

*Protecting our community's last wild spaces
for the benefit of wildlife, water, and people*

WILDLAND FIRE MANAGEMENT

Matt Hollon, Environmental Conservation Division Manager
Water and Wastewater Commission | July 20, 2022





Growing WUI: Wildland Urban Interface

- ♦ WUI = area where structures and other human development meet or intermingle with natural vegetation
- ♦ More than 90% of fires are caused from human ignition
- ♦ Danger of fire spreading from a road, power line, or neighborhood into a preserve, or vice versa, increases as Austin urbanizes
- ♦ Forecast for hot, dry summer: we need to be prepared



Presentation Outline

- Role of Wildland Conservation Division (WCD)
- Planning Overview
- Cooperative Projects
- Tools for Wildfire Preparedness
- AW Facilities and Operations
- Next Steps



Fuels Reduction
Projects

Ignition
Prevention

Ecological
Restoration

Prescribed
Burning

Cooperative
Projects

Long Range
Planning

Role of Wildland Conservation Division

The Wildland Conservation Division's role in a Fire-Adapted Community is to manage fire use and fire potential to benefit watersheds, habitat, and public safety.



Wildland Conservation Division



Balcones Canyonlands Preserve and Water Quality Protection Lands

@austinbcp @wildlandsforwater @bcp_traviscounty

austintexas.gov/wildlandevents

facebook.com/austinwildlandconservation

facebook.com/traviscountybcp

 Balcones Canyonlands Preserve (BCP)
 Water Quality Protection Lands (WQPL)

**Over 25,000
acres of
land directly
managed**



Projected Coordinate System: NAD 1983 StatePlane Texas Central FIPS 4203 Feet
at scale 1:341,564. Path S:\ArcPro_Projects\AW_WCD_General\Standard_Maps\Standard_Maps.aprx

This product does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.
This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes.
This product has been produced by the Wildland Conservation Division on Thursday, May 12, 2022 for the sole purpose of geographic reference.
No warranty is made by the City of Austin regarding specific accuracy or completeness.



PLANNING OVERVIEW





WCD Planning Overview

Wildland programs have approved land management plans and adopted Best Management Practices for wildfire mitigation.

- ◆ Balcones Canyonlands Conservation Plan (BCCP) and permit (1996)
- ◆ Balcones Canyonlands Preserve land management plan (1999, 2007)
- ◆ Water Quality Protection Lands land management plan (2001, 2012, 2022*)

* Currently in development.





Wildfire Risk Modeling

Hazard Determination

- 💧 **2009** - Fuels assessments and fire behavior modeling specific to the BCP produced by Baylor University as a part of the Community Wildfire Protection Plan (CWPP)
- 💧 **2012** - Refined methods for wildfire risk determination developed with AFD



Wildfire Contingency Plans

- ◆ Across all AW Wildlands facilities and properties, hazard mapping is underway to inform strategic site planning and guide emergency responders
- ◆ Plans support individual and recurring Firewise assessments and fuel mitigation projects



Wildfire Prevention Plans

Wildfire Prevention Plans required prior to access for all City of Austin Wildland Conservation Division properties.

Elements of these plans:

- ◆ Fire suppression equipment on site
- ◆ ID Fire department jurisdiction
- ◆ Wildfire spotter designation, name and phone #
- ◆ Emergency contacts

This guarantees two-way protection for both conservation lands and infrastructure providers



A photograph of four women standing outdoors in a wooded area. They are all smiling and looking towards the camera. The woman on the far left is wearing a black t-shirt and orange pants. The woman next to her is wearing a blue and white plaid shirt. The woman in the center is wearing a black t-shirt and a blue baseball cap. The woman on the far right is wearing a black t-shirt, a white baseball cap, and a black glove on her left hand. A semi-transparent blue banner is overlaid across the middle of the image, containing the text "COOPERATIVE PROJECTS" in white, bold, sans-serif capital letters.

COOPERATIVE PROJECTS



Cooperative Projects

- ♦ Austin/Travis County Wildfire Coalition
- ♦ Live Fuel Moisture Monitoring Program
 - Bi-monthly tracking since 2006
- ♦ BCCP Collaborative Infrastructure Projects
- ♦ AFD Wildfire Division
 - Support Firewise messaging and outreach efforts to community groups and neighborhoods



A group of firefighters in yellow gear are gathered outdoors in a field, possibly for a training exercise or a meeting. They are wearing helmets and carrying equipment. In the background, there are several vehicles, including a red fire truck and a white van. The sky is blue with scattered white clouds. A large blue banner with white text is overlaid on the middle of the image.

TOOLS FOR WILDFIRE PREPAREDNESS





Shaded Fuel Breaks

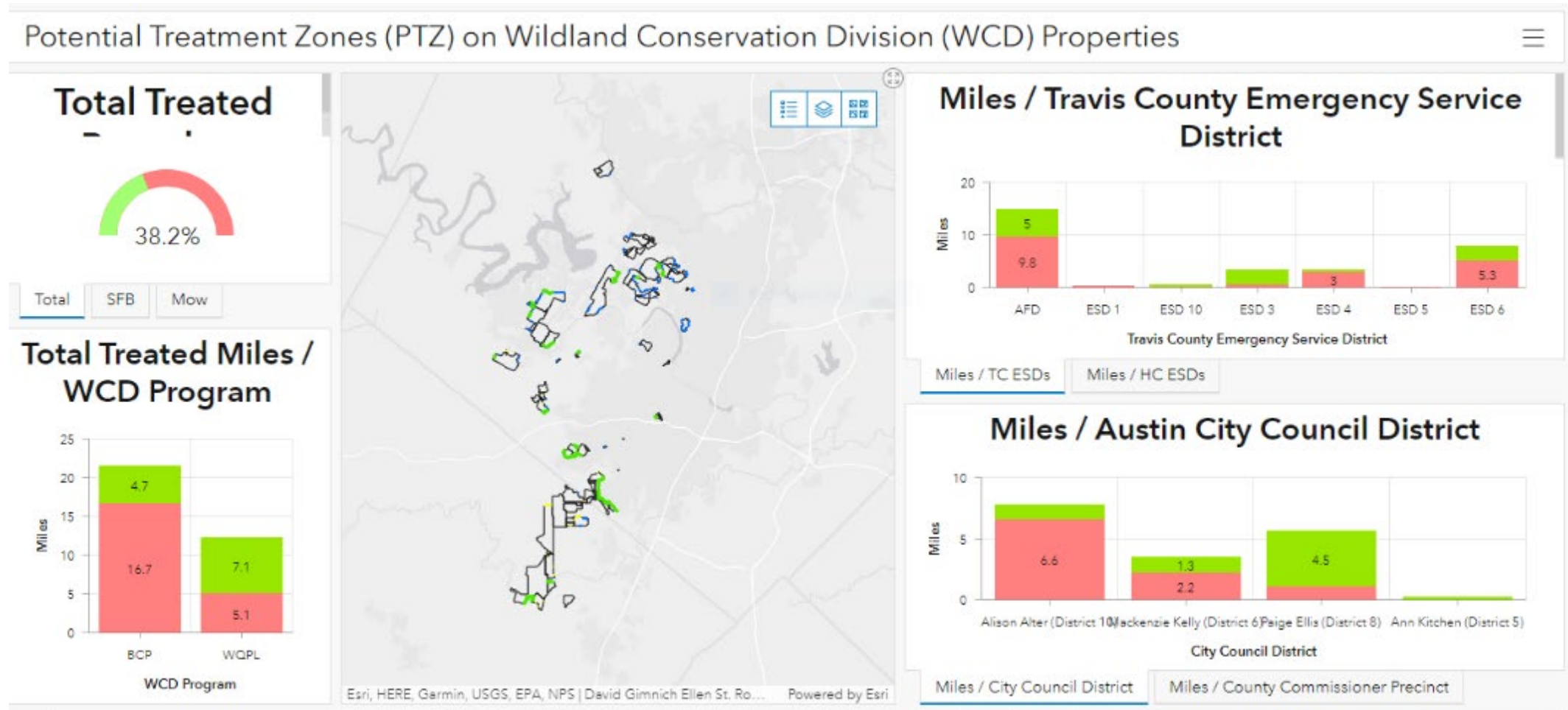
Carefully planned thinning and removal of understory vegetation and ladder fuels.

More fire protection, much less destructive than clear cutting.

- ♦ Typically 60-foot-wide treatment off property boundary (varies)
- ♦ Typically 4- to 8-foot-high trimming
- ♦ Shrubby underbrush only (<4 inches in diameter)
- ♦ All work occurs on COA side of fence



Planning Shaded Fuel Breaks: GIS Analysis and Dashboard



Staff Training

Collaborative wildfire training ongoing with AFD, county emergency service districts, and other local fire agencies.

- ◆ Incident Command System
- ◆ Wildland Urban Interface fire response
- ◆ Wildfire Cause Determination
- ◆ Courses in prescribed fire operations





Prescribed Burning

- ◆ Helps accomplish land management goals
- ◆ Conducted by staff trained to highest standards set by national wildfire experts
- ◆ To ensure safety, conduct burns following strict protocols in a narrow window of environ. conditions
- ◆ Austin Fire Department involvement
 - Issues permits for prescribed burns within jurisdiction; provides on-site support
- ◆ 11,000 acres of Austin's Wildlands treated since 2001





AW FACILITIES AND OPERATIONS

Climate resilience goals require equal parts hard work and thoughtful planning



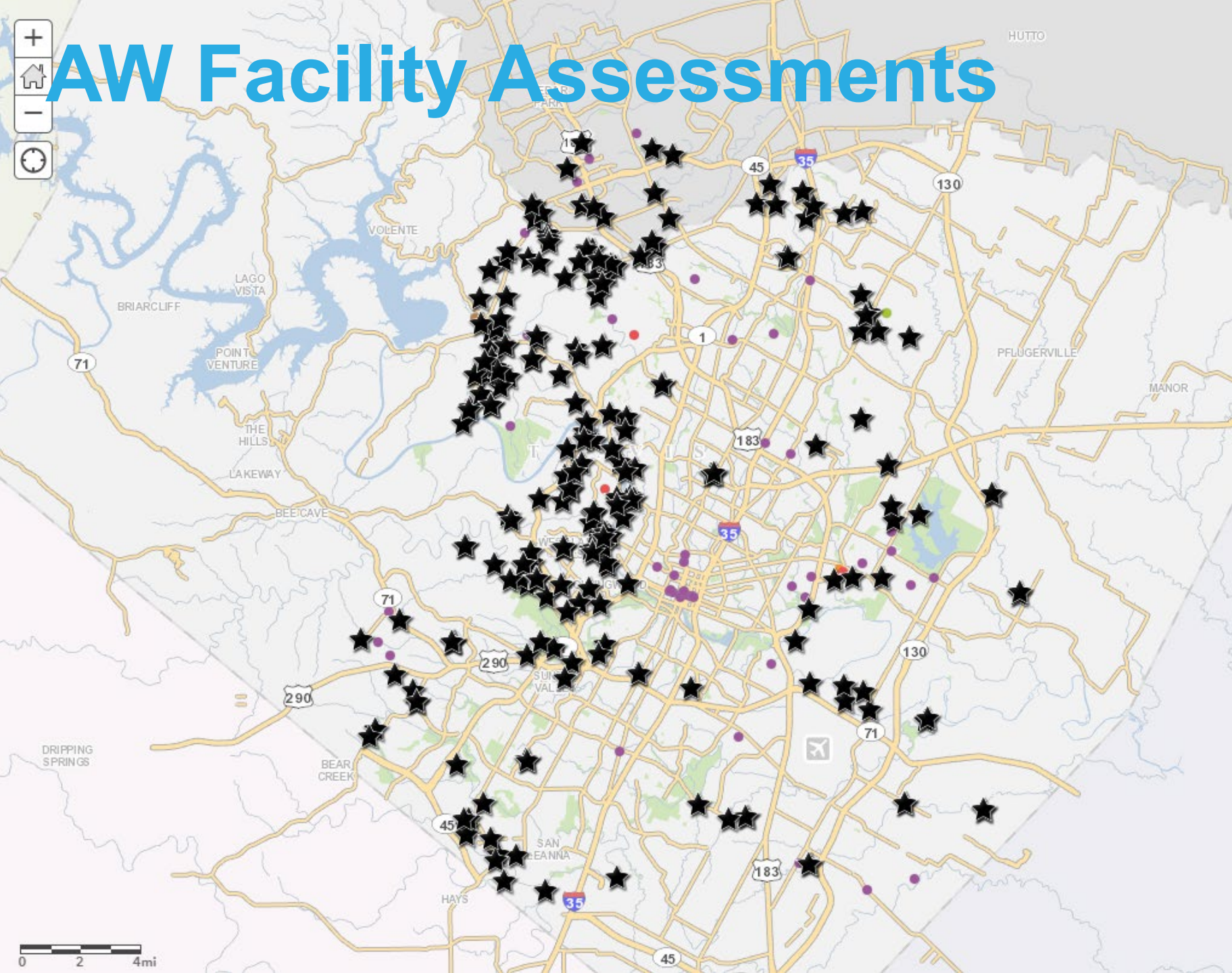
AW Facility Assessments




- Facility assessments conducted to determine level of wildfire risk, offer solutions
- Completed first phase of fuels reduction work at Ullrich Water Treatment Plant




AW Facility Assessments



 About

 Content









 Legend

Legend

Completed Assessments



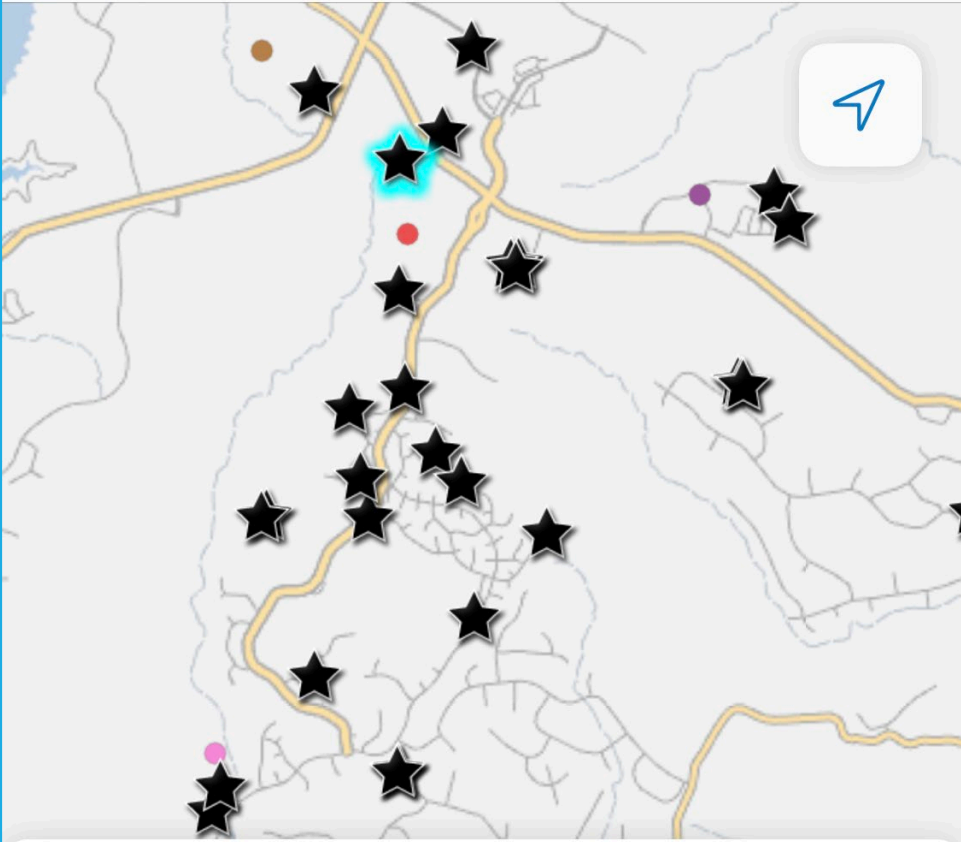
COA, High, In Service

-  WW Lift Station
-  Pump Station
-  Reservoir
-  Sampling Port
-  Wastewater Treatment Plant
-  Hydro Tank
-  Water Treatment Plant
-  Booster Station



AW Facility Assessments

GPS accuracy 114.8 ft · 30 ft required



✕

6.9 mi

Heavy fuel loading around site

No

Vegetation is overgrowing or contacting infrastructure

No

Site accessible by steep or narrow roads

No

Overhead powerlines feed the site or cross over access

No

Site is situated on or above chute/chimney/canyon-head

No

Flammable fencing materials

No

Site ventilation lacks screens

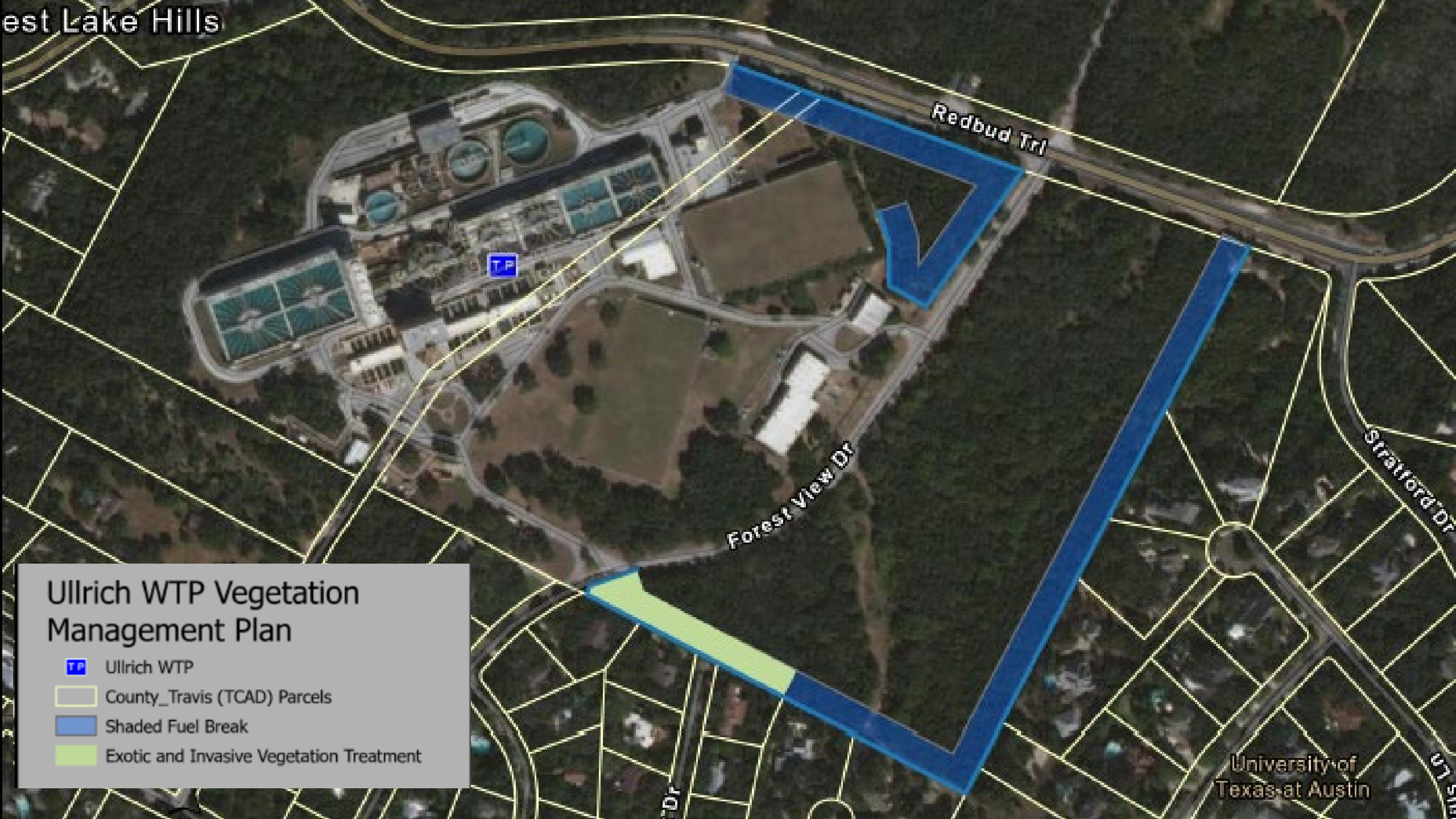
No

Flammable materials present





No

Hazmat present





Ullrich WTP Vegetation Management Plan

-  Ullrich WTP
-  County_Travis (TCAD) Parcels
-  Shaded Fuel Break
-  Exotic and Invasive Vegetation Treatment



Next Steps

- ◆ AW teams are working toward implementation of Facility Assessment recommendations
- ◆ Continue to work with partners e.g., AFD, PARD, and ACCC on Shaded Fuel Breaks
- ◆ Use projected impacts of climate change to inform land management and foster resilient landscapes

For more information:
austintexas.gov/wildlands





Questions

