

COMMUNITY WILDFIRE PROTECTION PLAN

CHITINA, ALASKA

June, 2007

Prepared for:

The Chitina Community

By: Native Village of Chitina's Natural Resource Department, Chitina Volunteer Fire Department, State of Alaska Division of Forestry and the Bureau of Indian Affairs

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Chitina

Community Wildfire Protection Plan

Executive Summary

The Chitina Community Wildfire Protection Plan (CWPP) is a collaborative effort that has been in response to the 2003 Healthy Forest Restoration Act (HFRA) which directs communities at risk for wildfire to develop a risk assessment and mitigation plan. Guidance for the Chitina Community Wildfire Protection Plan is based on Preparing a Wildfire Protection Plan: A Handbook for Wildland Urban Interface Communities (March 2004) and the Alaska Wildland Fire Coordinating Group CWPP outline.

The Copper River Basin has seen the second largest infestation of the Alaska Spruce Bark Beetle in the State of Alaska, the result of over a decade of this epidemic is heavy fuel loadings of standing and fallen beetle killed spruce and a steady decline in the health of the remaining forest. These conditions set the stage in the Chitina and McCarthy corridor for catastrophic wildfire in an area that has not burned since the 1920's.

- **Collaboration:** This CWPP is a collaboration of the Native Village of Chitina, the Chitina Volunteer Fire Department, State of Alaska Division of Forestry and the members of the Chitina Community.
- **Prioritized Fuel Reduction:** The State of Alaska Division of Forestry completed a hazard/risk assessment of the vegetation within the Chitina Wildland/Urban Interface Boundaries, and the Native Village of Chitina has contracted a GIS specialist to convert these layers to a GIS Community Profile Map completed by McKlintlock Associates. This map will identify the areas that pose a hazard to the community and can then be prioritized as to method and type of mitigation needed.
- **Structural Ignitability:** Defensible Space from vegetation has been provided to most homeowners in the Chitina WUI Boundary through the Native Village of Chitina's Hazardous Fuels Reduction Project, however there still remains many man made objects, such as fuel tanks and vehicles, against or adjacent to structures that could cause or contribute to the ignition and/or spread of fire.

Wildland Urban Interface Boundary

A Wildland Urban Interface Boundary is the line where human development meets and intermingles with undeveloped wildland or vegetative fuels. The Chitina Wildland Urban Interface Boundary was designated along the canyon walls surrounding the community and incorporates all of the residents and infrastructure of the area. The goal is to mitigate the potential for disaster within this boundary, by recognizing the hazards, prioritizing and then developing a workable action plan with clear goals and objectives.

Project Methodology

PLANNING PROCESS

In the spring of 2006, the Chitina Traditional Indian Village Council saw the need for a formal Community Wildfire Protection Plan. Working with Chitina Volunteer Fire Chief, Dean Lenard and Area Forester, Gary Mullen Natural Resource Director for the CTIVC, Carrie Hale began the documentation process and worked with Firewise consultant, Arlene Webersword on the application to become a Firewise Community.

PREPARATION

The CTIVC requested a Fuels and Hazard Assessment form Division of Forestry's Area Forester, Gary Mullen. The assessment was completed and we contracted a GIS specialist to add the hazard risk assessment to the Chitina Community Profile maps.

COMMUNITY INVOLVEMENT PUBLIC OUTREACH

A draft presentation of our Community Wildfire Protection Plan was put on display for public involvement and comment at the Council's Fire Prevention Day June 25th, 2006. It remained on display at the community hall for additional community involvement. It was again put on display at the Chitina Tribal and Community Health Center's open house July 14th, 2006.

Surveys were sent out to the Chitina Community and surrounding area asking the residents to prioritize wildfire mitigation efforts in July, 2006

The completed draft including the hazard risk assessment and both state and local agencies recommendations, were displayed to the community and general public for review and comment at Chitina's Community Planning meetings April thru June, 2007.

Community Profile

Population:

118 (2004 State Demographer estimate)

Incorporation Type:

Unincorporated

Borough Located in:

Unorganized

Taxes:

No taxing authority

Local Governing Body:

Chitina Traditional Indian Village Council

Chitina is located on the west bank of the Copper River at its confluence with the Chitina River, at mile 34 of the Edgerton Hwy, 53 miles southeast of Copper Center. It lies outside the western boundaries of the Wrangell St Elias National Park and Preserve, 66 miles southeast of Glennallen. The community lies at approximately 61.515830* North Latitude and -144.43694* West Longitude, (Sec. 14, T004S, R005E, Copper Meridian.) at approximately 1200 ft elevation. Chitina is located in the Chitina recording district. The area encompasses 84.6 sq. miles of land and 11.1 sq. miles of water. The climate in Chitina is continual, characterized by long cold winters and relatively warm summers. Total annual precipitation averages 12 inches, with an average annual snowfall of 52 inches. Temperatures extremes from a low 58 to a high of 91 degrees Fahrenheit have been recorded. Chitina is usually 10 degrees warmer than its neighbor Kenny Lake.

Economy /Infrastructure

Businesses/Agencies/Offices

Local Businesses:

Paw and Feathers Trading, Fish wheel shop, Chitina Liquor, Uncle Tom's Tavern, Captain Kim's Goodtime Charters, Hotel Chitina, Spirit Mt. Artworks, Chitina Emporium, Chitina 1 Stop, Hem's Charters, Lenard Enterprise, Mobile Movers, Chitina House B&B, Dan's Tire and Auto, Chitina Corp RV park, Teral Enterprise, CRBRHA housing, Chitina Village Clinic, CNR Enterprise, Copper River Charters and Wrangle Mt. Technical

Local Organizations:

Chitina Traditional Indian Village Council, Chitina Native Corporation, Chitina Volunteer Fire Department, Friends of Chitina, Chitina Chamber of Commerce, Chitina Ambulance Service and CIAC.

Agencies:

National Park Service visitors center, Fish and Game office and DOT maintenance station.

Schools:

There is currently not a school in the Chitina area, the majority of school children attend the Kenny Lake School 20 miles away, and all others attend correspondence school from their homes.

Tourism:

Tourism is a vital part of Chitina's economy with most business depending on the summer influx of dipnetters and subsistence fisherman as well as the pass through of visitors to the Wrangell St-Elias National Park to sustain them through the winter months.

Subsistence:

Most residents depend on subsistence harvests of fish, wild game, berries and local gardening and agriculture as a vital part of our rural lifestyle.

Community Background

History, Culture & Demographics

Alaska Community Database Community Information Summaries

Athabascan Indians have reportedly occupied this region for the last 7,000 to 10,000 years. Archaeological sites are located to the south and east of Chitina. Chitina was historically a large native village whose population was slowly decimated by the influx of people, disease and conflicts.

Rich Copper deposits were discovered at the turn of the century along the northern flanks of the Copper River Valley, bringing a rush of prospectors and homesteaders to the area. The Copper River & Northwest Railway enabled Chitina to develop into a thriving community by 1914. After the mines closed in 1938, support activities moved to the Glennallen area, and Chitina became a virtual ghost town with only natives and a few non-natives staying. In 1963, the Nelson estate was purchased by "Mudhole Smith", a pioneer bush pilot, who sold off the town site and the buildings.

A federally recognized tribe is located in the community – The Chitina Traditional Indian Village. The population in the community consists of 48.8% Alaska Native or part Native. Students are home schooled or attend school in Kenny Lake, 28 miles away. Most Athabascan residents are involved in subsistence activities year round. During the summer, subsistence dip netting for salmon in the Copper River brings large numbers of Alaskans from all over the state. Gardening, berry picking, herb gathering and hunting are popular pursuits. Winter activities include trapping, snow machining, and ice fishing.

During the 2000 Census, total housing units numbered 54, and vacant housing units numbered 2. It showed that 39 residents were employed. The unemployment rate at that time was 32.69%.

Emergency Preparedness

DIVISION OF FORESTRY

The Division of Forestry has statutory authority to protect forested lands from wildfire on state, private and borough lands. The DOF has a contractual agreement with the BLM Fire Service under which the federal government protects state and private lands in the northern area outside of DOF jurisdiction in exchange for the state protection of federal jurisdiction and Native lands.

Division of Forestry's response time to Chitina

- Helicopter - 30 minutes
- Response Vehicle - 60 minutes

CHITINA VOLUNTEER FIRE DEPARTMENT

FIRE FIGHTING CAPABILITIES OPERATIONAL VEHICALS

- Water Tender 5000 gal T-1 -Fair
- Structural 4-Mini Pumper 141-Good
- Structural 1- Pumper 121- Fair
- Structural 1- Pumper 111- Poor
- Structural 1- Pumper 112- Poor
- Structural 1-Pumper 113- Poor

The Chitina Volunteer Fire Department has structural jurisdiction and Initial Attack responsibilities from the Tonsina River on the Edgerton Hwy to the Chokosna River on the McCarthy Road with the exception of Mile 2-18 of the McCarthy Road that is the Service area of the Strelna Volunteer Fire Department. Approximately 15-20 volunteers are on on-call status throughout the year. However, many of the volunteers are out of the area in the summer months working as Type II EFF crews for the Division of Forestry throughout the state of Alaska and the lower 48 states as needed. Lack of radios makes communication difficult in our area as phone service is limited if at all.

Escape Routes:

1. Lower Village Road – Village residents
2. Copper River Hwy. – Dipnetters and campers
3. McCarthy Road – option 1 for Chitina community
4. Edgerton Hwy. – option 2 for Chitina community

Safety Zones:

There are three available safety zones in the Chitina area:

1. Copper River/Kotsina Flood Plain accessed by the McCarthy Road
2. Copper River Flood Plain accessed by O'Brian Creek Road
3. Chitina Air Strip/Copper River Flood Plain accessed at mile 28 Edgerton Hwy.

Wildfire History

- 1915 – Sourdough Hill Fire – 384,000 acres
Presumably set by sparks from the railroad. It burned from Chitina to the Kennicott River and from the Chitina River to the mountains north.
- 1915 – Kennicott Fire – 64,000 acres
Intentionally set to kill timber so as to provide fuel-wood for sale at the Kennicott mine.
- 1927 – Willow Creek Fire – 128,000 acres
Started by construction crews and burned between the Copper River and the Tonsina River with the Richardson Hwy as the western boundary.
- 2002 – 6th largest fire season
2.2 million acres burned in Alaska
- 2004 – largest fire season since 1950
6.7 million acres burned in Alaska
- 2005 – 3rd largest fire season
4.5 million acres burned in Alaska
- 88% of fires in the Copper River Basin are Human caused.
- 12% of fires in the Copper River Basin are caused by lightning or other factors.

Hazard and Risk Assessment

A hazard and risk assessment was completed by Area Forester, Gary Mullen, the results have been incorporated into a GIS layer over the Chitina Community Profile Map.

These hazard areas have been identified using fuel typing, topography, seasonal fuels and human traffic.

Fuel Hazards:

- **Seasonal High:** Dry grass areas around especially structures that pose a significant risk between the times of snow melt and green up.
- **High:** Areas untreated for Fuel Reduction that contains high loadings of surface fuels and thick pockets of spruce on steep topography.
- **Low to Moderate:** Hardwood stands, uninhabited areas, and areas on flat topography that poses little threat to ignition or spread.
- **Treated Areas:** Areas that have been treated either by the Chitina Hazardous Fuel Reduction Crews or by private landowners that no longer pose a threat at any time of the year.

The High areas present significant risk to the community due to ignitability, topography, wind and high human traffic, 88% of all fires in the Copper River Basin are man caused. The Chitina Traditional Indian Village Council's Hazardous Fuels Reduction crews working with the Chitina Volunteer Fire Department have reduced over 100 acres of Hazardous Fuels within the Chitina area since 2004 utilizing funding through Bureau of Indian Affairs, Fire Management Contracts. There are plans for maintenance in 2007 and work along O'Brian Creek Rd. and below the Chitina Village in 2008.

Seasonal High areas pose a significant threat of ignition during a few weeks in the spring, after the snow melts and before the grass "greens up".

Chitina's unique topography, being contained to a box canyon poses a significant threat in it self as fires are drawn through canyons much like a chimney, combined with the seasonal winds eight months out of the year has been and will be a major factor in all wildfire responses.

Naturally occurring fuels are only one of the hazards posing a threat to the community; many hazards come from man caused objects, which can be an even greater threat.

Human caused fuels that present a risk to the community are:

- Abandoned vehicles
- Fuel Tanks in close proximity to structures
- Piles of woody debris
- Wood piles against or adjacent to structures
- Unsafe burn practices IE: burn barrels/ yard debris
- Narrow or soft driveways inaccessible to emergency vehicles
- Tourist/Dipnetters
- Abandoned campfires

Risk of Wildfire Occurrence:

The Chitina area has not seen a wildfire of significant size since the 1920's, the naturally occurring fuel loadings from this absence of fire in combination with the Alaskan Spruce Bark Beetle infestation that has plagued the Copper River since early 1990's has left Chitina and the surrounding area in a stage set for catastrophic wildfire. Lightning strikes in the Copper River Valley are rare; fire history will show that fires in this area are all in areas of human population. With ever increasing tourism to the Copper River in search of Salmon and visitors passing through to the Wrangell St-Elias National Park the chances of ignition are steadily increasing.

Values of Concern:

Life and property are the first concern of the Chitina Community, most structures in Chitina are primary homes and/or private businesses, in addition to these values there many historic buildings from the Railroad days, some that have been beautifully restored at great cost to their owners and are irreplaceable monuments of our history. The Native Village of Chitina holds many areas sacred as cultural and traditional significance. Essential Infrastructure includes water supplies, power plants, communication systems and Emergency services.

Hazards Identified

- Dry grasses especially around structures
- High fuel loadings on slopes
- Topography
- Consistent winds
- Unsafe burning practices
- Tourist/dipnetters
- Abandoned vehicles near structures
- Not having an Evacuation plan
- Not having a public emergency plan
- Homes and businesses not being "Firewise"
- Driveways inaccessible to emergency vehicles
- Lack of adequate communications

Priorities

Through two surveys and at the public meetings, community members were asked to prioritize the importance of Educational programs, Emergency preparedness, Mitigation Efforts and Treatment and Disposal of Woody Debris.

The compiled results from the returned surveys and discussion throughout the public process are as follows with 1 being the most important:

- (1). Emergency Preparedness – Disaster Relief and Capacity Building for Emergency services
- (2). Educational Programs – Smokey Bear, Firewise
- (3). Mitigation Efforts – Fuel Reduction
- (4). Treatment and Disposal of Solid Waste and Woody Debris – Biomass, Approved Burn Site Solid Waste Transfer site

Community Needs

Emergency Preparedness

Evacuation Plan, Water Silos, Working water pumps, Building for EMS, Heated Ambulance Barn, Classroom space, Wildland EMS training, Communication, Fuel resource for Fire Dept.

Community Outreach

Firewise Programs, Smokey Bear, Signs and Posters, Home assessments, Events, Workshops.

Fuel Reduction

Continue Hazardous Fuel Reduction Program, Industrial Wood Chipper, Dump truck, Dozer

Treatment and Disposal

Solid Waste Disposal site and recycling as a sustainable program, Industrial Wood Chipper, Biomass Utilization.

Goals and Objectives

GOAL: Evacuation and Emergency Plan

- **Objective:** Coordinate emergency services to write Evacuation and Emergency plan
- **Objective:** Develop a public communication system
- **Objective:** Present plan to the community

GOAL: Firewise Outreach Program

- **Objective:** Find funding for program
- **Objective:** Have workshops and Community events
- **Objective:** Design flyers/handouts for tourists
- **Objective:** Home assessment program

GOAL: Continuation of Hazardous Fuels Reduction

- **Objective:** Develop maintenance plan/ solution for annual grasses
- **Objective:** Reduce fuels below Chitina Village

GOAL: Solid Waste Transfer Site

- **Objective:** Identify usable site
- **Objective:** Apply for funding
- **Objective:** Design Site to fit community needs

Action Plan

Information gathered through the Hazard/Risk Assessment and Community Meetings has identified a list of primary goals for Chitina's Community Wildfire Protection Plan. As this is a living document the community will continue to meet, develop strategies, identify roles and responsibilities and implement them to meet the objectives within this plan.

Declaration of Agreement and Concurrence

The following community representatives / agencies have reviewed and supported this Community Wildfire Protection Plan.

D.O.F. Area Forester, Gary Mullen

C.V.F.D. Fire Chief, Dean Lenard

D.O.F. State Forester, Chris Maisch

CTIVC Natural Resource Director
Carrie Hale

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