

PRESERVING GROUNDWATER RIGHTS FOR YOUR BENEFICIARIES IN THE FACE OF THE TEXAS WATER CRISIS WITH THE PRIVATE WATER TRUST

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I. INTRODUCTION

The impact water rights holders have had on the local environment in American legal history has been largely ignored.¹ It was not until the

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 1. See Richard Ausness, *Water Rights, the Public Trust Doctrine, and the Protection of In-stream Uses*, 1986 U. ILL. L. REV. 407 (1986).

twentieth century that courts acknowledged the key role environmentalism plays in the adjudication of water rights.² In its 1973 Report to the President and Congress, the U.S. National Water Commission determined that sufficient water must be made available to meet a broad range of environmental, recreational, ecological, and aesthetic needs.³ Today, the ecological health of water systems is a key element in the legal framework for water rights.⁴

Technological innovations in water use efficacy, such as drip irrigation, have not kept pace with groundwater depletion.⁵ In response, the legal community introduced the public water trust.⁶ A public water trust is a legal instrument that attempts to preserve water by encouraging the general public to donate funds for water resource development.⁷ The public water trust also promotes acquiring water rights from private entities to hold in trusts for the benefit of the environment (and in theory, for the benefit of the public good).⁸

The State of Texas established the Texas Water Bank Trust (Trust) in 1993, encouraging private entities to donate their water rights to the Texas Commission on Environmental Quality (TCEQ) for the benefit of the public.⁹ Unsurprisingly, private actors have been reluctant to entrust their property rights to the state.¹⁰ This uniquely Texan reticence—and Texas' application of the Rule of Capture to groundwater—has rendered the Trust largely ineffective.¹¹

This setback, however, can provide the Texas estate planning community with an opportunity to accomplish the Trust's stated goals.¹² With a private groundwater trust, estate planners are able create an instrument that preserves groundwater rights for their client's beneficiaries, while simultaneously fulfilling the state's mission to preserve the environment for future generations.¹³

The goal of this comment is to outline a brief history of water trusts in the United States and to provide guidance for estate planners interested in creating private groundwater trusts for their clients.¹⁴ Part I gives a general

2. *See id.*

3. *See id.*

4. *See id.*

5. *See* Jessica Harder, *Water Trusts: Problems and Possibilities for Western Water Markets*, UNIV. LINCOLN-NEB. (Apr. 6, 2006), <https://water.unl.edu/documents/WaterTrustPaper.pdf> [perma.cc/6G3S-WFYW].

6. *See id.* at 2.

7. *Id.* at 3.

8. *See id.*

9. TEX. WATER DEV. BD., <http://www.twdb.texas.gov/waterplanning/waterbank/index.asp> [perma.cc/XRG6-T43T] (last visited Feb. 2, 2019).

10. *See infra* Part II.D.2.

11. *See infra* Part IV.A.

12. *See infra* Part V.

13. *See id.*

14. *See infra* Part I.

understanding of the problems facing Texan groundwater users.¹⁵ Part II highlights a brief history of the public water trust in the United States, focusing on the problems which these trusts seek to resolve, as well as their inadequacies and innovations.¹⁶ Part III focuses on the Texas Legislature's attempt to use the water trust to protect state water resources.¹⁷ Finally, Part IV uses the lessons learned from the public water trust and the best practices of private land trust formation to create a legal strategy for the formation of a private groundwater trust.¹⁸

II. GROUNDWATER AND THE TEXAS WATER CRISIS

A. *Decades of Texas Drought and the Ogallala Aquifer*

Although much has been done to lessen the environmental impact of water consumption, nearly all water systems in the United States are overburdened.¹⁹ Water scarcity is a prevailing concern in the Midwest United States.²⁰ The arid climate and inadequate access to surface water has led to the concept of “first in time, first in right” (also called “prior appropriation”) laws.²¹ This doctrine holds that the first water use in time has superior rights to all subsequent water uses.²² Consequently, those who hold senior water rights could be the only users with access to water during dry years.²³ Groundwater is crucial for the survival of communities in over-appropriated regions and decades of prolonged drought has put this essential resource in jeopardy.²⁴

The hydrological cycle in Texas—the continuous, cyclical interplay between precipitation and evaporation—is a dynamic that is highly susceptible to periodic drought.²⁵ Drought occurs when a geographical area receives less than normal precipitation over a given period of time, causing depletion of surface and groundwater resources.²⁶ Surface water and groundwater resources affected by droughts are dependent on prolonged wet seasons to recharge to normal levels.²⁷ Often, the severity of a drought is

15. See *infra* Part I.

16. See *infra* Part II.

17. See *infra* Part III.

18. See *infra* Part IV.

19. See *infra* Part I.

20. See *infra* Part I.

21. See Reed D. Benson, *Alive but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law*, 83 U. COLO. L. REV. 675, 680 (2012).

22. 62 CAL. JUR. 3d WATER § 334.

23. See *id.*

24. See Mark McPherson, *Water Use and Water Law in Texas from an Oil and Gas Perspective*, 44 TEX. TECH L. REV. 939, 960–63 (2011–2012).

25. See *id.* at 960.

26. See *id.* at 960–61.

27. See *id.* at 961.

understood as either short-term or long-term.²⁸ Over the past several decades, Texas has experienced a series of prolonged droughts.²⁹

Fortunately, meteorologists can predict long-term and short-term droughts, even before they are expected to occur.³⁰ Meteorologists at the National Aeronautics and Space Agency (NASA) launched the Gravity Recovery and Climate Experiment (GRACE) satellites in an attempt to create detailed measurements of Earth's gravitational field and to predict weather patterns.³¹ In 2002, the GRACE-based Shallow Groundwater Drought Indicator showed groundwater levels to be to the lowest observed in more than 63 years.³² Beginning November 28, 2011 and extending into the summer of 2012, the GRACE mission monitored the most severe drought in recorded Texas history.³³ The drought was responsible for agricultural and livestock losses of an estimated \$5.2 billion.³⁴ Nearly a decade later, the GRACE satellites show only a minor improvement to the levels of groundwater in 2019, and even regression in certain areas.³⁵

The Texas Panhandle is one of the regions hit hardest by droughts.³⁶ Consequently, the Ogallala Aquifer, which supplies virtually all water for the High Plains region in Texas, is severely depleted.³⁷ The Ogallala Aquifer, also known as the High Plains aquifer, is essential to American agriculture.³⁸ The aquifer is responsible for one-sixth of the world's grain production and accounts for nearly one-third of all irrigation in the United States.³⁹ Even in times between droughts, the Ogallala aquifer recharges at a slower rate than water is withdrawn.⁴⁰

The Ogallala is not only a major supply of water for Texas, but also for eight different states in the High Plains region.⁴¹ The aquifer is responsible for most, if not all, of the water apportioned to residential, industrial, and agricultural uses.⁴² In fact, farming accounts for 94% of groundwater usage in this area.⁴³ The immense strain placed on the aquifer by agriculture,

28. *See id.*

29. *See infra* Part I.

30. McPherson, *supra* note 24, at 961.

31. *Id.*

32. *Id.*

33. *Id.*

34. *Id.*

35. GRACE-Based Shallow Groundwater Drought, NASA GRACE (Sept. 16, 2019), https://nasagrace.unl.edu/data/20190916/GRACE_GWS_20190916.pdf [perma.cc/TP95-6KGY].

36. *See id.*

37. Jeremy Frankel, *Crisis on the High Plains: The Loss of America's Largest Aquifer – the Ogallala*, UNIV. OF DENVER WATER L. REV. (May 17, 2018), <http://duwaterlawreview.com/crisis-on-the-high-plains-the-loss-of-americas-largest-aquifer-the-ogallala/> [perma.cc/Y5FC-CWAK].

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

43. *Id.*

related industries, and the inability of the aquifer to recharge, is unsustainable.⁴⁴ Entire human and wildlife populations are directly threatened by this unsustainable pace.⁴⁵

Additionally, alternate water sources in the area are primarily located in Texas, making access even more difficult for neighboring states.⁴⁶ Texas is unique due to its application of the Rule of Capture to groundwater rights, putting it at odds with the laws of surrounding states.⁴⁷ This distinction poses specific problems for preserving the Ogallala Aquifer.⁴⁸

All states in the High Plains region have legislative authority to manage the use of Ogallala waters, yet some states are less likely to exercise those powers.⁴⁹ Kansas makes use of Intensive Groundwater Use Control Areas during times of drought, cutting water applications for farmers and closing applications for new water uses.⁵⁰ However, Kansas authorities have used this solution only a handful of times in the past few decades, opting instead to allow irrigators to produce their own solutions in the form of Local Enhanced Management Area(s) (LEMA(s)).⁵¹ A LEMA allows a group of irrigators to implement custom groundwater conservation plans which, once approved by the state, become legally binding.⁵² Unfortunately, only a single group of irrigators has opted to submit plans to the Kansas legislature.⁵³

In contrast, Nebraska has taken a stricter hands-on approach.⁵⁴ The Nebraska Ground Water Management and Protection Act allows Nebraska to limit water allocation to irrigators and adopt systems designed to alleviate groundwater depletion, such as “rotating water permits,” which allows irrigators to share water permits throughout the season.⁵⁵ Nebraska also implemented a system comparable to Kansas, which gives farmers more control upon water-usage plan submissions that reduce the use of aquifer water.⁵⁶ However, unlike Kansas, if the Nebraska farmers desire autonomy, the plans are mandatory.⁵⁷ This more restrictive stance has resulted in a slower depletion of the Ogallala Aquifer than in most of the other High Plains states.⁵⁸

44. *Id.*

45. *Id.*

46. *Id.*

47. *Id.*

48. *Id.*

49. *Id.*

50. *Id.*

51. *Id.*

52. *Id.*

53. *Id.*

54. *Id.*

55. *Id.*

56. *Id.*

57. *Id.*

58. *Id.*

The variation in aquifer management between the High Plains states has done little to reduce aquifer depletion in the face of drought.⁵⁹ Other prior appropriation states, including Texas, have looked to the public water trust as another legal solution to this problem.⁶⁰

III. THE ADVENT OF THE PUBLIC WATER TRUST

Historically, a water trust is a private or public organization intended to preserve water usage for wildlife and the public good by obtaining water rights through donations and purchases from landowners.⁶¹ Applying land trust principles, the goal of these organizations is to purchase and encourage the donation of environmentally sensitive water resources to remove the water from the private market indefinitely.⁶² For the purposes of this comment, the public water trust refers to both state-mandated and non-profit water trusts designed for wildlife conservation and the public good.⁶³

Many water trusts are founded by private individuals, rather than mandated by the state.⁶⁴ However, the common theme of the water trust is the preservation of water for the public good.⁶⁵ Variations in state laws, as well as local attitudes toward water conservation, force each water trust to function in unique circumstances, thus requiring a variety of approaches to water rights acquisition for each regional trust.⁶⁶ The first US public water trust, the Oregon Water Trust, founded in 1993, continues to tackle these region specific issues with innovative techniques designed to balance the rights of private water users with the needs of the environment.⁶⁷

A. The Oregon Water Trust

The Oregon Water Trust (OWT), now known as The Freshwater Trust, was founded in 1993 by William Smith (president of a land management company), Geoff Pampush (the director of a wild fish environmental group), Ronald Nelson (manager of one of Oregon's largest irrigation districts), and Robert Hunter (an attorney known for in-stream flow activism).⁶⁸ Their goal was to test "market environmentalism" by taking the principles of the private

59. *Id.*

60. *Infra* Part III.

61. Harder, *supra* note 5, at 3.

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

67. *Id.*

68. Janet C. Neuman & Cheyenne Chapman, *Wading into the Water Market: The First Five Years of the Oregon Water Trust*, 14 J. ENVTL L. & LITIG. 135 n.1 (1999).

land trust and applying them to water.⁶⁹ Market environmentalism “uses the market rather than regulation or litigation” to protect the environment.⁷⁰ To accomplish this objective, the OTW purchased water rights from private entities and then converted them to in-stream water rights to enhance fish habitats.⁷¹ In just over five years, the OWT held fifty-one unique water rights on thirty-two streams around the state of Oregon.⁷²

The aims of the OWT were made possible through a piece of Oregon legislation that declared “public uses” to be beneficial use.⁷³ This statute established water rights for public in-stream uses and gave these rights the “same legal status as any other water right.”⁷⁴ An in-stream water right is “a water right held in trust by the Water Resources Department for the benefit of the people of the State of Oregon to maintain water in-stream for public use [without the need for] diversion or any other means of physical control over the water.”⁷⁵ Additionally, the statute provided that a private entity could “purchase or lease . . . or accept a gift of an existing water right or portion thereof for conversion to an in-stream water right.”⁷⁶ This allowed the OWT to convert private water rights to in-stream rights, ensuring that the water right maintained a senior priority date.⁷⁷ The statute allowed the OWT to use voluntary market transactions to effectuate water conservation.⁷⁸

The OWT decided to focus on acquiring water rights on a voluntary basis, rather than regulatory or other legal mechanisms, and would make use of legislative matters only as a last resort to accomplish its goals.⁷⁹ The trust targeted on river basins “where low flows caused by withdrawals for consumptive use were causing significant . . . ecological impacts, and where restoration of in-stream flows would produce the greatest ecological benefits.”⁸⁰ It was for this reason the trust decided to focus on small tributaries where investment in less substantial water rights would have a measurable impact on in-stream flows.⁸¹

To make the largest possible impact, the OWT avoided river basins entangled in legal proceedings, and concentrated on water rights that were identifiable, enforceable, and senior.⁸² The trust also screened for

69. *Id.* at 135–36.

70. *Id.*

71. *Id.* at 136.

72. *Id.*

73. *Id.* at 137.

74. *Id.*

75. OR. REV. STAT. § 537.332(3) (Westlaw, current through 2020 Regular Session of the 80th Legislature).

76. *Id.* § 537.348(1).

77. Neuman & Chapman, *supra* note 68, at 138.

78. *Id.* at 138–39.

79. *Id.* at 143–44.

80. *Id.* at 144.

81. *Id.*

82. *Id.*

the number and attitudes of water rights holders in a particular working area, the cost of water rights, the availability of funds, the ability to measure the effectiveness of any water acquired, and other governmental and non-governmental activities within a target area that might either support or undermine the trust's actions.⁸³

After weighing these criteria, the OWT designated a list of primary and secondary basins to focus its efforts.⁸⁴ The trust actively solicited the first group and conducted outreach in the second group.⁸⁵ In the primary basin, the trust acquired senior water rights through gift, purchase, and leasing.⁸⁶ The trust also sought water rights close to cancellation from abandonment or forfeiture, and offered financing for water conservation projects in exchange for dedication of a certain amount of water to in-stream flows.⁸⁷ Additionally, the OWT encouraged local water rights holders to use alternative water sources when possible and provided alternative sources of food for livestock to facilitate conversion of irrigation water to the in-stream flow.⁸⁸ In one instance, the trust agreed to purchase hay to feed a farmer's cattle in exchange for his water rights.⁸⁹

During the first few years of operation, the OWT obtained twenty-five unique water rights in the primary targeted basins.⁹⁰ By the end of the first five years, the trust portfolio contained "fifty-one water rights acquisitions, including eleven permanent in-stream water rights."⁹¹ The trust also assisted in funding efficiency improvements for local irrigators who encouraged farmers and ranchers to find ways to use less water in order to yield the same number of crops.⁹²

Along with the trust's successes came a number of problems.⁹³ The first challenge faced by the trust were difficulties in determining the value of water rights due to the lack of economic data.⁹⁴ Unlike states with long histories of active water rights trading, Oregon did not have an active water market until recently.⁹⁵ It was difficult for the OWT to determine the monetary worth of water for fish habitats.⁹⁶

83. *Id.*

84. *Id.* at 144–45.

85. *Id.*

86. *Id.* at 145.

87. *Id.*

88. *Id.* at 146.

89. *Id.* at 148.

90. *Id.* at 149.

91. *Id.*

92. *Id.* at 151.

93. *Id.* at 153.

94. *Id.*

95. *Id.*

96. *Id.* at 154.

To solve this problem, the trust decided to use a “farm crop budget analysis approach” to value water rights, which “involves determining the total crop revenue and adjusting this total by all the costs of production except irrigation water; the residual value is the maximum amount an irrigator will pay for water.”⁹⁷ Most importantly, this method accounted for “avoided costs of production,” which was a concern for the farmer or rancher.⁹⁸ Ultimately, when evaluating water right transactions, the trust used a price of \$330 per acre-foot as a guideline.⁹⁹ The trust found it was easier to determine dollar values from the farmer’s perspective than put a monetary value on the ecological benefits of conserving in-stream flow.¹⁰⁰

The valuations were based on benefits that were “qualitatively described, and hoped-for, rather than precisely predicted and quantitatively measured.”¹⁰¹ This meant the value guidelines are of little help when dealing with situations where it is necessary to remove diversion structures (*e.g.*, dams, culverts, ditches, etc.), where costs could be almost five times the average.¹⁰² In areas with hobby farms and rural residences, rather than commercial agriculture, the benefits to the landowners are more qualitative than quantitative.¹⁰³

Other issues the OWT continues to face include the scientific uncertainty of the impact of in-stream flow improvements,¹⁰⁴ the clash between private and public ownership of in-stream rights,¹⁰⁵ ongoing legal and policy changes in the state of Oregon,¹⁰⁶ and political and philosophical barriers.¹⁰⁷ The trust recommends that for any future public trust to succeed, the potential organization needs to bring together diverse interests to accomplish set goals.¹⁰⁸ In doing this, the trust also advocates building organizational strength early and establishing cooperative relationships with agencies and similar interest groups.¹⁰⁹ Most importantly, the OWT advises that any organization should “prepare for the long haul.”¹¹⁰ It argues that the political and cultural climate of water rights in each state spans centuries, and could take just as long to change attitudes toward ecological improvement.¹¹¹

97. *Id.*

98. *Id.*

99. *Id.* at 156.

100. *Id.* at 157–58.

101. *Id.* at 158.

102. *Id.* at 159.

103. *Id.*

104. *Id.* at 160–67.

105. *Id.* at 167–72.

106. *Id.* at 172–77.

107. *Id.* at 177–79.

108. *Id.* at 179.

109. *Id.*

110. *Id.*

111. *Id.* at 183.

The trials and successes of the OWT are a testament to how complex the management of a non-profit water trust is.¹¹² A public water trust must expend vast resources to acquire water rights and must do so strategically.¹¹³ Public water trusts must navigate legal, political, and social obstacles merely to remain competitive in the open market.¹¹⁴ Determining the most beneficial water rights to acquire is time consuming and fraught with complications.¹¹⁵ Furthermore, the need to acquire a diverse set of specialized skills and knowledge to operate a public water trust, the possibility of a long wait for political and cultural evolution, and the uncertainty of the impact of in-stream flow improvements, calls into question the efficacy of non-profit water trusts.¹¹⁶

Despite these impediments, the OWT reveals that the market has the potential to provide a solution to water scarcity.¹¹⁷ Additionally, many of the problems the OWT faces (along with other in-stream/surface water trusts), are issues which groundwater trusts rarely face, especially in states where the rule of capture determines the ownership of groundwater.¹¹⁸ A number of non-profit groundwater trusts have adopted lessons from the OWT and adapted them to serve the public good in their respective states.¹¹⁹

B. Non-Profit Public Groundwater Trusts

I. American Ground Water Trust

The American Ground Water Trust (AGWT) is a national organization dedicated to communicating the environmental and economic value of groundwater, while promoting efficient groundwater management, and highlighting groundwater science and technology solutions with the ultimate goal of increasing citizen awareness and further public participation in water resource decisions.¹²⁰ The trust acts as a think-tank instead of holding water rights.¹²¹ The donations to the AGWT are used to help further discussion and education rather than investing in groundwater resources.¹²² This method of preserving groundwater rights for future generations through education is an

112. *See supra* Part II.A.

113. *See supra* Part II.A.

114. *See supra* notes 97–99 and accompanying text.

115. *See supra* notes 85–95 and accompanying text.

116. *See supra* notes 96, 100, 102 and accompanying text.

117. *See supra* note 71 and accompanying text.

118. *See infra* note 285 and accompanying text.

119. *See infra* Part II.B.1.

120. AMERICAN GROUND WATER TRUST, <https://agwt.org/about> [perma.cc/7C7N-HRPH] (last visited Sept. 24, 2019).

121. *Id.*

122. *Id.*

important step to finding more specific solutions to preserving groundwater.¹²³

The American Ground Water Trust has published a number of papers to facilitate public education.¹²⁴ In *Competition for America's Ground Water Resources - the Public Perception*, Executive Director Andrew Stone details the competing pressures between traditional domestic or agricultural use and modern industrial and commercial access to groundwater.¹²⁵ According to Stone, decisions regarding priority to groundwater allocation, while based on legal, technological, and economic factors, are ultimately decided by political authority.¹²⁶ Domestic and irrigation demands for groundwater infrastructure development and improvement are ever increasing; Stone holds that the only way to successfully navigate this challenge is to educate the community at large.¹²⁷

Stone plans to educate the public by developing “consumer awareness and public education strategies” that are designed to provide information on the various aspects of ground water.¹²⁸ Through partnerships with other organizations, the American Ground Water Trust conducts programs focused on the drinking water supply and the irrigation industry.¹²⁹ The trust uses these programs to establish credibility with governmental agencies, private corporations, environmental groups, and the media.¹³⁰ Stone believes private sector involvement is crucial to water resource solutions and hopes to recruit the irrigation industry through educational partnership opportunities.¹³¹ Since 2012, the American Ground Water Trust has conducted an average of twenty programs per year in partnership with various private and government organizations.¹³²

In *Ground Water for Household Water Supply in Rural America: Private Wells or Public Systems?*, Stone presents the issues facing rural groundwater users in the face of government regulation of water supplies.¹³³ Stone states that over fifty percent of drinking water in the U.S. comes from groundwater.¹³⁴ For rural communities, he breaks this percentage into

123. *Id.*

124. See Andrew Stone, *Competition for America's Ground Water Resources- the Public Perception*, AMERICAN GROUND WATER TRUST (1998), <https://agwt.org/sites/default/files/Stone%20-%20Irrigation%20Water%20Use%20Perception%20-%201998.pdf> [perma.cc/Q7SJ-B2WB].

125. *Id.*

126. *Id.* at 1.

127. *Id.*

128. *Id.* at 6.

129. *Id.* at 2–3.

130. *Id.* at 6.

131. *Id.*

132. AMERICAN GROUND WATER TRUST, <https://agwt.org/content/past-events#2012> [perma.cc/N99J-ZSE] (last visited Sept. 24, 2019).

133. Andrew Stone, *Ground Water for Household Water Supply in Rural America: Private Wells or Public Systems?* (1998), <https://agwt.org/sites/default/files/Stone%20-%20Private%20Wells%20or%20Public%20Systems%20-%201998.pdf> [perma.cc/7PB9-AGWZ].

134. *Id.* at 1.

“independent home wells, small local rural water systems, and regional water utilities,” totaling fifteen million independent wells.¹³⁵ Due to the availability of government subsidies for water systems, as well as the predisposition of state departments toward pipelines, certain state policies encourage centralized water systems and discourage household wells.¹³⁶ Stone believes it is the responsibility of ground water specialists, such as the AGWT, to protect the interest of these rural communities in the face of decisions that are fraught with political agendas and vested interests.¹³⁷ He argues for keeping “small ground water based supply systems” in use, and expanding their use, which gives “the greatest opportunity for minimum environmental impact on aquifers.”¹³⁸

The American Ground Water Trust’s goals are primarily academic.¹³⁹ Other efforts the trust is involved in to solve groundwater problems include the following: writing amicus briefs for influential groundwater cases, circulating newsletters, and offering scholarships to students interested in groundwater conservation.¹⁴⁰ While education is always an important step in solving ecological problems, it is difficult to find information on how effective their education efforts are in reducing groundwater depletion.¹⁴¹ Other non-profit groundwater trusts, such as the Water Well Trust, focus more on practical solutions to problems associated with depletion of aquifers.¹⁴²

2. The Water Well Trust

The Water Well Trust (WWT) is a 501(c) nonprofit organization established by the Water Systems Council in 2010 to provide a clean water supply to American families living without access to clean water.¹⁴³ The organization is the only trust in the United States that provides low-interest loans for wells to be constructed for impoverished households when the cost for local governments to supply the water is prohibitive.¹⁴⁴ The WWT obtains funds through the Department of Agriculture (USDA) Rural Utilities

135. *Id.*

136. *Id.*

137. *Id.*

138. *Id.* at 8.

139. *See id.* at 1.

140. *See* Del. Tetra Techs., Inc. v. Cty. of San Bernardino, 247 Cal. App. 4th 352 (2016); *see* AMERICAN GROUND WATER TRUST, <https://agwt.org/content/agwt-e-newsletters> [perma.cc/568T-KRLF] (last visited Sept. 24, 2019); *see* AMERICAN GROUND WATER TRUST, <https://agwt.org/content/scholarship-opportunities> [perma.cc/857B-KCQ7] (last visited Sept. 24, 2019).

141. Author’s original writing.

142. *See infra* Part III.B.2.

143. *Water Well Trust Receives \$140,000 USDA Household Water Well Systems Grant*, PRNEWswire (Oct. 27, 2014), <https://www.prnewswire.com/news-releases/water-well-trust-receives-140000-usda-household-water-well-systems-grant-627965449.html> [perma.cc/Y4HE-JUHE].

144. *Id.*

Service (RUS) using the RUS Household Water Well System (HWWS) Grant Program.¹⁴⁵ The WWT contributes a fifty-one percent match towards the typical well project.¹⁴⁶

The HWWS Grant program was initiated to support the development of rural communities and assist the growth of the United States economy while protecting the environment.¹⁴⁷ The grant program “provides financial and technical assistance to help communities bring safe drinking water and sanitary, environmentally sound waste disposal facilities to rural Americans in greatest need.”¹⁴⁸ The RUS funds the construction of private wells in communities in need of potable water and ensures that facilities deliver safe and affordable drinking water.¹⁴⁹ The HWWS Program provides financing to households to offset the costs of “constructing or rehabilitating their private wells.”¹⁵⁰ The RUS also awards grants to non-profit organizations such as the WWT to accomplish these goals.¹⁵¹

Since 2012, the WWT has completed over one-hundred water well projects, serving water to 240 individuals across ten different states.¹⁵² The most current WWT project aims to facilitate the construction of twenty-five water wells in communities in eleven New Mexico counties “that do not meet current building code standards.”¹⁵³ American households requiring funding for new wells and rehabilitation of nonfunctional wells apply for assistance at the WWT website and are subsequently placed on a wait list until funds are made available through the RUS.¹⁵⁴

If Andrew Stone of the American Ground Water Trust is correct about the effect on minimizing environmental impacts on aquifers through the expanded use of groundwater wells, the WWT efforts will improve the aquifers in hundreds of communities across the United States.¹⁵⁵ However, the WWT only tackles the drinking water aspect of conservation.¹⁵⁶ State-mandated water trusts attempt to replicate the success of these non-profit trusts in improving groundwater resources.¹⁵⁷ A number of

145. *Id.*

146. *Id.*

147. *Household Water Well System Program 2019 Grant Application Guide*, UNITED STATES DEPARTMENT OF AGRICULTURE RURAL DEVELOPMENT, https://www.rd.usda.gov/files/HWWS_Guide_FY19.pdf [perma.cc/4BGE-Y87A].

148. *Id.* at 1.

149. *Id.*

150. *Id.*

151. *Id.*

152. *Water Well Trust Celebrates Completion of 100th Water Well*, PRNEWswire (May 03, 2014), <https://www.prnewswire.com/news-releases/water-well-trust-celebrates-completion-of-100th-water-well-300641896.html> [perma.cc/7N5H-Y7JJ].

153. *Id.*

154. *Id.*

155. *See infra* Part II.B.1

156. *See supra* Part II.B.

157. *See infra* Part II.C.

state-run water trusts take the best practices of the non-profit water trusts and apply them to unique regional groundwater conservation goals.¹⁵⁸

C. State-Mandated Public Water Trusts

1. The New Mexico Water Trust Fund

The New Mexico Water Trust Fund (WTF) was created in 2006 with an initial appropriation of \$40 million.¹⁵⁹ It distributes \$4 million annually to the state's Water Trust Board to conserve and protect the water resources of New Mexico and to ensure that New Mexico has the water it needs for a strong and vibrant future.¹⁶⁰ The trust acts as a fund which is used by the Water Trust Board to "secure a supply of clean and safe water for New Mexico's residents."¹⁶¹

The state investment officer invests the money contributed to the WTF as a land grant, using strict accountability and oversight measures dictated by the state investment council.¹⁶² The ultimate goal of these measures is to "ensure appropriate safety of and return on investments."¹⁶³ If the choice of investment by the investment officer results in any kind of earning, the money is credited to the fund.¹⁶⁴ To ensure the success of the trust, the funds in the trust may never be reverted or expended for any purpose outside the purpose of the water trust.¹⁶⁵ The state of New Mexico makes an annual distribution to the water fund, which is then used to "support critically needed projects that preserve and protect New Mexico's water supply."¹⁶⁶

Since the creation of the WTF, New Mexico has not been forthright on the successes or failures of the trust, nor where the funds have been spent over the past thirteen years.¹⁶⁷ Current estimates are that without additional capital there is at least a fifty percent chance the fund will be completely depleted within the next twenty years.¹⁶⁸ However, certain water projects completed using WTF funds are in the public record.¹⁶⁹

158. See *infra* Part II.C.

159. NEW MEXICO STATE INVESTMENT COUNCIL, *Water Trust Fund*, <https://www.sic.state.nm.us/water-trust-permanent-fund.aspx> [perma.cc/67LK-CCHQ] (last visited Sept. 23, 2019).

160. *Id.*

161. N.M. CONST. art. XVI, § 6 (Westlaw, current with amendments approved at the general election held November 6, 2018).

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. *Id.*

167. NEW MEXICO STATE INVESTMENT COUNCIL, *Water Trust Fund*, *supra* note 159.

168. *Id.*

169. Walt Kuhn, Jessica Tracy, Cody Walker, *Isleta Island Removal Project: Interpretation of Four Years of Post-Construction Monitoring Observations Compared to Design-Phase 2D Hydraulic and Sediment Transport Model Results and Lessons Learned* (2011), <https://www.sedhyd.org/2019/openconf/>

In 2011, the Native American habitants of the Pueblo of Isleta obtained a “watershed restoration and management grant” from the WTF to remove sedimentary islands from the Rio Grande River down-stream of the Isleta Diversion Dam.¹⁷⁰ The islands negatively impacted the native cultural practices and habitats for a number of federally listed species.¹⁷¹ The WTF recommended that the funds be used to establish the Isleta Island Removal Project (IIRP).¹⁷² The primary goals of the IIRP was to: “(1) provide a benefit for the federally listed RGSM; (2) remove as many islands, river bars, and as much sedimentation as is sustainable within the project site; and (3) provide flow against the west bank throughout the year.”¹⁷³ The design of the IIRP contained a three-tier channel, each consisting of a different flowrate.¹⁷⁴

The IIRP was moderately successful in achieving its goals.¹⁷⁵ The model somewhat accurately simulated the “lateral erosion of the lower benches . . . [the] overall aggradation trends in the channel . . . [the] natural levee formation but a lesser magnitude and extent than occurred.”¹⁷⁶ The models poorly predicted the “bed change magnitudes immediately downstream of the IDD . . . [the] stability of the upper benches, . . . [and] magnitude of aggradation on lower benches.”¹⁷⁷ Overall, the use of WTF funds used in the project yielded a minor success.¹⁷⁸

The WTF represents a public water trust held for the general public good.¹⁷⁹ Many such state-mandated water trusts follow this trend.¹⁸⁰ These general state trusts are occasionally successful in conservation efforts yet are regularly underfunded.¹⁸¹ Furthermore, projects that take advantage of the trust funds produce mixed results regarding water conservation.¹⁸² A number of state water trusts are formed with a specific goal in mind, such as alleviating or rectifying a state-wide problem.¹⁸³ The state of Idaho established the Petroleum Clean Water Trust Fund as a result of growing concern over ground water contamination by underground petroleum and hazardous substance storage tanks.¹⁸⁴

modules/request.php?module=oc_program&action=view.php&id=156&file=1/156.pdf [perma.cc/RW3L-6GYC].

170. *Id.* at 2.

171. *Id.*

172. *Id.* at 1.

173. *Id.* at 2.

174. *Id.*

175. *Id.* at 8.

176. *Id.* at 15.

177. *Id.* at 15–16.

178. *Id.*

179. See N.M. CONST. art. XVI, § 6.

180. See *infra* Part III.

181. N.M. CONST. art. XVI, §6.

182. See *supra* notes 162–70 and accompanying text.

183. See Murray D. Feldman, *Protecting Ground Water Quality Through the Idaho Petroleum Clean Water Trust Fund*, 28 IDAHO L. REV. 541, 566 (1991–1992).

184. See *id.*

2. *The Idaho Petroleum Clean Water Trust Fund*

The late 1980s saw a number of negative effects on groundwater caused by the leakage of underground storage tanks (USTs).¹⁸⁵ USTs are containers used to store petroleum and other hazardous byproducts of the petroleum industry.¹⁸⁶ The Environmental Protection Agency (EPA) established regulations for USTs in 1988, laying out an extensive framework for “the operation of USTs, including requirements for technical performance standards, corrective action to investigate and remediate UST releases, and financial responsibility standards to ensure UST owners or operators have funds available to undertake corrective action and compensate third parties for bodily injury or property damage arising from UST releases.”¹⁸⁷ The Idaho legislature established the Idaho Petroleum Clean Water Trust in 1990 to provide liability insurance coverage for petroleum storage tank (PST) operators in an effort to meet EPA requirements.¹⁸⁸

The trust fund provided financial resources that allowed for “swift corrective action of petroleum releases from leaking” USTs.¹⁸⁹ The goal was to provide protection of the “public health, safety, and the environment” from immediate threats to groundwater quality caused by chemical releases.¹⁹⁰

Accidental release of stored substances from USTs are a credible threat to groundwater quality.¹⁹¹ The EPA confirmed over 108,000 releases of toxic substances from more than two million USTs in existence nationwide.¹⁹² An estimated 7,000 active USTs presented a major problem in Idaho.¹⁹³ The state Division of Environmental Quality found 437 sites statewide where petroleum releases occurred.¹⁹⁴ Nearly half of these sites resulted in contaminated ground water.¹⁹⁵ This is an unprecedented issue in Idaho because ninety percent of the state obtains its drinking water from groundwater sources.¹⁹⁶ Additionally, Idaho’s consumption of ground water is the fifth largest in the United States.¹⁹⁷ Industrial, public, and rural groundwater uses constitute over thirty-five percent of all water resources

185. *Id.*

186. *Id.*

187. *Id.*

188. *Id.* at 542.

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.*

193. *Id.* at 542–43.

194. *Id.* at 543.

195. *Id.*

196. *Id.*

197. *Id.*

consumed in Idaho.¹⁹⁸ UST leaks of hazardous substances are a major cause of ground water contamination in the state.¹⁹⁹

Both the Idaho Petroleum Clean Water Trust and the WTF illustrate that state governments are capable of establishing institutions that have a positive impact on water conservation.²⁰⁰ Additionally, these trusts reaffirm that public water trusts require substantial funding in order to accomplish conservation goals.²⁰¹ This is a considerable problem for public water trusts in other states.²⁰² Eventually, as the WTF illustrates, capital will run out.²⁰³ Moreover, the circumstances surrounding the creation of and financial support for the Idaho Petroleum Clean Water Trust are unique to Idaho.²⁰⁴ The Texas public water trust faces these same problems and more.²⁰⁵

D. The Texas Public Water Trust

1. Statute

The success of public water trusts in other states prompted the Texas Legislature to follow suit.²⁰⁶ The 75th Legislature passed S.B. 1 in response to projected population growth and extended droughts beginning in 1995.²⁰⁷ The 1997 bill rewrote Texas water law to facilitate “comprehensive water resource planning, management, and development.”²⁰⁸ The authors of S.B. 1 recognized the importance of in-stream conservation, specifically flow rate, water quality, and protection of fish and wildlife habitat.²⁰⁹ The bill added section 15.7031 to the Water Code which allowed the Texas Water Trust to hold water rights within the Texas Water Bank and dedicate the water to pressing environmental needs.²¹⁰ Senate Bill 1 also added 31 Texas Administrative Code Chapter 359, which mandates rules governing the Texas Water Development Board (TWDB) and the process for holding and transferring water rights held by the Trust.²¹¹ When a citizen wishes to

198. *Id.*

199. *Id.*

200. *See supra* Parts II.C.1–2.

201. *See supra* Part II.A, C.

202. *See infra* Part II.D.2.

203. *See* N.M. CONST. art. XVI, § 6.

204. *See* Feldman, *supra* note 183, at 542.

205. *See infra* Part II.D.2.

206. Mallory Beagles, *Hydrating the Lone Star State for Years to Come: A Call to Implement In-stream Flow Protections*, 43 TEX. TECH L. REV. 687, 704 (2011).

207. *Id.*

208. Martin Hubert & Bob Bullock, *Senate Bill 1, The First Big and Bold Step Toward Meeting Texas's Future Water Needs*, 30 TEX. TECH L. REV. 53, 54 (1999).

209. Beagles, *supra* note 206, at 705.

210. *Id.*

211. TEXAS WATER DEVELOPMENT BOARD, *Texas Water Bank Trust*, <http://www.twdb.texas.gov/waterplanning/waterbank/index.asp> [perma.cc/E2hQ-D5PA] (last visited Sept. 24, 2019).

deposit water rights into the Trust, the application must be reviewed and approved by the TWDB.²¹² Water rights are not necessarily held in perpetuity and may be held for shorter terms, depending on the provisions of the contract.²¹³

2. History and Application

Individuals who have received water rights from the Texas Commission on Environmental Quality (TCEQ) are encouraged to donate their water rights to the Trust.²¹⁴ Initially, a potential donor must contact a staff member at the TWBD responsible for managing the Texas Water Trust.²¹⁵ The donor must then contact the Texas Parks and Wildlife Department to establish a trust contract manager for the water right he wishes to donate.²¹⁶ Next, the donor must file permit amendment documents with the TCEQ and add the “appropriate use” designation to the permit.²¹⁷ This designation allows the TWBD manager to transfer the permit for in-stream uses.²¹⁸ Finally, the manager transfers the water permit to the Trust.²¹⁹

The Trust has a twenty-three year history of relative failure.²²⁰ Between 1997 and 2019, donors deposited a total of eight unique water rights totaling around 500 acre-feet per year.²²¹ Of the eight donations, seven are water leases and are not permanent.²²² Since 2009, the Trust has received no donations.²²³ Additionally, no groundwater right donation has ever occurred.²²⁴ Recent donative attempts of permanent water rights have faced heavy litigation.²²⁵

In *Texas Commission on Environmental Quality v. San Marcos River Foundation*, the San Marcos River Foundation (Foundation) applied with the TCEQ to permit a 1.3 million acre-feet appropriation from the Guadalupe River Basin “for non-consumptive in-stream use and freshwater inflows into the Guadalupe/San Antonio bay and estuary system.”²²⁶ The

212. *Id.*

213. *Id.*

214. *Id.*

215. *Id.*

216. *Id.*

217. *Id.*

218. *Id.*

219. *Id.*

220. Robin Craig, *Drought and Public Necessity: Can a Common-Law “Stick” Increase Flexibility in Western Water Law?*, 6 TEX. A&M L. REV. 77, 92 (2018).

221. *Id.*

222. *Id.*

223. *Id.*

224. *Id.*

225. See Harder, *supra* note 5, at 16–17; see also Tex. Comm’n on Env’tl. Quality v. San Marcos River Found., 267 S.W.3d 356 (Tex. App.—Corpus Christi 2008).

226. See Tex. Comm’n on Env’tl. Quality, 267 S.W.3d at 357.

Guadalupe-Blanco River Authority, San Antonio River Authority, and San Antonio Water System filed motions for a contested-case hearing to deny or dismiss the Foundation's application.²²⁷ Initially, the executive director of the TCEQ issued a draft permit which reduced the requested amount.²²⁸ A year later, the TCEQ issued a public notice of the application and invited additional interested parties to file briefs regarding the action that the TCEQ should take.²²⁹

Eventually, the TCEQ denied the permit, citing section 11.131 of the Water Code which allows the commission to deny the application if no unappropriated water exists or "for other reasons."²³⁰ The Commission reasoned that because the Texas Legislature "intended for the Commission to protect" the state waters and it had never "issued a new permit for in-stream use only," the permit would be denied.²³¹

The Foundation brought suit against the TCEQ seeking judicial review.²³² It argued, *inter alia*, that the TCEQ "misconstrued the water code's statutory framework" when the Commission concluded it would not approve environmental-only permits.²³³ The Foundation sought a declaratory judgment regarding its rights in the water it applied for.²³⁴ The trial court eventually reversed the TCEQ's denial and remanded the permit application back to the TCEQ for further determinations.²³⁵ The Foundation appealed the dismissal of declaratory judgement, and the TCEQ appealed the reversal and remand of the denial order.²³⁶

Immediately, the TCEQ motioned to dismiss the appeal as moot.²³⁷ In the motion, the commission argued that even if the application were to be remanded, it would be unable to grant the application under section 11.0237 of the Water Code.²³⁸ This section provides that the TCEQ *may not* issue any new permit "for in-stream flows dedicated to environmental needs or bay and estuary inflows."²³⁹ The Thirteenth District Court of Appeals agreed with the TCEQ and reversed the trial court's decision.²⁴⁰ It dismissed the Foundation's application, reasoning that "[a] case becomes moot when (1) there is no real controversy, or (2) when a party seeks judgment which,

227. *Id.*

228. *Id.* at 358.

229. *Id.*

230. *Id.*

231. *Id.*

232. *Id.* at 358.

233. *Id.* at 359.

234. *Id.*

235. *Id.*

236. *Id.*

237. *Id.* at 360.

238. *Id.* at 358.

239. *Id.*

240. *Id.*

when rendered, cannot have any practical legal effect.”²⁴¹ In dismissing the application, the Court of Appeals affirmed the trial court’s decision denying declaratory judgement for the Foundation.²⁴²

Section 11.0237 and the decision in *San Marcos River* is a major roadblock for the Trust.²⁴³ Because the TCEQ must deny new permits for inflows dedicated to environmental conservation, the Trust relies on the donation of vested water rights.²⁴⁴ The past two decades indicate that private actors are largely unwilling to part with vested water interests, especially non-lease rights.²⁴⁵ Ultimately, it will be difficult for the Trust to have an impact on Texas water conservation using the eight donated water leases it currently manages.²⁴⁶ The miniscule amount of water saved per year through the Trust has a negligible effect on Texas drought conditions.²⁴⁷

IV. INHERENT PROBLEMS WITH THE PUBLIC WATER TRUST

There are a number of legal, practical, and political barriers that public water trusts face.²⁴⁸ Oftentimes, legal challenges uncover unforeseen philosophical and logistical problems.²⁴⁹ For example, the creation of the Texas Water Trust encouraged non-profit institutions to acquire water permits either by application or through the free market.²⁵⁰ However, these non-profits were hit with litigation as soon as they attempted to acquire water rights to fulfill the purpose of the Trust.²⁵¹ Additionally, in response to *San Marcos River*, the Texas Legislature passed a bill that placed a moratorium on in-stream permits between 2003 and 2005.²⁵² The litigation and subsequent moratorium put a number of private and public organizations on notice, encouraging a rush to acquire appropriative water permits from private entities before the court’s decision.²⁵³ However, private actors were unwilling to sell their water rights in this climate of legal ambiguity.²⁵⁴ The *San Marcos River* decision made it even more unlikely for water rights holders to transfer their rights to these non-profit entities.²⁵⁵

241. *Id.*

242. *Id.*

243. *See* Harder, *supra* note 5, at 18.

244. *See id.*

245. *See* Craig, *supra* note 220.

246. *See id.*

247. *See id.*

248. Harder, *supra* note 5, at 20.

249. *Id.* at 21.

250. *See supra* Part II.D.2.

251. *See* Harder, *supra* note 5, at 16–18.

252. *Id.* at 18.

253. *Id.* at 18–19.

254. *Id.* at 19.

255. *Id.*

Furthermore, rapid population growth and increased water scarcity amplify the controversy of public water trusts.²⁵⁶ The interests involved in water right allocation and issues that stem therefrom are more diverse than ever before.²⁵⁷ The primary challenge is no longer whether water will be available to appropriators, but rather, from whom will a new user obtain water in order to fulfil a newly permitted use.²⁵⁸ If a holder sells his water rights for economic gain, there is always a chance this may harm senior and junior right holders or public water use.²⁵⁹ Individuals intent on using water for personal gain are increasingly aware of water scarcity.²⁶⁰ The risk of not having enough water encourages an inclination to be better informed and thus more willing to advocate for their right to use the water.²⁶¹ Public water trusts are a direct affront to these interests.²⁶²

The agricultural industry has historically opposed water trusts because of a dependence on irrigation.²⁶³ The Oregon Water Trust, for example, encountered a substantial amount of resistance from the agricultural community.²⁶⁴ Although there is a deeper understanding of the hydrological relationship between water use and recharge, there is no legal consensus regarding a surface stream's need for water, especially if recharge negatively impacts consumptive water use.²⁶⁵ Agricultural businesses in the appropriation states of the Western U.S. have long enjoyed fulfilling their water needs by taking from a stream until a more senior irrigator is affected.²⁶⁶ It is foreseeable that any attempt to separate water from the land, where it has been used for centuries raises concerns for farmers and ranchers, regardless of the mechanism.²⁶⁷

The agricultural community is also concerned with how water trusts will affect the intricacy of water rights.²⁶⁸ For instance, water diversions are often complex, and many farmers depend on return flows.²⁶⁹ A water trust's acquisition of a water right for alternative uses may negatively impact agricultural interests.²⁷⁰ The procurement of in-stream rights may also impede economic growth and reduce municipal supplies.²⁷¹

256. Diane K. Brownlee, *The Public Vote in the Game of Water Wars: An Unquenchable Thirst to Define and Implement "Public Values" in Western Water Laws*, 70 UMKC L. REV. 647, 648 n.5 (2002).

257. *Id.* at 651.

258. *Id.* at 648.

259. *Id.* at 647.

260. *Id.* at 648.

261. *Id.* at 651.

262. See Harder, *supra* note 5, at 21.

263. *Id.*

264. *Id.*

265. Neuman & Chapman, *supra* note 68, at 138, 177–78.

266. See Harder, *supra* note 5, at 22.

267. *Id.*

268. *Id.*

269. *Id.*

270. *Id.*

271. *Id.*

The economic interest of the agricultural business is partially responsible for the western states which refuse to allow private in-stream water rights.²⁷² In most Prior Appropriation jurisdictions, water is viewed as a commodity that the general public has an interest in.²⁷³ Therefore, in these states, an individual with water rights has a usufructuary right to the water rather than ownership of the molecules; the water is controlled by the state.²⁷⁴ The philosophical underpinning of prior appropriation is that water is a public asset that must be protected and controlled by state agencies.²⁷⁵ The Prior Appropriation doctrine is strictly opposed to economic speculation presented by water trusts.²⁷⁶

Another problem with water trusts is the imbalance of economic interests regarding in-stream uses.²⁷⁷ Many users benefit from acquisition of in-stream rights yet do not expend time or money improving the water source.²⁷⁸ These “freeloaders” are inherent to a water trust’s acquisition of in-stream rights.²⁷⁹ For instance, a local fisherman pays nothing to take advantage of the improved wildlife habitat.²⁸⁰

Additionally, as discussed in Part II, water trusts face logistical impediments to water conservation goals, such as accurate water valuation and measurement.²⁸¹ The valuation of water is made even more difficult because the value of a commodity that is not for sale is inherently artificial.²⁸² Technically, in-stream uses are environmentally valuable.²⁸³ Placing a dollar amount on this environmental value, however, is inordinately difficult.²⁸⁴ Furthermore, to determine the price of the value of in-stream uses, economists must be hired to mimic market operations.²⁸⁵ This process must be repeated any time a price update is needed.²⁸⁶ The valuation of water is even more challenging in states where water rights are not actively traded on the open-market due to the lack of historical water prices.²⁸⁷

Another practical concern for public or non-profit water trusts is management.²⁸⁸ Before they purchase water rights, a public water trust must gather accurate data on wildlife population to determine what impact their

272. *Id.*

273. *Id.*

274. *Id.*

275. *Id.*

276. *Id.*

277. *See id.*

278. *See id.*

279. *Id.*

280. *See id.*

281. *See supra* Part II.

282. Harder, *supra* note 5, at 23.

283. *Id.*

284. *Id.*

285. *Id.*

286. *Id.*

287. *Id.*

288. *Id.* at 24.

purchase would have on surface streams and groundwater.²⁸⁹ Furthermore, a public water trust must make accurate measurements of water flow and ensure that flowrate is enforced after water rights are acquired.²⁹⁰ A public water trust must also work with landowners or local water management departments to monitor the water source to ensure that the agreed amount of water is left in-stream for the benefit of the environment and wildlife populations.²⁹¹ It is unusual for state agencies to have the means, funding, and manpower to monitor the water controlled by public water trusts.²⁹²

Perhaps the most difficult problem for public water trusts to overcome is obtaining the finances to acquire expensive, more senior, water rights.²⁹³ Unless trusts have continual funding, they often lack funds to make purchases that have an impact on inflow rates.²⁹⁴ The problem of funding is made more difficult in areas where local constituents are hostile toward the premise of public trusts, especially when the trust relies on private support because the government is not involved.²⁹⁵ For example, the New Mexico water trust discussed in Part II will be completely depleted within the next twenty years due to lack of funding.²⁹⁶

V. INCORPORATING PRIVATE TRUST PRACTICES INTO A PRIVATE WATER TRUST

The human-factor, specifically the capacity for our environment to support population growth, is the primary element in most environmental conservation efforts.²⁹⁷ Citizens are perhaps the most important part of the ecosystem.²⁹⁸ Unfortunately, due to the contention between man and nature, wildlife conservation is usually at odds with human activity.²⁹⁹ Perhaps this is why public water trusts tend to focus primarily on wildlife preservation when considering water conservation.³⁰⁰ The preservation of wildlife is controversial and usually complicated.³⁰¹ By instead focusing on protecting the water rights of beneficiaries, the legal community can avoid the intricate, difficult, often ineffective process of attempting to regulate the environment, and actually impact wildlife conservation.³⁰²

289. *Id.*

290. *Id.*

291. *Id.*

292. *Id.*

293. *Id.*

294. *Id.* at 24.

295. *Id.*

296. *See supra* § II.C.

297. *See Harder, supra* note 5, at 20.

298. *Id.*

299. *Id.*

300. *Id.*

301. *Id.*

302. *See infra* Part V.

The private water trust is an instrument that protects beneficiary water interests.³⁰³ Contrast this with the public water trust, which is designed to protect the public good or environment.³⁰⁴ Although a number of states have mandated public water trusts to ensure preservation of the ecosystem or to supply funds to water rights injured by industrial accidents, little has been written about using private water trust to protect water rights for descendants.³⁰⁵ Moreover, to date, there are no examples of private water trust litigation in Texas or anywhere in the United States.³⁰⁶ In Texas, the efficacy of a private water trust would rely on the interplay between the Rule of Capture doctrine and the Absolute Ownership doctrine.³⁰⁷

A. Rule of Capture versus Absolute Ownership

In Texas, the ownership of water and oil is nearly identical: any oil or water beneath the land is subject to ownership by the landowner.³⁰⁸ The primary goal of a private water trust is to maintain absolute ownership over the water rights in the event any land or mineral estate is sold or leased.³⁰⁹ The ability to separate water rights from the rest of the bundle of sticks is possible because Texas practices the Rule of Capture doctrine.³¹⁰

Rule of Capture specifically refers to the concept that the possessor of a well owns anything captured beneath his land.³¹¹ This doctrine is an American common-law theory which historically provides absolute ownership of natural resources that are seized with an intent to possess.³¹² The rule originated with disputes over the capture of wild animals, however, today it is more commonly applied to subsurface natural resources.³¹³

Absolute Ownership refers to when a single entity has “absolute dominion” over property.³¹⁴ Absolute dominion is the ability of a person to use or dispose of property as he sees fit “subject only to general laws.”³¹⁵ In Texas, a water rights owner enjoys absolute ownership in place.³¹⁶ This means a landowner owns the water beneath his land even before capture, subject to drainage from wells on adjacent lands and reasonable state

303. See Harder, *supra* note 5, at 25.

304. See *id.*

305. See *supra* Part II.

306. Author’s research yielded this conclusion.

307. See *City of Del Rio v. Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d 613, 617 (Tex. App.—San Antonio 2008); *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 826–28 (Tex. 2012).

308. *Day*, 369 S.W.3d at 823, 831–32, citing *Houston & T. C. R. Co. v. East*, 98 Tex. 146 (1904).

309. See *infra* Section IV.B.2.

310. See *Day*, 369 S.W.3d at 823.

311. *Rule of Capture*, THE WOLTERS KLUWER BOUVIER LAW DICTIONARY DESK EDITION (2012).

312. *Id.*

313. *Id.*

314. *Absolute Ownership*, BLACK’S LAW DICTIONARY (11th ed. 2016).

315. *Id.*

316. See *Day*, 369 S.W.3d at 823.

regulation.³¹⁷ Until recently, the Rule of Capture was indistinguishable from Absolute Ownership.³¹⁸ However, Texas courts have determined that Rule of Capture and Absolute Ownership are severable from one another.³¹⁹

1. Severing Absolute Ownership in Place from Rule of Capture

In *City of Del Rio v. Clayton Sam Colt Hamilton Trust*, the City of Del Rio purchased acreage from the Clayton Sam Colt Hamilton Trust.³²⁰ In the deed, the trust preserved water rights for the trust's beneficiaries.³²¹ The City challenged the deed, arguing the ownership of groundwater does not accrue until it is captured.³²² The court determined that the trust has absolute ownership of the entire estate and therefore may sever groundwater rights.³²³ It reasoned that the City had confused the Rule of Capture with Absolute Ownership.³²⁴ The court found the water right reservation did not violate the rule against perpetuities because the trust still had access to the water through the adjacent acreage.³²⁵ Therefore, the City never gained ownership of the groundwater rights and could not rely on the Rule of Capture doctrine to keep the rights from the trust.³²⁶ Ultimately, the court held a landowner is entitled to sever groundwater from surface estate, distinguishing Rule of Capture from Absolute Ownership.³²⁷

The Texas Supreme Court further distinguished the Rule of Capture from Absolute Ownership in *Edwards Aquifer Authority v. Day* by declaring Absolute Ownership includes the theory of ownership-in-place.³²⁸ In *Day*, a landowner purchased land to grow oats and peanuts and to graze cattle.³²⁹ He drilled a well to support irrigation and fed the majority of the water into a fifty-acre lake on his property.³³⁰ The Edwards Aquifer Authority, which governed the regional groundwater conservation district, required the landowner to obtain a permit to continue pumping water from the aquifer.³³¹ The Edwards Aquifer Authority was created in 1993 by the Edwards Aquifer

317. *Id.*

318. *See City of Del Rio v. Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d 613 (Tex. App.—San Antonio 2008).

319. *See id.*; *see also Day*, 369 S.W.3d at 814.

320. *Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d at 615–16.

321. *Id.* at 615.

322. *Id.* at 617.

323. *Id.*

324. *Id.* at 619.

325. *Id.* at 619–20.

326. *Id.*

327. *Id.*

328. *See Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

329. *Id.* at 818.

330. *Id.*

331. *Id.*

Authority Act (Act), a year before the landowner purchased the property.³³² The Court divined the Edwards Aquifer Authority was created “for the effective control of the resource to protect terrestrial and aquatic life, domestic and municipal water supplies, the operation of existing industries, and the economic development of the state.”³³³ The Edwards Aquifer Authority is “the primary source of water for south central Texas and therefore vital to the residents, industry, and ecology of the region, the State’s economy, and the public welfare.”³³⁴ The landowner applied for 700 acre-feet of water annually and was subsequently denied because the Edwards Aquifer Authority determined his historical withdrawals were not put to beneficial use.³³⁵

The landowner alleged the Edwards Aquifer Authority’s permitting process deprived him of his groundwater, therefore constituting a constitutional taking.³³⁶ The Edwards Aquifer Authority argued, *inter alia*, the water was not subject to Absolute Ownership until captured and that it had the authority to limit groundwater use under the Act.³³⁷ The court found that landowners do have a constitutionally compensable interest in groundwater, regardless of whether or not the water was actually captured.³³⁸ The court held the Edwards Aquifer Authority’s regulatory scheme resulted in a taking of the landowner interest because it deprived all of the economically beneficial use of the water.³³⁹ Furthermore, the court reasoned the Edwards Aquifer Authority cannot deprive the landowner of all beneficial use of the groundwater even if supply was limited and the landowner did not use the water during a historical period.³⁴⁰

The private water trust would be ineffective without the *City of Del Rio* and *Day* decisions.³⁴¹ The *City of Del Rio* decision affirms that landowners can sever water rights from the land, a key element of the private water trust.³⁴² The *Day* decision ensures that a landowner does not need to first capture the water and put it to beneficial use before groundwater can be subject to a private water trust.³⁴³ The unique water law in Texas allows a private water trust to be more effective than water trusts in other states

332. *Id.*

333. *Edwards Aquifer Auth. v. Chem. Lime, Ltd.*, 291 S.W.3d 392, 394 (Tex. 2009), quoting EAAA § 1.01.

334. *Id.*

335. *See Edwards Aquifer Auth. V. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

336. *Id.* at 821.

337. *Id.*

338. *Id.* at 838.

339. *Id.* at 842–43.

340. *Id.* at 843.

341. *See id.* at 814; *see also City of Del Rio v. Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d 613 (Tex. App.—San Antonio 2008).

342. *See Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d at 617.

343. *See Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

because it is clear who owns the groundwater.³⁴⁴ Additionally, Texas laws place no limit on how groundwater is used, as long as the use is not wasteful or negligent.³⁴⁵ Consequently, groundwater should be the focus of a private water trust for the same reason; surface water in Texas is owned by the state and therefore harder to preserve through a trust.³⁴⁶ For a private water trust to be most effective, an estate planner must take the elements from the public water trusts and incorporate them into the private land trust.³⁴⁷

B. The Illinois Land Trust and Incorporating Protections into a Private Groundwater Trust

Land and mineral trusts have historically preserved land and mineral rights for beneficiaries in Texas.³⁴⁸ The same principals of the private land trust can be translated to the water trust.³⁴⁹ The land trust originated in Illinois and is commonly referred to as the Illinois Land Trust.³⁵⁰ The Illinois Land Trust is usually created through judicial action rather than statute.³⁵¹ Accordingly, the only way to effectively create a private land trust is through the settlor because the settlor has the sole power to create and delegate powers to the trustee.³⁵² Therefore, it is common practice for lawyers to convey title of real estate to a straw person who acts as a nominee for the buyer as beneficiary.³⁵³ The private land trust differs from a classic trust in that most of the incidents of ownership are typically reserved by the beneficiary.³⁵⁴ Specifically, the trustee retains both legal and equitable title as well as administrative duties, while the beneficiaries exercise complete control and management of the trust property.³⁵⁵

A private land trust is created by two instruments.³⁵⁶ The first transaction conveys legal and equitable title of the property to a trustee through a deed of trust that gives the trustee the full power to execute deeds or mortgages, sell or dispose of the trust corpus, and manage the property in

344. *Id.*

345. *Id.*

346. *See* Tex. Comm'n on Envtl. Quality v. San Marcos River Found., 267 S.W.3d 356, 358 (Tex. App.—Corpus Christi 2008).

347. Author's opinion.

348. *See id.*

349. Myron J. Hess, *An Environmental Take on Environmental Flow Protection*, 34 ST. B. TEX. ENVTL. L.J. 265, 271 (2003).

350. Julius J. Zschau, Ulysses Clayborn, & Andrew M. O'Malley, *Using Land Trusts To Prevent Small Farmer Land Loss*, 44 REAL PROP. TR. & EST. L.J. 521, 521 (2009).

351. *Id.*

352. *Id.*

353. *Id.*

354. *Id.*

355. *Id.*

356. Robinson v. Chi. Nat'l Bank, 176 N.E.2d 659, 661 (1961).

accordance with written directions from the beneficiaries.³⁵⁷ Additionally, the deed contains a provision that entities accepting conveyance of the property, purchasing the real estate, or accepting it as loan security are both protected and not required to scrutinize the trustee's authority.³⁵⁸ The trust deed also includes a provision that limits the beneficiaries' interest to proceeds and avails from the corpus of the trust.³⁵⁹ Finally, the deed dictates that the beneficiaries have no legal or equitable interest in the property and proclaims that the interest of the beneficiaries is personalty rather than realty.³⁶⁰ Once the trustee records the deed, the trustee has unqualified title to the property, which allows a bona fide, third-party purchaser to deal with the trustee regardless of any outstanding interests of trust beneficiaries.³⁶¹

In a second, simultaneous transaction, a trust agreement is executed that reserves the full management and control of the real estate to the beneficiaries.³⁶² The trust agreement severely limits the broad authority given to the trustee in the first transaction.³⁶³ Unlike the first transaction, the trust agreement is not recorded, affording the trustee actual power to deal with third-parties.³⁶⁴ However, a reputable trustee must be chosen to ensure this power is not used without the beneficiaries' permission.³⁶⁵ The beneficiaries are given the power to exercise all rights of ownership other than holding or managing legal title, including collecting rents and improving/operating the land.³⁶⁶ The trust agreement also provides a provision that gives the trustee power over the disposition of the property only if he is granted written authorization from either the beneficiaries who control at least a fifty-one percent interest in the trust corpus, or from a person or board of directors designated by the other beneficiaries.³⁶⁷ A provision is included in the trust agreement that grants the beneficiaries the right to manage, control and possess the property.³⁶⁸ Here, the trust agreement mirrors the deed of trust by acknowledging that the beneficiaries shall receive all avails and proceeds from the corpus of the trust.³⁶⁹ The beneficiaries' interest is affirmatively identified as personalty rather than realty.³⁷⁰ This provision is identical to the one provided in the deed of trust and is key in

357. *Id.*

358. Richard A. Sayles, *A Device for Texas Land Development: The Illinois Land Trust*, 10 HOUS. L. REV. 692-93 (1973).

359. *Id.* at 693.

360. *Id.*

361. *Id.*

362. Robinson v. Chi. Nat'l Bank, 176 N.E.2d 659, 661 (1961).

363. Sayles, *supra* note 358, at 693.

364. *Id.*

365. *Id.*

366. *Id.*

367. *Id.*

368. *Id.*

369. *Id.*

370. *Id.*

determining the legal character of the Illinois trust.³⁷¹ Finally, the trust agreement ordinarily prohibits the trustee from divulging the names of the beneficiaries to creditors or other third-parties.³⁷²

1. *The Private Land Trust and the Statute of Uses*

The Statute of Uses is a major concern for estate planners when using a private land trust.³⁷³ The Statute of Uses is a law that converts the equitable interest of the beneficiary into a legal interest, thus destroying the trustee's legal right and voiding the trust if the trust is passive (i.e., the trustee is merely nominal and has no power or duty in relation to the trust property).³⁷⁴ In Texas, the trust is valid as long as the trustee maintains certain powers or duties respecting the property.³⁷⁵

2. *Advantages of the Land Trust*

One of the most common uses of a land trust is to balance the rights between multiple owners of a single piece of property.³⁷⁶ Thus, the private land trust is an effective tool for preserving ownership of groundwater rights passed down to future generations.³⁷⁷ A number of problems arise when real property is controlled by multiple owners; family estrangement, divorce, bankruptcy, death, owner incompetency, and the existence of subsequent judgments put the ownership at risk.³⁷⁸ Careful drafting of the private water trust may prevent any cloud on title in the event of a legal dispute over the rights.³⁷⁹ Furthermore, the Illinois land trust guarantees the beneficiaries maintain complete control of the trust property.³⁸⁰ As long as the proper terms are included, the beneficiaries have the right to direct the trustee in maintaining and disposing the trust property.³⁸¹

The possibility of deadlock between the shareholders is always a problem in co-ownership circumstances.³⁸² Deadlock refers to "inaction resulting from opposition, a lack of compromise or resolution, or a failure of election."³⁸³ A properly-drafted trust must include provisions designed to avoid deadlock with co-owners, such as an agreement for arbitration or other

371. *Id.*

372. *Id.*

373. Zschau et al., *supra* note 350 at 543.

374. *Id.*

375. TEX. PROP. CODE § 112.032.

376. Zschau et al., *supra* note 350, at 547.

377. *Id.*

378. *Id.*

379. *Id.*

380. Sayles, *supra* note 358, at 694.

381. *Id.*

382. Zschau et al., *supra* note 350, at 548.

383. *Deadlock*, BLACK'S LAW DICTIONARY (11th ed. 2016).

dispute resolution options.³⁸⁴ If the family decides to syndicate or develop the groundwater rights, the private water trust can simplify the situation.³⁸⁵ Syndication is when a group of people organizes for a common purpose or interest.³⁸⁶ For example, syndication of groundwater rights may eliminate the requirement of multiple signatures on a deed, giving a single person or an elected committee power of direction over the corpus of the trust.³⁸⁷ When developing the groundwater, such as improving pumping facilities, the private water trust can reduce delays, particularly when dealing with a number of contractors and where multiple signatures must be obtained from owners in different parts of the world.³⁸⁸

If more land is acquired for the trust, the beneficiaries of groundwater rights may need to transfer these rights into a larger real estate trust.³⁸⁹ In addition to avoiding deadlock, the Illinois land trust makes transferability easier.³⁹⁰ Realty transactions are especially complicated with shared ownership because of the unity of legal title in all parties.³⁹¹ This problem is evident in the event of bankruptcy, insanity, or death of a joint owner.³⁹² As previously discussed, joint ownership requires a signature from every participant when making financial decisions, like transferring title.³⁹³ This process is more difficult when co-owners live in different parts of the country.³⁹⁴ Furthermore, in a number of jurisdictions, specifically community property states, a spouse's signature is required for a valid conveyance of the property.³⁹⁵

Nearly all problems with transferability that are common with joint ownership of real estate are easily avoided with a land trust.³⁹⁶ Paperwork is simplified because the trustee has the full power of conveyance and only his signature is required to transfer legal title of the property.³⁹⁷ Moreover, because the beneficiaries' interest in the land trust is that of personalty, their interest can be represented by a certificate of ownership, which avoids many of the intricacies involved in the transference of realty.³⁹⁸ The real property record title remains uninterrupted even when the ownership of these

384. Zschau et al., *supra* note 350, at 548.

385. *Id.*

386. *Id.*

387. *Id.*

388. *Id.*

389. Sayles, *supra* note 358, at 694.

390. *Id.*

391. *Id.*

392. *Id.*

393. *Id.*

394. *Id.*

395. *Id.*

396. *Id.*

397. *Id.*

398. *Id.*

certificates frequently change.³⁹⁹ Additionally, a key problem with co-tenancy is that beneficiaries may look to break up and profit from the sale of the real estate.⁴⁰⁰ One way to limit the beneficiary's ability to promise their property interest to a third-party is to restrict the ability to transfer the interest without the trustee's consent.⁴⁰¹ This provision protects beneficiaries against the transfer of interest to a party whose aims are counter to the beneficiaries' wishes.⁴⁰² When the groundwater rights are placed into the trust, any beneficiary looking to partition the right cannot do so.⁴⁰³ The private trust also protects against any marital property claims that attach to realty.⁴⁰⁴

In contrast, if the owners wish to authorize the transfer of interests without consent from the trustee, the land trust makes the transfer easier because formal rules governing real property are inapplicable.⁴⁰⁵ When using a private land trust, if a beneficiary decides to assign the interest to a third-party, the purchaser has the confidence to abandon expenses commonly associated with real estate transfers such as title searches.⁴⁰⁶

When an investor desires to acquire groundwater rights under a large tract of land, prices may rise and sellers may hold out if the acquisition plan or buyers' names can be easily found in the public record.⁴⁰⁷ By utilizing the protections of the Illinois land trust for a private groundwater trust, the co-owners of the right can remain anonymous.⁴⁰⁸ Complete secrecy is afforded to the co-owners of the right because record ownership is held by the trustee.⁴⁰⁹ As long as the trust agreement includes a provision prohibiting the trustee from disclosing the identity of the beneficiaries, potential sellers cannot discover the identity, and therefore purpose, of the parties involved in the acquisition of the groundwater rights.⁴¹⁰ This anonymity protects the individual parties from liability.⁴¹¹

Anonymity provides a further benefit, allowing the beneficiaries to no longer own a real property interest in the groundwater, resulting in creditors looking to only being able to reach the beneficial personal property interest and not the groundwater right itself.⁴¹² Specifically, creditors of an individual beneficiary are unable to file a lien against the groundwater right and cannot

399. *Id.*

400. Zschau et al., *supra* note 350, at 531–32.

401. *Id.* at 531

402. *Id.* at 531–32

403. *Id.*

404. *Id.* at 549.

405. *Id.* at 531–32.

406. Zschau et al., *supra* note 350, at 550.

407. Sayles, *supra* note 358, at 694.

408. *Id.*

409. *Id.*

410. *Id.*

411. *Id.*

412. Zschau et al., *supra* note 350, at 549.

foreclose on the property.⁴¹³ Judgement and tax liens only attach to real property.⁴¹⁴ In addition to the anonymity the trust provides, a provision in the trust agreement that limits the beneficiaries' right to pledge their personal property interest limits creditors' ability to interfere with groundwater rights.⁴¹⁵

Coupled with the anonymity a trust affords, the private land trust may be drafted to provide for succession of ownership of groundwater rights and therefore avoid probate altogether.⁴¹⁶ Consequently, nonresident ownership of real estate is subject to double probate, or "a second grant of probate on one estate at the request of a joint executor who was not a party to the first grant."⁴¹⁷ This is avoided altogether because the interest held by the beneficiary is personalty rather than realty.⁴¹⁸ Furthermore, the death of a beneficiary will not trigger separate administration in the state where the land is located because the beneficiary's interest passes to a personal representative designated in the trust document.⁴¹⁹ As discussed earlier, this is particularly important because it protects the plan of development for the groundwater rights from dissident co-tenants who would otherwise have the right to partition the property.⁴²⁰

Finally, placing groundwater rights into a private land trust retains the tax advantages of individual ownership.⁴²¹ A properly drafted land trust receives the benefits of a corporation without the tax burden of a corporate entity.⁴²² Corporate syndication is subject to a double tax on earnings; taxes are paid on the corporation's taxable income first, while the shareholders pay an additional tax on this revenue.⁴²³ The private land trust protects from a challenge that the organization is taxable as a corporation.⁴²⁴ The tax status of an association depends on the likeness of the trust to six corporate characteristics.⁴²⁵ Here, the Internal Revenue Service (IRS) considers "the presence of associates, an object to carry on the business and divide the gains, continuity of life, centralization of management, liability for corporate debts limited to the corporate property, and free transferability of interests."⁴²⁶ The IRS will not classify the land trust as an association unless the corporate

413. *Id.*

414. *Id.*

415. *Id.*

416. Sayles, *supra* note 358, at 694.

417. *Id.*

418. *Id.*

419. *Id.*

420. *See supra* note 349 and accompanying text.

421. Sayles, *supra* note 358, at 694.

422. *Id.*

423. *Id.*

424. *Id.*

425. *Id.*

426. *Id.*

characteristics outweigh the non-corporate characteristics.⁴²⁷ Although a land trust usually contains four of these characteristics, the tax status is usually determined by limited liability and centralized management.⁴²⁸ It is uncommon for a land trust to consist of these characteristics.⁴²⁹ Estate planners may avoid this double-tax if they remain mindful of these characteristics while drafting the trust document.⁴³⁰

3. Provisions to Include in the Private Groundwater Trust

As discussed previously, the private water trust includes two documents: the deed in trust and the trust agreement.⁴³¹ The first section of the deed in trust focuses on the transfer of the rights and enumerates the powers of the trustee, while the second section describes the obligations of any party dealing with the trustee in a transaction regarding the groundwater rights.⁴³² The final two provisions of the deed in trust deal with the liability or obligation of the trustee and the interest of the beneficiaries.⁴³³ Although the trustee is given absolute power to deal with the groundwater rights, this power is tempered by the terms in the trust agreement.⁴³⁴

At the outset of the deed in trust, the grantor grants and conveys general warranty to the trustee the groundwater rights for valuable consideration.⁴³⁵ Here, it is important that the drafter name the trustee and provide the complete legal description of the rights.⁴³⁶ Following the description of the rights, the deed grants the property to the trustee as fee simple with appurtenances thereunto belonging to the trust and for the purposes and uses laid out in the trust agreement.⁴³⁷ Next, the deed grants full power and authority to the trustee, and the trustee's successors, to conserve and protect the water rights.⁴³⁸ The deed also gives the trustee power to sell and grant options to purchase the groundwater rights.⁴³⁹ Additionally, the deed in trust must give the trustee power to exchange the groundwater rights for any realty or personalty.⁴⁴⁰ Along with the power to exchange, the deed grants the trustee power to convey the groundwater rights by deed or other conveyance,

427. *Id.*

428. Zschau et al., *supra* note 350, at 550.

429. *Id.*

430. *Id.*

431. *See supra* Part IV.B.

432. Sayles, *supra* note 358, at 711–12.

433. *Id.* at 711–13.

434. *Id.* at 711–18.

435. *Id.* at 711.

436. *Id.*

437. *Id.*

438. *Id.*

439. *Id.*

440. *Id.*

and to mortgage, pledge, or lease the rights.⁴⁴¹ Finally, the trustee is given power to “release, convey or assign any other right, title or interest whatsoever in the Property or any part thereof.”⁴⁴²

Following the account of the trustee’s powers, the deed in trust enumerates the rights and obligations of third parties in dealing with the trustee.⁴⁴³ First, any party dealing with the trustee, regarding the groundwater rights, shall not be obliged to see the application of purchase, rent, money advanced, or money borrowed on the rights.⁴⁴⁴ Additionally, any party dealing with the trustee has no obligation to see that the terms of the trust are complied with, nor must they investigate the authority or expediency of the trustee.⁴⁴⁵ The party dealing with the trustee has no right to learn of or question the terms of the trust agreement.⁴⁴⁶ Any instrument executed by the trustee in regard to the groundwater rights, including lease, mortgage, or deed is conclusive evidence for any party claiming interest, right, or title of the rights.⁴⁴⁷ Specifically, at the time the trustee delivers the instrument, the trust is in full force and effect.⁴⁴⁸ Furthermore, the instrument complies with the terms and conditions of the trust agreement and is binding upon all beneficiaries.⁴⁴⁹ When the trustee executes any instrument regarding the groundwater rights, the trustee has assumed authority and power to deliver the instrument.⁴⁵⁰ If the rights are conveyed to a successor beneficiary in trust, the successor is properly appointed and the estate, title, powers, rights, obligations and duties of the predecessor beneficiaries are vested in the successor.⁴⁵¹

In closing, the deed in trust absolves the trustee of individual liability or obligation arising from ownership of the legal title of the groundwater rights.⁴⁵² The trustee is not liable for any act, indebtedness incurred, or contract entered into regarding the rights, except for any trust funds actually possessed by the trustee, gross negligence, or intentional malfeasance.⁴⁵³ As previously mentioned, this section establishes that the beneficiary’s interest in the trust is personalty and not realty.⁴⁵⁴ Thus, the beneficiary’s interest shall only be the earning, avails and proceeds of the property.⁴⁵⁵ Finally, the

441. *Id.*

442. *Id.*

443. *Id.* at 711–12.

444. *Id.* at 712.

445. *Id.*

446. *Id.*

447. *Id.*

448. *Id.*

449. *Id.*

450. *Id.*

451. *Id.*

452. *Id.*

453. *Id.*

454. *Id.*

455. *Id.*

grantor reestablishes that he has the right to convey the groundwater rights to the trustee, that there are no encumbrances to the rights, and that the trustee retains quiet possession of the rights.⁴⁵⁶

The deed in trust is drafted in conjunction with the trust agreement.⁴⁵⁷ An estate planner must consider the rules for trusts located in the Texas Property Code when drafting the trust agreement for a private water trust in Texas.⁴⁵⁸ The private water trust is a transfer of real estate and thus falls under the statute of frauds.⁴⁵⁹ Accordingly, the declaration must be in writing and signed by the settlor or their authorized agent.⁴⁶⁰ In Texas, to devise a trust, the trustor may either hold the groundwater rights as trustee for another person, make an *inter vivos* transfer of the rights “to another person as trustee for the transferor or a third person,” make a testamentary transfer of the rights to another person as trustee for the beneficiaries, make “an appointment under a power of appointment to another person as trustee for” the beneficiaries, or make a promise to a trustee whose rights under the promise are to be held in trust for the beneficiaries.⁴⁶¹

Additionally, the disposition of the private water trust is not invalid if the settlor reserves or retains in himself (or another person other than the trustee) any other interests in or power over the trust, such as:

a beneficial life interest for himself; . . . the power to revoke, modify, or terminate the trust in whole or in part; . . . the power to designate the person to whom or on whose behalf the income or principal is to be paid or applied; . . . the power to control the administration of the trust in whole or in part; . . . the right to exercise a power or option over property in the trust or over interests made payable to the trust under an employee benefit plan, life insurance policy, or otherwise; or . . . the power to add property or cause additional employee benefits, life insurance, or other interests to be made payable to the trust at any time.⁴⁶²

The first provision of the groundwater trust is a recital of conveyance, where the beneficiary conveys title of the rights to the trustee.⁴⁶³ Here, mirroring the deed in trust, the trust describes the groundwater rights.⁴⁶⁴ This section states that when the trustee takes the property, or any property later conveyed to the trust, it is agreed that the trustee shall hold the trust *res* for the uses and purposes outlined later by the terms in the trust agreement.⁴⁶⁵

456. *Id.*

457. *Id.* at 712–13.

458. *See* TEX. PROP. CODE §§ 112.001, 12.004, 12.033.

459. *See id.* § 12.001.

460. *See id.*

461. *See id.*

462. *See id.* § 12.033.

463. *See* Sayles, *supra* note 358, at 713.

464. *Id.*

465. *Id.*

As indicated in the previous section, this provision is essential to the designation of the beneficiaries' interest in the trust *res* as personalty, rather than realty.⁴⁶⁶ Also, the trust is ineffective until the land is transferred to the trustee for the benefit of the beneficiaries.⁴⁶⁷

The beneficiaries' interests follow in the following provision.⁴⁶⁸ Here, the interests are summarized as all the avails, proceeds and earning of the property determined by the proportion designated to each beneficiary, as submitted opposite their respective names, at the end of the agreement.⁴⁶⁹ As with the deed in trust, the beneficiary's interests shall be deemed personalty and shall pass or be assigned to whomever the beneficiary designates in will or other document.⁴⁷⁰ Furthermore, this section states that the beneficiaries shall have no legal or equitable title, interests or right in the real estate which comprises the property of the trust.⁴⁷¹ The beneficiary's right to compel partition is denied here, as well.⁴⁷² Finally, it must be stated that the death of a beneficiary shall not terminate the trust nor affect the powers of the trustee.⁴⁷³ This section works in tandem with the previous section and defines how personalty should be interpreted by the court.⁴⁷⁴ It is perhaps the most important provision as it protects the beneficiaries from personal liability.⁴⁷⁵

The next provision grants the beneficiaries the right to direct the trustee to convey and deal with the legal title to the property, to control and manage the trust property, and to receive any avails and proceeds from the mortgage, rental, or sale of the property.⁴⁷⁶ This section takes the control issued to the trustee in the deed of trust and brings it back into the hands of the beneficiaries.⁴⁷⁷ Without this provision, the beneficiaries do not have the power make decisions in regard to the trust property.⁴⁷⁸

Following this, a trust provision outlines the trustee's duties.⁴⁷⁹ As previously discussed, it is important to provide the trustee both with powers and duties related to the administration of the trust to avoid the Statute of Uses.⁴⁸⁰ At the written direction of the beneficiaries, the trustee must "execute all instruments which shall be necessary to protect and conserve"

466. See *supra* Part IV.B.2.

467. See TEX. PROP. CODE § 112.001(2).

468. Sayles, *supra* note 358, at 713–14.

469. *Id.*

470. *Id.*

471. *Id.*

472. *Id.*

473. *Id.*

474. See *supra* Part IV.B.2.

475. See *supra* Part IV.B.2.

476. Sayles, *supra* note 358, at 714.

477. See *supra* Part IV.B.3.

478. See *supra* Part IV.B.3.

479. Sayles, *supra* note 358, at 714.

480. See *supra* Part IV.B.1.

the trust property.⁴⁸¹ Upon written direction of the beneficiaries, the trustee must sell or grant an option to purchase the trust property, or any interests in the property.⁴⁸² The trustee must also exchange trust property or an interest in the property for real or personal property upon terms decided by the beneficiaries.⁴⁸³ Furthermore, the trustee agrees to convey the trust property by deed or other conveyance to any grantee the beneficiaries request in writing, with or without consideration.⁴⁸⁴ The beneficiaries may also require the trustee to pledge or mortgage the trust property or any interest in the property.⁴⁸⁵ Additionally, the beneficiaries may compel the trustee to lease, or extend, renew, amend or modify any lease on the property.⁴⁸⁶

The beneficiaries of the trust may require the trustee to assign, release or convey title or right to the trust property or any interest thereof.⁴⁸⁷ Finally, the beneficiaries do not require the trustee to investigate the propriety, necessity or authenticity of a written direction delivered by the beneficiaries or a representative of the beneficiaries.⁴⁸⁸ This provision is crucial because it outlines the power granted to the beneficiaries in the previous section.⁴⁸⁹

The following provision details the objects and purposes of the trust.⁴⁹⁰ This section dictates that the trustee may undertake only activities strictly necessary to managing the trust, and cannot commit self-dealing (i.e., “[p]articipation in a transaction that benefits oneself instead of another who is owed a fiduciary duty”).⁴⁹¹ This provision also records that the trust agreement does not create a corporation or any other type of business association between the beneficiaries and the trustee.⁴⁹² It is important to include this section to protect the individual beneficiaries from liability.⁴⁹³

Next, the trust agreement outlines the beneficiaries’ duties and powers to manage and operate the trust property, including the renting, selling, and managing the disposition thereof.⁴⁹⁴ This power includes the right to collect and handle any rent or avails, except when the trustee is granted in writing to collect any proceeds from the property.⁴⁹⁵ Additionally, the beneficiaries have the duty to pay taxes and insurance premiums, as well as other costs

481. Sayles, *supra* note 358, at 714.

482. *Id.*

483. *Id.*

484. *Id.*

485. *Id.*

486. *Id.*

487. *Id.*

488. *Id.*

489. *See supra* Part IV.B.3.

490. Sayles, *supra* note 358, at 715.

491. *Id.* at 714.

492. *Id.*

493. *See supra* Part IV.B.2.

494. Sayles, *supra* note 358, at 715.

495. *Id.* at 714.

concerning the trust property.⁴⁹⁶ This section allows the beneficiaries to delegate administrative tasks to a single person.⁴⁹⁷ Without this provision, the trustee does not have power to manage the trust for the beneficiaries.⁴⁹⁸

The next trust provision enumerates the rights and powers of third-parties regarding the conveyance, sale, lease or mortgage of the trust property.⁴⁹⁹ A third-party neither has the right to see the application of purchase money or rent, nor do they have the right to inquire into or see the compliance of the terms of the trust agreement.⁵⁰⁰ By mirroring the duties of the trustee, a third-party may not inquire to the authority, necessity or expediency of a trustee's act. Any third-party engaged with the trustee must accept every mortgage, lease, deed, or other instrument executed by the trustee on the behalf the trust.⁵⁰¹ Additionally, any document executed by the trustee in relation to the trust is conclusive evidence of the wishes of the beneficiaries and is binding upon the beneficiaries.⁵⁰² This section reiterates that the Trustee is authorized and empowered to execute and deliver any such document.⁵⁰³ If a beneficiary's interest is delivered to a successor, the successor is properly appointed and fully vested with rights, powers, duties, obligations, estate, and title of the predecessor in trust.⁵⁰⁴ This provision allows the trustee to carry out the beneficiaries' written instructions, as well as conduct the business of the trust.⁵⁰⁵ This removes any confusion in transactions between trustee and third-parties.⁵⁰⁶

The final provisions of the trust agreement are standard for trusts and should include the process by which the beneficiary assigns his interest to another; the trustee's liability in regard to the trust property, the trustee's reimbursement and indemnification for liability, the beneficiaries' duty to pay for insurance to protect the trustee; how a trustee may resign, how to amend the trust; the trust's governing law; how the trustee is compensate, and how successors to the trust are appointed.⁵⁰⁷ Following the final provision, the trustee and beneficiaries subscribe their names and signatures.⁵⁰⁸ Here, the drafter should note the beneficiaries' interest percentages.⁵⁰⁹

496. *Id.*

497. *See supra* Part IV.B.2.

498. *See supra* Part IV.B.2.

499. Sayles, *supra* note 358, at 715–16.

500. *Id.* at 714.

501. *Id.*

502. *Id.*

503. *Id.*

504. *Id.*

505. *See supra* Part IV.B.3.

506. *See supra* Part IV.B.2.

507. Sayles, *supra* note 358, at 715–16.

508. *Id.* at 714.

509. *Id.*

VI. CONCLUSION

Although public water trusts have yet to see widespread use throughout the United States, the public trusts that are currently utilized provide a number of important lessons that should be incorporated into the private water trust.⁵¹⁰ As previously discussed, the most successful public water trusts are those that focus on using resources to purchase or improve water resources.⁵¹¹ Non-profit organizations such as the Oregon Water Trust and the Water Well Trust are fruitful because they do not rely on water rights donations from the public.⁵¹² Instead, these groups use their own financial resources, or use readily available resources from public grants.⁵¹³ The Texas private groundwater trust, in turn, should focus on both acquiring groundwater rights and pooling the financial resources of the beneficiaries to improve water rights held under the trust.⁵¹⁴ Improvements may include building water wells, repairing existing wells, or fixing groundwater quality.⁵¹⁵

Another important lesson is that state-mandated groundwater trusts are largely ineffective.⁵¹⁶ Trends indicate that it is difficult to convince the public to give up valuable resources for a benefit that may or may not be actualized.⁵¹⁷ However, groundwater trust funds initiated by the state which utilize funds from lawsuit awards have been successful.⁵¹⁸ The wisdom here is the private groundwater trust is more likely to positively impact water conservation because it is a voluntary transaction. Right holders do not have to give up their water rights to preserve water. Additionally, both the estate planner and the trustee must always be aware of energy development within the watershed where the corpus of a groundwater trust is located.⁵¹⁹ It is important for a fiduciary to do anything within his power to protect client groundwater from contamination.⁵²⁰

Finally, the American Ground Water Trust illustrates that education is key for groundwater conservation.⁵²¹ It is the duty of every estate planner to educate their clients of the benefits of a private water trust.⁵²² In doing so, the estate planner can help protect their clients while at the same time benefitting the public good and contributing to the preservation of the

510. See *supra* Parts II, III.

511. See *supra* Parts II.A, II.B.2.

512. See *supra* Parts II.A, II.B.2.

513. See *supra* Parts II.A, II.B.2.

514. See *supra* Parts II, IV.

515. See *supra* Part II.

516. See *supra* Part II.

517. See *supra* Part II.

518. See *supra* Part II.C.2.

519. See *supra* Part II.C.2.

520. See *supra* Part II.C.2.

521. See *supra* Part II.B.1.

522. See *supra* Part I.

environment for future generations.⁵²³ These lessons, coupled with the protections of the private land trust, are more effective methods for protecting natural resources.⁵²⁴

523. See *supra* Part I.

524. See *supra* Part I.