

California Department of Forestry and Fire Protection

Humboldt - Del Norte Unit

2005 Fire Management Plan



Unit Chief Date

In keeping with the spirit of the California Department of Forestry and Fire Protection's "100 Years of Service" to the people of the State of California, we would like to dedicate the 2005 Humboldt – Del Norte Unit Fire Management Plan to the memory of our first Unit Chief.



G.E. Thompson
Humboldt – Del Norte Unit Chief 1921 - 1923

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California Department of Forestry and Fire Protection
Humboldt Del Norte Unit
Fire Management Plan

Executive Summary

The California Department of Forestry and Fire Protection (CDF) Humboldt Del Norte Unit is remotely located representing the most northern Unit along the California coastline. The Unit extends north to south approximately 180 miles and inland approximately 50 miles. This encompasses 1,941,991 acres of state responsibility lands and 1,963,581 of direct protection area. Approximately 70% of these lands are zoned for timber production and another 10% are recreation areas. Several watersheds exist within the lands including the Smith, Klamath, Mad, Trinity, Van Duzen, Mattole and Eel Rivers. Humboldt and Del Norte counties are home to not only the world's tallest living trees, but also the largest remaining stands of old growth coast redwood. Many of these stands are protected in parks and recreational areas. These include 11 State Parks, 20 County parks and beaches, Redwood National Park, United States Forest Service (USFS) Six Rivers National Forest and the newly acquired Headwaters Forest. The livelihood of these counties is dependent on the resources the land itself has to offer both in the form of timber production and recreation. In addition many of the smaller landowners manage their land for both timber production and ranching.

The Unit is culturally diverse as well. Twelve tribal agencies reside within the unit including the Hoopa, which boasts the largest Native American reservation in California. The Yurok, Wiotts, Karuk and Tolowa are some of the other tribes that are represented within the area.

Humboldt and Del Norte counties each have an urban interface dilemma. Del Norte County's main population centers are Gasquet, Crescent City and Klamath. Many of the residents live in rural areas. Humboldt County has an even greater risk of experiencing an urban interface fire. The population centers include Trinidad, McKinleyville, Blue Lake, Arcata, Eureka, Loleta, Ferndale, Fortuna, Rio Dell, and Garberville. Additionally there exist numerous other smaller communities. Any of these communities could experience an interface fire.

Ultimately the plan will balance the needs of the many stakeholders involved. The Fire Management Plan considers the needs of timber production, recreation, ranching, wildlife enhancement, cultural needs and fire hazard reduction. The area in itself is so diverse in its existence and needs, that the management plan must be diverse and able to accommodate all facets of land management.

In light of the above the Humboldt – Del Norte Unit regards the 2005 Unit Fire Management Plan to be compliant with the Healthy Forest Restoration Act (HFRA) of 2003 as a “Community Wildfire Protection Plan” (CWPP), as follows:

COLLABORATION

This plan is a compilation of efforts from various groups and agencies from throughout the Unit to address the mitigation of the hazardous fuel loading within the Unit and around the communities at risk within it. The plan addresses the priorities put forth by the Unit based on the key issues gathered from cooperators: 1) assets at risk, 2) level of service, 3) fuels, 4) fire weather, and 5) fire history.

PRIORITIZED FUEL REDUCTION

This plan identifies and prioritizes areas of hazardous fuel reduction treatments and recommends the type and methods of treatments that will be used by the Humboldt-Del Norte Unit to protect one or more of the Communities at Risk and their essential infrastructure within the Unit boundaries. This includes some efforts of local cooperators and their accomplishments.

TREATMENT OF STRUCTURAL IGNITABILITY

This plan recommends measures that homeowners and communities can take to reduce the ignitability of structures throughout the Unit. Information drawn from a variety of sources were included in this plan to help educate the public as to what they can do to help mitigate potential problems associated with living in the Wildland Urban Interface. (WUI)



Fire History

In order to fully understand the goal of the fire management plan, it is important to understand the history of fire in the area. Fire has long been a part of Humboldt and Del Norte counties. During the pre-settlement period (before 1875) the Native American people commonly used fires. The Native Americans found this area to be well suited to their needs. The access to the coast for trading and food, relatively mild temperatures, and the many tributaries provided for fresh water and food. They used fire for several reasons. It helped drive out rodents and insects, kept the forest understory open, which made for easier travel and hunting. Additionally it enhanced the forbs and grasses used in basket weaving. During the settlement period (1875-1897) European settlers used fire for maintenance and enlarging the pasturelands and as a land clearing method. These fires frequently escaped due to the lack of firefighting equipment or knowledge. Major land activities during the post settlement period (1898-1940) were livestock grazing, farming, debarking of the tanoak for tannin production and logging of Douglas-fir and Coast Redwood. Logging was clearly a dominant activity during this time period. Hundreds of small mills existed up and down the coastline; often the mills would have their own railroad for the transportation of the logs as well. In this time of unrefined mechanized equipment the logging operations were simplified as much as possible. Logged areas were burned to assist with the removal of the logs and reduce the logging

debris left behind. These fires were left to burn with no real control efforts. The same can be said for the area ranchers who commonly set fire to their land in order to maintain the grazing. This resulted in many large fires that are documented in area newspapers from 1880 to 1952.

Many studies have been conducted on the fire frequency of the Coast Redwood. Accordingly there are varying thoughts on the fire frequency. There is also a notable difference between the northern portion of the Unit versus the southern area. Estimates for the Redwoods in the northern portion of the Unit suggest a 50 to 100-year fire cycle. While in the southern portion of the unit the fire frequency is estimated to be 12 to 50 years. Reviews of area newspapers and various studies at Humboldt State University indicate that there was indeed a significant fire history from the late 1800's through early 1950's. Of note are 24 "fire seasons" between 1880 and 1952. During this time period the fire interval was 3.3 years. Accounts from these fires included entire towns being burned, such as the 1908 fire that destroyed the town of Luffenholz. People were left homeless, local mills and railroad tracks all perished from these large severe fires. After 1945 the severity and number of fires began to decline significantly. This was due, in part to two separate happenings. The State Forest Practice Act changed the manner in which lands were managed, which led to the curtailing and changing of logging activities. Secondly, World War II had taken the work force over seas; with the return of the soldiers came a active fire suppression program.



Luffenholtz , California. Near the present town of Westhaven
After the 1908 fire



**Humboldt – Del Norte Unit Headquarters staff
Circa 1945**



**Humboldt – Del Norte Unit Headquarters
Fortuna, California
Circa 1945**

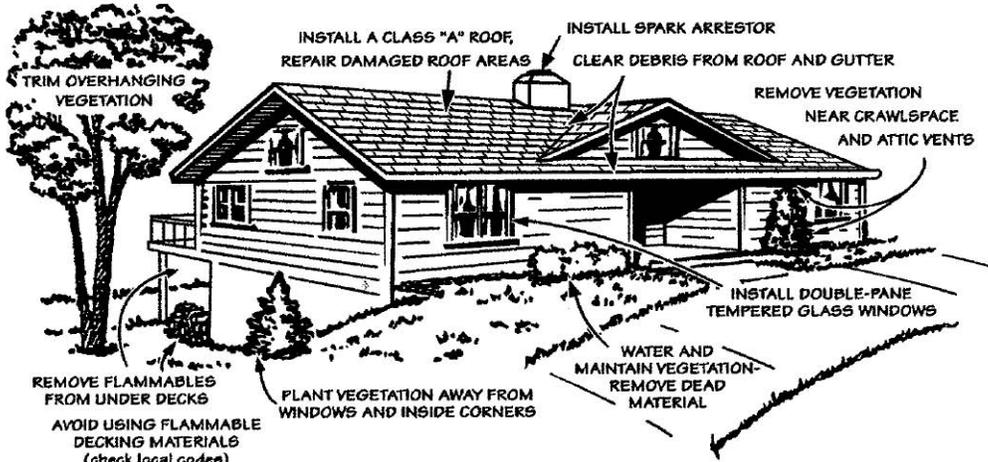
Stakeholders Collaboration

Who they are

Many stakeholders exist within the Unit. The demographics of the area lends itself to many special interest groups with a wide array of needs. Generally speaking the stakeholders are represented by government entities, private land stewards (both large and small), rural and interface homeowners and special interest groups. Among the government entities include State Parks, Humboldt and Del Norte County Parks, Bureau of Land Management, Six Rivers National Forest, Redwood National Park, Bureau of Indian Affairs, Hoopa Valley Reservation, Department of Fish and Game, North Coast Unified Air Quality Management District, Shelter Cove Resort Improvement District, the City of Arcata, Weott Consolidated Sanitary District, and Humboldt Fire District #1. Numerous stakeholders have varying amounts of land that is managed in one way or another for their livelihood and for their future. Large timber companies include Green Diamond Timber, Pacific Lumber Company and Sierra Pacific Industries. Other smaller timber companies include Barnum Timber and Eel River Sawmills. Included in the landowner group is a number of smaller landowner who utilizes their land for both logging and ranching. The Cattlemen's Association and the Farm Bureau generally represent this group. Special interest groups include the tribal councils of the Karuk, Yurok, Hoopa and the Northern California Basketweavers Association. The Mattole Restoration Council (MRC), Redwood Community Action Agency (RCAA) and the Institute of Sustainable Forest (ISF) are very active groups within the community that are aggressively pursuing fuels reduction issues and community safe plans.

CREATE AT LEAST 30 TO 100 FEET OF DEFENSIBLE SPACE TO...

PROTECT YOUR HOME FROM WILDFIRE



Fire Safe Council

FOR MORE INFORMATION,
GO TO WWW.FIRESAFECOUNCIL.ORG

HUU Federal Cooperators

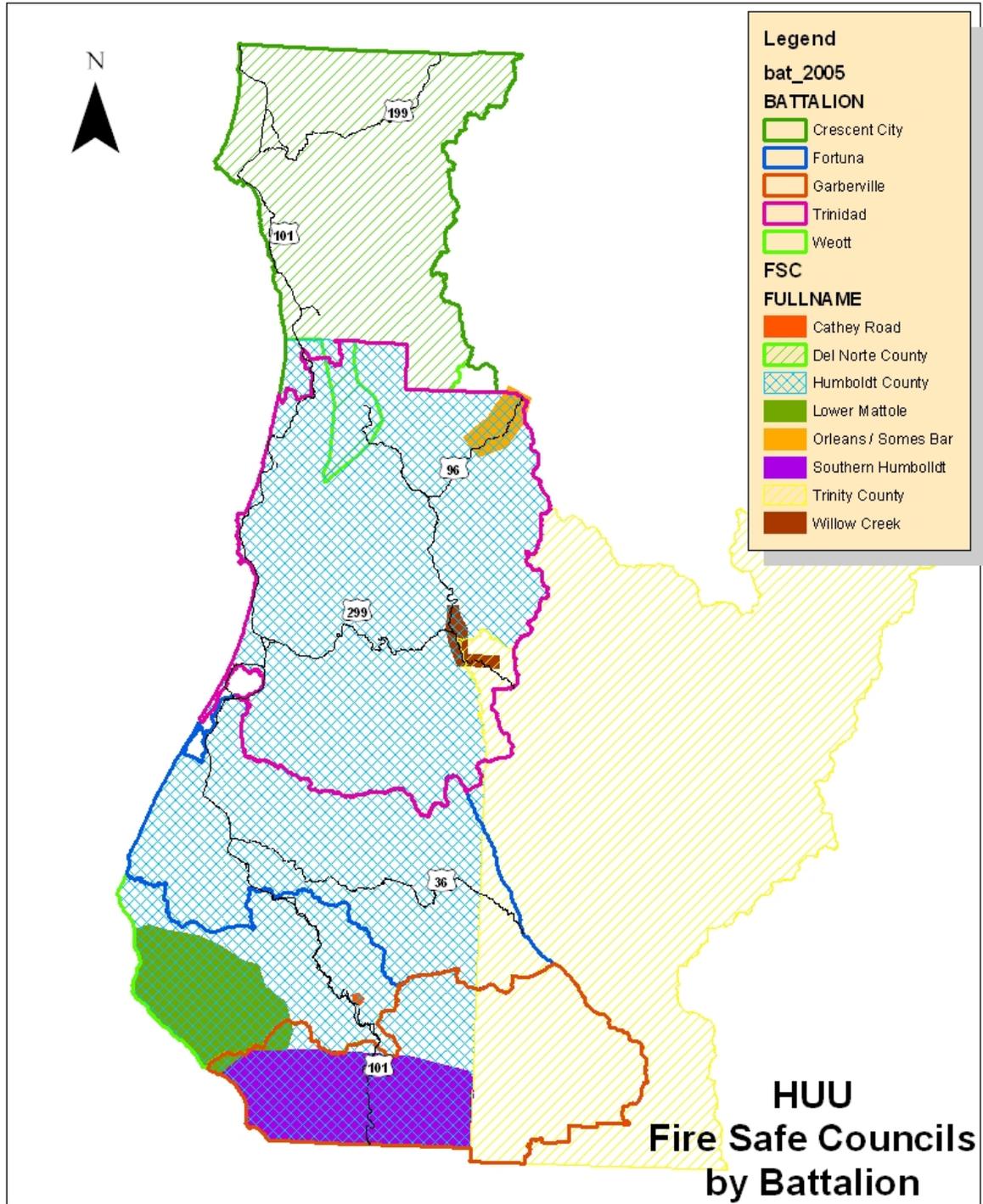




William Pierce Jeff Walter
Park Superintendent Forest Supervisor
Redwood National Park Six Rivers National Forest
USDI USDA
National Park Service United States Forest Service



Linda Rouche Gary Riesling
Area Manager Hoopa Fire Management
Arcata Field Office USDI
King Range National Conservation Area Bureau of Indian Affairs
USDI
Bureau of Land Management



The Del Norte County Fire Safe Council incorporates the entire county boundary under its umbrella.



**Del Norte
Fire Safe Plan**
Community Wildfire Protection Plan
Public Draft ~ November, 2004



Please send any comments on this draft by January 15th, 2005 to:

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This plan is a project of the:
Del Norte Fire Safe Council
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707-951-5437, dncfsc@charterinternet.com

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The DNCFSC Plan can be viewed @ <http://www.co.del-norte.ca.us>
then click on "Del Norte Fire Safe Plan" under New to Our Site.

Del Norte County Board of Supervisors
Chairman: Jack Reese

Del Norte County Fire Chiefs Association
Chairman: John Mc Farlan

Del Norte County Fire Safe Council
Chairman: Dan Leavitt



Del Norte County FSC “Fire Water Tank” project

Del Norte County Facts:

Land Area in Square Miles: 1,008

Persons per Square Mile: 27.3

Population: 27,913

Housing Units: 10,531

Metropolitan Areas: none

The Del Norte County Fire Safe Council, and the County of Del Norte are in the process of finalizing the county’s “Fire Management Plan”. The plan will address the service gaps, hazardous fuel reduction projects, need for water sources, etc. within the county. The Del Norte County Fire Safe Council is a working partner with other agencies, federal, state, and local including HUU.

The county operates under the “Fire Safe” regulations (PRC 4290-4291) and the

“Uniform Fire Code” for housing and land development.

Within Del Norte County, there are 9 total agencies that provide fire service. They are dispersed among 5 Fire Protection Districts, 2 of which do not levee assessment fees for services (Klamath and Gasquet), Crescent City Fire Department, the California Department of Forestry and Fire Protection (CDF), the US Forest Service, Six Rivers National Forest (USFS), and Redwood National Park (NPS). Each has its own fire service area. Mutual aid agreements are common among neighboring fire organizations to assist one another in responding to fire and other emergencies. Some rural areas of Del Norte County are not within any fire response area for structural protection, even though they have wildfire protection. USFS provides wildfire protection on Forest Service lands. CDF provides willand fire protection on the rest of the lands designated as State Responsibility Area (SRA), unless it is provided by local fire organizations.

The Del Norte County Fire Plan goals are as follows:

1. To identify priority projects to reduce risks and hazards from wildfire in
Del Norte County, California. This is anticipated to be achieved principally through prioritization and implementation of fuel hazard reduction, community education, and fire suppression projects and activities.
2. To use the document to provide fire safety educational information to residents of Del Norte County.
3. To provide a guidance document for future actions of the Del Norte Fire safe Council.
4. To create biomass projects within Del Norte County.

Fire Safe Councils operating under the umbrella of the Humboldt County Fire Safe Council:

Humboldt County Master Fire Protection Plan



Consultant's DRAFT – July 2004

- Lower Mattole FSC
- Van Duzen / Bridgeville FSC
- Cathey Road FSC
- Southern Humboldt FSC
- Orleans / Somes Bar FSC
- Willow Creek FSC

Potential Fire Safe Council start ups:

- Westhaven / Trinidad FSC
- Shelter Cove FSC

Humboldt County Board of Supervisors
Chairman: Roger Rodoni

Humboldt County Fire Chiefs Association
Chairman: Richard Leonardo

Humboldt County Fire Safe Council
Chairman: Kevin O’Niel



The HCFSC Plan can be viewed @ http://www.co.humboldt.ca.us/planning/fire_safe_council/fsc_default.asp

Southern Humboldt FSC monthly meeting

Humboldt County Facts:

Land Area in Square Miles: 3,572

Persons per Square Mile: 35.4

Population: 127,915

Housing Units: 56,916

Metropolitan Areas: none

HUU and the County of Humboldt have embarked on a fact finding study to address the service gaps within the county and hopefully rectify the problem through funding sources, contracts, etc., as they develop their County Master Fire Protection Plan.

The county operates under the “Fire Safe” regulations (PRC 4290-4291) and County Ordinance 1952 for housing and land development.

Within Humboldt County, there are 42 total agencies that provide fire service. They are dispersed among 16 Fire Protection Districts, six community service districts, sixteen Volunteer Fire Departments, several Special Districts, the City of Eureka Fire Department, the California Department of Forestry and Fire Protection (CDF) and the US Forest Service, Six Rivers National Forest (USFS). Each has its own fire service area. Mutual aid agreements are common among neighboring fire organizations to assist one another in responding to fire and other emergencies. Some rural areas of Humboldt County are not within any fire response area for structural protection, even though they have wildfire protection. USFS provides wildfire protection on Forest Service Lands. CDF provides wildland fire protection on the rest of the lands designates as State Responsibility Area (SRA), unless it is provided by a local fire organization. In addition, CDF’s Humboldt-Del Norte Unit Chief serves as the Humboldt County Fire Warden to assist with inspections and arson investigations.

The Humboldt County Master Fire Protection Plan goals are as follows:

1. Assure adequate fire protection for people, property, and communities.
2. Support development of local fire organizations and local Fire Safe Councils.
3. Encourage effective and risk-based allocation of fire prevention and suppression services.
4. Encourage local efforts to reduce or mitigate fire fuel loads for community fire prevention and protection.
5. Promote local fire safe planning and education programs.
6. Support fire prevention and resource protection funding and technical assistance efforts of local fire organization and communities.

The Trinity County Fire Safe Council incorporates the entire county boundary under it’s umbrella.

THE TRINITY COUNTY FIRE SAFE COUNCIL

FIRE MANAGEMENT PLAN

February 21, 2003 Version



THIS IS A WORKING PLANNING DOCUMENT. IT IS BEING REVISED FROM FSC MEETING TO FSC MEETING. COMMENTS ARE MUCH APPRECIATED AND WILL BE INCORPORATED BASED ON REVIEW AND AGREEMENT BY TCFSC.

To Fire Safe Council from Planning Sub-committee:
Ken Baldwin, Noreen Doyas, Yvonne Everett, Pat Frost, Lynn Jungwirth, Kelly Sheen, Phil Towle.

The Trinity County Fire Safe Council
Fire Management Plan
February 2003

1

The TCFSC Fire Management Plan can be viewed @ <http://www.tcrd.net> , then go to “Projects”, then to “Forest Health”, and then click on “Fire Management Plan”.

Trinity County Board of Supervisors
Chairman: Howard Freeman

Trinity County Fire Chiefs Assoc.
Chairman: Roger Chaderton
Trinity County Fire Safe Council
Chairman: Jesse Cox



Fire Department Home Inspections using the “Big Red Fire Engine”

Trinity County Facts:

Land Area in Square Miles: 3,179

Person per Square Mile: 4.1

Population: 13,476

Housing Units: 8,034

Metropolitan Areas: none

In the Fall of 1999 Trinity County and the Trinity County Resource Conservation District joined forces the local fire suppression agencies, and others to form the Trinity County Fire safe Council. Their mission is to reduce the risk of catastrophic fire in Trinity County by establishing priorities for reducing risk of catastrophic fire on a landscape scale in order to improve forest health, water quality and quantity and community well-being.

The county operates under the “Fire Safe” regulations (PRC 4290-4291) and a series County Ordinances for housing and land development.

In southwest portion of Trinity County which is included within the boundaries of the Humboldt-Del Norte Unit, there are a total of 8 total agencies that provide fire service. They are dispersed among 6 Volunteer Fire Departments, the California Department of Forestry, and the US Forest Service, Six Rivers National Forest. Each has its own fire service area. Mutual aid agreements are common among neighboring fire organizations to assist one another in responding to fire and other emergencies. Some rural areas of Trinity County are not within any fire response area for structural protection, even though they have wildfire protection. USFS provides wildfire protection on Forest Service lands. CDF provides wildland fire protection on the rest of the lands designated as State Responsibility Area (SRA), unless it is provided by local fire organizations.

The elements of the Trinity County Fire Management Plan area as follows:

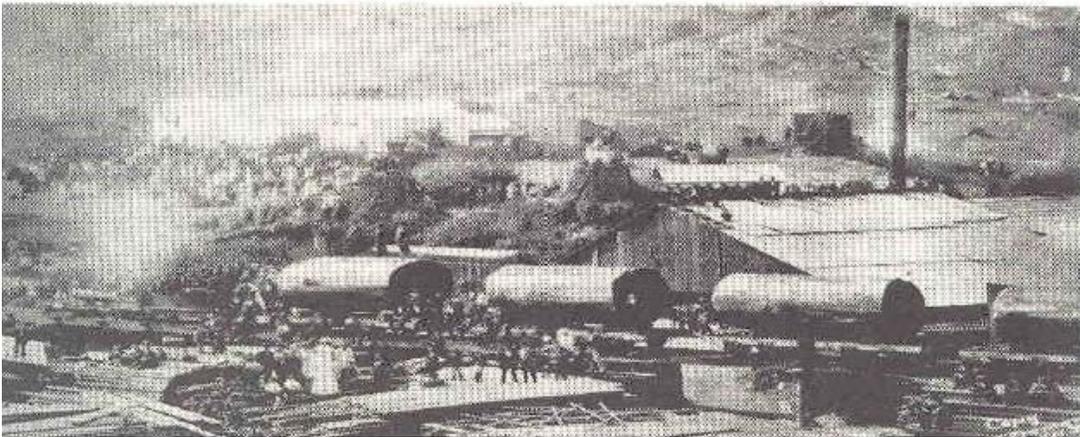
1. Reducing the current level of fire risk and hazard in the landscape through pre-Fire and post-fire treatment and managing for fire.
2. Support for local fire suppression forces.
3. Coordination among all actors.
4. Building local pre-fire treatment and fire suppression capacity.
5. Public education and involvement.
6. Funding fire management activities.
7. Identifying regulatory conflicts that affect fire management.
8. Cooperating with Trinity County Planning department on safety elements of General Plan.
9. Monitoring of plan implementation and effectiveness.

Key Issues

Key issues have been identified by the Unit. As stakeholders become more involved in the planning process a greater amount of input is expected. Some of the key issues currently identified include:

- Promote adequate fire protection and fire safe standards to be incorporated into the Humboldt and Del Norte County Master Fire Protection Plans.
- Support and promote the county level Fire Safe Councils in Humboldt, Del Norte, and Trinity counties to act as an umbrella for funding, environmental procedures, permits, and insurance for local Fire Safe Councils and Fire Departments.
- Develop, and promote the office of Humboldt County Fire Warden.
- Develop workable management plans with State and Federal cooperators.
- Reconcile Bureau of Land Management, National Park Service, and United States Forest Service operating agreement due to recent land acquisition.

- Develop Master Mutual Aid plan with local agencies.
- Identify local agency response boundaries within the unit to aid in the quality of service provided.
- Develop unit map books of suitable standard to aid in the quality of service provided through federal grant dollars.
- Provide input into the National Fire Plan and work cooperatively to achieve goals.
- Provide adequate and appropriate dispatch services to the Unit and it's cooperators.



The John Vance mill and railroad on Mad River. (HSU Library)

Assets at Risk

The Fire Plan assessment is on going process. The assets at risk within the Unit include the following:

- Communities and governmental infrastructure throughout Humboldt, Del Norte and southwestern Trinity Counties
- Recreational value of the many Federal, State, and County Parks
- Timber
- Grazing land
- Watersheds of Smith, Klamath, Trinity, Van Duzen, Mattole, Mad, Eel Rivers

- Scenic and economic value of the old growth Redwoods
- Wildlife habitat
- Large and small scale industry and agriculture



Salmon were once plentiful in the Eel River as shown this photograph of a “Day’s Catch” (HSU Library)

Communities At Risk

Population de-concentration in California has resulted in rapid development in the outlying fringe of metropolitan areas and in rural areas with attractive recreational and aesthetic amenities, especially forests. This demographic change is increasing the size of the wildland-urban interface (WUI), defined as the area where structures and other human development meet or intermingle with undeveloped wildland. The WUI is where wildfire poses the biggest risk to human lives and structures. The expansion of the WUI in recent decades has significant implications for wildfire management and impact. The WUI creates an environment in which fire can move readily between structures and vegetation fuels. Its expansion has increased the likelihood that wildfires will threaten structures and people.

WUI is composed of both interface and intermix communities. In both interface and intermix communities, housing must meet or exceed a minimum density of one structure per 40 acres. Intermix communities are places where housing and vegetation intermingle. In intermix, wildland vegetation is continuous, more than 50 percent vegetation, in areas with more than 1 house per 40 acres. Interface communities are areas with housing in the vicinity of contiguous vegetation. Interface areas have more than 1 house per 40 acres, have less than 50 percent vegetation, and are within 1.5 miles of an area (made up of one or more contiguous Census blocks) over 1,325 acres that is more than 75 percent vegetated.

The California Fire Alliance (2001) defined “vicinity” as all areas within 1.5 miles of wildland vegetation, roughly the distance that firebrands can be carried from a wildland fire to the roof of a house. It captures the idea that even those homes not sited within the forest are at risk of being burned in wildland fire.

With the use of the above definitions as a foundation the communities in and around these WUI areas become “Communities at Risk”. The following is a list of the Communities at Risk within the boundaries of the Humboldt-Del Norte Unit:



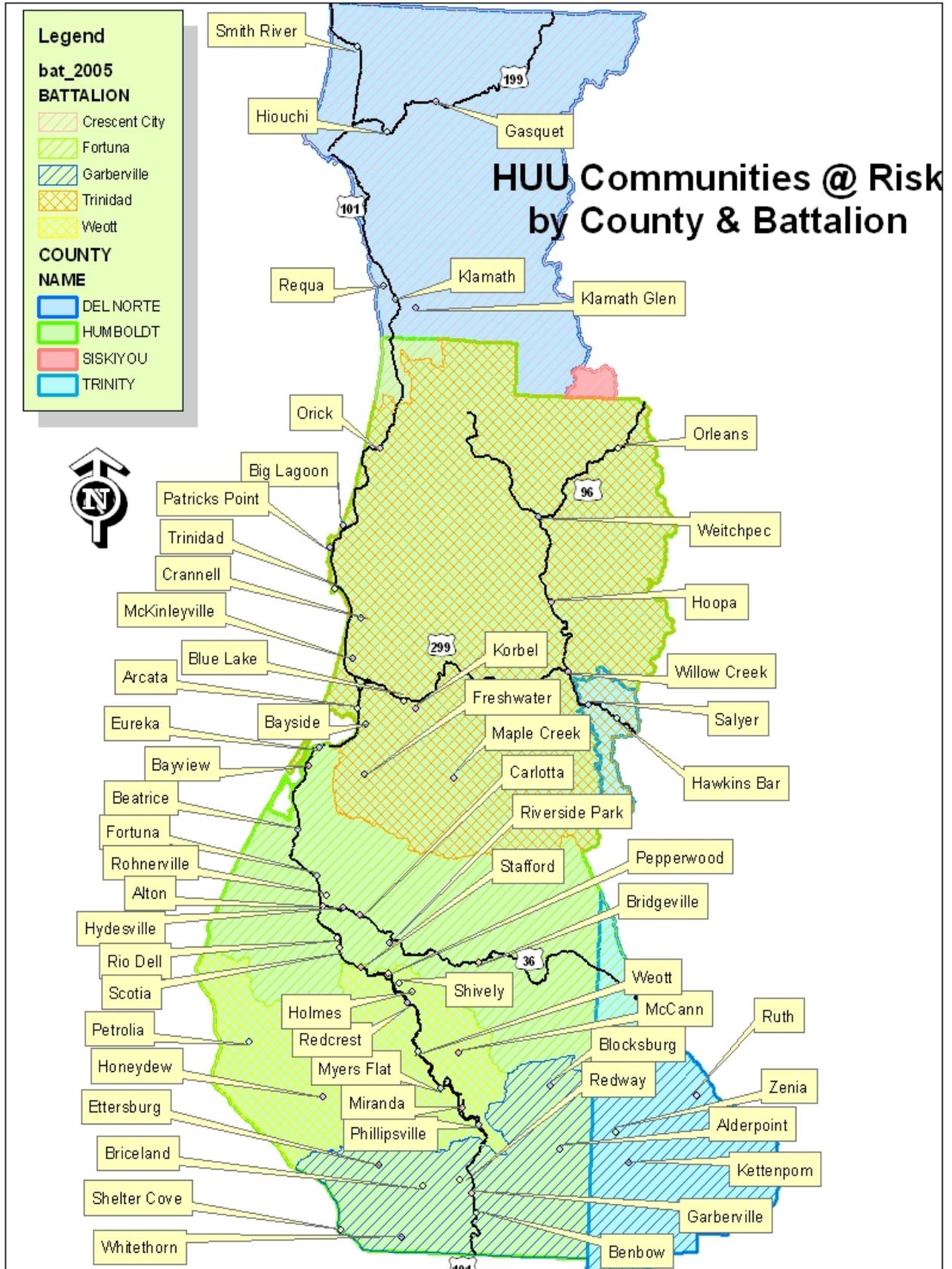
Community @ Risk:

**Benbow
Southern Humboldt
County**

Humboldt – Del Norte Unit Communities @ Risk

Community Name	Threat Hazard Level	Federal List *
Alderpoint	2	
Alton	2	
Arcata	3	
Bayside	3	
Bayview	2	
Beatrice	2	
Benbow	2	
Big Lagoon	3	*
Big lagoon Rancheria	3	*
Blocksburg	2	
Blue lake	2	*
Blue lake Rancheria	2	*
Briceland	3	
Bridgeville	2	*
Carlotta	2	
Centerville	3	*
Crannell	2	
Ettersburg	3	*
Eureka	3	
Fickle Hill	3	*
Flying AA Ranch	2	*
Fortuna	2	
Freshwater	2	
Garberville	2	
Gasquet	2	*
Hawkins Bar	3	*
Hiouchi	2	*
Holmes	2	
Honeydew	3	*
Hoope Indian Reservation	3	*
Humboldt Hill	2	
Hydesville	2	
Kettompom Valley	2	*
Klamath	3	*
Klamath Glenn	3	*
Klamath River	3	*
Kneeland	2	
Korbel	2	*
Little River	3	
Mad River	3	*
Maple Creek	2	
McKinleyville	3	
Miranda	3	
Myers Flat	3	

Orick	2	*
Orleans	2	*
Patricks Creek	2	*
Patricks Point	3	
Pepperwood	2	
Peterolia	3	*
Phillipsville	3	
Redcrest	2	
Redway	3	
Redwood Valley	3	*
Requa	3	*
Rio Dell	2	
Riverside Park / Swains Flat	2	
Rohnerville	2	
Ruth	3	*
Ruth Lake East	3	*
Ruth Lake West	3	*
Salyer	3	*
Scotia	2	
Shelter Cove	3	*
Shively	2	
Smith River	2	
Somes Bar	3	*
Stafford	2	
Trinidad	3	*
Trinidad Rancheria	3	*
Upper Mad River	2	*
Van Duzen	2	*
Weitchpec	2	*
Weott	3	
Whitethorn (Thorn)	3	*
Willow Creek	3	
Yurok Indian Reservation	3	*
Zenia	2	*



Current Fire Situation

The 2004 statewide declared fire season started on June 7th, 2004 and ended on October 19th, 2004. The fire season statistics show the number of fires and acreage were below 2003 and the five year average. There were 293 fires last year through December 31st, 2004. This number includes all fires in State Zones, which include CDF direct protection areas, Local Government Contract (Local Response Areas Under Agreement), and other agencies in State Zones. Fire occurrence was 1.3% below 2003, and 1.2% below the 5- year average. In 2004 fires burned 468 acres, which is 57% below the 2003 fire season, and 12% below the 5- year average for the Unit.

Of the 293 fires in 2004 in the Humboldt-Del Norte Unit (Humboldt, Del Norte, and western Trinity counties) 247 fires were on lands directly protected by CDF. An additional 1 fire was on land directly protected by CDF under a local “Amador” program, 4 fires were on lands directly protected by CDF, but where another agency provides life and property protection, and 15 reports were filed for false alarms. On lands directly protected by Federal Government Agencies (USFS, BIA, HIA, & NPS) there were 24 total fires.

The largest fire on record for this year (2004) was the Pilot Fire (04CAHUU005468) which started on October 6th, 2004 from a vehicle driving through tall grass. The fire consumed 274 acres of grass, woodland, and timber before it was controlled on October 10th, 2004.

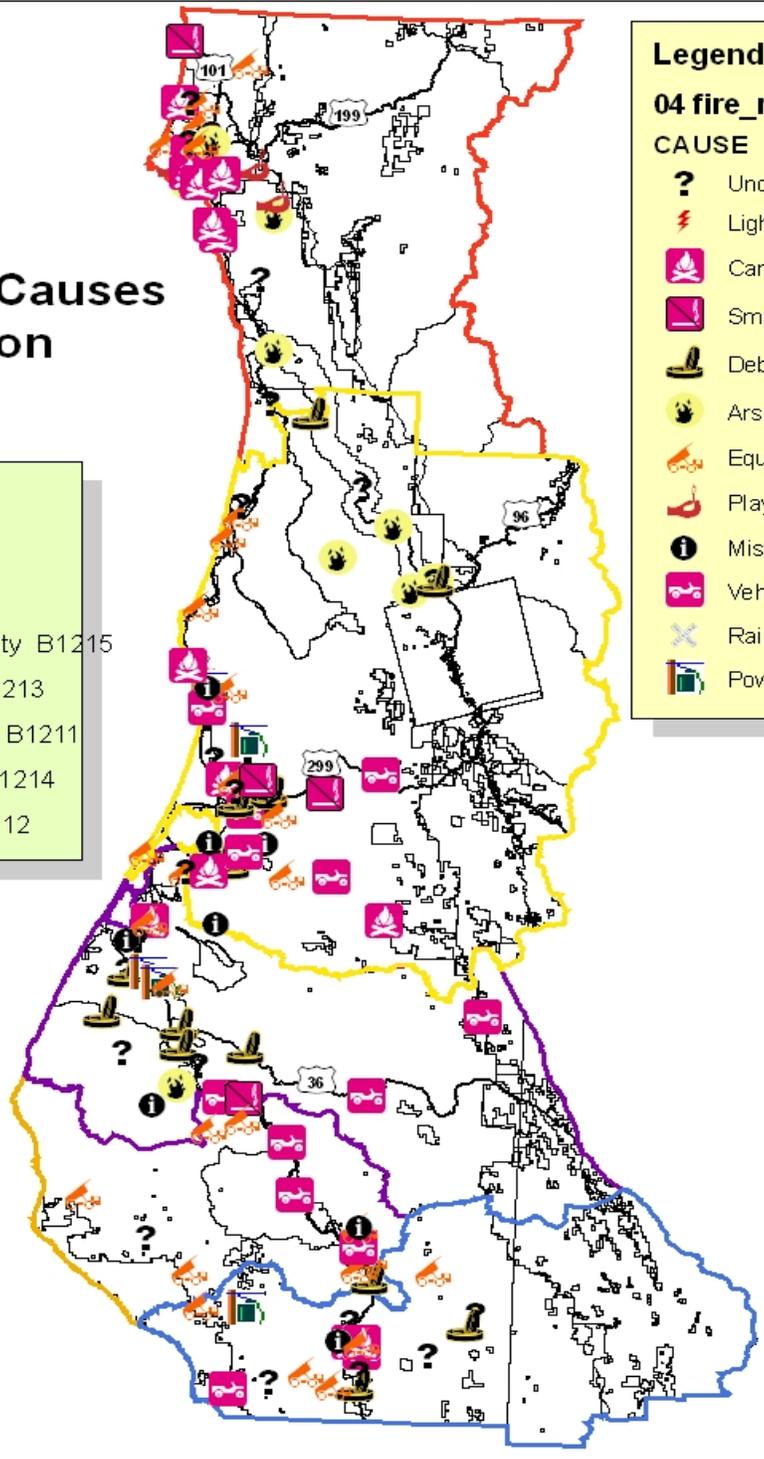
HUU 2004 Fire Causes By Battalion

Legend
bat_2005
BATTALION

- Crescent City B1215
- Fortuna B1213
- Garberville B1211
- Trinidad B1214
- Weott B1212

Legend
04 fire_rpt Events
CAUSE

- ? Undetermined
- ⚡ Lightning
- 🔥 Campfire
- 🚬 Smoking
- 🗑️ Debris
- 🔥 Arson
- 🔧 Equipment Use
- 🔥 Playing w/ Fire
- ❗ Misc.
- 🚗 Vehicle
- ✂️ Railroad
- 📡 Powerlines





Cause DPA 1.1 – 1.8 Fires Only											
Undet	Lightning	Campfire	Smoking	Debris	Arson	Equip Use	Vehicle	RxR	Elect Power	Play w/ Fire	Misc
51	1	23	5	48	27	7	36	1	14	13	15

Ignition Workload Assessment (Level of Service)

The Fire Plan analysis of the level of service in HUU is in a constant state of assessment.

The Humboldt – Del Norte Unit is composed of eleven fire stations, three camps, one air attack base, and one helitack base. CDF HUU maintains 14 frontline engines, with two engines in reserve, two dozers, 15 inmate crews, one helicopter, one air attack, and one air tanker for fire suppression efforts. There are approximately 100 permanent fire suppression personnel, 30 resource management personnel, and 6 clerical personnel to staff these efforts. Additionally the Unit hires 50 limited term personnel to supplement the permanent staff during the fire season.

The Inter-agency dispatch center, not only dispatches fire, law enforcement, and EMS Calls for the Six Rivers National Forest, and The Humboldt – Del Norte Unit, but also for 29 volunteer fire departments, 1 ambulance company, Redwood National Park, the Bureau of Land Management’s Kings Range National Conservation Area, and acts

“Central Ordering Point” for the Hoopa Square. Refer to maps in Appendix (7 thru 10).

In 2004 the Fortuna Interagency ECC dispatched a total of 6892 calls.



The Unit as a whole responded to a total of 293 fires in 2004. That was down from the 398 in 2003. From the 2004 fires, 468 total acres were consumed in the following categories: 206 grass, 54 acres brush, 107 acres woodland, 101 acres timber and 0 acres of agricultural product. Considering the 1,904,745 acres of state responsibility land and 1,962,817 direct protection area that the Humboldt – Del Norte Unit encompasses, 468 acres seems like a drop in the bucket, HUU has been fortunate.

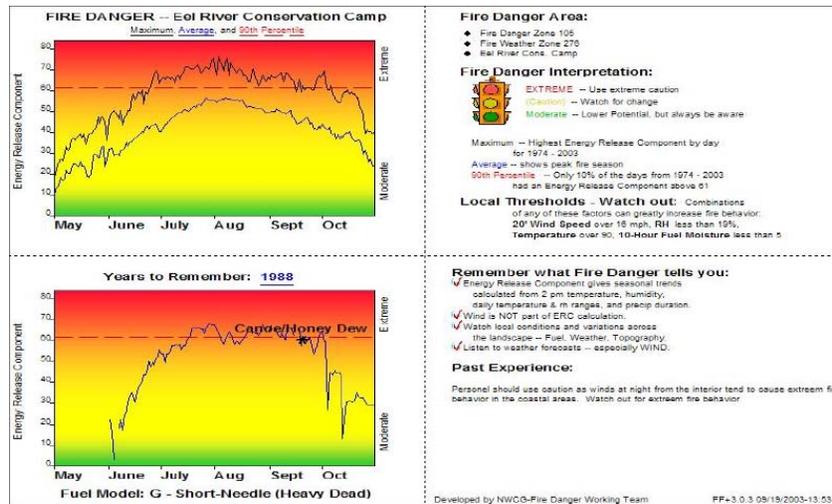
A total of six (6) fires out of the 293 that the Unit responded to were over 10 acres, (2 % of total) or 98% of all unwanted fires were contained at 10 acres or less in 2004.

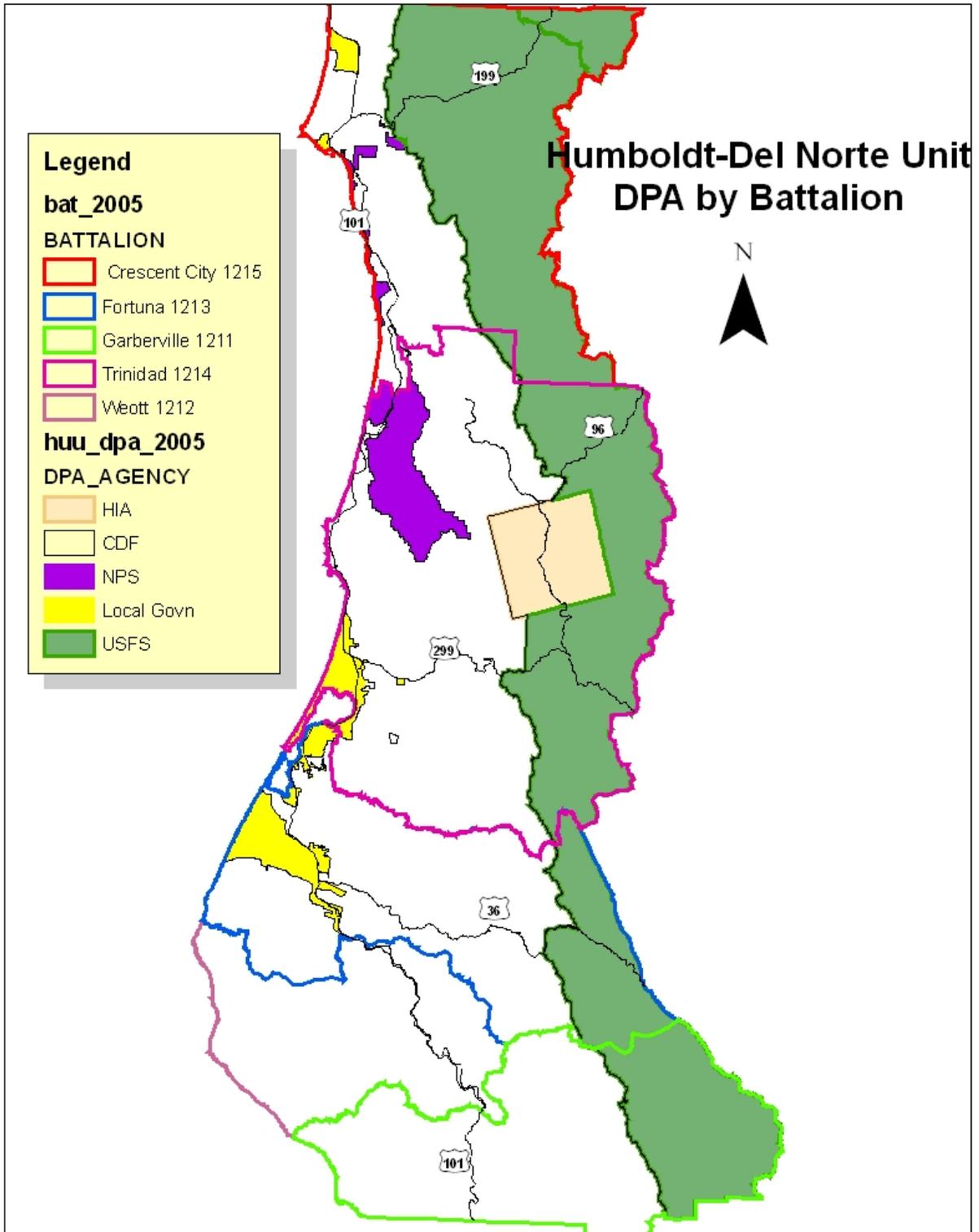
State	Unit ID	Fire #	Year	Fire Name	Agency	Alarm Date	Control Date	Control Method	Cause	Reported Acres	Inc. Number
CA	HUU	043	04	Blue	CDF	02/25/04	02/25/04	8	5	33	000022
CA	HUU	064	04	Deadman	CDF	06/15/04	06/16/04	2	3	30	000026
CA	HUU	096	04	Fish	CDF	07/03/04	07/05/04	2	7	15	000031
CA	HUU	209	04	Armstrong	CDF	09/01/04	09/03/04	2	1	17	000047

CA	HUU	215	04	Glendale	CDF	09/03/04	09/04/04	2	1	28	000047
CA	HUU	259	04	Pilot	CDF	10/06/04	10/10/04	2	8	274	000054

HUU has the potential for some rather large catastrophic fires; especially in it's southern and eastern regions. If one were to add the fire history, fuel build up, increase in population and housing, especially in wooded rural areas, you would quickly wonder why it has not happened. With the area becoming more and more popular as an area of scenic beauty, relative low land cost, etc., the risk will continue to grow, especially for the person who wishes to build and reside in remote areas of the Unit.

The Unit is one that has most of its fire protection adjacent to its population centers, leaving vast tracts of the Unit with long response times and very little protection. CDF's fire protection objective states that a system of basic fire protection will be provided so that damage to life, property and natural resources will be held at or below a level acceptable within social, political and economic constraints. Board of Forestry and Fire Protection designates in the California Fire Plan that CDF will strive to contain 95% of all unwanted fire at 10 acres or less.





California Department of Forestry & Fire Protection

Humboldt – Del Norte Unit

2004 Statistics

Agency Wildland Responsibility Direct Protection Acreage Difference

	Total Acres	Total Acres	Total Acres	
CDF	1,941,991	1,963,581	21,590	
CDF Wildland Contract	520*			
Hoopla (HIA)	90,666	90,851	185	
BIA	9,544			
LRA	87,196	86,676	520*	
BLM	80,569			
Redwood NPS	80,457	80,457		
Six Rivers NF	1,002,752	1,069,120	66,368	

DPA Breakdown: CDF Six Rivers NF

Arcata Jacoby Cr Forest: 520*

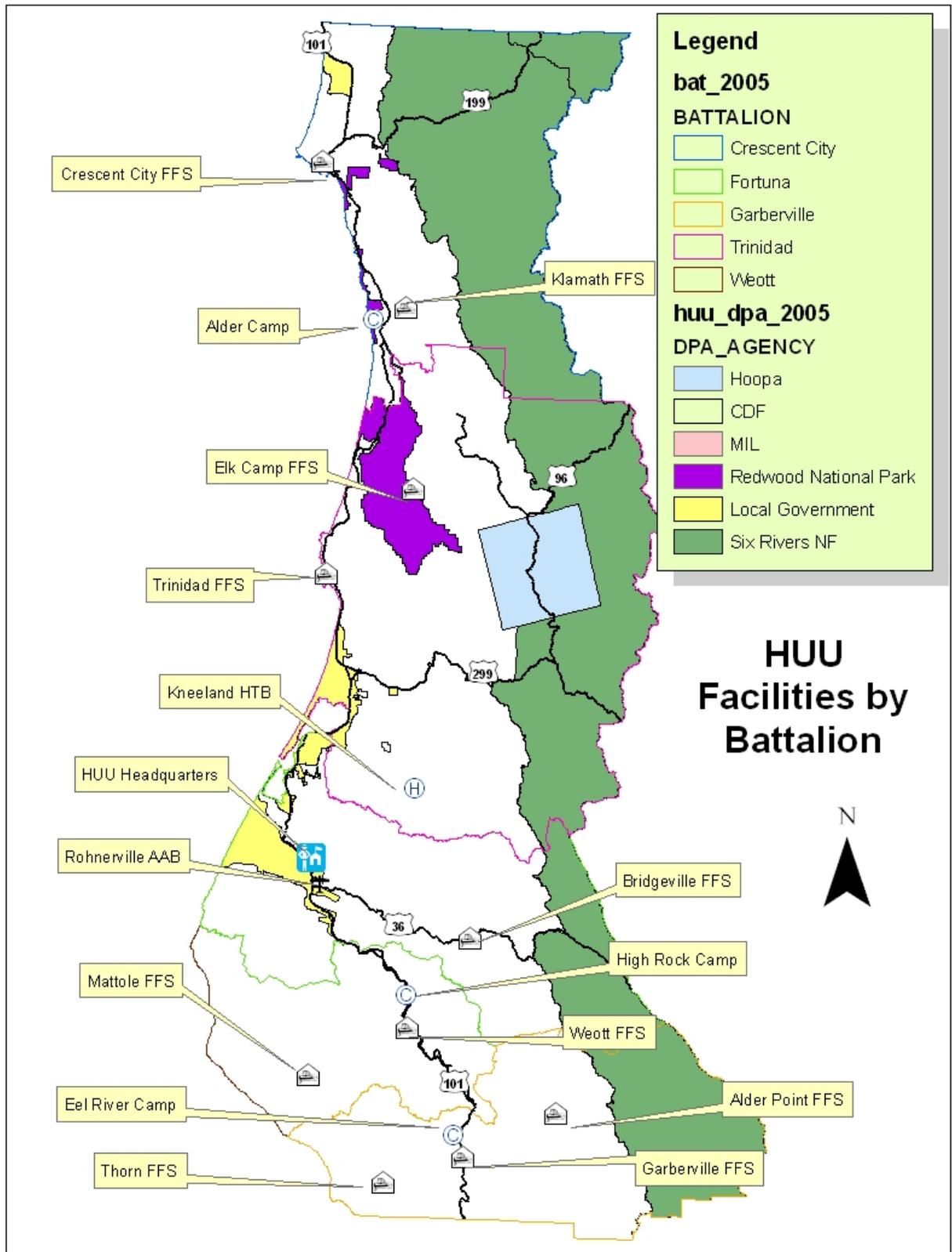
CDF: 1,841,547 100,334

BIA: 9,013 531

BLM: 80,556 13

Six Rivers NF: 31,945 968,242

1,963,581 1,069,120



**Local Fire Organizations Providing Service in the Humboldt-Del Norte Unit
HUMBOLDT DEL NORTE TRINITY**

City Fire Dept.

Eureka Crescent City

Fire Protection Dist.

Arcata Crescent
Blue Lake Fork Dick
Ferndale Smith River
Fortuna Hiouchi
Garberville
Humboldt Fire Dist.#1
Kneeland
Loleta
Myers Flat
Petrolia
Redway
Rio Dell
Samoa Peninsula
Telegraph Ridge
Whitethorn
Willow Creek

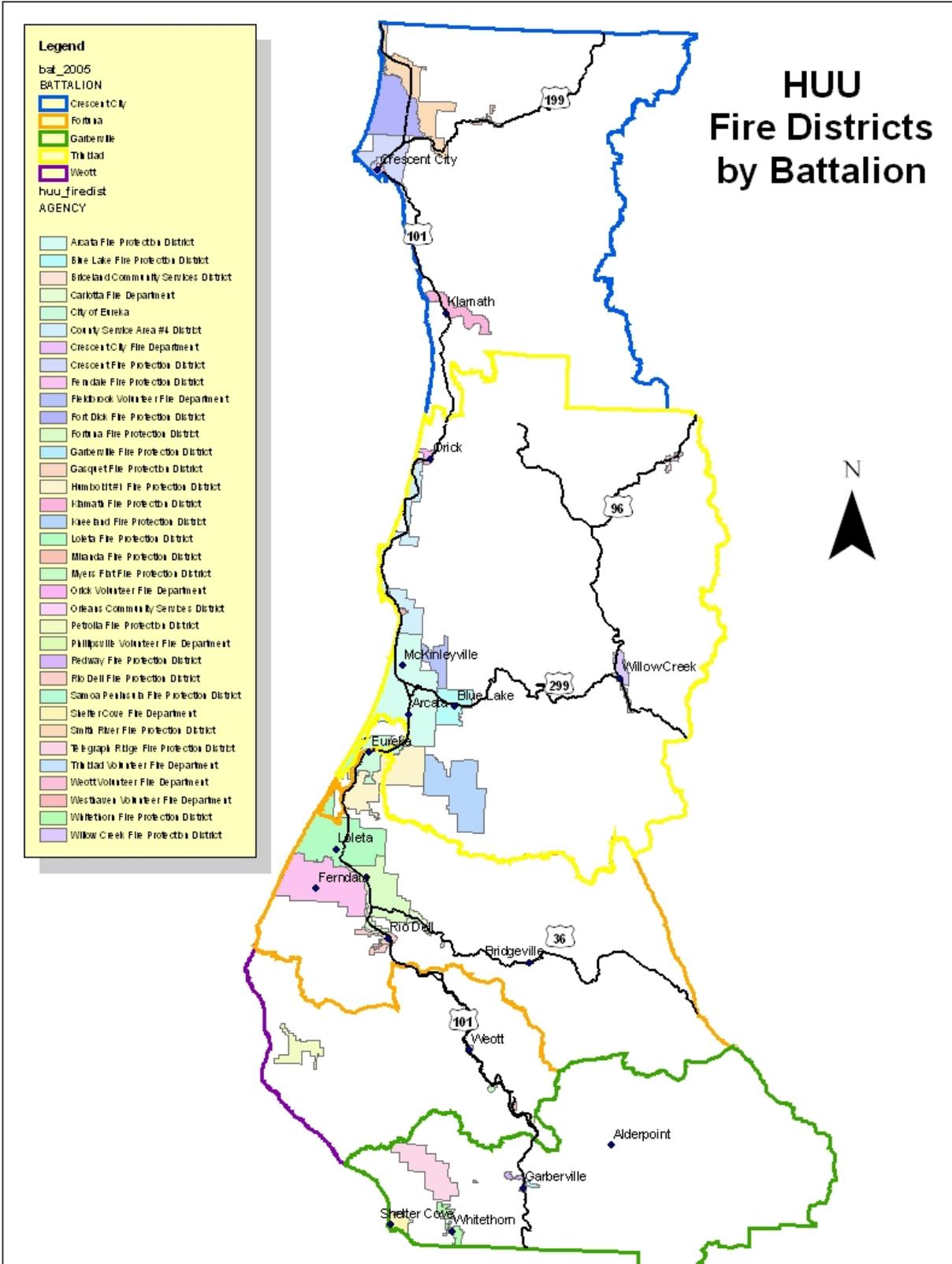
Volunteer Fire Dept.

Briceland Gasquet Kettenpom
Fruitland Klamath Salyer
Honeydew Burnt Ranch
Korbel Hawkins Bar
Maple Creek S. Trinity
Nielson Ranch Van Duzen
Orleans
Palo Verde
Prosper Ridge
Redcrest
Salmon Creek
Scotia
Shelter Cove
Sprowl Creek
Trinidad
Westhaven
Whale Gulch

Community Services Dist.

Carlotta/Riverside
Fieldbrook
Miranda
Phillipsville
Orick

Weott
Other Special Dist.
Community Service Dist.#4, Hoopa & Yurok Fire Dept.



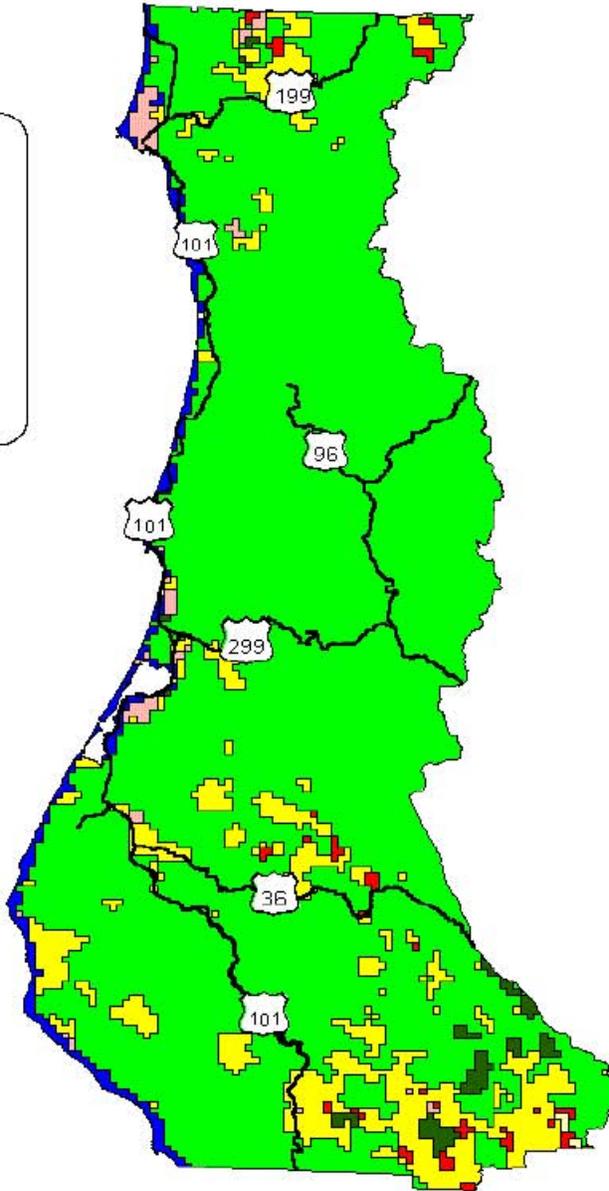
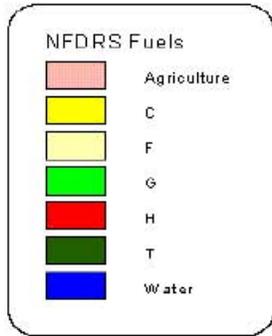
Fuels

The Fire Plan analysis of fuels has been completed for the Humboldt Del Norte Unit. While an actual rating for the fuels is available, some general statements can be made based on local knowledge of the fuels. The Unit is predominately mixed conifer forest (NFDRS Fuel model G) or Fire Behavior Fuel Model 10. This model consists of, Coast Redwood, Douglas Fir, Spruce with intermingled hardwoods including Madrone and Tanoak. A key component within this fuel type is the large amount of down and dead woody fuel. This vegetation type occurs in three zones. The coastal strip consists of Coast Redwood, Douglas Fir and Spruce. This is a closed canopy forest with a thick, lush understory of brush. The biomass in this fuel type is equal to or greater than a rainforest. In fact it is not uncommon to have a true Redwood forest referred to as a rainforest. The second zone occurs inland where the Douglas Fir dominates and resides with the above mentioned hardwoods. This results in a more open canopy with a sparser understory. The third zone occurs in the most southeastern portions of the unit, where the fuel is that of a typical Oak Woodland. The understory is open and consists of grass and brush (chaparral). Refer to maps in Appendix (1 thru 6).

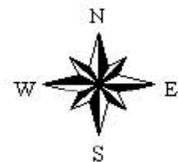
The following set of photographs depict a cross section of the vegetation types within the Humboldt-Del Norte Unit.







Humboldt Del Norte
Fuels



Fire Weather

The Fire Plan analysis of the frequency of severe fire weather has been developed. The business plan that addresses the validation process was completed this last year.

We found that the current weather station being used as a severity station for the Unit (Cooskie RAWS) because of its almost constant strong winds does not give an accurate depiction of the area. We are working on repairing the problem by switching to our Eel River RAWS, which we have used as our severity station for the past five years in our Unit Weather Plan.

The unit has used various options in order to mitigate this problem, in the past such as the use of Fire Family plus to tabulate existing weather data from our weather stations set in National Fire Danger Rating Zones, as addressed in the Unit Weather plan.

Using local knowledge and research work done at Humboldt State University we can define when and under what conditions severe fire weather occurs. The unit is also fortunate to have a good database (dating back to 1974) of weather observations from the Eel River manual weather observation station.

Three major synoptic weather systems are associated with large fires in the Humboldt



Del Norte Unit. They are the Pacific High (post-frontal), the Great Basin High and the Subtropical High Aloft pattern. These patterns can be expected to occur 50-55 days in the summer months, with the greatest number of days occurring in July, August or September.

National Weather Service, Eureka weather Office, Woodley Island, California

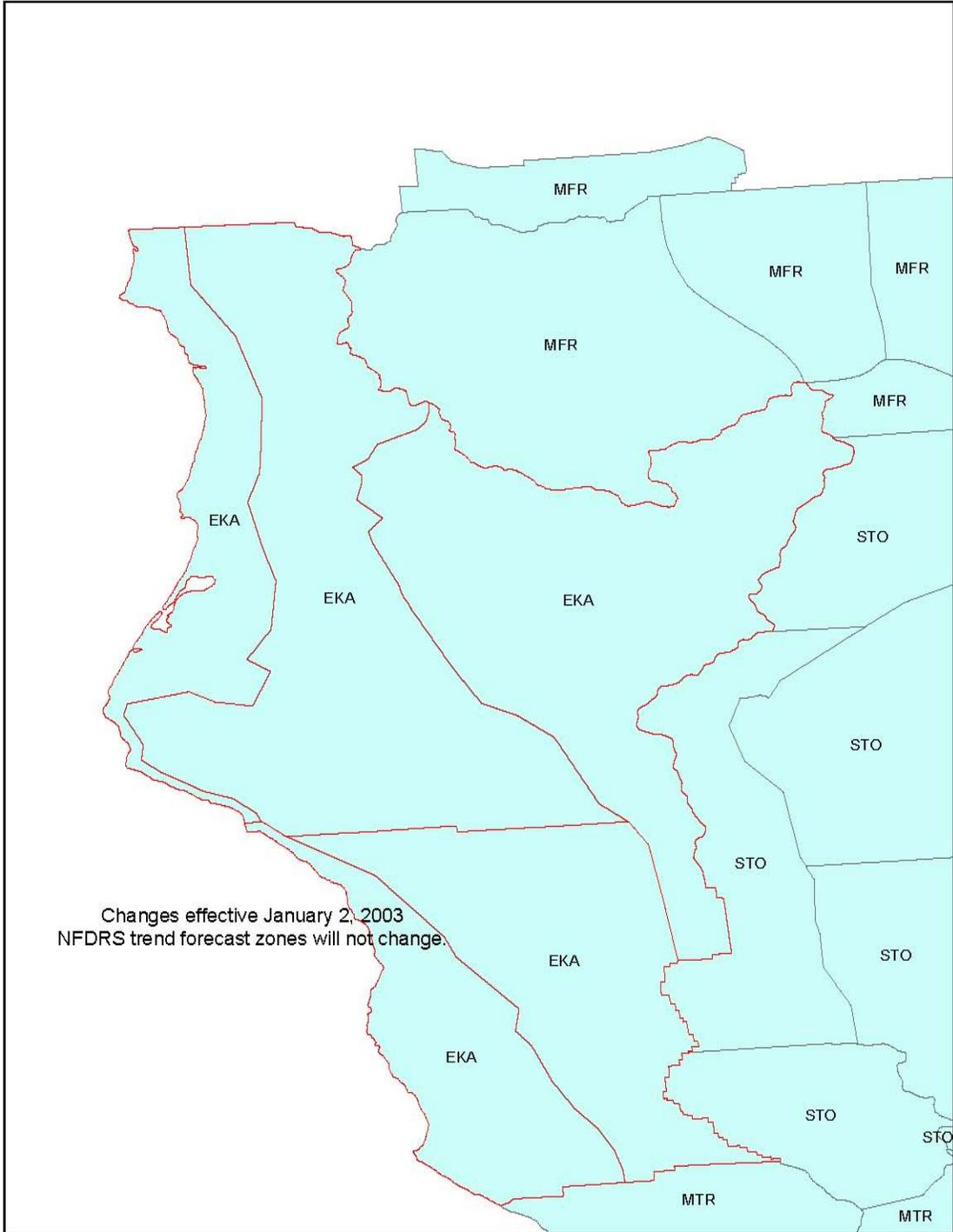
National Weather Service

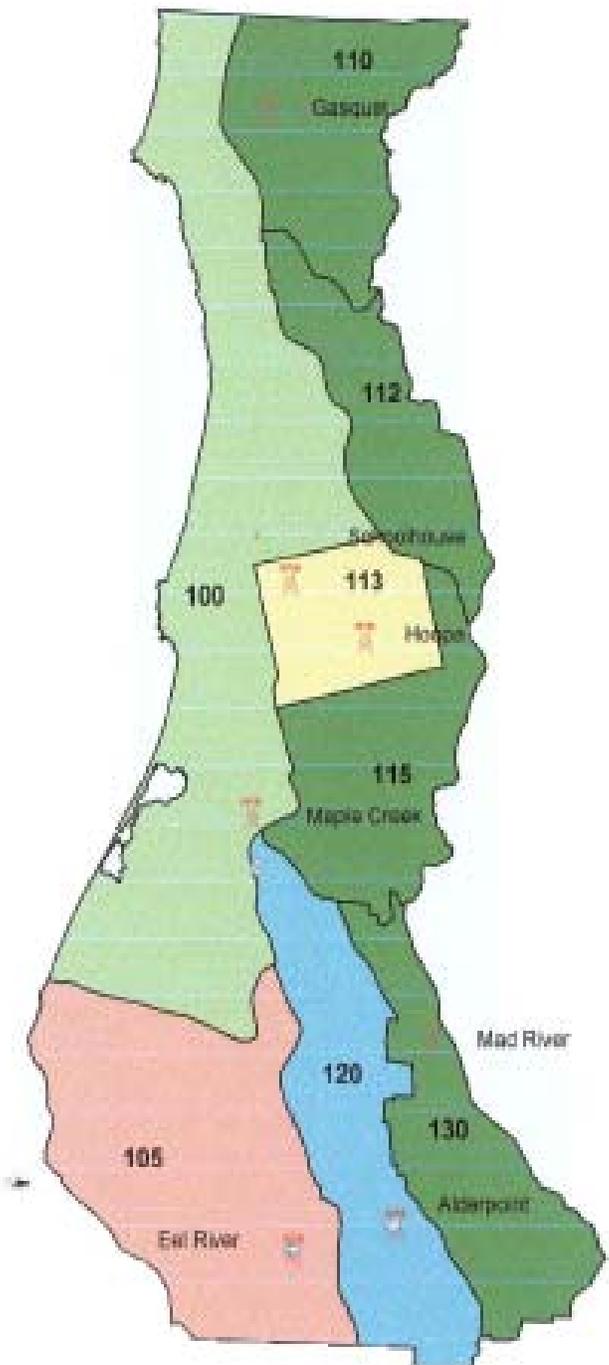
As of January 1st, 2003 the National Weather Service has moved all daily fire weather forecasting from Redding to the Eureka office. All spot weather forecasts will be requested through the Eureka office at their main web page:

<http://www.wrh.noaa.gov/Eureka>, with exception of those that are related to smoke management issues (Vegetation Management Program burns, etc.) In those cases, spot weather forecasts will be routed through the Redding office. This change will affect all areas of the unit that fall under CDF responsibility. Spot weather forecasts can be posted at <http://www.wrh.noaa.gov/cgi-bin/wrspot/spotmon?site=eka>.

Eureka Fire Weather Zones

EKA= Eureka MFR= Medford STO= Sacramento MTR= Monterey





RAWS & Field Reporting Locations

Legend

facility02_1

Field Reporting Locations

- Aberpoint FFB
- Est River DC
- Knoxland HB

hau_nrlirs

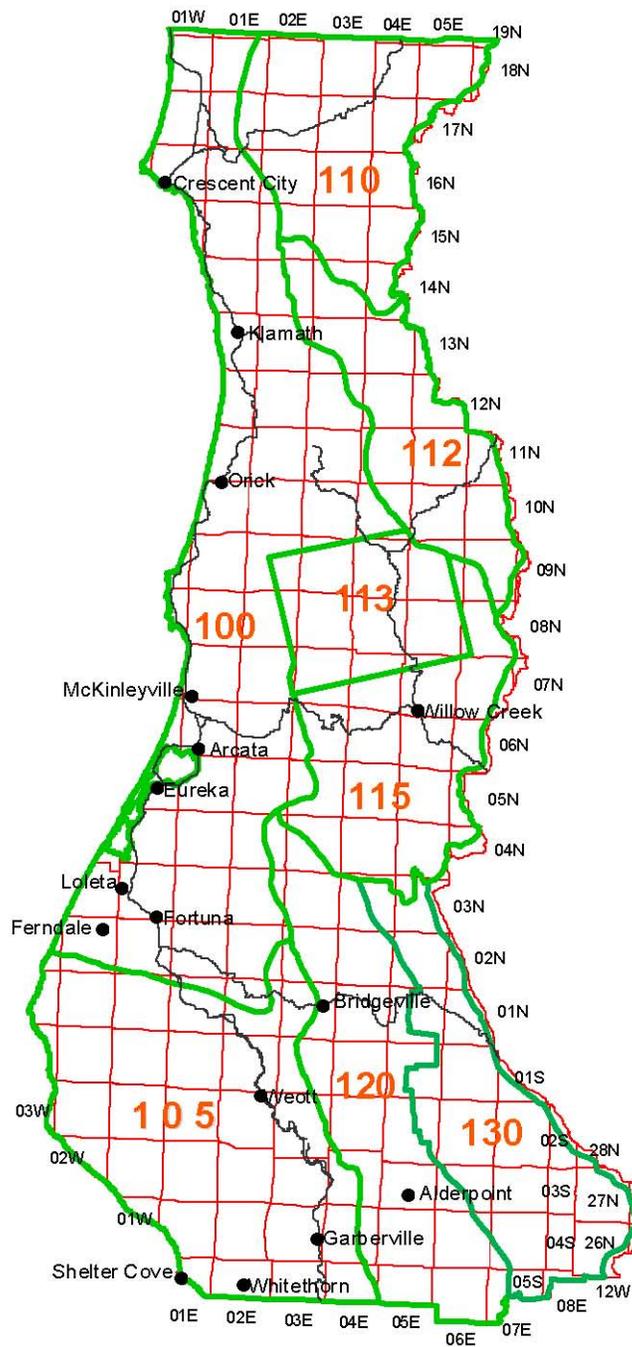
RAWS Name / Ownership

- Aberpoint HUU
- Est River HUU
- Gasquet SRF
- Hopps HA
- Maple Creek HUU
- Mad River SRF
- Schoonhouse RWP

hau_nrlirs

HUU/NFDRS Zones

- 100 HUU
- 105 HUU
- 110 SRF
- 112 SRF
- 113 HA
- 115 SRF
- 120 HUU
- 130 SRF



National Fire Danger Rating Zones

Located on the northeastern fringes of the City of Eureka, this area creates an interface problem. Many housing subdivisions back up to open forest that is zoned timber production and is being logged. The logging not only changes the fuel hazard type, but the activity itself can contribute to fire “starts”. The Unit and Humboldt Fire District typically control one or two fires a year within this general area.

Prioritized Fuel Reduction Areas

Description of priority areas

- Cathey Road / Avenue of the Giants

The Avenue of the Giants Corridor is located in the Southern portion of the Unit. The area extends from Pepperwood to Phillipsville and has many small communities along its path. Property ownership is a checkerboard of Humboldt Redwoods State Park and private property. There are many homes in this area as well as the old growth Redwoods, parks and rivers.



“Cathey Road
Clearance Project”
Part of the 2002 BLM WUI grant
Humboldt County Community Chipper Program
Completed in 2003

- Shelter Cove

Located in the southwestern portion of the Unit, this area is a resort district with a hazardous fuel buildup. Additionally, this area is subject to a strong on shore wind that is fierce at times and is can be accompanied by low humidities. Shelter Cove is a high use recreation area in the summer, not only for it’s ocean water sports but it also serves visitors to the King Range Conservation Area and the famous Lost Cost.

Shelter Cove Road
Shaded Fuelbreak
2003 USFS WUI Grant

Completed in 2004

- Mattole Valley/Prosper Ridge/Wilder Ridge

Many small communities represented this area. The potential for a large damaging fire in this area is significant. The fire history is also significant, some of the largest fires in the Unit have occurred in this area. This area has an apparent microclimate that supports the more extreme aspects of fire weather.

“Gypsie Residence Fuel Clearance” part of the 2002 WUI grant for Humboldt County Community Chipper Program



Completed in 2003

- Arcata Community Forest

The Arcata Community Forest is situated on the boundary of the City of Arcata. This area presents an interface problem to the many neighboring residents, Humboldt State University and the Pacific Northwest Experimental Station. The forest is a popular recreation area for residents throughout Humboldt County and is often host to many social events. The exclusion of fire has led to a hazardous fuel build up as well an unhealthy forest.

Arcata Community Forest Shaded Fuelbreak 2003 BLM WUI Grant



Completed in 2004

- Humboldt Redwoods State Park

The Humboldt Redwoods State Park extends from Pepperwood to Garberville along the Hwy 101 corridor. There are 52,000 acres within the park boundaries, of which 17,000 acres are old growth Coast Redwood. The park is well known for its enormous old growth Redwood trees, many campgrounds and waterways. Humboldt Redwoods State Park is one of the counties feature attractions. Over 750,000 people come from all over the world to visit the park each year. The park has had an active prescribed burning program for many years and seeks to maintain that program with the cooperative efforts of the Unit.



Understory VMP along the “Avenue of the Giants” in the Humboldt Redwood State Park

- Klamath River Drainage

This area is located “down river” from the Hoopa Reservation on Hwy 96 and represents the most easterly portion of the Unit. It is an area that is home to people from many different Native American tribes including the Yurok. This area has a significant fire history. While the population density is sparse the resources that stand to be lost are tremendous. This includes the Klamath watershed and associated wildlife as well as timber. Additionally, prescribed burning helps facilitate the collection of hazel stick and bear grass, key components to Native American basket weaving. This is a critical asset to maintaining the disappearing craft of the culture.

“Creasy Property” understory



burn conducted by the Orleans / Somes Bar Fire Safe Council
Completed in 2005.

- McKay Tract



The McKay Tract shown in the upper portion of this photograph.

DESIRED FUTURE CONDITIONS

Each target area has some unique assets that are targeted for one reason or another. However, in a general sense, the goals are the same. The reality is that we cannot “fix” the problems it took 50 years to create. With this thought in mind our goal is to increase public awareness of the conditions that do exist in hopes of spurring stakeholder interest in taking a more active role in the process. For many areas we hope to reduce the fire hazard through fuel reduction and increase public and firefighter safety, by helping improve the means of egress.

Additionally, we hope to improve or maintain the many ecosystems that surround us in order to maintain the quality of life for the residents of Humboldt, Del Norte, and Trinity counties. This would include cultural burning to help maintain the Native American culture.

Area Accomplishments

Humboldt County

Humboldt County Fire Safe Council received approximately \$25,000 of Title III money in 2003 which went to the County of Humboldt Community Development for council administration and formation. The FSC is in the process, along with the Humboldt County Planning Department and it’s contractor, of developing the County’s Master Fire

Protection Plan, which is a major part of the overall operating plan for the county. The council is discussing gaps in fire protection service areas, Fire Department funding and staffing problems, along with other issues. Through the use of the plan, the County will be able to see where the critical need for improvement in the areas of fire protection, fuel reduction, education, and other needs exist. HUU staff are involved in an advisory role in this process.

Two other areas of Humboldt County have completed Community Wildland Protection Plans: 1) Lower Mattole Fire Plan for the Lower Mattole Fire Safe Council and 2) Upper Mattole Fire Plan for the Southern Humboldt Fire Safe Council. Both plans were funded with monies from USFS Community Development grants. HUU staff were involved in an advisory role in each of these plans.

Del Norte County

The Del Norte County Fire Safe Council in cooperation with the Del Norte County Board of Supervisors has used monies from a Title III grant to develop a countywide Community Wildfire Protection Plan (CWPP). The plan is in its final stages pending Board of Supervisors adoption. HUU staff have been involved in an advisory role during this process.

Trinity County

The Trinity County Fire Safe Council has been holding monthly meetings addressing the various projects, and plan processes that they are involved in. HUU staff have attended regularly in an advisory role.

Action Plan

The Unit's action plan is identified by three categories. Completed projects are those that have been completed this current year. Ongoing projects are those that currently exist under a Vegetation Management Program (VMP) or funded through a Wildland Urban Interface grant (WUI) and are assumed to be ongoing with a contract renewal over the next 5-year period. Planned projects are those that are either in a VMP contract, WUI grant application stage or in an alternative cooperative fuel reduction effort. Some planned projects are in the concept stage only. It should be noted that the following list of projects are only those being undertaken by the Humboldt - Del Norte Unit and do not reflect the many projects that the Unit's local Fire Safe Councils are involved with on their own.

Completed Projects

- Arcata Community Forest Fuel Reduction 2001 WUI USDA
- Crescent City / Hambro Hwy 101 2003 VMP RX-North-045-HUU
- Del Norte County Chipping Program 2002 WUI BLM
- Humboldt County Chipping Program 2002 WUI BLM
- Shelter Cove Shaded Fuelbreak 2003 WUI USDA
- Arcata Community Forest Fuelbreak 2003 WUI BLM
- CCC Summer Work Program 2004 Humboldt Co. Grant

On Going Projects

- Humboldt Redwoods State Park VMP: Understory Burns & Prairie Burns
- Stewart Ranch VMP: Grazing Land Improvement
- Redwood National Park VMP: Prairie Burns
- Klamath River Drainage VMP: Cultural Burns

Planned Projects

- Johnson Ridge Shaded Fuel Break

This project is a joint venture with the Del Norte County Fire Safe Council, Green Diamond Timber Company, and HUU. The project will construct an 11 mile long shaded fuelbreak along Johnson Ridge, in Humboldt County that will separate Redwood National Park lands from lands owned by Green Diamond Timber Company. Removed vegetation will be either chipped or burned.

- Hobbs-Wall Fuel Reduction Project

This project is a joint venture with the California Department of Fish and Game, the Del Norte County Fire Safe Council, and HUU. The Hobbs-Wall mill site in the community of Crescent City (Del Norte County) is owned and managed by DF&G. The area has been developed for public use (hiking, and wildlife observation). In the past couple of years the area has been allowed to become overgrown, creating a potential problem with fire starts, transient encampment, refuge dumping, and public safety. HUU crews will mitigate the existing problem of the hazardous fuel build-up by cutting and chipping the vegetation on site. The buffer zone will not only help with future fire suppression efforts in the area (yearly average 2 to 3 fires) but will also create a safer environment for the public who wish to use the area.

- Humboldt-Del Norte Unit Assessment: WUI 2006 BLM Proposal

This grant proposal for \$30,763.00 will aid in the collection of data from throughout the Unit comprised of Humboldt, Del Norte, and southwestern Trinity counties. This data will be used to assess areas of need, plan projects to mitigate problem areas, and inform and educate the public at large of the potential fire problems within the Unit that could result in loss of life and property. The data that is gathered will be used by a variety of agencies within the Unit to help form a consolidated effort in the formation of fuel removal projects, fuelbreaks, and greenbelt projects.

- Humboldt-Del Norte Unit Prevention & Defensible Space: WUI 2006 BLM Proposal

This grant proposal for \$146,729.00 will increase community outreach in the wildland intermix areas through public education programs in schools and communities. It will also improve fire prevention awareness through the use of roadside signs, cooperative development and distribution of a “Living with Fire in Northwest California” annual publication. In addition an increased distribution of defensible space information will be made available to the public through home visits by local fire departments.

- Humboldt County Chipper Program/Phase II: WUI 2005 BLM Proposal

This grant proposal in the amount of \$36,225.00 will continue the Humboldt County chipping program started in 2002. Target areas will be assessed, and prioritized for need. One hundred crew days have been allotted for cutting and chipping vegetation to improve egress and ingress for the public and emergency personnel and vehicles.

- Del Norte County Chipper Program/Phase II: WUI 2005 BLM Proposal

This grant proposal in the amount of \$24,524.00 will continue the Del Norte County chipping program started in 2002. Target areas will be assessed, and prioritized for need. Fifty crew days have been allotted for cutting and chipping of vegetation to improve egress and ingress for the public and emergency personnel and vehicles.

Planned Projects Not Implemented

- Telegraph & Wilder Ridge Shaded Fuel Break: WUI 2004 BLM Proposal

Withdrawn by HUU: unable to carryout contracting with local vendors to do local projects without going through statewide bidding process.

- HUU Assessment and Data Collection: WUI 2004 USDA Proposal

This grant was funded, but due to the “Biscuit Fire” of 2004 monies were redirected to fire suppression efforts. Grant was resubmitted through BLM process in 2005 and had funding declined. Proposal is currently being resubmitted thru 2006 BLM process.

- HUU Prevention and Defensible Space: WUI 2004 USDA

Funding declined, resubmitted thru 2006 BLM process.

Map of the proposed 2004 WUI BLM



WUJ-2004
Wilder Ridge Shaded Fuel Break
 Between the communities of Whitethorn and Honeydew, Humboldt County, California
 15 miles (270 acres) total along the Eitersburg / Wilder Ridge Road

© Garmin Corporation 1999-1999

Grant for the “Telegraph & Wilder Ridge Shaded Fuelbreak” project.

Treatment of Structure Ignitability

The Humboldt-Del Norte Unit contains many communities that are threatened with potential loss of life and property due to wildfires. These and many other communities in California are subject to threats from wildfire, yet thousands of homes continue to be constructed every year that are not safe for fire prone areas.

Due to major wildfires that have occurred in California, various statues and regulations have been enacted to combat the ever-increasing threats to lives and property due to wildfire. Laws have been enacted to govern fire safety in regards to vegetation management, land use and more. However, aside from fire retardant roofing requirements, little had been accomplished at the state in regards to adoption of “Fire Safe” building standards for homes and other structures.

With passing of Assembly Bill 1216 in January 2005, the California State Fire Marshall (SFM) was given statutory authority to expand fire safety building standards in areas with high fire risk to include components such as: roofs, exterior walls, attic eave vents, windows and structure projections including porches, decks, balconies, and eaves.

(see PRC 4291 & Gov. Code 51189 on page 49 that apply to this law)

This law will reduce the spread of fire to and from structures and will save lives,

minimize property loss, and protect the environment.

Make Your Home FIRE SAFE

100' DEFENSIBLE SPACE

Contact your local CDF office, fire department, or Fire Safe Council for tips and assistance.
www.fire.ca.gov

100 YEARS OF CDF
 Preserving Our Landscapes • Protecting Our Future

A Quick Checklist

Following these simple steps can dramatically increase the chance of your home surviving a wildfire!

- Create a **DEFENSIBLE SPACE** of 100' around your home. The area closest to your home is the most important.
- Try to get 10 to 15 feet of spacing, both vertically and horizontally between shrubs, large plants, and trees. If you have a 4-foot high bush underneath larger trees with limbs, limb up the tree at least 14 feet. This eliminates the "fuel ladder" to the tops of trees. Breaks like this in the vegetation help to slow down an advancing fire and gives firefighters a fighting chance.
- Plan your landscape to eliminate a continuous path of vegetation. Do not have any combustible fuel within three feet of your home.
- For landscaping purposes, use of irrigated fire-resistant plants is encouraged. Green lawn, rock, stone, and other materials can be used to create an attractive and fire safe landscape.
- Clear all vegetation and other flammable materials from beneath your deck. Enclose undersides of elevated decks with fire-resistant building materials, or with screen mesh with openings no greater than 1/4 inch.
- Keep trees trimmed at least 10' from your chimney and trim all dead limbs hanging over your house or garage.
- Clean all needles and leaves from the roof, eaves, and rain gutters.
- Maintain your landscaping with regular watering and weeding to keep it fire safe.

More than 1,700 structures are destroyed by wildfire each year just within CDF's jurisdiction. Don't become a statistic...

Be Fire Safe, California!

May 2005

Public Resources Code 4291

(g) Prior to constructing a new building or structure or rebuilding a building or structure damaged by a fire in such an area, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government **Code**, and shall provide a copy of the certification, upon request, to the insurer providing course of construction insurance coverage for the building or structure. Upon completion of the construction or rebuilding, the owner shall obtain from the local building official, a copy of the final inspection report that demonstrates that the dwelling or structure was constructed in compliance with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government **Code**, and shall provide a copy of the report, upon request, to the property insurance carrier that insures the dwelling or structure.

Government Code 51189

(a) The Legislature finds and declares that space and structure defensibility is essential to effective fire prevention. This defensibility extends beyond the vegetation management practice required by this chapter, and includes, but is not limited to, measures that increase the likelihood of a structure to withstand intrusion by fire, such as building design and construction requirements that use fire resistant building materials, and provide protection of structure projections, including, but not limited to, porches, decks, balconies and eaves, and structure openings, including, but not limited to, attic and eave vents and windows.

(b) No later than January 1, 2005, the State Fire Marshal, in consultation with the Director of Forestry and Fire Protection and the Director of Housing and Community Development, shall, pursuant to Section 18930 of the Health and Safety Code, recommend building standards that provide for comprehensive space and structure defensibility to protect structures from fires spreading from adjacent structures or vegetation and vegetation from fires spreading from adjacent structures.



**Cooks Valley area
Humboldt / Mendocino
County line on the Hwy 101 corridor.**

Information drawn from a variety of sources is included in the following pages to help educate the public as to what they can do to help mitigate potential problems associated with living in the Wildland Urban Interface (WUI).

What is Pre-Fire Management?

California Department of Forestry and Fire Protection

Since 1923, more than 15,000 homes and other structures have been damaged or destroyed by wildfires in California. By placing the emphasis on what needs to be done long before a fire starts, Pre-Fire Management actions can reduce property losses, fire fighting costs, increase firefighter safety, and contribute to ecosystem health.

Pre-fire activities such as clearing a *defensible space*, putting in and maintaining *fire safe landscaping*, utilizing *prescribed fire*, creating *fuel breaks*, and practicing *forest management* are proven methods of reducing wildfire destruction.

In 2003, over 3,700 homes were destroyed by wildfires in Southern California alone. Pre-Fire Management is a term all Californian's living in a wildland setting need to know.



While the fire burned all around, defensible space, gave firefighters the chance to save this home.

Defensible Space

When you remove flammable vegetation and create a fire safe landscape of at least 100 feet, you create a "defensible space" - an area that will help protect your home and provide a safety zone for the firefighters who are battling the flames.

This defensible space around your home and other structures will not only provide you with the greatest chance for survival, it is also required by California law (PRC 4291). Check with your local fire department for defensible space requirements in your area.

Fire Safe Landscaping

Defensible space does not mean bare dirt. Fire safe landscaping around your home and other structures means:

- Using fire resistant plants with native species and green lawn;
- Spacing trees and shrubs at least 10 feet apart;
- Removing lower tree branches within six feet of the ground; and
- Maintaining your landscaping with regular watering and weeding.



Prescribed Fires/Vegetation Management Program (VMP)

The use of "prescribed" or intentionally set fire under controlled circumstances, can remove unhealthy and dangerously overgrown vegetation before a wildfire strikes. Prescribed fire projects reduce the risk of large damaging wildfires while improving the growing conditions of native plants and wildlife.

The CDF Vegetation Management Program (VMP) is a cost-sharing program with landowners that focuses on the use of prescribed fire, and mechanical means, for addressing wildland fire fuel hazards and other resource management issues on State Responsibility Area (SRA) lands.



A VMP burn removes the dense underbrush without killing the trees.

Fuel Breaks

Fuel breaks are wide strips of land on which trees and vegetation have been significantly, and in some cases permanently, reduced or removed. They may also be large greenbelt areas built into communities. These areas can slow, and even stop, the spread of a wildland fire because they provide fewer fuels to carry the flames. They also provide firefighters with safe zones to take a stand against a wildfire, or retreat from flames if the need arises.

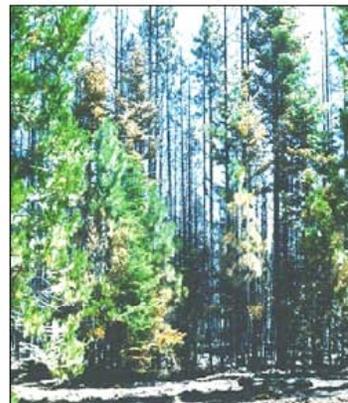


The varying pattern, and vegetation left throughout this fuel break, serves to blend better with the environment and maintains wildlife habitat.

Forest Management

Unthinned, unmanaged, densely-packed forested and vegetated areas provide ample fuel for flames to spread. Well-managed forests and wildland areas reduce fire hazard, improve forest health, wildlife habitat, and watershed resources.

This is an unthinned forest. The trees are densely packed. If flames get into this area they will easily spread from tree to tree.



This is that same area of forest after a wildfire burned through. Note the trees in the stand that have been completely scorched. If this forest had been managed through selective thinning many more trees would be left with their foliage.

January 1, 2005



Fire is a Fact of Life

California is home to some of the most scenic views in the world. The natural beauty and mild Mediterranean climate have attracted millions to walk in the foothills, deserts and coastal valleys.

But living in California means learning to live with fire. That's become our scenic view as fire-dependent. Fire creates seed catalogs, allowing our native plants to thrive. And it clears out dead brush that can choke living plants and cut off food for wildlife.

So why are today's fires so devastating, destroying our neighborhoods, taking our homes, possessions and even lives?

The answer lies in our own backyard.

Your Best Defense Against Fire

Firefighters require 16 1/2 feet of fire, but when fire will burn through an area, that's not nearly enough fire engine to protect your home. Firefighters need your help to give your home a fighting chance.

The single most important factor that will help your home stand alone against fire and give firefighters a base to battle the flames is A FIRE SAFE LANDSCAPE.

What is a Fire Safe landscape

A fire safe landscape uses fire resistant plants that are strategically placed to resist the spread of fire to your home.

The good news is, you don't need a lot of money to make your landscape fire safe. And you will find that a fire safe landscape can increase your property value and conserve water while beautifying your home.

The California Fire Safe Council is a broad-based partnership involving California through education and advice programs because we believe fire prevention and loss reduction are everyone's business.

Contact your local Fire Safe Council for more information about fire safe landscaping and other steps you can take to increase your home's chance of surviving a wildfire.



California Fire Safe Council
P.O. Box 3104
Oakland, CA 94760
510/733-7226
www.fire-safe-council.org

Works provided by a National Fire Plan Grant through the USDA Bureau of Land Management (www.blm.gov) and in collaboration with the California Department of Forestry and Fire Protection (www.fire.ca.gov).



FIRE SAFE
LANDSCAPING

How to Protect
Your Home Against
Wildfire Destruction

Defensible Space

Define the space in the back around your house that will give firefighters a fighting chance against fire. It means clearing all dry grass, brush and dead leaves of least 20 to 100 feet from your home.

The key here is "at least." Your local fire department may ask for greater clearance. Consult them for requirements in your area.

Define the space and a fire safe landscape don't mean a strip of bare dirt around your home. While establishing your landscape, keep trees farther from your house, shrubs can be close, and walking paths and lawns are around the house.

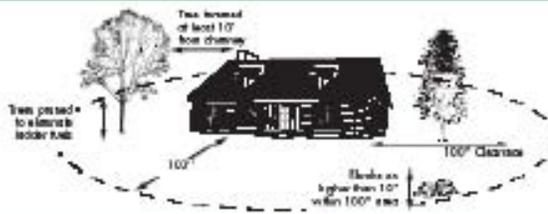
Your home may be the biggest investment you ever make. Protect that investment by following the steps in this brochure to create a fire safe landscape.

Planning

- Assess your fire risk. Is your home on a hill? Are you near highly flammable olive vegetation or drought-damaged ornamental plants? If your answer is yes, your fire risk is greater than average.
- Consult your local fire department for fire hazard ratings in your neighborhood.
- Plan your landscape to reduce the amount of flammable vegetation around your home. Establish defensible space.
- Consider installing your home security or a landscape contractor to help plan your landscape.

Pruning

- Eliminate the "tree ladder." Fire starts fast in trees. You can stop its climb by cutting 2 of the middle main branches of vegetation that are very flammable from your landscape to your house.
- Group plants of similar height and water requirements to create a "landscape mosaic" that can slow the spread of fire and use water most efficiently.
- Space trees at least 10 feet apart, and keep branches trimmed of least 10 feet from your roof. For trees taller than 10 feet, prune lower branches within an inch of the ground.



- Install fire resistant, drought-tolerant plants that have a high moisture content. Use plants that do not accumulate dead leaves or twigs.
- Use masonry or stone walls to separate plant groups and add variety to your landscape.

Watering

- Choose the right irrigation system. While all plants will eventually turn, healthy plants turn less quickly. Your plant selection and water practices will determine the right system for you.
- Consider drip irrigation for watering most of your landscape. It's efficient and conserves water because it targets where the water goes and how much gets there.
- Use sprinklers for trees or hot landscaping. Drip irrigation does not work well on leaves. Sprinklers on leaves ensure your trees get the right amount of water to keep it healthy and fire resistant.

Maintenance

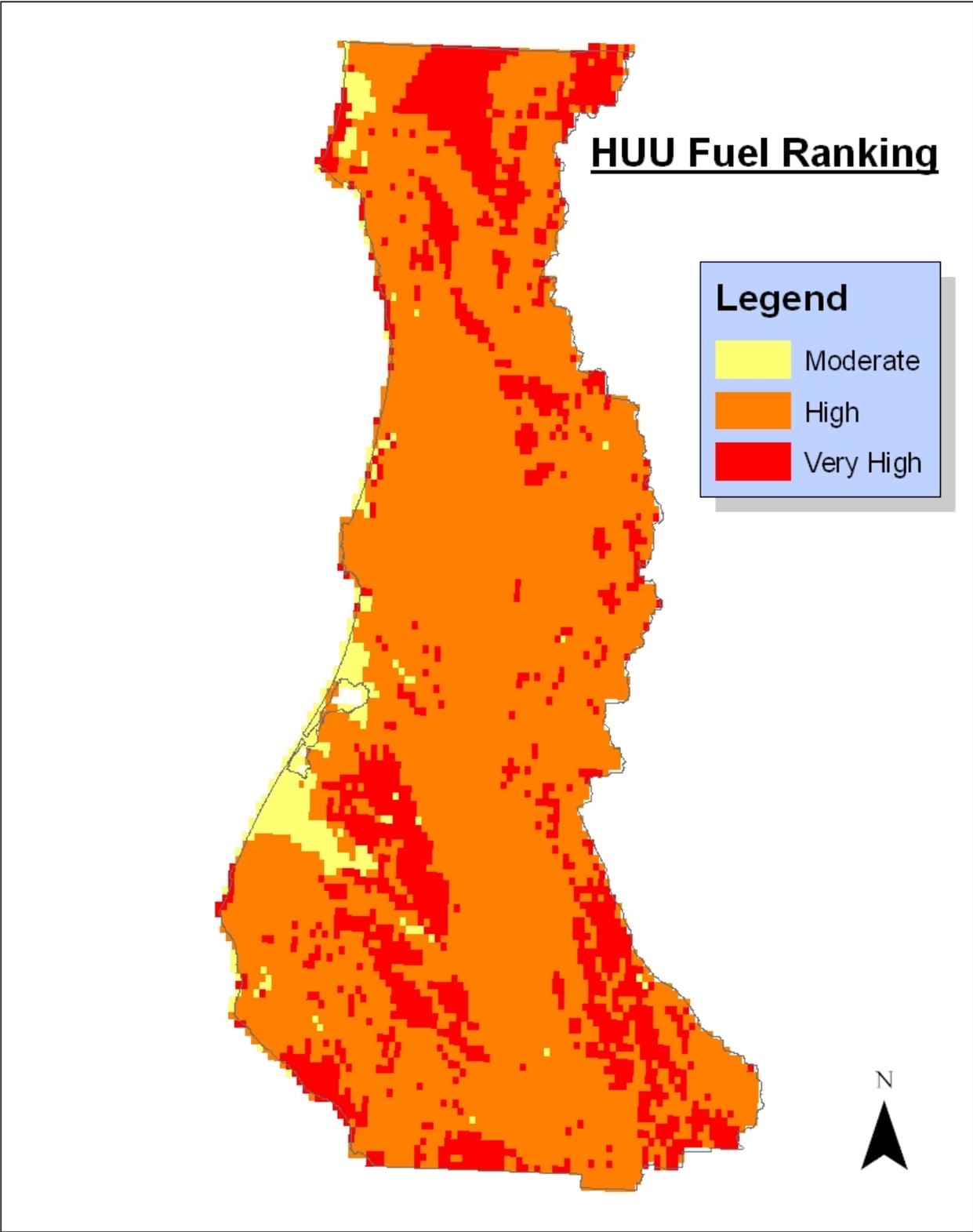
- Keep your landscape healthy and alive. On a regular basis, remove dead branches, leaves and pine needles from your yard. These can serve as added fuel to a fire.
- Prune and thin shrubs, trees and other plants to minimize the fuel load.

- Be diligent about cleaning up, especially during fire season. Remove dead shrubs from under the plants as well.
- Involve your gardener. If a gardener cares for your property, ask him or her to include these regular maintenance steps as part of the regular service.
- Recycle, reuse just plant material. Participate in your community's green waste recycling program. You can also compost plant life and create a money-saving alternative to store bought soil and mulch. Composting is another time and money-saving way to make your green waste work for you.

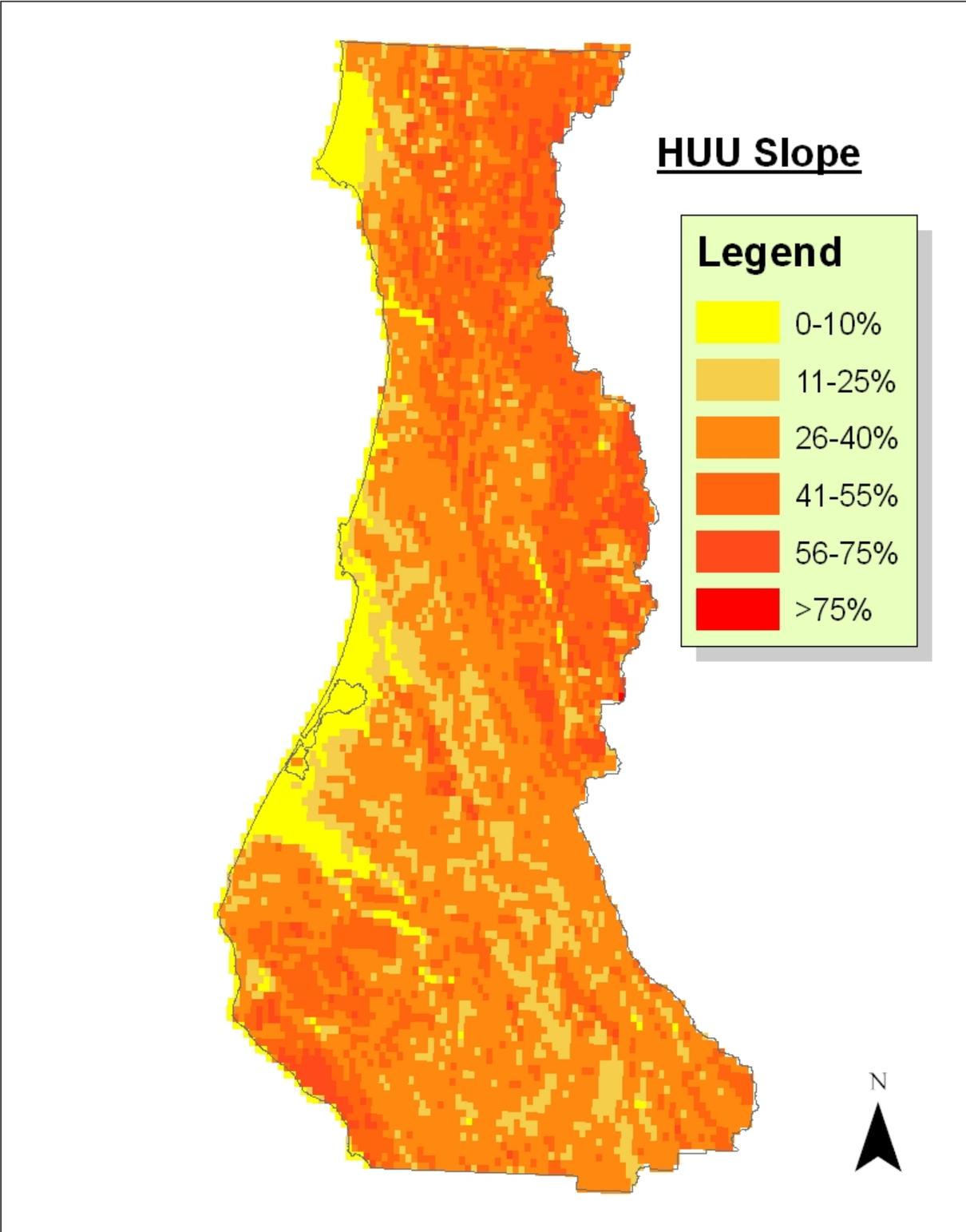
California Fire Safe Council

The California Fire Safe Council's mission is to prevent and reduce California's nonresidential residential losses by providing leadership and support that motivates all Californians to protect their homes, communities and environment from wildfire.

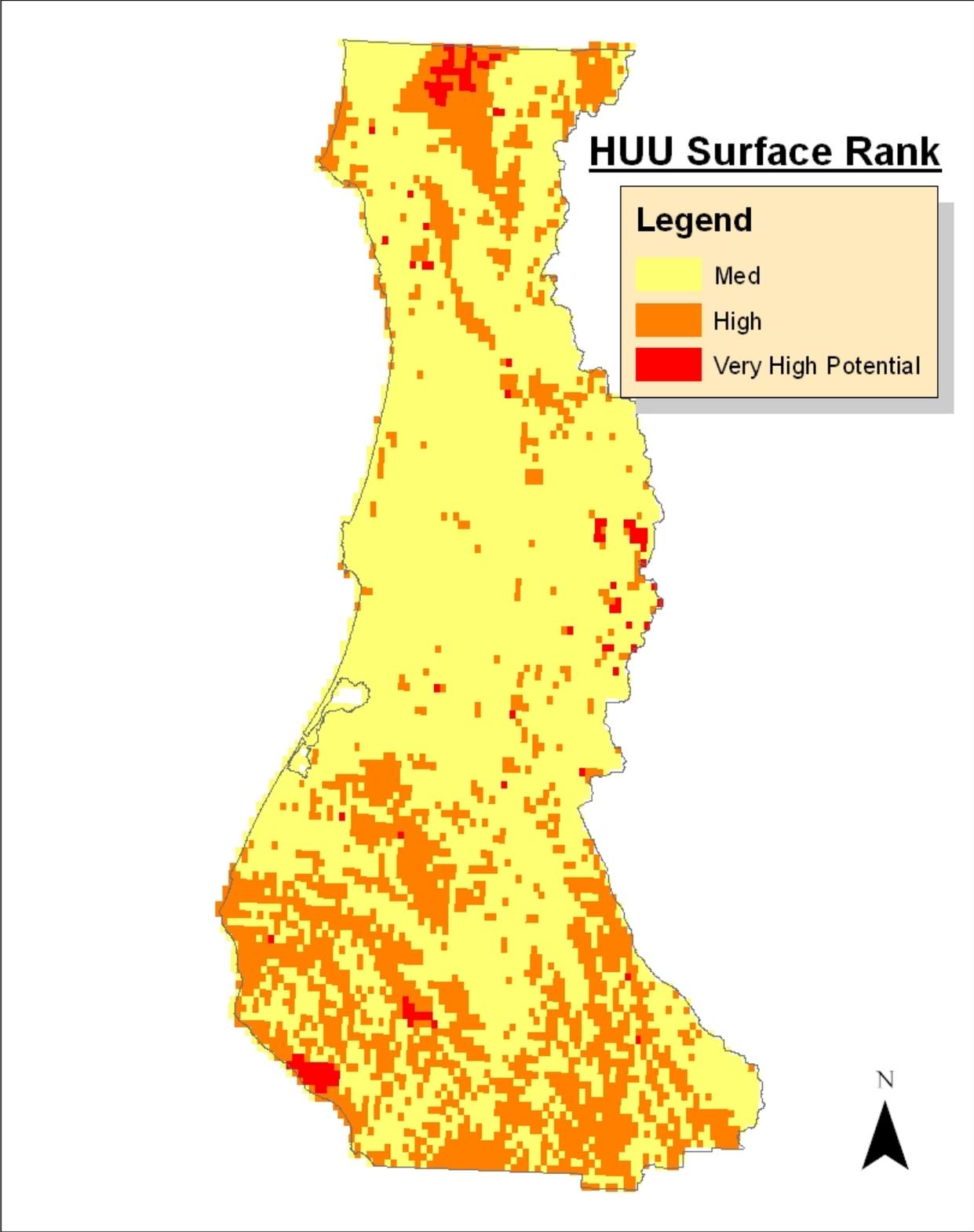
The California Fire Safe Council has more than 10 years of leadership in bringing together private individuals, local organizations, industry groups, government agencies and others for effective prevention and response activities.



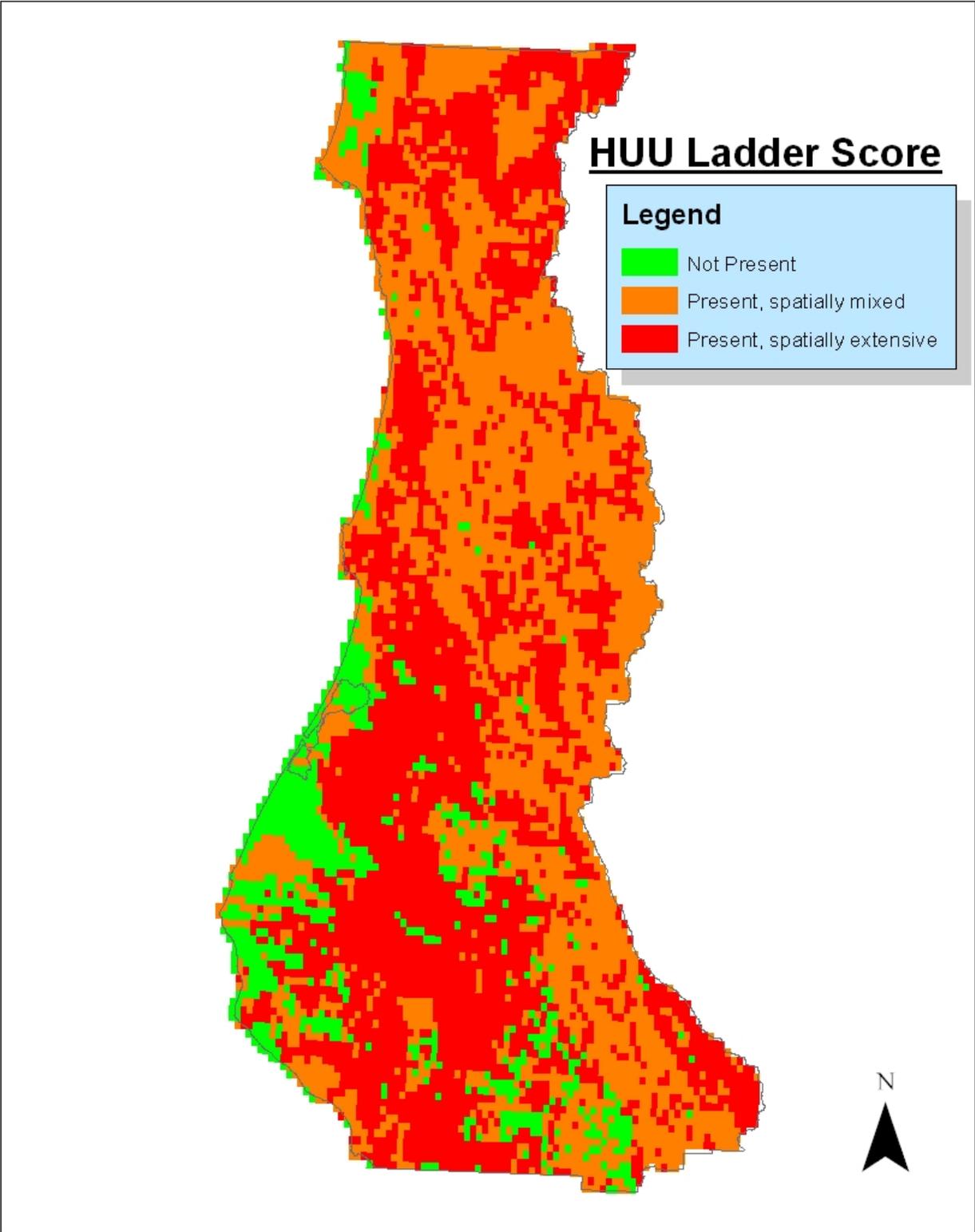
Appendix 1



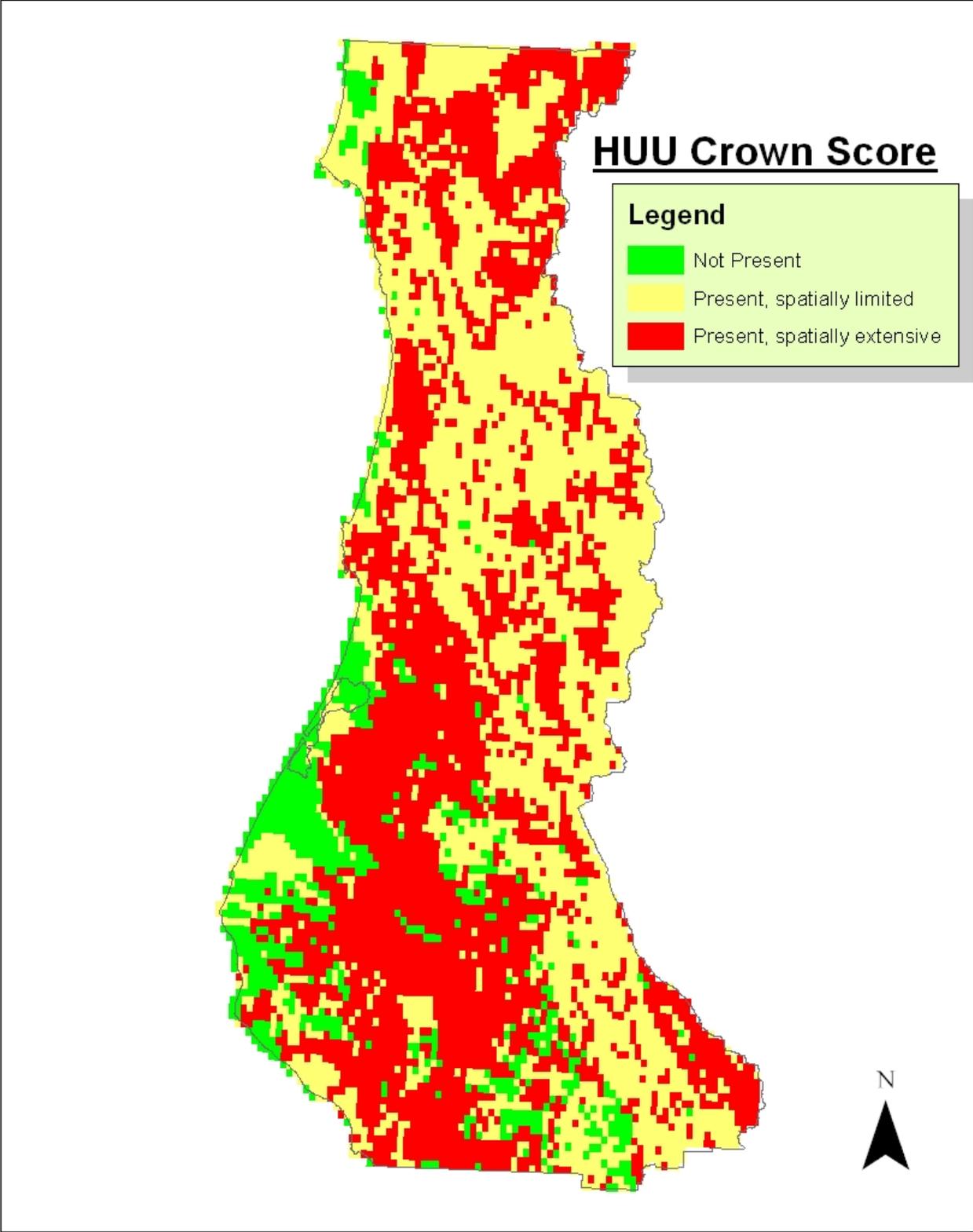
Appendix 2



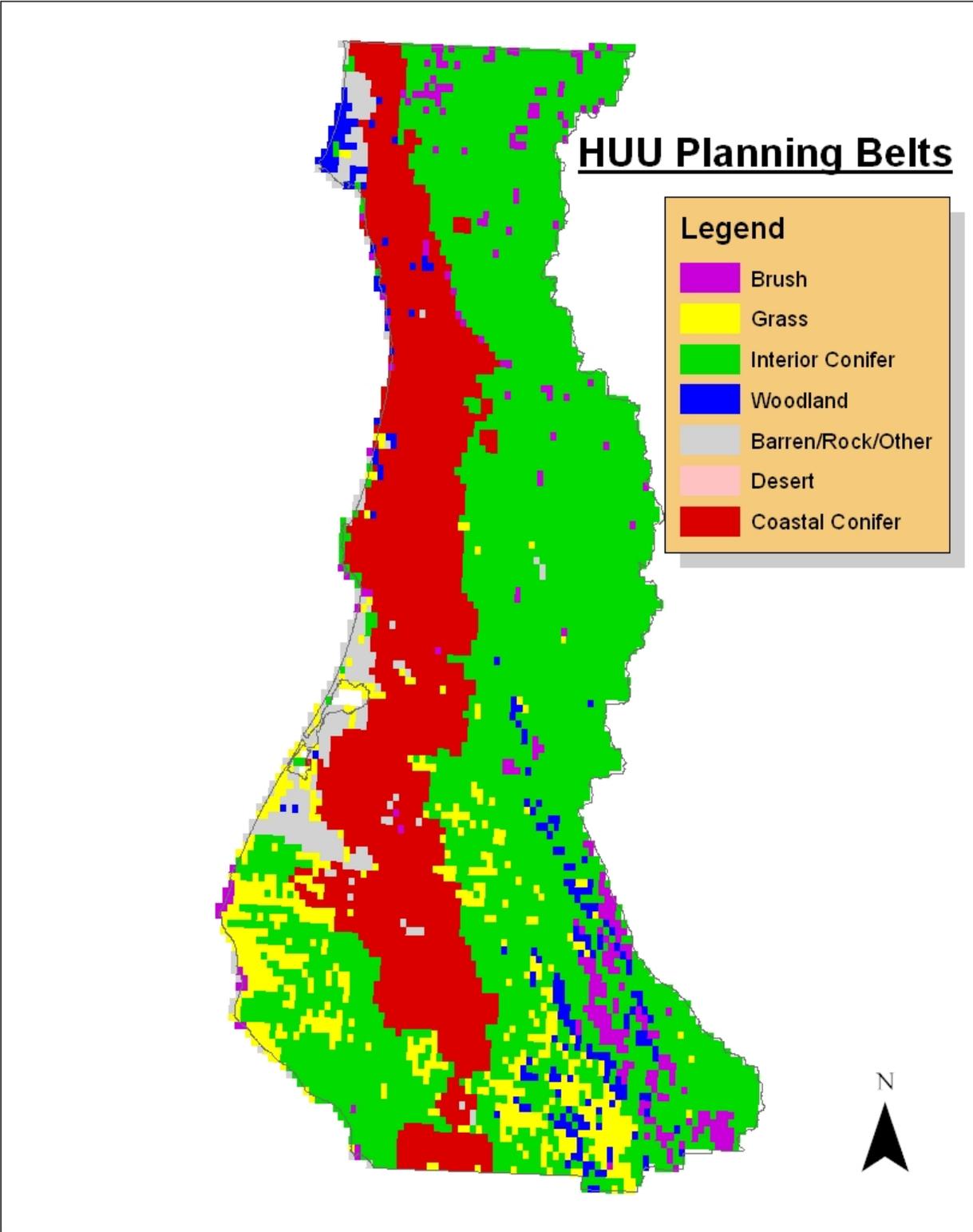
Appendix 3



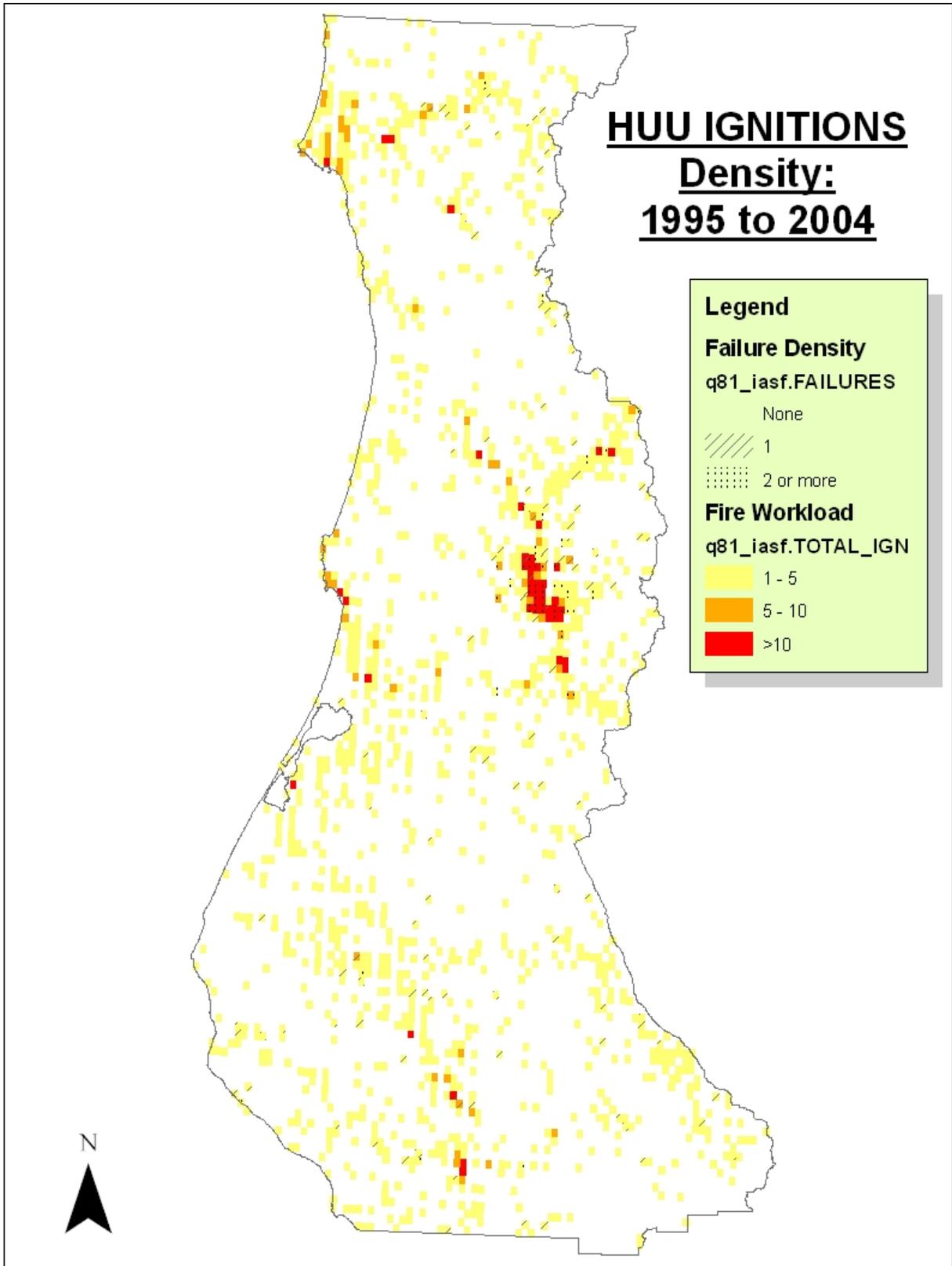
Appendix 4



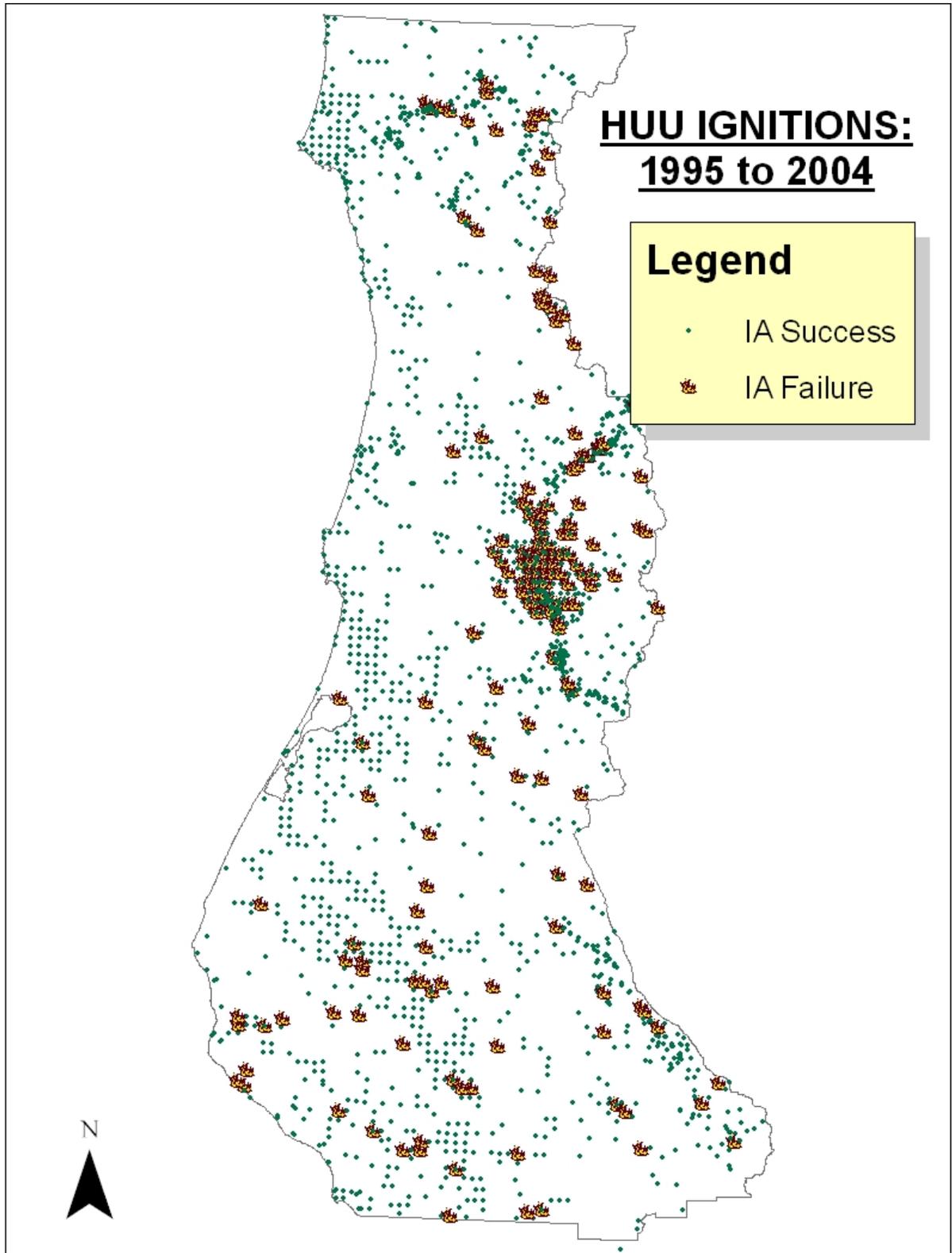
Appendix 5



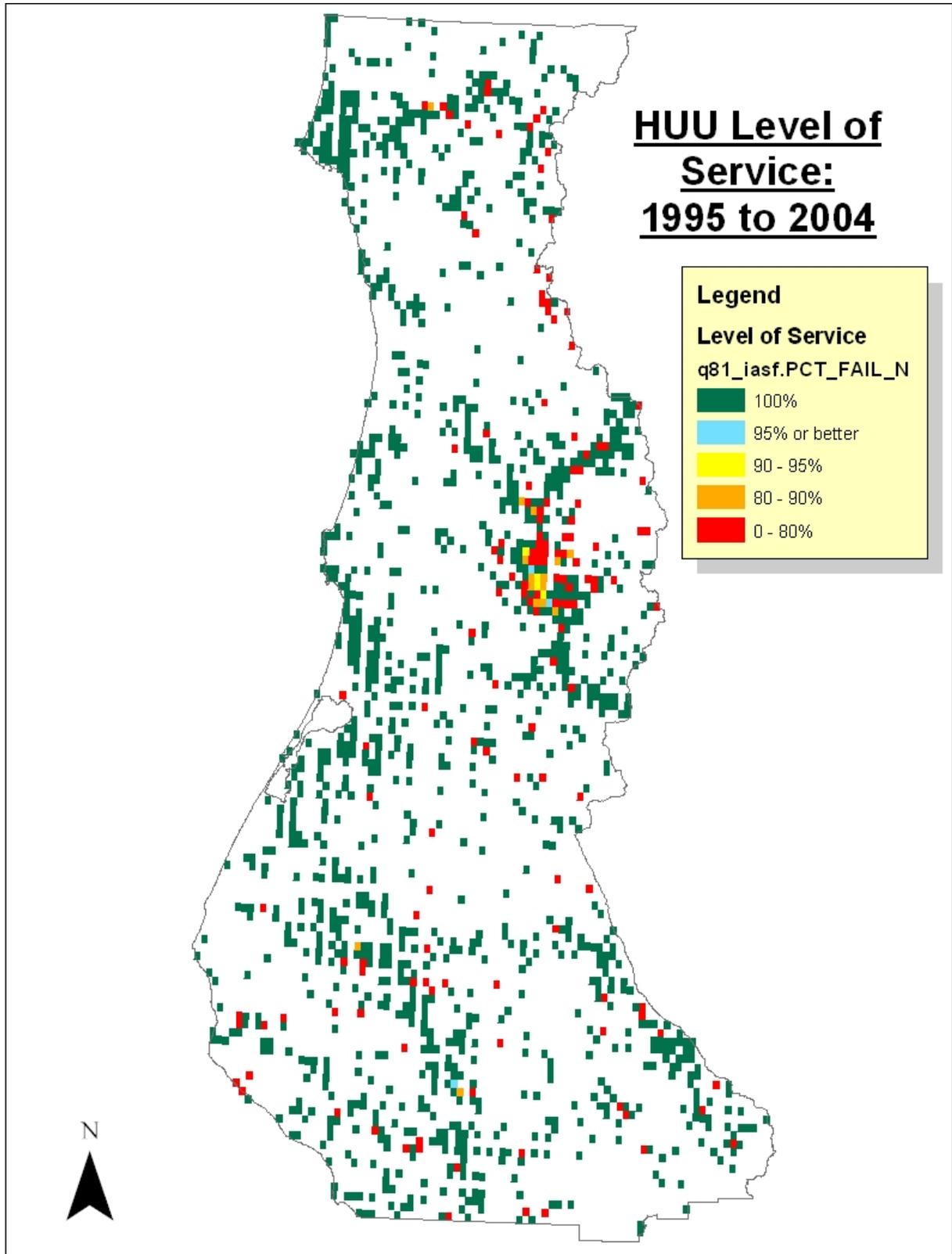
Appendix 6



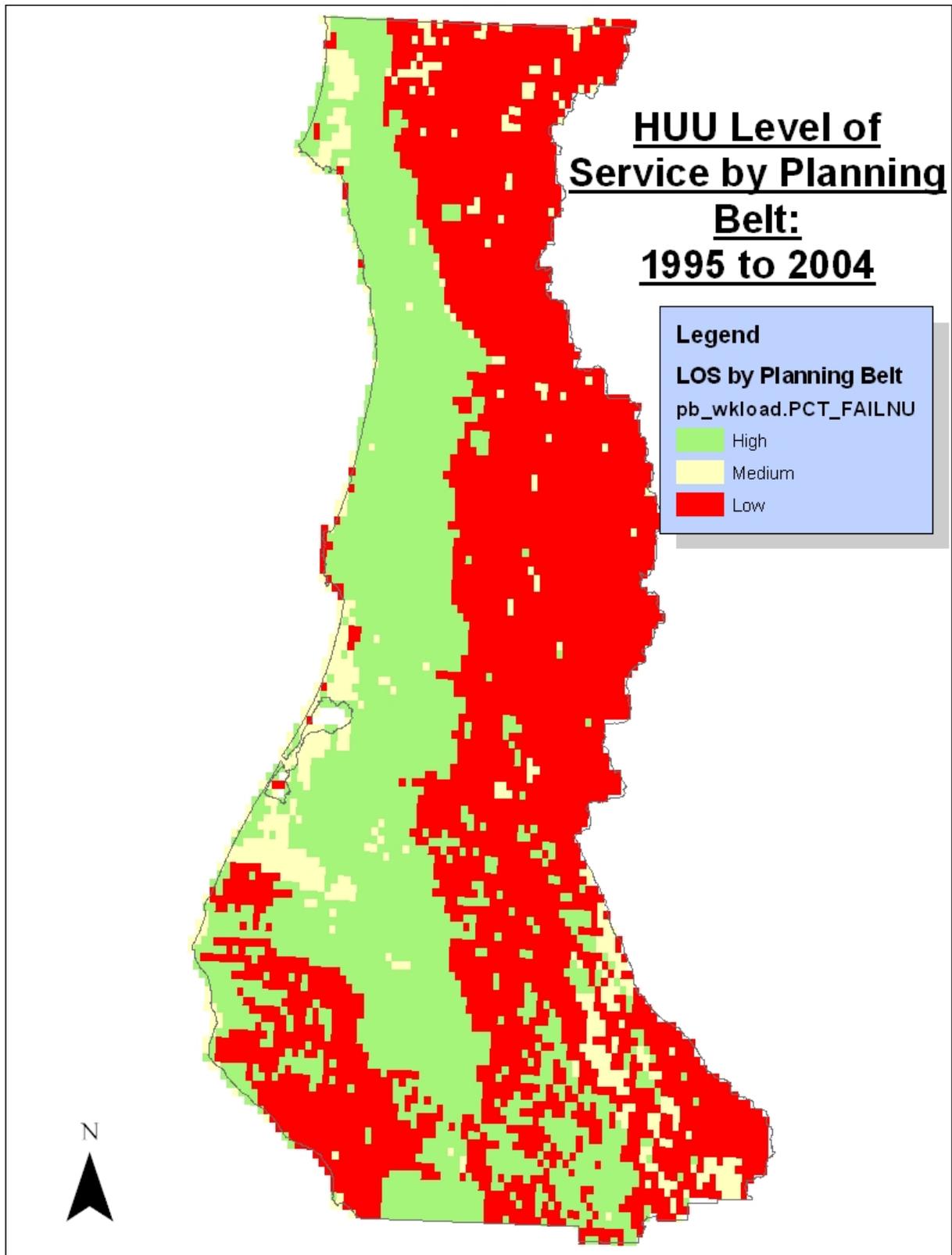
Appendix 7



Appendix 8



Appendix 9



Appendix 10