JEFF DAVIS COUNTY UNDERGROUND WATER CONSERVATION DISTRICT

MANAGEMENT PLAN

DISTRICT MISSION

The Jeff Davis County Underground Water Conservation District will strive to develop, promote, and implement water conservation and management strategies to protect water resources for the benefit of the citizens, economy, and environment of the District.

TIME PERIOD FOR THIS PLAN

This plan becomes effective upon adoption by the District Board of Directors and remains effect until a revised plan is adopted or September 1, 2008, which ever is earlier.

STATEMENT OF GUIDING PRINCIPLES

The District recognizes that the groundwater resources of the county are of vital importance. The preservation of this most valuable resource can be managed in a prudent and cost effective manner through education, regulations, and permitting. The greatest threat to prevent the District from achieving the stated mission is inappropriate management, based in part on the lack of understanding of local conditions. A basic understanding of the aquifers and their hydrogeologic properties, as well as a quantification of resources if the foundation from which to build prudent planning measures. This management plan is intended as a tool to focus the thoughts and actions of those given the responsibility for the execution of the District activities.

General Description

The District was created by the citizens of Jeff Davis County through an election, November 2, 1993. The current Board of Directors are Albert Miller - Chairman, W. W. McElroy Jr. - Vice-Chairman, Lynn Crittendon - Secretary, Delton Daugherty, and Johnny A. Wofford. The District Manager is Janet Adams. Jeff Davis County underground Water Conservation District (JDCUWCD) has the same areal extent as that of Jeff Davis County, Texas. The county's economy is dominated by the agricultural community. The agricultural income is derived mainly from cattle. Tourism and hunting also contribute to the income of the county.

Location and Extent

Jeff Davis County, having areal extent of 2258 square miles , is located in west Texas. The county is bounded on the east by Pecos County, on the north by Reeves County, on the west by Culberson County, and on the south by Brewster and Presidio Counties. Fort Davis, which is located on the east side of the county, is the county seat. Valentine, is the only other town in the county, is located in the west portion of the county.

Topography

Jeff Davis County is located in the mountains of West Texas. The county has the highest average elevation in the state of Texas with one mile or higher altitudes. The county consists of peaks, canyons, and plateaus.

Groundwater Resources of Jeff Davis County

In the Jeff Davis County Underground Water Conservation District, the Texas Water Development Board lists several aquifers which account for the known groundwater resources of the District. These include the Edwards-Trinity (Plateau), the West Texas Bolsons, of which there are several divisions, and the Igneous areas of the District. Due to the lack of scientific study, the aquifers are not well defined geographically. Probably the greatest water resources are located in the Ryan Flat area of the western portion of the District near Valentine. This area may well have water-bearing units both in the alluvium deposits as well as the underlying Tertiary Volcanics. The TWDB also lists a small portion of the Cenozoic Pecos Alluvium Aquifer along the northeaster boundary of the District.

The TWDB is currently conducting a groundwater hydrology study in the Fort Davis area. This study should assist the district in its effort to better understand the water resources of that part of the District. Geographically, the boundaries of the Jeff Davis County Underground Water Conservation District and the County of Jeff Davis are the same. The TWDB has provided the District with county-wide date to assist the District in determining the groundwater resources, usage and recharge characteristics of the aquifers in Jeff Davis County. This information will assist the District in Planning for future estimates of available groundwater and its conservation and protection.

Currently the District is using the TWDB's Groundwater Availabilities Estimation Process, which uses available datasets to generate descriptions of the aquifers as well as estimates of recharge and availability rates. When combined with recharge and production values, these estimates can be used by the District to come up with future estimates of available groundwater and necessary production limits. It is estimated that the annual effective recharge to the JDCUWCD is 8794 acre-feet per year. At the current time the projected average annual groundwater availability is 37308 acre-feet. This data was obtained from "Water For Texas", TWDB 1997.

Additional Amount Of Natural/Artificial Recharge That Would Feasible Be Achieved

The additional amount of natural or artificial recharge that would be realized from implementation of feasible weather modification would be a 8% increase in rainfall. This would result in a 703.5 acre feet increase in recharge. This data was obtained from the direct gathering of evidence of the High Plains Water District of their weather modification program.

Groundwater use in Jeff Davis County

In the past, annual groundwater usage in the District has varied from a high of 3452 acre-feet to a low of 1054 acre-feet. Annual usage for 1991 through 1995 is as follows:

1995	1054 acre-feet per year
1994	1093 acre-feet per year
1993	1062 acre-feet per year
1992	3452 acre-feet per year
1991	3364 acre-feet per year

This data was obtained from " Water For Texas", TWDB 1997. The District also received pumpage data from all water utilities and major users in the District, resulting from a user poll.

Projected Demands for Water in Jeff Davis County

This management plan is based upon the estimates received from "Water For Texas", TWDB 1997. The TWDB has projected that the total water demands for Jeff Davis County will be 3836 acre-feet per year by 2050. This estimate is based on projections of the following breakdown and population statistic. Fort Davis will have a demand of 225 acre-feet per year by the year 2050. The projected population of Fort Davis in 2050 is 1279. The projected demand and population for the rest of Jeff Davis County is 189 acre-feet per year with a population of 1210 for 2050. Projected irrigation demands from the West Texas Bolsons is estimated to be 2875 acre-feet per year. Projected livestock demands are 311 acre-feet per year from West Texas Bolsons and 236 From Edwards-Trinity (Plateau). Total Projected demands in 2050 will be 3836 acre-feet per year.

Projected Water Supply and Demand

Based on the supply and demand calculations and projections Jeff Davis County Underground Water Conservation District will not have a shortage of water. The demands will be less than the supplies. The supply and demand totals for 2050 are as follows

West Texas Bolsons	3895
Edwards-Trinity (Plateau)	5202
Igneous	300
Total Projected Supply	9397
Total Projected Demand	3836
Balance (Overage)	5561

This data was obtained from "Water For Texas", TWDB 1997. Even though the projected supply and demand show there will not be a shortage of groundwater, the Jeff Davis Underground Water Conservation District will continue to encourage conservation and management practices that will protect the water resources of the District.

Management of Groundwater Supplies

The District will manage the supply of groundwater within the District in order to conserve the resource while seeking to maintain the economic viability of all the 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 if implemented would result a reduction of groundwater use. An observation network shall be established and maintained in order to monitor changing storage conditions of groundwater supplies within the District. The District will make regular assessments of water supply and groundwater storage conditions and will report those conditions to the Board and to the public. The district will undertake, as necessary and co-operate with investigations of the groundwater resources within the District and will make the results of investigations available to the public upon adoption of the Board.

The District has rules to regulate groundwater withdrawals by means of 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 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 will include:
1) The purpose of the rules of the District
2) The equitable distribution of the resources
3) The economic hardship resulting from grant or denial of a permit or the terms prescribed by the permit

In pursuit of the Districts mission of protecting the resource, the District may require reduction of groundwater withdrawals to amounts, which will not cause harm to the aquifer. To achieve this purpose, the District may, at the Boards discretion amend or revoke any permit after notice and hearing. The determination to seek the amendment or revocation of a permit by the District will be based on aquifer conditions observed by the District. The District will enforce the terms and conditions of permits and the rules of the District by enjoining the permit holder in a court of competent jurisdiction as provide for in TWC 36.102.

Actions, Procedures, Performance and Avoidance for Plan Implementation

The District will implement the provisions of this plan and will utilize the provision 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 and any additional planning efforts in which the District may participate will be consistent with the provision of this plan.

The District will adopt rules relating to the permitting of wells and the production of groundwater. The rules adopted by the District shall be pursuant to TWC 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 with equality. Citizens may apply to the District for discretion in enforcement of the rules on grounds of adverse economic effects or unique local conditions. In granting of discretion to any rule, the Board shall consider the potential for adverse effects 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 the plan and management of groundwater supplies within the District. All activities of the District will be undertaken in co-operation and coordinated with the appropriate state, regional, or local water management entity.

The methodology that the District will use to trace its progress on an annual basis in achieving all of its 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 December 31, 2000). The report will include the number of instances each activity was engaged in during the year, referenced to the expenditure of staff time and budget so that the effectiveness and efficiency of each activity may be evaluated.

The annual report will be maintained on file at the District office.

GOALS, MANAGEMENT OBJECTIVES and PERFORMANCE STANDARDS

Goal

1.0 Implement a system to improve the basic understanding of groundwater conditions in the district.

Management Objective

1.1 Annually, obtain all the new information Water Resource Agencies have on Jeff Davis County wells.

Performance Standard

1.1a - Annually, report to the Board of Directors on the number of request made for information and the information received.

Management Objective

1.2 Strive to obtain five additional observation wells yearly.

Performance Standard

1.2a - Report to the Board of Directors annually on all new observation wells by aquifer.

Management Objective

1.3 Establish a procedure to determine location of newly permitted wells by the year 2002.

Performance Standard

1.3a - Report to the Board of Directors on methodology for location of wells by the year 2002..

1.3b - Report annually to the Board of Directors on all wells drilled.

Management Objective

1.4 Establish a database consisting of at least 50% of wells in Jeff Davis County.

Performance Standard

1.4a - Annually, provide a list of all new wells added to the database to the Board of Directors annually.

Goal

2.0 Implement management strategies that will provide for the most efficient use of ground water.

Management Objective

2.1 Disperse educational information yearly regarding the current conservation practices for efficient use of water resources.

Performance Standard

2.1a - Each year, report to the Board of Directors the number of articles in local newspaper pertaining to the economic benefits of implementing efficient water use practices.

2.1b - Each year, report to the Board of Directors the number of water conservation literature packets handed out.

Management Objective

2.2 Each year, enforce rule 5.1, all new wells must be registered by the well owner, well operator, or water well driller prior to being drilled.

Performance Standard

2.2a - Report to the Board of Directors monthly on the number of wells registered to be drilled in the county.

Management Objective

2.3 Each year, require all well owner, well operator, or any other person acting on behalf of the well owner, except as provided in Rule 5.1, to obtain the appropriate permit before a well may be drilled or operated.

Performance Standard

2.3a - Report to the Board of Directors monthly on the number of permits issued.

Management Objective

2.4 Each year, the District may require a well to be sealed, capped, or plugged that is prohibited from withdrawing groundwater within the District by the District Act, District Rules or Board orders, or when the General Manager determines that sealing, capping or plugging a well is reasonably necessary to ensure that the well is not operated in violation of the District Act, District Rules, or Board orders.

Performance Standard

2.4a - Each year, report to the Board of Directors the number of wells reported in violation.

2.4b - Easy year, provide a report to the Board of Directors indicating the number of wells properly closed

Management Objective

2.5 Each year, require all drillers to submit a drilling log or acceptable alternative for each new well drilled within the District.

Performance Standard

2.5a - Monthly, report to the Board of Directors on the number of driller's records and reports received each month.

Management Objective

2.6 Each month, require well service personnel to provide updated static levels to the District on all wells serviced in Jeff Davis County, by the year 2002.

Performance Standard

2.6a - Each year, provide a report to the Board of Directors indicating the number of letters sent to well service businesses by the year 2002.

Performance Standard

2.6b - Each year, provide a report to the Board of Directors indicating the number of new static levels received in the District Office by the year 2002.

Goal

3.0 Implement management strategies that will protect and enhance the quantity of useable quality water by controlling and preventing waste.

Management Objective

3.1 Conduct a survey of existing water practices by the year 2003.

Performance Standards

3.1a - Complete the water use survey by the year 2003.

Management Objective

3.2 Each year, investigate all reports of wasteful practices within the District.

Performance Standards

3.2a - Each year, locate all complaint sites on a District map.

3.2b - Each year, provide a report to the Board of Directors indicating the number of complaint sites.

Management Objective

3.3 All current existing rules and regulations will be reviewed and revised to address the needs of the District every three years.

Performance Standard

3.3a - Each year, report to the Board of Directors the number of changes required to keep District rules updated to District needs.

Management Objective

3.4 Each year, all persons generating, transporting, disposing, applying or otherwise managing any substances defined under state or federal law as solid, hazardous, or radioactive waste, or as sludge, must follow any and all applicable federal, state, and local environmental status, requirements and regulations.

Performance Standard

3.4a - Each year, provide a report to the Board of Directors indicating the number permits and applications requested.

Management Objective

3.5 Each year, require meters to be installed on all wells with five inches or more inside casing diameter and with an estimated pumpage of more than five-million gallons per year.

Performance Standard

3.5a - Each year, provide a report to the Board of Directors indicating the number of meters installed on new wells in the District and the location and ownership.

Management Objective

3.6 Each year, enforce rule 5.1, all new wells must be registered by the well owner, well operator, or water well driller prior to being drilled.

Performance Standard

3.6a - Monthly, provide a report to the Board of Directors on the number of wells registered to be drilled in the District.

Management Objective

3.7 Develop regulations on spacing of water sources to include private and public wells, supply lines, and underground cisterns with on-site sewerage units by the year 2001.

Performance Standard

3.7a - Regulations on spacing of water sources to include private and public wells, supply lines and underground cisterns with on-site sewage systems will be adopted by the Board of Directors by the year 2001.

Goal

4.0 Addressing conjunctive surface water management issues.

Management Objective

4.1 Develop a definition of surface water, by the year 2002.

Performance Standards

4.1a - The Board of Directors will adopt a definition of surface water, by the year 2002.

Management Objective

4.2 Determine if surface water exists in the District, by the year 2003.

Performance Standards

4.2a - Report to the Board of Directors if any surface water exists in the District, by the year 2003.

Goal

5.0 Implement and enforce a system of rules to meet the goals of regulating the production of groundwater within the District to insure that the citizens of the District will have adequate water for the future.

Management Objective

5.1 Adopt a permitting system that requires water well permit renewals, adopted by January 1, 2001.

Performance Standard

5.1a - Each year, provide a report to the Board of Directors the number of well permits renewed annually, beginning January 1, 2002

Management Objective

5.2 Develop a procedure to have non-exempt wells operating under production permits by January 1, 2002

Performance Standards

5.2a - Adopt a procedure to have non-exempt wells in District operating under production permits by January 1, 2002.

SB - 1 MANAGEMENT GOALS DETERMINED NOT-APPLICABLE

Goal

1.0 Control and prevention of subsidence.

The rigid geologic framework of the region precludes significant subsidence from occurring.

Goal

2.0 Addressing natural resource issues that impact the use and availability of groundwater or that are impacted by the use of groundwater

The District has no documented occurrences of endangered or threatened species dependent upon groundwater resources.

SUMMARY DEFINITIONS

"Board" - the Board of Directors of the Jeff Davis County Underground Water Conservation District.

"District" - the Jeff Davis County Underground Water Conservation District.

"TNRCC" - Texas Natural Resource Conservation Commission.

"TWDB" - Texas Water Development Board.

"Waste" - as defined by Chapter 36 of the Texas Water Code means any one or more of the following:

1. Withdrawal of groundwater from a groundwater reservoir at a rate and in a 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 used for a 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 salt water 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 a 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 commission under Chapter 26 of the Texas Water Code;

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.

7. For water produced from an artesian well "waste" has the meaning assigned by Section 11.205 of the Texas Water Code.

RESOLUTION ADOPTING MANAGEMENT PLAN OF THE JEFF DAVIS COUNTY UNDERGROUND WATER CONSERVATION DISTRICT

WHEREAS, The Management Plan of the Jeff Davis County Underground Water Conservation District, has been developed for the purpose of conserving, preserving, protecting, and recharging the underground water in the District.

WHEREAS, Under no circumstances, and in no particular case will this Plan, or any part of it, be construed as a limitation or restriction upon the exercise of any discretion, where such exist; nor may it in any way event be construed to deprive the Board of an exercise of power, duties and jurisdiction conferred by law, nor to limit or restrict the amount and character of data or information which may be required for the proper administration of the law.

THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE JEFF DAVIS COUNTY UNDERGROUND WATER CONSERVATION DISTRICT THAT:

The Management Plan of the Jeff Davis County Underground Water Conservation District are hereby adopted.

Adopted on this the 8th day of June 1998.

L. H. Crittendon

Secretary, Jeff Davis County Underground Water Conservation District

L. H. Crittendon

Posted 6-3-98
Sue Blackley
1:10 pm

NOTICE OF MEETING OF BOARD OF DIRECTORS
JEFF DAVIS COUNTY UNDERGROUND WATER CONSERVATION DISTRICT

Notice is hereby given that the Board of Directors of the Jeff Davis County Underground Water Conservation District will meet at the Fort Davis Water Supply Corporation Building, located on Highway 17, Fort Davis, Texas at 2:30 PM on Monday, June 8, 1998. This meeting is open to members of the public.

AGENDA

1. Call to order and establish a quorum.
2. Certify posting of notice of the meeting.
3. Read and approve minutes.
4. Consideration / approval of monthly bills.
5. Comments from the public.
6. Well permit applications for board to consider.
7. Discussion and action regarding budget.
8. Discussion and action regarding District Managers authority.
9. Discussion and action regarding clipping service and/or paper.
10. Discussion and adopt management plan.
11. Items for the next meeting
12. Adjourn

Janet Adams
District Manager

Jeff Davis County Underground Water Conservation District

June 04, 1998

There are no surface water management entities in Jeff Davis County Underground Water Conservation District.

Janet Adams
District Manager

STATE OF TEXAS

COUNTY OF JEFF DAVIS

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 9, 1998 BY JANET ADAMS.

NOTARY PUBLIC

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