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Water Planning and Drought Management Under the Prior Appropriation Doctrine

The Supreme Court of Texas has now Confirmed that the Prior Appropriation Doctrine must be Followed in the Enforcement of Water Rights Which Recognizes that the Doctrine is at the Core of Water Planning and Drought Management in Texas

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Table of Contents

I.	Prior Appropriation Doctrine
II.	Water Planning and Drought Management in Texas Depends
	Upon the Appropriation Doctrine
III.	The Role of the Doctrine4
	A. Senate Bill 1
	(1) Water Planning
	(2) Water Conservation
	(3) Other Strategies
	(a.) Water Marketing / Voluntary Reallocation
	(b.)Amendment to Water Rights10
	(c.) Emergency Transfers
	(d.)Interbasin Transfers 12
	(e.) Watermaster
	(f.) Dry Year Option 14
	Western States
	Lower Rio Grande Valley, Texas 16
	Edward Aquifer 16
IV.	Conclusion

I. Prior Appropriation Doctrine

In order to understand and consider the significance of the Supreme Court's action in the *Texas Farm Bureau* case, it is necessary to briefly review the background and principles of the Prior Appropriation Doctrine.

The Prior Appropriation Doctrine has been the law in Texas since at least the passage of the Irrigation Act of 1889 making prior appropriative (first in time is first in right) the law in the arid part of the State. See *Act Approved*, March 19, 1889, 21 Leg., R.S., ch.88, 1889 Tex. Gen. Laws 100, reprinted in 9 H.P.N. Gammel, the Laws of Texas 1822-1897 at 1128. The Irrigation Act of 1893 and later the Irrigation Act of 1895 extended the scope of the 1889 Act and confirmed the application of the prior 1889 Act to the entire State of Texas. See The Act of March 29, 1895, 23d Leg., R.S., ch. 44, 1893 Tex. Gen. Law 47; Act of March 9, 1895, 24th Leg. R.S., Ch. 21, 1895 Tex. Gen. Laws 21 reprinted in 10 H.P.N. Gammel, the Laws of Texas 1822-1897 at 751.

These Acts created a dual system of water rights in Texas because the common law was adopted in 1840 carrying with it common law riparian rights. This was the legal situation until the enactment of the Water Rights Adjudication Act in 1967, which called for the adjudication of water rights over the State, and resulted in a single system of water rights where the common law riparian right claim was converted into an appropriative right in the adjudication process. See *In Re Adjudication of the Water Rights of the Upper Guadalupe Segment of the Guadalupe River Basin*, 642 S.W.2d 438, 439 (Tex. 1982). For further discussion of the historical background of Texas surface water law, see Baad, *The Historical Background of Texas Water Law* – a Tribute to Jack Pope, 18 St. Mary's L. J. 2 (1986), and also, *Historical Development of Texas Surface Water Law: Background of the Appropriation and Permitting System and Management of*

Surface Water Resources, Glenn Jarvis, in Essentials of Texas Water Resources, Ch. 3 (State Bar of Texas, Mary K. Sahs, Editor, 2016).

The Prior Appropriation Doctrine was carried forward in state statutes through the 1913 and 1917-18 water statute and is now codified in § 11.027, Texas Water Code. All references in this paper are to the Texas Water Code, unless otherwise indicated.

The Doctrine is characterized as "first in time is first in right." That is, the time that a water right holder obtains a water right establishes its priority. Under the Doctrine, the possessor of a more senior water right has priority over junior water right holders. Now, these rights are recognized through the adjudication process by Court Judgment and Certificates of Adjudication issued following the adjudication of rights in the various river basins over the State and by Permits thereafter granted. Post adjudication (new) Permits include specific dates, which are called priority dates and establishes the holder's place in line of users. See §§ 11.121, 11.141. The holder of a water right with the earliest date on a given stream is the "most senior" right and the holder of a water right with the next earliest date is the next most senior and so forth.

The Appropriation Doctrine is the cornerstone and bedrock of water planning and drought management in Texas. If the doctrine is not enforced and followed, and a water right does not have the security of enforcement of the "first in time is first in right" protection, but be subject to a public safety and use priority determination by a regulatory agency then the security offered by the appropriation doctrine is lost. Large infrastructure investment made many years ago which depended upon this security of a water right is threatened. Certainty of the reliability of a water right is lost not only to those who relied upon the doctrine in the past, but to those in the future who are attempting to provide and make decisions relating to drought management and water planning for future needs.

In granting new Permits the Texas Commission on Environmental Quality ("TCEQ") is guided by preferences of use to be applied in the Permitting process, § 5.024. But, these preferences only apply prospectively in granting Permits, and not in applying prior appropriation rules. The TCEQ is charged with administering and enforcing the water rights regime over the State. See Section 5.013.

In summary, the prior appropriation system was adopted in order to provide security to senior water rights during water shortage periods and support for investment necessary in the development of water resources in the State. The appropriative system is necessary to develop the State's economy, and is the source of protection of water rights, which are property rights entitled to constitutional protection. *Texas Water Commission v. Wrights*, 464 S.W.2d 642 (Tex. 1971).

II. Water Planning and Drought Management in Texas Depends Upon the Appropriation Doctrine

The Appropriation Doctrine is a fundamental element and tool for drought management and water planning in Texas. It provides security and certainty to those holding water rights as to their rights in times of drought. That is, when there is a drought on a stream, then the most senior water right is entitled to use water over those junior water right holders. This gives certainty to senior water rights holders of the availability of water during a drought depending upon the reliability of a water supply. It provides junior water rights holders with notice to plan for the uncertainty of a water supply during a drought.

The authority to enforce the prior Appropriation Doctrine in times of drought is upon the TCEQ and where available, Watermasters. The establishment of Watermasters was initially established on the Rio Grande by a court, and was made available elsewhere in Texas by the 1967 Water Rights Adjudication Act, § 11.325. In addition to the Rio Grande, there are 3 other

Watermaster Programs: South Texas Watermaster, Concho River Watermaster, and Brazos Watermaster (lower Brazos River). For more information on Watermaster Program, See: *www.tceq.texas.gov/permitting/water_rights/wmaster/wmaster.html/#top*

The Prior Appropriation Doctrine does not itself solve all water need issues, but it provides the basis for action and projects in cases where water users have either failed to obtain necessary water rights or junior water right holders have insufficient senior water rights to serve their needs during a drought. To illustrate how the Doctrine has been essential, it is necessary to observe the roll of the Doctrine in the past in planning for and developing strategies to meet future water needs in Texas.

III. The Role of the Doctrine

Following a drought in the 1950's the State pursued an aggressive policy of construction of dams upon streams in the State creating reservoirs which conserved water for later use and made more water available during a drought. The certainty of the Appropriation Doctrine provided the security necessary to address and assume the risks involved in planning, financing, and construction of these large infrastructure water projects.

However, as times and laws changed with respect to structures on streams, it became more difficult to have dam construction on streams. Also, it was recognized that existing surface water supplies, in most river basins, were over-appropriated. Development of reservoir projects could no longer be dependent upon to provide the necessary water supply during droughts or in anticipation of future population growth in the State. Groundwater supplies are also finite and may not be relied upon always to supplement surface water in amounts necessary to meet growing needs for water supply.

A Senate Bill 1

Faced with these water supply issues, following a drought in the 1990's, major water rights legislation was adopted by the State Legislature in 1997. It sought to address change in water policy needed by the increasing need for water supply, and was given high priority by the Legislature. Its broad and important policy changes were contained in "Senate Bill 1" (SB1), which are now scattered throughout the Texas Water Code. A brief review of its provisions show that the Prior Appropriation Doctrine is at the core and necessary in many of the provisions of SB1.

(1) Water Planning

One major innovation in SB1 was the establishment of Regional Water Planning which changed the existing planning efforts in the State from a "top – down" exercise to a "bottom-up" where local regional planning groups would study and initiate plans for a Region. These local plans would be coordinated on a State-wide basis into the State Water Plan. This 1997 water planning concept has accomplished much since that time in meeting needs during droughts and for future growth.

To support this regional planning effort, the legislation provided for tools useful to the water planning effort by defining "water management strategies" for drought management and additional water supply needs brought about by future population growth. Most all of these strategies and tools are based and dependent upon the application of principles of the Prior Appropriation Doctrine as they relate to surface waters.

A few of these tools as relates to the Prior Appropriation Doctrine will be discussed below. The State Water Plan and Regional Water Plans can be reviewed for more complete

5

review of how these tools are being applied in creating water management strategies for future water needs, see Texas Water Development Board website, *www.twdb.gov*.

Experience under these planning provisions has shown that planning is essential to future water needs not covered by existing senior water rights either in drought situations or in future water needs based upon growth. The Legislature recognized this in passing the new drought rules in §11.053 which recognizes that the Prior Appropriation Doctrine must control. The point is simply: why should a junior water right holder spend money for acquiring senior water rights, or the developer of a project the construction cost of a water supply project, if it can be expected that the TCEQ would, under § 11.053, curtail or adjust senior water rights in the future. And while doing so, take water rights without compensation and reward the failure to plan for the need. If junior water rights are given preference during water shortages, then state policy of water planning would be undermined and become a needless exercise and expenditure of money in planning for new water supply projects or the acquisition of water rights. The *Texas Farm Bureau* case recognized this and the unintended consequences of applying § 11.053 otherwise.

While recognizing the importance of the Prior Appropriation Doctrine in water planning, it is also necessary for the success of available tools to provide water to those in need because of drought or future growth.

As would be expected at the top of the list is water conservation *all of the time*, and not only in times of drought. Water stewards are challenged to come up with innovative projects to achieve water conservation.

(2) Water Conservation

Water conservation is recognized as the most significant tool to maximize the amount of actual water available under water rights, and to lower amount of water demand in drought

6

situations or in meeting future needs of water.

If one has the right to divert 100 acre feet from a stream, but has losses amounting to 30% of that amount diverted, then the water right holder will actually only have available to use 70 acre feet of one's total water right. If the losses are reduced to 10%, he will actually have available to use 90 acre feet. The benefit is obvious. It would apply in a drought situation for example when only 50% of the water right is actually available for use, in which case instead 35 acre feet, the water user would actually have 45 acre feet to use. In non-drought situations in which additional water is needed for future growth or increased agricultural production when 100% of the water in a stream is available for use, less water loss means the water user will have more water to use. Also, the water user would have to plan for less water rights to cover future growth needs.

Water conservation is the most cost-effective water management strategy to meet the state's water needs, and regional water planners often identify public awareness and education as a key component of that strategy. Municipal water conservation is recommended in the 2017 State Water Plan to meet almost 10% of the state's water demands by 2070, and irrigation conservation almost 16% of 2070 demand. See page 9 Draft Report to the Legislature, Texas Water Conservation Advisory Council (December, 2016).

As noted above, conserving water by dam and reservoir projects are now limited. There are plans for a very few on-channel and some off-channel dams, but it is estimated these water conservation projects will account for only 13% of state water demands by 2070. But even so, they too, must accommodate and rely upon the Prior Appropriation Doctrine to be successful.

To achieve this conservation will usually require financial investment into water saving devices. This is the case in whatever authorized use of water is made, whether it be agricultural,

industrial, hydropower or environmental. If the water right itself does not have the assurance and security of the Prior Appropriation Doctrine, there is no incentive for making the required investment.

(3) Other Strategies

Senate Bill 1 provided for other useful water supply tools during drought periods and when water needs were not satisfied by existing water rights. For example, it encouraged voluntary reallocation and relocation of water rights by the marketing of existing water rights to others in need of water rights based upon an open market and on terms agreed upon by sellers and buyers. It also provided for emergency transfer of water during drought times, and addressed the right to reuse surface water and related bed and banks permits. It provided for standardized determination of availability of water subject to appropriation by the development of water availability computer models and provided for conservation and drought plans. However, it also amended existing laws involving interbasin transfers by adding considerable more limited criteria for the TCEQ to consider in interbasin transfer cases including what has been referred to as the "junior rights provision." This provision makes the water rights transferred from one basin to another junior to other water rights in the basin from which they are transferred. This discourages transfer of water from a basin having excess water and rights to another basin having a shortage of water. This state policy in a backward manner relies upon the Prior Appropriation Doctrine for implementation as further discussed below.

(a) Water Marketing / Voluntary Reallocation

Water marketing is a significant component of water management and reallocation of water rights in the western states. This tool may be used by junior water right holders in times of

drought or in meeting future needs of water. It is and was made a major part of water policy in Texas by SB1.

Water marketing and voluntary reallocation and relocation of water rights was made a water management strategy as an element of the State's water plan § 16.051(d)(e), and regional water plans § 16.053(e)(5)(H), and (I). It is a component in the emergency transfer of water under § 11.139, as described below. These provisions require that the state and regional water plans ". . . shall make legislative recommendations . . . to facilitate more voluntary water transfers in the region," § 16.053(I), and § 11.0275 establishes a legal definition of "fair market value for a water right" as the willing buyer/seller rule.

In cancellation proceedings, a new defense to cancellation was provided if the water right is ". . . currently being made available for purchase through private marketing efforts. . ." § 11.177(b)(6).

The legislature amended the Texas Water Bank laws by instructing the Texas Water Development Board ("TWDB") to administer the "... water bank to facilitate water transactions" § 15.702; and that the bank act "... as a clearinghouse for water marketing information including water availability, pricing of water transaction, environmental considerations, and potential buyers and sellers of water rights..." § 15.703(a)(8). It created the Texas Water Trust within the Texas Water Bank to hold water rights dedicated to environmental needs and instructed the TWDB, Parks and Wildlife Department, ("PWD"), and now the TCEQ to adopt rules governing the "... process for holding and transferring water rights," § 15.7031(b); and added as an authorized function of a water project "... the acquisition of water rights," 15.001(6)(A).

The TWDB was also authorized to prepare and publish a manual on structuring water transactions and to otherwise facilitate water transactions, § 15.703(a)(8), (9)(11).

Voluntary reallocation is the most efficient use of water and is a fair method by which water supply can be shifted from one use to another and reallocated to meet new water needs in the state by junior appropriators. Water marketing is an expression of our free enterprise and property rights system and is incentive based.

It goes without saying that if the Prior Appropriation Doctrine does not apply or is not available to enforce a water right, then there is much less incentive to take the risk and make the investment required in a water marketing transaction. Without it, this water management strategy is undermined and less effective.

(b) Amendment to Water Rights

A water marketing transaction often may require an amendment to the water right being transferred by changing the point of diversion and place of use, and in some cases, purpose of use. Amendments are also required in other cases where similar changes are needed to accommodate a change in water needs. A major issue in Amendment cases is whether an Amendment causes adverse impact on other water rights. If it does, then the Amendment cannot be granted. Adverse impact or the "no injury rule" could be asserted based on historical use being less than the full amount of authorized use at a particular point of development of an existing water right.

To address this contention, § 11.122(b) was added to the Code addressing the historical use issue. The TCEQ was directed to authorize an amendment of the change in the water right when the water rights "... will not cause adverse impact on other water right holders or the environment on the stream of greater magnitude than under circumstances in which the

permit, certified filing, or certificate of adjudication that is sought to be amended was fully exercised according to its terms and conditions as they existed before the requested amendment." This is referred to as the "Four Corners Doctrine" as a part of the "no injury" rule.

The "no injury" rule is now in rule form, see § 297.45 of the TCEQ rules. The "no injury" rule applies to cases involving new water rights as well as amendments involved in water marketing cases, and in other instances where changes may be required.

See *City of Marshall v. City of Uncertain*, 206 S.W.3d 97 (Tex. 2006), which deals with the meaning of Section 11.122(b).

These provisions are to encourage water rights transfers or other changes in water rights to meet changing needs which rely upon application of the Prior Appropriation Doctrine for success.

(c) **Emergency Transfers**

Section 11.139(h) provides a procedure for emergency and voluntary temporary reallocation of water during periods of shortage. It provides a process of compensation where there is a temporary transfer and use under an existing water rights. This is a procedure that the TCEQ can employ during an emergency situation in a drought or other circumstance where water is needed on an emergency basis. The TCEQ maintained in the *Texas Farm Bureau* case that these proceedings are difficult to implement. However, through foresight and planning, the methods could be devised to utilize this tool. It recognizes the property right of water rights by compensating for the water rights taken. Those who anticipate the need for an additional water supply in a drought could pre-arrange with senior water rights to provide water during drought by a temporary water transfer. Or, possibly structure a "dry year option" or forbearance

agreement discussed below. Such an arrangement could be structured as an amendment to the selling water rights holder's water right or possibly as a pre-arranged § 11.139(h) emergency procedure authorized by the TCEQ. This statute could also be made applicable to private arrangements prior to drought where transfers can be made on an emergency basis. This could be accomplished either in a water marketing situation or dry year option discussed below. In any case, application of the Prior Appropriation Doctrine would be necessary to provide security of enforcement that could be relied upon.

(d) Interbasin Transfers

Section 11.085 controls when water can be transferred from one river basin to another. It contains several restrictive conditions which make such transfers difficult.

Interbasin transfers are water management strategies which may be required to meet the water needs in one river basin by transferring water from another basin with excess water.

In this case, SB1 amended § 11.085, in such a manner which in most all cases prevents interbasin transfers from occurring. This was done by making the resulting water transfer junior to other water rights holders in the contributing basin. This is a direct application of the Prior Appropriation Doctrine by the Legislature in order to establish water policy.

There are those who argue both in support or in opposition of this provision which clearly gives protection to the contributing basin. There are those who argue that this provision has shut off a management strategy where many of the areas needing water could obtain from basins with excess water.

The writer believes that interbasin transfers should be considered in planning when such transfers are determined to be the most cost-effective and environmentally sensitive strategy to meet Texas' future water needs. The Legislature could assist in financing such interbasin transfers when participation by the state is beneficial to the citizens of Texas. The provisions of § 11.085 should not require changing the existing terms and the conditions of the right other than as requested by a water right holder or as is necessary because of the adverse impact of requested changes on other water right holders involved, or the environment. Consideration should be given to removing both the current junior rights and the environmental provision, in § 11.085 as it relates to amendment of existing water rights to authorize new interbasin transfers. These current provisions are inconsistent with state water planning goals and historic policy, eliminates a market for surface water transfers, and increases the pressure on groundwater.

In any case, existing § 11.085 is a reflection on the reliance on the Prior Appropriation Doctrine in Texas water law. Without the Prior Appropriation Doctrine, the current interbasin transfer junior water right provisions would have no meaning. Even if changes are made in interbasin transfer rules, the Prior Appropriation must be applied for projects to succeed.

(e) Watermaster

In addition to some of the provisions of SB1, more recent legislation, for example, encourages the establishment of watermaster programs where needed by periodic survey by the TCEQ. Watermaster programs are dependent upon the Appropriation Doctrine as the core rule of enforcing water rights on a stream or segment of a stream. Indeed, as an example, § 303.13(e) TAC pertaining to the Rio Grande Watermaster provides:

(e) If complaints are received by the watermaster concerning insufficient water to satisfy senior and superior water rights, the watermaster will conduct an investigation and may institute procedures to distribute the available waters, such as:

(1) order alternate pumping days for specified diverters;

(2) limit the pumping time;

(3) impose streamflow restrictions;

(4) order pumping to cease or pump at a decreased diversion rate until the situation is improved; and/or

(5) any other procedures needed to ensure water use is protected based on the priority system in the Texas Water Code.

(f) Dry Year Option

Another management strategy that has promising appeal is the dry year option or leasing and fallowing strategies between agricultural and municipal or possibly industrial use to supplement water supply during droughts.

Due to population growth and finite water resources, many have been struggling with the adverse effects of agricultural dry-up ("buy-and-dry") as cities purchase agricultural water rights and permanently transfer that water to meet growing municipal demand. In other words, the drying up of agriculture and loss of agricultural production coupled with resulting economic loss to those businesses and industry that depends upon agriculture.

Western States

For some time, water management in the western states has been searching for alternative solutions to traditional transfers and changes of water rights in order to prevent buy-and-dry. Leasing-fallowing –in which irrigators forego watering parcels of land and lease the water temporarily to cities for municipal uses –is one of these alternatives in Colorado. For example, leasing-fallowing is currently being tested in a pilot program as authorized by state statutes, and operated by the Colorado Water Conservation Board (CWCB).

Colorado water law governs permanent changes of water rights in the Colorado water court system and are generally applicable to temporary changes of water rights through leasingfallowing. Under Colorado law, changes of water rights are only permitted to the extent that they will not cause injury to junior appropriators. Injury is avoided by ensuring that the use of the changed water right is not expanded from the historical use and that the historic stream conditions are maintained. Thus, to avoid injury to other water rights, a water rights holder that seeks to change the use of their water right may only change the portion that was actually consumptively use *-i.e.*, the "historical consumptive use." In the context of irrigation water rights, this is limited to that amount of water actually consumed by the irrigated crop. The remaining amount of any water that was diverted by that water right holder returned to the stream for use by downstream water rights as "return flows." In order to prevent injury and maintain stream conditions for junior appropriators, these return flows must be maintained in time, place and amount. See *AG/MUNI WATER: Rotational Leasing – Fallowing Report*, Issue #147, May 15, 2016, Pages 9-14, *www.TheWaterReport.com* for a complete report on the statutory authority and program being developed in Colorado. See also consideration of the dry year option in Nebraska, Aiken J. David, "*DNR Proposes Three Republican River Dry Year Options*" (2009), Cornhusker Economics, Page 493. Aiken, J. David "DNR Proposes Three Republican River Dry Year Options" (2009). *Cornhusker Economics*. Paper 483.

http://digitalcommons.unl.edu/agecon_cornhusker/483

A more permanent arrangement for a temporary transfer of water from an agricultural user to a municipality in periods of water shortages could be achieved through private transactions. Such a program would provide funds to an agricultural user for loss of revenue in amounts which would reduce large expenditures by municipal users to obtain additional water rights for use during droughts which are not needed during non-drought periods.

Studies in the western states have indicated that to achieve this strategy in the surface water context as an alternative to the adverse effects of agricultural dry-up ("buy and dry") discussed above would justify necessary rule or statutory revisions in surface water law. For more information, see Global Water Forum "*Testing the Efficiency of Dry-Year Water Options with Market Experiments*"

www.globalwaterforum.org/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-options-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-of-dry-year-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-options-water-options-with-market-experiments-2/2014/02/testing-the-efficiency-options-water-options-w

Texas law governing Amendment to surface water rights are more favorable to a dry year option or lease-fallowing transaction. The Four Corners Doctrine would ease issues present in Colorado.

Lower Rio Grande Valley, Texas

A form of the lease-fallowing process is available on the Rio Grande below Amistad Dam under the Rio Grande Watermaster Rules, TAC, Chapter 303, *Operation of the Rio Grande*, §§ 303.51, 303.55 (Contractual Sales). These rules allow a defined amount of water allocations of a water rights holder to be assigned for use to another water rights holder for the same purpose of use. This covers actual stored water allocated for release from the Reservoirs and use and is not the water right itself. It allows for use by the water rights holder being assigned the defined amount of water during the contract term but is not considered "beneficial use of water" for cancellation purposes by the water rights holders making the assignment of the water.

Edward Aquifer

A similar process as a spring flow protection program in a groundwater context is in effect in the Edwards Aquifer in Texas. The Edwards Aquifer Authority (EAA) conducts a "Voluntary Irrigation Suspension Program Option" (VISPO) to reduce aquifer pumping demands during critical periods in order to improve aquifer levels and protect spring flows, protected species, and their habitats.

VISPO is described as open to participation primarily to eligible holders of irrigation water rights from the EAA in Atascosa, Bexar, Comal, Hays, Medina and Uvalde counties who are willing to suspend exercising all or a portion of their authorized withdrawal rights in exchange for financial compensation. Each Participant is paid a standby fee each year of a five (5) or ten (10) year program term regardless of aquifer level or condition and will be paid an implementation fee equal to an additional three times the standby fee each year the program requires suspension of withdrawals. Actual curtailment depends upon the aquifer level.

The volume goal of the program was initially 20,000 acre feet to be increased to 40,000 acre feet.

Irrigators are allowed to enroll a portion of their water rights and withdrawals are monitored by real time automated meters. VISPO is voluntary, but financial incentive is provided which should encourage participation.

The program was approved in 2013 for implementation in 2014. The EAA began to solicit enrollment in January 2013. Irrigators were sought out and signed up in 2013; however, they were not under any obligations until 2014, and their 2014 obligation was a function of the Aquifer level at a well site (J-17) on October 1, 2013. In 2014, leasing activity was slower due mainly to a continuing drought, but reached an accelerated enrollment. Final enrollment was 40,921 AF, nearly 1,000 AF more than its goal with more than one-half of the water coming from Uvalde County. The economic impact of the VISPO program in its first three years triggered in 2015, resulted in 40,921 AF of irrigation water being suspended and payments to irrigators of nearly \$8.7 million. It is reported that since 2014, VISPO has paid more than \$12 million to local irrigators for participation. The program has been recognized as a success and it is favorable that enrollment can be expanded. *Based upon telephone conference with Mr. Rick Illigner, Special Assistant to the General Manager, Edwards Aquifer Authority, with the author on August 30, 2016.*

For more details on this program, and an extensive report on dry-year options in general see report made by the Texas Water Resources Institute, Texas A & M University, "Texas A & M Researchers Investigative Use of Year Options," New Waves, Volume 9,

17

Number 3, October 1996, at twri.tamu.edu/newsletters/newwaves/nw-v9n3.pdf.

This strategy needs to be considered further in the future as an alternative management strategy to meet needs of municipal and industrial users in water shortage periods. In any event, the application of the Prior Appropriation Doctrine in surface water application will be necessary for workable arrangements.

IV. Conclusion

Hopefully, this paper illustrates that the Prior Appropriation Doctrine is imbedded in our surface water law in Texas and is alive and well today and necessary in the future in meeting the future demands for water in Texas.

Prior Appropriation provides the basis for existing water management strategies and for new and innovative strategies in the future.

There are many water management strategies and tools available for use to meet future water needs within the framework of the Doctrine when necessary water management planning is done.

The Doctrine recognizes that a perfected surface water right is a property right deserving of Constitutional protection.

It has been and is still appropriate for Texas!