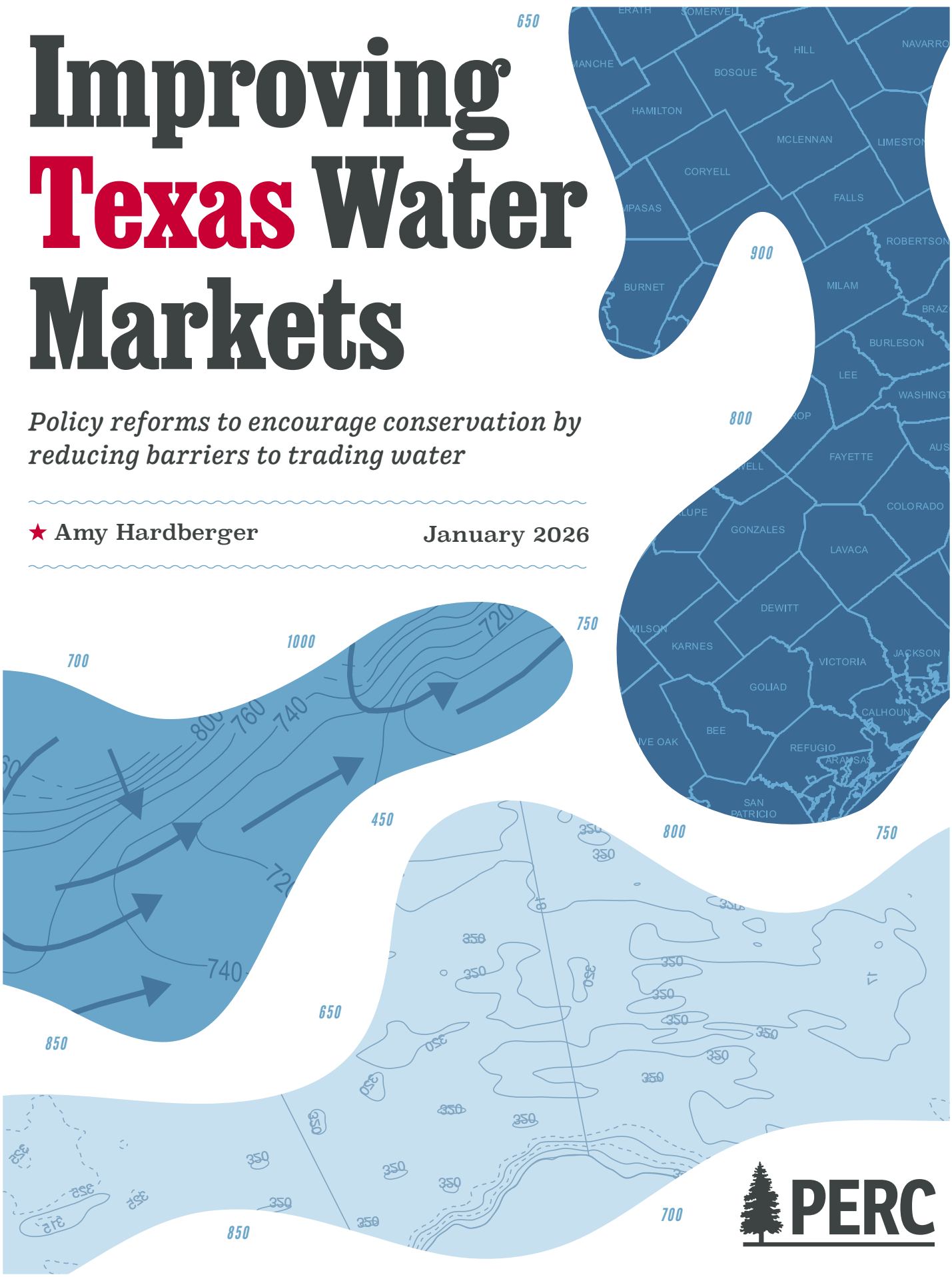
Improving Texas Water Markets

Policy reforms to encourage conservation by reducing barriers to trading water

★ Amy Hardberger

January 2026



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More detailed information and legal analysis can be found in: Amy Hardberger, *Get in the Flow: Policy Changes that Can Increase Texas's Surface Water Transfers,* 12 Texas A&M Law Review 591 (2024).

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Introduction

Like many western states, Texas is seeing exceptional growth while also suffering increasingly hot temperatures throughout the year.[1] Already home to over 30 million residents, the state's population is projected to soar to between 40 and 46 million by 2060.[2] All of these people will need water. Yet most new citizens are moving to burgeoning cities located along the I-35 corridor in the middle of the state with limited water supply opportunities.[3] Models using the drought of record, the worst drought in Texas history, predict a shortfall of 6.9 million acre-feet per year in 2070.[4]

Texas's surface water supplies include 15 major river basins and eight coastal basins. Many of these resources, particularly in the more populous areas, are already fully or over- allocated. In addition to water that will be needed for new users, the state has calculated environmental flow obligations without sufficient new water available to meet them.

Surface water in Texas is allocated using the prior appropriation permitting system, summed up as "first-in-time, first-in-right." This system locks in both the type of use and the method of diversion at the time the permit is issued, often leading to inefficiencies. During the 2011 drought, power plants holding relatively junior, or newer, permits were in peril due to declining and warming water supplies needed for essential cooling. Despite the state's growing needs for high-value uses, Texas courts have consistently ruled that senior, or older, users are entitled to their allocations before any junior users, regardless of the relative societal importance of the senior appropriator's use as compared to other needs.[5] Given this reality, trade is an important remaining option; however, barriers impede potential exchanges that would benefit buyers and sellers.

Utilizing existing water supplies in the most efficient manner and making conserved water available for new users and the environment is paramount for the state's future.[6] Unfortunately, state law creates barriers to active water markets that can help ensure water resources are channeled to the highest-valued uses. A primary market impediment is encumbering a transferor with the full burden to demonstrate that a proposed change will not harm any existing users or the public interest, which vests veto rights in third parties and leads to an underutilization of the resource. Further, there is not a clear measure of harm or de minimis exemption. Also, use-it-or-lose-it provisions create unintended consequences by encouraging inefficient applications of water.

This report reviews Texas surface water law, highlighting areas that discourage water transfers and providing detailed recommendations for reforming state law to promote water efficiency and facilitate markets. Changes are needed to improve the way water in Texas is conserved and repurposed to address the state's current and future water challenges.

Policy Reforms to Facilitate Texas Water Markets

1. Collect and assess data needed to clarify characteristics of water rights.
2. Legally recognize and protect rights to saved water.
3. Limit the power of third parties to veto transfers.
4. Use the state water trust and water bank to establish and promote a market for water transfers.
5. Use transfers to increase environmental flows and protect the public trust.

The Problem: Dwindling Water Supplies, Shifting Demands, and Barriers to Trade

In Texas, like many western states, surface water rights are governed by the prior appropriation doctrine, a first-in-time system that dates back to the mid-1800s. Under prior appropriation, the first user to make "beneficial use" of unappropriated water is referred to as the "senior user," who enjoys rights above all subsequent, or "junior," users.[7]

Unfortunately, prior appropriation allocations are often based on historic miscalculations of water availability, and state laws have solidified inefficient diversions and uses.[8] Prior appropriation was always intended to be a flexible doctrine. Uses deemed "beneficial" change throughout time to reflect evolving societal values.[9] Despite the system's potential to change with the times, water is often not available for new high-value users, including growing cities, power generators, and industry. Drought-prone states dependent on over-appropriated rivers face the enormous challenge of finding ways to use water more efficiently so that more is available for environmental purposes as well as quickly growing populations. The reality is that new priorities can only be achieved by increasing the efficiency of existing users and facilitating transfers of saved water to new users.

Although water rights are legally transferrable, the current system inhibits the ability to easily shift rights, even when a higher-value use is identified. Transfer of a water right often requires a permit amendment, which can trigger a time-consuming and cost-prohibitive process.[10] Frequently, the biggest impediment to a sale is the obligation to demonstrate that the change will not harm any existing users, regardless of their priority date, the public interest, or the environment.[11] This burden creates high transaction costs, which can chill market transactions.

Market transfers provide an opportunity to motivate efficient water use and shift rights to newer users. Some market solutions are already being implemented between users, including users paying a farmer not to irrigate during a drought, or a junior user funding improvements for a senior user's diversion to ensure enough water remains to reach the junior rights holder. While these transactions are helpful, they are often ad hoc and temporary. Longer-term solutions, including large-scale reallocation of water rights through cooperative market transfers, that could address changing community needs related to urban growth, the need for more power generation, and the desire to conserve the environment and ecosystem services are much more difficult.[12]

Policy changes can accelerate markets, while still maintaining state priorities related to types of use and increased water efficiency, meeting the needs of growing populations—all while respecting vested property rights.

Current Approaches: Slow and Expensive Processes that Lock in Inefficiencies

Simple in its first-come-first-serve ethos, modern administration of the prior appropriation doctrine also considers the public trust and the environment. Texas defines surface waters, or "state water," as: "The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed … "[13] State water is a resource held in the public trust to be allocated by the state to benefit the public even when the permit is held by an individual user.[14]

Obtaining a permit

Before a new permit application can be considered, water must be available for appropriation. Availability can be a complex evaluation, but water is generally unavailable for a new appropriation if it is already appropriated by an individual or set aside for other purposes such as environmental flows or interstate compacts.[15] Effective assessments of availability require an accurate understanding of complex hydrologic systems, which was often not available at the time many permits were issued. This lack of data led to the over appropriation of most Texas rivers.

An appropriation requires beneficial use, which is "the basis, measure and limit of a water right" without waste.[16] The type of use and quantity used (including any diversion losses) must be deemed valuable or productive at the time the permit is issued.[17] What is considered beneficial varies by jurisdiction and changes over time. Diversion and application techniques used when many water rights initially vested are highly inefficient. For instance, old earthen ditches with high carriage losses and flood irrigation resulted in high runoff and return flows, whereas the amount of water needed for modern applications may be considerably less.[18] Once a permit is issued, neither the beneficial nature of the use nor the method of diversion is revisited.

A water permit does not confer fee-simple ownership of the water resource, but rather it grants an authorization of a usufructuary, or use, right. An appropriation, however, is a constitutionally protected property right that is generally alienable, either as part of a land sale or as a separate interest.[19]

Water rights during shortage

Under a first-in-time system, a user's priority determines the strength and value of their right. A senior right provides a powerful advantage over subsequent users, especially in times of water shortage. When water is scarce, a senior user makes a "senior call." The permitting agency then sends notice to junior rights holders requiring the cessation of any water diversions that would impair the senior user, with very limited exceptions for public health or safety priorities. Depending on the intensity of the shortage, a senior call can completely deny junior users access to their appropriation. These actions have been strictly enforced by Texas courts holding that a senior appropriator is entitled to their entire supply before a junior appropriator can take their allocation regardless of the types of use.[20]

States can also have an interest in curtailing water withdrawals. Senior rights are often held by agricultural users, while municipalities, power generators, and industry usually hold more junior permits.[21] During drought, states may wish to protect junior users deemed essential for the public welfare by equalizing curtailment across users, but they are legally obligated to adhere to the property rights vested in permit priority. The state's permitting authority, the Texas Commission on Environmental Quality (TCEQ) has limited authority to temporarily suspend or adjust rights so long as they do so in accordance with the priority system.[22]

Loss of rights through nonuse

Prior appropriation rights cannot be speculative, and failure to diligently put water to a beneficial use can result in loss of the right through abandonment or forfeiture. Once a water right is lost through abandonment or forfeiture, it returns to the system to potentially be reallocated to a new user. Abandonment requires a showing of a voluntary relinquishment of water, whereas forfeiture provisions codify a period of nonuse, often five years, that can trigger a loss of the right. Unlike abandonment, the loss of part or all of a water right through forfeiture is based strictly on the set period of nonuse, and no intent is needed.[23]

Texas's forfeiture statute integrates intent by requiring a showing that water was "willfully abandoned" for the three-year statutory period.[24] This statute is mostly unutilized due to concerns about unintended consequences.[25] Attempts at enforcement could encourage users, who had previously not used their full allocation, to begin or expand their use to protect themselves against forfeiture proceedings. This spike in use could create larger shortages in systems that historically relied on incomplete withdrawals.[26] Exceptions to forfeiture provide that cancellation will not occur if the lack of use was the result of the implementation of conservation measures or the permit was "obtained to meet demonstrated long-term public water supply or electric generation needs as evidenced by a water management plan … "[27]

Permit modifications: no harm

Prior appropriation generally focuses on protecting senior users, but attention shifts to protecting junior users under the process for transferring or modifying permits. Permit modifications required with a water sale may include type of use, location of diversion, location of use, amount or location of return flow, and time of use.[28] Water rights can be transferred without loss of the priority date if the change will not harm existing users, including those junior to the transferring right. The applicant requesting the change must demonstrate that water for other appropriators from the same source will be unchanged in quantity and timing.[29] Junior users located upstream or downstream may object to changes related to the point of diversion, place of use, or a transition to a more consumptive use without any burden of proof. The requirement to demonstrate no harm is a large burden that adds significant time and expense, producing a chilling effect on transfers.[30]

The Solution: Reduce Barriers to Water Markets

Markets are part of the solution to prior appropriation challenges. In Texas, large groundwater transactions have become more common, but surface water has not seen a similar shift. Although an appropriation is technically an alienable property right that can be transferred, current legal obligations make it costly and time prohibitive. To accelerate permanent water transactions, the state must incentivize and facilitate market movement.

Clarify water rights

Market exchanges cannot occur without identifiable owners holding a delineated property right that informs the buyer and seller what is sought to be transferred.[31] Legal rights set the terms of use, exclusions, and exchange by clarifying how water can be owned and defining the specific conditions of ownership. Transaction risk is inversely related to the knowledge of a right's parameters.[32]

On its face, an appropriation right seems clear because a water right is a vested property interest that is legally transferable; however, insufficient data about actual diversions and return flow, hydrogeologic characteristics, and the power of third parties can stall transactions.[33] Overallocation makes it impossible to effectively define the parameters of a right because a paper right does not hold the same value as a wet right.[34] Uncertainty in recorded water rights also affects the reviewing agencies' ability to review and authorize transfers.

To advance and develop a market, Texas needs more data to further define water rights. The process of accurately defining a water right for a market may raise concerns about the true intent of the activity and generate suspicion that the result will be reduction or removal of rights. These apprehensions can lead to inaccurate reporting or misuse of water to game the process, which undermines the intent of the endeavor. Any process needs to consider these potential misunderstandings and include incentives for honest participation.

One way to avoid gamesmanship during a rights quantification analysis is to narrowly tailor the evaluation. Instead of attempting to assess all aspects of a permit holder's right and historic use, the state could focus only on the consumptive portion of the water right. While consumptive diversions may only account for a portion of the potential water market, this focus greatly reduces third-party complaints about harm, because that water has not been part of historic return flows and cannot be relied upon by downstream users.

Any accounting needs to be completed with transparent goals. Clear communications related to the purpose of the process may help people realize that the governing body is attempting to reduce the seller's transaction costs and ultimately provide them with a quantified transferable asset. This approach can also help junior users realize that water transfers are not focused on water they currently rely upon.

Concerns about historic nonuse penalties will arise even with the best communication strategy. To that end, the state should consider freezing implementation of forfeiture statutes during the assessment process. This idea is not without precedent. Idaho froze its forfeiture statute while adjudicating the Snake River Basin to reduce claim complications.[35] A compromise is also possible in which rights unused for twice the forfeiture period remain subject to cancellation, but shorter terms of nonuse are protected.

While tolling the nonuse statute may appear to provide a windfall by protecting a transferable asset that may otherwise be extinguished due to nonuse, a broader purpose is served. Under current practices, unused and poorly used water rights are not being reclaimed through statute or markets due to a historic lack of enforcement of the forfeiture statute. Even if the state decided to enforce the rule to recapture this water, it would require tremendous administrative costs and may motivate wasteful use of water. Enforcement would require the same type of adjudication of historic use to prove nonuse but would not include the benefit of moving water rights. If the goal is to increase market movement, some concessions must be made to prime the pump.

Protect conserved rights

Prior appropriation can create a chilling effect on increased efficiency by protecting historic uses and not facilitating the repurposing of saved water. If policy allows continued use of wasteful practices, other incentives must be provided to encourage new technology. Currently, unused water can be lost for nonuse, providing a perverse incentive to save. Property rights in conservation should be protected.

Some states legally protect conserved water for the appropriator rather than reducing the permit holder's property right. The California Water Code, for example, states that any reduction in the use of water through conservation efforts is equivalent to a reasonable beneficial use and exempted from forfeiture statutes. The law also enables the owner to transfer that water.[36] Similarly, Oregon prohibits partial forfeiture when an owner demonstrates they have the capacity and the intent to use the entire right even if they have not used it for the statutory five years.[37]

Texas should strengthen conservation protections. The inclusion of an intent requirement in the forfeiture statute makes it more challenging to lose water through nonuse. Texas Water Code § 11.173 also prohibits the cancellation of all or part of an appropriation that is not used during the 10-year period due to water conservation measures under a water conservation plan submitted by the holder of the permit.[38] While read together, the provisions recognize the importance of conservation, but Texas's provisions do not incentivize conservation as much as other states. Conservation could be included in Texas's list of beneficial uses, which reiterates the ongoing importance of saving.[39]

Although Texas does protect against loss of unused water due to conservation, it could be expanded to explicitly vest a property interest in saved water and allow its transfer. Texas lacks any statement defining the property interest held in conserved or salvaged water and any qualities included in that right. Adding this to the Texas Water Code could clarify any legal questions that would currently need to be adjudicated and provide incentive to install more efficient water diversions and technologies. State law can also expressly allow for the temporary or seasonal cessation of irrigation, particularly of high-water crops, without a forfeiture risk. Any vested interests created through conservation would still be subject to the rights of other water rights holders, creating additional market challenges.

Reduce the power of junior users' harm claims

The biggest impediment to water transfers is the burden held by the transferor to prove no harm will come to existing users. This obligation creates a particularly challenging barrier to entry because a junior can claim harm without providing any supporting materials, forcing the transferor to prove a negative, often without accurate data on others' return flows. Without the burden to prove harm, junior users may be motivated to contest a transfer to slow or prohibit a permit change. In practice, the no-harm provision removes a portion of transferors' right and vests it in a third party. Minimizing challenges from junior users will lower transaction costs by reducing the time and money spent by the applicant defending the transfer.

One option is to shift all or a portion of the burden of proof to the person claiming harm, minimizing a junior user's power to unilaterally delay or stop a transfer. A burden shifting standard is also possible to avoid either party from holding all of the responsibility up front. In this scenario, a junior user asserting harm would need to meet prima facie proof threshold. If achieved, the burden then shifts to the party seeking a transfer to disprove the contentions. Removing any or all proof obligations from the transferor would require a significant legal update that likely would be challenged by junior users arguing an unconstitutional reduction of their property right.

"No injury" regulations can also be narrowed to focus on return flow and exempt de minimis injuries.[40] State authorities can go further by establishing a quantity of consumed water that is available for transfer for each right. Separating water consumed from water diverted more accurately mitigates harm to existing users and ensures that impacts to return flows are quantified. Transfers of consumptive water would be presumptively valid, effectively shifting the burden to prove harm to the junior user.

The quantification of return flows lowers barriers to entry and could be used as a test market to encourage short-term temporary transfers, including dry-year options, and provide data that could be applied to larger or more permanent transfers.[41] Focusing transfers on consumptive quantities also avoids concerns about public interest and environmental flows as these transactions would not decrease water in the river.

Improve water banks and trusts

The lack of a marketplace can restrict the redistribution of water rights. Due to the individual nature of existing transactions, there is no centralized record of exchanges or their parameters. This limits the ability of buyers and sellers to find one another or have accurate information about pricing or harm disputes. Additionally, disaggregated property transactions often do not include a regional planning component, which can create unintended consequences for the state.

Water banks and trusts are potential marketplace tools to preserve unused water or hold a water right saved by conservation before transfer. Although the terms "water banks" or "water trusts" are sometimes used interchangeably, "trust" generally indicates a structure into which a water right is donated without the opportunity for a fee-simple transfer. A water "bank" can accept rights deposited by one user, which can then be withdrawn by another user after an appropriate property transaction has been completed.[42]

Rights' holders with unused water can deposit water in the bank on a temporary basis. This water escrow account is one way to circumvent the use-it-or-lose-it challenge that can discourage upgrades in diversion efficiency.[43] The bank also serves as a place for buyers and sellers to find one another for potential transactions, including fee-simple transfers, leases, dry-year options, and rotational fallowing. These marketplaces can facilitate quick and temporary transfers to meet a crucial water shortage where a junior user could request a buyer willing to forgo water use in the short term.[44]

In 1993, the Texas legislature created the Texas Water Bank to "facilitate water transactions to provide sources of adequate water supplies for use within the State of Texas."[45] The bank was meant to be a marketplace where willing sellers could locate willing buyers for temporary or permanent water transfers. Texas state law allows a permit holder to "deposit" their water right in the bank to locate a buyer while avoiding forfeiture for nonuse.[46] The Water Bank is managed by the Texas Water Development Board (TWDB), but it is not involved in marketing the water. Using the bank for a transaction does not reduce any legal obligations or procedures needed to transfer a right.[47]

Within the Texas Water Bank is the Water Trust, into which users can donate water rights that will then be held in trust for environmental purposes. Water trusts are effective tools for managing water for the environment. If flow requirements were promulgated after waterways were over appropriated, reclamation of permitted water is the only way to meet new standards. Administrators need to ensure that water held by a water trust is not considered available for future appropriations or diverted by junior rights holders.

Harnessing the promise of water banks and trusts presents some administrative challenges. Funding, sometimes substantial, is needed to obtain the water rights.[48] When water banks function as marketplaces, transactions could create income to maintain operational expenses.[49] Allowing temporary deposits into a water trust would require additional administration to track rights' movements. If a water bank is also tasked with additional obligations, including verifying or quantifying a right, additional expertise and funding would be needed.[50] With consideration, both trusts and banks have the potential to lower some barriers to entry, particularly to reclaim unused or overallocated water while also managing instream flows.

Avoid unintended consequences

Considerations like public trust and the environment were added after most rivers were fully appropriated, so older rights did not assess their potential impacts on these sectors.[51] A transfer permit allows the review of costs to third parties, public infrastructure, and the environment. Without protections in place, unintended environmental harm can occur. State obligations to protect non-water rights holders mean water markets cannot function free from governmental participation.[52]

Texas adopted comprehensive environmental flows legislation in 2007.[53] Despite these legal efforts, most rivers in Texas were already overallocated; therefore, flow requirements can only be met through thoughtful reallocation of appropriated water.[54] For new permits, the state agency is obligated to "consider and, to the extent practicable, provide for the freshwater inflows and instream flows necessary to maintain the viability of the state's streams, rivers, and bay and estuary systems."[55] This obligation also applies during a permit amendment's harm analysis. An opportunity to recapture over-appropriated rights and allocate water to environmental flows should not be missed.

Much of the flow currently used by the environment is water left in the system by nonconsumptive uses or existing rights that have not been fully withdrawn. A primary concern with moving water to new users is a net increase in consumptive water use. Usage shifts that occur as a result of permit transfers must consider impacts to the environment and can recapture water to meet flow provisions. Oregon's policy allows a transfer of the conserved water, in exchange for a donation of a portion to instream use. Rights holders can also donate all unused or conserved water to environmental flows while retaining the right to the quantity historically used.[56]

A New Market Alternative: Hypothetical Pilot

Updating prior appropriation policies to make it easier to transfer water rights will generate challenging discussions about existing property rights, the public trust, and potential environmental impacts. The objective is to increase conservation and efficiency through lowered transaction costs while reducing risks to junior users and the public interest. Because of potential property rights disputes, a pilot project could be an effective way to demonstrate opportunities and identify unintended consequences. The pilot should be located in an area with existing appropriations that has not yet been subject to significant water strain. Using a small, gradual approach would help evaluate the efficacy of such a program, allow for corrections, and provide a model for more complex areas.

A pilot market requires the participation of TCEQ, the permitting agency, in partnership with local stakeholders. It can be facilitated through the state agency or a non-profit partner. TCEQ must provide the necessary data to allow a proper initial analysis, including existing permits and withdrawals. It is also critical to know the portion of a withdrawal that is consumptive. Legal tools discussed above could be used to front load harm evaluations and rate areas as lower- and higher-harm risks. During the pilot, all forfeiture statutes for nonuse should be suspended in the target area to minimize concerns about losing rights in unused or conserved water.

Water transfers can be stimulated by designating which waters are transferable with no or de minimis harm. Once low-risk transfers are identified, these rights would be transferable on a fast-track approval system because the harm analysis is already complete. Expediting provisions should focus on compensating, incentivizing, or otherwise ameliorating impacts to existing junior users and the environment. For example, focusing on consumed water would assist permit holders in promoting efficiency measures by enabling them to transfer up to this amount. If quantifying consumptive use across a basin as an initial requirement is too onerous, another option is to set a minimum quantity that qualifies for fast tracking. This can be structured as a flat percentage of the right or a maximum quantity of water. Percentages should be low (5 or 10 percent) to minimize risk of harm to other users. Additional incentives could be provided by prioritizing water made available through conservation efforts or increased efficiency and marketed within a set timeframe.[57]

Expedited transfers would only apply to those who wish to participate in the fast-track program. Water transfers that do not qualify can still take place, but the traditional no-harm obligations would apply. A fast-track program does not remove any property rights from non-participating members; it simply provides an incentive for those who wish to increase efficiency and transfer those rights. Regulations related to the retention of priority dates would remain the same under a pilot system as it is in a traditional transfer.

Users who want an expedited process must use the Texas water bank for the transaction. This will drive buyers and sellers to a central marketplace and provide important data to the state related to water sales. Overall transaction costs are lowered because harm to junior users is reduced. Senior rights holders, particularly those located downstream, will appreciate the improved water access because current enforcement of priority is often unsuccessful or untimely.[58] Qualifying program transfer allowances would be assigned on a first-come, first-serve basis until a preset limit has been met. Preapprovals will be noted on the property listing to incentivize buyers.

Unused water is in a state of limbo, potentially causing uncertainty for junior users and not moving to a higher-value use. Users may want to use water more efficiently before making a final determination about how they wish to put to use the unused allocation, which benefits the system by avoiding waste. The harm of wasteful water use to avoid forfeiture justifies the risk of suspending forfeiture.[59]

Environmental protection can be incorporated into the pilot project by requiring that a small percentage of water from every pre-approved transfer revert back to the state. Oregon's program provides an excellent model. When water is made available through increased efficiency, 75 percent of it can be transferred, and the state receives the remaining 25 percent for instream flows or to protect junior users.[60] While the desired percentage may be lower than Oregon's, the amount that reverts back to the state may be adjusted higher if state programs funded the conservation measures; however, not so high that it thwarts participation.

A public interest reversion does result in a small loss of the transferable property right; however, the loss is outweighed by the benefit of a facilitated transfer for the remainder of a right that is currently too onerous to sell. This water will help meet Texas's existing environmental flows obligations and will not become available for reallocation. Water that reverts back as a result of this process should maintain its original appropriation date. The Texas Water Trust, located within the Texas Water Bank, is an ideal repository for retired rights. Although the Oregon Water Trust is a nonprofit rather than a legislatively created entity, it demonstrates what is possible when a centralized entity is utilized and funded.

Texas also has the option to become a market participant. Although many states would not have the resources to consider this, Texas is in a unique position. Texas had budget surpluses of $32.7 billion in 2023 and $24 million in 2025.[61] Using a portion of this money for water needs is already underway, and the state just voted to dedicate $20 billion over the next 20 years to create new water supply, improve water infrastructure, and increase water awareness.[62] Although not included as an option in the current legislation, future surpluses could also be used to buy water rights for the public trust or finance the installation of water efficiency measures in exchange for a portion or all of the resulting conserved water.

State funds can also be used to ameliorate any remaining harm to junior users in some circumstances. Funding for harm would require clear definitional parameters to be effective, and those receiving funding from this source would waive some opposition to the related water transfer to avoid double dipping. A state-incentivized solution could reduce Fifth Amendment takings claims by providing value directly to the rights holder and allows the state to target high-risk areas.

Policy Recommendations:
Specific Reforms to Facilitate Texas Water Markets

Several state policy actions would promote the transfer of surface water, allowing markets to encourage increased efficiency of existing users, to make water available for new uses, and to conserve water for environmental purposes.

1 Clarify water rights

State agencies need data related to actual diversions and historic return flow to differentiate wet rights f rom paper rights and assess potential harm to junior users, the public trust, and the environment in a transfer situation.

2 Legally recognize and protect rights to saved water.

Vesting property rights in conserved water and identifying conservation as a beneficial use clarifies an owner's interest for potential marketing.

3 Limit the power of third parties to veto transfers

While harm is an important consideration for a proposed transfer, shifting a portion of the burden to junior users or excluding de minimis harm would remove a significant barrier to entry.

4 Use the state water trust and water bank to establish and promote a market for water transfers

Utilization of the existing water bank infrastructure as a central marketplace can reduce administrative constraints and be expanded to include water rights' data.

5 Use transfers to increase environmental flows and protect the public trust

Water rights' transfers should be reviewed to avoid a net increase in consumptive use particularly when environmental users rely on those flows. Transfer incentives can include provisions that require a small portion be donated back to meet environmental goals.

Conclusion

As with much of the western United States, Texas is facing challenges of over-appropriated water and increasing demand. Many of the state's most senior users have no incentive to maximize efficiency absent a practical opportunity to sell the water they save. As the state searches for ways to meet the water needs of all of its residents, existing and new, increasing efficiency among current users and transitioning away from low-value uses is critical.

Texas has an opportunity to incentivize the use of markets, in concert with policy changes, to move water while protecting potential buyers and sellers. The key to a successful market for the state is one that motivates conservation and efficiency for all users while respecting vested property interests. The state can increase market transfers by protecting property interests in water salvaged through use improvements, reducing the threat of harm analysis in the permit transfer process, and using the existing water bank as a marketplace to house and fast-track a transfer system for select rights. All rights enrolled in this process are subject to limitations that respect public and environmental interests. State authorities can begin with targeted markets as pilot projects to better understand what is needed for successful program expansion. By merging economics and policy, Texas will be better prepared for its water future.

Endnotes

More detailed information and legal analysis can be found in: Amy Hardberger, *Get in the Flow: Policy Changes that Can Increase Texas's Surface Water Transfers*, 12 Texas A&M Law Review 591 (2024).

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About the Author

Amy Hardberger

Amy Hardberger is the George W. McCleskey Professor of Water Law at Texas Tech School of Law, where she is also the Director of the Center for Water Law and Policy. Her academic writings focus on the energy-water nexus, water pricing, the human right to water, and Texas groundwater law. She previously worked as an attorney in the Texas office of the Environmental Defense Fund, where she led partnerships with cities and interfaced with Texas state agencies on municipal water conservation policies, energy-water nexus and sustainable water planning, and co-created and authored a blog on Texas water policy. Hardberger is also a professionally registered Geoscientist in the State of Texas.

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