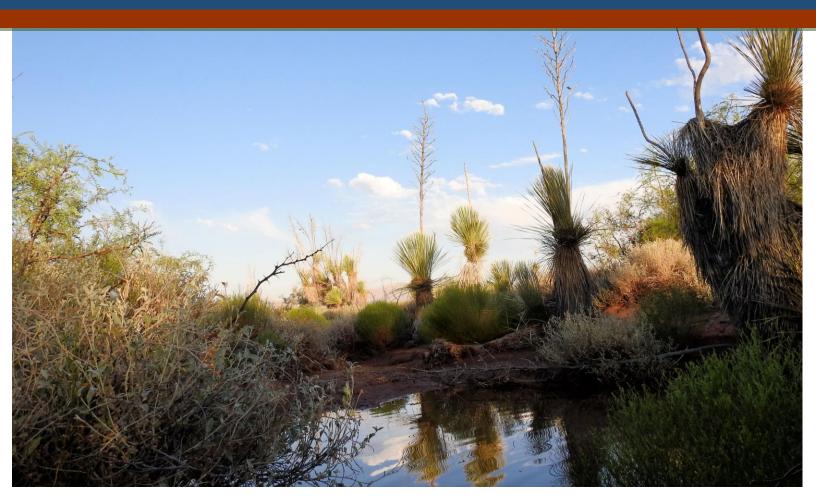


Drought Contingency Plan

2024



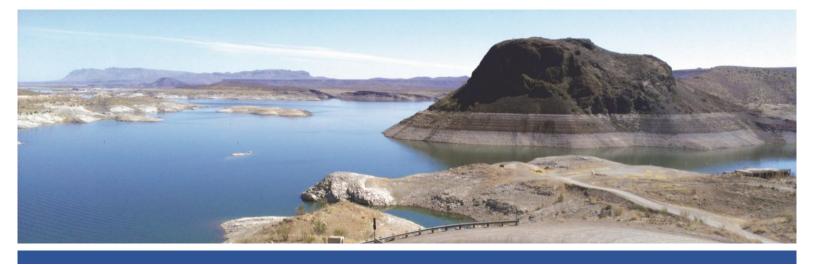


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Section 1: Introduction, Purpose, and Declaration of Policy

The City of El Paso is located in far West Texas in the heart of the Chihuahuan Desert and borders New Mexico and Mexico. This arid climate averages 8 to 10 inches of annual rainfall.

El Paso has relied on the Rio Grande River for almost half of its potable water supply with groundwater from two large aquifers – the Hueco Bolson and the Mesilla Bolson – serving as the other major source of water. Within the nearly 250 square mile service area, EPWater manages 2,767 miles of water lines, 76 reservoirs, 60 pump stations, 53 booster stations, and 153 wells. EPWater also has 4 water and 4 wastewater treatment plants that serve the city. EPWater continues to expand infrastructure and upgrade storage and delivery capacity as the community grows.

While drought is a naturally occurring phenomenon at the local level, El Paso is particularly affected by drought that occurs hundreds of miles away in the mountains of Southern Colorado and Northern New Mexico, a region that serves as the headwaters for the Rio Grande. Drought cycles are documented over the last century, with stretches of years with low precipitation and snowpack, which directly impacts Rio Grande flows and related surface water available for use.

Building on earlier conservation efforts, the Water Conservation Ordinance (passed in 1991) established designated watering days year-round and specified water conservation requirements to include seasonal time-of-day restrictions. This puts El Paso in a constant state of drought awareness and has helped El Pasoans reduce water consumption over the last several decades. Since 1980, per capita water consumption has dropped by 35%, and it continues on a downward trend.

El Paso Water has strategically diversified its water supply portfolio to effectively mitigate drought conditions. The utility utilizes fresh groundwater, desalinated brackish groundwater, surface water, and water reuse (reclamation and indirect potable reuse) to meet community needs. Moving forward, EPWater will incorporate direct potable reuse through our Advanced Water Purification Facility, and water importation from the Dell Valley and Hudspeth County.

Purpose

The purpose of this Drought Contingency Plan is to:

- Provide a framework to identify and manage a drought or water emergency;
- Conserve the available water supply; protect the integrity of water supply facilities (with particular regard for domestic water use, sanitation, and fire protection);
- Protect and preserve public health, welfare, and safety; and
- Minimize the adverse impacts of water supply shortage or other water supply emergency conditions.

With this Plan, El Paso Water sets regulations and restrictions on the delivery and consumption of water under certain drought or emergency conditions.

Water uses regulated or prohibited under this Drought Contingency Plan (the "Plan") are considered to be non-essential, and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water that may subject offender(s) to enforcement action as defined in Section 12 of this Plan.

Declaration of Policy

This Plan was developed to follow Texas Commission of Environmental Quality (TCEQ) guidelines and minimum requirements for the Drought Contingency Plan for municipal water suppliers and wholesale water suppliers contained in the Texas Administrative Code (TAC) Title 30, Part 1, Chapter 288, Subchapter B, Rules 288.20 and 288.22, respectively. Refer to Appendix B for the 30 TAC, Chapter 288, Subchapter B, Rules 288.20 and 288.22. This Plan follows the recommended structure provided in TCEQ Form 20191 (Rev. 12/2018).

This Plan also follows guidelines of the U.S. Bureau of Reclamation Water SMART Drought Response Program Framework and has been designed to include the six elements of a Drought Contingency Plan: (1) drought monitoring (Section 7), (2) vulnerability assessment (Section 13, with Mitigation), (3) mitigation actions (Section 13), (4) response actions (Section 9), (5) operational and administrative framework (with Monitoring, Section 7), and (6) plan update process (Section 11). The utility is eligible for certain drought funding opportunities by following the guidelines set by the Bureau of Reclamation.



Section 2: Public Involvement

EPWater will solicit public input for preparation of the Plan through:

- Written public notice that a drought contingency plan is being prepared (or revised);
- Notification to all wholesale customers of the proposed draft plan;
- Publication of the Draft Plan available for download on the EPWater website;
- Public survey, available on the EPWater website; and
- Public meeting(s) for the purpose of soliciting public comment.

Comments will all be reviewed and taken into consideration. Public input prior to finalizing the Plan is welcomed and will help ensure the Drought Contingency Plan represents the interests of citizens of El Paso and its wholesale customers.

Section 3: Public and Wholesale Water Customer Education

EPWater will periodically provide the public with information about the Plan in Spanish and in English, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information may be provided by some combination of communication methods, to include:

- Public service announcements on radio, television, and news channels
- Newspaper announcements
- Press releases
- Social media
- Public education forum(s)
- Mailed water bill inserts
- E-mail directly to customers and stakeholders
- Updates at regular Public Service Board meetings
- EPWater's conservation department water waste online form or hotline
- EPWater website

Effective communication will be maintained with all wholesale water customers or entities through meetings, mailings, and e-mailings.

Section 4: Coordination with Water Planning Group

The service area of EPWater is located within the Texas Water Development Board's Far West Texas Water Planning Group (Region E). EPWater will solicit input on the Plan from Region E and provide a copy of this Plan to Region E when it is finalized in order to coordinate with Region E to ensure consistency with the appropriate approved regional water plan. Refer to Appendix D as documentation of coordination with Region E.

Section 5: Authorization

The President/CEO of EPWater, or designee, is authorized by the Public Service Board to implement (initiate or terminate) any *voluntary* measures described in this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The Public Service Board is the governing body that may vote to implement any *mandatory* drought restrictions on customers. This action by the Public Service Board is separate from a Declaration of Local Disaster by the Mayor and City Council in accordance with Chapter 418 of the Texas Government Code or any other action by the City Council deemed necessary under the law for public health and safety purposes.

The President/CEO will be responsible for notifying the Executive Director of the TCEQ within five (5) days following the implementation of any mandatory water use restrictions. In the event that the drought, water

shortage, or water emergency is expected to continue for more than five (5) days, the President/CEO shall present a report to the Public Service Board, setting out the nature and expected severity of the drought, water shortage, or water emergency.

Section 6: Application

The provisions of this Plan shall apply to all persons or entities using water supplied by El Paso Water, including all retail and wholesale customers.

Section 7: Monitoring

El Paso is a naturally hot and dry city. In the summer months, water consumption increases to maintain landscaping, run air conditioners, and provide hydration. During long periods of acute heat and aridity, water demand monitoring is especially important.

Climate projections and preliminary outlook for annual surface water allocations help EPWater's Water Resources Manager determine if a "Drought Resolution" ("Resolution") is necessary. A Resolution may be passed by the Public Service Board as a call to action to prepare for possible drought conditions. This Resolution helps EPWater expedite the procurement of goods, services of consultants, and construction services for drought relief projects in accordance with exemptions to the bidding requirements under Texas law. Projects include but are not limited to drilling and equipping new wells, reconditioning existing wells and optimizing reclaimed and surface water production.

EPWater's Central Control Operator monitors system demand and provides a daily report. The Water Production Manager monitors maximum system capacity on a daily basis. The Water System Division Manager graphs demand versus maximum system capacity as a percentage. During peak water season, this graph is monitored daily, and presented to the Drought Task Force. (See Section 11 for information on the Drought Task Force.) Anticipated system demand is assessed based on current consumption trends, year-to-year comparison of seasonal consumption trends, precipitation, temperature, and other factors. The system capacity for the utility is based on a summary of production inputs – reservoir levels, operating wells, pumping capacity, desalination production capacity, and surface water availability.

Section 8: Criteria for Initiation and Termination of Drought Response Stages

Pre-Stage V	Vatch
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0	Criteria for Initiation	The Pre-Stage Watch is the continued observation of the Water Conservation Ordinance throughout the year.
AGE	Conditions	In combination with the Drought Resolution by the PSB, these are steps El Paso Water is taking to help ensure the continued stability of our water resources.
ST	Criteria for Termination	This Stage is not entered into or out of; instead, it is a constant reminder to remain vigilant about water usage.

Mild (Drought Watch)		
	Criteria for Initiation	Water demand has reached or exceeded 85% of delivery capacity for 4 consecutive days.
AGE 1	Conditions	All El Paso Water customers shall be requested to reduce consumption through voluntary measures described in the corresponding stage of Section 9 of this Plan.
ST	Criteria for Termination	Stage 1 may be terminated when Stage 1 conditions no longer exist and would be unlikely to recur upon termination, or demand drops below 80% of delivery capacity.

Moderate (Drought Advisory)

	Criteria for Initiation	Water demand has reached or exceeded 90% of delivery capacity for 3 consecutive days.
STAGE 2	Conditions	 Residential and commercial customers shall be requested to reduce consumption through voluntary measures. City, County, and institutional customers shall be required to comply with the requirements and adhere to mandatory restrictions on certain non-essential water uses, described in the corresponding stage of Section 9 of this Plan.
	Criteria for Termination	Stage 2 may be terminated when Stage 2 conditions no longer exist and would be unlikely to recur upon termination, or demand drops below 85% of delivery capacity.

Severe (Drought Warning)		
	Criteria for Initiation	Water demand has reached or exceeded 95% of delivery capacity for 2 consecutive days.
FAGE 3	Conditions	All customers shall be required to comply with the requirements and mandatory restrictions on certain non-essential water uses provided in the corresponding stage in Section 9 of this Plan.
.S	Criteria for Termination	Stage 3 may be terminated when Stage 3 conditions no longer exist and would be unlikely to recur upon termination, or demand drops below 90% of delivery capacity.

Extreme (Drought Action Stage)

		Criteria for Initiation	Water demand has reached or exceeded 95% of delivery capacity for 5 consecutive days.
	STAGE 4	Conditions	All customers shall be required to comply with the requirements and mandatory restrictions on certain non-essential water uses provided in the corresponding stage in Section 9 of this Plan.
	S.	Criteria for Termination	Stage 4 may be terminated when Stage 4 conditions no longer exist and would be unlikely to recur upon termination, or demand drops below 90% of delivery capacity.

Emergen	Emergency Event (Urgent Action Stage)		
CY EVENT	Criteria for Initiation	 Water demand exceeds a reduced delivery capacity for all or part of the system, as determined by EPWater; or Water line breaks or pump or systems failures occur, which impact the ability of EPWater to provide treated water service; or Natural or man-made contamination of the water supply source(s) occurs. 	
EMERGENCY	Conditions	All customers shall be required to comply with the requirements and mandatory restrictions on certain non-essential water uses provided in the corresponding stage in Section 9 of this Plan.	
EME	Criteria for Termination	The Emergency Event stage of the Plan may be terminated when the Emergency Event stage conditions no longer exist and would be unlikely to recur upon termination.	

Section 9: Drought and Water Shortage Response Stages

STAGE 0: Pre-Stage Watch

Enforce the rules and restrictions laid out in the City of El Paso Municipal Code Water Conservation Ordinance 15.13.120 and EPWater Rules and Regulations.

STAGE 1: Drought Watch Response

Target: Achieve a voluntary 10% reduction in total gallons per capita per day (GPCD).

Water Utility Measures:

- Increase public education and outreach regarding water use reduction
- Reduce landscape water consumption at all EPWater facilities by 10%
- Increase output by employing reserve wells, and maximizing reservoir holdings
- Cease routine line flushing and testing
- Cease routine fire hydrant flushing and testing
- Increase targeted outreach to high consumption ICI customers to urge water use reductions

Voluntary Water Use Restrictions:

- Request residential customers reduce consumption by 10%
- Request all Industrial, Commercial, and Institutional (ICI) customers reduce consumption by 10%
- Request all other wholesale water purveyors comply with voluntary measures set forth by EPWater unless they have standing contracts with EPWater that detail existing drought measures

Mandatory Water Use Restrictions:

None

STAGE 2: Drought Advisory Response

Target: Achieve a voluntary 15% reduction goal in total GPCD.

Water Utility Measures:

- Increase public education and outreach regarding water use reduction
- Reduce landscape water consumption at all EPWater facilities by 15%
- Increase output by employing reserve wells, and maximizing reservoir holdings
- Cease routine line flushing and testing
- Cease routine fire hydrant flushing and testing
- Increase targeted outreach to high consumption ICI customers to urge water use reductions

Voluntary Water Use Restrictions:

- Request residential customers reduce consumption by 15%
- Request all Industrial, Commercial, and Institutional (ICI) customers reduce consumption by 15%
- Request all other water purveyors comply with voluntary measures set forth by EPWater unless they have standing contracts with EPWater that detail existing drought measures

Mandatory Water Use Restrictions:

Under threat of penalty for violation, the following water use restrictions shall apply to all institutional customers:

• All institutional customers (EPWater, City, County, Schools) are **required** to reduce non-essential water consumption by 15%

The Public Service Board may vote to implement any *mandatory* drought restrictions to its customers including both residential and commercial business accounts. This action by the Public Service Board is separate from a Declaration of Local Disaster by the Mayor and City Council in accordance with Chapter 418 of the Texas Government Code or any other action by the City Council deems necessary under the law for public health and safety purposes.

STAGE 3: Drought Warning Response

Target: Achieve a 15% reduction goal in total GPCD.

Water Utility Measures:

- Increase public education and outreach regarding water use reduction
- Facilities landscape watering shall be reduced to 2 days a week
- Increase output by employing reserve wells, and maximizing reservoir holdings
- Cease routine line flushing and testing
- Cease routine fire hydrant flushing and testing
- Increase targeted outreach to high consumption ICI customers to urge water use reductions

Mandatory Water Use Restrictions:

All mandatory requirements of Stage 1 shall remain in effect during Stage 2, to also include:

- Landscape watering limited to 2 days a week
- No at home washing of cars, trailers, or trucks
- No draining or filling pools (except to maintain levels for filter function)
- Restaurants may only serve water upon request
- No use of ornamental fountains
- Tier 1 and 2 parks (as defined by City of El Paso Parks) may water as normal, tiers 3-5 reduce watering to twice a week, per table below
- Businesses that derive 75% of their income from watered plants (such as nurseries) shall be exempt from watering restrictions
- EPWater may also authorize additional personnel to issue notices of violation to enforce the Water Conservation Ordinance and the Drought Contingency Plan as well as increase public education and outreach regarding water use reduction.

STAGE 4: Drought Action Stage Response

Target: Achieve a 20% reduction goal in total GPCD.

Water Utility Measures:

- Increase public education and outreach regarding water use reduction
- Facilities landscape watering shall be limited to one day a week
- Increase output by employing reserve wells, and maximizing reservoir holdings
- Cease routine line flushing and testing
- Cease routine fire hydrant flushing and testing
- Increase targeted outreach to high consumption ICI customers to urge water use reductions

Mandatory Water Use Restrictions:

All requirements of Stage 2 shall remain in effect during Stage 3, to also include:

- Fines for violations of DCP/Water Conservation Ordinance will be doubled
- Residential watering shall be limited to one day a week
- All permits and variances will be suspended, and no new ones will be issued
- Recreational use of potable water supplied by EPWater, to include waterparks/splashpads, is prohibited
- No potable water shall be used in construction for dust control
- No potable water shall be used in street sweeping operations
- Tier 1 and 2 parks (as defined by City of El Paso Parks) may water as normal, tiers 3-5 reduce to once a week, per table below

Property Type	Stage 3 (Twice per Week)	Stage 4 (Once per Week)
Residential – EVEN	Tuesday/Saturday	Tuesday
Residential – ODD	Wednesday/Sunday	Wednesday
Commercial/Multifamily	Tuesday/Friday	Friday
Schools/Parks	Monday/Thursday	Monday

Emergency Event: Urgent Action Stage Response

Target: Achieve a reduction goal to be determined by EPWater based on the nature of the emergency.

Mandatory Water Use Restrictions:

All requirements of previous stages shall remain in effect during the Emergency Stage, to also include:

- Landscape irrigation is prohibited
- Use of water to wash any vehicle or part of property is prohibited
- Fines for violation of any of the aforementioned restrictions will triple while in the Emergency Stage

Section 10: Notification

Notification of the Public:

The Chief Communications & Government Affairs Officer or designee shall notify the public with voluntary actions requested or mandatory actions needed according to given drought stages by using any combination of the following:

- public service announcements (radio/TV)
- social media announcements
- news media (online/print)
- signs posted in public places

Additional Notification:

The President/ CEO or designee shall notify directly the following individuals and entities:

- Mayor
- City Manager
- Public Service Board
- City and/or County Emergency Management Coordinator(s)
- TCEQ (required when mandatory restrictions are imposed)
- Wholesale Customers
- Critical water users, i.e. hospitals
- Parks / street superintendents & public facilities managers

Section 11: Operational and Administrative Framework

Drought Task Force

The Vice President of Operations and Technical Services will convene the Drought Task Force at least annually and when drought conditions are anticipated to provide strategic direction on drought preparedness, planning, and response strategies. The Drought Task Force is made up of the following EPWater participants: President/CEO, Vice President of Operations and Technical Services, Vice President of Financial and Management Services, Chief Technical Officer, Chief Operations Officer of Treatment and Production, Conservation Manager, Water Systems Division Manager, Water Production Manager, Water Resources Manager, Chief Communications and Government Affairs Officer, and Chief Water Quality Officer. Senior leaders and additional members of the Task Force may participate depending on utility needs during the potential drought situation.

The following outlines roles and responsibilities for those undertaking each action necessary for each element of the plan.

DCP Process	Responsibility	Action
Review and Update of	Conservation Manager	Lead the review and update of the Plan with Task
the Plan	conservation manager	Force input (See Section 15
Public Involvement	Concernation Manager	Solicit public involvement to changes in the Plan
Public Involvement	Conservation Manager	(See Section 2)
		Apprise Region E Planning Group of changes to
Region E Coordination	Water Resources Manager	DCP, solicit input, ensure coordination for Water
		Plan updates (See Section 4)

	Central Control Operator	Monitors system demand and provides daily report
	Water Production Manager	Monitors maximum system capacity daily
Monitoring		Graphs demand versus maximum system capacity.
	Water Systems Division Manager	During peak season, this graph is monitored daily and presented to the Drought Task Force. <i>(See</i> <i>Section 11)</i>
Recommendation to President/CEO	Vice President of Operations & Technical Services	Notify the President/CEO with a recommendation to initiate drought stage when demand exceeds the percent capacities described in each stage of triggers.
Determination to Initiate or End Drought Stages 1 and/or 2, and Emergency Stage	President/CEO	Review the recommendation and make the administrative decision to initiate applicable voluntary drought stages 1 or 2 or emergency stage, or recommend to the PSB to initiate (See Section 5) mandatory drought stages 3, 4, or 5
Determination to Initiate or End Drought Stages 3, 4 and 5	Public Service Board (PSB)	Review the President/CEO recommendation, and vote to initiate mandatory drought stages 3, 4, or 5
Stakeholder and Public	President/CEO (or designee)	Notify key stakeholders of drought stage (See Section 10)
Notifications of Drought	Communications Manager	Provide public outreach of drought stage, requesting voluntary or mandatory reductions in consumption (See Section 10)
Enforcement	Chief Water Quality Compliance Officer	Lead enforcement activities (See Section 12 and Appendix B)
Ongoing Customer Education	Communications Manager	Develop and implement strategies annually to increase awareness of the DCP (See Section 3)

Section 12: Enforcement and Variances

In accordance with Section 15.13.080 of the City of El Paso Municipal Code, any person violating provisions of this Drought Contingency Plan shall be deemed guilty of a misdemeanor and, upon conviction, shall be punished by a fine not less than fifty dollars and not to exceed five hundred dollars. Each separate violation of the Drought Contingency Plan shall be deemed a separate offense and shall be punished accordingly.

Each Wholesale Customer shall be responsible for implementing and enforcing the measures of this Drought Contingency Plan as communicated by EPWater. Additionally, EPWater will seek any and all remedies available under each individual Wholesale Agreement if any Wholesale Customer fails to implement and enforce the provisions of this Drought Contingency Plan.

Nothing shall prevent either the Public Service Board from seeking compliance with or enforcement of this Drought Contingency Plan, from seeking injunctive relief in a court of competent jurisdiction, or from utilizing any other civil or equitable remedy to enforce this Drought Contingency Plan. The Public Service Board's attorneys are authorized to institute injunctive relief, or any other civil action deemed necessary to enforce compliance with the provisions of this chapter.

Any Customer seeking a variance to the Plan shall file an appeal in accordance with Section III Variances of EPWater Rules and Regulations No. 17.

Section 13: Wholesale Water Customers

In accordance with Texas Water Code Section 11.039, when necessary, as determined by EPWater, water deliveries to wholesale water customers may be curtailed on a pro-rata basis. Every wholesale water contract entered into or renewed after adoption of this Plan, including contract extensions, shall include a provision that in the case of a drought, water shortage, or water emergency declaration, water is to be distributed in accordance with Texas Water Code Section 11.039.

All stages of this Drought Contingency Plan are applicable to wholesale water customers. Each wholesale customer shall include in their Drought Contingency Plan appropriate provisions to implement and enforce the response stages of this Plan. Each Wholesale Customer shall be responsible for implementing the measures of this Drought Contingency Plan as communicated by EPWater and to enforce the restrictions with their respective retail customers.

Section 14: Mitigation Actions based on Assessment

EPWater has completed a comprehensive Drought Vulnerability Assessment that identifies three critical resources in the El Paso Water service area (surface water, groundwater and infrastructure) and how drought impacts these resources. The assessment considered future water conditions and uncertainties, including climate variability and changing demand, and identified a range of potential drought mitigation strategies. These are classified herein as long-term drought resilience projects and shorter-term drought stress relief projects.

As part of the Drought Vulnerability Assessment and consistent with El Paso Water's 2021 Integrated Water Management Strategies Report, five long-term water management strategies are identified to address potential future water supply deficits. Collectively, El Paso Water estimates that these alternative supplies and conservation programs could amount to over 60,000 AFY by 2070.

	Recommended Water Management Strategy	Source	Affected Aquifers	Strategy Supply by Decade (Acre-Feet Per Year)					
Strategy Number				2020	2030	2040	2050	2060	2070
R-1	Municipal Conservation Programs	Conservation	Both	4,950	5,530	5,080	9,950	13,140	17,820
R-2	Advanced Water Purification Facility at the Bustamante WWTP	Municipal Wastewater	Hueco	8,500	9,200	9,900	10,600	10,600	10,600
R-3	Hueco Bolson Artificial Recharge ¹	Rio Grande	Hueco		5,000	5,000	5,000	5,000	5,000
R-4	Surface Water Augmentation	Irrigation Canal	Mesilla		(begin)	4,480	6,940	6,940	6,940
R-5 ²	GW from Dell City Area (Phase I)	Capitan Reef Complex Aquifer	Hueco			10,000	10,000	10,000	10,000
	GW from Dell City Area (Phase II)	Bone Spring– Victorio Peak Aquifer					10,000	10,000	10,000
	Total			13,450	19,730	34, <mark>460</mark>	52,490	55,680	60,364

Table 8.1 El Paso Water Recommended Water Management Strategies per the 2021 IWMS Report

^{1.} The 2021 IWMS Report indicates that "the Hueco Bolson Aquifer has been successfully recharged with tertiary treated wastewater from the Fred Hervey Water Reclamation Plant" up to rates of 10,000 AFY. It is assumed that the additional 5,000 AFY cited above is in addition to this, up to a total of 15,000 AFY.

^{2.} Whether in one or two phases, the impacts on water reliability for the purposes of this study would be the same: Full capacity of 20,000 AFY by 2050, and all of this water used to offset water needs from the Hueco Bolson Aquifer.

- Municipal Conservation Programs and Water Reuse: El Paso Water has been implementing an aggressive water conservation program for over 30 years with actions such as adoption of a rate structure that encourages conservation, restrictions on residential watering, rebate programs for residential and commercial customers, public education, and enforcement. Water Reuse is also considered a conservation strategy by the TWDB. El Paso currently has a 'purple pipe' water reuse program that provides treated wastewater for irrigation of golf courses, city parks, school grounds, and apartment landscapes, construction and industrial use, and aquifer recharge. Over time, this has significantly helped reduce demand on fresh water to current levels.
- Advanced Water Purification. El Paso Water is also in the process of implementing direct potable reuse through an Advanced Water Purification Facility adjacent to the Roberto R. Bustamante Wastewater Treatment Plant. The wastewater plant currently discharges approximately 27 mgd into the Riverside Irrigation canal and 1.5 mgd to reclaimed water "purple pipe" customers as part of the Mission Valley Reclaimed Water Project. The Advanced Water Purification strategy includes additional conventional wastewater treatment at the existing plant to remove nutrients, an advanced treatment facility (microfiltration/ultrafiltration, nanofiltration or reverse osmosis, ultraviolet/advanced oxidation process, activated carbon, and chlorine disinfection) and storage. The purified water will be placed directly into the distribution system with anticipated additional supply of 10,600 AFY by 2050.

Reclaimed Water for Increased Groundwater Recharge

Aquifer recharge using both treated wastewater effluent and available surface water can mitigate aquifer overdraft and potentially restore groundwater supplies. El Paso Water has recharged approximately 80,000 AF of wastewater treated to drinking water standards back into groundwater since the mid-1980s. This equates to approximately 2,000 AFY over that period, on average. This value could increase to approximately 15,000 AFY based on existing and new facilities discharging to the Hueco Bolson aquifer. This increase is evaluated in the simulation scenarios that follow.

Surface Water Augmentation: El Paso Water plans to implement this project in multiple phases. The first
phase will begin in the decade of 2030 with new supply of about 4 MGD (4,480 AFY). The second phase
will be in the decade of 2040 with new supply of 6.4MGD (6,940 AFY). It is expected to primarily offset
demand in the Mesilla Bolson aquifer.

The Drought Vulnerability Study simulated climate and demand scenarios with the combined effect of aquifer recharge and multiple demand offsets. Results of the Hot/Dry scenario are shown below.

Aquifer	Scenario ID	Climate Scenario ¹	Mitigation	Mitigation: Demand Offsets						
			Aquifer Recharge ⁵	Conservation ²	Advanced Purification	Surface Water Augmentation	Importation ³	Total Demand Offsets ⁴		
Hueco Bolson	9	Hot/ Dry 2050	15,000 AFY	7,463 AFY	10,600 AFY		20,000 AFY	28,063 AFY		
	10	Hot/ Dry 2070	15,000 AFY	13,365 AFY	10,600 AFY		20,000 AFY	33,965 AFY		
Mesilla Bolson	11	Hot/ Dry 2050		2, <mark>488 AF</mark> Y		6,940 AFY		19,428 AFY		
	12	Hot/ Dry 2070		4,455 AFY		6,940 AFY		21,395 AFY		

Table 8.2 Drought Mitigation Simulation Scenarios

^{1.} These scenarios focus on worst case climate and demand conditions, with most aggressive drought mitigation strategy. All scenarios use a hydrologic input 1950-1999 altered by climate change scenario factors.

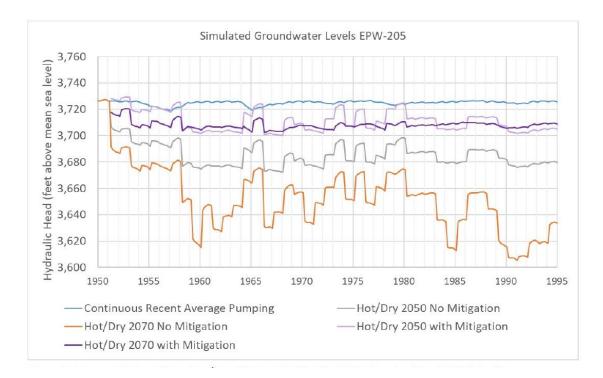
Conservation estimates assume approximately 75 percent of the conserved volume in Table 8.1 can be attributed to the Hueco Bolson and 25 percent to the Mesilla Bolson.

3. Importation estimates assume that the 20,000 AFY R-5 total in Table 8.1 will offset demand from the Hueco Bolson only.

4. Total demand offsets represent the collective impact of future conservation efforts in the form of decreasing gpcd, advanced water purification for direct potable reuse, and water importation – See Table 8.1.

^{5.} 15,000 AFY of Aquifer Recharge Assumes an upper limit of 10,000 AFY of existing capacity and 5,000 AFY of new capacity by 2030.

In the graph that follows, comparisons show current groundwater pumping with projections for pumping in 2050 and 2070 with no mitigation projects and with implementation of mitigation projects under a hot/dry climate scenario.



In addition to the long-term drought resilience projects that will contribute to water supply sustainability, El Paso Water has identified the following shorter-term projects to consider for drought stress relief. Most of these projects can be implemented in a shorter timeframe of 1-3 years.

Shorter Term Drought Stress Relief Projects	Implementation Timeline
Drilling and equipping new groundwater wells in the Hueco Bolson	< 1 year to implement
Optimizing lower valley well heads	< 1 year to implement
Acquisition of water rights from farmers or others for additional source water augmentation	< 1 year to implement
Agricultural Public-Private partnership agreements (i.e., water efficient irrigation investments in exchange for certain water rights)	< 1 year to implement
Installation of additional water control and measurement structures throughout the service area	< 1 year to implement
Rehab and optimize existing wellheads	< 1 year to implement
Reverse Osmosis Systems and/or CERRO projects on wellheads to take more advantage of brackish groundwater supplies	< 2 years to implement
Water storage projects to expand storage during drought and be able to better move water around the city per demand	< 3 years to implement
Larger diameter pipelines to better move system water to locations for aquifer recharge	< 3 years to implement
Industrial private-public partnerships to take cooling process water and treat for ASR	< 3 years to implement

Stormwater projects with green infrastructure elements that allow infiltration and aquifer recharge	<3 years to implement		
Regulating reservoir in conjunction with the El Paso County Water Improvement District #1	3-5 years to implement		

Section 15: Review and Update of the Plan

EPWater will review and update the Plan consistent with State law requirements. If the Plan is implemented during a water shortage, data obtained during the Plan implementation will be used to make any necessary modifications to the Plan. Additionally, the Plan will be updated as appropriate based on new or updated information regarding the system's delivery capacity. The Plan is to be submitted to TCEQ concurrently every 5 years with EPWater's Water Conservation Plan.

Section 16: Actions to Recover from a Drought

In the event of service disruptions as a result of drought or an emergency, EPWater will develop a lessons-learned document and/or after-action report to keep a record of response activities. Based on these lessons learned, updates should be made to vulnerability assessments, Emergency Response Plan, and the Drought Contingency Plan. Other actions following the drought should include:

- Be prepared for a spike in water demand. Once normal service has been restored after a period of time with restricted usage, customers will address those domestic water needs that were postponed.
- Continued communication to customers to thank them for cooperation and to encourage sustained water conservation measures and practices.
- Identify and prioritize mitigation and long-term adaptation measures that can prevent damage and increase utility resilience.

Appendix A

For the purposes of this Plan, the following definitions shall apply:

<u>Aesthetic water use</u>: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Available Capacity: the projected firm capacity of the EPWater system to deliver water based on the number of wells in service, water treatment plant production capacity and available river supplies and/or allotments, in-service booster pumping capacity impacted by equipment outages and/or other factors. The capacity is usually expressed in available million gallons per day and shall be as stated or expressed by the EPWater's Water Systems Division Manager.

Brackish groundwater: distastefully salty water less saline than seawater (between 1,000 and 10,000 ppm [parts per million] in total dissolved solids).

<u>Commercial and institutional water use</u>: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling reuse of water so that a supply is conserved and made available for future or alternative uses.

<u>Customer</u>: any person, corporation, partnership, association, organization, or other legal entity using water supplied by El Paso Water.

Drought Contingency Plan (DCP): A drought contingency plan or DCP is a strategy or combination of strategies that a water supplier develops and implements to monitor and respond to a drought or other temporary water supply shortage that can severely disrupt the supply of water to customers.

Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Drought Management Task Force (Task Force): the internal group of representatives from various sections of the utility including (but not limited to), to President/CEO, Vice President of Operations and Technical Services, Vice President of Financial and Management Services, Chief Technical Officer, Chief Operations Officer of Treatment and Production, Water Conservation Manager, Water Systems Division Manager, Water Production Manager, Water Resources Manager, Chief Communications and Government Affairs Officer, and Chief Water Quality Officer.

Essential Water Use: water use necessary for firefighting, health and safety, water needed to sustain human and animal life, and water necessary to satisfy federal, state and local public health, safety and environmental protection requirements.

ICI: Industrial, Commercial, and Institutional

Potable Water: water that is suitable for drinking by the public.

<u>Non-Essential Water Use:</u> water use that does not have any health or safety impacts and is not required by regulation or required by the City. <u>Task Force:</u> (see Drought Management Task Force)

Water Conservation Plan (WCP): EPWater's documentation showing water conservation progress and future that is updated and released every 5 years.

<u>Water Supply Portfolio</u>: diversification of water sources to include groundwater, surface water, conservation, water recycling and reuse, importation, harvesting and desalination.

<u>Wholesale</u>: any water supplier that receives all or a portion of its treated water supply from EPWater

Appendix B

RULES AND REGULATIONS NO.17

RULES AND REGULATIONS GOVERNING THE THE EL PASO WATER UTILITIES PUBLIC SERVICE BOARD DROUGHT CONTINGENCY PLAN

BY THE AUTHORITY VESTED IN THE EL PASO WATER UTILITIES PUBLIC SERVICE BOARD, TRUSTEES, UNDER TEXAS GOVERNMENT CODE SECTION 1502.070, CITY ORDINANCE 752, PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF EL PASO, TEXAS MAY 22, 1952, AS AMENDED, TITTLE 30 TEXAS ADMINISTRATIVE CODE SECTIONS 288.20 AND 288.22 AND CHAPTER 15.13 WATER CONSERVATION OF THE EL PASO MUNICIPAL CODE; NOW THEREFORE BE IT RESOLVED BY THE PUBLIC SERVICE BOARD OF THE CITY OF EL PASO, THAT THE FOLLOWING RULE AND REGULATION NO. 17 CONCERNING THE DROUGHT CONTINGENCY PLAN IS HEREBY ESTABLISHED.

SECTION I GENERAL

The El Paso Water Utilities-Public Board adopts the Drought Contingency Plan in Exhibit "A" of <u>these</u> <u>Rules and Regulations No. 17</u> in compliance with the requirements with the Texas Administrative Code Sections 288.20 and 288.22. The attached Exhibit "A" is hereby incorporated to these <u>Rules and</u> <u>Regulations No. 17</u>.

SECTION II ENFORCEMENT

In accordance with Section 15.13.080 of the City of El Paso Municipal Code, any person violating any provision of these <u>Rules and Regulations No. 17</u> shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a fine not less than fifty dollars and not to exceed five hundred dollars. Each separate violation of the Drought Contingency Plan shall be deemed a separate offense and shall be punished accordingly.

Each Wholesale Customer shall be responsible for implementing and enforcing the measures of the Drought Contingency Plan as communicated by EPWater. Additionally, EPWater will seek any and all remedies available under each individual Wholesale Agreement if any Wholesale Customer fails to implement and enforce the provisions of the Drought Contingency Plan.

Nothing shall prevent either the Public Service Board from seeking compliance with or enforcement of these <u>Rules and Regulations No. 17</u>, from seeking injunctive relief in a court of competent jurisdiction, or from utilizing any other civil or equitable remedy to enforce these <u>Rules and Regulations No. 17</u>. The Public Service Board's attorneys are authorized to institute injunctive relief or any other civil action deemed necessary to enforce compliance with the provisions of this chapter.

SECTION III VARIANCES

Customer-specific variances may be granted in cases of hardship or special conditions. After recommendation by the Water Conservation Manager, the President/CEO, Vice President of Operations and Technical Services, Vice President of Financial and Management Services, will consider a hardship or special conditions case to determine whether a particular circumstance warrants a variance. A variance shall be granted only for reasons of severe economic hardship, medical hardship or for a legitimate public health concern.

SECTION IV RIGHT OF APPEAL

For matters other than variances, the Customer may appeal in writing any ruling or action of the Utility or its agents to the PSB in accordance with the procedures established in Rules and Regulations No. 8. Any Customer who does not appeal such a ruling or action in accordance with these procedures within 60 days of the date of the issuance of the ruling or action shall waive any right to contest such action or ruling. The PSB, at its own discretion, may affirm, modify, limit or condition the ruling of the Utility or may defer final decision on the appeal in accordance with Rules and Regulations No. 8.

SECTION V SEVERABILITY

These Rules and Regulations are part of the other Rules and Regulations of the PSB and persons accepting service agree to comply with the appropriate provisions and conditions of all of the Rules and Regulations. If any provision, paragraph, section, subsection, sentence, clause or phrase of these Rules and Regulations No. 17 or the application of same to any person or set of circumstances is for any reason invalidated by any court of competent jurisdiction, such part shall be deemed severable and the invalidity thereof shall not affect the remaining parts of these Rules and Regulations No. 17. The remaining provisions, paragraphs, words or sections shall not be affected and shall continue in full force and effect.

SECTION VI SAVINGS

These Rules and Regulations No. 17 are part of the other Rules and Regulations adopted by the El Paso Water Utilities Public Service Board, and, save and except as amended hereby, the remaining provisions of the El Paso Water Utilities Public Service Board's Rules and Regulations shall remain in full force and effect.

SECTION VII EFFECTIVE DATE

These Rules and Regulations No. 17 shall be and become effective from and after its adoption hereby and shall remain in effect until otherwise amended by the El Paso Water Utilities Public Service Board.

PASSED, APPROVED and ADOPTED this 14th day of March, 2012 by the El Paso Water Utilities Public Service Board of the City of El Paso, Texas.

PASSED, APPROVED and ADOPTED this 10th day of April, 2024 by the El Paso Water Utilities Public Service Board,

EL PASO WATER UTILITIES PUBLIC SERVICE BOARD c

Ivonne Santiago, Chair

ATTEST:

APPROVED AS TO FORM:

Charlie Intebi,

Secretary-Treasurer

1 Daniel Ortiz,

General Counsel

Exhibit "A"

Drought Contingency Plan

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Appendix C

Texas Administration Code Title 30, Chapter 288, Subchapter B, Rule § 288.20 Drought Contingency Plan for Municipal Uses by Public Water Suppliers

(a) A drought contingency plan for a retail public water supplier, where applicable, must include the following minimum elements.

(1) Minimum requirements. Drought contingency plans must include the following minimum elements.

(A) Preparation of the plan shall include provisions to actively inform the public and affirmatively provide opportunity for public input. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.

(B) Provisions shall be made for a program of continuing public education and information regarding the drought contingency plan.

(C) The drought contingency plan must document coordination with the regional water planning groups for the service area of the retail public water supplier to ensure consistency with the appropriate approved regional water plans.

(D) The drought contingency plan must include a description of the information to be monitored by the water supplier, and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.

(E) The drought contingency plan must include drought or emergency response stages providing for the implementation of measures in response to at least the following situations:

(i) reduction in available water supply up to a repeat of the drought of record;

(ii) water production or distribution system limitations;

(iii) supply source contamination; or

(iv) system outage due to the failure or damage of major water system components (e.g., pumps).

(F) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this subparagraph are not enforceable.

(G) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:

(i) curtailment of non-essential water uses; and

(ii) utilization of alternative water sources and/or alternative delivery mechanisms with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).

(H) The drought contingency plan must include the procedures to be followed for the initiation or termination of each drought response stage, including procedures for notification of the public.

(I) The drought contingency plan must include procedures for granting variances to the plan.

(J) The drought contingency plan must include procedures for the enforcement of mandatory water use restrictions, including specification of penalties (e.g., fines, water rate surcharges, discontinuation of service) for violations of such restrictions.

(2) Privately-owned water utilities. Privately-owned water utilities shall prepare a drought contingency plan in accordance with this section and incorporate such plan into their tariff.

(3) Wholesale water customers. Any water supplier that receives all or a portion of its water supply from another water supplier shall consult with that supplier and shall include in the drought contingency plan appropriate provisions for responding to reductions in that water supply.

(b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.

(c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.

Texas Administration Code Title 30, Chapter 288, Subchapter B, Rule § 288.22 Drought Contingency Plan for Wholesale Water Suppliers

(a) A drought contingency plan for a wholesale water supplier must include the following minimum elements.

(1) Preparation of the plan shall include provisions to actively inform the public and to affirmatively provide opportunity for user input in the preparation of the plan and for informing wholesale customers about the plan. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.

(2) The drought contingency plan must document coordination with the regional water planning groups for the service area of the wholesale public water supplier to ensure consistency with the appropriate approved regional water plans.

(3) The drought contingency plan must include a description of the information to be monitored by the water supplier and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.

(4) The drought contingency plan must include a minimum of three drought or emergency response stages providing for the implementation of measures in response to water supply conditions during a repeat of the drought-of-record.

(5) The drought contingency plan must include the procedures to be followed for the initiation or termination of drought response stages, including procedures for notification of wholesale customers regarding the initiation or termination of drought response stages.

(6) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this paragraph are not enforceable.

(7) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:

(A) pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, §11.039; and

(B) utilization of alternative water sources with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).

(8) The drought contingency plan must include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.

(9) The drought contingency plan must include procedures for granting variances to the plan.

(10) The drought contingency plan must include procedures for the enforcement of any mandatory water use restrictions including specification of penalties (e.g., liquidated damages, water rate surcharges, discontinuation of service) for violations of such restrictions.

(b) The wholesale public water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.

(c) The wholesale public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as adoption or revision of the regional water plan.

Appendix D



Annette Gutierrez – Executive Director 8037 Lockheed, Ste. 100 El Paso, Texas 79925 Phone: (915) 533-0998 Fax (915) 532-9385 www.riocog.org

Wednesday, March 27, 2024

Alex Fashing Water Conservation Specialist, El Paso Water 10751 Montana Avenue El Paso, Texas 79961-0511

Dear Alex,

As the sponsoring entity of Region E's Water Planning group, known as the Far West Texas Water Planning Group, I am writing this letter to document that our group has reviewed your 2024 Drought Contingency Plan. We do not have any concerns with the document, and we are in support of your efforts.

If you have any questions, please contact me at 915-533-0998, ext. 114, or <u>annetteg@riocog.org</u>. Thank you.

Sincerely,

anette Sutiener

Annette Gutierrez Executive Director