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

# WILDLAND FIRE MANAGEMENT

Austin Water Oversight Committee | May 25, 2022





# Growing Wildland Urban Interface

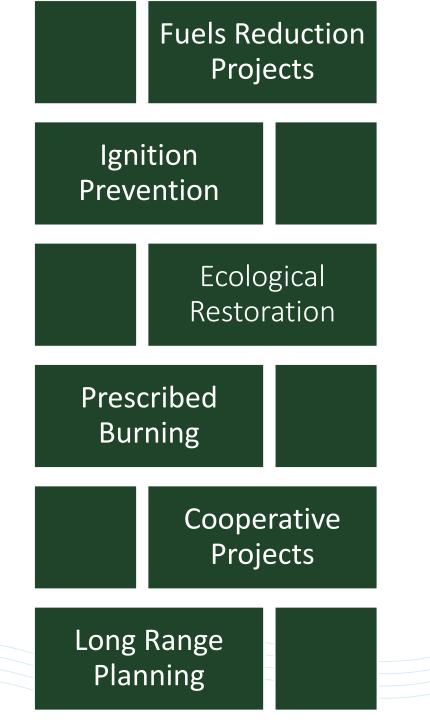
- The area where structures and other human development meet or intermingle with natural vegetation
- More than 90% of fires are caused from human ignition. The danger of fire spreading from a road or neighborhood into the preserve, or vice versa, increases as Austin urbanizes
- Forecast for hot, dry summer so 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





# 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

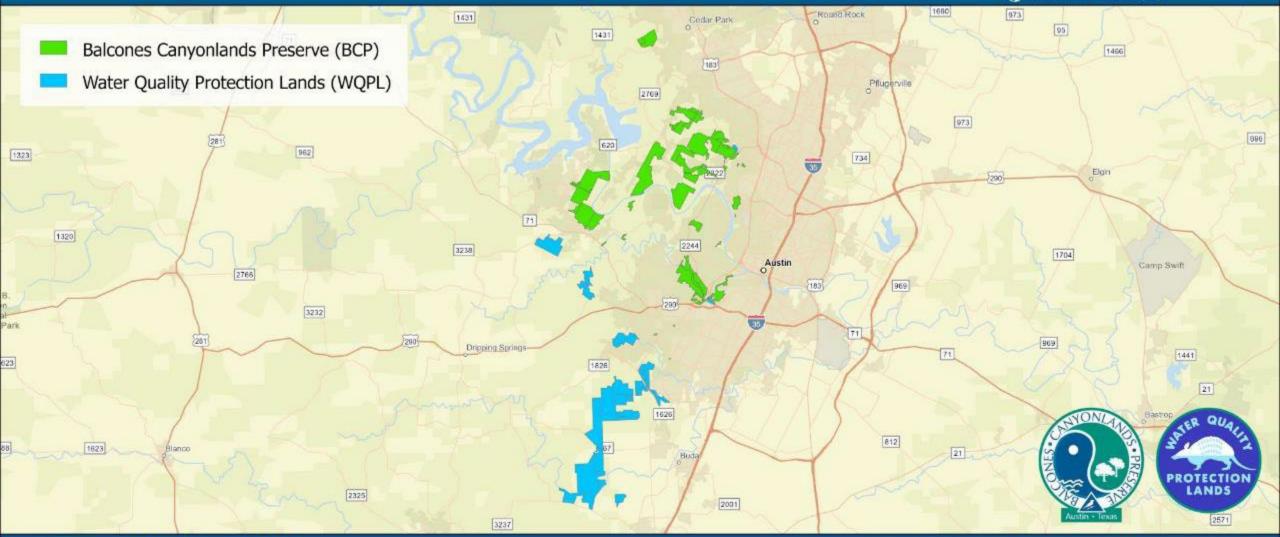
**Balcones Canyonlands Preserve and Water Quality Protection Lands** 

@ @austinbcp @wildiandsforwater @bcp\_traviscounty

austintexas.gov/wildlandevents

facebook.com/austinwildiandconservation

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#### 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.



#### @austinbcp @wildlandsforwater @bcp\_traviscounty Wildland Conservation Division austintexas.gov/wildlandevents facebook.com/austinwildlandconservation **Balcones Canyonlands Preserve and Water Quality Protection Lands** (7) facebook.com/traviscountybcp Brushy Creek **Round Rock** Cedar Park Bee Cave Jonestown Balcones Canyonlands Preserve (BCP) Lost Creek Water Quality Protection Lands (WQPL) Austin Pershing Anderson Mill Wells Branch ravis Lago Vista Jollyville 2769 Vinson Hudson Bend 183 Pleasant Hill Dripping EUS-29 Walnut Fores Springs ady Hollow Lakeway 150 Abercrombie Manchaca Onion Creek Hays City Driftwood 1625 Elder Hill Rd 1327 Bee Cave Lost Cre Austin Pershing 150 Hays PROTECTION Montopolis LANDS odcreek

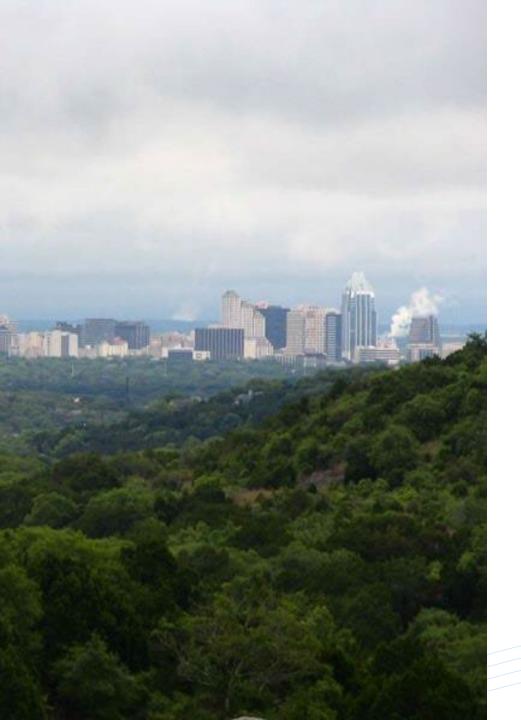
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# PLANNING OVERVIEW

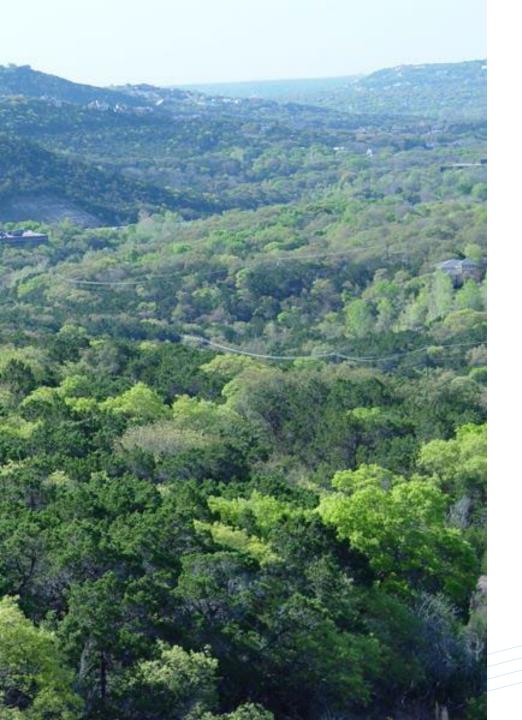
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# **Planning Overview**

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

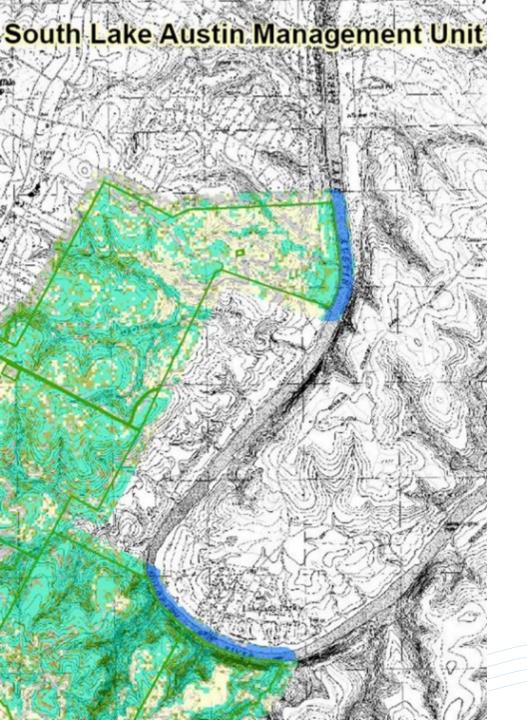
- Balcones Canyonlands Conservation Plan (BCCP) and permit - 1996
- 1999 Balcones Canyonlands Preserve land management plan
- 2001 Water Quality Protection Lands land management plan



## 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



# **Strategic Site Plans**

- Across all Austin Water facilities and properties, hazard mapping is underway to inform strategic site plans.
- Plans include individual and recurring
  Firewise structure and vegetation treatments.



# **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, including name and phone #
- Emergency contacts

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





# **COOPERATIVE PROJECTS**



# **Cooperative Projects**

- Austin/Travis County Wildfire Coalition
- Live Fuel Moisture Monitoring Program
  - AW has tracked live fuel moistures bi-monthly since 2007
- BCCP Collaborative Infrastructure Projects
- AFD Wildfire Division
  - Support Firewise messaging and outreach efforts to community groups and neighborhoods





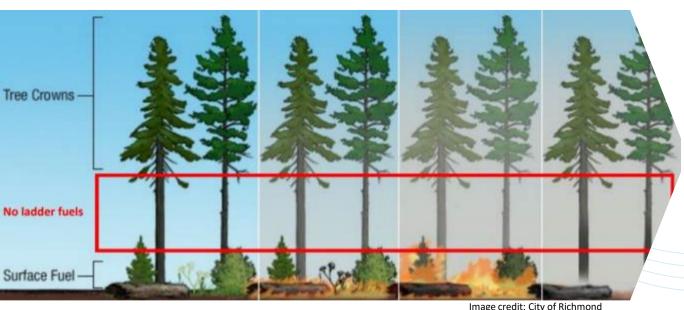
# TOOLS FOR WILDFIRE PREPAREDNESS



# **Shaded Fuel Breaks**

Carefully planned thinning of dense tree cover and removal of underlying brush. *More fire protection, much less destructive than clear cutting.* 

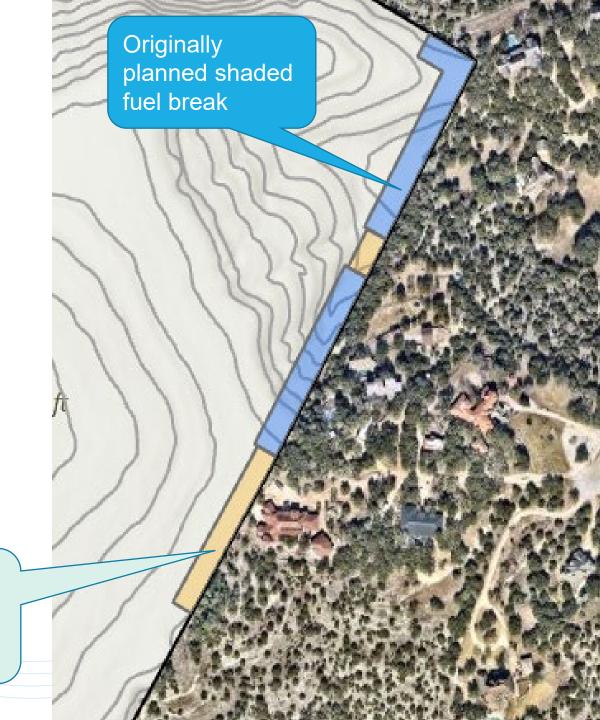
- Typically 60-foot-wide treatment off of property boundary (can vary)
- Typically 4 to 8 foot high trimming
- Shrubby underbrush only (<4 inches in diameter)</li>
- All work occurs on COA side of fence



### Planning Shaded Fuel Breaks: Detailed Evaluation

- Careful prioritization of treatment areas given limited funds and large scale of project
- Reality on the ground dictates work; anticipate adjustments
- Adapt to new construction built after original Potential Treatment Zone analysis

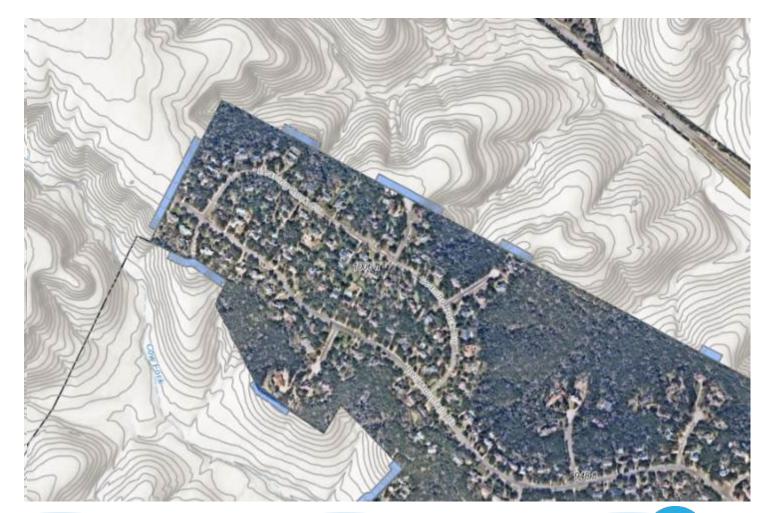
Additional shaded fuel break needed identified by ground truthing



## **Shaded Fuel Break**

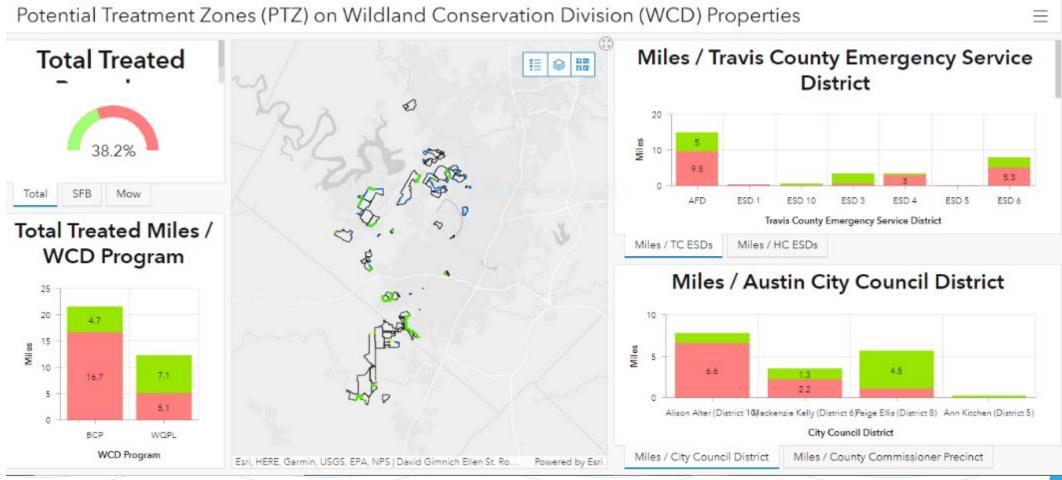
#### Challenges

- Difficult topography and limited access makes equipment access and debris removal challenging
- Steep terrain also requires extra care
- Need to minimize erosion/habitat impacts
- Limited workforce





### 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
- 2019 Forestry Specialist position funded and hired
- 2021- Second Forestry Specialist hired to assist with utility-wide wildfire preparedness work









# Prescribed Burning

- Accomplishes land management goals
- Conducted by staff trained to the highest standards set by national wildfire experts
- To ensure safety, practitioners follow strict protocols and conduct burns within a narrow window of environmental conditions
- Austin Fire Department involvement
  - issues permits for prescribed burns within jurisdiction
  - on site to provide 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

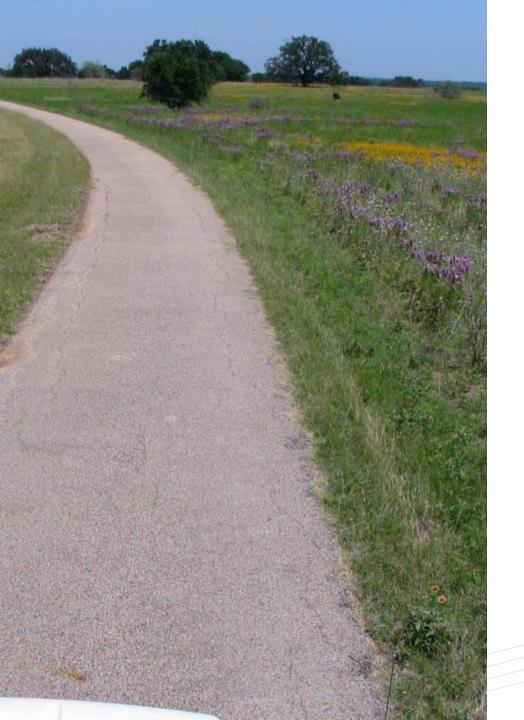


## **AW Facility Assessments**



- Facility assessments completed
- 2021: Completed first phase of fuels reduction work at Ullrich Water Treatment Plant





# **Next Steps**

- Continue working with partners such as AFD and PARD and newly created Austin Civilian Conservation Corps on Shaded Fuel Breaks and creating fire resilient landscapes
- Climate change considerations in managing land and building resilient landscapes

#### For more information: austintexas.gov/wildlands

