

Plateau Underground Water Conservation & Supply District

Management Plan

August 18, 1998

Plateau Underground Water Conservation & Supply District

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Plateau Underground Water Conservation & Supply District

Management Plan

Mission Statement

The Plateau Underground Water Conservation & Supply District was created by Acts of the 59th Texas Legislature in 1965. The District was created to provide for the conservation, preservation, protection, recharge and prevention of waste of the underground water reservoirs located under the District consistent with Article XVI, Section 59, of the Texas Constitution and Chapter 36 of the Texas Water Code. The District strives to bring about conservation, preservation and the efficient, beneficial and wise use of water for the benefit of the citizens and economy of the District through monitoring and protecting the quality of the groundwater. The District also strives to maintain groundwater ownership and rights of the landowners as provided in the Texas Water Code §36.002. 9 2

Time Period for This Plan

This plan becomes effective upon certification by the Texas Water Development Board and replaces the existing management plan adopted by the Board of Directors. This new plan remains in effect until a revised plan is certified or September 1, 2008, whichever is earlier. This plan will be reviewed and amended as necessary.

General Description

The District is governed by five Directors which are elected by local voters. The current Board of Directors are: Raymond Mittel, Chairman; Sam Henderson, Jr., Vice-Chairman; De Lux, Secretary; Steve Williams and Kirk Griffin. District rules have been in effect since 1992 which will effectuate the management plan. The District encompasses Schleicher County which is located in the southwestern part of Texas with Eldorado, Texas as the county seat. Schleicher County's economy is agricultural based with a significant contribution from the oil and gas industry.

Management of Groundwater Supplies

The District aid in the management of groundwater supplies within the District in order to conserve the resource while seeking to maintain the economic viability of all resource user groups, public and private. In consideration of the economic and cultural activities occurring within the District, the District will identify and engage in such activities and practices, that could result in a reduction of groundwater use. An observation network shall be maintained in order to monitor changing quality and storage conditions of groundwater supplies within the District. The District will employ all technical resources at its disposal to evaluate the resources available within the District and to determine the effectiveness of management or conservation measures.

The District has adopted rules to manage groundwater withdrawals by means of spacing and production limits. The District may deny a well construction permit or limit groundwater withdrawals in accordance with the guidelines stated in the rules of the District. In making a determination to approve or deny a permit or limit groundwater withdrawals, the District will consider the public benefit against individual hardship after considering all appropriate testimony. The relevant factors to be considered in making a determination to deny a permit or limit groundwater withdrawals include: purpose of District rules, legal rights, equitable distribution of resource and economic hardship to both individual surface owners and surrounding community resulting from grant or denial of permit or terms prescribed by the permit.

Regional Cooperation and Coordination

In 1988, four groundwater conservation districts, Coke County UWCD, Glasscock County UWCD, Irion County WCD and Sterling County UWCD signed an original Cooperative Agreement. As new districts were created, they too signed the Cooperative Agreement. In the fall of 1996, the original Cooperative Agreement was redrafted and the West Texas Regional Groundwater Alliance was created. The West Texas Regional Groundwater Alliance consists of ten locally created and locally funded groundwater conservation districts that encompass almost 8.75 million acres or thirteen thousand square mile of West Texas. Due to the diversity of the region, each member district provides it's own unique programs to best serve its constituents. The current member districts are:

| | | |
|------------------|------------------|--------------------|
| Coke County UWCD | Emerald UWCD | Glasscock UWCD |
| Hickory UWCD#1 | Irion County WCD | Lipan-Kickapoo WCD |

Plateau UWCS
Sutton County UWCD

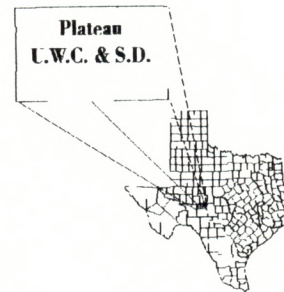
Santa Rita UWCD

Sterling County UWCD

This Alliance was created because the local districts have a common objective to facilitate the conservation, preservation and beneficial use of water and related resources. Local districts monitor water-related activities of the State's largest industries such as farming & ranching, oil and gas and municipalities. The Alliance provides coordination essential to effect region wide planning in an area which has common water resource allocation problems that are unique to this portion of the State of the member districts and the monitoring of activities in order to accomplish their objectives.

Geographical Information

The District lies within the Edwards Plateau and consists of approximately 838,003 acres in Schleicher County, Texas.



Groundwater Resources

The Edwards-Trinity (Plateau) aquifer is the fresh water source for Schleicher County and includes all rocks from the base of the Antlers to the top of the Georgetown Formation (Washita Group). Limestone is the predominant rock underlying the Edwards Plateau soils. The permeability of the limestone is not necessarily due to intergranular pore space as in sandstones, but more to joints, crevices, and solution openings that have been enlarged by solvent action of water charged with carbon dioxide.

Permian limestone contains fresh to slightly saline water in the area of the common corners of Kimble, Menard, Schleicher and Sutton Counties. The Permian is overlain by the Edwards and associated limestones in this area and is recharged by water from the Cretaceous.¹

Groundwater Resource Estimates

All estimates of groundwater availability, usage, supplies, recharge, storage and future

¹Occurrence, Availability, and Chemical Quality of Ground Water in the Edwards Plateau Region of Texas, Report 235, Texas Department of Water Resources, Loyd E. Walker, July 1979.

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demands are from data supplied by the Texas Water Development Board unless otherwise noted. Data sources include "Water for Texas, Today and Tomorrow, August 1997", aquifer parameters derived from pumping tests performed by TWDB, and TWDB personnel. These estimates will be used until alternate numbers are generated. Use of these estimates does not constitute endorsement by the District.

Useable Amount of Groundwater

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The total useable amount of groundwater within the Edwards and associated limestone is 670,402 acre feet. Saturated thickness data from drilling logs was used in the calculation and specific yield of 0.04.² The total useable amount of groundwater within the Trinity Aquifer is 5,590,841 acre feet. This figure is based on a 90 ft. saturated thickness and 0.074 specific yield.³ Water from the Trinity Aquifer is normally considered not potable.

Projected Water Supply

(expressed in acre feet)

| River Basin | Aquifer | 1990 | 2000 | 2010 |
|--------------|-----------------|---------------|---------------|---------------|
| Colorado | Edwards-Trinity | 24,375 | 24,375 | 24,375 |
| Rio Grande | Edwards-Trinity | 10,278 | 10,278 | 10,278 |
| Total | | 34,653 | 34,653 | 34,653 |

*source of data - *Water for Texas, Today & Tomorrow*, Texas Water Development Board, 1997.

The District consists of 838,003 acres with 34,653 acre feet of water. Dividing the acre feet by total acres brings a total of .04 acre feet/acre or 13,034 gallons/acre. It should also be noted that groundwater is available in quantities to sustain agricultural activities in most areas. However, some areas are void of enough water to adequately supply domestic uses.

²TWDB, Report 238

³*Water for Texas, Today and Tomorrow*, Texas Water Development Board, 1997.

Amount of Groundwater Used Annually

(expressed in acre feet)

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------|------|------|------|------|------|------|
| Municipal | 485 | 510 | 488 | 580 | 607 | 542 |
| Irrigation | 1065 | 1065 | 1441 | 1644 | 1818 | 1427 |
| Mining | 79 | 142 | 132 | 132 | 133 | 150 |
| Livestock | 484 | 503 | 396 | 384 | 531 | 540 |
| | | | | | | |
| Total | 2113 | 2220 | 2457 | 2740 | 3089 | 2659 |

*source of data - *Water for Texas, Today & Tomorrow*, Texas Water Development Board, 1997.

These figures do not include the water consumption of invasive vegetation. A large mature juniper has a transpiration rate of about 33 gal/day⁴ or 12,045 gal/yr. or 0.04 ac-ft/year. At a density equivalent to only one mature juniper per acre, an estimated loss of 33,720 ac-ft/year occurs within the District. The transpiration rate of a mesquite tree is estimated at 21 gallons/day⁵ or 7,665 gal/yr. or 0.02 ac-ft/year. At a density equivalent to one mesquite tree per acre, an estimated loss of 16,860 ac-ft/year occurs within the District. The following table is a brief description of brush populations within the District.⁶

| Density | | | | | |
|--------------|---------------|--------------|---------------|---------------|---------------|
| Light | | Moderate | | Heavy | |
| Cedar | Mesquite | Cedar | Mesquite | Cedar | Mesquite |
| 34,400 acres | 239,000 acres | 60,000 acres | 146,800 acres | 164,000 acres | 388,600 acres |

⁴"Biology and Ecology of Redberry Juniper," by Darrell N. Uehert, Technical Report 97-1, Juniper Symposium 1997, Texas Agricultural Experiment Station, TAMU.

⁵Ibid

⁶Brush Survey of 1973, Schleicher County, Soil Conservation Service.

Annual Effective Recharge & Recoverable Storage

(expressed in acre feet)

| River Basin | Aquifer | Recharge |
|--------------|-----------------|---------------|
| Colorado | Edwards-Trinity | 24,375 |
| Rio Grande | Edwards-Trinity | 10,278 |
| Total | | 34,653 |

*source of data - *Water for Texas, Today & Tomorrow*, Texas Water Development Board, 1997.

Rainfall is the only source of recharge for the District. Many parameters affect the amount of water that actually reaches the aquifer. Vegetative growth, soil construction and rate of rainfall are some of the parameters affecting the amount of water reaching the aquifer.

In The Edwards Plateau region, the annual rate of evaporation is three times greater than the annual rate of precipitation, thus creating a perpetual low soil moisture content that retards percolation except under the most ideal conditions. Percolation usually occurs during relative short periods after rainfall. Soil permeability is an expression of the ability of water to pass through pore spaces of the soil and varies throughout the Edwards Plateau from less than 0.06 to 0.63 inches per hour. Rain intensities greater than these rates will produce surface runoff.⁷

Additional Recharge

The estimate of the annual amount of additional natural or artificial recharge of groundwater within the District, that could result from implementation of feasible methods for increasing the natural or artificial recharge is difficult to determine due to the direct correlation to rainfall. There are several feasible methods of additional recharge:

1. Flood Prevention Sites - In 1962, Public Law 566 mandated the construction of thirteen dam sites on the Dry Devil's River Draw and Lowery Draw for the prevention of flooding in Sonora, Texas. Of the two of the sites located within

⁷Occurrence, Availability, and Chemical Quality of Ground Water in the Edwards Plateau Region of Texas, Report 235, Texas Department of Water Resources, Loyd A. Walker, 1979.

Schleicher County, site #1 is capable of detaining 4,866 acre feet and site #2 is capable of detaining 5,000 acre feet.⁸ The dams were designed to regulate flow of floodwater, thereby releasing water at a predetermined rate to prevent flooding. Since construction of the sites, the only storm event to produce enough storm water to fill structures #9, #10, #11 & #12 occurred in 1990. Structures #1-8 have never been filled to capacity.

2. Weather Modification - Weather modification is another tool considered effective for increased aquifer recharge. The Colorado River Municipal Water District Weather Modification Program indicates a 23% increase in rainfall within the target area over a 26 year period. San Angelo conducted a weather enhancement program from 1985 to 1989 with a result rate of 15% increase in rainfall. The District has been a member of the West Texas Weather Modification Association since the initial season of 1996. The average rainfall for the District is 19.0 in/year and 11.2 in from May through September when weather modification activities occur.⁹ A modest 10% increase of one inch of rainfall during the growing season results in a reduction of pumpage for all users, potential increase in runoff, increases productivity of crops and rangeland, provides additional moisture infiltration below root depth available for recharge and increases spring flow. One inch of rainfall distributed over the entire District is equal to 69,833 ac-ft of rainwater. Under ideal conditions, 20% of rainfall infiltrates beyond the root zone for potential recharge, increased rainfall would result in additional potential recharge as follows:

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| Increase During Growing Season (Ave. 11.2 in, May-September) | 10% Increase (1.12 inch) | 15% Increase (1.68 inches) | 23% Increase (2.58 inches) |
|--|--------------------------|----------------------------|----------------------------|
| Additional Recharge Potential in acre feet | 15,642 | 23,464 | 36,034 |

⁸Workplan for Watershed Protection and Flood Prevention, U.S. Department of Agriculture Soil Conservation Service, 1958

⁹Texas Almanac, 1995.

3. Range Management through brush control - Brush control can be accomplished by mechanical control, prescribed burn, combination of mechanical and burn, or chemical application. Brush control may be considered more as a conservation method than an additional recharge method. Effective brush control could potentially conserve up to 17,646 acre feet/year if the entire District were returned to 70% Grass, 12% Oak and 18% Juniper. The following table is results of the water balance on rangeland at the Texas Agriculture Experiment Station, Sonora, Texas.¹⁰

| | 100% Grass | 70% Grass 12% Oak 18% Juniper | 40% Grass 24% Oak 36% Juniper |
|---|------------|-------------------------------------|-------------------------------------|
| Rainfall (inches) | 22.6 | 22.6 | 22.6 |
| Interception Loss (inches) | 3.0 | 6.3 | 9.6 |
| Water Reaching the Soil (inches) | 19.6 | 16.3 | 13.0 |
| Runoff (inches) | 0.2 | 0.2 | 0.2 |
| Water Going into the Soil (inches) | 19.4 | 16.1 | 12.8 |
| Evapotranspiration (inches) | 15.7 | 15.8 | 12.8 |
| Deep Drainage (inches) | 3.7 | 0.3 | 0.0 |
| Moderate Stocking Rate (animal units/sec) | 34 | 22 | 11 |

Combined efforts of effective weather modification and brush control could possibly result in 33,288 additional acre feet/year.

¹⁰"How to Increase or Reduction in Juniper Cover Alters Rangeland Hydrology", by Thomas L. Thurow and Justin W. Hester, Technical Report 97-1, Juniper Symposium 1997, Texas Agricultural Experiment Station, TAMU.

Projected Water Demand

(expressed in acre feet)

| Demand | River Basin | Aquifer | 2000 | 2010 |
|----------------|-------------|-----------------|-------------|-------------|
| Eldorado | Colorado | Edwards-Trinity | 465 | 484 |
| County - Other | Rio Grande | Edwards-Trinity | 31 | 30 |
| County - Other | Colorado | Edwards-Trinity | 101 | 98 |
| Mining | Colorado | Edwards-Trinity | 147 | 125 |
| Irrigation | Colorado | Edwards-Trinity | 851 | 820 |
| Irrigation | Rio Grande | Edwards-Trinity | 175 | 168 |
| Livestock | Colorado | Edwards-Trinity | 367 | 367 |
| Livestock | Rio Grande | Edwards-Trinity | 128 | 128 |
| Total | | | 2265 | 2220 |

*source of data - *Water for Texas, Today & Tomorrow*, Texas Water Development Board, 1997.

Actions, Procedures, Performance and Avoidance for Plan Implementation

The District will implement the provisions of this plan and will utilize the provisions of this plan as a guidepost for determining the direction or priority for all District activities. All operations of the District, all agreements entered into by the District may participate will be consistent with the provisions of this plan.

The District has adopted and will amend as necessary rules relating to the permitting of wells and the production of groundwater. The rules adopted by the District shall be

pursuant to TWC Chapter 36 and the provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical evidence available.

The District shall treat all citizens equally. Citizens may apply to the District for discretion in enforcement of the rules on grounds of adverse economic effect or unique local character. In granting of discretion to any rule, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board, shall not be construed as limiting the power of the Board. The District will seek the cooperation in the implementation of this plan and the management of groundwater supplies within the District.

In an effort to recognize all potential contamination sources, the District will work to promote capping and plugging of abandoned water wells. The District will also coordinate efforts with the Railroad Commission in identifying abandoned oil and gas wells that pose potential threat to the integrity of the groundwater.

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Methodology for Tracking Progress

The methodology that the District will use to trace it's progress on an annual basis in achieving it's management goals will be as follows. The District manager will prepare and present an annual report to the Board of Directors on District performance in regards to achieving management goals and objectives (during last monthly Board of Directors meeting each fiscal year, beginning September 1, 1998). The annual report will be maintained on file at the District Office.

Coordination with Surface Water Entities

There are three adjudication certificates held by water users within the District. The District has no authority over surface water.

Goals

1.0 To provide for the most efficient use of groundwater.

Management Objective (1.1) The District realizes the importance of public education of groundwater usages and conservation practices. Each year, the District will publish at least two educational articles identifying conservation practices for the efficient use of groundwater. Each year, the District will respond to invitations to speak on groundwater topics to at least one group, if requested. Each year, the District will contact all schools within the District with information of educational material available.

Performance Effectiveness Standard (1.1a) Number of articles published identifying conservation practices for the efficient use of groundwater each year.

Performance Effectiveness Standard (1.1b) Number of speaking engagements responded to on groundwater topics each year.

Performance Effectiveness Standard (1.1c) Number of contacts made to schools regarding available educational material each year.

Management Objective (1.2) As a service to water well owners within the District a field lab service for water analysis is available. Annually, at least two articles will be published advertising the availability of water analysis service performed by the District. Each year the District will continue to perform water quality analysis for residents of the District upon all requests.

Performance Effectiveness Standard (1.2a) Number of articles published advertising the availability of water analysis service performed by the District each year.

Performance Effectiveness Standard (1.2b) Number of water analysis requested and performed each year.

Management Objective (1.3) According to District rules, wells within the District are required to be registered and/or permitted. As part of daily operations, the all wells will be registered with the District upon notification by well drillers or landowners. The District will permit all wells after the District personnel have determined that all well construction criteria have been met.

Performance Effectiveness Standard (1.3a) Number of wells registered annually.

Performance Effectiveness Standard (1.3b) Number of wells permitted annually.

Management Objective (1.4) The District is included in Region F Regional Planning Group. Each year that District personnel serve on the Region F RWPG Board, any committee or office, the District will actively participate in Region F Regional Planning and attend at least 80% of meetings.

Performance Effectiveness Standard (1.4a) Percentage of Region F Regional Planning meetings attended each year.

Performance Effectiveness Standard (1.4b) Number of committees, offices, duties performed by District each year.

Management Objective (1.5) The District will participate in weather enhancement for the purpose of aquifer recharge, reduction in groundwater use and economic benefit. Each year, at least two articles will be published on weather modification. All flight paths, if provided by West Texas Weather Modification Association, will be available at the District Office for public view. All rainfall data from a twenty gauge system will be recorded on a monthly basis during program schedule. An annual report of all program results will be given to the Board of Directors

Performance Effectiveness Standard (1.5a) Number of articles written on weather modification each year.

Performance Effectiveness Standard (1.5b) Number of flight paths available for public view each year.

Performance Effectiveness Standard (1.5c) Number of gauges with recorded rainfall data each month.

Performance Effectiveness Standard (1.5d) An annual report of program results to Board of Directors.

Management Objective (1.6) The District has entered into a Cooperative Management Agreement with the West Texas Groundwater Alliance. The purpose of the West Texas Groundwater Alliance is to facilitate the conservation, preservation and to provide for the most efficient use of groundwater. Each year, the District will attend at least 80% of West Texas Groundwater Alliance meetings.

Performance Effectiveness Standard (1.6a) Percentage of West Texas

Groundwater Alliance meetings attended each year.

Management Objective (1.7) A water quality baseline will be established for the District through a monitor well program of approximately sixty wells beginning September 1, 1999. At least 33% of the operating monitor wells will be tested each year. All test results will be entered into the database and a copy mailed to landowners within 30 days of testing.

Performance Effectiveness Standard (1.7a) Number of monitors wells sampled each year.

Performance Effectiveness Standard (1.7b) Number of days required to enter data into database and mail lab results to landowner each year.

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Management Objective (1.8) The District realizes the importance of monitoring the aquifer level to determine usable amount of groundwater. An established groundwater level program of selected wells will be maintained by the District. At least 80% of selected water wells will be measured annually.

Performance Effectiveness Standard (1.8a) Percent of water well levels obtained on an annual basis from selected monitor wells each year.

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(2.0) Implement strategies to control and prevent waste of groundwater.

Management Objective (2.1) Each year, the District will identify and respond to reports of wasteful practices within five working days. Each year, at least one article will be published on wasteful practices.

Performance Effectiveness Standard (2.1a) Number of reported wasteful practices identified and responded to each year.

Performance Effectiveness Standard (2.1b) Number of articles published on wasteful practices each year.

(3.0) Control and prevent subsidence.

The rigid geological framework of the region precludes significant subsidence from occurring. This goal is not applicable to the operations of the District.

(4.0) Address conjunctive surface water management issues.

All surface water impoundments located within the District are used to supply water for livestock consumption. There are no surface water management entities with surface water storage located within the District. This management goal is not applicable to the operations of the District.

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(5.0) Address natural resources that impact the use and availability of groundwater or are impacted by the use of groundwater within the District.

The District has no documented occurrences of endangered or threatened species dependent upon groundwater. Other issues related to resources - air, water, soil, etc. supplied by nature that are useful to life are likewise not documented. The natural resources of the oil and gas industry are regulated by the Railroad Commission of Texas and are exempt by Chapter 36.117(e). Therefore, this management goal is not applicable.

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Definitions:

- "District" - Plateau Underground Water Conservation & Supply District
- "Board" - Plateau Underground Water Conservation & Supply District Board of Directors
- "TWDB" - Texas Water Development Board
- "TAEX" - Texas Agricultural Extension Service
- "Waste" - as defined by Chapter 36 of the Texas Water Code means one or more of the following:
 - (1) withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threatens to cause intrusion into the reservoir of water unsuitable for agricultural, gardening, domestic, or stock raising purposes;
 - (2) the flowing or producing of wells from a groundwater reservoir if the water produced is not for beneficial purpose;
 - (3) escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater;
 - (4) pollution or harmful alteration of groundwater in a groundwater reservoir by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground;
 - (5) willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain,

sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule or order issued by the TNRCC under Chapter 26.

(6) groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge, or;

(7) for water produced from an artesian well, "waste" has the meaning assigned by Section 11.205.

- "Abandoned Well" - shall mean a well or borehole the condition of which is causing, or is likely to cause, pollution of groundwater in the District and includes a well which is or is not in use or which contains no pumping equipment (open or uncovered well). A well or borehole which is not in compliance with applicable law, including the Rules of the District, the Texas Water Well Driller's Act, Texas Natural Resource Conservation Commission, or any other state or federal agency or political subdivision having jurisdiction, is presumed to be an abandoned or deteriorated well.

*Plateau Underground Water
Conservation & Supply District
P.O. Box 324
Eldorado, Texas 76936
915-853-2121*

NOTICE

The Plateau Underground Water Conservation & Supply District Board of Directors will meet Tuesday, August 18, 1998 at 2:00 p.m. at the Schleicher County Annex Building, Eldorado, Texas.

- 1. Budget Hearing**
- 2. Management Plan Hearing**

FILED 8-6 1998 FOR RECORD
PEGGY WILLIAMS, CLERK
COUNTY AND DISTRICT COURT
SCHLEICHER COUNTY, TEXAS
Brenda Mayfield M
9:00A

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Notice

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mgt. plane sign.

Plateau Underground
Water Conservation & Supply District
P.O. Box 324
Eldorado, Texas 76936

MANAGEMENT PLAN

WHEREAS, the Plateau Underground Water Conservation & Supply District (District) was created by Acts of the 59th Texas Legislature in accordance with Article 16, Section 59 of the Constitution of Texas and Chapter 52 of the Texas Water Code, as amended; and

WHEREAS, the District is required by Senate Bill 1 through Chapter 36.1071 of the Texas Water Code to develop and adopt a new Management Plan; and

WHEREAS, the District is required by Senate Bill 1 to submit the adopted Management Plan to the Executive Administrator of the Texas Water Development Board for review and certification by September 1, 1998; and

WHEREAS, The District's new Management Plan shall be certified by the Executive Administrator if the plan is administratively complete; and

WHEREAS, The District Board of Directors, after reviewing the existing Management Plan, has determined that this plan should be replaced with a new 10 year Management Plan; and

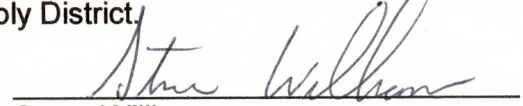
WHEREAS, the District Board of Directors has determined that the new 10 year Management Plan addresses the requirements of Chapter 36.1071.

NOW, THEREFORE, be it resolved, that the Board of Directors of the Plateau Underground Water Conservation & Supply District, following notice and hearing, hereby adopts this new 10 year Management Plan to replace the existing Management Plan; and

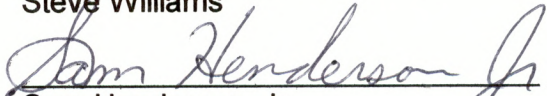
FURTHER, be it resolved, that this new Management Plan shall become effective immediately upon adoption and be reviewed and amended as necessary.

Adopted this 18th of August, 1998, by the Board of Directors of the Plateau Underground Water Conservation & Supply District.


Raymond Mittel


Steve Williams

De Lux


Sam Henderson, Jr.

Kirk Griffin

Draft water management plan to be considered

by *Cindy Cawley,*
Plateau UWCSO

Senate Bill 1 which was passed in the 75th Legislative Session, mandated that groundwater districts shall write a management plan by September 1, 1998 which must be certified by the Texas Water Development Board. To pass certification by the TWDB, certain criteria must be satisfied. Included in the criteria are estimates of total useable amount of groundwater, amount of groundwater used annually, projected water supply and demand, annual amount of recharge and additional recharge. The District will be subject to an annual state audit beginning one year from adoption of the plan.

The District has written a draft management plan with management objectives and performance standards to address specific goals outlined by Senate Bill 1. Once adopted by the Plateau Underground Water Conservation & Supply District Board of Directors and certified by the Texas Water Development Board, the plan will be in effect for a ten year period. At this time the District is asking for public comment in order for the plan to better serve water users within the District. The Draft Management Plan is available to the public and may be picked up at the Plateau UWCSO Office, Schleicher County Annex Building, 210 Main St. of by call 853-2121.

PUBLIC NOTICE

The Plateau Underground Water Conservation and Supply District Board of Directors shall conduct a public hearing on the Draft Plateau UWCSO Management Plan on Tuesday, August 18, 1998 at 2:00 p.m. Immediately following the hearing on the Draft Management Plan a budget hearing will be held for FY 98-099. Both hearing will be at the District Office located in the Schleicher County Annex Building, 210 Main St., Eldorado, Texas 76936. For more information call 853-2121. 33b

PLATEAU UNDERGROUND WATER CONSERVATION & SUPPLY DISTRICT
RULES

RULE 1 - Unless the context hereof indicates a contrary meaning, the words hereinafter defined shall have the following meaning in these Rules:

- (a) The "Board" shall mean the Board of Directors of the Plateau Underground Water Conservation and Supply District, consisting of five (5) duly elected members.
- (b) "District" shall mean the Plateau Underground Water Conservation and Supply District, maintaining its principal office in Eldorado, Texas. Where application, reports and other papers are required to be filed with or sent to "the District", this means the District's headquarters in Schleicher County, Eldorado, Texas.
- (c) The term "Well" or "Water Well" shall mean and include any artificial excavation constructed to produce water from underground reservoir.
- (d) "Water" shall mean underground water.
- (e) "Owner" shall mean and include any person, firm, partnership or corporation that has the right to produce water from the land either by ownership, contract, lease, easement, or any other estate in the land.
- (f) "Person" shall mean any individual, partnership, firm or corporation.
- (g) The word "Waste" as used herein shall have the same meaning as defined by the Legislature, as follows:
 - (1) The withdrawal of underground water from an underground water reservoir at such rate and in such amount so as to cause the intrusion therein of water not suitable for agricultural, gardening, domestic, or stock raising purposes.
 - (2) The flowing or producing of wells from an underground water reservoir to any other reservoir not containing underground water.
 - (3) The escape of underground water from one underground water reservoir to any other reservoir not containing underground water.
 - (4) The pollution or harmful alteration of the character of the underground water within the underground water reservoir of the District by means of salt water or other deleterious matter admitted from some other stratum or strata or from the surface of the ground; and
 - (5) Willfully or negligently causing, suffering, or permitting underground water to escape into any river, creek, watercourse, depression, or lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land or any other person than the owner of such well.

(6) The flowing or producing of wells from an underground water reservoir if the water produced is not used for beneficial use.

(7) Groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge.

(h) An "Authorized Well Site" shall be:

(1) The location of a proposed well on an application duly filed until such application is denied; or

(2) The location of a proposed well on a valid permit. (An authorized well site is not a permit to drill.)

(i) "Open or Uncovered Well" shall mean any artificial excavation drilled or dug for the purpose of producing water from the underground reservoir, not capped or covered as required by these rules, which is as much as ten (10) feet deep, nor more than six (6) feet in diameter.

(j) "Casing" shall mean a tubular watertight structure installed in the excavated or drilled hole to maintain the well opening and, along with cementing, to confine ground waters to their zones of origin and prevent the entrance of surface pollutants.

(k) "Cement" shall mean a neat Portland or construction cement mixture of not more than seven gallons of water per 94-pound sack of dry cement, or a cement slurry which contains cement along with betonite, gypsum, or other additives; the well driller will adhere to the manufacturer's recommended water content for the mix.

(l) "Completion" shall mean sealing off the access of undesirable water to the well bore by proper casing and/or cementing procedures.

(m) "Mud" shall mean a relatively homogeneous, relatively viscous fluid produced by the suspension of clay-size particles in water.

(n) "Plugging" shall mean an absolute sealing of the well bore.

(o) "Pollution" shall mean the alteration or the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the District that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(p) "Undesirable water" shall mean water that is injurious to vegetation, to land, or to fresh water, or water that can cause pollution.

- (q) "Well Log" shall mean a log accurately kept, on forms prescribed by the Water Well Driller's Board of Texas, or any successor regulatory agency with jurisdiction therefor, at the time of drilling showing the depth, thickness, character of the different strata penetrated, location of water bearing strata, depth, size and character of casing installed, together with any other data or information required by the Water Well Driller's Board of Texas or of this Board.
- (r) "Abandonment": shall mean the intentional discontinuation of use.
- (s) "Exempt Well": shall mean and include any artificial excavation constructed to produce or which produces less than 25,000 gallons of water per day or 17.36 gallons per minute. For all purposes herein, an "Exempt Well" as defined herein shall be exempt from permitting requirements created hereunder, but shall not be exempt from registration/validation requirements created hereunder.
- (t) "Aquifer" shall mean a geologic formation that contains sufficient saturate material to be capable of storing water and transmitting water in usable quantities to a well.
- (u) "Area of hydrologic impact" shall mean, as projected on the land surface, the aerial extent of migration of a subsurface water-bearing reservoir having ascertainable boundaries.
- (v) "Artesian Well" shall mean an artificial water well in which the water, when properly cased, will rise by natural pressure above the first impervious stratum below the surface of the ground.
- (w) "Beneficial use" or "Beneficial purpose" shall mean use for:
1. agricultural, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational, or pleasure purposes;
 2. exploring for, producing, handling, or treating oil, gas, sulphur or other minerals;
 - or;
 3. any other purpose that is useful and beneficial to the users.
- (x) "Capped well" shall mean a well that is closed or capped with a covering capable of preventing surface pollutants from entering the well and sustaining a weight of at least four hundred (400) pounds, or, in the case of an Artesian Well, an artesian pressure of up to four hundred (400) pounds, as necessary to effectively prevent water from flowing out of the well and running over the surface of the ground above the well or wasting through the strata through which it passes.
- (y) "Conservation" shall mean:
1. the development of water resources; and
 2. those practices, techniques, and technologies that will reduce the consumption

of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.

- (z) "Deteriorated well" shall mean a water well, the condition of which will cause, or is likely to cause, pollution of any water in the District.
- (aa) "Driller's Log" shall mean a record, made at the time of drilling, showing the depth, thickness, character of the different strata penetrated, and location of water-bearing strata, as well as the depth, size and character of casing installed.
- (ab) "Existing Well" shall mean a well which was drilled before the date of passage of these Rules and which is not abandoned or sealed, or a well which was not completed on said date but for which a notice of intention to drill was on file with the District on such date.
- (ac) "Fresh Water" shall mean water whose bacteriological, physical, and chemical properties are such that it is suitable and feasible for beneficial use.
- (ad) "Licensed water well driller" shall mean any person who holds a license issued by the State of Texas pursuant to the provisions of the Texas Water Well Drillers Act, as amended, and the substantive rules of the Water Well Drillers Board or its successor.
- (ae) "New well" shall mean a well for which a notice of intention to drill or a permit is required pursuant to these Rules.
- (af) "Permitted well" shall mean a well not exempt by state law (as defined in these rules - Rule 1.001 (s) and Chapter 52.170 of the Texas Water Code) and which has been either permitted or validated by the District.
- (ag) "Underground water" shall mean water suitable for agricultural, gardening, domestic, or stock raising uses, percolating below the earth's surface, but shall not include water in a defined subterranean stream or in the underflow of a river.
- (ah) "Well location" shall mean the location of a proposed water well on an application duly filed until such application is granted or denied, or the location of a well on a valid permit.
- (ai) "Well registration" shall mean District recording of exempt well information i.e. owner, address, location, type, use, log, yield, quality and any additional information owner/operator or District may feel pertinent.

(aj) "Well validation" shall mean confirmation and permitting of well location and wellhead equipment by District personnel.

RULE 2 - WASTE

(a) Underground water shall not be produced within or without the District in such a manner or under such conditions as to constitute waste as defined in Rule 1 hereof.

(b) Any person producing or using underground water shall use every possible precaution, in accordance with the most approved methods, to stop and prevent waste of such water.

(c) No person shall pollute or harmfully alter the character of the underground water reservoir of the District by means of salt water or other deleterious matter and/or substance admitted from some other stratum or strata or from the surface of the ground.

(d) No person shall commit waste as that term is defined by Section (g) Rule of 1 of the Rules of the Plateau Underground Water Conservation and Supply District.

RULE 3 - WELL REGISTRATION

Application for Registration is required for all existing and future wells in the District and shall be filed with the District on a form and in the manner required by the District.

(a) that produce less than 25,000 gallons of water per day;

(b) that produce or will produce water from the well to be used to supply the domestic needs of ten or fewer households and a person who is a member of each household is either the owner of the well or a person related to the owner or member of the owner's household within the second degree by consanguinity, or an employee of the owner;

(c) that produce or will produce water from the well to use or to be used to provide water for the feeding of livestock and poultry connected with farming, ranching, or dairy enterprises;

(d) that supply water for hydrocarbon production activities, regardless of whether those wells are producing, that are associated with any well permitted by the Railroad Commission of Texas drilled before the effective date of S.B. 1525, Acts of the 70th Legislature, Regular Session 1987; or

(e) that produce or will produce water used for domestic use;

(f) that produce or will produce water used for Industrial and/or manufacturing purposes;

(g) that produce or will produce water used for commercial and/or municipal purposes;

(h) that produce or will produce water for all other uses.

WHEN TO REGISTER -The owner of an exempt well to be drilled after the effective date of this rule shall register the exempt well at least one day prior to drilling the well. The District will collect registration information for all exempt wells drilled before the effective date of this rule. The owner of an exempt well drilled before the effective date of this rule should be cooperative with the District in its efforts to register all such wells.

WHERE TO REGISTER - An owner must file the required registration information at the District's principal office in Eldorado, Texas.

REREGISTRATION - If the owner of a registered well plans to change the use of the water, increase the production rate of the water, or to substantially alter the size of the well or well pump in a manner that does not require a permit, the owner must reregister the well.

RULE 4 - PERMIT REQUIRED

(a) No person shall hereafter begin to drill or drill a well, or increase the size of a well or pump therein, which well could reasonably be expected to produce, or a pump designed to produce, in excess of 25,000 gallons of water per day, without having first applied to the Board, and had issued a permit to do so, unless the drilling and operation of the well is exempt by the law or by these rules.

(b) No permit shall be required for the drilling of temporary wells exempt by Subsection 170 of Chapter 52, Texas Water Code (being generally wells used for the production of oil, gas, or other minerals and water wells used in conjunction therewith).

RULE 5 - DEPOSITS

Each application for a permit to drill a well shall be accompanied by a \$50.00 deposit which shall be accepted by the District. Said deposit shall be returned to the applicant by the District if:

(1) the application is denied; or

(2) if the application is granted, upon receipt of correctly completed registration form and log of the well; or

(3) if said permit location is abandoned without having been drilled, upon return and surrender of said permit marked "Abandoned" by the applicant.

In the event neither the registration forms and log of the well nor the permit marked "Abandoned" is returned to said District within six (6) months after the approval date of the permit or the extension date thereof, the said deposit shall become the property of the District. All deposits heretofore made or which shall hereafter be made shall become the property of the District if such registration form and log or permit has not been returned or is not returned to the District with which the deposit was made within six (6) months from the approval date of the permit.

RULE 6 - ISSUANCE OF PERMITS

(a) The Board shall issue or cause to be issued a drilling permit for a well properly

spaced upon proper application executed and filed by the owner with the District and containing the matters specified below. An application shall be considered filed when properly made out, completed, and signed and tendered to the District or a person duly designated by such District to receive the same.

Such applications shall be on forms provided by the District and shall be in writing and shall be prepared in accordance with and contain the information called for in the form of application, if any, prescribed by the Board, and all instructions which may have been issued by the Board with respect to the filing of an application. Otherwise, the application will not be considered.

(b) Rules for filing of applications:

(1) If the applicant is an individual, the application shall be signed by the applicant or his duly appointed agent. The agent may be requested to present satisfactory evidence of his authority to represent the applicant.

(2) If the application is by a partnership, the applicant shall be designated by the firm name followed by the words "a Partnership" and the application shall be signed by at least one of the general partners who is duly authorized to bind all of the partners.

(3) In the case of a corporation, public district, county or municipality, the application shall be signed by a duly authorized official. A copy of the resolution or other authorization to make the application may be required by the officer or agent receiving the application.

(4) In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate.

(c) Such applications shall set forth the following:

(1) The exact proposed location of the well to be drilled as provided in the application including the county, the section, block, survey and township, labor and league, and exact number of yards to the nearest non-parallel property lines (legal survey line), or other adequate legal description.

(2) The proposed use of the well to be drilled, whether municipal, industrial, or irrigation.

(3) The size of the pump.

(4) The approximate date drilling operations are to begin.

(5) The location of the three (3) nearest wells within a quarter of a mile of the proposed location, and the names of the owners thereof.

(6) An agreement by the applicant that a completed well registration form and log will be furnished to the District (on forms furnished by it) by the applicant upon completion of this well and prior to the production of water therefrom (except for such production as may be necessary to the drilling and testing of such well.)

(7) Such additional data as may be required by the Board.

(8) The name and address of the fee owner of the land upon which the well location is to be made.

(9) the proposed depth or water-bearing formation from which applicant shall

complete and produce from said well;

RULE 7 - REQUIREMENT OF DRILLER'S LOG, CASING AND PUMP DATA

(a) Complete records shall be kept and reports thereof made to the District concerning the drilling, maximum production potential, equipping and completion of all wells drilled. Such records shall include an accurate driller's log, any electric log which shall have been made and such additional data concerning the description of the well, its potential, hereinafter referred to as "maximum rate of production" and its actual equipment and rate of discharge permitted by said equipment as may be required by the Board. Such records shall be filed with the District Board within 30 days after the completion of the well.

(b) No person shall produce water from any well hereafter drilled and equipped within the District, except that necessary to the drilling and testing of such well and equipment, unless or until the District has been furnished an accurate driller's log, any electric log which shall have been made, and a registration of the well correctly furnishing all available information required on the forms furnished by the District.

(c) No person shall be required to equip and produce any well to its maximum rate of production; provided, however, that for purposes of reworking, redrilling or replacing a well pursuant to Rule 11 hereof, the maximum rate of production of each well established hereunder shall be considered the actual production rate even though said well is produced at a lesser rate of production.

RULE 8 - MINIMUM SPACING OF WELLS

(a) Distance Requirements:

(1) No well to be drilled subsequent to the date of enactment of this rule shall be drilled such that said well shall be located nearer than three hundred thirty (330') feet from the nearest existing well nor closer than fifty (50') feet to the property line, provided that the Board, in order to prevent waste or to prevent confiscation of property, may grant exceptions to permit drilling within shorter distances than those above described when the Board shall determine that such exceptions are necessary either to prevent waste or to prevent confiscation of property.

(2) In the interest of protecting life and for the purpose of preventing waste and preventing confiscation of property, the Board reserves the right in particular subterranean water zones and/or reservoirs to enter special orders increasing or decreasing distances provided by this rule.

(3) (i) In applying this rule and in applying every special rule with relation to spacing in all of the subterranean water zones and/or reservoirs underlying the confines of this District, no subdivision of property made subsequent to the adoption of the original spacing rule will be considered within the terms of such spacing rule, and no subdivision of property will be regarded in applying such spacing rule or in determining the matter of confiscation if such subdivision took place subsequent to the promulgation and adoption

of the original spacing rule.

(ii) Any subdivision of property creating a tract of such size and shape that it is necessary to obtain an exception to the spacing rule before a well can be drilled thereon is a voluntary subdivision and not entitled to a permit to prevent confiscation of property if it were either, (a) segregated from a larger tract in contemplation of water resource development, or (b) segregated by fee title conveyance from a larger tract after the spacing rule became effective and the voluntary subdivision rule attached.

(iii) The date of attachment of the voluntary subdivision rule is the date of discovery of underground water production in a certain continuous reservoir regardless of the subsequent lateral extensions of such reservoir, provided that such rule does not attach in the case of segregation of a small tract by fee title conveyance which is not located in an underground water production area having a discovery date prior to the date of such segregation.

(iv) The date of attachment of the voluntary subdivision rule for a reservoir under any special circumstance which the Board deems sufficient to provide for an exception, may be established other than above so that innocent parties may have their rights protected.

(b) Well Density. Subject to paragraph (a) (1) et seq. above, no more than a cumulative total of 16 wells, whether drilled prior to or subsequent to enactment of this rule, shall be permitted per survey section (hereinafter referred to as "drilled to density"). In the event the applicant owns less than a full section, then the number of wells permitted for said tract shall be proportionately reduced so that the total number of wells permitted shall be established by multiplying sixteen (16) times the quotient of the number of acres in the section; provided, however, that this density rule shall not apply to acreage drilled to density pursuant to these rules where the cumulative average of water production allowed per acre per minute is less than 3 gallons per acre per minute. In this event the landowner shall be permitted to drill additional water wells on said lands until the 3 gallons/acre/minute basis is attained. Said cumulative average gallonage per acre per minute basis shall be computed by District personnel according to maximum pumping capability of the water well established at the time the well is drilled. EDITOR'S NOTE: This means 16 permitted wells, not 16 registered wells.

RULE 9 - EXCEPTION TO SPACING RULE

(a) In order to protect vested property rights, to prevent waste, to prevent confiscation of property, or to protect correlative rights, the Board may grant exception to the above spacing regulations. This rule shall not be construed so as to limit the power of the Board, and the powers stated are cumulative only of all other powers possessed by the Board.

(b) If an exception to such spacing regulations is desired, application thereof shall be submitted by the applicant in writing to the Board at its District Office on forms furnished by the District. The application shall be accompanied by a plat or sketch,

drawn to scale of one (1) inch equaling six hundred (600) feet. The plat or sketch shall show thereon the property lines in the immediate area and shall show accurately to scale all wells within a quarter mile of the proposed well site. The application shall also contain the names and addresses of all property owners adjoining the tract on which the well is to be located and the ownership of the wells within a quarter mile of the proposed location. Such application and plat shall be certified by some person actually acquainted with the facts who shall state that all the facts therein are true and correct.

(c) Such exception may be granted ten (10) days after written notice has been given to the applicant and all adjoining owners and all well owners within a quarter mile of the proposed location and after a public hearing at which all interested parties may appear and be heard, and after the Board has decided that an exception should be granted. Provided, however, that if all such owners execute a waiver in writing stating that they do not object to the granting of such exception, the Board may thereupon proceed to decide upon the granting or refusing of such application without notice of hearing except to the applicant. The applicant may also waive notice or hearing or both.

RULE 10 - PLACE OF DRILLING OF WELL

After an application for a well permit has been granted, the well, if drilled, must be drilled within thirty (30) feet of location specified in the permit, and not elsewhere. If the well should be commenced or drilled at a different location, the drilling or operation of such well may be enjoined by the Board pursuant to Chapter 52, Texas Water Code.

RULE 11 - REWORKING OR REPLACING OF WELL

(a) No person shall rework, redrill, or reequip a well in a manner that would increase the maximum rate of production of such well as established by Rule 7 above without first having made an application to the Board, and having been granted a permit by the Board to do so; nor shall any person replace a well without a permit by the Board. A replacement well, in order to be considered such, must be drilled within one hundred fifty (150) feet of the old well and not elsewhere. It must not be located toward any other well or authorized well site unless the new location complies with the minimum spacing requirements set out in Rule 8; otherwise the replacement well shall be considered to be a new well for which application must be made under Rule 6 above. Provided, however, that the Board may grant an exception without notice or hearing in any instance where the replacement well is placed farther away from any existing wells or authorized well sites.

The location of the old well (the well being replaced) shall be protected in accordance with the spacing rules of the District until the replacement well is drilled and tested. The landowner or his agent must within 90 days of the issuance of the permit declare in writing to the District which one of these two wells he desires to produce. If the landowner does not notify the District of his choice within this 90

days, then it will be conclusively presumed that the new well is the well he desires to retain. Immediately after determining which well will be retained for production, the other well shall be:

- (1) plugged and abandoned, or
- (2) properly equipped in such a manner that it cannot produce more than 25,000 gallons of water a day; or
- (3) closed in accordance with article 9202, Vernon's Annotated Civil Statutes, as amended. Violation of such article is made punishable thereby a fine of not less than \$100.00 nor more than \$500.00

An application to rework, reequip, redrill, or replace an existing well may be granted by the Board without notice or hearing.

(b) The size or maximum rate of production of a well shall not be hereafter changed to a larger size or capacity so as to substantially increase the rate of production of a well without a permit from the Board. (For example, increasing the size of the well bore from six inches to eight inches.)

(c) In the event that application meets all spacing requirements, the Board may grant such application without further notice.

RULE 12 - TIME DURING WHICH A PERMIT SHALL REMAIN VALID

Any permit granted hereunder shall be valid if the work permitted shall have been completed within two (2) months from the filing date of the application. It shall thereafter be void. Provided, however, that the Board, for good cause, may extend the life of such permit for an additional two (2) months if an application for such extension shall have been made to the District during the first two (2) months period. Provided further, that when it is made known to the Board that a proposed project will take more time to complete, the Board, upon receiving written application may grant such time as is reasonably necessary to complete such project.

RULE 13 - CHANGED CONDITIONS

The decision of the Board on any matter contained herein may be reconsidered by it on its own motion or upon motion showing changed conditions, or upon the discovery of new or different conditions or facts after the hearing or decision on such matter. If the Board should decide to reconsider a matter after having announced a ruling or decision, or after having finally granted or denied an application, it shall give notice to persons who were proper parties to the original action, and such persons shall be entitled to a hearing thereon if they file a request therefor within fifteen days from the date of the mailing of such notice.

RULE 14 - RIGHT TO INSPECT AND TEST WELLS

Any authorized officer, employee, agent or representative of the District shall have the right at all reasonable times to enter upon the lands which a well or wells may be located within the boundaries of the District, to inspect such well or wells and to

read, or interpret any meter, weir box or other instrument for the purpose of measuring production of water from said well or wells or for determining the pumping capacity of said well or wells; and any authorized officer, employee, agent, or representative of the District shall have the right at reasonable times to enter upon any lands upon which a well or wells may be located within the boundaries of the District for the purposes of testing the pump and the power unit of the well or wells and of making any other reasonable and necessary inspections and tests that may be required or necessary for the information or enforcement of the rules and regulations of the District. The operation of any well may be enjoined by the Board immediately upon refusal to permit the gathering of information as above provided from such well.

RULE 15 - OPEN WELLS TO BE CAPPED

Every owner or operator of any land within the District upon which is located any open or uncovered well is, and shall be, required to close or cap the same permanently with a covering capable of sustaining weight of not less than four hundred (400) pounds, except when said well is in actual use by the owner or operator thereof; and no such owner or operator shall permit or allow any open or uncovered well to exist in violation of this requirement. Officers, agents and employees of the District are authorized to serve or cause to be served written notice upon any owner or operator of a well in violation of this rule, thereby requesting such owner and/or operator to close or cap such well permanently with a covering in compliance herewith. In the event any owner or operator fails to comply with such request within ten (10) days after such written notice, any officer, agent, or employee of the District may go upon said land and close or cap said well in a manner complying with this rule and all expenditures thereby incurred shall constitute a lien upon the land where such well is located, provided, however, no such lien shall exceed \$500 for any single closing. Any officer, agent, or employee of the District, is authorized to perfect said lien by filing of the affidavit authorized by Section 52.171 of the Texas Water Code as amended. All of the powers and authority granted in such section are hereby adopted by the District, and its officers, agents, and employees are hereby bestowed with all of such powers and authority.

RULE 16 - FINAL ORDERS OF THE BOARD

The orders of the Board in any non-contested application of proceeding shall become the final order of the Board on the day it is entered by the Board. All orders of the Board in contested applications, appeals or other proceedings shall contain a statement that the same was contested. In such event the order will become final after fifteen (15) days from the entry thereof and be binding on the parties thereto unless a motion for rehearing is filed under Rule 19 hereof.

RULE 17 - REHEARING

(a) Any person whose application is denied, whose contest is overruled, or who is

not granted the relief desired, may file with the Board a motion for rehearing within fifteen (15) days from the announcement by the Board of its decision or action. The Board shall act thereon within a reasonable time. If such a motion for rehearing is filed and is overruled, the order of the Board shall be final on the date the motion is overruled.

(b) The Board may, in a proper case, find that an emergency exists and that substantial injustice will result from delay. In that event, and upon recitation of such finding, the order of the Board will become final on the date of the announcement of the order by the Board, and no motion for rehearing will be considered thereon.

(c) If an application or contest is denied by the Board, and if the applicant or contestant shall not have had and shall not have been afforded an opportunity for a hearing before the Board, as elsewhere provided by these rules, the applicant or contestant shall be entitled to a hearing before the Board. A written request to the Board for such a hearing, stating such facts, must be filed with the Board within the above fifteen (15) day period. If such motion is in order and is duly filed, the Board shall give notice to the applicant and all proper and necessary parties of the time and place of such hearing, and shall proceed to conduct such a hearing.

RULE 18 - RULES GOVERNING PROTESTS

(a) **NOTICE OF PROTEST.** In the event anyone should desire to protest or oppose any pending matter before the Board, a written notice of protest or opposition shall be filed with the Board on or before the date on which such application or matter has been set for hearing. For the convenience of the Board, it is urgent that protests be filed at least five (5) days before the hearing date.

(b) **PROTEST REQUIREMENTS.** Protests shall be submitted in writing with a duplicate copy to the opposite parties and shall comply in substance with the following requirements:

(1) Each protest shall show the name and address of the protestant and show that protestant has read either the application or a notice relative thereto published by the Board.

(2) There shall be an allegation of injury to protestant which will result from the proposed action or matter to be considered by the Board.

(3) If the protest is based upon claim of interference with some present right of protestant, it shall include a statement of the basis of protestant's claim of right.

(4) Protestant should call attention to any amendment of the application of adjustment which, if made, would result in withdrawal of the protest.

(c) **CONTESTED APPLICATIONS OR PROCEEDINGS DEFINED.** An application, appeal, motion, or proceedings pending before the Board is considered contested when either protestants or interveners, or both, files the notice of protest as above set out and appears at the hearing held on the application, motion or proceeding and present testimony or evidence in support of their contentions, or present a question or questions of law with regard to the application, motion or proceedings.

Where neither protestants nor interveners so appear and offer testimony or evidence in support of their contentions, or raise a question of law with reference to any pending application, motion or proceeding, the same shall be considered as non-contested.

(d) In the event of a contested hearing, each party shall furnish other parties to the proceeding with a copy of all motions, amendments or briefs filed by him with the Board.

RULE 19 - GENERAL RULES OF PROCEDURE FOR HEARING

(a) **HEARINGS:** Hearings will be conducted in such a manner as the Board deems most suitable to the particular case, and technical rules of legal and court procedure need not be applied. It is the purpose of the Board to obtain all the relevant information and testimony pertaining to the issue before it as conveniently, inexpensively and expeditiously as possible without prejudicing the rights of either applicants or protestants.

(b) **WHO MAY APPEAR:** Any party at interest in a proceeding may appear either in person or by attorney or both in such proceedings. A party at interest is any person owning a water right within the bounds of the District who is or may be affected by such proceeding. At the discretion of the Board, anyone not a party at interest in a proceeding may appear.

(c) **ADMISSIBILITY:** Evidence will be admitted if it is of that quality upon which reasonable persons are accustomed to rely in the conduct of serious affairs. It is intended that needful and proper evidence shall be conveniently, inexpensively, and speedily produced while preserving the substantial rights of the parties to the proceedings.

(d) **TESTIMONY SHALL BE PERTINENT:** The testimony shall be confined to the subject matter contained in the application or contest. In the event that any party at a hearing shall pursue a line of testimony or interrogation of a witness that is clearly irrelevant, incompetent or immaterial, the person conducting the hearing may forthwith terminate such line of interrogation.

(e) **A STIPULATION:** Evidence may be stipulated by agreement of all parties at interest.

(f) **LIMITING NUMBER OF WITNESSES:** The right is reserved to the Board in any proceeding to limit the number of witnesses appearing whose testimony may be merely cumulative.

RULE 20 - GENERAL RULES

(a) **COMPUTING TIME:** In computing any period of time prescribed or allowed by these rules, by order of the Board, or by any applicable statute, the day of the act, event or default from which the designated period of time begins to run, is not to be included, but the last day of the period so computed is to be included, unless it be a Sunday or legal holiday, in which event the period runs until the end of the next day which is neither a Sunday nor a legal holiday.

(b) **TIME LIMIT:** Applications, requests, or other papers or documents required or permitted to be filed under these rules or by law must be received for filing at the Board's offices at Eldorado, Texas. The date of receipt and not the date of posting is determinative.

(c) **SHOW CAUSE ORDERS AND COMPLAINTS:** The Board, either on its own motion or upon receipt of sufficient written protest or complaint, may at any time, after due notice to all interested parties, cite any person operating within the District to appear before it in a public hearing and require him to show cause why his operating authority or permit should not be suspended, canceled, or otherwise restricted and limited, for failure to comply with the orders or rules of the Board or the relevant statutes of the State, or for failure to abide by the terms and provisions of the permit or operating authority itself. The matter of evidence and all other matters of procedure at any such hearing will be conducted in accordance with these rules of procedures and practice.

RULE 21 - WELL VALIDATION

In order to provide for the validation of existing water wells that are subject to the rules and regulations of the Plateau Underground Water Conservation & Supply District (hereinafter referred to as the District), it shall be the policy of this Board that a certificate of validation for a well can be issued only after the location of the well and the wellhead equipment of the well has been determined by field survey by the District personnel, and/or designated agents acting for said District.

It is the privilege of this Board to cause to be issued a validation certification for wells drilled and equipped within the District for which the landowner or his agent has not applied for an Application For Water Well Permit; or for wells not otherwise properly permitted, provided that such wells were not drilled, equipped and operated (pumped) in such a manner as to violate any other rules and regulations of the District; and provided that the costs of such well validation are paid to the District as provided by this resolution. Nothing in this resolution is intended to limit the powers of this Board to any other course of action granted within Texas Law, or within its rules and regulations, or within the prerogative of the Board.

RULE 22 - TRANSPORTATION OF WATER FROM THE DISTRICT

I. Every person must obtain a permit from the District for the transporting of water by pipeline, channel, ditch, watercourse or other natural or artificial facilities, or any combination of such facilities, if such water is produced from wells located or to be located within the District, and if all or part of such water is used or is intended for use outside of the boundaries of the District. However, the requirement for a permit hereunder shall not apply to any well currently in operation located within the District prior to the effective date of this Rule provided that amount of water transported from such well annually shall not exceed the greatest amount of water transported in any one of the previous three (3) calendar years.

(a) The permit provided for herein must be applied for and filed with the District in

the form or forms promulgated by the District hereunder and such permit must be obtained from the District prior to the proposed transporting of water, all in accordance with the provisions of this rule.

(b) An application for the transportation of water for which a permit is required under this Rule must:

- (1) be in writing and sworn to;
- (2) contain the name, post office address and place of residence or principal office of the applicant;
- (3) identify the location of the well from which the water to be transported is produced or to be produced;
- (4) describe specifically the proposed transportation facilities;
- (5) state the nature and purposes of the proposed use and the amount of water to be used for each purpose;
- (6) state the time within which the proposed construction or alteration is to begin;
- (7) state the length of time required for the proposed use of the water;
- (8) provide information showing the effect of the proposed transportation on the quantity and quality of water available within the District;
- (9) identify any other possible sources which could be used for the stated purposes, including quality and quantity of such alternate sources;
- (10) identify any other liquids that could be substituted for the fresh ground water and possible sources of such liquid including quantity and quality.

(c) The application must be accompanied by a map or plat drawn on a scale not less than one inch equals 4,000 feet, showing substantially:

- (1) the location of the existing or proposed well; and
- (2) the location of the existing or proposed water transporting facilities; and
- (3) the location of the proposed or increased use or uses.

(d) The application must be accompanied by an application fee in the amount of \$50.00.

(e) The District shall determine whether the application, maps, and other materials comply with the requirements of this Act. The District may require amendment of the application, maps, or other materials to achieve necessary compliance.

(f) The District shall conduct a hearing on each application within ninety (90) days of the filing of the complete application.

(g) The District shall give notice of the hearing on the application as prescribed by this Rule, stating:

- (1) the name and address of the applicant;
- (2) the date the application was filed;
- (3) the location and purpose of the well from which the water to be transported is produced or to be produced;

- (4) the time and place of the hearing; and
- (5) any additional information the District considers necessary.

(h) At the time and place stated in the notice, the District shall hold a hearing on the application. The hearing may be held in conjunction with any regular or special meeting of the District, or a special meeting may be called for the purpose of holding a hearing. Any person may appear at the hearing, in person or by attorney, or may enter his appearance in writing. Any person who appears may present evidence, orally or by affidavit, in support or in opposition to the issuance of the permit, and it may hear arguments.

(i) After the hearing, the District shall make a written decision granting or denying the application. The application may be granted in whole or in part. Any decision to grant a permit, in whole or in part, shall require a majority vote of Directors present.

(j) Such application shall not be approved unless the Board of Directors finds and determines that the transporting of water for use outside the District applied for will not substantially affect the quantity or quality of water available to any person or property within the District; that all other feasible sources of water available to the person requesting a permit have been developed and used to the fullest; that no other liquid could be feasibly substituted for the fresh ground water; and that the proposed use, of any part of the proposed use, will not constitute waste as defined under the laws of the State of Texas. In evaluating the application, the District shall consider the quantity of water proposed to be transported; the term for which the transporting is requested; the safety of the proposed transportation facilities with respect to the contamination of the aquifer; the nature of the proposed use; the effect of the proposed use of the water to be transported on District residents taking into account all beneficial use of District residents, including municipal, agricultural, industrial, recreational and other categories; and such other factors as are consistent with the purposes of the District.

(k) On approval of an application, the District shall issue a permit to the applicant. The applicant's right to transport shall be limited to the extent and purposes stated in the permit. A permit shall not be transferable except as provided in Paragraph (O).

(l) The permit shall be in writing and attested by the seal of the District and it shall contain substantially the following information:

- (1) the name of the person to whom the permit is issued;
- (2) the date the permit is issued;
- (3) the term for which the permit is issued;
- (4) the date the original application was filed;
- (5) the destination and use or purpose for which the water is to be transported;
- (6) the maximum quantity of water to be transported annually;
- (7) the time within which construction or work on the well

transportation facilities must begin and the time within which it must be completed; and

(m) The permittee shall file with the District quarterly reports describing the amount of water transported and used for the permitted purpose. Such report shall be filed on the appropriate form or forms provided by the District within ten (10) days of March 31, June 30, September 30, and December 31 following the commencement of transporting of water, and within ten (10) days of each such quarterly date thereafter.

(n) All transporting facilities for wells subject to the requirements of this subsection shall be equipped with flow monitoring devices approved by the District and be available for District inspection at any time.

(o) A permittee may apply for an extension of any permit granted under this subsection or for transfer of a permit to another person. The District shall consider and grant or deny such application for extension or transfer of a permit in the same manner as is provided herein for the application for a permit.

(p) Any permit granted under this subsection shall be subject to revocation for nonuse or waste by the permittee, or for substantial deviation from the purposes or other terms stated in the permit. Revocation of a permit for nonuse shall require that no water is transported under the permit for a period of five (5) years.

II. Any person transporting water produced from wells located within the District for use outside of the District, regardless of the amount of water so transported, must register such transporting with the District. Such registration shall be made within one hundred eighty (180) days after the effective date of this Rule.

(a) Any person subject to the requirements of the Subsection (II) shall file with the District quarterly reports describing the amount of water transported, the destination and use of such water. Such report shall be filed on the appropriate form or forms provided by the District within ten (10) days of March 31, June 30, September 30, and December 31 following the commencement of transporting of water and within ten (10) days of each such quarterly date thereafter.

(b) All transporting facilities for wells subject to the requirements of this Subsection shall be equipped with flow monitoring devices approved by the District and available for District inspection at any time.

RULE 23 - WELL DRILLING, COMPLETION, CAPPING AND PLUGGING

(a) Responsibility:

All well drillers and persons having a well drilled, deepened, or otherwise altered shall adhere to the provisions of this Rule prescribing the location of wells and proper drilling, completion, capping, and plugging of wells.

(b) Location of Domestic, Industrial, Injection, and Irrigation Wells

(1) Except as noted in paragraph (c)(1) of this Rule (relating to Standards of Completion for Domestic, Industrial, Injection, and Irrigation Wells), a well shall be located a minimum horizontal distance of 50 feet from any water-tight sewage and

liquid-waste collection facility.

(2) Except as noted in paragraph (c)(1) of this Rule (relating to Standards of Completion for Domestic, Industrial, Injection, and Irrigation Wells), a well shall be located a minimum horizontal distance of 150 feet from any concentrated sources of contamination, such as existing or proposed livestock or poultry yards, privies, and septic system absorption fields.

(3) A well shall be located at a site not generally subject to flooding; provided, however, that if a well must be placed in a flood prone area, it shall be completed with a watertight sanitary well seal and steel casing extending a minimum of 24 inches above the known flood level.

(c) Standards of Completion for Domestic, Industrial, Injection, and Irrigation Wells. Domestic, industrial, injection, and irrigation wells shall be completed in accordance with the following specifications and in compliance with local county and/or incorporated city ordinances:

(1) The annular space between the borehole and the casing shall be filled from the ground level to a depth of not less than 10 feet below the land surface or well head with cement slurry. The distances given in Paragraph (b)(1) and (2) of this Paragraph (relating to Location of Domestic, Industrial, Injection, and Irrigation Wells) may be decreased provided the total depth of cement slurry is increased by twice the horizontal reduction. In areas of shallow, unconfined groundwater aquifers, the cement need not be placed below the static water level. In areas of shallow, confined groundwater aquifers having artesian head, the cement need not be placed below the top of the water-bearing strata.

(2) In all wells where plastic casing is used, a concrete slab or sealing block shall be placed above the cement slurry around the well at the ground surface.

(i) The slab or block shall extend at least two (2) feet from the well in all directions and have a minimum thickness of four inches and shall be separated from the well casing by a plastic or mastic coating or sleeve to prevent bonding of the slab to the casing.

(ii) The surface of the slab shall be sloped to drain away from the well.

(iii) The top of the casing shall extend a minimum of one foot above the top of the slab.

(3) In all wells where steel casing is used:

(i) The casing shall extend a minimum of one foot above the original ground surface; and

(ii) A slab or block as described in Paragraph (2)(i) is required above the cement slurry except when a pitless adapter is used. Pitless adapters may be used in such wells provided that:

(a) the adapter is welded to the casing or fitted with another suitably effective seal; and

(b) the annular space between the borehole and the casing is filled with cement to a depth not less than 15 feet below the adapter connection.

(4) All wells, especially those that are gravel packed, shall be completed so that aquifers or zones containing waters that are known to differ significantly in chemical quality are not allowed to commingle through the borehole-casing annulus or the gravel pack and cause quality degradation of any aquifer or zone.

(5) The well casing shall be capped or completed in a manner that will prevent pollutants from entering the well.

(d) Standards for completion for Wells Encountering Undesirable Water.

(1) If a well encounters undesirable water and the well is not plugged, the licensed well driller or owner shall see that the well drilled, deepened or otherwise altered is forthwith completed in accordance with the following:

(i) When undesirable water is encountered in a well, the undesirable water shall be sealed off and confined to the zone(s) of origin.

(ii) When undesirable water is encountered in a zone overlaying fresh water, the well shall be cased from the top of the fresh water zone to the land surface.

(iii) The annular space between the casing and the wall of the borehole shall be cemented to the land surface.

(iv) When undesirable water is encountered in a zone underlying a fresh water zone, the part of the well bore opposite the undesirable water zone shall be filled with cement to a height that will prevent the entrance of the undesirable water into the pumping well.

(2) The person who performs the well completion on a well containing undesirable water shall, within 30 days after completing the well, submit a well completion report to the District Manager, on forms supplied by the District.

(e) Standards for Wells Producing Undesirable Water.

(1) Wells completed to produce undesirable water shall be cased from the top of the undesirable water zone or 50 feet below the lowermost fresh water zone to the land surface.

(2) The annular space between the casing and the wall of the borehole shall be cemented to the land surface, or as a minimum, to a height greater than the hydrostatic head of the undesirable water aquifer plus the uppermost 10 feet of casing.

(3) If the undesirable water does not enter the cased part of the well, the lowermost and uppermost 10 feet (minimum) of the casing shall be cemented in order to seal off all other water-bearing or other permeable sections from the well.

(f) Recompletions.

(1) The landowner shall have the continuing responsibility of insuring that a well does not allow the commingling of undesirable water and fresh water or the unwanted loss of water through the wellbore to other porous strata.

(2) If a well is allowing the commingling of undesirable water and fresh water or the unwanted loss of water, and the casing in the well cannot be removed and the well recompleted with the applicable rules, the casing in the well shall be perforated and squeeze cemented in a manner that will prevent the commingling or loss of water.

If such a well has no casing, then the well shall be cased and cemented, or plugged in a manner that will prevent such commingling or loss of water.

(3) The District Manager may direct the landowner to take proper steps to prevent the commingling of undesirable water and fresh water, or the unwanted loss of water.

(g) Well Plugging and Capping:

(1) It is the responsibility of the landowner or person having the well drilled, deepened, or otherwise altered, to plug or have plugged a well which is abandoned.

(2) It is the responsibility of the landowner or person having the well drilled, deepened, or otherwise altered, to see that any well which encounters undesirable water is plugged under the standards set forth in this Rule (relating to Well Drilling, Completion, Capping, and Plugging).

(3) The person that plugs such a well shall, within 30 days after completion of plugging is complete, submit a well completion and plugging report to the District Manager, on forms supplied by the District Manager.

(h) Standards for Plugging Wells.

(1) If the use of a well that does not contain any undesirable water zones is permanently discontinued, all removable casing shall be removed from the well and the entire well filled with cement to the land surface.

(2) In lieu of the procedure in subsection (1) of this paragraph, the well may be filled with heavy mud followed by a cement plug extending from the land surface to a depth of not less than 10 feet.

(i) Standards for Plugging Wells That Penetrate Undesirable Water Zones.

(1) If the use of a well that penetrates undesirable water is to be permanently discontinued, all removable casing shall be removed from the well and the entire well filled with cement to the land surface.

(2) In lieu of the procedure in subsection (1) of this paragraph, either the zone(s) contributing undesirable water, or the fresh water zone(s), shall be isolated with cement plugs and the remainder of the wellbore filled with heavy mud to form a base for a cement plug extending from the land surface to a depth of not less than 10 feet. If a well is plugged under this subsection, prior approval of the plugging procedure must be obtained from the District.

RULE 24 - REPORTING UNDESIRABLE WATER

(a) Each licensed well driller shall immediately inform the landowner or person having a well drilled, deepened, or otherwise altered when undesirable water has been encountered.

(b) The well driller shall submit to the District Manager and the landowner or person having the well drilled, deepened, or otherwise altered, on forms supplied by the District Manager, a statement signed by the well driller indicating that the landowner or person having the well drilled, deepened, or otherwise altered, has been informed that undesirable water has been encountered and shall note on all logs filed that such water was found.

(c) The statement indicated in subsection (b) of this Rule must be submitted within 10 days after encountering undesirable water.

REPEAL OF PRIOR REGULATIONS

All of the previous rules and regulations of the District have been revised and amended; and except as they are herein republished, they are repealed. Any previous rule or regulation which conflicts with or is contrary to these rules is hereby repealed.

SAVINGS CLAUSE

If any section, sentence, paragraph, clause, or part of these rules and regulations should be held or declared invalid for any reason by a final judgment of the courts of this state or of the United States, such decision or holding shall not affect the validity of the remaining portions of these rules; and the Board does hereby declare that it would have adopted and promulgated such remaining portions of such rules irrespective of the fact that any other sentence, section, paragraph, clause or part thereof may be declared invalid.

**PLATEAU UNDERGROUND WATER
CONSERVATION & SUPPLY DISTRICT
P.O. Box 324
Eldorado, Texas 76936**

August 26, 1998

Mr. Craig Pedersen
Executive Administrator
Texas Water Development Board
1700 N. Congress
Austin, Texas 78711-3231

Dear Mr. Pedersen,

Attached is a copy of the adopted Management Plan of the Plateau Underground Water Conservation & Supply District as required by §36.1072 (a) of the Texas Water Code. The Plateau UWCSD Management plan was developed during open meetings of the Board as required by the Open Meetings Act. Documentation that notice and hearing requirements were followed is also presented. The Management Plan was adopted on August 18, 1998 by the Board of Directors.

The following cross-references are provided as a means of documenting the completeness of the Management Plan as applicable to the statutory requirements of Chapter 36 of the Texas Water Code. 12

§36.1071(a) since there are no surface water entities located within the District, no surface water entities were notified.

§36.1071(a)(1) is addressed in the Section titled Goals, Goal 1.0, page 12.

§36.1071(a)(2) is addressed in the Section titled Goals, Goal 2.0, page 14.

§36.1071(a)(3) is addressed in the Section titled Goals, Goal 3.0, page 14.

§36.1071(a)(4) is addressed in the Section titled Goals, Goal 4.0, page 15.

§36.1071(a)(5) is addressed in the Section titled Goals, Goal 5.0, page 15.

§36.1071(b) is not applicable since no Regional Water Plan has been adopted.

§36.1071(e)(1) is addressed in the Section titled Goals, page 12.

§36.1071(e)(2) is addressed in Section titled Actions, Procedures, Performance and Avoidance for Plan Implementation, page 10.

§36.1071(e)(3)(A) is addressed in Section titled Useable Amount of Groundwater, page 5.

§36.1071(e)(3)(B) is addressed in Section titled Amount of Groundwater Used Annually, page 6.

§36.1071(e)(3)(C) is addressed in Section titled Annual Effective Recharge & Recoverable Storage and Additional Recharge, page 7.

§36.1071(e)(3)(D) is addressed in Section titled Projected Water Supply and Section titled Projected Water Demand, pages 5 & 10.

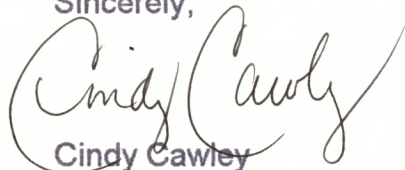
§36.1071(e)(4) is determined not applicable since there is not an approved Regional Water Plan at present.

§36.1071(f) is addressed in Section titled Management of Groundwater Supplies and Section titled Actions, Procedures, Performance and Avoidance for Plan Implementation.

§36.1071 (g) is determined not applicable at this time.

I respectfully submit this Management Plan for your review and certification.

Sincerely,

A handwritten signature in black ink that reads "Cindy Cawley". The signature is written in a cursive style with a large, looping initial "C".

Cindy Cawley
Manager