

# The Texas Water Development Board's Texas Water Service Boundary Viewer

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Presented to  
Management Systems (WIMS) Workshop &  
USGS National Water Use (USGS WU) Data Collaboration  
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The following presentation is based upon professional research and analysis within the scope of the Texas Water Development Board's statutory responsibilities and priorities but, unless specifically noted, does not necessarily reflect official Board positions or decisions.



# Water Service Boundary Viewer

## Mapping Application

To collect and provide the most up-to-date and best data available on the water service areas for all community Public Water Systems within Texas.

# Overview

- Purpose
- Background
- Application Overview
- Response & Outreach
- Benefits
- Potential Future Plans



# Purpose

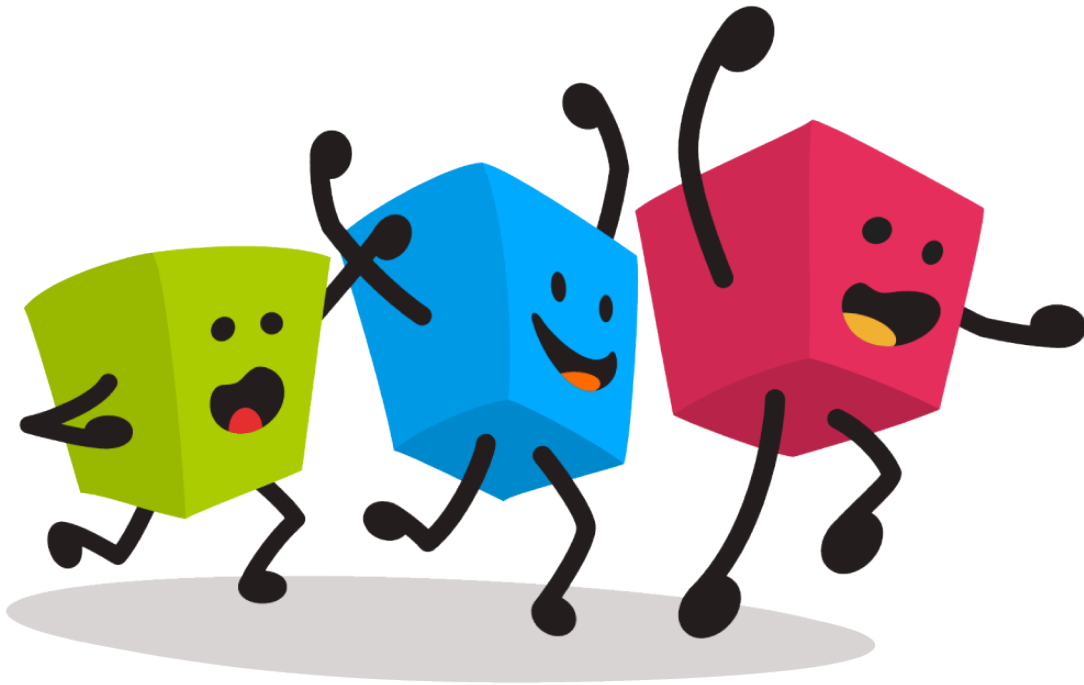
- Create & maintain a clearinghouse of all drinking water service area boundaries
- Geographically display associated water data & system information to the public
- Better estimate future municipal water demands for the State Water Planning Process

# Background

- Original boundary map snapshot produced in 2009 through a one-time TWDB research grant
- Grant from USGS Water Use Data & Research Program:
  - Identify, update, & maintain the retail water service area boundaries of all active community public water systems (4,500+) in Texas
  - December 2016 – Contract between USGS & TWDB
  - **January 2019 – Application Deployed**

# Application Overview

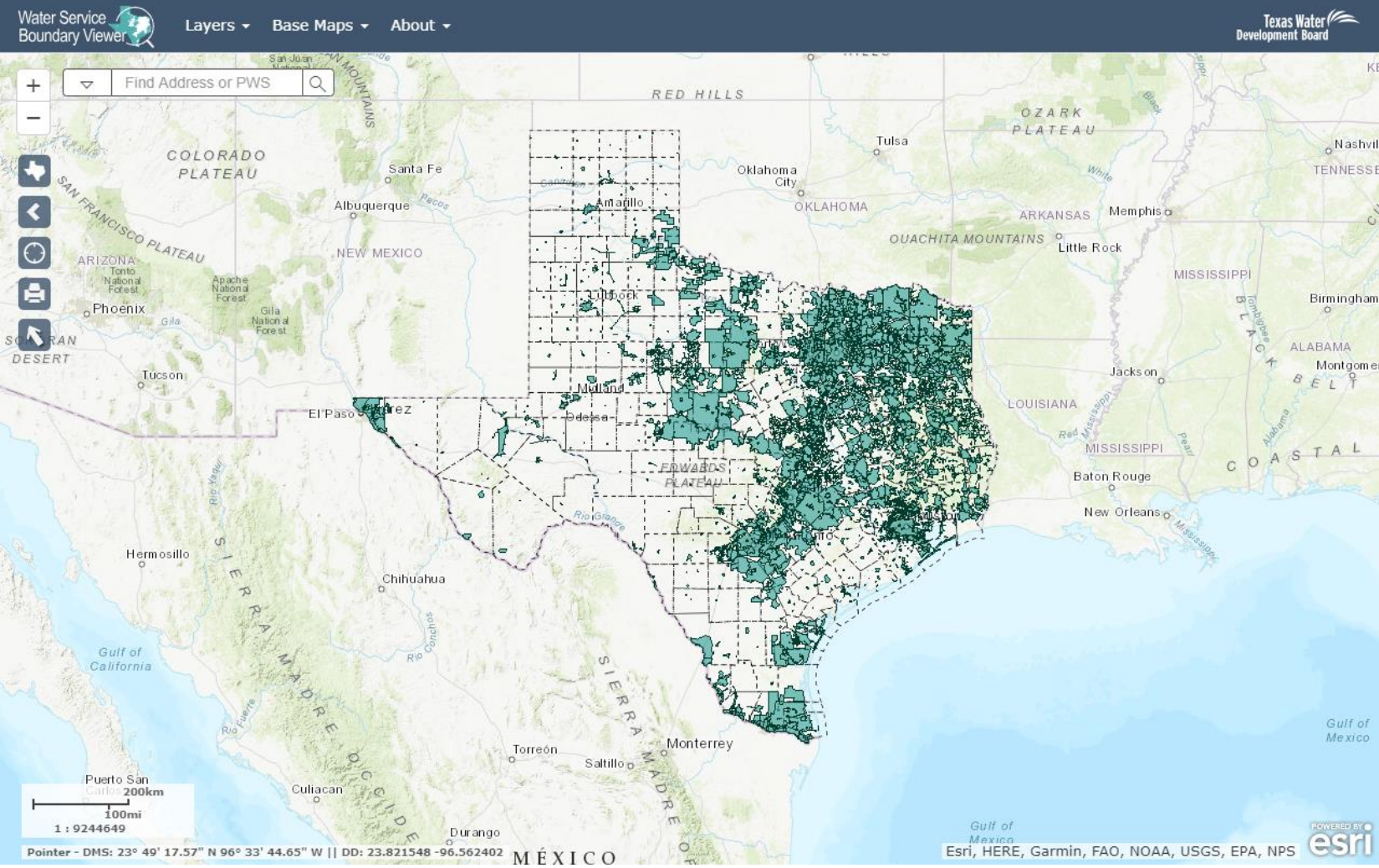
## Three Components



- Public: View, create a map, or download a shapefile of the water system boundaries & view linked reports
- Editor: Allow utility representatives to update or verify boundaries
- Admin: Review & provide customer support



# Public

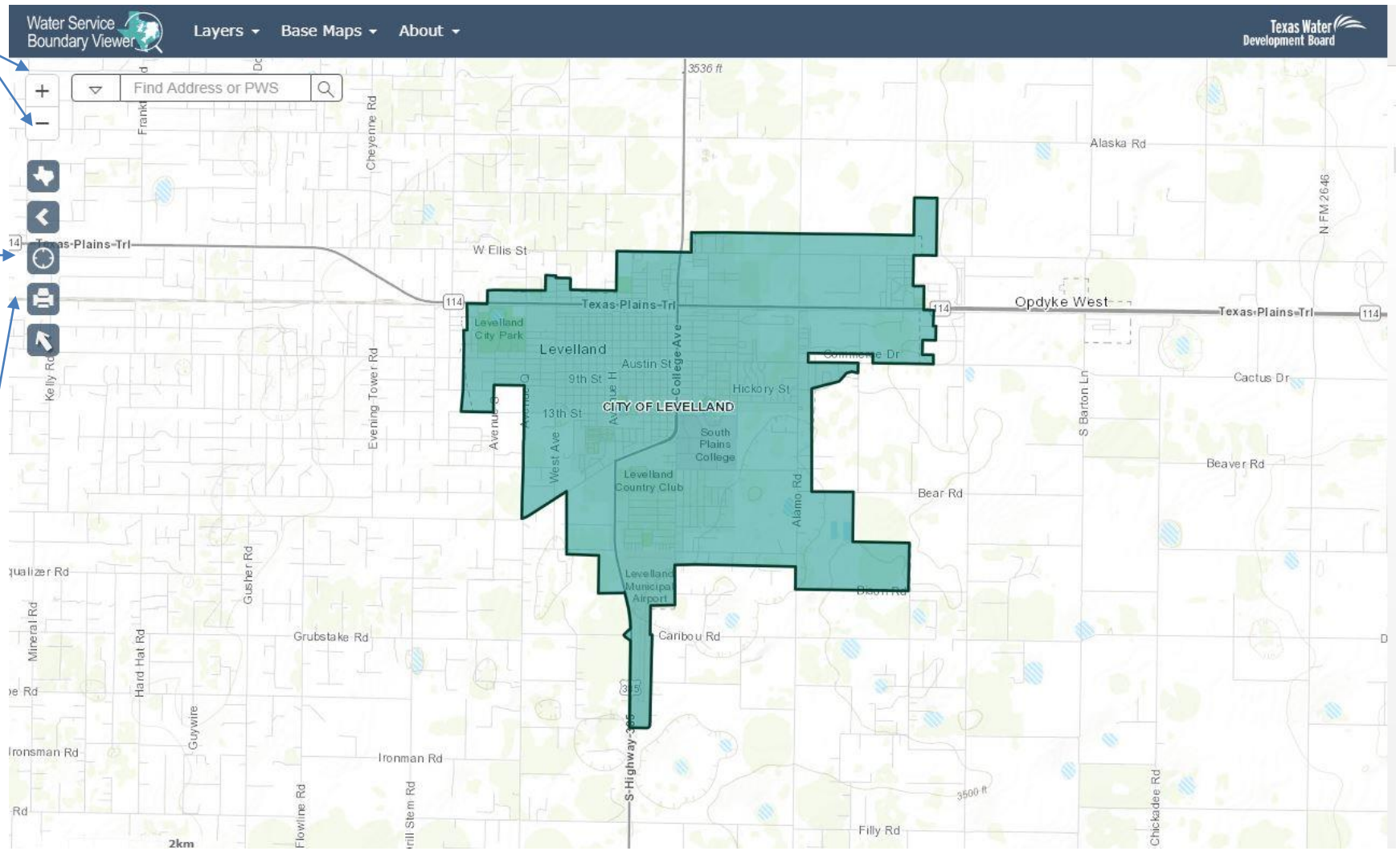


# Public

Zoom in and out

Find my location on the map

Download map & print





# Public

Water Service Boundary Viewer

Layers ▾ Base Maps ▾ About ▾

Public Water Service Area

PWS Id: TX2270001  
Name: CITY OF AUSTIN WATER & WASTEWATER

Reports:  
[TCEQ Drinking Water Watch](#)  
[Water Use Survey](#)

Zoom To

Service Areas **4227** Download Service Area Selections ▾

PWS ID	PWS Name	PWS Review Date	Area (sq mi)
TX2270001	CITY OF AUSTIN WATER & WASTEWATER		381.505
TX1960006	CITY OF AUSTWELL		0.364
TX1940005	CITY OF AVERY		0.972

# Public Reports

## Water System Detail

<a href="#">Water System Facilities</a>	<a href="#">Violations</a>	<a href="#">Enforcement Actions</a>	<a href="#">TCR Sample Results</a>	<a href="#">TTHM HAA5 Summaries</a>
<a href="#">Source Water Assessment Results</a>	<a href="#">Assistance Actions</a>		<a href="#">Recent Positive TCR Results</a>	<a href="#">PBCU Summaries</a>
<a href="#">Sample Points</a>	<a href="#">Compliance Schedules</a>		<a href="#">Other Chemical Results</a>	<a href="#">Chlorine Summaries</a>
<a href="#">Sample Schedules / FANLs / Plans</a>	<a href="#">TOC/Alkalinity Results</a>		<a href="#">Chemical Results; Sort by: Name Code</a>	<a href="#">Turbidity Summaries</a>
<a href="#">Site Visits</a>	<a href="#">LRAA (TTHM/HAA5)</a>		<a href="#">Recent Non-TCR Sample Results</a>	<a href="#">TCR Sample Summaries</a>
<a href="#">Milestones</a>				
<a href="#">Operators</a>	<a href="#">Glossary</a>			<a href="#">DWW Instructions</a>
<a href="#">All POC</a>				

## Water System Detail Information

Water System No.:	TX2270001	System Type:	C
Water System Name:	CITY OF AUSTIN WATER & WASTEWATER	Primary Source Type:	SW
Principal County Served:	TRAVIS	System Status:	A
Principal City Served:		Activity Date:	01-01-1913
Population:	981783	System Recognition:	SUPERIOR

## Water System Contacts

Type	Contact	Communication	
		Phone Type	Value
AC - Administrative Contact	ADLER, STEVE PO BOX 1088 AUSTIN, TX 78767-1088	BUS - Business	512-972-0108
		BUS - Business	512-972-0101
		BUS - Business	512-974-2250
		FAX - Facsimile	512-974-2337

## Sources of Water

Name	Type	Activity	Availability
INTAKE 2 - DAVIS SWTP	IN	A	P
INTAKE 4 - HANDCOX SWTP / LAKE TRAVIS	IN	A	P
INTAKE 3 - ULLRICH SWTP	IN	A	P
INTAKE 1 - GREEN SWTP	IN	I	O

## Source Water Percentages

Surface Water	0	Surface Water Purchased	0
Ground Water	0	Ground Water Purchased	0
Ground Water UDI	0	Ground Water UDI Purchased	0

## Water Purchases

<b>Water System \ Treatment Status</b>
No Water Purchases



# Public Reports

Today's Date  Survey Year

SurveyNo (This number is the same every year and must total 7 digits. Add preceding zeros "000" if needed.)

1 of 1 Find | Next

Date/Time Survey Submitted: 3/1/2018 1:01:58 PM

**TEXAS WATER DEVELOPMENT BOARD  
WATER USE SURVEY**

WATER USE IN CALENDAR YEAR: 2017

**SYSTEM NAME:** GENERAL DISTRIBUTION SYSTEM  
**OPERATOR NAME:**  
**MULTIPLE SURVEY ORG:** CITY OF AUSTIN  
**MAILING ADDRESS 1:** PO BOX 1088  
**MAILING ADDRESS 2:**  
**CITY/STATE/ZIP:** AUSTIN TX 78767-  
**PWS NAME:** CITY OF AUSTIN WATER & WASTEWATER


**SURVEY NUMBER:** 0041010  
**PRIMARY USED COUNTY:** TRAVIS  
**PRIMARY USED RIVER BASIN:** COLORADO  
**ORGANIZATION MAIN PHONE:** 512-972-0423  
**MAIN EMAIL:** helen.gerlach@austintexas.gov  
**WEB:** www.austintexas.gov  
**PWS CODE:** 2270001

**INTAKE:**

Water Type	County	Basin	Reservoir / River	Water Right #	% Consumed	Metered or Estimated	Brackish / Saline (Y or N)	% Treated Prior to Intake	Total Volume (gallons)		
SURFACE WATER SELF SUPPLIED	TRAVIS	COLORADO	TOWN LAKE/RESERVOIR	05471-0-A	100.00	M	N	0.00	34,273,252,569		
JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
2,744,349,707	2,491,912,937	2,810,725,556	2,980,396,172	3,265,157,360	2,989,246,285	3,401,314,201	2,350,610,910	2,229,518,161	3,227,893,040	2,997,242,668	2,784,885,572
Water Type	County	Basin	Seller Name and/or Seller System	River / Reservoir	Metered or Estimated	Brackish / Saline (Y or N)	% Treated Prior to Intake	Total Volume (gallons)			
SURFACE WATER PURCHASED	TRAVIS	COLORADO	LOWER COLORADO RIVER AUTHORITY	LCRA LAKE TRAVIS 14230	M	N	0.00	14,182,387,802			
JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
714,135,052	718,143,019	844,996,813	785,300,910	981,202,531	1,357,052,109	1,740,321,313	2,499,616,055	2,133,985,165	919,831,754	779,240,081	708,563,000

# Editor

## 1. Locate



ional Service Are.

WS ID	Survey Number	PWS
No filter applied		
TX000000	1104874	MY WAT

Click on  
your PWS to  
get started

# Editor


## 2. Verify







**Review your boundary and upload to replace or edit as needed**






# Editor

Edit Tool 

 Upload

 Edit  Add  Clip

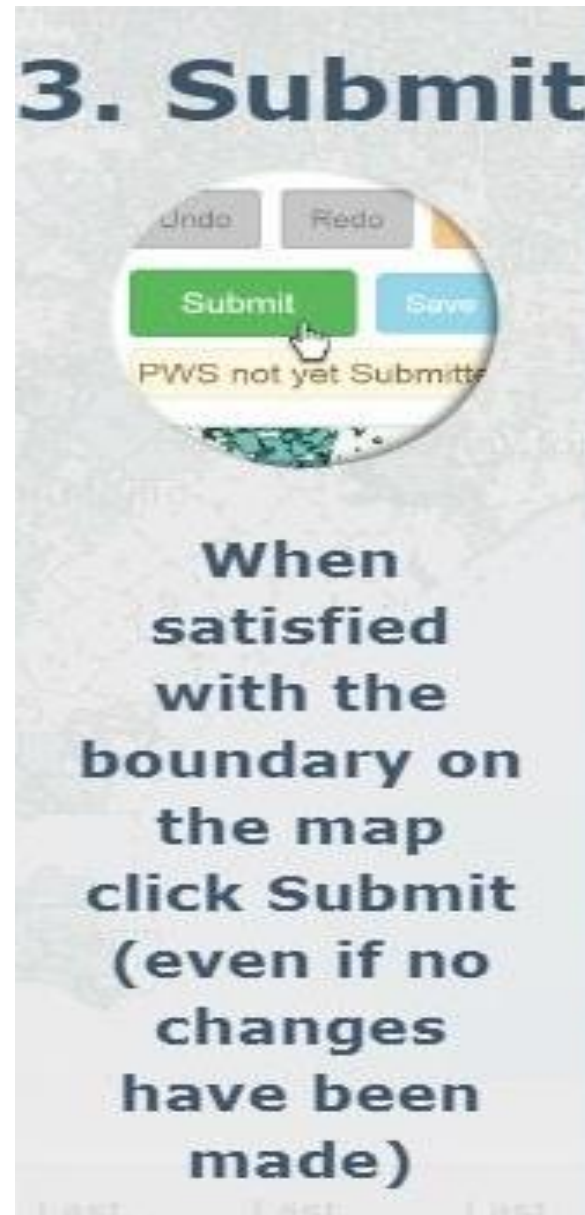
 Delete  Revert  Zoom To

Undo Redo **Cancel**

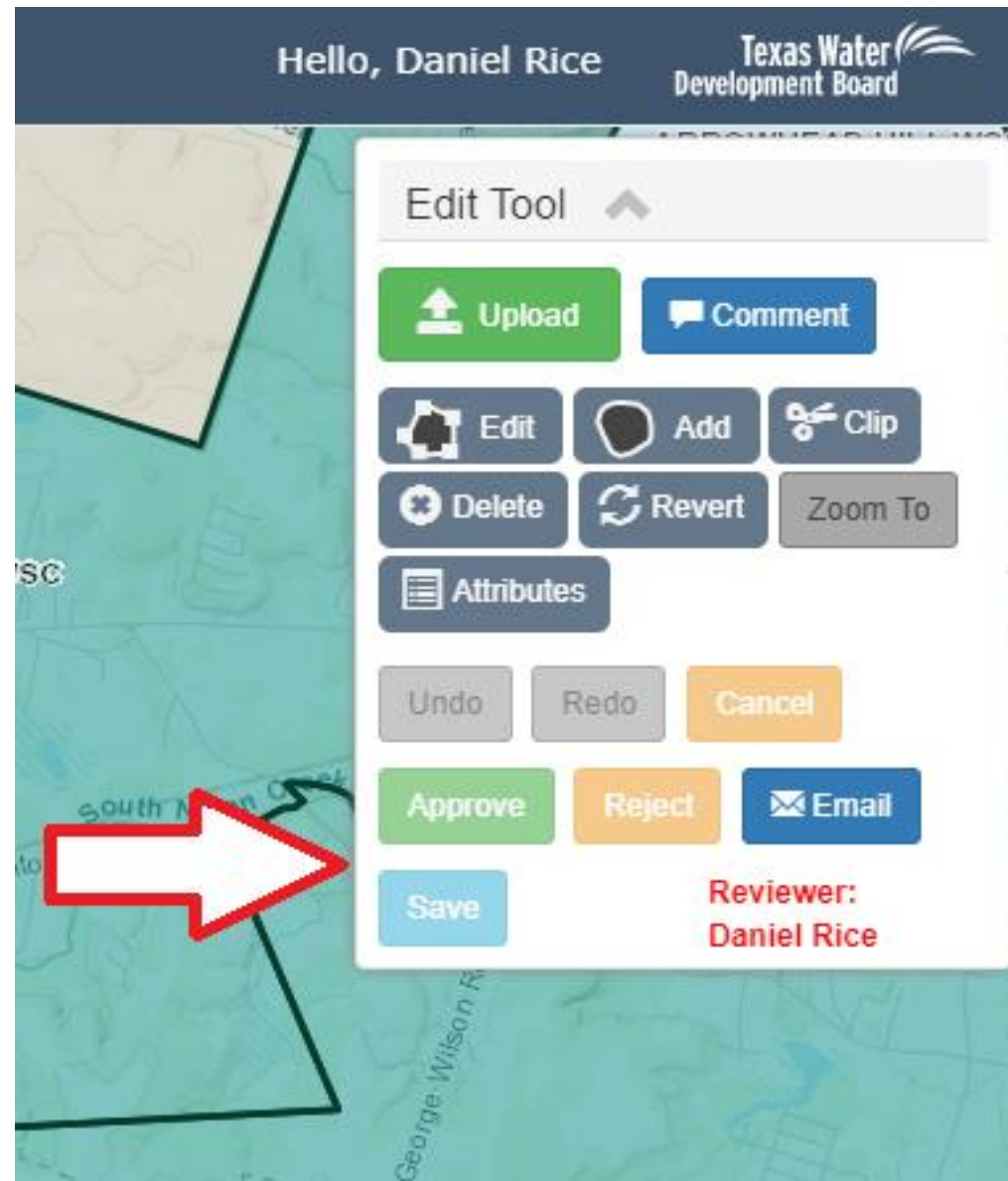
**Submit** Save

Submit PWS when complete

# Editor



# Admin



# Response

- 4,523 of the 4,573 system boundaries on file
- Of these, 31% have verified their boundaries this initial year

# Outreach

- Mailout, email blasts, & social media
- Conference presentations
- Publication in periodicals
- Statewide workshops
- More than 8,500 Internet Hits



# Agency Benefits

- Estimate water use more accurately in various geographic areas (river basins & watersheds)
- Connect water use & water source locations
- More accurate system population estimates lead to more accurate gallon per capita daily (GPCDs) data critical for calculating future water demand for water planning

**OH REEALLY?  
PLEASE TELL ME MORE...**



# Agency Benefits

Visually evaluate characteristics of a system's service area for:

- existing developed/undeveloped areas
- potential build-out of the area
- locations of special populations including prisons
- locations of the existing infrastructure by overlaying the satellite imagery (help with infrastructure planning and review)

# Agency Benefits

- During the legislative session, review new district boundaries for Water Impact Statements
- Water use survey data including connections, population, & water used to review or justify historical growth of the system's boundary



# Stakeholder Benefits

- Groundwater Conservation Districts can check & verify system data within their district boundaries
- One-stop data portal for users to access information
- Identify possible interconnections with neighboring systems
- Potential resource for public health professionals
- Potential resource for emergency response to natural disasters to identify impacted systems

# Potential Future Plans

- Determine system socioeconomic characteristics by overlaying other data layers such as Census data (income, age, household size, population density, etc.). Such information can be used to:
  - Study relationships between water use patterns, trends, & demographics characteristics of the communities
  - Identify systems that might need financial assistance for water infrastructure improvements



# Potential Future Plans

- Link Water Conservation Plans, Annual Conservation Reports, & Water Loss Audit Data
- Collect Federal Drinking Water Infrastructure Needs Survey data through the application
- Display TWDB-funded infrastructure project data associated with a system



**WE'RE  
HIRING!**

**Application Administrator (GIS Analyst)**

<http://www.twdb.texas.gov/jobs/>

# Questions?

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Texas Water Development Board

