

6.0 PLAN IMPLEMENTATION

Implementation of the Austin-Travis County CWPP will occur via four processes. First, the CWPP will be approved and adopted as required by the city, county, and TFS. Second, the actual implementation of specific recommendations will require action on the part of numerous entities, property owners, and wildfire professionals as they utilize the various mitigation tools and strategies presented herein. Third, progress reviews are recommended both for specific mitigation strategies and the regional plan as a whole. The fourth and final process recommends establishing a periodic update CWPP to ensure the plan continues to function as a living document, maturing in its capability to guide the constituent communities of all scales toward being more fire adapted.

6.1 PLAN ADOPTION

The Austin-Travis County CWPP is a shared plan and was developed based upon a collaborative process. The plan will be adopted through resolution by the Austin City Council and the Travis County Commissioners' Court and acknowledged by the Texas A&M Forest Service in order to meet HFRA requirements.

6.2 RECOMMENDATIONS FOR IMPLEMENTATION

The Austin-Travis County CWPP is a non-regulatory, non-binding document and its effectiveness will be contingent upon the implementation of the plan and recommendations identified in **Section 6.0**. Implementation of the recommendations will need to be tailored to each specific project and location depending on available resources and regulations. On-the-ground implementation of the recommendations in the Austin-Travis County CWPP planning area will require a coordinated and holistic effort in completing each project.

6.2.1 FORMALIZE JWTF INTO A PERMANENT COALITION

The city and county already have the necessary agencies needed to implement this plan, with well-established cooperation between fire and non-fire agencies (e.g., BCP land managers, utilities, and natural resource agencies). In order to maintain information sharing and institutional knowledge, the JWTF should be transitioned into a permanent organization. This permanent wildfire coalition should include the committees or work groups assigned to address, as a minimum, these tasks:

- Executive Committee – Evaluate current JWTF sub-committees and redefine roles and responsibilities as needed for consistency in supporting the CWPP and other purposes.
- COA Coordination Committee - Continue to coordinate with Imagine Austin’s effort to develop comprehensive land management plans for the city’s green space properties (e.g., open-space, parks, Balcones Canyonlands Preserves, Water Quality Protection Lands) and expand to include county lands where feasible.
- Public Education Committee – Promote wildfire education as discussed in **6.2.2**.
- Local-Level CWPP Committee
 - Database of current local-level CWPPs, RSG, and Firewise Communities;
 - Listing of prioritized Planning Units/plan for promoting CWPP (see **Table 24, 6.2.3**),
 - Monitor CWPPs for initial implementation progress and prescribed plan updates.
- Mitigation Implementation Committee
 - Track projects implemented with maintenance requirements,
 - Develop pilot projects program with proposal solicitation and submittal process followed by project implementation and results monitoring.
- Wildfire Response Readiness Committee – Coordinate with local leaders and emergency response teams to:
 - Coordinate evacuation planning for communications, routes, and shelters,
 - Monitor and coordinate equipment and staffing levels and sharing procedures.
- Code and Regulations/WUI Code Committee
 - Develop clearinghouse/database of codes/regulations conflicts and solutions encountered in the development of local-level CWPPs;
 - Promote development and adoption of a WUI code that is coordinated within the powers granted to the cities and county jurisdictions within the planning area,
 - Research successful codes and regulations throughout the nation.
- ATC CWPP Website Committee

- House, provide access, and maintain CWPP documents;
- House, provide access, and maintain a database of current local-level CWPPs, RSG, and Firewise Communities in the plan area;
- House, provide access, and maintain the GIS database and risk assessment tools,
- House, provide access, and maintain the wildfire mitigation projects database.
- Research and Training Committee
 - Conduct outreach/education about wildfire, resources, data, plans, and successes within and between city/county departments (i.e., educate staff). An important component of this effort will be the development of cohesive messaging across organizations, and reviewed by potentially affected programs.
 - Hold an annual “lessons learned” and applications workshop for the JWTF, Fire Departments/ESDs, and relevant programs responsible for additional data collection and update.

6.2.2 OUTREACH AND PUBLIC EDUCATION

Garnering public support for this planning effort and the region’s overall strategy of creating a fire-adapted community, fire-resilient landscape, and safe, effective, and efficient firefighting response to wildfire will be one of the most important tasks. It will be greatly enhanced through effective public communication, outreach, and education programs. The City of Austin, Travis County, and Texas A&M Forest Service have developed and implemented education programs and materials related to wildfire preparedness and prevention in the past; however, through enhanced collaboration and communication, regionally specific efforts have accelerated since the 2011 Bastrop Complex fire and the establishment of the Joint Wildfire Task Force. This section recognizes the past and ongoing public education and outreach efforts by the JWTF and associated local government entities and departments and recommends future actions and activities that will facilitate the implementation of this planning effort and assist in realizing the overall goals and objectives stated in **Sections 1.3 and 1.4**. Outreach and public education efforts described in this section can be applied to local CWPP development; however specific strategies and recommendations are covered in the following section.

6.2.2.1 WILDFIRE PREVENTION AND PREPAREDNESS PRINCIPLES

Soon after the creation of the JWTF, its members recognized that outreach and education are primary implementation strategies essential for increasing knowledge and awareness among residents about wildfire risk, prevention, and preparedness. In 2012, the JWTF established goals to direct and facilitate outreach efforts throughout the county that included, (1) increasing peoples' understanding of the importance of fire in shaping the environment and that it is possible to live with fire, (2) raising awareness and empowering individuals to undertake simple steps to protect their lives and homes, and (3) decreasing the likelihood that lives and structures may be hurt by future wildfires.

To effectively utilize limited staff and budget, the foundations of any outreach and public education efforts must capitalize on established and recognized national programs and materials, such as those developed for the Firewise Communities program and Ready, Set, Go! (RSG). Nationally accepted wildfire preparedness and prevention principles can be adapted for regional audiences, concerns, issues, and risk.

In February 2012, the JWTF customized the national RSG brochure for central Texas and distributed thousands of copies to local fire departments and partnering agencies to furnish to the general public. More recently, the regional RSG brochure was translated to Spanish to reach a larger proportion of county residents. Regionally adapting national programs provides another opportunity to stretch local resources. Doing so benefits from accepted, effective messaging that raises awareness and empowers individuals to take positive actions to prepare for and prevent wildfire. Also, local outreach and public education efforts can use national programs to establish a benchmark for success and be responsive to changing national cohesive strategies and scientific research findings with regard to appropriate and effective mitigation strategies and preparedness and prevention principles.

The TFS is also an important, regionally relevant, resource for the JWTF, the COA, and Travis County to use when developing outreach and education programs and materials based on wildfire prevention and preparedness. The TFS has developed, or is actively developing, a number of resources based on national principles including, but not limited to, a video about the benefits of prescribed fire (*A Land in Balance*), an online wildfire risk assessment tool (TxWRAP), and numerous printed and digital materials about wildfire preparedness and prevention (e.g., *Firewise Landscaping in Texas*, *50 Things You Can Do to Protect Your Home*,

Living in the Urban Wildland Interface) that can bolster and complement any local outreach and education.

6.2.2.2 APPROACHES, MATERIALS, AND OPPORTUNITIES

There is a full suite of outreach and education programs, materials, approaches, and strategies that can be implemented by the JWTF, COA, Travis County, and associated emergency service providers and local government departments to promote development of local CWPPs. These resources will help impart individual responsibility in creating fire-adapted communities and resilient landscapes to create wildfire situational awareness and to change attitudes about living with wildfire and using fire to reduce hazardous fuels. Numerous opportunities exist to engage and educate a broad spectrum of stakeholders -- elected and public officials, local media, businesses, service providers, home- and landowners, fire professionals -- regardless of their current understanding and engagement in preparing for and preventing wildfire.

MESSAGING

Developing and communicating a unified message to Travis County residents is imperative to the success of this planning effort. Key message development should revolve around a single theme or slogan, such as the existing “Wildfire Ready Austin” campaign launched in 2012. All communications should tie into, be defensible, and articulate a sense of urgency -- without creating fear or a sense of helplessness -- and stress the need for engagement regardless of the audience’s current understanding or perception of wildfire risk. Existing national resources can be adapted to be regionally relatable and relevant.

There are a number of fundamental steps in message development to consider and implement in order to create a community of engaged stakeholders who understand that wildfire can affect their lives. It will be important to tailor messages to specific targeted audiences. The messages could vary among elected officials versus homeowners, individuals living in the WUI versus those in downtown Austin, or adults versus children and young adults. The messages must be inclusive of the diverse ethnicities and languages throughout the county.

Outreach messages and education materials must include fair and true statements and not be overly technical, redundant, or overwhelming. Statistics and data can be powerful tools in creating buy-in with the general public. Finally, it will be important to continuously and

routinely conduct reviews of outreach efforts regarding the effectiveness and relevancy of the key messages and education materials in order to adjust to changing attitudes and perceptions.

Overall, any messaging should promote Firewise and RSG principles and encourage at-risk communities to develop their own local CWPP. The JWTF, with assistance from local government public information officers (PIOs), has developed and recommended initial talking points, or messages, to enhance communication with the public and among members and partnering agencies. The following provide some examples that can be built upon and expanded:

- **Defend your home from wildfire by creating 30 feet of defensible space.** Defensible space is a buffer zone you create by removing dead and downed vegetation from your yard. You do not have to remove all vegetation, but keep tree limbs trimmed. Any limbs lower than six to eight feet should be trimmed from trees within this zone to keep ground fires from climbing into the trees. Find more information in the *Ready, Set, Go!* brochure.
- **Make your home less vulnerable to flying embers.** Fire embers can travel more than a mile from a wildfire. Use fire-resistant building materials for roofs, decks, and siding. Completely enclose areas under decks with non-combustible skirting and cover attic vents with 1/8-inch metal mesh to block embers. See the *Ready, Set, Go!* brochure.
- **Reduce the risk of wildfire within your neighborhood and community.** The defense of your house from wildfire doesn't stop 30 feet from your home. Work with neighbors to extend the defensible space throughout the community by removing dead and dying vegetation, mowing annual grass to a maximum height of four inches and trimming low tree branches. Learn more at Firewise.org and become a nationally recognized Firewise Community.
- **Prepare for home evacuation in case it becomes necessary.** Create a Family Disaster Plan that includes meeting locations, communication plans, and emergency supplies. During a wildfire, monitor local news reports for updated information. Register for CAPCOG's Emergency Notification System Cellular Telephone Interface: <http://wireless.capcog.org>.

Efforts to create a unified message will benefit all levels of leadership within local government, assist customer (such as Austin 3-1-1) and emergency service providers to effectively address residents' concerns and questions, provide local media outlets with accurate information, and build a common language among all stakeholders involved in creating a fire-adapted community.

MASS OUTREACH

Implementing mass outreach methods -- public service announcements, billboards, brochures -- can be useful in understanding issues and proposed solutions related to wildfire prevention and preparedness. Mass outreach methods can be effective in reaching a large proportion of the population; however, they may or may not reach or engage the targeted audience. Examples of general population mass outreach would be billboards along major thoroughfares, public service announcements on local television and radio channels, and news articles in local newspapers. Participating in interviews about wildfire prevention and preparedness and fire resilient landscaping on public television and radio programs, such as *Central Texas Gardener* on KLRU and local NPR news programs on KUT, is another possible method for reaching a broad audience in the planning area.



Figure 56. An example of wildfire preparedness billboard created by the Ad Council and the U.S. Forest Service. (Photo attributed to @smokey_bear Twitter account)

However, it may be more effective and efficient to employ targeted mass outreach methods in high wildfire risk areas delineated during the risk assessment discussed in **Section 4.0**. Targeted, broad-based outreach efforts and materials in identified high-risk areas may include the following:

- Signs or placards and associated brochures located at the entrances, or in areas of home improvement and grocery stores that sell merchandise such as fire extinguishers and landscaping materials;
- Direct mailing inserts in utility bills;
- Displays at community centers, subdivision mailbox centers, and post offices,
- Door hangers for homes and businesses.

Broad-based outreach efforts and materials are limited because they will only increase the public's general knowledge of the issues and solutions related to wildfire preparedness and prevention, not necessarily engage them personally to understand how wildfire affects them directly or how individual and collective actions make a difference. Interactive outreach can build upon the interest generated and foundational knowledge created by mass outreach methods and facilitate personal responsibility and fundamental understanding of wildfire management.

EVENTS

Convincing Travis County residents -- particularly those within the WUI – that they have a personal responsibility in advancing wildfire mitigation, prevention, and preparedness may be the biggest hurdle for successfully meeting the goals and objectives of this planning effort. General interpretive messages will only facilitate the strategies of becoming a fire-adapted community to a certain point.

It's better to tailor outreach and education activities to the particular values and concerns of a local community, homeowners association, or neighborhood. Providing opportunities to meet with fire professionals and subject matter experts will help local citizens accept the relevancy of issues, engage them in wildfire prevention principles, and adopt behavior that minimizes a community's wildfire risk. Outreach and education opportunities that are objective, unbiased, consistent and integrate broad-based efforts with specific interactive activities will

more likely succeed in creating a fire-adapted community, fire-resilient landscape, and safe, effective, and efficient firefighting responses.

Promoting and participating in national events locally like the National Wildfire Community Preparedness Day (launched on May 3, 2014) and National Fire Prevention Month (October of every year) provides biannual opportunities to reach a large number of residents and further the region’s cohesive strategy. For the initial launch of National Wildfire Community Preparedness Day, the Austin Fire Department received one of 20 grants from State Farm Insurance to assist in providing a local workshop with interactive sessions on planning, insurance, community action, and empowerment. AFD also distributed 150 evacuation preparedness kits to attendees. Prior to this event, the Austin City Council proclaimed May 3 as Wildfire Preparedness Day, and in 2012, the Austin City Council and Travis County Commissioners’ Court declared April as Wildfire Awareness Month. The TFS annually declares the second week in April as Wildfire Awareness Week. Creating annual events during these dedicated time periods can help establish consistent opportunities to highlight ongoing risk, empower personal responsibility, and encourage community awareness year around. Other past events sponsored and hosted by the city and county include an annual Capital Area Emergency and Disaster Preparedness Summit, Wildfire Symposium, and Fire Adapted Communities Symposium.



Figure 57. Austin Wildfire Community Preparedness workshop on May 3, 2014, at the J.J. Pickle Commons Learning Center. (Photo courtesy Justice Jones)

Such events create an opportunity for interactive outreach. They allow residents, business owners, and other stakeholders to engage with local experts, see mitigation strategy demos and other interactive forms of learning. Participants can learn from and engage with other community members who can share their experiences, concerns, and needs as they become more situationally aware and proactive in their behaviors. Events can be easily and readily adapted to address the current priority issues, like local development of a CWPP and Home Ignition Zone assessments and training, for a particular community or invited audience. It will be important to connect with diverse cultures and consider stakeholder ideas and feedback to improve each successive event. Also, it will be important to share the success of each event with local media and other informational sources to encourage more participation in the future.

To encourage behavior modification and expand the understanding of specific mitigation strategies, inviting residents to wildfire mitigation demos, such as prescribed fire applications, will give participants a greater understanding of and support for fire management activities and a chance to discuss their concerns with trained personnel. Commons Ford Ranch Metropolitan Park - Prairie Restoration Project and Decker Tallgrass Prairie Preserve, and Indiangrass Wildlife Sanctuary all have prescribed burn regimes. In the case of prescribed burns, it will be important to have a contingency program ready in case parameters for conducting a safe and effective burn are out of acceptable ranges. Providing volunteer opportunities to participate in other hazardous fuel mitigation activities will facilitate overall buy-in, allay fears, and empower individuals.

The Jester Estates Pilot Program (discussed in **Section 2.8.3**) is an exceptional example of outreach and education that established the foundation of a fire-adapted community in collaboration with the Austin Fire Department, Balcones Canyonlands Preserve, and Texas A&M Forest Service. These initial efforts eventually led to specific fuel-reduction treatments that engaged interested and concerned residents and benefited the entire neighborhood.

VIDEO AND WEBINARS

Videos and webinars are some of the most effective and resource-efficient outreach and education methods available. Both the city and the county have media relations and services departments, public information officers, and support staff that can help create digital content for training, outreach, and education. Additionally, both the city and the county maintain public access television channels that can broadcast content related to this planning effort. As discussed previously, the TFS has created *A Land in Balance* video about the benefits of

prescribed fire. The TFS website or on their dedicated YouTube channel has other brief public service fire prevention announcements narrated by celebrities and politicians, and a number of other videos. Travis County Media Services and Emergency Services PIO produced a video series – the *On Call Wildfire Video Series* -- about the 2011 fires in central Texas and four essential steps to prevent, prepare, respond, and recover from wildfires. These videos are available on the Travis County Fire Marshal webpage and on YouTube. They are exceptional and informative videos.

The following are in development by the JWTF and its partnering agencies or suggestions for future video and webinar development. It is recommended that any outreach and education efforts continue to build upon past or current video and webinar projects and facilitate adoption by others within the planning area.

- Record mitigation strategy activities and demonstrations, like prescribed fire and shaded-fuel break applications. Highlight areas that need to consider mitigation strategy impacts to federally protected species habitat and other environmentally sensitive areas.
- Create webinars that cover topics such as Home Ignition Zone assessments, steps for local CWPP development, recent fire research findings, and RSG and Firewise principles.
- Create content for children and young adults that educators and youth group leaders (e.g., Boys and Girls Club of America, Boy Scouts of America, and Girl Scouts of the USA) can show during class and meetings or can be accessed at any time to facilitate education and awareness in a younger audience.
- Translate any video or webinar content to Spanish to facilitate outreach to the Hispanic community in Travis County.
- Translate content to Vietnamese or other Asian languages to address outreach and education needs for the growing Asian community in Austin and Travis County.
- Develop video and webinars that will highlight how it is possible to live with fire and show examples of communities and individuals who have incorporated Firewise and RSG principles and/or developed a local CWPP.

- Record visits to communities affected by wildfire and discuss how recovery continues, any steps taken to mitigate future wildfire occurrences, and how the community has modified behaviors and perceptions.

PRINTED AND DIGITAL EDUCATIONAL MATERIALS

A number of brochures and publications have been developed by the JWTF and partnering agencies (e.g., *Before and After the Fire: Environmental Best Management Practices for Wildfire Risk Reduction and Recovery*, the regional RSG brochure, *Maintain a Defensible Space*) with important educational material that can be distributed in print to targeted audiences or made widely available as digital files through various websites. These materials can be easily adapted to regional concerns and priorities and a wide-range of audiences. They are particularly effective if material development includes multiple ways of presenting information (e.g., graphical representations of text content, reference photographs, tabular and graphical data) that can be easily understood. Utilize outreach and educational materials developed for other campaigns as templates, such as the *Grow Green - Weed and Feed* brochure and *Cool Spaces: Six Strategies* flyers from the COA Office of Sustainability, in order to capitalize on previous efforts and maximize resources. Recommendations for future efforts include the following:

- Continue to adapt national program education materials to be regionally relevant.
- Expand on the Spanish version of local RSG brochure to include other publications as well as development of other language versions to reflect the diversifying culture in the Austin area.
- Produce materials that summarize the benefits and steps to developing a local CWPP by using the toolkit in **Appendix E** of this document.
- Create materials that strongly and effectively emphasize the individual's responsibility in creating fire-resilient systems in either the human or natural environments and that these two environments are not mutually exclusive. Residents of the WUI are an integral part of the natural landscape around them and education efforts need to emphasize a holistic approach to creating fire resiliency.

- Develop materials for children and young adults such as wildfire or fire ecology educational trunks for use by educators, youth leaders, and fire or natural resource professionals. These trunks could include materials such as teacher resource and activity guides, DVDs of age-appropriate educational videos, and coloring book/sheets to assist in educating younger audiences about the WUI, wildfire preparation and prevention, and fire and the natural environment. Educational trunks can be brought to events, checked out by educators, and used by fire and natural resource professionals during outreach to local schools and youth programs.
- Generate materials that specifically target utility providers and assist them with implementing appropriate mitigation strategies within their utility rights-of-way.
- Create an online or printed services and products guide of Firewise- and RSG-certified professionals (discussed further below) to assist the general public in becoming fire adapted and creating fire-resilient landscapes (similar to the Grow Green Landscape Professional online database).
- Develop resources specifically for members of the business community who could be hurt directly and indirectly by a wildfire. Direct impacts could include: structural damage, equipment and inventory losses, staff evacuation and displacement, and financial losses. Indirect ones could include: limited access due to road closures, utility outages, limited deliveries, and reduced distribution chains. The Insurance Institute for Business and Home Safety has developed general resources, like the OFB-EZ Toolkit for business preparedness, which could be customized for regional business use.

WEBSITES

Currently, there are a number of local websites that publish content regarding wildfire risk, prevention, and preparedness. They include the COA Office of Homeland Security and Emergency Management, COA Watershed Protection Department, Austin Fire Department, and Travis County Fire Marshal and Emergency Service Districts. Since a majority of the county's population is connected to and/or uses the Internet, the success of any outreach and education effort must include an inventory of current content and must remove access to outdated and inaccurate information.

The next step will be to publish a unified message and current, accepted outreach and education materials across all appropriate and available outlets. It will also be useful for website visitors to access links to all other websites with relevant content. Information and support from these outlets can help an individual become situationally aware, fire adapted, and fire resilient in their behaviors. Relevant websites could provide yet another way for the community to become more connected to this effort. They might offer ways for visitors to sign up for electronic newsletter subscriptions, RSS feeds for website updates and posted news or blog items, or other notifications regarding events and volunteer opportunities related to mitigation activities.

If budget and staff resources allow, it will be beneficial to create a sole-source web presence that creates a one-stop resource for the local community. One website with all relevant and useful information and resources will limit frustration in accessing information and better control the type and accuracy of information provided to county residents. Some examples of websites that could be templates for this effort include CAL FIRE, the Department of Forestry and Fire Protection Services website (www.readyforwildfire.org), the California Wildland Fire Coordinating Group website (www.preventwildfireca.org), Colorado State University's Wildfire Mitigation website (<http://csfs.colostate.edu/pages/wildfire.html>), or the Central Texas Conservation Partnership website (www.texasconservation.org).

SOCIAL MEDIA

Social media sites -- Facebook, Twitter, Instagram, and YouTube -- can complement outreach and educational efforts by providing relevant, timely, and accurate information to raise awareness and engage individuals to integrate wildfire issues and concerns into their daily routines and behaviors. These sites can also play an important role in providing information during wildfire incidents and provide a platform for residents to share information with emergency responders. To establish these sites as reliable resources, messages must be consistent, unified, and updated frequently. Links to accounts can be embedded on appropriate websites to encourage followers to sign up. Also, social media updates can link back to websites.

TRAINING

According to the AFD's 2013 Year-End Review, AFD became the first large municipal fire department in the state to have every uniform member certified in wildland firefighting. Building capacity among all firefighting professionals must be a priority to create a safe,

effective, and efficient firefighting response throughout the county and beyond. Expanding efforts and opportunities to partner with agencies facilitates collaboration and raises overall knowledge and awareness of wildfire risk and prevention and preparedness principles. AFD continues to be a leader in addressing wildfire risk through the creation of the first statewide Wildfire Mitigation Division within their organization. Through dedicated staff and resources, AFD can play a pivotal role in facilitating cross training among fire professionals and the general public in fuels management, prescribed fire applications, home inspections, wildfire suppression and prevention, and emergency preparedness. Travis County ESD #4 has also provided leadership by making wildfire prevention and preparedness an outreach priority for their district. Expansion of capacity building among the region's firefighters will ensure fewer losses of life and property during wildfires, expand outreach and education efforts, and establish the region's commitment to being wildfire ready.

Service providers and businesses that interact daily with WUI residents can benefit from targeted training about wildfire prevention and preparedness principles. These include architects, landscapers, arborists, homebuilders, and residential and commercial services providers. In 2013, JWTF members partnered with TFS to provide HIZ training for landscapers during the Grow Green Training Series. Service providers can expand the capacity and reach of outreach and education efforts by completing such training. Service providers can be encouraged to attend and promote wildfire prevention and preparedness principle trainings by including them on resource and service provider lists exclusively for certified businesses and individuals.

6.2.2.3 CREATING SITUATIONAL AWARENESS

Situational awareness can be defined as being aware of, or paying attention to, one's surroundings. This practice applies to all facets of society and disciplines, but it can be particularly important in preparing for and responding to wildfire. For the entire Travis County community, a critical piece of all outreach and education efforts will be to emphasize the importance of personal responsibility and becoming situationally aware of wildfire risk. There are a number of wildfire forecasting tools available for professionals and laypeople to assist them in becoming situationally aware. As previously discussed in **Section 5**, The Texas Weather Connection (TWC) (<http://twc.tamu.edu/drought/tfdforecast>) and the Texas Interagency Coordination Center (TICC) (<http://ticc.tamu.edu/PredictiveServices/FuelsFireDanger.htm>) provide many tools that assist in cultivating situational awareness of potential wildfire. By

practicing situational awareness, unintended wildfire ignitions created by daily activities can be avoided or anticipated and quickly suppressed through changed behavior. Individuals and families can prepare for potential evacuations on high wildfire danger days, and fire professionals and emergency responders can increase readiness levels in anticipation of incident deployment and response. The Capital Area Fire Chiefs Association recognized the need to create more situational awareness in the region, and they recently adopted the National Fire Danger Rating System (NFDRS) as the preferred method to broadcast daily wildfire risk. Currently, “high-alert” or “red-flag” days communicated by local media outlets and fire departments convey the potential for increased wildfire risk. However, the NFDRS provides an improved, and nationally recognized, way to alert communities.

The effectiveness of adopting NFDRS to communicate fire danger to the general public will depend on comprehensive outreach and education efforts that target the local media, meteorologists, and associated government entities. This ensures that a consistent, simple, but effective, message reaches the residents in the planning area and beyond. One way AFD plans to initiate the messaging shift is by installing fire danger signs across the county. Another way to shift from the current messaging will be to provide targeted media training and coaching opportunities that will educate reporters and meteorologists about NFDRS and the other wildfire forecasting tools readily available.

Training and coaching options may include meeting one-on-one with meteorologists to explain the predictive models and their overall effectiveness. It also could involve participating in television and radio interviews and conducting reporter tours of previously wildfire-impacted areas while discussing wildfire situational awareness, preparedness, and prevention principles. And don’t overlook providing press releases on high fire danger days that clearly and succinctly convey the accepted, unified message about wildfire risks and specific actions that the general public can take to respond to the heightened risk. Encourage local media outlets to add “Wildfire Ready” web pages to their websites (e.g., CBS Denver at <http://denver.cbslocal.com/content-vertical/wildfire-ready/>) that prominently display daily fire danger alerts.

Finally, encourage and help residents to register for the Regional Notification System (RNS) on the Capital Area Council of Governments (CAPCOG) web site (<http://alertregistration.com/capcog/>). The RNS can send notifications and incident-specific information by voice, email, SMS text, alpha pagers, and numeric pagers. CAPCOG also provides additional resources, such as an ENS FAQ sheet, Spanish version of the FAQ sheet

(the registration site allows users to pick their preferred language), and sample newsletter, Twitter, and Facebook posts, to encourage registrations.

6.2.2.4 ADAPT TO CHANGING ATTITUDES AND RISK

It's imperative to continuously evaluate the effectiveness of the messaging, outreach, and education materials and efforts, and to adjust when appropriate. This will keep the planning effort effective and efficient with limited resources and meet its overall goals and objectives. A re-evaluation of the initial high-risk planning units -- identified during the risk assessment described in **Section 4.0** -- as conditions change will also allow shifting outreach and education efforts to areas currently most at risk. Individual and community feedback will assist overall outreach and education efforts to become increasingly relevant, direct, and engaging to the whole community. By providing opportunities to comment and make suggestions, participants will become more invested and be more likely to share their experience with others in the community. The goal is for everyone to be more aware of their role and responsibility in creating a fire-adapted community, fire-resilient landscapes, and safe, effective, and efficient firefighting response capabilities to wildfire. The Austin Fire Alliance, a group of recognized Firewise Communities, recently united to provide a forum to facilitate collaboration with existing and future communities and to share resources and experience. Groups like Austin Fire Alliance will be indispensable in encouraging other residents to become engaged in this effort.

6.2.3 PROMOTION OF LOCAL-LEVEL CWPP DEVELOPMENT

The current record-setting drought, coupled with its increased frequency and extents of wildfires, and implementation of the proposed Outreach and Public Education discussed above will result in ever increasing public awareness of the need to reduce wildfire risks. The Wildfire Coalition recommended in **6.2.1** above and the constituent wildfire cooperators will have limited resources that must be allocated as effectively as possible. The growing public interest and concern in reducing wildfire risks will come from and be best addressed in three general audience categories: individuals, subdivisions or HOAs, and municipalities or clusters of developments. For the proposed Wildfire Coalition, the first two are more focused on education and response, while the latter is the target for proactive promotion of local-level CWPP development.

Individual residents and business owners within the WUI can achieve the most effective wildfire risk mitigation by preparing the property they control with Home Ignition Zone (HIZ) principles and practices recommended in this regional CWPP. AFD has also prepared Ready,

Set, Go! (RSG) documents in both English and Spanish customized to local conditions. The proposed Wildfire Coalition will best serve this scale audience through expanded support of the RSG program and continued public education. Additional information about the RSG program is in **Appendix D**.

As a group of neighbors within a subdivision, HOA, or POA recognizes the potential for compounding wildfire mitigation benefits through a neighborhood-scale approach, they have moved themselves up to an audience category that will typically have their risk concerns best addressed by participation in the Firewise Communities program. “The Firewise Communities approach emphasizes community responsibility for planning in the design of a safe community as well as effective emergency response, and individual responsibility for safer home construction and design, landscaping and maintenance.” (Scranton, Cohen, et al., Hazard Assessment Methodologies) The proposed Wildfire Coalition will best serve this scale audience through expanded support of the Firewise Communities program and continued public education. Additional information regarding the Firewise Communities program can be found in **Appendix D**.

The largest of the audience categories -- municipalities or clusters of developments -- are of sufficient scale and complexity to warrant a local-level CWPP. The differences in this regional plan and the proposed local plans are essentially based in the change from a more strategic focus to a more tactical implementation focus. The discussion in **Section 5.2** includes **Table 19** and provides a comparison of the two plan levels applied across the CWPP section topics. Additionally, a toolkit to aid in the development of these localized plans, providing further clarification for local-scale elements and instructions for step-by-step preparation, is provided in **Appendix E**.

The first priority for promoting local-level CWPPs should be municipalities since they already have in place various organizational structures and regulatory controls within a known boundary, all elements that aid in the CWPP development process. At the same time, each of these jurisdictions should be attentive to opportunities to absorb adjacent high-risk areas into their CWPP plan area because this may optimize risk reduction within the city or village limits. The CWPP is a plan to reduce wildfire risks within a plan area and can be established to work cooperatively with willing neighbors to support mutually beneficial mitigation efforts.

Lago Vista, Jonestown, and the City of Sunset Valley, in coordination with AFD, have TFS-acknowledged CWPPs, and the City of Austin will have one after this document has been

adopted. **Table 24** is an ordinal list of the remaining 20 municipalities that have all or some portion of their incorporated limits within the plan area for this regional CWPP. The recommended prioritization focuses on three attributes. Relative risk is assigned based on the Planning Units (PU) associated most closely with the boundary of the municipality. The other two elements relate to the municipality’s location within the county and its proximity to other municipalities. Preference goes to those located wholly within Travis County and a grouping of those whose proximity could result in more effective separate CWPP development or potential development of a single CWPP for a consolidated plan area.

Table 24. Prioritization of Municipalities for Local-Level CWPP Promotion

Municipality	Travis County	Applicable PU(s)	PU Rank	Category	Priority
Creedmoor	All	SE04	6	Highest	1
Mustang					
Ridge	Majority	SE04	6	Highest	1
Briarcliff	All	SW03	14	Highest	3
Volente	All	NW06	19	High	4
Bee Cave	All	SW06	22	High	5
Manor	All	NE02	32	High	6
Point Venture	All	NW04	36	Medium	7
San Leanna	All	SC12	37	Medium	10
Rollingwood	All	SC02, SC03	44, 59	Medium, Low	11
West Lake					
Hills	All	SC02, SC03	44, 59	Medium, Low	11
Lakeway	All	SW04, SW05	50, 54	Low, Low	13
The Hills	All	SW04, SW05	50, 54	Low, Low	13
Webberville	Majority	NE06	11	Highest	15
				Medium,	
Pflugerville	Majority	NC01, NE01	42, 41	Medium	16
Leander	Portion	NW03	4	Highest	17
Elgin	Portion	NE05	15	Highest	18
Cedar Park	Portion	NW05, NW07	2, 55	Highest, Low	19
Round Rock	Portion	NC01	42	Medium	20

The second approach for promoting local-level CWPPs focuses on identifying clusters of developments that can be joined into a plan area to address wildfire mitigation for WUI areas generally beyond the incorporated limits of municipalities. As discussed in **Section 4.4** and illustrated in **Figure 25**, any number of geographic conditions may contribute to establishing the optimal plan area for a local-level CWPP. The local wildfire cooperators -- primarily the leadership of ESDs within a local plan area -- will have the best insights in guiding the determination of the limits based on their familiarity with the local wildfire conditions.

As the resources become available, prioritization of support for developing local-level CWPPs and implementing wildfire mitigation strategies should be governed by the relative risk of those projects competing for limited resources. It is recommended that the proposed Wildfire Coalition and public officials utilize the ordinal list of Planning Units (PU) found in **Table 15 of 4.3.3** in prioritizing projects. Additional consideration should be given to those ESDs where the majority of PU are in the higher risk categories. **Table 18 in 4.3.3** shows that ESDs 1, 11, and 12 have three or four PU areas in the highest-risk categories, while all of the ESD 3 and 8 PU areas are in the highest category.

Independent of CWPP promotion efforts by the proposed Wildfire Coalition, local-level community leaders can use the CWPP Tool Kit found in **Appendix E** and the PU Exhibits found in **Appendix C** for developing their own local-level CWPP. The required collaboration with the local wildfire cooperators will bring to the process knowledge of local conditions and the property owners needed to begin to formulate an initial plan area for consideration.

The next step is to contact local stakeholders to determine their understanding of, and interest in pursuing, the localized benefits of a CWPP. After initiating discussions, the CWPP development can be turned over to local leadership, depending on their capacity to support planning and/or implementation.

The development of all local-level CWPPs should include a review of the community input received in the process of creating this countywide CWPP. The community feedback is summarized in **Section 1.6** while the raw data is provided in **Appendix A**. Many of the community values and concerns (e.g., facilities of concern, evacuation routes) are most appropriately addressed at the local level. Reviewing the stakeholder input provided in this plan may assist a local team in collecting and addressing the various issues specific to their location.

The Local-Level CWPP Committee referred to in the **Section 6.2.1** recommendations for the proposed Wildfire Coalition should be given the responsibility for monitoring the development of local-level CWPPs throughout the plan area. Acting as a liaison through the development and approval process will allow the team to confirm compliance with this regional plan and give the Wildfire Coalition the capacity to add credibility to the local-level CWPP. Approved local-level CWPPs may be appended to this regional plan as they are approved or during one of the periodic updates proposed in **Section 6.4**.

The tactical implementation of many of the objectives established for this regional plan relies on the development of local-level CWPPs. While the occasional dramatic wildfire season and continuing public education process will create interest in general, focused promotion of local-level CWPPs will advance their development in areas with higher risk first. Prioritizing local-level CWPP development in higher-risk areas will provide a trickledown effect by facilitating wildfire mitigation in the most susceptible portions of the WUI while simultaneously removing them as a probable source for embers and enhancing the safety of surrounding areas.

6.2.4 FACILITATE PUBLIC ACCESS TO RISK ASSESSMENT DATABASE

The wildfire-modeling database prepared for this countywide CWPP is an extremely powerful tool for assessing risk and planning wildfire mitigation. It was developed using ESRI ArcGIS software and requires specific knowledge and skills to be useful. It will be rolled out in a process that facilitates access by additional users as the JWTF directs and as the development of the user interfaces expands.

Initially, the database will be maintained with access through city and county wildfire professionals and planners. At some point it is anticipated that various layers will be available within the city and county GIS systems. Development of an independent user interface is also being considered. Ultimately, a web-based form similar to TxWRAP would optimize its availability to all users.

The recommendation to establish a permanent coalition discussed in **Section 6.2.1** includes the creation of a committee or work group to take responsibility for housing and maintaining the database and for facilitating access to all interested users.

6.2.5 PROMOTE PROPERTY PROTECTION

All citizens in Travis County areas at risk of wildfire should be aware of the specific steps they can take to become Fire Adapted, including homeowners, renters, and property owners. Specific recommendations for home and property protection are provided in **Section 5.3** and **Appendix D**, including effective measures for the Home Ignition Zone, defensible space, and structure ignitability.

An educated, empowered, and prepared public is the most important element for promoting Property Protection, Structure Protection, and the Home Ignition Zone (HIZ). Advancing Ready, Set, Go!, and Firewise principles throughout the plan area is the first step towards achieving the desired future conditions of the Austin-Travis County CWPP.

The following measures are specific recommendations for the public agencies responsible for CWPP implementation.

6.2.5.1 HOME IGNITION ZONE AND DEFENSIBLE SPACE RECOMMENDATIONS

- Continue to provide wildfire risk assessment training to appropriate city and county personnel. Understanding potential fire hazards in the Home Ignition Zone and knowing alternative actions to address those hazards is crucial to becoming a Fire Adapted community. The HIZ concept is considered state-of-the-art and instruction provides a consistent platform for home risk assessments and the steps needed to prepare individual residences for wildfire. The NFPA offers a nationally recognized course; however, it is important that ongoing opportunities are provided locally for training in wildfire risk assessments. Currently, there is an online training course for all of Travis County Fire Service, which could be used to educate others (<https://www3.ci.austin.tx.us/spring2014wuiha2/>).
- Support the delivery of the Home Ignition Zone principles to area communities. As city/county personnel become trained, incorporate a “train-the-trainer” program to provide instructors for community-based HIZ workshops. These same trainers can also hold workshops for other city/county personnel. The Wildfire Ready Austin poster titled *Maintain a Defensible Space*, the companion document titled *Before and After the Fire: Environmental Best Management Practices for Wildfire Risk Reduction and Recovery* and the *Ready, Set, Go!* brochure all provide an excellent basis to educate the public about HIZ principles (**Appendix D**).

- All residences and businesses in at-risk communities should be assessed for wildfire risk. Individual assessments and their mitigation recommendations provide a blueprint for the home or business owner to follow in improving their preparedness status. In addition, the assessments give the fire departments a tool to aid their pre-fire (pre-attack) planning by identifying defensible space concerns, potential hazards to responders (e.g., old wells, underground gasoline or propane tanks, location of septic systems), or egress and ingress issues prior to entering the property to suppress a wildfire. Risk assessment forms include Ready Set Go! and NFPA Form 551.
- Key cooperators such as the JWTF should establish a time frame for identifying the number of homes and businesses in at-risk communities, as well as establishing a timeframe for evaluating and completing these individual risk assessments. **By involving key cooperators such as the JWTF and community groups in the development process, the process can be accomplished using materials developed in this CWPP and future local-level CWPPs with the goal of completion through self-performed assessments.** Representatives from appropriate and willing cooperators can be trained to provide the assessments. Furthermore, homeowners can accomplish the task themselves by attending appropriate training. For communities interested in achieving Firewise Community, USA recognition, if requested the Texas A&M Forest Service can provide community wildfire risk assessments. Contact the Texas A&M Forest Service directly to identify a reasonable timeframe for completion of a community wildfire risk assessment through their agency.
- Via all available media, distribute to property owners outreach documents as identified by the JWTF, such as the *Ready, Set, Go!* recommendations, the primary outreach mechanism currently available. In addition, *Maintain a Defensible Space* and the companion document *Before and After the Fire: Environmental Best Management Practices for Wildfire Risk Reduction and Recovery* (see **Appendix D**) are also excellent resources for property owners.
- Continue to develop and facilitate good defensible space practices by training and building the capacity of private sector professionals such as arborists, builders, and landscaping organizations to meet the communities WIU needs.

6.2.5.2 STRUCTURE IGNITABILITY REDUCTION RECOMMENDATIONS

- **Appendix D** includes current, scientifically sound recommendations for fire-resistant materials. These recommendations should be updated as often as necessary and made available in both print and electronic formats for builders, architects, contractors, and residents through the various community education and outreach mechanisms discussed in **Section 6.2.2**.
- Continue to develop and facilitate good structure ignitability reduction measures by home design and construction organizations in the private sector. The JWTF should work with the Homebuilders Association of Greater Austin, the Texas Association of Builders, the American Institute of Architects Austin, and the Texas Society of Architects as necessary to encourage the inclusion of structure ignitability reduction recommendations into home design and construction.
- Provide guidance on defensible space and structural ignitability methods and recommendations to communities being established. For existing HOAs interested in incorporating defensible space and structural ignitability methods and recommendations, provide guidance and assistance for revision of CCRs and other rules that conflict with accepted HIZ. Provide communities and HOAs with data and tools to make informed decisions regarding standards and practices that address structure ignitability.

6.2.3 DEVELOP A COORDINATED FUEL-REDUCTION PLAN

The desired future conditions within the Austin-Travis County CWPP's defined Wildland Urban Interface are vegetative and human communities compatible with the local fire environment. The most important element of this desired future condition is an educated, empowered, and prepared public. Creating defensible space around private and public structures is one of the highest priorities in this mitigation plan.

As part of the desired future conditions, vegetation treatments should be designed to ensure the overall ecological health of treated areas. Noxious weeds and invasive species should be managed to prevent their introduction or spread. Riparian communities should be managed to protect the area's hydrology by utilizing the methods as described in **Section 5.4**. **Appendix D** also provides several other useful resources for protection of the area's hydrology and associated riparian communities.

The Home Ignition Zone (HIZ) mitigation strategy detailed in **Section 5.3** is the most important tool that homeowners in the WUI can implement to protect life and property. Hazardous fuel reduction, while a subset of the HIZ discussion, is also important because this mitigation strategy contributes significantly to minimizing wildfire damage.

The purpose of any fuels-reduction treatment is the modification of potential fire behavior to achieve a desired goal, such as protection of life and property and natural resources. Resource management objectives requiring fuel management are often diverse and complex. As such, fuel reduction treatments are site-specific and should be adapted to best meet the needs, goals, constraints, and resources of the land manager/landowner and local jurisdiction while remaining sensitive to the values of area residents. Fuel-reduction methods, best management practices for fuel reduction, and the process for implementing fuel management treatments are described in depth in **Sections 5.3 and 5.4**.



Figure 58. Prescribed fire fuel reduction at Commons Ford Ranch Metropolitan Park – Prairie Restoration Project (Commons Ford PRO).

The development and selection of fuel management activities for reducing wildfire intensity on a property requires a detailed site assessment that focuses on the fuel characteristics and fuel types present. It must also review site-specific considerations/constraints such as environmentally sensitive areas, protected species, water quality, and topography. Most properties are composed of multiple fuel types with varying characteristics, and each fuel type and characteristic should be evaluated independently, as well as a component of the whole when developing a mitigation plan that incorporates fuels reduction to reduce wildfire intensity.

The detailed discussions in **Appendix C** introduce the concepts that went into the development of the Wildfire Mitigation Strategies Builder (WMS Builder) (**Section 5.6**). It is a tool that can be utilized to determine appropriate structural hardening and fuel reduction

treatments for specific site conditions. A dichotomous key to be used in conjunction with the PU Exhibits, the WMS builder is designed to assist the user determine the most appropriate best management strategies for a given site. It provides additional resources, considerations, and guidance for the development of effective fuel mitigation treatments and includes information on how to use the WMS Builder and PU Exhibits, a dichotomous fuels key; methods to utilize based on the results of the custom assessment, and recommended mitigation strategies.

6.2.4 MODEL AND TEST INNOVATIVE MITIGATION STRATEGIES

The wildfire mitigation strategies identified in **Sections 5.3 and 5.4** are part of an ever-expanding field of study. There is a wide variation of WUI conditions across Travis County with multiple layers of specific constraints that cover protected species habitats, watershed health, forest health, and other community values. It will require flexibility to select the most functional wildfire treatments to include in the mitigation strategy for any particular locale. Developing and tracking customized strategies based on the various combinations of treatments needed to address a particular set of site conditions will yield a series of repeatable packages that can be selected when similar conditions are encountered in the future.

Local wildfire professionals with greater understanding of local fuel types and conditions should be encouraged to recommend innovative ideas that can be vetted and developed into pilot projects. Treatments and strategies from across the country should also be examined for their applicability and/or adaptability for use in the mitigation of local fuel types under local conditions. Approved pilot projects can be implemented and monitored, and then successful methods can be included in the suite of available wildfire mitigation tools.

Proper monitoring of wildfire mitigation efforts via a database will allow analysis of their effectiveness during GIS database and risk assessment updates. The recommendation to establish a permanent coalition discussed in **Section 6.2.1** includes the creation of a committee or work group to take responsibility for developing a database to track the various wildfire mitigation projects being undertaken in the plan area. This same database could be used to monitor the pilot projects created to test and/or verify the effectiveness of any innovative mitigation strategies.

6.2.5 GROW WILDLAND FIREFIGHTING CAPABILITIES IN STEP WITH THE EXPANDING WUI

Continued population growth within the plan area will lead to continued expansion of the WUI. While implementation of the mitigation strategies recommended in this CWPP will lead to improved protection of people and property, the addition of human activity in a growing WUI must be monitored so that wildland firefighting capabilities keep pace with additional risk. This recommendation includes, but is not limited to:

- Wildland firefighter training;
- Wildland firefighting equipment and vehicles;
- Remote wildfire detection systems,
- Improved resource sharing.

A fire-adapted community doesn't need a fire truck for every structure, but it must keep its investment in wildland firefighting capabilities in line with the need for their services. A committee or work group within the wildfire coalition recommended in **6.2.1** should monitor this function so that inter-jurisdictional coordination will work effectively to ensure adequate coverage and avoid inefficient redundancy.

6.3 PROGRESS REVIEWS

Plan maintenance and revision is a critical component of any CWPP plan. The recommendation to establish a permanent coalition discussed in **Section 6.2.1** includes the creation of various committees or work groups to take responsibility for specific functions as directed by the coalition leadership. Likewise, the coalition leadership should develop a system for monitoring the progress within the specific subareas and the program as a whole. Quarterly or semi-annual reviews by the leadership will provide an accountability mechanism for both the committees and/or work groups answering to the leadership and leadership answering to the public officials and general public relying on the coalition.

6.4 PLAN UPDATES

The permanent coalition should conduct a complete evaluation and update of the Austin-Travis County CWPP on the same update schedule as the Travis County and City of Austin's Hazard Mitigation Plans, or every five years. It is recommended that the JWTF use a process

similar to that identified in the *Community Wildfire Protection Plan Evaluation Guide* (University of Oregon 2008) during five-year reviews. This guide provides information on the specific steps to be taken during the evaluation, a framework for conducting the evaluation, and sample survey examples and other resources for completing the evaluation.

Updates to the GIS database should follow a similar periodicity but must take into consideration the timing of the LiDAR data collection process. Seasonal variations in vegetation canopies, coverage overlap, single mission coverage of entire plan area, and coding consistency should be taken into consideration in support of optimal identification of canopy characteristics. Additional detail regarding these issues can be found on page 37 of the Baylor report (White et al. 2014) included in **Appendix B**.