

Humboldt County Community Wildfire Protection Plan

IV.13. Southern Humboldt Planning Unit Action Plan

IV.13.1. Southern Humboldt Planning Unit Description

The Southern Humboldt *Planning Unit* encompasses a huge portion of the southern half of Humboldt County, totaling 375,608 acres, with a wide range of land uses and geographical types. The town of Redcrest lies just north of the Unit, while Mendocino County borders the Unit to the South and Trinity County to the East. Much of the Unit is extremely rugged and difficult to access, with a series of four major northwest-trending ridges characterizing the terrain. The difficulty of accessing this remote coastal expanse has earned the region its “Lost Coast” moniker.

Highway 101 acts as the main transportation corridor through the Unit; the highway follows the inland valley formed by the path of the South Fork of the Eel River, which traverses the Unit in a north-to-south orientation and veers slightly westward as it continues north past Phillipsville. The main stem of the Eel River also passes through this unit from the south-east corner running north-west until it is joined by the South Fork Eel River at the town aptly named “South Fork”. The Unit contains many *tributary watersheds* of the Eel River system as well. Significant tributaries of the South Fork Eel include: Salmon Creek, Dean Creek, Bull Creek, Redwood Creek, Sprowel Creek, and the East Branch South Fork Eel River. Significant tributaries of the main stem Eel include: Doby Creek, Steelhead Creek, and Jewett Creek.

The Unit also encompasses upper portions of the Mattole Watershed. The headwaters of the Mattole River are located just across the Humboldt County line in Mendocino County. The Mattole River runs through the western part of the Southern Humboldt Planning Unit in a south to north direction and enters the Mattole-Lost Coast Planning Unit just past Ettersburg. Some noteworthy tributaries of the Upper Mattole Watershed in this Planning Unit include: Gibson Creek, Harris Creek, Mill Creek, and Nooning Creek in the Whitethorn area; and Finley Creek, Blue Slide Creek, Mattole Canyon Creek, Grindstone Creek, and Bear Creek in the Ettersburg area. Many of these tributaries help distinguish the communities in this Planning Unit, and several roads and neighborhoods share the names of their nearby creeks.

The neighboring towns of Redway and Garberville comprise the community population center of this Planning Unit; however, the Unit area is populated with many distinct, widely dispersed communities. Several towns are clustered along Highway 101, from the southernmost town of Benbow, to Garberville and Redway, up to Phillipsville, Miranda, and Myers Flat, and up to the northernmost town of Weott. Many communities populate the land on either side of Highway 101 as well: South-east of Weott lies the small community of Eel Rock, with Fort Seward and Alderpoint even further to the south-east, and Palo Verde in the south eastern region, east of Benbow. Located west of the Garberville-Redway area are the communities of Briceland and Whitethorn; Ettersburg lies north of Whitethorn, with Shelter Cove tucked away into the southwestern corner of the Unit, amidst the King Range National Conservation Area. Whale Gulch is a community located in Mendocino County but primarily accessed from the Humboldt County side with its population orienting towards Redway and Garberville for services. Although Whale Gulch is not included in this countywide Community Wildfire Protection Plan (CWPP), it is a planning area within the Southern Humboldt CWPP and within the area of Southern Humboldt Fire Safe Council (FSC) activity (*learn more about the Southern Humboldt CWPP and FSC in “Community Preparedness” below*).

The Southern Humboldt Planning Unit contains a variety of land uses and ownership patterns, which include residential parcels, ranchlands of various sizes, lands managed by timber companies, state park areas, and swaths of Bureau of Land Management (BLM) land. About half of the King Range National Conservation Area exists within the Unit, bordering the coastline, while the northwestern portion of the Unit is dominated by Humboldt Redwoods State Park, which extends to Highway 101. The BLM manages a few other land areas as well, south of

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Humboldt Redwoods State Park, and in the southeastern Unit area, near Palo Verde. Highway 254--known as the “Avenue of the Giants”-- parallels portions of Highway 101, from just north of Redway, up through the top of the Unit.

Richardson Grove State Park is situated in the southernmost part of the Unit, with lands owned by Barnum Timber to the west and the Benbow Lake State Recreation Area to the north. The majority of the western portion of the Unit--between Highway 101 and the King Range National Conservation Area--primarily includes rural residential parcels and small- to medium-sized ranchlands, while large tracts of ranchland dominate the eastern half of the Unit, with residential parcels distributed throughout. A map of this planning unit can be viewed in Figure IV.13-1. Southern Humboldt Unit: CWPP Unit Map.

IV.13.2. Southern Humboldt Community Process Summary

Two open-house community workshops were held within this Planning Unit for the purpose of gathering local information and garnering public input regarding various factors contributing to the extent of wildfire risk and/or preparedness among the communities in this Unit. One meeting was held on March 20, 2012 in Miranda and another was held on March 29, 2012 at the Healy Senior Center in Redway. A group exercise, which involved maps of the Planning Unit area, invited those present to help identify and pinpoint on the map where particular *fire hazards* exist, the location of *protection resources*, such as fire water drafting sites, as well as values and *assets at risk* within the community that could be threatened by wildfire. These workshop processes also provided an opportunity for participating community members to ask questions and provide information based on their local knowledge.

Participants were also asked to review pre-existing information illustrated on the maps which had been added by community members during similar workshops that took place during the initial planning process in 2006. These workshops and mapping exercises also facilitated discussion among community members about potential actions that could be taken to reduce fire risk in their communities. Through discussion and collaborative processes, participants identified major hazard areas and compiled lists of project proposals for enhancing their communities’ fire preparedness.

The community-identified fire hazards, protection resources, and values and assets at risk discussed throughout the following sections of this Planning Unit Action Plan reflect information generated by these community workshop mapping exercises, as well as information resulting from direct outreach to local fire departments and residents. The workshops in Southern Humboldt fell short on time for the mapping exercise, so additional information was gathered from community members by Bill Eastwood, who is working on the area’s CWPP.

The project proposals resulting from community member discussions are contained in section IV.13.8. Community-Identified Projects in this Planning Unit Action Plan.

IV.13.3. Southern Humboldt Wildfire Environment

Approximately 78% of the Southern Humboldt Planning Unit is zoned “High Fire Hazard Severity,” as determined by the California Department of Forestry and Fire Protection (CAL FIRE).¹ Approximately 21% of the Unit, including much of the northeastern portion and areas surrounding Garberville and Shelter Cove zoned “Very High Fire Hazard Severity,” with only about 1% of the Unit zoned “Moderate Fire Hazard Severity.” The steep topography of the Unit can accelerate the rate of fires spreading throughout the region and can make access for firefighting *apparatuses* and personnel very difficult.

¹ 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://frap.cdf.ca.gov/>

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The Unit is characterized by a Mediterranean climate with cool, wet winters and hot, dry summers, although the heat of summer is tempered by the coastal fog zone in some areas. Local *vegetation types* consist primarily of *conifer forests* and coastal redwoods, with Douglas-fir *dominant*. Madrone is also prevalent in the Unit, along with the Blue Blossom and Whitethorn species of Ceanothus, as well as Bay trees, which have been identified as key players in the spread of Sudden Oak Death.² Annual grassland prairies and oak woodlands cover a substantial portion of the Unit as well, particularly along ridge tops; oak species include: tan oak, black oak, white oak, and canyon live oak.

Traditionally, fire was an integral part of the *ecosystems* in this region. Forest management by indigenous tribes often included low-intensity, intentional burns that helped enhance forest ecosystems and prevent the accumulation of high *fuel loads*. Some of the early agricultural settlers in the mid-1800s used intentional burning to clear and then maintain grasslands for pasture animals. However, a heavy *fire suppression* campaign beginning in the 1940s has allowed the accumulation of dense, flammable vegetation in forest *understories*, which acts as *fuel* and increases the risk of high-intensity wildfires. Forest ecosystems, accustomed to low-intensity fires that would burn off *brush* and newer starts in the understory, become threatened by overcrowded forests and accumulated fuel. Intense timber harvests during the 20th century further exacerbated damages to forest ecosystem health. Encroachment of Douglas-fir, which was sewn into many logged areas, has contributed to alterations in *stand compositions* in redwood forests. Douglas-fir encroachment has also been witnessed in oak woodlands and grassland areas as well, threatening ecosystems, wildlife habitat, and negatively impacting the forests' *resiliency* to wildfire. 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 49% of the Southern Humboldt Planning Unit is condition class 3, meaning the fire regime is significantly altered from the historical range; and approximately 16% of the area is condition class 2, or moderately altered from the historical range.

Communities within the Southern Humboldt Planning Unit are increasingly vulnerable to damage from wildfire. The buildup of fuel has increased the potential for higher intensity of fires, loss of life and property, and higher wildfire suppression costs. The California Fire Alliance has listed many *communities at risk* within this Planning Unit. Furthermore, the increasing subdivision of timber- and ranchlands throughout the Unit area has generated an increase in the number of homes that exist in the *wildland-urban interface* (WUI), which increases the likelihood that *wildland fires* will spread to structures, and vice versa.

In 1973 a wildfire driven by Santa Anna winds burned 10,000 acres between Ettersburg and the ocean at Shelter Cove in ONE day! Fortunately the area was sparsely populated and damage was minimal. Today, Shelter Cove and nearby wildlands are heavily populated and the young brushy forest that has re-vegetated the burn area is now even more hazardous than it was in 1973. Hundreds of homes are gravely threatened. Many other communities within the Unit face similarly hazardous conditions.

Major fire events within this Planning Unit between the years 2000-2010 include:

- 10 Fire, 2003: 213 acres.
- Canoe Fire, 2003: 952.5 acres.
- Paradise Ridge Fire, 2008; 981 acres.

² For more information about Sudden Oak Death in Humboldt County, see "Vegetation and Fuels" in section II.1.3. in Chapter II.1. Wildfire Environment.

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Several smaller fires occurred throughout the Unit during this period as well, including Colony Fire, Brown Fire, Pratt Fire, Casterlin Fire, and High Fire.

Humans are the most likely *ignition source* for fires in this Planning Unit. Vehicle accidents, smoking, playing with fire, poorly maintained *debris burning*, and incendiary burning are just a few potential causes. Various types of equipment use and downed power lines can also be potential ignition sources. Lightning is the most probable natural cause of fire starts within this Unit.

Dead plant matter and vegetation with low *moisture levels* within 100-150 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 sidings add to this risk, as do the presence of wooden decks, particularly those with dead plant matter accumulated beneath them. Figure IV.13-2 found at the end of this Planning Unit Action Plan illustrates risks and hazards identified by community members at public workshops and can be used as a key to access detailed descriptions of community-identified fire planning features on the Humboldt County Web GIS Portal, “Fire Planning” section: <http://gis.co.humboldt.ca.us/>.

Highway 101 is the central *ingress and egress* route, and main roads such as Briceland Thorne Rd., Alderpoint Rd., and Dyerville Loop connect smaller communities and residential roads to the central highway. Poor or complete lack of *signage* at roads and intersections pose potential problems for ingress and egress; this is especially true for more remote residences that are further away from the main towns. Problems with poor signage are exacerbated by ambiguity of road names and partial addresses used throughout the Unit. The narrowness of smaller roads leading to remote residences could create serious complications for emergency vehicle response trying to gain access during simultaneous home evacuations. Routes may also be overgrown with vegetation, and many properties have inadequate *turn around spaces*. The potential for landslides in the area could also inhibit access.

Potable water and *fire protection water* are provided to the majority of communities in this Unit by a number of special districts; they include: the Garberville Sanitary District branch of the Garberville/Redway *Community Services District*, the Alderpoint County Water District, which covers approximately 370 acres,³ the Shelter Cove Resort Improvement District, and the Weott Community Services District. Residents outside of these service districts obtain water through other means, such as drawing from nearby creeks and holding tanks. Creeks and swimming holes, such as Delta Hole, are also drawn upon by firefighters to *draft* water for fire protection. Some drafting locations in this Unit, as identified at community workshops, include the following (these will need to be vetted further with local firefighting personnel):

- Bear Creek
- Lauffer Ranch Ponds - dipping
- Holmes Flat Eel River drafting site
- McCann Eel River drafting site
- Barnes Pond - drafting
- Duggans Mill drafting spot
- George Bushnell Pond
- Culvert water source on West Moody Rd – Sprowel Creek
- Myers Flat Eel River drafting site
- Williams Grove Eel River drafting site
- Fort Seward – East Side River Access.
- Miller’s Pond – Sprowel Creek
- Debra Lake Pond (150,000 gallons)
- Dyerville Bar Eel River drafting site
- Hans Ponds -drafting
- Heartwood Pool -- drafting

³ Humboldt Local Agency Formation Commission. (2009, January). *Alderpoint County Water District Municipal Service Review [Draft]*. Retrieved from http://www.humboldtlafo.org/sites/default/files/msr/Alderpoint_CWD_MSR_Jan_2009.pdf

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The map in Figure IV.13-2 found at the end of this Planning Unit Action Plan illustrates these *drafting sites* as well as other community-identified wildfire *protection resources*. The map can be used as a key to access detailed descriptions of community-identified fire planning features on the Humboldt County Web GIS Portal, “Fire Planning” section: <http://gis.co.humboldt.ca.us/>.

IV.13.4. Southern Humboldt Values and Assets at Risk

Assets at risk can be defined as those things that are important to quality of life that can be threatened with destruction or loss from wildfire. These may include community assets such as homes and businesses, as well as environmental values such as wildlife habitat, natural resources, and air quality, along with any other important attribute that individual communities rely on for their well being. Loss or damage to community assets as a result of wildfire can have short- or long-term impacts of varying severity, depending on the asset. Short-term loss caused by a *wildfire* can include the destruction of residences, commercial assets, timber, wildlife habitat, scenic vistas, and *watersheds*. Long-term effects may include displaced persons, smaller timber harvests, reduced access to affected recreational areas, and destruction of cultural, ecological, and economic resources, and community infrastructure.

The assets at risk in this Planning Unit are as diverse as the land uses within the region. The majority of community assets at risk include residential homes and neighborhoods, along with a variety of commercial and service industries, community centers, schools, fire stations, churches, historic sites, post offices, medical and dental clinics, municipal buildings as well as infrastructure components, such as water treatment plants and a communication site. The ranching, agricultural, and timber industries within the Unit are also considered assets at risk. The Unit also contains several campgrounds and RV Parks.

The map in Figure IV.13-2 found at the end of this Unit Action Plan illustrates values and assets at risk to wildfire identified by community members at public workshops. The map can be used as a key to access detailed descriptions of community-identified fire planning features on the Humboldt County Web GIS⁴ Portal, “Fire Planning” section: <http://gis.co.humboldt.ca.us/>. Some of the community-identified assets at risk within this Unit include:

- Garberville Airport
- Eel River Conservation Camp
- Kekewaka Power Station
- Fort Seward Train Station – historical
- Benbow State Park
- Beginnings Community Center
- Burlington Ranger Station/Visitor Center/RSP
- Pratt Mountain Lookout (cell, communication)
- Benbow Golf Course and Clubhouse
- Grasshopper Lookout

The Unit contains many areas of great environmental significance as well. The Avenue of the Giants, Richardson Grove, and Humboldt Redwoods State Park hold some of the last remaining *stands* of old growth redwoods in the county and, along with the King Range National Conservation Area, provide valuable *habitat* for wildlife species in the region. The Eel River South Fork and its tributaries are also ecologically valuable for the fisheries they support, including coho and chinook salmon, and steelhead trout. However, the ability of these populations to reproduce successfully has been negatively affected by heavy *sedimentation* in the river, which has been exacerbated by certain timber harvest practices and road building activities.⁵ The river also provides numerous recreational opportunities for communities in the

⁴ Geographic Information Systems (GIS).

⁵ Dyett & Bhatia. (2002, September). South Fork of the Eel River Watershed. *Humboldt 2025 General Plan Update: Natural Resources and Hazards; Vol. 2: Detailed Watershed Characteristics and Regulatory Framework Analysis*. Retrieved from <http://www.co.humboldt.ca.us/gpu/documentsbackground.aspx>.

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Unit. Many culturally sensitive sites of special importance to Native Americans exist throughout the Unit as well.

IV.13.5. Southern Humboldt Community Preparedness

Communities within the Southern Humboldt Planning Unit are informed and abetted by the Southern Humboldt *Fire Safe Council* (SHFSC), which operates throughout the entire Unit. The SHFSC was formed in 2002 by residents in the region who recognize the potential for community devastation by wildfire; their mission is: “to protect the region’s natural and manmade resources by mobilizing our community to make their homes, neighborhoods, and communities fire safe.”⁶ The SHFSC meets irregularly and participation has been widespread throughout the Unit, with more than forty individuals including representation from the following fire departments: Briceland, Telegraph Ridge, Sprowel Creek, Palo Verde, Whale Gulch, Shelter Cove, and Salmon Creek. Participation also includes personnel from CAL FIRE, BLM, California State Parks, the Mattole Restoration Council (MRC), and the Humboldt County Planning Department. In addition to protecting resources, the SHFSC’s goals include: reducing the risk negative impacts by wildfire, increasing community preparedness and fire planning, creating jobs through *fuels reduction* projects, utilizing materials from *hazardous fuel reduction* efforts, and improving forest health and ecosystem functioning. Their focus goes beyond wildfire concerns and includes public safety issues such as earthquake preparedness and emergency medical response as well. The SHFSC can be reached by calling (707) 923-9109 or (707) 845-3282, or by visiting their website at: <http://www.newforestry.org/shfsc/>.

The SHFSC has been successful in collaborating with a variety of fire and forestry organizations to achieve its goals; these organizations include: Beginnings Inc., the Institute for Sustainable Forestry, Ancient Forest International, Sanctuary Forest, and the Humboldt Fire Chiefs Association, with cooperation from the California Department of Forestry and Fire Protection’s Garberville Battalion Chief and other personnel from CAL FIRE’s Humboldt-Del Norte Unit in Fortuna as well. Some of the SHFSC’s primary objectives are to educate the public about fire safety, create extensive *fuelbreaks*, initiate a *prescribed burning* program, increase communication among residents as well as *volunteer fire departments* (VFDs) improve training for emergency response teams, and to conduct fundraising for these efforts. The SHFSC also attempts to coordinate their activities with other fire prevention efforts by networking with entities such as the BLM, the MRC, and the California Conservation Corps. Since 2004, the SHFSC has completed *shaded fuelbreak* projects along Salmon Creek Rd., Bell Springs Rd., Perry Meadow/Elk Ridge Rd., and King’s Peak Rd.

Collaboration with the Institute for Sustainable Forestry and the Mattole Restoration Council has led to the implementation of the *Fire-adapted Landscapes and Safe Homes (FLASH) program* throughout the Unit area. FLASH is a rebate program that reimburses property owners for *hazardous vegetation management* completed around their homes, along *access routes*, and in particularly hazardous areas. Between 2010 and 2011, over 41 acres were treated under the FLASH program and 27 site visits including a home *risk assessment* were conducted by FSC staff. The program has received additional funding for 2012-2013 and the goal is to treat approximately 53 acres.

The SHFSC and Institute for Sustainable Forestry are also in the process of producing a locally focused *community wildfire protection plan* (CWPP). Participants in this process are working to identify local and area wide needs through meetings in neighborhoods and with local fire chiefs. The purpose of this plan is to help educate and assist residents in the Unit area with information and resources for better fire planning and emergency preparedness.

⁶ Southern Humboldt Fire Safe Council. (n.d.). *Mission Statement*. Retrieved September 9, 2012, from <http://newforestry.org/shfsc/aboutSHFSC.htm>.

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The Crooked Prairie Fire Safe Council (CPFSC) also exists within this Planning Unit. Located in the Ettersburg area, the CPFSC encompasses approximately four square miles with about 30 homesteads. It was established in 2005 as the result of the dissolution of the Crooked Prairie Fire Crew. The organization of the CPFSC is intentionally small and simple; it is an all-volunteer group that meets approximately once a year and obtains all of its funding from donations and fundraisers. Though small, they have been capable of some major contributions to improving fire safety in their community. Some of their activities and accomplishments include: installing a 5,000 gallon water tank adjacent to a firehouse with a grant acquired through the MRC; hosting an informative workshop on *Sudden Oak Death*; equipping firefighters with *personal protection equipment (PPE)*; and participation in the FLASH rebate program. The CPFSC can be reached by calling (707)-986-7705.

None of the communities within the Southern Humboldt Planning Unit has yet achieved *Firewise Communities/USA®* recognition. However, the existence of two local FSCs, as well as the SHFSC's inclusive involvement with a variety of residents, and its extensive efforts to collaborate with other organizations indicate significant dedication to fire safety planning and fire *hazard mitigation* among the communities in this Unit. Considering this, Firewise® recognition may not be far off for some of these communities.

IV.13.6. Southern Humboldt Wildfire Protection Capabilities

There are various *special districts* that provide fire protection within this Planning Unit, including a resort improvement district, a *community services district*, and *fire protection districts* (FPD). These districts are financially supported by revenue generated from a variety of sources that can include property taxes, *special taxes* and assessments, donations, and fundraisers. Fire protection services within these districts are provided by VFDs, which supply the communities in this Unit with fire protection, as well as medical and rescue services.

The following entities provide fire protection services to districts within this Planning Unit:^{7, 8}

- **Briceland Volunteer Fire Department** has 25 volunteers and serves 650+ residents in a 40 square mile area. This VFD operates out of three stations. Station 1, located in Briceland, has the following apparatuses: a 750 gallon, crew cab, type-1 engine; a 500 gallon, crew cab, type-3 engine; a 200 gallon, type-4 engine, a type T2, 1,200 gallon *water tender*, and a type-3 Basic Life Support (BLS) ambulance. Station 2 is located in Crooked Prairie and contains a 500 gallon type-3 engine, and a type T2, 1500 gallon, 500 gallon-per-minute (gpm)_pump water tender, with a 1,500 gallon portable water tank. And Station 3 has a 4WD SUV Chiefs/command C5400 with medical and rescue equipment. In August 2012, residents in the area voted on the issue of whether or not to transform this VFD into an official fire protection district, which would be funded via a special tax. The Briceland VFD secured a sufficient number of votes and the proposal passed. The Briceland VFD can be reached by calling (707) 923-7204, by email at: bricelandfire@yahoo.com, or by visiting their website at: <http://bricelandfire.org/>.
- **Garberville Volunteer Fire Department** was established in 1940 and includes approximately 702 acres. This VFD has 12 volunteers and also houses Southern Humboldt Technical Rescue, a separate agency. The Garberville VFD's apparatuses include: a 1,000 gallon, 3 passenger type-2 engine; a 750 gallon, 5 passenger type-2

⁷ County of Humboldt, Natural Resources Planning. (2012). *Humboldt County Fire Chiefs Association Annual Report, 2010*. Humboldt County Fire Safe Council. Retrieved from http://www.co.humboldt.ca.us/natural-resources/fire_safe_council/fireserviceannualreport.aspx

⁸ Humboldt County Fire Chiefs Association. (2012). 2012 Local Fire Protection Survey.

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engine; a 1,000 gallon, 3 passenger type-2 engine; and a utility truck. The Garberville VFD can be reached by calling (707) 923-3196.

- **Miranda Volunteer Fire Department** has 12 volunteers and serves 500 residents in approximately 10 square miles. Their apparatuses include: one type-1 engine, one type-3 engine, and a type-4 quick attack engine. The Miranda VFD can be reached by calling (707) 943-3023.
- **Myers Flat Volunteer Fire Department** has three full-time volunteers. Their apparatuses include: two type-3 engines, one with a Compressed Air Foam System (CAFS). The Fire Chief of the Myers Flat VFD can be reached by calling (707) 223-3175.
- **Redway Volunteer Fire Department** has 11 volunteers. Apparatuses include: a 2000 gallon water tender, two type-1 engines, a quick attack engine, and one utility vehicle. Funding for this VFD is supplemented with annual BBQ fundraiser. The Redway VFD can be reached by calling (707) 923-2617 or (707) 223-1498, by email at redwayfire@gmail.com, or by visiting the Redway Fire Protection District's Facebook page.
- **Shelter Cove Volunteer Fire Department** has 12 volunteers who cover an area of approximately 49 square miles. Their apparatuses include: a 1,000 gallon type-1 engine; a 300 gallon type-3 engine; a 200 gallon type-4 engine; a 750 gallon type-1 pumper; a rescue truck; as well as an RHI boat and a Yamaha jet-ski with a rescue sled. The Shelter Cove VFD can be reached by calling (707) 986-7507, or by visiting their website at: <http://sheltercove-ca.gov/fire/fire.htm>.
- **Telegraph Ridge Volunteer Fire Department** is located in the Ettersburg area and has 12 members. Their apparatuses include: a 500 gallon type-3 engine, and two type-4 quick attack engines, which hold 300 and 200 gallons. The Telegraph Ridge VFD can be reached by calling (707) 986-7488.
- **Weott Volunteer Fire Department** has 8 volunteers. Their apparatuses include: a type-2 engine and a rescue truck. The Weott VFD can be reached by calling (707) 946-1953 or by email at weottvfd@att.net.
- **Whitethorn Volunteer Fire Department** has 15 volunteers. Their apparatuses include: a type-1 engine, a type-2 engine, and two type-4 quick attack engines. The Whitethorn VFD can be reached by calling (707) 986-7728.

Several *volunteer fire companies* (VFC) also exist within the Unit that have no tax-based support and rely largely on donations and various fundraising efforts from within their communities. These entities provide fire protection, as well as medical and rescue services. They include:^{9, 10}

- **Alderpoint Volunteer Fire Company** was organized November 2007 and has 12 volunteers. Their apparatuses include: a Type-3, 500 gallon fire engine, a Type-2, 750 gallon fire engine, a medical rescue vehicle, and a Chief's truck. The Alderpoint VFC can be reached by calling (707) 923-1665.
- **Fruitland Ridge Volunteer Fire Company** is located three miles east of Highway 254, in between Myers Flat and Miranda. This company has 8 volunteers and serves 338 residents in approximately 38 square miles. Their apparatuses include: a 2,250 gallon, freightliner water tender and a 900 gallon international fire engine. In August 2012, residents in the area voted on the issue of whether or not to transform this VFC

⁹ County of Humboldt, Natural Resources Planning. (2012). *Humboldt County Fire Chiefs Association Annual Report, 2010 and 2011*.

¹⁰ Humboldt County Fire Chiefs Association. (2012). 2012 Local Fire Protection Survey.

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into an official fire protection district, which would be funded via a special tax. However, the Fruitland Ridge VFC was not able to secure enough votes and the proposal did not pass and is now in jeopardy. The Fruitland Ridge VFC can be reached by calling (707) 943-3402.

- **Palo Verde Volunteer Fire Company** was established in 1983 and has 8 active volunteer firefighters. Their apparatuses include: one type-3 wildland fire engine and a type-4 quick attack/brush truck. The Palo Verde VFC also receives department support from federal assistance through USFS (surplus fire engines) and the BLM (funding for fire shelters, webbing gear and fire hose). In August 2012, residents in the area voted on the issue of whether or not to transform this VFC into an official fire protection district, which would be funded via a special tax. The Palo Verde VFC was not able to secure enough votes and the proposal did not pass. The department is now reevaluating its service and reorganizing its support structure. The Palo Verde VFC can be reached by calling (707) 223-0571.
- **Phillipsville Volunteer Fire Company** has 3 volunteer firefighters along with 10 auxiliary members. Their apparatuses include: a type-2 engine that holds 2000 gallons, a type-1 engine, and a type-4 engine. The Phillipsville VFC can be reached by calling (707) 943-3555.
- **Salmon Creek Volunteer Fire Company** services a remote community of about 300 homes, located six miles west of Highway 101. This VFC is made up of 8 volunteers, with 4 auxiliary volunteers, and their apparatuses include: a 1,800 gallon, type-3 water tender, one type-3 fire engine and one type-4 quick attack engine. The Salmon Creek VFC can be reached by calling (707) 943-3006.
- **Sprowel Creek Fire Company** provides fire protection to the Neilson Ranch subdivision in Garberville, with a response area of approximately four square miles. This VFC has upwards of 20 volunteers and their apparatuses include: a 1,000 gallon water tender, and four fire engine pumpers, with capacities of 350 gallons, 700 gallons, and two with 300 gallons. The Sprowel Creek VFC can be reached by calling (707) 223-3399.
- **Whale Gulch Volunteer Fire Company** was started in the 1970s and now has 16 volunteers. Their apparatuses include two type-3 engines, each with a 500 gallon capacity, and one type-4 medical vehicle with 250 gallons. The Fire Chief of the Whale Gulch VFC can be reached by calling (707) 986-7341.

CAL FIRE also has several stations located throughout the Planning Unit. Staffing levels at the CAL FIRE stations in Weott and Garberville vary throughout the year, but remain adequate for emergency response during most of the year. Other stations, located in Alderpoint and Whitethorn (Thorn) are staffed only seasonally, during the declared *fire season*. CAL FIRE also operates two Conservation Camps in the Unit: High Rock Camp, located in Weott, and Eel River Camp, located in Redway. Each camp provides five hand crews for firefighting purposes, and each crew is made up of up to 17 firefighters and a captain. These crews are an all-risk department resource used both within Humboldt County and on a statewide basis year-round. These camp assets are maintained fire/emergency ready year-round. During non-emergency response, these crews are deployed to work on fuel reduction projects and projects requested by other public agencies throughout the year. These crews are trained in emergency responses including, but not limited to, fire, flood, earthquake, medical, and vehicle accidents.

Many of the local fire protection service groups in this Planning Unit have a need for more volunteers and face issues with inadequate facilities and equipment. Emergency response from these groups can be hindered by residential areas within the Unit that have poor signage and contain roads and driveways with insufficient clearance for firefighting apparatuses.

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The Southern Humboldt Fire Chiefs Association (SHFCA) is a venue for fire departments and community organizations in the Unit to collaborate for preparedness. The SHFCA is a chapter of the Humboldt County Fire Chiefs Association, a 501(c)3, and comprises firefighters from all the Unit departments and companies as well as Redcrest and Honeydew.

The initial purpose of the SHFCA was to provide a stronger voice for fire departments to bring more training opportunities to the Unit, increase communication between local departments and with CAL FIRE, and to create a stronger fire department identification and numbering system. Successful implementation of those goals over the last 15 years has grown the SHFCA to include representatives from the SHFSC, the HCFSC, the Red Cross, the Southern Humboldt Emergency Preparedness Team (SHEPT), the County Radio Dispatch Co-op, CAL-EMA, Humboldt County OES, and other emergency preparedness groups.

The SHFCA sponsors the Southern Humboldt Technical Rescue Team. The Team is comprised of firefighters from departments within the Unit who specialize in rope, water, and wilderness rescue. Team members are highly dedicated firefighters who train and respond to rescues in addition to the normal training and duties of their respective fire departments. The Southern Humboldt Technical Rescue can be reached by calling (707) 834-1432.

The SHFCA recognizes the community living in the Unit needs to be informed about the issues surrounding wildfires, emergencies, and disaster management. One of the tools used to inform the public is the "Burning Issues" fire and rescue radio talk show on KMUD FM radio. This show provides the SHFCA an opportunity to voice information to the public about training, prevention, standards, legislation, grant writing, and new initiatives and innovations.

In times of emergency, current information needs to be communicated to the public in affected areas of the Unit. FM radios are recognized by the public as a means of getting current emergency information. The KMUD FM radio Community Emergency Response Team receives information from sources such as the SHFCA Public Information Team, CAL FIRE, the California Highway Patrol, and the Humboldt County Office of Emergency Services, and relays that information using live on-air broadcasts and internet updates.

IV.13.7. Southern Humboldt Evacuation

Evacuation from the Southern Humboldt Planning Unit will either travel north or south along Highway 101, southwest on Briceland Thorne Rd., or northeast on Alderpoint Rd., depending on the location of the community at risk and law enforcement recommendations based on *fire behavior*, wind patterns, traffic, and ingress of emergency vehicles. Communities in the western portion of the Unit rely strongly on Briceland Thorne Rd. and the smaller roads connecting to it for ingress and egress; few alternative routes exist for these communities, with the exception of Wilder Ridge Rd., which leads northwest towards Honeydew. The same is true for communities in the eastern portion of the Unit that depend on the accessibility of Alderpoint Rd. and Dyerville Loop Rd. for reaching residences and evacuating during emergencies. However, these roads could provide access away from the Unit if necessary; Briceland Thorne Rd. leads southward into the King's Range Wilderness and Alderpoint Rd. continues northward toward the community of Blocksburg. The critical necessity of these routes for many of the communities within this Planning Unit highlights the importance of maintaining these roads and suggests that residents and law enforcement groups should be thinking creatively about alternative paths that may be taken if these primary routes became inaccessible during an emergency.

Shelter Cove is perhaps the most isolated community in the Unit, however, they could potentially evacuate to the north along Kings Peak Rd., east along Briceland Thorne Rd., or south on Chemise Mountain Rd., which eventually rejoins Briceland Thorne Rd. Given their proximity to the coast, residents in this area could evacuate to the beach, if necessary.

Evacuation impediments may include: dense, steep road sections, landslides, fallen trees, overgrown vegetation preventing emergency vehicle access, poorly marked streets and

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intersections, 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.

During wildfire events that have the potential to threaten personal safety, 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. The determination for the location of these sites is normally made by Humboldt County Emergency Operations Center Incident Commander in cooperation with an *Incident Management Team*. The Humboldt County Sheriffs and Emergency Officials will use mass communication and door-to-door methods to inform residents about the threat and where residents should go to take shelter.

If a catastrophic event occurs, residents may not be able to reach designated evacuation sites. In such cases, residents may need to make decisions on their own about seeking shelter where they can survive the passage of the wildfire until they can reach an evacuation site. It can be very difficult to determine the right thing to do as the fire approaches. Before a wildfire threatens, community members should talk to their local fire department about evacuation procedures in their neighborhood.

See section V.2.3 in Part V. Fire-Safe Communities for more information on preparing for safe evacuation and evacuation planning for pets and livestock. Also see section II.3.5 Evacuation Routes and Vulnerability in Part II. Risk Assessment for information about evacuation procedures and challenges in Humboldt County.

IV.13.8. Southern Humboldt Community Identified Potential Projects

The following section includes a summary of potential projects identified through the community processes discussed above. Some of the potential projects are illustrated on the community-identified projects map found at the end of this Unit Action Plan (Figure IV.13-3). This map includes projects carried over from the 2006 County fire-planning process, those identified and refined during the local CWPP development process, as well as the 2012 County CWPP update process. In addition, Figure IV.13-2 illustrates community-identified Values and Assets, Hazards and Risks, and Wildfire Protection Resources. The maps in Figure IV.13-2 and Figure IV.13-3 can each be used as a key to access detailed descriptions of community-identified fire planning features on the Humboldt County Web GIS Portal, “Fire Planning” section: <http://gis.co.humboldt.ca.us/>.

Because of the tremendous amount of work that has been accomplished within this unit and the continued refinement of priorities that is underway, a project matrix was not included in this Unit Action Plan. All of the community identified project information is cataloged in the Web GIS Portal described above and this CWPP incorporates that information by reference here. This information will continue to be made available as a resource for capturing grant funds and continued project implementation tracking.

The Southern Humboldt FSC CWPP is nearing completion and should receive final approval by mid-2013. This document will be much more area specific and will include descriptions of more than 20 neighborhood planning units.

Project ideas are also listed below that are not visible on the maps, because they are not geographically based. These proposed actions also add to and expand upon the 2006 plan, based on the 2012 process (including the County CWPP update and the local CWPP development process). No *vegetation treatments* recommended in this plan will be carried out without the consent and involvement of the property owner and all applicable local, state and federal regulations must be observed.

- Develop a wide range of opportunities for **community education on preparing for wildfire**. This effort should involve the production and distribution of a variety of **informational materials** such as:

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- A “Before and After Fuels Reduction” pamphlet, describing and illustrating the process and benefits of reducing hazardous fuels around homes, in neighborhoods, and along access roads.
- A “Constructing a Shaded Fuelbreak” guide that outlines the value and process of creating shaded fuelbreaks.
- A “Living With Fire” publication with information specific to the Southern Humboldt region.
- A compilation of information on proper and safe evacuation planning during a wildfire event.

Community education efforts should also include putting on **workshops** that demonstrate best practices for mitigating fire hazard risks. Potential workshop topics include:

- An educational workshop for landowners on how to create and maintain defensible spaces around homes. This workshop should include information on the importance of defensible spaces for protecting structures, a discussion of fire safe landscaping techniques, and a hands-on demonstration of proper techniques for thinning vegetation and removing brush piles.
 - A presentation by CAL FIRE showing wildfire in action, supplemented with photos and video clips. There is potential to conjoin the efforts of this workshop with a fundraiser event for the SHFSC.
- Education efforts should also include **information on ways community members can support and assist local fire departments** by helping with fundraisers, grant writing, becoming a volunteer, etc.
 - Conduct projects to **implement more fuelbreaks** throughout the area. Fuelbreaks are needed along access roads in order to assist firefighters and to improve safety during evacuation efforts. Fuelbreaks are should also be implemented within the landscape so as to reduce the risk of rapidly spreading wildfires in the tree canopy.
 - **Increase community preparedness for emergency evacuation.** Pinpoint and identify localized evacuation site “Safe Zones” and ensure that residents are made aware of their locations.
 - **Improve signage** throughout the communities in this Unit by installing more highly visible road and address signs. This action should also include efforts to reduce confusion within the addressing system, which may contain partial addresses, and minimize ambiguity of road names.
 - **Increase available water sources and label them** within the communities so that they may be more readily identified and accessed by firefighters. Install more water tanks and fill them during the winter so as to avoid drawing from creeks that provide critical fish habitat during the summer months. Ensure that existing water tanks are equipped with the proper fittings for fire engines. Water source labeling may be undertaken by implementing the Blue Dot Program.
 - **Improve clearance for emergency vehicles** and ensure that driveways and access roads have enough width and height for firefighting apparatus to easily pass through and access properties.
 - **Amplify outreach efforts** to improve community workshop participation. Strategies may include: developing fire safety education posters to be displayed at community events; reaching out to local businesses for support; and sending announcement flyers home with students from school.

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IV.13.9. Southern Humboldt Action Plan

The following items are the initial priorities for community action for the Southern Humboldt Planning Unit as recommended by this Humboldt County CWPP (not listed in order of priority). In an ideal world, everything recommended here would be implemented. However, it must be understood that implementation will be subject to the availability of funds and other resources and the willingness/ability of community members and Plan Partners to take action. This Action Plan can be cited in grant applications to leverage needed implementation funds and used to guide and inspire action.

- Maintain and support the SHFSC and CPFSC to facilitate community wildfire preparedness and mitigation. This Plan encourages more collaboration between these two active local FSCs.
- Ensure that the SHFSC continues to be represented on the Humboldt County FSC.
- Community members should support their local fire department through activities such as volunteering as firefighters or auxiliary members, making donations, supporting fundraisers, writing grants, and/or helping with administrative tasks. With community support, local fire departments can continue to provide a wide variety of vital emergency services.
- The SHFSC and local fire department representatives should work with community members to further refine and integrate the lists of potential projects identified through the various fire planning processes discussed above and collaborate to prioritize and implement them (See the list included in the section above as well as projects illustrated on the Web GIS Portal). Consider starting with these key project categories:
 - Roadside Clearance and Road Maintenance - Coordinate with Humboldt County Public Works, Roads Division to identify priority areas where collaboration between the County and the local FSC will be possible.
 - Road and Address Signs - Many homes and driveways throughout this community lack adequate signs. Actions that might begin to address this issue are the following:
 - Obtain funding to purchase address signs for residents and educate the community about the importance of signage.
 - Obtain funding to purchase and post additional street/road names.
- Identify neighborhoods that would benefit from participation in the Firewise Communities/USA® Recognition Program and assist them with the application process. This will include an annual update of Firewise® action plans, which can be used as a short-term CWPP implementation tool. Actively implementing and maintaining the Firewise® action plan on an annual basis will take small bites out of the CWPP which has a five to ten year planning horizon. Focus initial efforts on the following communities:
 - Briceland
 - Telegraph Ridge
 - Salmon Creek
 - Shelter Cove
- Share GIS data sets between local representatives and County staff to maintain the projects included in the County Web GIS Portal.

The SHFSC and local fire department representatives should work with the Humboldt County Office of Emergency Services to engage community members in evacuation preparedness. Efforts should be made to ensure that local gates are open or accessible during Red Flag conditions.