

## **EXECUTIVE SUMMARY:**

### **PIMA COUNTY COMMUNITY WILDFIRE PROTECTION PLAN**

The Pima County Community Wildfire Protection Plan (CWPP) was developed in response to the Healthy Forests Restoration Act (HFRA) of 2003 for the at-risk communities and unincorporated areas in Pima County, Arizona, located in and around public lands administered by the US Department of the Interior Bureau of Land Management (USDI BLM) Gila District Office, Coronado National Forest (CNF), National Park Service (NPS) Saguaro National Park, US Department of the Interior Fish and Wildlife Service Buenos Aires National Wildlife Refuge (BANWR), the Tohono O'odham Nation, and the Pascua Yaqui Tribe. HFRA established unprecedented incentives for communities to develop comprehensive wildfire protection plans in a collaborative, inclusive process. Furthermore, this legislation gives direction to BLM and the US Forest Service to address local community priorities in fuel reduction treatments, even on nonfederal lands. For a community to take full advantage of the opportunities provided in HFRA, it must first prepare a CWPP. A CWPP developed in accordance with HFRA is the most effective way to acquire federal funding for fire preparedness and planning. Pima County, partner agencies, and participating communities wish to adopt a CWPP to better protect their communities from wildfire risk, to better prepare citizens, and to become eligible to apply for and receive federal and other grant monies to implement wildland fire mitigation projects and programs.

To ensure that all residents of Pima County were represented in this planning process, three core teams were formed to implement the agency and public collaboration necessary to develop a CWPP compliant with HFRA: the Northern Planning Zone Core Team consists of the communities of Mount Lemmon, Oro Valley; northwest Tucson, Lukeville; Ajo; Why; Pima County lands adjacent to the Catalina Mountains; Rincon Mountains; Marana; Avra Valley; and Picture Rocks to the Gates Pass area, including Saguaro National Park West and Tucson Mountain Park. The Southern Planning Zone Core Team consists of the developed lands adjacent to the Pascua Yaqui Tribe, Robles Junction, Green Valley, Sahuarita, Arivaca-Sasabe CWPP lands, South Tucson, Vail, Corona de Tucson, Saguaro National Park East, and Pima County lands to the Cochise County boundary. The Central Core Team is composed of the cities of Tucson and South Tucson.

#### **Section I. Introduction**

A primary objective of a CWPP is to help local governments, fire departments and districts, and residents identify at-risk public and private lands to better protect those lands from severe wildfire threat. Additional functions of a CWPP are to improve fire prevention and suppression activities, as well as to identify funding needs and opportunities to reduce the risk of wildland fire and enhance public and firefighter safety. Identifying at-risk areas and improving fire protection capabilities helps the communities to prioritize high-risk projects and to expedite overall project planning. Pima County's CWPP was created to meet these objectives at a local level while integrating with overall federal- and state-level fire planning.

The Core Teams identified needed agency and organization partners and interested parties to initiate the collaborative process and to establish the following overarching goals of the Pima County CWPP:

- Improve fire prevention and suppression, emphasizing firefighter and public safety
- Reduce hazardous fuels, emphasizing public and private property protection

- Restore forest, rangeland, and riparian health
- Promote community involvement and provide for community protection
- Recommend measures to reduce structural ignitability in the wildland-urban interface (WUI)
- Encourage economic development in the communities from vegetative treatments
- Promote development of wildfire emergency evacuation and communication plans
- Integrate use of the CWPP with surrounding community and agency fire management plans

The Core Teams developed and concurred with the process that was to be followed in developing the Pima County CWPP. This section establishes all necessary planning components and clearly articulates the intent of the Pima County CWPP, discloses the communities identified for analysis, and ensures that the Pima CWPP is compliant with HFRA.

## **Section II. Community Assessment**

Section II covers the methods used in community wildfire risk assessments; the identification of the WUI; and the identification of communities with high, moderate, and low wildland fire risk within the WUI. The Pima County CWPP was developed through quantitative analyses of wildland fire risk across Pima County, designing mitigation measures and priority needs to implement mitigation measures, whether for wildland fire fuel manipulations, resource response, reduced structural ignitability or public education and outreach.

Environmental elements used by the Core Teams to identify the WUI include wildland vegetative fuel hazards, comparison of normal and extreme rainfall years, consideration of aspect and local topography, historical fire occurrence, and wildfire ignition history. These environmental factors were coupled with community-based characteristics and values, such as local fire resource preparedness, infrastructure, evacuation routes, and population/structure density. An external element, the Fire Insurance Service Organization ratings, was also used in determining wildland fire risk to communities within the WUI. These elements were all identified and combined using spatial analysis within a geographic information system (GIS). As a result of the GIS analysis, a WUI and sub-WUI boundary map and a wildfire risk rating map were created. Sub-WUIs were divided into treatment management areas, according to high, moderate, and low fuel hazard. Several components, including slope, aspect, fire behavior models for each vegetation type, and presence of nonnative/invasive plants, were used to make fuel hazard determinations. The Pima County CWPP analysis consisted of 5,877,578 acres of federal, state, and private lands, of which 1,579,699 acres were classified as the WUI. Cumulative risk levels across the Pima County CWPP community WUIs include 121,511 acres (8%) of high wildland fire risk, 926,760 acres (59%) of moderate risk, and 531,189 acres (34%) of low risk.

## **Section III. Community Mitigation Plan**

Section III prioritizes the areas in need of wildland fuel mitigation and recommends the types and methods of treatment and management necessary to mitigate the potential for catastrophic wildland fire in the WUI. Also presented in this section are the Pima County CWPP communities' recommendations for enhanced wildland fire protection capabilities; public education, information, and outreach; and support for businesses and industries centered on local wood products, woody biomass, and wildland vegetative fuel management.

As part of the community mitigation plan, the Core Teams identified the Pima County CWPP administrators—Pima County fire chiefs, Pima County Office of Emergency Management (PCOEM), CNF, Arizona State Forestry Division (ASFD), Tohono O’odham Nation, Pascua Yaqui Tribe, and BLM—who will be mutually responsible for implementing and monitoring Pima County CWPP action recommendations in coordination with the future-established countywide community CWPP Working Group. Pima County CWPP administrators are responsible for ensuring implementation of the Pima County CWPP, for preparing reports and work plans, and for developing community bulletins and public service announcements that inform residents of wildfire dangers and preventive measures. Additional tasks include assisting federal and state agencies and private landowners to identify appropriate funding sources to implement action recommendations of the Pima County CWPP, as well as continued coordination with communities outside the analysis area. Pima County CWPP administrators are also responsible for the monitoring and reporting of implementation actions that will allow for enhanced coordination of management programs and that will reduce inconsistencies among local, state, and federal agencies.

To prioritize treatments, the Core Teams identified 95 wildland treatment management units within 23 sub-WUI designations of the WUI. These treatment units were analyzed and categorized according to potential risk for wildfire. The Core Teams ranked and described each unit, then provided a recommendation for each unit’s preferred treatment type and method. Preferred treatments were recommended for treatment management units identified as high risk. These treatments are designed to meet the fuel reduction and modification objectives of the Pima County CWPP.

#### **Section IV. Pima County CWPP Priorities: Action Recommendations and Implementation**

To achieve the goals outlined in the CWPP, the Core Teams identified priority action recommendations, which are presented in Section IV. The first action recommendation was to identify priority treatment areas for fuel reduction projects. Treatment areas were identified within community WUIs to create survivable space through treatments within the home ignition zone, the use of strategically placed fuelbreaks, and the modification of hazardous wildland fuels. The objective of a fuels reduction project is to create an acceptable vegetation condition class for community and infrastructure protection and public and firefighter safety. Priority treatment management areas were designated in areas identified as high risk. Table 4.1 in Section IV lists the priority action recommendations for the reduction of hazardous fuels within the Pima County CWPP area. The second action recommendation identified by the Core Teams was to reduce structural ignitability. Reduction of structural ignitability is achieved through evaluation; maintenance; and, at times, upgrades to community response facilities, capabilities, and equipment. The third action recommendation identified was to promote community involvement through education, information, and outreach.

#### **Section V. Monitoring Plan**

The monitoring plan, outlined in Section V, describes how monitoring the implementation of the Pima County CWPP will occur. The Pima County CWPP administrators are responsible for implementation and monitoring. Implementation begins by securing grants and other funding necessary to execute the action items.

The Pima County CWPP administrators will report successful grant awards and projects implemented as a result of those awards to the CWPP signatories. The administrators will also update work plans based on projects completed in the previous years.

### Acknowledgments

The following communities and agencies were involved in the collaborative process in preparation of and are assisting as appropriate in the implementation of the Pima County CWPP:

- Pima County Office of Emergency Management
- Arizona State Forestry Division
- Municipal fire departments and local fire districts and fire chiefs from the following communities:

Ajo-Gibson Volunteer Fire Department	Tucson Fire Department	Helmet Peak Volunteer Fire Department
Arivaca Fire District	Green Valley Fire District	Sonoita-Elgin Fire Department
Avra Valley Fire District	Cascabel Volunteer Fire Department	Picture Rocks Fire District
Three Points Fire District	South Tucson Fire Department	Mescal-J6 Fire District
Golder Ranch Fire District	Elephant Head Volunteer Fire Department	Pascua Yaqui Tribe Fire Department
Rural Metro Fire Department	Why Fire Department	Drexel Heights Fire District
Corona de Tucson Fire Department	Arivaca Fire District	Northwest Fire District
Mount Lemmon Fire District	Rincon Valley Fire District	

- US Department of the Interior, Bureau of Land Management
- US Forest Service, Coronado National Forest
- National Park Service, Saguaro National Park
- US Fish and Wildlife Service, Buenos Aires National Wildlife Refuge
- Pascua Yaqui Tribe
- Southern Arizona Buffelgrass Coordination Center
- Altar Valley Conservation Alliance
- Salt River Project
- Tucson Electric Power
- Trico Electric Cooperative