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**THE NORTH TEXAS REGION AND THE DEVELOPMENT OF WATER
RESOURCES IN THE TRINITY RIVER BASIN OF TEXAS, 1840-1998**

THESIS

**Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements**

For the Degree of

MASTER OF SCIENCE

By

Michael D. Sparkman, B.A.

Denton, Texas

August, 1999

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This study focuses on the development of water resources in the Trinity River basin for navigation, flood control, water supply, recreation, and allied purposes. Special emphasis is given to the development of the upper Trinity River basin through the influence of community leaders in Dallas and Fort Worth. A desire harbored for generations by upper basin residents for creating a navigable waterway on the Trinity River coalesced in the twentieth century into a well organized movement for all facets of water resources development.

Sources include correspondence, speeches, and promotional materials of civic leaders, politicians, and other citizens, as well as works by the United States Army Corps of Engineers.

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CHAPTER 1

TOO MUCH OR NOT ENOUGH: THE TRINITY RIVER BASIN, WATER, AND HISTORY

Samuel Taylor Coleridge did not have the State of Texas or its Trinity River in mind when he wrote the famous line, “Water, water, everywhere/nor any drop to drink.” He had an altogether different setting in mind as he put his poetic pen to paper. Despite this obvious distinction, the residents of Texas living in the watershed of the Trinity River, from the Dallas-Fort Worth metropolitan complex to the outskirts of metropolitan Houston on the Gulf Coast, have faced a water-related dilemma of their own throughout the region’s history. The water-related problems of flood and drought have been quite serious at times, forcing basin inhabitants and city builders to make significant decisions. Their choices in regards to water impacted the development of the state’s urban centers.

The desire for an economic impetus in the form of a navigable inland waterway eventually dominated the basin’s water resources development. The addition of pollution did not make the task easier. Throughout the history of the basin’s development, the Trinity River existed both as a blessing and a curse – giving the much needed liquid ingredient of life and taking away the fruits of human labor. The past of the Trinity River, and its future potential, have enthralled men’s blood with a deep thirst for more -- more water, more money, more growth, and more power. Rather than being the quest for a Holy Grail, the history of man’s relationship with the Trinity River has been a struggle

to maximize the effects of every drop from a commoner's cup that is already held in hand.

The Trinity River follows a southeasterly course from its North Texas headwaters to its mouth on the Texas coast. Along its journey to the Texas coast, it passes through seven major soil regions and travels up to one and a half times the basin's general length of 360 miles. Its often-tortuous course cuts through a moderately to gently sloping plain. The river and its principal tributaries drain an area of 17,969 square miles, an area encompassing all or part of thirty-six Texas counties. Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, and Vermont each occupy smaller territories than the Trinity basin.¹

The headwater region for the Trinity Basin is a varied terrain of hills, valleys, prairies and grasslands. The East Fork rises in central Grayson County and flows south for seventy-eight miles through Collin, western Rockwall, eastern Dallas, and western Kaufman counties. In southwestern Kaufman County, the East Fork flows into the river

¹ The location of the basin falls between 29-46 and 33-44 north latitude and 98-40 and 98-43 west longitude. It is surrounded by the Red, Sabine Neches, Brazos and San Jacinto river basins. The soil regions of the basin include: the Western Cross Timbers, the Grand Prairie, the Eastern Cross Timbers, the Blackland Prairie, the Gulf Coastal Plain, the Coastal Flatwood, and the Coast Prairie. Some records disregard counties with extremely small basin area, resulting in smaller totals. United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 14, 18, 21; Randy L. Ulery, Peter, C. Van Metre, and Allison S. Crossfield, "Trinity River Basin, Texas," United States Geographical Survey, at <http://txwww.cr.usgs.gov/trin/envs.html>, last updated April 3, 1995; Gene Kirkley, A Guide to Texas Rivers and Streams (Houston: Lone Star Books, 1983) 88; Trinity Improvement Association, Trinity River [of Texas]: New Vistas of Opportunity for Texas and the Great Southwest, no page numbers, Ray Roberts Collection, Texas A & M University-- Commerce (hereafter Roberts Papers) Box 6, File 2.

itself. The Elm Fork rises in eastern Montague County. Following a southeasterly eighty-five-mile course through Cooke and Denton Counties, the Elm meets the West Fork in central Dallas County to form the river a mile west of the City of Dallas.²

The Elm Fork's partner in creating the Trinity River, the West Fork, rises in southern Archer County. This fork is the longest of the four, flowing along a southeasterly course of 180 miles through Jack, Wise, Tarrant, and Dallas Counties before it meets the Elm Fork. The smallest of the forks, the Clear Fork, rises in northwestern Parker County. It travels forty-five miles, first southeast then northeast, until it joins the West Fork in central Tarrant County at the City of Fort Worth.³

From its formation in Dallas, the river flows between Ellis and Kaufman Counties. From the point the East Fork flows into it in Kaufman County, the river runs 423 miles southeast. It passes through or along the county lines of Kaufman, Ellis, Henderson, Navarro, Freestone, Anderson, Leon, Houston, Madison, San Jacinto, Liberty and Chambers Counties before it issues forth into Trinity Bay, just west of Anahuac.⁴

Europeans first encountered the river during the sixteenth century. Alonso Alvarez de Pineda made record of it, along with the Mississippi and Rio Grande, while mapping the North American Gulf Coast for Spain in 1519. The river received its name from Alonso de Leon, leader of a Spanish expedition to found a mission in 1690. He

² Wayne Gard, "Trinity River," The New Handbook of Texas. Volume 6 (Austin: The Texas Historical Association, 1996) 569; Ulery, Van Metre, and Crossfield, "Trinity River Basin, Texas," internet document; Trinity River Authority Home Page, <http://www.trinityra.org/trahp.htm>.

³ Gard, "Trinity River," 569.

⁴ Ibid.

called it Rio de la Santisima Trinidad, in honor of a Catholic feast day. Despite other names previous explorers had used for the river, Rio de la Santisima Trinidad became the accepted name. Settlers from the United States adopted the name, calling it the Trinity River.⁵

At the time of the Spanish attempts to settle the basin in the 1690s, the Upper Trinity Basin was the home of the Wichita Confederacy. The confederacy consisted of the Wichita, Taovaya, Tawakoni, Kichai, and Iscani tribes. The nomadic Comanches began encroaching on the Wichita's Trinity and Brazos territory in the early eighteenth century. Rather than fight, the Wichita tolerated the Comanches and allied with them against the western Apaches and the northern Osages. Tribes such as the Coushatta, Kickapoo, Delaware, Shawnee, Choctaw, Chickasaw, Cherokee, Creek, and Kiowa began moving from the United States into the Trinity basin during the 1830s.⁶

Settlement of the Trinity basin by non-aboriginal peoples began in the eighteenth century. Spanish Governor Jacinto de Barrios y Jauregui founded the presidio-mission complex of Presidio San Agustin de Ahumada and Mission Nuestra Senora de la Luz near the river's mouth in 1756. El Orcoquisac, a name used for the presidio and mission site, was situated near present Anahuac in Chambers County. Flies, mosquitoes, and undrinkable water plagued the Spanish padres and caused dysentery. Food, clothing, and supply shortages also troubled them. Father Anastacio de Romero, during an inspection in 1760, wrote, "The Rio Trinidad is very quick to overflow its banks and flood the

⁵ Julia Kathryn Garrett, Fort Worth: A Frontier Triumph (Fort Worth: Texas Christian University Press, 1996), xi-xii.

⁶ *Ibid.*, 8-9.

fields. . . . [T]he tide of the river is so that, I have heard said it is possible to go fishing inside the houses. . . . Flies . . . torment the inhabitants as in Egypt of old.” Despite the unpleasant conditions, the settlement remained viable for several years before being abandoned in 1770.⁷

Spanish cattle baron Antonio Gil y Barbo (Ybarbo) established the second settlement on the river, Nuestra Senora del Pilar de Bucareli, in August 1774. Located where the Nacogdoches road crossed the river, in modern Madison County, Bucareli had 347 settlers by 1777. Flooding and Comanche raids forced abandonment of the settlement in 1779, and the settlers relocated to Nacogdoches.⁸

There is no record of how many Americans entered the lower Trinity Basin to settle illegally or attempt settlement between 1800 and 1824. The Spanish sent troops back to El Orcoquisac and established a garrison at Atascocito in 1806, located at a spring near modern Liberty, in an attempt to regulate the illegal immigration and settlement of interlopers from the United States. The outpost failed, and the Spanish had again abandoned the area by about 1812.⁹

⁷ Ibid., xii-xiv; Donald E. Chipman, Spanish Texas, 1519-1821 (Austin: University of Texas Press, 1992), 166-167.

⁸ Garrett, Fort Worth, xii-xiv; Rupert N. Richardson, Adrian Anderson, and Ernest Wallace, Texas: The Lone Star State, Seventh Edition (Upper Saddle River, New Jersey: Prentice Hall, 1997), 46.

⁹ Richardson, Texas, 48; Jeffrey J. Richner and Joe T. Bagot, A Reconnaissance Survey of the Trinity River Basin, 1976-1977 (Dallas: Archaeology Research Program Department of Anthropology, Southern Methodist University, 1978) Report Submitted to the Corps of Engineers, Ft. Worth District, in fulfillment of contract DACW63-76-C-0133, Archaeology Research Program Research Report 113, 90.

A final French venture into the lower Trinity Basin occurred when French exiles attempted to establish the colony Le Champ D'Asile, south of present-day Liberty. General Charles Lallemand, encouraged by Joseph Bonaparte, organized the venture in Florida. The expatriates hoped to use it as a base to liberate New Spain and release Napoleon from his Saint Helena imprisonment. General Antoine Rigaud led the settlers to Galveston Island, and with aid from Jean Laffite, transported the French settlers to the Trinity River. The venture proved futile, and they abandoned their plans in less than a year because of food shortages and fear of Spanish reprisal for their territorial encroachment.¹⁰

Following Mexico's independence in 1821, Anglo-Americans began to immigrate into the Trinity basin in earnest. During the years of Mexican dominance the pace was slow, but increased steadily following the establishment of the Republic of Texas in 1836.¹¹

A few towns had their origins along the river between 1820 and 1840. The settlers practiced subsistence farming, supplemented with hunting, fishing, and gathering natural vegetation. What little cash income existed during these years came predominantly from the sale of hides. The supplemental activities resulted in a noticeable decline in the bison population of the basin, along with a smaller decrease in the numbers of deer and turkey. Settlers were limited to oxen, burro, horse, or their own feet for

¹⁰ Richner and Bagot, Reconnaissance Survey, 90.

¹¹ Ibid.

transportation. The early vestiges of Trinity River navigation commenced during the Texas Republic years.¹²

The first enduring Trinity basin settlement established by immigrants from the United States occurred about 1830 in the locale of the former Spanish garrison of Atascocito. Seventy miles from Galveston Bay, it became the town of Liberty. Liberty prospered and survived on the river's left bank as the Republic of Texas' third largest port. Following the settlement of Liberty, other towns started to develop in the basin in the 1830s and 1840s: Halls Bluff in Leon County, 1834; Carolina in Walker County, 1835; Swartout in Polk County, 1838; Cincinnati in Walker County, 1837; Navarro in Leon County, 1841; Troy in Freestone County, early 1840s; Magnolia in Anderson County, 1840s; Taos in Navarro County, 1843; Tuscaloosa in Walker County, 1853; Buffalo in Henderson County, 1847; Trinity City in Navarro County, 1849; Alford's Bluff in Trinity County, 1848; Newport in Trinity County, 1854; and Sebastopol in Trinity County, 1850. Each had a ferry or boat landing, or both, and riverboat traffic became significant to their economies.¹³

Settlement had showed an increase throughout the basin by 1840 as cotton farming emerged as the dominant economic activity that provided cash income. More towns began to develop in the basin, contributing to a greater diversification of available jobs. Transportation of goods to market and supplies from market to home posed a

¹² Ibid., 91.

¹³ The arrival of the railroad in the 1870s caused the demise or deterioration of many basin towns that relied on river commerce as a significant part of their economies. Garrett, Fort Worth, xiv; Richner and Bagot, Reconnaissance Survey, 184-200.

significant problem for early basin residents. With the absence of railways, people had to depend on ox-wagon or river transport to carry freight to and from the interior.¹⁴

Wagon roads and ferry crossings provided the main east-west ties through the basin, while river transport dominated north-south movement during periods of navigable water. River navigation emerged as a significant method for transporting goods for domestic use. Ox-wagons were a costly and slow means of transport, requiring up to a month to cover 175 miles. With this shortcoming in mind, it is understandable that early Texans gave significant attention and thought to the potential of waterborne commerce. To their misfortune, settlers discovered that the river was not a willing partner in their undertakings. Its unreliable flow, often tortuous route, and natural barriers such as sandbars, snags, rafts of logs, and low hanging trees often made navigation difficult. The river's fluctuating flow provided the greatest barrier to navigating the river. Usually steamers could travel the river for about four months a year, and flatboats could operate for up to seven months. The river's unpredictability forced a reliance on the sluggish wagons.¹⁵

Following Texas President Mirabeau Lamar's efforts to expel the Cherokee from East Texas in 1839, Captain Jonathan Bird in 1840 organized a ranger company to penetrate the Upper Trinity basin. The company built a makeshift military outpost on the

¹⁴ Richner and Bagot, Reconnaissance Survey, 91.

¹⁵ Ibid., 91, 96-97.

banks of the West Fork in present-day Tarrant County. Known as Bird's Fort, the post attracted settlers to its vicinity.¹⁶

The ranger company abandoned the post in 1841, but some settlers decided to remain. A fire attributed to Indian hostility had burned off the grass in the area, leaving the remaining settlers with little game to hunt. Scantily provisioned, they endured a harsh winter and in 1842 abandoned Bird's Fort. Some traveled eastward to reside at a settlement established in 1841 by John Neely Bryan. The city of Dallas grew up around Bryan's cabin. The rich agricultural lands of the upper basin soon became a focal point of settlement.¹⁷

In 1849, the United States Army established Fort Worth, near the previous site of Bird's Fort. After the soldiers abandoned the fort in the 1850s, the upper basin had become secure enough for settlers to remain. Fort Worth, Dallas, and smaller towns of the upper basin grew, and by the twentieth century the region had developed into an economic center for transportation, fabrication, assembly, marketing, insurance, corporate and government administration, and a wide assortment of additional activities. During the century and a half following settlement, the majority of the basin's population became concentrated in the upper basin's metropolitan area, while smaller cities and rural population made up the remainder of its residents. At the end of the twentieth century, the watershed contained more inhabitants, large cities, and industrial development than any

¹⁶ Garrett, Fort Worth, 18-19, 33.

¹⁷ Garrett, 18-19, 33; Trinity River Authority, TRA Home Page.

other Texas drainage basin. An essential factor, fixation, and fascination associated with the basin's development has been water.¹⁸

According to one Texas statesman, water has been more important than oil or gold or any other natural resource. Air alone equals it in significance. The Texas Water Development Board (TWDB), in Aquifers of Texas, resonated this view in 1995, writing, "Water is one of the state's most precious natural resources and basic economic commodities. It interrelates with and affects almost every aspect of human and natural existence." In its legislative summary of the State Water Plan Update in 1997, the TWDB added, "Water, more than any other natural resource, will determine Texas' future in the decades to come. The era of plentiful water, when an area's needs could be readily met with the development of new supplies are past." Yet despite its obvious and seemingly simple yet essential relation to life, water is often overlooked or ignored in the state's history. The impact of water, in its many roles, upon the development of the Trinity River Basin is significant to the history of the basin and the state.¹⁹

¹⁸ Ulery, Van Metre, and Crossfield, internet document; Kirkley, A Guide to Texas Rivers and Streams, 88; Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, no page numbers; Trinity River Authority, TRA Home Page.

¹⁹ Telephone interview with former Speaker of the United States House of Representatives Jim Wright, April 8, 1998; Texas Water Development Board, Aquifers of Texas, November 1995, from TWDB Web Page, <http://www.twdb.state.tx.us/www/twdb/pdf/agpubs.html>; Texas Water Development Board, in conjunction with the Texas Natural Resources Conservation Commission and the Texas Parks and Wildlife Department, Water for Texas Today and Tomorrow: Legislative Summary of the 1996 Consensus-based Update of the State Water Plan, January 1997, downloaded pdf from Texas Water Development Board Web Page.

Water has been barrier and conduit, sustenance and slayer, physical asset and spiritual metaphor in the history of the world. To disregard the role of water, in all of its various forms, and relegate it as an insignificant shadow on the course of human history, is to disregard a major element of history itself. That mankind's material progress, especially that of the United States, and the relative ease with which water is acquired, makes the existence of water as afterthought easily understandable. The ready accessibility of such a basic requirement for life deserves attention.

Environmental and western historian Donald Worster begins one of his books with words of color and import:

Earth has been variously called the planet of water and the planet of life, the connection between the two attributes being by no means casual. Without water, there simply can be no life. Water flows in the veins and roots of all living organisms, as precious to them as the air they breathe and the food they eat. It is the lifeblood of their collective body. Water has been critical to the making of human history. It has shaped institutions, destroyed cities, set limits to expansion, brought feast and famine, carried goods to market, washed away sickness, divided nations, inspired the worship and beseeching of gods, given philosophers a metaphor for existence, and disposed of garbage. To write history without putting water in it is to leave out a large part of the story. Human experience has not been so dry as that.²⁰

²⁰ Environmental historian Donald Worster has sought to revive attention to the significance of the overlooked liquid in his writings. In An Unsettled Country: Changing Landscapes of the American West (Albuquerque: University of New Mexico Press, 1994) 31-32, Worster described his thoughts and outlined a new approach for historians, "Water has an incredibly complex cultural history. It has been as vital to our minds as to our bodies and has been among the most widely used metaphors as well as solvents. Although historians will not be surprised by such a claim, we have not yet written the cultural history of water for any of the major or minor cultures, ancient or modern. In thinking about the past, we tend not to think about water at all, or we unconsciously think about it in the cultural terms most familiar to us – that is, in the terms of modern civilization. Today water refers mainly to a commodity providing material comfort and prosperity. Modern people, including historians, think less about its mythic, allegorical, or religious past, its relation to life and death, to moral regeneration or salvation, and more about its many uses in the economy. We expect it to be as clear, colorless, and odorless as we can get it, and then we dismiss it from consciousness. With

Worster's words echoed the sentiments of hydraulic scholar Karl Wittfogel. Wittfogel argued that "the most telling history is not to be found in the chronicles of kings, generals, wars and politics; it is written in the book of nature." Wittfogel wrote in 1928 that "Man and his work on one side, nature and its material on the other -- this is the fundamental relation, the eternal natural condition of human life upon which every form of this life, and above all its social form is dependent."²¹

Water is defined by The New Lexicon Webster's Dictionary of the English Language as "the transparent, colorless liquid, H₂O, which falls from the sky as rain, issues from the ground in springs, and composes three-quarters of the earth's surface in the form of seas, rivers, lakes, etc." For an entity holding such a significant and necessary position in the world, it most often holds an insignificant position in our thoughts. At least this is the case until the pipes freeze or burst, making it unavailable, or the Mississippi River breaks out of its normal bounds, laying waste to human dreams and activities. When something along those lines occurs, it catches our attention in a forceful manner. Then, after the crisis passes, water quietly recedes back to its usual status as an afterthought, trickling into the recesses of our minds as the drippings of a leaky faucet

hardly any effort on our part, it comes gushing from a tap, while the means by which it has reached us are taken for granted. . . . It is time for historians to look more closely at this substance and the forms it has taken, the roles it has played, and to probe the meaning of water beyond what the dictionary provides." Donald Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West (New York and Oxford: Oxford University Press, 1992), 19.

²¹Worster, Rivers of Empire, 22-23, 27.

trickles down the drain. Perhaps, this omission from our consciousness is an unfortunate byproduct of the boon called progress.²²

The role of water development in the development of urban Texas is an especially significant chapter, albeit neglected, in the state's history. President Harry S. Truman's commissioner of reclamation, Michael Straus, stressed the importance of water development, stating it served "as a prerequisite of all development and elevation of living standards." He also praised "the American concept of comprehensive river basin development" for seizing the world's "imagination." Though Straus's claim might appear as a mixture of truth with exaggeration, environmentally conscious Texas author John Graves likewise argued for water's significance. He made a specific case for water's importance to Texas when he wrote that nothing "has more to do with the way Texas regions vary than the distribution of water. Terrain and latitude and geology and history have some effect, but rain has far more." The relationship of man and water in the Trinity River basin is a history of accomplishment and progress; it is also a history of failure and hardship.²³

Since rainfall for the upper basin is moderate, the watersheds are relatively small, and demand for water is so great, recurring water shortages became a dilemma as the population grew. Communities depended on natural springs, wells, and small, man-made

²² The New Lexicon Webster's Dictionary of the English Language (New York: Lexicon Publications, Inc., 1989), 1111.

²³ Michael W. Straus, Why Not Survive? (New York: Simon and Schuster, 1955), 78, quoted in Donald Worster, An Unsettled Country: Changing Landscapes of the American West (Albuquerque: University of New Mexico Press, 1994), 47; John Graves, "Texas: 'You ain't seen nothing yet'" in The Water Hustlers, (San Francisco and New York: Sierra Club, 1971) 18-19.

lakes for water in the late nineteenth century. When natural springs eventually ceased to be an option for practical purposes, towns and cities had to develop more wells and lakes. As the population density of the upper basin continued to soar in the twentieth century, the wells also declined in importance because of the limited productivity of the basin's aquifers. Practically every town with a population in excess of 10,000 had become dependent on surface water sources by the end of the 1990s.²⁴

The basin's total population reached 4.5 million by 1990. The upper basin counties of Denton, Dallas, and Tarrant contained nearly 75 percent of the basin's residents. Dallas and Fort Worth were the ninth largest metropolitan population center in the United States. Ground water sources and the relatively undeveloped Trinity River at the beginning of the twentieth century could not have sustained this dense population.

Development of surface water reservoirs made the dramatic population growth possible. To match the growth of the region, approximately sixty reservoirs had been constructed for municipal needs. As time elapsed, several of the smaller reservoirs went out of use when their inadequacy became apparent for drought periods. Forty lakes were in use by 1998, providing a total normal storage of seven million acre-feet.²⁵

The construction of reservoirs for water supply is only one feature in the history of the upper basin's water resources development, albeit a significant one. During the history of the Trinity basin, some of the river's tributaries actually ceased flowing in

²⁴ Ulery, Van Metre, and Crossfield, internet document; United States Geographical Survey, "National Water Quality Assessment Program – The Trinity River Basin," Land, L. F., 1991, Open-File Report 91-158, <http://txwww.cr.usgs.gov/trin/ofr91-158.html>; Trinity River Authority, TRA Home Page.

²⁵ Ibid.

periods of severe drought. This posed problems to people without access to wells or natural springs, and especially to dense population centers where surface water was essential. On the other hand, the river has been known to unleash disastrous floods within the same year as a drought. Floodwaters have wreaked havoc on both life and property. The history of flood problems in the upper basin, prompted Dallas blues legend Aaron "T-Bone" Walker to immortalize the river. In a 1929 song, Walker sang,

That dirty old Trinity River, sure has done me wrong
It came in my window and doors and now all my things are gone
Trinity River Blues keep me bothered all the time
I lost my clothes. . . believe I'm gonna lose my mind
They done built a levee, I have no more worry about
If that river should happen to rise
I'm gonna have to move my things out.²⁶

Despite the potential for disaster, as recorded by Walker's song, early inhabitants of the basin placed themselves at the mercy of the unremarkable river's dangerous whims. The commerce-minded residents also desired the benefit of waterborne transportation to carry people and products up and down the river. Yet, the river's unpredictable nature and physical shortcomings hindered attempts at establishing gainful navigation of its waters.²⁷

In order to overcome these dilemmas, inhabitants of the Trinity basin applied themselves to finding solutions that would alleviate their pains and grant their desires. The relationship of man and water in the upper basin centered on reshaping, recreating, and exploiting the river itself. They resolved to manipulate nature and force it to

²⁶ "Trinity River Blues" lyrics from Ric Jensen, Information Specialist for the TWRI, "Finding Answers to Flooding Woes: Federal Policies, Unsound Development, and Reservoir Operations All Contribute to Flood Problems," <http://twro.tamu.edu.twripubs.WtrResrc/v16n3/text/-0.html>.

²⁷ Ibid.

acknowledge their control. Yet, a fourth dilemma emerged as the upper basin grew more dense in population, and this dilemma was the creation of man, not nature. Pollution of the river's water reached a devastating level during the first quarter of the twentieth century, creating a threat to the lives of people, animals, and the river. Writing in 1971 for the Sierra Club, John Graves colorfully and exquisitely summarized the issue of pollution:

Water supply and water quality are not separable considerations. No matter how much water you have around, if it is too foul or mineralized for what you want to do with it, it is no supply at all. In the past Texas, wide and mainly unindustrial, has tended to lag behind some other parts of the nation in the intensity and malignity of the pollution poured into its waters, but lately it has been striving hard to catch up. Sewage treatment-plant effluents or plain picturesque sewage overfertilize and degrade varying stretches of streamway below most main Texas towns and cities that have a stream to degrade. Oxygen deficiency, stink, blue sludge, algae, and happy concentrations of bacteria are some of the drearily familiar results known to anyone who ever indulged himself in float trips on metropolitan rivers. Industry pours in its share of substances ranging from pulp-mill wastes and poisonous heavy-metal compounds to chicken guts and refinery discharges, with little restriction until lately. The federally prodded process of discouraging all this is only now getting weakly underway, hampered as it is everywhere else by the political muscle of industry and the fact that communities are often leery of giving offense to those who administer local payrolls.²⁸

The issue of a contaminated Trinity River became an area of concern, but for far too long it received too little attention.

The various and sundry activities in confronting these four dilemmas are the complicated story of water resource development in the Upper Trinity River basin. By the mid-twentieth century, all of these issues had been merged into a comprehensive approach, with North Texans leading the way. As with most aspects of human history, it is a tale that intermingles the bittersweet tastes of success and failure, conflict and

cooperation, wants and needs. Man's struggles against and collaborations with the natural order have resulted in a Trinity River that is a much different stream than when settlers first tasted its waters and suffered its floods. Depending on personal views, this judgment can be seen in either a positive or a negative light, in a nonlinear way, or perhaps both. It might be possible to appreciate the improvements for contributing to the region's growth, yet still look back with wistful regret at abuses of the river. That resolution is for the individual to decide.

²⁸Graves, "Texas: 'You ain't seen nothing yet.'", 30-31.



Map 1: The Trinity River basin of Texas.
(Adapted from a map of the Trinity River Authority of Texas)

CHAPTER 2

EARLY DEVELOPMENT OF WATER RESOURCES IN THE BASIN

In regards to water resource development, North Texans living in the Upper Trinity River basin during the nineteenth century focused their attention primarily on navigation and water supply. People remained at the mercy of the river's and its tributaries' flooding while recreation, compared to its latter twentieth century manifestation, remained insignificant. Businessmen's desire to exploit the river's economic potential through navigation held a firm grasp on the region's imagination and its newspapers's headlines. Water supply issues showed an increase in significance as the century neared its end. The ideas conceived as independent projects for Trinity River improvement during the century, and implemented in piecemeal fashion, would mature and merge in the twentieth century in an exhibition of remarkable longevity. The ideas existed in various forms since the settlement period, and matured in the twentieth century.

The Upper Trinity River Basin lay within the domain of the Peters Colony, or Trinity Colony as it was often publicized, when permanent settlement began in the early 1840s. John Neely Bryan, city promoter, merchant, and lawyer, settled on what became the city of Dallas in November, 1841. The site he selected, one of three crossings on White Rock Creek, proved propitious in later years. Bryan valued the crossing, water supply, and potential navigation offered by the site's proximity to the river as possible

aids to his settlement's prosperity. Henry J. Graeser, Dallas water superintendent during the 1970s, pointed to Bryan's decision to settle on the river's bank as the beginning of water resource development for the city.¹

Advertisements and promotions of the Texas Emigration and Land Company had attracted at least 1,787 "bona fide" families of colonists to the Peters Colony between 1841 and 1850. They came predominantly from the Ohio River Valley, a trend that continued for decades to come. Farmers, small landholders, merchants, and artisans who inhabited the region helped the area develop faster commercially than other areas of Texas. It was the largest empresario venture in Texas since Mexico had approved the practice.²

The newly annexed state of Texas had created the counties of Dallas, Denton, and Grayson in the Upper Trinity Basin in 1846. Cooke County, due north of Denton and lying in both the Red River and Trinity River basins, came into existence by act of the state in 1848. Fort Worth came into being with the United States Army's decision to establish ten forts along Texas's western line of settlement. The forts acted as significant

¹ Population statistics from Texas Almanac and State Industrial Guide, 1972-1973 (Dallas, Texas: A.H. Belo Corporation, 1971), 157-165.. A. C. Greene, Dallas: The Deciding Years – A Historical Portrait (Austin, Texas: Encino Press, 1973), 5; Jackie McElhaney, "Navigating the Trinity," in Dallas Reconsidered: Essays in Local History, Michael V. Hazel (Dallas: Three Forks Press, 1995), 45; Henry J. Graeser, "Development of Dallas Water Supply," a paper presented at the Joint Annual Conference of the Southwest & Texas Sections of the American Water Works Association, at Little Rock, Arkansas, 16 October 1984, Dallas Public Library, Graeser Collection, Box 2, Folder 28, 7; Seymour V. Connor, Peters Colony of Texas, (Austin: Texas State Historical Association, 1959) 205.

² Connor, Peters Colony of Texas, 104-105, 164.

way stations and protection for travelers. Texas created Tarrant County, in which Fort Worth is located, in 1849.³

The populations of the Upper Trinity counties rested at a relatively low level in the census of 1850, but in the next ten years they saw steady growth. In 1850, Dallas contained 2, 743 persons; Tarrant, 664; Denton, 641; and Cooke, 220. By 1860, Dallas had 8,665 persons; Tarrant, 6,020; Denton, 5,031; and Cooke, 3,760. The overall total population of 23,476 for the four counties displays a growth of 19,208 persons. Various aspects the Trinity River's nature were already apparent to residents of the area. These aspects are well described by writer A. C. Greene as "Sluggish in summer, scant. A red and awesome terror in a wet spring. Too much river . . . or not enough." Too much river or not enough are the dual, menacing heads of the river and constitute an annoying paradox for North Texans during the basin's history. The city of Dallas has experienced flooding and inadequate water supply as some of its recurring problems since it emerged in the 1840s as a little village on the Trinity's banks. One of the most severe floods in the river's recorded history had already raged in 1844.⁴

Dallas's western neighbor, Fort Worth, was also already acquainted with the river's precarious attributes. Dr. J. M. Standifer, the post surgeon during its establishment, had reported to Washington of the "floods and draughts caused by excessive changes in the river." Writing a century later for the Fort Worth Star-Telegram, Madeline Williams emphasized that during the nineteenth century, "Indians

³ Texas Almanac and State Industrial Guide, 1972-1973, 247, 251, 267, 278, 334.

⁴ Greene, Dallas, 3; Graeser, "Development of Dallas Water Supply," 7.

were conquered quickly, but the river remained a more stubborn foe. In Fort Worth's first century the Trinity and its tributaries took a far greater toll in lives and property than hostile Indians could ever have boasted."⁵ Another severe flood, reportedly the greatest of record, struck in 1866. A Denton County resident remembered it as the biggest rain ever known in North Texas. He recalled:

The weather had been beautiful and clear, but late in the morning of that eventful day the sky became overcast with great, black clouds, and in a short time the rain came down in such torrents as to produce in a few hours the greatest flood known in the history of Texas. The creeks and streams were all out of their banks, and part of Denton was put under water. From ten o'clock in the morning it rained in incessant downpour for about six hours. The various forks of the Trinity River crowded water into that famous stream until its banks were lost to sight. From Long's Lake on into Dallas the country was from five to twelve feet deep in water, and the damage done was enormous.⁶

Dallas lost communication with the surrounding world for a week as it essentially became an island except for an occasional trail when the waters subsided. The flood of 1866 impacted an area much broader than the headwater region of the Trinity. Down the main stream in Navarro County, the flooding destroyed the town of Taos. The experiences of 1866 highlighted a part of the river's paradox, "too much river," at its worst.⁷

⁵ Fort Worth Public Library, Clippings Files, "Flood, FW, 1942-50," Fort Worth Star-Telegram, 4 October 1950.

⁶ Ed. F. Bates, History and Reminiscences of Denton County, (Denton, Texas: McNitzky Printing Company, 1918) 395-396.

⁷ Jeffrey J. Richner and Joe T. Bagot, A Reconnaissance Survey of the Trinity River Basin 1976-1977, (Dallas: Archaeology Research Program Department of Anthropology, Southern Methodist University, 1978) Report Submitted to the Corps of Engineers, Ft. Worth District, in fulfillment of contract DACW63-76-C-0133, Archaeology Research Program Research Report 113, 195-196.

In the ensuing years the army had abandoned the Tarrant County fort as the frontier moved westward and settlers occupied its buildings. As families continued to migrate into the area, the town eventually grew enough to incorporate in 1872. With a mere distance of thirty miles separating Fort Worth and Dallas, a competitive rivalry developed between the two over business and settlers. One factor that could eventually overcome this mutual antagonism was the river's vagaries and its potential.⁸

The benefits of the river as a source of water and the possibility for economic gain in its rich bottomlands and potential navigation attracted North Texans to brave the river's extremes. The conclusion of Texas's last president, Anson Jones, that the state's rivers "will not do to depend on even for local uses much less as channels for a great commerce" did not deter them. Navigation would be their Holy Grail for over a century and a half. According to legend, John Neely Bryan in the spring of 1842 invited some unhappy settlers thirty miles west at Bird's Fort to join him at his Trinity settlement. One of the few who agreed was a former Mississippi riverboat captain, Mabel Gilbert. In early April 1842, Gilbert loaded his family in two canoes and guided them down the flooded West Fork to join Bryan, adding to local navigation lore. Gilbert's waterborne journey amounted to what A. C. Greene called "the first instance, and almost the last, of

⁸ D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, (Fort Worth: 1979) 86-87.

putting the upper river to gainful travel.” Activity on the river’s lower parts kept the interest in navigation alive.⁹

In 1836, the Scioto Bell, a steamer, made the first recorded trip up the Trinity River, and possibly reached as far as the future site of Dallas. The second steamer known to travel the river was the Correro, under the guidance of a Captain Ferguson. He reported that navigation was practicable as far as Carolina Landing in Walker County.¹⁰

The Branch T. Archer, a small side-wheeler that arrived on the Brazos in 1834, had been renamed following the Texas rebellion and sent to test the Trinity River's commercial potential. Disregarding financial enticements offered by the town of Cincinnati, the Archer shortly relocated to operate on the Buffalo Bayou. In March 1840, Howell, Myers, and Company sent a steamer named the Trinity up the river. Under the command of a Captain Gold, the vessel reached Alabama in Houston County. It then grounded above Alabama in June and stayed stuck for several months. A year after John Neely Bryan established the settlement of Dallas in 1841, the Ellen Franklin reportedly reached within sixty to seventy miles of the Red River. In 1847, a Galveston firm, Emerson and Lufkin, made its attempt on the river. They had the Thomas F. McKinley built for \$25,000. This vessel made several trips on the river. On one trip it reportedly carried a thousand bales of cotton, some deer hides, and a few Indian scalps.¹¹

⁹ S.G. Reed, A History of the Texas Railroads, and of Transportation Conditions under Spain and Mexico and The Republic and The State, (Houston: St. Clair Publishing Company, 1941) 22; Greene, Dallas, 5.

¹⁰ Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 101.

¹¹ *Ibid.*, 102.

The example of John C. McCoy, Dallas's first practicing attorney, also reveals the extent of early notions concerning Trinity navigation. Landing in Houston as a Peters Colony representative in the early 1840s, McCoy encountered the surprise that no boat waited to carry him up the river to "the Colony in the Cross Timbers." To his dismay, he recalled that instead of floating on the river's waters, he "navigated the Trinity on foot." Another aspect of local lore has John Neely Bryan, accompanied by the Reverend James A. Smith, floating down the river to attend a Trinity River navigation convention in Huntsville during 1849.¹² Thus began Dallas's love affair with the elusive idea of gainfully navigating the stream.

The Reverend Mr. Smith built Dallas County's first cotton gin in 1851. Seeking relief from using freight wagons to transport the gin's product, which he perceived to be too great an expense, Smith initiated Dallas's first navigation experiment. He commissioned the construction of a boat to carry the cotton downstream. The result bore closer resemblance to an oar-propelled raft than an actual boat. Nevertheless, Smith christened it the Dallas and on March 2, 1852 launched it under the command of Adam Haught. By June, the Dallas had traveled only eighty miles to Porter's Bluff in Ellis County. Deeming the water level too low, Haught unloaded the twenty-two bales of cotton and shipped them the rest of the way to Houston by wagon. The Dallas struck a snag and broke up on its return voyage to its home city. The vessel's short-lived career did not deter hopes for navigation, supporting the claim that "optimism and volunteer

¹² Greene, Dallas, 9, 19; John William Rogers, The Lusty Texans of Dallas, (New York: E. P. Dutton and Company, Inc., 1951) 111.

blindness have always been at least part of Trinity navigational history.” In later years, navigation supporters enjoyed pointing out that between 1852 and 1873 nearly fifty boats continuously navigated the river. Some vessels actually reached as far north as Trinidad in Kaufman County and Porter’s Bluff in Ellis County. Knowing that these boats typically remained on the river’s lower reaches did not deter their dreams, and rarely came up in their propaganda.¹³ The activity of the federal government during these years further boosted navigation proponents’ optimism.

From 1852 to 1922 the federal government made numerous appropriations for improving the Trinity River. As a leader of the twentieth century navigation movement explained, Congress unfortunately allotted the funds in a “piecemeal and haphazard fashion which formerly characterized our waterway policy.” The development of the Trinity River lacked continuity and a broad base of support, faults that added to its eventual failure.¹⁴

The Act of August 30, 1852, the first Rivers and Harbors Act passed by Congress during Texas's statehood made two provisions for the Trinity River. It first authorized \$3,000 independent survey of the river, "including the bar at the mouth." The bill also

¹³ Greene, 19; David McNeely and Lyke Thompson, “The Unholy Trinity Incident,” Texas Monthly, June 1973: 42.

¹⁴ Speech of the Hon. Roy Miller, a member of the Executive Committee of the Mississippi Valley Association, a member of the Executive Committee of the National Rivers and Harbors Congress, Active Vice-President of the Intracoastal Canal Association, and Executive Vice-President of the Trinity River Canal Association, delivered at the Twelfth Annual Convention of the Mississippi Valley Association, November 24-25, 1930, Amon Carter Papers, Amon Carter Museum Archives, Fort Worth, Texas, RGH Box 41. File 7a.

grouped the Trinity along with the Sabine, Galveston, Passo Caballo, Velasco, Brazos de Santiago, and Corpus Christi harbors and the Sabine and Brazos rivers in a \$5,000 appropriation for surveys. It was the survey of the river itself, however, that received attention in North Texas.¹⁵

In 1852, the United States Army Corps of Engineers, as directed by the congressional Rivers and Harbors Act, made its first examination of the Trinity River. Lieutenant William H. C. Whiting oversaw the survey and in his August 30, 1852 report offered a favorable evaluation. He found navigation "practicable" for most of the river's course during the high water season, and navigable for a hundred miles during the rest of the year. He claimed "overhanging timber, the snags, which occur at various intervals, and the bar at its mouth" as the river's primary impediments from providing the basin's "very rich cotton, wheat, corn, and sugar" lands from the benefits of navigation. Whiting believed the river could be improved at little expense and reported that the "importance [of navigation] to this growing country will be considerable." He added that the river's "size, length and depth and the section of the country through which it flows entitle it to consideration." Intense local interest led to repeated surveys over the next century.¹⁶

¹⁵ Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41. File 7.

¹⁶ Congress authorized additional surveys of the Trinity River in 1870, 1872, 1879, 1890, 1894, 1899, 1900, 1902, 1912, 1916, 1924, 1929, 1930, 1936, 1943, 1945. Remarks of Colonel Delbert B. Freeman, District Engineer, Fort Worth District, Corps of Engineers, to the Dallas Chapter of the Texas Society of Professional Engineers, 8 October 1951 on the Future of the Upper Trinity Watershed. Dallas Public Library, 2; "Resolution Just Adopted by Senate Re-opens a Long Dormant Question of 600-Mile Course through Texas," Texas Waterways, Fort Worth Public Library, Clippings File, "Trinity River," 627.1.

Dallas remained the center of the movement for making the river navigable to its upper reaches. In 1866, the year of the "Great Flood," the Texas legislature passed an act incorporating the Trinity River Slack Water Navigation Company. Except for keeping the idea of navigation alive, no other significant activity followed this event. Lured by the offer of a financial reward by Dallas residents, Captain James H. McGarvey piloted his steamboat, Job Boat No. 1, up the river to Dallas. Collecting the promised \$15,000, McGarvey slipped back down to the coast with his boat. Navigation booster's proudly held this event up in later decades as an example of the river's untapped potential.¹⁷

Using the success of Job Boat No. 1 as a starting point, three Dallas businessmen built their own boat. They launched the vessel on December 17, 1868, as the daughter of one of the investors, Dr. J. W. Haynes, smashed a bottle of sparkling wine against the bow. Bearing the child's name, the Sallie Haynes departed following Dr. Haynes speech predicting routine Trinity River navigation would occur "at no instant delay." The good doctor's optimism proved to be blind, and the Sallie Haynes completed only a few trips as far as Magnolia before striking a snag and sinking just forty miles from Dallas, another victim of the Trinity River.¹⁸

Interest in navigation did not confine itself to Dallas County alone, but flowed freely northward during the 1860s. Harboring a desire to ease the expense incurred by transporting goods by wagon, Denton County residents openly discussed the possibility of making the Elm Fork navigable northward to Gainesville in Cooke County. The

¹⁷ Greene, Dallas, 19.

¹⁸ Ibid., 18.

Denton Monitor claimed construction of a canal from the Trinity to the Red River would transform Denton, Pilot Point, Lewisville, and Dallas into bustling river towns.¹⁹ In the midst of these discussions, another means of transportation reached North Texas to alleviate the region's transportation dilemma.

The Houston and Texas Central Railroad initiated an aggressive building campaign in the late 1860s and early 1870s. The rail line ran through the most productive Texas farmlands. The same area could have utilized the Trinity River had it been improved. In 1872, the railroad reached Dallas. To undermine steamboat operations on the river and end the speculation of navigation year round, the Houston and Texas Central that year cut its freight rates, charging only \$1.05 to haul a bale of cotton from Dallas to Houston. After the company had substantially undermined steamboat traffic it increased the price to \$2.45. This action raised the ire of upper basin businessmen and resurrected talk of Trinity navigation in the upper basin while modest traffic continued on the lower stream.²⁰

The town of Dallas served as a supply and storage post for Texas during the Civil War. Historian S. G. Seymour characterized the town as "a struggling hamlet on the banks of the Trinity." Following the war's conclusion, the town entered a thirty-year period of steady growth in the 1870s brought about by the successful lobbying for two

¹⁹ E. Dale Odom, "The Impact of Railroads in Denton County," East Texas Historical Journal, 29 (2): 59-60.

²⁰ Bob Gearhart, "Channel to Liberty Underwater Archaeological Investigations, Liberty County, Texas" Austin, Tex. : Espey, Huston & Associates, 1990. Prepared for the United States Department of the Army, Corps of Engineers, Galveston District, under contract DACW64-89-D-002.

railroads, the Houston and Texas Central and the Texas and Pacific. In 1872, the Houston and Texas Central arrived in Dallas, and during the following year the Texas and Pacific line reached that community. The arrival of these two rail lines made Dallas a regional transport center for products headed to manufacturing centers to the north and east. The first railroad to reach Texas from beyond the state's borders was the Missouri, Kansas and Texas, better known as the Katy. In 1872, the MK&T completed building the line through Indian Territory. In 1873, the MK&T completed laying the final five miles from the Red River to Denison, Texas where it met the Houston & Texas Central as it came from the south. This vital link provided connection to the markets of the Midwest. Merchants and banking and insurance companies, attracted by the city's transportation and communication facilities, migrated to Dallas. The city also became a regional center for cotton trading. Business and political leaders developed close relationships during the late nineteenth century, influencing development of Dallas's city character and actively promoting its economic growth.²¹

Fort Worth citizens, irked to see cattle being driven through their city to the Dallas rail lines, united together in an effort to bring rail service to their city. In 1876, it became the eastern terminus for the Texas and Pacific Railroad. After the Texas and Pacific's financier, Jay Cooke and Company, failed in 1873, Fort Worth citizens had rallied to finance its completion. On July 19, 1876, the long awaited blessing of rail traffic arrived in Fort Worth. The people of Fort Worth greeted the first train with

²¹ S. G. Reed, A History of the Texas Railroads, 209, 363; Charles P. Zlatkovich, Texas Railroads (Austin: University of Texas, 1981) 19.

unrestrained joy, for with the smoke that belched from old No. 20's stack came the promise of industry and heightened commerce. Agricultural products, particularly cattle, dominated the city's economy and Fort Worth began its own venture of population and economic growth. As S. G. Reed wrote, "Fort Worth threw off its swaddling clothes and soon attained the front mark in Texas as a livestock center."²²

In 1870, before the railroads arrived, Dallas County contained 13,314 persons; Tarrant County, 5,788; and Denton County, 7,251. By the end of the decade, the three county collective population of 26,353 grew to 76,302. In 1880, Dallas County had 33,488; Tarrant, 24,671; and Denton, 18,143. The three principle cities in the counties also showed growth. Dallas contained 10,358 of the county's population; Fort Worth, 6,663; and Denton, 1,194.²³

The railroads' contributions to population and economic growth caused a significant increase in the importance of water supply development for the urban areas in North Texas. Railroads meant more business. More business meant more people, and more people meant a greater collective thirst to one of life's basic necessities. Some major southern cities had constructed water works during the 1870s, and during the 1880s

²² Seymour, A History of Texas Railroads, 364; Oliver Knight, Fort Worth: Outpost on the Trinity (Fort Worth: Texas Christian University Press, 1990) 68-69, 59, 73-76.

²³ Texas Almanac and State Industrial Guide, 1972-1973, 157-165.

most large areas had them. By the end of the 1890s, almost every small southern city and town had water works. These generalizations apply reasonably well to North Texas.²⁴

In the 1870's, Dallas residents resorted to shallow wells to augment the river's water supply. A group of businessmen, seeking to capitalize on the city's growth, started Dallas's first private water system. The first water system comprised a dug, circular reservoir lined with stones around Browder Springs. A steam pump fed the water into Dallas's main water line. Proud of their level of achievement, some contemporaries looked to the water source as a perpetual supply of good, healthy water. It did not take long for them to realize the overestimation of the supply's capabilities.²⁵

In 1881, a large fire engulfed Dallas, and the town came close to utter destruction. The private water system's inability to control the conflagration inspired the town to buy the system and operate it as a public system. This turn of events marked the beginning of Dallas's water department. The Trinity River shortly posed a new emergency for the young agency within three years.²⁶

In the spring of 1884, the June rains brought about a flood that broke down the Browder Springs reservoir's walls, and filled the pool with earth, gravel, and mud. The calamity forced city leaders to proclaim a water famine during July, as emergency teams labored to clean out the reservoir and rebuild its walls to a greater height. Once repaired

²⁴ Edward L. Ayers, The Promise of the New South: Life After Reconstruction (Oxford and New York: Oxford University Press, 1992) 74.

²⁵ Browder Springs is currently a downtown Dallas City Park. Graeser, "Development of Dallas Water Supply," 7-8.

²⁶ Ibid., 7-8.

and refilled, the structure did not stay long at full capacity. The growing city's water demands exceeded the reservoir's supply, and Dallas had to construct another stone-walled reservoir to augment the water supply. That same year, Fort Worth constructed its Vickery Street reservoir to serve as a water source.²⁷

Facing growing demands for water, Dallas returned to the Trinity River for relief. Between 1885 and 1887, the city built two settling stations and the Turtle Creek Pump Station at the junction of Turtle Creek and Trinity. The water department closed down the Browder Springs site, and pumped the Trinity's untreated water directly into the main water system. With the Turtle Creek Pump Station pumping ten million gallons of raw water a day, Dallas considered its water problems solved. A new water-related problem reared its head during the next decade, serving as a lesson against shortsightedness.²⁸

Pollution of the West Fork reached dire levels by 1896 to make the water supply unusable. Dallas turned to the Elm Fork as a new water source, building the Record Crossing Dam and pumping plant on the Elm Fork in 1896. A twenty-six-inch wooden stave pipeline channeled water from this site to the Turtle Creek Station. The city employed the Record Crossing reservoir well into the first two decades of the twentieth century.²⁹

The town of Denton also faced problems of water scarcity in the late nineteenth century. Though quite smaller than its southern neighbors of Dallas and Fort Worth, the

²⁷ Graeser, "Development of Dallas Water Supply," 8; Trinity River Authority, TRA Homepage.

²⁸ Graeser, "Development of Dallas Water Supply," 9; Greene, 19.

town had experienced a substantial population growth of its own. From a population of 391 in 1870, Denton had grown to 2,558 by 1890, making it the largest town in Denton County. During the 1880s, some families drew their water from shallow wells. Many others relied on rain barrels resting under the eaves of their homes to collect usable water. The town did not have running water until 1892. Denton residents looked to the new artesian well service for an abundant water supply during the century's last decade. Unfortunately, by 1900 residents had noticed the gradual diminishment of the artesian water flow. The city installed water pumps to combat this decline, only to realize it was fighting a losing battle when water levels in the wells continued to decline. Water supply development shared navigation's weakness of overestimation.³⁰

Despite the importance of water development to the expansion of Dallas and other North Texas communities, it remained overshadowed by a resurgence of navigation propaganda. As Dallas, Fort Worth, Denton, and other communities entered a new era of heightened water supply problems, the Dallas-based navigation movement sparked a resurgence in late 1880s and early 1890s. Despite the importance of the railroads to Dallas, some leaders in the agriculturally-dominated area were dissatisfied by what they considered to be excessive freight rates. Their dissatisfaction kept the dream of Trinity navigation alive. Politicians introduced several unsuccessful bills to aid Trinity River navigation improvement into the Texas state legislature during the 1880s. Historian E.

²⁹ Graeser, "Development of Dallas Water Supply," 9.

³⁰ C.A. Bridges, History of Denton, Texas: From its Beginning to 1960 (Waco, Texas: Texian Press, 1978), 195, 392; Texas Almanac and State Industrial Guide, 1972-1973, 157-165.

Dale Odom credited the arrival of railroad technology with the failure of the state to develop navigation in the nineteenth century.³¹

With the Rivers and Harbors Act of July 11, 1870, Congress had again focused attention to navigation at the Trinity River's mouth, but offered no funds to provide for navigation to Dallas. The June 10, 1872 Rivers and Harbors Act called for a survey from the Trinity's mouth upriver to Magnolia. On June 18, 1878, Congress made the first appropriation targeted for any actual improvement effort. The Rivers and Harbors Act passed on that day appropriated \$10,000 for deepening the channel at the river's mouth and removing obstructions at Liberty. The River and Harbor Act of March 3, 1879, further supplemented this appropriation with another \$2,500. Over the next decade, Congress repeatedly allocated funds for the improvement of the lower Trinity River in the River and Harbor Acts of June 14, 1880 (\$4,000); March 3, 1881 (\$10,000); August 2, 1882 (\$5,000); August 11, 1888 (\$12,500); September 19, 1890 (\$10,000); and July 13, 1892 (\$10,000). Sensing the benevolence of Congress at the time, Dallas civic leaders launched a revival of the navigation movement in the 1890s.³²

By 1890, Dallas had emerged as the largest city in the state with 38,067 people, in the most populous county in the state with 67,042 people. Even though this growth transpired without aid of a navigable waterway, the desire for carrying commerce up and down the Trinity did not disappear. Dallas businessmen continued to protest the

³¹ McNeely and Thompson, "The Unholy Trinity Incident," 42; Rogers, The Lusty Texans of Dallas, 127; Odom, "The Impact of Railroads on Denton County," 59.

³² Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41. File 7.

arbitrarily high railroad freight rates by establishing the Trinity River Navigation Company. They argued that Trinity navigation would alleviate the burden imposed upon business by high freight rates and enliven the area's economy.³³

The most vocal and visible advocates of the navigation movement were members of the Dallas business and civic elite. Colonel William C. Wolff, a Dallas attorney, served as the standard bearer for navigation. He beseeched the members of practically every public meeting or political rally he attended to pass a resolution in support of the navigation project. General George F. Alford, a prominent member of Dallas's commercial and banking elite; Leo Wolfson, secretary of the Dallas board of trade, and Colonel Henry Exall, a respected Dallas civic and business leader, lent their support. They led an active, colorful campaign for public backing. The staff of the Dallas Morning News did their part by devoting column after column to laud the groups efforts.³⁴

William C. Wolff, a man who knew "a thing or two about navigation" according to the Dallas Morning News, in May 1890 announced the organization of a joint stock company for the navigation of the Trinity River. Initial announcements explained the company would focus its initial endeavors on local trade. He estimated that for \$3,000 the company could buy a boat to carry on trade for six months of the year between Dallas

³³ Rogers, The Lusty Texans of Dallas, 127.

³⁴ Rogers, The Lusty Texans of Dallas, 127; "The Trinity River," Dallas Morning News, "The Trinity River," 8 May 1890, 8; "Trinity River Navigation," Dallas Morning News, 11 June 1890, 2; "To Open the Trinity", 30 January 1892, "The Trinity River", 24 April 1892.

and Palestine. To mark the occasion, boosters planned a Sunday excursion of fishermen or possum hunters loaded into a blue boat. Thereafter, they expected to focus on hauling bois d'arc and cord-wood.³⁵

George F. Alford had lived on the Trinity River for over fifty years and had actually owned and operated steamboats on it. He dubbed the navigation movement as the most exciting topic to capture the interest of the area's residents in many years. All of North Texas, particularly the counties with territory in the Trinity River watershed, stood to benefit from regular waterborne commerce on the river, Alford claimed. Somewhere in the area of 750,000 Texans would be affected by the venture, especially from the effect of solving the freight question.³⁶

The Dallas Board of Trade's consensus held that the project was both feasible and justifiable. Within six months, the supporters claimed, workers could make the river navigable by pulling snags, cutting low overhanging branches, and dynamiting narrow portions of the channel. Some, such as Alford, held the belief that the United States Congress would gladly reimburse the company and allocate funding for further improvement if North Texans energetically backed the project and proceeded independently. A Dallas Morning News article captured the optimism of the boosters with the following phrase: "With good navigation to Dallas, the future of that wide-awake and pushing city is assured beyond all peradventure." Members of the Texas congressional delegation lent credence to the navigation supporters' expectations. The

³⁵ Dallas Morning News, 8 May 1890, 8.

³⁶ "Trinity River Navigation," Dallas Morning News, 11 June 1890, 2.

United States Army Corps of Engineers, however, did not share in the unbridled optimism.³⁷

The Corps completed another survey of the river in 1891, and the resulting report did not resemble the positive recommendations of Lieutenant Whiting's 1852 survey. Major Charles J. Allen reported that everyone knew that the snags and logjams obstructing the Trinity's upper course made travel from Magnolia to Dallas difficult and dangerous. He went on to explain that since the entire river suffered from similar circumstances, further attention to Trinity River navigation was unwarranted. The negative report did not deter navigation supporters hopes. Instead, they set out to prove it wrong.³⁸

The navigation supporters continued to issue their arguments in favor of Trinity improvement. They claimed that Dallas's future as a manufacturing and distribution point depended on the inclusion of the lower water freight rates. At one meeting in 1892, a John H. Cochran declared that there was no need to argue over their endeavor's importance. To the supporters, the necessity and significance of their goal was self-evident. Instead, they nurtured the idea that success would be inevitable if the people of Dallas and North Texas would unite to offer their aid and support. Supporters refused to

³⁷ Ibid.

³⁸ Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, 87.

acknowledge doubts concerning the project's feasibility and prepared to prove naysayers wrong.³⁹

In 1892, Colonel Henry Exall, a former Virginia cavalryman, readied to lead a force down the river to overthrow all doubts concerning the feasibility of navigation. Having moved to Dallas in 1888, Exall had immersed himself in Dallas civic and business ventures. He bred racehorses at his Lomo Alto Farm, north of the city, and crusaded for improvements in agricultural production and farm life. With the revival of the navigation issue, Exall literally jumped into the boat to show his support. In the spring of 1892, Exall led a committee down the river on behalf of the Trinity River Navigation Company to assess the river channel's feasibility for navigation. They journeyed by rowboat as far as Magnolia as a wagon carried their supplies overland. Having traveled the section of the river deemed difficult and dangerous, Exall and his companions returned to an enthusiastic welcome. Following the expedition, navigation supporters bolstered their self-confidence with predictions that Dallas would one day proudly rival St. Louis and the other leading cities of the country. The key to the bright future was the Trinity River.⁴⁰

After years of propaganda lauding the inevitable success of Trinity navigation and the glorious boon that would follow, material progress could be seen on the river's banks

³⁹ Dallas Morning News, 30 January 1892, "The Trinity Navigation," 3 February 1892, "The Trinity River," 20 April 1892.

⁴⁰ Darwin Payne, Dallas: An Illustrated History, (Woodland Hills, California: Windson Publications, 1982), 109, 111; Rogers, The Lusty Texans of Dallas, 127; Dallas Morning News, 24 April 1892; "The Trinity River," 3 June 1892.

in the fall of 1892. A crew laboring under the management of Major R. V. Tompkins worked to construct a snag-boat, which upon completion would rid the river of obstacles so that gainful travel could begin. Tompkins said "The work was undertaken without any flourish of trumpets," for the Trinity River Navigation Company meant to do "more work than blowing." Having apparently mastered the art of "blowing," as evidenced by the frequent meetings, orations, and newspaper columns parading the wonders of navigation, it remained to be seen how well the project backers would do when it came to "work" and progress.⁴¹

The answer to this query came in 1893 and it appeared to be in the affirmative. Having completed its \$10,000 snag-puller, The Dallas, the Trinity River Navigation Company readied it for its first test. A reported crowd of thirteen thousand onlookers gathered to inspect the stern-wheeled vessel, measuring twelve by sixty-four feet, the Sunday before it launched. It then set out, with hopes of a better outcome than the Reverend Mr. Smith's Dallas of 1852 experienced.⁴²

The members of the Trinity River Navigation Company were not disappointed with The Dallas's first river voyage. The boat made a successful trip down the river and back, returning with a load of cordwood. An enthusiastic crowd met the boat. The first cord to be auctioned off brought \$10, while several spectators bought single stick

⁴¹ Dallas Morning News, 26 November 1992.

⁴² Payne, Dallas: An Illustrated History, 109.

souvenirs for fifty cents each. Deeming its first endeavor a success, the company proceeded to the next step in its venture.⁴³

Within a few weeks of The Dallas's maiden voyage, on March 8, 1893 the Trinity River Navigation Company arranged the purchase of the H.A. Harvey, Jr. Named after its Louisiana owner, the one hundred horsepower steamboat had been built to carry six hundred cotton bales and one hundred fifty passengers. Its previous service had been clearing obstructions on Louisiana's Mermentau River. The H.A. Harvey, Jr. steamed into Dallas on the afternoon of May 24, 1893, preceded by The Dallas.⁴⁴

An enthusiastic crowd greeted the new boat as it docked at Commerce Street, to mark what the Dallas Morning News heralded as the "most important event in the history of Dallas."⁴⁵ Citizens paraded to welcome the boat as artillery salutes sounded. Orators expounded on the wonders and rewards of navigation as people leisurely enjoyed lunches on the riverbank. The Dallas Morning News heralded North Texas' "red-letter day" by printing alternate pages in red ink and providing drawings to immortalize the event. The newspaper declared the significance of the occasion as a day in which all North Texans united to announce the region's commercial independence to the world. It went on to congratulate the people of Dallas, saying,

It is quite natural that the people of this city should be so proud of what has been so rapidly accomplished. . . . The river has been opened to its mouth without a nickel of Government money. The facilities for doing the work have been crude and weak. The stream contained the accumulation and obstacles of ages. The dead river has been

⁴³ Rogers, The Lusty Texans of Dallas 128.

⁴⁴ Ibid., 128-129.

⁴⁵ "The Great Celebration," Dallas Morning News, 24 May 1893.

vitalized by Dallas enterprise and capital.⁴⁶

It also called the event “the genesis of an event the record of which will go down in posterity.” By 1993, “when Dallas will be spread out to Mesquite,” the Dallas Morning News predicted the arrival of the H.A. Harvey, Jr. would be “the inspiration to the touch of time,” the impetus to an expansive growth and prosperity. The early navigation proponents issued no guarded words concerning their mission. Economic growth served as their goal. Navigation, or so the navigationists prayed, was no longer an experiment but a fact. Trinity River improvement, by constructing dams and locks, would solidify the moment.⁴⁷

The actions of the people and the tone of the newspaper appeared as a stern rebuff to the Corps of Engineers negative report in 1891, calling for abandoning the idea of Trinity navigation. Morrison & Fourmby’s Dallas City Directory predicted that by the end of 1893, three to five hundred tons of goods would travel regularly from Galveston to Dallas during eight or nine months of the year, proclaiming, “This is no longer a dream, but is reality.” The only remaining obstacles amounted to no more than an “ant hill.” In April, 1894, the Dallas Times Herald boldly referred to Dallas as a “big river town,” and by July it ran a list of arrivals and departures for the “Port of Dallas.” Unfortunately for the navigation promoters, the progress they celebrated was little more than a mirage.⁴⁸

⁴⁶ “Red Letter Day,” Dallas Morning News, 25 May 1893.

⁴⁷ Ibid.

⁴⁸ Rogers, The Lusty Texans of Dallas, 129; Payne, Dallas: An Illustrated History, 109, 111.

Though marked with vaunting declarations of success and a hefty dose of celebration, the advent of "the Port of Dallas" proved to be nothing more than a study in narcissism. The image of boats riding the tidal wave of commerce up and down the river ended up being an illusion. The Trinity River Navigation Company eventually sold the H.A. Harvey, Jr. in 1898 for use on Louisiana's Calcasieu River following a year of sitting idle. The disappointing turn of events, however, did not halt the efforts of the navigation supporters. Their efforts had not been in vain and, as they had hoped, soon received attention from the federal government.⁴⁹

Congress's Rivers and Harbors Act of August 18, 1894 marked a turning point in the federal attitude towards the Dallas navigation movement, for it included a survey from Magnolia to Dallas with a \$5,000 appropriation in addition to continuing lower river improvement. It was followed up by another \$5,000 appropriation for continuing improvement operations. Until 1899, appropriations and authorizations associated with the Trinity River did not mention any specific plan of improvement or development. The March 3, 1899 River and Harbor Act was a departure from business as usual. It read:

Improving Trinity River, Texas: Continuing improvement, seven thousand dollars: Provided, That out of said sum the Secretary of War is hereby directed to cause a preliminary survey of said Trinity River to be made from its mouth to the city of Dallas, with separate estimates of the cost of procuring a navigable depth at low water of four feet, five feet, and six feet, respectively, in said river, by locks and dams or otherwise; said report to included the best method for improving the river, and such report may be made so as to divide said river into separate sections, with a statement of the advisability of such improvement.⁵⁰

⁴⁹ Payne, Dallas: An Illustrated History, 111.

⁵⁰ Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41 File 7.

In 1899, the Dallas navigation boosters, exerting steady pressure on Congress, obtained authorization for a preliminary survey of the river. Lieutenant Colonel C. J. Riche reported his judgment that the Trinity could be made navigable, providing specific improvements were made to that end. He recommended the construction of thirty-seven locks and dams to assure a navigable depth of six feet. To the delight of Dallas, the Corps report helped convince Congress to authorize river improvements after the turn of the century.⁵¹

The Trinity River Navigation Company's lobbying efforts attracted enough attention to secure a \$7,000 survey from Dallas to the Gulf. Colonel Riche reported that a series of 37 locks and dams would provide a depth of at least six feet for eight months of the year. The estimated total cost of such improvements stood at \$4,650,000. He recommended that the project should proceed because the river was a "natural canal" passing through commercially rich territory, from which Dallas would benefit. Colonel H. M. Roberts, Riche's superior, also endorsed the project.⁵²

In 1899, recommendations of the Corps of Engineers included the necessity of locks and dams to impound water at shoal crossings below Dallas and at other shallow points throughout the river's course. With these improvements, navigation boosters believed vessels could travel the entire river, practically year-round, rather than for only

⁵¹ Payne, Dallas: An Illustrated History, 111; Brown, Rivers, Rockets and Readiness, 88.

⁵² Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 1976-1977, 113, 115.

six months. Federal backing arrived shortly thereafter for navigation as well as for early flood control measures in Dallas.⁵³

The quest for a navigable Trinity River did not end with the disappointments at the end of the nineteenth century. Rather, the dawning of a new century marked the beginning of a prolonged effort that would grow for over another seventy years. As the movement matured, it would unite with efforts to provide adequate water supply and flood control for the growing urban areas of the Upper Trinity River basin. The events of nineteenth century's water resource development in North Texas, independent and piecemeal in nature, were but a prologue to the intense, unified improvement efforts of the twentieth century.

For over half a century, Dallas citizens had considered the Trinity River as a key to the city's prosperity. Combining rail transportation with Trinity navigation, navigationists expected to solidify Dallas's position as one of Texas' preeminent business centers. At the end of the nineteenth century, their dream seemed close to realization.

On May 25, 1900, two proponents of Trinity River navigation, S.W.S. Duncan and R.E. Cowart of Dallas, presented a lengthy argument in favor of improving the Trinity River to the U.S. House of Representatives Committee on Rivers and Harbors. The already well-worn arguments of navigation's benefits to the basin, state and country were supported by the report prepared by Riche. They also likened the river to the Erie Canal.

⁵³ Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed (April 1946), 41.

With their well-crafted arguments, the men named the cities in different states from which fifty Dallas merchants purchased goods, merchandise, and machinery. The list scrolled on in small type for four pages and ranged from Mobile, Gurley, Bessemer, and Birmingham in Alabama to Enosburg Falls, Rupert, Chelsea, St. Albans, and Burlington in Vermont, and from Yazoo, Mississippi, to Bolivia, New York.⁵⁴

Duncan and Cowart even included a lengthy endorsement by N.A. Steadman, a former Texas Railroad Commission member. He wrote that millions of dollars would benefit the state and that "No other scheme would so effectually tend to solve the transportation problem in Texas." Not a single railroad station in the state would escape feeling the canal's impact and would result in fair rates for the state's citizenry.⁵⁵

In their conclusion, the navigationists made bold predictions for the Trinity along with pronouncements against the railroads. The Trinity could become a "great highway of commerce" and establish reasonable freight rates in Texas, as well as Oklahoma and all the territory south of the Missouri River and west of the Mississippi River. They declared that navigation of the Trinity River stood as an issue of national importance. By granting aid, Congress would be making a bold move, a memorable stroke to free millions of people "from the grinding tyranny of excessive freight taxation, and give them what other States and people have -- a free and open waterway to the sea." By

⁵⁴ Committee on Rivers and Harbors, House of Representatives, U.S., Proposed Improvements of the Trinity River in Texas, From Galveston Bay to Dallas, Texas. Argument of S. W. S. Duncan and R.E. Cowart of Dallas, Texas. Friday, May 25, 1900. 10-14.

⁵⁵ Ibid., 30.

couching their arguments in such a manner, the navigation proponents hoped to clothe the issue with the shroud of patriotism. The arguments presented by Duncan and Cowart would be a recurrent theme in the century to come.⁵⁶ Their arguments formed the basis for navigationist lobbying and propaganda for most of the twentieth century. Though not immediate, legislative success loomed nearer.

The Rivers and Harbors Act of June 13, 1902 contained the first well-focused and most feasible plan of improvement and provided the first sizable appropriation for work. It authorized the expenditure of \$700,000 for improving the Trinity River. Half of the money was designated for section one, and the remainder went to the rest of the river. Only \$125,000 became immediately available, \$50,000 of which went to operating a snag-boat for clearing section one. The Corps divided the river into five sections. The first section ran from Dallas to the mouth of the East Fork and was to receive seven of the locks and dams at a cost estimated at \$650,000. This act provided Congress's first appropriations for the thirty-seven locks and dams recommended by the Corps of Engineers. The Act of March 3, 1903 contained another \$250,000 for the Trinity River. Texas Senator Charles A. Culberson won congressional approval to increase the size of the locks and dams in 1904, an improvement designed to make the river accommodating to larger vessels.⁵⁷

⁵⁶ Ibid., 49-51.

⁵⁷ Roy Miller, "The Legislative History of the Trinity River," c. 1930; Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin 116, Carter Papers, RGH Box 41. File 7; Darwin Payne, Dallas: An Illustrated History, (Woodland Hills, California: Windson Publications, 1982), 111; Ernest Sharpe, G. B. Dealey of The

The act also allocated funds for a crew of 170 workers to clear the 75 miles of the river from Dallas southward. By removing obstacles, engineers hoped to abate flooding by speeding water runoff. In October 1902, workmen began cutting down trees and clearing brush from the river bottom between Dallas and Oak Cliff. By March 30, 1904, the crew had cleared the channel 75 miles south of Dallas.⁵⁸

The optimism of the Dallas navigationists ran high as the project progressed closer to fulfillment. Bursting with satisfaction from legislative victory, the proponents of river improvement exuded pride over their efforts. C.A. Keating, president of the Trinity River Navigation Company, had been elated by the authorization of \$700,000 by Congress. He called it the "greatest single thing for Texas since her admission to the Union." Unbridled enthusiasm for the project, such as that displayed by Keating, remained one of the central facets of the navigation movement throughout the twentieth century.⁵⁹

The Trinity Project received a new hurdle to deal with when Congress passed the Rivers and Harbors Act of 1903, which established a Board of Engineers. The board received the responsibility on advising the Congress if the \$350,000 should actually be spent on the first section of the project. On October 31, 1903, the board reported that it needed more information before it could make a responsible recommendation. The board

Dallas News (New York: Henry Holt and Company, 1955), 117; Brown, 88, 96; David S. Switzer, Its Our Dallas County: The Story of SELF-Government Since 1846, 60.

⁵⁸ Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 116.

directed D. A. Watt, a lock-and-dam specialist, to examine the issue in detail. On November 19, 1903, the board reported that section one would require upwards to \$918,000 instead of \$625,000, and that six locks, rather than five, were needed. Despite the adjustments, the board endorsed the project.⁶⁰

A provision in the March 3, 1905 Rivers and Harbors Act provided further funding, with the stipulation that Dallas must provide the secretary of war with \$66,000 to be applied to dam construction in Section 1 at Old River and Parsons Slough. It also abandoned Lock and Dam Number 4 for the time being. The June 30, 1906 Act provided two authorizations for Trinity improvement, totaling \$111,000. The Act of March 2, 1907 provided further funds, as did the appropriations granted on March 4, 1907, May 27, 1908, March 4, 1909, June 25, 1910, February 27, 1911, July 25, 1912, March 4, 1913, and July 27, 1916.⁶¹

To aid in clearing the channel, in March 1904 the government had the Frank P. Holland, a sternwheeler named in honor of a Dallas mayor and navigation activist, built in Dallas to work as a survey and supply boat. It also employed a snagboat, the W.C. Wolff, for clearing duty in the channel. Actual construction on the water control system began on a lock and dam in July 1905 at McCommas Bluff, approximately 13 miles below Dallas. The citizens of Dallas had to pay for all sites for the locks and dams,

⁵⁹ Bernice Lockhart, Navigating Texas Rivers (1821-1900) MA thesis prepared in partial fulfillments of the requirements for the degree of Master of Arts at St. Mary's University of San Antonio, 1949, 126.

⁶⁰ Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 116.

which totaled approximately \$66,000. Lock and Dam Number 6, located 43 miles below Dallas, was built by the Holand Realty Company; Captain N.P. Wooten of the Corps monitored construction.⁶²

The navigation boosters prematurely promised to present Trinity navigation to Dallas as a 1908 Christmas present. Dallas issued a bond for \$875,000 in 1908 to raise four bridges to accommodate the expected river traffic and construct a viaduct across the river, but Christmas came and went in 1908 without fulfillment of the promise.⁶³

Three vessels, the Nellie Maurine, Katie Putnam, and Charles T. Gray, briefly used the upper river for commercial efforts after construction reached completion at Parson's Slough in 1909. But following the TRNC's failure to live up to its promise that the river would be navigable by Christmas 1908, C. A. Keating resigned his presidency of the TRNC, providing a compilation of company expenditures as totaling \$165,343.65. With his resignation, the company's efforts to keep the dream alive deteriorated.⁶⁴

In 1914, railroads completed negotiations with Dallas that played a significant role in killing the navigation movement. If the city ceded the high bluffs at the riverbank, which the TRNC deemed essential for docking facilities, the railroads would construct a Union Station there. Against the TRNC objections, the city agreed to the railroad

⁶¹ Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41.File 7.

⁶² Brown, 96; Remarks of Colonel Delbert Freeman, 2; Payne, 145 Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 41; Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 116.

⁶³ Ibid.

proposal. Shortly thereafter the TRNC dissolved. Another company immediately formed but did not receive enough financial backing. The railroads had won another battle against navigation.⁶⁵

The July 27, 1916 Act was the last appropriation made by Congress. It stipulated no further funding would be made until Dallas or other local interests provided another \$50,000.⁶⁶ The increasing cost burden shouldered by the promoters, such as bridge modification, also factored into the deterioration of the company's previous energy.⁶⁷ John W. Philp, C. W. Hobson, and J. C. Duke headed the formation of a new Trinity River Navigation Company in 1916. They planned to operate boats on the upper reaches of the river where lock and dam construction had been completed. An accurate instrument survey completed during 1916 revealed that the entire channel required canalization to make it navigable. This recommendation would require 27 more locks, 29 more dams, \$13,000,000 and 15 years to complete. Gainful navigation could not be a reality until 1931, according to the Corps's estimates. Though boats such as the Nellie Maurine, Katie Putnam, and Charles T. Gray traveled the Trinity's upper reaches by

⁶⁴ Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 116-117.

⁶⁵ *Ibid.*, 117.

⁶⁶ Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41. File 7.

⁶⁷ Brown, 96; Remarks of Colonel Delbert Freeman, 2; Payne, 145 Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 41.

1917, the goal of year-round travel was far from complete and the project's future looked grim.⁶⁸

The Dallas Chamber of Commerce and the Manufacturers Association also decided to take action, and formed a Trinity River Committee. Colonel Frank P. Holland headed the committee as chairman. Holland traveled to Washington to make an offer to Congress. Dallas would provide \$3 million for canalization if the federal government matched the amount, but Congress refused to even hear the offer. Following another attempt at a navigation company in 1920 without success, all construction and channel maintenance came to a stop.⁶⁹

By 1917, workers had completed seven locks and dams within fifty miles downstream of Dallas, but the energy previously exhibited by navigation proponents had declined. Despite the initial joy of navigation proponents, the project had suffered because of Dallas's overly successful and jealous lobbying. The project illogically started at the wrong end. By starting at Dallas and working down to the mouth, it incurred a delay and waste of valuable time when the river could have been navigable from the coast to the completed locks and dams. The original estimate for the project had

⁶⁸ Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 117; Brown, 96; Remarks of Colonel Delbert Freeman, 2; Payne, 145 Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 41.

⁶⁹ Lockhart, Navigating Texas Rivers (1821-1900), 44.; Richner and Bagot, A Reconnaissance Survey of the Trinity River Basin, 117.

been too low, and the Republican administration was cutting government expenses and lowering taxes in a different kind of pork-barrel politics.⁷⁰

Following the First World War, the Corps of Engineers reevaluated the project. The Chief of Engineers' report of January 21, 1921, effectively sounded the death knell for the project. It recommended abandonment of all efforts to make the river navigable above Liberty, declaring it was not economically feasible. The survey found that the low-lift locks called for and authorized had become obsolete. Such a technicality might have been repaired, but the Corps's recommendations for the project's lack of feasibility and worth doomed further progress. The Corps also cited difficulty in maintaining open-river navigation between widely separated navigation pools. The report declared the impracticability of navigation above Liberty, but endorsed a six-foot channel to Liberty at an annual cost of \$72,000 to construct and \$20,000 to maintain. Congress formally abandoned the project in 1922, and private interest dwindled until the end of the decade.⁷¹

Congressman Clay Stone Briggs from Galveston and Texas Senator Morris Sheppard pled for the project at its last hearing on February 4, 1922. But their arguments were not strong enough to save the project. The River and Harbor Act of September 22,

⁷⁰ Lockhart, Navigating Texas Rivers (1821-1900), 49; Brown, 96; Remarks of Colonel Delbert Freeman, 2; Payne, Dallas: An Illustrated History, 145 Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 41.

⁷¹ Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 41; Brown, 97; Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 3; A Reconnaissance Survey of the Trinity River Basin, 1976-1977, 117-118.

1922 abandoned the portion of the project for construction of locks and dams between Dallas and Liberty. The project reverted to a six-foot channel between Liberty and the river's mouth. In 1925, construction of the channel project ended at Liberty at river mile 41. Almost exactly eight years after the decisive act ended Dallas's hope for navigation, Congressman Hatton W. Sumners confessed with regret to an audience of Dallas civic leaders that "I was Representative of Congress when the Trinity River navigation project was abandoned. It died in my arms."⁷²

As with previous navigation efforts in Dallas, a core group of Trinity navigation supporters refused to let the project go quietly to its grave. As the city continued to grow, along with its western neighbor of Fort Worth, several navigation-friendly water resource developments occurred at local and national levels. The old Trinity zealots who remained kept a watchful eye on events, while attracting and grooming a new leadership of influential civic leaders for a revival of the movement. The combination of events occurring in the 1920s set the stage for the emergence of a new project that would shape water resource development in the Trinity Basin for the rest of the century.

For the North Texas business and political leaders of the early twentieth century, the Trinity River represented a great untapped resource. By recreating the river and

⁷² "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B. Cranfill, Dallas Morning News, February 23, 1930. Special Feature – 5, Carter Papers, RGH Box 41. File 7a; James S. Maxwell, Corps of Engineers, District Engineer of the Galveston District, to Vernon Poole, January 22, 1964, Vernon H. Poole Collection, Sam Houston Regional Library and Research Center, Liberty, Texas, File 29; House of Representatives Document No. 403. Trinity River and Tributaries, Texas. Letter from the Secretary of War transmitting a letter from the Chief of Engineers, United States Army, Dated September 4, 1941. 2.

manipulating and shaping it according to their desires, they hoped to inflict a blow against the railroads and open an entirely new avenue of trade. The navigation zealots, refusing to accept defeat, believed that, once they finally subjugated the river to the will of man, the region would blossom into an area of prosperity and wealth. The Trinity paradox--too much water or not enough--could be eliminated.

CHAPTER 3

FOUNDATION OF A RENAISSANCE: POLLUTION, WATER SUPPLY AND FLOOD CONTROL IN THE EARLY TWENTIETH CENTURY, 1900-1930

During the years that the navigation movement had surged and receded, the cities of the upper basin found themselves confronted by dilemmas of water supply, flood control, and pollution. As urban growth and a major flood unveiled the need for further water supply and flood control improvements in the upper basin, the navigation project withered and died. Dallas County had grown to a population of 82,726 by 1900, up from 67,042 in 1890. Tarrant County reached a population of 52,376 by 1900, up 41,142 from 1890. Denton County contained 28,319 in 1900, and the city of Denton grew from the 2,558 of 1890 to 4,187. The city of Dallas contained a population of 42,638, up from 38,067, and Fort Worth had 26,668, up from 23,076, by 1900. During the next two decades the populations of Dallas and Fort Worth increased rapidly. Dallas County reached 210,551 people by 1920, and the city of Dallas had 158,976. Tarrant County housed 152,800, and Fort Worth served as home to 106,482. Denton County grew to 35,355, and 7,626 called the city of Denton home by 1920. These population trends increased the stress on water systems of the growing cities, and officials found themselves faced with the need to provide adequate water supplies. The decisions they

made concerning water shortage and flood control ultimately resulted in a rebirth of the navigation movement at the end of the 1920s.¹

Thirteen of Fort Worth's artesian wells at its Holly Plant had ceased flowing during the first three years of the century. The Clear Fork source of water was also in short supply. The public demanded action on the poor quality and insufficient quantity of water. The Fort Worth Telegram reported on June 29, 1903 that there was so much mud in the river that one morning the water pumped into the mains resembled paste. To rectify the problem, Fort Worth drilled sixteen new water wells between 1905 and 1914, and installed its first water filtration plant in 1912. To further insure a reliable water supply and improved water quality, engineers recommended placing a dam on the West Fork.²

Workers completed the West Fork dam in 1914, creating Lake Worth. The reservoir, situated near the city's northern limits, had a storage capacity of 27,000 acre-feet. It served as Fort Worth's principal municipal water supply until lake siltation, population growth, and flood control needs forced the city to look for further measures in the 1930s.³

Like Fort Worth, Dallas's water needs exceeded its water supply as the city grew. Demand surpassed the Elm Fork water supply by the turn of the century. The city drilled a new well at the Turtle Creek Pump Station in 1901, and the Trinity Sands delivered

¹ Texas Almanac and State Industrial Guide, 1972-1973 (Dallas: A. H. Belo Corporation, 1971), 157-165.

² Oliver Knight, Fort Worth: Outpost on the Trinity (Norman: University of Oklahoma Press, 1953), 185-186.

water to the surface with a force of a hundred pounds per square inch. In addition, Dallas built Bachman Lake to store stream runoff during periods of heavy rain to insure against shortages. For the time being, Fort Worth and Dallas had the necessary water supplies to provide adequate service to their residents.⁴ Fort Worth had also made its first effective venture into flood control by constructing a municipal levee. The combination of the Fort Worth levee with what one water resource leader later called "Texas's first successful major reservoirs, Worth and White Rock," marked the first effective local activity in water resource development for the Trinity Basin.⁵ With the water supply issues for the cities temporarily in check, the Trinity River struck a powerful blow to the expanding city of Dallas.

A storm originating on the Pacific Coast reached North Texas in late May, 1908. For three days a continuous downpour totaling fifteen inches inundated the river's upper reaches of the West and Elm Forks. The rain reached Dallas on May 24, and by midnight the swollen streams created an immense torrent in the river valley. During the early morning hours of May 25, the raging Trinity began to unleash its power on Dallas. A Denton observer reported, "The water seemed to rise up in great bodies from the river

³ *Ibid.*; The Texas Almanac and State Industrial Guide (1936) 184.

⁴ Henry J. Graeser, "Development of Dallas Water Supply," a paper presented at the Joint Annual Conference of the Southwest & Texas Sections of the American Water Works Association, at Little Rock, Arkansas, 16 October 1984, Dallas Public Library, Graeser Collection, Box 2, Folder 28, 10.

⁵ Amon Carter Papers, Box RGH 41, File 20, John W. Carpenter to Governor Allan Shivers, October 11, 1954.

bed, as well as to sweep down in great torrents. The surprised residents of the suburbs of Dallas and other portions of the river valley were terror stricken.”⁶

The rushing water bottlenecked between the high ground of Dallas’ business district and Oak Cliff. By 3:00 A.M., the river covered a width as great as ten miles. Floodwaters struck Dallas’s power plant before dawn, flowing into its basement and leaving the city in total darkness. The Commerce Street bridge stood less than a foot over the water. The swollen river destroyed the Texas & Pacific railroad’s trestle. Governor Thomas Campbell mobilized the state militia to give aid to the paralyzed city and to patrol the streets at night until the electricity returned. Formed to aid the suffering, the Citizens Relief Committee could not safely board the Nellie Maureen and survey the flood damage in Oak Cliff and West Dallas until June 3, 1908.⁷

The heavy, relentless rain had also transformed the creeks and branches of Denton County into raging torrents. The hollows and creeks reached heights in the town of Denton that reportedly surpassed the flood of 1866. Residents of low lying areas fled to higher, safer ground. Branches of Pecan Creek, flowing through the northern section of the town, brought the greatest destruction, when their waters demolished all but one of the bridges along one of its main thoroughfares, Bell Avenue. The flood divided the town with no passage between sections for several hours. Outhouses, chicken coops, drowned animals, and stove wood filled the swollen streams. If they escaped drowning,

⁶ Texas Almanac, 1998-1999 (Dallas: A. H. Belo Corporation, 1997), 106; Ernest Sharpe, G. B. Dealey of The Dallas News (New York: Henry Holt and Company, 1955), 142-144; Denton County News, 28 May 1908, 1.

⁷ Sharpe, G. B. Dealey, 142-144.

horses or cows pastured on the Elm bottomlands suffered severe injury from barbed wire. Water inundated Denton's telephone exchanges, flour mill engine rooms, and the street car company's powerhouse. Railroads ceased operation throughout North Texas for several days, and Denton residents who happened to be in Dallas or Fort Worth found themselves stranded until the waters subsided. A group of Hispanic laborers clearing brush on a farm near the Elm Fork on Saturday had to seek refuge in trees. They clung to the branches until Monday afternoon, when a boat rescued them. An observer wrote, "The situation is the most serious that ever confronted the people of North Texas and is one that column after column might be written and the story never told."⁸

The flood forced two to four thousand people in Dallas to evacuate, and tent cities sprang up around the city. The city suffered \$2.5 million in damage, three nights of darkness, and malaria and typhoid epidemics following the destruction of the municipal water supply. The stench from thousands of drowned livestock, many left hanging in treetops, lingered for days. In the flood's aftermath, Dallas braced itself and launched a campaign to insure against the recurrence of such devastation.⁹

Dallas began serious city planning following the flood by adopting procedures of the City Beautiful Movement. Flood control proposals ranged from constructing retarding basins, widening and deepening the river channel, to creating a lake between Dallas and Oak Cliff. The Federation of Women's Clubs initiated a pure-water initiative in the aftermath of the malaria and typhoid epidemics. George B. Dealey, head of the

⁸ Denton County News, 28 May 1908, 2, 7, 16.

⁹ Patricia Evridge Hill, Dallas: The Making of a Modern City (Austin: University of Texas Press, 1996), 10, 19.

Dallas Morning News, emerged as a vocal leader in the planning movement to organize and secure the safety of Dallas.¹⁰

Dealey, described as an ambitious and intelligent man, recognized the Trinity River as Dallas's greatest handicap. Having aloofly supported earlier Dallas improvement plans, he noted their tendency to collapse once they achieved some success or encountered setbacks. They had no staying power. Influenced by The Awakening of Harrisburg, an American Civic Association pamphlet, Dealey adopted a new approach based on other cities' successes. He resolved to increase his involvement in improvement efforts and to keep civic movements alive.¹¹

Using his newspaper and community standing, Dealey became an impetus for civic activity. Between 1908 and 1910, he launched a vigorous campaign to draw support for city planning. As historian Mel Scott wrote, Dealey's "contagious enthusiasm" inspired Dallas's leadership to embrace planning. The newspaper publisher's efforts led to commissioning George Kessler, a nationally respected architect and city planner, to do the work.¹²

Kessler's task involved formulating a comprehensive plan for Dallas that offered solutions for the Trinity's periodic flooding, the city's chaotic street system, insufficient recreational facilities, and the muddled, costly transportation system. An admirer of beauty and nature, Kessler merged this feeling into his work, transforming waste places

¹⁰ Hill, Dallas, 10, 19; William K. Wilson, "Adapting to Growth: Dallas, Texas, and the Kessler Plan, 1908-1933." Arizona and the West, Autumn 1983, 25 (3): 245-248.

¹¹ Sharpe, 235-237; Wilson, "Adapting to Growth. . .", 248-250.

into parks and gardens. His plan for Dallas left his imprint on the city's organization and character.¹³

In 1912, Kessler presented his plan for Dallas. His practical approach reflected the city business leaders' goals, leading off with proposals to control the Trinity floods with a levee system. The levees and straightening of the channel would also make the river conducive to navigation. Kessler predicted that with flood control, the Trinity bottomland's property values would rise and "a great city" would "spring up immediately." Dallas began to act on Kessler's plan, and later showed its appreciation to his contributions by later building a memorial boulevard to him near downtown.¹⁴

Before Dallas took any significant action towards flood control planning, North Texas faced another serious dilemma. The region suffered one of its most severe periods of prolonged drought from November 1908 to August 1913. In 1907, Dallas had already procured land north of the city on White Rock Creek for a new water supply reservoir, but the drought began before its completion. The city dug new wells, utilized water from gravel pits, pumped small city park lakes dry, and reactivated the old Browder's Springs site. The Dallas Water Department enforced extreme measures, including disconnecting domestic services and providing daily allotments for residents from water wagons.

¹² Wilson, "Adapting to Growth. . .", 245-250; Mel Scott, American City Planning Since 1890, (Berkeley and Los Angeles: University of California, 1969) 78.

¹³ Wilson, "Adapting to Growth. . .", 245-248; "George Edward Kessler," The National Cyclopedia, Volume 20, 1929, 296-297.

¹⁴ Wilson, "Adapting to Growth. . .", 251; Scott, 124; "George Edward Kessler," The National Cyclopedia, Volume 20, 1929, 297.

People had to carry their water allotment to their homes from tubs placed on curbs and street edges.¹⁵

The city also took action to provide for the future. Contemporaries predicted White Rock Lake, completed in 1910, should meet Dallas's water needs forever. For assurance of a continuous water supply, the city in 1910 built California Crossing Dam on the Elm Fork above Bachman Lake and in 1911 another dam above Carrollton. Following the unveiling of Kessler's city plan for Dallas, the city also initiated efforts to improve the water quality.¹⁶

Water from the Trinity River had flowed untreated into Dallas's water mains, but following the flood of 1908 people's cries for cleaner water initiated a pure water movement, which the Federation of Women's Clubs spearheaded. To answer the demands, Dallas built its first treatment plant in 1913 at the Turtle Creek Station. The plant filtered the water from Elm Fork and Bachman Lake, while White Rock Lake's water remained untreated until 1923. The 1908 call for cleaner water foreshadowed a developing problem that by 1925 demanded serious attention.¹⁷

Fort Worth had installed a sewage system in the early 1880s, and began discharging its raw sewage into the West Fork of the Trinity River. In March 1903, the Armour Packing Company and the Swift Packing Company officially opened slaughtering and manufacturing plants at Fort Worth, making it the meat-packing capital

¹⁵ Graeser, "Development of Dallas Water Supply," 9-11, 52. The Texas Almanac and State Industrial Guide, (1936), 185.

¹⁶ Ibid.

¹⁷ Graeser, "Development of Dallas Water Supply," 9-11.

of the Southwest. The two businesses added their industrial waste to the municipal sewage flowing into the stream. In addition to the city and packing plants sewage, other industries such as rendering plants and oil refineries added their industrial waste to the river. Dallas, barraged with Fort Worth's pollution, added to the problem by discharging its sewage into the river as well. In addition, people thoughtlessly dumped their garbage from bridges into the river. Basin residents downriver reported that when heavy rains flushed the river, "black rises came down killing fish by the thousands." For twenty years the practice continued, creating a terrible pollution problem.¹⁸

By 1925, the river upon which some wished to transport commerce resembled a "a great septic tank." The average Fort Worth packing house sewage was about ten times as concentrated as the average city in America, and, as stated by the Texas Health Department, carried "as much objectionable matter as would be delivered by a city of 104,000 people." Thirty-seven towns discharged about forty million gallons of sewage effluent a day into the river. In April 1924, Fort Worth and the packing plants began readying an updated disposal plant. While Dallas, in June 1924, made extensions to its treatment plant, the city discharged its raw sewage directly into the Trinity. During this period, the river's condition became so unbearable that the State Board of Health ordered a survey of the river.¹⁹

The State Health Department performed a survey of the Trinity River from October 1924 to June 1925, and produced a startling report detailing the extent of

¹⁸ State Health Department of Texas, Trinity River Sanitary Survey (Austin: Texas State Board of Health, 1925), 13-17, 43, 155, 225, 229, 237.

¹⁹ *Ibid.*, 13-17, 43, 155, 225, 229, 237.

pollution. J. G. Burr, a member of the state's Game, Fish, and Oyster Commission, who participated in the survey, declared the river's water quality to be in a situation of "gravity and extreme peril" and argued for "heroic" efforts to improve water treatment and rectify the problem. Throughout the length of the river's course, some twenty-five towns and cities channeled their waste directly into the stream or its tributaries. They practiced varied levels of treatment. One official feared Fort Worth and Dallas' recently expanded treatment plants were insufficient when compared to the abysmal quality of the Trinity's water.²⁰

The Trinity River Sanitary Survey stated that, instead of being "examples of culture and cleanliness to the dwellers along the stream," Dallas and Fort Worth's combined waste ruined river frontage downstream and reached health threatening proportions. The flow of municipal and industrial waste from Fort Worth to Dallas had been quite severe for twenty years. The growing city of Dallas likewise dumped its sewage straight into the river, seeing no reason to pursue serious efforts at preserving the river's quality as long as Fort Worth's sewage continued to flow.²¹

Since the turn of the century, Dallas and Fort Worth had inflicted severe damage to the river. Their combined refuse ruined the river for domestic, stock, and recreational use for a hundred miles downstream. People could no longer rely on the river to water their cattle or for fishing. Burr's description of the river below Dallas vividly illustrates the extent of pollution, and cannot be equaled by paraphrasing. He wrote,

²⁰ Ibid., 1, 7, 9.

²¹ Ibid., 1.

The flow from below Dallas for many miles does not impress one as being that of a river. A stench from its inky surface putrescent with the oxidizing processes to which the shadows of overarching trees add Stygian blackness and the suggestion of some mythological river of death. With this burden of filth the purifying agencies of the stream are prostrated; it lodges against obstructions in the stream and rots, becoming hatcheries of mosquitoes and malaria. A thing of beauty is thus transformed into one of hideous danger.

The river gave off an extremely foul stench, likened to that of a septic system and dried barn yard blood. At one section of the Trinity that went on for several miles in Fort Worth, a coating of manure covered the river so thick that a wooden log could not break through and grass actually grew on the river's surface. The survey advised that the continued growth of towns along the river between Fort Worth and Dallas removed the possibility that Dallas would ever have a perfectly clean Trinity River flowing through it.²²

Convincing a city of the importance of clean, healthy drinking water supplied by the river would be an easy task, but taxpayers were indifferent to the pollution they sent downstream to others. Basin residents as far as 225 miles downstream claimed the pollution created an unbearable stench, and the putrid matter flowing in the Trinity caused the wholesale destruction of fish. The Texas legislature had passed a pollution law demanding that rivers be kept clean. For twelve years, Dallas had failed to observe the measure adequately.²³

By the time of the 1925 survey, Dallas had emerged as the commercial center and the financial capital of the Southwest. The survey found it surprising that Dallas, a city

²² Ibid., 2, 4-5, 7, 10, 46, 47,

²³ Ibid., 2, 4-5, 7, 10, 46.

that prided itself for leadership in finance, culture, and refinement, would be content in trailing Houston, San Antonio, and even Fort Worth, in sanitation. Dallas's substantial population growth during the first quarter of the twentieth century presented a huge sewage problem. The gauge for measuring a city's sanitary engineering during the 1920s focused on the number of typhoid cases. In merely seven months of 1923, Dallas had 60 cases and 4 deaths from typhoid, while Harris County had 49 cases, Bexar County had 13 cases, and Tarrant County had 27 cases. In August and September 1924, Dallas' typhoid cases stood at six times the total of Harris, Bexar, and Tarrant combined, an alarming rate considering that other areas of the country had significantly reduced the prevalence of waterborne diseases such as typhoid. The main factor causing this problem was the severe pollution of the Trinity River, primarily the result of Fort Worth and Dallas's terrible sewage practices.²⁴

While the terrible pollution of the river posed a severe problem, Dallas and Fort Worth preferred to pay closer attention to their water supply needs. Several factors contributed to Fort Worth's expansion of reservoir capacity in the 1920s. An April 1922 flood left thirteen of the city's residents dead, twenty-nine hospitalized, and fifteen hundred homeless. The waters inflicted an estimated \$3 million in damage. City leaders rallied in its aftermath to create a flood control plan. Also during the 1920s, Fort Worth's growing population increasingly taxed Lake Worth, which experienced problems with siltation. The city leadership's attention to both water supply and flood control resulted in the creation of the Tarrant County Water Control and Improvement District Number 1.

²⁴ Ibid., 1-7, 10.

The state empowered the district to build Eagle Mountain and Bridgeport Reservoirs, and in 1928 voters authorized bonds for the flood control and water supply reservoirs. Construction began in 1930.²⁵

Dallas, continuing its population growth to 260,475 by 1930, also looked to the city's future water needs. Water managers proposed construction of a lake in Denton County near the town of Garza. Some Dallas residents grumbled about the plan, considering it too big and unnecessary. Others disparaged what they perceived as a foolish financial waste on a recreational facility for Denton County. Several Denton County residents also disapproved, looking with disdain at the loss of farm land and tax base for the county.²⁶

Feeling the pressures of urban growth on the city's water supply, Dallas officials disregarded the disparaging remarks and proceeded to build Lake Dallas. Completed in November, 1927, the reservoir became the sixth reservoir financed solely by the city of Dallas, and the first of three constructed in Denton County. Dallas offered the city of Denton the chance to purchase water in the lake, but shortsighted city officials rejected the proposal. Denton's leaders explained that underground water supplies would be sufficient for the city's growth. The city, which would reach a population of 9,587 in 1930 and 21,345 by 1950, later regretted this shortsighted decision. Dallas, meanwhile,

²⁵ Fort Worth Public Library, Clippings Files, "Flood, FW, 1942-50," Fort Worth Star-Telegram, 4 October 1950; The Texas Almanac and State Industrial Guide (1936), 184.

²⁶ The town of Garza changed its name to Lake Dallas after the reservoir's construction. Graeser, "Development of Dallas Water Supply," 11; Texas Almanac and State Industrial Guide, 1972-1973 (Dallas: A. H. Belo Corporation, 1971), 157-165.

in 1929 proceeded to install a pump station and treatment plant at Bachman Lake. It also closed down the White Rock treatment plant and converted the lake into a park facility. The water supply that was to last forever had not stayed in use for a quarter of a century.²⁷

After years of debate and failure, Dallas also finally dealt with flood control issues raised following the flood of 1908. The Dallas mayor, city planning commission chairman, Kessler Association chairman, and Dallas Chamber of Commerce president established the Ulrickson Committee to correlate various improvement projects that had fallen by the wayside because of poor funding. Engineers, including the chief engineer of Panama Canal construction, agreed that the Kessler levee plan could be a satisfactory flood control and land reclamation project. It served as the foundation of the committee's eighty-one project plan which it presented in a \$23.9 million bond issue, capping off four years of consideration. G. B. Dealey, maintaining his support of the plan, campaigned through the Dallas Morning News for its acceptance. Dallas voters on December 15, 1927 approved the multi-million dollar plan, bringing Dealey and his allies joy and gratification.²⁸

A thousand spectators gathered in July 1928 to commemorate a giant dragline excavating machine as it started to work on the levee project. At the ceremony Dealey, unleashing his happiness while addressing the group, stated:

²⁷ By 1930, Dallas had constructed Record's Crossing (1896), Bachman (1902), California Crossing (1910), Carrollton (1912), White Rock Lake (1912), and Lake Dallas (1927). Switzer, 52; E. Dale Odom, An Illustrated History of Denton, County (1996), 69-70. Graeser, "Development of Dallas Water Supply," 11.

²⁸ Sharpe, G. B. Dealey, 235-237; Scott, American City Planning, 254.

This is a red-letter day for Dallas. Strange as it may seem, in 1902, more than twenty-five years ago, I stood on the old Commerce Street bridge and looked down into the valley and became obsessed of the idea that some day the flood situation would be corrected and the valley would be reclaimed. . . . I am well aware that during all these years most people regarded the project as a chimerical and a huge joke.²⁹

Noting the previous two failures to gain the project's approval, Dealey continued, "[b]ut Fate decreed that the efforts should become 'Trinitarian,' and the third effort was the charmed one, and we are here today to congratulate the men who are responsible. . . . Their motto has been 'Never say die.'" The persistence and determination that Dealey alluded to had already started to show up in the supposedly debunked navigation movement.³⁰

When the Trinity navigation project had died in 1922 in the arms of Hatton Sumners on the floor of the United States Congress, a core group of navigation zealots refused to commit their dream to the grave. One of the most significant of these zealots was Dallas's Dr. J. B. Cranfill. His dedication almost single-handedly resurrected the project at the end of the decade. Cranfill had been a pioneering advocate of Trinity River navigation for many years. In his heart and mind, Cranfill knew that Trinity navigation held the potential of tremendously influencing the destiny, not only of the Trinity River watershed, but of the entire state of Texas.³¹

Cranfill had been born west of Fort Worth in Parker County when it was still frontier. Raiding Indians killed one of his cousins within half a mile of Cranfill's

²⁹ The levees reached completion by 1932. Sharpe, G. B. Dealey, 237.

³⁰ Ibid.

³¹ J.B. Cranfill of Dallas to Amon G. Carter, August 4, 1930, Amon Carter Papers, Amon Carter Museum Archives, Fort Worth, Texas, RGH Box 41.File 7a

birthplace. He had lived in Waco when the Harvey arrived in Dallas. After relocating to the city of Dallas, he immersed himself in the navigation movement, later became chairman of the Trinity River Navigation Company, and in 1914 oversaw the arrival of a vessel, the Commodore Duncan, from Galveston to Dallas as a promotion of the project. When Congress ceased funding the project in 1922, Cranfill did not accept the federal dictum. He believed that Trinity navigation was far too important for the future of Texas.³² Cranfill was determined to contribute all that he could to seeing his dream transformed into reality. In a 1930 recollection he combined recollection with prophecy,

What was Texas when I was born? What was Fort Worth? Why, Fort Worth was only a fort and there was a fort at Weatherford. Dallas was not seventeen years old and was not as big as Grand Prairie is now. The march of the oncoming millions that has reverberated in this state has occurred since I was born and Texas had not yet begun. . . . Trinity River navigation or canalization is an imperative necessity for us and what Texas is to be none of the eyes of the men here will be here to behold. . . . the day is coming when Texas will begin to be developed; why we haven't begun yet; we haven't scratched the surface of our oil fields; we haven't begun to exhume and exhibit the wealth of our mineral resources; we have not more than scratched the surface of our agricultural land and if you are inclined to doubt this and call it hyperbole, just remember that any lie told about Texas to-day will become the truth to-morrow.³³

His enthusiasm and dedication, reinforced by the water resource development in the upper basin during the 1920s, played a significant role in a renaissance of the Trinity navigation movement.

³² Minutes of the Meeting of the Trinity River Canal Association, held in the Metropolitan Hotel Building, Fort Worth, Texas at Ten A.M., August 28, 1930. 18-20, Carter Papers, RGH Box 41. File 7a.

³³ Ibid., 20-21.

CHAPTER 4

TRINITY RIVER RENAISSANCE, 1922-1930

Following the apparent death of the canal project in 1922, canal zealots remained faithful to their ideal. As the local physical environment and the national political environment underwent significant changes, they prepared to launch a new and improved navigation movement. The Trinity River renaissance that emerged in 1930 relied on an energized information campaign and emphasized a broader purpose. A new organization, the Trinity River Canal Association, dedicated itself to convincing the United States government and the people of Texas that a navigable Trinity River would be to the benefit of all.

In 1924, congressional authorization of the Louisiana-Texas Intracoastal Canal provided navigation proponents with fresh ammunition. The Gulf Intracoastal Canal Association of Louisiana and Texas (GICA) had played an especially vital role to the project's success in Congress. Since 1875, proponents of an intracoastal canal stretching along the Gulf Coast from the Mississippi River to the Rio Grande had been muddling along in a similar fashion to the Trinity navigation supporters. After forming the GICA in 1905, intracoastal canal advocates focused intense activity on the nation's legislators. Its structure and operation, along with its success in 1924, would serve as a model for Trinity navigation advocates. The intracoastal canal also provided the Trinity canal with increased legitimacy. A navigable Trinity River, with its junction to the intracoastal

canal, would serve as a significant part of a national transportation system, according to its supporters.¹

Following the authorization for the intracoastal canal in 1924, Congress passed another piece of legislation in 1925 that also benefited the cause of navigation.² Illinois Congressman E. E. Denison's act required railroads to accept freight from and deliver to waterways. It gave the supporters of the water transport industry leverage against the group considered to be their greatest enemy, the railroad companies. If successful in defeating their powerful opponents, the Trinity navigation boosters could be assured that the railroads could not retaliate by refusing waterborne commerce going to or coming from the Trinity River.³

These two acts spawned a renewed effort in North Texas for Trinity navigation. Dr. J. B. Cranfill, once president of the defunct Trinity River Navigation Company, paid close attention to the events of the 1920s, as he sought a rebirth of his dream of a navigable Trinity. Cranfill firmly believed that canalizing the Trinity River was essential to the future prosperity of Dallas and the state of Texas. In John William Carpenter, a

¹ "Trinity River Plans Headed by Carpenter," Dallas Morning News, 28 May 1930; Archive materials at Tulane University in New Orleans contains the records of the Gulf Intracoastal Canal Association which formed in 1905, along with intracoastal canal movement materials stretching back to 1875., Tulane University web site, <http://www.edu/~lmiller/Transportation.html>.

² John M. Fouts to Amon G. Carter, August 22, 1930, Amon Carter Papers, Amon Carter Museum Archives, Fort Worth, Texas, RGH Box 41.File 7a.

³ "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B. Cranfill, Dallas Morning News, February 23, 1930. Special Feature, 5, Carter Papers, RGH Box 41.File 7a; Amon Carter to L.F. Swift, Jr, N.O. Hogue, and Al. Donovan of Fort Worth, December 15, 1930. Silliman Evans to Amon G. Carter, November 30, 1930, Carter Papers, RGH Box 41.File 7a.

respected leader of Texas industry, Cranfill found a younger man he believed could give life to the movement.⁴

On August 31, 1881, Carpenter had been born to a farm family in Navarro County, Texas. Although his roots were in the countryside, Carpenter's destiny lay northward in the city of Dallas and with the waters of the Trinity River. He received education from North Texas State Normal College in Denton and Draughton's Business College in Fort Worth. Eulogized after his death as a self-made man, Carpenter entered the workforce as a laborer for Corsicana Gas and Electric Company. He enrolled in a correspondence course on electricity, and between 1900 and 1905 Carpenter ascended through the ranks as laborer, lineman, plant engineer, bookkeeper, collector, superintendant of distribution, and finally general superintendant of Corsicana Gas and Electric Company. After a brief stint with a Texarkana electric company, Carpenter worked for General Electric Company in Ohio and Indiana from 1905 to 1907, then returned to become president and general manager of Corsicana Gas & Electric. He also became president and general manager of Corsicana Transit Company and Athens Power & Light Company. Carpenter left all three positions to move to Dallas in 1918 to become vice president and general manager of Dallas Power & Light Company. Through his years of training and advancement, Carpenter had learned the value of research and determination. Dallas offered great opportunity to a man with Carpenter's determination

⁴ Minutes of the Meeting of the Trinity River Canal Association, held in the Metropolitan Hotel Building, Fort Worth, Texas at Ten A.M., 28 August 1930. 18-20, Carter Papers, RGH Box 41. File 7a.

and skill, and in 1919 he became vice president and general manager of the Texas Power & Light Company of Dallas.⁵

Texas Power & Light Company, a relatively young business when Carpenter joined the firm, expanded and prospered under his guidance. His reward came in 1927 when he became president of the company. By that year he had achieved a solid reputation in the North Texas business world, and along with his presidency of TP&L, Carpenter received administrative positions with the Dallas Railway and Terminal Company (president, 1927-1935), the Texas Electric Service Company (executive vice president, president, general manager, 1927-1935), the Texas Public Utilities Corporation (president and general manager, 1927-1947), the New Mexico Electric Service Company (president and general manager, 1931-1946), and the Texas Refrigeration and Ice Company (president and general manager, 1945-1949). His peers acknowledged him to be the "dean of the electrical industry in the Southwest." Already successful in the electrical industry by 1930, in that year Carpenter ventured into a new business arena when he organized the Texas Security Life Insurance Company, the foundation upon which he built Southland Life Insurance Company. By the time of his death in 1959, the company had over \$1,250,000,000 of life insurance and ranked as the fifteenth largest publicly-owned (stock) life insurance company in the United States.⁶

⁵Southland Life Insurance Co., John W. Carpenter, 1881-1959, front matter, Dallas Public Library; "John William Carpenter," The National Cyclopedia of American Biography, Volume 48, (New York: James T. White & Company, 1965), 597-598; Robert L. Johnson, Texas Power & Light Company, 1912-1972, 62-64.

⁶Ibid.

While he guided his assorted business ventures, Carpenter managed to find time for many interests, but none of them seemed to capture his imagination or his heart like the goal of Trinity River navigation. He had arrived in Dallas in time to see the navigation movement stumble on its last legs and eventually crumble in 1922. John Carpenter would be an instrumental figure in reviving the navigation movement and in the comprehensive development of the Trinity River Basin's water resources.⁷

Carpenter always kept a poem hanging on his office wall. It provides a telling look into his outlook and determination. It read, in part:

If you strike a thorn or rose, Keep a-goin.
If it hails or if it snows, Keep a-goin.
'Taint no use to sit and whine;
When the fish ain't on your line:
Bait your hook and keep on tryin' --
Keep a-goin.'

Carpenter carried this simple yet uplifting concept of persistence with him in his endeavors. In the movement to which he dedicated a great part of his life, Trinity navigation, such persistence would be sorely needed. Carpenter's determination and optimism would remain a trademark characteristic of the improvement effort long after his death..⁸

In 1927, the president of Dallas's Chamber of Commerce, at Dr. Cranfill's suggestion, appointed Carpenter to serve as chairman of the group's committee on the Trinity River. Carpenter picked up the torch for navigation and for the next thirty-two

⁷ Ibid.

⁸Southland Life Insurance Co., John W. Carpenter, 1881-1959, [Dallas: Southland Life Insurance Company, 1959], front matter.

years carried it forward into what he hoped would be a bright future. Following his appointment in late 1927, Carpenter engaged a private engineering firm to investigate the feasibility of barge traffic on the Trinity River. The resulting report informed Carpenter that the Corps of Engineers had not altered its negative opinion of the Trinity River. According to the Corps, the benefits of the navigation project were too low and there was not enough local interest in it to proceed. Having learned the project's weaknesses, Carpenter moved to eliminate them.⁹

One of Carpenter's strengths lay in his wide-ranging business and personal relationships with the state's business and political elite. Recognizing that a fresh attempt for navigation by the citizenry of Dallas alone would be futile, Carpenter looked westward to Fort Worth to forge a navigation alliance. In that city, he found his most able ally in civic leader Amon Carter.¹⁰

Carpenter's Fort Worth counterpart in the Trinity navigation movement, Amon Giles Carter, shared a similar rags to riches past. Carter had been born in a log cabin near Crafton, in Wise County, Texas on December 11, 1879. Carter's only formal education came in a small country schoolhouse and lasted only until he was eleven years old. At that age, he started working odd jobs in the Montague County railroad town of Bowie.

⁹ D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, (Fort Worth: 1979) 99-100; "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B. Cranfill, Dallas Morning News, 23 February 1930. Special Feature – 5, Carter Papers, RGH Box 41. File 7a; Johnson, Texas Power & Light Company, 1912-1972, 62-64.

¹⁰ Brown, 99-100; "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B. Cranfill, Dallas Morning News, 23 February 1930. Special Feature – 5, Carter Papers, RGH Box 41. File 7a; Johnson, Texas Power & Light Company, 1912-1972, 62-64.

He lived and worked in that small town, northwest of Fort Worth, until age eighteen. He washed dishes and waited tables at a boarding house, and supplemented the \$6 a month he earned there by carrying water to Bowie's largest general store and selling chicken sandwiches to passengers on the Fort Worth & Denver Railway while they stopped in the town. When chicken was unavailable, Carter would substitute rabbit meat and hope the passengers were safely down the line before they noticed the difference.¹¹

Carter left Bowie at age eighteen, and after a venture in Indian Territory peddling gilt-framed pictures he journeyed westward to San Francisco, California to work for an advertising firm. He returned to Texas in 1905, having learned that the meat packing firms of Armour & Company and Swift & Company had started plants in Fort Worth. The meat packers promoted economic growth and opportunity in the town, and Carter intended to benefit from the developments. He set up a small advertising firm, and after a year of labor he caught the eye of some businessmen interested in establishing a newspaper to rival the Fort Worth Telegram. Carter began his newspaper career in 1906, as advertising manager of the Fort Worth Star.¹²

After playing an influential role in the merger of the Star with the Telegram in 1909, Carter became the new enterprise's business manager along with his role as

¹¹ By far the most complete biography of Amon Carter, Sr., is Jerry Flemmons's well written book Amon: The Life of Amon Carter, Sr. of Texas (Austin: Jenkins Publishing Company, 1978), which he revised and updated with Amon: The Texan Who Played Cowboy for America (Lubbock: Texas Tech University Press, 1998). "He 'Kept Faith' With City, West Texas," Fort Worth Star-Telegram, 25 June 1955; "Amon G. Carter Dies at Home After Illness Which Began in '53," Fort Worth Star-Telegram, 24 June 1955.

¹² Ibid.

advertising manager. Other endeavors also caught Carter's attention over the years. He helped bring the first airplane to Fort Worth in 1911, launching a lifelong affair with aviation. Carter became the youngest president of the Fort Worth Chamber of Commerce, and in 1923 Carter became president and publisher of the Star-Telegram. In 1928, Carter became director of the Aviation Corporation, which included the fledgling American Airways, later American Airlines (1934), in its holdings. After he had already become involved with the Trinity navigation movement in 1930, Carter became wealthy when he achieved success in the oil industry by drilling a discovery well in New Mexico. In 1939, the Fort Worth mayor praised Carter by saying the man's "personality is so intertwined in the destiny of Fort Worth that his very name is synonymous with it." Later oil projects brought in the Texas Wasson Pool in Gaines and Yoakum counties, a portion of which he sold in 1947 for \$16,500,000. Throughout these years, Carter had actively promoted Fort Worth and West Texas ahead of Dallas, but put aside his civic prejudices in 1930 to join with Carpenter in the establishment of the Trinity River Canal Association. Navigation opened an entire new avenue of development for his community, and like he did with all projects he believed in, Carter stood firmly behind the advancement of the movement.¹³

Carter, an accomplished businessman like Carpenter, also knew how to use his influence to advance the causes he found important. He once said, "A man can not live off his community; he must live with it." He also shared a similar hardnosed determination with Carpenter. "Most everybody can get results when kindly

¹³ Ibid.

encouraged," Carter said, "but give me the man who can get there in spite of hell." These quotes, like Carpenter's favorite poem, set the tone for the navigation movement's activities and persistence. Carter and Carpenter, supported by an army of allies, would significantly influence the water resource development of the Trinity River basin.¹⁴

Following the election of Herbert Hoover to the presidency, Cranfill embarked on a mission to generate support for a Trinity navigation revival in Washington, D.C. Dr. Cranfill felt that the presence of Hoover in the White House bode well for the Trinity River. Although a Democrat, Cranfill had campaigned for the Republican candidate, believing Hoover's background as an engineer along with his advocacy of internal improvements would be favorable for the navigation movement. Hoover had carried Texas by 25,000 votes, and Cranfill hoped this information would endear the president to the Trinity project. In February 1929, Cranfill journeyed to Washington to meet with Hoover's Secretary of War, James W. Good, with whom he had become acquainted during the campaign. Travelling again to Washington in May 1929, Cranfill had the opportunity to meet with the president and present the case for the Trinity program. Even though Hoover did not offer an outright endorsement, the president did stress his support of inland waterway improvement. While in Washington, Cranfill also lobbied extensively with the Texas delegation. His work paid large dividends.¹⁵

¹⁴"He 'Kept Faith' With City, West Texas," Fort Worth Star-Telegram, 25 June 1955.

¹⁵ That Cranfill campaigned for Hoover was an anomaly in the Democrat stronghold of Texas. Cranfill was a Democrat, but Hoover's support for inland navigation along with other factors outweighed Cranfill's normal support for the Democrats. "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B.

At the suggestion of Texas Senator Morris Sheppard, the Senate Committee on Commerce adopted a resolution to review the Trinity River reports on December 10, 1929. Cranfill, Dallas Water Department manager John Fouts, and W. S. Mosher were overjoyed to hear this news as they arrived in Washington to attend the National Rivers and Harbors Congress. The Sheppard resolution directed the Board of Engineers for Rivers and Harbors to reconsider the project.¹⁶ Next, Sheppard, Texas Senator Tom Connally, Illinois Congressman E. E. Denison, W. S. Mosher, Fourth Assistant Postmaster General John W. Philp, John Fouts, and Cranfill visited with General Lytle Brown, Chief of Engineers. Then on February 3, 1930, Major Milo P. Fox, the Galveston District Engineer for the Corps, held a hearing on the project at Dallas.¹⁷

While the legislative fate of Trinity River navigation played itself out in the nation's capital, civic leaders of North Texas carried the navigation renaissance to its next level. On May 22, 1930, reminiscent of the pomp and circumstance frequently associated with earlier navigation movements, the Dallas Police Band trumpeted the arrival of over a hundred Dallas businessmen to Fort Worth. The neighboring cities's civic leaders organized the Trinity River Navigation Association, which shortly became the Trinity

Cranfill, Dallas Morning News, 23 February 1930. Special Feature - 5, Carter Papers, RGH Box 41. File 7a.

¹⁶ Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41. File 7.

¹⁷ "Bringing Trinity River Navigation Back to Life was Giant's Job", by Dr. J.B. Cranfill, Dallas Morning News, 23 February 1930. Special Feature - 5, Carter Papers, RGH Box 41. File 7.

River Canal Association, a group dedicated to establishing Dallas and Fort Worth as inland ports, an achievement all previous movements had failed to attain.¹⁸

The Fort Worth Chamber of Commerce president, Walter B. Scott, presided over the meeting. Just six months before the meeting, Scott had been among the many doubters of Trinity navigation. Having reviewed the engineering reports, Scott had change his position to emerge with Amon Carter as one of Fort Worth's staunchest navigation advocates. Scott considered the cultivation of public support to be their paramount duty as navigation advocates. "We are assured," Scott announced to the assembly, "that the water and the tonnage are available. It is up to the people of Texas who will be benefited by this project, which includes fully half the citizens of this State to interest themselves in this problems and get their shoulder to the wheel." It was up to the fledgling organization to make sure that public support existed.

One of the central figures to address the meeting was a former mayor of Corpus Christi turned professional political lobbyist and advisor, Roy Miller. He had been especially instrumental in the successful twenty-five-year Intracoastal Canal struggle, serving as one of the chief officials of the Intracoastal Canal Association. Miller now brought his considerable talents and knowledge to the Trinity navigation renaissance. "I tell you the very future and life of interior cities like Dallas and Fort Worth are at stake," stressed Miller, "A commercial and industrial revolution is being brought about in this country by inland navigation." To illustrate the significant contribution navigation could make to Dallas and Fort Worth, Miller compared the cost of shipping steel by water and

¹⁸"Dallas Joins Fort Worth in Trinity Fight," Dallas Morning News, 23 May 1930.

rail. Moving a ton of steel by rail from Pittsburgh to North Texas cost about \$20 in 1930. Barges travelling an unfettered Trinity River would lower the transportation cost to only \$4 a ton. According to Miller, the Intracoastal Canal movement had "muddled along for fifteen years" before organizing in the same way that the Trinity navigation leaders were currently doing. The time had come for Dallas and Fort Worth to link into the growing inland water system of the United States in order to guarantee their prosperity.

Critics said the Trinity was too small a river for navigation. To contradict this view, supporters directed their gaze to Alabama's Warrior River, a smaller stream than the Trinity that had been made navigable from Mobile to Birmingham and carried 20,000,000 tons of freight each year. Fort Worth's C.H. Taber had been among the government's engineers in conducting an earlier survey of the Trinity, and insisted that the project would work. Having covered the river on foot from Fort Worth to the Gulf Coast, Taber knew the Trinity as well as any living person and declared that the only barrier to the project would be a lack of enthusiasm and understanding.¹⁹

¹⁹ When the meeting began, Scott had appointed an organization committee. Its membership included Dallas's Dr. J.B. Cranfill and John Fouts, along with Fort Worth's E.J. Hosey, H.C. Burke, Jr., and Ed P. Byars. These men selected the Association's board of directors: from Dallas -- John W. Carpenter, Homer D. Wade, C.J. Crampton, Henry C. Morris, W. Hal Noble, Hugh E. Prather, Dr. J. B. Cranfill, Frank P. Holland, Albert L. Reed, John M. Fouts, Captain J. F. Lucey, Dr. C.C. Selecman, Colonel W.E. Talbot, Martin Weiss, Tom C. Gooch, A.O. Anderson, Walter A. Dealey, Schuyler Marshall, F. F. Florence, E. N. Noyes; from Fort Worth -- S.W. Freese, City Manager O.E. Carr, W.C. Hedrick, Ed P. Byars, Walter B. Scott, W.E. Connell, R. E. Harding, Mayor William Bryce, William Monnig, Judge James C. Wilson, A.P. Barrett, Amon G. Carter, John C. Griffith, E. J. Hosey, John P. King, Ernest Alexander, W.C. Stripling, Lloyd McKee, Van Zandt Jarvis, E.D. Minter, E. A. Landreth, H.C. Burke, Jr., along with other basin representatives -- Jim Smith and Mose Brombert of Catalina, George Sealey of Galveston, Tucker Royall of Palestine, R.T. Craig and F. A. Kolstad of Athens, E. A. Humphries of Liberty, John T. Fortson of Corsicana, T.H. Harbin of Waxahachie, and

Five days later, on May 27, 1930, the Trinity River Navigation Association's Board of Directors held their first official meeting in Fort Worth and elected Carpenter president of the organization. The board then formally formed the association and set down the foundation for its organization. Cranfill addressed the meeting and shared a positive message. He told his colleagues that the project would give Dallas, Fort Worth, and Texas much more than economic prosperity. The cooperation being demonstrated between the usually jealous cities could be the inspirational event that would unite the two cities in a "close harmony which one day probably will result in the two cities merging and becoming the greatest metropolis in the South."²⁰

The new association used a ceremony to christen the Trinity River Levee Improvement District's new hydraulic dredge in order to make its presence and purpose known. Since most of the people involved with the levee district were also supportive of the new Association, it was more a reshift in focus than a coup. Excitement and anticipation for the navigation boosters grew as July 14, 1930, the date of the ceremony, drew nigh. Carpenter invited senators and congressmen from the watershed and other areas of Texas to attend the christening ceremony for the Trinity River Levee

Roy Miller of Corpus Christi. "Trinity River Plans Headed by Carpenter," Dallas Morning News, 28 May 1930.

²⁰ Scott; Cranfill; Roy Miller; Van Zandt Jarvis; Frank P. Holland; Fort Worth Mayor William Bryce; J.M. North, Jr., editor of the Fort Worth Star-Telegram; Hugh Prather; John P. King; and F.F. Florence became Vice Presidents of the Association. The directors also appointed a temporary executive committee, with Scott as chairman and Carpenter as vice chairman. Other members were John C. Griffith, W. S. Mosher, A. P. Barrett, and John M. Fouts. They awaited taking further action until Carpenter could be present to provide guidance. "Trinity River Plans Headed by Carpenter," Dallas Morning News, 28 May 1930.

Improvement District's "BIG HYDRAULIC DREDGE." The dredge's first job would be to make the river more amenable to navigation by creating a turning basin for barges. He urged the politicians to contact Chief of Engineers General Lytle Brown in person and encourage him to attend the ceremony. The Trinity boosters also sent invitations to prominent business and political leaders throughout the watershed. On July 14, 1930, Amon Carter headed a body of representatives from Fort Worth that joined with Carpenter and Dallas navigation advocates to commemorate the event.²¹ The navigation boosters also had good reason to celebrate in mid-July, for within a few days after the invitations went out President Hoover signed the Rivers and Harbors bill of July 3, 1930 that authorized a new survey of the Trinity from Fort Worth to the Gulf.²²

While the Rivers and Harbors Bill secured a legislative foothold for the navigationists, and the christening ceremony marked the Association's arrival in North Texas, the selection of two men to act as the organization's field marshalls was equally significant. John Fouts, Dallas water commissioner, would serve as the general manager of the Association. Knowledgeable and energetic, Fouts proved to be an excellent choice. The Trinity River project consumed him. Energy and devotion marked his activities on behalf of the navigation movement as he kept all participants filled with up-to-date information and position statements.²³

²¹ Telegram from Carpenter to Senators Tom Connally, Morris Sheppard, and Congressmen Hatton W. Summers and Fritz Lanham, June 28, 1930, Carter Papers, RGH Box 41. File 7.

²² John W. Carpenter to Amon G. Carter, July 5, 1930, Carter Papers, RGH Box 41. File 7.

²³ Ibid.

In addition to Fouts, Roy Miller agreed to be the Washington liason for the Association without pay, occupying the office of executive vice president. Carpenter wrote that he believed Miller's advice and services would be an especially significant factor in "assuring the success of the canalization of the Trinity." Miller's previous "work and vision and great ability" had "perfected the organizations of the Corpus Christi Port association and the Intracoastal Associations, with the results that both of these projects succeeded and are now in operation." Carpenter thought it rather fortunate to have been able to work out an arrangement to utilize his services with the Texas Gulf Sulphur Company, Miller's primary employer. A Mr. Judson, vice president and general manager of the company, had told Walter Scott that he was supportive of the Trinity project and was pleased that Miller could aid its progress.²⁴

Historian Robert Dallek described Miller as a rich, intensely conservative, and successful man of influence. A contemporary described Miller as "perhaps the most effective single lobbyist Washington has ever known." With an income of \$80,000 a year, he flew between Texas and Washington in a private plane, lived in a luxurious Washington suite, and operated with a "seemingly endless expense account." Another contemporary described Miller as a "very distinguished looking fellow. . . . One of these kinds of fellows when he walked into a room everybody sort of came to attention. He just had a magnetic personality." His services would be extremely valuable to the navigation movement. Carpenter said of Miller, "I don't think there is a man in all of the United States who knows more about how to bring about inland waterways than Mr.

²⁴ Ibid.

Miller." He brought much needed experience and clout to the organization. As lobbyists, advisors, and strategists, Roy Miller and John Fouts contributed the stamina and knowledge to accompany the devotion of Carpenter and Carter.²⁵

The Association blamed the past failures in Trinity navigation on two factors. Miller wrote that the first weakness had been "doubt in the minds of those in authority as to the sufficiency of the water supply to insure navigation, and, second, the purely local character of the project which limited possible services to the area immediately contiguous to the river." Miller believed these factors were in the process of being removed. The Trinitarians proposed that Lake Worth and White Rock Lake, along with the planned lakes of Eagle Mountain, and Bridgeport, and Texas Power & Light's Mountain Creek reservoir, would provide enough water to keep barges afloat in the otherwise unreliable Trinity River. Canal supporters pointed out with pride that these five reservoirs combined to impound 1,820,000 acre-feet of water, the equivalent of 595

²⁵ Miller would also be influential in young Lyndon Johnson's political career. In November 1931, Lyndon Johnson accepted an appointment as secretary to Richard Kleberg, the newly elected U.S. congressman from Texas Fourteenth District. Roy Miller had acted as Kleberg's campaign manager. Miller had been mayor of Corpus Christi and worked as a lobbyist for Texas Gulph Sulphur. Following the advice of Welly Hopkins, Miller suggested to Kleberg that he offer Johnson the job, thus beginning the Texas school teacher's political journey. Later on, as he rose from congressman, to senator, to vice president, and eventually president of the United States, Johnson would be in a position to abet a project of interest to Miller. He provided large sums of money to finance Johnson's congressional campaigns. Amon Carter, likewise, would play an important supportive role in Johnson's career. The Fort Worth newspaper and oil man's money, influence, and news publicity were given in support to the ambitious politician. Robert Dallek, Lone Star Rising: Lyndon Johnson and His Times, 1908-1960 (New York: Oxford University Press, 1991), 91-92, 108-110, 154, 308, 368, 423, 586; Minutes of the Meeting of the Trinity River Canal Association, held in the Metropolitan Hotel Building, Fort Worth, Texas at Ten A.M., August 28, 1930. 3, Carter Papers, RGH Box 41. File 7a.

billion gallons. This amount of water more than doubled that impounded by the Nile River's Assuan Dam. The relationship of the Trinity canal with the "great Mississippi River System, more than 14,000 miles in extent, [and] with the Intracoastal Waterway of Louisiana and Texas" also transformed the local nature of the project into one of national importance. Being linked into the national waterway system erased the criticism that the project served only a local purpose. These developments, along with the navigation-friendly Denison Act of 1925, reshaped the project's situation. The Trinity navigation advocates did not have to look on the project, wrote Miller, as a goal for "steamboats or packets plying a small river between Fort Worth and Dallas and Galveston Bay." Instead, they could present a vision of a canalized Trinity River, accentuated with locks and dams. Miller promised that the river would become:

a great transportation artery, carrying upon its bosom fleets of towboats and barges coming from or destined to the commercial, manufacturing and industrial centers that rest upon the banks of scores of improved streams throughout the great Mississippi Valley from the Alleghenies on the East to the Rocky Mountains on the West, and from the Canadian border to the Gulf of Mexico, all of them part and parcel of the greatest inland waterway system in the world, with the Trinity River serving the most populous and productive part, area considered, of the vast empire which this enormous system when completed will traverse.

With such a vision to share with Congress and the residents of the basin, the Trinity canal boosters felt assured of success.²⁶

In past Trinity improvements, local interests such as the cities of Dallas and Fort Worth had expended approximately \$35,000,000 on improving the river. They had invested \$14,000,000 for water reservoirs and flood control and \$18,000,000 for levee

districts. The levee districts, primarily set up for flood control, also worked to the benefit of navigation by straightening the river channel. The remainder had been expended by early navigation supporters on locks and dams. If the federal government would provide matching funds, \$30 to \$40 million, the Trinity River could be a commercial waterway capable of paying for itself in a few years and it would "develop an empire whose resources and possibilities have scarcely been touched."²⁷

In August 1930, after almost a year of planning and organization, General Manager John Fouts opened the office for the Trinity River Canal Association in Fort Worth. He and his associates had been busy during the year attending conferences and traveling, attending to preliminary work necessary before the Association launched its effort. Fouts wrote to Amon Carter that "the brush has been cleared away for a strenuous battle for the canalization of the Trinity River," and the first page had been written in "a new book concerning the history of the Trinity River, which book will not be concluded until the last shovelful of dirt is removed, the final lock and dam built, and the barges actually commence their bringing of commerce and water rates to our doors." Fouts stressed that the Trinity River would be the gem that would attract a new empire of prosperity.²⁸

²⁶ Quotes of Miller from the Roy Miller, "The Legislative History of the Trinity River," c. 1930, Carter Papers, RGH Box 41.File 7; The Trinity River Canal Association, "Trinity River Canalization," 1930 brochure, Carter Papers, RGH Box 41.File 7a.

²⁷ Ibid.

²⁸ John M. Fouts to Amon G. Carter, August 22, 1930, Carter Papers, RGH Box 41.File 7a.

By the end of August 1930, the TRCA's executive committee had drawn up a constitution and by-laws, and Amon Carter had taken over as chairman of the committee. With the final adjustments made to the Association's structure and leadership, the TRCA held its first official meeting in Fort Worth. With an audience that included Senator Tom Connally of Marlin, Congressman Fritz Lanham of Fort Worth, and Galveston District Engineer Major Milo P. Fox, John Carpenter opened the meeting with some resounding words. He declared the meeting to be one of the most important ever held in Texas. A navigable Trinity River, he said, would "bring more good to the people of the southwest than any movement for a commercial or industrial enterprise that has taken place in a long while." The Association's efforts would lay "the foundation for greater cities in Texas."²⁹

Amon Carter also addressed the meeting and stressed that difficult times awaited them. They faced an uphill battle filled with hard work. At an earlier small gathering at his farm, Carter had already secured a promise of cooperation from Senator Morris Sheppard and Congressmen Fritz Lanham, Hatton W. Sumners, and Sam Rayburn. After securing further political support and creating convincing engineering plans, the remaining obstacle would be financing. Despite the difficulty they would face, Carter believed all the toil and trouble would be worthwhile. Citing the rivalry between Dallas and Fort Worth, a rivalry that he had capitalized on to build civic spirit in his home town,

²⁹ Walter B. Scott to Board of Directors of Trinity River Canal Association, August 28, 1930, Carter Papers, RGH Box 41. File 7a; Constitution of the Trinity River Canal Association; By-Laws of the Trinity River Canal Association; John M. Fouts to Amon G. Carter, August 22, 1930, Carter Papers, RGH Box 41. File 7a; Minutes of the

Carter explained that only the project concerning the river which flowed by both cities could unite the competitive municipalities. Fort Worth had been suspicious at first, but Carter and others had finally accepted the project's feasibility and potential. "This is the only job that Fort Worth could really join in with Dallas," Carter said, "Don't see how Dallas could gyp us on this thing." While faith in the project might be enough to unite the cities and get the canal movement started on a good footing, nothing would be accomplished without cultivating good relationships with Congress, the Corps, and all interested agencies.³⁰

Carter also focused on the opposition lying in wait to defeat the canal. The railroads still harbored prejudice against Trinity navigation. Carter had asked some of his friends in the railroad industry for aid, only to be rebuffed. One of them had shared a story that summed up his and other railroad leaders feelings concerning navigation. "I am not for navigating it," said the man, "I'm for paving it". Despite the ridicule directed towards the navigation advocates, Carter declared that they would prove it was neither fad nor fancy. The ridicule from residents of North Texas came from ignorance of the engineering principles of the plan. The Association would have to educate the populace, and illustrate the tremendous economic benefit to the entire region.³¹

Meeting of the Trinity River Canal Association, held in the Metropolitan Hotel Building, Fort Worth, Texas at Ten A.M., August 28, 1930. 2, Carter Papers, RGH Box 41. File 7a.

³⁰ Minutes of the Meeting of the Trinity River Canal Association, held in the Metropolitan Hotel Building, Fort Worth, Texas at Ten A.M., August 28, 1930. 6, Carter Papers, RGH Box 41. File 7a.

³¹ Ibid.

Roy Miller reinforced Carter's statements. The past efforts at navigation had burdened the river with a bad reputation. Two missions lay before the TRCA. The first involved a wide-spread publicity campaign to remove the bad reputation, and the second focused on preparing a brief for the engineers.³² Fouts said the publicity campaign needed to show that the project had changed, that there was more available water, and that the Intracoastal Canal, the Denison Bill, and the region's growth made it feasible.³³ The educational campaign would be accompanied by Amon Carter's financial campaign. Carter exercised responsibility for naming the amounts to be sought, and the individual members played an important role in making sure these goals were reached. Fouts would handle the report preparation; Silliman Evans would do the publicity. If the report could not withstand intense scrutiny, Fouts said, then the group's effort would again be rejected. It would take strong evidence to convince the government to invest \$30 to \$40 million on a river that had previously been abandoned.³⁴

The East Texas Chamber of Commerce, South Texas Chamber of Commerce, and West Texas Chamber of Commerce each offered their endorsements and support to the movement. A.H. Wheeler, representing the West Texas Chamber, told the TRCA that, "West Texas will receive a greater benefit than any other part of Texas in the improvement." Carpenter chimed in his appreciation, especially of the West Texas Chamber of Commerce, saying, "This area from Fort Worth to the West is one of the finest agricultural parts in the State of Texas and it is fine to have these Chambers of

³² Ibid., 12.

³³ Ibid., 15.

Commerce cooperating and working as they are." Despite this initial vote of confidence in the project, in the near future West Texas would emerge as a prickly thorn in the canal movement's side. For the time being, however, the future looked bright.³⁵

In addition to the support of Dallas and Fort Worth's civic leaders and prominent Texas congressmen, the TRCA left the meeting with a friend in Major Fox of the Corps of Engineers. Following an early October 1930 visit, Roy Miller assured Carter that, "With you in the lead, I feel that so far as Fort Worth is concerned, the canalization of the Trinity River is almost an accomplished fact. Really, I have never been so enthusiastic about anything as I am about this project." He also confided that their Corps of Engineers guest, Major Fox, had told him, "I think I had better be getting out of this town and back to Galveston; the first thing you know Amon Carter will have me on his \$500.00 [contribution pledge] list!" Strong relationships with Congress and the Corps would be a trademark of the Association. Carter was an accomplished fund-raiser and could skillfully present a passionate argument for projects he felt important to the development and promotion of Fort Worth and Texas.³⁶

Having held their first meeting, the Trinity navigation advocates started to work. S.W. Freese, of the Hawley, Freese, & Nichols firm, offered his company's services as consulting engineers without pay, and pledged \$500 a year to the Association.³⁷ Fouts

³⁴ Ibid., 16.

³⁵ Ibid., 27.

³⁶ Roy Miller to Amon G. Carter, October 10, 1930, Carter Papers, RGH Box 41.File 7a.

³⁷ Minutes of the First Meeting of the TRCA Executive Committee, October 31, 1930, Carter Papers, RGH Box 41.File 7a.

circulated copies of a book, "The History of the Trinity River Canal," that he planned to use in his educational campaign by circulating it in the Tarrant and Dallas county school systems. At Roy Miller's direction, the TRCA donated \$1000 to the Mississippi Valley Association and to the National Rivers and Harbors Congress as a sign of solidarity among water-related organizations.³⁸ By the end of August the project had already been endorsed by the National Rivers and Harbors Congress's secretary, S.A. Thompson, and had already received supportive statements from civic bodies of the basin and port cities. The TRCA had also made extensive use of radio to publicize the revived movement, along with an animated exhibit at the State Fair of Texas which showed the terrain and how the lock and dam system would actually function. The exhibit circulated some forty thousand pamphlets. To show gratitude to Miller's sacrifices of time and money on behalf of the project, the TRCA also hired W.A. Bernrieder to serve as Miller's secretary to handle Trinity canal related matters.³⁹

Miller explained the importance of establishing positive relationships with organizations such as the Mississippi Valley Association, the National Rivers and Harbors Congress, and the Intracoastal Canal Association. "The essence of our job is to bring the Trinity River into the national picture, and to emphasize constantly its intimate relationship to the national program." Miller emphasized the point that the utility of projects such as the Mississippi River System depended "largely upon the improvement and development of the many projects which compose it," especially a project such as the

³⁸ Ibid.

³⁹ TRCA Executive Secretary to members of the Executive Committee, October 31, 1930, Carter Papers, RGH Box 41. File 7a.

Trinity River. "What we must seek to put over is that the Trinity River is an integral and essential part of the System, and ... for that reason, every one of the twenty-six States comprising what we call the Mississippi Valley, is vitally interested in the improvement of the Trinity River for navigation purposes."⁴⁰

By November 1930, the TRCA presented its industrial and commercial survey to the U.S. Army Corps of Engineers District Engineer. The report predicted an annual saving of \$16,567,000 as the project's financial return. Miller estimated the cost of installing the locks and dams and other improvements to cost from thirty to forty million dollars. Within three years, the project would have paid for itself. The five reservoirs constructed by Dallas and Fort Worth for an adequate water supply and flood control would also provide a sufficient flow of water for navigating the river year-round.⁴¹

While they were confident in their ultimate success, the navigation boosters were practical in their expectations. Roy Miller explained the virtue of patience to Carter, "Of course, as Rome was not built in a day, so it is going to require several years of persistent, determined and enthusiastic effort to make a canalized Trinity an actual reality. Legislative processes, as you well know, are slow, and scenes are constantly shifting." Ardent attention to making the TRCA operate as a well-oiled machine required

⁴⁰ Roy Miller to John M. Fouts, November 20, 1930, Carter Papers, RGH Box 41. File 7a.

⁴¹ Speech of the Hon. Roy Miller, a member of the Executive Committee of the Mississippi Valley Association, a member of the Executive Committee of the National Rivers and Harbors Congress, Active Vice-President of the Intracoastal Canal Association, and Executive Vice-President of the Trinity River Canal Association, delivered at the Twelfth Annual Convention of the Mississippi Valley Association, November 24-25, 1930, Carter Papers, RGH Box 41. File 7a.

adequate financing, an activity in which Carter was especially adept. However, with men of skill and character such Carpenter, Carter, and Scott involved, the TRCA was confident it would succeed.⁴² Miller had been correct in his assessment of the situation, for several years would pass before they made any visible progress.

⁴² Roy Miller to Amon G. Carter, December 30, 1930, Carter Papers, RGH Box 41. File 7a.

CHAPTER 5

FROM TRINITY RIVER CANAL ASSOCIATION TO TRINITY IMPROVEMENT ASSOCIATION: EXPANDING THE MISSION, 1930-1945

Between 1927 and 1930, pro-development citizens in North Texas had successfully revived the movement to make the Trinity River a navigable stream. Their political allies in Congress had won authorization for a reevaluation of the project. They had formed a new special interest organization to promote their interests and had broadened the base of support to encompass Dallas, Fort Worth, and their spheres of influence. The nascent association modeled itself on another organization that had already achieved its navigation-related goals and enlisted the support of one of the most influential lobbyists in the country. It had also filled its organizational ranks with successful and influential business leaders, firmly devoted to their common goal. The Trinity River Canal Association, having positioned itself to launch a forceful effort with Congress, cultivated an attitude of extreme confidence and believed it was promoting a righteous cause that was destined to succeed. Although it appeared the navigation program was on the path to progress by the end of 1930, several obstacles still blocked the fulfillment of John Carpenter and Amon Carter's dreams for the river.

In 1931, the Dallas levee project neared completion, but a problem arose to prevent its fulfillment. The new river channel and the levees were practically complete, and the Trinity had been diverted. Only a few openings in the levees awaited installment

of storm sewers. Dallas's agreement with the county and levee district obligated the city to construct sewers. As facilitators in carrying water runoff beneath the levees and into the river channel, the storm sewers were essential to the reclamation of the 10,500 acre flood plain and were crucial to the flood control design of the project. Ten million dollars had already been expended on the project, and the storm sewers would require an investment of only about a half million dollars. Feeling pressured by the depression, Dallas officials reneged on the agreement by refusing to expend any more money for the project. G. B. Dealey, publisher of the Dallas Morning News, furious that his city had again given up on a project, went on the offensive with his newspaper. He argued that the project was "the biggest and most important project ever before the people of Dallas since my coming here forty-five years ago." Under such pressure, the levees finally reached completion.¹

At the urging of the Trinity River Canal Association in May 1931, the Texas legislature established the Trinity River Canal and Conservancy District. If approved by voters, it would act as the legal administrative agency for canal activities. The association argued that high railroad rates for the Trinity River basin made the canal feasible, and a Department of Commerce survey supported the claims. The Galveston District Office of the Corps of Engineers stated otherwise, declaring the project remained an uneconomic alternative to the railroads. The Trinity River Canal Association launched an extensive advertising campaign, only to suffer defeat at the hands of the Great Depression. In August 1935, to the dismay of the TRCA, voters refused to approve

¹ Ernest Sharpe, G. B. Dealey of The Dallas News (New York: Henry Holt and

additional taxes the district would need to levy and rejected the project. The association had lost the first battle, but the war continued. Twenty years would elapse before the canal supporters obtained another chance at a state approved agency that could pursue its goals.²

On March 31, 1932, the Corps's Galveston district engineer issued a report that combined the aspects of the 1930 survey and the review of reports commissioned by the Senate in 1929. Intrigued by the findings, the Chief of Engineers initiated a survey to estimate the cost of canalization under various scenarios. The district engineer's subsequent report of March 18, 1935 painted a negative image for the project which upset the Trinity River Canal Association, but the Board of Engineers granted the TRCA a reprieve and delayed its final decision on the issue. The TRCA needed to regroup and make a new assault.³

Having suffered its initial setbacks, the TRCA received a turn of good fortune when Congress passed a measure that increased the viability of Trinity River improvement. With the Omnibus Flood Control Act of June 22, 1936, Congress authorized the first wide-scale use of public funds on a national level for river improvements. In the act, Congress recognized that the destructive nature of flooding upset the "orderly processes" and caused "loss of life and property." Congress declared

Company, 1955), 251-253.

² D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, (Fort Worth: 1979), 101.

³ United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 11-12.

that flooding constituted "a menace to national welfare." Acting on this premise, Congress legislated that river basin improvements were in the nation's best interests. The act established conservation of soil and water resources as national policy, and gave the Corps of Engineers responsibility for developing river basins. The TRCA felt encouraged to continue its activities. The act also authorized the secretaries of war and agriculture to examine the Trinity River's flood control needs. The preliminary reports emphasized the need for a comprehensive plan of development for flood control and allied purposes. By associating flood control features with the canal in a multi-purpose plan, the association could hope to overcome the objection that the canal lacked economic feasibility.⁴

Following passage of the 1936 flood control act, the TRCA sponsored the creation of the Trinity Watershed Soil Conservation and Flood Control Association in 1937. The two associations worked together and pushed for passage of a bill in the Texas legislature to create a district on the watershed so it could participate in the next flood control act. John Fouts explained that "The 'New Deal' has pressed home the thought that governments have an inescapable responsibility for the conservation and wise use of

⁴ Ibid., ix; David Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971, Vernon H. Poole Collection, Sam Houston Regional Library and Research Center, Liberty, Texas, File 174; Remarks of Colonel Delbert B. Freeman, 12; Brown, 12; Resolution, (excerpted from the minutes of a joint meeting of all the organizations and individuals interested in the proper conservation and development of the soil and water resources of the entire Trinity Watershed.) 1938, Amon Carter Papers, Amon Carter Museum Archives, Fort Worth, Texas, RGH Box 41, File 10.

all natural resources, especially soil and water." The TRCA intended to take full advantage of the situation.⁵

In May 1937, the TRCA delivered an engineering report on a "Revised Plan of Improvement."⁶ The plans for Trinity River improvement called for 21 locks and 17 dams between Galveston Bay and Fort Worth. The river would be shortened from 570 miles to 393 miles. The Board of Engineers, having received the TRCA's new plans, called for a public hearing in Washington, D.C. for June 28, 1937. Fouts believed the TRCA had finally prepared a set of plans that would convince the board to extend its support.⁷ The technical studies had cost in excess of \$50,000, yet the new report varied only slightly from the survey report's plan of 1935. Still, Fouts felt confident that they would meet with the Board's approval. For fifteen months, the TRCA had engineers rework the district engineer's plans to make them acceptable to the board. The TRCA did not publicize the upcoming hearing, for fear of giving the railroads an incentive and sufficient time to formulate a rebuttal.⁸

The hearing went well, and the quality of the witnesses such as Carter and Miller impressed the board. Fouts felt good about the board's reaction, and hoped it would

⁵ John M. Fouts, "Interesting Facts Regarding Trinity Watershed, 1937, Carter Papers, RGH Box 41, File 10.

⁶ United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 11-12.

⁷ John M. Fouts to Amon G. Carter, February 24, 1937, Carter Papers, RGH Box 41, File 10.

⁸ John M. Fouts to Amon G. Carter, June 8, 1937; John M. Fouts to Senator Morris Sheppard, June 14, 1937; Brigadier General M.C. Tyler, Acting Chief of Engineers to Senator Morris Sheppard, Carter Papers, RGH Box 41, File 10,

recant its negative statements from the year before. One thing did trouble Fouts, however. "The railroads," he wrote to Roy Miller, "are going to turn Heaven and earth in order to upset us at this next hearing."⁹

The Board of Engineers had approved the project in executive session immediately after the Washington hearing. But the Trinity navigation supporters could not yet celebrate. The railroads went on the attack, flooding the Board of Engineers and congressmen with demands for another hearing on the matter. Initially, the board refused, but finally caved in and agreed to hold hearings at Wichita Falls and Fort Worth in order to give the opponents a fair opportunity to offer evidence concerning the canal's negative impact. Fout's reported that nothing occurred at the hearings to hurt the movement, and he believed the canal argument had been further bolstered.¹⁰

The railroads took a circuitous rout in their attempt to derail the project by attempting to influence the West Texas Chamber of Commerce, which represented 130 West Texas counties and 178 affiliated towns and cities. Parties on both sides of the issue, the TRCA, and the railroads, asked the West Texas Chamber to make a statement on the proposed canal. To settle the dilemma, the executive board and traffic committee intended to give the issue serious consideration. Carter, a member of the West Texas organization's executive committee, suggested that the West Texans gather, as Carter's guests, at the Worth Hotel in Fort Worth. Meeting on the morning of July 13, 1937, they

⁹ John M. Fouts to Roy Miller, July 2, 1937, Carter Papers, RGH Box 41, File 10.

¹⁰ John Fouts to E.J. Kiest, publisher of the Dallas Times Herald, September 20, 1937, Carter Papers, RGH Box 41, File 10.

were presented a report by E.R. Tanner of the El Paso Chamber of Commerce, who had studied the Trinity River Traffic Survey along with other materials.¹¹

The Chamber's executive committee, once warmed and welcomed in Carter's home city, endorsed the project. One member shared with Carter that he had arrived at the meeting with an open mind, but became convinced that the advantages of the project thoroughly outweighed any disadvantages. The executive board and the traffic committee, following the meeting in Fort Worth, urged the Board of Engineers to approve the Trinity River canal project. The potential savings from lower freight rates made it imperative that the project receive approval.¹²

Following the Fort Worth meeting, T. N. Carswell notified the Fort Worth Chamber of Commerce in mid-August that the Abilene Chamber of Commerce had made a formal decision to side with the Wichita Falls Chamber of Commerce and the railroad interests in opposing the canal. Canal supporters were confident the railroads were behind the opposition. The supporters of the canal project found it hard to believe that the opponents would actually accept the railroads's misguided statements concerning how

¹¹ Telegram from B. Reagan, Chairman of the West Texas Chamber of Commerce Traffic Committee to E.R. Tanner, July 7, 1937; Telegram from Milburn McCarty, president of West Texas Chamber of Commerce, to Amon Carter, July 10, 1937; D.A. Brandeen, Manager of West Texas Chamber of Commerce, July 10, 1937, Carter Papers, RGH Box 41, File 10.

¹² Telegram from Milburn McCarty and D.A. Brandeen of the West Texas Chamber of Commerce, to General G.B. Pillsbury, Chairman of the Board of Engineers for Rivers and Harbors, July 14, 1937, Carter Papers, RGH Box 41, File 10.

the canal would surely wreck and ruin West Texas.¹³ Wichita Falls and Abilene, opponents of the canal, called a meeting of Chamber of Commerce officials in protest of the executive committee's endorsement.¹⁴

On July 16, 1937, the opposition faction in the West Texas Chamber of Commerce met in Abilene, Texas. The organization's executive committee and D. A. Brandeen, its manager, were not welcome at the protest meeting. Refusing to sit idly by and let the opponents proceed unchecked, Brandeen managed to convince influential members of the Abilene Chamber of Commerce to withdraw the chamber's support from the meeting, which dealt an embarrassing blow to the canal opponents holding the meeting in Abilene. Furthermore, Brandeen had wired General G.B. Pillsbury, chairman of the Board of Engineers for Rivers and Harbors, as well as Senators Tom Connally and Morris Sheppard and several congressmen with the Executive Committee's endorsement of the canal project. By the day of the July 16 anti-canal meeting, all of the message's recipients had acknowledge receiving the endorsement and promised their cooperation.¹⁵

Carter, introducing himself as a member of both the Trinity River Canal Association and the West Texas Chamber of Commerce, also sent General Pillsbury a lengthy endorsement of the Trinity River Canal. He explained to General Pillsbury that

¹³ Jack H. Hott, Manager of Fort Worth Chamber of Commerce, and Ed P. Byars to T.N. Carswell, Secretary-Manager of the Abilene Chamber of Commerce, August 19, 1937, Carter Papers, RGH Box 41, File 10.

¹⁴ Hamlin Overstreet, Farwell, Texas, member of West Texas Chamber of Commerce Executive Board, to Amon G. Carter, July 16, 1937, Carter Papers, RGH Box 41, File 10.

¹⁵ D.A. Brandeen to Amon Carter, July 16, 1937, Carter Papers, RGH Box 41, File 10.

the main instigator of opposition had been Dudley Foy, a representative of the Santa Fe Railroad from Amarillo, the Wichita Falls Chamber of Commerce's traffic manager, and the manager of the Kell Milling and Elevator Company of Wichita Falls. At the meeting, opponents had read a brief that claimed the canal was impractical even from an engineering standpoint. Carter declared this critique to be little more than an absurd contention. Fort Worth's traffic manager had attended the meeting and effectively challenged the opposition's statement. He argued that the opponents were acting merely on generalities and an unwarranted fear that the canal could hurt jobber rates in Wichita Falls. Cornered by the canal supporter, one of the West Texas leaders in the canal opposition even acknowledged that the canal would be of benefit to farmers, producers, and consumers of West Texas! Carter concluded that the recent outbreak of opposition originated with railroad animosity. Carter assured General Pillsbury that he and the Fort Worth Star-Telegram had been actively promoting the growth and sound development of West Texas for thirty years, and neither he nor the newspaper would endorse the canal if it would jeopardize the region's future development and well-being.¹⁶

One of the opponents to the canal was Malcolm Meeks, president of Abilene's Citizens National Bank. He called the idea of canalizing the river "preposterous." It involved too much money and only Fort Worth and Dallas would benefit. He also

¹⁶ Telegram from Amon G. Carter to General George B. Pillsbury, Assistant Chief of Engineers and Chairman of the Board of Engineers for Rivers and Harbors, July 17, 1937, Carter Papers, RGH Box 41, File 10.

preached that no boats would ever actually use it, and that the canal would hurt West Texas.¹⁷

On September 10, 1937, the Board of Engineers held another hearing concerning the Trinity canal. Interested parties assembled at the Texas Hotel in Fort Worth. Carter introduced the attendant senators and congressmen gathered in support, and Dr. J.B. Cranfill, John W. Carpenter, D.A. Brandeen, Ed. P. Byars, a group of grain men, Colonel C.S.E. Holland, president of the Intracoastal Canal Association, and John M. Fouts, along with a host of others who offered their hearty support for the canal. The sheer number of respected businessmen present overwhelmed anyone who would dare rise in opposition.¹⁸

At the beginning of 1938, the Trinity supporters felt confident about the program's progress, but the changing disposition concerning water development projects would ruin their mood. The resident member of the Board of Engineers assured Senator Sheppard that the Trinity was first on the board's program for the Southwest. The chief of engineers also assured Senator Sheppard that he would do whatever he could to speed the process. Despite these votes of confidence, the possibility still existed that the stiff opposition of the railroads and their allies against the canal could delay furtherance of the plan. Fouts told Carter, "It will be entirely up to us to see that our project is not placed in

¹⁷ Ed P. Byars, Fort Worth Chamber of Commerce Traffic Manager, to D.A. Bandeen, July 20, 1937, Carter Papers, RGH Box 41, File 10.

¹⁸ Outline of Testimony and Witnesses for Hearing on Trinity Canalization Project, Texas Hotel, Fort Worth, September 10, 1937, Carter Papers, RGH Box 41, File 10.

the 'ice box'; and I think that, with our many connections in Washington, we can see that this does not happen."¹⁹

On March 9, 1938, the district engineer submitted a new analysis of the Trinity Improvement Association's contributions and arguments. The group then requested that the 1935 report and other proceedings on navigation be incorporated into the upcoming survey report on flood control.²⁰ On April 29, in an effort to assure the project's success and capitalize on recent legislation of 1936, the Trinity navigation supporters met in Washington with key officials to make arrangements. Roy Miller believed that, by making changes, the navigation advocates could insure the Trinity project's success. At a conference with Colonel Wheeler, representatives of the TRCA, including Miller, worked out an agreement to present a comprehensive navigation and flood control report. By merging the two interests together, the navigation project could feed off of the flood control aspect for legitimacy and further solidify the navigation proponents's arguments. It would take at least another year for the new report to run the gamut of critiques and calculations, but in the long run, Miller believed it was the best possible scenario. He wrote, "The construction cost credits, which I am sure the flood control study will develop, will unquestionably reduce the cost of the navigation project to the point where it will be fully justified, even accepting the far too conservative estimates of economic benefits." Miller credited Senator Sheppard with finding a way to save the navigation project. Miller assured his fellow navigation proponents that the new arrangements

¹⁹ John M. Fouts to Amon G. Carter, February 7, 1938, Carter Papers, RGH Box 41, File 10.

would make "the Trinity River basin the garden spot of Texas, and the great industrial and commercial empire of the Southwest."²¹

To illustrate publicly the arrangements made at the Washington strategy session, all Trinity watershed interests gathered at the Roof Garden of the Hotel Adolphus in Dallas on May 26, 1938. John W. Carpenter, president of the Trinity River Canal Association, and J.W. Slaughter, president of the Trinity Watershed Soil Conservation and Flood Control Association, oversaw the consolidation of the organizations and individuals concerned with the conservation and development of the Trinity basin's soil and water resources. The meeting marked the Trinity River Canal Association's absorption of the Trinity Watershed Soil Conservation and Flood Control Association. The TRCA remained intact structurally, with officials such as Slaughter positions on the board of directors. Carpenter remained president; Miller remained executive vice president; Fouts remained general manager; Cranfill remained first vice president and a member of all committees; and Amon Carter remained the head of the executive committee. The TRCA would continue as the operating organization in the place of all other concerned agencies. To denote the organization's broader focus its name became the Trinity Improvement Association.²²

²⁰ United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 11-12.

²¹ Roy Miller to John M. Fouts, April 30, 1938. Written from his lodging at the Raleigh Hotel, Washington, D.C., Carter Papers, RGH Box 41, File 10.

²² J. W. Slaughter of Dallas became a TIA vice president, and J.O. Wallace of Rockwall, became a member of the executive committee. The TWSCFCA board of directors became a part of the TRCA board. John M. Fouts to Amon G. Carter, May 16, 1938; Telegram from John W. Carpenter to Amon Carter, May 24, 1938; John M. Fouts to Amon G. Carter, May 31, 1931, Carter Papers, RGH Box 41, File 10; Resoulition,

A Texas Planning Board report on the development of the state's rivers emphasized the issues the TIA would need to focus on. The report stated that Dallas, Fort Worth, and the densely populated adjacent region depended on the river as an indispensable water supply. Heavy drafting on wells had lowered the water table and increased the region's reliance on the river for water. The planning board recognized that the major problem of stream pollution was becoming even more serious with the growth of large cities. Dallas's sewer system lagged behind in relation to the city's growth, and during low water the river did not have enough water to dilute the sewage from Dallas and Fort Worth. As of 1938, Dallas had finalized plans for enlarging and modernizing its sewage treatment plant. An allotment from the Public Works Administration aided in providing the sewage treatment facilities enlargement and extension in Dallas. The board recommended maintenance of a regulated flow below Fort Worth to dilute industrial and municipal wastes. The problem of municipal and industrial wastes of Dallas and Fort Worth made itself easily noticeable all the way to the gulf. Smaller municipalities in the basin likewise faced a dilemma of dealing with sewage disposal as their communities grew. Many of the basin's towns had either inadequate or antiquated sewage treatment plants that required expansion and renovation. The average age of the plants exceeded twenty years. The planning board's report listed water supply for municipal and industrial uses as a "problem of major importance."²³

excerpted from the minutes of a joint meeting of all the organizations and individuals interested in the proper conservation and development of the soil and water resources of the entire Trinity Watershed.) 1938, Carter Papers, RGH Box 41, File 10.

²³ John M. Fouts, general manager of the Trinity River Canal Association, also represented the Texas Watershed Organization as a member of the Texas Planning

Several plans, such as those prepared by the Texas State Planning Board and the Trinity Improvement Association, contributed to the Corps of Engineers' own planning process. In 1939, the Galveston District of the Corps of Engineers completed its Trinity Basin water development plan. The plan included projects for Benbrook, Grapevine, Garza-Little Elm, and Lavon reservoirs, along with floodway planning for the Trinity's upper reaches. The plan's content encompassed water supply and flood control features that also benefited the goal of navigation. The survey predicted a potential traffic of 5,097,000 tons in the tributary area.

According to the report, the flood control features were essential to the region's well-being. All major flooding of the river originates in the headwater region rather than the main stream. Between 1908 and 1938 fourteen major floods occurred on the Trinity. Each exceeded a gage depth of 33 feet, and the biggest flood reached a maximum of 52.6 feet. Flooding occurred in 28 of the 31 years of this period with an average duration above flood stage of 20 days. With a combined plan of flood control with water supply and navigation, the development boosters felt they had a strong case to present to Congress.²⁴

Board's Basin Committee. The board, chaired by Fort Worth's W.M. Massie issued its Development of Texas Rivers: A Water Plan for Texas in March 1938, detailing the problems and potential for each of the state's river basins. The Texas Planning Board, Development of Texas Rivers: A Water Plan for Texas, Austin, March 1938, 1, 2, 25-27, 30-32.

²⁴ According to United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 10-11, the 1941 report was the culmination of several inspections into the Trinity River. Section 2 of the River and Harbor Act approved in July 27, 1916 "authorized and directed" the Secretary of War to undertake a survey of the Trinity River and its tributaries and determine to what extent, if any, the United States government should participate in flood control efforts. The

Federal, state, and local agencies all fed information into the survey process. Between January 1938 and October 1939, representatives of the Corps of Engineers had conducted field surveys throughout the watershed to ascertain flood control, water conservation, and navigation needs. On November 15, 1939, the Galveston office of the Corps finished its written report on the survey. In 1941, following a War Department review, the Corps released its study results. It announced the engineering feasibility of the Trinity canal to Dallas and Fort Worth. The 1941 report, the culmination of decades of research and planning, resulted from consultation with a wide variety of agencies.²⁵

incentive to take action, according to the act, depended on how the projects would protect navigation. The Flood Control Act of May 31, 1924, again called for "preliminary examinations" of the Trinity River for flood control. The U.S. Senate's Committee on Commerce resolved on December 10, 1929, to revive the Trinity improvement issue. The committee directed the Board of Engineers for Rivers and Harbors to review the earlier reports on the river (contained in HD no. 409, 56th Congress, 1st Session) and revise the suggestions if necessary. The River and Harbor Act of July 3, 1930 provided further impetus to improvement projects on the Trinity by additional surveys of the stream. The River and Harbor Act of June 22, 1936, provided for additional flood control surveys in the basin. In accordance with the Congressional directives, the Corps of Engineers presented five reports, June 25, 1920, March 20, 1926, January 31, 1927, September 18, 1935, and February 15, 1937. The 1937 report revised and brought the previous reports into accordance with the new provisions established by the Flood Control Act of 1936. Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, c. 1969; Brown, 103; Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971. Poole Collection, File 174; United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 4.

²⁵ Federal agencies participating in formulating the plan were the United States Geological Survey, United States Coast and Geodetic Survey, United States Department of Commerce, and National Resources Committee. Seven state agencies that contributed were the Texas State Reclamation Department, Texas State Board of Water Engineers, Texas State Planning Board, University of Texas, Texas Agricultural and Mechanical College, Texas State Board of Health, and Texas State Highway Department. Local participants included the Trinity Improvement Association, Meyers, Noyes, and Forest, consulting engineers, Texas Association of Railroads, Edgar Tobin Aerial Surveys,

Despite the canal's inclusion in the district engineer's proposals and the endorsement of the project's engineering viability, the chief of engineers, Major General J. L. Schley, and the board ruled that the canal to Fort Worth was not justified at that time. The district engineer offered his full endorsement of canalization, but the chief of engineers took a more cautious approach. He did not reject the project, nor did he call for its immediate construction. Except for the forty miles to Liberty, the rest of the project entered a wait and see mode. Further growth in the basin might economically justify the project by bringing benefits by water transportation further above the annual costs. The 1941 report revealed that the proposed plan's flood control recommendations would have a significant impact on the basin and provide "benefits considerably in excess of costs." The report's comments on the topic of navigation, although favorable, were more closely guarded. The savings gained from lower transportation costs would outweigh the costs of canalization, but only slightly. In June 1941, with hopes of spurring congressional approval, and perhaps of disputing the delay on canalization, Amon Carter and John Fouts led a large delegation from the Trinity basin to lobby for congressional support and to attend congressional hearings. They represented a changing and growing region.²⁶

Freese & Nichols, consulting engineers, and the various counties, municipalities, and improvement associations of the basin. A wide number of basin residents also made considerable contribution. United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 12-13.

²⁶ Dallas Morning News, 11 November 1941; Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971. Poole Collection, File 174; United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 3, 6, 10.

As of 1941, the Trinity Basin's population stood at 1,041,000, being 52 percent urban and 48 percent rural. Dallas had 260,000 residents; Fort Worth, 163,000; while middle and lower basin cities existed in a more rural setting. Corsicana had a population of 10,000 and Palestine contained 11,445. Seventy-five percent of the basin's land was devoted to farming, with corn and cotton occupying the position of principal crops. Some farmers in coastal counties cultivated rice, often irrigating with Trinity River water. Crude oil production was also an important economic activity in the basin. Dallas and Fort Worth dominated the basin as centers for the manufacture of clothing, food and dairy products, flour and feed, furniture, machinery, and building products. Further economic development and prosperity depended, the representatives believed, on developing the river basin to its fullest potential.²⁷

This delegation of development-minded Texans did not gain authorization for their project, but they kept it alive. Speaking at a meeting in November 1941, John Carpenter said, "We are like a football team with one more yard to go. Let's not stop now when we have spent \$300,000 in the last ten years bringing this dream so close to fulfillment."²⁸ Carpenter expanded on these sentiments the next month at the Oak Cliff Chamber of Commerce fall smoker. Asking his listeners to visualize a Dallas of one million people, he assured them that within twenty-five years that image could be fact if Congress approved the Trinity program. He emphasized that the fate of the Trinity

²⁷ United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 1.

²⁸ Dallas Morning News, 11 November 1941; Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971. Poole Collection, File 174.

project held greater importance than any issue ever faced by any organization in Dallas. The future of the basin swung in the balance. With enough work and support on behalf of Trinity improvement the future of Dallas and North Texas could be spectacular. The region stood to gain greater opportunities than ever imagined. "It [the canal] means," Carpenter told them, "the difference between a city where industries flock and one which gradually loses many of its important concerns to towns served by water transportation." Congress's failure to approve the development program would signal the region's doom.²⁹

The hopes of Carpenter and the Trinity Improvement Association for a quick resolution did not come, for within days of Carpenter's words, Japan attacked Pearl Harbor and the United States shifted its focus to the war effort. United States involvement in the Second World War resulted in a deferral of all civil work projects, and the Trinity project remained in legislative purgatory. The war effort did not deter the efforts on behalf of Trinity River improvement, but it did deter attainment of Congressional approval. In the light of war, proponents added to their arguments for the project's significance by stressing the contributions waterborne commerce could make to the war effort and national security. But rather than pushing for the entire package at once, considering the nation's wartime circumstances, Trinity boosters pursued an incremental approach. During the war years, Congress addressed the subject of changing the river's depth to Liberty, Texas, from a six-foot to a nine-foot project, along with the construction of flood-control dams in the upper basin. These proposals were contained in

²⁹ Ibid.

House Resolution 5993, a bill addressing Trinity improvement for navigation, flood control, and allied purposes. Held over from the 1941 congressional session, the bill before the House of Representatives Committee on Rivers and Harbors received attention at a hearing on October 22, 1943.³⁰

At the hearing, Colonel P. A. Feringa, resident member of the Board of Engineers for Rivers and Harbors, stressed the project's importance. The members of the congressional committee also showed support in their statements. In agreement with the improvement plan, the Board of Engineers recommended construction of Benbrook, Little Elm, and Grapevine, in addition to modification of the Garza Reservoir (Lake Dallas.) The board also endorsed the modification of the Dallas and Fort Worth floodways and levees so they could adequately handle the floodwaters released from the dams. Feringa characterized the area as a "rich basin" abounding in agriculture and mineral deposits. Michigan's representative, George A. Dondero, complimented the region, suggesting, "If that valley is as rich in material as the fine men they send to Congress are in statesmanship, I am satisfied it is a worthwhile project." Mississippi's John E. Frankin agreed, calling the Dallas-Fort Worth region

One of the richest agricultural areas in the world and one whose industrial development through the processing of its own raw materials is being held back by the exorbitant freight rates, and today the people of the East, some of them, are suffering because of lack of those materials.

³⁰ Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971; "Trinity River and Tributaries, Texas," Hearings before the Committee on Rivers and Harbors, House of Representatives, Seventy-Eighth Congress, First Session, on the Subject of the Improvement of the Trinity River Basin, Tex., for Navigation, Flood Control, and Allied Purposes, October 22, 1943. (Washington, D.C.: United States Government Printing Office, 1943) 1, 3.

The Trinity Improvement Association's delegation certainly enjoyed the flattering and supportive statements, which signaled strong support for the project.³¹

Roy Miller, executive vice president of the Trinity Improvement Association, told the committee that the Dallas-Fort Worth vicinity had an urgent need for flood works. Such projects would act as an essential part of Trinity improvement program for flood protection, conservation, and stream control regulation. In addition, Miller justified the navigation aspects by pointing out the river's relation to the Intracoastal Waterway. The Intracoastal Waterway, Miller explained, had handled five to six times more tonnage than had been expected when Congress authorized it. He insinuated that similar results could be expected from the Trinity River canal. But despite the warm welcome in the halls of Congress, opponents loomed in the corridors hoping to derail the project. Railroad interests remained the primary opponents, along with disgruntled West Texas and Oklahoma communities. They focused on the argument that it would be unfair to use federal money for the promotion of water development in an already growing region. It would also be a display of favoritism to waterborne commerce.³²

John T. Corbett, national legislative representative of the Brotherhood of Locomotive Engineers, declared that the federal government's participation in the matter constituted unfair subsidization of a transportation project. He added that artificial

³¹ "Trinity River and Tributaries, Texas," Hearings before the Committee on Rivers and Harbors, House of Representatives, Seventy-Eighth Congress, First Session, on the Subject of the Improvement of the Trinity River Basin, Tex., for Navigation, Flood Control, and Allied Purposes, October 22, 1943, 2, 5-7.

³² Ibid., 8-9; United States Congress. Trinity River and tributaries. (House Document 403, 77th Congress, 1st Session. September 4, 1941), 2.

waterways, such as the Trinity channel to Liberty, offered little value to the war effort. Corbett also warned against the incremental approach the project's advocates were taking. He likened approval of the improvements under consideration as "cutting off but a small portion of the dog's tail to accustom the dog to operations," an endeavor, he concluded, that had never been a successful procedure. Roy Miller offered a short and simple rebuttal to the argument that the Trinity project would injure the railroads, calling it "just so much 'hooey.' There is no argument."³³

Although no immediate legislation for navigation occurred following the hearings, the Trinity Improvement Association could comfort itself in the strong showing of support from the committee's members, and the TIA's lobbying successfully resulted in Congress' authorization of a soil conservation program for the upper basin in 1944. The plan called for construction of over 1,200 flood control dams above Palestine and Fairfield. Such improvements would be significant for soil conservation in the upper basin and would also aid in flood control. Another 1944 victory involved the creation of the Chambers-Liberty Counties Navigation District by the Texas legislature as a subdivision within the state. This agency would promote and assist in the overall development of the Trinity River with particular interest in Chambers and Liberty Counties.³⁴

³³ "Trinity River and Tributaries, Texas," Hearings before the Committee on Rivers and Harbors, House of Representatives, Seventy-Eighth Congress, First Session, on the Subject of the Improvement of the Trinity River Basin, Tex., for Navigation, Flood Control, and Allied Purposes, October 22, 1943, 9-12, 16-17.

³⁴ The Flood Control Act of 1944 and PL 83-566 called for the Soil Conservation Service to prepare plans for small floodwater retarding reservoirs in the Trinity basin's upper reaches. Essentially the geographic territory of the SCS operations begins in the

Bolstered by such events, development supporters kept their gaze concentrated on the prize of Trinity navigation. On March 2, 1945, the United States Congress passed a Rivers and Harbors Act containing the first elements of a comprehensive water resources development program for the Trinity River basin. The act, along with the Flood Control Act of 1944, provided the legislative authority necessary for federal participation in developing the basin. The program included in the bill consisted of four multiple purpose reservoirs – Benbrook, Grapevine, Lewisville, and Lavon; floodway projects for Dallas and Fort Worth; and the nine-foot channel from the Houston Ship Channel to Liberty. Although Congress approved the overall plan developed by the Corps, it delayed authorization for canal construction above Liberty. Congress reserved its final decision on the entire canal until the Corps undertook another extensive survey of the entire basin. Nor did authorization of the floodway projects guarantee immediate action. Such activity awaited funding appropriations. On the positive side for development partisans, authorization substantiated a big first step in the political process, and proved to be especially propitious for events in the near future.³⁵

upper reaches of the West, Elm, and East Forks, and ends at U.S. Highway 79-84 in the mid-basin area. By 1971, the Soil Conservation Service had completed 700 of the dams, applying soil conservation to 8,240,00 acres of farm and ranch land. As of 1977 the SCS plans called for 1,108 reservoirs, down from a planned level of 1,300, of which 834 were constructed. Brune, "Accomplishments of the Trinity Improvement Association," 1, April 8, 1971. Poole Collection, File 174; Trinity River Authority, Trinity River Basin Master Plan, February 22, 1977, C1; Guy C. Jackson, Jr. the general counsel for the commissioners of the CLCND, Poole, vice chairman, J.M. Rich, chairman, and J.O. Nelson, secretary, to Colonel R.P. West, District Engineer, Fort Worth, Texas, December 12, 1961, Poole Collection, Box 1 File 60.

³⁵ Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971, Poole Collection, File 174; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 79; Comprehensive Survey Report on Trinity

Following passage of the Rivers and Harbors Act, John Fouts told Dallas and Fort Worth's civic leaders, "The improvement of the Trinity River for practical barge navigation will mean the freeing of Texas -- of the entire southwest -- from the economic bondage that has enslaved us since the railroads came to Texas." John Carpenter urged them not to "sell the Trinity River short," that real progress was close at hand. Fifteen years of arguing, lobbying, and issuing propaganda had paid off for the Trinity Improvement Association. Many years of labor remained to move the canal from the realm of conjecture and propaganda to reality, but the 1945 act gave the navigation supporters a new basis from which to work. Unfortunately, the act would be among the last significant achievements of Roy Miller. The canal stalwart died at the beginning of 1946.³⁶

Former Texas representative Fritz Lanham succeeded Miller as the TIA's Washington liaison. Highly regarded in the nation's capital, Lanham approached the job with enthusiasm and energy, a characteristic common to the movement. Miller's son, Dale Miller, filled in his father's role as president of the Intracoastal Canal and also worked closely with the TIA in its efforts. The dedication Lanham and Miller brought with them to their positions would be greatly needed in the next phase of the TIA's

River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers, Fort Worth and Galveston, 4; Trinity Improvement Association, Controlled Water Resources of the Trinity River Watershed, 43; Remarks of Colonel Delbert B. Freeman, 3; Vernon Poole to James S. Maxwell, District Engineer of the Galveston District, dated January 22, 1964, Poole Collection, File 29.

³⁶ Dallas Morning News, 17 March 1945.

mission.³⁷

³⁷ Amon Carter Papers, Box RGH 41, File , Dale Miller to John M. Fouts, January 7, 1947; Amon Carter Papers, Box RGH 41, File , Craig F. Cullinan, Chairman of the Intracoastal Canal Association of Louisiana and Texas's Advisory Council to Officers, Directors, Subscribers, and Members of the Association, May 23, 1946.

CHAPTER 6

STRIVING ONWARD: IMPLEMENTING AND EXPANDING WATER RESOURCES DEVELOPMENT, 1945-1955

Just as the events of the 1920s coalesced to create a scenario suitable for the resurrection of the Trinity River canal movement in North Texas, the events following passage of the Rivers and Harbors Act of 1945 established a stage upon which the water resource struggles of the 1960s and 1970s would be played out. Although some of the events might appear unrelated at first glance, in retrospect this was not the case. The activities of federal, state, and local agencies, including individuals, were all interrelated. Not each and every specific event or activity was significant to other groups or agencies, but the broad, ever advancing movements of all the participants linked together and influence the whole. The Trinity River, an insignificant looking stream, united them.

From 1947 to 1957, the United States Army Corps of Engineers constructed the four multiple purpose reservoirs as well as the Dallas and Fort Worth flood protection projects legislated in the 1945 Rivers and Harbors Act. The projects would provide much needed flood protection to North Texas, but in 1949, before any of the projects could be of use, a major flood devastated Fort Worth. The creation of the Fort Worth District in the Southwest Division of the Corps facilitated the construction and planning process in 1950, and brought the Trinity improvement movement's leaders into closer contact with the Army engineers responsible for their program. One of the worst droughts in Texas

history also occurred in the 1950s. Lasting six years, it confirmed the necessity of water projects in the urbanizing region.

The Trinity Improvement Association also continued its promotion of further water resource development in the watershed, while rationalizing ways in which every project would benefit the ultimate goal of navigation. With the canal dream remaining as the TIA's primary reason to exist, in 1955 the Association pushed through legislation at the state level to create an Texas agency that could implement its goals.

On the individual level, the improvement movement suffered losses and made gains in the 1950s. Amon Carter, one of the men responsible for the TIA's existence, passed away in 1955, as did John William Carpenter, Carter's Dallas ally, four years later. The loss of these two Trinity stalwarts opened the door for a younger generation of improvement leaders, and each of their sons assumed his father's role. The year of Carter's death was also marked by the arrival in Washington, D. C., of a freshman congressman from Fort Worth. Although elected in 1954 against the wishes of Carter, Jim Wright would become the central force in the promotion of water resource development in the Trinity watershed at the federal level. Wright also adopted Carter's unfulfilled dream of Trinity navigation, hoping to leave it as his political legacy to the state of Texas. Each of these events contributed to a new legislative push in Congress for the expansion of the Trinity development program in the 1960s, and established some of the main participants in the Trinity turmoil of the 1970s.

With the president's signature inscribed on the Rivers and Harbors Act of 1945, the Corps of Engineers readied to construct the Trinity watershed's first four multiple

purpose reservoirs. In May 1947, work began on the Benbrook dam. Constructed on the Clear Fork, about ten miles southwest of Fort Worth, the project reached completion in 1952.¹ The Corps also constructed the Grapevine reservoir between January 1948 and July 1952. The dam was located about twenty miles northwest of Dallas on Denton Creek, an Elm Fork tributary.² Construction on Lavon Lake began in January 1948, and it reached completion in September 1953. The dam was built about twenty-two miles northeast of Dallas on the East Fork, between Wylie and Lavon, in Collin County. Along with flood control, Lavon would provide an association formed by ten North Texas communities, the North Texas Municipal Water District, with water for municipal and

¹ Benbrook Reservoir controlled the run-off of approximately 429 square miles. The reservoir's total storage capacity was 258,600 acre-feet, which is devoted to flood control, conservation storage, and sediment reserve. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 82; Vernon H. Poole Collection, Sam Houston Regional Library and Research Center, Liberty, Texas, File 174, File 174, David Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971; Southwestern Division, Corps of Engineers, United States Army, Water Resources Development by the Corps of Engineers in Texas, January 1955, 20, Amon Carter Papers, Amon Carter Museum Archives, Fort Worth, Texas, Box RGH 41, File 21.

² The Grapevine reservoir controlled the runoff of 695 square miles, and had a total storage capacity of 425,500 acre-feet for flood control, conservation storage, and sediment reserve. Twenty-five thousand acre-feet of water was reserved for navigation. The project cost \$18,896,000, of which local interests provided \$2 million for water supply storage. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 85; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971, Poole, File 174; Southwestern Division, Corps of Engineers, United States Army, Water Resources Development by the Corps of Engineers in Texas, January 1955, 21-22, Amon Carter Papers, Box RGH 41, File 21.

industrial uses.³ In November 1948, the Corps started building Garza-Little Elm reservoir, which incorporated Lake Dallas. In November 1954, it reached completion.⁴

Although enough work had been done on the reservoirs for them to be useful by the end of 1954, the official completion date was scheduled for 1955. Carpenter and the TIA looked with pride at the projects and sponsored a two-day celebration to mark the event. Carpenter wrote, "It is such a great affair that I feel like the President of the United States should be present and officially make the dedication." Carpenter felt that a statement by President Dwight Eisenhower at the 1954 National Rivers and Harbors Congress justified the TIA's efforts. In regards to stream planning and developments in watersheds, the president had expressed his horror over piecemeal action. Carpenter heralded the construction of the Benbrook, Grapevine, Garza-Little Elm, and Lavon Reservoirs, along with the Fort Worth and Dallas flood protection projects, as a wonderful example of coordination and comprehensiveness. Despite the achievement reached in North Texas, the works had not been completed in time to either stave off the

³ Lavon Dam and Reservoir would also provide, according to a 1955 Corps report, "flood control for the rich East Fork and Trinity River farmlands as well as conservation storage for municipal and agricultural purposes." Lavon cost approximately \$11,174,000. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 86; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole, File 174; Southwestern Division, Corps of Engineers, United States Army, Water Resources Development by the Corps of Engineers in Texas, January 1955, 23, Amon Carter Papers, Box RGH 41, File 21.

⁴ Dallas and Denton reserved conservation storage in the Garza-Little Elm reservoir for 415,000 and 21,000 acre-feet respectively. The project's initial cost was \$20.6 million. Local interests contributed \$3.7 million. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 87; Southwestern Division, Corps of Engineers, United States Army, Water Resources Development by the Corps of Engineers in Texas, January 1955, 22-23, Amon Carter Papers, Box RGH 41, File 21.

effects of one of the river's worst floods or to provide much needed water during one of the longest and costliest droughts in Texas history.⁵

Both heads of the Trinity River paradox, "too much water, or not enough," had reared again before the Corps finished the reservoirs and before Dallas and Fort Worth could gain authorization for their floodways. During the Great Depression, Dallas and Fort Worth's growth had entered a lull, but during the Second World War their steady growth had resumed. Dallas's population reached 434,462 by 1950, and the much smaller city of Denton had nearly doubled in size to 21,345. Fort Worth's population had expanded during the 1940s by over a hundred thousand to reach 278,778. With population growth came development and expansion, making the passage of the 1945 Rivers and Harbors Act a welcome aid in meeting the municipal water supply and flood control needs. From 1949 on into the 1950s, the act's significance became readily apparent.

During the 1940s, the flood control needs of the upper basin had moved to the forefront, providing true meaning to Roy Miller's claims in 1943 of their urgency. In June 1941, the Trinity River had reached its highest flood stage in Dallas since 1908. The river's waters spread above and below the levees, forcing hundreds of people to flee their homes. As with the flood of 1908, but to a lesser degree, livestock drowned, crops perished, and property received damage. Firemen patrolled in boats, searching for stranded or drowned victims. Dallas Mayor Woodall Rogers declared at an American and Civic Association Conference in April, 1946, that "Harnessing of the floodwaters of

⁵ John W. Carpenter to Governor Allan Shivers, October 11, 1954, Amon Carter

the Trinity is the greatest frontier we have faced since our forefathers came West.” The events of 1949 gave credence to the Dallas mayor’s statement.⁶

In the 1940s, especially during April 1942 and March 1945, Fort Worth had also experienced severe flooding. In early 1948, North Texans witnessed the typical, seasonal flooding of the Trinity River, then in May of that year a drought settled upon the countryside. By the end of 1948, it had become especially serious, but before fears of a return to the recurring drought of the 1930s could fully develop, rains broke the drought during the first three months of 1949. Again the expected moderate seasonal flooding spread out from the river. Then, with worry of drought eased, a heavy rain varying from six to twelve inches over the Fort Worth area fell during the night of May 16 and 17, to produce the worst flood on record for Fort Worth.⁷ For decades afterwards, it was known simply as the “Great Flood.” Those two words conjured up strong memories to persons who experienced it. The waters left eleven people dead, thirteen thousand homeless, and inflicted an estimated eleven million dollars in damage. The ravaging waters deluged and wreaked damage to business and residential areas alike. If the Benbrook reservoir had been completed before the flood, it would have nearly paid for itself in damage averted.⁸

Papers, Box RGH 41, File 20.

⁶ Dallas Morning News, 13 June 1941; 21 April 1946.

⁷ The National Weather Service for Fort Worth and Dallas internet site, <http://www.srh.noaa.gov/fwd/wx-sum.htm>.

⁸ United States Army Corps of Engineers, Water Resources Development in Texas 1995, 82; Fort Worth Star-Telegram, 30 March 1945; 17 May 1989, Fort Worth Public Library, Clippings Files, “Flood, FW, 1942-50.”

Following the flood, Fort Worth rallied and found itself comfortably positioned to benefit from the Trinity Improvement Association's 1940s lobbying efforts. Amon Carter chaired the Citizen's Flood Control Committee and encouraged the city's residents to approve a \$7 million bond that functioned as part of a cooperative plan reached between the federal government and the Tarrant County Water Control and Improvement District No. 1. The plan, which utilized the floodway improvements approved by Congress in 1945, aimed at preventing another "Great Flood." The floodway project would shorten the river's course through the city by a mile and make adjustments to the levees. According to army engineers, the floodway project and Benbrook Dam, approved in 1945, could have averted the 1949 flood.⁹

Following the disastrous floods of the 1940s and Congress's authorization of the Trinity Project in 1945, the chief of U.S. Engineers acted in April 1950 to create the Fort Worth Engineer District. The district held responsibility for water resources development in two-thirds of Texas, as well as military design and construction in Texas and parts of Louisiana and New Mexico. It covered a geographical area of approximately 410,000 square miles. Lieutenant Colonel Delbert B. Freeman became the first district engineer, and from his Fort Worth offices he oversaw practically all of Texas's flood control and water conservation work. Freeman entered his new assignment, coming from his service on General Douglas MacArthur's staff in Tokyo. Freeman believed water to be the most

⁹ Fort Worth Star-Telegram, 20 January 1950; Fort Worth Public Library, Clippings Files, "Flood, FW, 1942-50."

important factor to the Upper Trinity watershed's continued development, a belief shared by TIA general manager John Fouts.¹⁰

In May 1950, Fouts voiced his satisfaction with the findings of a poll of a thousand leading Texans which showed that water and soil conservation was the state's most important issue. The previous year it had ranked tenth and Fouts considered the new findings a great victory for his twenty years with the Trinity Improvement Association. He and Colonel Freeman shared the belief of many others during those years that water resources development must be handled with a basin-wide approach. The water supply problems of the 1940s and those of the 1950s helped confirm the significance of these views.¹¹

In January 1950, the Corps of Engineers received authorization to begin the Fort Worth floodway project. Voters had to approve the bond proposal, however, before rights-of-way could be purchased and work could begin. Lieutenant Colonel Delbert Freeman played on the city's fear by warning of the danger of delay or rejection. He explained that the longer it took to gain the rights-of-way, "the longer Fort Worth will face the threat of floods." Luckily, while devastating floods did not recur, Fort Worth voters approved the multimillion-dollar bond in October 1950, over a year and a half after the flood of 1949. William Holden, executive vice president of the Fort Worth

¹⁰ "Freeman Tackles \$175,000,000 Job," The Trinity Project, June 1950, 13, Fort Worth Public Library, Clipping Files, "Trinity River."; Remarks of Colonel Delbert B. Freeman, 1.

¹¹ Trinity Project, June 1950, 19, , Fort Worth Public Library, Clipping Files, "Trinity River."; Remarks of Colonel Delbert B. Freeman, 8; J. B. Smallwood, "Historical Perspectives on Water and the Western Environment: A Selective Bibliography of Recent Writings," Journal of the West, 22 (2): 3.

Chamber of Commerce's Trinity Development Committee, praised the Trinity Improvement Association for having already advanced Fort Worth flood protection through the Congress in 1945. The association's activity had allowed the city to secure federal emergency appropriations for the Corps to complete the plans and start reconstructing the levee system immediately following the 1949 flood.¹²

Construction on the Fort Worth Floodway began in 1950 and reached completion in 1957. The project included levees and widening and straightening the Clear Fork from Lancaster Street Bridge to the channel's junction with the West Fork between University Drive and Riverside Drive. It provided flood control protection for Fort Worth's Crestwood and Brookside areas on the West Fork. The project consisted of removing about 7 million cubic yards of material. Federal cost of the project was \$3.9 million, and local interests provided a cash contribution of \$3.9 million along with lands and rights-of-way. In all, the cost of the project totaled \$9.5 million. Dallas followed on Fort Worth's heels in gaining authorization for its floodway.¹³

John M. Stemmons, a member of the TIA and president of the Industrial Properties Corporation, appreciated the value of the TIA's efforts. Along with L. Storey Stemmons, vice president and general manager of Industrial Properties Corporation, L. A. Stemmons, Jr., and other directors of the development corporation, John Stemmons had overseen and taken advantage of the creation of the Trinity Industrial District. Eight

¹² Fort Worth Star-Telegram, 6 October 1950, Fort Worth Public Library, Clippings Files, "Flood, FW, 1942-50."

¹³ United States Army Corps of Engineers, Water Resources Development in Texas 1995, 84.

years before 1953, not a single permanent building had stood at the site. By 1953, 450 firms had "invested in modern, high class structures" to house their operations. The Industrial Properties Corporation estimated investment in the area of \$55 million, and the river bottom area of the Trinity Industrial District was only half developed.¹⁴

Construction began on the Dallas Floodway in January 1953 and reached completion in May 1960. The project strengthened approximately twenty-three miles of existing levees constructed between 1928 and 1932, cleared the floodway channel, and improved interior drainage facilities. The floodway levee system encompassed approximately 10,500 acres in Dallas, near the Elm and West Fork confluence. The Dallas and Fort Worth floodways would eventually prove their worth, but flooding would not be of concern for most of the 1950s. Drought became the main concern as the growing cities of North Texas looked with despair at their dwindling water supplies¹⁵

The 1950s would be especially memorable for North Texas. Moderate flooding occurred on the Trinity during the wet and cool summer of 1950. The pleasantness came to an end, however, when inordinately dry conditions developed. The drought continued into 1951, and the summer had extremely hot weather. A heavy rain fell in the Dallas vicinity at the end of August 1951 as the region experienced high temperatures. Wind and dust storms marked the spring of 1952, while another short period of relief to the dry conditions came with some heavy rains in April and May. Then the hot weather and

¹⁴ "A Directory of Business Firms in the Trinity Industrial District, Dallas, Texas," December 1953, Amon Carter Papers, Box RGH 41, File 20.

¹⁵United States Army Corps of Engineers, Water Resources Development in Texas 1995, 83.

drought resumed, only to be slightly relieved with November rains. The extreme weather continued in 1953, and 1954 became one of the warmest years experienced in North Texas. It rivaled 1933, 1934, 1938 and 1939 in heat intensity and dust storms. The rain that did fall was welcome, but it was far from enough. The next year, 1955, was not as harsh as the four previous years, but no end to the awful conditions came. The drought resumed its severity in 1956 and carried on into 1957. To the relief of North Texans, 1957 marked the end to the prolonged extreme conditions. Storms arrived in March and in April heavy rains fell. The precipitation of April 19-30 and May 22-26 produced the worst floods in years, but it brought relief from the dryness.¹⁶

During the drought, the cities of the Upper Trinity basin faced recurring water shortages. Some communities turned to expensive, temporary water supplies to augment their overtaxed systems. Fort Worth had an average annual rainfall of 33.7 inches. During the six years, 1951 to 1956, Fort Worth's rainfall ranged from a low of 18.6 to a high of 25.2, with a six-year average of 22.4. The water crisis made evident the critical nature of water supply development in the urbanizing state. According to one water official, Dallas' 1952 water shortage reached such a severe level that the city faced the possibility of drowning in its own filth. The situation forced city leaders to realize the terrible problems they would face if they actually ran out of water. The experience prompted them to plan intensively for future water needs. As Dallas's water manager,

¹⁶ The National Weather Service for Fort Worth and Dallas internet site, <http://www.srh.noaa.gov/fwd/wx-sum.htm>.

Henry Graeser, remarked, "Yes, there is nothing like an emergency . . . for selling a Long-Range Program."¹⁷

Denton already understood the need for a long-range program. Denton's water troubles had become increasingly evident during the 1940s as its refusal to participate in the Lake Dallas project came back to haunt the city. New wells drilled during the decade proved inadequate to meet the city's needs. While Denton's population nearly doubled in size during the decade, the underground water supply continued to drop. Denton had to enact water restrictions during a 1943 shortage, and while the city faced an even more severe shortage in August 1946, it allowed residents to use water for only the most necessary reasons. The problems facing Denton forced an increased water consciousness in North Texas.¹⁸

Dallas water officials had known from studies before the Second World War that the city required a water supply expansion, but a wartime moratorium on construction prevented action. Following the war's end, they moved into activity. Because of the Trinity Improvement Association's wartime efforts on behalf of water resource development, Dallas received federal cooperation for multipurpose reservoirs on the Elm Fork. Dallas had to pay for its share of the reservoirs' conservation capacity, therefore

¹⁷ Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 14; Report of Major General R. G. MacDonnell to the Chief of Engineers, Department of the Army, March 14, 1963, 4, located in Roberts Papers, Box 1, Folder 15, "General Correspondence File - Trinity River"; Graeser, "Development of Dallas Water Supply," 3.

¹⁸ C. A. Bridges, History of Denton, Texas: From its Beginning to 1960 (Waco, Texas: Texian Press, 1978), 388, 404-405.

the city advanced \$500,000 to the federal government to expedite the process. Congress, assured of Dallas cooperation, appropriated the necessary funds and began construction on Grapevine Lake, which lay in Denton and Tarrant Counties. June 1952 marked the Corps's completion of the project.¹⁹

Having learned from its past mistake at rejecting reservoir water, Denton joined Dallas and moved to acquire 21,000 acre-feet of water from the Garza-Little Elm Reservoir. The Corps of Engineers built the reservoir, later known as Lewisville Lake, as an expansion of Lake Dallas in Denton County. Having started the project in November 1948, in 1957 the Corps finished construction of the dam. The new reservoir was twice as large as Lake Dallas, with 183 miles of shoreline, and it provided the water needed to insure further growth for Denton and Dallas. The Grapevine and Garza-Little Elm impoundment's combined to cover nearly one-fifth of Denton County. This measure marked Denton's acceptance that future urban development depended on reservoirs.²⁰

Prior to completion of the above mentioned projects, Dallas city officials became aware during the drought that Lake Dallas could only yield an adequate supply of water for four more months. The closest source of additional water was the Red River where Dallas erected an emergency pump station. The pump, located north of Gainesville in Cooke County, carried water into the Elm Fork channel. The water then flowed to Lake Dallas by gravity. The first Red River water reached Dallas in 1954. The city also reactivated the White Rock treatment plant for use during the summer months until the

¹⁹ Graeser, "Development of Dallas Water Supply," 11-12.

²⁰ Odom, An Illustrated History of Denton County, 93-94; Bridges, History of Denton, Texas, 434-435, 468.

drought ended in 1957. The city also drilled emergency wells, setting pumps at a thousand feet below ground level. Scarcely fifty years had passed since the same underground aquifers provided artesian wells that flowed at one hundred pounds per square inch. To secure a more reliable water supply in the future, Fort Worth in 1956 received congressional authorization to purchase storage space in Benbrook Lake.²¹

Henry Graeser provided a clear summation of the drought's effect on the public's awareness of water issues. Just before the drought broke, he wrote,

Before 1950, it was very difficult to find space in our local newspaper for new items on the water department. However, out of the drouth [sic] came an awakened interest in the water supply problem so that it has been front page news for nearly seven years now. In the course of this drouth period, plans for the future have been presented and costs for such future plans have been brought home to the consumer through repeated headline coverage.

The Trinity Improvement Association later lobbied extensively for the plans Graeser wrote about, especially for a 1953 plan initiated by Dallas.²²

In June 1953, the Dallas City Council formed a committee to solve the city's water problems. W.C. Vollmer, president of the Texas & Pacific Railroad, headed the committee. In March 1954, the Vollmer Committee acquired the services of Forrest & Cotton Consulting Engineers, a Dallas firm, to develop a water plan that would match Dallas's growth through the end of the century. This effort attempted to maximize all available sources to supply the Dallas County metropolitan area. The committee recommended a development plan that included an interbasin transfer from the Sabine

²¹ Graeser, "Development of Dallas Water Supply," 9, 12-13; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 82.

²² Henry J. Graeser, "Water & Sewerage Utility Earnings," 2 May 1957, 1, 6, Graeser Collection of Dallas Public Library, Box 1, Folder 7.

River to Dallas, construction of Ray Hubbard Reservoir on the East Fork, and the ultimate development of the Elm Fork by constructing Aubrey Reservoir above Garza-Little Elm. Action on the Ray Hubbard and Aubrey reservoirs did not come for several years, but in 1956 the interbasin transfer began to take shape.²³

Historically, a city's water supply had depended on the water available in its own basin. Facing the taxing effects of urban growth and the 1950s drought, in 1956 Dallas pioneered the first major transbasin diversion of water in Texas. By that year, Dallas had developed the Trinity River above the city and owned water rights on most of the river's yield in that area. Estimates anticipated a Dallas by the year 2000 that would require more water than the watershed had to offer. The Sabine River, flowing thirty-three miles east of Dallas, was practically undeveloped and the Sabine River Authority faced a dilemma. The authority, legally obligated to construct a major reservoir in the Sabine's upper watershed, faced a default of its responsibilities because it lacked sufficient financing. A Dallas official said that the "time was ripe for a deal," and Dallas took advantage of the situation.²⁴

Dallas seized the opportunity and acted to secure a water supply in the Sabine basin. The city and the Sabine River Authority reached an agreement to construct Lake Tawakoni, a 55,000-acre lake with a yield of 200 million gallons a day. Dallas paid the total cost for the lake, in exchange for 80 percent of the lake's yield in perpetuity. The

²³ Graeser, "Development of Dallas Water Supply," 13-14.

²⁴ Henry J. Graeser, "Water Resources for the '80's," presented to North Carolina Section, AWWA, Greensboro, North Carolina, 8 November 1982, 15-16, Graeser Collection of Dallas Public Library, Box 2, Folder 25.

lake, treatment facilities, and a thirty-two mile pipeline reached competition in late 1963, and Dallas received its first treated Lake Tawakoni water in February 1964. While Dallas pursued its water resources development, other towns and cities in the upper basin also took action on their water futures.²⁵

In 1953, the Corps of Engineers had finished Lavon Reservoir on the East Fork for water conservation and flood control. During 1955, the city of Weatherford constructed Weatherford Reservoir on the Clear Fork in Parker County. That same year, the city of Bowie built a reservoir for water supply purposes on Big Sandy Creek, a West Fork tributary, and named it in honor of Amon Carter. Arlington, situated between Dallas and Fort Worth, put the Arlington Reservoir into operation during May 1957 to supply not only Arlington with a municipal water supply but also the Texas Electric Company with industrial water for one of its steam electric generating plants. The Ellis County Water Improvement District No. 1 completed the Waxahachie Reservoir in 1957 for municipal uses. After enduring the 1950s drought and expanding water supply resources for the future, North Texans turned their attention to flood control.²⁶

When April and May 1957, heavy rains broke the severe drought and caused flooding throughout the area between the Pecos and Sabine Rivers. The heavy rain quickly filled the new reservoirs constructed by the Corps of Engineers. Rainfall amounting to 28.8 inches from April into early June 1957 fell in North Texas. Heavy

²⁵ Graeser, "Water Resources for the '80's," 15-16; Graeser, "Development of Dallas Water Supply," 13-14.

²⁶ Fort Worth's Amon Carter spent his youth in Bowie and died in 1955, the year of the reservoir's completion. Forrest and Cotton, Report on the Master Plan of the Trinity River and its Tributaries, 11-12, 14-15, 18.

rainfall through most of the basin caused the largest volume of rainfall for any similar period for which records existed. Had it not been for the low water level in the recently constructed reservoirs and the older water conservation reservoirs, the Corps declared that the basin would have suffered from record breaking flood peak discharges. During the April and May 1957 flooding, Benbrook Lake and the Fort Worth Floodway combined to prevent an estimated \$9.3 million in damages to Fort Worth.²⁷

Despite the presence of the reservoirs and floodways, protection was not complete. Four thousand people had to evacuate from unprotected lowlands above Fort Worth on the West Fork during May. Dallas's continued development also brought flood control concerns, as construction moved into unprotected areas of the river's floodplain. Damage incurred by flooding fueled calls for more levees to protect river-bottom development.²⁸

As the Upper Trinity basin's urban areas continued to build and expand, the pressure for continued water resource development became a recurring theme. Since 1930, the Trinity Improvement Association had gained significant legislation for flood control, water supply, and of course, navigation. The reservoir and flood control projects completed since 1945 also served as integral parts for the canal facet of the Trinity development program. While the Corps constructed the projects authorized during 1945,

²⁷ Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 14; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 82.

²⁸ Texas Almanac, 1994-1995, 124; McNeely and Thompson, "The Unholy Trinity Incident," 42.

the Trinity Improvement Association continued to support the addition of new projects related to their goals.

Encouraged by the Trinity Improvement Association, Congress expanded the comprehensive Trinity basin plan by authorizing the construction of additional projects with the Flood Control Acts of 1954, 1960, and 1962. These projects included building Navarro Mills Lake and Bardwell Lake, and modifying Lavon Lake's additional water supply conservation. The congressional legislation also called for improving the East Fork downstream from Lavon Dam, providing two extensions to Fort Worth's floodway project, and improving the channel through the Fort Worth suburb of Richland Hills.²⁹

²⁹The Flood Control Act of September 1954, and modifications in the Flood Control Act of July 1958 authorized construction of a multiple purpose reservoir on Richland Creek, a Trinity River tributary. The Navarro Mills lake was constructed about sixteen miles southwest of Corsicana between December 1959 and March 1963. A multiple purpose project, the impoundment had flood control capacity, water conservation, and allied benefits. That dam controls the runoff from 320 square miles, and is designed to hold back a total storage capacity of 212,200 acre-feet. The lake cost \$13.1 million, including local interest contributions of \$300,000. The local contribution came with hopes the reservoir would result in higher utilization of downstream lands of the watershed. The Trinity River Authority contracted to purchase its conservation storage for municipal and industrial purposes. By December 1993, Navarro Mills Lake had provided flood control savings in the area of \$100,080,600. Between August 1963 and November 1965, the Fort Worth District constructed Bardwell Lake on Waxahachie Creek, five miles above its confluence with Chambers Creek and about five miles south of Ennis. The project cost \$12,941,000. The completed lake, built for water conservation, had a total storage capacity of 140,000 acre-feet. The Trinity River Authority contracted to use the conservation for water supply. The Fort Worth District began work on the Big Fossil Creek Channel Improvement in May 1964, and completed the project in December 1988 at a cost of \$2.1 million. Nonfederal interests contributed \$200,900 towards the total cost. The project straightened and enlarged the creek, along with constructing 1.27 miles of levees along its left bank in the city of Richland Hills. Interior drainage facilities were also installed. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 79, 82, 83, 88.

As early as 1954, the TIA began promoting another project, a saltwater barrier in the vicinity of Wallisville, near the mouth of the Trinity. At the suggestion of Amon Carter and the insistence of John Fouts, senators Price Daniel and Lyndon Johnson attended the April 29, 1954 hearing of the Board of Engineers for Rivers and Harbors. Both testified on behalf of the saltwater barrier's merits and the board approved modification of the plans. Congressional authorization, however, would have to wait a few more years. Unbeknownst to the Association, this very project would eventually contribute to the canal's downfall.³⁰

By September 1954, the TIA had started working towards the creation of a "governmental agency to be known as the Trinity Improvement District." Carter's poor health limited his activities, but he assured Fouts that he was "100% behind the idea of creating a district and he would give it his full support." Carter extended his blessing for any plan Carpenter and Fouts decided to pursue. Fouts explained to Carpenter in a letter

³⁰ Senator Lyndon Johnson also gave an address to Trinity supporters at an Anahuac fish fry in 1954, near the vicinity of the proposed Wallisville Lake and Saltwater Barrier. Johnson told the Trinity boosters: "The history of the past was made by the men who built the first fort at Anahuac in 1831. It was made by the small bands who fired the shots that represented the first engagement between Texans and Mexicans on July 13, 1832. The history of the present is being made by men like Guy Jackson and John Fouts -- by the Trinity Improvement Association and other organizations which have been so effective in the development of the river. . . . The Trinity is a river which inspires both awe and reverence. It is responsible for the growth of some of our greatest cities." Lyndon Johnson to Amon G. Carter, June 22, 1954, and copy of Johnson's Speech given at the Tenth Annual Fish Fry of the Fraternity of the White Heron, at Anahuac, Texas, June 19, 1954, Amon Carter Papers, Box RGH 41, File 20; John Fouts to Lyndon Johnson, Senator, Texas, April 24 and April 26, 1954; Telegram from John M. Fouts to Amon G. Carter, April 26, 1954; Senator Price Daniel to Amon G. Carter, April 30, 1954, Amon Carter Papers, Box RGH 41, File 20.

the significance the agency would have for the Trinity Improvement Association and the canal movement:

During the last 10 years we have been the leading sponsor of fully developing the soil and water resources of the Trinity Watershed, and in that ten-year period of time we have seen approximately \$100 million dollars spent to carry out this great program, and I will predict that the entire Master Plan can be carried out within ten (10) years after the creation of an overall district and its successive financing.³¹

With full confidence that a state agency would assure the success of Trinity River navigation, the TIA proceeded to implement the new idea.

The TIA scheduled a Board of Directors meeting for October 27, 1954 at the Texas Hotel in Fort Worth. Carpenter assured Carter that it would be the "most important meeting that the Trinity Improvement Association has had since it was organized." At the meeting, John Fouts reported on a master plan for Trinity Basin development and the establishment of a state agency to implement the TIA's programs.³²

Carpenter also began wooing Governor Allan Shivers's support for the agency. He explained in a letter to the governor that by 1939 local interests had constructed, independent of federal or state aid, "over a hundred levee systems, six major reservoirs, four major irrigation developments and scores of smaller water utilizations of all kinds." In 1954 dollars, these projects would have exceeded \$150 million in investment, not including interest, maintenance, operation, and flood damage considerations that local interests had faced. In addition, the TIA had succeeded in winning federal participation

³¹ John Fouts to John W. Carpenter, September 23, 1954, Amon Carter Papers, Box RGH 41, File 20.

³² John W. Carpenter to Amon G. Carter, October 8, 1954, Amon Carter Papers, Box RGH 41, File 20.

in implementing its comprehensive development plan. A state agency with the power to finish the TIA's mission would be the final step.³³

The TIA rewarded Fouts for his faithful service in October 1954 by making him a vice president of the association. He also remained the general manager, and continued to put the finishing touches on the TIA's new strategy. The plans made by the TIA for the state governmental agency called for an authority over the watershed with the "power to raise money through the sale of revenue bonds and a small ad valorem tax." This maneuver would enable the Trinity boosters to contract with the state government to further the master plan of development prepared by the Corps of Engineers and the U.S. Soil Conservation Service.³⁴

When created by the Dallas and Fort Worth Chambers of Commerce, the TIA received instructions "to remain on duty until the Trinity River and its Watershed was completely harnessed." On October 27, 1954, directors of the TIA felt they were drawing nearer that goal when they voted to petition the Texas Legislature to create a "Trinity River Authority." The state agency would have power to implement and finance various facets of its comprehensive plan, especially the navigation project.³⁵

Fouts believed that the quickest and best way to succeed in fulfilling its soil conservation measures and the canal project was the establishment of the Trinity River

³³ John W. Carpenter to Governor Allan Shivers, October 11, 1954, Amon Carter Papers, Box RGH 41, File 20.

³⁴ John W. Carpenter, Amon G. Carter, and John M. Fouts to members of the Trinity Improvement Association, October 1954, Amon Carter Papers, Box RGH 41, File 20.

Authority. In regards to the canal, Fouts wrote "we simply must have a way to finance this [canal] and the practical, sensible way is with a 'users toll.'" The state agency would give the boosters of Trinity development the ability to finance and construct the canal, along with major dams "for storing water for every purpose." If successful in the legislature, the TIA anticipated completion of all its goals within twelve years. By 1970 at the latest, barge traffic could be journeying along the Trinity River, soil conservation could be fully implemented, and cities and towns in the Trinity watershed would have a water supply capable of sustaining steady development. Unfortunately for the TIA, not everyone agreed with its goals, and the bill went through several revisions.³⁶

The January 1955 revision of the proposed bill to create a Trinity River Authority initially called for a broader territory than the legislature later granted. The bill, based on Article XVI, Section 59 of the Texas Constitution, would be "a governmental agency of the State of Texas and a body politic and corporate." Constitutionally, the TRA would be a conservation and reclamation district. Looking at the entire Trinity basin as a unit, the TIA reasonably included those counties in which the Trinity basin made up a significant portion of the land area, and divided them into ten areas for administrative representation on the Board of Directors: Montague (Area 2), Cooke (2), Grayson (1), Jack (3), Wise (3), Denton (2), Collin (1), Parker (3), Tarrant (4), Dallas (5), Johnson (3), Ellis (7), Hill (7), Navarro (7), Rockwall (6), Kaufman (6), Van Zandt (6), Henderson (6), Freestone

³⁵ John Fouts to William Holden, Executive Vice-President of the Fort Worth Chamber of Commerce, Amon Carter Papers, Box RGH 41, File 20.

³⁶ John Fouts to Members of the Trinity Improvement Association Educational Committee, 1954, Amon Carter Papers, Box RGH 41, File 20.

(8), Anderson (8), Leon (8), Houston (8), Walker (9), Madison (9), Trinity (9), San Jacinto (9), Polk (9), Liberty (10) and Chambers (10). Dallas and Tarrant Counties were each considered as areas without connection to other counties, and Hunt and Fannin Counties were not included at all in any area. Each area would have at least one director appointed from it, and any one area could actually have up to six of the eighteen directors, each to be appointed by the governor and approved by the state Senate.³⁷

The proposed bill granted many powers and responsibilities to the Authority. It would be within the TRA's power to supervise storing and conserving waters in the watershed "to the greatest beneficial use" as well as "conservation of water for domestic uses within and without the watershed," such as for cities and towns. The agency would be responsible for encouraging, constructing and protecting navigation canals, harbor and terminal facilities, and fixing and collecting tolls and charges for the services provided by the facilities. In addition to navigation and water supply issues, the TRA would focus on soil and other surface resource conservation to prevent "destructive erosion, thereby preventing the increased flood menace incident thereto, and for the prevention of sedimentation and siltation of lands, channels, reservoirs and coastal waters." The agency could also provide irrigation water within and without the watershed; water for commercial and industrial enterprise developments and execute contracts with municipalities and others for constructing water related projects, such as reservoirs, dams, water supply lines, water purification and pumping facilities. When necessary, the

³⁷ A Bill To Be Entitled An Act to Create Trinity River Authority of Texas, Enacting Other Provisions Related to The Subject, and Declaring an Emergency, Draft of January 6, 1955, Amon Carter Papers, Box RGH 41, File 21.

Authority could pursue opportunities to bring water into the basin from other watersheds and encourage and develop recreational facilities and fish and wild life preservation. Furthermore, the Authority had the power to "construct, own and operate sewage gathering, transmission and disposal services," and charge for associated services. The draft also gave the Authority the power to levy and collect ad valorem taxes approved by elections. The maximum rate would be ten cents per \$100 valuation of taxable property. To vote on a tax proposal, a voter had to own taxable property within the Authority's territory. The Authority could also issue bonds for operations and its projects.³⁸

Ben Carpenter, son of the TIA president, led an effort to help the TIA with its Trinity River Authority Bill while it was under consideration before the legislature. In January 1955, Ben Carpenter headed a group of fifty to sixty Texans who called on the governor. In a letter to Amon Carter, John Carpenter told his longtime Trinity ally of their efforts. "I just wanted you to know how hard we are working to help bring about the realization of the Trinity program which we have been working on so many years," Carpenter wrote, "and I believe that if everyone continues to do his best that we will get the Bill passed, and when it is passed that will mean that we will bring barge service to the City of Fort Worth." During their years of involvement with the canal movement, Carter and Carpenter had seen the project approved by Congress after a careful Corps study, while two chiefs of the Corps of Engineers had voiced their endorsement of the project's feasibility. Carpenter closed the letter to his old friend by saying, "I hope that you are taking good care of yourself because I believe that these matters which you have

³⁸ Ibid.

been working on so faithfully and so long, all in the interest of the whole public, will come into full fruition." Carpenter's assurances to Carter were premature. The railroads still exerted significant influence in the state, and an assortment of opponents voiced their objections to parts of the bill.³⁹

The bill was again rewritten to satisfy various parties, including the rice growers in the lower basin area, the Houston Chamber of Commerce, Richland-Chambers Creek area residents, the Soil Conservation District Supervisors Association of Texas, the Tarrant County Water Control and Improvement District #1, and the City of Fort Worth. It also eliminated twelve border counties containing "only a small portion of their area in the northern, western and eastern parts of the Trinity Watershed."⁴⁰ A new amendment limited the Authority's territory to the counties of: Collin, Tarrant, Dallas, Ellis, Navarro, Rockwall, Kaufman, Henderson, Freestone, Anderson, Leon, Houston, Walker, Madison, Trinity, San Jacinto, Polk, Liberty and Chambers.⁴¹

The Conservation & Reclamation Committee of the Texas House of Representatives adopted the Trinity River Authority Bill by unanimous vote on the night of March 9, 1955. Since the first draft had been issued in early November 1954, the bill had undergone four revisions. Fouts assured Trinity development supporters that, "This Bill, as drafted by the House Committee, is excellent and the people of the Trinity

³⁹ John W. Carpenter to Amon G. Carter, February 5, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁴⁰ John M. Fouts to J.B. Thomas, president of Texas Electric Service Company, Fort Worth, Texas, February 18, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁴¹ Committee Amendment No. 2, Amend House Bill No. 20, Amon Carter Papers, Box RGH 41, File 21.

Watershed can develop the soil and water resources of the Trinity River as they see fit, if it is enacted into law." He warned, however, that the railroads were preparing to destroy the bill's effectiveness with "crippling amendments."⁴²

Carter wrote to the officers and executive committee members of the West Texas Chamber of Commerce in March 1955. Once again, canal opponents were fighting the canal by opposing the Trinity River Authority bill. The opponents resurrected the argument that claimed the bill would economically injure West Texas. Carter hoped to squelch the controversy again and wrote, "To the contrary, it seems to us, creation of the authority and full development of the Trinity River for water supply, soil conservation, flood control, irrigation and navigation would be of tremendous benefit not only to the watershed area but to all of West Texas." Carter said he and Fort Worth had always been in favor of promoting the "welfare and progress of West Texas" and would never support anything that would harm the region. For twenty-eight years Carter claimed his newspaper had worked for Trinity River improvement. He insisted that the well-being of West Texas and the state as a whole had served as one of his principle reasons for promoting the Trinity River improvements. West Texas had weighed heavily in winning congressional approval for the navigation feature in 1945, and Carter hoped the region could again unite with him. Carter wrote that the Trinity River Authority bill's supporters believed that most of the bill's opposition arose from the "selfish motives of the opponents or to misunderstanding of the purpose of the measure and what its economic

⁴² John M. Fouts to Trinity River Watershed Supporters, March 1955, Amon Carter Papers, Box RGH 41, File 21.

effect would be on Texas and West Texas." To the surprise and dismay of the TIA, the organization had to worry about opposition in more areas than just West Texas.⁴³

On March 16, 1955 the mayor and Chamber of Commerce officials of Houston issued two objections to the TRA Bill: a clause of the bill legislated that "the first call on any water restored in Lake Liberty will be for municipal purposes not only to Houston, but to other cities within the area." The second objection was to the amount of water entitled to rice interests. Both objections essentially pointed out that the city of Houston looked to the Trinity River as a significant future water source, and it feared that the bill did not assure it of "an ample water supply at a reasonable cost." Houston's engineers had advised the city officials that Lake Liberty would be the city's "best permanent supply for the future." Fouts assured Houston that the TRA could build Lake Liberty large enough to satisfy all interested parties, including for Houston up to 1 million acre-feet a year. In addition, plans for canalization would result in a 250-mile stretch on both sides of the river between Dallas and Liberty that would be perfect for industrial development. The corridor's proximity to Houston would be a blessing for the Gulf Coast city's future economic growth and sound development. Fouts claimed he knew of six major industries that were prepared to move to the Trinity River and invest half a billion dollars in "their initial development program."⁴⁴

⁴³ Amon G. Carter to Marvin C. Nichols, president of the Fort Worth Chamber of Commerce and partner of Freese & Nichols, Fort Worth, Texas, with draft of telegram sent to the West Texas Chamber of Commerce by Carter, March 25, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁴⁴ John Fouts to Ben Belt, president of the Houston Chamber of Commerce and Joe Hofheinz, mayor of the City of Houston, March 25, 1955, Amon Carter Papers, Box RGH 41, File 21.

Trinity improvement supporters, including those in West Texas, chastised the West Texas opponents. The advocates argued that if they were going to persist in opposing the Trinity River canal, then they should have opposed projects such as the St. Lawrence seaway and the Houston ship channel. By the mid-1950s, the Houston channel became the second largest port in the United States and served fourteen southwestern states. Canal proponents pointed out the changing tactics of the railroads. Initially, the railroads had argued that the canal was infeasible and could not work. The new tactic employed by railroad officials, telling West Texans that industry would consolidate along the Trinity River, essentially admitted that it would work as planned. Advocates replied that industry on the Trinity River, along with the lower freight rates that would also result, would be of great benefit to West Texas.⁴⁵

To the TIA's great dismay, the Texas legislature yielded to opposition pressure and deleted provisions in the bill that gave the agency authority to develop the river for navigation. Ben Carpenter had said before the event, "If navigation comes out, the blame rests on the railroads." Exertion of their considerable influence had given the railroads a victory over the canal. An editorial in the Fort Worth Star-Telegram marveled that the Trinity watershed could actually be given a restriction on navigation that no other Texas watershed had to endure.⁴⁶

⁴⁵ "Lawmaker Raps Abilene C.C. for Opposing Trinity Plans," Fort Worth Star-Telegram, March 29, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁴⁶ "Curtailed Trinity Bill Should Be Passed," Fort Worth Star-Telegram, April 6, 1955, Amon Carter Papers, Box RGH 41, File 21.

Carpenter and Carter, although respecting Houston's right to oppose the TRA Bill, could not find any rationalization or justification for the city's stance. Canal enthusiasts found it difficult to believe the House had removed the navigation feature from the bill, but for a city several miles outside of the Trinity basin to criticize the TIA's efforts to develop the water resources for the basin's residents, and potentially for Houston's future needs, seemed incongruous. Houston newspapers had criticized the bill, pointing out that Dallas and Fort Worth would be using water from the Sabine and Brazos Rivers, respectively. Carpenter and Carter's statement acknowledged that Dallas and Fort Worth might well be served by water from other watersheds in the future, but only after negotiating with the proper agencies. Houston should not harm the future of the Trinity basin's development merely to bypass the creation of a legitimate state agency. The Trinity River basin was the last of the major Texas watersheds to be without an official coordinating agency. Despite the limitations placed on the bill by the railroad interests, Carpenter and Carter declared it "imperative that this program of water conservation and development be permitted to be carried out by the people of the Trinity River Valley."⁴⁷

Despite the numerous attacks and setbacks, the TIA refused to surrender. Carpenter, Carter, and their allies used whatever leverage they could to push the cut-up bill through the legislature.⁴⁸ Their efforts served them well. The Senate sent the TRA bill to a subcommittee by a ten to four vote. State Senator Doyle Willis assured Carter

⁴⁷ Joint Statement issued by John William Carpenter and Amon G. Carter on Friday, April 8, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁴⁸ John W. Carpenter to Amon Carter, April 8, 1955, Amon Carter Papers, Box RGH 41, File 21.

that he and others were doing everything they could to get the bill out of committee and force a floor vote.⁴⁹

After the Texas House passed the emasculated bill, the Trinity River Authority's fate rested with the Texas Senate. The railroads, having exerted powerful pressure, had succeeded in deleting the navigation feature from the bill. Despite this achievement, the railroads continued their opposition to the agency's creation. John Carpenter did not hesitate to point out the injustice of the railroads' actions. In a statement, he lamented:

Previous Legislatures have already created similar water conservation and reclamation agencies on all of the major rivers in Texas with the exception of the Trinity. Failure on the part of the Legislature to pass the Trinity River Authority Bill would evidence a discrimination against the people residing within the Trinity River Valley, which would be impossible to understand. The people of the Trinity Valley deserve this opportunity to develop this vast unused resource for the benefit of themselves and the entire state.

Carpenter also explained that the river's annual flow of six million acre-feet often caused damage and destruction, especially to the mid-Trinity area, and then wasted away into the Gulf of Mexico. Dallas and Tarrant counties, with a population greater than one million persons, used less than 150,000 acre-feet a year. Carpenter and his fellow advocates bristled at the waste of water and the unchallenged destruction caused by flooding. The Trinity River Authority could be of tremendous value, they asserted, in harnessing the water for beneficial use and curbing the flooding.⁵⁰

⁴⁹ Doyle Willis, State Senator for District 10, Tarrant County, to Amon G. Carter, April 20, 1955, Amon Carter Papers, Box RGH 41, File 21.

⁵⁰ Statement by John W. Carpenter, May 16, 1955, Amon Carter Papers, Box RGH 41, File 21.

After months of debate and deliberation, the Texas legislature passed the TRA Bill. The bill specified that on September 6, 1955, the Authority would formally come into existence. A twenty-four-member board, to be appointed by the governor, would oversee the authority's activities. The bill charged the board with the creation of a master plan for developing water and soil conservation throughout the basin. The law gave the Authority the right to levy a tax of up to two cents per hundred-dollar valuation in its territory of five complete counties and portions of twelve others.⁵¹

The Trinity River Authority legislation now awaited the governor's signature. Following this final piece of the process, the governor would appoint the TRA's twenty-four directors. Carpenter wrote to Carter, telling him that despite the reduced form of the bill, it could still be used to "accomplish what we first started out to accomplish." The Board's membership would be extremely important to reach this end. With the right personnel in position, the canal advocates could find a way to reinsert the navigation feature into the TRA's mission. In due time, Carpenter promised Carter, they could overcome the railroads. It was better, in his opinion, to pass the bill as it was than to have no bill at all. Carpenter and others were already giving serious thought about how to influence the governor's appointments in a favorable way. Carpenter sent notices to TIA leaders in all the TRA counties, recommending that they provide a list of the strongest and most capable leaders favorable to the TIA program. Carpenter realized that Carter

⁵¹ Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole, File 174; Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1956, 3; D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, 104; "Bill on Trinity Signed into Law," Fort Worth Star-Telegram, 25 June 1955, 1.

was in poor health, and hated to bother him, but he "did not feel that it would burden [Carter] too much to have these suggestions." Carpenter personally suggested that Carter's son, Amon, Jr., O.B. Leonard, and Webb Maddox would be good selections for Tarrant County's representatives. Carpenter welcomed any advice Carter could offer him on the matter. Carter, however, would never get to see the Trinity River Authority become a reality.⁵²

Amon Carter died on June 23, 1955, one day before Governor Shivers signed the TRA bill. Carter left behind twenty-five years of labor as the executive committee chairman and co-founder of the Trinity Improvement Association. He left behind a heritage of civic promotion and philanthropy. He left behind a son, Amon Carter, Jr., who carried on in his footsteps as president of the Fort Worth Star-Telegram and as chairman of the Trinity Improvement Association's executive committee. He left behind a legacy of basin-wide water consciousness for flood control and water supply, and he left behind a mission to make the Trinity River navigable from the Gulf of Mexico to Fort Worth. His life came to an end without having seen the seagulls flying over Fort Worth that Will Rogers had joked about in the 1930s. But he also left behind a legacy of achievement and optimism in water resource development for the Upper Trinity River basin that his survivors strove to sustain. Senator Lyndon Johnson had complimented Carter in 1954 by writing, "Because you have given a great portion of your life to the development of the Trinity--and because of you, perhaps more than any other man, you

⁵² John W. Carpenter to Amon G. Carter, June 10, 1955, Amon Carter Papers, Box RGH 41, File 21.

are responsible for the great progress which has been made on that river."⁵³ Carter's friend and colleague, John Carpenter, had also acknowledged the Fort Worth leader's contributions in a speech during 1953. "Amon Carter," Carpenter explained, "has provided the spark and the drive which has turned our hopes of yesterday into today's realities and kept us dreaming of other tomorrows ripe with still more promise."⁵⁴ Carter would have appreciated the achievements and the struggle that occurred over the next two decades.

Although the Trinity River movement lost one of its staunchest supporters and strategists, with the death of Amon Carter in 1955, it gained two new allies. One was a man, Jim Wright, and the other was an institution, the Trinity River Authority. The pair, along with all others supportive of exploiting the potential of the river, would work closely together in bringing Amon Carter's dream closer to reality.

In 1955, an ambitious freshman congressman from North Texas arrived in Washington, D.C., determined to make an impact. Only the year before, Jim Wright, the former mayor of Weatherford, had challenged the Fort Worth establishment's incumbent representative. In a shrewd tactical maneuver, Wright had declared in a full-page political advertisement in Amon Carter's Fort Worth Star Telegram that he would work on behalf of everyone in the district on equal terms. But, Wright boldly asserted, he

⁵³ Lyndon Johnson to Amon G. Carter, June 22, 1954, and copy of Johnson's Speech given at the Tenth Annual Fish Fry of the Fraternity of the White Heron, at Anahuac, Texas, June 19, 1954, Amon Carter Papers, Box RGH 41, File 20.

⁵⁴ Speech presented by John W. Carpenter, "A Controlled Trinity River," at the Trinity Recreation Committee Meeting, held July 3, 1953 at the Hotel Texas in Fort Worth, Texas, Amon Carter Papers, Box RGH 41, File 19.

would not be Carter's personal representative or lackey in the United States Congress. He won by a sizable margin. The victorious new congressman later shepherded Amon Carter and John William Carpenter's beloved project through Congress.⁵⁵

Speaking on the floor of the House in 1957, Congressman Wright uttered a phrase that would be the central thought to his stance on water resources policy, "Mr. Speaker, water is the one ingredient indispensable to the Nation's future." As mayor of Weatherford in the early 1950s, a town west of Fort Worth, Wright had learned the virtues of sound water resource development. As the town writhed with the rest of Texas under the parching drought of 1950-1957, its young mayor oversaw the replacement of outhouses and septic tanks with sanitary sewer lines. Wright and Weatherford also broadened the reach of the water system, oversaw the purchase of a small lake from the Texas Pacific Railroad, and initiated construction of another reservoir. His service as mayor provided him with an appreciation for public improvements, especially those involving water. He carried the experience with him as he journeyed to Washington as a freshman representative for the state of Texas in 1955, and the philosophy he developed concerning water improvements benefited those devoted to Trinity River development. The first time he heard public works projects such as water resource improvements derided as "porkbarrel," Wright stammered, "Pork hell! That's bread and butter!" That

⁵⁵ Jim Wright's recollection of his congressional career in Balance of Power: Presidents and Congress from the Era of McCarthy to the Age of Gingrich, (Atlanta: Turner Publishing, Inc., 1996), along with John M. Barry's The Ambition and the Power (New York: Viking Penguin, 1989) and Ben Procter's summary on Wright in Kenneth E. Hendrickson, Jr., and Michael L. Collins, Profiles in Power: Twentieth Century Texans in Washington (Arlington Heights, Illinois: Harlan Davidson, Inc., 1993), each provide useful material on Wright's life and career.

short phrase, when coupled with his words of 1957, captures the philosophy and line of argument that would benefit the advancement of the Trinity development movement.⁵⁶

At the request of the Speaker of the House, Sam Rayburn of Bonham, Texas, and at the urging of his fellow Texas delegates to Congress, Wright accepted an appointment to the House of Representatives Public Works Committee. No Texans served on the committee at the time, and the Texas delegation insisted to the young representative that he take advantage of the opportunity. Rayburn related one of his familiar axioms to Wright, "Any jackass can kick down a barn, but it takes a skilled carpenter to build one." Explaining the remark, the Speaker extolled the virtues of working on behalf of public works. While on the committee, a "skilled carpenter" could carry on in the tradition established by the Continental Congress and expanded at the prodding of Henry Clay, of building a unified nation, tied together with roads and waterways. Such a carpenter could also build a strong relation with his district, and over time he could erect a precipice of influence within Congress.⁵⁷

With such a concept placed before him, Jim Wright acquiesced. Upon taking his seat with the committee during the first month of his first term in the House, Wright learned that he, his district, and the state of Texas would reap great benefits. In accepting the appointment, Wright also positioned himself in a strategic post from which he could advance the cause of Trinity River development. He immediately began a courting

⁵⁶ Evaporation Control in Southwest, Remarks of Congressman Jim Wright, Floor of the House, March 19, 1957, Jim Wright Collection, Texas Christian University, Fort Worth, Texas, Box 19-17, Trinity River Project; Wright, Balance of Power, 41-42.

⁵⁷ Wright, Balance of Power, 40-41.

process with his fellow committee members on behalf of the Trinity development movement. Ten years would pass before he and Trinity improvement boosters felt the time was right to take the program to the next legislative level. In the meantime, as a new warrior for Trinity development began his thirty-four year congressional career, eventually ascending through the ranks of power to occupy Sam Rayburn's position as Speaker, events at the state level advanced favorably for the Trinity Improvement Association.⁵⁸

⁵⁸ Wright, Balance of Power, 40, 131.

CHAPTER 7

PLANNING FOR PROGRESS: EXPANDING THE TRINITY IMPROVEMENT PROGRAM, 1955-1965

By 1960, much had changed in the Trinity River watershed since John Carpenter and Amon Carter united Dallas and Fort Worth in the promotion of Trinity navigation. Since 1930, the city of Dallas had grown by 419,209, reaching a population of 679,684 people. Fort Worth, with 163,447 in 1930, reached 356,268 by 1960, and Denton, with a population of 26,844 in 1960, had grown from 9,587 in 1930. Seventy-five percent of Texas inhabitants were classified as urban, and fifteen percent of them lived in these three Upper Trinity cities. According to a Corps of Engineers report, the entire Trinity basin's population stood at 1,895,000 in 1960, comprising 20 percent of the state. Fifty-six percent of the basin's population resided in Denton, Dallas, and Fort Worth. This dramatic population growth had required action in the areas of flood control and water supply. It had also resulted in rising levels of pollution. Each of these water related factors, including the canal issue, required further activity as the population trends continued in the next three decades. The public and private organizations concerned with these areas busied themselves by adopting their plans to the changing Upper Trinity River basin's demographics and economy.¹

¹ Charles L. Schultze, Director of the Bureau of the Budget, Executive Office of the President, to Stanley R. Resor, Secretary of the Army, 11 August 1965, Roberts

In September 1955, Governor Allan Shivers appointed the TRA's twenty-four member board of directors. The TIA had successfully promoted a navigation friendly board to the governor, as Carpenter had hoped. The membership was weighted in favor of Dallas and Tarrant counties, which received four and three positions respectively. Two members represented the area at large, and one representative from the each of the remaining basin counties filled out the board's membership. The infant organization came close to quenching the Trinity Improvement Association's thirst for a state agency that could implement and supervise the basin's water development, a thirst that had endured since the 1935 failure of the Trinity River Canal and Conservancy District. The railroads' success in having the navigation feature removed from the act that created the TRA hindered the attainment of the goal. Even though it was an scaled-down version of the agency the TIA had envisioned, it served as an important stepping stone towards the goal of navigation and the implementation of other water resource developments to combat water supply and pollution control needs.²

The TRA's board of directors followed the pattern Carpenter had suggested to Carter before the Fort Worth civic leader's death. A navigation friendly periodical listed brief biographies of each of the men, noting their support of Trinity navigation. Governor Shivers appointed Amon Carter, Jr., as one of Tarrant County's representatives,

Papers, Box 6, File 2; Report of Major General R. G. MacDonnell to the Chief of Engineers, Department of the Army, 14 March 1963, 1, Roberts Papers, Box 1, Folder 15.

² Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, n.p.; Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1956, 3; D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, 104.

and the presidency of the authority went to another Trinity activist's son. At the age of thirty-two, Ben H. Carpenter became one of the youngest heads of a major Texas government agency. Having been indoctrinated by his father with the "Trinity gospel" since his youth, Ben Carpenter felt up to the task. Like Amon Carter, Jr., Carpenter was closely involved with his father in business, serving as executive vice president of the large Southwest Life Insurance Company, a company created by John Carpenter. He exercised direct responsibility for the investment of \$28 million annually with the company, and also served as president of Crockett Company, a Texas real estate investment firm. As if this were not enough, he also participated in a variety of other enterprises, while making time to attend to his TRA and TIA duties. With death of Amon Carter and the creation of the Trinity River Authority, the next generation of the canal movement prepared to lead the development of the Trinity's water resources.³

Having witnessed the struggles of his father and the elder Carter since the 1930s, Ben Carpenter acknowledged that the TRA's success depended upon public support. "If the people want the proposed projects badly enough to give their all-out support to the authority," said Carpenter, "then the Trinity River Authority will be in a position to provide the legal vehicle necessary to bring them into being." The Trinity Improvement Association, now having a public agency that shared its goals, continued its focus on making sure the people of the basin and Congress wanted the projects, as Carpenter said, "badly enough." An old saying instructs that you can lead a horse to water, but you can't

³ Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1956, 43; Trinity Improvement Association, Trinity Valley Progress, July-August, 1963, 7.

make it drink. The Trinity improvement proponents disregarded the well-worn adage, and devoted themselves to convincing the people of the basin to take a deep, long drink of the Trinity River's potential benefits. Rather than simply follow public opinion, they intended to shape it as well.⁴

The legislative mandate creating the Trinity River Authority had charged it with three functions: maintenance of a Master Plan for basin-wide development, acting as the local sponsor of federal water projects, and provision of services within the agency's defined territory as authorized by the Texas legislature. The Authority's first order of business focused on creating a Master Plan for the basin. The TIA funded the undertaking.⁵

On March 2, 1956, as its first order of business, the Trinity River Authority commissioned the consulting engineers T. Carr Forrest, Jr., and James A. Cotton, the same firm used by Dallas' Vollmer Committee, to create a Master Plan for developing the Trinity River and its tributaries. Before the establishment of the Fort Worth District, Cotton had headed the Southwest Division district engineer's sub-office in Fort Worth.

⁴ Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1956, 3, 9, 43.

⁵ The Trinity River Authority's defined territory consists of all of Tarrant, Dallas, Ellis, Navarro, and Chambers Counties, along with parts of Kaufman, Henderson, Anderson, Freestone, Leon, Houston, Madison, Walker, Trinity, San Jacinto, Polk, and Liberty Counties. Trinity River Authority, Trinity River Authority of Texas Annual Report FY 1996, 1; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole Collection, File 174.

Cotton's past experience working in the Upper Trinity basin while serving in the Corps of Engineers undoubtedly aided him in devising plans that could win the Corps approval.⁶

In 1956, the Trinity Improvement Association also furthered its understanding of the inner workings of the Corps of Engineers by making a new administrative appointment. In April, John Carpenter announced the association had named Colonel Hubert S. Miller as a vice president and general manager, who assumed his position upon his retirement from the military in June. Commissioned in the Army in 1921, Miller brought his experience of heading several engineering projects involving water conservation, flood control, navigation, and port development in the United States and abroad. The goals of the association he joined remained committed to promoting the region's water development. Miller and the TIA would face continued opposition from committed canal critics. The group also faced the mission of justifying the canal following several years of growth and development. Past arguments for the canal had focused on the region's economic retardation because of a lack of water transportation. Officially, the Trinity Improvement Association was on its own for promoting the canal, since the law creating the Trinity River Authority restricted it from promoting navigation above Liberty County. Since the members of the TRA and the TIA were closely linked, the restriction did not hurt as much as some had feared. In 1957, the TIA finished an economic study of Trinity River navigation. The detailed report investigated the

⁶ Forrest and Cotton, Report on the Master Plan of the Trinity River and Tributaries, iii; Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1950, 31; "Lanham is Named Executive By Trinity Project Backers," Fort Worth Star-Telegram, 21 November 1946, Fort Worth Public Library, Clipping Files, "Trinity River, 1940-1949."

economic impact of the prospective tonnage, and according to Ben Carpenter, the transportation savings justified canalization.⁷

The events at a Fort Worth public hearing on the Trinity River Authority's pending Master Plan offer an interesting example of the close and convenient interrelationship of the authority and the association. At the hearing, a Texas Railroad Association representative, Gilbert Smith, voiced his organization's opposition to the navigation section of the plan. He argued that it had no economic justification, and taxpayers who had nothing to gain from the project should not be required to subsidize the few who would benefit. Ben Carpenter, attending the hearing as the Authority's president, immediately responded.⁸

Carpenter explained that the authority was legally restricted from promoting navigation above Liberty County. But, he added, the authority also had the obligation of recognizing congressional authorization of the canal project to Fort Worth. Facts were facts. While walking a fine line, he said that as president of the authority he could recognize a congressionally authorized project without promoting it, therefore he had nothing more to say about the canal to Fort Worth. Carpenter then proceeded to sit down,

⁷ "Trinity Improvement Body Selects Manager," Dallas Morning News, 27 April 1956, Dallas Public Library, Clippings Files, "Clubs and Organizations - Trinity Improvement Association;" Fraternity of the White Heron and the Trinity Valley Association, Trinity Project, June 1956, 39; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole Collection, File 174; Ben Carpenter to Col RP West, District Engineer, FW District dated November 27, 1961, Poole Collection, File 60

⁸ "Pact for the Trinity Navigation Pledged Anew at Hearing," Fort Worth Star-Telegram, 29 August 1957, Fort Worth Public Library, Clippings File, "Trinity River - 1950-1959."

only to quickly rise again. He now arose, not as president of the TRA, but as an officer of the Trinity Improvement Association.⁹

Carpenter invited his audience to look back with him into the past. He shared his memory of travelling with his father, John Carpenter, to the office of Fort Worth's influential Amon Carter. Listening to his father and Carter speak with such conviction about the tremendous importance of navigation's benefits, Ben Carpenter promised both "to work the rest of my days for barge navigation on the Trinity from the Gulf all the way to Fort Worth." He then went on the offensive, poking holes in the railroads' opposition to the project. Other Trinity River Authority directors, including Amon Carter, Jr., voiced their support of Carpenter's statements, as members of the Trinity Improvement Association. Such technicalities as a legal restriction from promoting the project did not hinder the booster's efforts to advance their cause. Besides, the reason the TRA could not act on the canal had been a result of the railroads' opposition. Over the years, the TIA and TRA finely honed their skills in presenting their arguments and dominating hearings.¹⁰

In 1958, the Trinity River Authority approved and adopted the Master Plan for the Trinity River and its tributaries as prepared by Forrest and Cotton. The plan cited water supply, flood control, and stream pollution as the basin's main water problems, issues that had long haunted basin residents. The report described the upper basin's stream

⁹ "Pact for the Trinity Navigation Pledged Anew at Hearing," Fort Worth Star-Telegram, 29 August 1957, Fort Worth Public Library, Clippings File, "Trinity River – 1950-1959."

¹⁰ *Ibid.*

pollution as “particularly bad in the Fort Worth-Dallas area because of insufficient treatment of sewage and industrial wastes.” Oil fields polluted the Trinity and its tributaries in other areas. Basin municipalities were also facing the dilemma of increased demand for water. The plan, as expected, called for a barge canal. To solve the other problems it proposed twenty-seven major reservoirs with a total controlled storage capacity of about 10,100,000 acre-feet. Combined with existing reservoirs, the total storage capacity of the basin would reach 12,910,000 acre-feet. With these components, in addition to measures addressing pollution, the TRA proceeded to advance the plan with the lobbying and promotional support of the Trinity Improvement Association. Even before the Authority approved the Master Plan, however, it had already begun addressing the problem of pollution that since the 1920s had haunted the river.¹¹

While waiting for Forrest and Cotton to deliver the Master Plan, the TRA forged ahead and pioneered a regional concept of sewage transportation and treatment in Texas. In 1957, the Authority contractually established the Central Regional Wastewater System. Construction reached completion in 1959, and on December 1 the treatment plant began serving the four customer cities of Irving, Grand Prairie, Farmers Branch, and a western portion of Dallas. The four-member wastewater system was a significant step towards improving the terrible water quality of the river. The Authority later expanded the concept by building additional plants and extensions in North Texas. With this accomplished, the TRA had established itself as a viable agency, capable of carrying a concept to its fulfillment. Before it and the TIA could make a fresh push for navigation

¹¹ Forrest and Cotton, Report on the Master Plan of the Trinity River and

and other aspects of the Master Plan, Trinity improvement supporters suffered yet another loss.¹²

On June 16, 1959, after devoting over thirty years of his life to Trinity River improvement, John William Carpenter died. Under his and Amon Carter's leadership, the Trinity Improvement Association had cultivated the canal project and adopted multipurpose planning to meet this goal. Under their leadership, the TIA gained the cooperation of cities, towns, and individuals throughout the basin in their effort to bring their dreams into reality. Carpenter had utilized relationships made during his life experience in finance, real estate, resource development, steel, transportation, life insurance, and civic endeavors in his efforts for Trinity River improvement. At the time of his death, the accomplishments credited to the TIA's sponsorship and surveys included: congressional approval and construction of Garza-Little Elm, Grapevine, Lavon, and Benbrook reservoirs; improvements to the Dallas and Fort Worth floodways; preliminary work on the Trinity River canal on its lower reaches connecting to the Intra-Coastal Waterway; and the creation of the Trinity River Authority. Carpenter's original philosophy of water development served as the TRA's motto: "to develop all the water

Tributaries, i-iii, 10.

¹² Membership in the Central Regional Wastewater System grew significantly to twenty-one members by the 1990s: Carrollton joined in 1967; Arlington, Bedford, Euless, and Dallas/Fort Worth Airport, 1973; Mansfield, 1974; Grapevine, Colleyville, North Richland Hills, and Hurst, 1975; Coppell and Fort Worth, 1976; Keller and Duncanville, 1984; Cedar Hill, 1985; Southlake, 1988; and Addison, 1995. Trinity River Authority, Trinity River Authority of Texas Annual Report FY 1996, 5; Brune, "Accomplishments of the Trinity Improvement Association," 2-3, April 8, 1971. Poole Collection, File 174.

resources of all of the Trinity Basin for all purposes for the greatest benefit of all the people.”¹³

The Fort Worth Star-Telegram eulogized Carpenter as the Trinity watershed’s “most ardent fighter for the river development program and one who unquestionably had done more than any other to weld support of that program from one end of the stream to the other.” According to the Plainview Daily Herald, he did this as “a giant among those of his generation,” yet acted “so inconspicuously and quietly, that he seemed to mingle with and be one of the crowd.” Following Carpenter’s death, Colonel Hubert S. Miller wrote,

Although he had many other responsibilities, I believe the Trinity River was closest to Mr. Carpenter’s heart. He never mentioned the river without a sparkle in his eyes and tremendous enthusiasm in his voice. He frequently told me the greatest desire of his life was to bring barge navigation to Dallas and Fort Worth.

He accomplished many things in the realms of water development and industry, but like Carter before him, Carpenter died having never seen one of his greatest desires take earthly form. With the death of its champion, the Trinity Improvement Association turned to his son, Ben Carpenter, to carry his father’s legacy forward as the association’s president into the 1960s.¹⁴ In October 1959, Ben Carpenter had just finished fulfilling his term as the Trinity River Authority’s president, when the Trinity Improvement Association elected him as president. He maintained his ties to the authority by serving

¹³ Southland Life Insurance, Co., John William Carpenter, 1881-1959, 4.

¹⁴ Southland Life Insurance, Co., John William Carpenter, 1881-1959, 5, 24, 30.

on its board of directors, and occupied the chair of its newly created executive committee.¹⁵

John Carpenter died just as the TRA, TIA, and a variety of interested organizations made preparations to launch a fresh attack for navigation. The Trinity River Authority had filed its Master Plan for the Trinity basin with the Texas State Board of Engineers in 1958 and Congress authorized a Corps re-survey of the Trinity Basin that same year. The Corps began its engineering and economic re-survey the next year. Also in 1958, Senator Lyndon Johnson also pushed for and received authorization for a temporary federal agency to study the eight intrastate Texas river basins from the Neches to the Nueces. In January 1959, the TRA filed a "Report on Soil Conservation and Upstream Flood Prevention of the Trinity River and Tributaries, Texas" with the State Board of Water Engineers as a companion to the Master Plan. The report planned upstream development in coordination with the larger, main channels. In 1959, the Stanford Research Institute, of Menlo Park California prepared a "Study of the Potential Water Use in the Trinity River Basin, Texas" for the TRA. The report provided detailed predictions of natural resources and industrial growth and water requirements until 2010. It confirmed the natural richness of the basin, and pointed to great potential in resources of iron ore, lignite, and timber. In 1960, the TIA prepared a supplement to this study.¹⁶

¹⁵ "New Officers Elected for Trinity Group," Dallas Times Herald, 20 October, 1959, Dallas Public Library Clippings File, "Organizations – Trinity Improvement Association"; "Trinity Authority Dedicates Project," Fort Worth Star-Telegram, 17 October 1959, Fort Worth Public Library Clippings File, "Trinity River – 1950-1959"; McNeely and Thompson, "The Unholy Trinity Incident," 42.

¹⁶ Ben Carpenter to Col RP West, District Engineer, FW District dated November 27, 1961, Poole Collection, File 60; Trinity Improvement Association, The Trinity River:

Faced by the demographic and economic changes in the past thirty years, and backed by new research, the Trinity development supporters stressed the ways in which a fully improved Trinity River could further develop the basin and the State. In 1961, Ben Carpenter led a large delegation of Trinity basin mayors, judges, attorneys, bankers, ranchers, farmers, and assorted businessmen to Washington, D.C. to attend hearings before the House and Senate appropriations sub-committees. They urged Congress to appropriate additional funds to ensure completion by August 1962 of the Corps' Trinity survey. While in Washington, they received a warm welcome from Texas' congressional delegation, including meetings with Speaker of the House Sam Rayburn and Vice President Lyndon Johnson. It was time to act decisively for the betterment of the Trinity River watershed.¹⁷

Speaking at a hearing in Fort Worth on December 20, 1961, Congressman Jim Wright explained that the types of industries regularly involved with iron ore, lignite, and

New Vistas of Opportunity for Texas and the Great Southwest, n.p., Roberts Papers, Box 6, File 2; Trinity Improvement Association, Trinity Valley Progress, July-August, 1961, 8-9, Fort Worth Public Library Clippings File, "Trinity River"; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole Collection, File 174; Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 5; Graves, "Texas: 'You ain't seen nothing yet.'", 44-45; Statement of Congressman Jim Wright, Trinity Canal Open Hearing, Fort Worth, Hotel Texas, December 20, 1961, much of which is the same or similar to Statements made on May 11, 1955 and April 7, 1960, before the House Appropriations Sub-Committee, Jim Wright Collection, Texas Christian University, Fort Worth, Texas, Box 19-17, Trinity River Project, RC Box 19-16.

¹⁷ Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, n.p., Roberts Papers, Box 6, File 2; Trinity Improvement Association, Trinity Valley Progress, July-August, 1961, 8-9, Fort Worth Public Library Clippings File, "Trinity River."

timber resources described in the Stanford report, required water transport to compete worldwide. He explained that in the mid-Trinity area, Crockett, Texas had lost a proposed paper mill to South Carolina in 1960, primarily because of navigation's absence from the basin. Far too often, explained Wright, the lack of navigation contributed to the basin's economic and industrial retardation:

On the upper reaches of the Trinity basin, more than 1,600,000 people inhabit this growing Fort Worth-Dallas area which is the center of the great North Texas aviation industry. Where the Trinity empties into the Gulf of Mexico, metropolitan Houston, with more than 1,000,000 in its own right mushrooms out to touch almost contiguous municipalities where the oil and chemical industries so vital to our national welfare have taken root. Between and surrounding these centers lies an area in which the past ten years have furnished conclusive proof that development and conservation of the water which falls upon its sprawling acres is infinitely more important in the final analysis than the discovery of oil, gold, uranium or any other natural resource. As this area's development is vital to the national economy, so the development of the Trinity is vital to the economic life of the area.

Texans were now ready to develop the middle basin and share in the benefit of flood control. Wright, having investigated the Southwestern floods of 1957 for the Special Subcommittee of the House Public Works Committee, appreciated the "rich dividends which have resulted from our earlier investments." Benbrook, Grapevine, Garza-Little Elm, and the Dallas and Fort Worth Floodways had prevented many more millions of dollars of damage.¹⁸

As hoped by Wright, Carpenter, Carter, and their allies, the U.S. Study Commission – Texas and the Corps of Engineers finished their reports in 1962. The plan

¹⁸ Statement of Congressman Jim Wright, Trinity Canal Open Hearing, Fort Worth, Hotel Texas, December 20, 1961, much of which is the same or similar to Statements made on May 11, 1955 and April 7, 1960, before the House Appropriations Sub-Committee, Wright Collection, RC Box 19-16.

designed by the commission corresponded with the plan in the Corps' Trinity River report. The commission's reports covered natural resources, population growth, and water resources in Texas. The agency created a comprehensive plan for each of the water needs in the state through the year 2010. Texas author John Graves later wrote that the three-volume report "nudged general thought about Texas water hard toward the concept of a Grand Plan, an overall detailed prescription for hydrologic bliss." The state government, however, felt uneasy about the implications of increased federal involvement and control of its water supplies. Before the commission issued its report in 1962, the Texas Board of Water Engineers made the state's first venture into overall planning and in 1961 issued the modest A Plan for Meeting the 1980 Water Requirements of Texas. Compared to the vast and imposing report of the U.S. Study Commission it looked insignificant and the state did not venture to implement it; yet it was a step towards asserting the state's dominion over its water planning, albeit a small one. Despite the efforts at federal and state planning, the impetus for development projects remained at the local level.¹⁹

In producing its plan for the Trinity River, the Corps reviewed and adopted facets of plans developed by other federal, state, and local agencies. The result was a plan that

¹⁹ Ben Carpenter to Colonel R. P. West, District Engineer, FW District dated November 27, 1961, Poole Collection, File 60; Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, n.p., Roberts Papers, Box 6, File 2; Trinity Improvement Association, Trinity Valley Progress, July-August, 1961, 8-9, Fort Worth Public Library Clippings File, "Trinity River"; Brune, "Accomplishments of the Trinity Improvement Association," 2, April 8, 1971. Poole Collection, File 174.; Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort

worked in concert with all interested parties in the basin's water resources problems and goals. The TIA submitted additional data studies to the board to supplement the Corps' report.²⁰ The District Engineers of Fort Worth and Galveston called for large multi-purpose flood control and water supply reservoirs, water quality control facilities in the main channel, five flood control projects for three metropolitan areas, recreation, fish and wildlife conservation facilities, and development of the river's main channel for barge navigation from the Gulf Intracoastal Waterway at the Houston Ship Channel to Fort Worth. The navigation features required twenty-three locks and nineteen dams to be operative. Following the public hearing on December 20, 1961 at which Wright had given an address, the Corps of Engineers had added the Aubrey Reservoir (originally proposed by Dallas' Vollmer Committee); modification of Garza-Little Elm Reservoir; Roanoke Reservoir; modification of Grapevine Reservoir; and "water conveyance facilities between the proposed Tennessee Colony Reservoir and the existing Benbrook Reservoir." Aubrey Reservoir, if completed in the near future, would be for water quality control initially and as municipal and industrial demands grew it would shift to water supply. The massive Tennessee Colony Reservoir, which included plans for a national wildlife refuge, would provide the upper basin with water quality control, while

Worth and Galveston Corps of Engineers Fort Worth and Galveston. 5; Graves, "Texas: 'You ain't seen nothing yet.'", 44-45.

²⁰ Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 5; Graves, "Texas: 'You ain't seen nothing yet.'", 44-45; Brune, "Accomplishments of the Trinity Improvement Association," 3, April 8, 1971. Poole Collection, File 174.

providing municipal and industrial water for the middle basin area. Eventually, it would be used entirely for the upper basin's water needs.²¹

When considering the canal by itself, the survey revealed that it would return seventy-five cents for every dollar invested. But if considered as part of a multi-purpose channel project for navigation, flood control, water supply, and recreation, the improvements would yield \$1.50 for every dollar invested. The estimates were lower than the Trinity Improvement Association's 1958 cost-benefit ratio, but with some creative accounting the canal could still be deemed economically feasible.²²

In the midst of the flurry of plans and reports, other aspects of water resources development in the basin had advanced. Congress had already expanded the comprehensive Trinity basin plan by authorizing the construction of additional projects with the Flood Control Acts of 1954, 1960, 1962. These projects include Navarro Mills Lake, Bardwell Lake, and modification of Lavon Lake for additional water supply conservation. The congressional legislation also called for improving the East Fork downstream from the Lavon Dam, provision of two extensions to Fort Worth's floodway project, and channel improvements through the Fort Worth suburb of Richland Hills.²³

²¹ Trinity Improvement Association, The Trinity River: New Vistas of Opportunity for Texas and the Great Southwest, n.p., Roberts Papers, Box 6, File 2; Report of Major General R. G. MacDonnell to the Chief of Engineers, Department of the Army, 14 March 1963, 1, Box 1, Folder 15, "General Correspondence File – Trinity River," 1-3.

²² Report of Major General R. G. MacDonnell to the Chief of Engineers, Department of the Army, 14 March 1963, 1, Box 1, Folder 15, "General Correspondence File – Trinity River," 1-3.

²³ United States Army Corps of Engineers, Water Resources Development in Texas 1995, 79.

industrial purposes.²⁵ In 1960, the Tarrant County Water Control & Improvement District started construction on the Cedar Creek Reservoir in Henderson County.²⁶

In 1964, the City of Dallas began constructing a part of the TRA Master Plan, the Forney Dam and Reservoir (later renamed Ray Hubbard Lake in honor of a Dallas parks commissioner) on the East Fork. That same year, Houston voters approved funding for the Livingston Dam and Reservoir on the river's main stem. The TRA contracted with Houston to construct, operate and maintain the project. Under the agreement, Houston would receive 70 percent of the reservoir's water yield, with the remainder being the possession of the Authority.²⁷

Multiple-purpose Wallisville Reservoir, recommended by a 1961 report to the House of Representatives, had been designed for navigation, water supply, salinity control, fish, wildlife and recreational purposes, and water conservation for a reservoir

²⁵ Sam Rayburn died of cancer of the pancreas on November 16, 1961, having represented Texas in Congress since 1913 and a record seventeen terms as Speaker of the House. A special election held on January 30, 1962, sent Ray Roberts of McKinney to fill Rayburn's unexpired term. Roberts, born in the year Rayburn first went to Washington, retained the congressional seat through his retirement in the 1980s. Concerned with water issues for his home state and the country, Roberts would eventually earned reputé as "Mr. Water" and became a principal contact for the Trinity Improvement Association. He assured Ben Carpenter in 1963 that he would do everything within his ability to aid the Trinity program. Ray Roberts to Ben H. Carpenter, 13 November 1963, Roberts Papers, Box 1, Folder 15, "General Correspondence File - Trinity River"; Brune, "Accomplishments of the Trinity Improvement Association," 3, April 8, 1971. Poole Collection, File 174; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 88.

²⁶ Brune, "Accomplishments of the Trinity Improvement Association," 3, April 8, 1971. Poole Collection, File 174.

²⁷ *Ibid.*, 3-4.

Between August 1963 and November 1965, the Fort Worth District constructed another facet of the Trinity program, Bardwell Lake on Waxahachie Creek, five miles above its confluence with Chambers Creek and about five miles south of Ennis. The project cost \$12,941,000. The completed lake, built for water conservation, had a total storage capacity of 140,000 acrefeet. The Trinity River Authority contracted to use the conservation for water supply.²⁴ Between December 1959 and March 1963, the Navarro Mills Dam and Reservoir in Navarro and Hill counties was constructed about sixteen miles southwest of Corsicana. The Flood Control Act of September 1954, and modifications in the Flood Control Act of July 1958 had authorized construction of a multiple purpose reservoir on Richland Creek, a Trinity River tributary. A multiple purpose project, its waters were reserved for flood control, water conservation, and allied benefits. Its dam controls the runoff from 320 square miles, and is designed to hold back a total storage capacity of 212,200 acre-feet. The lake cost \$13.1 million, including local interests' contributions of \$300,000. The local contribution came with hopes the reservoir would result in higher utilization of downstream lands of the watershed. The Trinity River Authority contracted to purchase its conservation storage for municipal and

²⁴ The Fort Worth District began work on a longterm project, the Big Fossil Creek Channel Improvement in May 1964, and completed the project in December 1988 at a cost of \$2.1 million. Nonfederal interests contributed \$200,900 towards the total cost. The project straightened and enlarged the creek along with constructing 1.27 miles of levees along its left bank in the city of Richland Hills. Interior drainage facilities were also installed. United States Army Corps of Engineers, Water Resources Development in Texas 1995, 62, 63.

near the small town of Livingston.²⁸ Saltwater intrusion from Trinity Bay into the river caused an "urgent problem," and the Corps and concerned parties felt it demanded attention. Lower Trinity River farmers pumped water for irrigation, and the saltwater intrusion hindered their cultivation. The 1961 Corps report recommended construction of a multiple-purpose reservoir in the vicinity of river mile 4. The TRA's Master Plan had also recommended the Wallisville project, which along with salinity control was designed for navigation, water supply, fish and wildlife and recreational purposes. The reservoir would work with the incomplete Livingston Reservoir for water conservation, a project sponsored by the City of Houston and the TRA.²⁹ In 1962, Congress authorized the Wallisville Reservoir Project, and the Fort Worth Floodway extension on the Clear Fork, an enlargement of the Lavon Reservoir, and East Fork channel improvements.³⁰ Though located near the river's mouth, the Wallisville project later had significant effects on developments in the upper basin.³¹ On September 14, 1959, TRA and Houston had contracted to construct the Wallisville Salt-Water Barrier and Livingston Project, as integral units of a water system for the lower Trinity basin and the Houston metropolitan area. Then on September 23, 1959, the two parties petitioned for, and following lengthy hearings, received permits from the State Board of Engineers (later the Texas Water

²⁸ Comprehensive Survey Report on Trinity River and Tributaries, Texas, June 1962, Volume 1, Main Report, U.S. Army Engineer Districts Fort Worth and Galveston Corps of Engineers Fort Worth and Galveston. 4.

²⁹ Ibid.

³⁰ Brune, "Accomplishments of the Trinity Improvement Association," 3, April 8, 1971. Poole Collection, File 174.

³¹ Brune, "Accomplishments of the Trinity Improvement Association," 3, April 8, 1971. Poole Collection, File 174.

Rights Commission) to construct the two projects. The River and Harbor Act of 1962, Public Law 874 of the 87th Congress, 1st session authorized the Wallisville project. The TRA and Houston entered into a new contract in 1964, and the voters of Houston approved the contract at a June 27, 1964 election with a vote of 49,114 to 11,256. In 1966, Congress appropriated funds for construction, and on June 20, 1967 the federal government contracted with the City of Houston, Chambers-Liberty Counties Navigation District, and the TRA to construct the Wallisville Project. On February 2, 1968, the Secretary of the Army took the final step and approved the contract.³²

In the early 1960s, the development minded agencies and individuals of the Trinity basin also gained another influential political representative. While campaigning for the governor's office of Texas in 1962, John Connally sought the support of the Trinity development boosters. Connally explicitly shared his position on the development of the Trinity River so that there would be no question of where he stood on the issue. He had been a member of the TIA's board of directors while engaged in the practice of law and business in Fort Worth, and if elected to office he would advance basin development "without reservation." Upon winning the election, the newly elected governor shortly received a chance to back up his words of support.³³

The National Rivers and Harbors Congress (NRHC) met in Washington, D.C., during the spring of 1963, and endorsed the comprehensive development plan for the Trinity basin. This pleased supporters of the plan, since the congress usually reserved its

³² David Brune, General Manager of TRA, to Mr. D.T. Graham, of the Galveston District Chief Engineering Division, July 22, 1971, Wright Collection, RC Box 205.

endorsements for authorized projects. Dale Miller, Southwest Regional Director of the NRHC, Dallas Chamber of Commerce Washington representative, and a Trinity Improvement Association director, attributed the endorsement to three factors. First, the project served the Southwest, a large area of the country. Second, the project had an esteemed and influential body of support, including Vice President Lyndon Johnson. Third, the Committee on Inland Navigation had adeptly presented the arguments for the canal. The project's supporters welcomed the good fortune of recognition by the influential national organization. With the approval of the Engineers Board for Rivers and Harbors, the project now awaited review by the Chief of Engineers, Governor John Connally of Texas, the Texas Water Commission, and other interested agencies.³⁴ In June 1963, the U.S. Army Chief of Engineers, Lieutenant General Walter K. Wilson, Jr., concurred with the Board of Engineers for Rivers and Harbors and endorsed the plan. While the state and federal agencies had a three month period to comment on Wilson's recommendations, an unexpected endorsement arrived to bolster the Trinity developers.³⁵

The Texas Railroad Association maintained the canal would add to the transportation's excess capacity problem. Such a result would conflict with President John Kennedy's April 5, 1962 statement that investment or capacity needed to remain at a balance with the requirements for "fast, safe and economical transportation services

³³ John Connally to the CLCND dated November 2, 1962, Poole Collection, File 60.

³⁴ Trinity Improvement Association, Trinity Valley Progress, May-June, 1963, "Extra" supplement, 6, Fort Worth Public Library, Clippings File, "Trinity River."

³⁵ Trinity Improvement Association, Trinity Valley Progress, May-June, 1963, "Extra" supplement, 6, Fort Worth Public Library, Clippings File, "Trinity River."

needed in a growing and changing economy to move people and goods." Clarence D. Martin, Jr., Under Secretary of Commerce for Transportation, agreed that the existing rail and highway facilities and services adequately met projected transportation requirements. But, he added, he agreed that the program should proceed because the canal would help create economical prices necessary to develop maximum traffic and stimulate growth.³⁶

The railroads continued their stringent opposition to the canal. On November 9, 1962, R. Wright Armstrong, vice-president of the Fort Worth and Denver Railway Company addressed the Downtown Rotary Club in Fort Worth. His speech carried the title, "The Truth About the Trinity Canal." Armstrong recognized that speaking publicly in his home town of Fort Worth against the Trinity canal was "about like advocating the closing of the Stock Show or the Lena Pope Home." He continued: "Many people in Tarrant, Dallas and other Texas counties along the Trinity River put the Trinity Canal in the same class with Home, Mother and The Flag." In spite of this recognition, he stood before the members of the Fort Worth Rotary Club, "as a 'voice crying in the wilderness.'"³⁷

Armstrong considered it a "great tragedy" that there had been no organized opposition in the past thirty years except the railroads. The week before Armstrong's

³⁶ Clarence D. Martin, Jr., Under Secretary of Commerce for Transportation, to Lieutenant General W.K. Wilson, Jr., Chief of Engineers of the Department of the Army, 3 December 1963, Roberts Papers, Box 2, Folder 9; Trinity Improvement Association, Trinity Valley Progress, May-June, 1963, 19, Fort Worth Public Library, Clippings File, "Trinity River."

³⁷ Amon Carter Papers, Box RGH 41, File 21, An Address by R. Wright Armstrong, Vice-President of the Fort Worth and Denver Railway Company before the Downtown Rotary Club, Fort Worth, Texas, November 9, 1962, entitled, "The Truth About the Trinity Canal."

address, Ben Carpenter had extolled the benefits of navigation. Armstrong called Carpenter "a fine young man" and

an exceptionally good speaker. . . . a handsome, well-educated young man with a lot of energy, and [at a presentation on December 20, 1961] I don't think I ever witnessed a smoother job of 'brain-washing' and propaganda-spreading in my life than was done by him and others under his most able leadership.

Armstrong accepted the accusation that, to a small extent at least, part of the reason the railroads opposed the canal was because they did not want any more competition. But Armstrong argued that there was more to it than that; the railroads did not want their tax dollars and the tax dollars of any citizen being spent for the benefit of potential competitors. He explained that the "so-called 'low barge rates'" were "possible ONLY BECAUSE OF THE HIDDEN COSTS PAID BY YOU, THE TAXPAYERS!" In addition to construction costs, tax payers would bear the burden of providing an estimated \$21,610,000 in maintenance charges. Speaking directly to Ben Carpenter and the TIA, Armstrong recommended that they get the Legislature to pass an act allowing the organization of a

private corporation or a Canal Authority to build and maintain the Trinity Canal. Then let's float a bond issue and build this canal -- just like the Texas Turnpike Authority did for the turnpike. Then let's charge the barge operators a toll sufficient to meet the annual payments to retire the bonds, with interest, plus the amount necessary to operate and maintain the Canal, plus a small profit.

Had Ben Carpenter been in attendance, he would have taken exception with Armstrong. Indeed, he would have found this recommendation rich and interesting, one which his father and John Fouts had wished to pursue if the railroads had not interfered and

successfully removed the navigation features from the legislation creating the Trinity River Authority, an agency permitted to issue bonds.³⁸

Other factions of the transportation industry did not accept the leadership of the railroads. James E. Taylor, executive director of the Texas Motor Transportation Association, announced in 1963, "I don't know anybody in the trucking industry who is not for the (Trinity River) canal." Water transportation of bulk commodities would add to, not take from, the business of the trucking industry. The truck lines eagerly awaited the chance to haul the shipments to off-port points. Rather than taking a negative view, Taylor and others believed the railroads should look to the canal as an asset. Trinity River navigation's expected impetus to industrial development would result in more manufacturing and fabrication products for transport on the rails and highways. In the long term, the transportation industry expected more overall activity rather than a decline at the hands of the canal.³⁹

As he had promised during his campaign, Governor John Connally sent his personal and official endorsement of the Trinity Project to the Chief of Engineers on August 3, 1963, following a two-day public hearing and unanimous endorsement by the Texas Water Commission. Over six hundred Trinity basin residents lent their support to

³⁸ Amon Carter Papers, Box RGH 41, File 21, An Address by R. Wright Armstrong, Vice-President of the Fort Worth and Denver Railway Company before the Downtown Rotary Club, Fort Worth, Texas, November 9, 1962, entitled, "The Truth About the Trinity Canal."

³⁹ Clarence D. Martin, Jr., Under Secretary of Commerce for Transportation, to Lieutenant General W.K. Wilson, Jr., Chief of Engineers of the Department of the Army, 3 December 1963, Roberts Papers, Box 2, Folder 9; Trinity Improvement Association, Trinity Valley Progress, May-June, 1963, 19, Fort Worth Public Library, Clippings File, "Trinity River."

the project at the hearings, and the Texas Water Commission rejected the request of twenty Texas railroads for postponement. Governor Connally related that he was "personally very pleased" and stated that "Navigation on the Trinity will open doors to progress of a nature never before possible for the inland cities within its watershed."⁴⁰

Governor Connally felt assured the flood protection and recreation, even when considered alone, made the project "one of the most ambitious projects ever undertaken in the Southwest." The channel would benefit millions with "a new era of commercial development." The Corps of Engineers development plan blended well with local, state, and federal improvement plans.⁴¹ Following these events, Ben Carpenter expressed his pleasure that the TWC had already spent several months reviewing the Corps program and that the TWC "promptly and unanimously approved and recommended the Trinity River report and found it to be feasible and justified." Carpenter also appreciated Governor Connally's prompt but not unexpected endorsement of the Texas Water Commission's findings and transmission the report to the Chief of Engineers in Washington.⁴²

The Trinity Program also received two much appreciated acts of support in 1963. First, on August 2, 1963, the Board of Directors of the Lubbock Chamber of Commerce and the Board of City Development announced that they were ending their longstanding opposition to the program. Up till that day, Lubbock had been the principal opponent to

⁴⁰ Trinity Improvement Association, Trinity Valley Progress, July-August 1963, 19, Fort Worth Public Library, Clippings File, "Trinity River."

⁴¹ Ibid.

the program aside from the railroads. Second, on August 23, 1963, federal Judge Joe Estes dismissed a suit filed months before by the Texas Railroad Association's attorneys in an effort to delay processing of the report. Estes threw the railroad's claims out on the grounds that they had no legal basis for filing suit, and that the railroads had failed to show where the Board of Engineers for Rivers and Harbors favorable action on the Trinity report had injured the railroads. Estes told the General Counsel for the association that the railroads actions "could completely make a shambles out of the investigative processes of Congress." He then denied the request for an injunction against the Chief of Engineers and the Secretary of the Army to prevent the normal review process. Ben Carpenter hailed this as a significant step forward for accelerating the process. W. C. Orr, Jr., president of the First Bank of Denton, wrote Congressman Roberts in November, 1963, and shared his feelings on the project's importance. He wrote, "This is a program which will not only affect the growth of those counties located in the Trinity River area, but will also affect the total economic development of the state of Texas." His words reflect the anticipation with which others in the area awaited the project to move through the political process.⁴³

By 1965, Jim Wright had served ten years in the House of Representatives. Beginning his sixth term that year, Wright had finally shaken off the limitations of being a "junior" congressman. Stepping up a level in the congressional caste system, he

⁴² Ben H. Carpenter to Vernon F. Poole, Chairman of the Board of CLND, September 3, 1963, Poole Collection, File 60.

⁴³ Ibid.; W.C. Orr, Jr. to Ray Roberts, 19 November 1963, Ray Roberts Papers, Commerce, Texas, Box 2, Folder 9.

prepared himself, as he later wrote, “to make a broader mark in the legislative arena.” One of the significant legislative tasks he embraced involved guiding the Trinity River development program through Congress and to the president’s desk. During the session beginning in 1965, Wright would rise to a sub-committee chairmanship in the Public Works Committee, heading the watershed development panel. As sub-committee chairman, Wright occupied a prime position for influencing the success or failure of the Trinity movement. After a decade, as he later wrote, “grooming and shepherding” the program through the Corps study process, he and the Trinity development leaders felt that 1965 was the year to bring the wait to an end. In particular, Wright wrote that he wished to leave the navigation component of the plan as his legacy to “Texas posterity.”⁴⁴

The administration’s Bureau of the Budget (BOB) posed a nettlesome quandary for Trinity improvement. In August 1965, the Bureau of the Budget, a branch of the president’s executive office, appeared to offer a positive assessment of the plan. The bureau’s director, Charles L. Schultze, felt the proposals to improve the quality and quantity of water in the area would boost economic growth in what he considered a “dynamic” region. Aubrey, Lakeview, and Roanoke reservoirs exhibited good benefit-cost ratios and would provide significant flood control, water supply, and water quality measures. Despite these kind words, the canal facet of the program bothered Schultze, and he cautioned that a project of such complexity, magnitude, and importance required

⁴⁴ Wright, Balance of Power, 126-127, 131.

careful consideration. His refusal to release the Budget Bureau's official recommendations chaffed Wright and the other Trinity proponents⁴⁵

Though Lyndon Johnson had been a longtime public supporter of the canal and water resource development in the Trinity basin, the weight of the presidential office forced him to reconsider the matter. Charles Schultze feared public works such as the Trinity plan, when combined with the effects of the rapid U.S. buildup in Vietnam, would drastically increase the rate of inflation. Influenced by Schultze, Johnson accepted that the Trinity plan lacked economic justification and quietly removed his support for the project. The president's change of heart devastated the Trinity boosters.⁴⁶

The BOB did not issue a negative indictment of the project; it simply delayed releasing a statement of any kind. Time was of the essence. At least three years would pass before another omnibus Rivers and Harbors bill came before Congress. Wright tried to reason with Schultze face to face, and pointed to the positive benefit-cost ratio found in the Corps' report. Schultze, however, was suspicious that the Corps had shown overt bias in its figures and he would not renounce his opinion. He wanted to protect the president by restraining expenditures as much as possible.⁴⁷

In a meeting with President Johnson, John Connally debated the merits of Trinity development with Schultze for half an hour. Though a close friend to Johnson, Connally failed to sway him. A week after Connally's attempt, Wright also made a personal

⁴⁵ Charles L. Schultze, Director of the Bureau of the Budget, Executive Office of the President, to Stanley R. Resor, Secretary of the Army, 11 August 1965, Roberts Papers, Box 6, File 2.

⁴⁶ Wright, Balance of Power, 131-132.

appeal to Johnson. Journeying to the White House, Wright played on the fact that Johnson, along with virtually every major Texas political figure during the century, had endorsed the project for several years. He again pointed to the positive benefit-cost ratio. But as the President explained to him that the BOB had advised him that the project lacked economic justification, Wright realized he too had failed to sway him. He told Johnson that he was prepared to advance the legislation with or without the Budget Bureau's endorsement, and he believed he could win. No law required the Bureau's permission before Congress could act. Johnson cautioned Wright. According to Wright, Johnson explained, "Jim, they'd laugh us both off the House floor if you tried to pass that bill over the Bureau's objection!" Wright threw the caution aside, saying, "I don't care if they laugh, Lyndon. I can pass the bill with them laughing." President Johnson, however, did care, and refused to yield.⁴⁸

Wright left the meeting and called Ben Carpenter, who had traveled to Washington to hear the results of the discussion. The news crushed him. It looked as if the dream would endure yet another long delay. Wright assured Carpenter that the battle had not been lost. He stressed that they must carry on and that they would win.⁴⁹

In concert with Carpenter, Dale Miller, and Ray Roberts, Wright orchestrated the legislative strategy for pushing the Trinity Project through Congress. They enlisted the support of a number of other Texas congressmen -- Olin Teague, Earle Cabell, Graham Purcell, Joe Pool, Jack Brooks, Clark Thompson, John Dowdy, Lindley Beckworth, Jake

⁴⁷ Ibid., 132.

⁴⁸ Ibid., 132-133.

Pickle, and John Young -- and supportive congressmen from other states, especially Alabama's Bob Jones and Oklahoma's Ed Edmondson. In the Senate, the Trinity improvement activists received the support of Texas senators Ralph Yarborough and John Tower. Their task would not be an easy one, for some Washington observers sided with President Johnson's judgement that it would be impossible to win authorization without the explicit approval of the Budget Bureau and Secretary of the Army. Convincing Congress to vote in support of the Trinity Project would require all the legislative skill and political influence the Trinity promoters could muster.⁵⁰

The Trinitarian troops rallied, and basin residents made the trek to Washington in the summer of 1965 to show their unity before the Public Works Committee. At the August, 1965 hearing, 281 Texans filled the meeting room at the Public Works hearing. They declared that state, local, and private interests had already invested \$269 million into improving the river, and pledged to raise an additional \$256 million to complete the comprehensive plan. They did not make the trip in vain.⁵¹

At the House Public Works Committee hearings of August 1965 on the Trinity Project, Congressman Ray Roberts testified. He stated that as a resident of the Southwest he recognized the significance of sound water development for the region. He had followed the subject of Trinity improvement since the Trinity Improvement Association's establishment in 1930 under the watchful eye of John William Carpenter and Amon

⁴⁹ Ibid., 133-134.

⁵⁰ Trinity Valley Progress, September-October 1965, 23, Wright Collection, RC Box 205.

⁵¹ Wright, Balance of Power, 134.

Carter. Over a hundred towns lay along the river's 548 miles, and Roberts claimed over 20 percent of Texas' population lay in the watershed. The entire project, when completed, would greatly reduce the \$6.5 million damage in soil erosion experienced each year. Roberts pointed to the unity displayed by the basin's industry, state and local government, labor, and private individuals as excellent, and to the \$269 million that had already been contributed by non-federal units. Roberts considered the pending legislation containing the Trinity Project as vital to the development to the entire Southwest.⁵²

The railroads, still determined to decisively crush the canal once and for all, presented their case at the hearings. In fact, the railroad representative to the hearing was the only person to speak in opposition. Wright was prepared for the opposition and subtly dissected Mr. Reynolds argument. Wright made clear that the railroads had regularly been involved in opposing navigation projects. For example, the railroads had opposed canalization of the Upper Mississippi, basing their opposition on the view that the Engineers' traffic projections were inflated. The railroads had argued that the Upper Mississippi would never carry 9 million tons of cargo, but by 1963 the traffic on the river had been 39,945,000 tons. Wright continued to illustrate that the railroads had also voiced opposition to the Illinois Waterway and the Ohio River canal on similar grounds, and had similarly been proven quite wrong. The Gulf Intracoastal Canal had exceeded the original traffic estimates by more than 10 times, even though the railroads had declared such tonnage would never occur. Wright went on to show the railroad representative that railroads active in areas served by navigation made bigger returns on

⁵² Testimony of Congressman Ray Roberts before the Public Works Committee,

investment than the railroads lying outside of navigable areas. The railroad witness could not counter Wright's arguments, aside from maintaining his opening statement that "the resultant savings of taxpayers' money is a worthwhile objective." The Trinity improvement supporters argued that the Trinity canal would more than pay for itself and the subsequent economic growth justified taxpayer investment.⁵³

Following the hearings, Dallas Congressman Earle Cabell said he felt rather encouraged by the sub-committee's receptiveness. He said the "unanimity of purpose" displayed for the project by residents of the basin had impressed the committee members. He was not misled. In the first week of September 1965, the United States House Rivers and Harbors Subcommittee approved the comprehensive program of Trinity River development. Representative Jim Wright, senior Texan on the Public Works sub-committee, made the motion and approval came on a thirteen to two vote. The motion carried an authorization for \$83 million dollars for the project's initial work, which would cost in the area of \$1 billion to complete.⁵⁴

The next day the Public Works Committee also rendered its approval. Wright then carefully handled the other members of the House, and arranged for several congressmen to be ready to defend the project if anyone rose in opposition when the omnibus bill came up for consideration. Nobody did, and the bill passed the House and then the Senate, with Senator Ralph Yarborough laboring on behalf of the plan.

United States House of Representatives, 12 August 1965, Roberts Papers, Box 6, File 2.

⁵³ Trinity Valley Progress, September-October 1965, 26, Wright Collection, RC Box 205.

⁵⁴ Dallas Morning News, 16 August 1965; 1 September 1965.

Unfortunately for the Trinity navigation supporters, representatives from the Budget Bureau had successfully lobbied with the Senate conferees to include an amendment that restricted construction funding until the Corps of Engineers completed another navigation reevaluation. Despite his misgivings, President Johnson signed the bill, according to Wright, "without a negative murmur." Johnson then discreetly gave Wright the pen he used to sign the bill into law, a much appreciated act of congratulations for standing up for the project and winning what the president considered a hopeless battle.⁵⁵

Congress's passage of the River & Harbor Act of 1965 authorized the comprehensive development plan for the Trinity River basin. Despite authorization, no action could take place to build the needed reservoirs and dams until Congress appropriated funds. A long wait lay ahead for some aspects of the plan, such as the canal and Aubrey Reservoir.⁵⁶ Congress held back funding for the canal, and asked for a re-study of the navigation's feasibility. In 1965, construction began on the Fort Worth Floodway's West Fork Extension and the TRA broke ground on the Livingston Dam and Reservoir.⁵⁷ The basin wide plan of improvement included flood protection, multiple purpose reservoirs, a multiple purpose channel from the Houston Ship Channel to Fort Worth, and a water conveyance system from Tennessee Colony Lake to Benbrook Lake.

⁵⁵ "Trinity River Navigation (The Need for Action This Year," Document for President Johnson, 1968, Wright Collection, RC Box 205.; Wright, Balance of Power, 134.

⁵⁶ McNeely and Thompson, "The Unholy Trinity Incident," 42; Trinity River Authority, Progress Report – Trinity River Authority of Texas, covering the period January 1, 1964-December 31, 1965, Roberts Papers, Box 6, File 1; Report – Aubrey Reservoir – Denton, Texas, n.d., Roberts Papers, Box 115, File 21.

The multiple purpose reservoir projects were Lakeview (later Joe Pool Lake), Roanoke Lake, Aubrey (later Ray Roberts Lake), and Tennessee Colony. The water conveyance system to Benbrook Lake from the proposed mid-basin Tennessee Colony reservoir was for water quality purposes. The five local flood protection projects included the West Fork Floodway, the Elm Fork Floodway, a Dallas Floodway Extension, Duck Creek Channel Improvements, and a Liberty Levee.⁵⁸

Congress charged the Corps of Engineers with a restudy of the Trinity River's navigational potential, under the assurances from the Secretary of the Army's office that it would only take between six months to a year to complete. Two and a half years later, interested parties still found themselves waiting. The TIA did not know why there was a holdup.⁵⁹

In regards to the administration's failure to request funds for the beginning of actual construction on any facet of the Trinity River Program, Wright wrote in 1965, "Apparently our program, like a number of other things, has fallen victim to the Vietnam war." According to Wright, they expected to receive the restudy within six months to a year, but the administration's refusal to request funds delayed the project for at least an additional year. A curious note to this is, regardless of whether or not Congress accepted

⁵⁷ Brune, "Accomplishments of the Trinity Improvement Association," 4, April 8, 1971. Poole Collection, File 174.

⁵⁸ United States Army Corps of Engineers, Water Resources Development in Texas 1995, 79.

⁵⁹ Trinity Improvement Association Progress Report, Report #3, March 18, 1968, Arlington, Texas, Poole Collection, File 173

or agreed with the economic analysis, the project was still authorized, and no time limit existed limiting its lifespan.⁶⁰

In the winter of 1965, following their long awaited success, the Trinity improvement proponents honored a select group of ten men for their work, in the winter of 1965. Amon Carter, Jr., and Ben Carpenter headed a list that included Dallas' John Stemmons, James Cotton, Hubert Miller, Robert Cullum, and Fort Worth's O. P. Leonard, Raymond Gee, C. L. Richart, and John M. Scott. Each had been significant influences at the local level, embracing the legacy established in 1930 by the modern vanguard of Trinity improvement. Robert Cullum deferred honor to the two sons of the Trinity Improvement Association's founding fathers. He said, "Without Ben [Carpenter] and Amon [Carter, Jr.] there would have been no Trinity improvement as there is to this point. They are the two who have delivered the goods. This could have been a two-man honor delegation instead of a ten-man one." Carpenter, however, could not accept the honor without paying homage to his deceased father, who was the "stimulus and inspiration" of the movement. John Carpenter's success and strength came because he "believed in developing the creativity of man." Ben Carpenter acknowledged the achievements they had won, pointing out that laughter that had once been directed at the idea of developing the river's resources had now grown muffled. But he cautioned against premature celebration, saying, "Your crop is not yours until it is harvested and in the barn. That's the case of the Trinity. We still have a lot to do." His cautionary

⁶⁰ Jim Wright, Texas 12th District, to Price Daniel, March 31, 1966, Poole Collection, File 205

statement held a prophetic significance, for the decisive battle over the canal's success or failure lay eight years away, and the interim would be filled with repeated struggle.⁶¹

⁶¹ "10 Men Honored for Work On Canalization of Trinity," Fort Worth Star-Telegram, 1 December 1965, Fort Worth Public Library Clippings File, "Trinity River."

CHAPTER 8

SO CLOSE, YET SO FAR: THE FURTHER TRIALS AND TRIBULATIONS OF THE TRINITY PROJECT, 1965-1973

Throughout the many levels of his public career, President Lyndon Baines Johnson had voiced his support of all aspects of Trinity River improvement. His failure to embrace openly the Trinity canal in 1965 had come as an unpleasant surprise for its backers. The railroads and some West Texas towns had been the Trinity canal's primary opponents for decades, but a branch of Johnson's administration emerged as yet another staunch nemesis.

On November 20, 1964, following release of the 1963 Corps's Trinity River report, the Bureau of the Budget released new criteria for evaluating waterway benefits. In 1965, Congressman Jim Wright had guided the entire Trinity development plan through Congress, backed by the state of Texas, Corps of Engineers, Federal Power Commission, Department of the Interior, Department of Agriculture, Department of Commerce, and Department of Health, Education, and Welfare. The reservations posited by the Bureau of the Budget (BOB), based on the new criteria, delayed progress. The BOB said its hesitation arose because the only economic study available on the proposed

canal had been made during 1958. The Bureau of the Budget recommended a restudy, and Congress subsequently agreed.¹

When the Bureau of the Budget resisted the Trinity Project in 1965 and refused to issue a recommendation, water development supporters in Congress began to worry about the future of improvement efforts. On February 18, 1966, the sixteen House and Senate members, including Jim Wright, notified President Johnson that they hoped to work out an understanding on how waterway plans should be evaluated. The Trinity Project was not the only threatened enterprise. Congressmen were concerned about the fates of several similar works, such as the Tennessee-Tombigbee Waterway, the Red River Project, and the Chattahoochee River Project from Columbus to Atlanta, Georgia. The proposed criteria might well eliminate some, perhaps all, of these improvement endeavors.²

In May 1966, Wright received his reply. Charles L. Schultze, director of the Budget Bureau, informed Wright that the Corps would soon be applying a new cost basis criteria. The news dismayed Wright and his fellow Trinity Project supporters and they

¹ Press Release from Congressman Jim Wright, June 18, 1968, Jim Wright Collection, Texas Christian University, Fort Worth, Texas, RC Box 19-16.

² Henry H. Wilson, Jr., Administrative Assistant to the President, to Jim Wright, August 24, 1966; Phillip S. Hughes, Acting Director of the Bureau of the Budget, to Jim Wright, August 24, 1966; Congressmen Allen J. Ellender, Jennings Randolph, Richard Russell, Fred R. Harris, Roman L. Hruska, Russell B. Long, John Sherman Cooper, A. S. Mike Monroney, Spessard L. Holland, John A. Blatnik, Robert E. Jones, Kenneth J. Gray, Michael J. Kirwan, James C. Wright, Jr., Ed Edmondson, and Harold T. Johnson to President Lyndon B. Johnson, February 18, 1966, Wright Collection, RC Box 205.

immediately went on the offensive.³ Another letter from Schultze on May 21 increased the Trinity canal supporters' unsettled feeling. Schultze's letter reinforced the BOB's negative position on projects like the Trinity River plan. Had the proposed criteria been in use in earlier years, practically none of the existing waterways would have been judged as "economically feasible." Yet, according to Wright, the majority of improved waterways had surpassed the tonnage projections available when Congress first authorized them. Schultze went so far as to say that "the Nation cannot afford to build expensive waterways merely to force a lowering of competitive rates."

Wright called Schultze's view "specious," especially since Schultze contradicted himself in the letter by claiming that "waterways should be justified as a means of providing more efficient transportation." It seemed obvious to Wright that if "waterways did not provide more efficient transportation, they would not be able to offer the benefits of lower rates." Wright's correspondence to the president strongly chastised Schultze's negative attitude, and informed the president that such views contradicted the administration's regional development policy. Wright found it astounding that the president would endorse such views within his administration, considering Johnson's history of advocating water resources development.⁴ Wright received assurances that the

³ Henry H. Wilson, Jr., Administrative Assistant to the President, to Jim Wright, August 24, 1966; Phillip S. Hughes, Acting Director of the Bureau of the Budget, to Jim Wright, August 24, 1966; Charles L. Schultze, Director of the Budget Bureau, to Congressman James C. Wright, Jr., March 21, 1966, Wright Collection, RC Box 205.

⁴ Jim Wright to Lyndon Baines Johnson, April 7, 1966, Wright Collection, RC Box 205.

president would pay personal attention to the matter and that Wright's arguments against the new criteria would be given special consideration.⁵

While the Johnson administration evaluated the criteria controversy in 1966, the canal advocates made their annual trek to appropriations hearings in Washington, D.C. Congressman Wright accompanied a small group of Trinity boosters, headed by Dallas's John M. Stemmons, to request funding for the navigation restudy. Wright explained to the committee that it was a small delegation because they only required a small amount of money. The president's budget asked for only \$200,000 for the Trinity Project in the budget, while authorization for \$83 million to initiate construction had been in the Rivers and Harbors Act of 1965. The Trinity supporters insisted that they were not worried about the ongoing Corps restudy. Actually, they anticipated the new criteria would simply yield additional support of the project's economic feasibility. The region's growth and economic development since the Corps base study of 1958 reassured them that the tonnage predictions would guarantee a favorable report.⁶

Following the hearings, Congress approved funds for the Trinity navigation restudy and for constructing the Wallisville Project. The Trinity Improvement Association lent aid by preparing a survey report justifying the dredging of the river's lower reaches.⁷ An immediate argument for the need and revival of navigation to Liberty centered on the

⁵ Henry H. Wilson, Jr., Administrative Assistant to the President, to Jim Wright, April 11, 1966, Wright Collection, RC Box 205.

⁶ Statement for appearance before House Appropriation Committee by Jim Wright, May 1966, Wright Collection, RC Box 19-16.

decision of the American Rice Growers Exchange and Coastal Chemical Corporation, both owned by farmers, to build a fertilizer warehouse and distribution center at Liberty. Not having been dredged since 1940, the channel was navigable during high water, but during low water sandbars in the last nine miles below Liberty inhibited reliable transport. Maintenance of the channel would help insure the reception of their barge shipments.⁸

The optimism of the Trinity delegation at the 1966 hearings had been well founded. Following the onslaught of Wright and his colleagues against the new criteria, the Bureau of the Budget retreated and reverted to the pre-November 1964 criteria. The Bureau justified its decision by explaining that "further consideration has been given to the matter and it is apparent that additional study will be required before a new procedure that will insure and improved evaluation of costs can be instituted." The Corps would return to the pre-November 1964 criteria for evaluating waterway feasibility.⁹

Wright responded to the news by sending messages to his North Texas contacts, reveling in what he called a "major victory in the waterway criteria battle."¹⁰ The next

⁷ David Brune, "Accomplishments of the Trinity Improvement Association," 4, April 8, 1971. Poole, File 174, Vernon H. Poole Collection, Sam Houston Regional Library and Research Center, Liberty, Texas.

⁸ Price Daniel, Special Counsel of the Chambers-Liberty Counties Navigation District, to Senator Ralph Yarborough, September 12, 1966, Poole Collection, Box 1 File 29.

⁹ Henry H. Wilson, Jr., Administrative Assistant to the President, to Jim Wright, August 24, 1966; Phillip S. Hughes, Acting Director of the Bureau of the Budget, to Jim Wright, August 24, 1966, Wright Collection, RC Box 205.

¹⁰ Jim Wright to Obie Leonard, August 26, 1966, Ben Carpenter, August 25, 1966, John M. Stemmons, August 25, 1966, and John M. Scott, August 25, 1966, Wright Collection, RC Box 205.

month he explained to Dallas Times Herald Vice President Albert N. Jackson that the BOB's notion of applying new criteria had been ridiculous. Wright had approached the president, once again, and politely challenged the administration's stance on the criteria. Pleased that the Trinity improvement supporters had been victorious in the matter, Wright found personal satisfaction that the president "must have gotten the message."¹¹ The criteria battle, significant as it seemed at the time, would eventually face much graver obstacles. The development advocates won the battle, but Schultze and the Budget Bureau had already unknowingly won the war by forcing a destructive delay by means of a project review.

The next year seemed to progress rather smoothly for the Trinity Project as boosters awaited the review's release. In 1967, Congress appropriated funds to build new bridges across the Trinity River to meet navigation requirements. The bridges were on U.S. Highway 190 across Lake Livingston, Interstate 635 in southeast Dallas County, Interstate 45 in Dallas County, State Highway 31 between Corsicana and Athens, and State Highway 105 in Liberty County. In 1967, the Lakeview Project, located south of Grand Prairie and southwest of Oak Cliff, received its first funding appropriation from Congress. Even more significant for the canal advocates, in 1967 the Texas legislature gave the Trinity River Authority full navigational powers over the river with Senate Bill 579. It also increased the Authority's taxing power from 2 cents to 15 cents per \$100

¹¹ Jim Wright to Albert Jackson, September 6, 1966, Wright Collection, RC Box 205.

property valuation.. The provisions were subject to voter ratification within the TRA territory.¹²

Miller retired from the position as general manager and vice president of the TIA in 1967.¹³ His retirement became effective on September 1, 1967, after having served as the chief administrative official of TIA since 1956. Ben H. Carpenter commented that "the revitalized movement to accelerate complete development of the water resources of the Trinity River watershed, which resulted in the authorization of the \$911,000,000 Trinity River Program by Congress in 1965, is largely the result of Col. Miller's work in direction of the Association's affairs." Carter called Miller's eleven years service the most significant factor to the progress of Texas' water resource projects. Following his retirement, Miller served on a part-time basis as a special consultant on navigation to the TRA.¹⁴

Miller's retirement coincided with a move by the TRA to establish a full-time management team. The board of directors selected David Brune as the first general manager of the Trinity River Authority of Texas. Since the Authority's establishment in 1955, the board of directors had operated out of their briefcases, and funding had been out of pocket or provided by the Trinity Improvement Association. With the Texas

¹² Brune, "Accomplishments of the Trinity Improvement Association," 4-5, April 8, 1971. Poole Collection, File 174.

¹³ Vernon Poole to Colonel Miller, dated September 5, 1967, Poole Collection, File 202.

¹⁴ J. Paul Comola succeeded Hubert Miller as General Manager of the TIA in 1967. TIA, "Col. Miller Retires As Chief of Trinity Improvement Assn," press release 1967, Poole Collection, File 202; J. Paul Comola, General Manager of TIA, to Jim Wright, October 3, 1967, Wright Collection, RC Box 205.

legislature's allocation of navigation control over the river to the Authority and the restudy due shortly, they felt it was time to establish a full-time management structure.¹⁵ The directors of TRA approved Brune as the agency's first general manager. He opened the TRA office on May 1, 1968 on the third floor of the Arlington Bank and Trust Building in Arlington, Texas. The newly headquartered agency, and all supporters of Trinity development, looked forward to the impending release of the Corps's reevaluation.¹⁶

At the end of March 1968, the Trinitarians and the rest of the country received a surprise from President Johnson. While most Americans expected the president to run again, Johnson announced on March 31 that he would not seek reelection. Trinity development supporters were taken aback by the revelation, for they had counted on having him in office to ease their program's advancement. One of the most prized assets of the Trinity Project proponents had been the support of the president of the United States. They lost this assurance. Even though canal backers felt that Johnson had been

¹⁵ Trinity Improvement Association Progress Report, Report #4 - From J. Paul Comola, general Manager of TIA, April 8, 1968, Poole Collection, File 173.

¹⁶ Having been appointed as general manager of the Trinity River Authority, David H. Brune, an attorney and manager of the San Antonio River Authority for nine years, understood that he was "undertaking a tremendous assignment: the implementation of the Trinity River Master Plan with particular emphasis on the earliest possible construction of the barge canal to Fort Worth." Having been congratulated in a letter from Jim Wright, with whom he would work closely in the next few years, Brune responded, "At this point, all I can do is to pledge to you the dedication of all my energy and abilities, whatever they may be, to the successful accomplishment of this task."; Trinity Improvement Association Progress Report, Report #5, April 26, 1968, Poole Collection, File 173; David H. Brune, San Antonio, the newly appointed TRA general manager, to Jim Wright, April 16, 1968, Wright Collection, RC Box 205.

less than helpful to the project since becoming president, they had believed Texans could rally enough backing to influence him.¹⁷

In early April 1968, Texas's Fifth District representative, Earle Cabell, wrote to the president regarding the dissatisfaction of the Trinity basin citizens concerning "the dilatory tactics pursued by the Corps of Engineers" in providing the Trinity reassessment. Rather than being finished in six months as promised, it had been nearly two years and the restudy still was no where to be seen. Cabell understood that preliminary reports had been favorable, but related his disgust that they had been subjected to further reevaluation under different guidelines. He said that if the reports he received were true, then "this would clearly indicate that the rules of the ballgame are being changed even after the ball has been put in motion." Cabell apologized to President Johnson for bothering him with the matter "during such trying times," but felt the Corps' apparently "dilatory tactics" were offensive to the chief executive. He felt it a matter of concern that the president should be aware of such tactics.¹⁸

John M. Scott, a TIA officer and a Fort Worth attorney, shared with Wright the Trinitarian attitude towards the events. President Johnson's announcement that he would not seek another term significantly altered the TIA's plan to use his Texas ties as leverage against him. Scott suggested a new tactic. Instead of attempting to strong arm the president, Scott argued that the canal advocates should play to the president's sense of fairness, his history of Trinity improvement support, and the significance of the canal as

¹⁷ Earle Cabell to Lyndon Baines Johnson, April 8, 1968, Wright Collection, RC Box 205.

¹⁸ Ibid.

his legacy to his home state. According to Scott's correspondence with Congressman Wright, the improvement sponsors simply wished to have the report's "unvarnished facts . . . go to Congress at the earliest time, immune from obstructive tactics that a different administration [might] apply." The advocates concealed their fear from the public that without Johnson's aid the report might well portray the project in a negative light. If substantial advancement of the project to Congress did not occur quickly, the TIA would have to approach the president with such an argument.¹⁹ When it became time to address the situation with the president, Wright would be the man to lead the way.

The Corps of Engineers protested the accusation of dilatory tactics. In December 1967, the Dallas Division Office of the Corps of Engineers had requested an expansion of time and money to finish the reevaluation. The engineers shared with the Trinity Improvement Association that they were considering multiple adjustments to make the benefit-cost ratio acceptable. To lower the cost of construction, thereby improving the benefit-cost ratio, the Corps removed three locks below Dallas and considered eliminating two more if necessary. Unfortunately for the eager Trinity development boosters, this attempt to make the report as favorable as possible required another economic review of tonnage. As of December 8, 1967, the Trinitarians could expect the report's release near the first of March 1968.²⁰

¹⁹ John M. Scott to Jim Wright, April 17, 1968, Wright Collection, RC Box 205.

²⁰ Memorandum from J. Paul Comola to Ben Carpenter, John Scott, John Stemmons, and O.P. Leonard, December 8, 1967, Wright Collection, RC Box 205.

These worries were not restricted to the Trinity Project. In 1968, a fear of another change to criteria for evaluating water resource projects circulated.²¹ A resolution from the House of Representatives would have established a moratorium on all Public Works projects. Senator Jennings Randolph, chairman of the Public Works Committee, was outraged and sponsored an amendment to delete the section containing the moratorium. Randolph explained, "I reaffirm my support for cutting waste and fat from the budget. But these resource development programs which serve humanity must not be subjected to this kind of ruthless and radical treatment." Behind his leadership, the Senate excluded the moratorium and avoided a halt to planning and construction that would have lasted for two years. Amidst such an environment, Jim Wright approached the White House to settle the delay of the Trinity Project.²²

President Johnson asked Wright to meet with the secretary of the army, the director of the budget, the chief of engineers, the chief of civil works and a member of the president's staff, Larry Temple, on June 4, 1968. They talked for at least an hour.²³ Following a brief he had prepared for the president, Wright stressed a variety of points. Having been "planned for more than a generation," the Trinity had been "repeatedly delayed while other waterways, less justified economically," had proceeded. The Second World War had been the first delay after the government had endorsed the project in

²¹ Trinity Improvement Association Progress Report, Report #3, March 18, 1968, Arlington, Texas, Poole Collection, File 173.

²² Trinity Improvement Association Progress Report, Report #4 - From J. Paul Comola, general Manager of TIA, April 8, 1968, Poole Collection, File 173.

²³ Jim Wright to Amon Carter, Jr., John Scott, O.P. Leonard, and Ben Carpenter, June 5, 1968, Wright Collection, RC Box 205.

1939. The Budget Bureau's decision to arbitrarily hold the report for eighteen months following the chief of engineers recommendation had been another severe delay. In 1965, Congress had agreed to a six-month review. Three years after this decision, the review had not yet been submitted.²⁴

This delay had denied competitive equity to Dallas-Fort Worth, "the largest metropolitan population center in the U.S. still not served by a navigable waterway." More Americans lived in the Trinity watershed than in any of thirty-two states. By 1965, local interests had already invested \$269 million for comprehensive development of the basin, and local governments and "reputable financial interests" had pledged to invest \$256 million more. The cost-benefit ratio of 1.4, as stated in the 1963 report, more than justified the Trinity Project economically. Each time the division engineer reached a point at which he felt prepared to report, the department of the army requested a new inquiry. Wright questioned whether it was the BOB or the army that stood as the source for these delays. Since 1948, President Johnson had publicly pledged his support to the project. Speaking in Fort Worth in 1962, Vice President Johnson had promised: "The Trinity is going to be built, and I am going to see to it that it is." Wright urged the BOB and the army to support the president. To do otherwise would make the president turn his back on the project and make him look insincere.²⁵

Having presented his case, Wright believed that he had answered many questions that had been raised within the administration. The Trinity project's status dominated the

²⁴ "Trinity River Navigation (The Need for Action This Year," Document for President Johnson, 1968, Wright Collection, RC Box 205.

²⁵ Ibid.

discussion at the meeting. Following the meeting, Wright informed his North Texas contacts that significant progress would soon arrive. He told his fellow congressman, Olin Teague, that he believed the president was giving them his full cooperation. The Washington office of the Corps, Wright stated, would have its division office send over the project report to the president within a week.²⁶

On June 18, 1968, true to their word, the Corps finally released the Trinity navigation feasibility study.²⁷ To the delight of navigation proponents, the study reported a more favorable benefit to cost ratio, 1.5 to 1, than the first report. To help speed the process, the TRA began making plans for aerial photography of the basin that was in harmony with Corps specifications. The Authority completed the photographs during 1969, thereby speeding the process by an estimated two years. Congress approved \$150,000 for the project design. The Authority also proceeded to aid the process of developing the river for navigation by initiating construction of an embankment tie at the Livingston Dam. The project would allow the Corps to construct Navigation Lock 5 without having to lower Livingston's water level or endanger the dam. In 1969, the U.S. Highway 190 bridge over Livingston also reached completion.²⁸

The 1968 report reduced the number of locks between Dallas and the Houston Ship Channel from twenty-three to twenty, with sixteen below Dallas and four between

²⁶ Jim Wright to Amon Carter, Jr., John Scott, O.P. Leonard, Olin Teague, and Ben Carpenter, June 5, 1968, Wright Collection, RC Box 205.

²⁷ Trinity Improvement Association Progress Report, Report #7 - From Paul Comola, July 9, 1968, Poole Collection, File 173.

Dallas and Fort Worth; increased the sizes of four locks from Dallas to Fort Worth; and broadened the channel's width from 150 to 200 feet so that two five barge tows could pass with reasonable safety. The Corps based the report on the criteria set forth in the October 15, 1966 Department of Transportation Act. The Galveston district had started the restudy in January 1967, and based their findings on a fifty-year project life, rather than the earlier report's hundred-year project life. The changes resulted from the restudy's finding that the "prospective commerce on the waterway would exceed the physical capacity of the [1965] plan." The 1968 restudy predicted the waterway could carry 15.9-million tons of commerce during its first year if completed by 1985.²⁹

With the release of the report, Wright felt justified in having opposed the Johnson administration. He remarked, "We've waited a long, long time for this report, but it was worth waiting for." "By any yardstick," Wright said of the 1.5 benefit-cost ratio, "this is good business. . . . Now that we have succeeded in getting the piles of paper moved, I'm anxious to get some dirt moved."³⁰

It did not take long for Wright to see dirt moved. By the spring of 1969, according to the TIA general manager, the lower Trinity was "booming with activity!" Projects under construction included the channel to Liberty, the Wallisville Reservoir,

²⁸ Brune, "Accomplishments of the Trinity Improvement Association," 5-6, April 8, 1971. Poole Collection, File 174; Trinity Improvement Association Progress Report, Report No. 8 - From Paul Comola, July 29, 1968, Poole Collection, File 173.

²⁹ Technical Liason Office, U.S. Army Corps of Engineers, Southwestern, Dallas, July 16, 1968. Favorable Trinity Restudy Submitted to Congress, July 16, 1968, Wright Collection, RC Box 19-16.

³⁰ Press Release from Congressman Jim Wright, June 18, 1968, Wright Collection, RC Box 19-16.

and the first lock. In addition, a seven-foot spur channel on Double Bayou had been approved to connect with the existing Trinity navigation channel in Trinity Bay. Project engineers advanced planning for the upper basin's Lakeview reservoir and held meetings to discuss progress in the Fort Worth district.³¹

All of this activity occurred even though the Revenue and Expenditure Control Act of 1968 had seriously curtailed the Corps of Engineers civil works program for the fiscal year of 1969. It had delayed the Corps from awarding a contract for the Wallisville project, but not for long.³² In the fall of 1969, the Trinity Project received its first funding of \$150,000 when the House of Representatives passed the public works appropriations bill. Although only a small amount in comparison to the overall cost of the project, the appropriation began the year-by-year funding process. Congressman John Blatnik said, "A little key can unlock big doors," and supporters of Trinity development anticipated that the \$150,000 key would open a billion dollar door within the next twelve years at a minimum.³³

President Richard Nixon's budget funded Trinity River improvement far below the Corps's capability and far below the desired level of funding. It made minimal funds available for investigations and surveys of basin needs. The administration did, however, budget a sizable sum of \$300,000 for planning the Lakeview Reservoir, but left the

³¹ Trinity Improvement Association Progress Report, Report #4 - From J. Paul Comola, general Manager of TIA, April 8, 1968, Poole Collection, File 173.

³² Colonel Franklin B. Moon, District Engineer, Galveston District, Corps of Engineers, to J. Paul Comola, TIA dated July 28, 1969, Poole, File 201.

³³ Trinity Improvement Association Newsletter, October 10, 1969, Poole, File 175.

Aubrey Reservoir with nothing at all. Construction funds budgeted by the administration for the Clear Fork Extension and Wallisville Reservoir were adequate, but Lavon Reservoir received only \$5,000,000 of the needed \$12,000,000. The high level bridges over the river received recommendations of \$1,500,000 instead of the expected \$4,000,000. Regardless of these budget deficiencies, development proponents were pleased to get whatever they could, considering the country's uncertain economic situation. In all, Nixon's budget appropriated \$1,391,000 for operation and maintenance, \$140,000 for general investigations, \$625,000 for advanced engineering and design, and \$7,060,000 for construction.³⁴

In June 1969, John M. Stemmons again headed the annual TIA delegation to appropriations hearings in Washington. Stemmons explained to the Senate appropriations subcommittee on public works, that supporters of the Trinity basin comprehensive development plan were sensitive to the fact that the Vietnam War and other inflationary economic factors made great demands on the federal budget. But Stemmons also pointed out that local investment over the years surpassed \$300 million, far more than the federal government had invested in the Trinity Valley. With these facts in consideration, Stemmons courteously requested that Congress appropriate at least the administration's budget recommendation for \$150,000 for the Trinity River Project, with a hint that anything closer to \$1.45 million would be better. In addition, all the other items in the comprehensive plan, such as the bridge adjustments, Lavon Reservoir

³⁴ Lieutenant Colonel Daniel D. Ludwig, Acting Deputy Division Engineer, Southwestern Division, Corps of Engineers, to Paul Comola, Trinity Improvement Association, January 30, 1969, Poole, File 175.

modification and channel improvement, and Wallisville Reservoir, were budgeted far below the Corps of Engineers's capabilities. Stemmons and the TIA considered the Bureau of the Budget's freeze on new construction starts to be a significant detriment to the national economy.³⁵

Other members of the delegation to appear before the Senate committee included David Brune of the Trinity River Authority and Dallas Mayor Erik Jonsson. Jonsson's statement offered the city of Dallas's support to the comprehensive plan for the Trinity, and placed special stress on the Aubrey Reservoir, which had been left out of the administration's budget. Dallas and Denton had agreed by contract to co-sponsor the reservoir, and on June 4, 1969, the Texas Water Rights Commission designated them as co-sponsors for the project.³⁶

Jonsson explained the project's significance in detail. Upon completion of the Dallas-Fort Worth Regional Airport, the region anticipated a growth rate in the mid-cities between Dallas and Fort Worth that would exceed Dallas's new water supplies from the East Fork and the Sabine basin. Since Dallas was committed to supplying water to the

³⁵ Statement Before Committee on Appropriations Subcommittee on Public Works, United States Senate Concerning Trinity River, Texas, by John M. Stemmons, June 11, 1969, Wright Collection, RC Box 205.

³⁶ Statement of the Trinity River Authority Before the Subcommittee on Public Works of the Committee on Appropriations of the United States Senate Concerning Trinity River, Texas, June 11, 1969, Wright Collection, RC Box 205; Statement for the City of Dallas before the Public Works Subcommittee of the Committee on Appropriations of the United States Senate Concerning Projects for Comprehensive Plan For the Trinity River Basin in Texas, by Erik Jonsson, June 11, 1969; Announcement of Public Meeting for Establishing the Dam Site for Aubrey Lake, Elm Fork, Trinity River by Colonel R.S. Kristoferson, District Engineer, Department of the Army, Fort Worth District, Corps of Engineers, March 26, 1971, Wright Collection, RC Box 205.

airport and to area towns, the need for the Aubrey Reservoir surpassed the water demands of Dallas and Denton alone. Dallas currently faced a water shortage, and Denton was already overdrafting its safe yield from Garza-Little Elm. If the committee refused to appropriate the \$150,000 needed for planning, Dallas and Denton offered to supply the money for the Corps's work.³⁷

Hampered by insufficient funding in 1969, the Corps could not finish the Livingston reservoir. The Trinity River Authority, eager to help, financed aerial photography in 1970 to aid the engineers. During 1971, the Fort Worth district completed an extension of the Fort Worth Floodway along the Clear Fork between Benbrook Lake and the existing floodway. The work provided 6.5 miles of channel improvement, 2.3 miles of levee, auxiliary drainage facilities, and a mile of diversion channels. The federal government funded \$4.1 million of the \$8.7 million expended.³⁸

By the time another round of public works hearings began in May 1970, the Trinity River Authority had spent \$74,300 of its own funds on the aerial mapping and mosaics, which the Corps used in mapping the basin. Ben Carpenter made a point of sharing this information with the public works committee in his testimony, as a sign of

³⁷The Corps had prepared to initiate advance planning for the Aubrey Reservoir in early 1971. The authority to do so came from the Public Works for Water, Pollution Control, and Power Development and Atomic Energy Commission Act of 1970, approved on December 11, 1969. On the morning of April 30, 1971, the Corps of Engineers held a public meeting at the Denton Civic Center Community Center to establish a site for the Aubrey Dam. The Corps had four dam sites for consideration, but Dam Site No. 1, northeast of the town of Aubrey, west of Pilot Point, and east of Sanger became the accepted location. Ibid.

³⁸J. Paul Comola, Trinity Improvement Association Progress Report #12, January 31, 1969, Poole Collection, File 173; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 84.

the local agencies good faith and an impetus to speed the planning and construction process. The Trinity delegation urged Congress to be prudent and economic in its funding. For them, these terms meant approving much larger sums for the Trinity River Project as opposed to Congress's recent adherence to making minimal federal appropriations. Rather than the \$150,000 provided for fiscal year 1970, or the \$500,000 recommended by the administration's budget, the Trinity promoters requested a significant increase to \$1.5 million for fiscal year 1971. They saw no reason to delay progress of the multi-purpose channel, the Dallas Floodway Extension, the West Fork Floodway, and the Tennessee Colony Reservoir/water conveyance system. Carpenter also prodded Congress to make at least a minimal allotment towards the completion of the Wallisville Reservoir, along with engineering and design funding for Aubrey Reservoir, Lakeview Reservoir, Duck Creek improvements, and the Elm Fork Floodway. Providing more funding would be difficult for the committee. The administration, with its budget, had challenged Congress to cut expenditures across the board. But Carpenter chided the legislators for allowing the annual funding to starve "the water resource base of the Nations [sic] economic growth." With estimates pointing to a population of 350,000,000 by the year 2000, it was imperative that the United States give serious attention to "the overall development of our water resources." Trinity improvement advocates continued to stress that Congress consider money spent on water projects as investments in the nation's future, not as unnecessary expenditures. The canal, reservoirs,

and flood control works would assure the United States of a productive national economy and guarantee continued prosperity.³⁹

Despite the canal advocates prodding, Congress provided only \$500,000 for 1970 to continue designing the Trinity Canal along with \$2,650,000 for bridges. In March of 1970, the Corps began actual engineering fieldwork on aligning the channel between Fort Worth and Dallas. The Corps also began expansion work on Lake Lavon, a \$54 million project. The Wallisville Project entered its final phase as the Farrell Construction Company began work on it and Lock No. 1 for navigation, and Texas Tech University, assisted by the TIA, performed an environmental impact study of the river development plan.⁴⁰

As improvement advocates watched the Corps labor on the initial work, the TRA further demonstrated its closeness to the TIA by moving its key staff and combining the TRA and TIA at a central office in Arlington. David H. Brune, president of the TIA and general manager of the TRA, called the merger a streamlining of the Authority's operations and an acceleration of the joint public affairs effort of both organizations. The event actually publicly solidified a unity that had existed since 1955. The TRA and the TIA launched a combined public affairs effort by showing an informative slide presentation to the basin's civic groups, issuing more news stories concerning basin

³⁹ Statement Before Committee on Appropriations, Sub-Committee on Public Works, U.S. House of Representatives, Concerning Projects for Comprehensive Plan for the Trinity River Basin in Texas, by Ben Carpenter, May 5, 1970; Jamie L. Whitten, Second District Representative from Mississippi and member of the Committee on Appropriations, to Jim Wright, April 15, 1970, Wright Collection, RC Box 205.

⁴⁰ David Brune, "Accomplishments of the Trinity Improvement Association," 6, April 8, 1971. Poole Collection, File 174.

development, and making the TIA monthly magazine, Trinity Valley Progress, available to more people. Development proponents exhibited an air of extreme optimism on the one billion two hundred million dollar projects. When the projects reached completion in the projected year of 1985, TRA general manager David Brune predicted “hundreds of years” of economic and environmental prosperity. As was often the case with the canal movement, such grandiose statements were shortly followed by a new threat.⁴¹

The main opposition in the canal’s final fight came not from the railroads, who had staunchly opposed it for decades. Nor did it come from the West Texas chambers of commerce, covetous of the project’s funds. The final foe came from the birthplace of the canal movement, from the people of the Trinity basin itself. An odd coalition of environmentalists and fiscal conservatives united to give the canal advocates what was, perhaps, the most surprising and stiffest competition in the movement’s lengthy history.⁴²

Just when Trinity improvement advocates believed their project, so long in the making, was finally progressing smoothly, Congressman Jim Wright received a fourteen-page petition in opposition to the Trinity River Project. It arrived in July 1970, in an envelope originating from the University of Texas at Arlington Department of Biology, yet no specific person associated with the department claimed credit for the petition or the statement attached to the list of names. The statement urged Wright to revise the project that, as currently structured, would dramatically change the nature of the North

⁴¹ Ibid., 6-7.

⁴² Interview with Edward C. Fritz, by Dr. J. B. Smallwood, 7 February 1983, University of North Texas Oral History Collection, Denton, Texas, 1, hereafter cited as Fritz interview.

Texas region and the character of the Trinity River. The statement's author abhorred the resulting industrial growth and population expansion predicted to accompany the Trinity improvements. Rather than fuel money into an undertaking destined to recreate the landlocked metropolitan area of North Texas as a seaport and spur super-industrialization, the petitioners laid out their own alternatives. Funds should be funneled into developing a mass transit system and establishing additional federal scholarships for qualified students. More attention needed to be paid to the abatement of air and noise pollution. Essentially, the petition urged Wright and the Trinity improvement advocates to focus on quality of life improvements and discard notions of promoting growth by destroying the natural environment. The petition and the accompanying request signified a new entrant into the Trinity River debate. Whereas the most stringent opposition in the past had been from the railroads and disgruntled West Texans, this new opposition came from within the basin itself and injected new arguments against the improvements based on respect for the environment and quality of life. Although there was no reason at the time to worry over the petition's content, or so it seemed, in the near future the ideas the statement presented and the people behind them would emerge as serious foes for the Trinity Project.⁴³

In his response to the petition, Wright took great care to defend the comprehensive plan. He commended the opponents for their interest in the latter named projects, but seemed surprised "that a message so obviously ignorant of the well-

⁴³ Petition on the Trinity River Project from University of Texas Biology Department, postmarked July 18, and Jim Wright's Letter in reply, July 22, 1970, Wright Collection, RC Box 205.

recognized needs and purposes addressed in the Trinity River program would be circulated on a university campus." Wright stated further that he "had been vitally concerned about environmental quality for many years, long before it became popularly fashionable." He had studied the Trinity plan for several years, and could assure all in doubt "that it is the result of many, many years of arduous study by dedicated conservationists and that its result will be a vast improvement in the environmental quality of the region." ⁴⁴

Over a period of many years, Trinity Project advocates had created a plan of development for all aspects of water and land resource improvement. In addition to the canal, flood control, and reservoir facets of the plan, it included "provisions for fish and wildlife refuges, sedimentation abatement, terracing and cover cropping to reduce run-off and thus reduce the quantity of chemicals that find their way into water supplies." The project also contained features to promote water quality improvement, as well as stream beautification and recreation. Wright agreed that pollution posed a serious problem for the river: "Parts of the river today, sadly, are used as dumping grounds and automobile graveyards. Inadequately treated sewage and harmful chemicals invade the waters and in dry seasons collect in stagnant cesspools. The Trinity program is designed to correct these environmental blights." The navigation component of the plan would make Dallas and Fort Worth more competitive for industry by offering another transportation alternative, and would attract much needed small industry development between Dallas

⁴⁴ Petition on the Trinity River Project from University of Texas Biology Department, postmarked July 18, and Jim Wright's Letter in reply, July 22, 1970, Wright Collection, RC Box 205.

and Houston. "In all," Wright concluded, "the Trinity program is far from 'obsolete.' It has been continuously studied and upgraded throughout the years with a view to the future." Wright recommended that opponents should give fair consideration to these points, rather than criticize the plan out of ignorance. The attacks of people involved in the emerging modern environmental movement seriously irked the Trinity developers. Neither side could understand the basis for the other sides goals.⁴⁵

The next year, David Brune and Ben Carpenter became aware of what they considered a serious threat to the Trinity River Project as the environmentalists again made their presence and opinions known. Brune had already warned Ben Carpenter in February 1971, that "[i]f the people of the Trinity River Basin do not begin to see some tangible activity, the Project will lose the grassroots support that has thus far been its life blood."⁴⁶ In mid-August 1971, the impetus that would lead to the loss of grassroots support for the canal made itself visible. Alba Etie, president of the Association for a Natural Trinity River and a student at the University of Houston, sent a letter to both Carpenter and Brune requesting information on land prices along the proposed canal, especially information regarding increases in land values. Etie advised them to deal with Jim Bush of Frost, Texas or Bill Berry of Kerens, Texas, if the TIA would rather deal with nearer chapters of the organization. Etie also sent a similar letter to the TRA seeking background information on that agency and its relation to the Trinity River Barge Canal Project.

⁴⁵ Ibid.

⁴⁶ Memorandum from David Brune to Ben Carpenter, February 10, 1971, Wright Collection, RC Box 205.

Following a meeting with Etie, Bush, and Berry, Brune warned Jim Wright that special care needed to be used in dealing with them. He credited them for their intelligence and determination, while lamenting that they were falling sway to the ideas and theories of anti-project environmental groups and college professors. Brune did not give them short shrift. He correctly acknowledged that they could potentially disrupt the project by approaching their mission "with the same fervor that similar college groups have shown in fighting the Viet-Nam War and the draft." The anti-establishment ideas intimated in their discussions with Brune convinced the TRA general manager that the environmental groups presented a "far greater threat to the Trinity River Project than the railroads ever have." Railroads had been a vested interest, and the TIA had successfully isolated them as such. The infant environmental groups injected nebulous issues and concepts into the debate. Brune called them "slippery as eels," and warned that fighting them would be as dangerous as fighting against motherhood. Brune correctly recognized the significance of the environmental opposition, for on the first Earth Day in 1970 when the petition had been circulated, the first volleys of the most severe battle over the Trinity River canal had been fired.⁴⁷

The three young men who met with Brune believed that there should be zero population growth, and, applying that to the Trinity Basin, they felt it should not grow in population and should be left in its current state. "They are opposed to water skiing and power boats (the 'jet set')," Brune wrote. Dallas and Fort Worth must completely curtail

⁴⁷ David Brune to Jim Wright, September 7, 1971. Alba Etie to Ben Carpenter and David Brune, TIA officials, August 16, 1971. Alba Etie to Trinity River Authority, August 16, 1971, Wright Collection, RC Box 205.

growth. They characterized the Trinity Project as a "Boondoggle" designed to give the Corps a purpose for existing and to benefit "rich landowners along the river." Brune noted with amazement, "They are making their own survey of major landowners along the river!"⁴⁸

They asked several questions of Brune, including: why were the projects necessary, on what population projections are they based, will there be enough water for all uses, what type of industries will the canal attract, what effect would it have on the wildlife, why had not the TRA built tertiary sewage treatment plants, how many trees would be cut down, and would not inflation destroy the benefit-cost ratio. Brune also made clear that the three were well aware that if the Wallisville Project were stopped, navigation on the Trinity would be stopped.⁴⁹

Following the meeting, Brune took them to lunch in an attempt to smooth things over. They parted company with Brune secure in the idea that they were sincere in their beliefs and that they were prepared to do anything within their ability to stop the Wallisville and Trinity Projects. "I do not believe that the anti-project dedication of these youths can be dismissed," Brune informed Wright. A lawyer and environmental activist in Dallas, Ned Fritz, would come to their aid, as would the Sierra Club and other environmental groups. Brune recognized that college professors and groups would eagerly supplement their devotion with ideas, theories, and figures. Furthermore, the

⁴⁸ Ibid.

⁴⁹ Memorandum distributed by David Brune to the TRA executive committee, John M. Scott, John M. Stemmons, T. Louis Austin, and Beeman Fisher, September 7, 1971, Wright Collection, RC Box 205.

media would leap at the possibility to publicize the environmentalist message. Brune, perhaps more than any other interested project supporter, understood the ramifications of their new opposition.⁵⁰

On August 24, 1971, the Lone Star Chapter of the Sierra Club, the Houston affiliate of the New York-based Environmental Fund, Inc., and Houston's Citizens' Environmental Coalition sent a letter making an urgent request that the Corps of Engineers cease and desist construction of the Trinity River Navigation Project and the Wallisville Dam Project. Construction of the first lock and dam was already progressing approximately four miles north of the river's opening into Trinity Bay. The environmental leaders accused the Corps of failing and refusing to comply with the National Environmental Policy Act and the Environmental Quality Improvement Act by not providing an environmental impact statement. If allowed to proceed, they charged that the project would obliterate thousands of acres of river-bottom land and millions of trees. The habitat for an abundance of game and other wildlife would be drastically changed for the worse. Developers would pour into the river's flood plains and over time the influx of river-bottom facilities would face the wrath of flood waters. At the Gulf Coast, the Trinity Project would destroy thousands of acres of estuaries and nurseries. As if all of these negative events were not enough, the canal and related water resource projects would encourage industrial and population growth in already over-developed areas. This last occurrence would cause a rise in pollution and urban problems. The environmentalists did not challenge the economic and growth feasibility of the project.

⁵⁰Ibid.

Instead, they agreed with all the promises the TIA had been heralding for decades. The basin would grow in population and industry while furthering the economic prosperity of the Texas and the Southwest. Rather than challenge these outcomes, the environmentalists attacked the negative byproducts they would produce. The end-product of the construction would be a Trinity River that had been reduced to "a series of placid, polluted pools of stagnant water." They went on to challenge statistics used in evaluating the project, citing the lack of "any realistic ratio formula of benefit to cost."⁵¹

The environmental groups also addressed specific destructive results. The Wallisville Dam Project would, according to the charges, destroy approximately "12,500 acres of prime estuarine area above it and destroy or irreparably damage approximately 8,200 acres of prime nursery grounds below it." Wright had informed the petitioners that the project would promote water quality and remove the presence of stagnant pools in dry weather. The activists refused to concede the point of pollution and declared that the Trinity River's natural free-flowing beauty would be horribly metamorphosed into "a stagnant reservoir one to four feet deep." The project would also inundate potentially valuable archeological and historical sites. Upon completion, the project would force the commercial fish harvest to lose approximately 7,027,000 pounds annually and it would eradicate marshlands, depriving and harming migratory waterfowl, mink, otter, muskrat, nutria, raccoon, shore birds, and alligator of their natural habitat. The Corps must stop the project immediately.⁵²

⁵¹ David Brune to Ray Roberts, September 30, 1971, Wright Collection, RC Box 205.

⁵² Ibid.

David Brune, becoming aware of the letter from the Lone Star Chapter of the Sierra Club, the Environmental Protection Fund., Inc. and the Citizens' Environmental Coalition, contacted Jim Wright with the urgent request that the congressman relate his position on the Trinity River Project and the Wallisville Project.⁵³ The Wallisville suit was one of about a hundred similar cases currently around the country based on the National Environmental Policy Act of 1969.⁵⁴

The letter and lawsuit notwithstanding, the Corps continued its work on river improvements. Despite the assertions of the environmental groups, the agency drafted an environmental impact statement. Colonel Carlyle H. Charles, assistant director of Civil Works for Plains Divisions, told Jim Wright that the Wallisville Lake would be essential to the Trinity River Navigation project. Despite the suit filed against the projects in the federal district court in Houston, Colonel Charles assured Wright and the development advocates that the projects would proceed rapidly according to plan and in accordance with NEPA and all other applicable laws.⁵⁵

At the request of the Trinity River Authority, Wright sought to counter the message of the environmentalist critics. In a letter to Russell E. Train, chairman of the Council of Environmental Quality in Washington, D.C., Wright assured him that the August 24, 1971 letter had been composed by "a group of somewhat self-appointed advisors." They represented a "tiny minority" of Texans who were oblivious of the paper

⁵³ David Brune to Jim Wright, August 31, 1971, Wright Collection, RC Box 205.

⁵⁴ David Brune to Ray Roberts, September 30, 1971, Wright Collection, RC Box 205.

mountain of studies and restudies that had been prepared in the last quarter century. It would be a severe blow if the Wallisville Project, already 50 percent complete, were further delayed. It was an essential component of a plan to supply the city of Houston with pure water, and had been supported by the citizens of Houston by a five-to-one vote. Wright also stressed that, as a member of the House Committee on Public Works, he had stayed in constant contact with the progress of the Trinity Project and supported it wholeheartedly. The petition signed by the environmental leaders contained "both exaggerations and outright misrepresentations." He recognized and appreciated their sincerity, but could not allow three self-appointed purveyors of environmental justice to interfere with a congressionally authorized project that had broad public support and had been analyzed for several years. Wright asserted that the projects would improve the environment for Texans, not degrade it.⁵⁶

Attempting to establish a strong counter-argument to the environmentalist criticisms, David Brune in December 1971 set down his thoughts on "The Trinity River Master Plan and Its Relation to Our Environment." He stressed that the establishment of the Trinity Improvement Association had been for noble reasons, "to further the full development and beneficial use of the Trinity's soil and water resources." The comprehensive development plan passed by Congress in 1945 and the Master Plan adopted by the Trinity River Authority, and supported by the Trinity Improvement

⁵⁵ Colonel Carlyle H. Charles to Jim Wright, September 17, 1971, Wright Collection, RC Box 205.

⁵⁶ Jim Wright to Russell E. Train, chairman of the Council of Environmental Quality, August 24, 1971, Wright Collection, RC Box 205.

Association, had made substantial contributions to bettering the environment. Trinity improvement advocates and the programs they sponsored had insured that agriculture production, water supply, water quality, flood control, and economic growth would advance. Brune insisted that these factors contributed positively to the environment. To state otherwise would be an insult based on ignorance. Brune further stressed that communication between supporters of Trinity improvement and their critics remained the best way to reach sound results pleasing to all concerned parties. A lack of communication would result in lawsuits along the lines of the Wallisville Project.⁵⁷

Despite Brune's protestations, the communication that did occur, even from the Corps of Engineers, continued to be negative towards the project. In another unexpected turn of events, the Corps had surprisingly changed its attitude towards the Lakeview Reservoir. Following the Corps's negative testimony before the House Appropriations Committee on September 28, 1971, Congressman Olin Teague advised improvement supporters to meet with the new district engineer to work things out. Teague wrote, "We have made more mistakes on the small side than on the large side as far as our dams are concerned. I am sorry it turned out this way. It was certainly a shock to me."⁵⁸

Brune, notified of the events by concerned Lakeview supporters, contacted Colonel Floyd H. Henk, the Fort Worth District Engineer. A rumor had been circulating that a high ranking Corps official had said the Lakeview Project "was dead" even before

⁵⁷ David Brune, "The Trinity River Master Plan and Its Relation to Our Environment," December 27, 1971, Wright Collection, RC Box 205.

⁵⁸ Olin E. Teague, Texas's Sixth District Representative, to Dr. Charles Pitts, president of Dallas Baptist College and Chairman of the Lakeview Reservoir Planning Council, August 3, 1971, Wright Collection, RC Box 205.

the appropriations hearing. The previous district engineer, Colonel R. S. Kristoferson, denied this, but the scenario only worsened. The TRA, concerned with the status of the Lakeview Project, suggested a conference with the Corps to reach a firm understanding. If it were true that the Corps felt the project had died, then the TRA anticipated three choices of action. They could readjust the plans and design a cheaper multiple-purpose project, a single-purpose project, or abandon the entire project. Brune hoped that this unexpected disagreement was not the beginning of a bad relationship with the Corps of Engineers.⁵⁹

Brune, already faced with problems with the Corps over the Lakeview project, exhibited an obsession with as well as a respect for the environmentalist opponents. Following the filing of a suit against the Wallisville Project on September 13, 1971, Brune shared his feelings with Wright. The Authority, having a vested interest in the case would seek to intervene. The TRA also considered filing suit against the "environmental extremists based on the value of water the Authority is having to release from Livingston until Wallisville is completed." He found it distressful for local agencies and governments, such as the TRA and Houston, to have to suffer at the hands of "groups without any vested interest in the plan, who are not parties to any of the contracts, and who do not speak for any governmental entity. If this kind of tactic prevails and is

⁵⁹ David Brune, TRA general manager, to Colonel Floyd H. Henk, Fort Worth District Engineer, August 11, 1971, Wright Collection, RC Box 205.

sanctioned by the Federal courts, the Environmental Protection Agency, or the Congress, this Nation is headed towards a state of anarchy."⁶⁰

Wright also expressed his disgust with the events surrounding Wallisville. In a September 8, 1971 letter to Brune, Wright said that he was "peeved at these latter-day environmentalists who have suddenly taken it upon themselves as a sacred obligation to halt public works projects from one end of the country to another." A House subcommittee considered investigating the Environmental Defense Fund's financing but did not since most of its funds came through newspaper solicitations and membership contributions. Wright found it amazing that a group operating on a tax-deductible basis could file suits in court to derail carefully reviewed public works projects.⁶¹ On September 14, 1971, Carpenter informed Wright of the lawsuit to halt the Trinity River Project and the Wallisville Dam and Reservoir. Wright responded that "I guess this is typical of the type of harassment that we will have to face from time to time in the future." His words could hardly have been truer.⁶²

On December 21, 1971, the U.S. Water Resources Council made its new recommendations for evaluating water resource programs. The council reasoned that the discount rate used in the cost-benefit analysis should be based on the "opportunity cost" or "the real rate of return on non-federal investments." Although the appropriate rate

⁶⁰ David Brune to Jim Wright, September 15, 1971, Wright Collection, RC Box 205.

⁶¹ Jim Wright to David Brune, September 8, 1971; Brune to Wright, September 29, 1971, Wright Collection, RC Box 205.

would be 10 percent at the end of 1971, the council suggested the use of 7 percent until 1977. A change of this nature would have a drastic negative impact on water resource development, especially on projects involving navigation, reclamation and flood control projects. Application of a high discount rate would allow little more than low capital intensive projects having near-term benefits. The federal government would only be allowed to take on projects that would provide an immediate return in benefits equal to the rate of return in private sector investments. Only Bardwell Reservoir and the Clear Fork Extension of Fort Worth's Floodway System would have passed the new criteria. Benbrook and the Fort Worth Floodway, Garza-Little Elm, Grapevine and the Dallas Floodway, Lavon (original), Navarro Mills, and Fort Worth's West Fork Extension would have all been rejected as feasible projects by the federal government. David Brune called it "a usurpation of the Congress' prerogatives and a damaging blow to the Nation's economy."⁶³

The U.S. Water Resources Council had recommended an increase in the discount rate from 5-3/8 percent to 7 percent, with another adjustment to 10 percent in 1977. The agency reasoned that federal water projects should have the same rate of return as private investments, a line of logic called "fallacious" by the TIA. John M. Scott, Fort Worth attorney and TRA president, told the council on March 22, 1972, that its proposals

⁶² Telegram from TRA chairman of the executive committee, September 14, 1971, Ben Carpenter to Jim Wright and letter from Wright to Carpenter, September 16, 1971, Wright Collection, RC Box 205.

⁶³ Harry N. Cook, executive vice president of National Waterways Conference, Inc., to Jim Wright, March 9, 1972; David Brune to Jim Wright, February 14, 1972, Wright Collection, RC Box 205.

constituted a breach of faith with the Trinity River basin's residents. He emphasized that the watershed's constituents would not consider the council's actions a light affliction. Since the comprehensive plan of development had already been authorized, the people of the basin should be afforded the same respect as other areas by allowing it to proceed. Scott regarded changing the "rules in the middle of the game" as unfair and unwise. Scott and ten others testified in early 1972 against the suggestions at hearings before the council in Washington, D.C.⁶⁴

Amon Carter, Jr., told the council that if the suggestions were implemented, "America will wake up to some awesome and awful realities." Adoption of the suggested principals and standards would bring the conservation, development, and management of the country's soil and water resources to a "screeching halt." To pursue such a course of action would invite severe water rationing, death and destruction from floods, overcrowded and inadequate water facilities for recreation, dying rural areas and overcrowded cities, faltering economies that had once been bolstered by water resource development, stagnated river systems, transportation systems without versatility, and unemployment for blue collar workers employed by water projects.⁶⁵

At the Water Resource Congress convention in St. Louis, held prior to the hearings, Congressman Jim Wright addressed the convention and stressed that the U.S. Congress did, indeed, need to create a clear formula geared for establishing the feasibility of water resource development projects. Wright announced his personal opinion that

⁶⁴ Trinity Valley Progress, publication of the Trinity Improvement Association, March-April 1972, 6, Wright Collection, RC Box 19-17.

⁶⁵ *Ibid.*, 10.

people interested in developing the nation's water resources faced "men who know the cost of everything, but the value of nothing" in the Office of Management and Budget. These remarks were in response to the recommendations of a Task Force in the Bureau of the Budget, which had made the same recommendations issued by the Water Resources Council. Wright explained that the people of the Office of Management and Budget had committed themselves to the opposition of big water resource improvements, such as the Trinity Project, and would only extend support to smaller projects. Wright characterized the bureau's stance as "a little bit like shooting the arrow and then going and drawing the target around the point where the arrow has hit; that way you can get a bull's eye everytime. They arrived at the conclusion they wanted to reach, and so now they write the formula by which they can reach that conclusion." ⁶⁶

Dale Miller, TIA member and president of the WRC, also addressed the St. Louis convention. He railed against the "neo-ecologists," a "conservationist cabal that often seems to be motivated only by a mindless obsession against change or progress of any kind." Miller asserted that no other federal program had ever been forced to endure such detailed economic and environmental evaluations. He and his fellow water development proponents found it indefensible that the United States had expended millions of dollars on water works in other nations, endeavors practically identical to the Trinity Project. These undertakings, asserted Miller, had not endured the same "economic strictures" American water resource improvements faced. Furthermore, the improvement-minded citizens of the United States faced a constant attack "by a mindless obsession against

⁶⁶Ibid., 15.

change and progress of any kind." The neoecologists, as Miller labeled the environmentalists, displayed an insatiable and voracious appetite. Miller closed with a stern rebuff to water resource development opponents: "We who work and build are tired of being reviled as despoilers by those who toil not. . . . We are tired of being flagellated by the tinsel halos and gossamer wings of the self-righteous." Miller avowed that the advocates of improvement were prepared to fight. The nation required progress and vitality, not stagnation and atrophy. The people of the United States owed a debt to their ancestors and to their yet unborn descendants, a debt Miller and the Trinity improvement advocates vowed to pay.⁶⁷

Miller's reference to a fight was especially apropos, for the Trinity Project supporters would have to face a war on two fronts. One enemy would be from the environmentalist camp. The other opposition would come from people attracted by the environmentalist's economic arguments. The worst case scenario would be for the two fronts to unite, and unfortunately for the Trinity Project, that would be just what would happen.

⁶⁷Ibid., 38.

CHAPTER 9

WATER HUSTLERS VERSUS CRACKPOT ENVIRONMENTALISTS:

THE 1973 BOND ELECTION

Canal opponents of the 1970s came from two general areas of concern, environmental and economic. Environmentally conscientious citizens, worried over the potential devastation of the Trinity River, initiated a grassroots revolt against the business and political establishment of North Texas. While the railroads and West Texas opponents had focused inordinately on influencing the federal level of government by lobbying, prophesying doom and gloom, and pleading, the North Texas opposition that cropped up in the 1970s went directly to the people of the basin and orchestrated a victory that contributed to the canal's demise as a viable project. The economic arguments against the canal, firmly embraced by the environmental activists, ultimately played the most significant role in convincing the people of the Trinity River basin to turn away from the Trinity Improvement Association and Trinity River Authority's promises of grandeur and profit.

Just as John Carpenter and Amon Carter had been the stimulus and inspiration of the canal movement in 1930, a Dallas attorney named Edward "Ned" Fritz served as the inspiration of the anti-canal movement in North Texas. Fritz, born in 1916, grew up in Tulsa, Oklahoma and developed a love for creeks and open spaces in his youth. Finishing law school at Southern Methodist University in Dallas in 1940, Fritz made the

city his home from then on. Fritz developed the reputation as a leading environmental activist during the next thirty years. In 1983, he offered the following description of the environmentally and economically concerned people who united against the canal. On the one hand were those who flinched at the environmental devastation accompanying projects such as the Trinity canal. To rip up the natural order and reshape it simply to further economic goals shocked the environmental opponents as an affront to that order. The Trinity River, the creatures that lived in its waters, and the beasts living along its banks, as well as the trees lining the stream, deserved more respect than the improvement advocates imparted to them. On the other hand were people Fritz dubbed "fiscally intelligent," people who saw an egregious problem in the propagation of costly "big dams and big channels" simply along the lines of following an idea that insisted on growth and big water projects for no other reason than that is what had always been done. The economic opponents believed that the time had arrived to take a step back and take more cautious and prudent actions in order to protect the quality of life already earned from generation after generation of hard work. Somehow people accepting these two points of view managed to find each other and unite to confront the water hustlers in an all out anti-canal campaign.

In a critical article penned for the Fort Worth Star-Telegram in early 1972, Fritz outlined the opposition's objections to the Trinity Project. According to Fritz and the environmental-economic anti-canal coalition, the Corps of Engineers consistently underestimated the project's costs while overstating its benefits. Whatever benefits that would accrue would go into the pockets of shippers and landowners. The canal would

also ruin the river and destroy the estuaries. Furthermore, canal opponents insisted that the Trinity River Authority and the Corps of Engineers were guilty of promising a false prosperity. Defeating the destructive and wasteful project would require an active citizenry devoted to spreading the truth. Citizen action had successfully brought about President Richard Nixon's halting of the Florida Barge Canal after it had already reached 50 percent completion. North Texas environmentalists readied themselves to wield similar power against the Trinity River canal. Fritz and his canal critic cohorts of the environmentalist persuasion would be influential in the fight, but victory depended upon arguments based on economic injustice.¹

The term "water hustlers" referred to those who stood to make a profit from the project and their associates, people who would derive monetary, pecuniary, or political benefit from the process. The Army Corps of Engineers, Bureau of Reclamation, and similar organizations made a living from planning and constructing water projects. The land developers who could earn significant profits from having a water project formed another group. A third category included people involved in heavy construction, such as the building of dams or levees. Politicians made up the final group of the so-called water hustlers. Politicians benefited from getting their names on dams and bragging rights for getting jobs in the area with the construction of the canal and reservoirs. Water

¹ Edward C. Fritz, chairman, Texas Committee on Natural Resources, "The Proposed Trinity River Canal Would Be A Harmful Waste of the Taxpayer's Money," attached to a letter from Louis W. Hudson, Assistant City Editor, Fort Worth Evening Star-Telegram, December 29, 1971, Jim Wright Collection, Texas Christian University, Fort Worth, Texas, RC Box 205.

development projects provided the politicians with a material representation of their work.²

According to Fritz, the water projects allowed politicians to say, "There it is. . . . Big and obvious to behold.' A big dam and a big lake backed up to it, or a big channel, and hopefully for them barges going up and down or high levees with industry on the outside theoretically protected from the floods." By Fritz's characterization, John Carpenter, Ben Carpenter, Amon Carter, Amon Carter, Jr., John Scott, David Brune, Ray Roberts, Jim Wright, John Connally--virtually everyone ever associated with the projects of the Trinity Improvement Association and the Trinity River Authority--were water hustlers.³

Opponents of the canal, dulled by cynicism, scoffed when men such as Ben Carpenter or Jim Wright pledged that their ultimate goal centered on the betterment of Dallas, Fort Worth, North Texas, Texas, and the Southwest. When Wright argued that "Conservation has been one of the principal driving forces behind the Trinity planners," and cited the flood control, soil conservation, economic opportunity, recreation, water quality and scenic preservation facets of the plan to support his statement, Fritz replied that Wright was "either grossly uninformed or prejudiced." Regardless of how devoted David Brune, Jim Wright, Ben Carpenter, Amon Carter, Jr., and Ray Roberts might be to

² Fritz interview, 6-7; The Texas Observer, "The Trinity River Canal: An idea whose time has come and gone?" January 19, 1973, 10-11, Wright Collection, RC Box 205.

³ Ibid.

developing the environment and quality of life, canal opponents were just as devoted to protecting the status quo of the environment and quality of life.⁴

Fritz's arguments puzzled improvement supporters. Many of Fritz's criticisms reminded them of the strategy used in the past by the railroads. Fritz had stated that the Trinity Project had been enacted without the democratic process. Brune countered by pointing out the number of elected governmental bodies that had voted to support the Trinity improvement project as an answer to the question of the project's democracy. Like the railroads, Fritz criticized the freight traffic projections. Brune characterized this argument as unreasonable as well, for the Corps's restudy between 1965 and 1968 had received sharp scrutiny from the Corps of Engineers and the Bureau of the Budget. The project supporters believed opponents such as Fritz were being unreasonable and unfair in their exaggerations of the Trinity Project's negative environmental effects.⁵

Despite efforts to counter the opposition arguments, the environmental sector had sparked the flame among the populace that spread into a grassroots inferno. The appeal on the basis of fiscal conservatism brought in the votes they needed to defeat the water plan. The people who emerged as the leaders of the anti-canal forces did not come from an organized environmental or political background. Dr. James White, a theology professor and George McGovern supporter, initiated the organized movement. Having

⁴ Ibid.

⁵ Memorandum to Colonel Floyd Henk, C.E., District Engineer, John M. Scott, President, Board of Directors, TRA, James L. Strawn, Development Manager, TRA, Martin Harris, Special Counsel, TRA, Frank Booth, General Counsel, TRA, and David Lewis Steed, Ph. D., Environmental Consultant, TRA, from David Brune, January 4, 1972, Wright Collection, RC Box 205.

read an item in a newspaper about the issue, White approached Fritz for advice on opposing the canal issue. White saw moral issues involved in the matter and decided to take a stand. President Nixon had been calling for the elimination of wasteful government spending, and to White the Trinity Project seemed an obvious example of wasteful spending to eliminate.⁶

In April 1972, White, along with James Bush of Kerens, Texas and Donald Smith, an economist at Southern Methodist University, founded the Citizens Organization for a Sound Trinity (COST.) Henry Fulcher, a fiscal conservative from Dallas, became the group's vice chairman and White served as chairman. Alan Steelman, a Republican candidate running against canal supporter, Congressman Earle Cabell, became the political spokesperson for the group and incorporated the issue in his successful political campaign. They called the Trinity Improvement Association's cost-benefit ratio a "hoax," and showed the return on every dollar invested would only be sixty cents. Steelman derided the project as a "billion dollar ditch." The diverse coalition of Wallacites, Republicans, and environmentalists befuddled the program's advocates. Steelman called the anti-canal group "the wildest coalition" he had ever heard of. Regardless of their political or philosophical bent, the canal advocates tended to group them all together as environmental extremists.⁷

⁶ Fritz interview, 8-9, 12-13; J. B. Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," unpublished paper, 8.

⁷ D. Clayton Brown, Rivers, Rockets and Readiness: Army Engineers in the Sunbelt, 110-111; Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 4-7.

As part of his campaign for Cabell's seat in the House of Representatives, Steelman campaigned against the Trinity Canal. Steelman stressed the arrival of a new agenda for Dallas. Steelman's "new agenda" heralded a shift of priorities for Dallas and North Texas. In his opinion, Dallas needed to focus on quality of life. Growth would come with or without the canal. Growth had already occurred without the canal. Essentially, Steelman argued that the work for growth had been done by earlier generations. It was now time to reap the benefits of earlier generations' efforts. Opponents could have pointed out the selfishness of this attitude, arguing that the current generation owed a debt and legacy of growth to the future, yet unborn generations of North Texans, just as previous generations had labored. Steelman, however, did not simply suggest that his fellow citizens sit back and enjoy the opportunity created by their forebears. Rather the Steelman agenda focused on heritage preservation by concentrating on improved police protection, environmental issues, historical building preservation, mass transit, and improved education. Steelman wrote, "This new agenda defines progress in a new way: Bigger is no longer necessarily better, quality is what counts." Stressing quality, according to Steelman, would be just as valuable a gift to the future generations as growth had been from the past generations. For Steelman, the Trinity Canal Project represented everything the old agenda had to offer and everything his new agenda was against. A single choice lay before the voters. Would they embrace quality or would they continue turning their heads and allowing others to make decisions for them and advance the old notion of quantity over quality? Would voters allow approximately one billion dollars to be wasted on the canal or would they reject

porkbarrel spending with investments in enhancing quality of life for those who lived in the basin already.⁸

Steelman argued that every family in Dallas, Fort Worth, and Houston would have to pay \$20 in increased federal taxes to fund the project and the benefits would "go to the wealthy land speculators who have been buying up property along the river for years, and to shipping companies who will be charged nothing for use of the facility." Steelman also resurrected the interest rate adjustment in calculating the cost-benefit ratio suggested by President Nixon's Water Resource Council. The failure to use a going rate of interest of 7 percent, instead of the 3.25 percent rate used by the Corps, was another example of government subsidy. The 7 percent rate of interest would change the benefit-cost ratio from 1.5 to 1, and result in a .67 to 1 benefit-cost ratio, making the project unprofitable in business terms.⁹

Steelman also injected environmental concerns into his campaign. The 552 miles of natural river "with a great deal of fishing, recreation and natural beauty" would, according to Steelman, be replaced by a "335 mile ditch, with stone or concrete reinforcement in those places where the 185 oxbows are to be straightened." He claimed canalization would result in stagnant pools of water up and down the river, and warned that even "high-level treatment of municipal sewage" could not "remove enough oxygen-burning nutrients from the Trinity to support normal aquatic life." The first lock and dam

⁸ Alan W. Steelman, *The Trinity Canal - A Billion Dollar Ditch*, October 17, 1972; Alan W. Steelman, *Fallacies of the Trinity Project*, October 17, 1972, Wright Collection, RC Box 205.

⁹ *Ibid.*

on the river would also "virtually destroy a major marine estuary and would kill shrimp, crab and Menhaden as well as non-commercial marine life." Hundreds of miles of forests would also have an ugly and destructive swath cut through them. The choice was simple for Steelman and he wrote, "The Trinity River is the major geographical feature of the area and we should not allow it to be destroyed."¹⁰

Steelman painted a grim, dark picture of Dallas's future. Port Dallas "would go the way of other port cities," plagued by crime, polluted water, and heightened inner city deterioration. The canal would attract heavy industry, such as petrochemical plants and steelmills, all of which, according to Steelman would bring "undesirable social effects." "The regional airport," mused Steelman, "is our kind of port." Instead of the community benefiting from the canal, as supporters promised, the product categories of sand and gravel (66 percent), export grain (7 percent), heavy iron and steel (13 percent), and chemicals (6 percent) would make up 92 percent of the total tonnage. Commercial firms and most citizens would receive no specific benefits from the project.¹¹

Cabell knew he was in trouble before the election, but he had no idea his political situation had entered into such dire straits. Cabell later described Steelman as an "attractive, glib" opponent who had campaigned for six months, "walking around, shaking hands." Steelman, bolstered by Nixon's presidential election landslide and the unrest he and the canal opponents had created over the Trinity Canal, defeated Cabell in a closely contested election. Following the election, Cabell seemed bewildered that

¹⁰ Ibid.

¹¹ Ibid.

environmentalists he had considered friends had become “rabid” about the Trinity project. Cabell believed Steelman had managed to turn several of his regular supporters against him by proposing “phoney” [sic] alternatives. Steelman had successfully branded Cabell as nemesis to the people and a friend to pork barrel projects and high taxes. Rather than attending to the needs of Dallas, Cabell, as alleged by Steelman, had preoccupied his time with other affairs.¹²

The canal opponents did not single out Cabell. They also turned their sights on other prominent development advocates. In December 1972, Dr. James F. White announced COST's intention to stress that only a select few stood to benefit from the canal. He demanded that Dallas Mayor Wes Wise honestly address the issue of who truly stood to benefit from the Trinity project. COST insisted that while land speculators and some bulk shippers would benefit, the average citizen would be forced to carry the burden of higher property taxes, and higher income taxes. The organization also insinuated that a sales tax would be placed upon the citizenry to pay for the questionable improvements. If the mayor actually intended to protect the average taxpayer then he should not hesitate to do so. Otherwise he should be honest and announce his backing for a small group that stood to benefit. To support his statement, White cited the recent election of Alan Steelman, who based his campaign in part on opposition to the canal. White claimed that an owner of a \$25,000 home could look forward to an additional \$36 in property taxes and \$20 per family in income taxes for the federal participation. COST

¹² Interview with Earl Cabell by Dr. Ronald E. Marcello, at Dallas on October 16, 1974, University of North Texas Oral History Collection, OH 273, 330, 332, 334.

set out to present the information to the residents of the seventeen counties in the TRA jurisdiction and promoted Steelman's agenda for quality over quantity.¹³

The proponents for the "old agenda," as Steelman would have characterized them, endeavored to convince people that quality of life and growth could be had simultaneously. The canal could be extremely important in calculating the equation. On January 29, 1973, John Stemmons telegraphed Jim Wright with a statement for the Trinity Valley congressional delegation, excepting Alan Steelman, to sign. Stemmons felt it imperative for the congressmen to get involved and show a united front against Steelman. Texas politicians Lloyd Bentsen, Olin E. Teague, Jim Wright, Ray Roberts, Dale Milford, Charles Wilson, and Jim Collins signed the statement prepared by Stemmons and the Trinitarians, urging the Trinity River Authority to meet at the earliest date and call an election to verify the local support necessary to secure the federal funds. John Scott, TRA president, received the telegram from the congressmen on February 8, 1973.¹⁴

In October 1972, Trinity River Authority manager David Brune had announced that the Trinity basin's seventeen counties would vote on the \$150 million bond issue that made up the local contribution to the project. In January 1973, the TRA revealed that the territory would vote on the project bond election on March 13, 1973. The program's supporters hoped the date would limit the amount of time available for COST to win the

¹³ December 29, 1972 Dallas Morning News clipping, "Group to Fight Bond Proposal," Wright Collection, RC Box 205.

¹⁴ Telegram from John Stemmons to Jim Wright, January 29, 1973, Wright Collection, RC Box 205.

ear of the public.¹⁵ To insure that people did not accept COST's arguments, Tom Unis, a Dallas attorney and former city council member, organized the Trinity Opportunity Development Committee to lead the campaign for the project's supporters. Backed by a long list of business and political leaders, the project boosters launched an advertising campaign. They focused on formal groups to spread the pro-Trinity Project message.¹⁶

COST did not have the financial resources enjoyed by development boosters. Instead, the coalition focused on rank and file voters by circulating leaflets bearing its message. The canal's critics relied on their slant on the cost-benefit ratios and the canal's negative effects. They further astutely recognized and publicized that the canal needed the reservoirs more than reservoirs needed the canal. The project's water supply reservoirs were worthy and doable without a canal and without straightening the river into a 360-mile "concrete ditch" which would destroy the river's beauty and its natural fish and wildlife habitats.¹⁷

On January 25, 1973, Dr. White struck a blow at more pro-canal adherents. In addition to focusing on other negative aspects of the canal, he attacked the top leadership of the Trinity River Authority and the Trinity Improvement Association by concentrating an attack on Ben Carpenter. White used the Annual Stockholders Report of Carpenter's Southland Financial Corporation to show that the firm held approximately 25,000 acres "right square in the middle of where the canal was going to go." This revelation raised

¹⁵ Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 6-7.

¹⁶ Brown, 112; , Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 8..

the question of an apparent conflict of interest for officers in both the Trinity Improvement Association and the Trinity River Authority. David Brune, president of the Trinity Improvement Association, earned a public salary of \$50,000 as general manager of the Trinity River Authority. COST's revelations raised the public's suspicions concerning the pro-canal leaders who stood poised to profit from the project while local and national taxpayers lost. COST members enjoyed using the slogan, "Your money, their canal," to emphasize their stance.¹⁸

The attack on Carpenter's character appalled canal advocates. Upon hearing of the attack, Amon Carter, Jr. informed Wright that "a small group of publicity-seeking college professors and self-styled ecologists" had "launched an effort to stop progress on the comprehensive water conservation and improvement program for the Trinity River Basin." To reach this end, the "environmental extremists," explained Carter, "had made "malicious and false insinuations" about Carpenter.¹⁹

Carpenter, who was out of town when White made his personal attack, immediately attempted to set the record straight on the matter. He issued a statement to challenge the anti-canal charges. He stated emphatically that the contentions that he had not disclosed ownership of property along the Trinity River and that he had actually been purchasing land all along the Trinity for speculation were false. Carpenter's family had farmed and raised cattle in the Trinity watershed since 1877, and the family had owned a

¹⁷ Brown, 112.

¹⁸ Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 11.

¹⁹ Jim Wright to Amon Carter, Jr., February 2, 1973; Amon Carter, Jr., to Jim Wright, January 30, 1973, Wright Collection, RC Box 205.

ranch in Freestone County and Kaufman County for over twenty-five years. Originally, the family had owned them outright, but over time they had become part of a family-owned company that later became a publicly-owned company. By 1973, the Carpenter family owned only 20 percent interest in the ranches. Aside from these properties, neither Carpenter nor his company owned property along the Trinity River. Carpenter declared, "The insinuation that I or the company have been going up and down the Trinity River buying up land for speculative purposes is totally false and incorrect. To create such a myth by a distortion of the facts is both malicious and irresponsible."²⁰

Carpenter contended that, if the proposed Tennessee Colony Reservoir were ever constructed, only 2,800 of the 20,000 acres in the Wildcat Ranch in Freestone County would be above water. These remaining acres would be several miles from the proposed canal. The Kaufman County Valley Ranch, consisting of about 6,500 acres, had about 2,500 acres of river frontage. Carpenter called the "contention that all of the land along the Trinity River" would "receive special and highly profitable benefits from" Trinity navigation "extremely naive, to say the least." He disputed the notion that the entire length of the river from North Texas to the Gulf would be developed as high-dollar property.

To imply that industrial plants will be built along every mile of this river front property is as ridiculous and preposterous as to contend that every mile of highway from Dallas to El Paso represents the site for costly improvements, or to say that all properties fronting on every mile of railroad track from Dallas to Houston will be the site of an industrial plant.²¹

²⁰ Statement by Ben H. Carpenter, January 26, 1973, Wright Collection, RC Box 205.

²¹ Ibid.

There would be benefits, but the development supporter refused to leap to such absurd claims that the opposition put forth. Carpenter also took issue with the contention that ownership of a ranch in the Trinity watershed disqualified the owner from being interested in "conservation, improvement, and proper development of the soil and water resources of the river basin." Carpenter said that he had just as much right and responsibility to be involved in such issues as a professor, lawyer, housewife, or congressman. The real issue concerning the Trinity Project was "whether or not a small group of publicity-seeking college professors and self-styled ecologists" could halt progress on "an important and constructive program of water conservation and improvement by continuous false charges and emotional attacks."²²

Regardless of Carpenter's attempts to vindicate himself and the project, the damage had been done. David Brune's hope for constructive debate and communication had deteriorated into outright war, marred by accusations and name calling by both parties. As the vote on the Trinity Project grew near, the battle to control public perception grew hotter.

The pro-canal forces suffered another blow in February 1973 when U.S. District Court Judge Carl O. Bue stopped the construction of Wallisville Dam near Houston. Opponents to the dam project claimed it would adversely effect the environment of the Trinity basin. Bue cited the 1969 National Environmental Protection Act as the basis for his decision.²³ The Trinity Project proponents decried the federal district court's

²² Ibid.

²³ Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 7.

injunction against further work. Citing deficiencies in the project's environmental impact statement, the Fifth Circuit Court of Appeals ruled that a supplemental environmental impact study had to be completed before work could proceed.²⁴

Congress had authorized the Wallisville Saltwater Barrier and Navigation Lock Project in 1962. Construction began in 1966, and by 1973 it was about 72 percent complete, with its dam and navigation lock being 87 percent complete. In 1965, Congress authorized ten more projects in one action for the Trinity River basin: Multiple-purpose Channel, Liberty Local Protection, Tennessee Colony Dam and Reservoir, Dallas Floodway Extension, West Fork Floodway, Elm Fork Floodway, Lakeview Dam and Reservoir, Aubrey Dam and Reservoir, Roanoke Dam and Reservoir, and Duck Creek Channel Improvement. Eight of the projects received funding in the following years, while the Liberty Local Protection project fell victim to unsatisfactory benefit-cost analysis and the Roanoke Dam and Reservoir declined in feasibility because of extensive highway construction in the proposed reservoir site. The federal government united four of the projects that were interrelated by design, construction, and operational factors (e.g., the channel, West Fork Floodway, Dallas Floodway Extension, and Tennessee Colony Dam and Reservoir) under one name for budget and appropriations purposes as the "Trinity River Project."²⁵

²⁴ United States Army Corps of Engineers, Water Resources Development in Texas 1995, 91.

²⁵ Analysis of Decision of Federal District Judge with Regard to the Wallisville and Other Trinity Projects, by David H. Brune, General Manager, Trinity River Authority of Texas, 2-4, Wright Collection, RC Box 205.

Congress had passed the National Environmental Policy Act (NEPA) in 1969. It required that federal construction agencies prepare five-point environmental impact statements (EIS) for any federal-related project.²⁶ Shortly thereafter, groups began preparing suits to halt projects, citing the absence of an EIS or inadequate EIS. Hence, federal courts became a new battleground and began creating an expansive and complex body of case law related to environmental impact statements. The Sierra Club, Environmental Protection Fund, Houston Sportsman's Club, Houston Audubon Society, Texas Shrimp Association, Charles L. Peting and Eugene A. Dutton filed suit in federal court in Houston against federal officials, especially officers in the Corps of Engineers. The plaintiffs requested that the Wallisville and Trinity Project be permanently halted, and based the request on alleged noncompliance with NEPA and potential damages that the projects would allegedly inflict on the environment. Seventeen counties, eighty cities, and eighteen special purpose districts and rural electrification cooperatives filed interventions to support the projects as defendants. The TRA, City of Houston, and the Coastal Industrial Water Authority were admitted early on to the suit as Defendants by Intervention. Fort Worth and Dallas were admitted later. The plaintiffs requested that the court grant a permanent injunction since there were no undisputed material facts, and the defendants requested that the case be dismissed since the plaintiffs had no standing to sue. The judge examined all the Corps' records related to the case, and signed a

²⁶ The Congressional Record contains the language of the National Environmental Policy Act. In addition, it provides thorough remarks on the act's background. President Richard Nixon signed NEPA on January 1, 1970. The 91st Congress, 1st Session, Congressional Record, Volume 115, Part 14, (Washington, D.C.: United States Government Printing Office, 1969), 19008-19013.

Summary Judgment and a Memorandum and Order on February 26, 1973 in favor of the plaintiffs.²⁷

Brune lamented that no witnesses had ever appeared before the judge. Instead, he had thoroughly investigated the federal documents associated with the project and weighed them against the opponents's claims. The judge ruled that the Corps of Engineers and other related parties to the projects, were

permanently enjoined from constructing, or causing the construction of, directly or indirectly, the Trinity River Project or the Wallisville Project, or of any parts or components thereof, unless said Defendants fully comply with the law, including all requirements of the National Environmental Policy Act and this Court's Memorandum and Order of February 16, 1973.

The judge excluded the six high-level bridges from his order and gave the Corps until April 15, 1973 to finish specific parts of the Wallisville project. The Corps had to install and adjust gate seals on the Wallisville navigation lock; remove the gates and apply protective coating, paint the armor and steel sheet piles, and remove the lower well paint system and flood chamber at Wallisville; remove the upper well paint system, and protect ends of concrete overflow dam with sandbags; and clean up, move out, and secure equipment and supplies. The Corps of Engineers regretted the time limit set by the judge, feeling it to be inadequate and precursory to material deterioration of the project. Trinity improvement supporters were confused by the judge's actions.²⁸

²⁷ Analysis of Decision of Federal District Judge with Regard to the Wallisville and Other Trinity Projects, by David H. Brune, General Manager, Trinity River Authority of Texas, 2-4, Wright Collection, RC Box 205.

²⁸ Ibid., 4.

By the judge's terminology throughout the Summary Judgement and Memorandum and Order, it appeared that he had enjoined every Trinity-related project authorized in 1965 by Congress. David Brune and others believed that this was the judge's goal, but an argument could be made, due to the use of "Trinity River Project" in budget and appropriations processes, that the judge included only the channel, Dallas Floodway Extension, West Fork Floodway, and Tennessee Colony Dam and Reservoir, thus saving the Aubrey Project and others from the decree. Brune explained that the guidelines laid out by the judge concerning the EIS exceeded the NEPA requirements, and the Corps feared that compliance could cost at least \$5 million and delay the Trinity Project by up to ten years. Twenty-five years would pass before the Corps would receive permission to complete the Wallisville Project.²⁹

If Judge Bue's intentions confused Brune and his Trinity improvement colleagues, the intense debate over the canal also posed a bewildering dilemma for politicians. Some political leaders who had extended their support for the project in the past, such as Senator John Tower, vacillated by saying they would await the referendum's outcome to guide their actions. An aide to Senator Lloyd Bentsen called the canal a "touchy, touchy, . . . whipsaw kind of issue." In 1965, victory for the Trinity Project had seemed imminent, but by 1973 its future seemed very uncertain.³⁰

For politicians such as Jim Wright, Ray Roberts, and the like, only one option remained--they must stay the course and keep their promise to support Trinity

²⁹ Ibid., 4-9.

³⁰ Ibid. 15.

improvement. They must also get their message out to the public and dispel the doubts being promoted by the grassroots economic-environmental coalition. On February 12, 1973, Wright began an address by quoting the Israelite king Solomon's words, "Where there is no vision the people perish." Wright explained that the Dallas and Fort Worth area had been blessed by having forebears with

an abundance of vision. They saw the need for rail transportation and these communities early became rail centers. They had the foresight to grasp the potential of aviation when manned flight was in its infancy. Our area became deeply involved in the aerospace industry and thrived. Forty years ago, they saw the impelling need for water and began laying plans for the future. Many of those plans already have borne fruit. Without the lakes which glisten in the sunlight on the upper reaches of the Trinity River, Dallas and Fort Worth would have suffered severe water and power problems and serious economic dislocation. Men of vision also saw the need for a tamed and navigable Trinity River to give us a gateway to the sea and to the commerce of the world. Within a relatively few days -- assuming that the present generation of Texans have not become fat and complacent and lost its vision -- that great dream will be one huge step nearer to reality.³¹

Wright declared that, in the preceding two years, close to twenty thousand skilled and semiskilled workers had lost their jobs in the turbulent economy. Developing the Trinity River, especially for barge navigation to Fort Worth, could "provide the dynamic infrastructure of lower freight rates which will result in a wide variety of new enterprises and cheaper transportation costs, meaning in turn lower prices to local consumers for a broad range of commodities." The project, Wright believed, could turn the economic situation around and for the good. The numbers themselves should have been convincing

³¹ Remarks of Congressman Jim Wright in Support of the Trinity Canal Bonds to the Dallas Assembly, February 12, 1973, Wright Collection, RC Box 19-16.

enough: \$1 would move a ton of freight 5 miles by air, 15 miles by truck, 80 miles by rail, or 333 miles by barge.³²

Lyndon Johnson, about twelve years prior, had "prophesied that development of the full resources of the Trinity including navigation would result in doubling the bank deposits of the area, adding 25 percent to the value of every home, and adding 15 percent to the spendable income of the working families in the Dallas-Fort Worth region." Twelve years later, the prophecy was within reach.³³

Wright described opponents of the canal as "some of small faith and little vision." Some opponents supported implementation of flood control, soil conservation, and water purity measures without the navigation project. Wright chided them, saying "This would be like suggesting that we should count on eating the fruit from the tree but chop down the tree itself." Returns on the investment in navigation would pay for the rest of the proposals. According to the Fort Worth representative, the Trinity River improvement program had been more intensively studied and planned than any other water resource project in the history of the nation. He added that the opponents's arguments that the project should be restudied under new criteria "would be like hanging the defendant and then giving him a fair trial." The formula would have disqualified both Dallas and Fort Worth's floodways, along with Benbrook, Grapevine, and Garza-Little Elm, resulting in throwing Dallas and Fort Worth into "the throes of a serious water shortage and a stifling power shortage today!" In 1972, the Gulf Intra-Coastal Canal carried ten times the

³² Ibid.

³³ Ibid.

commercial tonnage originally predicted by the Corps, while the Ohio River carried fourteen times the estimate, and the Illinois Waterway exceeded original predictions by five times. The Arkansas River Navigation Canal had already doubled the estimated tonnage after only two years of operation. Wright essentially delivered the message John Carpenter had delivered three decades before, "Don't sell the Trinity River short."³⁴

Wright also sought to remove the destructive and exploitative veil from the project supporters. Conservationists had always been among Trinity improvement's leading proponents. Unfortunately, explained the Fort Worth representative, since 1970 "a strange phenomenon -- a group of people who rather indiscriminately fight water resource developments in the name of the environment" had developed. He deplored that relative newcomers to the conservationist cause had deliberately aligned themselves against the goals of the people who had labored to build the cities of North Texas. He stressed that "for decades [they had] led the lonely and sometimes thankless battles for conservation and environmental improvement." Wright conceded that most such people meant well, but "in their commendable zeal, attempting to become instant authorities on a complex subject, some have missed the basic point--that the environment exists primarily to accommodate the human species." This last sentence reveals where the Trinity development advocates had "missed the basic point." Many people were accepting the opinion that the environment did not exist "primarily to accommodate the human

³⁴ Ibid.

species," and were seriously worried at the prospect that men such as Wright, Roberts, Carpenter, Carter, and their allies might actually believe such a statement and act on it.³⁵

Little else could be done on behalf of the Trinity Project. Wright, Brune, and a host of development-minded proponents, walking in the large shoes left to fill by the earlier generations of improvement backers, were confused and affronted by the resilient canal opponents. Surely, they hoped, the arguments that had repeatedly swayed Congress would likewise sway the people for which the project had been designed.

As the March 13, 1973 vote approached, the Fort Worth Press and Fort Worth Star-Telegram included a lengthy, color supplement. It proclaimed the need for "Port Worth and the Trinity River Improvement Program. We need them both for the good of all!" Supporters of the Trinity Project proudly pointed out that the Trinity Basin encompassed nearly 6.5 percent of Texas's land area, served as home to one out of every five Texans, could provide 37.5 percent of the state's water by 1980, produces 25 percent of the Texas economy. Texas could not "afford to lose out on the greatest opportunity for growth and development ever had!" The examples they used to illustrate what it would cost "to save the river and give us all a better life" attempted to convince voters how little an impact the tax to finance the program would make individually. The initial tax, that would start in 1974 if approved, totaled five cents for every one hundred dollars of the assessed valuation on a home or property. In 1980, the tax would reach its maximum of fifteen cents per hundred dollar property valuation. The project supporters advertised that the "investment" in the project for a person owning a twenty thousand dollar home

³⁵Ibid..

would be \$2.50 a year, or the price of a soft drink each month. The 1980 tax for the same person would reach the maximum of \$7.50 a year, or the price of about three soft drinks for each month.³⁶

The supporters also offered a great deal of information as to what tax payers' "investments" would return. The Trinity improvement program would clean the polluted river and straighten the channel to correct the meandering channel caused by soil erosion and poor agricultural practices in the late nineteenth and early twentieth centuries. Citizens would have better flood protection and a wider range of recreational facilities. The program included greenbelts, parks, and other recreational opportunities for campers, sportsmen, and people wanting to get closer to nature. The supporters also claimed they would be bringing nature back to the cities by cleaning up the river and removing things that made it an "open sewer filled with waste and trash and disease-bearing mosquitoes." The opponents of the program, according to the supporters, had no flood control program at all. The supporters painted those who wanted to leave the river as it was as people who lived in areas already with flood control measures or in areas without significant flood problems. A vote against the project would be "a step backward in the progress of the region."³⁷

To further discredit the opposition, supporters pointed out that if the "ecology extremist" theories had been incorporated as public policy in the past, then Garza-Little

³⁶Port Worth and the Trinity Improvement Program, a supplement to the Fort Worth Press and Fort Worth Star-Telegram sponsored by Tarrant Citizens for the Trinity. Fort Worth Public Library, Clipping Files, Trinity River, 627.1.

³⁷ Ibid.

Elm (Lewisville), Grapevine, Lavon, Benbrook, and Navarro Mills reservoirs would not exist in 1973. Their absence would throw the region into a devastating water crisis. Their theory would also have prevented the Dallas and Fort Worth Floodway Systems, systems that prevented an estimated \$241,448,000 in flood damage.³⁸

The new vistas of opportunity and economic prosperity promised hinged on the multiple purpose channel. It was not simply a barge canal and it would not be a "concrete lined ditch." Supporters argued that the program served as an attempt "to work with nature in improving the environment rather than to be in conflict with nature or to neglect the river by leaving it permanently in its present un-natural state." The project supporters urged voters to show their support for progress and refuse to be swindled by the "handful of misguided people whose actions are intended to halt progress and who are gaining extensive press coverage through emotion-packed false claims." Voting against the project would be the equivalent to voting for a Texas water resource crisis.³⁹

The supporters of the Trinity Project attempted to downgrade the COST's efforts. Supporters ran an ad during March 1973 that illustrated their response to the opposition. It asked, "Who is for the Trinity Project?" As an answer it listed a long list of Texas notables plus Dallas County political and economic leaders. Then the ad asked, "Well, who is against it?" For an answer it listed three or four individuals on the right-hand side

³⁸ Ibid.

³⁹ Ibid.

of the long list of supporters. Congressman Alan Steelman, Professor Jim White, and Ned Fritz ranked as the greatest opponents of the Trinity River Project.⁴⁰

Regardless of development proponent statements, canal opponents did have flood control proposals. Opponents offered nonstructural floodplain management as a counter approach to the Trinity Project. They argued that planning and zoning rules should excluded buildings and homes in floodplains or in areas prone to flooding. They argued that not only would less damage occur, but billions of dollars of taxpayers's money would not be "squandered" on flood control projects, dams, levees, and channels. Sensible zoning would prevent over development in the floodplains and decrease the amount of damage caused by flooding. Building a dam, levee, or channel and then telling people they had flood control gave them a false sense of security. People would then move into the area without realizing that a there existed a possibility that a flood of greater size than the structures were designed for could eradicate everything that had been built⁴¹

The close affiliation of the Trinity River Authority and the Trinity Improvement Association also worked against the project. Opponents accused the authority, a public organization, of being too closely aligned with the association, a private organization. They used David Brune and Ben Carpenter as the living embodiment of this alignment. This intertwining had once been a point of pride for the Trinity Improvement

⁴⁰ Fritz interview, 14-15.

⁴¹ Ibid., 16.

Association. Opponents construed the relationship into an effective argument against the project.⁴²

Before and after the bond election, Wright received letters from citizens regarding their fear of increased taxes. Jim Wright had earlier sent out a standard letter to his constituents, to request their support. One reply bore a sharp yet incisive criticism:

Thanks for your letter, I really didn't need a reminder to vote as I have already made up my mind and talking to ever [sic] one I see about voting AGAINST The Trinity River improvement program. I am fed up to 'here' with 'programs' that will benefit [sic] a few and raise my taxes."⁴³

Another correspondent, a supporter of the project, reinforced the theme of tax fear,

In my opinion, it should carry, but you know the people in Tarrant County are so afraid that if that goes through [the bond issue], they will have to pay more taxes, and a lot of people will then vote against it for that reason. Personally, I don't know if that will increase taxes or not, but Fort Worth needs a shot in the arm and this should do it.⁴⁴

A high school student from Fort Worth also gave insight to another aspect of opposition to the plan. The student opposed the measure, not necessarily because of the taxes and environmental arguments, but because of the negative aspects of growth that would surely result from the project. He did not want Fort Worth and the surrounding area to continue down the path of growth and expansion. The student foresaw

⁴² Ibid., 30-41.

⁴³ The Jim Wright Collection at Texas Christian University in Fort Worth contains an extensive collection of letters relating to constituent opinion on the bond election. The terms of usage require that the correspondents identities be withheld from publication, but all of the letters can be viewed in the archive. The letters cited here and in the following pages range from December 2, 1972 to March 15, 1973. Wright Collection, RC Box 205.

⁴⁴ Ibid.

"undesirable effects" with the Trinity Project's implementation. He wanted Fort Worth and the North Texas region to stay as close to its present size as possible.⁴⁵

A Fort Worth housewife shared her support of the Trinity Project with Wright, as well as a personal reminiscence. "I fell in love with that muddy mess way back in my early teens when I was being driven by the Texas Hotel and an old fellow in cowboy hat and boots came out the door. 'There's Colonel Hatfield [an eccentric yet popular proponent of Trinity navigation], the fool, he thinks he can navigate the Trinity.' The possibility intrigued me then, and thirty some odd years later, it intrigues me still." This letter of unbridled, romantic, optimism and support, however, did not reflect the consensus. Many more letters, even from supporters, reflected a hesitation and outright revulsion at the thought of increased taxes.⁴⁶

A week and a half before the election, Wright felt apprehensive about the prospective outcome. He believed the news media had been infiltrated by persons hoping to upset the Trinity Project. On the eve of the awaited verdict, however, Wright shared with Earle Cabell that he felt they had "turned the corner." "All of us have worked so darn long on this project that--if it should be turned down--we'll probably feel like the quarterback who spent the better part of a football game getting the ball down to the opponents one yard line only to fumble it there." Undoubtedly, the canal opponents,

⁴⁵ Ibid.

⁴⁶ Ibid.

having waged a fight resembling that of David against the Philistine giant, Goliath, held the same feeling as Wright.⁴⁷

The supporters of the project needed to gain a majority of the votes and carry nine of the seventeen basin counties for the proposal to succeed. At 9:00 A. M. on the day after the election, Wright received the latest results. His fear had been realized; after a lengthy and intense fight, the Trinity Project team had failed in their final attempt to cross the goal line.⁴⁸ All the time and money spent on the canal for the previous forty-three years since the Trinity Improvement Association's formation had ended in defeat.⁴⁹

Various reasons floated about concerning why the canal issue had lost. The environmental faction liked to say that voters turned down the bond proposal because of possible destruction of shellfish breeding grounds near the Gulf, drinking water pollution, and a disproportionate benefit for local business interests.⁵⁰

Seven of the lower basin counties approved the project, but the northern metropolitan areas overwhelmed their effect. Fort Worth and Dallas residents voted 54 percent and 56 percent, respectively, against the bond proposal, while the rest of the basin displayed opposition of only 47 percent. In all, 137,006 people voted against local funding for the project. Decades upon decades of planning and propaganda failed to sway

⁴⁷ Jim Wright to Earle Cabell, March 12, 1973, Wright Collection, RC Box 205.

⁴⁸ Typed note detailing information of phone conversation with Joe Shosid, Wednesday morning, 9:00 AM, March 14, detailing results, Wright Collection, RC Box 205.

⁴⁹ Brown, 117.

⁵⁰ Hill, 171; Smallwood, "Texas Water Politics: Opposition to the Trinity Barge Canal," 11; Brown, 117; Citizen's Organization for a Sound Trinity, Information Sheets, June 5, 1975. 1. Fort Worth Public Library, Clippings File, "Trinity River, 1970s." 1.

a public that had displayed positive sentiment in the past. With the canal issue dead for the moment, water quality, water supply, and flood control issues still had life.⁵¹

Congressman Alan Steelman and his fellow canal opponents saw the bond election as a substantial victory. Steelman released the following statement upon learning the news, making sure that everyone heard the canal's death knell:

Washington, D.C. ---- This vote is an indication to me that the people in the 17 counties were concerned -- not only with the prospect of higher taxes, but also with the quality of life issue. . . . The voters have had the chance to express their opinion and it is clear that the Trinity Barge Canal is dead. . . . The only source of contention was the barge canal and now that the issue has been decided, it is time to look to the future for the improvement of the Trinity River.⁵²

Steelman's elation over the election results was well deserved. He and the anti-canal coalition had labored in what many powerful people considered a losing battle. His judgement that the Trinity Project was dead, failed to consider the lengthy history of the Trinity improvement movement. The proponents of Trinity improvement would not surrender, nor was the election a writ for Steelman to push more anti-development legislation through Congress. Struggle, practically inherent to water resource development in the Trinity basin, still remained for all who cared to venture into the fray.

A Fort Worth resident showed considerable insights into the results in a message penned to Wright on the day after the election. The outcome reflected several factors. First, it had been a taxpayers's revolt. Second, the message, "Quality of life is better than quantity. . . natural growth is better than induced growth," might well have taken hold of

⁵¹ Ibid.

⁵² Press release containing the statement of Congressman Alan Steelman, 5th District, Texas, concerning the "Defeat of the Trinity River Bond Issue," March 14, 1973, Wright Collection, RC Box 205.

public opinion. Third, there had been an element of suspicion, i.e., when a relative handful of people with suspected self interest launch an expensive propaganda campaign to convince the public that the end result is in their best interest, the public rightfully becomes suspicious. The project had been oversold! Fourth, many did not believe in the necessity of both the new airport and a canal. The fifth reason presented by the author took aim at Congressman Wright himself, and illustrated a growing attitude among voters. The letter writer labeled Congressman Wright's activity as irresponsible and as the same kind of behavior that had caused the current massive federal debt. This letter, and the majority of others, firmly illustrated that although the environmentalist activists had played a significant role in instigating the rebellion, it had been the economy and disgust with more taxes that had truly defeated the project.⁵³

Another Fort Worth citizen summed up his feelings as he reflected on the project's rejection. He bemoaned the negativism that had corrupted the nation's spirit, and laid blame on the supporters who failed to sway voters "to dream as our forefathers dreamed." Although he had voted against the proposal, he took little satisfaction in opposing outstanding leaders such as Jim Wright, Olin Teague, and John Connally.⁵⁴ Wright

⁵³ Typed copy of a letter submitted to the editor of the Dallas Morning News by Gip D. Oldham, Jr. on March 14, 1973. sent to Wright by Oldham of Dallas. Wright Collection, RC Box 205.

⁵⁴ Confidential letters to Jim Wright, December 2 - March 15, 1973, Wright Collection, RC Box 205.

agreed with the author of the above mentioned letter, commending him for his analysis of the election results as a taxpayers's revolt.⁵⁵

Despite the insight of that letter, it was another letter that perhaps gave one of the most profound reasons the bond election failed. A Fort Worth woman wrote to Wright the day after the election about her disgust with politicians.

There maybe parks [in the project], but please tell me how poar [sic] little boys and girls are to get to those parks. They cant [sic] walk accross [sic] town fur [sic] an hours play[.] You politicians had better get to the poar [sic] people and help them, by lowering taxes instead of raising them for we get no raise for eggs & butter, but it has doubled at the super market. Dressed chickens has gone from 29 cents a lb to 49 cents in just a few short weeks So wake up politicians and keep the poar [sic] working slob.⁵⁶

The economic message of canal opponents had found its audience. Although apparently environmental concerns did not rank as the main reason people opposed the Trinity program of development, they managed to infuse their ideals with commonsense reasons for opposition. They effectively pushed the "no more taxes" card along with their environmental concerns.

Following the bond election fiasco, Texan folklorist and media personality John Henry Faulk emerged as a dogged opponent to the Trinity Project. He had been close to three respected Texas scholars, J. Frank Dobie, Walter Prescott Webb, and Roy Bedichek, whom he described as living "close to the earth; they leaned their ear over

⁵⁵ Jim Wright to confidential recipients, Fort Worth, March 22, 1973 and to March 22, 1973, Wright Collection, RC Box 205

⁵⁶ Confidential letters to Jim Wright, December 2 - March 15, 1973, Wright Collection, RC Box 205

close to catch the sounds and rhythms of earth."⁵⁷ Faulk praised his mentors, particularly Bedichek and Dobie as forerunners of environmental concern, and lauded Webb for his interest in water conservation in the shaping of regional development. Faulk's association with these three men influenced his decision to join the anti-Trinity Project movement.⁵⁸ The folklorist-conservationist held that people should live in harmony with their surroundings rather than persistently exploiting nature for shortsighted gain.

All associated with support of the Trinity Project were undoubtedly disappointed by the election results, but one report showed an uncharacteristic lapse. A newspaper story reported that John Scott, president of the Trinity River Authority, believed any potential success for the Trinity Project had ended. Price Daniel, then a member of the Texas Supreme Court, chastised Scott for his remarks. Daniel understood the public attitude regarding additional taxation, but advised supporters to work for a new election at a more propitious time because of the positive benefits to be derived by Trinity basin residents. In the meantime, Daniel advised the Trinitarians to remain positive, attain further congressional appropriations, concentrate on getting votes for flood control and other projects independent of navigation, and work to lift the injunction against the Wallisville Reservoir.⁵⁹

Following the initial shock of the bond election defeat, aside from John Scott's reported remark, the Trinity improvement supporters did not publicly rant or rave in

⁵⁷ John Henry Faulk interview with Dr. J.B. Smallwood, June 9, 1981, University of North Texas Oral History Collection, Denton, Texas, 10.

⁵⁸ Ibid., 40-43.

anger. Rather, they held fast to the vision that G. B. Dealey had shared forty years before, although now dimmed with disappointment. For them, it was not over. They had fought too long and had overcome too many obstacles to let one bond election crush their dreams. Lowell Duncan, Director of Public Information for the Trinity Improvement Association, praised Jim Wright for the congressman's espousal of the Trinity River Project. Duncan wrote that river basin improvements would provide continued progress for the entire Trinity region and should be pursued diligently. On behalf of the TIA, Duncan pledged his best efforts to realize the dream.⁶⁰ The Trinitarian movement, however, could not shake the steady grip of their staunch opponents, the "deluded 'so-called' ecologists" as Price Daniel had labeled them, who had instigated the anti-canal campaign, and their economic allies who had joined with them.

⁵⁹ Price Daniel, Justice of the Supreme Court of Texas, to John Scott, TRA president. March 17, 1973, Wright Collection, RC Box 205.

⁶⁰ Lowell C. Duncan, Director of Public Information for the Trinity Improvement Association to Jim Wright, March 19, 1973, Wright Collection, RC Box 205,

CHAPTER 10

WATER WARS, POLLUTION PROBLEMS AND TRINITY TURMOIL: TRINITY IMPROVEMENT AT THE END OF THE TWENTIETH CENTURY

A desire for navigation on the unreliable Trinity River, a stream whose course vacillated from trickling and near still at one extreme to an enraged and wrathful torrent at the other, had served as a significant impetus in the development of North Texas's urban water resources for much of the twentieth century. In the first third of the 1900s, canal proponents had embraced all facets of Trinity improvement, hopefully maneuvering their agenda in an effort to make the canal project more attractive by grasping the other facets such as flood control and soil conservation with the belief that they were truly important to the region's well being. It was a marriage of convenience and necessity. Navigation advocates funneled their hefty resources and influence into advancing the fulfillment of a comprehensive plan to satisfy all the needs of a growing urban hub. With the navigation cause having faced a serious setback in the 1973 bond election, the legacy of fully developing water resources of the region carried on, pushed by the weight of urban demands and a withering dream that maybe, just maybe, some messiah might step forward to resurrect the floundering canal plan one last time. Water supply and flood control designs remained either incomplete or on blueprints, and pollution, though much improved since the 1920s, still inflicted a detrimental blow to the river's water

quality and well being. From the 1970s to the 1990s, individuals, organizations, and governmental entities concerned with improving the basin's resources for urban growth continued to promote their cause, all the while under the watchful eye of equally concerned environmental and economic watchdogs.

The Trinity River Authority and the cities of North Texas had made improvements to waste water treatment since the 1920s, yet pollution persisted in the Texas stream. Technological fixes implemented during these decades had failed to keep up with the population growth of North Texas. A state survey conducted during the early 1970s found the Trinity's water quality in the Dallas and Fort Worth vicinity to be in such poor condition that fish could not survive. Substantial changes were necessary to erase the Trinity's stigma as a river of death. In 1969, the Texas Water Quality Board began requiring initial planning for advanced secondary treatment by the major wastewater systems in the Dallas and Fort Worth metropolitan area. The agency took this action six months before Congress passed the Clean Water Act. Passage of the Federal Water Pollution Control Act of 1972 established further high standards for wastewater treatment. The upper basin wastewater systems began implementing the improvements during the 1970s. By then the Trinity River Authority had already emerged as an active and dedicated state agency in improving the water quality.¹

Before the entities involved with cleaning up the river made great headway, Texas author John Graves recorded the reason why such measures were of such import. Having won literary acclaim for Goodbye to a River, his eulogy of the Trinity's southern sister,

¹ Trinity River Authority, TRA Home Page, <http://www.trinityra.org/trahp.htm>.

the Brazos, Graves turned his attention to the stream that flowed through his onetime home of Fort Worth. He wrote in the early 1970s that sewage nutrients roiled along so thickly in the river below Fort Worth and Dallas, that if aggressive action were not taken, the large downstream reservoirs would suffer the fate of eutrophication, a rapid destruction marked by "overfertilization and choking and sliminess." Lake Erie had already experienced such devastation, and Graves warned that it would be a foul blemish on Texas's environmental record to allow it to occur to the Trinity River.²

Graves had grown up in Fort Worth, and commented on how the Trinity River had changed over the years. Because of flood control projects and pollution, Graves's memory of the "Trinity as the pleasant if rather scrawny meandering wooded stream it used to be" had been eradicated. Although the flood control projects had proved their worth and would remain, the river's filth had become a problem definitely requiring attention.³

The Trinity River Authority had been operating, expanding, and improving the Central Regional Wastewater System since 1959. In 1970, the authority initiated the Walker-Calloway Branches Outfall Line Project to transport wastewater from North Richland Hills and Hurst to the Fort Worth wastewater system for further treatment. The agency put the Ten Mile Creek Regional Wastewater System into operation in 1971, serving portions of Cedar Hill, DeSoto, Duncanville, Lancaster, and all of Ferris. These developments, along with improvements of systems in Dallas, Fort Worth, and other

²John Graves, "Texas: 'You ain't seen nothing yet.'", in The Water Hustlers, (San Francisco and New York: Sierra Club, 1971) 32.

³Ibid., 47.

cities had been long awaited and much needed.⁴ Nevertheless, by 1975 the Trinity River's flow still contained more than 90 percent sewage effluent, making it one of Texas's most polluted rivers despite the TRA's efforts.⁵ The TRA's water treatment projects constituted the first significant action against the Trinity's defilement, and the agency continued to implement new methods until the river's water quality significantly improved.

If water supply without water quality is little better than no supply at all, quality water without an adequate supply can also be regarded as a losing proposition. The burgeoning cities of North Texas were still eager for and in need of the additional reservoirs called for by the 1950s Vollmer Committee report and TRA master plan. As the urban populations of North Texas cities steadily grew, the projects faced just as much danger from the interested parties as they did from anti-development coalitions.

Texas had about 180 major reservoirs by the 1970s. Over fifty of these reservoirs had capacities greater than 100,000 acre-feet, and as in the Trinity Basin, the majority had been constructed since the Second World War. Even environmentally concerned citizens had trouble discounting their significance. Even though they might clutter the streams around Dallas and Fort Worth, without them the cities could not sustain the

⁴ Trinity River Authority, Trinity River Authority of Texas Annual Report FY 1996, 5-7; Trinity River Authority, TRA Home Page, <http://www.trinityra.org/trahp.htm>.

⁵ Lowell Duncan to Jim Wright, November 18, 1975, Jim Wright Collection, Texas Christian University, Fort Worth, Texas,, RC Box 205.

populations that called them home and enjoyed their opportunities. More water was still required to meet the projected demands of the future.⁶

The need for the further water supply improvements called for in the late 1950s had not magically disappeared. In fact, it had intensified. The Texas Water Development Board's studies released in early 1969 revealed an annual shortage of 119,200 acre-feet of water for the Dallas area and its thirteen suburban cities by the year 2020. In addition, North Texas residents could reasonably expect some flood activity during April, May, and June of the 1960s and 1970s. The urban growth into flood prone areas resulted in millions of dollars of flood damage each year. The water officials of the Upper Trinity basin stressed the need for new reservoirs for both flood control and water supply, as well as recreation to entertain the urban denizens. Advocates of the Aubrey and Lakeview projects would face a great deal of frustration as they faced delay after delay.⁷

A 1968 editorial in the Dallas Morning News had described water as Dallas's recurring nemesis. It ranked the navigation issue, still very much alive at the time, and the recurring shortages of drinkable water as two of the city's most important issues. The second half of the Trinity paradox--overabundance--also remained as an issue. The earlier implemented flood control projects had made an impact, but the region's growth since the Second World War created new flood related problems. Development had

⁶Major reservoirs are defined as bodies of impounded water with a storage capacity of at least 5,000 acre-feet. Graves, "Texas: 'You ain't seen nothing yet.'", 46.

⁷Terry G. Jordan, John L. Bean, and William M. Holmes, Texas: A Geography (Boulder: Westview Press, 1984), 23.

made flooding a greater problem than in the past. A hundred acres of concrete and asphalt quite obviously could not absorb the rain that a hundred acres of pastureland had in the past. The hard surfaces added to the prevalence of flash floods. The editorial stressed that cities needed to pay special attention to flash flood drainage and large scale flood control along the Elm Fork of the Trinity River.⁸

In November 1969, after three years of laboring on behalf of the Aubrey Reservoir, a public work that would ameliorate water supply needs and provide added flood protection, Trinity watershed congressmen finally succeeded in including it in the budget. Congressman Earle Cabell of Dallas had stressed the reservoir's importance even beyond the borders of Dallas itself. He explained that the water project was also vital to the city of Denton and the Dallas/Fort Worth Regional Airport. A real sense of urgency existed for the Aubrey project. Western parts of Dallas would be in need of the reservoir water before it could be completed. If planning began in 1969, then the cities could expect to have water from the \$34 million reservoir by 1980. Yet funding problems and feuds between North Texas cities over water rates and water rights delayed the project.⁹

A research team from North Texas State University performed an environmental study on the proposed reservoir, which would be located north of Denton on the Elm Fork, and offered its endorsement to the project in 1972. The team suggested that the

⁸Editorial, Dallas Morning News, 22 March 1968, 2D.

⁹"Senate Panel Praised for Reservoir Action," Dallas Morning News, November 16, 1969, 57A; Dallas Times Herald, November 13, 1969, Dallas Public Library Clippings Files.

Aubrey Reservoir would have a positive environmental impact.¹⁰ The Environmental Protection Agency took issue with the environmental impact statement, however, which had a deadline of September 1973. Confronted with this situation the district engineer failed to meet the deadline, and did not present a satisfactory environmental impact statement until February 1974. This delay prevented the Corps from requesting construction funds from Congress.¹¹

The environmental impact statement delay forced Dallas Water Utilities Director Henry Graeser to announce that the U.S. Army Corps of Engineers' failure to get the Aubrey Reservoir included in President Richard Nixon's budget cast doubt on Dallas's future water supply. Dallas and Denton both counted heavily on the reservoir's construction by 1980. For more than five years, Denton and Dallas had urged the Corps to speed up its efforts for a construction start. Graeser and others had expected construction to begin in 1974. While Dallas's city government looked forward to the reservoir's supplying the rapidly growing section of Northwest Dallas, Denton needed the reservoir's water immediately.¹²

¹⁰"Proposed Reservoir passes environmental standards," Dallas Times Herald, July 19, 1972, 22A. Dallas Public Library Clippings Files.

¹¹Colonel Floyd H. Henk to Ray Roberts, July 23, 1973, Ray Roberts Papers, Box 115, File 21; Note on Congressional letterhead, February 4, 1974, Roberts Papers, Box 115, File 21; Lowell Duncan to Harry Stout, administrative assistant to Ray Roberts, August 28, 1973, Roberts Papers, Box 115, File 21; Lowell Duncan to Harry Stout, administrative assistant to Ray Roberts, August 28, 1973, Roberts Papers, Box 115, File 21; Note on Congressional letterhead, February 4, 1974, Roberts Papers, Box 115, File 21.

¹²Dallas Morning News, 16 February 1974, 1D.

Graeser announced that Dallas currently had 430 million gallons of water available each day during a drought. That amount was enough to meet Dallas's needs through 2050, but 900 million gallons a day were necessary to meet the demands of Dallas and the suburban cities it supplied. He announced that six reservoirs and several pipelines were needed to increase the daily water supply to the required amount. To add to the project's delays, Dallas and Farmers Branch faced off in a fight over the proposed contract for the expansion plan. Poor relations with the suburbs over water rates and rights became a recurring nightmare for Dallas during the rest of the decade.¹³

The federal government's attitude towards water development projects had been hard to measure since Charles Schultze had influenced President Lyndon Johnson and Congress in the 1960s. His attitude had spread to become a problem not just for the Aubrey and Lakeview projects or the other facets of the Trinity Project, but for water development throughout the country. Speaking to the Texas Water Conservation Association on March 1, 1974, Congressman Ray Roberts declared that many areas of the United States would not have the necessary quantities of water to sustain life if important development plans were not initiated. Texas Governor Dolph Briscoe announced to the Texas Water Conservation Association that the energy crisis should wake people up to the need to take action and prevent a water resources crisis. Officials at the meeting discussed the recent federal policy changes that withdrew support from water projects. Joe G. Moore, director of the National Commission on Water Quality, suggested that

¹³Ibid., 22 August 1973, 2D.

Texas should seriously consider acting independently to start water development if federal action remained as insufficient and unreliable as it had been in the past decade.¹⁴

The funding problems for the Aubrey project, as well as the Dallas dispute over water with its suburbs worried Denton officials. They feared the Denton water situation might reach a critical stage in the near future without the reservoir. Suffering its own water supply problems, Dallas might terminate the relationship or raise the contract price astronomically when the water supply contract to construct the reservoir between Dallas and Denton expired in 1980. For Denton, each passing year brought hardship nearer.¹⁵

Trinity development advocates did not want to abandon hope that the federal government would finally come to see things their way and lend sufficient aid to their pet projects. The Trinity Improvement Association rallied delegations from Dallas and Denton and surrounding cities to Washington, D.C. in 1974 as Jim Wright and Ray Roberts fought in Congress to get funding for the Aubrey and Lakeview reservoirs and other Trinity development projects. Both congressmen made impassioned requests for funding.¹⁶

¹⁴ Ibid., 2 March 1974, 18A.

¹⁵ Henry J. Graeser to Ray Roberts, March 4, 1974, Roberts Papers, Box 115, File 21. Tom D. Jester, Jr., a Denton attorney and city council member, to Ray Roberts, May 7, 1974; "Locals to Seek Reservoir Funding," Denton Record-Chronicle, 18 April 1974, 1A.

¹⁶ "Reservoir Fund Rescuers Shove Off Monday," Denton Record-Chronicle, 21 April 1974, 1A. "Dentonites Begin Trek To Capital," Denton Record-Chronicle, 22 April 1974, 1A. "Tower Will Support Reservoir Project," Denton Record-Chronicle, 23 April 1974, 1A. "City Delegation Encouraged," Denton Record-Chronicle, 24 April 24, 1974, 1A; Roland Boyd to Ray Roberts, June 12, 1974, Roberts Papers, Box 115, File 21; "Water Optimism," Dallas Morning News, 16 June 1974, 30A. "House Okays \$5 Million

Wright told the Public Works committee that he appeared before them "as a man who, symbolically at least, has two hats." One hat represented his role as a member of the United States Congress. In that role, he recognized the severe fiscal constraints facing the members of Congress, at a time in the nation's history that had rarely been surpassed in regards for the "need for care and prudence in the expenditure of federal funds. Wracked by inflation, haunted by the specter of recession, our country desperately needs to save money." Wright knew that he and his fellow congressmen needed to cut back spending as much as possible. His metaphorical second hat represented his role as a Texan, "and as one who has some degree of familiarity with the Trinity."

He assured the committee that the Trinity expenditures called for in the budget were much more than "simply expenditures," they were "investments -- doggoned good investments." The projects supported by the Trinity Improvement Association, "our friends and neighbors," were good investments that would eventually pay for themselves in benefits. The budget included merely \$1 million for a construction start for Lakeview. The reservoir, located on the Dallas-Fort Worth metroplex's fringe, would provide a dependable water supply for cities and communities in the densely populated area. Furthermore, it would also play a crucial role in controlling floods on the Trinity River's West Fork. Congressman Ray Roberts had requested only \$300,000 for a start on the Aubrey Reservoir, a request Wright wholeheartedly backed. The administration's budget had not included the project, but Wright agreed with Roberts's statement that the potential flood control and water supply dividends merited a modest investment of \$300,000. In

For Aubrey Reservoir," Denton Record-Chronicle, 7 June 1974, 1A; Ray Roberts to

closing, Wright beseeched the committee to reaffirm its commitment to the lower basin project, Wallisville Lake, which he called "the keystone of the comprehensive Trinity development program." In addition to Wallisville's benefits to the lower basin, it remained a significant part of the canal plans that Wright and his improvement cohort's refused to bury.¹⁷

The efforts of Wright, Roberts, the TIA, Denton, and Dallas, on behalf of the Aubrey Reservoir succeeded initially, but faced another setback in the fall of 1974, when President Gerald Ford exercised his power to postpone an authorized \$82 million expenditure for public works. The administration included half of the Aubrey project's funds in the deferral. Reporting the action to Congress on October 31, 1974, the administration expressed its desire to reduce the effect of inflationary government spending, particularly the amount related to the Public Works for Water and Power Development and the Atomic Energy Commission Appropriation Act of 1975. The action did not kill the project, but it did add yet another delay to the reservoir's start. Max L. Friedersdorf, deputy assistant to the president, assured Roberts that President Ford intended to include the full Army budget request for Aubrey in the 1976 budget. Whatever consolation this might have given Roberts and the improvement advocates, city officials in Denton and Dallas grew increasingly frustrated.¹⁸

Nelson L. Watson, Denton resident, July 2, 1974, Roberts Papers, Box 115, File 21.

¹⁷Congressman Jim Wright, Testimony before the Subcommittee on Public Works of the House Committee on Appropriations, April 23, 1974, Wright Collection, RC Box 19-16.

¹⁸Deferral of Budget Authority: Deferral No. D75-81. Roberts Papers, Box 115, File 21; Max L. Friedersdorf to Ray Roberts, December 21, 1974. Roy L. Ash, Director

In February 1975, Dallas officials announced that the continued delay in construction of the Aubrey Reservoir was forcing the city to spend over \$22 million for a new thirty-two mile water supply line from Lake Tawakoni. Dallas Water Utilities Director Henry Graeser revealed that Dallas could no longer depend on the Aubrey Reservoir to prevent water shortages in the 1980s. Frustration is clear in Graeser's statement: "At the rate we are going now, it could take 40 years to build Aubrey Reservoir." The Corps's plans estimated the lake would provide an important eighty-nine million gallons of water for North Texas residents. The success of obtaining limited funding for 1975 and the subsequent action of the Ford administration's budget deferral was joined shortly by increased local squabbling over water.¹⁹ Arguments over water supply beginning with the 1973 fight between Grand Prairie and Farmers Branch with Dallas over rates escalated in 1975.²⁰ Dallas and Denton even reached a standoff in August 1975 over the amount of water each city could access from the proposed reservoir.²¹

The Aubrey Reservoir water war continued to heat up in 1976 as the continuing disputes over water rates and water rights between Dallas and its suburb cities aggravated

of the Office of Management and Budget to Max L. Friedersdorf, December 19, 1974, Roberts Papers, Box 115, File 21.

¹⁹"Delay Forces New Water Line Expenditures," Dallas Morning News, 6 February 1975, 1D; United States Army Corps of Engineers, Water Resources Development in Texas 1995, 88.

²⁰"Water Feud Develops," Dallas Morning News, 13 June 1975, 1A. "Water Feud Develops"

²¹"Denton, Dallas Take Water Fight to TWRC," Dallas Morning News, 9 August 1975, 1A.

advancement of the project. Dallas had developed the plan of selling surplus water to customer cities in the 1950s. Twenty-six years later the setup acted as a recurring thorn in the city's side. Weary officials already foresaw further delay in the Aubrey Reservoir project's construction. Dallas City Manager George Schrader summarized the situation succinctly when he described the water issue as a "very emotional thing."²²

While Denton, Dallas, and the Trinity Improvement Association struggled with their water problems, the Trinity River Authority had started working to alleviate the water supply needs of some other North Texas cities. During 1974, the TRA finished construction and put into operation the Tarrant County Regional Water Supply Project. Bedford and Euless, growing rapidly during the 1970s, contracted with the TRA for a solution to their diminishing well water sources. The TRA project pumped water uphill from the Tarrant Regional Water District's Cedar Creek and Richland-Chambers reservoirs for eighty miles to Lake Arlington. The TRA's Lake Arlington raw water pump station then sent the water another nine miles to the regional treatment plant near Euless. Colleyville, and parts of Grapevine and North Richland Hills joined the project in 1980.²³

The Lakeview Project, sponsored by the Trinity River Authority, resembled the Aubrey Project in its repeated delays. Contract problems related to differing interpretations of the Federal Water Project Recreation Act was a major obstacle. The recreation contract for Lakeview had been submitted in February 1975, and the TRA

²²"Water Compromise Urged," Dallas Morning News, 1 March 1976, 1D.

²³ Trinity River Authority, Trinity River Authority of Texas Annual Report FY 1996, 5-7; Trinity River Authority, TRA Home Page, <http://www.trinityra.org/trahp.htm>.

related its desire to limit its liability to the monies collected as entrance and users fees. The Corps disagreed, and Brigadier General Charles I. McGinniss explained that he knew of no arrangement where such repayment had been used. He added, that such an arrangement could change the recreation and water supply benefit proportions. Funds had been appropriated in FY 1975 for construction, but the delays restricted progress. David Brune's letter to Brigadier General McGinnis made clear the emotional and inflammatory nature of the project's delay. He called the Lakeview Lake situation "ridiculous!" Inflation took its toll on the project with each delay. The TRA demanded all obstacles be removed and that construction begin at the earliest possible date. Brune had grown tired of accusations that the authority played any part in holding up progress on the reservoir. He emphatically stressed that it was "time for this shadow-boxing to cease and for the Corps and TRA to resolve whatever differences, if any, remain ASAP. However, the Authority is not going to surrender its rights under various Federal laws as part of the price for expediting Lakeview's construction." Along calmer lines, TRA general manager David Brune wrote again and advised the parties involved "to get down to 'brass tacks'" and urged the Corps to take a more aggressive role in advancing the project to construction.²⁴

The Trinity River Authority's distaste with the Corps of Engineers's attitude reached into other areas as well. In a letter extending extreme gratitude for Jim Wright's aid in Trinity improvement, Brune also related some incidents on the absurdity of the

²⁴ David H. Brune, General Manager, TRA to Brigadier General Charles I. McGinniss, Division Engineer, Department of the Army, Southwestern Division, Corps

burgeoning bureaucracy. The Corps of Engineers had drafted environmental impact statements on the four long-existing multiple purpose reservoirs of Benbrook, Grapevine, Bardwell, and Navarro Mills. Brune found it insulting and ridiculous that the Corps actually listed abandonment as options for the Bardwell and Navarro Mills Lakes. The TRA had contracted with the federal government to purchase all the reservoirs' water yields, and in turn sold them to industrial and municipal customers. Improvement advocates refused to believe that Congress, by its passage of the National Environmental Policy Act, had wanted the Corps to waste citizens' tax dollars and time by concentrating on such "ridiculous alternatives." Brune lamented that rather than the "practical builders" that had once guided the Corps of Engineers, he now had to deal with "esoteric planners who love to 'plan to plan to plan.'"²⁵ Those intimately involved with water projects often became emotionally involved with their projects, such as Brune's writings often show, and the complexities of water related issues were increasingly becoming more frustrating each year.

Fortunately, the emotional situation over Aubrey Reservoir calmed down somewhat in mid-March 1976, when Dallas and its suburban cities neared a compromise for developing water supplies from the Aubrey Project. An end to the bickering could not come soon enough for Denton. Denton representatives emphasized that it was imperative for the project to be finished by 1994. After that date, Denton's water supply

of Engineers, Dallas, Texas, March 29, 1976, April 8, 1976, and McGinnis to Brune, April 7, 1976, Wright Collection, RC Box 205.

²⁵ David Brune to Jim Wright, April 7, 1976, Wright Collection, RC Box 205.

would be in a dangerous situation. Denton officials also expected costs for the \$158 million project to go up 25 to 30 percent in the next three years.²⁶

To further complicate matters, other cities in the upper Trinity Basin entered the water battleground. At the end of April 1976, the Texas Water Rights Commission (TWRC) refused Gainesville's attempt to gain access to the proposed reservoir's water. Gainesville's city attorney argued that the proposed Aubrey permit made everyone second-class citizens in relation to Denton and Dallas. On April 22, 1976, Chairman Joe Carter responded, "That's the way the cookie crumbles," as the commission denied Gainesville of its claims. A controversy already brewed over whether or not Dallas's satellite cities could access water from Aubrey. All participants, regardless of the side they supported, invariably referred to the Aubrey Reservoir project as an essential factor in the further growth of North Texas.²⁷

The Texas Water Rights Commission tentatively approved a proposal for Dallas and Denton's control of the reservoir on May 18, 1976, deferring action until the formal order could be drawn up. John Goldsum, Frisco's attorney, asserted small North Texas communities would "die on the vine" without water from the reservoir. Frisco, Gainesville, and two utility districts protested Dallas and Denton's exclusive control of the water at a June 22 hearing before the TWRC. Goldsum argued that without access to Aubrey Reservoir, the three thousand person town of Frisco would be without water by

²⁶Inflation had definitely taken its toll on the Aubrey Project, which had been estimated to cost \$34 million in 1969. "Compromise near in Dallas-suburbs water dispute," Dallas Morning News, 19 March 1976, 13A.

²⁷"Gainesville Fails in Effort to Gain Lake Aubrey Water," Dallas Morning News, 25 April 1976, 12B.

the year 2000. The town had suffered a water crisis in 1974, when the water supply came close to running dry and firemen did not have an adequate supply to do their job. Frisco officials arranged to receive water from McKinney, which ended the water crisis, but they said it still was inadequate for the future. The town wanted eight million gallons a day from the proposed reservoir.²⁸

The day after the TWRC's decision, the mayor of Frisco, H.P. Bacchus, declared the city would fight to the highest courts in the land to force Dallas to supply suburban cities with water or get out of the way so the smaller towns could plan their own water supplies. Frisco was not even a water customer of Dallas, having been refused a contract from Garza-Little Elm Reservoir in 1974. The combination of this previous rejection with the TWRC rejection of Frisco's request for eight million gallons a day on May 18 made Frisco administrators agitated enough to take action. Mayor Bacchus claimed Frisco would be without water in five years unless a new water supply could be accessed. Otherwise the city would stagnate, and growth would end. To further its claims, the town filed a suit over the Aubrey water permit.²⁹

For months Joe Carter, chairman of the Texas Water Rights Commission had insisted that Dallas must agree to supply the suburban towns with water. Eventually, in May 1976, the commission wore down and tentatively gave Dallas and Denton the water division permit for the Aubrey Reservoir Project without a Dallas guarantee to supply its suburban towns with water. The permit allowed Dallas to impound and divert 591,704

²⁸ "Aubrey Reservoir termed vital to small area towns," Dallas Times Herald, June 7, 1976, Dallas Public Library Clippings Files.

²⁹ "Frisco plans to fight for water," Dallas Morning News, 20 May 1976, 38A.

acre-feet from Aubrey Reservoir and 131,424 from Lewisville Lake. Denton received permission to impound and divert 207,896 acre-feet from Aubrey Reservoir and 46,176 from Lewisville Lake. James Wilson, a special water attorney for Dallas, cautioned the participants not to revel in their victory. He warned that Dallas might still drop out of the project. If two factors reached an amiable resolution, the project could continue. The ongoing rate dispute still before the TWRC needed to reach a satisfactory end, and the City Council of Dallas needed to lift a moratorium on further water development. The second factor hinged on the council's decision as to whether or not Dallas would continue supplying water to satellite cities. To the chagrin of Denton, Wilson said, "It cannot be assumed that Dallas would enter a contract with the Corps of Engineers immediately or at all."³⁰

The TWRC confirmed the tentative permit in June, giving Dallas and Denton all of the nearly 1 million acre-feet of water in the Aubrey Reservoir and the expansion of Lewisville Lake. The three-person commission split over the decision, however. The dissenter, Dorsey B. Hardeman, said the permit gave Denton and Dallas a virtual monopoly on North Texas water and did not protect the interests of smaller cities. The commission's other members, Joe Carter, and Joe R. Carroll disagreed, believing the permit operated with the reasonable assumption that Dallas and Denton would sell water to surrounding towns. Hardeman argued that an assumption was far from a satisfactory arrangement. The water rates dispute embroiling Dallas and the satellites, along with the

³⁰"Reservoir project tentatively OK'd," Dallas Morning News, 19 May 1976, 8A.

Dallas moratorium on water projects still held the fate of Aubrey Reservoir in the balance.³¹

Amidst the continued delay of the Aubrey Reservoir project, Denton and Dallas clashed over water rights to Lake Lewisville in 1977. After two years of adjudication hearings, the Texas Water Commission handed down a compromise. Denton and Dallas, facing ever increasing strains on their water supplies and frustrated over the continued hold up of the Aubrey Reservoir project, entered into a study to investigate the feasibility of funding the Aubrey Reservoir as a local project rather than as an Army Corps of Engineers project. Denton's water requirements had reached a peak of 16 million gallons per day in 1978. With only 4.5 million gallons of its own water available in Lake Lewisville, Denton had to purchase over 11 million gallons per day. Unknown at the time, relief for the two cities loomed in the near future.³²

On July 5, 1979, the Texas Supreme Court removed one of the obstacles barring continuation of the Aubrey Reservoir project by dismissing Frisco's suit over the Denton-Dallas water permit. Two major deterrents remained. First, the continuing feud between Dallas and its customer cities over water rights needed to be resolved. Second, Denton and Dallas needed to agree upon project contracts with the Corps of Engineers. Dallas refused to take action on the contracts until the first obstacle disappeared.³³

³¹"Dallas, Denton get reservoir water," Dallas Morning News, 29 June 1976, 11A.

³² Newspaper clippings from the Denton Record-Chronicle, June 3, 1979 and June 6, 1979, Roberts Papers, Box 199, File 18.

³³ George R. Schrader, City Manager of Dallas, to Ray Roberts, July 23, 1979, Roberts Papers, Box 199, File 18.

As the Aubrey Reservoir delays dragged on in tedious fashion, a steadfast supporter of the Trinity Project and the reservoir, Congressman Ray Roberts, planned to delay announcement of his retirement until Dallas and the customer cities arranged a settlement. He had served in Congress and promoted Trinity improvement since 1962. Project boosters still expressed hope and optimism that the plan would quickly become reality. As Roberts and his Trinity development boosters had hoped, by the end of the year Dallas and the customer cities reached an agreement to resolve the water rate controversy.³⁴

Just as things began looking pleasant for the Aubrey Project and Dallas and Denton readied to savor its long awaited water, another long delayed project, Lakeview, came on line in 1979. Congress authorized the Corps to build the reservoir's dam on Mountain Creek. During 1973, Congress authorized funds to reassess the plan and consider alternatives for reducing the project's size and scope. Congress provided construction funding in 1975, and finally in September 1977 land acquisition started. In 1977, the Trinity River Authority contracted for the conservation storage to distribute the water supply. The Fort Worth District initiated construction of reservoir in March 1979, and finished the project during 1986. The lake had a total controlled storage of 304,000 acre-feet, which provided flood control and water conservation. The estimated cost of the project came to \$226,890,000 with estimated annual benefits of \$213 million. During

³⁴ Note typed on July 30, 1979, by a Ray Roberts' aide on the letter from George R. Schrader, City Manager of Dallas, to Ray Roberts, July 23, 1979; Resolution by the Dallas Chamber of Commerce's Board of Directors, January 18, 1980, Roberts Papers, Box 199, File 18; Paul M. West, City Manager of Farmers Branch, to Ray Roberts,

the heavy flooding of 1990, the lake provided an estimated \$91.6 million in flood control benefits. By December 1993, the lake, named after Joe Pool in honor of a member of the Texas legislature who had played a significant role in passing the Trinity River Authority Bill in 1955, had provided \$403,693,200 in cumulative flood control benefits.³⁵

The Aubrey Project also reached a construction start after Denton and Dallas finalized the terms with the Corps of Engineers. On January 22, 1980, the Denton City Council resolved to authorize the mayor to execute the contracts with the Corps of Engineers for construction of the Aubrey Reservoir. The Council also resolved to petition Congress for the re-naming of the Aubrey Reservoir project in honor of Roberts. By the summer of 1980, Dallas took similar action to proceed. When Clifford Alexander, Jr., secretary of the army, signed the final contracts approving construction in September 1980, the long struggle over the Aubrey Reservoir project ended. The Corps of Engineers immediately jumped into activity to purchase land and begin construction by the end of the next year. President Jimmy Carter signed House Resolution 8024 on October 6, 1980, making the Aubrey Reservoir project's name Ray Roberts Lake. When the Corps of Engineers completed construction in 1987, Denton and Dallas had yet another significant source for water supply, flood control, and recreation.³⁶

August 17, 1979; George R. Schrader, City Manager of Dallas, to Ray Roberts, July 23, 1979, Roberts Papers, Box 199, File 17.

³⁵United States Army Corps of Engineers, Water Resources Development in Texas 1995, 85.

³⁶Chris Hartung, City Manager of Denton, to Ray Roberts, January 25, 1980, Roberts Papers, Box 199, File 17; Robert S. Folsom, Mayor of Dallas, to Ray Roberts, April 29, 1980; Announcement issued by Colonel Donald J. Paladino, Fort Worth District Engineer, on September 22, 1980; Point Signal (Pilot Point, Texas), September

The Corps built the Aubrey Project at river mile sixty on the Elm Fork, approximately 30 miles upstream from the Lewisville Dam. The finished project provided 260,800 acre-feet for flood control storage and 749,200 acre-feet for water conservation. Costing an estimated \$312.7 million, the lake provided an estimated \$2,039,329,100 in flood control benefits by 1993. In 1991, Denton completed a hydro-electric generating plant downstream of Ray Roberts Dam. Power from the plant went online on July 21, 1991.³⁷

The frustrations involved with the Ray Roberts (Aubrey) and Joe Pool (Lakeview) Lakes were matched by the frustrations caused by other aspects of the Trinity Project. The biggest difference, however, had been that the reservoir fights ended in success. The Trinity River Authority bond election of 1973 might have signaled the death blow to the Trinity Project in the minds of many observers, but it did not end the process of seeking funds for it or the determination of the TRA, TIA, and their political allies. Supporters rallied and reinforced themselves with the belief that they could succeed at another date, possibly in another way. So the yearly process of political lobbying and requesting appropriations for all items associated with the comprehensive plan continued. Each year that they argued the benefits of the reservoirs, they also struggled on behalf of the Wallisville Project, Tennessee Colony Reservoir project, the canal, and other Trinity

18, 1980, A1, Roberts Papers, Box 199, File 17; Paula Sue Norris, "A Survey of Landowner Attitudes Toward the Construction of Lake Ray Roberts" (master's thesis, University of North Texas, August 1991), 1.

³⁷United States Army Corps of Engineers, Water Resources Development in Texas 1995, 88.

Project facets. Despite the blow inflicted by disgruntled and tax weary Texans, the Trinitarians continued to travel each year to Capitol Hill to request funding.³⁸

After many years of delay, the advocates of water resources improvement had gained success by the 1980s in the realm of water supply. The canal part of the project did not result in such a happy ending. From the 1970s onward, the Trinity development supporters were matched in their resilience by their opponents, who kept a careful eye on their activities, lest they try to sneak the Trinity Project's navigation friendly elements by the people. Adversaries such as Ned Fritz believed that navigation proponents would try to bring back their plan for barges on a reconstructed Trinity River. Wright and his fellow Trinity basin congressmen, as they worked to promote improvement goals for water supply and flood control, did indeed continue to seek funding in Congress to keep the Trinity canal afloat. Ultimately, this effort was a matter of a dream dying hard. The canal advocates held a steadfast belief in the project, but time weighed heavily against the concept of Trinity navigation. Even TRA General Manager David Brune conceded in 1975 that, although the TRA was not surrendering its hopes for the canal, the agency would no longer put "any priority on it." The state agency found itself busy enough working for water quality and supply. Despite the mistrust of Fritz and the wary environmental and economic critics, a decision made by the Corps of Engineers, for all intrinsic purposes, sealed the canal's fate. In June 1979, information from a report being prepared by the Corps of Engineers filtered out to the press, and to the dismay of the remaining canal advocates it offered an unfavorable critique of Trinity navigation above

³⁸ Lowell Duncan, executive director of TIA, to Jim Wright, August 28, 1973,

Liberty. The actual report, released in 1981, confirmed the leak by stating that at the time the canal idea could not be justified economically. As historian Jackie McElhaney wrote in a collection of historical pieces on Dallas history, the "vision of a water highway to the Gulf died with a whimper." Dreams of a navigable Trinity River dissipated and retreated into the foggiest extents of the region's historical consciousness, having survived for over a century and buoyed by the persistent and optimistic activities of North Texas leaders. The dreams of the canal, dreams that had outlived their practicality, dreams made irrelevant by the very growth that came without a canal, were replaced by new dreams.³⁹

North Central Texas represented the largest urban metropolitan area located on an inland waterway by the end of the twentieth century. Its population of 4.5 million exceeded the populations of thirty states. Though some rural communities managed to survive with ground water supplies, the impounded water of the reservoirs that had been constructed since the beginning of the 1900s provided a significant water source for the Dallas/Fort Worth Metroplex cities. Without them, the region's dense population could not be sustained.⁴⁰

The city of Denton, with an estimated population of 69,875, was in the fastest growing county in the state according to the 1990 census. City officials anticipated that

Wright Collection, RC Box 205.

³⁹ Edward C. Fritz, interview with Dr. J.B. Smallwood, February 7, 1983, University of North Texas Oral History Collection, Denton, Texas, 13; Dallas Times Herald, 1 August 1975; Jackie McElhaney, "Navigating the Trinity," in Michael Hazel, editor, Dallas Reconsidered, 57.

⁴⁰ North Central Texas Council of Governments Home Page, Trinity River Information Network, Development of the COMMON VISION, <http://www.nctcog.dst.tx.gov/trin/common/develop.html>.

the water rights secured by the city for 24.6 million gallons per day from Lewisville and Ray Roberts Lakes would be sufficient to carry Denton far into the twenty-first century.⁴¹

All of Dallas's water supply came from above ground sources. By 1998, Dallas held water rights to Ray Hubbard Lake, Lewisville Lake, Grapevine Lake, Ray Roberts Lake, and Lake Tawakoni. Having learned from past water shortages to be forward thinking on water resource issues, Dallas also planned to use Lake Fork and Lake Palestine as auxiliary water supply sources when demand justified such action. The Dallas Water Utilities Department served its residents, along with providing water to twenty-six neighboring communities, a service area of 699 square miles and a population of approximately 1.7 million. Three treatment plants, East Side, Elm Fork, and Bachman, with a capacity of 815 million gallons per day, funneled water through 4,494 miles of water main. The EPA declared that Dallas provided some of the best drinking water in the states of Texas, Arkansas, Oklahoma, Louisiana, and New Mexico when in 1991 it awarded the Region 6 Environmental Excellence Award for Public Water Supply. Following usage, wastewater and sewage pumped to Dallas's two wastewater treatment plants, Central and Southside, where the water is processed and returned to the Trinity River much cleaner than the water removed from the river upstream in the city's five reservoir sources. As of 1997, the plants could treat up to 240 million gallons a day of wastewater.⁴²

⁴¹ City of Denton Home Page, Area Facts and Utilities, <http://www.iglobal.net/denton/utilities/water.html> and <http://www.iglobal.net/denton/facts/index.html>.

⁴² City of Dallas Home Page, Water Utilities, http://www.ci.dallas.tx.us/html/water_utilities.html.

Once notorious for river pollution, Dallas now pointed with pride at its water treatment as water quality concerns received the much-needed attention that had been previously relegated to a position of lesser significance. Despite vast improvements by the Trinity River Authority and various municipalities in the late 1960s and 1970s, several major fish kills had occurred during rise events in the 1980s. The concerned agencies subsequently improved the scenario by implementing new wastewater treatments. Navigation had been all but forgotten, but, with thanks to the intense urban development in the upper basin, flood control returned as a central issue of concern.⁴³ Although Dallas voters had rejected bond issues in 1973 and 1978, a floodway expansion proposal reemerged in the 1990s.⁴⁴

By 1997, the City of Dallas contained 378.4 square miles of land and 45 square miles of lakes, a considerable jump from John Neely Bryan's cabin in 1841 by any standard of comparison. The North Central Texas Council of Governments estimated the city's population at 1,047,350, while 1,842,900 people had employment within the city's boundaries. Estimates projected a population of 2,145,000 by 2010. Major flooding had occurred in 1981, 1989, 1990, and 1992. Following the devastating rise of the

⁴³ North Central Texas Council of Governments Home Page, Trinity River Information Network, Development of the COMMON VISION, <http://www.nctcog.dst.tx.gov/trin/common/develop.html>.

⁴⁴ "Trinity Plan Is Awash In Mixed Views," Dallas Morning News, April 12, 1998, A, 1, 20, 21.

Mississippi River and its tributaries in 1993, Dallas leaders launched a new movement for investigating and planning to harness the Trinity.⁴⁵

In August 1994, the Dallas city council established the 400-member Trinity River Citizens Committee (TRCC). Within five months, the committee and a Dallas Interdepartmental Team developed recommendations for improvements valued at \$7.3 million, which the city council approved. American Rivers, a river conservation organization, awarded the TRCC with the Urban River Restoration Award for Grassroots Activism in 1996. In the spirit of John Carpenter, Amon Carter, and the legion of allies who had worked for decades on behalf of Trinity improvement, the city's new mayor, Ron Kirk, established the Trinity River Corridor Project as his top priority. Kirk claimed that the top five priorities for the City of Dallas were, "Trinity River, Trinity River, Trinity River, Trinity River, and Trinity River." He foresaw an achievement surpassing San Antonio's "dinky little river walk." He wanted the city to do something, "big, bold and magnificent." If the vision of development succeeded, Kirk asserted, the river

⁴⁵ City of Dallas Home Page, http://webster.ci.dallas.tx.us/html/statistical_profile.html; North Central Texas Council of Governments Home Page, Trinity River Information Network, Reflections On the Trinity, a quarterly report on the pursuit of a COMMON VISION for the Trinity River of North Central Texas, <http://www.nctcog.dst.tx.us/envir/trin/feasible.html>; North Central Texas Council of Governments Home Page, Trinity River Information Network, Development of the COMMON VISION, <http://www.nctcog.dst.tx.us/trin/common/develop.html>; University of North Texas Institute of Applied Sciences Watershed Projects Web Page, Elm Fork Hydrology, <http://www.ias.unt.edu/elmshed/hydro/hydrointro/html>.

improvements “could be the greatest legacy we leave for our children.” Dallas began its study during January 1996.⁴⁶

The city of Dallas repackaged the project into Proposition 11, otherwise known as the Trinity River Corridor Project. It consisted of interdependent projects, namely, the Dallas Floodway Extension, the Elm Fork Levee Project, the Trinity River Corridor Transportation Improvements, the Great Trinity Forest, and a chain of lakes within the Dallas Floodway. The bond issue would cover Dallas’s \$246 million part of the \$1.2 billion cost. The restructured package included the four components of flood control, transportation, recreational lakes, and the Great Trinity Forest Park. Dallas Mayor Ron Kirk, leader of the project backers, said that the river project was the city’s last hope to turn the Trinity River, long considered a negative part of the city, into a positive asset. As Jim Wright and the throngs of Trinity improvement supporters had always argued, Kirk characterized the project as an investment in the city’s future. He went so far as to claim the improved river and allied projects would have as big an economic impact as the D/FW Airport had made on North Texas.⁴⁷

Enduring problems prompted the city to propose the measures. The levees, originally constructed in the 1930s, and then expanded in the 1950s, had been constructed to protect downtown Dallas, West Dallas, and the Stemmons corridor from a standard-

⁴⁶ North Central Texas Council of Governments Home Page, Trinity River Information Network, Development of the COMMON VISION, <http://www.nctcog.dst.tx.us/envir/trin/common/common.html>.

⁴⁷ City of Dallas Home Page, http://www.ci.dallas.tx.us/pwt/bond/Prop7_11.htm; “Trinity Plan Is Awash In Mixed Views,” Dallas Morning News, April 12, 1998, A, 1, 20, 21.

project flood, events with a probability of occurring every 800 years. By 1998, upstream construction, which resulted in more water runoff into the river had resulted in a drop from standard-project flood protection to the 300-year-frequency level. If a flood exceeding that level of protection occurred, proponents of the plan declared that thousands of lives and over \$13 billion in property would be exposed. The existing levees had also disregarded the Cadillac Heights neighborhood and the Lamar Street commercial areas of southern Dallas. The transportation measures would attempt to alleviate downtown Dallas traffic jams that chafed motorists, delayed travel to work, and polluted the air. Dallas freeway conditions ranked among the ten worst in the United States. With the 1998 Trinity Project proposals contained in Proposition 11, city officials hoped to rectify these issues. As with previous development plans associated with the river, the plan would encounter staunch criticism and opposition.⁴⁸

The Dallas Floodway Extension and the Elm Fork Levee were joint projects of Dallas and the Corps of Engineers, heralding back to the Rivers and Harbors Act of 1965. The extension plans called for a 1,400 acre chain of wetlands along with twenty to twenty-one foot levees along Lamar Street and Cadillac Heights. The proposed levees would connect to existing levees from the 1930s and 1950s. It would also realign the river channel to protect the bridge structure at IH-45. The city's cost for the extension was \$24,700,000. The Elm Fork Levee, at a cost to the city of \$30,000,000, called for a six mile levee ranging from fifteen to eighteen feet in height. The project would provide

⁴⁸"Trinity Plan Is Awash In Mixed Views," Dallas Morning News, April 12, 1998, A, 21.

protection to the Stemmons North Industrial District and 600 structures. The value of the property protected by the Elm Fork plans exceeded \$700 million.⁴⁹

Since the last levee system expansion in the 1950s, the city of Dallas had grown in population by half a million, while the region had increased by over three million. These developments had undermined the original effectiveness of the flood control measures. The flood control component included the six mile Elm Fork levee extension, 5.3 miles of southern Dallas levees to provide protection for the vulnerable Cadillac Heights and Lamar Street residential areas, and a 4.5 mile and 1,400 acre chain of wetlands south of downtown. The city cost for the flood control measures totaled \$54.7 million, divided into \$24.7 million for the southern wetlands and levees and \$30 million for the Elm Fork levee. The federal government would contribute \$103 million for the wetlands and levees and \$30 million for the Elm Fork levee, if necessary. The southern Dallas levees could also rectify misdeeds from the city's past. Mayor Kirk, speaking along those lines, said, "We now have a chance to confront the more ugly blatant and racial elements of our past. . . . For a lot of people, this is a gut check for this city. . . ." He also proposed that if the bond issue failed, it would be "one more piece of evidence for those people who believe that Dallas doesn't really doesn't care about poor people, black people, and Hispanics. That we really aren't interested in ever seeing any real social economic progress come to South Dallas, Cadillac Heights and West Dallas. . . . And a lot of the positive progress we've made is going to come to a screeching halt."⁵⁰

⁴⁹ City of Dallas Home Page, http://www.ci.dallas.tx.us/pwt/bond/Prop7_11.htm.

⁵⁰"Trinity Plan Is Awash In Mixed Views," Dallas Morning News, April 12, 1998, A, 20, 21.

Proponents of the project, summed up their reasons for the plan succinctly. They believed each component would contribute to a better, more attractive Dallas. The measures would expand and upgrade the city's flood protection, provide recreation, alleviate traffic bottlenecks, and preserve and increase access to the overlooked urban forest. If approved, argued supporters, each measure would improve the city's economic well being and quality of life. Yet, despite the straightforward and confident assertions of project backers, critics raised reasonable doubts.⁵¹

The NAACP and the League of Women Voters of Dallas announced their opposition to the plan in April, 1998. The league had issued its own set of goals for the river in 1995, calling for relocation of residents from the flood plain, preservation, and making parks more accessible. The league felt the project contained in Proposition 11 worked against these goals. The group called for nonstructural flood control instead of the traditional levee option. It also questioned whether or not the open space and recreation plans were realistic. Mayor Kirk chastised the group for its shortsighted and disruptive intrusion into the debate. Maintaining his optimistic public persona, Kirk disregarded the opposition of the two civic groups, and claimed broad support for the plan.⁵²

Ned Fritz, founder of the Texas Committee on Natural Resources, was again among the opponents to a Dallas development project, and warned against accepting the development movement's propaganda. "Don't fall for this babble about making the

⁵¹ Ibid.

⁵² "League of Women Voters opposes Trinity plan," Dallas Morning News, April 14, 1998, 14A.

Trinity River our front yard. Who wants a front yard with toll roads four lanes wide running through it?" Following an article detailing the pros and cons of the project in the April 12, 1998 issue of the Dallas Morning News, Fritz chided the paper in a letter to the editor. In his opinion, the article failed to clarify two points that he found key. The Trinity River Corridor Citizens Committee's 1995 recommendations preferred the nonstructural, or voluntary buyout, approach, an opinion Fritz had long espoused. It was also a "truly voluntary" option for landowners. This approach would cost an estimated \$60 million in city and federal funds, as opposed to "the \$130 million cost of a swale and additional levees." Fritz also stressed that the voluntary buyout method was the "modern way to go, as in California, Tulsa [Oklahoma] and several cities in Texas (e.g., Arlington), and as written in Challenge 21, by the Army Corps of Engineers." Fritz added that construction contractors and paid politicians, "water hustlers" as he elsewhere called them, obviously preferred the "backward approach" of swales, levees and other flood plain construction. He laid the blame for this perversion and rejection of modern trends on Mayor Ron Kirk. Kirk, Fritz claimed, had prevented the Corps from fully assessing the nonstructural approach's benefits. In closing, Fritz argued that the nonstructural method was a "more permanent solution" to flood problems, "because levees are overtopped in floods that rise higher than the Army Corps predicts, and swales sooner or later break through to the river, wiping out everything in between." Thus, Fritz ended his letter with an ominous prophecy of doom if Dallas foolhardily rushed to approve Proposition 11 on May 2.⁵³

⁵³ "Trinity Plan Is Awash In Mixed Views," Dallas Morning News, April 12,

David B. Gray, chairman of the Texas Committee on Natural Resources and the Save the Trinity group, called the Trinity River bond proposal a “boondoggle,” a useless and wasteful project. Only politicians, land speculators, developers, and contractors stood to gain from the project’s implementation. He summarized his organizations’ opposition succinctly. The project would, “Increase potential for a disastrous flood; build costly, dangerous, polluting toll roads inside the levees; harm neighborhoods; hurt the environment.” He also pointed out that the Corps of Engineers report that would reveal whether the plans met federal requirements would not be released until after the May 2 election, leaving the city with “a big, blank check.” He urged abandonment of the current proposal and a return to the TRCC’s earlier proposal for “a fair, voluntary, relocation program to move people and business out of the flood plain and allow the river to flood safely and naturally. Raising the protection of existing levees needs to be included as well.”⁵⁴

Barry R. Knight, president of the Greater Dallas Planning Council, countered the opposition’s stance. The council had actively participated in the planning process, which Knight described as “an orderly, effective process.” He declared that the input of everyone within the corridor had been encouraged and welcome. “An overwhelming majority of the participants in these studies,” he continued, “enthusiastically support the final bond package.” If approved, he argued, the thoroughfare improvements alone

1998, 20A; Edward C. Fritz, “Two Points Missing,” letter to the editor, Dallas Morning News, April 19, 1998, 3J.

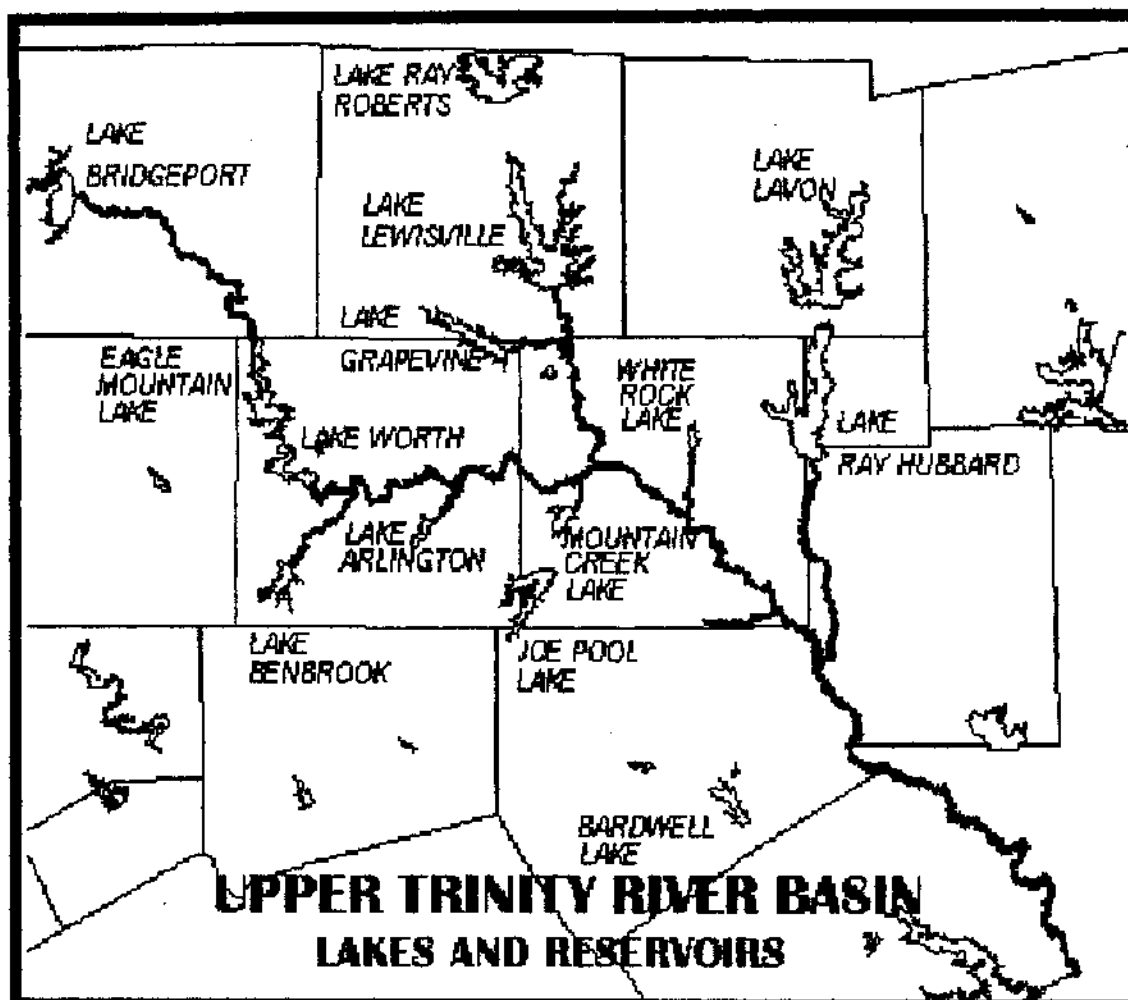
⁵⁴ David B. Gray, Chairman, Save the Trinity, Chairman, Texas Committee on Natural Resources, March 27, 1998, Viewpoint, from the Save the Trinity Web Page, http://www.savethetrinity.com/position_papers.htm.

would result in an estimated \$10 billion economic impact over the next fifteen years. Only time would tell as to whether the floodway improvements would fail for the third time in twenty-five years.⁵⁵

When the sun set on May 2, 1998, and the ballots were counted, Dallas had finally accepted one of the only surviving parts of the Trinity improvement advocates legacy. The hard-nosed, intelligent, well-researched opposition of the economic-environmental coalition that had repeatedly won against development since the 1970s did not work. An intense publicity campaign carried out along lines that had been followed for decades, promising a bright and positive future along the waters of an improved Trinity River and a vibrant economy had been persuasive enough to win approval with a slim majority. As in the 1973 bond election, the 1998 vote had been hotly contested. The opponents could find solace, however, in the successful impact they had made for two decades on federal, state, and local policy. No longer could their arguments be shuffled off to the side as environmental extremism. By the same token, the remaining Trinity improvement warriors, though their dream of a canal had faded into a humorous anecdote for many, could find solace in the positive impact they had made upon the growth of North Texas. Disputes remained over policy and implementation of growth oriented projects, but the factors that insured urban survival in an unreliable climate and dry landscape could not be discounted. Born with a dream of creating an inland port, Trinity improvement had succeeded in reshaping the landscape to give generations of Texans an opportunity to partake of the indispensable water to sustain life, cleaner water amidst urban and

⁵⁵ Barry R. Knight, "Important to our city's future," letter to the editor, Dallas

industrial pollution, and outlets for recreational pastimes to relieve the constriction of metropolitan existence.



Map 2: Upper Trinity River Basin Lakes and Reservoirs
(Adapted from North Central Texas Council of Governments map)

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