nations so that those nations or states not agreeing to the law are not bound.³²⁶ Another area of international law is *jus cogens*. "[J]us cogens embraces customary laws considered binding on all nations and is derived from values taken to be fundamental by the international community rather than from the fortuitous or self-interested choices of nations."³²⁷ However, treaties appear advantageous over customary or *jus cogens* because the Constitution recognizes their authority, and case law demonstrates the ability of treaties to preempt contrary state law.³²⁸

A large number of law review articles and court opinions cite the destructive competitive nature of states, otherwise known as the race-to-the-bottom and the resulting lowered state standards. Ironi-

cally, consideration of one state's effort to create substantive environmental law may demonstrate an alternative to the Commerce Clause analysis. Consider Montana's approach of creating a fundamental right to a clean environment.³²⁹ Montana rewrote its state constitution in 1972 and specifically included a fundamental right to a clean environment as an inalienable right.³³⁰ The Montana constitution placed this right to a clean environment upon not only the state but upon individuals within the State, with the Montana legislature providing enforcement.³³¹ Although the right to a clean environment appears to be in direct conflict with the individual right to property use, property law has addressed this issue within the concept of nuisance.³³² "The right to a clean and healthful environment is simply a right to be free from nuisance writ large."³³³

Admittedly, the concept that states would take it upon themselves to create this fundamental right is improbable. However, given the Supreme Court's "penumbras" of fundamental rights to include privacy, arguably another area of traditional state regulation, a fundamental right to a clean environment does not appear that far-fetched.³³⁴ Another commentator argues this "natural right" is nothing new.³³⁵ The Constitution has been interpreted to provide for non-textual rights before.³³⁶ The author is careful to note this right is of a general "human welfare – not a right to nature itself."³³⁷

Another solution involves Congressional action. This solution could mean positive or negative impact for the ESA. On one end, a federal constitutional amendment specifically giving authority in a comprehensive scheme to the federal government apart from the Commerce Clause is one alternative.³³⁸ However, this solution detracts from the pendulum swing of authority from federal to state and vice versa. It is unlikely the founding fathers intended this area of power to remain unchanging in federal hands. One author, however, indicates that if the Supreme Court does not step in, "the battleground will move more squarely to Congress . . . [posing] a serious threat to the future of the ESA."³³⁹ This alternative predicts a negative impact on the ESA by Congressional members, bowing to the pressure of companies and public interest groups supporting their causes.³⁴⁰ However, Congress represents the people, including both the developers and the environmentalists.

Although the two following solutions do not provide an alternative constitutional basis, they

ameliorate the harsh effects of the ESA upon state, local, and private land users. One alternative is replacement of the absolute standards of the ESA with "bargaining entitlements," essentially a trading program.³⁴¹ This program would provide more flexibility instead of barring all land use.³⁴² Another alternative is providing federal subsidies or tax credits to help "spread the cost of species preservation."³⁴³ Subsidies would allow for a balancing of equity between the continued economic development and conservation of species.³⁴⁴

VII. CONCLUSION

The ESA is designed to ensure the federal conservation of species and their habitats, although this goal is worthy, it does not fall under interstate commerce.³⁴⁵ Under *Lopez* and *Morrison*, a substantial *economic* connection must actually exist between the protection of diversity and interstate commerce.³⁴⁶ Lower courts widely diverge on the interpretation of *Lopez* to the ESA.³⁴⁷ However, several judges recognize an individual insect or arachnid may not in and of itself possess any commercial value.³⁴⁸ Although species as a whole, basically the ecosystem, do provide opportunities for medical and technological advances, the nexus connection between the "potential" future value and interstate commerce is arguably not significant enough to overcome the substantial activity test from *Lopez*. Under federalism principles, land use regulation occurring under the ESA's habitat protection regulations are apart of the "massive legislation" left to the states. Admittedly, federal species conservation is important; however, this worthy goal should fall under another source of constitutional authority.

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ENDNOTES

- 1 16 U.S.C. §§ 1531-1544 (2000).
- 2 US CONST. art. I, § 8.
- 3 GDF Realty Investments v. Norton, 326 F.3d 622 (5th Cir. 2003), *cert. denied*, 125 S.Ct. 2898 (2005).
- 4 *Id.* at 640-41. “Nevertheless, in a sense, Cave Species takes are neither economic nor commercial. There is no market for them; any future market is conjecture.” *Id.* at 638.
- 5 *Id.* at 630, 639-40.
- 6 *See* discussion *infra* Part V.D.
- 7 *See* discussion *infra* Part V.
- 8 *See* discussion *infra* Part V.
- 9 125 S.Ct. 2898 (2005).
- 10 *Id.* However, the Supreme Court recently granted certiorari to three Clean Water Act (CWA) cases to determine the reach of federal regulation. *Rapanos v. United States*, 376 F.3d 629 (6th Cir. 2004); *Carabell v. U.S. Army Corps of Eng’rs*, 391 F.3d 704 (6th Cir. 2004); *S.D. Warren Co. v. Maine Bd. of Env’tl. Prot.*, 868 A.2d 210 (Me. 2005). These cases dispute whether the CWA can apply to isolated wetlands truly adjacent to navigable waters or those isolated wetlands merely hydrologically connected to navigable waters. *Rapanos*, 376 F.3d at 639.
- 11 *United States v. Lopez*, 514 U.S. 549 (1995).
- 12 *United States v. Morrison*, 529 U.S. 598 (2000).
- 13 *Lopez*, 514 U.S. at 561; *Morrison*, 529 U.S. at 613.
- 14 *Lopez*, 514 U.S. at 564; *Solid Waste Agency of N. Cook County v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 174 (2001) [hereinafter *SWANCC*].
- 15 *See* discussion *infra* Part V.
- 16 *See* discussion *infra* Part VI.
- 17 ROBERT V. PERCIVAL, ET AL., ENVIRONMENTAL REGULATION: LAW SCIENCE, AND POLICY 853 (4th ed. 2003).
- 18 *See id.* “With this broader understanding, the conservation of biological diversity poses a fundamental challenge, implicating, for example, climate change, toxic chemicals, and land use.”
- 19 *See* Lacey Act, ch. 553, 31 Stat. 187 (1900) (codified as amended at 16 U.S.C. § 701, 16 U.S.C. §§ 3371-3378, and 18 U.S.C. § 42 (2000)).
- 20 *Id.*
- 21 MICHAEL J. BEAN & MELANIE J. ROWLAND, THE EVOLUTION OF NATIONAL WILDLIFE LAW 193 (3rd ed. 1997) (citing remarks of Congressman John F. Lacey at 33 Cong. Rec. 4871 (1900)).
- 22 31 Stat. 187 (1900) (codified as amended at 16 U.S.C. § 701, 16 U.S.C. §§ 3371-3378, and 18 U.S.C. § 42 (2000)); *see* Bradford C. Mank, *Can Congress Regulate Intrastate Endangered Species Under the Commerce Clause? The Split in the Circuits over whether the Regulated Activity is Private Commercial Development or the Taking of Protected Species*, 69 BROOK. L. REV. 923, 933 (2004).
- 23 Ch. 128, 40 Stat. 755 (1918) (current version at 16 U.S.C. §§ 703-712 (2000)); *Missouri v. Holland*, 252 U.S. 416, 435 (1920). *See* U.S. Const. art. II, § 2, cl. 2 (treaty power); U.S. Const. art. VI, cl.2 (treaties binding on states). Treaty power as a source of an alternative federal authority for regulation of endangered species will be discussed later. *See* discussion *infra* Part VI.
- 24 Ch. 128, 40 Stat. 755 (1918) (current version at 16 U.S.C. §§ 703-712 (2000)).
- 25 *Missouri v. Holland*, s252 U.S. 416 (1920).
- 26 *Id.* at 432. “If the treaty is valid there can be no dispute about the validity of the statute under Article I, Section 8, as a necessary and proper means to execute the powers of the Government.” *See* Mank, *supra* note 22, at 934.
- 27 BEAN & ROWLAND, *supra* note 21, at 18-19.
- 28 Pub. L. No. 89-669, §§ 1-3, 80 Stat. 926 (repealed 1973)
- 29 *Id.* § 2(a).
- 30 *See id.* § 2(a).
- 31 *See* BEAN & ROWLAND, *supra* note 21, at 194; Mank, *supra* note 22, at 935.
- 32 *See* BEAN & ROWLAND, *supra* note 21, at 195.
- 33 *See id.* at 20-21. The Solicitor for the Department of Interior boldly asserted his authority for issuing regulations for lands within the National Wildlife Refuge System, stating that the United States “has constitutional power to enact laws and regulations controlling and protecting . . . [its] lands, including the . . . resident species of wildlife situated on such lands, and that its authority is superior to that of a State.” *Id.* at 20. This controversy of federal authority to regulate wildlife under the property clause was not officially settled until *Kleppe v. New Mexico*, 426 U.S. 529 (1976). *Id.* at 21.
- 34 Mank, *supra* note 22, at 935-36.

- 35 Pub. L. No. 91-135, 83 Stat. 275 (repealed 1973).
- 36 Mank, *supra* note 22, at 936.
- 37 § 3(a), 83 Stat. 275.
- 38 *Id.* § 2.
- 39 BEAN & ROWLAND, *supra* note 21, at 198.
- 40 *See* Mank, *supra* note 22, at 936.
- 41 Pub. L. No. 93-205, 87 Stat. 884 (1973) (current version at 16 U.S.C. §§ 1531-1543).
- 42 PERCIVAL, *supra* note 17, at 853; Mank, *supra* note 22, at 937.
- 43 16 U.S.C. §§ 1532(6), 1533(20). *See generally* § 1536 (requiring agencies to carry out programs to conserve both endangered and threatened species).
- 44 *Id.* § 1531(a)(3).
- 45 *Id.* § 1531(b).
- 46 Tenn. Valley Auth. v. Hill, 437 U.S. 153, 184 (1978) [hereinafter *TVA*].
- 47 Sara D. Van Loh, *The Latest and Greatest Commerce Clause Challenges to the Endangered Species Act: Rancho Viejo and GDF Realty*, 31 *ECOLOGY L. Q.* 459, 467 (2004).
- 48 Nat'l Ass'n of Home Builders v. Babbitt, 130 F.3d 1041, 1050-51 (D.C. Cir. 1997) [hereinafter *NAHB*] (quoting H.R. Rep. No. 93-412, at 4-5 (1973)).
- 49 *Id.* (quoting S. Rep. No. 91-526, at 3 (1969)).
- 50 *Id.* at 1051.
- 51 *Id.*
- 52 *See id.* (emphasizing the unique aspect of genetic variations of a particular species).
- 53 BEAN & ROWLAND, *supra* note 21, at 200.
- 54 *Id.*
- 55 *Id.*
- 56 Prof. Victoria Sutton, Introduction to the Endangered Species Act, Environmental Law, Texas Tech University School of Law (April 11, 2005).
- 57 *Id.*
- 58 16 U.S.C. § 1532(6) (2000).
- 59 *Id.* § 1532(20).
- 60 *Id.* §§ 1533(a)(2)(A) (listing in Section 4 of the Act those species as endangered or threatened), § 1533(d). Threatened species are protected by prohibitions “necessary and advisable to provide for the conservation of such species.” *Id.* § 1533(d).
- 61 *Id.* § 1532(5)(A). *See* BEAN & ROWLAND, *supra* note 21, at 202. Critical habitat also includes areas where the listed species may need to expand in the future in order to maintain survival.
- 62 16 U.S.C. §§ 1533(b)(1)(A) (2000).
- 63 *Id.* § 1533(a)(1)(E).
- 64 *Id.* § 1533(f).
- 65 Mank, *supra* note 22, at 940.
- 66 16 U.S.C. § 1536(a)(2) (2000).
- 67 *Id.* § 1538(a)(1)(A).
- 68 *Id.* §§ 1538(a)(1)(B), (C).
- 69 *Id.* § 1532(19).
- 70 *See id.*
- 71 40 Fed. Reg. 44412, 44416 (1975), current version at 50 C.F.R. § 17.3 (1995). The regulations define harm as an act or omission which actually injures or kills wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavioral patterns, which include, but are not limited to, breeding, feeding or sheltering; significant environmental modification or degradation which has such effects is included within the meaning of ‘harm.’
- 72 BEAN & ROWLAND, *supra* note 21, at 213.
- 73 16 U.S.C. § 1540(b)(1) (2000). “The stiffest penalties may be imposed against those who knowingly violate the Act’s prohibitions with respect to endangered species; they can be imprisoned for a year and fined \$50,000.” BEAN & ROWLAND, *supra* note 21, at 227 (citing § 1540(b)(1)). Penalties for violations against threatened species are exactly half the amount of prison time and fine. *Id.* at 228 (citing § 1540(b)(2)). Civil penalties for violating endangered species are a maximum of \$25,000 and violations against threatened species are half the amount. *Id.* (citing § 1540(a)(1)). Criminal violations can also include revocation of permits, licenses, etc. *Id.* (citing § 1538(d)). Finally, any equipment such as guns, ships, or aircrafts is subject to forfeiture. *Id.* (citing § 1540(e)(4)).
- 74 16 U.S.C. § 1540(g) (2000).
- 75 PERCIVAL, *supra* note 17, at 854 (citing E.O. WILSON, *BIOPHILIA* 121 (1984)). Currently, we rely on less than 1 percent of living species. *Id.*

- 76 EDWARD O. WILSON, *THE DIVERSITY OF LIFE*, at xvi (1999).
- 77 *Id.*
- 78 *Id.* at xvii.
- 79 Robert M. May, *How Many Species Are There on the Earth?*, 241 *SCIENCE* 1441 (1988).
- 80 WILSON, *supra* note 76, at xxii-iii.
- 81 PERCIVAL, *supra* note 17, at 855-56 (citing E.O. WILSON, *BIOPHILIA* 121 (1984)). "Natural products have been called the sleeping giants of the pharmaceutical industry." *Id.* at 855.
- 82 *Id.*
- 83 D.D. Soejarto & N.R. Farnsworth, *Tropical Rain Forests: Potential Source of New Drugs?*, 32 *PERSPECTIVES IN BIOLOGY AND MEDICINE* 244 (1989).
- 84 *Id.* at 250.
- 85 *Id.* at 248. This list includes drugs used for a variety of clinical uses ranging from antitumors to sedatives, male and female contraceptives, and insecticides.
- 86 WILSON, *supra* note 66, at 283. Profits from drugs using this plant exceed \$180 million a year.
- 87 *Id.*
- 88 *Id.*
- 89 *Id.* at 286.
- 90 *Id.*
- 91 *Id.* at 285. Hirudin is used to treat thrombosis, contusions, rheumatism, and hemorrhoids.
- 92 *GDF Realty v. Norton*, 326 F.3d 622, 638 (5th Cir. 2003), *cert. denied*, 125 S.Ct. 2898 (2005).
- 93 *Id.* at 640-41.
- 94 *Id.* at 638.
- 95 *See* WILSON, *supra* note 76, at xxii-iii.
- 96 *See id.* at 283-86.
- 97 *See GDF Realty*, 326 F.3d at 638; D.R. Morse & J.H. Lawton, et. al, *Fractal dimension of gestation and the distribution of arthropod body lengths*, 314 *NATURE* 731 (1988).
- 98 Morse & Lawton, *supra* note 97, at 731-733.
- 99 *See id.*
- 100 Edward O. Wilson, *The Little Things That Run the World*, 1 *CONSERVATION BIOLOGY*, 344 (1987). Wilson predicts:
- But if invertebrates were to disappear, I doubt that the human species could last more than a few months. Most of the fishes, amphibians, birds, and mammals would crash to extinction about the same time. Next would go the bulk of flowering plants and with the physical structure of the majority of the forests and other terrestrial habitats of the world. The earth would rot. As dead vegetation piled up and dried out, narrowing and closing the channels of the nutrient cycles, other complex forms of vegetation would die off, and with them the last remnants of the vertebrates. The remaining fungi, after enjoying a population explosion of stupendous proportions, would also perish. Within a few decades the world would return to the state of a billion years ago, composed primarily of bacteria, algae, and a few other very simple multicellular plants.
- 101 *United States v. Lopez*, 514 U.S. 549 (1995).
- 102 *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824).
- 103 *Id.* at 197.
- 104 *Id.* at 203.
- 105 U.S. CONST. amend. X.
- 106 *Gibbons*, 22 U.S. at 203.
- 107 *See id.*
- 108 *Wickard v. Filburn*, 317 U.S. 111 (1942).
- 109 *Id.* at 124.
- 110 *Mank*, *supra* note 22, at 946.
- 111 *United States v. Darby*, 312 U.S. 100 (1941).
- 112 *See id.* at 113.
- 113 *Hoke v. United States*, 227 U.S. 308 (1913) (upholding the Mann Act, which prohibited the transportation of individuals in interstate commerce for immoral purposes).
- 114 *Heart of Atlanta v. United States*, 379 U.S. 241 (1964).
- 115 *Id.* Qualitative effect was the uncertainty of finding lodging and the quantitative effect was African American discouragement of travel.
- 116 *Id.*
- 117 *Katzenbach v. McClung*, 379 U.S. 294 (1964).
- 118 *Id.* at 304-05.
- 119 *Id.*

- 120 *See id.*; *Heart of Atlanta v. United States*, 379 U.S. 241, 261-262 (1964).
- 121 *See* discussion *supra* Part II.
- 122 *See* discussion *infra* Part IV.B.-C.
- 123 *Hodel v. Virginia Surface Mining and Reclamation Association*, 452 U.S. 264 (1981).
- 124 *Id.* at 281-82.
- 125 *Id.* (citing 30 U.S.C. § 1201(g) (1976 ed., supp. III)).
- 126 *See id.*
- 127 *See id.*
- 128 *See* discussion *infra* Part IV.B.
- 129 *United States v. Lopez*, 514 U.S. 549 (1995).
- 130 *Id.* at 567.
- 131 John T. Winemiller, *The Endangered Species Act and the Imprecise Scope of the Substantial Effects Analysis*, 18 TUL. ENVTL. L. J. 159, 175 (2004).
- 132 *Lopez*, 514 U.S. at 559-67.
- 133 Mank, *supra* note 22, at 948 (citing *Lopez*, 514 U.S. at 559-67).
- 134 *Lopez*, 514 U.S. at 561 n.3.
- 135 *Id.* at 576-77 (Kennedy, J., concurring).
- 136 *Id.* (Kennedy, J., concurring).
- 137 *Id.* at 577 (Kennedy, J., concurring).
- 138 *Id.* at 558-59 (citations omitted).
- 139 *Id.*
- 140 *Id.*
- 141 *Id.*
- 142 *Id.*
- 143 *See id.* at 561-64.
- 144 *Id.* at 561.
- 145 *Id.* at 561-62.
- 146 *Id.*
- 147 *Id.* at 562.
- 148 *Id.* at 563-67.
- 149 *Id.* at 564 (commenting on states' historical sovereign powers).
- 150 *Id.* at 561.
- 151 *Id.*
- 152 *See* Mank, *supra* note 22, at 950.
- 153 *Lopez*, 514 U.S. at 567.
- 154 *Id.* at 626-27 (Breyer, J., dissenting).
- 155 *Id.* at 627 (Breyer, J., dissenting).
- 156 *Id.* (Breyer, J., dissenting).
- 157 *United States v. Morrison*, 529 U.S. 598 (2000).
- 158 *Id.* at 613-19.
- 159 *Id.* at 615-16.
- 160 *Id.* at 617.
- 161 *Id.* at 615-17.
- 162 *See id.* at 613.
- 163 *Id.*
- 164 *Id.* at 618.
- 165 *Id.*
- 166 *Id.*
- 167 *United States v. Olin*, 107 F.3d 1506 (11th Cir. 1997).
- 168 *Id.* at 1511.
- 169 *Id.* at 1015 (citing *Lopez*, 514 U.S. at 561-62).
- 170 *Id.* at 1511.
- 171 *Id.*
- 172 *Id.*
- 173 *Solid Waste Agency of North Cook County vv. United States Army Corps of Engineers (SWANCC)*, 531 U.S. 159 (2001).
- 174 *Id.* at 163-64.
- 175 Mank, *supra* note 22, at 960-61.
- 176 *Id.* at 961.
- 177 *Id.* at 961-62.
- 178 *Id.* at 962.
- 179 *See SWANCC*, 531 U.S. at 173.
- 180 *Id.*
- 181 *See id.* at 174.
- 182 *See id.*
- 183 *Id.* “[R]egulation of land use [is] a function traditionally performed by local governments.” *Id.* (citing Hess

- v. Port Auth. Trans-Hudson Corp., 513 U.S. 30, 44 (1994)).
- 184 See Loh, *supra* note 47, at 483
- 185 Rancho Viejo v. Norton, 323 F.3d 1062 (D.C. Cir. 2003).
- 186 National Association of Home Builder v. Babbitt (NAHB), 130 F.3d 1041 (D.C. Cir. 1997)
- 187 Gibbs v. Babbitt, 214 F.3d 483 (4th Cir. 2000).
- 188 See discussion *infra* Part V.A.-B.
- 189 See NAHB, 130 F.3d at 1057.
- 190 *Id.* at 1043.
- 191 *Id.* at 1043-44. The Delhi Sands Flower-Loving Fly [hereinafter “the Fly”] is named after its habitat, the “Delhi series” soils that are found only in the San Bernardino and Riverside Counties in California. *Id.* at 1043. Urban development in the highly populous state of California has effectively eliminated over 97 percent of the Fly’s habitat. *Id.* at 1044. In 1992, the Fish and Wildlife Service listed the Fly in a final determination as an endangered species, affording the Fly all the protections under the ESA. *Id.* However, the proposed hospital was to be a “state of the art” earthquake-proof hospital of sizable proportions. *Id.*
- 192 *Id.* at 1043.
- 193 *Id.* at 1045.
- 194 *Id.*
- 195 *Id.*
- 196 Mank, *supra* note 22, at 964.
- 197 NAHB, 130 F.3d at 1046; *Id.* at 1057 (Henderson, J., concurring). “It is clear that, in this instance, section 9(a)(1) of the ESA is not a regulation of the instrumentalities of interstate commerce or of persons or things in interstate commerce.” *Id.* at 1046.
- 198 *Id.*
- 199 *Id.* at 1046-48.
- 200 *Id.* at 1048 (quoting *Heart of Atlanta*, 379 U.S. at 256).
- 201 *Id.* (citing *Heart of Atlanta*, 379 U.S. at 256; *Darby*, 312 U.S. 100).
- 202 *Id.* (citing *Lopez*, 514 U.S. at 558))
- 203 *Id.* at 1063 (Sentelle, J., dissenting).
- 204 *Id.* at 1058 (Henderson, J., concurring).
- 205 *Id.* (Henderson, J., concurring).
- 206 *Id.* at 1049.
- 207 Mank, *supra* note 22, at 967 n.268. “Judge Wald’s broad approach to evaluating noncommercial impacts such as biodiversity was more consistent with Justices Breyer and Souter’s dissenting opinions in *Lopez* than the majority opinion.” (citing David A. Linehan, *Endangered Regulation: Why the Commerce Clause May No Longer Be Suitable Habitat for Endangered Species and Wetlands Regulation*, 2 TEX. REV. L & POL. 365, 421-422 (1998)).
- 208 United States v. Morrison, 529 U.S. 598 (2000); *SWANCC*, 531 U.S. 159 (2001).
- 209 See *Morrison*, 529 U.S. at 613.
- 210 *SWANCC*, 531 U.S. at 159, 174 (2001).
- 211 NAHB, 130 F.3d 1041, 1051 (D.C. Circuit 1997) (citing *TVA*, 437 U.S. at 178-79. See also discussion *supra* Part II.B.
- 212 NAHB, 130 F.3d at 1053.
- 213 *Id.* at 1053-54.
- 214 *Id.* at 1053-56. “[T]he case at hand involves a regulation of the conditions under which commercial activity takes place.” *Id.* at 1056.
- 215 *Id.* at 1058 (Henderson, J., concurring).
- 216 *Id.* at 1063 (Sentelle, J., dissenting).
- 217 *Id.* (Sentelle, J., dissenting).
- 218 *Id.* at 1058 (Henderson, J., concurring).
- 219 *Id.* at 1058-60 (Henderson, J., concurring).
- 220 See *id.* at 1063 (Sentelle, J., dissenting).
- 221 *Id.* at 1065 (Sentelle, J., dissenting).
- 222 *Id.* at 1054-57.
- 223 *Id.* at 1054 (citing *Hodel*, 452 U.S. 264).
- 224 *Id.* at 1055. “The ESA and the Surface Mining Act both regulate activities—destruction of endangered species and destruction of the natural landscape—that are carried out entirely within a State and which are not themselves commercial in character.”
- 225 See *id.* at 1054-57.
- 226 Gibbs v. Babbitt, 214 F.3d 483 (4th Cir. 2000).
- 227 *Id.* at 506.
- 228 *Id.* at 488.
- 229 *Id.*

- 230 *Id.* at 488-89.
- 231 *Id.* at 492-97.
- 232 *Id.* at 491.
- 233 *Id.* (quoting *Lopez*, 514 U.S. at 561).
- 234 *Id.* at 492.
- 235 *Id.*
- 236 *Id.* at 495.
- 237 Mank, *supra* note 22, at 971.
- 238 Compare NAHB, 130 F.3d 1041, 1051 with *Gibbs v. Babbit*, 214 F.3d 483, 494 n.3 (4th Cir. 2000).
- 239 NAHB, 130 F.3d at 1051.
- 240 *Gibbs*, 214 F.3d at 494 n.3.
- 241 *Ranch Viejo v. Norton*, 323 F.3d 1062 (D.C. Cir. 2003).
- 242 *Id.* at 1080.
- 243 *Id.* at 1064.
- 244 *Id.* at 1065.
- 245 *Id.*
- 246 *Id.*; NAHB, 130 F.3d at 1043.
- 247 *Ranch Viejo v. Norton*, 323 F.3d 1062, 1065 (D.C. Cir. 2003).
- 248 *Id.*
- 249 *Id.* at 1066.
- 250 *Id.* at 1066-80.
- 251 *Id.* at 1066-70.
- 252 *Id.* at 1070-80.
- 253 *Id.* at 1066-70.
- 254 See *id.* at 1071-73.
- 255 *Id.*
- 256 See Mank, *supra* note 22, at 973.
- 257 NAHB, 130 F.3d 1041, 1072 (D.C. Circuit 1997) citing *United States v. Morrison*, 529 U.S. 598, 690 (2000); *SWANCC*, 531 U.S. 159, 173 (2001). Chief Justice John Roberts dissented in this D.C. Circuit ruling, raising concern among environmental groups during his nomination process. *U.S. Supreme Court Nominee John Roberts has Limited Record in Environmental Cases*, 36 *Envtl. L. Rep. (BNA) No. 29*, 1525-26 (July 22, 2005). He wrote, “[t]he panel sustains the application of the Act in this case because Rancho Viejo’s commercial development constitutes interstate commerce and the regulation impinges on that development, not because the incidental taking of arroyo toads can be said to be interstate commerce.”
- 258 See *Rancho Viejo v. Norton*, 323 F.3d 1062, 1072 (D.C. Circuit 2003).
- 259 *Id.* (citing *SWANCC*, 531 U.S. at 173).
- 260 See *id.* at 1070-80.
- 261 *Id.* at 1073. The *Viejo* court also relies on *United States v. Ho*, where the Fifth Circuit determined that asbestos removal, not the interstate pollution, is a commercial activity. *Id.* at 1073 n.12 (citing *United States v. Ho*, 311 F.3d 589, 601-04 (5th Cir. 2002)).
- 262 *Id.* at 1078-79.
- 263 *SWANCC*, 531 U.S. at 173. *SWANCC* did not fully explain whether the object or activity meant the targeted activity or the activity benefited. The context for *Viejo*’s quote on the activity of regulations is as follows:
- These arguments [regarding migratory birds] raise significant constitutional questions. For example, we would have to evaluate the precise object or activity that, in the aggregate, substantially affects interstate commerce. This is not clear, for although the Corps has claimed jurisdiction over petitioner’s land because it contains water areas used as habitat for migratory birds, respondents, now, post litem motam, focus upon the fact that the regulated activity is petitioner’s municipal landfill, which is plainly of commercial nature. But, this is a far cry, indeed, from the navigable waters and waters of the United States to which the statute by its terms extends.
- 264 See *GDF Realty Investments v. Norton*, 326 F.3d 622, 33-34 (5th Cir. 2003).
- 265 *Id.* “Neither the plain language of the Commerce Clause, nor judicial decisions construing it, suggest that . . . Congress may regulate activity solely because non-regulated conduct by the actor engaged in the regulated activity will have some connection to interstate commerce.” *Id.* at 634.
- 266 *Id.*
- 267 *Id.* at 624.
- 268 *Id.*
- 269 *Id.* at 625. The species included the Bee Creek Cave Harvestman, the Bone Creek Harvestman, the Tooth Cave Pseudoscorpion, the Tooth Cave Spider, the Tooth

- Cave Ground Beetle and the Kretschmarr Cave Mold Beetle.
- 270 *Id.*
- 271 *Id.* at 626.
- 272 *Id.* at 627.
- 273 *Id.* at 627-628. “[T]he Supreme Court has been quite clear, the aggregation principle has limits.” *Id.* at 629.
- 274 *Id.* at 630.
- 275 *United States v. Ho*, 311 F.3d 589 (2002).
- 276 *GDF Realty*, 326 F.3d at 635 (citing *Ho*, 311 F.3d at 602).
- 277 *Id.* at 636.
- 278 *Id.* at 636-37.
- 279 *Id.* at 636.
- 280 *Id.* at 637.
- 281 *Id.*
- 282 *Id.*
- 283 *Id.* at 640.
- 284 *Id.*
- 285 *Id.* at 639-40.
- 286 *Id.* at 639.
- 287 Jeffrey M. Gaba, *Environmental Law*, Fifth Circuit Survey June 2002-May 2003, 35 TEX. TECH. L. REV. 831, 842 (2004).
- 288 *GDF Realty*, 326 F.3d at 640. “[T]he ‘essential purpose’ of the ESA is ‘to protect the ecosystems upon which we and other species depend.’” *Id.* (citing H.R. Rep. No. 93-412, at 10). One commentator compares this “interdependent web” approach conceptually to Judge Henderson’s ecosystem rationale. Winemiller, *supra* note 131, at 182-83.
- 289 *GDF Realty*, 326 F.3d at 644 (Dennis, J., concurring).
- 290 *Id.* at 630, 639-40. “In order to aggregate, the regulated intrastate activity must also be an ‘essential’ part of the economic regulatory scheme.” *Id.* at 639.
- 291 *Id.* at 640.
- 292 *See id.*
- 293 *See id.* at 639-40.
- 294 *Id.* at 640.
- 295 *See id.* at 630.
- 296 *Id.*
- 297 *Id.*
- 298 *United States v. Lopez*, 514 U.S. 549, 558 (1995). “In response to the dissent’s warnings that the Court was powerless to enforce the limitations on Congress’ commerce power because ‘[a]ll activities affecting commerce, even in the minutest degree, [*Wickard*], may be regulated and controlled by Congress, the *Wirtz* Court replied that the dissent has misread precedent as ‘neither here nor in *Wickard* has the Court declared that Congress may use a relatively trivial impact on commerce as an excuse for broad general regulation of state or private activities.’”
- 299 *See id.*
- 300 *Lopez*, 514 U.S. at 560.
- 301 *United States v. Morrison*, 529 U.S. 598, 617 (2000).
- 302 *Loh*, *supra* note 47, at 481-82.
- 303 Daniel J. Lowenberg, *The Texas Cave Bug and the California Arroyo Toad “Take” on the Constitution’s Commerce Clause*, 36 ST. MARY’S L.J. 149, 182 (2004) (quoting *GDF Realty*, 326 F.3d at 644 (Dennis, J., concurring)).
- 304 *See Lopez*, 514 U.S. at 557.
- 305 *Id.* at 557 n.2 (quoting *Hodel*, 452 U.S. at 311 (Rehnquist, J., concurring)).
- 306 *Id.* at 558-59.
- 307 *Id.*
- 308 *Id.* at 562.
- 309 U.S. CONST. art. VI.
- 310 Ernest A. Young, *The Rehnquist Court’s Two Federalisms*, 83 TEX. L. REV. 1, 151 (2004).
- 311 Gavin R. Villareal, *One Leg to Stand On: The Treaty Power and Congressional Authority for the Endangered Species Act After United States v. Lopez*, 76 TEX. L. REV. 1125, 1153 (1998).
- 312 *Missouri v. Holland*, 252 U.S. 416 (1920).
- 313 *Reid v. Covert*, 354 U.S. 1, 18 (1957) (discussing *Missouri v. Holland*, 252 U.S. 416, 432 (1920)).
- 314 U.S. CONST. art. II, § 2.
- 315 Villareal, *supra* note 311, at 1155-56.
- 316 16 U.S.C. § 1531(a)(4) (2000).

- 317 *Id.* § 1531(a)(5).
- 318 Villareal, *supra* note 287, at 1156.
- 319 *Id.* at 1157.
- 320 *Id.* at 1157-59.
- 321 *Id.* at 1160-62.
- 322 *Id.*
- 323 U.S. CONST. art. IV, § 3, cl.2.
- 324 Villareal, *supra* note 311, at 1149-51.
- 325 Kleppe v. New Mexico, 426 U.S. 529 (1976).
- 326 Siderman de Blake v. Republic of Argentina, 965 F.2d 699, 715 (9th Cir. 1992).
- 327 *Id.*
- 328 *See* discussion *supra* notes 318-22.
- 329 MONT. CONST. art. II, § 3.
- 330 *See id.*; Bryan P. Wilson, *State Constitutional Environmental Rights and Judicial Activism: Is the Big Sky Falling?*, 53 EMORY L. J. 627, 627 (2004). The statute's provision includes: "All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environmental and the rights of pursuing life's basic necessities, enjoying and defending their lives, liberties, acquiring, possessing, and protecting private property, and seeking their safety, health and happiness in all lawful ways. In enjoying these rights, all persons recognize corresponding responsibilities."
- 331 *See* MONT. CONST. art. IX, § 1.
- 332 Wilson, *supra* note 330, at 655.
- 333 *Id.*
- 334 Griswold v. Connecticut, 381 U.S. 479, 484 (1965). "The foregoing cases suggest that specific guarantees in the Bill of Rights have penumbras, formed by emanations from those guarantees that help give them life and substance." *Id.* For example, the right of privacy is found within several of the Bill of Rights. *Id.*
- 335 Bruce Ledewitz, *Establishing Federal Constitutional Right to a Healthy Environment in Us and In Our Posterity*, 68 MISS. L.J. 565, 586 (1998).
- 336 *Id.*
- 337 *Id.* at 565, 586.
- 338 *Id.* However, the actual passage of a constitutional environmental amendment seems implausible. *Id.*
- 339 Winemiller, *supra* note 131, at 198.
- 340 *Id.* "The specter of flies, toads, and cave bugs thwarting the construction of hospitals, schools, and Wal-Marts is sure to encourage some in Congress to vote for changes to the ESA."
- 341 William F. Pedersen, *Using Federal Environmental Regulations to Bargain for Private Land Use Control*, 21 YALE J. ON REG. 1, 22-24 (2004).
- 342 *Id.*
- 343 Winemiller, *supra* note 131, at 198-99.
- 344 *Id.*
- 345 *See* discussion *supra* Part II.B.
- 346 *See* discussion *supra* Part IV.B.-C.
- 347 *See* GDF Realty v. Norton, 326 F.3d 622 (5th Cir. 2003); Rancho Viejo v. Norton, 323 F.3d 1062 (D.C. Cir. 2003); Gibbs v. Babbit, 214 F.3d 483 (4th Cir. 2000); NAHB, 130 F.3d 1041 (D.C. Cir. 1997).
- 348 *See* GDF Realty, 326 F.3d at 638; NAHB, 130 F.3d at 1058.

RECENT DEVELOPMENTS

AIR QUALITY

TCEQ PROPOSES STANDARD PERMITS TO AUTHORIZE EMISSIONS FROM MSS ACTIVITIES

The Texas Commission on Environmental Quality (TCEQ) has proposed a standard permit to authorize emissions resulting from normal maintenance, startup, or shutdown (MSS) activities. Tex Comm'n on Env'tl. Quality, Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown Emissions Releases 2 (December 2005) at http://www.tceq.org/permitting/air/newsourcereview/mss_1286715.pdf. An affirmative defense exists for MSS emissions releases that are not already included in a permit. 30 TEX. ADMIN. CODE § 101.222(c) (2005). The TCEQ intends to phase out the affirmative defense for MSS emissions. Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown Emissions Releases at http://www.tceq.org/permitting/air/newsourcereview/mss_1286715.pdf at 2. Previously permitted facilities will have two years to obtain authorization for their MSS emissions before losing the affirmative defense. *Id.*

MSS emissions can be authorized in three ways. *Id.* at 3. MSS emissions can be claimed as a part of a facility's initial registration for a standard permit or as a revision to an existing permit. *Id.* MSS emissions can be claimed under a permit by rule as provided for in 30 TAC § 106.268. *Id.* Finally, MSS emissions can be permitted by the proposed MSS standard permit. *Id.*

To use the MSS standard permit, the applicant must satisfy a number of technical requirements. It must make specific representations for quantifying MSS emissions. Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown Emissions Releases at http://www.tceq.org/permitting/air/newsourcereview/mss_1286715.pdf at 4. It must use best available control technology (BACT) to minimize MSS emissions to the greatest extent possible. *Id.* at 4-5. It must perform an air quality monitoring analysis that demonstrates that the impacts of all applicable air contaminants will not exceed any state regulatory standard, any national ambient air quality standard, and any value

enumerated in Table 1 of the proposed standard permit. *Id.*

These data must be sealed by a professional engineer, and the entire registration must be certified and signed by a responsible official. *Id.* at 6. The registration must include descriptions of how the applicant met the technical requirements. *Id.* The applicant must pay a fee of \$900 unless it is a small business; non-profit organization; or municipality, county, or independent school district with a population of 10,000 or fewer residents, in which case the fee is \$250. Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown Emissions Releases at http://www.tceq.org/permitting/air/newsourcereview/mss_1286715.pdf at 6.

The TCEQ can prevent the use of the standard permit by notifying the applicant that there are significant health concerns regarding its potential MSS emissions. *Id.* at 9. The applicant must address those concerns to the TCEQ's satisfaction before its emissions can be authorized by the standard permit. *Id.* If the TCEQ does not send a written acceptance, the standard permit will authorize the MSS emissions within 90 calendar days of the TCEQ's receipt of the registration. *Id.* at 6.

If there will be a change that will increase emissions, the permittee must submit a registration alteration no later than 60 days prior to the start of construction or implementation of the change; construction may begin if the TCEQ either accepts in writing or does not respond within 60 days. *Id.* The permittee must pay a fee of \$450 unless the TCEQ receives the requested alteration within 180 days after the original registration approval. Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown Emissions Releases at http://www.tceq.org/permitting/air/newsourcereview/mss_1286715.pdf. A change that does not increase emissions requires only a notification to the TCEQ no later than 30 days after construction or implementation of the change begins. *Id.* at 6-7.

Agricultural facilities, animal feeding operations, and all associated facilities are subject to a different set of requirements for using the MSS standard permit. *Id.* at 10. They must not emit

particulate matter in amounts greater than the emission rates specified in 30 TAC § 111.71, meet BACT, submit compliance records upon request, and provide descriptions of their emissions and BACT compliance. *Id.*

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FEDERAL CASENOTES

FIFTH CIRCUIT HOLDS THAT COMPANY'S ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE POLICY COVERS CERCLA REMEDATION COSTS

The Fifth Circuit Court of Appeals recently examined whether a company's claims-made Environmental Impairment Liability (EIL) insurance policy covered the remediation costs that the Environmental Protection Agency (EPA) imposed against the company under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 (2000). *Int'l Ins. Co. v. RSR Corp.*, 426 F.3d 281 (5th Cir. 2005). Applying Texas law in this diversity case, the court held that sufficient evidence supported the jury's finding that the EPA had made a claim against the insured company, RSR, within the insurance policy period, interpreting "claim" broadly in favor of the insured, and that RSR had not waived its coverage. *Id.* at 284. The Fifth Circuit upheld the judgment of the district court, which declared that the EIL insurer, International, was contractually obligated to indemnify RSR for the CERCLA remediation costs that the EPA had assessed against RSR. *Id.*

In 1982, during RSR's EIL policy period, the EPA stated in a press release that it was placing an RSR property in Washington on the National Priorities List (NPL) because of substantial lead pollution from RSR's smelter. *Id.* at 285. RSR forwarded the press release to its insurer, International's predecessor in interest. *Id.* The EPA's final listing, which also occurred within RSR's EIL policy period, noted that "[p]ublication of sites on the final NPL will serve as notice to any potentially responsible party ("PRP") that the Agency may initiate Fund-financed response actions." *Id.* (quoting 48 Fed. Reg. 40,658 (Sept. 8, 1983)).

International filed suit in 2000 in the Northern District of Texas seeking a declaratory judgment regarding its obligations for the remediation costs of an RSR West Dallas property. *Id.* The ensuing litigation included the dispute over indemnification for the Washington property. *Id.*

On appeal, the Fifth Circuit first analyzed the EIL policy, noting that the policy did not define the term "claim." *Id.* at 286. The policy merely stated that it covered "all sums which the insured shall be obligated to pay . . . for damages by reason of the liability imposed upon the insured by law on account of . . . personal injury . . . property damage [or] impairment of . . . any other environmental right." *Id.* at 288. However, the Fifth Circuit held that, under Texas precedent, the policy term "damages" covers CERCLA claims against the insured for response costs, cleanup costs, and costs of remediation. *Id.* (citing *SnyderGeneral Corp. v. Century Indem. Co.*, 113 F.3d 536, 539 (5th Cir. 1997); *Bituminous Cas. Corp. v. Vacuum Tanks Inc.*, 75 F.3d 1048, 1053 (5th Cir. 1996)). Moreover, the court recognized that most jurisdictions have abandoned the distinction between legal and equitable damages; contamination to air, soil, and groundwater caused by pollution is now seen as "property damage." *See id.* (citations omitted).

Nonetheless, International argued, in part, that the definition of "claim" in the jury's instruction was legally erroneous. *Id.* at 286. The district court had instructed the jury that "the term 'claim' means an assertion by a third party that, in the opinion of the third party, the insured is liable to it for damages within the risks covered by the policy . . ." *Id.* at 290. Applying Texas' substantive insurance law, the Fifth Circuit recognized that, when a contract term is reasonably susceptible to more than one meaning, courts should adopt a construction that favors the insured. *Id.* at 291 (citing *Nat'l Union Fire Ins. Co. v. Hudson Energy Co.*, 811 S.W.2d 552, 555 (Tex. 1991)). Because the EIL policy did not define the

term “claim,” the term was susceptible to more than one meaning. *Id.* Thus, the district court did not err by adopting a meaning of “claim” that was favorable to RSR. *Id.* at 295. In addition, the Fifth Circuit held that a supplemental jury charge – instructing the jurors to consider contextual evidence regarding the EIL policy and whether the EPA and RSR thought there was a “claim” – was not misleading because Texas law allows for extrinsic evidence when a contract is ambiguous; moreover, courts should follow the construction of the parties in interpreting the agreement. *Id.* (citing *Kelly v. Rio Grande Computerland Group*, 128 S.W.3d 759, 768 (Tex. App.—El Paso 2004, no pet.)) (other citations omitted).

Finally, in addition to resolving International’s waiver issue in favor of RSR, the Fifth Circuit held that the record contained sufficient evidence to support the jury’s verdict that the EPA made a claim against RSR within the EIL policy period. *Id.* at 297. The record reflected the undisputed facts that RSR’s smeltery caused the lead pollution and that RSR was liable under CERCLA. *Id.* Although the court acknowledged that an NPL listing is merely the first step in a process, the court also stated that with the listing comes a “virtual certainty of further investigative and enforcement actions” by the EPA. *Id.*

Especially damaging to International’s case was the testimony of the former counsel to International’s predecessor in interest. The testimony detailed how the insurer viewed the NPL listing as a claim

by the EPA against RSR that, in turn, led to a claim by RSR against the insurer. *See id.* at 298. The Fifth Circuit rejected International’s assertion that the testimony violated the attorney-client privilege, reasoning that the former counsel described and made independent inferences from communications between him, RSR, and its agents, without revealing any confidential communications between him and his client, the insurance company. *Id.* at 299.

RSR clarifies the interaction of claims-made EIL insurance policies and claims for CERCLA costs. This case recognizes the trend in a majority of federal and state jurisdictions, including Texas, to interpret the insurance policy term “damages” to cover CERCLA costs of response, remediation and cleanup. *RSR*, 426 F.3d 287-88. RSR also reiterates that, under Texas’ insurance law, including the interpretation of EIL policies, the court will construe the term “claim” in favor of the insured when the term is deemed ambiguous. *Id.* at 291-92.

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NATURAL RESOURCES

CHANGES IN THE APPLICATION PROCESS FOR PERMITS ALLOWING THE USE OF NATURAL RESOURCES FOR ENERGY PROJECTS AND FUTUREGEN PROJECTS IN TEXAS

Governor Perry’s executive order No. RP-49 and the subsequent standing order issued by the State Office of Administrative Hearings (SOAH), address the permitting procedures for energy projects. Perry issued executive order No. RP-49 on October 27, 2005, establishing three goals: an electric customer education choice campaign, electric conservation by state agencies, and diversification of the energy supply. Tex. Gov. Exec. Order No. RP-49 (Oct. 27, 2005), available at <http://www.governor.state.tx.us/divisions/press/exorders/rp49> (last visited Feb. 8, 2006).

tx.us/divisions/press/exorders/rp49 (last visited Feb. 8, 2006).

The first aspect of the Governor’s order, the electric customer education choice campaign, is a privately-funded campaign to make customers aware of the choices available in the retail electric service industry. The Public Utility Commission will administer the plan, which will begin sometime after January 1, 2006.

The second aspect of the order, the State Agency Energy Savings Program, requires all state agencies to develop energy conservation plans with percentage reduction goals for electricity, gasoline, and natural gas. The state agencies are required to follow with quarterly reports; these reports will address whether state agencies met their goals, while offering suggestions for areas of possible improve-

ment. The Texas Commission on Environmental Quality (“TCEQ” or “Commission”) committed to a five-percent reduction in energy consumption over the five-year period starting January 1, 2006. TCEQ Energy Saving Plan 1-2 (Dec. 2005) (Tex. Comm’n on Env’tl. Quality), *available at* http://www.tceq.state.tx.us/admin/support-services/EnergySaving-Plan_1255990.pdf (last visited Feb. 8, 2006). The agency will use the average recorded consumption of electricity, gasoline, and natural gas during the calendar year to calculate the five-percent reduction goal. *Id.*

The third aspect of the order, Diversity of Energy Supply, covers permitting procedures for energy projects in Texas and imposes an accelerated timeline for permit processing. Tex. Gov. Exec. Order No. RP-49 (Oct. 27, 2005), *available at* <http://www.governor.state.tx.us/divisions/press/exorders/rp49> (last visited Feb. 8, 2006). Pursuant to the order, the TCEQ must “apply the full resources of the agency to prioritize and expedite the processing of environmental permit applications that are protective of the public health and environment and propose to use Texas’ natural resources to generate electrical power” to encourage diversity in the supply of energy. *Id.* Under the order, the SOAH must hold a preliminary hearing within one week of the thirty-day public notice period for an electric generating facility issued a draft permit. *Id.* The SOAH must designate parties and set a schedule that returns a proposal for decision (“PFD”) to the Commission within six months from the referral date. *Id.* Under the accelerated schedule, the TCEQ must require notice within 48 hours of referral to the SOAH. *Id.* The TCEQ is to give priority consideration to PFDs issued by the SOAH for permits covered by the order. Both the SOAH and the TCEQ must report and explain delays that could lead to noncompliance with the requirements of the order to the Governor’s Office on a monthly basis. *Id.*

To implement the executive order, the SOAH issued a standing order on October 28, 2005 that set forth procedures for all cases covered under the Governor’s order. State Office of Admin. Hearings, *All Cases Involving Application for Permits from the Texas Commission on Environmental Quality for Electrical Power Generation Facilities*, (Oct. 28, 2005), *available at* <http://www.soah.state.tx.us/elect-gen-permits-standing-order.pdf> (last visited Feb. 8, 2006). Pursuant to the standing order, by the preliminary hearing date, applicants must pre-

file in electronic format with the SOAH all evidence that the applicants will offer at the hearing, including witness testimony, the entire application with attachments, and all other documentary evidence. *Id.* Evidence not pre-filed by this deadline will not be admitted at the hearing unless the applicant shows that the need for the evidence to prove the case could not have been reasonably anticipated. To accelerate discovery, the standing order required that each applicant disclose and produce certain information by the date of the preliminary hearing, including information related to applicable statutes and rules, witness background, and documents prepared by or for witnesses in anticipation of witness testimony. *Id.*

The potential for economic, social, and environmental benefits from FutureGen (clean coal) projects in Texas led to the legislature’s enactment of HB 2201 codified in the Texas Health and Safety Code and Texas Water Code, which requires changes in the permitting procedures for FutureGen projects. TEX. HEALTH & SAFETY CODE ANN. § 382.0565 (Vernon 1992), TEX. WATER CODE ANN. § 5.558 (Vernon 1997); *see also* Tex. Comm’n Env’tl. Quality, <http://www.tceq.state.tx.us/rules/pendadopt.html#05053> (describing HB 2201). Specifically, the streamlining requirement applies to “Permits required to construct a component of the Future Gen project designed to meet the FutureGen emissions profile as defined by Section 382.0565, Health and Safety Code.” TEX. WATER CODE ANN. § 5.558(a). “FutureGen” refers to a U.S. Department of Energy initiative to build a clean coal technology prototype power plant using a combination of technologies for carbon sequestration, carbon dioxide enhanced oil recovery, electric generation, and hydrogen production, with the end result being a zero-emission fossil fuel power plant. U.S. Department of Energy, *FutureGen: Tomorrow’s Pollution-Free Power Plant*, <http://www.fossil.energy.gov/programs/powersystems/futuregen/>.

To improve the state’s competitive advantage when competing for federal funds for FutureGen projects, HB 2201 requires the TCEQ, as well as the Texas Water Development Board and the Railroad Commission of Texas, to establish streamlined permitting procedures for FutureGen projects no later than September 1, 2006. Tex. H.B. 2201, § 13, 79th Leg., R.S. (2005). Specifically, HB 2201 eliminates contested case hearings on applications for permits and requires the modification of public notice re-

quirements to reflect the elimination of contested case hearings. TEX. WATER CODE ANN. § 5.558(c).

In the November 25, 2005, the TCEQ proposed rules to implement the required streamlining. 30 Tex. Reg. 7831 (Nov. 25, 2005). These rules establish the streamlined procedures for permitting a FutureGen project in a new Chapter 91 of Title 30 of the Texas Administrative Code and make corresponding changes to other sections of Title 30. *Id.* With the exception of the elimination of the contested case hearing requirement, the TCEQ's rules provide that applications for FutureGen projects are subject to the same public participation requirements, such as public meetings and public comments, that otherwise

would apply to the authorization being sought. *See id.* As of date of this article, the rules were pending adoption by the Commission.

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P U B L I C A T I O N S

THE EPA'S USE OF SUPPLEMENTAL ENVIRONMENTAL PROJECTS

Steven Bonorris, Chelsea Holloway, Annie Lo, and Grace Yang, *Environmental Enforcement in the Fifty States: The Promise and Pitfalls of Supplemental Environmental Projects*, 11 *Hastings W.-N.W. J. Env. L. & Pol'y* 185 (Spring 2005).

For over a decade, the Environmental Protection Agency (EPA) has utilized Supplemental Environmental Projects (SEPs or "projects") as a tool to help resolve environmental enforcement actions. *Environmental Enforcement in the Fifty States ("Environmental Enforcement")* gives a comprehensive overview of SEPs, and discusses the pertinent legal issues and model practices for the use of SEPs.

BACKGROUND

Traditionally, deterrence was the primary basis for assessing penalties for the violation of environmental regulations. Steven Bonorris, Chelsea Holloway, Annie Lo, and Grace Yang, *Environmental Enforcement in the Fifty States: The Promise and Pitfalls of Supplemental Environmental Projects*, 11 *HASTINGS W.-N.W. J. ENV. L. & POL'Y* 185, 187 (Spring 2005). However, recent trends indicate a move away from the deterrence as a primary purpose and instead focus on self-reporting, community involvement, and innovative "win-win" solutions. *Id.* SEPs are a very significant part of this trend. *Id.*

EPA SEP GUIDELINES AND MEMORANDA

SEPs are "environmentally beneficial projects that go beyond compliance" that are treated as part of the "penalty" in environmental enforcement actions. *Id.* at 188. When SEPs are implemented as part of the settlement of an enforcement action, the "EPA may mitigate a portion of the civil penalty that otherwise might have been assessed." *Id.* However, the project must be voluntary and must improve, protect, or reduce risks to public health or the environment. *Id.*

Once an informal practice, policies on the use of SEPs are now formally detailed at the federal level in EPA's 1998 *Final SEP Policy* (Policy) and 2002 *Supplemental Environmental Projects (SEP) Policy*. *Id.* at 189. *Environmental Enforcement* details the requirements of EPA's SEP policies and lists the established categories of SEPs. *Id.* at 189-90. The article also presents a comprehensive overview of the six key topics covered by the *Final SEP Policy* and associated guidance. *Id.* at 189-95.

First, even though a regulated entity may choose to implement a beneficial SEP, the *Final SEP Policy* notes that a minimum cash penalty is still necessary for reasons of "deterrence and fairness." *Id.* at 190. The article lays out the EPA's five-step calculation process for the final penalty. *Id.* at 190-91. Second, the *Final SEP Policy* requires that the SEP be "accurately and completely" described in the settlement agreement, noting that the regulated entity retains the responsibility of ensuring the project is implemented and completed as agreed upon in the settlement. *Id.* at 192. Unsatisfactory completion

of SEPs will result in stipulated penalties for the settling party. *Id.* Third, the *Final SEP Policy* encourages community involvement where appropriate. Indeed, EPA issued a 2003 guidance memorandum to facilitate this endeavor. *Id.* at 192-93. Community involvement is not required, however, and the memorandum lists several factors to consider when assessing the appropriateness of involving the community. *Id.* at 193. Fourth, SEPs that comply with the *Final SEP Policy* generally do not require special approval, but all SEPs that are part of a settlement must be documented. *Id.* at 193. Fifth, a 2003 memorandum supplementing the *Final SEP Policy* provides guidance on how to treat SEPs that may ultimately prove profitable to the regulated entity. *Id.* at 194. Profitable SEPs may be accepted, but the memorandum's limits on such SEPs are strict. *Id.* Finally, further memoranda supplementing the *Final SEP Policy* deal with the issues of aggregating individual SEPs into a larger project and using third parties to manage SEPs. *Id.* at 194-95. Both aggregation and the use of third parties may be permissible in certain situations. *Id.*

THE LAW OF SEPs

The article provides a thorough discussion of SEP laws as well as background on how SEPs relate to the statutory and prosecutorial discretion of EPA. *Id.* at 195-202. The information discussed in the article focuses on federal case law and administrative materials, but is also relevant to states. *Id.* at 195. The article explains that, although "no Congressional act expressly authorizes EPA to accept SEPs in mitigation of civil enforcement penalties," the EPA possesses great discretion in this area and "no court has ever invalidated an EPA-approved settlement with a SEP." *Id.* at 196. The EPA's broad and virtually unreviewable discretionary power arises from the agency's congressional authorization to administer and enforce federal environmental laws. *Id.* at 197. "The broad power that EPA enjoys to mitigate or abandon civil enforcement actions would appear to include the lesser power to settle an action by incorporating a SEP." *Id.* at 198.

Although the EPA's authority came under attack by the Federal General Accounting Office (GAO) in the 1990's, the issue was limited to mobile source violations under the Clear Air Act, and a subsequent revision of the SEP policy has resolved that question for the most part. *Id.* at 199-200.

The article further suggests that specific state SEP guidelines are preferable over more informal application of SEPs on an ad hoc basis. *Id.* at 200. Some courts, however, have found even specific SEP guidelines to lack clarity, and the limited case law in this area raises unanswered questions. *Id.* at 200-02.

POLICY IMPLICATIONS OF SUPPLEMENTAL ENVIRONMENTAL PROJECTS

The article highlights the policy goals of enforcement actions, including the promotion of environmental compliance and the protection of the environment and public health. *Id.* at 202-03. The article takes an in-depth look at both the benefits and risks of SEPs, *id.* at 203-08, noting that SEPs benefit all parties involved. *Id.* at 205. SEPs encourage cooperation between regulators and violators, serve as laboratories for innovation, and benefit the community by promoting restorative justice. *Id.* at 203-04. In addition, SEPs provide an opportunity for regulated entities to repair their damaged corporate image. *Id.* at 205. Hence, the authors describe SEPs as a "win-win situation for all parties involved." *Id.* Critics argue that the benefits to the regulated community are too great and weaken the deterrent effect of environmental regulations. *Id.* Critics also cite as risks the discretionary nature of SEPs, opportunistic violators, and inconsistency in enforcement. *Id.* at 206. SEPs have also come under criticism by community groups, some of whom regard unadorned penalty actions as a more just course of action. *Id.* at 207. The article points out that the promulgation of formal and public federal and state SEP policies minimizes many of the noted concerns; risks of abuse are greater where formal policies or guidelines are absent. *Id.* at 209. Currently, thirteen states have no such guidelines or policies. *Id.* The Texas Commission on Environmental Quality (TCEQ) has developed standard procedures for successful completion of SEPs, instead of paying a monetary penalty. Tex. Comm'n on Env'tl. Quality, GI-352, Supplemental Environmental Projects, (May 2006), available at http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-352_1501164.pdf.

MODEL PRACTICES OF THE FIFTY STATES

Although many states follow the federal SEP model, others have taken different approaches. *Id.* at 210. The article provides an examination of different

state SEP policies and practices and provides model practices for policymakers, regulators, and affected communities. *Id.* The article categorizes model SEP practices by the values that justify each practice. *Id.*

The first set of values identified in the article is “the most aspirational.” *Id.* These are the values that deal with environmental justice and “are concerned with extending environmental enforcement beyond the punitive to the remedial, and encompass the collaborative model of engagement between the regulator and the regulated community.” *Id.* The article explains how environmental justice values support notions of restorative and social justice and how these values dovetail with the use of SEPs. *Id.* at 211-12. State practices in this area involve either giving preference to or providing further mitigation for SEPs that promote environmental justice. *Id.* at 212. In addition, SEP “idea banks” successfully incorporate community input in providing regulated entities with pre-approved SEP lists. *Id.* at 213. The article explains that a new collaborative model is on the rise in this area and cites New Hampshire’s use of this approach. *Id.* at 214-15.

A second category of values animating SEPs involves a state’s unique issues. This approach allows states to tailor their practices to unique or smaller violations that may require special treatment to ensure an effective solution. *Id.* at 216. The article describes several model practices for less significant enforcement contexts including small SEP contributions toward larger SEP projects managed by third parties. *Id.* at 217. Also mentioned are practices for transboundary SEPs that often arise in smaller states. *Id.* at 218.

The last identified value set influencing SEP policies and practices in the states concerns efficient and effective administration of environmental laws. *Id.* at 218-221. The authors found that some states take an open or transparent approach to SEPs to respond to the common criticisms of SEPs. *Id.* at 218-19. Model practices in this area focus on oversight and enforceability, transparency and neutrality in the approval process, and community input. *Id.* at 219-221.

CONCLUSION

The article concludes that, by focusing on cooperation, SEPs can be beneficial to all involved parties—from affected communities to regulators to regulated entities. *Id.* at 221. However, the use of SEPs present some risks, and the authors encourage the use of model practices to implement safeguards, better ensuring that SEPs benefit the public and are not subject to abuse. *Id.* at 221-22. Thus, nexus requirements and practices focusing on transparency and accountability are highly valuable in realizing the benefits of SEPS while limiting the risks. *Id.* at 222.

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SOLID WASTE

TCEQ PROPOSES NEW REGULATIONS REQUIRING GROUNDWATER MONITORING WELLS

In response to a growing concern for the protection of groundwater resources in the state, TCEQ has proposed a new regulation requiring groundwater monitoring wells to be spaced at a minimum of 600 feet for point of compliance monitoring systems at solid waste disposal facilities. 30 TEX. ADMIN. CODE §330 (2006) (Tex Comm’n on Env’tl. Quality) Draft Rules for Adoption *available at* [http://www.tceq.](http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoption/04031330_ado.pdf)

[state.tx.us/assets/public/legal/rules/rule_lib/adoption/04031330_ado.pdf](http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoption/04031330_ado.pdf) (Jan. 13, 2006).

Groundwater monitoring wells sample and test groundwater for the presence of leachate chemicals. Ideally, when wells are closely spaced, more contamination can be detected. Although it is widely recognized that municipal landfills can and do leak contaminants into groundwater, for years TCEQ regulations have had no minimum distance requirements for the spacing of groundwater monitoring wells. 30 TEX. ADMIN. CODE §330.231 (2003) (Tex Comm’n on Env’tl. Quality, Municipal Solid Waste). The existing regulations require well spacing to be

determined solely on a site-specific basis, taking into account aquifer thickness, groundwater flow rate and direction, in addition to stratigraphy and hydraulic characteristics of saturated and unsaturated geologic units. *Id.* Environmental groups have long argued that the existing regulations are inadequate to protect groundwater resources in the state. Robin Schneider, Texas Campaign for the Environment and Public Research Works, *Texas Trash Rules Matter* (2006) available at: http://www.texasenvironment.org/landfill_reports.cfm.

TCEQ originally proposed a 300-foot minimum spacing requirement between point of compliance wells. 30 Tex. Reg. 5449, 5657 (2005) (to be codified at 30 TEX. ADMIN. CODE. §330.403) (proposed Sept. 9, 2005) (Tex Comm'n on Env'tl. Quality). After industry objected that the spacing requirement was arbitrary and ignored the technical aspects of a landfill's geologic setting and liner design, however, TCEQ increased this distance to 600 feet. In addition, industry argued that the 300-foot spacing requirement was not cost effective, because if adopted, it would needlessly double the number of groundwater wells at most facilities, resulting in increased installation and sampling costs. Consequently, TCEQ revised the proposed rules and increased the minimum well spacing requirement from 300 feet to 600 feet. 30 TEX. ADMIN. CODE §330 (2006) (Tex Comm'n on Env'tl. Quality) Draft Rules for Adoption available at http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoptions/04031330_ado.pdf (Jan. 13, 2006)

In addition to requiring minimum well spacing of 600 feet, the proposed rules oblige owners and operators of existing landfills to comply with the revised well spacing requirements by applying for a permit modification within two years from the effective date of the 2006 Revisions. 30 Tex. Reg. 5449, 5655 (2005) (to be codified at 30 TEX. ADMIN. CODE §330.401) (proposed Sept. 9, 2005) (Tex Comm'n on Env'tl. Quality).

Initially, the proposed regulations required owners or operators of disposal facilities to create models to justify greater well spacing. 30 Tex. Reg. 5449, 5656 (2005) (to be codified at 30 TEX. ADMIN. CODE §330.401) (proposed Sept. 9, 2005) (Tex Comm'n on Env'tl. Quality). Industry objected to the modeling requirement, arguing that site-specific analysis other than modeling should be used to support an alternative spacing of wells. Industry stressed that factors such as groundwater flowlines, the nature

of the geology, the depth of the groundwater, the usability of the groundwater, and the amount of annual rainfall can be analyzed to determine appropriate well spacing. Additionally, industry claimed that the type of geology best suited for landfills, such as tight, seamless clay, is the most difficult soil to model. As a result, less suitable geology might be favored simply because of its capability to be easily modeled. Industry also argued that, if TCEQ wants to require a default distance between wells, then the distance should be measured between groundwater flowlines, rather than the distance between the wells themselves. 30 TEX. ADMIN. CODE §330 (2006) (Tex Comm'n on Env'tl. Quality) Draft Rules for Adoption available at: http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoptions/04031330_ado.pdf (Jan. 13, 2006)

In response to these comments, TCEQ revised the proposed rules. Owners or operators will still have to submit technical demonstrations supporting well spacing for the groundwater monitoring system; however, the option to model for greater well spacing has been removed. 30 Tex. Reg. 5449, 5656 (2005) (to be codified at 30 TEX. ADMIN. CODE §330.401) (proposed Sept. 9, 2005) (Tex Comm'n on Env'tl. Quality). Furthermore, under §330.403(e)(2), an owner or operator may use an applicable multi-dimensional fate and transport numerical flow model to supplement the determination of the spacing of monitoring wells or other sampling points. *Id.*

It remains to be seen whether TCEQ's overhaul of the solid waste disposal rules will provide better protection for groundwater resources in the state of Texas. While industry believes well spacing should be based on site-specific analysis, and that arbitrarily setting a minimum distance requirement will not necessarily provide better protection for groundwater, environmental groups see the 600-foot minimum requirement as a step in the right direction, but hope that more constraints are forthcoming.

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STATE CASE NOTES

TNRCC SITE-CLOSURE LETTER DOES NOT PROTECT LANDOWNER FROM SUIT

The Fourth Court of Appeals recently held that a site-closure letter from the Texas Natural Resource Conservation Commission (TNRCC) does not bar future action against the landowner for soil contamination. *Ronald Holland's A-Plus Transmission & Automotive, Inc. v. E-Z Mart Stores, Inc.*, 184 S.W.3d 749 (Tex. App.—San Antonio 2005, no pet. h.). The controversy arose when a neighboring landowner discovered levels of soil contamination above state action levels on his property years after the defendants completed remediation. *Id.* at 752. The court's decision opens the door to suits by neighboring landowners long after a regulatory agency approves the remediation of soil contamination. *Id.*

FACTS

The Hollands' property was adjacent to E-Z Mart's property. *Ronald Holland's* at 752. Before E-Z Mart leased the property for a gas station, Williams Express owned the property. *Id.* In 1988, Williams Express removed an underground waste oil storage tank. *Id.* Williams Express removed 250 cubic yards of contaminated soil from the property and then sold the property to Jim Yates in 1989. *Id.* Yates leased the property to E-Z Mart. *Id.* E-Z Mart later discovered a gas line leak and disposed of 886 cubic yards of contaminated soil. *Ronald Holland's* at 752. In 1998, E-Z Mart again found contamination in excess of state action levels and completed soil testing and remediation in compliance with TNRCC requirements. *Id.* TNRCC issued a letter stating that E-Z Mart had met site-closure requirements and that further remediation was not necessary. *Id.*

The Hollands leased a portion of their property to Trinity Wireless in 2001 for the construction of a cell tower. *Ronald Holland's* at 752. An explosion occurred while Trinity Wireless was boring a hole for the tower. *Id.* Testing revealed soil contamina-

tion in excess of state action levels. *Id.* Because the Hollands' property had previously been used only for farming, an independent environmental consulting firm determined that the contamination resulted from the migration of hydrocarbons from E-Z Mart's gas station to the Hollands' property. *Id.*

RULING

Relying on *Taco Cabana, Inc. v. Exxon Corp.*, 5 S.W.3d 773, 778 (Tex. App.—San Antonio 1999, pet. denied), E-Z Mart asserted that the site-closure letter that the TNRCC issued had barred the Hollands' action. *Ronald Holland's* at 754. In *Taco Cabana*, the court entered a take-nothing judgment in favor of Exxon because Exxon complied with the remediation standards set forth in the Texas Water Code and Texas Administrative Code. *Taco Cabana* at 778. In *Ronald Holland's*, the court disagreed with E-Z Mart's reliance on *Taco Cabana*, distinguishing the situations on the grounds that "a wrongdoer is not relieved from liability by the Texas Administrative Code, the Water Code, or the TNRCC's regulations for contamination of another's land when it is above the state action level." *Ronald Holland's* at 755 (citing *Taco Cabana* at 778). The court held that a site-closure letter will not exonerate property owners from common law liability "if subsequent unreasonable contamination is discovered." *Id.*

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WASHINGTON UPDATE

LANDMARK CLEAN WATER ACT CASES ARGUED BEFORE THE SUPREME COURT

Rapanos v. United States and Carabell v. U.S. Army Corps of Engineers

On February 21, 2006, the United States Supreme Court heard oral arguments in the cases of *Rapanos v. U. S.*, 376 F.3d 629 (6th Cir. 2004) and *Carabell v. U.S. Army Corps of Engineers*, 391 F.3d 704 (6th Cir. 2004). The cases offer the Supreme Court an opportunity to address the confusion surrounding the extent of the U.S. Army Corps of Engineers' jurisdiction over permitting under Section 404 of the Clean Water Act (CWA). The parties asked the Court to clarify the definition of "navigable waters" under the statute, with potentially significant implications for the administration of one of the nation's key pollution-control statutes. *Rapanos*, 376 F.3d at 635; *Carabell*, 391 F.3d at 708.

FACTS AND PROCEDURAL POSTURE

Petitioners in both cases appealed decisions of the U.S. Court of Appeals for the Sixth Circuit. In *Rapanos*, petitioners Judith and John Rapanos and three of their wholly owned companies sought to develop land they owned in three Michigan counties. *Rapanos*, 376 F.3d at 632. They began to dredge and fill wetlands on their land without obtaining the permits required by Section 404 of the CWA. *Id.* at 632-633. Civil proceedings were initially brought against the Rapanoses in 1994, and in 2000, the U.S. District Court for the Eastern District of Michigan found that they had filled their property in violation of the CWA. *Id.* at 634. The Sixth Circuit affirmed in 2004. *Id.* at 632.

The *Carabell* petitioners sought to develop a parcel of land containing wetlands separated from a drainage ditch by a man-made berm. *Carabell*, 391 F.3d at 705. In 1998, the Carabells received a permit to fill the wetlands from the Michigan Department of Environmental Quality (MDEQ), but the EPA notified the landowners that the state permit did not suffice to constitute authority to fill under the CWA. *Id.* at 706. The Carabells then applied for the required federal permit from the U.S. Army Corps of Engineers (Corps) but, in 2000, the Corps denied the permit. *Id.*

QUESTIONS PRESENTED

The Supreme Court faced questions about the scope of jurisdiction under the CWA. The petitioners' briefs ask whether CWA jurisdiction extends to wetlands that are hydrologically isolated from navigable waters of the United States, in *Carabell*, or wetlands that are adjacent to tributaries of waters of the United States, in *Rapanos*. The petitioners' briefs also ask whether such regulation exceeds the boundaries of the federal government's power to regulate intrastate activities under the Commerce Clause. Reply Brief at 1-2, *Carabell v. U.S. Army Corps of Eng'rs*, 126 S.Ct. 1295 (S.Ct. 2006) (No. 04-1384); Petitioners' Reply Brief at 1, *Rapanos v. U.S.*, 126 S.Ct. 1294 (S.Ct. 2006) (No. 04-1034).

CLEAN WATER ACT PRECEDENT

Current CWA jurisdictional boundary lines are marked by *U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) and *Solid Waste Agency of Northern Cook County ("SWANCC") v. U. S. Army Corps of Eng'rs*, 531 U.S. 159 (2001).

In *Riverside Bayview*, the Supreme Court upheld the Corps' inclusion of adjacent wetlands in its definition of waters of the United States. *Carabell*, 391 F.3d at 709; see 33 C.F.R. § 328.3(a)(7) (2006). The *SWANCC* court, while avoiding alteration of the *Riverside Bayview* holding, limited the Corps' CWA jurisdiction by rejecting the Corps' Migratory Bird Rule. *Carabell*, 391 F.3d at 709. The result was a definition of the outer limit of Corps' jurisdiction that did not include isolated intrastate waters. *Id.*

In both *Rapanos* and *Carabell*, the Sixth Circuit agreed with a majority of Circuits that apply *SWANCC* narrowly, only to isolated waters, and rejected the notion that *SWANCC* restricts federal regulation to navigable waters and non-navigable waters directly abutting navigable waters. *Id.*; *Rapanos*, 376 F.3d at 637.

THE PARTIES' ARGUMENTS

The brief for the United States in *Rapanos* stresses the reasonableness of inclusion of wetlands adjacent to tributaries of traditional navigable waters in the definition of "waters of the United States." Petitioners' Reply Brief at 14-15, *Rapanos v. U.S.*, 126 S.Ct. 1294 (S.Ct. 2006) (No. 04-1034). The United States asserts that federal jurisdiction is appropriate because, practically, pollution entering

tributaries may eventually affect quality of downstream navigable waters. *Id.* Additionally, the United States argues that regulation of adjacent wetlands is appropriate based on the Supreme Court's holding in *Riverside Bayview*. *Id.* at 15. In its brief, the United States' also takes the position that regulation of adjacent wetlands is an appropriate extension of Corps' authority under the Commerce Clause because the Corps may act to prevent pollution of navigable waters, and in the aggregate, discharges into adjacent wetlands substantially impact interstate commerce. *Id.* at 16.

The brief for respondent U.S. Army Corps of Engineers in *Carabell* asserts that Corps regulation of wetlands adjacent to a covered tributary is appropriate even though the wetlands are separated from the tributary by a man-made berm. Reply Brief at 13, *Carabell v. U.S. Army Corps of Eng'rs*, 126 S.Ct. 1295 (S.Ct. 2006) (No. 04-1384). The brief also calls for deference to agency determinations of which bodies of water to regulate, and asserts that if a berm or similar feature ever caused the wetland not to affect adjacent waters, that would be justification for granting a permit, not for nullifying federal jurisdiction. *Id.* at 14-15.

On the other hand, the brief for petitioners Rapanos argues that Congress intended that the term "waters of the United States" be limited to traditionally navigable waters and adjacent wetlands. Petitioners' Reply Brief at 1, *Rapanos v. U.S.*, 126 S.Ct. 1294 (S.Ct. 2006) (No. 04-1034). Regulation of wetlands adjacent to tributaries of navigable waters based on a hydrological connection, however, exceeds the federal government's regulatory authority under the CWA. *Id.* at 2-3.

The Carabells' brief focuses, in part, on its understanding of *SWANCC*. The brief claims that the CWA's jurisdiction does not extend to wetlands absent a "significant nexus" to navigable waters, and that the minimum requirement for a nexus to be significant is surface or groundwater hydrological connection. Reply Brief at 1-2, *Carabell v. U.S. Army Corps of Eng'rs*, 126 S.Ct. 1295 (S.Ct. 2006) (No. 04-1384).

AMICI

Both sides of the dispute have drawn supporters and multiple *amici* briefs. The Respondents drew support from various governmental entities, environmental groups, and scientists, among others. Petitioners Rapanos and Carabell were supported by

various groups representing the interests of property owners and developers.

Notably, a coalition of 34 states ("the States") led by Michigan and New York filed an amicus brief supporting respondent United States' authority to regulate wetlands "adjacent to the nation's tributaries." Brief of Amici Curiae the States of New York, et al. supporting Respondents, *Rapanos v. U. S.*, 125 S.Ct. 1294 (S.Ct. 2006) (Nos. 04-1034, 04-1384). The States see federal regulation of non-navigable tributaries and adjacent wetlands as the proper federal state balance in water quality regulation. *Id.* at 4. The States stress that much of the pollution that eventually reaches navigable waters is originally discharged into non-navigable tributaries or their adjacent wetlands, necessitating federal regulation. *Id.* Such discharges into tributaries find their way to downstream states, and absent federal control, states would have to disproportionately regulate in-state pollution sources to make up for the impacts of upstream states' pollution. *Id.* at 3-4.

The petitioners' supporters, such as the International Council of Shopping Centers, *et al.*, emphasize that federal regulation far beyond the nation's navigable waters is "wreaking havoc on legitimate land development." Brief of Amici Curiae the International Council of Shopping Centers, et al. supporting Petitioners, at 4, *Rapanos v. U. S.*, 125 S.Ct. 1294 (S.Ct. 2005) (Nos. 04-1034, 04-1384). The National Association of Home Builders argues on behalf of Petitioners that discharges into drainage ditches should be regulated as point source discharges under Section 402 of the CWA instead of by Corps permitting under Section 404, and thus the Corps' assertion of jurisdiction in these cases is improper. Brief of Amicus Curiae Nat. Assoc. of Home Builders in Support of the Petitioners, at 1-2, *Rapanos v. U. S.*, 125 S.Ct. 1294 (S.Ct. 2005) (Nos. 04-1034, 04-1384).

IN ORAL ARGUMENTS AND THE JUSTICES' QUESTIONS

Attorneys representing the Carabells and the Rapanoses emphasized different arguments in front of the Supreme Court on February 21, 2006.

Reed Hopper, representing the Rapanoses, argued that the Corps overreached by attempting to regulate non-navigable tributaries of navigable waters. 2006 WL 496220, at *3. He also asserted that the language of the CWA does not authorize Corps jurisdiction over the millions of miles of tributar-

ies in the country. *Id.* Hopper also claimed that this overreaching exceeds the agency's authority under the Commerce Clause. *Id.* at *43. He fielded questions from Chief Justice Roberts and Justices Scalia, Alito, Ginsburg, and Souter about proper jurisdictional boundaries under the CWA. *See Supreme Court Hears Landmark Wetlands Cases at* <http://www.bdlaw.com/assets/attachments/111.pdf>, at 1.

Timothy A. Stoepker, attorney for the Carabells, chose to focus on the distinctions between his clients' situation and that of the Rapanoses. *See Supreme Court Hears Landmark Wetlands Cases at* <http://www.bdlaw.com/assets/attachments/111.pdf>, at 1-2. He emphasized the isolated nature of the Carabells' wetlands due to the presence of a berm that separated the property from a ditch draining into waters of the United States. *Id.* Stoepker asserted that the drainage ditch on the other side of the berm should more appropriately be regulated as a point source under Section 402 of the CWA. *Id.* He responded to a question from Justice Stevens by stating that development on the property that created a hydrological connection still fell outside the Corps' jurisdiction. *Id.* Justice Souter claimed such a law would "lock the barn after the horses go." *Id.* at 2.

Solicitor General Paul D. Clement argued on behalf of the United States and the U.S. Army Corps of Engineers. 2006 WL 496220. He described the hydrologic connection to navigable waters on the

Rapanos property, and answered questions from the Chief Justice regarding the definition of a tributary and how it is distinguishable from waters of the United States. *Id.* at *44. When Clement stated that manmade features, such as storm drains, could constitute tributaries, Justice Scalia responded with skepticism over a storm drain representing waters of the United States. *Id.* at *52. In countering Stoepker's arguments for the Carabells, Clement stated that proximity to navigable waters or their tributaries is sufficient to designate a wetland as adjacent, and a hydrologic connection to navigable waters is not required. *Id.* at *68. Although he later conceded after questioning that mere proximity is not enough to create jurisdiction, Clement continued to deny the validity of Stoepker's hydrologic connection argument. *Id.* at *74.

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WATER QUALITY & WATER UTILITIES

APPLICANTS FOR CERTIFICATES OF CONVENIENCE AND NECESSITY ARE NOT REQUIRED TO OWN OR OPERATE WATER SYSTEM

Bexar Metro. Water Dist. v. Tex. Comm'n on Env'tl. Quality, No. 03-04-00574-CV, 2006 WL 305195, at *1 (Tex. App. Feb 10, 2006).

In 2000, the City of Bulverde (Bulverde) filed an application to the Texas Commission on Environmental Quality (TCEQ) for a certificate of convenience and necessity (CCN) to provide water utility service in its extra-territorial jurisdiction and some outlying areas. *Bexar Metro. Water Dist. v. Tex. Comm'n on Env'tl. Quality*, No. 03-04-00574-CV, 2006 WL 305195, at *1 (Tex. App. Feb 10, 2006). Bulverde contracted with Guadalupe-Blanco River Authority

(GBRA) to design, construct, finance, and operate the water system. *Id.* Bexar Metropolitan Water District (BexarMet) requested a hearing on Bulverde's application and subsequently filed its own application to amend its certificate to provide water utility service to an area that overlapped with the service area sought by Bulverde. *Id.* In 2002, an administrative law judge (ALJ) conducted a hearing, in which the ALJ found that Bulverde, by itself, lacked the financial, managerial, and technical capability to provide continuous and adequate service. *Id.* The ALJ recommended denial of Bulverde's application and approval in part of BexarMet's application. *Id.* at *2. The Commission, however, approved Bulverde's application, relying on the contractual relationship between Bulverde and GBRA; the Commission held that ownership of the facilities by the CCN applicant

was not legally required. *Id.* After the Commission decision was affirmed by the trial court, BexarMet appealed to the Austin Court of Appeals. *Id.*

STATUTORY REQUIREMENTS FOR GRANTING A CCN

The Texas Water Code requires that, to approve an application to obtain a CCN for water utility service, the Commission must ensure that the applicant: (i) possesses the financial, managerial, and technical capability to provide continuous and adequate service; (ii) is capable of providing drinking water that meets specified statutory requirements; and (iii) has access to an adequate supply of water. TEX. WATER CODE ANN. § 13.241(a)-(b) (West 2000). BexarMet argued that the applicant itself must possess the necessary capabilities, or alternatively, that the agreement between Bulverde and GBRA does not grant Bulverde sufficient control to satisfy the “continuous and adequate service” requirement. *Bexar Metro. Water Dist.*, 2006 WL 305195, at *2. Additionally, BexarMet argued that Bulverde did not meet the requirements of Commission regulations favoring regionalization of water utilities. *Id.*

AGENCY DISCRETION IN DECISIONMAKING

In considering whether § 13.241(a) was satisfied, the court of appeals determined that the language “in determining whether to grant a certificate...the Commission shall ensure...” was indicative of broad discretion placed in the hands of the Commission. *Id.* at *4. This language from § 13.241(a) was contrasted with the language in § 13.241(d), which states that an “applicant must demonstrate...” *Id.* In choosing the application of Bulverde over BexarMet, the Commission chose between “two quality players.” *Id.* at *6. Although BexarMet also had experience and capabilities as a water supplier, the appeals court did not find that the decision in favor of Bulverde was “arbitrary, capricious, or represented an abuse of discretion” and found that it was supported by “substantial evidence.” *Id.*

DID THE CCN APPLICANT HAVE TO OWN THE FACILITIES USED TO SUPPLY WATER?

The court found that use of the term “possesses” in § 13.241(a) did not require the applicant to own the facilities. *Id.* at *4. The court reviewed this issue of statutory construction de novo, with the construction of the statute by the Commission entitled to “great weight by reviewing courts.” *Id.* at

*3 (citing *State v. Public Util. Comm’n*, 883 S.W. 2d 190, 196 (Tex. 1994)). The legislature had not defined “possess” in the Water Code. *Id.* at *4. Turning to Black’s Law Dictionary, the court found “possess” to mean “to have in ones own actual control,” and “control” to mean “the direct or indirect power to direct the management and policies of a person or entity whether...by contract or otherwise.” *Id.* (citing BLACK’S LAW DICTIONARY 1201 (8th ed. 2004)) The ordinary meaning of the term thus supported the argument that, by entering into a contract with GBRA, Bulverde could be within the statutory requirements for possessing the necessary capabilities to provide continuous and adequate service. *Id.*

The court found additional support for Bulverde’s demonstration of capabilities through contracts with another entity in the Interlocal Cooperation Act. *Id.* at *5. Under that statute, a municipality, district, or river authority may contract with another to obtain water supply for the purpose of increasing the efficiency and effectiveness of local governments. TEX. GOV’T CODE ANN. § 791.026 (Vernon 2004).

After finding that Bulverde did not have to own facilities in order to “possess” them, the court found that substantial evidence supported the Commission’s conclusion that Bulverde did possess the capabilities to provide “continuous and adequate service.” *Id.* The court cited testimony current operations of GBRA, and the financial status and budget of Bulverde as indicative of such capabilities. *Id.*

ENFORCEMENT ISSUES

Although Bulverde would hold the CCN, the court found that the Commission had sufficient authority to bring any necessary enforcement action against GBRA. *Id.* at *6. The Water Code provides that the attorney general can bring an action on behalf of the Commission against *any* retail public utility that violates Chapter 13. TEX. WATER CODE ANN. § 13.411(a) (Vernon 2000). Chapter 13 imposes obligations on a retail public utility that provides water without a certificate – prohibiting the discontinuance, reduction, or impairment of service without Commission approval. *Id.* § 13.250(c), (d). Additionally, every district that furnishes water service must provide service that is safe, adequate, efficient, and reasonable. *Id.* § 13.139. Finally, the contract between Bulverde and GBRA is specifically subject to all applicable sections of the Texas Water Code and Commission rules. *Bexar Metro. Water Dist.*, 2006 WL 305195, at *7.

DID THE APPLICANT MEET THE REGIONALIZATION REQUIREMENTS?

State policy, as enforced by Commission rules, encourages the development of optimum regional systems to prevent redundancy and ensure low rates. Tex. Const. art. III §49-d(a), 30 Tex. Admin. Code §291.102(b) (2003). Prior to the Commission granting a certificate for an area requiring a physically separate water system, an applicant must demonstrate that regionalization is not economically feasible. TEX. WATER CODE § 13.241(d). Although BexarMet suggested that Bulverde did not meet this requirement, the Commission found that Bulverde's system would, in fact, be part of the Western Canyon Treated Water Project. *Bexar Metro. Water Dist.*, 2006 WL 305195, at *7. Thus, the water supplied by GBRA would result in economies of scale. *Id.* Citing testimony from GBRA's Director of Project Development, the court of appeals held that the Commission's findings regarding Bulverde's system being part of a regional water project were supported by substantial evidence. *Id.*

IMPACT OF DECISION

An applicant for a CCN need not own the facilities necessary to supply water to the CCN service

area. *Id.* at *4. Chapter 13 of the Water Code allows a CCN holder to contract with another water supplier who will provide the facilities and operations to supply water within the service area, and also includes the enforcement mechanisms necessary to ensure that the Commission can ensure that such an arrangement meets the requirements of continuous and adequate service. *Id.* (applying TEX. WATER CODE ANN. § 13.241(a)); TEX. WATER CODE ANN. § 13.411. As a result of this holding, a relatively small entity which does not own or operate water supply facilities can nonetheless obtain a CCN. Thus more entities may begin to compete for CCNs.

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WATER RIGHTS

CITY OF IRVING IS GRANTED AUTHORIZATION TO REUSE WATER

INTRODUCTION

On January 6, 2006, the Texas Commission on Environmental Quality (TCEQ) granted the City of Irving's request for an amendment to its water right (the Amendment) to allow it to reuse treated wastewater effluent in the future. *See* Tex Comm'n on Env'tl. Quality, *Amendment to Certificate of Adjudication No. 03-4799C*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (Jan. 6, 2006). This amendment authorized the City of Irving to indirectly reuse up to 31,600 acre-feet per year of Sulphur River Basin water in the Trinity River Basin. *Id.* at 2. This authorization for future reuse, however, is contingent upon the City of Irving identifying all specific points of discharge and diversion, and obtaining "bed and banks" permits by satisfying the requirements of Texas Water Code § 11.042. *Id.*; *see also* TEX. WATER CODE ANN. § 11.042 (Vernon 2005).

This amendment is the first application the Commissioners have considered since the statutes were amended by Senate Bill 1 in 1997). While other permits for indirect reuse have been issued, these have been the result of uncontested or settled permit matters and thus been issued directly by the Executive Director without the need to have Commission consideration. This decision could be important to applicants that are similarly situated to the City of Irving because the approach would allow them to obtain approval to reuse effluent that it will discharge to the river in the future and prior to knowing where its discharge and redirection points will be.

BACKGROUND

Many municipalities are examining the reuse of its municipal effluent as a way to meet their future water needs. Todd Chenoweth and Robin Smith, Tex Comm'n on Env'tl. Quality Interoffice Memorandum, *Reuse Issues in Water Rights Permitting* (Feb. 25, 2005) at 1 (*at* <http://www.tceq.state>).

tx.us/assets/public/permitting/watersupply/water_rights/030905summary.pdf). The City of Irving has had the right to impound water from the Sulphur River Basin in Lake Chapman, within the Trinity River basin, since 1968. See Tex Comm'n on Env'tl. Quality, *City of Irving Closing Argument*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (June 8, 2005), at 1. The City of Irving is authorized to divert and use its Lake Chapman water in the Trinity River Basin for municipal and industrial purposes. *Id.* The water was not physically available in the Trinity River Basin until 2003, and at the time of the application for the amendment, the Lake Chapman water had been diverted into the Trinity River Basin for less than one year. *Id.* at 9. Based on the Texas Water Development Board's 2004 population and water-demand projections, Irving needs to develop at least 23,758 acre-feet per year of additional water supply to meet future demands. *Id.* at 13. To meet the growing water demand of its increasing population, Irving sought the right to reuse treated wastewater effluent derived from its Lake Chapman water.

PROVISIONS OF THE AMENDMENT

The Amendment expressly authorizes the City of Irving to reuse 31,600 acre-feet per year of effluent derived from the Sulphur River Basin water in the Trinity River Basin. Tex Comm'n on Env'tl. Quality, *Amendment to Certificate of Adjudication No. 03-4799C*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (Jan. 6, 2006), at 2. The other provisions of the Amendment do the following: (1) delete Special Condition 5.A., which originally required water diverted but not consumed to be returned to the Trinity River Basin at the owner's disposal plant and the disposal plants of the industrial users; (2) require Irving to identify all specific points of discharge and diversion and satisfy the requirements of Texas Water Code § 11.042 for the use of the bed and banks of State watercourses; (3) require Irving to provide a method to measure and account for all Lake Chapman water reused within the Trinity River Basin; (4) deny Irving authorization to discharge any wastewater effluent for Irving's reuse into a facility owned or operated by the City of Dallas; and (5) subject Irving's right to reuse its Lake Chapman water to the Trinity River Authority's right, prior to discharge from the TRA treatment facility, to make direct use of those return flows. *Id.* at 3.

Several of these provisions are the result of negotiations between Irving and initial objectors to the Amendment, namely the Trinity River Authority and the City of Dallas. An important provision also requires Irving to identify specific points of discharge and diversion, as well as satisfy the requirements of Texas Water Code § 11.042, prior to implementing any indirect reuse project. *Id.*

WHAT IS WATER REUSE?

In water rights permitting, reuse typically involves the use treated wastewater effluent derived from surface water that has already been beneficially used once under a water right, or the reuse of groundwater-derived effluent that has been placed in a watercourse. 30 TEX ADMIN. CODE § 297.1(44) (2005). The City of Irving application is only for surface water. Tex Comm'n on Env'tl. Quality, *Amendment to Certificate of Adjudication No. 03-4799C*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (Jan. 6, 2006), at 2. There are two types of reuse: direct reuse and indirect reuse. Direct reuse occurs "when effluent from a wastewater treatment plant is piped directly to a place where it is used." Todd Chenoweth and Robin Smith, Tex Comm'n on Env'tl. Quality Interoffice Memorandum, *Reuse Issues in Water Rights Permitting* (Feb. 25, 2005) at 1 (http://www.tceq.state.tx.us/assets/public/permitting/watersupply/water_rights/030905summary.pdf). Indirect reuse is "the reuse of water, usually effluent, which is placed back into the river or stream." *Id.* TCEQ staff has concluded in some cases, such as Irving's, that a "bed and banks" permit under Texas Water Code § 11.042 is required to use a watercourse to transport treated effluent for any subsequent diversion and reuse. *Id.* The City of Irving's return flows will go to the Trinity River Authority Central Regional Wastewater System's treatment plant, and then Irving will divert and reuse the treated effluent after it is discharged back into the watercourse. Tex Comm'n on Env'tl. Quality, *City of Irving Closing Argument*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (June 8, 2005), at 3.

TEXAS WATER CODE § 11.042: "BED AND BANKS" PERMITS

Irving's reuse of Lake Chapman water is contingent on acquiring "bed and banks" permits once diversion and discharge points are delineated. Tex Comm'n on Env'tl. Quality, *Amendment to Certificate of Adjudication No. 03-4799C*, Docket No. 2003-1530-

WR; SOAH Docket No. 582-04-8097 (Jan. 6, 2006), at 2. When the water is discharged from the TRA treatment plant, Irving needs a Texas Water Code § 11.042 “bed and banks” permit to transport the water. TEX. WATER CODE ANN. §§ 11.042(a)-(c) (Vernon 2005). There is little legislative guidance regarding § 11.042, and major issues remain unresolved. Todd Chenoweth and Robin Smith, Tex Comm’n on Env’tl. Quality Interoffice Memorandum, *Reuse Issues in Water Rights Permitting* (Feb. 25, 2005) at 1 (http://www.tceq.state.tx.us/assets/public/permitting/watersupply/water_rights/030905summary.pdf). One issue is the conflict between Texas Water Code § 11.042 and § 11.046. *Id.* Section 11.046(c) says that as soon as surface water is returned to the stream, it effectively is state water again and is therefore amenable to appropriation by others. TEX. WATER CODE ANN. §§ 11.042(a) (Vernon 2005). This results in conflicts between appropriators and those planning to indirectly reuse effluent. Tex Comm’n on Env’tl. Quality Interoffice Memorandum, at 1. This is especially true in situations where the “bed and banks” applicant is seeking to reuse historically discharged return flows that other appropriators have relied upon. *Id.* at 1-2.

Furthermore, other issues regarding priority of a “bed and banks” permit remain unclear, including: whether § 11.042 is a new appropriation and thus subject to § 11.134; how to determine the water availability for a “bed and banks” permit; who can apply for an indirect reuse permit; what the required notice is for a “bed and banks” application for historically discharged return flows; how to determine rights in times of water shortages; and whether water sales by a treatment plant is acceptable. *Id.* at 2-5.

Even after the City of Irving’s Amendment was granted, the exact analysis required under § 11.042 remained unclear. This was because there was no significant historical discharge of the Lake Chapman water into the Trinity River Basin. Tex Comm’n on Env’tl. Quality, *City of Irving Closing Argument*, Docket No. 2003-1530-WR; SOAH Docket No. 582-04-8097 (June 8, 2005), at 9. Because the water was not historically in the Trinity River Basin, authorizing the Amendment posed no harm to appropriators or the environment. *Id.*; see also Tex. Comm’n on Env’tl. Quality, *Executive Director’s Closing Argument*, Docket No. 2004-1178-WR; SOAH Docket No. 582-045-8097 (June 8, 2005), at 2-3. Therefore the Executive Director of TCEQ was able to summarily

conclude that the authorization to reuse the water will not adversely impact the Trinity River instream uses, environment, or other appropriators. *Id.*, at 3. However, by the time Irving obtains a bed and banks authorization the facts may have changed due to the effluent having been discharged to the river so that the cessation of those flows could impact water rights and the environment.

CONCLUSION

Water reuse is an innovative way for a city to make the most efficient use of its water resources. The Texas Water Code can facilitate this type of efficient use by authorizing the right to reuse water which has not been historically discharged. The City of Irving has been granted the authorization for reuse, subject to the future acquisition of § 11.042 “bed and banks” permits. This authorization grants reuse of this wastewater to the City and no one else can obtain a bed and banks authorization for these return flows. The exact analysis for bed and banks permit for surface water historically discharged return flows, however, remains unclear due to Irving’s unique factual situation. If Irving delays its application for “bed and banks” permits for a few years while continuing to discharge Lake Chapman water into the Trinity River Basin, the city may face a more exacting § 11.042 analysis due to environmental impacts of the return flows.

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FUTURE EVENTS

NOVEMBER

- 11/8** **Internet**
Doing Business with the Government (webcast)
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www.texasbarcle.com/CLE/home.asp
- 11/13** **Houston**
Alternative Dispute Resolution Course 2006 (video)
Contact: State Bar of Texas
www.texasbarcle.com/CLE/home.asp
- 11/15** **Internet**
The Demise of Attorney/Client Privilege (webcast)
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- 11/16 - 17** **Midland**
Advanced Oil / Gas & Energy Resource Law Course 2006 (video)
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- 11/16 - 17** **Washington, D.C.**
Species Protection and the Law – Endangered Species Act, Biodiversity Protection, and Invasive Species Control
Cosponsored by the Environmental Law Institute with the cooperation of the Endangered Species Committee of the ABA Section of Environment, Energy, and Resources
www.ali-aba.org/aliaba/cm013.htm
- 11/30 - 12/1** **Albuquerque, New Mexico**
11th Annual Conference – Land Use Law: A Sustainable New Mexico
Contact: CLE International
www.cle.com/dev/product_info.php?products_id=747

DECEMBER

- 12/4 - 8** **Austin**
40-Hour Basic Mediation Training Course
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www.utexas.edu/law/academics/centers/cppdr/training/courses.php#basic
- 12/14 - 15** **Austin**
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JANUARY 2007

01/04 - 5 **Denver, Colorado**
4th Annual NEPA Conference
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www.cle.com/upcoming/PDFs/DENNEP07.pdf

JUNE 2007

6/4 - 8, 2007 **Austin**
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CHANGES IN THE ENVIRONMENT

Barbara Porter Fratila, formerly Assistant General Counsel of the Port of Houston Authority, has moved to her home on the San Bernard River in Brazoria County to establish a private practice in real estate, wills, probate, and environmental matters. She will complete work on her LLM in environmental law at the University of Houston Law Center in December 2006.

Nathan Block has moved to Houston and become an associate with McGlinchey Stafford, P.L.L.C.

Gregory M. Ellis, former General Manager of the Edwards Aquifer Authority, started his own private practice about two years ago, primarily serving groundwater conservation districts.

Andrew M. Abrameit, *Student Editor-In-Chief* of the Texas Environmental Law Journal for 2005-2006, has joined Nunley Davis Jolley Cluck Aelvoet, L.L.P., in Boerne, where his practice focuses on real estate, water rights, and other property law matters.

The Texas Commission on Environmental Quality named **Robert Martinez** Director of the Environmental Law Division. Previously, he was the Water Utilities/Water Rights Senior Attorney at TCEQ.

Wendall Corrigan Braniff, formerly the managing partner of Braniff Attorneys-Counselors' Austin offices, has joined the Texas Water Development Board as its General Counsel.

Jim Bateman, **Michelle McFaddin**, and **Robert Flores** joined the Texas Water Development Board as staff attorneys.

David Jason Klein, joined the water practice group of Lloyd Gosselink. Before joining the firm, David worked at the Texas Commission on Environmental Quality, specializing in water rights, water utility permitting, water utility rate, dam safety, and district matters.

Jason Hill has recently joined the Austin office of Kemp Smith, LLP, as an associate in the firm's Environmental, Administrative and Public Law section.

Adina Opalek Owen, *Student Recent Developments Editor* of the Texas Environmental Law Journal for 2005-2006, has joined Gulf South Pipeline Company, LP, in Houston, as corporate counsel.

Brad Raffle has started a new venture, Conservation Capital, with an office in downtown Houston.



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