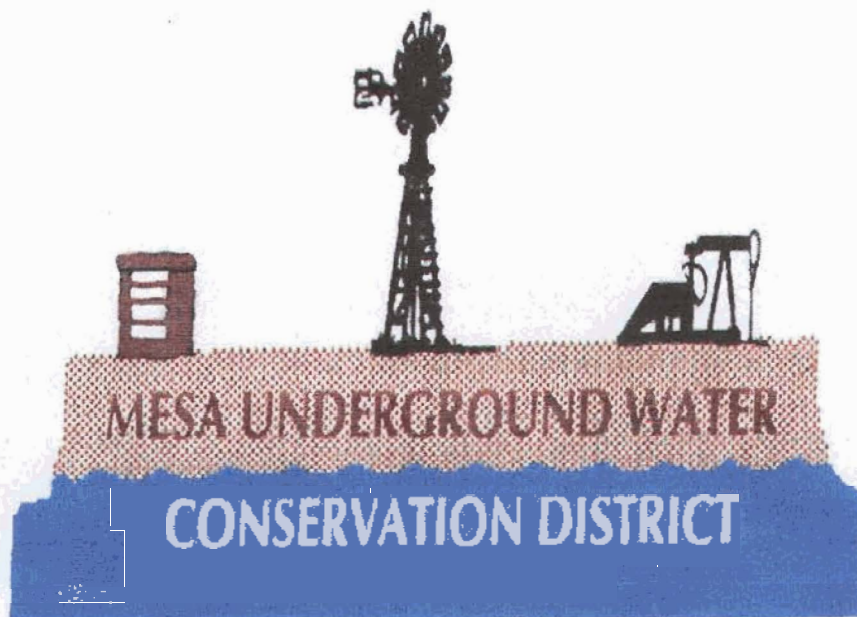


# Management Plan

August 31, 1998  
thru  
September 1, 2008



## District Mission

Mesa Underground Water Conservation District (Mesa UWCD) will strive for the conservation, preservation, protection, and prevention of the waste of groundwater from the Ogallala Aquifer, the groundwater reservoir over which the District has jurisdiction. The District will implement water conservation and management strategies to prevent the extreme decline of water levels for the benefit of all water right owners, the economy, our citizens, and the environment of the territory inside the District.

## Time Period for this Plan

This District management plan becomes effective August 31, 1998 following adoption by the local Board of Directors and certification by the Texas Water Development Board (TWDB) affirming the plan is administratively complete. This District management plan will remain in effect for a period of 10 years (minimum planning period), or until a revised or amended plan may be certified or September 1, 2008, whichever comes first.

## Statement of Guiding Principles

The guiding principles in developing this management plan are to better understand groundwater conditions, to encourage the most efficient use of groundwater, to preserve and improve groundwater quality, to increase public awareness and education, and to monitor legislative activities along with rules and orders of state agencies which may affect the private ownership of groundwater including the authority to manage at the local level.

The District acknowledges that groundwater resources of the region are of vital importance. The District recognizes the private ownership and rights of the land, as well as the private ownership and rights in the groundwater percolating below and emphasize that nothing in the Texas Water Code shall be construed as depriving or divesting the owners their ownership or rights, subject to the implementation of this management plan and rules promulgated by Mesa UWCD.

The District seeks to protect the private property rights of all water rights holders, whatever group of users they may represent. The District upholds the private property right of the owner to mine that part of the aquifer which the landowner obtained at the time of purchase of the land surface. The water use must be for a beneficial purpose and without waste. The aim of the District is to assure that all water rights owners are entitled to an equal opportunity to use the groundwater beneath their land. The District asserts that all water users shall be treated fairly and equally.

The District believes our most valuable natural resource **WATER** can be managed at the local level in a prudent and cost effective manner by regulating the spacing of the wells

and the production of water from the wells. The administrative law process of permitting and well registration are the tools necessary to facilitate the District authority and capability to manage the groundwater resource.

The District is continually searching for better methods to understanding the local conditions of the Ogallala Aquifer. An accurate understanding of the aquifer and its hydrogeologic properties, as well as a quantification of resources is the foundation from which to build sound planning measures. This management document is intended as a tool to focus on the thoughts and actions of those given the responsibility for the execution and performance of District functions and activities. This management plan is the exact guideline for the Board and District staff to follow in the operations of Mesa UWCD.

## **General Description**

The District was created by the citizens of Dawson County through a local election in January 1990. The District boundaries are the same as Dawson County. The District has five board members, one member representing the residents from each single precinct from the four total county precincts and one at large member elected by and representing all of the residents in the county. The Board of Directors serve four year terms with a 2 year stagger and grouped with precinct 1 and 3 together for their elections and precinct 2, precinct 4, and the at large member grouped together for their elections 2 years later. The Board employs a General Manager, Administrative Assistant, and a part time employee. The local economy is vibrantly substantiated by agriculture, ranching, and oil and gas production. The agricultural income is derived from cotton, peanuts, grain sorghums, alfalfa, and beef production. The recent increase in irrigated agriculture has greatly helped to stabilize the economy and expanded the cropping possibilities for agriculture in this semi arid community.

## **Location and Extent**

Dawson County and Mesa UWCD, a square 30 mile by 30 mile county totaling 900 square miles, is located in the southeast small portion of the enormous Ogallala Aquifer. The Caprock Escarpment squeezes off the Ogallala on, along or near the east boundary of the District. Borden County joins us on the east, Martin County on the south, Gaines County on the west, and Lynn County along with Terry County on the north. Lamesa, which is centrally located in the county, is the county seat and where our office is located at 212 North Avenue G. O'Donnell, located in the northeastern part of the county with the county line dividing the largest part into Lynn County, is the next largest town in the District. O'Donnell, much like Lamesa, receive their municipal water from the Canadian River Municipal Water Authority (CRMWA) via an inter basin transfer through a pipeline networking system beginning at Lake Meredith over 240 miles away. Ackerly is located in the southeastern part of the county and it too is divided by the county line with Martin County. Ackerly depends upon a well field with three water wells, located in the District,

to supply the community with groundwater for their use. Welch is located in the northwestern part of the county and they too depend on groundwater for their community water needs.

## **Topography and Drainage**

Lamesa has a Spanish name which means "the table top". This name is true because when you climb over 100 feet almost straight up the side of the Caprock Escarpment you reach the "Mesa". The flat land slopes from NW to SE with less than a 375 feet drop over the 45 miles diagonally across the District. The altitude is 3172 feet on the Gaines, Terry, and Dawson County lines intersection. The altitude is 2800 feet on the Borden, Martin, and Dawson County lines intersection. The rainfall, when showering gently, on Mesa UWCD basically remains where it drops. This is one of the major factors which enables the dryland agricultural community to survive and flourish in our semi arid climate.

Mesa UWCD lies within the drainage system of Colorado River Basin. Tobacco Creek, originating in Dawson County and dry almost all of the time, is the headwaters of the Colorado River which empties out into Matagorda Bay and the Gulf of Mexico. There are no other surface waters in the District.

## **Groundwater Resources for Mesa UWCD**

Historical data of water level monitor wells clearly show the water levels in Mesa UWCD were at a benchmark high in January 1993. Texas Water Development Board records were passed along to the District when TWDB staff trained our personnel to take over the monitoring program in 1991. Historical data on well # 28-09-901 dates back to 1938 and the record clearly reflect this well never had as much water in it as it recorded in 1993.

Because thorough understanding of the Ogallala aquifer is not necessary for all the water users, the following Two (2) paragraph discussion of geology and hydrology is rather general. (Bell, Ann, Morrison, Shelly, November 1978 ANALYTICAL STUDY OF THE OGALLALA AQUIFER IN DAWSON AND BORDEN COUNTIES, TEXAS, Texas Department of Water Resources, Rept 225, 3 p.)

Fresh groundwater in Mesa UWCD is obtained principally from the Ogallala Formation of Pliocene age. Water in the Ogallala Aquifer is unconfined and is contained in the pore spaces of unconsolidated or partly consolidated sediments.

The Ogallala Formation principally consists of interfingering bodies of fine to coarse sand, gravel, silt, and clay-material eroded from the Rocky Mountains which was carried southeastward and deposited by streams. The earliest sediments, mainly gravel and coarse sand, filled the valleys cut in the pre-Ogallala surface. Pebbles and cobbles of quartz, quartzite, and chert are typical of these early sediments. After filling the valleys, deposition continued until the entire area that is now the Texas High Plains was covered

by sediments from the shifting streams. The heavy clay material called the "red bed" serve as a nearly impermeable floor for the aquifer.

The Ogallala Formation is presumed to exist under all of the District surface except that area to the east, off and below the Caprock Escarpment. The Ogallala Aquifer is very different throughout the District because of the vast differences in the permeability of the interfingering bodies of water bearing sands and clay materials. Irrigation wells capable of producing large amounts of water may be found and only a short distance away the aquifer may provide hardly enough water for domestic needs. The water levels in the two wells may be the same and the well depths the same. Well yields are subject to deviations caused by localized geological conditions. The Ogallala is not a homogeneous formation: that is, the silt, clay, sand, and gravel which generally comprise the formation vary from place to place in the thickness of the layers, layering position, and grain -size sorting. The porosity of the formation also contributes to determining the well yield.

The water quality in the District is as different as the water quantities. The interfingering bodies contain many different minerals and in various amounts. Consequently, the water may be of highest quality in one well and very poor quality not so far away. All wells need to be tested to determine the quality of the water produced by that well. Most of the poor quality water problems appear to be from natural causes. However, there are isolated instances where groundwater contamination from past oil field practices have occurred. The high concentration of chlorides suggest the contamination was from oil field brines, disposed in unlined surface pits prior to the statewide "no pit" order, in 1964, by the Texas Railroad Commission. Additional brine contamination may be a result of abandoned oil, gas, injection wells, and wells with improperly cemented casings.

Currently the District is using the TWDB's Groundwater Availabilities Estimation Process, which uses available data-sets to generate digital descriptions of the aquifers as well as estimates of recharge and availability rates. The data-sets describe saturated thickness and yield, which the product describes as water in storage. When combined with recharge and production values, these estimates can be used by the District to derive goals for future estimates of available groundwater and necessary production limits.

## **Surface Water Resources of Mesa UWCD**

There is no surface water available for use in the District. As a result of large fast rains, run off water is collected in natural topographical depressions referred to as playa lakes. These natural lakes allow the rainwater to percolate downward to the aquifer and create natural recharge of the aquifer. This lake water does not last very long. It evaporates and drains away so fast there is little or no time for wildlife to establish habitat patterns.

Tobacco Creek, headwaters of the Colorado River, is not a source of surface water available for use in the District. The only surface water impounded, a very small number of dirt tanks, is used strictly for livestock drinking water. Consequently, the conjunctive surface water management issues within the District are not-applicable.

## **Inter-basin Transfer of Water into the District**

Inter-basin transfer of water is very important to the residents of Lamesa, Texas, the county seat of Dawson County and the largest town in Mesa UWCD territory. Water, upon which the city dwellers of Lamesa have been dependent upon for the past 30 years, comes from Lake Meredith located in the Canadian River Basin. Transported water crosses the Red River Basin, Brazos River Basin and into the Colorado River Basin. Inter-basin transfer is not new or unique to the residents of Dawson County.

The city of Lamesa was an original founding member of the Canadian River Municipal Water Authority. Over 90% of the municipal use for the city comes from Lake Meredith. Lake Meredith is located over 240 miles to the north. The water travels to Lamesa through an underground pipeline system connecting member cities such as Pampa, Borger, Amarillo, Plainview, Lubbock, Slaton, Levelland, Tahoka, Brownfield, O'Donnell, and Lamesa. Lamesa and O'Donnell both contract with the city of Lubbock to treat the raw water at their big efficient treatment plant. This makes the treated water less expensive for city residents. The water is then piped to Lamesa, at the end of the pipeline.

Mesa UWCD has no jurisdiction over surface water. Likewise, chapter 35.003 states "The laws and administrative rules relating to the use of surface water do not apply to groundwater". Consequently, the city of Lamesa must work out all necessary arrangements for the present and future use of surface water with CRMWA. City officials may contract for the amount CRMWA has available and is willing to sell. The city owns several hundred acres of water rights inside the District. The city water wells provide only a small part of the total annual demand for water. The city of Lamesa, like all other water users, must follow the rules of Mesa UWCD for their production and use of groundwater.

## **Transfer of Water Out of District**

The city of Gail, county seat of Borden County, receives their municipal water supply from water wells located in the territory of Mesa UWCD. This transfer arrangement dates back to 1978. The city of Gail relies on this water supply as their soul source of municipal water.

The contract calls for an annual maximum supply of 239 acre feet per year. The amount of actual demand is much less than the supply contract. The single most important factor affecting the annual amount of use is rainfall. The average usage is generally less than 25% of the contract amount. At the current usage rate the supply of groundwater should last the city of Gail much longer than this management plan is in effect. The District will coordinate this effort with Colorado River Municipal Water District and Region F.

The District is aware of the needs for municipal water use throughout Texas. Likewise, the District is mindful of the rights of groundwater owners to market their resource. As a

result, the Mesa UWCD will do everything possible to protect **all** water users under our permitting process with strict requirements which promote fair and equitable spacing and production limitations. The District supports the beneficial use of water inside or outside the District providing all conditions are consistent with the rules of Mesa UWCD.

## Projected Groundwater Supplies of Mesa UWCD

The true and accurate supply of groundwater available for use in the District may be very difficult to determine (additional dialogue page 7). The TWDB figure 4, page 10, Report 341 shows the water level changes in this District. The 20 feet, 40 feet, and 60 feet rises continued through the year 1993. The area where the 60 feet rise is drawn on the map continued to rise to a level of over 83 feet. The water levels in 100% of the Districts' measurement wells reached benchmark highs in January 1993. Historical data from one monitor well 28-09-901 dates back to 1938 and never before has the water level been as high as in January 1993.

The District will use these values for the *Estimated Volume of Water in Storage*, TWDB Report 341, page 13, September 1993. The report, in millions of acre feet, as follows:

County	Unused	1990	2000	2010	2020	2030	2040
Dawson	0.70	6.31	5.96	5.65	5.35	5.05	4.77

The District will attempt to develop a more comprehensive methodology to determine a more accurate water in storage estimate. The District has areas of high volume water wells and areas of low volume wells with saturated thickness which are very close.

## Groundwater Use in Mesa UWCD

During the past five years, annual groundwater usage in Dawson County has varied from a high of 67,117 acre-feet to a low of 39,678. Annual usage for the past five years is as follows:

1995	67,117 acre-feet per year
1994	51,227 acre-feet per year
1993	67,006 acre-feet per year
1992	39,678 acre-feet per year
1991	47,883 acre-feet per year

These data numbers were obtained from Texas Water Development Board's *Estimated*

*Groundwater Pumpage Summary by Major Aquifer.* These numbers for Dawson County (058) include municipal, manufacturing, power, mining(oil and gas recovery) irrigation and livestock. Data was verified by contacting city of Lamesa and city of O'Donnell water utilities. Files of the Texas Railroad Commission were searched to obtain historic information on freshwater used in the production of oil and gas. The data for fresh water used in water flood projects in 1994 is estimated to be around 711 acre feet or 2.4% of the total annual pumpage within the District. These values are quite close to the numbers used by TWDB in this report.

## **Projected Demands for Water in Mesa UWCD**

The TWDB published groundwater demand forecasts in their planning document "1996 *Consensus Texas Water Plan*". The management plan for Mesa UWCD is based upon this document and related files of the Texas Water Development Board and will be used until alternatives are generated. The TWDB has projected that the total water demands for Mesa UWCD will be 32,274 acre-feet per year by 2040. This estimate is based on projections of the following breakdown and population statistics. Lamesa will have a municipal demand of 2,294 acre-feet, O'Donnell, Ackerly, and Welch 386 Acre-feet. Manufacturing, Mining, and Livestock account for 311 acre-feet. Irrigation is projected to use 29,521 acre-feet.

One of the projects the District needs to pursue would be to develop a data base of current information reflecting the use and availability of groundwater in the District. Weather conditions have been so different in the past several years and this has caused data used in prior studies to be way out of kilter. Likewise the agriculture patterns have changed drastically in the past few years. There is no possible way projections made a few years ago could have predicted the enormous increase in irrigation acres in Dawson County. The data we are using in the development of this management plan is the best data available and we greatly appreciate the hard work TWDB has given over the many years to perform these studies and prepare projections and overviews. However, we believe it is imperative for the District to have better data in preparing the management plan for the year 2007. We trust the TWDB will be able to guide and assist our District toward developing accurate and precise overviews and projections as a result of the new conditions and the new data the District has able to assimilate during this period of time when changes have been running wild and rampant in the southern region of the Ogallala Aquifer. The District will request Region O water planning group to consider the southern region of the Ogallala Aquifer as an area where additional studies need to be performed.

## **Demand and Supply Issues and Resolutions**

Based on supply and demand calculations and projections based on estimates from available data it appears issues will arise as the management plan is implemented over the next 10 years. The District is using Texas Water Development Board's Report 341



*The High Plains Aquifer System of Texas, 1980 to 1990 Overview and Projections, September 1993.* This management plan will use the Table 3. Volume of Water in Storage for Future Periods, South Model, page 13. The estimated usable amount of groundwater available projected for the year 2040 is 4.77 million acre-feet less .7 million acre-feet shown to be unrecoverable, or a estimated net volume of 4,070,000 acre-feet. This management plan will use Table 5, page 19, reflecting USGS recharge rate of 3,921 acre feet per year for the South Model. TWDB report 288 uses 24,600 acre feet per year as the recharge rate. Estimates of annual recharge vary considerably. The District is in agreement with the authors of Report 341 which state *"The 1990 revision of the TWDB High Plains aquifer model resulted in an increased awareness that, especially in the southern region, recharge to the aquifer is more variable than previously envisioned. Further study is needed to improve simulation of the various recharge mechanisms that occur within the aquifer"*.

Recharge of the Ogallala Aquifer in Mesa UWCD is very difficult to understand. Studies have suggested recharge ranging from 0.01 (Stone, 1984) to 0.833 (Knowles, 1984) inches per year. However, after the record setting rainfall in Dawson County in the mid 1980's, evidence may be discovered in future studies to increase that amount greatly.

The District is well aware of a large number of cases where water availability changes in Dawson County have occurred. Areas which have historically been capable of only producing stock water now have the capabilities of producing irrigation water. Residents in these areas, as well as the District, are very concerned as to where this new found irrigation water has come from. There was a large earth quake at Frankel City, Texas in the early 1990's which is less than 50 miles away. Could this have caused geological shifts underground and opened up new passage ways for groundwater to enter the District? The District is very interested in promoting additional studies in an attempt to help answer these unusual phenomenons.

Artificial recharge in the District is not generally a planned operation. There are no recharge projects designed for the purpose of increasing natural or artificial recharge. However, farming practices have changed the topography of playa lakes over the years. The bottoms of these small lakes have filled with top soil washed in from nearby farms. Consequently, these lakes are more shallow and the total amount of run off accumulations from rainfall spreads over a much larger surface area. We call this the "do nut" effect.

The "do nut" effect is a result of evolving playa lakes. The small clay lined bottom of a playa lake which was designed to hold and prevent the impounded water from percolating downward has changed. The lake is now much larger and there is no clay bottom under the largest portion of the run off collection lake. As a result, the water will travel through the sandy soils downward toward the aquifer at a rapid rate. The rapid rate of drying up the playa lakes adds more water to the aquifer because it reduces the amount of evaporation normally calculated for shallow water bodies in the sunshine. This much larger area of water outside the clay bottom also adds to the recharge rate caused by the very large volume of water which can be absorbed by the soils. The local producers try to prevent excessive run off water from washing across their fields toward these lakes, but

it is virtually impossible. Most of the local farmers employ best management practices such as furrow dikes, contour rows, and terracing in attempts to better control the run off problems. The lakes which form after fast heavy rainfall events, will remain as the most feasible methods of increasing the natural recharge. This "do nut" natural recharge method is definitely increasing the water levels in Mesa UWCD.

As a future project, the District may consider precipitation enhancement as a possibility to enhance recharge of the aquifer. Cloud seeding projects are becoming more and more popular over wide spread areas. The District may choose at a later date to join other entities who seem to be having good results. Estimates from past data collection endeavors indicates 10% to 25% increases in annual rainfall. With an additional 2" to 5" of rainfall over the District, and the effects of the "do nut" recharge method, an estimated 3,125 acre/feet of artificial recharge could possibly result from implementation of this feasible method for increasing the natural and/or artificial recharge. The estimated recharge calculation is derived from TWDB report 341, page 5.

The District is very cautious and skeptical of the projected water supply figures, not as a result of the studies TWDB has performed, but because of the tremendous changes which were occurring in the aquifer during and shortly after the studies were completed. Another major concern the District has with using these numbers is the huge increase in irrigated acres which have been converted from dryland to irrigated farming during and since the completion of the study. The number of new center pivot irrigation systems which have been added into the county, converting dryland, where no groundwater is mined, to irrigated acres, which use several acre feet/ per acre/per year, have increased by over 400%. However, there is not adequate time to develop new numbers before the management plan must be certified. Consequently, we will use the demand and supply totals for year 2040 which will appear as follows:

<b>Projected Supplies of Water 2040</b>	
Groundwater in Storage-Ogallala Aquifer	4,070,000 acre feet
Surface water available to City of Lamesa	2,528 acre feet
Total Projected Supply	4,072,528 acre feet
Projected Demands for Water 2040	
Dawson County total groundwater use	32,274 acre feet
City of Lamesa Surface water use	1,795 acre feet
Total Projected Demand	33,069 acre feet
Surplus (shortage)	4,039,459 acre feet

Estimated surface water available for the City of Lamesa come from a letter report dated June 17, 1998 from Canadian River Municipal Water Authority. The estimated projection numbers indicating this large amount of surplus water available is very encouraging. However, the District will be continually working to conserve and protect the Ogallala Aquifer from extreme declines. The District agrees completely with the recommendations of the authors on page 32 of Report 341 which states: *Cooperative efforts should be made with the local underground water conservation districts to refine the base data from the model into smaller regional models. These models can be used to refine ground-water availability, evaluate efficient water-use management techniques, and demonstrate the effects of local pumpage scenarios on the aquifer. The information from such efforts would then be available to those responsible for managing this precious resource.*

## **Management of Groundwater Supplies**

Using the figures published in Texas Water Development Board report 341, Table 3 indicates an estimate of the existing total useable amount of groundwater in the District at this time to be approximately 6 million acre-feet with .7 million acre-feet to be subtracted as unrecoverable, results in an estimated net of 5.3 million acre-feet. 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 resource users 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 in a reduction of groundwater use (Purpose 2.0) (Purpose 5.0).

The District will establish and maintain an observation network in order to monitor changing storage conditions of groundwater supplies within the District (Purpose 1.0). The District will make a regular assessment of water supply and groundwater storage conditions and will report those conditions to the Board (Purpose 1.1A, Evaluation of Effectiveness {B}) and to the public (Purpose 1.1A, Activity Indicator {1.1ag}).

The District will adopt rules (Purpose 5.0) to regulate groundwater withdrawals by means of spacing (Rule #5 Spacing Requirements) and production limits (Rule #6 Production Limitations). The District may deny a water well operating permit or limit groundwater withdrawals in accordance with the guidelines stated in the District (Rule 7.3 Production Use Measurement Area). In making a determination to deny a permit or limit groundwater withdrawals, the District will consider the Rules of the District (Rule 10.3(a) Standard Operating Permit Provisions). 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 (Rule 14.1(a) Permit Hearings).

The District will enforce the terms and conditions of permits and rules of the District. (Rule 15.3 Rule Enforcement). All of the District Well Registration/Water Well Drilling Permit Applications include the requirements of §36.113 and §36.1131. The District Rule Book includes all the specifications for the actions, procedures, performances and avoidance necessary for the District to effectuate the management plan.

## **Drought Contingency Plan**

A contingency plan to cope with the effects of water supply shortages due to climatic or other conditions will be developed by the District and will be adopted by the Board after notice and hearing. In developing the contingency plan, the District will consider the economic effect of conservation measures upon all water resource user groups, the local implications of the degree and effect of changes in water storage conditions, the unique hydrogeologic conditions of the aquifer and the appropriate conditions under which to implement the contingency plan.

The District will employ additional technical specialists at its disposal to evaluate the resources available within the district and to determine the effectiveness of regulatory or conservation measures. A public or private user may appeal to the Board for discretion in enforcement of the provisions of the water supply deficit contingency plan on grounds of adverse economic hardship or unique local conditions. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

## **Actions, Procedures, Performances and Avoidance for Implementation of District Management Plan and Future Board Review**

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 District activities. Operations, agreements, and planning efforts of the District will be consistent with this plan. The District will seek the cooperation of all interested parties in the implementation of this plan. This plan is for a 10 year planning period; however, the Board may review the plan annually and re-adopt the plan with or without revisions at least every five years.

## **Regional Water Plan**

This management plan has been adopted prior to the development of the regional management plan for Region O (Llano Estacado Region). As required by §36.1071(b) this management plan and any amendments thereon shall be consistent with the certified regional water plan. After the time a regional water plan has been adopted, the District shall address water supply needs in a manner that is not in conflict with the appropriate approved regional water plan which must be approved under Section 16.053. Senate Bill # 1 intended for water management to be a bottom up approach. Therefore, the regional planning group must consider this local certified, Mesa UWCD Management Plan in the development of the regional water plan. Considering this local management plan, will hopefully, meet the intent of Senate Bill #1 and; consequently, result in a regional management plan which is consistent with this local management plan, resulting in the protection of the local control of groundwater management by the local people who elected the Board of Directors to operate the District.

**GOALS, MANAGEMENT OBJECTIVES,  
PERFORMANCE STANDARDS, AND  
METHODOLOGY TO  
EVALUATE PROGRESS**

**Goal 1.0 Implement Management Strategies by December 31, 1998 to Protect and Enhance the Quantity of Usable Quality Water by Providing the Most Efficient Use of Groundwater.**

Management Objective

- 1.1A Each year, on four (4) or more occasions, the District will disseminate educational information relating to the conservation practices for the efficient use of water resources.

Performance Standards

- 1.1aa Number of occasions, annually, the District disseminated educational information pertaining to the benefits of conservation practices for water use efficiency.

Management Objective

- 1.2A Each year the District will provide informative speakers to schools, civic groups, social clubs, and organizations for presentations to inform a minimum of 50 citizens on the activities and programs, the geology and hydrology of groundwater, and the principles of water conservation relating to the best management practices for the efficient use of groundwater.

Performance Standards

- 1.2aa Number of citizens in attendance at District presentations concerning the principals of water conservation relating to the best management practices for the efficient use of groundwater each year.

## Methodology

Annually, the district manager will prepare and present a report to the Board of Directors on District performances in regards to achieving Goal 1. 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 report will be maintained on file at the District office.

## **Goal 2.0 Implement Management Maneuvers to Control and Prevent the Waste of Groundwater by December 31, 1998.**

### Management Objective

2.1A Each year, on two (2) or more occasions, the District will disseminate educational/information materials directed toward preventing the waste of groundwater.

### Performance Standards

2.1aa Number of occasions the District disseminated educational and informational materials directed toward preventing waste of water each year.

### Management Objective

2.2A Each year the District will inventory, inspect, and evaluate 50% of the new well sites to control and prevent pollution to the groundwater from deleterious matter admitted from the ground surface because of sub standard well completion practices.

### Performance Standards

2.2aa Number of new well sites in the District each year.

2.2ab Number of new well sites the District inventoried, inspected, and evaluated during the year to control and prevent pollution a waste of groundwater each year.

### Management Objective

2.3A Annually the District will insure the proper closure of 90% of the open or uncovered wells which have been discovered or reported to prevent and control waste as a result of polluting the groundwater.

### Performance Standards

2.3aa Number of wells discovered or reported during the year which need proper closure.

2.3ab Number of wells properly closed each year.

### Management Objective

2.4A Each year the District will expend 80 staff hours in identifying, investigating, and seeking to prevent and control waste of groundwater by halting wasteful practices which allow groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or ditch, or onto land other than that of the well owner, unless such discharge is authorized.

### Performance Standards

2.4aa Number of staff hours the District expended to identify, investigate, seeking to control waste for the year.

### Methodology

Annually, the district manager will prepare and present a report to the Board of Directors on District performances in regards to achieving Goal 2. 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 report will be maintained on file at the District office.

## **Management Goals Determined Not-Applicable**

### **Goals Not-Applicable to Mesa UWCD**

#### **1.0 Controlling and preventing subsidence.**

The rigid geologic framework of the region precludes subsidence from occurring. *The management goal for controlling and preventing subsidence within the District is therefore not applicable to the operations of the District.*

#### **2.0 Addressing natural resource issues which impact the use and availability of groundwater and which are impacted by the use of groundwater in 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), unless the spacing requirements of the District can be met when space is available. *Therefore, the management goal for addressing natural resource issues which impact the use and availability of groundwater and which are impacted by the use of groundwater in the District is not applicable to the operations of the District.*

#### **3.0 Addressing conjunctive surface water management issues within the District.**

There is no surface water impoundments in the District, except for livestock consumption, which could possibly require conjunctive management. At the present time, Mesa UWCD has no jurisdiction over any surface water projects. Likewise, no agency which regulates surface water, has the authority to manage groundwater within the territory of this District. *Therefore, the management goal for addressing conjunctive surface water management issues within the District is not applicable to the operations of the District.*



# ADDENDUM

Pursuant to Texas Water Code Chapter 36.1072(c)(2) to preclude a later request from Executive Administrator, Mesa Underground Water Conservation District would like to include the following information to supplement the previous Goals, Management Objectives, Performance Standards, and Methodologies. The Board of Directors believe this additional information is necessary to clarify the District activities in pursuit of the procedures that will effectively and expeditiously accomplish the purpose of the District Act to conserve and protect the groundwater within the District.

## **Purpose 1.0 Implement a Monitoring System by December 31, 1998 to Improve the Basic Understanding of Groundwater Conditions in the District.**

### Objective to Conserve and Protect

1.1A Measure the monitor wells to determine the water level of the Ogallala aquifer annually.

#### Activity Indicators

- 1.1aa Develop a network of 123 water level measurement wells.
- 1.1ab Mark 90% of the measurement wells on USGS 7 ½ minute topo maps to assure adequate coverage with emphasis on water usage in each quadrant.
- 1.1ac Measure 90% of the measurement wells annually.
- 1.1ad Insure greater accuracy by measuring the wells within 20 days of the same date as the previous years measurement date.
- 1.1ae Enter the results of each measurement from the field water level data book into the computer data base within 20 days of completing the measuring procedure.
- 1.1af Prepare and e-mail a water level report to TWDB within 30 days after completing the measuring procedure.
- 1.1ag Publish in the local newspaper 1 summary report of the annual water level monitoring program within 2 months of completing the program.
- 1.1ah Prepare and mail a letter for each well owner/operator within 3 months, reflecting the current water level, the change in water level from the previous year, and other well information which may be pertinent.
- 1.1ai Prepare and mail a chart to 90% of well owner/operator which shows the land surface, total depth of the well, the annual water level measurements, and for wells with historical data before the District was created, the first measurement, the lowest water level, and an average historical water level.
- 1.1aj Annually place a copy of the new well chart for 90% of the measurement

wells in the field water level data book.

- 1.1ak Provide the field water level data book in the District office for 10 interested parties to study and utilize in order to obtain greater information and a more basic understanding of the groundwater conditions in the District.
- 1.1al Record the name of at least 10 interested people on a sign-in log who reference the field water level data book.

#### Evaluation of Effectiveness

- A. Prepare a report reflecting the results of the annual water level monitoring program.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

#### Objective to Conserve and Protect

- 1.1B Annually operate the water level monitoring program at an average cost to the District of less than \$100 per well.

#### Activity Indicators

- 1.1ba Record the miles driven to measure the measurement wells.
- 1.1bb Record the hours spent measuring the wells.
- 1.1bc Record the hours used to transfer the data from the field data book to the computer water level program.
- 1.1bd Record the hours used to prepare and e-mail the levels report to TWDB.
- 1.1be Record the hours used to prepare the newspaper summary report.
- 1.1bf Record the cost of publishing the newspaper report.
- 1.1bg Record the hours used to prepare the annual water level monitoring report.
- 1.1bh Record the hours used to prepare the letters and charts which will be mailed to the well owners/operators.
- 1.1bi Record the postage expense for the mail-out.
- 1.1bj Record any other expenses occurred in the water level measuring program such as equipment, supplies, repairs, or other associated costs.

#### Evaluation of Efficiency

- A. Prepare an annual report reflecting the average cost per well to administer the water level monitoring program.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## Objective to Conserve and Protect

### 1.2A Annually operate a water quality monitoring program.

#### Activity Indicators

- 1.2aa Develop a network of 40 water quality test wells by the end of the calendar year.
- 1.2ab Locate 1 test well in each NE, NW, SW and SE quarter of the District and other test wells located throughout the District to present an overall view of the groundwater quality condition, and keep these wells at least one year.
- 1.2ac Sample 90% of the network wells annually.
- 1.2ad Perform water analysis on 90% of the sampled well sites for 10 tests including pH, Total Dissolved Solids, Specific Conductivity, Chlorides, Alkalinity, Hardness, Fluorides, Iron, Nitrates, Sulfates annually.
- 1.2ae Record 90% of the test results on a comparison data sheet in the water quality book on an annual basis.
- 1.2af Prepare a letter for 90% well owner/operator within 3 months, providing information on an annual comparison data sheet of test results.
- 1.2ag Provide a Water Quality Data Book at the District office for 10 people interested in obtaining water quality information to sign each year.
- 1.2ah Record the name of 10 interested people on a sign-in log and record the name of others referencing the water quality data book on an annual basis.

#### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the results of water quality monitoring program.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## Objective to Conserve and Protect

### 1.2B Annually sample and analyze the water quality monitor wells at an average cost to the District of less than \$200 per well.

#### Activity Indicators

- 1.2ba Record 90% of the miles driven to gather quality samples annually.
- 1.2bb Record 90% of the hours spent gathering quality samples annually.
- 1.2bc Record 90% of the hours used to perform the water analysis annually.
- 1.2bd Record 90% of the expenses for chemicals, lab equipment and other costs associated in performing water analysis used each year.

### Evaluation of Efficiency

- A. Prepare an annual report reflecting the average cost per well to administer the water quality monitoring program.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

1.3A Analyze all collected water quality samples of irrigation water annually.

#### Activity Indicators

- 1.3aa Encourage all producers who come into the office to have their irrigation water analyzed.
- 1.3ab Perform water analysis on each irrigation water sample for pH, Specific Conductivity, EC<sub>W</sub> and Chlorides.
- 1.3ac Record quality results on a lab test sheet.
- 1.3ad Prepare a report in the H2O data base computer program.
- 1.3ae Mail or hand deliver the report to the well owner/operator.

#### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the results of irrigation water analysis.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

1.4A Annually analyze all collected water quality samples for domestic wells.

#### Activity Indicators

- 1.4a Encourage domestic well owners to have their water tested annually.
- 1.4b Perform water analysis on each domestic water sample for pH, Specific Conductivity, Chlorides, Alkalinity, Hardness, Fluoride, Iron, Nitrate and Sulfate.
- 1.4c Record quality results on a lab test sheet.
- 1.4d Prepare an analysis report.
- 1.4e Mail report to the well owner/operator.
- 1.4f File a duplicate copy of report in well owner's/operator's District file.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting results for the domestic water quality monitoring.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

1.5 Annually analyze domestic well samples for Total Coliform and E-coli.

#### Activity Indicators

- 1.5a Encourage domestic well owners to have annual water testing for bacteria contamination.
- 1.5b Provide domestic well owner with sanitized sample container and instructions for collection.
- 1.5c Perform bacteria analysis on each domestic water sample for total coliform and E-coli.
- 1.5d Record negative and/or positive results on a lab test sheet.
- 1.5e Prepare an bacteria analysis report.
- 1.5f Mail report to the well owner/operator.
- 1.5g Provide instructions for treating contaminated well and supply a sanitized sample container for an additional test 60 days after treating the well.
- 1.5g File a duplicate copy of report in well owner's/operator's District file.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting total bacteria analysis for domestic wells, including total number of wells which tested positive and those testing negative.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## **Purpose 2.0 Implement Management Strategies to Protect the Aquifer from Extreme Decline and Damage Resulting From Over Production.**

### Objective to Conserve and Protect

2.1A When the two (2) year average of the water level decline in three (3)

adjacent monitor wells (excluding the first {1st} year change in a new monitor well) is greater than -5 feet consider the establishment of an Extreme Decline Study Area (EDSA) which is a resolution by the Board to officially name (designate) and draw (delineate) on a map, a square, nine-section area for the purpose of collecting extensive hydrological information on an annual basis for all available wells in that sector.

#### Activity Indicators

- 2.1aa Annually, the District will review and study data obtained from the Annual Water Level Monitoring Reports (AWLMR). If evidence of extreme decline exists, comparable to other monitor wells, the Board will consider within 6 months of the new calendar year the need for establishing an EDSA.
- 2.1ab The District will provide notification to 100% of the known landowners, well owners/operators and water right holds within the EDSA, at least 60 days before the date of public hearing.
- 2.1ac A summary of available data from the AWLMR will be included in the notification letter mailed to the party 60 days before the public hearing.
- 2.1ad One time or more, the Board will call for a public hearing to consider the establishment of an EDSA 60 days after the notice has been given.
- 2.1ae The District will present data from the AWLMR at the hearing.
- 2.1af The Board will receive testimony from landowners, well owners/operators and water right holders within the proposed area.
- 2.1ag The Board will receive testimony from the public.
- 2.1ah The Board will evaluate the proceedings and consider a resolution to establish an EDSA.

#### Evaluation of Effectiveness

- D. The Board will evaluate the proceedings and make a resolution to establish an EDSA.
- E. The Board will evaluate the proceedings and determine an EDSA is not necessary at this time.

#### Objective to Conserve and Protect

- 2.2A Within one year after an EDSA has been established, implement a data collection system to better understand the groundwater condition within the EDSA.

#### Activity Indicators

- 2.2aa The District will measure 90% of available wells to determine the water level

of measurement wells in the EDSA.

- 2.2ab The District will measure the wells within 20 days of the same date last year to assure greater accuracy.
- 2.2ac The District will compare subsequent changes in water level on an annual basis and the historical basis for monitor wells with historical data that may be in the EDSA.
- 2.2ad The District will evaluate and consider climate and environmental events which have occurred during the year.
- 2.2ae The District will consider changes in water use practices.
- 2.2af The District will consider available information on the use of new technology and/or procedures.
- 2.2ag The District will consider relevant information reflecting extreme declines of the aquifer within the EDSA.

### Evaluation of Effectiveness

- A. Prepare an EDSA report for the Board to review and study within the first two board meetings after the annual study is completed.
- B. Annually, the Board will make one or more of the following decisions:
  - 1. Continue monitoring and evaluating data of the area.
  - 2. Determine the *dis-continuation* of the EDSA and cancel the program.
  - 3. Determine from evidence gathered in the study area that possible over-mining of the aquifer is occurring within the EDSA.
  - 4. Begin the process of designating and delineating a Production Use Measurement Area (see 2.4a).
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

- 2.3A Operate the EDSA activities at an annual average cost less than \$200 per well.

#### Activity Indicators

- 2.3aa Develop a District expense report to reflect EDSA expenses.
- 2.3ab Record the miles driven in the EDSA measurement program.
- 2.3ac Record the time needed to measure the EDSA monitor wells.
- 2.3ad Record other expenses incurred in the measuring activities.

#### Evaluation of Efficiency

- A. Prepare an annual report reflecting average cost per well to operate EDSA

- activities.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

2.4A Within one year after the EDSA has indicated possible over production and apparent damage to the aquifer, establish a Production Use Measurement Area (PUMA) which is the resolution by the Board to officially name (designate) and draw (delineate) on a map, no more than four (4) contiguous Sections located within the EDSA whereby, all well/well systems will require an operating permit and a water meter will be installed to accurately measure the use of water.

#### Activity Indicators

- 2.4aa The District will review and study data obtained from the Annual Water Level Monitoring Reports (AWLMR). If evidence of possible and probable excessive mining of the aquifer, comparable to other monitor wells in the EDSA, the Board will consider the need for a PUMA.
- 2.4ab The District will provide notification to known landowners, well owners/operators and water right holds within the PUMA, at least 60 days before the date of public hearing.
- 2.4ac A summary of available data from the EDSA will be included in the notification.
- 2.4ad The Board will call a public hearing to create a PUMA.
- 2.4ae The Board will present data from the EDSA at the hearing.
- 2.4af The Board will receive testimony from landowners, well owners/operators and water right holders within the proposed area.
- 2.4ag The Board will receive testimony from landowners, well owners/operators and water right holders within the EDSA.
- 2.4ah The Board will receive testimony from the public.
- 2.4ai The Board will evaluate the proceedings and consider a resolution to establish a PUMA.

#### Evaluation of Effectiveness

- A. The Board will evaluate the proceedings and make a resolution to establish a PUMA.
- B. The Board will evaluate the proceedings and determine a PUMA is unnecessary at this time and continue the EDSA.



## Objective to Conserve and Protect

2.5A Implement an annual operating permit and water measurement program for all permitted water users located within the PUMA.

### Activity Indicators

- 2.5aa Notify landowners, well owner/operator and water right holders of their placement in the PUMA and the requirements for which they are responsible.
- 2.5ab The District will require all well/well systems to file a completed operating permit application prior to operating a well/well system within a PUMA.
- 2.5ac The District will provide and install a water measuring device to accurately measure the water used in each operating permit.
- 2.5ad The District will calculate maximum allowable production for each operating permit.
- 2.5ae The District will read and record meter readings every other month.
- 2.5af The District, on a quarterly basis, will compare meter readings with the operating permit terms and notify the permit holder.
- 2.5ag The District will prepare renewal operating permits at the end of the existing operating period for all permit holders operating below the permit limitations.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting PUMA activities.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## Objective to Conserve and Protect

2.6A Annually operate the PUMA program at an average cost to the District of less than \$1000 per well.

### Activity Indicators

- 2.6aa Develop a District expense report to reflect PUMA expenses.
- 2.6ab Amortize the cost of the water meters over 3 years.
- 2.6ac Amortize the installation cost for installing the water meters over a 3 year allocation period.
- 2.6ad Record maintenance expense for the water meters.
- 2.6ae Record the mileage required for reading the meters every two months.
- 2.6af Record the time required to read the meters.

- 2.6ag Record the time required by office staff to record the readings into computer program.
- 2.6ah Record the time required by office personnel to prepare the quarterly comparison reports.
- 2.6ai Record the time required by office personnel to prepare renewal permit applications.

Evaluation of Efficiency

- A. Prepare an annual report reflecting average annual cost per well to operate the PUMA activities.
- B. Present the annual report to the Board.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

**Purpose 3.0 Implement a Program to Protect the Quality of the Aquifer by Collecting and Recycling Waste Oil and Used Oil Filters by December 31, 1998.**

Objective to Conserve and Protect

- 3.1A Provide a network of six (6) collection sites for "Do It Yourself" (DIY) oil change citizens to dispose of waste oil and used oil filters by 12-31-98.

Activity Indicators

- 3.1aa Locate at least three(3) collection sites throughout Dawson County.
- 3.1ab Locate at least three(3) collection sites throughout the city of Lamesa.
- 3.1ac Record the gallons of used oil collected from each site each time oil is removed from the container.
- 3.1ad Prepare an annual report for Texas Natural Resource Conservation Commission reflecting the total gallons collected at each site.

Evaluation of Effectiveness

- A. Prepare an annual report reflecting the results of the DIY collection program.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

Objective to Conserve and Protect

- 3.2A Provide a curbside pick-up vehicle to collect waste oil from the large

generators in the District by 12-31-98.

Activity Indicators

- 3.2aa Employee one used oil collection attendant for 20 hours per week to operate the vehicle.
- 3.2ab Provide waste oil pick-up service to 10 or more generators who accumulate large quantities of used oil.
- 3.2ac Prepare a oil pick-up report for 90% of the clients and mail it to them within 10 days of the date of collection.
- 3.2ad Prepare an annual report for 90% of the clients reflecting the total oil and filter collection history for the year.
- 3.2ae Mail the history reports to 90% of the clients within the 60 days after the end of each calender year.

Evaluation of Effectiveness

- A. Prepare an annual report reflecting the results of the curbside pick-up collection program.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

Objective to Conserve and Protect

3.3A Provide a collection and recycling program for used oil filters by December 31, 1998.

Activity Indicators

- 3.3aa Retrofit the used oil collection truck by December 31, 1998 with one wench to pick-up and transfer the used oil filters from the DIY and curbside collection sites to the oil center where they will be processed and recycled.
- 3.3ab Prepare a used oil report for 90% of the clients and mail it to them within 10 days of the date of collection.
- 3.3ac Prepare an annual report for 90%of the clients reflecting the total oil and filter collection history for the year.
- 3.3ad Mail the history reports to the clients within the 60 days after the end of the each calender year.

Evaluation of Effectiveness

- A. Prepare an annual report reflecting the results of the used oil and filter collection program.

- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

3.4A Annually operate the waste oil and used oil filter collection and recycling program at a cost of less than \$.50 per gallon of oil collected.

#### Activity Indicators

- 3.4aa Record the salary for the used oil collection attendant.
- 3.4ab Record the UOC telephone expense.
- 3.4ac Record the UOC lease expense.
- 3.4ad Record the UOC maintenance expense.
- 3.4ae Record the UOC operating expense.
- 3.4af Record the UOC truck expense.
- 3.4ag Record the UOC utilities expense.
- 3.4ah Record the oil sales income.
- 3.4ai Record the scrap metal sales income.

#### Evaluation of the Efficiency

- A. Prepare an annual report reflecting the average cost per gallon of waste oil collected to operate the used oil and filter collection program.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

**Purpose 4.0 Implement Oversight Strategies to Monitor Legislative Activities and State Agency Rules and Orders Which May Affect Private Ownership of Groundwater, as well as Maintaining the Authority to Manage Groundwater at the Local Level by December 31, 1998.**

### Objective to Conserve and Protect

4.1A Annually join and participate as a full member of Texas Alliance of Groundwater Districts.

### Activity Indicators

- 4.1aa Join and pay annual dues to Texas Alliance of Groundwater Districts.
- 4.1ab Attend 90% of quarterly and special called meetings.
- 4.1ac Serve as a member of Legislative Committee.
- 4.1ad Volunteer to serve on two or more committees.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the activities of Texas Alliance of Groundwater Districts.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

4.2A Annually participate in activities of the State Legislature including the committee meeting during the biennium.

### Activity Indicators

- 4.2aa Attend and participate in 90% of Natural Resource Hearing involving groundwater and Groundwater Conservation Districts.
- 4.2ab Attend and participate in 75% of committee hearing during the biennium.
- 4.2ac Immediately report to the Board any new activity which affects the District.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the activities of Texas Legislature.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

4.3A Annually attend and participate in Groundwater related issues Statewide.

### Activity Indicators

- 4.3aa Attend 75% of Statewide activities involving groundwater issues.
- 4.3ab Immediately report to the Board any new activity which affects the District.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the activities affecting the District.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

### Objective to Conserve and Protect

4.4A Annually attend and participate in Llano Estacado Regional Planning Group Meetings.

#### Activity Indicators

- 4.4aa Attend and participate in 90% of Region O meetings.
- 4.4ab Report to the Board any activity which affects the District.

### Evaluation of Effectiveness

- A. Prepare an annual report reflecting the activities affecting the District.
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## **Purpose 5.0 Implement an Administrative Program for the Management of Groundwater Resources by December 31, 1998.**

### Objective to Conserve and Protect

5.1A Each Year the District will utilize the Well Registration/Water Well Drilling Permit Application as the administrative law process for the mechanism to facilitate the regulation of groundwater use from all new water wells drilled in the territorial jurisdiction of the District.

#### Activity Indicators

- 5.1aa The District will require a Well Registration/Water Well Drilling Permit Application to be filed for all water wells drilled in the District.
- 5.1ab Each Well Registration/Water Well Drilling Permit Application is certified by the applicant that the data provided is true and correct and all provisions have been read and the applicant shall abide by all terms.
- 5.1ac Every Well Registration/Water Well Drilling Permit Application applicant

certifies to abide by the included provisions stating "In compliance with Chapter 36 of the Texas Water Code, I will drill and operate this well within the framework of the District Rules. I agree to comply with the District Management Plan and abide by the requirements of the Drought Contingency Plan. I shall comply with the Water Well Drillers and Pump Installers Rules in chapter 238".

- 5.1ad Each applicant shall indicate the site of the proposed well on the Well Registration/Water Well Drilling Permit Application, in addition to location of all existing wells along with the gpm production from each of these wells.
- 5.1ae Each applicant shall record on the Well Registration/Water Well Drilling Permit Application the measured feet the proposed well is to be located from the nearest 2 property lines of adjoining land owners.
- 5.1af On all Well Registration/Water Well Drilling Permit Applications every applicant agrees to a maximum allowable production of 5 gpm per contiguous acre owned or operated. In no event may a well or well system be operated such that the total annual production exceeds four (4) feet of water per acre owned or operated within the same Section.
- 5.1ag Notice of a due process public hearing will be posted in three (3) locations for each filed Well Registration/Water Well Drilling Permit Application to inform the citizens of the exact and specific Well Registration/Water Well Drilling Permit Applications the Board will consider for approval at the next Board meeting. The posted notice will give the instructions for the procedure to follow if any resident wishes to file an opposition to the granting of said drilling permit.
- 5.1ah After the Board of Directors receive a report on each of the Well Registration/Water Well Drilling Permit Applications from the District manager, the Board will approve or deny each application.

#### Evaluation of the Effectiveness

- A. Prepare an annual report reflecting the total number of Well Registration/Water Well Drilling Permit Applications the District has processed .
- B. Present the annual report to the Board of Directors.
- C. After the first annual report, the District will provide a yearly comparison report as the procedure for tracking progress on an annual basis.

## Definitions and Concepts

**“Board”** means the Board of Directors of Mesa UWCD.

**“District”** is Mesa Underground Water Conservation District and those given the responsibility for the execution and performance of District functions and activities.

**“Drilling Permit”** means a permit for a water well issued or to be issued by the District allowing a water well to be drilled.

**“Groundwater”** means water located beneath the earth’s surface within the District but does not include water produced with oil in the production of oil and gas.

**“Landowner”** means the person to whom bears ownership of the land surface area and water rights thereunder, unless previously sold.

**“Operating Permit”** means a permit issued within a *Production Use Measurement Area* by the District for a water well, allowing only a specified amount of groundwater to be withdrawn from a water well for a designated period of time.

**“Person”** includes corporation, individual, organization, government or Governmental subdivision or agency, business trust, trust, partnership, association, or any other legal entity.

**“Rule”** means the rules of Mesa UWCD adopted May 1, 1997 to achieve the provisions of the District Act.

**“Section”** means the number section of a survey or block as shown in “Dawson County Farm Plats,” 1996 Edition, (Smith Publishing Co.).

**“Well”** means any facility, devise, or method used to withdraw groundwater from the groundwater supply within the District.

**“Water Rights Holder”** means the person other than the landowner who has ownership of the water rights beneath the land surface.

**“Well owner” or “Well operator”** means the person who owns the land upon which a well is located or is to be located or the person who operates a well or a water distribution system supplied by a well.

**“Well system”** means a well or group of wells tied to the same distribution system.