

Prescribed Burning by Austin Water  
Utility  
*Draft*

# What is Prescribed Burning

- Prescribed fire is applied generally to planned use of fire in wildland management. Brown, A, KP Davis, Forest Fire Control and Management, 1973
- Systematic firing of land when weather and vegetation favor a method of burning that can maximize benefits. Valentine, J.F., Range Development and Management, 1971
- [Prescribed Burning] remains one of the most feasible ways to manipulate vegetation for range management and restoration of natural communities. Blair K, J.C. Sparks, J. Franklin, Prescribed Burning the Current State of the Art, Weed and Brush Management Symposium, San Angelo TX, 2000
- The controlled application of fire to naturally occurring or naturalized vegetative fuels under specified environmental conditions in accordance with a written prescription plan designed to confine the fire to a predetermined area and to accomplish planned land management objectives. Texas Natural Resources Code 153.047 enacted 76th Legislature 1999, amended 81<sup>st</sup> Legislature 2009

# Why Does Austin Water Use Prescribed Fire

- Prescribed fire is most commonly used to restore and maintain healthy resilient landscapes. In order to achieve this, prescribed burning practitioners must not only understand fire behavior, they must also understand the nature of the resources being managed so that prescribed fire does not work against sound natural resource management objectives
- Managing ecological succession
  - Historic landscape component
  - Woody encroachment
  - Plant vigor
  - Community diversity
- Managing fuels for unintentional fires
  - Slash from mechanical treatments
  - Manage woody reinvasion

# Why Does Austin Water Conduct Prescribed Burns on AWU Managed Wildlands Instead of the Fire Department

- Land Managers know and understand ecological and management objectives
- Land Managers intimately know the landscape, fuels, access, and conditions on the burn site and adjacent sites.
- Land Managers understand fire behavior and its ability to achieve goals and objectives.
- Land Managers always collaborate with AFD and other fire professionals on Prescribed Burns

# How is Prescribed Burning Done?

- Prescribed burning is NOT simply the act of igniting fuels on wildlands causing them to burn. A successful prescribed burning program involves four basic steps:
  - Thorough planning which must include careful evaluation of fuels, topography, access, expected fire behavior and how these will interact to safely and effectively to achieve prescribed burning objectives. This step also includes identification of nearby interests that might be affected by the burn or smoke.
  - Preparation of the burn site for execution. This includes construction and maintenance of control lines; management of fuels adjacent to control lines to mitigate escape risks; preparation of access routes; water sources and pre-staging of equipment.
  - Safe and effective execution of the burn. This includes monitoring and mop up of the burned area after the planned burn is complete in order to ensure the prescribed burn does not re-kindle and escape to become a wildfire
  - Sound management of the site after the burn to assure the benefits from the burn are not lost due to mismanagement after the burn.
  - Prescribed burning is not a stand alone practice





date

August 2009





May 2010





November 2011





original extent

April 2014





original extent

October 2014





original extent

April 2015

# How is Prescribed Burning Done?

- Prescribed burns are facilitated through highly coordinated written burn plans that:
  - identify the optimum conditions under which tree and plant species will burn to achieve best and safest results.
  - consider temperature, humidity, wind, moisture of vegetation, and conditions for smoke dispersal.
  - Consider whether the optimum conditions identified in the written plan are compared to actual conditions on the ground before a burn is implemented.



# How Does Austin Water Collaborate with Fire Professionals

- Employ a Burn Boss certified as NWCG Prescribed Burn Boss II, Texas Certified Prescribed Burn Manager, 700 + prescribed burns experience before AWU employment
- MOU with Austin Fire Department to provide holding and initial attack resources for burns.
- Collaboration through agreements with ESD's, Texas Forest Service, US Fish and Wildlife Service
- Burn Plans require Unified Command to decide if a prescribed burn has escaped and converted to a wildfire

# How Does Austin Water Collaborate with Fire Professionals

- The Austin Water Utility has a lengthy history of conducting prescribed burns. The Utility has dedicated and highly-trained Land Managers who know and understand ecological and management objectives. They are intimately familiar with the landscapes, fuels and other contributing factors that are needed to ensure optimum fire behavior. All of these employees participating in burns are qualified under NWCG standards as well.
- The Utility also works closely with other partnering agencies, including Travis County and surrounding ESDs, the Texas Forest Service, and U.S. Fish & Wildlife Service.
- Prescribed burning practices in Austin – through the collaboration of the abovementioned partnering agencies AWU maximizes the expertise of industry professionals all while achieving important land management and public safety needs for the City.

Note: Numerous other subdivisions of the State of Texas including Texas A&M AgriLife Extension, the Texas Forest Service, and Travis County practice the art and science of prescribed burning in the same manner as Austin – all without TCFP commissioned firefighters. Prescribed burning in Austin is done in a manner that is consistent with national and state standards.



# Austin Water Utility Implementing Prescribed Fire on AWU Managed Wildlands

- Its done safely
- Its ecologically effective as a management tool
- It provides wildfire benefits
- Its done with professional leadership
- Its operationally implemented with participation of fire professionals a from all levels
- It utilizes the expertise of professionals at all levels to meet land management and public safety needs