

Texas Outcomes-Based Finance Challenge: Summary and Lessons Learned

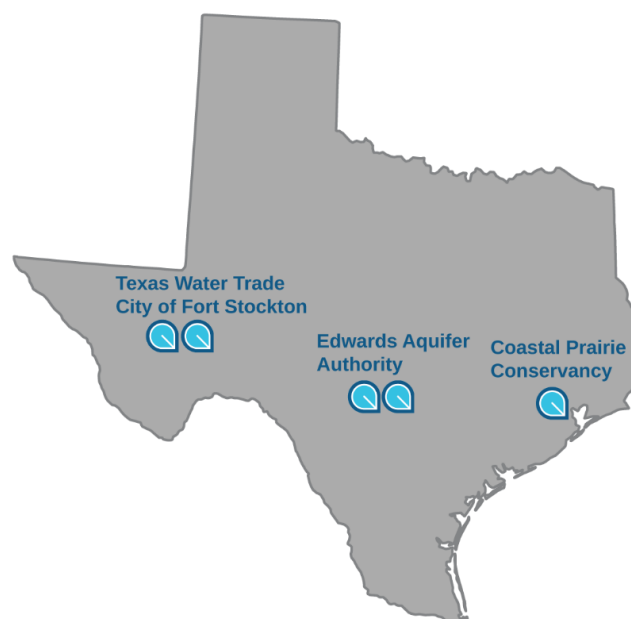
Summary

Quantified Ventures launched the Texas Outcomes-Based Finance Challenge in October 2020. We solicited and provided pro bono transaction design and structuring services for five projects addressing environmental and community needs, thanks to the generous support of The Cynthia and George Mitchell Foundation, Lyda Hill Philanthropies, Harte Charitable Foundation, Jacob & Terese Hershey Foundation, The Meadows Foundation, and the Water Funders Initiative.

Outcomes-based finance seeks to quantify and leverage the environmental and social outcomes of a project to attract new capital. At times, these outcomes are directly monetized through purchase agreements from payors, such as through the sale of voluntary carbon offset credits. In others, they're the centerpiece of new narratives that broaden the coalition of willing funders and investors, who are motivated to pay for or provide financing to a project because it aligns with their objectives.

The forms of outcomes-based finance are as diverse as the projects that they support. We've assisted in the issuance on Environmental Impact Bonds, which infuse the standard municipal bond structure with a prediction, evaluation, and disclosure of project outcomes. We've created revolving funds that support environmental restoration projects, then replenish via outcomes monetization and public funding. We've also organized the creation of local intergovernmental authorities formed specifically to coordinate funding streams, share staff capacity, and win larger public and philanthropic grants.

The Texas Outcomes-Based Finance Challenge took place in three phases, and generated five projects:



Project Overviews

Edwards Aquifer Authority: Next-Generation Aquifer Program	
Summary	QV designed a first-of-a-kind water contract that dictates usage depending on drought conditions, allowing irrigators to retain ownership while providing more environmental water in extreme drought
Delivered Solution	<ul style="list-style-type: none"> ▪ EAA pays irrigators upfront to enroll in a water contract that allows different actions depending on aquifer conditions: <ul style="list-style-type: none"> ▪ Wet years: Irrigators maintain control (70% of the time) ▪ Drought years: EAA gains ability to decide how much of the water is pumped vs. remains in the ground to feed the springs (25% of the time) ▪ Emergency drought years: All water remains in the ground (5% of the time)
Key Outcomes	<ul style="list-style-type: none"> ▪ Water contract is a financial “win-win” that is more cost-effective for EAA and more financially rewarding for irrigators than current market options ▪ Water transactions expected to cost 75% less than fee simple acquisition ▪ Created and delivered presentation to EAA board of directors ▪ Initial pilot program target of 4,000 acre-feet (\$4 million)

Edwards Aquifer Authority: Next-Generation Land Management Program	
Summary	QV created a 10-year blueprint for groundwater management agency with four financing/funding program models to build programs and partnerships that influence regional land use patterns.
Delivered Solution	<ul style="list-style-type: none"> ▪ Four distinct program phases with specific activities, goals, and target partners. Includes in-house financing and incentive programs to work with key regional stakeholders: <ul style="list-style-type: none"> ▪ Gap financing program: offers small loans that aid conservation organizations in buying easements ▪ Bridge financing program: offers large loans for conservation organizations to acquire easements quickly, and pay back over time ▪ Aquifer-friendly BMP revolving loan fund: works with developers to finance on-site projects that improve aquifer recharge ▪ Aquifer recharge credit bank: facilitates a regional environmental market for aquifer recharge
Key Outcomes	<ul style="list-style-type: none"> ▪ Identified near-term activities for EAA to advance regional land conservation activities as stepping stones to a broader long-term program ▪ Designed four funding and financing programs that EAA could offer in the future with accompanying financial models and financial analysis

Texas Water Trade: Aquifer Sustainability	
Summary	QV supported identification and implementation of pilot groundwater sustainability strategies that are politically, culturally, and financially feasible in the local context.
Delivered Solution	<ul style="list-style-type: none"> Application by the city of Fort Stockton to the Texas Drinking Water State Revolving Fund for an alternative drinking water well Collaboration with one of the largest local agricultural water users (high-efficiency sprinklers replacing flood irrigation) Framework for a regional Aquifer Sustainability Fund that can pool contributions from groundwater users to support mutually beneficial water projects
Key Outcomes	<ul style="list-style-type: none"> Analyzed feasibility of various aquifer sustainability strategies and eliminated unworkable ones, such as crop conversion, farm acquisition Delivered summary of aquifer sustainability need and solutions to Fort Stockton city council (presentation co-created by QV + TWT, delivered by TWT) Linked aquifer sustainability outcomes to nature-based tourism economy outcomes

City of Fort Stockton: Nature-Based Economic Development	
Summary	QV crafted an economic development strategy centered around “heritage springs tourism” to leverage the city’s regionally unique tourism and water assets
Delivered Solution	<ul style="list-style-type: none"> Drafted 25-page Implementation and Investment Plan containing specific near- and long-term projects to build the heritage springs tourism economy Convened a core group of local stakeholders, small business owners, and private citizens to coordinate local actions to implement the Plan Created economic model of potential visitation and local tax revenues
Key Outcomes	<ul style="list-style-type: none"> Implementation and Investment Plan recommendations on heritage springs tourism will be integrated into the city Economic Development Master Plan Core group of local stakeholders continues to meet monthly, moderated by QV and TWT

Coastal Prairie Conservancy: Green Burials Initiative	
Summary	QV conducted due diligence, transaction structuring, and investor engagement for a first-of-its-kind land conservation investment supported by an on-site green burials business
Delivered Solution	<ul style="list-style-type: none"> Completed due diligence on the cemetery industry, land conservation industry, and local market demand through stakeholder and subject matter expert interviews Developed a revenue and cost model including pricing and volume by offering, upfront and ongoing costs, and long-term financial sustainability Created a capital raise strategy with 35+ funder and investor targets
Key Outcomes	<ul style="list-style-type: none"> \$3.3 million capital raise ongoing for prairie restoration supported by a green burials business venture 50 acres of land conservation

Lessons Learned

1. Outcomes-based finance can work for more than just local governments, and in more forms than just Environmental Impact Bonds: QV's previous regional Challenges focused on working with local governments to issue Environmental Impact Bonds, which uses the municipal bond transaction structure as a basis for outcomes-based finance. In Texas, we broadened eligibility to all organizations and transaction types for the first time. As a result, we saw a broad range of creative proposals from different types of groups and ended up with a diversity of outcomes-based finance strategies and structures to solve their individual challenges.

Project	Partner type	Transaction vehicle(s)	Outcomes-based provisions
Edwards Aquifer Authority groundwater program	Gov't agency	Conservation easement	Use provisions and payment obligations vary based on aquifer drought conditions
Edwards Aquifer Authority land program	Gov't agency	Revolving loan facility; planning survey	Loan terms dictated by quantified aquifer benefit; recharge credits certified for development offsets
Texas Water Trade aquifer sustainability	Non-profit	Donor-advised fund	Long-term aquifer sustainability benefits quantified to attract funders, outcomes payors
City of Fort Stockton nature-based economy	Local gov't	Local sales tax; tax district	Increased springflow attracts tourism to generate sales tax revenue
Coastal Prairie Conservancy green burials	Non-profit	Business venture	Green burial plots sold to finance non-profit land acquisition

2. Extensive upfront planning and stakeholder engagement are required to position projects to secure innovative funding and financing: Outcomes-based finance approaches are novel tools, and by definition do not fit effortlessly into the established processes, stakeholder dynamics, and analytical frameworks they're meant to disrupt. Innovative thinking is needed even before the point at which projects need capital. These transactions typically need prior effort in market assessment, transaction design, quantitative modeling, and due diligence. The Edwards Aquifer Authority, for example, came with several strong ingredients for an outcomes-based financing: a defined environmental outcome, dedicated financial resources, in-house subject matter expertise, and strong stakeholder relationships. However, to move from those raw ingredients to a specific transaction vehicle with novel financial flows was a multi-stage process that involved: learning the regulatory, political, and environmental context; interviewing stakeholders and experts to analyze existing groundwater management approaches for best practices and lessons learned; building a financial model; vetting proposed transaction structures with focus groups of key transaction participants, such as irrigators; and gaining approval from key decisionmakers within EAA. These steps are all critical to make sure that a novel financing approach, which is inherently disruptive to accustomed processes and

established understandings of risk/reward, is not only uniquely fit for the challenge it's addressing but also building buy-in from all participants.

3. Land and water are the two use cases in Texas with the most potential for innovative funding and financing strategies: Texas was the fastest growing state of the last decade, increasing its population by 15%, or 4 million people. Generational ranches and farmlands are facing development pressure beyond what policymakers, communities, and nonprofit groups can react to. Outcomes-based finance can help find a balance between growth and heritage, whether by structuring alternative business propositions for open lands or incentive programs for developers to incorporate more green spaces. Similar “third way” options can be structured for the state’s precious water resources, by aligning incentives for shared stewardship between municipal users and agricultural producers or capturing the economic value of restoring historic spring flow. Outcomes-based finance works best where it can accomplish multi-sector aims efficiently, quickly, and impactfully alongside traditional tools.
4. The outcomes-based finance approaches developed through the Challenge can be replicated within Texas and throughout the country: Replicability was a key criteria in selecting projects through the Challenge. The Coastal Prairie Conservancy’s green burials venture, for example, can close funding gaps for land preservation at the juncture of urban and rural – a pressing need in many booming metro areas in the US. The Edwards Aquifer Authority’s groundwater conservation easement creates a financial structure that mediates the central tension behind the rising western water crisis: competing uses of environment, drinking water, and agriculture. The outcomes-based structures in Fort Stockton work together to promote sustainable water use and then capture resulting nature-based tourism benefits, which adds onto traditional notions of “highest and best” water use in the west. As Quantified Ventures continues its work in Texas and in the west, the outcomes-based finance tools, partnership models, and deliverables created through the Texas Outcomes-Based Finance Challenge have already sparked new conversations with groups intrigued by how these approaches can be brought home to their local initiatives.