

Chihuahuan Desert Climate Collaborative

Summit # 2 of 3

May 7th, 2025



**Chihuahuan
Desert**
Climate
Collaborative

POWERED BY THE CITY OF EL PASO



Agenda

- **Introductions and Opening Remarks** (*5 mins*)
 - **Overview** (*10 mins*)
 - **Case Studies** (*10 mins*)
 - **Q&A** (*20 mins*)
 - **Next Steps** (*5 mins*)
 - **Focus Group Discussions**
- 

Opening Remarks

Dr. Juan Aguilera

**University of Texas Health Science Center at
Houston**

**School of Public Health in El Paso
Center for Community Health Impact**



Overview



Summit Objectives

- Bring partners together to **collaborate**
- Communicate **resource needs** to support effective implementation
- Shape **implementable actions** by identifying priorities, opportunities, and solutions
- Summit # 3 – July 2025 (*tentative*)



Community Feedback

We asked community members which **ideas they support and want to see implemented.**

Events or Survey	# of Responses or Attendees
Climate Summit	81
Community Open Houses (2 events)	139
English Survey	311
Spanish Survey	12
Total	543

12,194
Total Votes



10 Draft Measures

Public Votes 



Promote Walking, Biking, and Riding Transit



Increase Energy Efficiency and Decarbonize Buildings



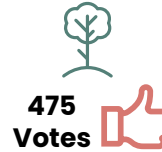
Install Renewable Energy Systems



Promote Sustainable Food Systems and Waste Management Practices



Support the Zero Emissions Vehicle Transition



Cool Communities, Protect Health, and Increase Native Ecosystems



Reduce Flood Risk



Build Drought Resilience and Conserve Water



Monitor and Improve Air Quality



Implement and Oversee Climate Action

Promote walking, biking, and riding the bus or train



Example actions:

- 224  Explore options to provide free public transit
- 219  Improve the frequency and quality of transit services

Increase Energy Efficiency and Decarbonize Buildings



Example actions:

- 257  Partner with industries to reduce emissions related to industrial activities
- 252  Increase energy efficiency in public buildings



Install Renewable Energy System



Example actions:

362

Install solar panels on public buildings and public land and as shade structures

Promote Sustainable Food Systems and Waste Management Practices



Example actions:

291

Develop local food hubs

255

Implement community-wide composting for food and yard waste

Support the Zero Emissions Vehicle Transition



Example actions:

233  Transition municipal fleets to EVs

188  Install public EV charging stations

Cool Communities, Protect Health, and Increase Native Ecosystems



Example actions:

350  Develop a community stewardship program to mitigate heat by increasing tree canopy and shading

Reduce Flood Risk



Example actions:

230 

Deploy green infrastructure and reduce impermeable surfaces along roads and at critical facilities

Build Drought Resilience and Conserve Water



Example actions:

268 

Expand wetlands and parks to support groundwater recharge

Monitor and Improve Air Quality



Example actions:

306 

Install air quality monitoring systems at the international bridges

Implement and Oversee Climate Action



Example actions:

Establish green revolving loan funds to support sustainability projects in public buildings

Summit #1 Feedback

Climate Fellow



Summit #1 Feedback

- Over 80 attendees
- Opportunities for implementation
- Barriers for implementation



Case Studies



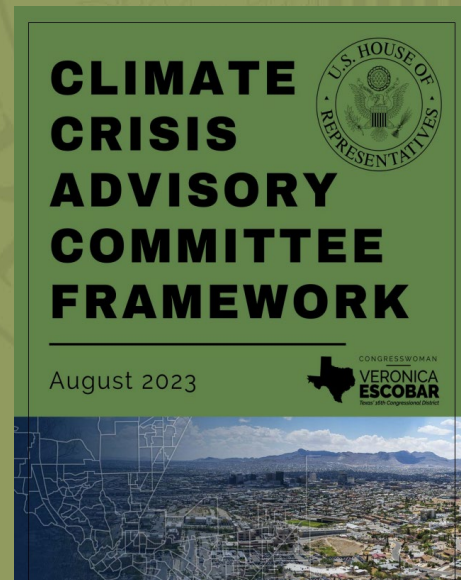
Climate Adaptation Plan Act

Congresswoman Escobar Office



H.R.2996 Climate Adaptation Plan Act of 2025

- This legislation directs the Environmental Protection Agency (EPA) Administrator to establish a grant program to facilitate the development of climate adaptation plans for local and tribal governments like the Climate Crisis Advisory Committee Framework.
- Climate adaptation plans make recommendations to local governments by centering resilience measures, environmental justice, economic prosperity, and community-driven collaboration.





Building a Sustainable Water Future for El Paso

History of Diverse Water Sources



Late 1800s
Groundwater



1962
Water Reuse



2007
Desalination

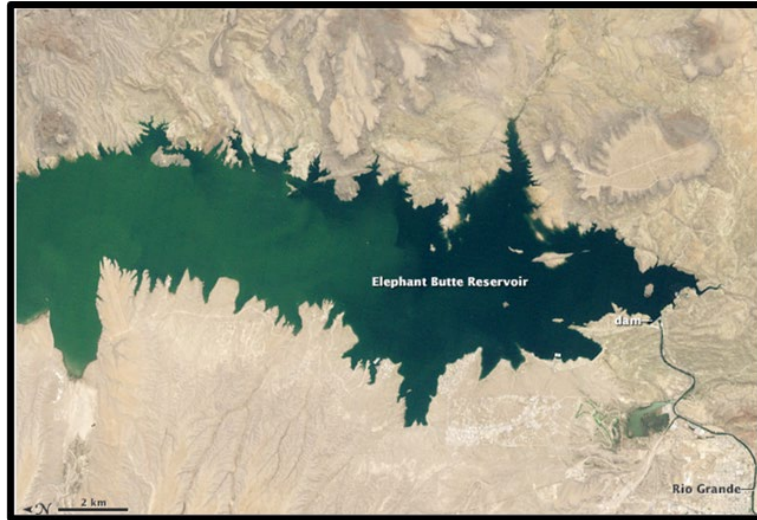
1940s
River Water



1991
Conservation



Why do we need to diversify?

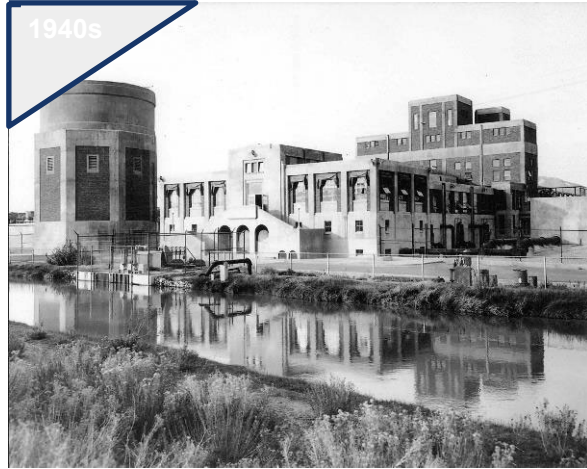


**Elephant Butte Reservoir -
June 1994 - A “normal” year**



**Elephant Butte Reservoir
July 2013 – Drought year**

Evolution of Water Reuse

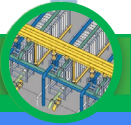


Origins of Purified Water



Water treated for irrigation will be cleaned AGAIN in a rigorous process to create high quality, purified water.

Multiple barriers to remove contaminants



Membrane Filtration

STEP 1

Primary barrier for particles like bacteria, viruses, and protozoa.



Reverse Osmosis

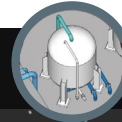
STEP 2

Removes salts and chemicals and provides an additional barrier for microorganisms.



Advanced Oxidation with Ultraviolet Light and Hydrogen Peroxide STEP 3

Additional barrier for microorganisms and chemicals.



Granular Activated Carbon STEP 4

Additional barrier for chemicals.



Chlorine Disinfection STEP 5

Final barrier to microorganisms that lasts as the water reaches homes and businesses.

Proof of concept

- Several processes piloted in 2015-16
- Testing for **97** contaminants of emerging concern (CECs)
- Thousands of samples sent to Texas Commission on Environmental Quality (TCEQ)
- Over 300 people toured facility



Pure Water Center is the first of its kind



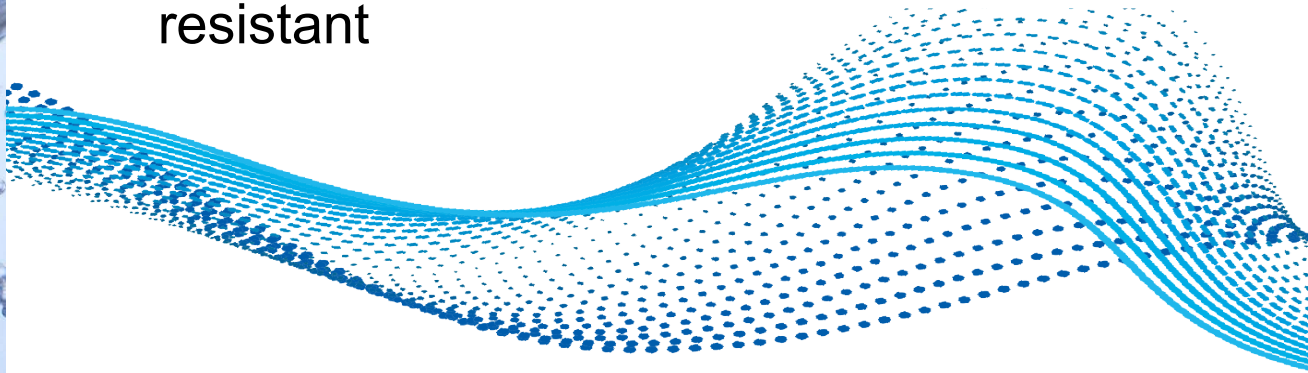
Completion set for 2028





Pure Water Center provides additional water supply

- 10 million gallons per day or 3.6 billion gallons per year
- Reducing reliance on Rio Grande water
- Safe, local, reliable and drought resistant



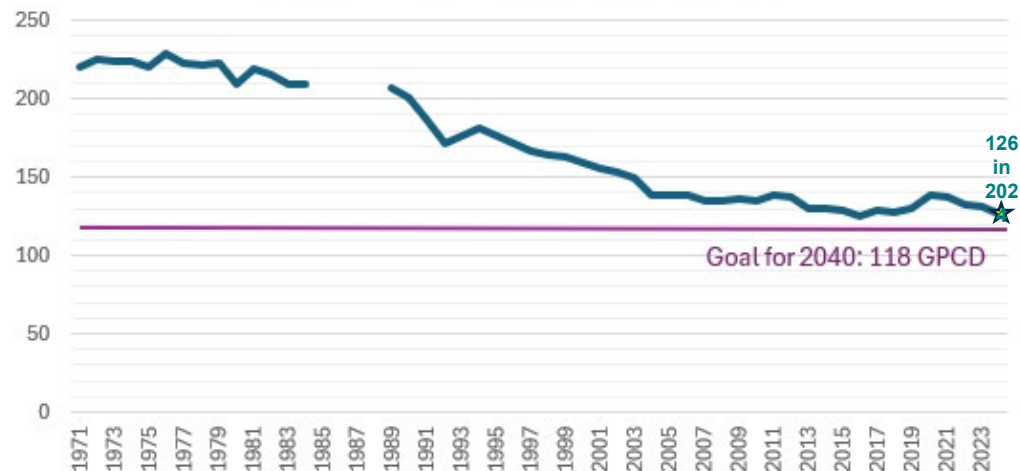
Water Conservation

El Paso Water



2024 Update

Gallons per Capita per Person (GPCD)
Over Time - El Paso, Texas



This Just In!	2024	2023
GPCD:	126	131
Water Loss as %	9.53%	18.6%
Residential GPCD	71	69

Water and Conservation Education



Teachers/Students

- Field Trips to TechH2O
- El Paso-based Lessons at www.techH2o.org

Public Outreach and Publications

- Signature Events
 - DiscoverE (February); WaterFest (late summer)
- Newsletters
- Bill Inserts & Social Media

Websites

- [Epwater.org/residential/conservation](http://epwater.org/residential/conservation)
 - Conservation tips and information
- www.elpasodesertblooms.org
 - Low Water Use Plant&Idea database
 - Adding tools for planning and design



10 maneras de ahorrar dinero en tu factura de agua 

Comience a hacer cambios en su hogar para reducir su consumo de agua y será recompensado con una factura de agua más baja. La conservación del agua no solo le ahorra dinero, sino que también hará su parte para garantizar un suministro de agua sostenible para El Paso.

Siga el programa de riego (del 1 de abril al 30 de septiembre) Riegue hasta tres veces por semana antes de las 10 a.m. o después de las 6 p.m. No se permite el riego residencial los lunes.	Haga funcionar el lavavajillas y la lavadora solo cuando están llenos Configure la lavadora solo para agua fría y respalde las piezas antes de colocarlas en el lavavajillas.
Utilice un sensor ahorrador de agua Recoge un sensor ahorrador de grifo de cobre y plano de tamaño estándar gratis en el Centro de aprendizaje Tech.O de EPWater. Llame al 915-621-0000 para obtener información y el horario del centro.	Busque la etiqueta WaterSense Estas productos cumplen con los especificaciones de la EPA para la eficiencia y el rendimiento del agua, lo que le permite ahorrar dinero.
Use un lavadero de autos Ahorra alrededor de 100 galones de agua en casa por lavado.	Use un controlador inteligente de riego Los controladores utilizan los datos meteorológicos locales y las condiciones del paisaje para programar la cantidad, la frecuencia y el tiempo.
Repare fugas Busque y repare fugas en sus grifos, inodoros y conexiones de mangueras de agua regularmente.	Programa de reembolso WaterWise de EPWater (solo para empresas) Para obtener información, vaya a epwater.org/reembolso empresarial.
Tome duchas de 5 minutos Mientras espera que el agua se caliente, reducida en el baño y utilícela para sus plantas.	

Para obtener más consejos para reducir el consumo de agua, visite epwater.org/conservation.



Helping Customers to Conserve

- **Residential Incentives**
 - Aerators, hose nozzles, showerheads free to the public
 - Rebates on toilets, washers, rainwater cisterns, pool covers, irrigation timers, laundry-to-landscape conversions
- **Multifamily/ICI Water Audits and Conservation Tools**
- **ICI & Homeowner Education**
 - Sun Country Tree & Landscape Conference, with WTUFC
 - El Paso Water Landscape Expo
 - GROWS Workshops (with Master Gardeners)
 - Working on videos & publications



**WaterWise Business
REBATE Program**
Reembolso de Gastos

Are you a business looking to replace any of these?
Tiene negocio, y está pensando en reemplazar cualquiera de estos para ahorrar agua?

 Restaurant Kitchens Equipment Aparatos de Cocina	 Car Wash Equipment Aparatos Lavacarros	 Industrial Laundry Equipment Aparatos Para Lavandería Industrial	 Restroom Fixtures Grifos, Inodoros	 Smart Water Irrigation Sistemas de Riego
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Up to \$15,000 rebate

Rebates will cover 50% of equipment cost.
Los reembolsos cubrirán 50% del costo de los nuevos aparatos.

To be eligible, you must:

- Be an EPWater business customer for the past twelve months at current location.
- Not have any watering violations within the last 5 years.

Go to epwater.org/businessrebate to see if you qualify and fill out an application today!

For questions, call 915.594.5508 or email conservation@epwater.org



Rebates available to EPWater customers



Toilets
(Up to 2 per household,
\$100 max)

\$50



**Washing
Machines**

\$100



**Weather or Soil Moisture-Based
Irrigation Controllers**

\$75



Laundry-to-Landscape

Up to **\$250**



Rainwater Harvesting

Up to **\$1,000**

Apply at epwater.org

Micro-grid at Recreation Center

City of El Paso and NREL





Microgrid – Chihuahuita Rec Center

Techno-economic feasibility study for a microgrid

Scope:

- Least-cost mix of energy generation
- Load requirements
- Optimal technical combination (solar, battery, diesel)
- 2-hour power outage

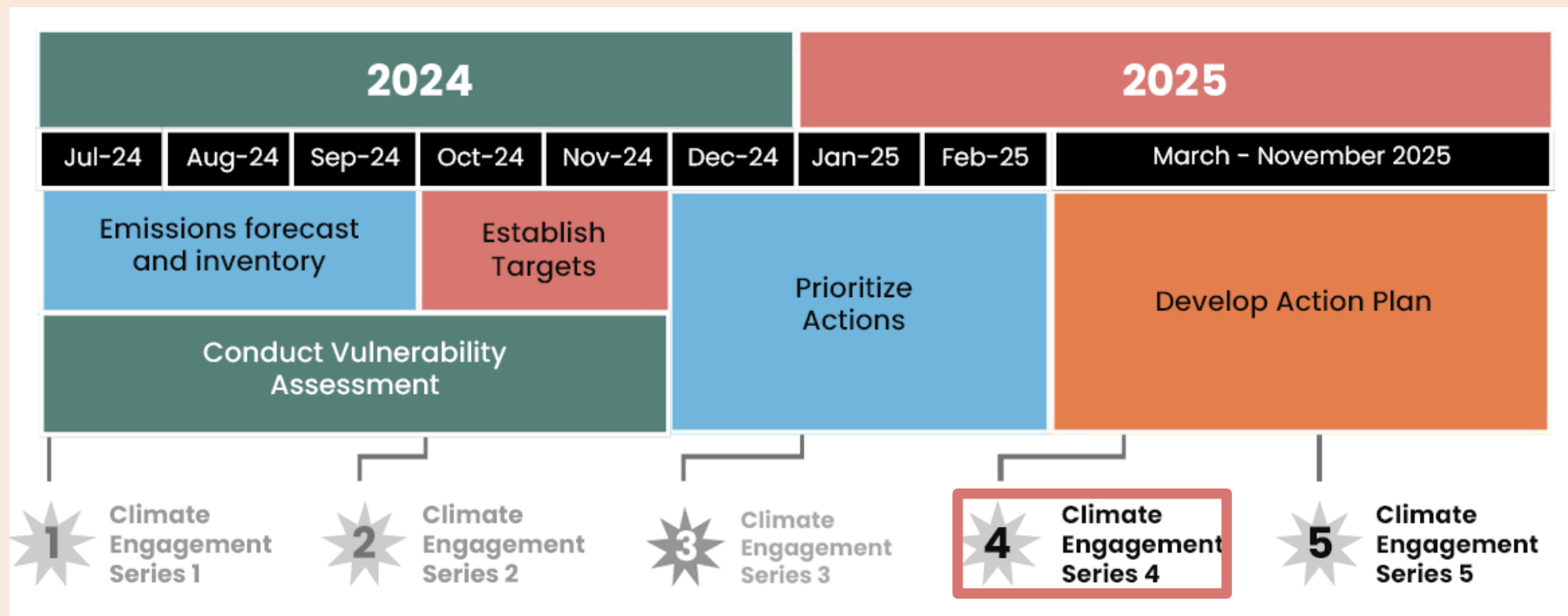
Outcome:

- Preliminary insights on microgrid feasibility for rec centers
- Economic insights on energy savings
- Rec centers as resilience hubs

Next Steps



Timeline



Thank you



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Climate Collaborative