

2022 North Texas Water Conservation Symposium

Communicating Conservation

November 17, 2022



Bio



Matt Wittern

Senior Consultant, Raftelis

- 20+ Years of Experience
- Accredited in Public Relations, PRSA
- Certificate in Public Participation, IAP2
- Project Management Professional, PMI
- BA Journalism, Colorado State University

Who is Raftelis?

The most experienced utility financial, communications, and management consulting practice in the nation.

With more than...

120+

consultants across the U.S.

Raftelis has provided financial/organizational assistance for

1,200+

public agencies and utilities

that serve more than

25%

of the U.S. population

including the agencies serving

38/50

of the nation's 50 largest cities

Today's Discussion

- Purpose and Need
- Public Relations Theories and Concepts
- Successful Water Conservation Campaigns Showcase

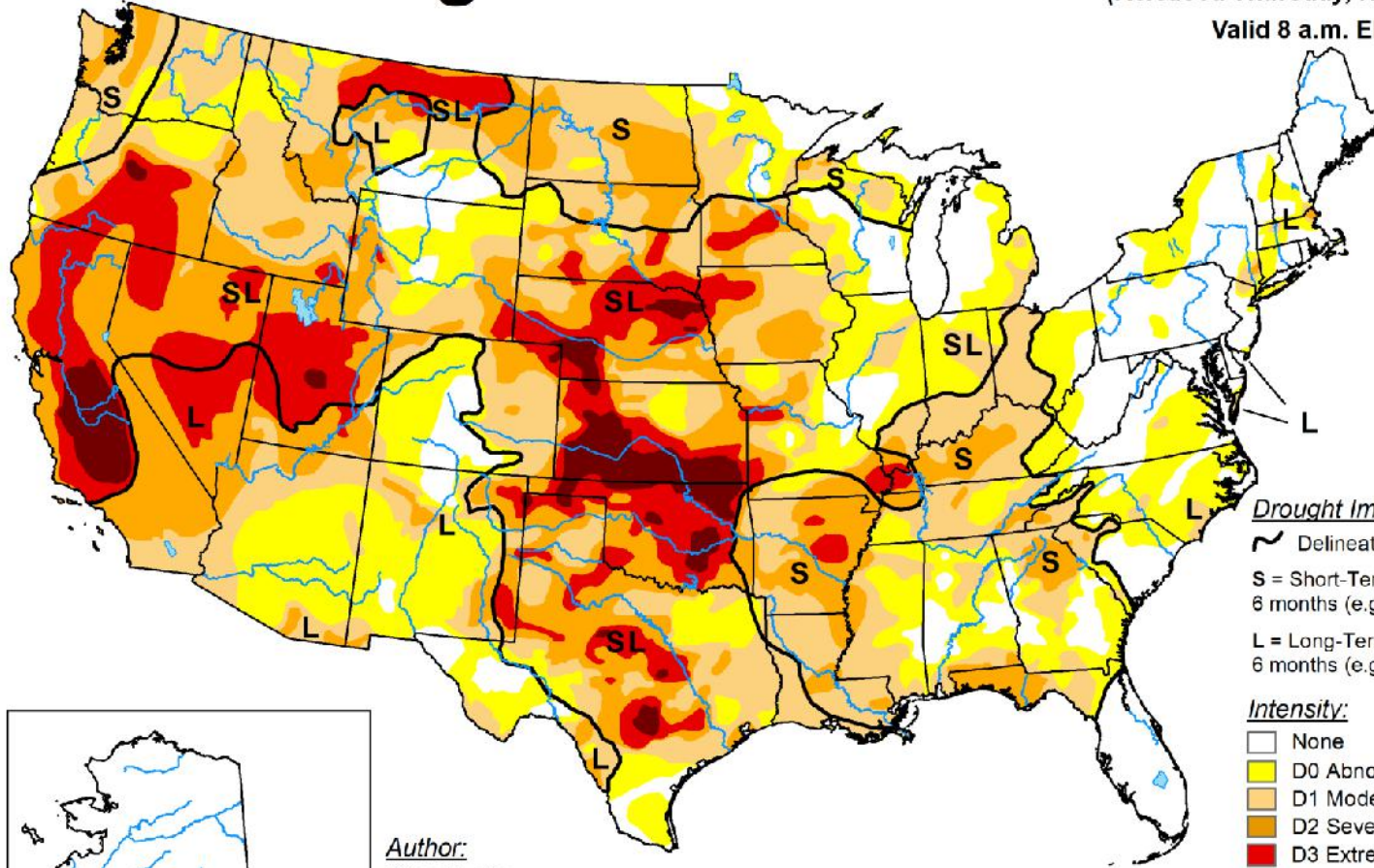
Purpose and Need



U.S. Drought Monitor

November 1, 2022
(Released Thursday, Nov. 3, 2022)

Valid 8 a.m. EDT



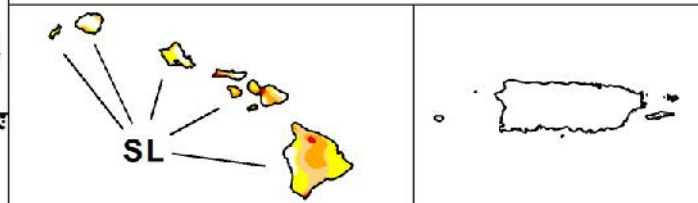
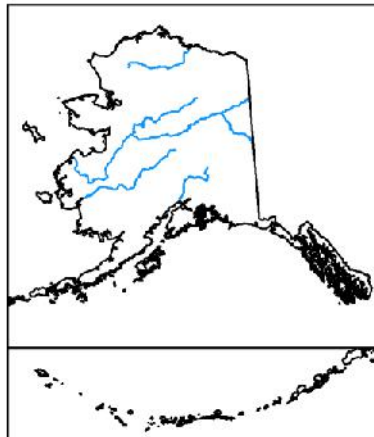
Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

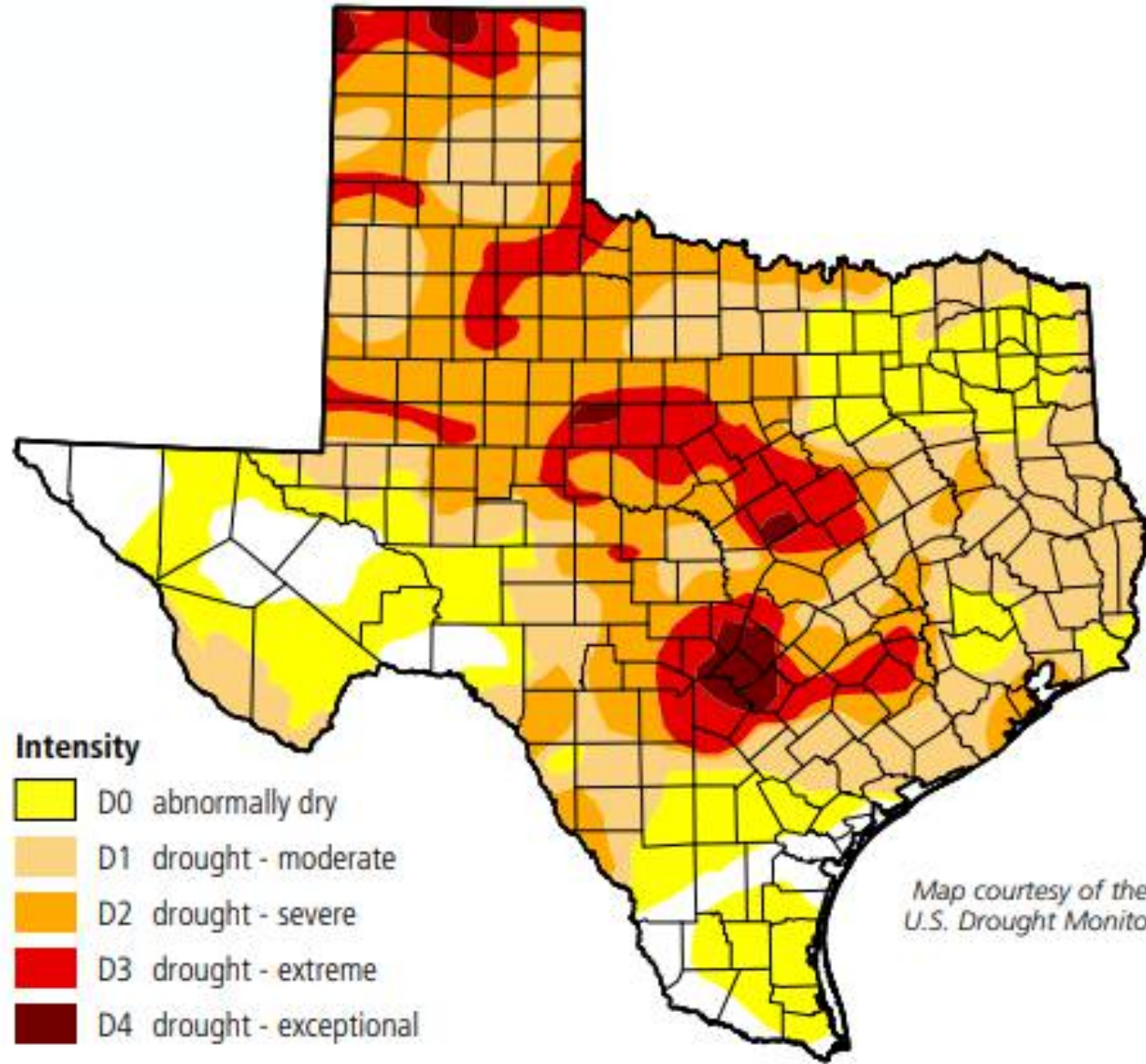
Author:
Brian Fuchs
National Drought Mitigation Center



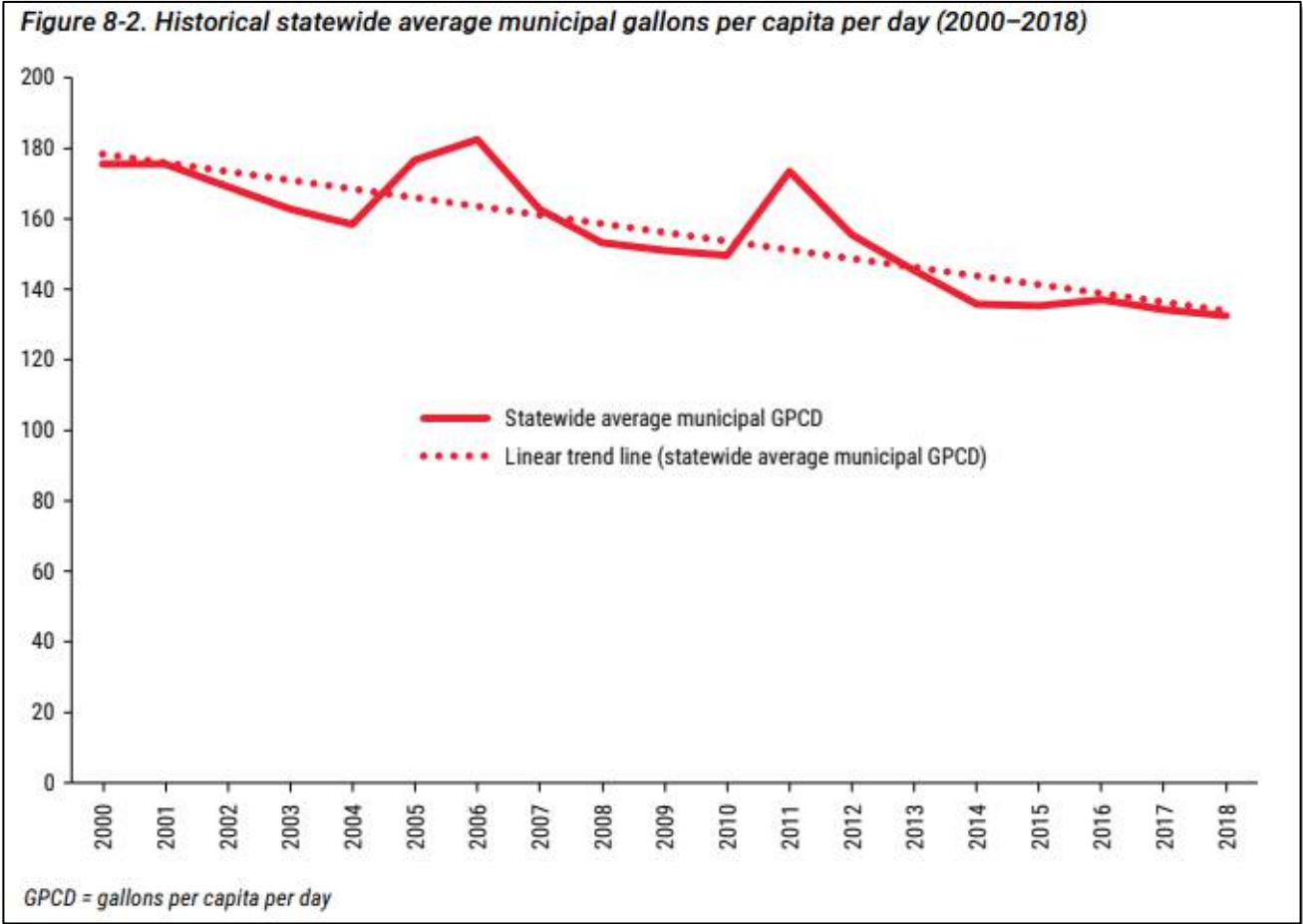
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



droughtmonitor.unl.edu



TX Trends



TX Future

Figure 5.1 - Projected population in Texas

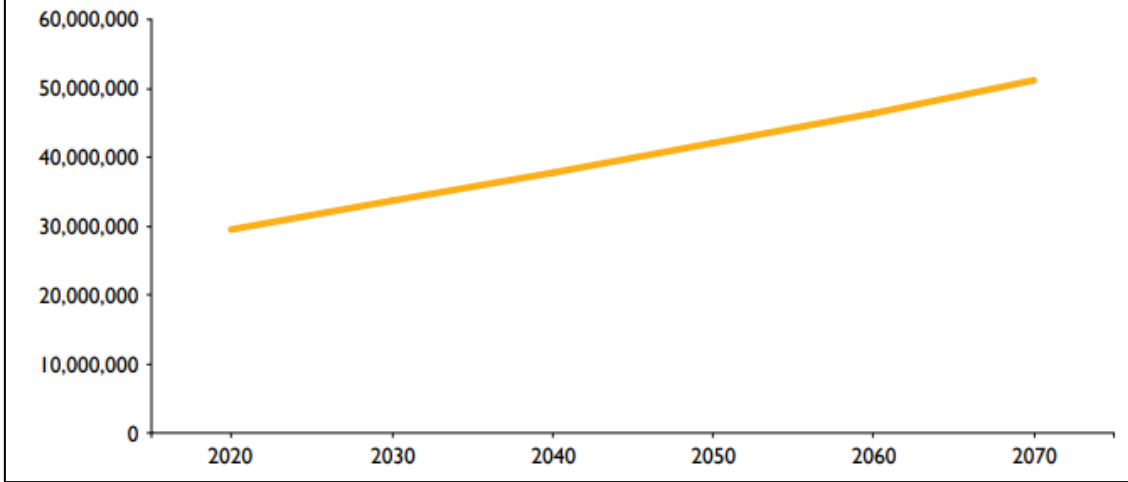
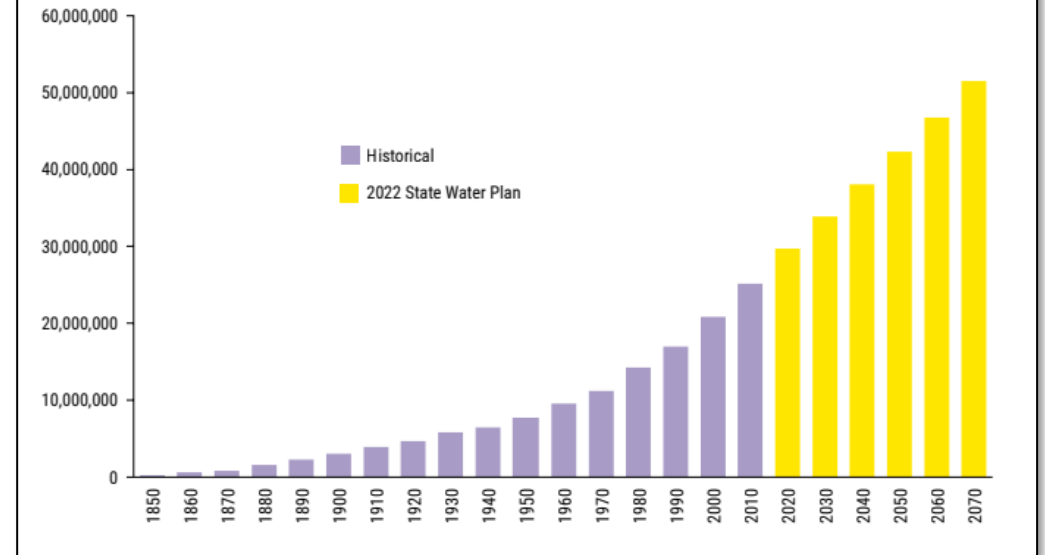
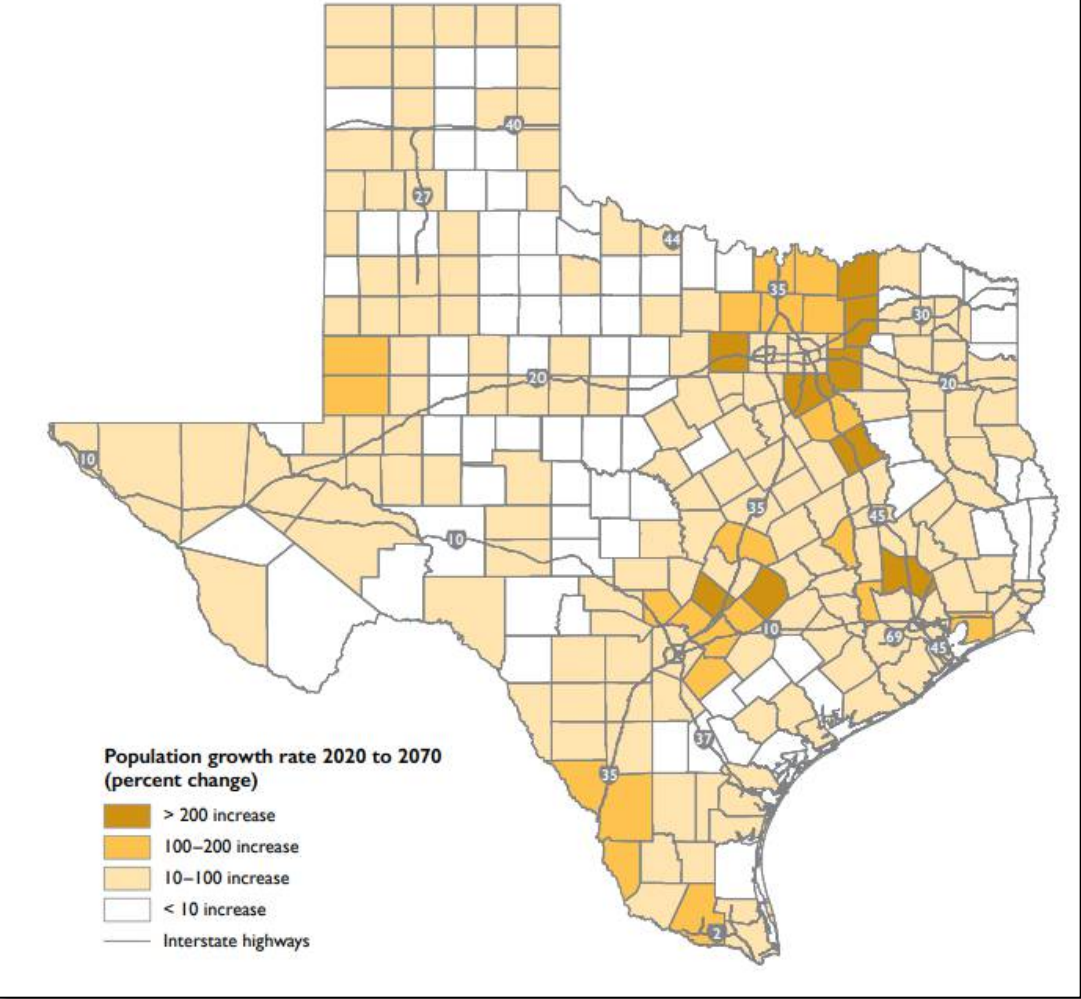


Figure ES-2. Historical and projected population growth in Texas (1850–2070)

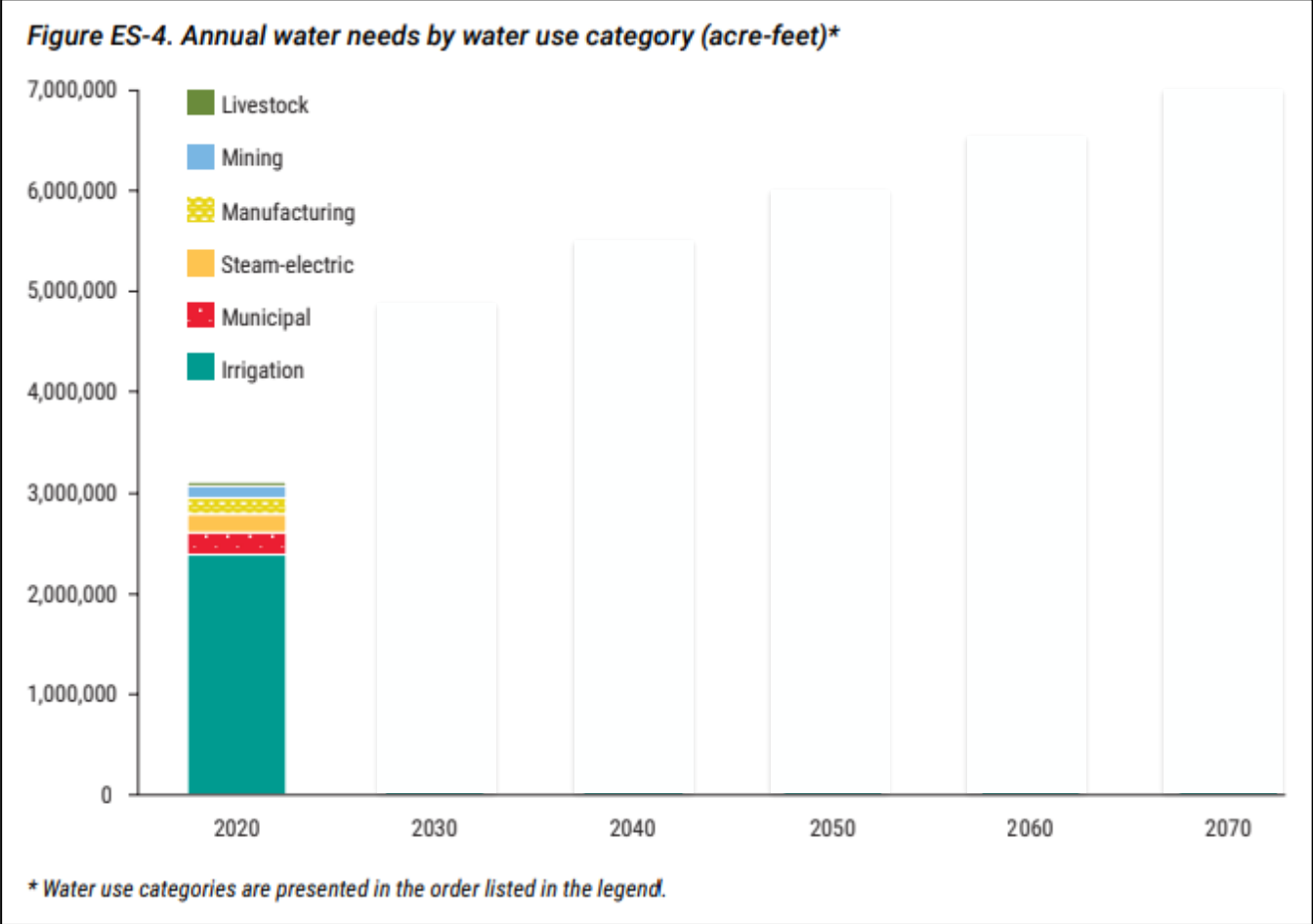


TX Future

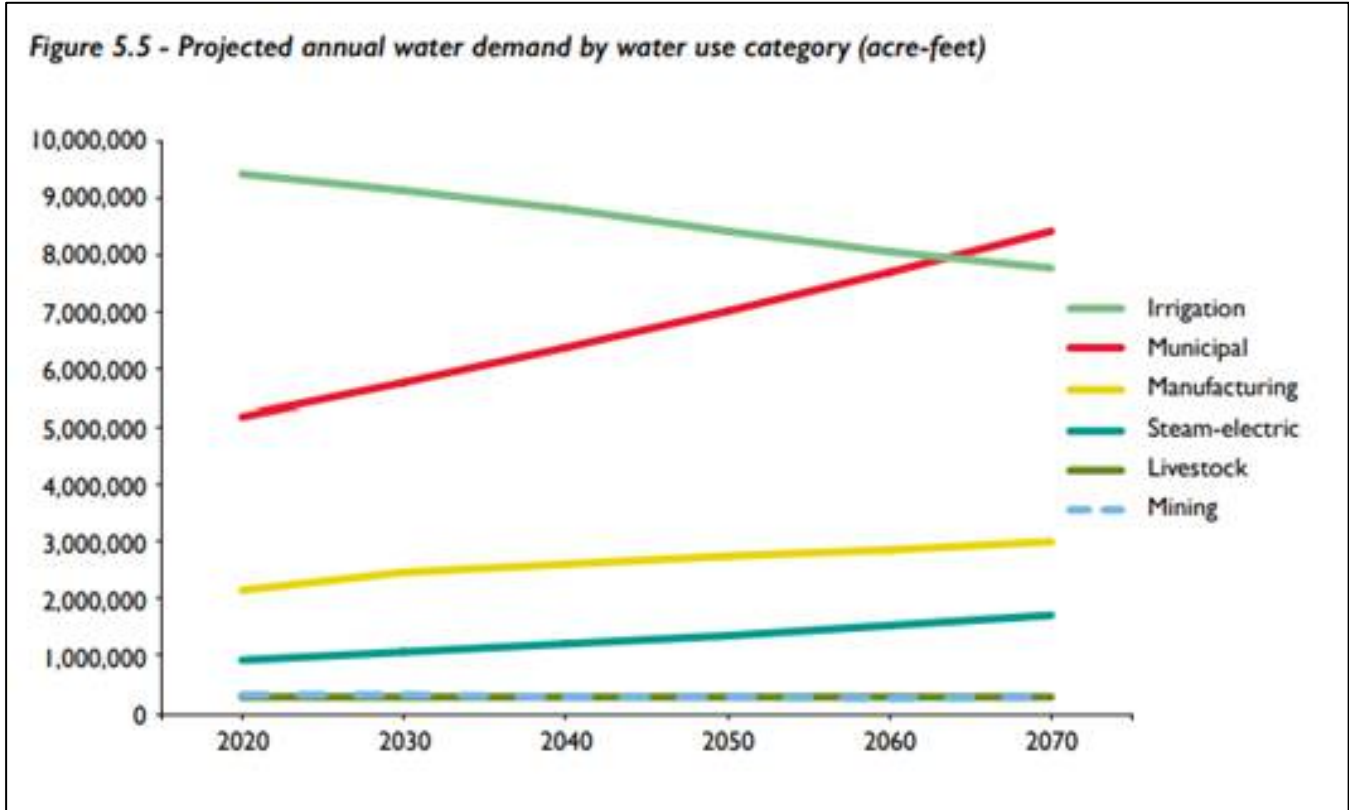
Figure 5.2 - Projected population growth in Texas counties



TX Future



TX Future



TX Future

Figure 5.6 - Water use category shares of projected annual water demand in 2020

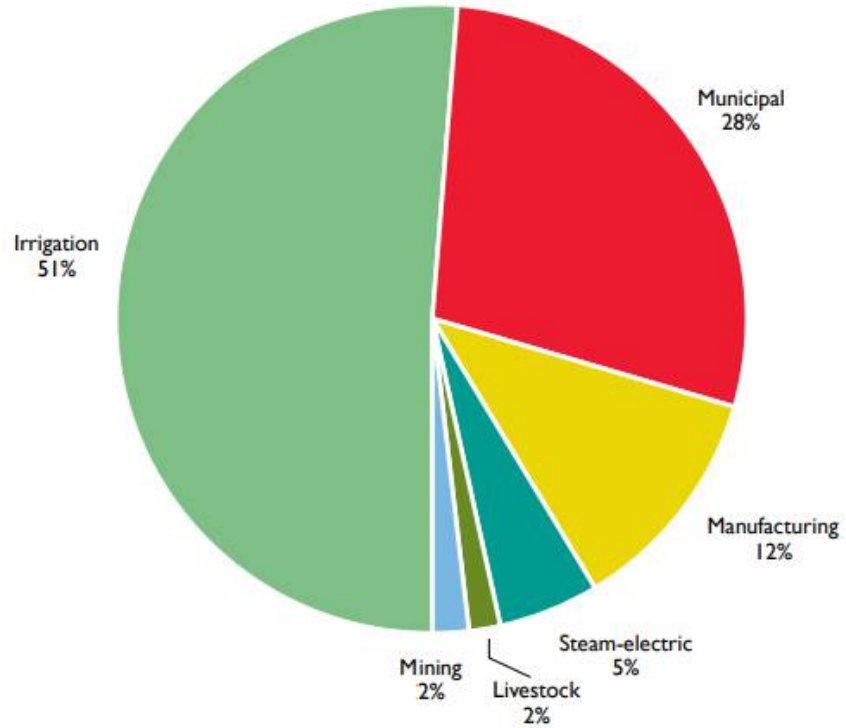
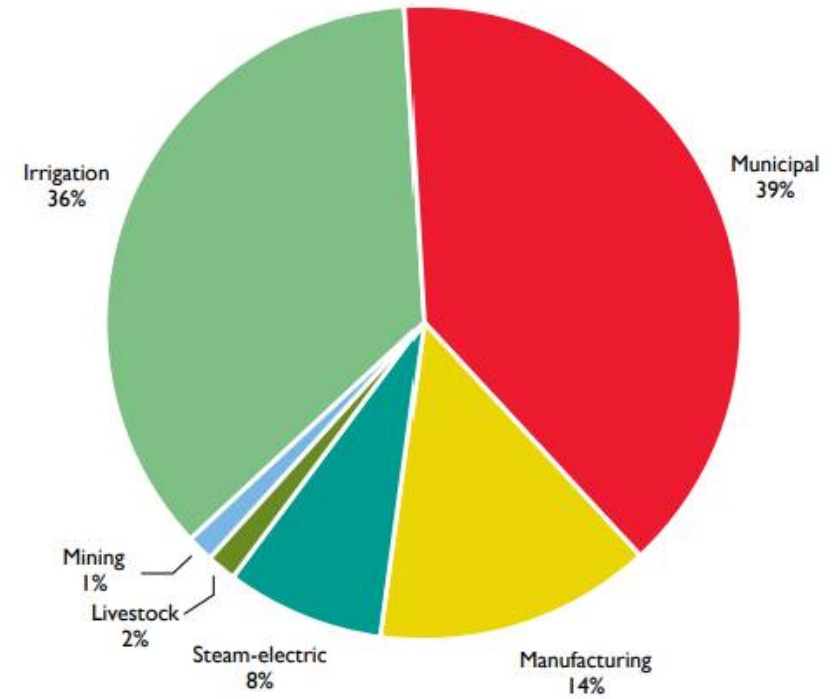
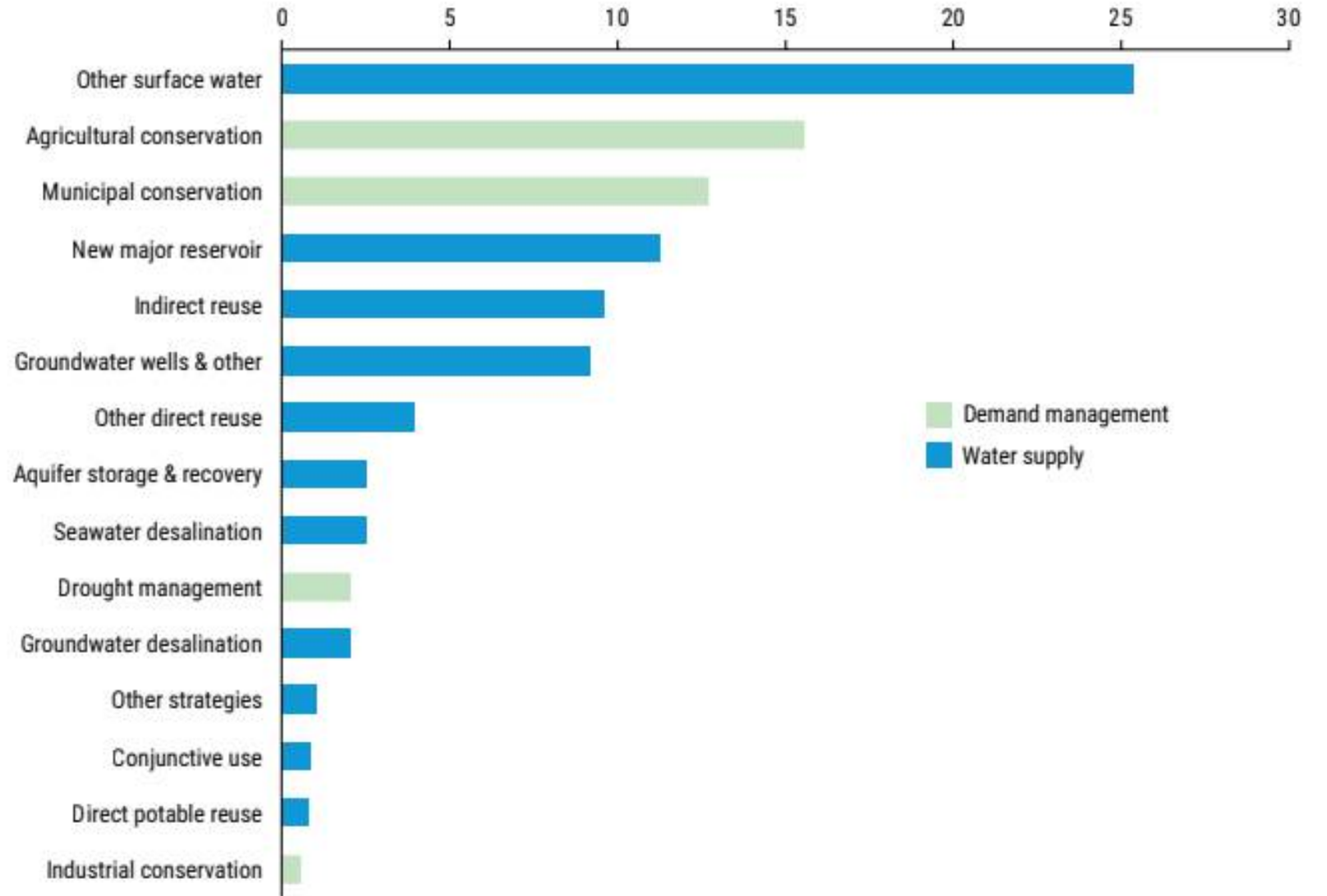


Figure 5.7 - Water use category shares of projected annual water demand in 2070



TX Future

Figure ES-7. Share of recommended water management strategies by strategy type in 2070 (percent)



TX Future



FAILURE =

-\$153

billion/year

Conservation Comms: WHAT'S DIFFICULT?

**Fatigue: Crisis,
Drought, Message**

**Human nature to discount
concern about issues as they
go into the distant future**

**What difference can one
person or one household
make?**

**Unawareness of turf
alternatives like xeriscaping
and how that can be beautiful**

**Lack of commitment from my
agency/utility to
communicating need for
conservation**

**Lack of awareness that there
is a drought/scarcity problem**

**Ignorance
of problem**

**Unwillingness to sacrifice
(i.e., my gorgeous lawn!)**

**Outright denial – my faucet
works every time I try to use
it, so what's the problem?**

**Not much of a conservation
ethic or culture**

**Lack of timely data (like from
AMI) to understand
usage/behavior link**

**Internal utility audiences
wondering why we'd want to
discourage our product's
usage, reduce revenue(s)**

PR Theories / Concepts



Influencing Humans

- Situational Theory of Publics



Dr. James E. Grunig



Situational Theory of Publics



Non Publics



Latent Publics

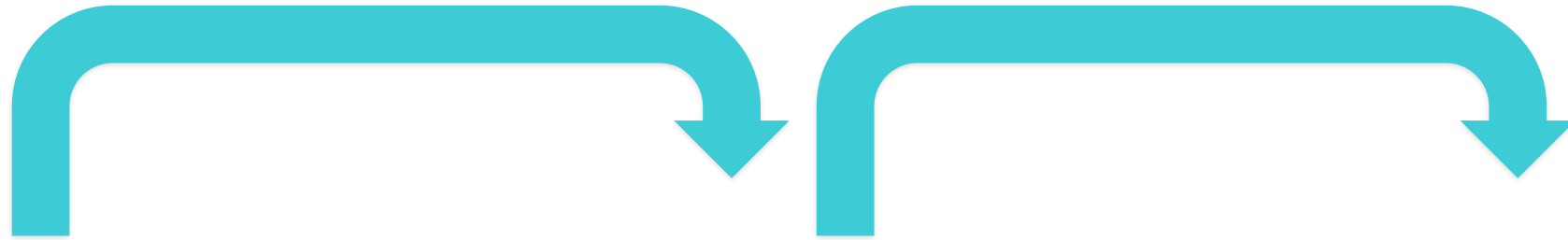


Aware Publics



Active Publics

Grunig in Action



Problem Recognition



Problem Personalization



Constraint Removal

Situational Theory of Publics



Non Publics



Latent Publics



Aware Publics



Active Publics

Situational Theory of Publics



Problem
Recognition



Problem
Personalization



Constraint
Removal



Non Publics



Latent Publics



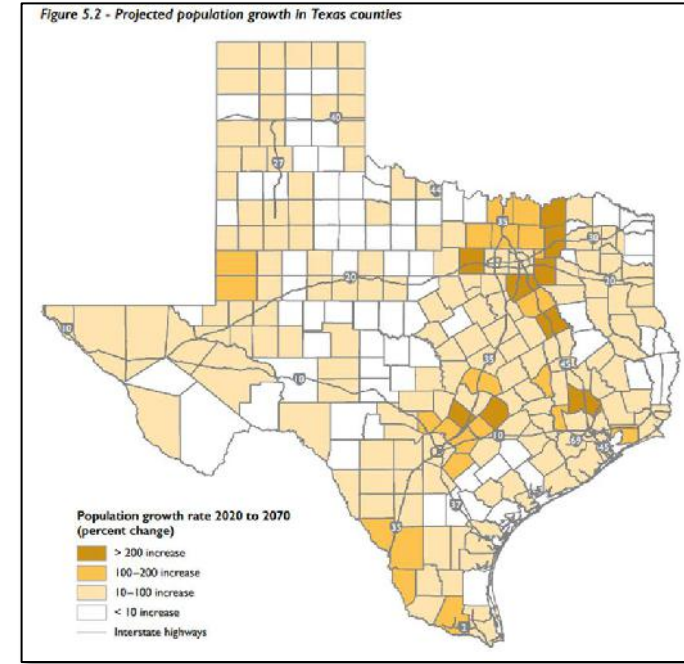
Aware Publics



Active Publics



Drilling Down: PROBLEM RECOGNITION



Drilling Down: PROBLEM RECOGNITION



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[US Water Alliance](#)

A large background image of a lush green agricultural field with multiple center pivot irrigation systems spraying water. The scene is captured during the golden hour of sunset or sunrise, with a warm, hazy light and long shadows. The word "ESSENTIAL" is overlaid in large, bold, black capital letters across the center of the image.

ESSENTIAL

[Find Out About Water's Value](#)



Drilling Down: PROBLEM RECOGNITION


THE UNITED STATE(S) OF WATER

THE SOUTH*

Ongoing access to clean, safe water is critical to our economy, health, and way of life. Although we live in different parts of the country, Americans are united in our dependence on water and the infrastructure that connects, protects, and supports it.


WE NEED WATER

The average person living in the South uses 131 gallons of water per day.




WE RELY ON REGULAR SERVICE

El Paso Water provides 103 million gallons to 806,000 people and receives an average of 62 million gallons of wastewater each day.




LOTS OF NEW TECHNOLOGY EXISTS

Florida, a national leader in water reuse, uses 719 million gallons of reclaimed water per day.




OUR SYSTEMS ARE AGING



PROVIDING WATER ISN'T FREE

People who live in the South pay an average of \$4.46 per 1000 gallons of drinking water, and \$6.48 per 1000 gallons of wastewater they use. In some cases, the true value of water can be as high as \$30 per 1000 gallons!*



WE RELY ON REGULAR SERVICE



El Paso Water provides 103 million gallons to 806,000 people and receives an average of 62 million gallons of wastewater each day.



Drilling Down: PROBLEM RECOGNITION



Health



Safety



Economy

Drilling Down: PROBLEM RECOGNITION



Environment



Quality of Life

Drilling Down: PROBLEM PERSONALIZATION



Affordability



Social Unrest



**Lower Quality
of Life**

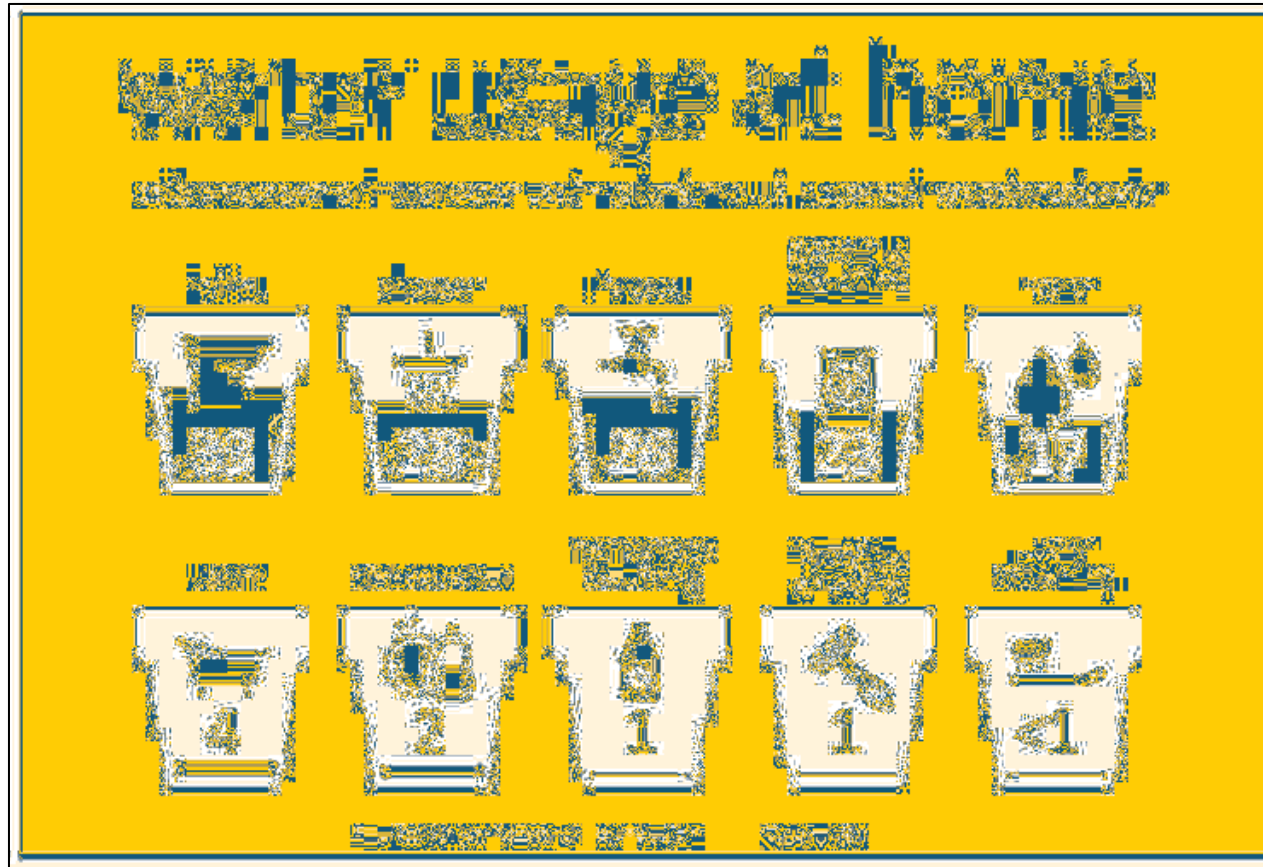
**Outdoor
Recreation**

**Ground
Subsidence**

**Severe
Watering
Restrictions**

**Economic
Impacts**

Drilling Down: PROBLEM PERSONALIZATION



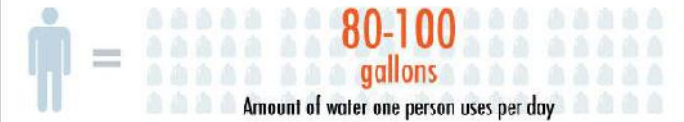
The Water We Use



Clean water, one of the world's most precious resources, plays an essential role in every person's life. Typical water usage in the United States:



Credit: Dreamstime.com



Daily Activities

Some individual household activities and the amount of water they consume:



SOURCES: ENOTES.COM, U.S. GEOLOGICAL SURVEY

R. TORO / © LiveScience.com

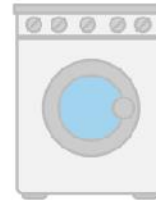
Drilling Down: CONSTRAINT REMOVAL

WHAT DOES A 20% REDUCTION IN WATER LOOK LIKE?



AVERAGE DAILY USE

The average Californian uses 196 gallons of water per day. Here are some easy ways to reduce water use. Find the right combination for you to reduce by 20% or 39 gallons a day.



**WASH ONLY FULL
LOADS OF CLOTHES**

SAVES
15-45 GALLONS per load



**ONLY RUN DISHWASHER
WHEN FULL**

SAVES
3-8 GALLONS per load



**INSTALL AN ULTRA LOW
FLOW TOILET**

SAVES
19 GALLONS per person/day



**INSTALL A FREE LOW
FLOW SHOWER HEAD**

SAVES
1.2 GALLONS per minute



**INSTALL AERATORS ON
FAUCETS**

SAVES
1.2 GALLONS per person/day



**TURN OFF WATER
WHEN BRUSHING TEETH**

SAVES
10 GALLONS per person/day

For more information please visit
www.ci.manteca.ca.us/PublicWorks/Water



Influencing Humans

- Situational Theory of Publics
- Nudge Theory

Nudge Theory



Nudge Theory

City of SACRAMENTO 1395 35th Avenue
Department of Utilities Sacramento, California 95822

User address

User name

31%
Less Water

Your home used **31% less water** per day compared to similar homes in Sacramento.

How Does Your Home Compare?
Here's how your average daily water usage compares against homes like yours during October 2015.

You	190 Gallons
Similar Homes ¹	276 Gallons

PDFNZqPLsw15104

Take Action!
Follow these steps, and you'll be on your way to using water more efficiently.

1. Cash in your grass.
Take advantage of the River Friendly Rebate Program to replace your thirsty turf grass with drought-tolerant landscape and receive up to \$1.00 per square foot of turf replace.

2. Fix that leaky toilet.
Even a small leak can waste 30 gallons per day. That's over 10,000 gallons per year. Yikes.

3. Choose and use your appliances wisely.
Choose ENERGY STAR certified appliances whenever possible and always use them at full capacity to save water and energy.

Rebate Offer

Free water conservation devices and rebates are available.

To get pre-qualified, please call 311 to schedule a free Water Wise House Call. Visit www.sparesacwater.org/rebates for more information.

A Message from the City of Sacramento

The City of Sacramento is in a Stage 2 Water Shortage requiring a mandatory 28 percent reduction in water use.

You can do your part during this drought by:

- limiting your outdoor irrigation to two days per week
- shortening shower time to 5 minutes or less
- using a commercial car wash that recycles water instead of washing your vehicle at home.

Average Water Usage Per Day²
Your average daily water usage compared to similar homes in Sacramento over the past year.

Month	You	Similar Homes
OCT 2014	300	310
NOV 2014	250	260
DEC 2014	200	210
JAN 2015	180	200
FEB 2015	180	200
MAR 2015	200	220
APR 2015	250	260
MAY 2015	300	310
JUNE 2015	350	360
JULY 2015	380	390
AUG 2015	350	360
SEPT 2015	250	260
OCT 2015	190	276

You now have online access to your hourly water usage information.

Visit mywater.cityofsacramento.org and enter your account number to register.

Account #

Questions? Contact the City of Sacramento Department of Utilities at 311 or at waterconservation@cityofsacramento.org.

Get the EyeOnWater App

Download the EyeOnWater App to keep an eye on your water usage, track historical trends, monitor your home for leaks, and more. It's free.

Download on the App Store | GET IT ON Google play

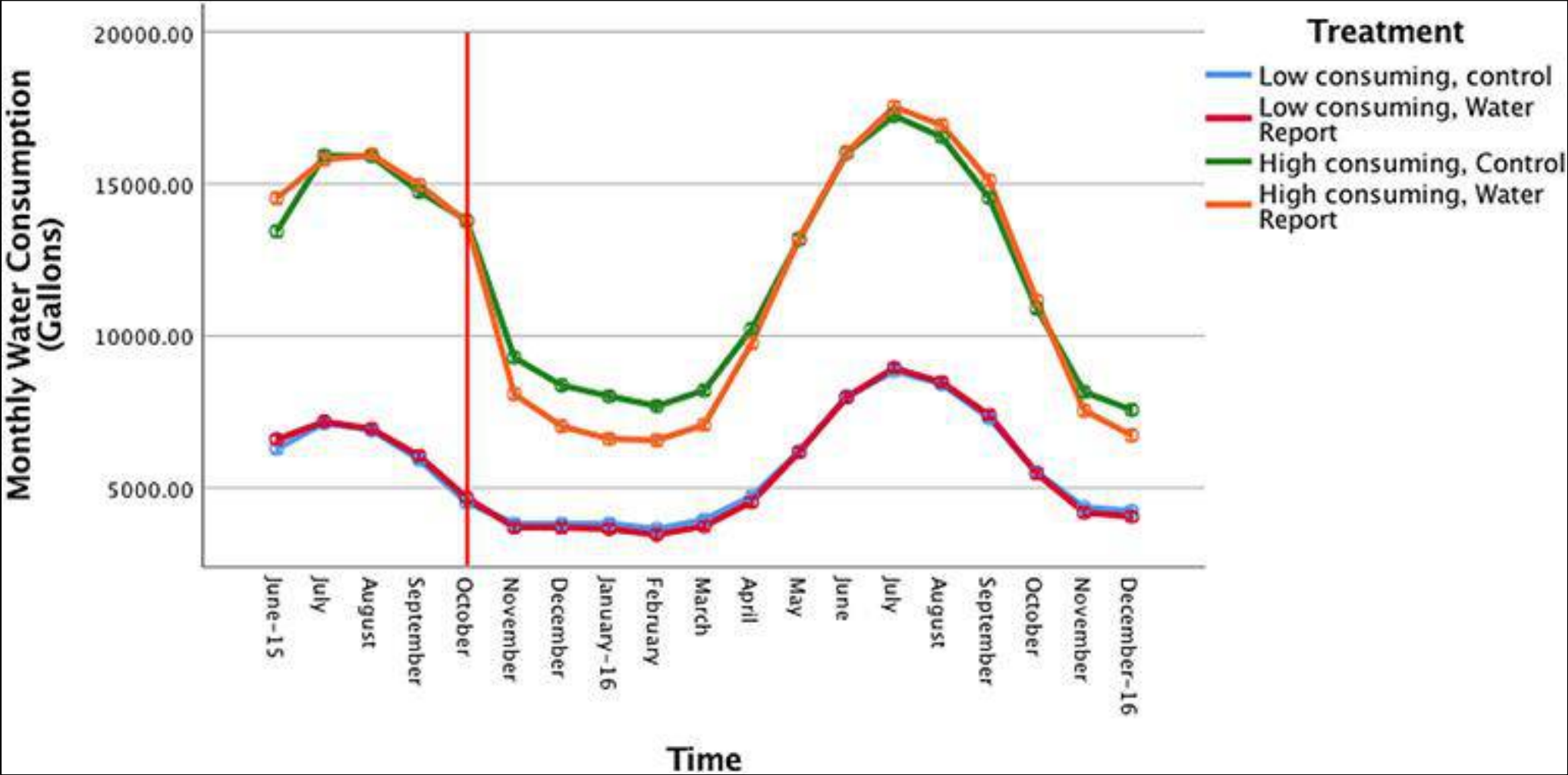
¹ In this comparison, "Similar Homes" are determined by the average water usage from a sample of single family homes in Sacramento.

² Average daily values are calculated from your historic usage records and may be estimated in some cases.

PDFNZqPLsw15104

Powered by Nudge Meter

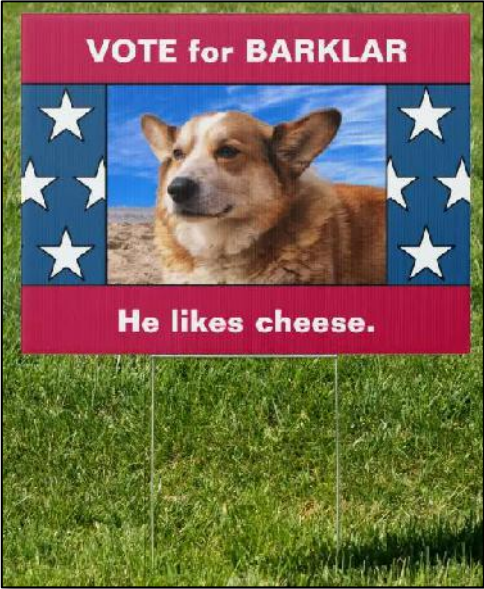
Nudge Theory



Influencing Humans

- Situational Theory of Publics
- Nudge Theory
- Social Conformity and Norms

Social Conformity and Norms



Social Conformity and Norms



Conservation Campaigns



Conservation Campaigns

- Save Water Texas Coalition
- Water is Awesome
- City of St. Helena
- Denver Water



Conservation Campaigns



YOUR YARD'S NEW VERY BEST FRIENDS!

Three cartoon characters are shown in circular frames. On the left is Wesley Weasel, a brown weasel holding a camera. In the middle is Irry Gator, a green alligator wearing orange sunglasses and a red shirt with yellow spots. On the right is Jayb Blue, a blue bird perched on a yellow sun.

WESLEY WEASEL

IRRY GATOR

JAYB BLUE

BE A WATER HERO

Where will their water come from?
The water we conserve today can serve THEM tomorrow!

COMING SOON



TEXAS WATER HOG

A Water Conservation Program For Kids Of All Ages

Texas WATER HOGS live in neighborhoods just like yours. They irrigate their lawns in the rain, they don't repair leaky faucets and hoses - wasting thousands of gallons of our drinking water, and they figure it'll be worth the wait, jilling can be as long as they want.

Visit texaswaterhog.com to learn more.

A cartoon illustration of a pink pig wearing a brown cowboy hat, looking up and to the right. The pig is framed by a yellow, braided rope that forms a circular arch over its head.

Conservation Campaigns



Conservation Campaigns

- Save Water Texas Coalition
- Water is Awesome
- City of St. Helena
- Denver Water



Conservation Campaigns

- Save Water Texas Coalition
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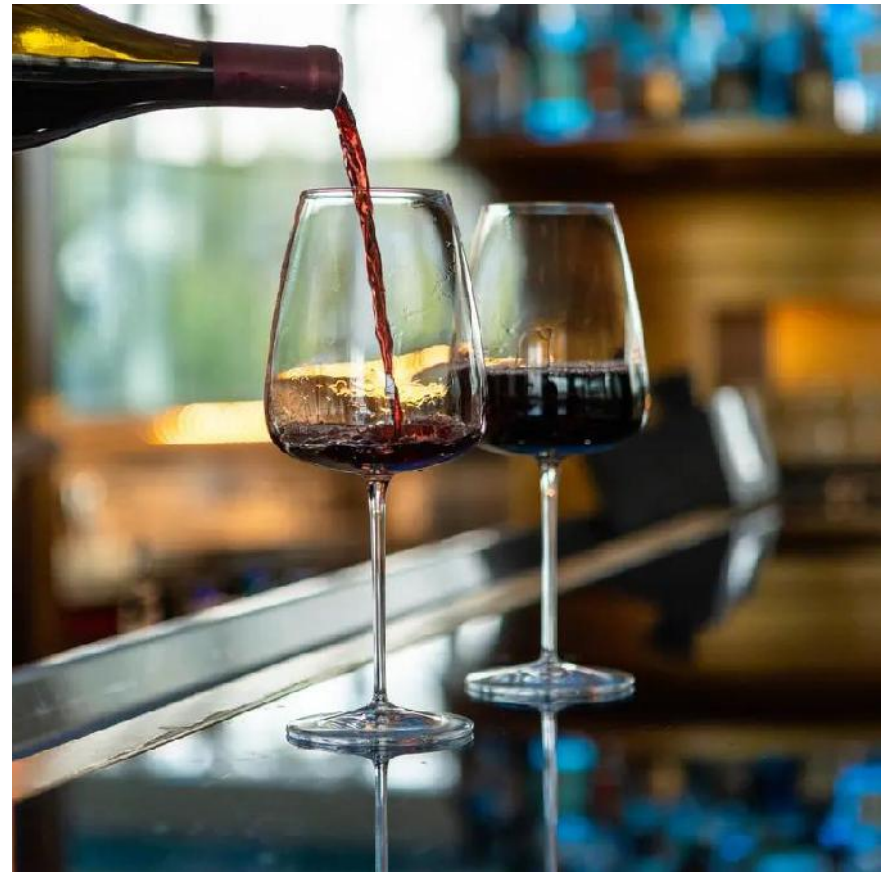
TALL TALES

FROM THE


TOWERS *of* TEXAS



Conservation Campaigns



Fact Sheet



2021 Water Conservation Phase II Restrictions





Using **less than 65 gallons per person per day indoors** will help our community avoid additional, more painful restrictions

Working Together to Do Our Part

Currently in a Phase II drought, we must come together as a community to further reduce summertime total water use.

If we fail, it is likely that a Phase III drought will be declared, triggering far more painful water use restrictions.

Factors Contributing to Current Drought:

-  Lack of rain
-  Use of Bell Canyon Reservoir water to fight 2020 wildfires
-  High summer temperatures increase reservoir evaporation
-  Fire hydrant flushing required to maintain drinking water quality

Water Conservation Tips:

Indoors 65 gal/day/person	Outdoors 2,500 gal/month, Apr-Oct
 Install Sink Aerators Save 1.2 gallons per person per day	 Use Water-wise Plants Most California-native plants are water-wise
 Install High-Efficiency Toilets Save 19 gallons per person per day	 Install Drip Irrigation and Add a Smart Controller Save 15 gallons each time you water
 Wash Full Loads of Clothes and Dishes Save 19 gallons per person per day	 Use a Broom to Clean Outdoor Areas Save 8-18 gallons per minute
 Turn Water Off When Brushing Teeth or Shaving Save 10 gallons per person per day	 Set Mower Blades to 3" Encourage deeper roots and save 16-50 gallons per day
 Fill Bathtub Halfway or Less Save 12 gallons per bath	 Adjust Sprinkler Heads Saves 12-15 gallons each time you water
 Take 5-minute Showers Save 12.5 gallons per shower	 Fix Irrigation System Leaks A leak as small as the tip of a ballpoint pen can waste 6,300 gallons of water per month!
 Fix Leaks Save 110 gallons per month	

Learn More

For more information and tips for how you can do your part to help our community navigate through the current drought, visit www.cityofstheleena.org





City Staff Email Signature

**Help End
St. Helena's
Water Crisis**



Residential
< 65 Gal
per person per day



Business and
Agricultural
↓ ^{at least} **10%**

For conservation tips, visit www.cityofstheleena.org!

**Ayuda a Poner
Fin a La Crisis Del
Agua en St. Helena**



Residencial
< 65 Gal
por persona



Negocios y
Agricultura
Por Lo Menos
10% ↓

¡PARA CONSEJOS DE CONSERVACIÓN, VISITA WWW.CITYOFSTHELENA.ORG!



Utility Bill Stuffers



Help End St. Helena's Water Crisis



St. Helena Water Crisis: Mandatory Outdoor Watering Restrictions



Allowed only between
8 p.m. and 8 a.m.

Penalties for Inefficient Water Use

In recognition of the City of St. Helena's ongoing water crisis, earlier this summer City Council adopted a penalty structure for customers who exceed their property's monthly water allocation. These penalties are designed to minimize the impact on those bills that exceed the allocation by a little bit, while sending a strong message to egregious water users.

Exceed Monthly Water Allocation By	Penalty per Hundred Cubic Feet (748 Gallons)	\$ per Gallon Exceeded
Less than 25% (up to 24.999%)	\$10.00	\$0.013
25-50% (25-49.999%)	\$25.00	\$0.033
50-100% (50-99.999%)	\$100.00	\$0.134
Greater than 100%	\$250.00	\$0.334

For summer watering rules and conservation tips, visit www.cityofstheleena.org!



Utility Bill Stuffers



Water Conservation Rebates

+ Learn More

Contact Environmental Services
Technician Ian Dale at 707-967-2794
or at idale@cityofsthelema.org.



Cash For Grass:
Up to \$1.50 per square foot of turf grass replaced



High-Efficiency Toilet:
Up to \$300 per replacement



Rainwater Harvesting:
Up to \$100 for system installation



Greywater System:
Up to \$100 for system installation



Recirculating Hot Water Pump:
Up to \$100 for system installation



Flume Water Monitor:
Visit <https://flumewater.com/sthelema>

Bookmarks



Help End St. Helena's Water Crisis

 Indoor
< 65 Gal
per person per day

 Outdoor
< 2,500 Gal
per month

 Business and
agricultural
↓ at least 10%



For summer watering rules
and conservation tips, visit
www.cityofstheleena.org!



Social Media

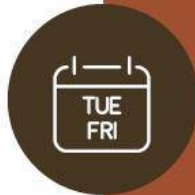


St. Helena Water Crisis:

Mandatory Outdoor Watering Restrictions



Allowed only between
8 p.m. and 8 a.m.




Odd numbered addresses:
Tuesdays and Fridays ONLY



Even numbered addresses:
Mondays and Thursdays ONLY



Social Media



Only 1% of the earth's water is available for drinking water. 2% is frozen.




At one drip per second, a faucet can leak **3,000 gallons in a year.**




Average California Home Water Usage

	50% Landscaping
	20% Toilets
	18% Showers



LESS THAN **2%** of the Earth's water supply is fresh water.

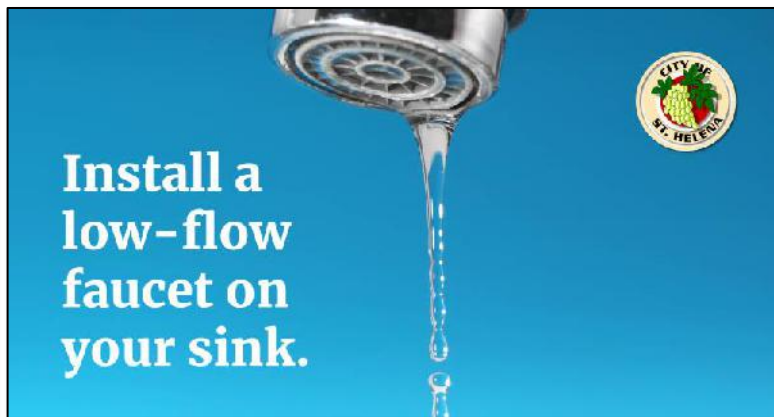




Social Media



**Don't water the lawn
on windy days**



**Install a
low-flow
faucet on
your sink.**



**Don't let your faucet
needlessly run while
you're cooking.**

You're letting good water
(as well as energy and money)
run down the drain.



**Check
your water
meter**



**Check your in-ground
irrigation system each spring
before you turn it on**



Set lawn mower blades one notch higher

**longer grass equals
less evaporation**



Restaurant Table Tents / Posters



**Help Save
Our Water**

For every glass of water
not served, three glasses
of water are saved!

WWW.CITYOFSTHELENA.ORG

**St. Helena is in a
water emergency.**

Among other actions, we're
doing our part to help
conserve water by serving
water only upon request.

WWW.CITYOFSTHELENA.ORG



Coasters



**Water Only
on Request**

We're doing our part to conserve water
during St. Helena's water crisis.

WWW.CITYOFSTHELENA.ORG



Coyote Gulch

The health of our waters is the principal measure of how we live on the land – Luna Leopold

[Home](#) [About](#)



Conservation: Denver Water's 'Use only what you need' campaign has resulted in a 20% drop in consumption

From the Huffington Post (Ryan Grenoble):

The current campaign – which gave rise to the billboards, bus signage, and

Categories

- [Colorado Water \(22,894\)](#)
- [Climate Change \(20,451\)](#)
- [Colorado River Basin \(7,808\)](#)
- [Infrastructure \(5,449\)](#)
- [South Platte Basin \(3,494\)](#)

Year



Use Only What You Need





Use Only What You Need





Use Only What You Need





Use Only What You Need





Use Only What You Need





Use Only What You Need





Use Only What You Need





Stop a Running Toilet





Stop a Running Toilet





Watering Times





Waste Is Out





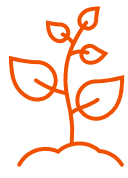
Waste Is Out





Grass Is Dumb





Grass Is Dumb





Grass Is Dumb





Grass Is Dumb – What It Needs





Grass Is Dumb – What It Needs



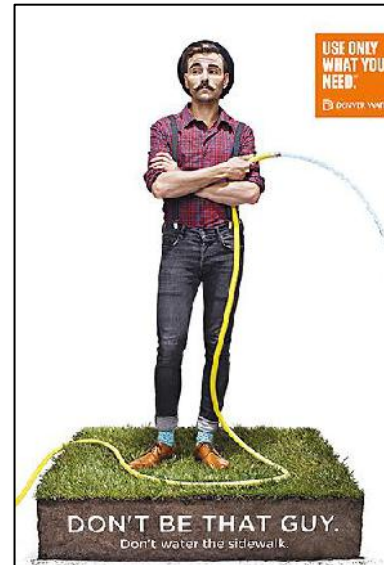


Water Less



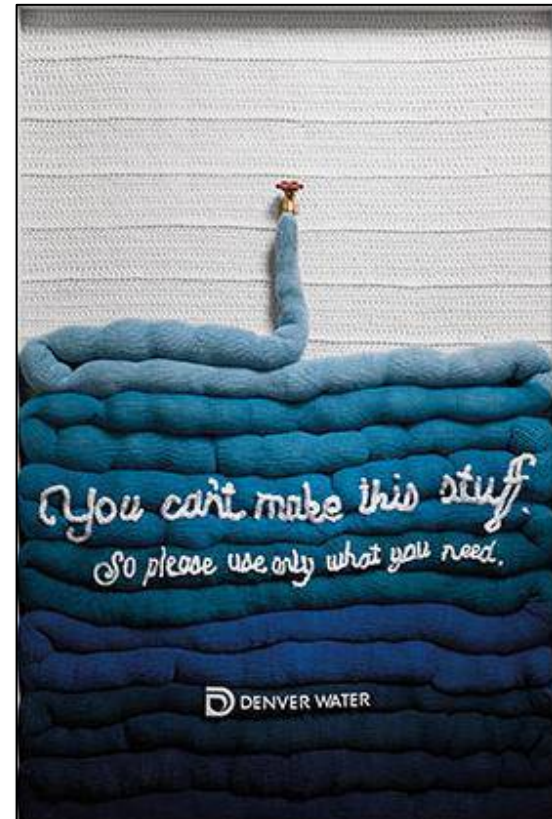


Don't Be That Guy





You Can't Make This Stuff



In Summary



Know Your Audience



Non Publics



Latent Publics

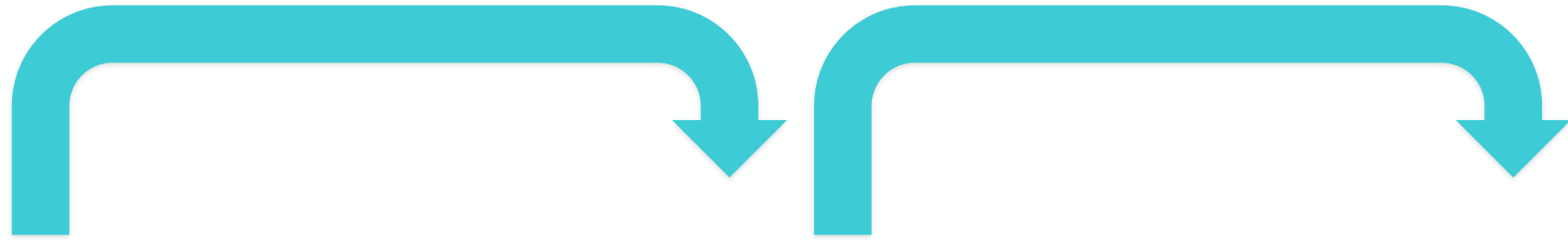


Aware Publics



Active Publics

Know Their Location



Problem Recognition



Problem Personalization



Constraint Removal

Meet Them With a Message



Problem
Recognition



Problem
Personalization



Constraint
Removal



Non Publics



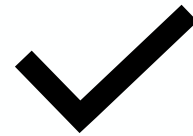
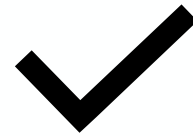
Latent Publics



Aware Publics



Active Publics



Q&A



Thank you!

Contact: Matt Wittern
303.305.1147 / mwittern@raftelis.com