

1. Hazardous Fuels Reduction Plan Update Process

1.1 UPDATE PROCESS OVERVIEW

The purpose of this process was to update the hazardous fuels reduction plan portion of the 2006 Humboldt County Master Fire Protection Plan (MFPP) which is Humboldt County's equivalent to a Community Wildfire Protection Plan (CWPP). The results of the update process are cataloged and displayed in this document as well as in a web-based geographic information systems (GIS) mapping tool known as the Humboldt GIS Portal. The fuels reduction project data described in this document and displayed in the GIS Portal were generated through the evaluation of projects identified in the 2006 MFPP, gathered at community based meetings, and reviewed and refined by local Fire Safe Council (FSC) representatives, Humboldt County staff, and fire agency personnel.

At the beginning of the process, a project committee was convened to provide guidance on the structure of the fuels update plan and the new web mapping application of the GIS Portal. The committee was composed of representatives from local FSCs, Six Rivers National Forest, Bureau of Land Management, Cal Fire, and Humboldt County Community Development Services. Descriptive categories were identified to improve the level of detail captured for each new and updated project, and a plan for how to collect the data was made.

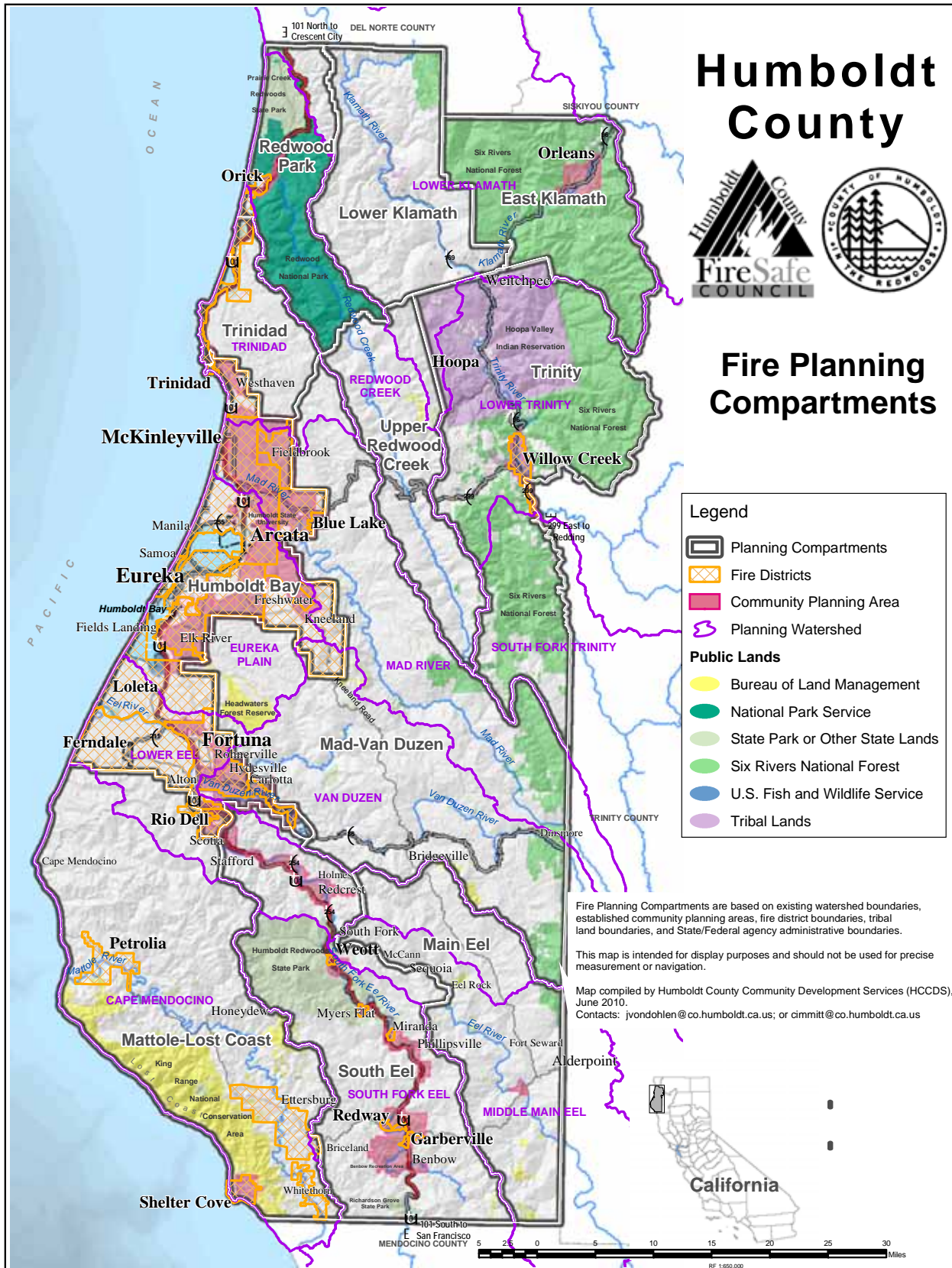
A series of public meetings was conducted in order to get community and agency assistance with the project update process. These meetings took place in areas of the county where there are active local FSCs. Project staff then worked closely with representatives from these areas to further refine the data gathered at the meetings. For areas that are not served by a local FSC, a more broad-brush approach was applied using air photos, fire hazard severity zone maps, and individual key contacts. These areas deserve more attention in a future update and the Humboldt County FSC will continue to work with communities interested in starting a local FSC. An active local fire planning organization greatly facilitates the process of project identification and progress tracking.

The updated project information is organized by the fire planning compartments developed for the 2006 MFPP. The boundaries of these eleven fire planning compartments were based on a combination of General Plan Planning Watersheds, community planning areas, fire district boundaries, tribal lands, and state and federal administrative boundaries. Table 1-1 lists the fire planning compartments and their associated planning watersheds and community planning areas. Figure 1.1 is a map illustrating the compartments.

1-1 Fire Planning Compartment Reference Matrix

<i>Fire Planning Compartment</i>	<i>Planning Watersheds Contained (General Plan)</i>	<i>Community Planning Areas Contained</i>
1 Lower Klamath	Lower Klamath (45%)	
2 East Klamath	Lower Klamath (45%)	Orleans
3 Trinity	Lower Trinity South Fork Trinity	Willow Creek
4 Redwood Park	Redwood Creek (40%) Lower Klamath (5%)	Orick
5 Trinidad	Trinidad (80 %)	
6 Humboldt Bay	Eureka Plain (70%) Lower Eel (30%) Mad River (10%) Trinidad (10%) Van Duzen (95%)	McKinleyville, Fieldbrook- Glendale, Blue Lake, Arcata, Jacoby Creek, Trinidad- Westhaven, Freshwater, Fortuna, Eureka, Hydesville- Carlotta, Rio Dell Fieldbrook-Glendale
7 Upper Redwood Ck.	Redwood Creek (60%) Lower Klamath (5%)	
8 Mad-Van Duzen	Van Duzen (95%) Mad River (90%) Eureka Plain (30%) Trinidad (10%)	
9 Main Eel	Middle Main Eel Lower Eel (25%)	Alderpoint
10 South Eel	South Fork Eel Lower Eel (25%)	Avenues-Weott, Miranda, Myers Flat, Phillipsville, Stafford-Red Creek Garberville-Redway-Benbow
11 Mattole-Lost Coast	Cape Mendocino Lower Eel (20%)	Shelter Cove

Figure 1.1 Humboldt County Fire Planning Compartments



1.2 USE OF EXISTING INFORMATION

The starting place for updating information about hazardous fuels reduction projects in Humboldt County was predominantly the 2006 version of the Humboldt County MFPP (Humboldt's countywide CWPP). The project information presented in the 2006 MFPP was gathered through a series of 24 community meetings held throughout the County from September 2004 through March 2005. It was not within the scope of this 2009-2010 update process to visit such a large number of communities but a variety of methods were used to update the information. Other existing local fire plans were also reviewed and some project information was incorporated into this update.

1.4 PROJECT UPDATE DETAILS

Community meetings were held in the Mattole, Southern Humboldt, Van Duzen, Willow Creek, Orleans, and Humboldt Bay areas to review existing fuel hazard reduction project information and request feedback and new information about proposed projects or already treated areas. The general format of the meetings was organized in the following way:

- Review what was proposed in the County MFPP and, where applicable, other local CWPPs
- Identify the status of each proposed/treated project
- Identify if the project needs to be retained, modified, or removed
- Update any retained/modified projects and describe, including the descriptive characteristics listed below
- Identify new proposed/treated projects, including the descriptive characteristics listed below

Follow-up meetings or phone and email communication took place with key contacts in each of these areas to further refine the updated data. Where the capacity existed, GIS data sets were sent back and forth between the County and the local FSC to track update information and attempt to reach a certain level of standardization for how to organize the data tables.

The updated or new project information was added to a GIS database and used to generate the display maps and project tracking matrixes included in this document. The data was also uploaded to the Humboldt GIS Portal where projects can be selected from a display map and the information in the data table will be displayed. A data field was created for each of the descriptive characteristics listed below and an attempt was made to fill these fields with the updated information. All data fields are included in the on-line GIS Portal and a consolidated version is provided in the project tracking matrixes found in the next section.

Descriptive Characteristics for Projects:

- **Map ID #** - This identification number is the number that was assigned to the project in the MFPP or a new number assigned during the update process. The number corresponds to the mapped illustration of the project.

- **Description** – This is where a longer description of the proposed activity or past accomplishment is included.
- **Location** – In many cases the location identifies the community, access route, neighborhood, structure, or area at risk to wildfire that the proposed project addresses.
- **Project Type** – The project type is identified as one of the following three types:
 - Roadside Clearance – Projects that involve treating vegetation along driveways and roads and other key transportation corridors.
 - Defensible Space – Projects that involve treating vegetation in the 100 foot zone around homes and structures.
 - Landscape - Projects that involve treating vegetation in wildland areas beyond the immediate vicinity of structures.
 - Other – Often this designation would be accompanied by a descriptive word or words such as “Water” or “Access Improvement”.
- **Project Category** – This identifies the project as an update or correction from the MFPP or as an entirely new project.
- **Project Status** - The project status is identified as one of the following:
 - No treatment needed or low priority
 - Treatment needed –Med priority
 - Treatment needed - High priority
 - Funded
 - Initiated
 - Treated
- **Year** – Identifies what year the project was proposed, funded, initiated, or treated
- **Treatment Type** - The treatment type is identified as one or more of the following:
 - Broadcast Burn
 - Pile Burn
 - Chipping
 - Mastication
 - Biomass Removal
 - Lop and Scatter
 - Hand Pile
 - Thinning
 - Other
- **Vegetation Type** - The vegetation type was identified as one or more of the following:
 - Brush
 - Douglas-fir
 - Grassland
 - Mixed Conifer
 - Oaks
 - Redwood
 - Tanoak
 - Other
- **Recommended Maintenance Schedule** – Where possible, details are identified to explain how the project has been or will be maintained, such as frequency of maintenance, type of maintenance treatment, purpose of treatment, and so on.

- **Funding Source(s)** – this field identifies the actual or possible funding source.
- **Number of Acres** – The project acreage is estimated, calculated, or, in some cases, unavailable. If the project proposal specified, for example, a certain number of miles of road clearance with vegetation treatment to take place 50 feet on either side of the road, then the acres could be calculated. Sometimes the project proponent provided the acreage. There are even instances in which the GIS tool auto calculated the acreage based on the polygon created to illustrate the general project area. In these cases the acreage is higher than what will likely be treated and will be sorted out during future updates.
- **Latitude** - Identifies the Latitude of the project location.
- **Longitude** - Identifies the Longitude of the project location.

1.5 PROJECT PRIORITIZATION

One single prioritization methodology was not applied to this countywide fuels reduction plan update process. A few communities are in the process of updating or completing their local community wildfire protection plans and are using a variety of prioritization methods. Although it would be ideal if the methodology were standardized, this is not something that the County can impose on communities. It should also be noted that each area of the county is unique and a one-size-fits-all method of prioritizing projects might not be appropriate. However, because the community-specific prioritization information is not yet available, a light touch approach was applied to the countywide process. The approach loosely evaluated fire hazard severity rating zones, population density, estimated value of assets/resources at risk, proximity to existing project, visibility to the public (public demonstration value), and value as an evacuation route. The results of this evaluation were reflected in the Project Status. For example, a roadside clearance project along a road serving as the only way in and out of a large community in a very high fire hazard severity zone would be assigned a status of "Treat-High". Conversely, a roadside clearance project along a road serving 4 homes with a moderate fire hazard severity rating might be assigned a status of "Treat-Med" and so on. In future updates this analysis should be refined by both incorporating community identified priorities and improving the rough estimate methodology.

1.6 HUMBOLDT GIS PORTAL

Based on the data collected through this hazardous fuels reduction plan update, a new mapping application was added to the Humboldt GIS Portal. All of the mapping applications in the GIS Portal enable viewing of GIS mapping data covering all of Humboldt County. Key datasets include Parcels, Zoning, Land Use, Highways and Roads, Streams, USGS Topo Quads and Aerial Photography. Datasets have been compiled from various sources including State and Federal Agencies. Digital Aerial Photography have been provided by the City of Eureka GIS (2007) and the USDA Farm Service Agency (FSA) Aerial Photography Field Office (County image mosaic for Humboldt, CA - NAIP 2005 and 2009). All mapping applications display map services with basic layers, functionality and search options. Basic functionality includes map zooming and panning, identify,

measurement, layer control, and map printing. Search by address or parcel number is available in all applications. Other search functions are also available depending on the application.

The new fire planning GIS Portal allows users to search for and view specific fire planning features by location or to zoom into a desired area from a countywide view. To access the Portal, go to www.humboldtGISportal.com and choose "Fire Planning" from the list of mapping applications. The project data collected through this update was used to create a GIS layer within the Portal that displays the fuels reduction projects visually and allows the viewer to access project details. In addition to the fuels reduction project information, other fire planning features are included such as community identified assets and values at risk, safety resources, fire risks and hazards, FSC areas of service, fire related district boundaries, and fire department response areas. Appendix A contains more detailed information about navigating the fire planning GIS Portal.

Please note the accuracy of the GIS Parcel Lines and other data shown in this system varies from location to location in the County. This GIS system is useful for planning purposes but should not be solely relied upon to determine property, zoning or general plan designation boundaries. While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. The law will take precedence should any difference or error occur.

1.7 PLAN IMPLEMENTATION AND FUTURE UPDATES

This document represents a snapshot in time of a moving target. As the identified projects are implemented and/or maintained the progress should be recorded in the database created for this update. This can be done through the exchange of GIS data sets between the local FSC and the County, project update information submitted online from the GIS Portal, or simply updating the project tracking matrixes included in this document and submitting them for inclusion in the GIS database. This information should be collected over time and included in any future comprehensive county-wide CWPP update and/or local CWPP updates.

The following suggestions are made for future updates:

- More community meetings
This will help directly reach more of the areas that were visited during the original planning process. Reaching these areas provide an opportunity to gather more detailed project information so that all of the data fields in the update matrix can be filled. During this update it was very challenging to include the necessary key details for each updated project. So even though each project is shown in the matrix, they vary in the amount of descriptive detail provided. During future updates these gaps will be filled. Conducting more meetings in the outlying areas will also provide an opportunity to foster the formation of local FSCs where they currently do not exist.
- Incorporation of projects recommended on state and federal lands
During this update process some progress was made in coordination with public land agency partners to share data for areas they have identified as needing treatment. However, it was beyond the scope of this project to review that data with the public and incorporate community priorities for public lands into the lists of recommended projects. This will be done as part of a future update.

- Mapping methodology and standardized project information
Although progress was made toward coming to countywide consensus on a standard methodology for collecting, storing, and maintaining project data in the GIS format, there is still work to be done to fully realize that goal. Because each local FSC has a different way of digitizing their projects and storing their data and different levels of experience with and knowledge of the GIS tool, reaching consensus on a standard methodology is challenging.

Using GIS to map community identified fuels reduction projects and other fire planning features is a specialty area that deserves attention. Standardizing the collection, storage and maintenance of GIS data for CWPPs will necessitate the identification of best practices that can be applied countywide. Training will be necessary for learning best processes for this type of mapping. This will greatly facilitate the process of updating projects and incorporating the desirable level of detail.