

HOOPA PLANNING UNIT ACTION PLAN



Hoopa Valley. Photo: National Museum of the American Indian.

HUMBOLDT COUNTY COMMUNITY WILDFIRE PROTECTION PLAN, 2019

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Helpful Links	
HOOPA TRIBE OFFICIAL WEBSITE:	https://www.hoopa-nsn.gov
HOOPA FIRE DEPARTMENT AND OFFICE OF EMERGENCY SERVICES (OES):	https://www.hoopa-nsn.gov/the-tribal-government/departments/emergency-service-departments/wildland-fire-department
HOOPA OES FACEBOOK PAGE:	https://www.facebook.com/HoopaOES
HOOPA TRIBAL FORESTRY:	http://www.hoopaforestry.com
HOOPA FSC WEBPAGE:	https://humboldt.gov/2440/Hoopa-Fire-DepartmentFSC
HUMBOLDT COUNTY WEB GIS:	https://webqis.co.humboldt.ca.us/HCEGIS2.6_CWPP
HUMBOLDT COUNTY FIRE SAFE COUNCIL (HCFSC):	https://humboldt.gov/FireSafeCouncil
HCFSC REPRESENTATIVE, CYBELLE IMMITT:	cimmit@co.humboldt.ca.us

4.4 HOOPA PLANNING UNIT ACTION PLAN

4.4.1 HOOPA PLANNING UNIT DESCRIPTION



A larger map of this planning unit can be viewed in Map 4.4.1, **Hoopa Planning Unit**.

The Hoopa Planning Unit spans over 114,000 acres of rugged, mountainous terrain and a broad valley, which forms the basin of the Trinity River watershed. The Trinity River and its tributaries bisect the valley, flowing in a northerly direction towards its confluence with the Klamath River near the town of Weitchpec, just north of the Unit. Highway 96 follows alongside the Trinity River and serves as the main transportation corridor into and out of the area. The map, at left, shows the Reservation boundaries as well as the aboriginal territories to the east of the reservation, currently under Six Rivers National Forest management. The reservation is 12 miles square.

At over ninety-two thousand acres, the Hoopa Valley Indian Reservation (HVIR), is the largest Indian Reservation in California.¹ The reservation covers approximately 50% of the Hupa aboriginal territory. The Hoopa Valley Tribe, under a compact agreement

with the United States, is a Self Determination – Self Governance Tribe and manages all lands within the exterior boundary of the Reservation. Privately owned land within this boundary, which accounts for less than 2% (1,553 acres), also falls under the jurisdiction of the Tribe.

The town of Hoopa comprises the community population center and is the only town within the boundaries of the Reservation. The gently sloping Hoopa Valley is where all of the businesses, schools, post office, Tribal offices, and the majority of residences are located. Approximately 4,000 people reside in this planning unit. More populous areas of the Reservation include the valley floor, Bald Hills, and Trinity River Gorge. Neighborhoods on the valley floor include Telescope Road, Agency Field, Big Hill Road area, Upper and Lower Campbell Field Housing, Hostler Field Housing, Community Services Housing, Hostler Flat, and Norton Field Housing. Outside of the Valley, the Reservation can be characterized by steep mountainous

Wildland-Urban Interface (WUI): The zone where structures and other human developments meet, or intermingle with, undeveloped wildlands.

terrain. In large part due to the rugged terrain surrounding the Hoopa community, the Federal Register classifies the entire Reservation as *Wildland Urban Interface (WUI)*.²

4.4.2 HOOPA ASSETS AND VALUES AT RISK

Assets and values at risk are those things that are important to quality of life that can be threatened with destruction or loss from wildfire. These include a variety of things such as homes, businesses, critical infrastructure, cultural sites, wildlife habitat, natural resources, air quality, recreational facilities and areas, historical structures, and any other important attribute that individual communities rely on for their well-being.

¹ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (pp. 3-4). [PDF]. Retrieved from <https://www.hoopa-nsn.gov/wp-content/uploads/2017/09/Revised-final-CWPP-9-5-15.pdf>

² USFS, BIA, BLM, CDFW, & NPS. (2001). Urban Wildland Interface Communities Within the Vicinity of Federal Lands That Are at High Risk From Wildfire. Document 66 FR 751. Retrieved from <https://www.federalregister.gov/documents/2001/01/04/01-52/urban-wildland-interface-communities-within-the-vicinity-of-federal-lands-that-are-at-high-risk-from>

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The majority of assets at risk in this planning unit are residential homes and tribal facilities, along with a variety of commercial and service industries, community centers, medical and dental clinics, schools, museums, as well as infrastructure components, such as a water treatment facility. Timber is a highly significant asset in this unit. The Hoopa Valley Tribal Forestry Department is responsible for over 87,000 acres of timberland. The Tribe’s sustainable, environmentally-focused timber practices earned its certification as a Responsible Forestry Operation by the Forest Stewardship Council. Timber values on the Reservation are estimated in the hundreds of millions of dollars.³ However, the forest is valued for much more than the monetary benefits it confers. The Tribe places a high value on the abundance of culturally useful plant species, game animals, and other natural resources found throughout the forest. Trinity River is also an asset at risk. The Tribe relies on the River’s salmon populations for subsistence and ceremonial purposes. Low water levels and sediment buildup can have devastating impacts on their ecosystems. Numerous areas throughout the Reservation are held in high regard for cultural reasons as well.

Map 4.4.2, found at the end of this Planning Unit Action Plan, illustrates assets and values at risk to wildfire identified by community members at public workshops. More detailed descriptions of community-identified fire planning features can be found on the Humboldt County Web Geographic Information System (GIS) Portal: https://webgis.co.humboldt.ca.us/HCEGIS2.6_CWPP.

Some of the key community-identified assets at risk within this unit are listed in the table below. This list is not intended to be comprehensive and illustrates participating community members’ concerns.

FIGURE 4.4.1 HOOPA: ASSETS AT RISK	
<i>Community-Identified Assets at Risk</i>	
Agency Field neighborhood	KIDE Radio/Police dispatch/Casino/Post Office
Big Hill & Rice Lane neighborhood & Squire Housing	K’ima:w Medical Center, Dental Clinic & Rest Home
Cell tower on Bald Hills (TV, radio, phone)	Lower Campbell
Gathering grounds for indigenous plants and foods (used for cultural reasons and subsistence)	Norton Field Housing Authority
Hoopa Fire Department and OES Services facilities	Telescope neighborhood
Hoopa High School/Elementary School and Water	Tribal cemetery, near School Rd along Trinity River
Hoopa Tribal neighborhood facilities	Tribal dance grounds
Hoopa VFD	Upper Campbell neighborhood
Hostler Field housing	Water Treatment Facility
<i>Additional Assets</i>	
Lucky Bear Casino	Tish Tang Campground
Merchantable timber	Trinity River
<i>Note: The Hoopa Valley Indian Reservation CWPP contains a detailed list of values at risk identified by Tribal fire professionals organized by district and fire risk levels (see Table 4, page 30 of the Hoopa CWPP).⁴</i>	



Hoopa Valley High School. Photo: KTJUSD



Hazel and spruce basket. Photo: J. Kalt



Coho salmon. Photo: BLM

³ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 28).

⁴ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 30).

4.4.3 HOOPA WILDFIRE ENVIRONMENT

A detailed wildfire risk assessment is included in the Hoopa Community Wildfire Protection Plan.

Readers are encouraged to review that plan for more details about the **wildfire environment**.

The plan can be downloaded and more information about wildfire and other hazard preparedness can be found on the Hoopa Fire Department and Office of Emergency Services webpage: <https://www.hoopa-nsn.gov/the-tribal-government/departments/emergency-service-departments/wildland-fire-department>

Approximately 94% of the Hoopa Planning Unit is zoned “Very High Fire Hazard Severity,” as determined by the California Department of Forestry and Fire Protection (CAL FIRE).⁵ A small portion of the land area in the Valley, particularly along Highway 96, is zoned “High Fire Hazard Severity” (4%), while a negligible amount is zoned “Moderate Fire Hazard Severity”. Fire management in the Reservation is divided into two Fire Management Zones (FMZs) by the Hoopa Fire Department (HFD) and Office of Emergency Services’ (OES) Prevention Plan. One FMZ saw 90% of the fires in the last 10 years. Not coincidentally, this FMZ covers the most populated, Wildland Urban Interface (WUI) areas (Bald Hills, Gorge Valley, Valley West, and Highway 96), representing 47.3% of the Reservation’s total acreage. The second FMZ contains 52.7% of Reservation acres and only 10% of the fires in the last 10 years; it is comprised of unpopulated, mountainous, and forested areas with mostly steep terrain (Telescope, Pine, Hopkins, Deerhorn, and Tish Tang).

*For a closer look at fire hazard severity in this planning unit, see Map 4.4.2, **Hoopa Community-Identified Protection Resources, Values/Assets, & Risks/Hazards**.*

How is Fire Hazard Severity determined by CAL FIRE?

- The classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings.
- Zone boundaries and hazard levels are determined based on vegetation. For wildland areas, the current FHSZ model uses burn probability and expected fire behavior based on weather, fuel, and terrain conditions. For urban areas, zone boundaries and hazard levels are based on vegetation density, adjacent wildland FHSZ scores, and distance from wildland areas.
- Each area of the map gets a score for flame length, embers, and the likelihood of the area burning. Scores are then averaged over the zone areas.
- While FHS zones do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and therefore are of greater concern.

Humans are responsible for nearly all fire ignitions in this planning unit. Arson is an ongoing problem throughout the Reservation, to the extent that arson or suspicion of arson has represented 90% of fire causes in the past decade. Less common ignitions result from campfires, trash burning and brush clearing, vehicles, and fireworks. Lightning is the sole natural cause for fires reported on the Reservation and is only responsible for 0.54% of fire starts since 1999.⁶

⁵ CAL FIRE (California Department of Forestry and Fire Protection). (2007). Fire Resources Assessment Program (FRAP). [Map showing Fire Hazard Severity Zone ratings within various geographic areas, mapped by county]. Fire Hazard Severity Zones Map. Retrieved from http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps

⁶ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 14).

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6 The costs associated with wildfire and other fire incidents between the years 1999-2011 in the Reservation are totaled at \$15,710,150.⁷ 9

Fire History

Ecosystems and plant communities in this region are historically adapted to regular wildfire occurrence. Hoopa Tribal members have traditionally implemented intentional burns throughout the Reservation area for ecological and cultural purposes. However, a heavy *fire suppression* campaign beginning in the 1930s has allowed the accumulation of dense, flammable vegetation in forest understories, this fuel increases the risk of high-intensity wildfires. Forest ecosystems, accustomed to low-intensity fires that historically burned off brush and newer starts in the understory, become overcrowded with accumulated fuel. This puts them at greater risk for destructive loss from wildfire.

Fire suppression: All the work and activities connected with control and fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

Natural fire regime: (1) A natural fire regime is a classification of the role fire would play across a landscape in the absence of modern human mechanical intervention, but including the influence of aboriginal burning (Agee 1993, Brown 1995). Five natural (historical) fire regimes are classified based on average number of years between fires (fire frequency) combined with the severity (amount of replacement) of the fire on the dominant overstory vegetation.

The extent that the landscape has been altered as a result of fire suppression is reflected in the condition class of the Unit area. Condition class describes the degree of departure from the historical *natural fire regime*. Where the condition class indicates that fire has been absent for an unnaturally long time, the hazard and potential damages are high to both the environment and human developments in the area.

Approximately 60% of the Hoopa Planning Unit is condition class 3, meaning the fire regime is significantly altered from the historical range; and approximately 30% of the area is condition class 2, or moderately altered from the historical range.

In the past decade there has been frequent wildfire activity within and adjacent to the Hoopa Unit. According to the Hoopa Valley Hazard Mitigation Plan, local firefighting resources respond to anywhere from 200 to 400 fires per year, the majority of which are caused by arson or human error.⁸ The Hoopa Valley Indian Reservation Community Wildfire Protection Plan states that 98.5% of fires on the reservation are human caused.⁹ The Hoopa Valley remains one of the highest risks for arson related fires and incidences in the State of California. The most recent such fire was determined to be started by an arsonist on August 16, 2018. The fire burned over 3,600 acres in the Mill Creek watershed north of the Hoopa community—the largest wildfire on the Hoopa Reservation in recorded history. Local firefighters worked tirelessly to contain the blaze and were joined by reinforcements from the out of area Type 2 Incident Management Command Great Basin Team 6. Unhealthy air quality from the fire impacted residents of the Hoopa Valley and an associated emergency declaration was made by the Hoopa Tribal Chairman.

⁷ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 7).

⁸ Hoopa Valley Tribe. (2014). Multi-Hazard Mitigation Plan. [PDF]. (p. 134). Retrieved from <https://www.hoopansn.gov/wp-content/uploads/2017/09/2014-approved-Hoopa-Valley-MHMP-distribution-copy-5.30.14.pdf>

⁹ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 7).

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The names, year, cause, and acreage covered by recent major fire events within this planning unit are summarized in the table below.

FIGURE 4.4.2 HOOPA FIRES OVER 10 ACRES 1967-2017 ¹⁰				
Fire Name	Cause	Year	Acres	
			In Unit	Total
Megram	Lightning	1999	20,205	125,073
Corral	Lightning	2013	1,728	12,541
Mill Creek 4	Miscellaneous	2009	1,298	2,831
Lt-17 (Backbone)	Lightning	2009	554	5,194
Bald Hill 3	Vehicle	2014	210	210
Deer Horn 2	Lightning	2015	86	86
Packsaddle	Lightning	2008	24	35
Telescope	Miscellaneous	1997	1	38
Summit	Unknown/ Unidentified	2016	0.49	20

Note: An interactive map of fire history through 1908 is available through the County WebGIS.

Structural Ignitability

Homes in this planning unit exist within the WUI, which increases the risk of wildland fires becoming structural fires, and vice versa. Embers carried on the wind from nearby wildfires—even miles away—could ignite homes within this planning unit. This was made all too clear during recent, catastrophic wildfire events in Northern California that claimed thousands of homes. Many of the homes lost burned from the inside out, as embers were forced inside by strong winds, or sucked in through ventilation systems. For this reason, home hardening should be a top priority for homeowners concerned about their fire resiliency. Roofs and eaves, windows, vents, and siding are all components that can be upgraded to reduce a home’s vulnerability to loss. Resources for homeowners ready to take this leap in fire preparedness include *Appendix L, Living with Wildfire* and *Home Survival in Wildfire-Prone Areas*¹¹, published by the University of California Agriculture and Natural Resources. **Based on field observations, there are many homes in this planning unit where steps need to be taken to ensure structure survival when wildfire is nearby.**

Wildfire risk is exacerbated by the presence of dense vegetation growing in the *Home Ignition Zone* and flammable items in direct contact with the structure. Dead plant matter and vegetation with low moisture levels within 100-300 feet of homesteads pose some of the greatest threats to *structural ignitability*. Of particular concern are houses with needles and leaves accumulating on rooftops or in rain gutters. Houses with wooden rooftops and siding add to this risk, as do the presence of wooden decks, particularly those with dead plant matter accumulated, or other flammable materials stored beneath them. The high

Home Ignition Zone: The home and area out to approximately 100 feet, where conditions affect a home’s potential ignitability during a wildfire.

Structural ignitability: The ease with which a home or other structure ignites.

¹⁰ CAL FIRE. (2018). FRAP. State Fire Perimeters 1908-2017.

¹¹ Quarles, S.L., Valachovic, Y., Nakamura, G.M., Nader G.A., & De Lasaux, M.J. (2010). Home Survival in Wildfire-Prone Areas: Building Materials and Design Considerations. University of California, Agriculture and Natural Resources. ANR Publication 8393. [PDF]. Retrieved from <https://anrcatalog.ucanr.edu/pdf/8393.pdf>

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percentage of mobile homes in the Unit is another concern for structural ignitability. Mobile homes are subject to the same risks as built houses regarding the accumulation of fuels on or nearby the structure; however, if ignition does occur, mobile homes have a greater propensity to burn rapidly and completely.

Managing fuels for at least 100 feet of defensible space is highly recommended by this CWPP and is mandated by California Public Resources Code 4291¹². By reducing the intensity and rate of spread of a fire, defensible space provides suppression personnel the option to deploy their resources to defend the home; it also reduces the likelihood that a house fire will spread outwards. Likewise, managing fuels along access roads provides safer escape routes for both residents and suppression personnel.

Map 4.4.2, found at the end of this planning unit Action Plan, illustrates risks and hazards identified by community members at public workshops with an underlay map of fire hazard severity zones. More detailed descriptions of community-identified fire planning features can be found on the Humboldt County Web GIS Portal: https://webgis.co.humboldt.ca.us/HCEGIS2.6_CWPP.

Water Sources

The Hoopa Valley Public Utilities District provides potable water and fire protection water throughout the Hoopa Valley Reservation. The table below summarizes the drafting sites identified by community members through the County's fire-planning workshops.

Community-identified locations from which fire protection water could be drawn are listed in the table below. This list is not intended to be comprehensive and illustrates participating community members' knowledge.

FIGURE 4.4.3 HOOPA: FIRE PROTECTION WATER DRAFT SITES
Legion Way – River Access
Tish Tang Road – River Access
Mill Creek
HFD – River Access
<i>Note: Locations identified at community workshops and will need to be vetted further with local firefighting personnel.</i>

Map 4.4.2, found at the end of this Unit Action Plan, illustrates these drafting sites as well as other community-identified wildfire protection resources. More detailed descriptions of community-identified fire planning features can be found on the Humboldt County Web GIS Portal: https://webgis.co.humboldt.ca.us/HCEGIS2.6_CWPP.

4.4.4 HOOPA FIRE PROTECTION CAPABILITIES

Fire protection services in this planning unit are provided by the Hoopa Fire Department and Office of Emergency Services (HFD/OES) and Hoopa Volunteer Fire and Rescue (HVFR). HVFR is a community-based volunteer organization established in the late 1970s by the Hoopa Valley Tribal Council and the Bureau of Indian Affairs (BIA) as an all-risk organization primarily focused on structural fire suppression.

The HFD/OES is a chartered stand-alone organization within Tribal government and is solely operated and managed by the Hoopa Valley Tribe. The Hoopa Fire Department and the Tribal Office of Emergency Services operate in synchrony under the leadership of the Chief of the Department and are tasked with operational responsibilities all year round. The HFD/OES is an all-risk program that is responsible for disaster planning, response, preparedness, and recovery from disasters. The HFD/OES is a national resource and responds across the nation to provide assistance to local, state, and federal agencies when requested.

¹² California Public Resources Code 4291 is provided as *Appendix K* of this CWPP.

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Responsibility for fire management over the last 30 years has fallen to the Hoopa Valley Tribe and the HFD/OES. Strategies have continued to strongly emphasize fire suppression and strategic decision making by Department command staff due to a large fire occurrence, with a ten year average of 194 wildfires annually. Because the HFD/OES is federally funded, they are part of the California Mobilization and National Mobilization guides and receive mutual aid and assistance through the mobilization process. Through a cooperative agreement with the Bureau of Indian Affairs (BIA) and the compact agreement with the U.S. government, the Fire Department utilizes the statewide master agreement for Fire Management. The Bureau of Indian Affairs Regional Fire Management Program is signatory to the Statewide agreement and allows the HFD/OES to participate as the parent agency.

FIGURE 4.4.4 HOOPA FIRE PROTECTION RESOURCES ¹³				
PERSONNEL	SERVES		APPARATUS	RESPONSE
	RESIDENTS	AREA (SQ. MI)		
HOOPA VOLUNTEER FIRE AND RESCUE (HVFR) – PHONE: (530) 625-1118				
19 Volunteers 3 Auxiliary	4,000	144	<ul style="list-style-type: none"> ○ (2) Type-1 engine ○ Rescue utility vehicle ○ Command vehicle ○ (2) 16-ft outboard jet boats ○ Rescue-2 support unit (retired ambulance) 	<ul style="list-style-type: none"> ○ Structural fires ○ All-risk organization ○ Provides support for wildland fires
HOOPA FIRE DEPARTMENT AND OFFICE OF EMERGENCY SERVICES (HFD/OES) – PHONE: (530) 625-4366				
19 Full-time 6 Temporary	4,000	144	<ul style="list-style-type: none"> ○ (3) Type-3 engines ○ (2) Type-4 quick attack engines ○ Type-2 water tender 	<ul style="list-style-type: none"> ○ Wildland fires / All-risk ○ Provides assistance to local, state, and federal agencies when requested

4.4.5 HOOPA EVACUATION

When wildfires have the potential to become disasters by threatening life and safety, procedures are initiated to support the safe evacuation of people, domestic animals, and livestock from potentially hazardous areas. During such events, community evacuation sites may be established where residents can go to survive a wildfire. **Evacuation sites will be established in different locations depending on the anticipated path of the wildfire and location of the affected population.** The determination for the location of these sites is normally made by the Hoopa Incident Commander in cooperation with an Incident Management Team. Mass communication and door-to-door methods will be used to inform residents about the threat and where residents should go to take shelter. As part of the Evacuation Alert Protocol all community residents should tune into KIDE FM 91.3 when they hear the Warning Sirens alert to determine the type of emergency and what they are instructed to do.

Evacuation routes in the Hoopa Planning Unit will depend on the location of the community at risk and law enforcement and/or HFD/OES recommendations based on fire behavior, wind patterns, traffic, and ingress of emergency vehicles. Highway 96 is the central ingress and egress route, with numerous smaller roads connecting residences and neighborhoods to it. Adequate ingress and egress along these roads is vital to residents that may need to access the main highway evacuation route and for firefighters responding to wildfires near these neighborhoods.

¹³ Humboldt County Fire Safe Council. (2018). Humboldt County Fire Chiefs’ Association Annual Report, 2017. (pg. 41-42). Retrieved from <https://humboldtqov.org/Archive.aspx?AMID=75>

FIGURE 4.4.5 HOOPA: ALTERNATIVE EVACUATION ROUTES TO HWY 96

- **Mill Creek Road** leads northeast to Orleans.
- **Big Hill Road** leads east into Six Rivers National Forest territory.
- **Bair Road** provides westward access toward Redwood Valley and 299, via Stover Road.
- **Bloody Camp and Dowd Roads** provide northern access.
- **Pine Creek Road**, leads north to Bald Hills Road, which connects with town of Orick.

Note: Most of these roads are narrow and windy that traverse unpopulated and steep terrain and would therefore, not be ideal for massive evacuation efforts. There are more details provided about evacuation routes in the Hoopa Valley CWPP on page 22.

Most of the structures within the Unit are not far from the main highway, but a few neighborhood groupings are more remote. The narrowness of smaller roads leading to remote residences could create complications for emergency vehicle response trying to gain access during simultaneous home evacuations. Landslides resulting from heavy rains falling on snow melt in the late winter and early spring could inhibit access and create hazardous road conditions. Other ingress and egress impediments may include steep road sections, fallen trees and power lines, wooden bridges susceptible to burning, and one-way-in, one-way-out roads that could inhibit evacuation and emergency response vehicles or leave residents stranded should the roads become blocked. Poorly or inaccurately marked streets and intersections may also present a challenge for emergency responders.

If a catastrophic event occurs, residents and visitors may not be able to reach designated evacuation sites. In such cases, people may need to make decisions on their own about seeking shelter where they can survive the passage of the wildfire. Residents should seek shelter as a last resort, when evacuation is not an option. It can be very difficult to determine the right thing to do as the fire approaches, which is why it is so critical to **have a plan** and to **evacuate early**, if possible. Before a wildfire threatens, community members should research options and talk to fire and emergency service representatives about evacuation procedures, expected fire behavior in their neighborhood, and what to do if they get trapped.¹⁴ If residents are forced to take shelter, the horrific sound, smoke, and heat of a passing wildfire may be physically and emotionally difficult to endure. It may bring some solace and may help combat the natural urge to flee knowing that all possible measures have been taken to increase the odds of survival.

*See Appendix H, **Living with Wildfire** for more information on preparing for safe evacuation, and evacuation planning for pets and livestock. See also Chapter 5.4.6, **Evacuation Preparedness in Part 5, Risk-Assessment Detail** for information about evacuation procedures and challenges in Humboldt County.*

Humboldt Alert: Humboldt County’s Mass-Notification System

- ❖ The best way for emergency personnel to alert you of an emergency in your geographic area. You may choose to be contacted by email, text message, landline, or cellphone – or all four.
- ❖ It is geographically targeted. You will only receive alerts relevant to your geographic area, which is based on the address(es) you provide. The system can hold multiple addresses under one account (e.g. home, office, child’s school).
- ❖ The service is completely free of charge.
- ❖ To sign-up visit: <https://humboldt.gov/alerts> or contact the **Humboldt County Office of Emergency Services (707) 268-2500**.

¹⁴ CAL FIRE and Idaho Firewise offer advice on what to do if you become trapped:

<http://www.readyforwildfire.org/What-To-Do-If-Trapped> and <http://idahofirewise.org/evacuation/if-you-get-trapped>.

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4.4.6 HOOPA COMMUNITY PREPAREDNESS

The HFD/OES strives to develop programs and processes for the protection of the Hoopa Indian Reservation and the community of Hoopa. This is accomplished through an aggressive suppression and prevention program. The Department has developed a Community Wildfire Protection Plan, approved in 2016. With this plan, the development and initiation of the Hoopa Fire Safe Council has direction and an opportunity to plan for and protect the community from wildfire within the WUI.

Fire Prevention is also a large part of the HFD/OES' daily activities. Helping landowners and working on Tribal Lands, department personnel assist with land clearing, utilizing mechanical methods as well as burning. In addition, the HFD/OES conducts public presentations, fire prevention drills and talks in the local schools, and constantly shares information with the community about the prevention of catastrophic fire. An active Facebook¹⁵ presence helps keep followers informed about emergencies and where to find support.

The Hoopa FSC was formed in 2013 to assist with the development and implementation of a local CWPP. Members of the HFD/OES are working to rebuild the FSC as a venue for implementing the Hoopa Valley Indian Reservation CWPP and educating community members about wildfire preparedness. *See section 4.4.7 below for a summary of that CWPP.*

The Hoopa Valley Tribe and Tribal departments can be reached by calling **(530) 625-4211** or by visiting their website at: <http://www.hoopa-nsn.gov>.

FIGURE 4.4.6 HOOPA: FIRE PREVENTION ACCOMPLISHMENTS

- The Hoopa Valley Indian Reservation Community Wildfire Protection Plan was successfully completed, and approved by the Tribal Council on January 7, 2016.
- The Hoopa Valley Tribe Multi-Hazard Mitigation Plan was successfully completed and approved by FEMA on May 28, 2014 and is currently being revised and rewritten.
- The HFD/OES has treated approximately 90 acres since August 2017 under the Fuels Management Program.
- The WUI program has successfully cleared approximately 600 acres of hazardous fuels on the valley floor and Bald Hills area since August 2017.
- HVFR secured funding through Measure Z for the purchase of turnouts, radios, and SCBA (self-contained breathing apparatus).
- Hoopa Tribal Forestry has completed numerous fuels reduction projects including ridgetop and roadside shaded fuel breaks and they continue to plan and implement more projects.
- The Hoopa Valley Tribe hosted Team Rubicon¹⁶ to assist with "Operation KI Te Lit". Their goal is to prioritize and complete WUI projects identified in the Hoopa CWPP, to safeguard and protect structures, minimize the impacts of potential conflagration from fire, and save lives. The work of this volunteer team saved the Tribe over \$60,000.

¹⁵ Hoopa Office of Emergency Services Facebook page: <https://www.facebook.com/HoopaOES>

¹⁶ Team Rubicon website: <https://teamrubiconusa.org>

4.4.7 HOOPA LOCAL WILDFIRE PREVENTION PLANS

The Hoopa Valley Indian Reservation Community Wildfire Protection Plan was successfully completed, and adopted by the Tribal Council on January 7, 2016. The Hoopa Valley Tribe Multi-Hazard Mitigation Plan¹⁷ is also a significant source of information and guidance about wildfire prevention and preparedness. The HFD/OES also offers guidance to residents on how to plan for fire safety in the Tribes' Fuels Management Plan, which has also been approved by the Tribal government.

Hoopa Valley Indian Reservation CWPP

The primary objective of The Hoopa Valley Indian Reservation CWPP is to achieve the goal of a resilient fire safe community by creating a pathway for the community to understand and reduce their wildfire risk. It is hoped that the CWPP will help set priorities for wildfire mitigation projects, inspire local wildfire preparedness action, and leverage funding to support projects. The CWPP outlines a number of priority actions that have been identified by HFD/OES, Hoopa Valley Fire and Rescue, and various Tribal resource professionals.

- **Himalayan Blackberry Removal:** Himalayan blackberry, an invasive species, continues to grow in dense thickets around critical infrastructure and key resources. The dense, woody thickets have become a major fire hazard throughout Hoopa Valley. Removal projects will be a top priority in coming years.

Blackberry infestation should be identified around CIKR (Critical Infrastructure and Key Resources) and removed as first priority. The subsequent recommendations are: 1) a detailed mapping of Blackberry infestation on reservation land, 2) Develop a prioritized removal plan based on mapping and CIKR, 3) Determine best method for removal of Blackberry thickets in region and finally 4) Implement removal plan. It is suggested that some test sites be implemented to see best method for removal in conjunction with removal around CIKR and infestation mapping to reduce timeline for removal.¹⁸

- **Fuels mitigation projects through education and outreach:** Create an incentive system for community members to complete fuels reduction projects. Provide resources and educational tools to support the community in these projects.
- **Increased Responsibility and Funding:** Pursue funding through the Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation (PDM) project grant.
- **Long-term Wildfire Risk Reduction Planning with WUI Partners:** Continue collaborating with the Humboldt County Fire Safe Council. Plan and carry out a demonstration project that would both reduce wildfire risk in the chosen area through fuels reduction, and educate commuters and community members about wildfire hazards and the effectiveness of simple changes. Pair the project with a public outreach campaign to maximize reach.

The Hoopa Valley Tribe Indian Reservation CWPP is available for download on the Tribe's website: <https://www.hoopa-nsn.gov/wp-content/uploads/2017/09/Revised-final-CWPP-9-5-15.pdf>.

Fuels Management Plan

In 2008 the Hoopa Tribal Forestry Department completed and the Tribe approved a Ten-Year Fuels Management Plan for the Hoopa Reservation. The document lays out a plan for implementing a variety of

¹⁷ Hoopa Valley Tribe. (2014). Multi-Hazard Mitigation Plan [PDF]. Retrieved from <https://www.hoopa-nsn.gov/wp-content/uploads/2017/09/2014-approved-Hoopa-Valley-MHMP-distribution-copy-5.30.14.pdf>

¹⁸ Hoopa Valley Tribe. (2016). Hoopa Valley Indian Reservation Community Wildfire Protection Plan. (p. 34). Retrieved from <https://humboldtqov.org/2440/25270/Hoopa-Fire-DepartmentFSC>

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fuels treatment activities on approximately 20,000 acres, or 20% of the Reservation, over the 10-year management period. The plan seeks to improve forest health while also protecting the community from the potentially catastrophic consequences of a wildfire. This plan will be updated within the next few years.



HFD/OES Cultural Burn. Photos: Hoopa Valley Tribe.

4.4.8 HOOPA COMMUNITY IDENTIFIED POTENTIAL PROJECTS

As part of the collaborative planning process to create this CWPP, 14 community wildfire preparedness workshops were held throughout the County. See *Chapter 1.2, Collaborative Planning Process and Appendix B, Planning Process Details for more information*. The workshop for this planning unit was held on December 6, 2017 at the training facility of the HFD/OES with the following goals:

Provide information:

- Fire protection capabilities and needs.
- Prevention of unplanned human-caused wildfires.
- Wildfire and emergency preparedness.
- The role of wildfire in our local environment.
- The Humboldt County Community Wildfire Protection Plan (CWPP).

Seek Information:

- Obtain local knowledge and concerns regarding assets and hazards.
- Provide an opportunity for direct input into priorities for community fire safety.

Through the initial 2004-2005 fire-planning process and the 2012 and 2017 CWPP update processes dozens of projects were identified for this planning unit through a community workshop mapping exercise. These projects are illustrated on the community-identified projects map found at the end of this Unit Action Plan (*Map 4.4.3*). It should be noted that the maps associated with the Hoopa Planning Unit are a reflection of **County-maintained data**. There are known gaps in this data including an underestimate of development and inaccurate or missing road name information. It is possible that some of this data can be replaced in the future with data developed and maintained by the Hoopa Tribe. As directed by this CWPP (see *Integrated Planning* in the *Action Catalogue* below), the County will work with Hoopa planning partners to develop a system of data-sharing.

New or confirmed existing project ideas proposed during the 2017 update process are summarized in *Figure 4.4.7* and *4.4.8* in this section. For more information on the mapping exercise, see *Appendix B.5, Mapping Exercise Instructions*. The community-identified fire hazards, protection resources, and assets and values at risk discussed throughout this Planning Unit Action Plan (*Map 4.4.2*) also reflect information generated by these community workshop mapping exercises, as well as information resulting from direct outreach to local fire departments and residents.

The data collected through these planning processes can also be viewed in the GIS layers within the fire-planning GIS Portal. The GIS Portal allows users to search for and view specific community-identified fire-planning features by location or to zoom into a desired area from an aerial view. The GIS Portal also provides descriptions of each planning feature. To access the Portal, go to: https://webgis.co.humboldt.ca.us/HCEGIS2.6_CWPP. For a copy of fire-planning feature descriptions in table format, please contact the Office of Natural Resources Planning by phone (707) 267-9542, or email cimmitt@co.humboldt.ca.us.

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The following non-geographic community-identified project ideas have been identified through the planning process described above and will not be found on the maps or in the GIS Portal but are important to note and evaluate for feasibility.

FIGURE 4.4.7 HOOPA: COMMUNITY-IDENTIFIED PROPOSED PROJECTS, NON-GEOGRAPHIC

- Increase public outreach regarding elder/low income assistance with vegetation management.
- Improved and well maintained fire hydrant system (could improve ISO rating)
- Increased training for local HVFR and HFD (could improve ISO rating)
- Grant writing support for HVFR.
- Include policy about the use of fire retardant within sensitive areas in pre-attack plan and identify those sensitive areas.
- Resolve problems of blocked river access for firefighting water and other uses.
- Identify and map priority medicinal and material gathering places.

The local residents who attended the December 6, 2017 workshop identified the following projects as their top priority projects to be evaluated for feasibility and implemented over the next five years.

FIGURE 4.4.8 HOOPA: PRIORITY COMMUNITY-IDENTIFIED PROJECTS

PROJECT DESCRIPTION	PROJECT TYPE	PROJECT ID
Hazardous vegetation clearance around Tish Tang North Campground	Defensible Space	WCK413
Break up continuity of hazardous fuel in Heck Creek drainage	Landscape	WCK411
Campbell Field Rd: High winds, fuel buildup, and fire history	Roadside Clearance	WCK416
Bald Hills brush removal below cell tower	Defensible Space	WCK120
Brush removal on State fee lands, either side of HWY 96	Roadside Clearance	WCK108

4.4.9 HOOPA ACTION PLAN

Ideally, everything recommended in this action plan will be implemented. However, feasibility analysis and implementation will be subject to the availability of funds and other resources, and the willingness and ability of community members and plan partners to take action. This action plan can be used to guide the action of community members, organizations, and agencies working and living within each of the 14 planning units within Humboldt County. It is the intention of the HCFSC that one or more local groups be sustained within each planning unit to lead local action. It is understood that some units have more capacity than others. The HCFSC, with individual members from higher-capacity areas and partner agencies, can provide guidance for building capacity where needed.

Any recommended vegetation treatments in this CWPP must be undertaken with the consent and involvement of the property owner and the observance of all applicable local, Tribal, state, and federal regulations. Please work closely with the applicable regulatory and permitting authority as projects are developed, particularly if public funds are being used and/or the project will take place in public right-of-ways. For more information about how to ensure regulatory compliance, refer to *Appendix I, Regulations and Compliance*.

The following Action Plan is intended as a resource to guide and inspire action, as well as to cite in grant applications to leverage implementation funds.

Priority Action Recommendations:

The following recommendations are based on a review and evaluation of community-identified fire planning features, local fire planning documents, and findings from this Humboldt County CWPP risk assessment. Given the results of this analysis, a growing understanding of local capacity, and potential supporting resources, it was determined that the following list of **priority actions** would best serve as a starting place towards the fire safety of the communities in this planning unit.

- **T**he residents of the Hoopa Valley are fortunate to have active agencies, organizations and programs that support efforts to prepare for and protect them from wildfire. This CWPP recommends that those living and working in Hoopa work together to evaluate, further develop, seek funding for, and implement—as appropriate and feasible—the community-identified priority actions listed above as well as all community-identified potential projects stored in the Web GIS Portal. Perform this same process for actions identified in the *Hoopa Valley Indian Reservation CWPP*, the *Hoopa Valley Tribe Multi-Hazard Mitigation Plan*, the *Hoopa Valley Tribe Fuels Management Plan*, this *Priority Action Recommendations* list, and the *Action Catalogue* below. Pursue activities that align with available resources, community values, and the highest wildfire risks to local assets and values.
- **C**ontinue to build the capacity of the Hoopa FSC to support the implementation of local plans and promote community outreach and education.
- **E**nsure active participation from the Hoopa Valley Tribe on the Humboldt County Fire Safe Council.
- **T**he high fire danger, a dispersed WUI population, the large number of dead-end roads leading to multiple residences, and limited individual wildfire evacuation preparation combine to make **evacuation planning** and education a top priority in this planning unit. Work with HFD/OES, the County Office of Emergency Services, and local fire service to engage community members in

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evacuation preparedness and the identification of local evacuation routes and sites. In addition, identify local community liaisons to work directly with emergency management officials. This plan recommends that residents stay vigilant and evacuate as early as possible to avoid loss of life.

Direct initial evaluation and outreach efforts to neighborhoods along the following priority roads:

- Campbell Field District, ingress and egress
 - Redwood Grove Road
 - Pine Creek Road
 - Community Service Road
 - Hostler Ridge Road
 - Beaver Creek Road, near Pine Creek Road
 - Tish Tang Road
 - Community Services Road
 - Both sides of Highway 96
- **F**ocus roadside fuel reduction efforts on priority ingress and egress routes for safe evacuation, especially those roads used by the highest number of residents, single access roads, and roads leading to remote-hard to access residence. Overgrown brush and tree limbs along roadways and in residential driveways can pose challenges to emergency response vehicle access. Priority roads for initial evaluation and outreach efforts include:
- In and around Tish Tang Campgrounds (ongoing WCK413)
 - Campbell Field Road (an area with high winds, fuel buildup, and fire history - WCK416)
 - Brush removal on State fee lands, either side of HWY 96 (Roadside Clearance - WCK108)
 - Priority roads identified in relevant Hoopa Valley Tribe planning documents
- **C**ollaborate with relevant Tribal Departments (Forestry and Fire) and local partners to plan and fund landscape level fuels reduction and management where appropriate and in observance of applicable environmental laws and regulations. Match the site with the best method of treatment to meet forest resiliency and community protection goals including prescribed fire, forest thinning, landscape pruning, mowing, or targeted grazing. Evaluate the following priority areas/actions:
- Break up continuity of hazardous fuel in Heck Creek drainage (WCK411).
 - Bald Hills brush removal below cell tower on Translator Road (WCK120).
 - Collaborate to design strategic fuel breaks between Six Rivers National Forest lands and private/Tribal forestlands to protect timber, cultural, and natural resource assets from wildfires that start on public lands.
 - Develop and implement forest health and landscape fuels management projects within this planning unit to increase wildfire resiliency and restore ecosystem function and cultural values.
 - Explore ways to reintroduce fire to medicinal and material gathering places.
 - Support and promote cultural burning education and training.

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- Identify, map, and prioritize treatment of pockets of invasive Himalayan blackberry causing hazardous fuels buildup, especially around homes and critical infrastructure. Explore use of prescribed fire for maintenance.
- **C**ontinue to explore options and make progress on building the capacity of the HVFR as a community fire protection and rescue provider, such as:
 - Recruiting and retaining volunteers, particularly those who can be available all day, every day, as many volunteers are unavailable to respond during business hours, due to jobs or childcare responsibilities.
 - Increasing volunteer training.
 - Identifying community members or others to assist with grant writing and fundraising, to address a persistent lack of sufficient funding.
 - Rebuilding the firehouse, which was originally built in the early 1970s and is in desperate need of upgrades.
 - Replacing old fire engines.
- **C**ontinue coordinating efforts of HFD/OES, HVFR, USFS, and CAL FIRE to reduce unplanned human-caused ignitions.
- **I**ncrease public outreach regarding elder/low income assistance with vegetation management.
- **M**anage brush accumulation (especial blackberry bushes) around fire hydrants and water tanks to reduce hazardous conditions. Hoopa residents are encouraged to clear brush to assist local volunteer firefighters.
- **I**mprove maintenance of fire hydrant system and replace hydrants as needed.
- **P**ursue FEMA Pre-Disaster Mitigation project grant funding to address wildfire hazards and disaster preparedness.
- **E**xplore ideas for how to assist residents with keeping or securing affordable fire insurance. There is a need for advocacy on this topic and community concern expressed about potential “red-lining”.
- **I**dentify sensitive areas and priority medicinal and material gathering places and include in pre-attack plans to limit use of fire retardant. There is local concern about fire retardant’s potential harmful impacts on the environment and basket making materials.
- **W**ork closely with the Executive Council to address problems with frequent and intentional blocking of access points that could hinder evacuation and emergency response.
- **T**o support integrated planning and collaboration, share relevant local GIS data sets between the County FSC and Tribal Departments so that future coordinated planning efforts are based on the best possible mapping and data analysis for the Hoopa Valley. This may include locally generated GIS layers containing roads, land use and planning designations, wildfire ignitions and perimeters, planned and completed fuels reduction projects, natural resources features, and evacuation routes.

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Action Catalogue:

This Action Catalogue lists additional wildfire mitigation actions that can be selected in addition to, or to compliment, the priority actions above. Action items are organized under each of the six countywide goal categories outlined in *Part 3, Countywide Action Plan*. Local groups are encouraged to implement these actions within their communities wherever possible and to actively seek opportunities to engage with and benefit from the associated work being done countywide by the Humboldt County Fire Safe Council (HCFSC). To contact the HCFSC, call **(707) 267-9542**, or email cimmitt@co.humboldt.ca.us. In addition, the Hoopa CWPP and Hazard Mitigation Plan provide detailed recommendations similar to the general guidance listed on the following pages. To guide local action, review those plans first.

Wildfire Ignition Prevention

- **I**mplement One Less Spark education: www.readyforwildfire.org/One-Less-Spark-Campaign.
- **U**se *Living with Wildfire in Northwestern California* as a primary outreach tool and distribute widely: www.humboldt.gov/livingwithwildfire.
- **I**dentify primary ignition sources in the local community and focus prevention efforts on reducing them (particularly arson).
- **I**ncrease community awareness and access to information about proper methods for safe pile-burning, prescribed fire, and other fuel reduction strategies that could result in an unintended wildfire.
- **I**nform residents about the importance of vigilance and caution during Red Flag conditions when a small ignition has a higher probability of growing into a large fire.

Wildfire Preparedness

- **D**evelop a wide range of opportunities for community education on preparing for wildfire. This effort should involve the production and/or distribution of a variety of informational materials.
 - Use existing materials as much as possible and develop materials tailored to the local community as needed and able.
 - Distribute materials through mailers (including already occurring mailers such as local utility bills); via community hubs such as the post office; at all community events; on community bulletin boards; through the use of social media and networks, local media outlets, and any means used by the local community to share important information.
 - Include compelling stories about past wildfire events.
 - Encourage local service organizations to perform community service activities including delivering literature to homeowners or clearing around and painting fire hydrants.
- **P**rovide residents with information about ways to reduce structural ignitability and maintain adequate defensible space around their homes.
- **C**ollaborate to maintain defensible space for elderly, disabled, and low-income residents who are unable to do or fund the work themselves.

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- **F**ocus roadside fuel reduction efforts on priority ingress and egress routes for safe evacuation. See details in the *Priority Action Recommendations* above.
- **W**ork with PG&E and local landowners to reduce fuels along power line easements.
- **S**upport or create community chipping programs.
- **C**ompile a directory of brushing crews and other resources for landowners seeking to reduce fuels on their property.
- **C**ollaborate with agency and local partners to plan and fund landscape level fuels reduction. See details in the *Priority Action Recommendations* above.
- **C**reate a hardened homes and defensible space demonstration project. The project should be centrally located, highly visible, and include interpretive signage to educate residents and commuters.

Disaster Preparedness

- **E**vacuation preparedness and the identification of local evacuation routes and sites is a priority for this unit. See details in the *Priority Action Recommendations* above.
- **I**mprove community communication networks and explore ways to increase redundancy. This might include developing a community phone tree list and/or compiling a list of contacts to call in case of emergency or when help is needed from (or in) other areas. As another form of emergency communication, consider training or identifying a few community members to use HAM radios and secure funds to purchase radios and store them strategically throughout the community.
- **W**ork with a local fire or law enforcement agency to form a Community Emergency Response Team or CERT. Coordinate with the Humboldt CERT Coalition.
- **P**romote the creation of family disaster and evacuation plans.
- **I**nform residents about Humboldt Alert and encourage them to sign up to receive emergency notifications at <https://humboldtqov.org/alerts>.
- **W**ork with residents to ensure adequate road and home address signage for more efficient emergency response. Signs should be large, reflective, and have lettering at least three-inches in height. Less noticeable but more sentimental address signs may remain but it is important to post reflective signs as well.
- **I**nform residents about the importance of keeping gates open or accessible during Red Flag conditions. Community members should consider providing a key or access code to the local fire department.
- **A**ddress road conditions that inhibit effective evacuation and access by emergency responders. Begin by systematically identifying and mitigating such access impediments.
- **I**ncrease the availability of water for fire protection by investing in more community water tanks and ensuring existing water tanks are outfitted with fittings compatible with firefighting equipment.

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- Identify and mitigate access limitations such as narrow roads, lack of turnouts, and/or limited turnaround points for emergency vehicles.

Fire Protection

- Support the local fire departments by becoming a volunteer. Volunteer firefighters and volunteers who are emergency medical service (EMS) trained are essential to a functional local fire service. In addition, volunteers are needed for non-firefighting and EMS duties such as logistical support, traffic control, administration, fundraising, public education, and fire prevention.
- Assist in the development of recruitment and retention strategies for volunteer fire departments.
- Help local fire departments raise funds by making donations directly and/or organizing fundraising events or efforts.

Restoration of Beneficial Fire

- Provide resources to private landowners interested in implementing prescribed burns on their property, including the contact information for the HFD/OES.
- Share information about educational events that provide information about prescribed burning.
- Encourage landowners with larger acreages to work with the Humboldt County Prescribed Burn Association to conduct prescribed burns on their lands and the HFD/OES for the Hoopa Indian Reservation, for Hoopa Lands.
- Help nearby federal land managers garner local support for using prescribed fire or managed wildfire on the public lands they manage.

Integrated Planning

- Integrate the evaluation, development, and implementation of all relevant planning documents. See details in *Priority Action Recommendations* above.
- Initiate and maintain participation in the Firewise Communities/USA® Recognition Program with neighborhood groups in developed areas adjacent to the wildland. This will include active implementation and maintenance of the Firewise® action plan and organizing an annual Firewise® Day.
- Share GIS data sets between local representatives and County staff to maintain the fire planning features included in the County Web GIS Portal. See details in *Priority Action Recommendations* above.