

RESOLUTION NO. 04-007

**A RESOLUTION APPROVING A DROUGHT AND WATER EMERGENCY RESPONSE PLAN.**

The City Council of the City of Las Cruces is informed that:

**WHEREAS**, in 1996 the City enacted the Water Conservation Ordinance codified as LCMC, §§ 28-301 through 28-307; and,

**WHEREAS**, as the region continues to suffer from well publicized below average precipitation and/or river flow, the City needs to provide for future drought and temporary water emergencies; and

**WHEREAS**, a Drought and Water Emergency Response Plan ("Plan") is necessary for the public health, safety or welfare, or to preserve the water supply; and

**WHEREAS**, staff has prepared a Plan after reviewing the plans of other municipalities and water companies; and

**WHEREAS**, the purpose of the Plan is to reduce water use within the City limits and within the City's water utility service area in the event of a declared water emergency caused by a drought or a temporary water emergency; and

**WHEREAS**, the Plan provides for definitions of technical words used in the Plan; measurable criteria for determining the severity of the water emergency; implementation authority for each level of water emergency; response measures for each level of water emergency; termination of response measures; and variances.

**NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LAS CRUCES as follows:**

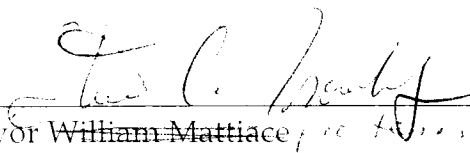
**(I)**

That the City of Las Cruces Drought and Water Emergency Response Plan attached hereto and incorporated herein is approved.


**(II)**

That City staff is hereby authorized to take all action necessary to implement the intent of this Resolution and of the Plan.

DONE AND APPROVED on this 7th day of July, 2003.

  
Mayor ~~William Mattiace~~

ATTEST:

  
City Clerk

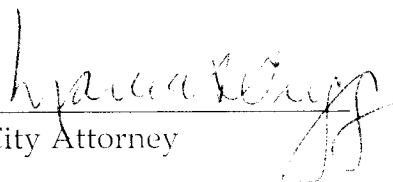
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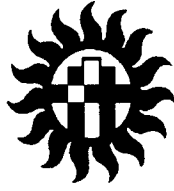
Moved by: Moore

Seconded by: Archuleta

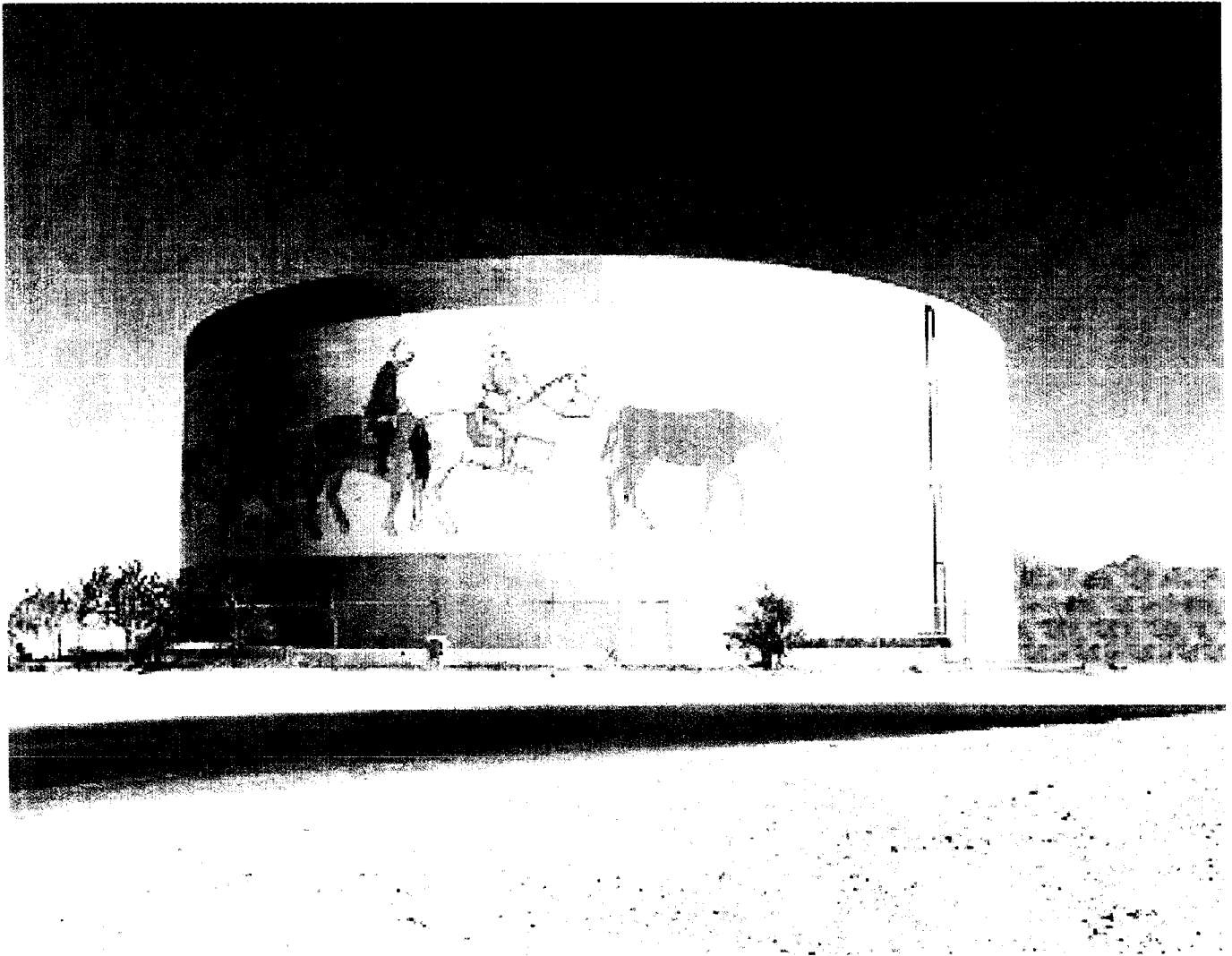
Mayor Mattiace:	<u>aye</u>
Councillor Fietze:	<u>aye</u>
Councillor Moore:	<u>aye</u>
Councillor Archuleta:	<u>aye</u>
Councillor Trowbridge:	<u>aye</u>
Councillor Strain:	<u>aye</u>
Councillor Miyagishima:	<u>absent</u>

APPROVED:

  
Asst City Attorney



City of Las Cruces



*City of Las Cruces  
Drought and Water Emergency Response Plan*

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## **I. EXECUTIVE SUMMARY**

Drought is a natural phenomenon that has recurred at varying intervals throughout history. The City of Las Cruces Utilities Department defines drought as an extended period of below-average precipitation and/or river flow that stresses the City's water supply by reducing the City's well pumping capacity.

For planning purposes, City of Las Cruces' water supply strategy is to have enough water to meet the customers' water needs without compromising public health and safety. It is impossible to predict when drought will occur or how long it will last. Our water supply comes from deep aquifers that are not affected by long-term droughts of one to two years. Even though our main aquifer, the Mesilla Bolson, is replenished by the Rio Grande, a long-term drought that curtails water deliveries in the river and increased groundwater pumping can have an adverse effect on well pumping capacities.

It is the intent of the City of Las Cruces Utilities Department to recognize drought conditions early and respond appropriately. Our prime drought response goal is to reduce water use so that supply will be available for the most essential uses for the drought's duration. Accordingly, we have developed this Drought and Water Emergency Response Plan (DRP) to identify triggering criteria, implementation authority, potential response measures, and variances. The DRP is also intended to respond to water emergencies that temporarily result in reduced water production or distribution.

If the City Council approves a DRP, it will be necessary to modify the City's Water Conservation Ordinance concerning declared water emergencies.

## **II. WATER SUPPLY AND DEMAND**

The City of Las Cruces Water Utility provides water to a population of approximately 74,000. Water supply comes entirely from 28 wells in the Mesilla Bolson and four wells in the Jornada Bolson. At this time, the City's West Mesa wells are not included in this total because they are not connected to the valley water system. The peak system demand in the summer of 2002 was approximately 30,427,000 gallons per day excluding West Mesa customer demand. Even though the West Mesa production and distribution system is a "stand alone" system, the DRP would apply to its customers.

Weather is the single biggest factor affecting demand. Other factors affecting demand include population growth, the effects of the City's long-term water conservation efforts, and water rates.

### III. DEFINITIONS

The following definitions are used in the DRP:

**Maximum system-wide pumping capacity:** The total water pumped from all wells per day at 100% capacity.

**Minimum system-wide storage requirement:** System-wide water tank storage levels necessary to provide the following minimum capacities to ensure public health and safety:

- Operational storage (25% of maximum peak daily demand);
- Fire flow storage (6000 gallons per minute for four hours); and
- Emergency storage (20% of average day demand).

**Operational storage:** Amount of water in storage needed to satisfy peak daily demand. This storage is used when water demand exceeds pumping capacity.

**Seven day moving average:** Running average of the seven previous days which is updated daily.

**Water Emergency:** System failure due to hydrological, mechanical, electrical or any other condition that reduces the total system-wide pumping and/or storage capacity, which cannot be remedied within seven days. Most water emergencies such as a major line break can be repaired within seven days.

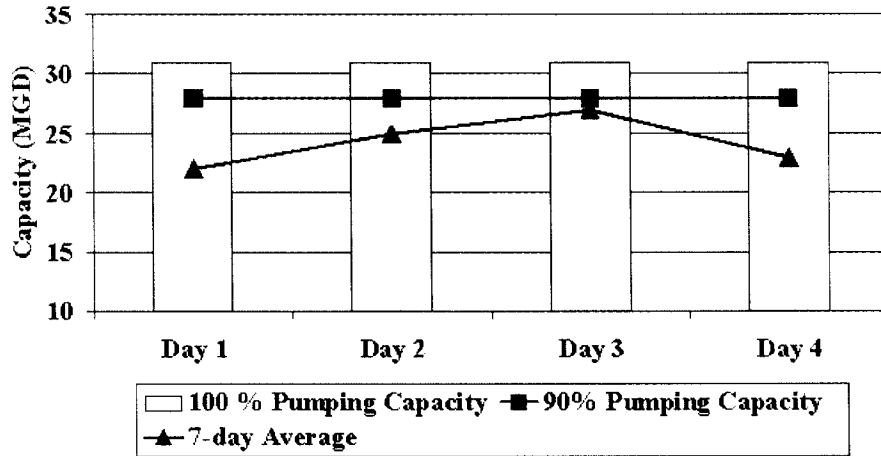
**Goal:** Targeted reduction in water use measured from the seven day moving average of system-wide water production when a Level I emergency is declared.

### IV. DETERMINING SEVERITY OF WATER EMERGENCY

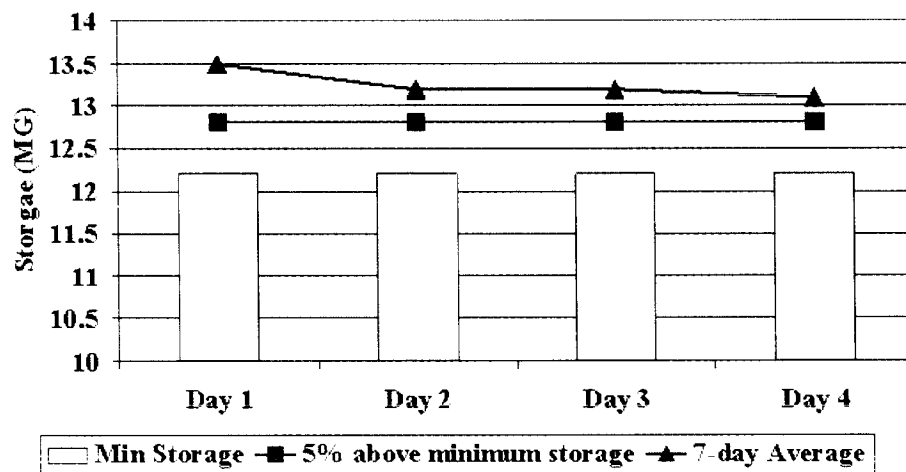
Water pumping and storage levels are monitored on a real-time basis through a state-of-the-art supervisory control and data acquisition (SCADA) system. This information is immediately available for daily assessment of drought or water emergency impacts on the water system.

The DRP is based on three levels of drought or water emergency, each of which is triggered by the expected or actual loss of pumping and/or storage capacity at any given time. Utilizing a seven day moving average of pumping and/or storage capacity, response levels will be determined as described below. Figure 1 and Exhibit “A” shows a condition where there is no water pumping emergency. Figure 2 and Exhibit “B” shows a condition where there is no tank storage capacity emergency.

**Figure 1: No Emergency Capacity Condition**



**Figure 2: No Emergency Storage Condition**

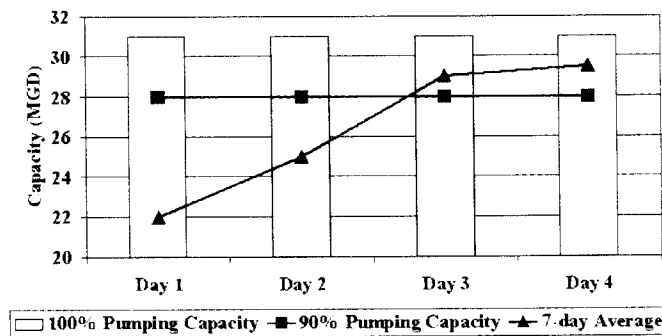


A. Level I - Mild

A Level I water emergency exists when either of the following conditions occur:

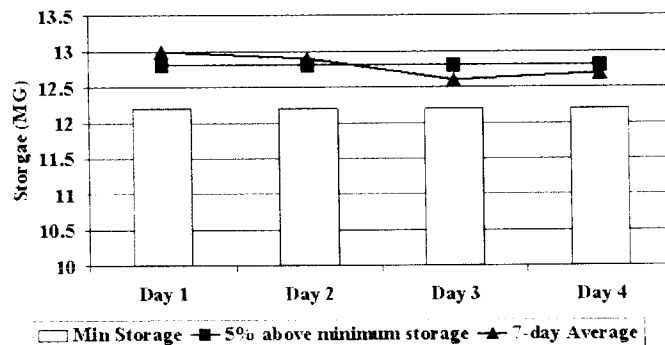
- **Condition 1.** When the seven day moving average of system-wide daily water production is within ten percent (10%) of the maximum system-wide water pumping capacity (Figure 3).

**Figure 3: Level I Emergency Capacity Condition**



- **Condition 2.** When the 7-day moving average of system-wide minimum daily tank storage falls within five percent (5%) of the minimum system-wide tank storage requirement (Figure 4).

**Figure 4: Level I Emergency Storage Condition**



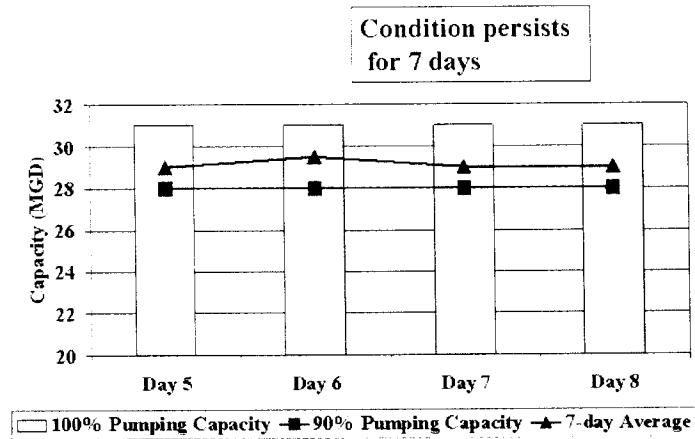
System operations will determine when Condition 1, Condition 2 or both are used to trigger a Level I water emergency.



**B. Level II - Severe**

A Level II water emergency exists when the seven day moving average of system-wide water production is within ten (10%) percent of the maximum pumping capacity for 7 consecutive days (Figure 5).

**Figure 5 Level II Emergency**

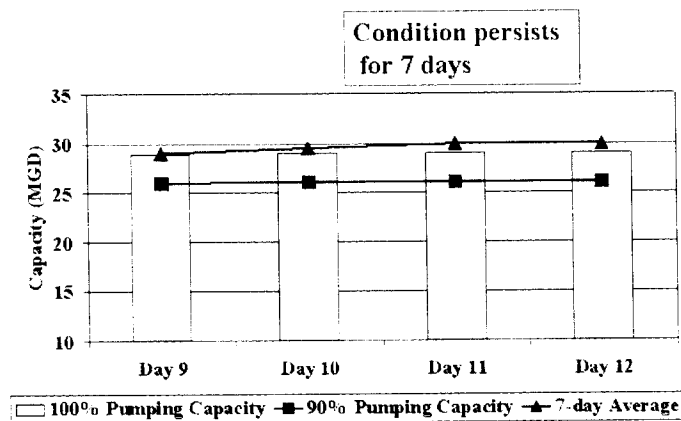


Storage condition is assumed to be severe and is not used as a trigger.

**C. Level III - Critical**

A Level III water emergency exists when the seven day moving average of system-wide water production equals or exceeds the maximum pumping capacity for seven consecutive days (Figure 6).

**Figure 6 Level III Emergency**



Storage condition is assumed to be critical and is not used as a trigger.

## V. IMPLEMENTATION AUTHORITY

Once a determination is made based on operational conditions that a drought or water emergency response level has been triggered, the following occurs:

### A. Level I - Mild

The Utility Director advises the City Manager, who in turn declares a Level I emergency. City Council is informed immediately. Response measures are implemented automatically.

### B. Level II - Severe

The Utility Director advises the City Manager, who in turn declares a Level II emergency. Mandatory response measures are implemented immediately. An emergency City Council meeting will be called for the Council to determine whether any of the discretionary response measures should be implemented.

### C. Level III - Critical

The Utility Director advises the City Manager, who in turn declares a Level III emergency. Mandatory response measures are implemented immediately. An emergency City Council meeting will be called to determine whether any of the discretionary response measures should be implemented.

## VI. GENERAL RESPONSE MEASURES

A. **Increasing Water Supply.** The City of Las Cruces Water Resources could increase its water supply in the event of a drought. There are several options for doing this, each presenting its own set of intergovernmental and technical considerations. Among the possibilities:

- Drill additional wells.
- Negotiate water supply agreements with other water providers.

B. **Decreasing Water Demand.** The City Water Resources' prime drought response is to reduce water use so that supply will be available for the most essential uses during the duration of the drought or water emergency. There are a wide variety of options that could be used to decrease water use. In general, it is expected that reductions would be voluntary during a mild drought, with mandatory measures being phased in if drought conditions become more serious. It is important to ensure that any discomfort, difficulty or potential loss is shared as equitably as possible across all customer classes.

## **VII. SPECIFIC RESPONSE MEASURES AND EXPECTED GOALS FOR EACH EMERGENCY LEVEL**

### **A. Level I – Mild**

1. Goal: 10% reduction in water use
2. Mandatory Response Measures to be Implemented by City Manager:
  - Initiate campaign to alert public to drought or water emergency and to response measures that they can expect if emergency continues or intensifies.
  - Begin vigorous enforcement of Water Conservation Ordinance.
  - Require that the City and request that other governmental entities reduce their own water use by 10% or more to demonstrate leadership in dealing with the crisis, and then publicize their results.
  - Notify water customers of the City Manager's action and the time framework for implementation of emergency response measures.
  - Contact special interest groups with heavy water use to get their ideas and support.
  - Publish suggestions for temporarily reducing water use.
  - Encourage City residents connected to private wells or a private water utility company to reduce water use.
  - Ask customers to voluntarily reduce outdoor water use using their own methods and water suggestions.
  - Discourage changes in landscape or establishment of new landscape that increase water demand.
  - Monitor drought response effectiveness, recommend adjustments monthly to City Manager, report to the public regularly, and document results.

### **B. Level II - Severe**

1. Goal: 20% reduction in water use.
2. Mandatory Response Measures to be Implemented by City Manager:
  - Continue all measures initiated in Level I.
  - Require that the City and request that other government entities reduce their own water use by 20 percent or more to demonstrate leadership in dealing with the crisis, and then publicize the results.

- Establish and generate publicity about a Drought Response Hotline, and prepare Las Cruces Utilities and customer service employees to respond to drought-related questions and give information.
  - Train and assign Las Cruces Utilities field services and meter reading personnel to:
    - Monitor outdoor water use.
    - Issue warnings and report to Codes Enforcement.
  - Restrict outdoor vegetation watering
  - Prohibit planting new lawns from seed or sod.
  - Generate more intense public discussion and media involvement about water use priorities, ways to cut water use while minimizing impacts on landscape, and recovery planning.
  - Intensify public discussion about water use priorities and ways to reduce water use, and involve the Las Cruces Fire Department more intensively in these public discussions.
  - Intensify public information to reinforce the need for extreme measures.
  - Encourage customers to voluntarily limit or eliminate non-essential water uses and provide guidelines.
  - Publish extraordinary efforts of residential and commercial customers as examples of leadership.
  - Perform water use audits for high-volume water users in all customer classes, advise them on ways to reduce water use and, where appropriate, recommend retrofit devices.
  - Publish a do-it-yourself “water waste reduction” brochure for households and aggressively promote it by inserting it into water bills, by utilizing the City’s web site, and using other effective distribution methods.
  - Further restrict vehicle washing.
  - Monitor effectiveness and update City Council on a monthly basis.
3. Discretionary Response Measures Which May Be Implemented by City Council:
- Introduce drought pricing mechanisms such as a surcharge on water use in excess of the average daily per capita or per household consumption.
  - Revoke waivers to franchised private water utilities for their customers within the City limits and require compliance with City’s outdoor vegetation watering restrictions.

### C. Level III – Critical

1. Goal: 30% reduction in water use
2. Mandatory Response Measures to be Implemented by City Manager:
  - Continue all measures initiated in Level I and Level II.
  - Prohibit all fire hydrant uses except those required for public health and safety.
  - Require all hotels, motels, and bed and breakfast establishments to have only showerheads and faucet aerators meeting maximum flow rates of 2.5 gallons per minute as per the 1997 Uniform Plumbing Code Sec. 402.1-9.
  - Intensify reductions of outdoor water use:
    - Authorize Water Resources staff to assist Codes Department personnel in policing water conservation ordinance violations.
    - Prohibit all vehicle washing.
    - Prohibit filling private swimming pools.  
Reduce the use of or close public and private swimming pools.
    - Require that ornamental fountains be turned off.
    - Impose further restrictions in landscape water use in proportion to the severity of the drought.
    - Restrict greenhouse and plant nursery water use.
    - Restrict water use for fertilization, pesticide and herbicide application by commercial enterprises or by individuals.
    - Prohibit all new landscaping including planting of trees and shrubs except for extremely drought resistant varieties such as cacti or mesquite.
3. Discretionary Response Measures Which May Be Implemented by City Council:
  - Refine or adjust drought pricing mechanisms.
  - Prohibit all outdoor water use except for subsistence irrigation of trees and shrubs.
  - Terminate water utility service if a violation is not immediately corrected after written notice is given to the customer or posted on the customer's premises.
  - Impose a moratorium on new water connections.

## **VIII. TERMINATION OF RESPONSE MEASURES**

### **A. Level 1 - Mild**

Level I response measures may be rescinded by the City Manager when the triggering conditions have ceased to exist for at least seven consecutive days.

### **B. Level II – Severe**

Mandatory Level II response measures may be rescinded by the City Manager when the triggering conditions have ceased to exist for at least seven consecutive days. Upon termination of mandatory Level II response measures, Level I response measures go into effect unless otherwise determined by the City Manager. Discretionary Level II response measures may only be rescinded or modified by the City Council.

### **C. Level III – Critical**

Mandatory Level III response measures may be rescinded by the City Manager when the triggering conditions have ceased to exist for at least seven consecutive days. Upon termination of the mandatory Level III response measures, the mandatory Level II response measures go into effect unless otherwise determined by the City Manager. Discretionary Level III response measures may only be rescinded or modified by the City Council.

## **IX. PUBLIC OUTREACH**

During a drought, it is essential that City staff communicate effectively not only with our customers, but also with other area water suppliers, local governments, and other groups who may be affected by the City's drought response.

During drought or water emergency conditions, Utility staff is directed to actively work with the City Public Information Office and other agencies to ensure the public is fully informed about the conditions affecting water supply.

## **X. VARIANCES**

Customer specific variances may be granted in cases of hardship or very special conditions. Variances shall be submitted to the Utilities Director for review and recommendation. Final determination as to whether a particular circumstance warrants a variance will be made by the City Manager in consultation with the Legal Department.

A variance will be granted only if it is found that the requested water use is necessary to prevent an emergency condition relating to public health or safety, or extreme economic hardship; or essential governmental services such as fire and similar emergency services. Efforts made to conserve water at any time prior to onset of emergency conditions may be considered in granting a variance.

## **XI. SUMMARY**

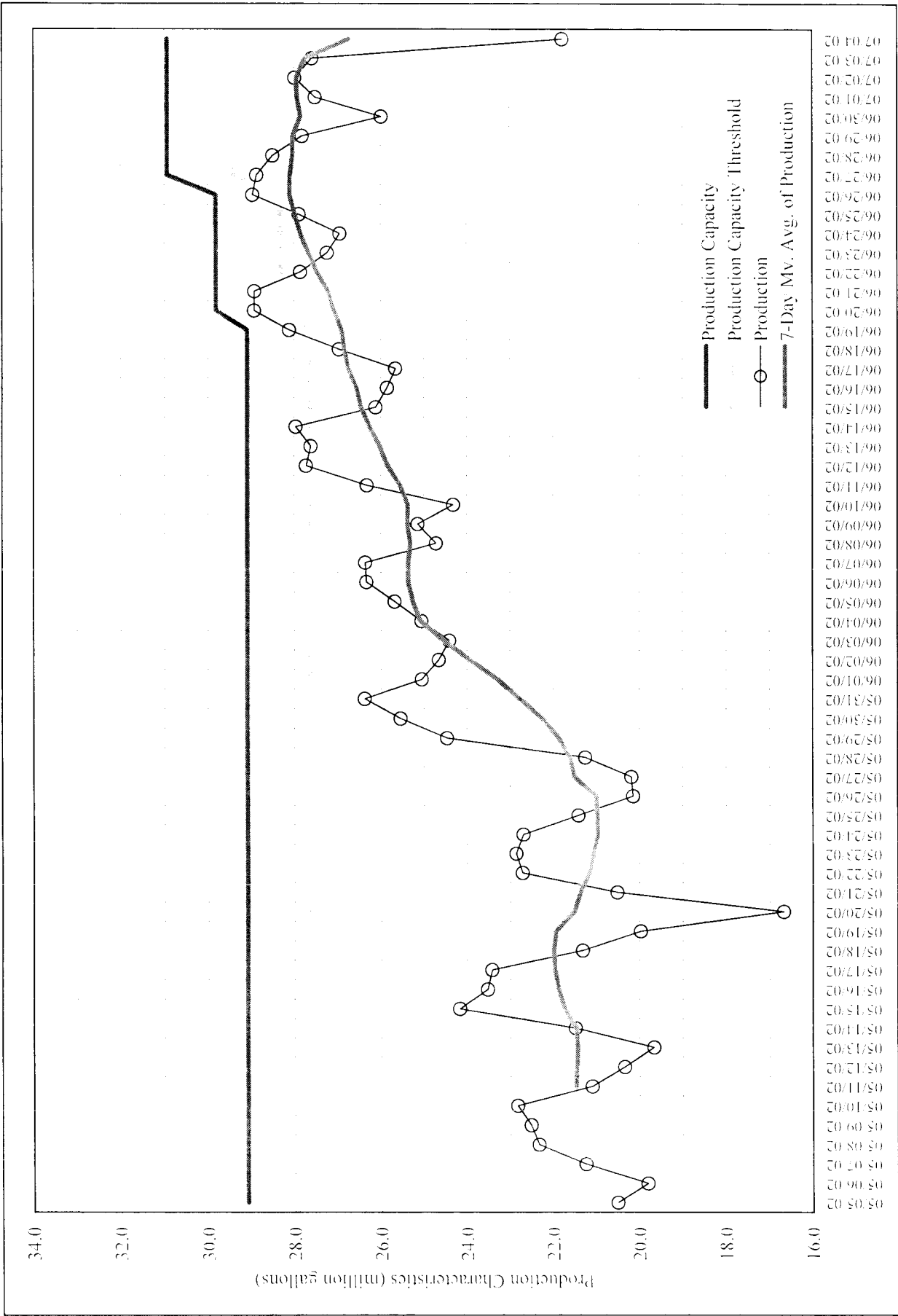
The DRP provides a technical approach to monitor water supply conditions using the City's SCADA system. Real time monitoring of water supply and storage are used to develop "triggers" of water emergency levels. Emergency levels are classified as Mild, Severe and Critical, depending on specific system conditions.

Each emergency level has a series of measures intended to reduce water use anywhere from ten (10) to thirty (30) percent during the duration of the emergency conditions. Measures may include the introduction of water pricing mechanisms as directed by the City Council.

While the options listed in the DRP are based on lessons learned here and from other water utilities during past droughts, it is important to understand that every drought is different and that the City Manager, in consultation with the Utilities Director, will adjust and refine measures based on actual drought conditions. This plan is intended to help the City of Las Cruces be better prepared when a drought or water emergency occurs.

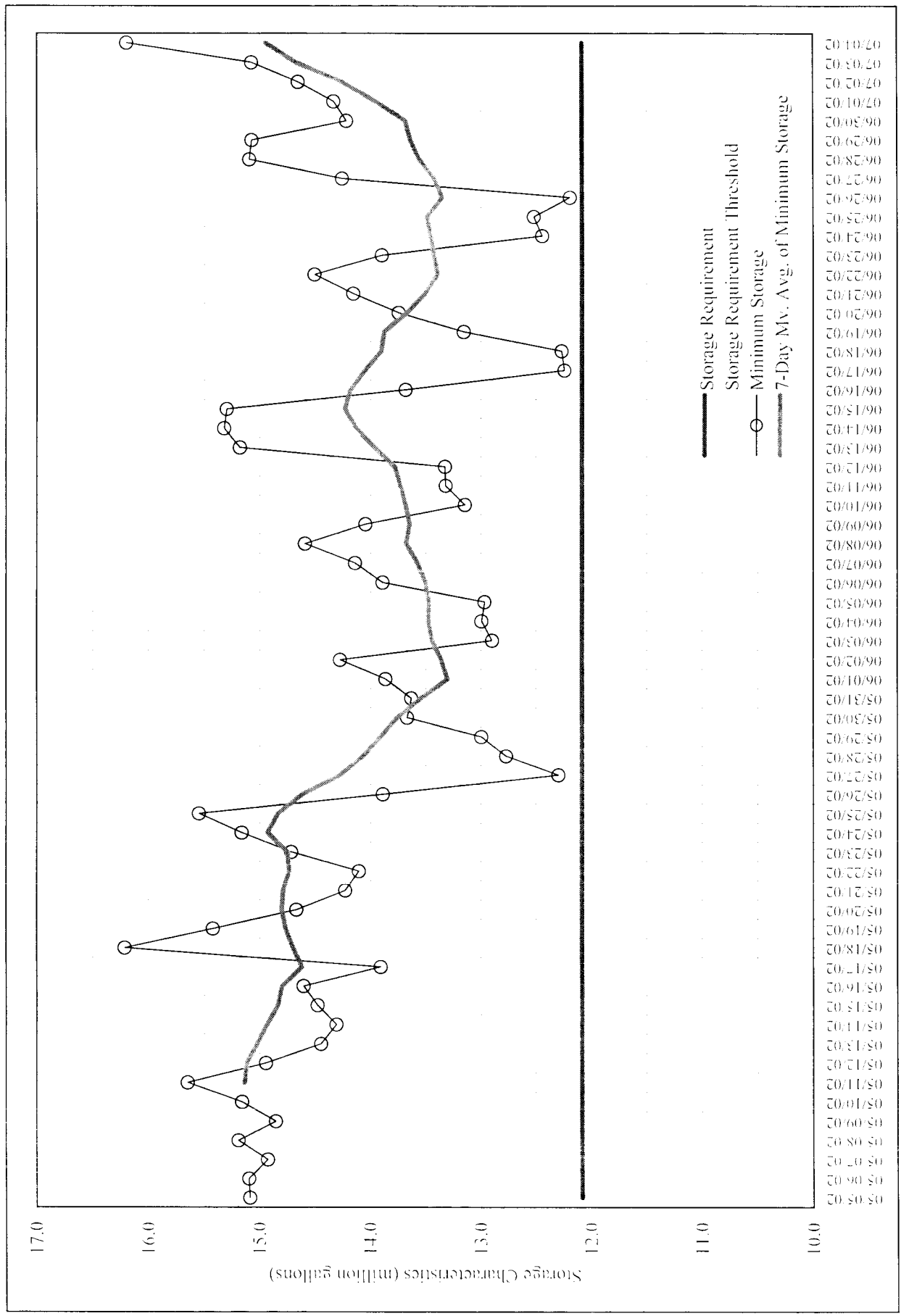
# Exhibit A





**CITYWIDE DAILY PRODUCTION**  
 (does not include the West Mesa system)

# Exhibit B



**CITYWIDE DAILY MINIMUM TANK STORAGE**  
 (does not include the West Mesa system)

(e) *Hearing officer.* Upon timely receipt of a request for hearing, the DWR shall request the appointment of a hearing officer by the city manager. The hearing officer shall not be a city employee and shall have knowledge of the technical requirements. Any reasonable fees and expenses of the hearing officer shall be paid by the city. The user shall reimburse the city for these fees and expenses and for any other reasonable costs of the hearing if the user does not prevail. The hearing officer shall have the discretion to prorate the fees, charges, and costs of the hearing if a compromise decision is reached.

(f) *Continuation of suspension, revocation, or termination.* The suspension, revocation, or termination shall continue in effect from the effective date given in the notice of the suspension, revocation, or termination until completion of the hearing, provided that all such hearings shall begin within 30 days of the day that the DWR received the request for hearing. In the event that hearing is not begun within the 30 day period, the suspension, revocation, or termination shall be delayed until the hearing officer issues a final determination. The hearing officer's final determination shall be the final administrative decision and shall exhaust all administrative remedies of the parties.

(g) *Appeal to district court.* Any party aggrieved by a final decision of the hearing officer may appeal to the state district court within 30 days after receipt of final administrative decision. (Ord. No. 1793, § I, 4-17-00)

**Sec. 28-294. Industrial user noncompliance—Civil action.**

(a) *Injunctive relief.* The city attorney may, in the name of the city, file in state district court or such other courts as may have jurisdiction, a suit seeking the issuance of an injunction, damages, or other appropriate relief to enforce the provisions of this article or applicable law or regulation.

(b) *Assessment of damages.* When a discharge of waste causes an obstruction, damage, or any other impairment to the POTW or any other expense to the city, the city shall assess the expenses incurred. The DWR shall file a claim with the user or any other person causing or

allowing said damages to occur seeking reimbursement for any expenses incurred by the city. If the claim is ignored or denied, the DWR shall notify the city attorney to take such measures as shall be appropriate to recover any expense or other damage suffered by the city.

(Ord. No. 1793, § I, 4-17-00)

**Sec. 28-295. Industrial user noncompliance—Additional remedies.**

In addition to other remedies for enforcement provided herein, the DWR may petition NMED or EPA to exercise such methods or remedies as shall be available to such government entities to seek criminal or civil penalties, injunctive relief, or such other remedies as may be provided by applicable federal or state laws to insure compliance by users of applicable pretreatment standards, to prevent the introduction of toxic pollutants or other regulated pollutants into the POTW, or to prevent such other water and/or ground water pollution as may be regulated by state or federal law.

(Ord. No. 1793, § I, 4-17-00)

**Secs. 28-296—28-300. Reserved.**

**ARTICLE VII. WATER CONSERVATION**

**Sec. 28-301. Title; purpose.**

This article shall be known as the Water Conservation Ordinance. This article shall both require and encourage all users of water within the city limits to reduce water consumption and waste. (Code 1988, § 29-361)

**Sec. 28-302. Applicability.**

(a) The restrictions contained in this article shall apply to all users of city-provided water and to all users of water provided by water utility companies franchised by the city; however, the water use restrictions contained in subsection 28-304(b)(1) shall apply to all water users within the city limits.

(b) The outdoor vegetation watering restrictions in section 28-303 shall not apply to users of irrigation water provided by Elephant Butte Irri-

gation District, or to users of water provided by mutual domestic water companies or from domestic wells.

(Code 1988, § 29-362)

**Sec. 28-303. Outdoor vegetation watering restrictions.**

(a) All outdoor vegetation on residential and commercial properties located (i) on the even numbered side of the street shall be watered only on Tuesdays, Thursdays and Saturdays, and (ii) on the odd numbered side of the street shall be watered only on Wednesdays, Fridays and Sundays. For corner buildings or properties having both odd and even numbers, the number shown on the city's or the franchised water companies' utility records shall control.

(b) From April 1 to September 30, all outdoor watering of vegetation is prohibited between the hours of 10:00 a.m. and 6:00 p.m.

(c) A water utility company franchised by the city may apply yearly to the city's utilities division for a waiver from the outdoor vegetation watering restrictions in this section in accordance with the following:

- (1) The waiver will be granted by the utilities division if it determines that compliance with these restrictions will negatively impact the company's water system operations. The granting and the renewal of any waiver will be based on the company's consumption patterns being comparable to the city's residential water use.
- (2) Each waiver request must be accompanied by monthly water use records for the past year. The utilities division may require that the company provide additional information to justify the waiver request.
- (3) If the utilities division denies the waiver, the water company may file a written appeal with the city manager within ten days of the denial. The city manager will issue a final written decision within 20 days of receipt.

- (4) The waiver may be revoked by the city in a declared water emergency.  
(Code 1988, § 29-363)

**Sec. 28-304. Miscellaneous water use restrictions.**

(a) The washing of vehicles and other types of mobile equipment shall be done only with a handheld bucket or a handheld hose equipped with a functioning shutoff nozzle for quick rinses. This restriction does not apply to the washing of vehicles or mobile equipment at a commercial carwash or commercial service station. When used in this subsection, the term "bucket" means a container holding five gallons of water or less.

(b) The following uses of water are defined as wasting water and are prohibited:

- (1) Allowing water to flow onto adjacent property or onto any street, alley or other public right-of-way.
- (2) Watering outdoor vegetation excessively so that water ponds on site.
- (3) Failing to repair a water leak within five working days of the discovery of the leak.
- (4) Washing sidewalks, driveways, parking areas, tennis courts, patios and other impervious surfaces with a hose, except in emergencies to remove spills of hazardous materials or to eliminate dangerous conditions which threaten the public health, safety or welfare. When used in this subsection, the term "impervious surface" means any surface covered with nonporous material.

(Code 1988, § 29-364)

**Sec. 28-305. Penalty, injunctive relief authorized.**

(a) Any person who is convicted of a violation of any section of this article shall be guilty of a petty misdemeanor and shall be punished in accordance with section 1-10.

(b) With respect to violations that are continuous in time, each day the violation continues is a separate offense.

(c) Violations that are continuous in time may be abated by injunctive or other equitable relief. The imposition of a criminal penalty does not prevent equitable relief.

(Code 1988, § 29-365)

**Sec. 28-306. Exceptions to enforcement.**

The following shall constitute exceptions from compliance with this article concerning outdoor vegetation watering restrictions and miscellaneous water use restrictions:

- (1) The water flow is a result of natural events such as rain or snow, unless the user is watering at the same time.
- (2) The water flow is a result of temporary malfunctions of or vandalism to the municipal water supply system.
- (3) The water flow is a result of water used for firefighting purposes, including the inspection and pressure testing of fire hydrants, or the use of water for firefighting training activities.
- (4) The use of water is required for the control of dust or the compaction of soil as may be required by municipal codes.
- (5) The water is used to wash down areas where flammable or otherwise hazardous material has spilled, creating a dangerous condition.
- (6) The water is used to prevent or abate public health, safety or accident hazards when alternate methods are not available.
- (7) The water is used for routine inspection or maintenance of the municipal water supply system.
- (8) The water is used to facilitate construction within public a right-of-way in accordance with city requirements and good construction practices.
- (9) The use of the water is permitted under a variance granted by the city.
- (10) The water is used for street sweeping, sewer maintenance or other established utility practices.

(11) Watering contrary to the odd/even or time of day requirements is permitted for one day only where application of chemicals requires immediate watering to preserve an existing lawn.

(12) Watering contrary to the odd/even or time of day requirements is permitted for up to two weeks for newly planted landscaping vegetation.

(Code 1988, § 29-366)

**Sec. 28-307. Water emergency; restriction of water use.**

(a) The city council may declare a water emergency during a severe drought or during any condition which significantly reduces the city's ability to supply water in order to protect the public health, safety or welfare or to preserve the water supply.

(b) During such a water emergency, the city manager may implement water use restrictions approved by the city council.

(Code 1988, § 29-367)

**Secs. 28-308—28-350. Reserved.**

**ARTICLE VIII. ELECTRIC UTILITY\***

**Sec. 28-351. Authority.**

The city council, pursuant to NMSA 1978, § 3-24-1 and article 10, section 6 of the state constitution, enacts this article relating to the establishment of an electric utility as authorized by such sections.

(Code 1988, § 29-351; Ord. No. 1793, § II, 4-17-00)

**Sec. 28-352. Purpose.**

The purpose of this article is to provide for the efficient delivery of reliable electric power service to electricity consumers in the city at the lowest cost.

(Code 1988, § 29-352; Ord. No. 1793, § II, 4-17-00)

*\*Editor's note*—Ord. No. 1793, § II, adopted April 17, 2000, renumbered former article VI, sections 28-266—28-270 as new article VIII, sections 28-351—28-355.

*State law reference*—Electric utility, NMSA 1978, § 3-24-1 et seq.

Drought and Water Emergency Response Plan  
Public Hearing  
May 29, 2003

Attendees:

Leroy Lozier  
Tamie Smith  
Mayor William Mattiace  
Councilor Steve Trowbridge  
Councilor Dolores Archuleta  
Jorge Garcia, Utilities Director  
Gilbert Morales, Water Administrator  
Pat Dominguez, Administrative Services Manager  
Marcy Driggers, CLC Attorney  
Diane Gamboa, Executive Secretary  
Maricruz Vigil, Word Processing Specialist  
Ken Luchini

The hearing was convened by Dr. Jorge Garcia. He introduced city staff and reviewed the public hearing process. He will be giving a presentation and then take questions or comments after.

**Dr. Jorge Garcia:** One of the basic questions that we have had to answer recently is why do we need this type of document. The City of Las Cruces is very different from the City of El Paso because we are not dependent on surface water supply. However, we do need to consider that groundwater supply is in charge by surface water supply. Surface water can and will eventually trickle down to groundwater. Groundwater is not immune to droughts. We know there are droughts in the Lower Rio Grande Basin. Even though the impact on groundwater is not immediate, we may see an impact especially if there is a long-term surface water drought. The impact on groundwater can come from reduced recharge unto the aquifer in the Mesilla Bolson or it can come from pumping by others. For example, if there are short surface supplies and more people use groundwater, then it is very likely that all the wells could be impaired by the use of others and therefore we could face a problem. There could be a physical impact on the system which would result in reducing water productions and increased energy use. This is the logical consequence of dropping water levels.

The picture on the slide shows a typical surface water aquifer where we have the wells drawing from some river aquifer, which is the situation in the Mesilla Bolson. So, this is the typical scenario that you might have under the present conditions, but if we have some drops in groundwater levels, what you might see is that some wells could be dried up or have increased pumping levels. The science is there and the understanding of the groundwater and surface water interactions are there to be able to determine if there is serious impact to surface water. Those impacts could easily trickle down to groundwater. So there is a need to have some plan or to react to this situation and this is what the attempt of this document is.

This slide shows two curves that in a system like ours, where there is an equilibrium between a system and a pump, you have dropping water levels. What happens is that you would find a new equilibrium point where you are having higher pumping water levels. In other words, you have to draw the water from deeper in the aquifer and that results in reduced flow and increased energy. There could be an impairment to the system even with a small impact by reduced production on different wells. This is the physical impact that could result from dropping groundwater levels.

Some of the discussion items we will be discussing today are some of the justification for targeting outside water use in this plan and this comes from an analysis of the water levels and water usage of the different types of systems. The proposed plan has some data requirements, which we will go over some definitions. We will go over the different emergency levels and then the implementation authority and then we will go into questions. Feel free to stop me if you have questions that cannot wait until the end, but at the very end we make sure that we take all your questions.

The next slide, which is slide 7 in the presentation, shows the water demand by use of calendar year 2002 to illustrate the different types of customers in the high variability throughout the year. Mainly we have the residential customers, some of the multi-units, and some of the commercial customers that peak during the summer. If you were to go into a draft emergency, that is one way to achieve results, it would be to target or try to reduce outside watering in order to have enough water for indoor use. In this graph, it shows that we are a summer peaking utility. In other words, a lot of the water used in the summer is because of the outside usage and not necessarily indoor water usage. This is an important understanding.

The other reason to look at outside water use and mainly some of the residential and other commercial customers, is that you have a distribution where the great percentage of the usage is by residential, which is the four inch curve. To a lesser extent is some of the small commercial and industrial usage. This is in turn for a total volume of usage.

54% of the usage is residential. Parks is 4.79% and some other usage such as industrial is 2.89%. Again, from the volume point of view, residential usage is the largest use within the water utility.

The next graph, figure 10, shows the peaking affect of the different uses throughout the year. This is not the daily peak, but is the peaking usage throughout the year showing that the outside users tend to have a higher peak to average ratio, such as parks and the golf course, and so on. This is throughout the year, the difference between the average and the high peak of the summer usage.

The next curve, on page 11, illustrates a similar thing, where we show the demand of distribution throughout the year for the different customer classes. Five percent of the usage is done in the summer versus the other months. In all of these graphs, they basically point out to the fact that if we are in a drought emergency, we need to target outside water use first. Inside water use can be affected too, but from the volume standpoint outside water use is what we need to target first.



We defined three drought and water emergency levels called I, II, and III. They are also named mild, severe, and critical. One of the things we do with our system is monitor our storage system capacity through a supervisory control system, which is a computer system. We have a state-of-the-art computer system that tells us what is being pumped out of each well, what are the tank levels, which pumps are running, which pumps are not running, etc. We have a very sophisticated computer system that assists us in running the system.

One thing that we thought about in developing this plan is using this state-of-the-art technology we have as a tool to define the emergency levels in this plan. What we decided is to use data generated by this SCADA system to trigger each of the emergency levels. We used two parameters, which one is water production and the other is water storage. Water production means the rate at which you're drawing water from the aquifer and water storage is the amount of water stored in the different reservoirs throughout town.

Some of the definitions that we have, on slide 14, are the maximum system-wide pumping capacity, which means how much we pump at 100% capacity. In other words, how many million gallons a day do we pump at a 100% capacity? The other is minimum system-wide storage requirement. What is the minimum storage that is needed? This needs to include different factors. One is the operational storage, in other words, there is a certain amount of water that we need to keep in storage to satisfy at least a portion of our peak day demand which is 25%. This is called operational storage. Fire flow storage is assuming about 6000gpm for four hours. We would store this so that in case there is fire flow we are impaired in terms of wells going down or wells reducing the capacity. We would have some type of storage. The emergency storage is about 20% of average day demand. This is how we define the minimum storage. We will need to have a minimum level of storage because if we don't that will trigger an emergency.

We have other definitions in the book which are operational storage and this is the amount of water that you need to satisfy your peak day because during the day you have fluctuations between the hours of the day and those fluctuations come from operational storage. We use accounts known as seven day average, which is a running average of the seven previous days of both storage and production capacity. This gives us the parameter to be monitoring through the system. The monitoring or calculation for the seven day average will be done on a daily basis. . . updated on a daily basis. A water emergency is being defined as system failure that reduces total system-wide pumping and/or storage capacity. We could have drought triggering this emergency level or we could have a true water emergency triggering this level. Contamination of a well could be a well emergency and things like that.

Next figure shows condition. The red bars show a 100% pumping capacity over a four-day period. There is a 10% safety factor, which is the blue line at 90% of pumping capacity and that defines a zone we don't want to cross. The green line on slide 16 is the seven day moving average. In this particular example there is no emergency on a capacity basis.

**Councilor Trowbridge:** I just wanted to ask Dr. Garcia, is that purely hypothetical? How does this relate? Is this just an example?

**Dr. Jorge Garcia:** This is an example. It is not the real data. I have access to the real data on future slides.

**Councilor Trowbridge:** Thank you.

**Dr. Jorge Garcia:** Slide 17 is the next slide. Slide 17 shows the condition of storage. If we keep the storage that is shown on the red bars, which is the minimum storage, then we are okay. We have a safety factor of about 5% above minimum and we want to stay on the seven day average of minimum storage above this blue line. The green line stays above the blue line and that's the objective. In this case, there would be no emergency condition.

So what happens when we have a Level I Emergency and what triggers a Level I Emergency? One of two things can trigger it. Depending on what the conditions of the system are at the time, we will decide which condition is triggering the Level I emergency. But basically, the 7-day moving average is within the 10% of maximum pumping capacity. That's one condition or the other alternate condition could be that the moving average of minimum storage is within 5% of your minimum requirement. In other words, you enter this zone of a safety factor and you need to declare a Level I emergency.

Slide 19 shows the capacity emergency of Level I. If the green line is right above the blue line, we have a problem and we need to do something. Or figure 4, which is on slide 20, shows the green line dropping within this margin of 5% of storage. One or both of the conditions would trigger a Level I emergency. The nice thing about this system is that this is not an arbitrary decision based on some judgment. It is based on real data from day to day operations.

Slide 21 shows a Level II emergency. Level II emergency is defined as the 7-day moving average stays now within this 10% margin for seven consecutive days. In other words, if you don't recuperate, there is no reduction in usage. With the Level I emergency, you still have a problem as shown in slide 22. Now the green line has stayed for 7 consecutive days above the blue line, then we need to declare a Level II emergency. I'm going to go over the measures in each emergency level a little later on.

Level III emergency is when the 7-day moving average equals or exceeds the maximum pumping capacity. In other words, since your average is 7 days, it could be that you lose a couple of wells or the groundwater level drops and two more wells on the system go dry or they don't pump up much water and then your total production goes down. That condition is shown on slide 24, where the green line all of a sudden finds itself at or near the top of this slide. In fact, it could be above for a few days until your average brings you back down. If this condition persists for seven days, then we have a serious problem and that's a Level III emergency.

The next slide shows some of the data. I'm going to try to log in to the real data. This is what Councilor Trowbridge was asking about. In this slide you see the data for last summer, Councilor Trowbridge. Where this is the storage data, this is real data and there are daily fluctuations. When you do a 7-day average it varies. There is a weekly trend. There is water usage on Mondays, obviously. There might be more water usage on Fridays, Saturdays, and Sundays. Towards Monday, there is no usage and then it picks up again towards the middle of

the week. So there are fluctuations, but we are using a moving average which is the red line. There is a dotted line which is the minimum storage threshold, the 5% safety, and then this is the minimum storage. Again, this is real data and of course everyday this scale at the bottom moves one day over. If you recalculate this everyday, then you have what is called real-time data.

The next slide of this portion is in your presentation, which is at the very end of the plan. There are a couple of exhibits and those are the graphs I am showing right now. This shows the production last year. We repaired some wells and put a new one in the system. So towards the end of June that added capacity. This is the dashed line of the 10% safety and this is the moving average. If you look at basing ourselves from these criteria, last summer we got fairly close to going to Phase I. However, we knew that because we had just added this new well on the system. The red line is what you don't need to monitor on a daily basis against this dash line because that will trigger emergencies.

Slide 26 on the presentation shows the implementation authority. For a Level 1 emergency or a mild emergency, my office or the Utilities Director will advise City Manager. He will declare a Level I emergency and council will get immediately informed. The measure will be implemented immediately. I will go over the measures shortly.

Level II and Level III emergencies are the same in that the Utilities Director advises the City Manager. The manager declares the Level II emergency. We have certain mandatory measures that will be implemented immediately and then the City Council will have to meet and address discretionary measures. I will go over the discretionary measures that only the City Council in an emergency meeting of some kind can decide whether to implement or not.

Level III emergency implementation authority is the same as Level II, where the Manager, upon my advice, will declare the Level II emergency. However, only those mandatory measures will be implemented immediately. Council will have to address discretionary measures that they have before them.

Some of the Level I measures, in many of plans with review we have seen has had every different level with some kind of a goal whether theoretical or attainable. In this case, Level I is traditionally a 10% reduction water use. We want to reduce our water use from the time we declare an emergency and reduce that value by 10% in terms of our water production. Some of the measures include very heavy--this is just a summary of what is in the report, the report has quite a bit more detail, a lot of public information. One addition that the council asked when we were at the work session was that we would have an internal goal within the city's government to reduce usage by 10%. We would have quite an increase ordinance enforcement that secures the water conservation ordinance. There are quite a few voluntary reductions and a lot of public education in terms of reductions. We would then implement certain guard monitoring procedures that we need to do to be able to brief the council and the public as to what is coming. And usually what comes after a Level I is a Level II emergency.

In the Level II, there is a goal which is a 20% reduction and some of the mandatory measures called for continuing the Level I measures. We would then reduce our internal use, which would be parks and facilities, by 20%. We would establish an emergency public information hotline.

This needs to be done in Level II to be able to advise the public as to what the situation is. Here we assign field services personnel to monitor outdoor use, issue warnings, and do codes enforcement. In the Level II, this resolution authorizes some of utilities' personnel to issue warnings on violations of the ordinance. They would not issue citations because only codes can do that but it authorizes us to have meter readers or any field services people that we have to police the outside water use. We have implementation of several outdoor water use measures that are defined in your plan. We can go over those in the public discussion.

On the Level II, we are authorized under this resolution in the ordinance to conduct water use audits if we see that certain types of customers or certain customers are using a lot of water. We would be performing those audits and contacting those customers individually to show them that they are not abiding by the emergency conditions. This will require a lot of personnel from utilities, but I think it is a way of really addressing the customers that are a problem. Also, Level II measures will restrict vehicle washing. Some of the discretionary measures—and there's a couple—that the council can consider are: one is to introduce either fines or drought pricing mechanisms of any kind. Staff is not authorized to do that. Council would have to decide whether in addition to the measures that are mandatory, if they would introduce any fines or punishments or any pricing for those that use above certain amounts. This would be up to the council to decide if they are going to do that and what that would be. Also the council would issue waivers to private franchise water companies and other waivers that get issued for people planting grass or people that want to do vehicle washes for fundraising. I think the council is the only one that is able to authorize to revoke those waivers that have been issued.

The Level III measure includes a goal of 30% reduction. By the way, in Level II, I wanted to mention that the 20% is not unreasonable. El Paso has proved that they can achieve similar measures above 24% reduction with Level II measures. For a Level III, the goal is 30% reduction. Of course, some of the mandatory measures—in addition to continuing the measures of Level I and II—we would prohibit all fire hydrant uses except those required for public health and safety. So the fire department would not be practicing. Unfortunately, we would not do any line flushing in case there are complaints of dirty water or things like that. We wouldn't be doing any of those under this prohibition because that would prohibit all the uses again. Unless there's a public health and safety issue, like contamination or a problem with part of system then we would have to flush. Otherwise, there would be no flushing whatsoever. We would intensify outdoor water use measures. The plan also lists a few indoor water measures. In a true emergency, I don't personally believe that a lot of the indoor measures are going to make a big difference quickly. Indoor measures make a difference in a longer period of time, so this is why this plan mainly targets outdoor water measures.

Discretionary measures—the Council can refine or adjust the pricing mechanisms. They can decide to prohibit all outdoor water use. Under Level II, the Manager has the authority to reduce the water use if it is three times a week to once a week or twice a week or whatever. But, total prohibition of outdoor watering would be only the prerogative of the City Council. If there are persistent violators, the Council may consider terminating utility service or at least threaten to terminate utility service in targeting certain violators if the violations are not corrected. Last thing, the Council could also impose temporary moratorium on new taps if we are on a Level III

emergency. Again, this would not be staff's decision but a City Council decision to decide that no more taps are issued until we revert back to a Level II or a Level I.

With that, I will entertain comments from the public or staff or any comments on the actual plan. This is a brief presentation. The plan is much more elaborate terms of the measures.

**Tamie Smith:** I appreciate the fact that some of the Councilors are here. I am concerned that there aren't more people here. I would like to encourage the city—I don't know who sets up these meetings. Who set this up? Who does this anyway?

**Dr. Jorge Garcia:** We set it up through PIO. We usually go set up a meeting through the Public Information Office. The first choice, of course, is requesting the chambers. When the City Chambers is not available, then we ask for an alternate site and this is how we got this one.

**Tamie Smith:** You might want to know that there are no meetings at the Chambers tonight. I checked.

Dr. Garcia: We were told that there was a meeting.

**Tamie Smith:** That's why I'm telling you. I want you to know that. Now, it didn't occur to me . . .

**Mayor Mattiace:** Dr. Garcia—Tamie, I don't want to interrupt you, but we had a retreat. It was to be used for our retreat. We had it scheduled and I think when they did the scheduling at that time, we had the Council retreat that was going to be done at the Council Chambers.

**Tamie Smith:** Okay, but I don't know about the last one. I didn't check, but I would like to see more people show up. I would just like you to know that I did try to get—I called some people to go. There was no bus that comes here for those that don't drive or don't want to drive. A lot of people don't get home from work in time. Other people had supper time that they had to consider. And so, I'm mentioning this because there are other community centers that are closer to where the population of Las Cruces lives. Like the Benavidez Center on McClure, which would be very convenient to me because I live over there, but just something that is more convenient. When something like this happens, you give the image to many people that you really don't want public input. You need to know this because it bothers me and it bothers a lot of other people.

I have a couple of questions. On page—let me see—there is a little inconsistency in the fire flow storage. On this brochure here, the one that has the picture on it, it says the fire flow storage of 8,000 gpm for four hours.

**Pat Dominguez:** What page are you on?

**Tamie Smith:** Well, on this one it's page three, the one that has the nice picture of the water tank on it. But, if you look on page 14—wait a minute.

**Dr. Jorge Garcia:** Tamie, let me answer that. What I presented is—that was the old draft and I apologize. I want to make sure . . .

**Tamie Smith:** Okay, I just wanted to know because one says 6,000 and the other one 8,000.

**Dr. Jorge Garcia:** We modified the technical limits. We have now a 20%—there are two differences. One is the fire flow, but then we added a number on the 20% at the bottom. It is a technical change from the time we did the work session. Sorry, but we have a technical reason we did that.

**Tamie Smith:** I just wanted to let you know that one says 8 and the other says 6 and it could have been a typo.

**Dr. Jorge Garcia:** It is not a typo. We changed those two bullets on the minimum system-wide storage requirement on page 3. The two bullets, the second and third bullets, have changed and I will make sure the record reflects that.

**Tamie Smith:** Okay.

**Dr. Jorge Garcia:** Thank you for bringing that up.

**Tamie Smith:** You mentioned the fire hydrants. It said for public health and safety. Did you say they wouldn't be flushing the hydrants?

**Dr. Jorge Garcia:** Unless there is a public health issue we will not be flushing hydrants. A lot of times there are hydrants flushed or a little of iron and magnesium in the line. It is not a public health issue. Sometimes the fire department practices with the fire hydrants and on an emergency level that would not be allowed. This is what the point is.

**Tamie Smith:** I can see that not being allowed. I am a little bit concerned about flushing when you have to do it because of the pipes. I have had a load of clothes ruined, which were white because I didn't look before I put them in and they had flushed unbeknown to me. So it was all brown water. This is not a health issue, but quite frankly, I would hate to use that water for my coffee or my soup. It really looks terrible. It may not be a health problem, although, I can't imagine drinking dirt in your water is good for you. I think that should be reconsidered. This is just a comment.

The other thing is that I don't see anything listed here that when you say the water will be turned off and there will be certain water use prohibited. For example, there is no mention of the first step being halting something which we don't need. It is nice to have but we don't need and that is immediate halting of all golf course watering. I don't mean just Sonoma. I mean all. The reason I'm bringing this up is because what I'm concerned about is that there is a lot of people in Las Cruces that grow veggies. I don't know if you know that or not. I would hate to see them as residential uses of water for their vegetable garden having their water restricted while the golf courses continue to be watered. If there is some way of adding that to your documentation—unless it is already there somewhere and I missed it—I would like to see it adjusted.

**Dr. Jorge Garcia:** Let me respond to the golf course. As we discussed before, the Level I does not prohibit outdoor water use. Level II has prohibitions or reductions in outdoor water use. That outdoor water use would apply to any customer of ours. One golf course is a customer of ours. This document does not exempt the golf course in a Level II emergency. The other golf courses—and I'll let Marcy answer that—I don't know what authority we have as a municipality to tell the golf courses inside city limits, like the Country Club and Picacho Hills. I don't know if we have any authority to enforce their water use.

Marcy would you like to put something in the record about this? They have their own wells and they are not our clients. It is the same for NMSU golf course. I don't believe we have any authority there.

**Tamie Smith:** When you say they have their own wells, I was told that once by somebody in engineering on campus when they were watering the grass after it rained for three days. I said to him, "Why can't you stop watering?" And he explained that it would mess everything up if they tried to turn off the water. I was told, "Don't worry about it the university has their own wells." I thought about this but it really didn't register and I talked to someone from the state water department. They said that it was a pretty ridiculous answer because whoever has a well and uses the water from the well, that lowers the water table. So when you say the Country Club has their own well, aren't they still lowering the water table?

**Dr. Jorge Garcia:** You're correct. From the hydrologic point of view, they are drawing water from the same place. From the enforcement point of view and the regulatory point of view, I would like for Marcy to answer that. Can we restrict the university golf course, the Country Club, and Picacho Hills?

**Marcy Driggers:** First of all, there are about four golf courses within the city limits area. The only one that we have regulatory authority over is the Sonoma Ranch Golf Course because it is a city water customer. The Las Cruces Country Club is within the city limits but they draw their irrigation water from their own wells, which are regulated not by the City of Las Cruces but by the New Mexico Office of State Engineer. Now, you might secure a political solution in which the State Engineer's office looks at curtailing water use for recreational purposes. But right now, there is no such authorization. The other two golf courses, although close to the city are outside the city limits. The university property is not part of the city limits, although it touches the city limits on University Avenue. They again water from their own wells and do not receive any city water. Just for clarification, the Las Cruces Country Club does get potable city water for within the country club for the drinking fountains and kitchen usage, but not for the outside irrigation. Picacho Hills Country Club is, I believe, a customer of "Carlos Blanco Water Company"—I'm not sure what it's called—but again they provide water with their own wells. I think part of Picacho Hills is water from reclaimed water generated from treated sewage from the Picacho Hills residential area. Thank you.

**Leroy Lozier:** I would agree with Tamie that the timing of this meeting is when everyone is at supper. It is like the City Council meetings during the day when most of all the citizens that are

paying taxes are out working and they are not able to come. I guess it is one of the hazards of a representative government.

I would like to see—since I was here in the 1950's, we had one severe drought. All of the farmers were without surface water and they had to revert to wells. They dug wells all over the valley and most of those wells are being rejuvenated now and many, many more domestic wells for people that have built houses out in the . . . and are drawing water from the aquifer. I would like to see the city adopt a policy that we do live in the desert. The amount of water, no matter what we say with these fancy charts and everything, is limited to the total amount of rainfall that we received in the water shed. The long-range policy, as I understand it, is that we are going to rely on surface water in years to come. It would be a terrible thing to have a water policy within the city that is very wasteful of our water supplies, which you don't have to be a road scholar to know that the amount of water that is available is very limited in this part of the world. And the droughts are cyclical. This drought could go on to become very severe. We have a policy here for this city and we have not informed the citizens of this community, in my opinion, of the seriousness of having to conserve water and having a water conservation program that fits in with the desert community that we live in.

Up on I-25, the new landscaping that is going in there on Lohman and North Main, they are putting in an elaborate irrigation system for non-native plants that will have to be watered. They are taking out mesquite bushes and taking out yuccas and all those native plants that live with the rainfall and putting in plants that require a lot of extra work by people that will make money from this. But I think it's a shame that we have to do that. The city's water policy is very wasteful. Over at the model airplane park, that ground serves very few people and there is 2-or 3-acres of grass. It's flooded at least once a week. When I checked with the city to find about why they were doing it that way instead of a sprinkler system or something, they said it doesn't matter because it's being pumped from the groundwater and we have no control over it. We own the well, but we can't tell them how to water the land over there. And so there is hundreds, and hundreds or acres of grass in this city where there shouldn't be. We shouldn't have grass. We should have desert landscaping that fits in with the area that we live in. We should have a cooperative policy with the county and the university and with the school systems to have an overall policy that will reduce the long-range use of water and only conserve the water rather than wait until a big emergency comes and then say, "Oh, we are out of water and now we have to be more careful." So I think the long-range plans are not adequate for the amount of water we have.

It is nice to think that there is plenty of water. I was told by our former Mayor, Ruben Smith, at a meeting when I told him my concerns about conserving water and necessity of having conservative policies for water in place. He told me, "Mr. Lozier there is no water shortage here in this valley. We will never have any problem with water shortage." But I know, based on past experience, if you pump the aquifer down then the quality of the water goes down. If you rely on surface water, then you will be in the same boat that the people are in Phoenix, Arizona. Where they absolutely can not use the tap water because it comes out of the tap and it stinks. And so, that is what will happen here when the aquifer is pumped down and the dissolved solids become more . . . the ratio becomes higher and then you have to revert to reverse osmosis for



drinkable water. I think instead of going through all these steps, the city should adopt a water conservation program that fits in with the desert community that we live in.

The other thing that I would like to comment on is, I think we should find a place and set a time where a good number of people can come to these meetings. I have had several people call me and I have called several people to come to the meetings. They say they can't come because they have supper or other responsibilities, but if it was done at 7:00 p.m. then they could make it. They just can't come and they are the people that are paying the bills and they should have a logical explanation from the city as to what they are going to do with the limited amount of water that we have. With that I would like to say thank you very much for listening to me.

**Dr. Jorge Garcia:** I just want to add one comment. Mr. Lozier about the landscaping, I don't know if you were at the work session when we addressed this, but the Community Development Department was looking at revamping our landscape ordinance to be more in tangent with the water conservation elements in this plan. It was presented to council and council gave some direction. We will be visiting more pertaining to what you were talking about.

**Leroy Lozier:** In reference to my comments about the landscaping on I-25, you can drive from Albuquerque to El Paso and both sides of the interstate are landscaped by nature and there all kinds of beautiful plants. If you see them now, the yuccas are now in blossom. We have prickly pears and all sorts of plants that do very well without any care from man except from picking up the Wal-Mart bags that are thrown out the window when people drive by. So I think that the reliance on no grass and lots of native plants, I mean mesquites and prickly pears and all the plants that grow naturally without any water or human care. I would hope that we could go towards that goal.

**Tamie Smith:** I'm really concerned about what was said about those plants on the highway. There isn't anything we could do about that right now, is there? By the time the city gets to meeting and drawing up a new landscape plan everything would be planted and in the process of being watered. What should we do?

**Dr. Jorge Garcia:** I'm not directly involved in that project. If the Mayor doesn't bring it up to the manager, I will bring it up to the manager right away. It is in the middle of the construction right now, which is the Highway 70 plans. We will bring it up to the City Manager. I believe Community Development is managing that project, so we will bring the concerns to them right away.

**Tamie Smith:** Is there anything we could do about that big hunk of property—I know it is the county courthouse. It used to be Alameda Junior High School on Picacho and Alameda. They finally planted grass and a few trees. All I could think of is for somebody to put cactus and low watering trees and so forth. It would kill so many birds with one stone. People would be able to see what it looks like. Many people think that Xeriscaping is a pile of dirt and a rock. There are many sufficient numbers of examples around town, but that would be so wonderful to be stuck there at the traffic light and you have to look at it. This would be encouraging people to do this in their yard. Have a billboard read, "We used to use "x" amount of water to water the grass and trees that were here, now we are using this amount." So people can have something interesting

and informative to read while they are there and it might accomplish something. What can we do about that? I notice the County Courthouse and maybe we should try something. Would you pass this on?

**Dr. Jorge Garcia:** We will pass it on.

**Tamie Smith:** The other thing I want to mention is that we need some incentives to reduce plants. I have been collecting stuff on low water use plants for many years. I really did try to interest this city 15 years or so ago. I really didn't get anywhere. I have a lot of information and about how much green grass do you really need. You really do need some green grass for the children to play and the cooling affect, so forth and so on. Once again I would like to see incentives offered to the consumer as they have done in El Paso to reduce the amount of grass to reduce their water. Some kind of a little reward because all we see is that aw are being penalized with increased water rates.

The last thing I want to mention—and Leroy mentioned something about the quality of the water. I have lived here for a long time. The water may be safe to drink but the hardness, at least where I live, has increased drastically. My hair hasn't been shining for years, I can no longer rinse off my car like I used to because there are big white water blobs all over it and if I leave a glass of water overnight there is sludge in the bottom. I know they are not technical and scientific. All I can tell you is that they are real and I won't tell you what my faucet looks like because I am tired of chipping at it with a chisel. We need to think about when we keep growing that maybe there is plenty of water in the Bolson but it depreciates tremendously in quality. I wanted you to know that. Can you fix it?

**Dr. Jorge Garcia:** Let me respond on the water quality. The sludge is really not sludge. It is iron and magnesium mixed together that make the water look like tea. We add some chemicals to prevent that from happening, but unfortunately you let it sit and that's what happens. It comes from Mother Nature.

**Tamie Smith:** But it didn't use to, is the point I'm trying to make.

**Dr. Jorge Garcia:** It is possible. Depending on where we drill and the combination of wells we have today versus many years ago, it is possible we are drawing water that is more mineralized. It is hard water and it is high iron and magnesium.

Any other comments?

Mayor would you like to say something?

**Mayor Mattiace:** I just like to put a positive at the end of the record. I just want to say thank you to your staff. As I told the television, I always appreciate when NMSU graduates can come out and protect the city in emergency situations by having these plans and having the emergency storage. The last thing I want to see is that there is not enough pressure in the lines if Tamie Smith's house catches on fire. I think we are taking all those things into consideration. I think that is important for the public to understand that it is a total picture of the utilities department

not just whether you get a salt glass of water. There is a lot that goes into it from hydrology, to quality, to the safety factor, checking the chemical analysis of the water, etc. Ms. Driggers makes sure that we stay within the legal adjudication of the use of the water and whose water we can enforce regulation and whose water we can't. Being here tonight was quite a lesson in all the facts that one needs to know about the operation of a water system. I appreciate you doing this. I think I will end it with my theory. If you don't have the public out in numbers I think they trust you. So I'm going to go with that theory. Thank you.

**Dr. Jorge Garcia:** This concludes the public hearing on the drought plan. For members of the public, this will be in the council agenda at the subsequent meeting. Not next Monday, but the 16<sup>th</sup> of June. Thank you. Thank you for coming.



City of Los Angeles

**COUNCIL ACTION FORM**

For the Meeting of July 7, 2003  
(Adoption Date)

**TITLE:        A RESOLUTION APPROVING A DROUGHT AND WATER EMERGENCY RESPONSE PLAN.**

**BACKGROUND:**

In 1996, the City enacted the Water Conservation Ordinance codified as LCMC §§ 28-301 through 28-307. The Water Conservation Ordinance required and encouraged all users of water within the City limits to reduce water consumption and waste. It established the now familiar odd-even address and time of day watering restrictions as well as other water use restrictions such as prohibiting water flowing onto City streets.

Although the Water Conservation Ordinance has been effective in reducing water consumption and waste in combination with the City's inclining block water rates, Utility Department staff believes that the City needs to have a detailed response plan in place to address future drought or a water emergency to reduce water use beyond the reductions being accomplished through the Water Conservation Ordinance.

(Continue on additional sheets as required)

Name of Drafter: Marcia B. Driggers	Department: Legal/City Attorney	Phone: 541-2128
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Department	Signature	Phone	Department	Signature	Phone
Originating Department	<i>[Signature]</i>		Budget	<i>[Signature]</i>	
Legal	<i>[Signature]</i>		City Manager	<i>[Signature]</i>	

<b>Account Number:</b>	<b>Amount of Expenditure:</b>	<b>Budgeted Amount:</b>
N/A	No Expenditure	No Budget Impact

City staff has reviewed numerous drought and water emergency contingency plans from other cities within New Mexico and other Western states to see how other water utilities have attempted to reduce peak demand and to extend their water supplies. Staff has compiled a proposed Drought and Water Emergency Response Plan ("Plan"), which combines different response options from a number of different municipalities and water utilities.

Further, there has been public input and a public hearing on May 29, 2003 to review the Plan.

**SUPPORT INFORMATION:**

- 1) Resolution;
- 2) City of Las Cruces Drought and Water Emergency Response Plan;
- 3) LCMC, §§ 28-301 through 28-307;
- 4) Minutes from Drought and Water Emergency Response Plan Public Hearing held on May 29, 2003.

**COUNCIL OPTIONS:**

- 1) Approve the Resolution and Plan as drafted.
- 2) Modify the Plan as the Council deems appropriate.
- 3) Not approve the Resolution and Plan and provide direction to staff as to addressing water shortages in the event of a water drought or water emergency.