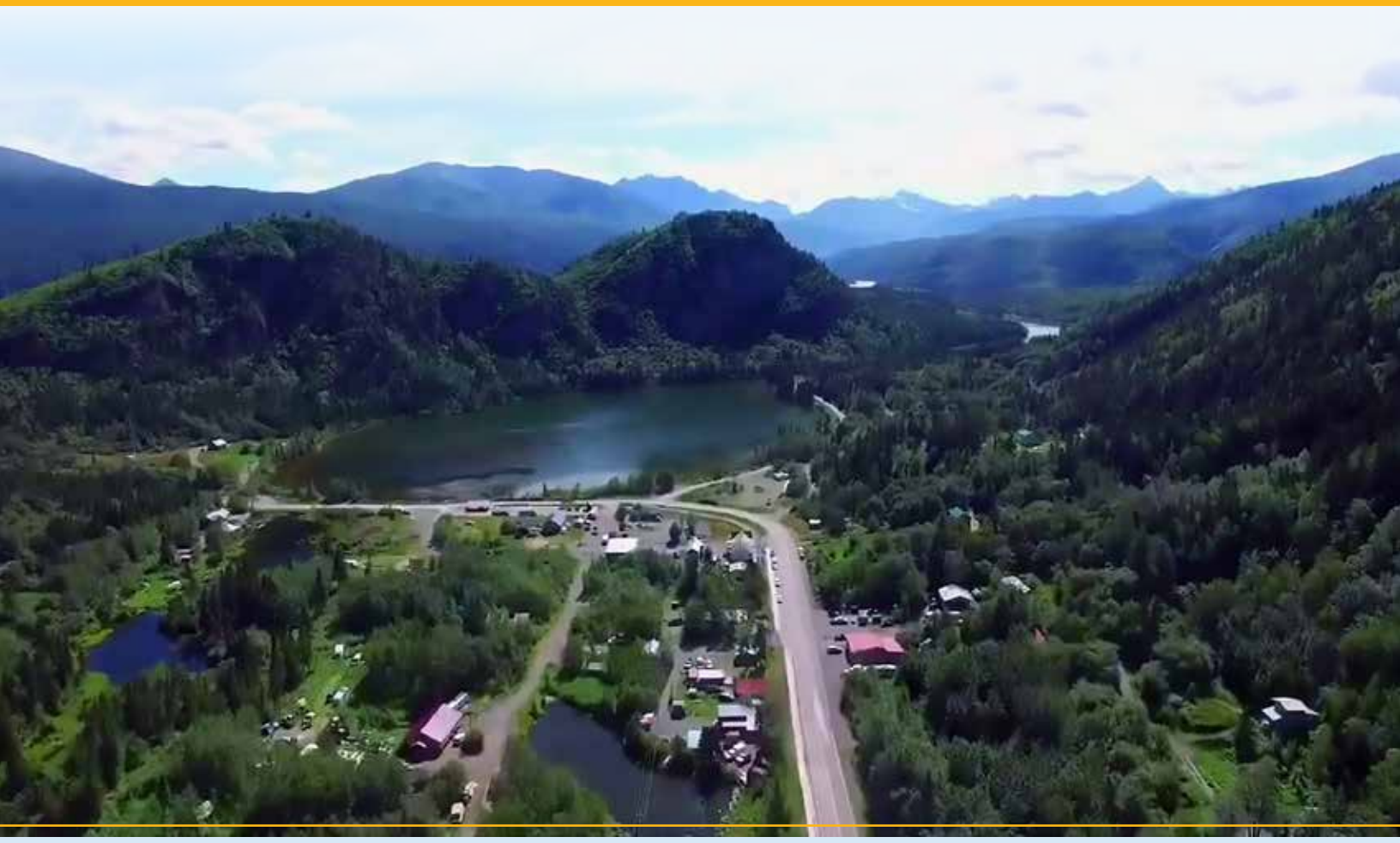
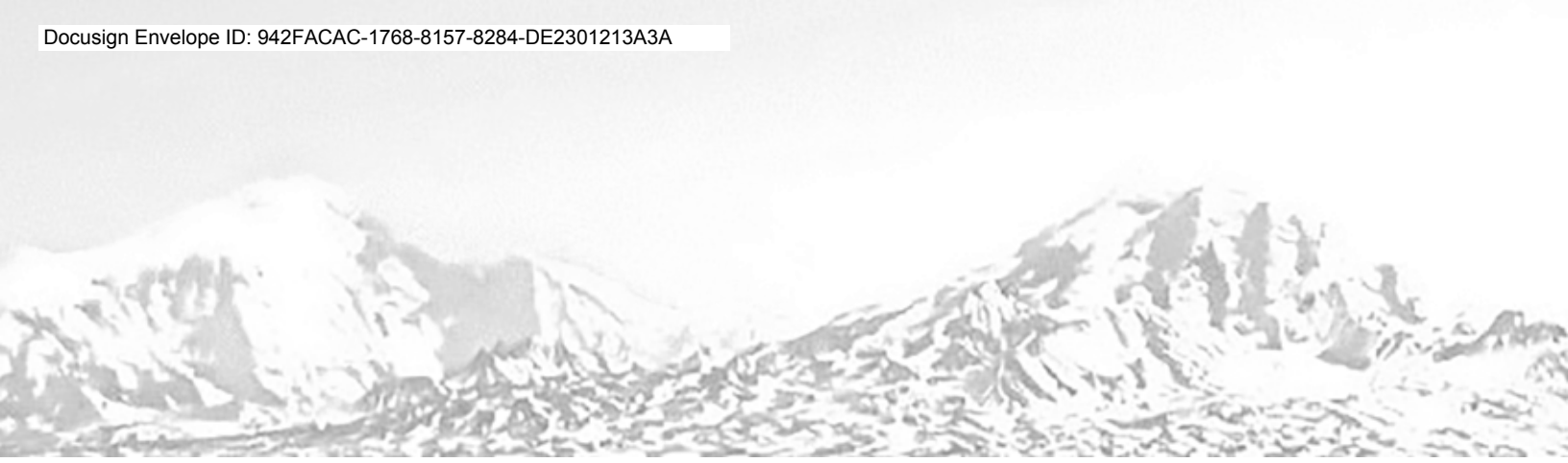
COMMUNITY WILDFIRE PROTECTION PLAN



Chitina

VALDEZ - COPPER RIVER
DIVISION OF FORESTRY & FIRE PROTECTION

ALASKA DIVISION OF FORESTRY & FIRE PROTECTION



A Cooperative Agreement Grant provided funding through BLM, Glennallen Field Office to SOA, Valdez-Copper River Area Forestry & Fire Protection. We appreciate the opportunity this grant gave our office to create, develop and execute writing ten (10) Community Wildfire Protection Plans for the Copper River Basin. Partnerships like this help agencies plan, collaborate, and take action to make our communities safer and better prepared in the event of large-scale wildland fire.

The Valdez-Copper River Area Community Wildfire Protection Plans have been created and written by Emily Hjortstorp, CWPP Project Coordinator, and Jenny Moser, Wildland Fire Prevention Lead, along with help and input from the local community and 3rd party resources. Guidelines suggested in “Preparing a Community Wildfire Protection Plan — A Handbook for Wildland-Urban Interface Communities” that is posted on the State of Alaska Website were followed during the development of this plan. An interactive website and a local Valdez-Copper River Area Forestry & Fire Protection logo were also created through this grant funded project.

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Executive Summary

Wildland fire is a natural event in the boreal forest, which extends throughout much of Alaska, including the Copper River Basin. Being a fire-prone ecosystem, the effects of fire are needed to regenerate old forests, introduce nutrients to the soil, and create a mosaic pattern on the landscape of new-growth vegetation, which provides diversity and valuable animal habitat. Fires in the wildlands of Alaska can be beneficial, but they are extremely destructive to our communities, infrastructure, areas of cultural significance and resource values. These areas must be protected from the threat of wildland fire. Thunderstorms and associated lightning strikes are a frequent cause for wildland fire concern during the summer. An even greater threat of wildland fire is posed by human-caused fires, often started in or around our communities which cause more damage with less acres burned, than a lightning caused wildland fire in a remote area.

Proper planning and preparation can reduce the destructive effects of wildland fire. This Community Wildfire Protection Plan (CWPP) analyzes the risk of wildland fire to the Chitina community planning area and mitigation efforts to reduce future wildland fire hazards.

The community risk/hazardous fuels assessment confirms that the fuel accumulation and threat of danger from wildland fire to Chitina is high. This rating is due to vegetative fuel types and configuration in and outside the community. Hazards that reside in the Chitina planning area consist of expanses of dry grass during pre-season green up, consistent strong and erratic winds through the canyons in which Chitina is situated, and long response times for emergency resources with limited radio communications. Many homes do not have adequate defensible space and are surrounded by hazardous debris including inoperable vehicles, dilapidated trailers, and buildings.

Additionally, in the 1990s, the Kenai Peninsula and Copper River Basin experienced a spruce beetle *(Dendroctonus rufipennis)* outbreak that affected nearly 2.3 million acres by its peak in 1996, killing most large diameter spruce trees in many parts of these regions (Werner et al. 2006). The Copper River Basin saw large scale infestation from spruce beetle for many years during this outbreak, resulting in heavy fuel loading of standing and fallen beetle-killed spruce. The result of over a decade of this epidemic is heavy fuel loading of standing and fallen beetle killed spruce. Spruce beetle is a natural forest disturbance much like wildland fire, which can cause an increase in fuel loading and resistance to suppression efforts.

Based on community input from the 2021/2022 survey results, Chitina residents identified hazards including lack of clear road signage, unimproved roads with minimal gravel to support large fire apparatus, needs for equipment and training for the Volunteer Fire Department, and no subsurface water source, only surface water sources are available to fill equipment.

The community risk and wildland fire hazard ratings are used to create an action plan to reduce the risk of catastrophic wildland fire. The plan evaluates various risk elements, encompassing vegetation types prone to fueling fires, such as black and white spruce, mixed hardwood forests and grass and shrub lands. These fuels pose high flammability and can contribute to fires of intense magnitude. Additionally, within the community, there are added hazards like tall dry grass during pre-green up, debris, abandoned inoperable vehicles near residences, and challenges to emergency responders increasing the risk and hazards of wildland fire potential and emergency response. Beyond the community periphery, corresponding vegetative fuels extend wildland fire risk.

Though natural barriers like the Copper River and elevated terrain with sparse vegetation offer some defense, notable vulnerabilities persist, particularly to the north and south of the community to include high concentration and continuous fuels. Additionally, the local Volunteer Fire Department (VFD) encounters obstacles due to limited resources, training, and equipment. The Alaska Division of Forestry & Fire Protection (DOF) has prolonged response times of 60+ minutes by road and 30+ minutes by helicopter.

Background

The Chitina Community Wildfire Protection Plan (CWPP) is a collaborative effort created in response to the 2003 Healthy Forest Restoration Act (HFRA) which directs communities at risk for wildland fire to develop a risk assessment and mitigation plan. The Community Wildfire Protection Plan (CWPP) process assists communities in developing an appropriate and desired wildland fire protection plan to guide future mitigation efforts. Completion of this CWPP involved the following steps:

- Identify stakeholders, land management agencies, and interested parties
- Establish a community planning area
- Develop a community risk assessment
- Ongoing opportunities for community input through surveys, public meetings, and the creation of a dedicated website
- Address priorities through stakeholder meetings and public input
- Develop an action plan and task-matrix
- Finalization of the plan with a total of three public community meetings throughout the process

Chitina's first Community Wildfire Protection Plan was accepted in June 2007. While the Native Village of Chitina's Natural Resource Department addressed many of the priorities in the action plan, not all items were addressed and much of the fuels work completed needs re-treatment. Additionally, some identified problems remain ongoing, such as removal of debris, trash and inoperable vehicles surrounding homesites to allow fuel reduction efforts to take place, road labeling and maintenance, and increased radio communications for all first responders. The natural conditions surrounding Chitina remain equally concerning, with areas of the 90's beetle kill trees and fuel-loading of dead and down trees, steep slopes that funnel irregular winds and large expanses of coniferous trees that pose a threat to the wildland urban interface when hot and dry weather conditions exist.

Refer to Appendix A for guidance on Alaska statewide interagency wildland fire management response and planning.

Collaboration

The Alaska Division of Forestry & Fire Protection (DOF) / Valdez-Copper River Area office partnered with members to help with the identification, assessment, and prioritization areas of greatest risk and vulnerability in the event of a wildland fire.

- **Bureau of Land Management (BLM)**
- **Bureau of Indian Affairs (BIA)**
- **Chitina Native Corporation**
- **Chitina Volunteer Fire Department**
- **Chitina Traditional Indian Village Council**
- **Fjørdland Fire Solutions LLC.**
- **Local landowners, business owners, and community**
- **Valdez-Copper River Area Division of Forestry & Fire Protection (DNR)**
- **Wrangell - St. Elias National Park and Preserve (NPS)**

COMMUNITY PROCESS

Community input was solicited by in-person visits to Chitina including both formal and informal meetings, presence at public events, online and mail delivered surveys, social media, and a collaborative website displaying the latest information. All ideas were collected and analyzed to determine the priority needs and actions included in this plan.

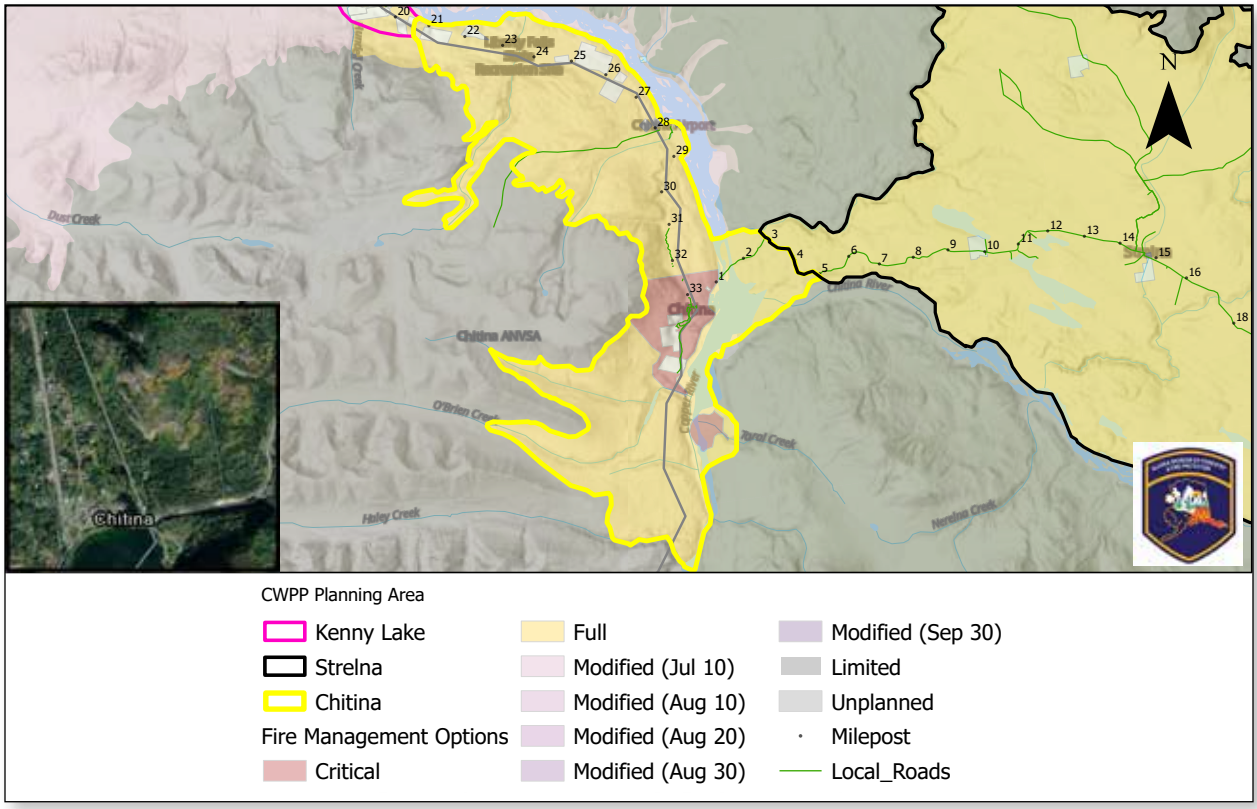
CWPP PLANNING AREA

A Wildland Urban Interface (WUI) Boundary is the line where human development meets and intermingles with undeveloped wildland and vegetative fuels. The Chitina (WUI) Boundary is designated to incorporate the surrounding Critical and Full-Fire-Management option, which includes all residents and infrastructure of the area as well as the surrounding lands that would cause a threat in the event of a wildland fire. A fire management option is a classification assigned by the jurisdictional agency that provides fire protection and determines the initial response to a wildland fire. The goal is to mitigate the potential of catastrophic wildland fire within this boundary by recognizing the hazards, prioritizing, and developing an action plan with clear goals and objectives (*Alaska Interagency Wildland Fire Management Plan*, 2024).

Critical-Fire-Management option is defined by the State of Alaska and Alaska Fire Service as "The highest priority for suppression actions. Lands in wildland urban interface and other densely populated areas where there is an immediate threat to human life, primary residences, inhabited property, community-dependent infrastructure, and structural resources designated as National Historic Landmarks should be considered for the Critical Management Option. This classification is applicable to an entire village or town as well as a single inhabited structure "(*Alaska Interagency Wildland Fire Management Plan*, 2024)."

Full-Fire-Management option is defined by the State of Alaska and Alaska Fire Service as "High priority but below Critical. Provides for protection of moderately populated areas, cultural and archeological sites, developed recreational facilities, physical developments, administrative sites and cabins, structures, high-value natural resources, and other high-value areas" (*Alaska Interagency Wildland Fire Management Plan*, 2024).

Chitina CWPP Planning Area Map



The Chitina Community Wildfire Protection Planning Area covers from mile 20.5 of the Edgerton Hwy to mile 3 of the McCarthy Road. Liberty Falls State Recreation Area, the Chitina Airport, and the Chitina Tribal/Community Health Center that lies to the north of Chitina. South of Chitina, the planning area includes a heavily used recreation and fishing corridor around O'Brien Creek Rd. extending south to Haley Creek and to the east across the Copper River encompassing a culturally sensitive area on the eastern bank. To the east, the planning area follows the Chitina River and connects to the Strelna Planning Area. This eastern area includes a state campground located in a windy area between the confluences of the Kotsina and Chitina Rivers where they flow into the Copper River, as well as AHTNA managed access to floodplains on the Copper and Kotsina Rivers where many fishwheels are present, and an AHTNA campground in a forested area near mile 3 on the McCarthy Rd.

Community Profile

Chitina is located on the west bank of the Copper River at the confluence with the Chitina River. It lies outside the western boundaries of the Wrangell-St. Elias National Park and Preserve, 66+ miles southeast of Glennallen. The community of Chitina was established in 1908 as a railroad stop on the Copper River & Northwest Railway as a supply town for the Kennicott Copper Mines. In 1938, almost overnight, Chitina became a ghost town. The Kennicott Mine closed and those that resided in this area moved away. Today, according to the 2020 Census data there are 101 people living in Chitina. During the summer, subsistence dip netting for salmon in the world-famous Copper River brings large numbers of Alaskans and tourists to the Chitina area. Gardening, berry picking, herb gathering, and hunting are popular pursuits among locals. Winter activities include trapping, snow machining and ice fishing.

The natural resource values in Chitina consist of subsistence fishing, hunting, gardening, forest foraging and berry picking. Sensitive cultural sites in the Chitina planning area are located at and around the village, along the corridor of the Copper River and surrounding creek drainages, Hayley, O'Brien, and Fox Creek. As well as the Taral Historic Site on the East bank of the Copper River.

LOCATION

The Community of Chitina is in the Copper River Basin in South Central Alaska. Their general geographic location is approximately 61.515830° north latitude -144.43694° west longitude, township 4 south, range 5 east, section 14, Copper River Principal Meridian.

Chitina is located 67 road miles southeast of Glennallen on the edge of the Wrangell - St. Elias National Park and Preserve. Rich copper deposits were discovered at the turn of the century along the northern flanks of the Copper River Basin, 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.

POPULATION

According to the 2020 census data the population of Chitina is 101 people.

CRITICAL FACILITIES (INFRASTRUCTURE)

There are a total number of 132 homes in the Chitina area, 51 are occupied and 81 vacant or uninhabitable homes. The Native Village of Chitina is located on a hill west of the townsite and includes village office buildings, housing, a laundry facility, and community hall.

Other community buildings in Chitina include the VFD & EMS building, and a clinic located near the airport. Commercial buildings include a store, bar, gas pump facility and electric

generator facility. Seasonally inhabited structures and businesses for the Chitina planning area consists of bed and breakfast establishments, hotels, campgrounds, eateries, as well as National Park Service buildings.

Chitina has a limited infrastructure. There is one diesel power plant run by Chitina Electric Inc., and an airstrip 5 miles outside of the town. A cemetery lies on the east side of town perched on top of a hill north of Town Lake. All roads in Chitina, aside from the Edgerton Highway, are gravel or dirt. The Edgerton Highway is maintained by DOT. Industry sources for the Chitina planning area include the tourism and fishing industry, and jobs supplied by the Chitina Corporation, Chitina Traditional Indian Village Council, and the Chitina Electric Company. There is no transfer station or dump in this area.

SEASONAL FACTORS

Spring pre-green up grass poses wildland fire threat, commonly found around structures and previously cleared areas. Summer thunderstorms bring frequent lightning from mid-June to mid-August bringing the potential of lightning caused fires. During the summer, subsistence dip netting for salmon in the Copper River brings many Alaskans from all over the state to the Chitina area increasing the risk of wildland fire within the WUI.

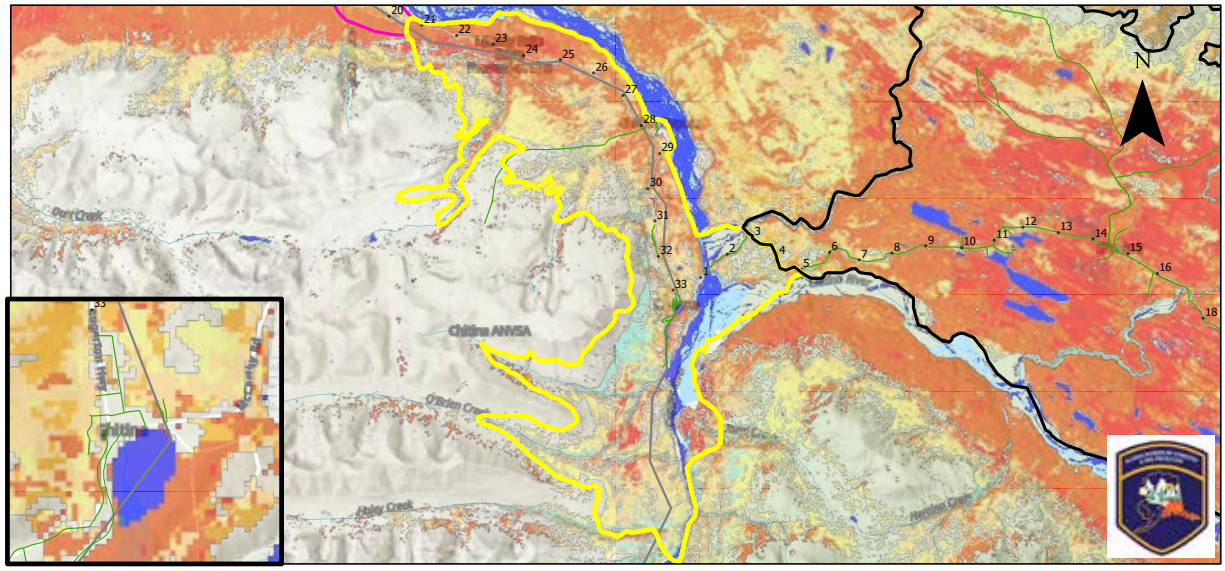
WILDLAND FIRE HISTORY

Large fire history in the surrounding area:

- **2019 lightning-caused Chetaslina Fire burned 2,100 acres north of the Chitina planning area.**
- **2016 lightning-caused Steamboat Creek reburned 39,300 acres in the 2009 Chakina Fire scar, east of the Chitna planning area.**
- **2011 lightning-caused Gilahina Fire burned 1,065 acres in the Chokosna area, east of the Chitina planning area.**
- **2009 lightning-caused Chakina Fire burned 57,000 acres in the McCarthy area, east of the Chitina planning area.**
- **1969 human-caused Edgerton Fire burned 3,700 acres west of the Chitina planning area.**

- **1927 human caused Willow Creek Fire burned 128,000 acres (started by construction crews) between the Copper River and the Tonsina River with the Richardson Hwy as the western boundary, west of the Chitina planning area.**
- **1915 Sourdough Hill Fire burned 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.**
- **From 1940 to the present, numerous human-caused fires can be found in the Alaska Fire History Location database within Chitina's CWPP Planning area. These, wildland urban interface (WUI), fires were smaller in size; however, if they were not contained while small, they could have led to a catastrophic outcome.**

Chitina Vegetation Type Risk Map



CWPP Planning Area
- Kenny Lake
- Strelna
- Chitina
- Milepost
- Local_Roads

LANDFIRE EVT 2016
- Alaskan Pacific Wet Low Shrubland & Floodplain Wetland
- Alaskan Pacific-Aleutian Alder-Salmonberry-Copperbush Shrubland
- North American Arctic-Subarctic Tussock Tundra
- Western North American Boreal Alpine Dwarf-shrubland
- Western North American Boreal Alpine Mesic Herbaceous Meadow
- Western North American Boreal Black Spruce Bog and Dwarf-Tree Peatland
- Western North American Boreal Black Spruce-Tamarack Fen
- Western North American Boreal Dry Aspen-Steppe Bluff
- Western North American Boreal Dry Grassland
- Western North American Boreal Freshwater Emergent Marsh
- Western North American Boreal Mesic Birch-Aspen Forest
- Western North American Boreal Mesic White Spruce Forest
- Western North American Boreal Mesic-Wet Black Spruce Forest and Woodland
- Western North American Boreal Riparian Stringer Conifer Forest
- Western North American Boreal Shrub Swamp
- Western North American Boreal Spruce-Lichen Woodland
- Western North American Boreal Treeline White Spruce Woodland
- Western North American Boreal Wet Black Spruce-Tussock Woodland
- Western North American Boreal Wet Meadow
- Western North American Boreal Treeline Hardwood-White Spruce Woodland
- Western North American Boreal Treeline White Spruce-Hardwood Woodland
- Western North American Boreal Mesic Hardwood-White Spruce Forest
- Western North American Boreal Mesic White Spruce-Hardwood Forest
- Alaska Sub-boreal White-Lutz Spruce-Hardwood Forest and Woodland
- Western North American Boreal Mesic-Wet Black Spruce-Hardwood Forest and Woodland
- Western North American Boreal Lowland Large River Floodplain Shrubland (Conifer Forest)
- Western North American Boreal Herbaceous Floodplain
- Recently Burned-Tree Cover
- Open Water
- Developed-Open Space
- Agriculture-Cultivated Crops and Irrigated Agriculture

LandFire (EVT) 2016
symbology edited to reflect fire danger

RISK/HAZARD ANALYSIS, AVAILABLE FUELS

The Copper River Basin is classified as Fire Regime Group IV, which means a Stand-Replacement-Severity fire is expected every 35-100+ years.

The image above shows vegetative fuels with the color corresponding to their flammability or fire danger in prime fire weather conditions. Fuels shown in shades of red constitute coniferous needle-bearing trees, primarily black or white spruce, which are highly flammable in high fire danger conditions. Orange tone vegetative fuels consist of a more mosaic mix of spruce and hardwoods or more open canopy structure. While still highly flammable, these vegetative fuel types constitute less of a threat than a continuous closed canopy forest. Yellow tone vegetative

fuels display hardwood, willow, and alder type shrubs and grassland areas, while the green and blue tones show the subalpine brush component found near and above the tree line at higher elevations. In the right conditions, these areas can still burn and show resistance to control; however, they are less of a threat than the spruce component of the boreal forest in the Chitina planning area.

Other areas of concern include spring pre-green up conditions, where tall and matted dry grass is abundant in Chitina around the Native village of Chitina and pockets of beetle-killed trees from an outbreak in the 1990s on the west bank of the Copper River and eastern portions of the planning area.

COMMUNITY RISK ASSESSMENT

Rating Elements

1. **RISK/HAZARD ANALYSIS** of available fuels inside community (inside community to 1 mile)
2. **RISK/HAZARD ANALYSIS** of available fuels outside community (1–10 miles)
3. **BARRIERS**
4. **FIRE PROTECTION RESOURCE AVAILABILITY**
5. **COMMUNITY FIREWISE RATING**
6. **OVERALL COMMUNITY RATING**

1. INSIDE COMMUNITY:

The rating area includes lands within one mile of the community in all directions. The rating is based on history/likelihood of fire in the community and the availability of hazard fuels.

Rating: High

Based on potential ignition sources and surrounding fuel types, the risk of fire spreading from within the community is high. Fires that start within the community are primarily human-caused and could be extinguished by community members if they have the necessary equipment and training. The times of highest concern are spring when pre-green up conditions exist, and tall, thick, and often matted grass is prevalent around many structures. Additionally, debris, trash, and inoperable vehicles are prevalent within the community boundary, creating a hazard. Irregular winds funneling through the canyon can cause erratic and unpredictable fire behavior. Many residents and businesses use burn barrels to dispose of organic waste. This area sees a large influx of recreational users in the spring, summer, and fall (tourists traveling to Kennicott, salmon fishermen, rafters, and hunters). Camping in non-designated spots is very common, and these users pose a very high risk of leaving campfires unattended or not fully extinguishing their fire. Wildland fuels within one mile of Chitina to the north, west, and southwest consist primarily of spruce and spruce-mixed hardwood forest with pockets of beetle-killed trees.

2. OUTSIDE COMMUNITY:

The rating area is from 1–10 miles outside the community and is based on the history/likelihood of fire in the area and the availability of hazard fuels.

Rating: High

Due to the prevalence and various concentrations of spruce (black spruce, white spruce, spruce/hardwood mix), insect and disease in mixed boreal forest (beetle-kill), and grass (seasonal cured tall standing or matted), Chitina is determined to be in the risk/hazard analysis category of high.

3. BARRIERS:

This includes water, natural and human-made features.

Rating: **Moderate**

The community has natural or constructed barriers that provide thorough protection from fuels less than 1 mile away in at least two cardinal directions. The Copper River provides protection from a large-scale fire to the east, and the high elevation terrain provides protection from the west and southwest. The community of Chitina and highway lies within a corridor of spruce forest that parallels the Copper River to the west, leaving the infrastructure unprotected from any natural barriers to the north and south, and airport structures exposed to forested land on the west. Other natural water and rock features can be found within the planning area, which would provide an anchor point for firefighting resources to engage a fire or lessen fire intensity. Conversely, areas of continuous fuels also exist in areas surrounding infrastructure. Previous fuels reduction work has been done in and around the community, but much of it needs retreatment and has been re-established back in tall grass, causing a fire hazard in pre-green up conditions.

4. FIRE PROTECTION RESOURCE AVAILABILITY:

Includes local and agency resources.

Rating: **High**

A rating of high for resource availability criteria states that adequate initial attack resources are more than 75 minutes away and adequate extended attack resources are more than 12 hours away. The Division of Forestry & Fire Protection (DOF) has statutory authority to protect forested lands from wildland fire on state, private, and borough lands and has a contractual agreement with the BLM Fire Service to provide protection of federal jurisdiction and Native lands. Valdez-Copper River Area (DOF) initial response times are 60+ minutes by road and approximately 30 minutes by helicopter. Other air resources are 1 hour+ out, and extended attack resources could be as long as 12 hours away. The Chitina Volunteer Fire Department (VFD) response area is from the Tonsina River on the Edgerton Hwy to mile 2 on the McCarthy Road. Chitina VFD is currently not registered with the Fire Marshall's Office and does not receive notification from Matcom 911 dispatch. Kenny Lake Volunteer Fire Department and Strelna Volunteer Fire Department assist the Chitina area in the event of a fire; however, they have longer response times. Equipment and training are needs of the Chitina VFD, with one water pumping apparatus being the only serviceable vehicle. Due to the terrain, radio communication is non-existent in many parts of the Chitina planning area.

5. COMMUNITY FIREWISE RATING:

Includes landscaping, construction, water supply and access.

Rating: High

LANDSCAPING: Less than 35% of homes and community buildings have a clearing of flammable vegetation at least 30 feet around the structure or have lawns that are mowed and watered regularly. Ladder fuels can be found throughout the community and in-between structures with pockets of trees lacking crown spacing. Tall and matted uncut grass can be found along road corridors and around structures, along with unoccupied and dilapidated structures with debris, trash, and inoperable vehicles surrounding them.

CONSTRUCTION: Less than 35% of homes are made of fire-resistant or non-combustible construction materials. Roofing materials range from metal to wood shake roofs. Many structures do not have skirting around the bottom or other general Firewise and Home Hardening recommendations, such as covering vents and openings with wire mesh, cleaning organic debris off roofs and other surfaces that trap leaves and needles to prevent ember entrapment and ignition.

WATER SUPPLY: Less than 35% of homes do not have a reliable water source or the means to protect their property with a water source in the event of a wildland fire. The Chitina VFD relies on surface water sources year-round due to not having a community designated well.

ACCESS: The only road access route that is at least 2 lanes wide and clearly marked is the Edgerton Highway. Ample turnaround space for vehicles/fire equipment exists in less than 35% of homes and community buildings. Due to persistent landslides within the Copper Basin all roads that exist along bluffs and rivers are susceptible to sluffing. If there is not ongoing construction and road closures, there exists more than one escape route and safety zone.

Escape Routes:

1. Lower Village Road — Village residents
2. Edgerton Hwy. — option 1 for Chitina community
3. McCarthy Road — option 2 for Chitina community

Safety Zones:

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

6. OVERALL COMMUNITY RATING:

OVERALL RATING CHART SUMMARY

1. **RISK/HAZARD ANALYSIS** of available fuels inside community to 1 mi	HIGH
2. **RISK/HAZARD ANALYSIS** of available fuels outside community 1–10 mi	HIGH
3. **BARRIERS**	MODERATE
4. **FIRE PROTECTION RESOURCE AVAILABILITY**	HIGH
5. **COMMUNITY FIREWISE RATING**	HIGH

The overall assessment, based off the findings, shows the threat of danger from wildland fire is high.

Wildland fire risk to the Chitina community using Wildfirerisk.org is very high. Chitina is higher than 90% of communities in the United States. Risk is determined by the Risk to Homes national percentile rank of the selected community, county, tribal area or state. Low is less than 40th percentile; Medium is 40th–70th percentile; High is 70th–90th percentile; Very High is equal to or greater than 90th percentile. More information regarding this rating can be found at Wildfirerisk.org.

Action Plan

The Chitina Community Wildfire Protection Plan (CWPP) aims to address the wildland fire risks in the Chitina area, located in the Copper River Basin in Southcentral Alaska. This region is prone to wildland fires due to its boreal forest ecosystem, which requires fire to regenerate and maintain ecological balance. However, wildland fire poses significant threats to the community, its infrastructure, and areas of cultural significance. Frequent lightning strikes and human activities are the major causes of wildland fires in the area.

The plan assesses various risk factors including the types of vegetation that can fuel fire, such as black and white spruce, mixed hardwood forests, and grass and shrublands. These fuels are highly flammable and can lead to high-intensity fires. Within the community, there are additional hazards like tall, dry grass, debris, and inoperable vehicles near homes, and inadequate road signage. Outside the community, similar vegetative fuels extend the risk zone up to 10 miles away.

Natural barriers like the Copper River and high elevation terrain provide some protection, but there are significant gaps, especially to the north and south of the community. The local volunteer fire department (VFD) faces challenges due to limited resources, wildland fire training and equipment needs. Incoming emergency resources experience long response times.

By addressing these concerns and implementing appropriate measures, the plan aims to reduce the wildland fire risk to Chitina, making it safer for residents and preserving its natural and cultural resources.

PRIORITIZED ASSESSMENT FINDINGS

1. Dry grasses especially around structures during pre-green up
2. Homes and businesses not being Firewised
3. Long response times for first responders
4. VFD training and equipment needs
5. Driveways inaccessible to emergency vehicles
6. Not having clear road signs
7. Update evacuation plan
8. Unsafe burning practices
9. Public wildland fire education
10. Lack of subsurface water source
11. Lack of adequate radio communications
12. Shaded fuel break south of Chitina
13. Protection of Native heritage sites
14. Identify other fuel reduction projects
15. Support local fuel crews
16. Chitina weather station
17. Community woody mass disposal site

TASKS AND MATRIX OF MITIGATION MEASURES

The following table is a Task Matrix and identifies solutions for each prioritized assessment finding listed in the previous section, to ensure proper risk mitigation, and potential entities that may address these tasks.

ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
Dry grasses especially around structures during pre-green up (Implementation)	1. Educate home and business owners on dangers of pre-green up dry grass and removal actions. 2. Implement mitigation program through grant funding.	Business Owners Copper River Basin Regional Housing Authority Homeowners State of Alaska Division of Forestry & Fire Protection
Homes and businesses need to be Firewised (Implementation)	1. Educate homeowners on Firewise and home hardening principles. 2. VFD participation on home/ structure assessments and creation of defensible space. 3. Apply for a Firewise grant program that will establish a cost share program for homeowners. 4. Identify/designate an area or equipment for the community members to dispose of woody debris. 5. Apply for grant program and funding for a community cleanup project for removal of hazardous materials such as but not limited to inoperable vehicles, tires, and other hazards. 6. Complete a hazardous materials cleanup project on homes/structures within the planning area. 7. Adopt State of Alaska Stewardship Program model for Firewise home assessments.	Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council Chitina Volunteer Fire Department Copper River Basin Regional Housing Authority Homeowners State of Alaska Department of Environmental Conservation State of Alaska Division of Forestry & Fire Protection
Long response times for first responders/firefighters (Implementation)	1. Advertise for recruitment of new VFD members. 2. Support VFD training needs. 3. Update equipment.	State of Alaska Division of Forestry & Fire Protection
VFD training and equipment needs (Implementation)	1. Continue wildland fire response program with training, equipment, and coordination with the State of Alaska Copper River DOF office. 2. Strengthen local prevention programs in coordination with State of Alaska Copper River DOF office.	Chitina Volunteer Fire Department State of Alaska Division of Forestry & Fire Protection
Public wildland fire education (Implementation)	1. Promote teaching general wildland fire knowledge to the community with emphasis on safe burning practices and creating defensible space through Firewise and Home Hardening programs. 2. Continue wildland fire education outreach in schools.	Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council Chitina Volunteer Fire Department State of Alaska Division of Forestry & Fire Protection

ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
Driveways inaccessible to emergency vehicles/address ingress and egress concerns (Implementation)	1. Initiate contact with AK DOT and Native entities to have an assessment done and recommendations to widen main roads. 2. Apply for grants to assist homeowners in widening existing roads and driveways to support large firefighting apparatus to include brush clearing and/or widening roads.	Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council State of Alaska Division of Forestry & Fire Protection
Community roads do not have clear road signs (Implementation)	1. Update maps. 2. Clear brush around existing road signs. 3. Work with DOT to install new road signs.	State of Alaska Department of Transportation State of Alaska Division of Forestry & Fire Protection
Update evacuation plan (Planning)	1. Review and modernize existing community emergency plan. 2. Include updated and centralized community contact list. 3. Include maps with road signage and house identifiers (in conjunction with community Firewise mapping). 4. Adopt Alaska Ready, Set, Go standards.	Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council Local Emergency Planning Committee State of Alaska Division of Forestry & Fire Protection
Unsafe burning practices (Implementation)	1. Implement wildland fire and debris burning safety programs into the community. 2. Hold community fire safety events and education opportunities. 3. Post signage and information around community, campgrounds and fishwheel sites.	State of Alaska Division of Forestry & Fire Protection
Lack of free subsurface water source (Implementation)	1. Identify area for community well to be drilled. 2. Apply for a grant to fund the project.	Copper River Development Association
Lack of adequate communications (Implementation)	1. Work with DOF to set up a permanent or seasonal repeater in Chitina. 2. Coordinate use with multiple agencies including EMS and VFD. 3. Update VFD radios. 4. Work with State of Alaska Emergency Coordination Center and Copper Valley Telephone to set up an emergency alert system.	Copper Valley Telephone State of Alaska Division of Homeland Security and Emergency Management State of Alaska Division of Forestry & Fire Protection Wrangell - St. Elias National Park and Preserve

ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
Shaded fuel break south of Chitina (Implementation)	1. Identify fuel reduction area. 2. Involve all land managers in planning. 3. Identify heritage sites to be protected. 4. Implement plan to construct shaded fuel break.	Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council State of Alaska Division of Forestry & Fire Protection
Protection of Native heritage sites (Implementation)	1. Native entities internally identify heritage sites to be protected. 2. Implement appropriate measures and desired fire suppression tactics for protecting these areas. 3. Insure they are denoted as "other land" contact land manager on Known Sites Database.	Bureau of Indian Affairs Bureau of Land Management Chitina Native Corporation Chitina Traditional Indian Village Council State of Alaska Division of Forestry & Fire Protection
Identity other fuel reduction projects (Planning)	1. Determine areas where spring-cured fine fuels including pre-green up grass, pose a threat. 2. Determine areas of beetle-kill and other dead-standing timber. 3. Identify other infrastructure to be protected, plan fuel reduction/fuels removal project to protect them. 4. Address work through mitigation plans.	Ahtna Inc. Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council State of Alaska Division of Forestry & Fire Protection
Support local fuel crews (Implementation)	1. Re-form local Fuels Crews through BIA. 2. Coordinate with Fuels Crew, VFDs and DOF for training. 3. Work with newly formed Fuels Crews to prioritize community projects.	Ahtna Inc. Bureau of Indian Affairs Chitina Native Corporation Chitina Traditional Indian Village Council State of Alaska Division of Forestry & Fire Protection
Chitina weather station (Implementation)	1. Set up a real time weather station for tracking to assist in allocation of agency resources.	State of Alaska Division of Forestry & Fire Protection
Community woody mass disposal site (Implementation)	1. Identify/designate an area for the community members to dispose of woody debris.	State of Alaska Division of Forestry & Fire Protection

Summary, Review, and Updating Process

The community of Chitina has a high risk of wildland fire potential and impact. Due to the type of fuels both inside and outside of the community, fire protection resource availability, and the overall community Firewise rating to include safety zones and escape routes, are all given the score of high wildland fire potential. Combined with the moderate rating for natural and man-made barriers, Chitina's overall assessment findings show a high threat of danger from wildland fire.

Wildfirerisk.org outlines Chitina's wildland fire risk of 90% higher than other communities throughout the United States. (July, 2024)

Through collaboration on this CWPP, community members and organizations, Native entities, and the Chitina VFD will take first steps to mitigate the potential negative impacts from wildland fire. The community along with its entities are encouraged to continue fuels mitigation, education, and implementation that are consistent with the Alaska Firewise program.

This is a living document, where changes can be discussed and made at any time. Review and updates to this CWPP is recommended to take place every three (3) years, not to extend past five (5) years. The Community Risk Assessment and Action Plan should be reviewed and updated by subject matter experts, through solicited information via public meetings with community members and landowners.

The following table represents the timeline that the Chitina's CWPP needs to be reviewed, updated and when it expires.

REVIEW: 3 YEARS	UPDATE: 5 YEARS	EXPIRE: 10 YEARS
December 1, 2028	December 1, 2030	December 1, 2035

Signature Page

This plan has been reviewed and approved by the following:

Signed by:
Norm McDonald - State of Alaska Forestry & Fire Protection, Deputy Director (Fire)
X_____ Date_____
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State of Alaska Forestry & Fire Protection, Deputy Director (Fire)

JOSHUA SCOTT Digitally signed by JOSHUA SCOTT
Date: 2026.01.09 13:09:13 -09'00'
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Wrangell - St. Elias National Park and Preserve

William M. Dunk Jr. Digitally signed by WILLIAM DUNK
Date: 2026.01.14 13:41:19 -09'00'
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Bureau of Land Management

JOLENE JOHN Digitally signed by JOLENE JOHN
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Bureau of Indian Affairs

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Ahtna Inc.

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Chitina Traditional Indian Village Council

Ed Herndon Digitally signed by Ed Herndon
Date: 2026.02.06 09:13:45 -09'00'
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Chitina Native Corporation

Signed by:
Jeff Ramsethel - Tribal VFD
X_____ Date_____
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VFD Community Representative

Appendix A

The Chitina Community Wildfire Protection Plan (CWPP) is a collaborative effort created in response to the 2003 Healthy Forest Restoration Act (HFRA) which directs communities at risk for wildland fire to develop a risk assessment and mitigation plan. [1] The HFRA includes the following guidance:

> The minimum requirements for a CWPP as described in the HFRA are: (1) Collaboration: A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties. (2) Prioritized Fuel Reduction: A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure. (3) Treatment of Structural Ignitability: A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan. [2]

Additionally, the Alaska Interagency Fire Management Plan, of which the State of Alaska Division of Forestry & Fire Protection is a signatory, recognizes that each of the land-managing Federal and State agencies and ANCSA corporations in Alaska have their own missions, goals, and objectives related to their lands and that to effectively prioritize and manage Alaska wildland fires there is a need to consider the full spectrum of initial responses to wildland fire; from suppression actions designed to contain and control wildland fire growth, to periodic surveillance of wildland fires that are allowed to spread naturally across the landscape. To accomplish this, jurisdictional organizations and protecting agencies have collaboratively assigned one of four wildland fire management options (Critical, Full, Modified, and Limited) to nearly all lands in Alaska. Pre-identified Wildland Fire Management Options allow fire managers to:

- *Quickly prioritize areas for protection actions and the allocation of available initial attack firefighting resources to achieve protection objectives.*
- *Optimize the ability to achieve land use and resource management objectives and integrate fire management, mission objectives, land use, and natural resource goals.*
- *Reinforce the premise that the cost of suppression efforts should be commensurate with the economic, social, and resource values identified for protection.*[3]

Wildland fire management in Alaska is a joint effort among federal, state, local, and tribal governments, native organizations, local fire departments, communities, and landowners. The land management agencies, also known as jurisdictional agencies, have the overall land and resource management responsibilities as provided by federal, state, or local law. The Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement improves Alaskan fire management agencies' efficiency in responding to wildland fire by facilitating the coordination and exchange of

[1] WADNR. (2023, April 25). *Community Wildfire Protection Plan Guidance CWPP ...*Wildfire Preparedness. https://www.dnr.wa.gov/sites/default/files/publications/rp_cwpp_guidance_04102023.pdf.pdf
[2] *H.R.1904 - Healthy Forests Restoration Act of 2003.* (2003, December 3). CONGRESS.GOV. Retrieved October 30, 2024, from https://www.congress.gov/bill/108th-congress/house-bill/1904
[3] *ALASKA INTERAGENCY WILDLAND FIRE MANAGEMENT PLAN*. (2024). Alaska Interagency Coordination Center. Retrieved October 30, 2024, from https://fire.ak.blm.gov/content/aicc/Alaska%20Statewide%20Master%20Agreement/3.%20Alaska%20Interagency%20Wildland%20Fire%20Managment%20Plan%20(AIWFMP)/Alaska%20Interagency%20Wildland%20Fire%20Management%20Plan.pdf

personnel, equipment, supplies, services, and funds while sustaining activities such as prevention, preparedness, communication and education, fuels treatment and hazard mitigation, fire planning, response strategies, tactics and alternatives, suppression, and post-fire rehabilitation and restoration.[4]

Acknowledging increased complexity in fire management practices, the State of Alaska State Hazard Mitigation Plan (SHMP) notes that future conditions for wildland fire hazards, including climate change, highlight an intensified pattern of wildland fire that is emerging in Alaska as rapidly increasing temperatures and longer growing seasons alter the state's environment. Both tundra and boreal forest regions are seeing larger and more frequent wildland fires. The impacts of these fires are felt across the state. In response to changing wildland fire patterns, Alaska's fire management agencies are adapting quickly. The use of remote sensing tools, such as data from satellites, and science-based decision making have been a critical component in responding to intensified wildland fire seasons. [5]

Additionally, the Statewide Operating Plan (SOP) is applicable to all signatory parties to the Alaska Master Agreement (AMA). Its purpose is to address statewide issues affecting cooperation, interagency working relationships and protocols, financial arrangements, sharing of resources, and joint activities/projects.[6]

Jurisdictional agencies (as identified in the Alaska Master Agreement) are responsible for all planning documents (e.g., land use plans, resource management plans, fire management plans, and decision support documents) for a unit’s wildland fire and fuels management program.[7]

Protecting agencies (as identified in the Alaska Master Agreement) are responsible for implementing the actions documented and directed by the appropriate planning and decision support documents for initial and extended attack on wildland fire incidents. They provide supervision and support including operational oversight, direction, and logistical support to incident management teams (IMTs). [8]

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[4] *ALASKA MASTER COOPERATIVE WILDLAND FIRE MANAGEMENT AND STAFFORD ACT RESPONSE AGREEMENT: 2024 ALASKA STATEWIDE OPERATING PLAN.* (2020, August 6). Alaska Interagency Coordination Center. Retrieved October 30, 2024, from https://fire.ak.blm.gov/content/aicc/Alaska%20Statewide%20Master%20Agreement/2.%20Alaska%20Statewide%20Operating%20Plan/Alaska%20Statewide%20Operating%20Plan.pdf

[5] SOA. (2023). State of Alaska State Hazard Mitigation Plan. Alaska Division of Homeland Security and Emergency Management Hazard Mitigation Section. https://ready.alaska.gov/Documents/Mitigation/SHMP/2023 State of Alaska Hazard Mitigation Plan.pdf

[6] *ALASKA MASTER COOPERATIVE WILDLAND FIRE MANAGEMENT AND STAFFORD ACT RESPONSE AGREEMENT: 2024 ALASKA STATEWIDE OPERATING PLAN.* (2020, August 6). Alaska Interagency Coordination Center. Retrieved October 30, 2024, from https://fire.ak.blm.gov/content/aicc/Alaska%20Statewide%20Master%20Agreement/2.%20Alaska%20Statewide%20Operating%20Plan/Alaska%20Statewide%20Operating%20Plan.pdf

[7] *ALASKA MASTER COOPERATIVE WILDLAND FIRE MANAGEMENT AND STAFFORD ACT RESPONSE AGREEMENT: 2024 ALASKA STATEWIDE OPERATING PLAN.* (2020, August 6). Alaska Interagency Coordination Center. Retrieved October 30, 2024, from https://fire.ak.blm.gov/content/aicc/Alaska%20Statewide%20Master%20Agreement/2.%20Alaska%20Statewide%20Operating%20Plan/Alaska%20Statewide%20Operating%20Plan.pdf

[8] *ALASKA MASTER COOPERATIVE WILDLAND FIRE MANAGEMENT AND STAFFORD ACT RESPONSE AGREEMENT: 2024 ALASKA STATEWIDE OPERATING PLAN.* (2020, August 6). Alaska Interagency Coordination Center. Retrieved October 30, 2024, from https://fire.ak.blm.gov/content/aicc/Alaska%20Statewide%20Master%20Agreement/2.%20Alaska%20Statewide%20Operating%20Plan/Alaska%20Statewide%20Operating%20Plan.pdf

The State of Alaska Forest Action Plan (FAP) seeks to prioritize areas where forests matter most to Alaska's people—forest lands and wildland urban interface areas that have been identified through the robust Alaska Interagency Wildland Fire Management Plan as having resources requiring fire protection; private forest lands including Alaska Native corporation lands; and state forests and state land classified for forestry. This plan also highlights the following key goals relevant to fire management on State of Alaska lands:

1. *Cultivate fire adapted communities*
2. *Manage fuels to reduce risk to communities & to benefit forest ecosystems.* [9]

Similarly, the National Cohesive Wildland Fire Management Strategy Addendum Update (Addendum Update) identifies new drivers impacting the wildland fire management system. As Federal agencies, states, tribes, and the private sector all ramp up work together to meet the challenge of the wildland fire crisis, stakeholders are challenged to reach beyond individual, organizational, and historical silos to collectively define and understand their risk; set landscape-level and community-wide priorities; share and co-manage risk across boundaries and jurisdictions; accept some short-term risk for long-term benefit; and collectively invest in outcome-based approaches and activities, rather than outputs. The Addendum Update elevates critical issues like climate change and environmental justice and defines key challenges that are not limited to one agency or organization, provides new guidance for stakeholders addressing today's wildland fire challenges and aims to "safely and effectively extinguish fire, when needed; use fire where allowable; manage natural resources; and collectively, learn to live with wildland fire." The updated National Cohesive Strategy goals include:

1. *Resilient Landscapes – Landscapes, regardless of jurisdictional boundaries are resilient to fire, insect, disease, invasive species and climate change disturbances, in accordance with management objectives.*
2. *Fire Adapted Communities – Human populations and infrastructure are as prepared as possible to receive, respond to, and recover from wildland fire.*
3. *Safe, Effective, Risk-based Wildland fire Response – All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildland fire management decisions.* [10]

Ultimately, the Community Wildfire Protection Plan (CWPP) process aligns with the goals outlined by the National Cohesive Strategy and the State of Alaska Forest Action Plan, and offers prescriptive recommendations based on feedback gathered at the community level, while also referencing Fire Management Response Guidance from the AIWFMP, the Stafford Act and the SHMP. This collaborative planning process assists

[9] *2020 Forest Action Plan*. (2020, December 31). Alaska Natural Resources Division of Forestry & Fire Protection. https://forestry.alaska.gov/Assets/pdfs/forestactionplan/FINAL2020AlaskaForestActionPlan.pdf
[10] Wildland Fire Leadership Council. (2023). *National Cohesive Wildland Fire Management Strategy Addendum Update*. https://www.forestsandrangelands.gov/documents/strategy/natl-cohesive-wildland-fire-mgmt-strategy-addendum-update-2023.pdf

communities in developing an appropriate and desired wildland fire protection plan to guide future mitigation efforts. Completion of this CWPP involved the following steps:

1) *Identify stakeholders, land management agencies, and interested parties.*
2) *Establish a community planning area.*
3) *Develop a community risk assessment.*
4) *Ongoing opportunities for community input through surveys, public meetings, and the creation of a dedicated website.*
5) *Address priorities through stakeholder meetings and public input.*
6) *Development of an action plan and task-matrix.*
7) *Finalization of the plan with a total of three public community meetings throughout the process.*

Appendix B

Assessment of Hazard, Barriers, and Defensible Space Rating Criteria (Community Risk Assessment)

Rating Elements

1) Risk/Hazard Analysis of available fuels inside community (inside community to 1 mile)
2) Risk/Hazard Analysis of available fuels outside community (1-10miles)
3) Barriers
4) Fire Protection Resource Availability
5) Community Firewise Rating
6) Overall Community Rating
7) Wildfire Risk to Communities (wildfirerisk.org) Rating Summary

Risk/Hazard Analysis, Available Fuels

The Copper River Basin is classified as Fire Regine Group IV, which means a stand replacement severity fire is possible every 35-100+ years.

1. **Inside Community**: The rating area includes lands within one mile of the community in all directions. The rating is based on history/likelihood of fire in the community and the availability of hazard fuels.

RISK/HAZARD ANALYSIS AVAILABLE FUELS CHART 1

FUELS (predicted fire behavior based on historic summertime weather with hot, dry conditions)	Alaska Fire Return Interval: High 0-99 years	Where Found:
Black Spruce Boreal Forest (CFFDRS=C2) *rate of spread: high intensity: high spotting potential: high*	HIGH	
Black Spruce Lichen Woodland (CFFDRS=C1) *rate of spread: moderate intensity: moderate spotting potential: high*	HIGH	
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) *rate of spread: high intensity: moderate: spotting potential: low*	HIGH	
Mixed Boreal Forest (may include white or black spruce, aspen and/or birch; CFFDRS=M1) *rate of spread:* moderate intensity: moderate spotting potential: moderate	MODERATE	
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) *rate of spread: low intensity: low spotting potential: low*	MODERATE	
Deciduous Brush (includes willow & alder) *rate of spread: low intensity: low spotting potential: low*	LOW	
Insect and Disease in Mixed Boreal Forest (may include white or black spruce, aspen and/or birch) *rate of spread: moderate intensity: High spotting potential: High*	MODERATE	

Narrative description fuels within one mile of community.

2. **Outside Community**: The rating area is from 1-10 miles outside the community and is based on the history/likelihood of fire in the area and the availability of hazard fuels.

RISK/HAZARD ANALYSIS AVAILABLE FUELS CHART 2

FUELS (predicted fire behavior based on historic summertime weather with hot, dry conditions)	Alaska Fire Return Interval: High 0-99 years	Where Found:
Black Spruce Boreal Forest (CFFDRS=C2) *rate of spread: high intensity: high spotting potential: high*	HIGH	
Black Spruce Lichen Woodland (CFFDRS=C1) *rate of spread: moderate intensity: moderate spotting potential: high*	HIGH	
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) *rate of spread: high intensity: moderate: spotting potential: low*	HIGH	
Mixed Boreal Forest (may include white or black spruce, aspen and/or birch; CFFDRS=M1) *rate of spread:* moderate intensity: moderate spotting potential: moderate	MODERATE	
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) *rate of spread: low intensity: low spotting potential: low*	MODERATE	
Deciduous Brush (includes willow & alder) *rate of spread: low intensity: low spotting potential: low*	LOW	
Insect and Disease in Mixed Boreal Forest (may include white or black spruce, aspen and/or birch) *rate of spread: moderate intensity: High spotting potential: High*	MODERATE	

Narrative description fuels 1-10 miles from community.

3. **Barriers**

Standards for rating natural and constructed (human-made) barriers:

Low Fire Danger: The community has a natural or constructed barriers that provide thorough protection from fuels less than 1 mile away in at least 3 cardinal directions. An example of this would be a small community sandwiched between a major river and a runway, or a community on an island

Moderate Fire Danger: The community has natural or constructed barriers that provide thorough protection from fuels less than 1 mile away in at least two cardinal directions. Communities may have multiple barriers affecting a rating. Examples are airstrips separating a community from significant outside fuels, communities set amidst less flammable vegetation types, or communities situated on major rivers.

High Fire Danger: Any barriers that exist which provide protection from fuels less than 1 mile away in fewer than two cardinal directions. Examples of insignificant barriers are small streams or sloughs with narrow riparian zones situated in highly flammable fuel types.

BARRIER RATING CHART

Barrier Type	Rating for Community (Low, Moderate or High Fire Danger)	Where Found:
Water Features		
Other Natural Features		
Constructed (Human-made) Features		
Overall Community Barrier Rating		

Narrative description of natural barriers.

4. Fire Protection Resource Availability

FIRE PROTECTION RESOURCES RESPONSE CHART

Response Time	Risk	Kind of Response (List resources available for initial attack)
Adequate initial attack resources are more than 75 minutes away and adequate extended attack resources are more than 12 hours away.	High	
Adequate initial attack resources are 30- 75 minutes away and adequate extended attack can be in place in 8-12 hours.	Moderate	
Adequate initial attack resources are less than 30 minutes away and adequate extended attack can be in place in less than 8 hours.	Low	
Overall Fire Response Rating		

Narrative description of fire protection resources.

5. Community Firewise Rating

Alaska Firewise Standards for Creating Defensible Space

Landscaping: There is a clearing of flammable vegetation at least 30 feet around the home for firefighting equipment: coniferous brush and dead/overhanging branches are removed; trees are pruned 6-10 feet above the ground; lawn is mowed and watered regularly, and ladder fuels are removed from the yard; remaining trees are spaced at least 30' apart at crowns; garden equipment (hoses and hand tools) are kept on the property.

Construction Guidelines: Home is made of fire-resistant or non-combustible construction materials (especially important for roofing); vents are covered with wire mesh no larger than 1/8 inch; at least two ground-level doors exist; at least two means of escape exist in each room.

Water Supply Guidelines: Home has a reliable water source, 3 to 4 sprinklers and enough hose to circle the home.

Access Guidelines: Access roads are at least 2 lanes wide and clearly marked; ample turnaround space exists for vehicles/fire equipment. Clear of Flammables/Refuse/Debris Guidelines: Combustible materials are not located in the yard or under decks or porches; firewood is stored away (at least 30 feet) from the house; all debris or refuse is picked up regularly.

COMMUNITY FIREWISE FOR DEFENSIBLE SPACE RATING CHART
(Overall community assessment, not individual structures)

Alaska Firewise Standards	Low Excellent Over 65% of homesites and community buildings meet standard	Moderate Between 35- 65% of homesites and community buildings meet standard	High Less than 35% of homesites and community buildings meet standard
Landscaping			
Construction			
Water Supply			
Clear of Flammables/ Refuse/Debris (flammables stored properly & area cleared)			
Overall Rating			

Narrative description of fire protection resources.

6. Overall Community Rating

OVERALL RATING CHART

Category	Rating
Risk/Hazard Analysis of available fuels inside community (inside community to 1 mile)	
Risk/Hazard Analysis of available fuels outside community (1-10miles)	
Barriers	
Fire Protection Resource Availability	
Community Firewise Rating	

Narrative on other contributing factors to risk and mitigation of wildland fire in this community.

7. Wildfire Risk to Communities (wildfirerisk.org) Rating Summary

Appendix C

Fjørdland Fire Solutions

C.1 — RISK ASSESSMENT AND ACTION PLAN

CONTENTS

COMMUNITY CONCERNS

- Consistent high winds during fire season
- Homes/Structures not Firewise compliant
- Dry grasses around structures
- Unsafe burning practices
- Tourist/dipnetter potential for human-caused fire starts
- Abandoned vehicles near structures
- Lack of clear road signs
- Driveways inaccessible to emergency vehicles
- Long response times for First Responders
- Lack of Wildfire training in VFD
- Lack of established fuel break between Chitina and Obrien Creek
- Lack of established fuel break between Chitina and Hayley Creek
- Lack of fast-fill water source for VFD/Agency Firefighters
- Lack of Weather Station in Chitina
- Need for reinstitution of local Fuels Crew with Wildfire training
- Lack of Public Emergency Plan
- Inadequate EMS infrastructure
- Only one access to Chitina Village
- Lack of ingress/egress to outlying structures
- Roads overgrown with spruce need to be widened out
- Areas of beetle-kill spruce
- Radio communication issues for EMS personnel

MITIGATION PRIORITIES

1 Community Firewise

Associated Tasks

1. Reinstitute WUI Grant Cost Share Incentive Program for private/homeowner fuels reduction around structures
2. Adopt and apply Alaska Firewise Standards to all at-risk structures
   a. Firewise should include ample escape routes and safety zones for every household, as well as alternate escape routes and safety zones when needed
   b. Firewise should include evacuation plan for all pets and livestock
   c. Widen overgrown escape routes and establish ample turnarounds for Emergency Vehicles
3. Post clear signage throughout community
4. Create system of structure mapping (including Firewise ratings) for land manager/emergency responder use
5. Institute program to remove junk vehicles and other hazmat
6. Provide community Firewise outreach and education

Additional Notes

It should be emphasized to the community that fuels reduction focus should be primarily on spruce species and tall grasses.
Firewise efforts should be combined with Forest Stewardship Program directives.

It should be emphasized to community members that spruce is best cut at a certain time of year in order to mitigate the spread of spruce beetles.

MITIGATION PRIORITIES

2 VFD Training & Funding

Associated Tasks

1. Apply for Federal Grants to bolster VFD with improved infrastructure, equipment and training
   a. Frequent training between VFD, DOF, BIA Fuels Crew as well as standardization of Standard Operating Procedures
   b. Increased Wildfire training

Additional Notes

Emphasis on Wildfire Training for VFD, including but not limited to FFT1 (Squad Boss) qualification and FFT2.

3 Local Fuels Crew

Associated Tasks

1. Re-form local Fuels Crew
   a. Following historical precedent, attain funding to form Fuels Crew to assist in fuels reduction projects, Native Allotment protection, Heritage Site protection and community Firewise
   b. Prioritize Wildfire training for Fuels Crew
   c. Prioritize close working relationship/overlap with VFD, as well as DOF and other Wildfire agencies

Additional Notes

Emphasis on Wildfire Training for local Fuels Crew, including but not limited to FFT1 (Squad Boss) and FFT2.
A current viable pathway to Fuels Crew funding is through BIA financial incentive programs.

MITIGATION PRIORITIES

4 Protection of Native Heritage Sites

Associated Tasks

1. Per Chitina Native Tribe instructions and cooperation, identify heritage sites to be protected and implement appropriate measures
   a. Create improved mapping of heritage sites so that agency firefighters can locate and protect.

Additional Notes

Recently discovered gravesites near O'Brien Creek are included in this

5 Shaded Fuel Break South of Chitina

Associated Tasks

1. Locate an area South of the Native Village of Chitina to cut a shaded fuel break that extends from river bed to high-elevation unburnable fuels
2. Construct shaded fuel break with emphasis on the ability to burn off of said fuel break in the event of wildfire from the south
3. If possible, include construction of a designated helispot to deploy agency resources rapidly in the event of the need for a rapid backburn
4. If viable, select fuel break location in a dual-purpose area
5. Plan and implement methods to repurpose fuel break byproduct (woody mass material) for community firewood, biomass if applicable, etc.

Additional Notes

Due to the recent discovery of Gravesites/Cultural sites in the area of O'Brien Creek, look for a viable location for a fuel break which encompasses said cultural sites. If this is not viable, look into the possibility of implementing point protection on these cultural sites.

MITIGATION PRIORITIES

6 Fuel Reduction Below Chitina Native Village

Associated Tasks

1. Thinning of hazardous fuel on the downhill side of Chitina Native Village with a focus on spruce and tall grasses

7 Community Woody Mass Disposal Site

Associated Tasks

1. Identify/designate an area for the community/private landowner to dispose of woody mass byproduct of community Firewise and fuel reduction projects
   a. Ideal area would be easily accessible and safe to burn piles in
   b. Allow community access to repurpose woody mass accumulation for firewood, biomass, etc.

8 Chitina Weather Station

Associated Tasks

1. Set up Weather Station for real time weather tracking to assist in allocation of Agency resources

MITIGATION PRIORITIES

9 Community Water Fill Site

Associated Tasks

1. Identify site and funding to implement a fast-fill water site for Emergency Services/Agency Firefighters/Community members and develop the preferred infrastructure

Additional Notes

The capacity/infrastructure of this fill site should go beyond the drafting method that is currently available.

10 Beetle-Kill Mitigation

Associated Tasks

1. Determine areas that beetle-kill and other dead-standing timber can be accessed
2. Explore the viability of opening or gaining access to these areas for the purpose of community/private firewood or other viable biomass opportunities
3. Public outreach to make these areas known

MITIGATION PRIORITIES

11

Biomass Viability

Associated Tasks

1. Continually reevaluate the viability of biomass solutions in the Native Village of Chitina, Chitina, or outlying communities

12

Improved EMS Communication Coverage

Associated Tasks

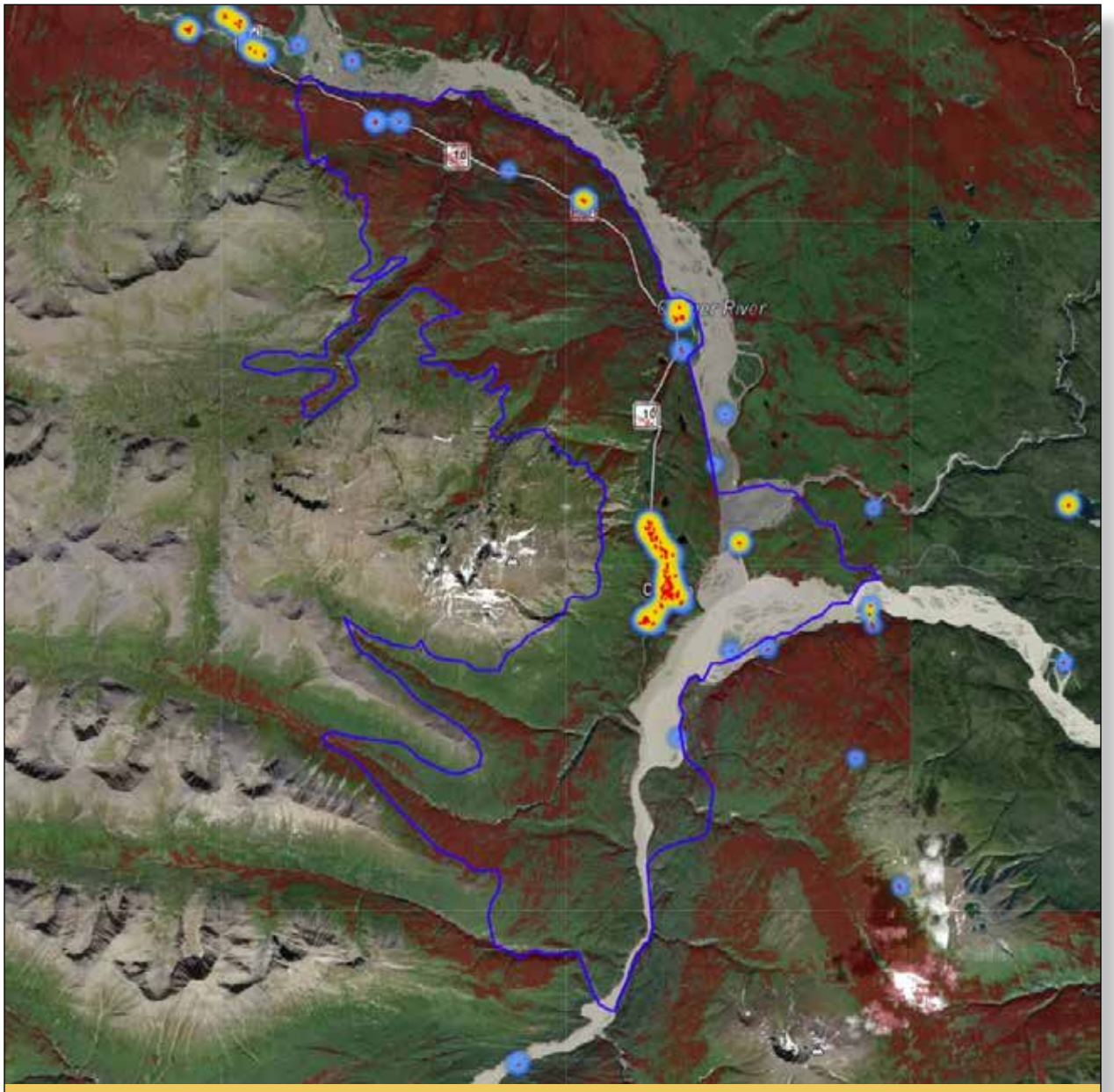
1. Determine the best location, then deploy an agency radio repeater for Emergency Services use to mitigate gaps in radio communication coverage

C.2 — MAPS

MAPS APPENDIX

CHITINA 10

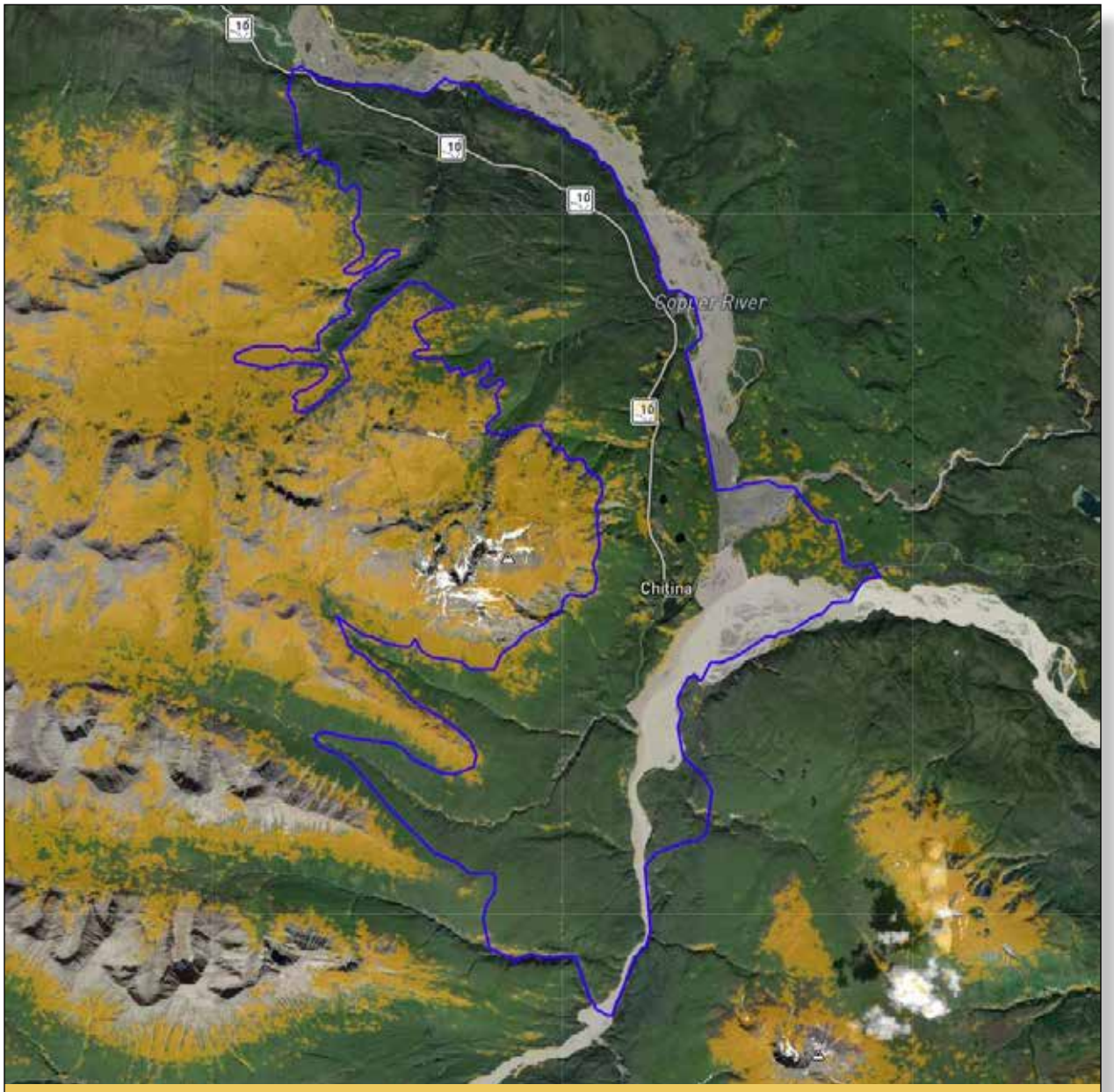
FJØRDLAND FIRE SOLUTIONS



STRUCTURE DENSITY MAP WITH SPRUCE IN RED

CHITINA 11

FJØRDLAND FIRE SOLUTIONS



GRASSES IN GOLD

CHITINA 12

FJØRDLAND FIRE SOLUTIONS

Chitina

COMMUNITY WILDFIRE PROTECTION PLAN

Chitina_CWPP_Final

Final Audit Report 2026-03-24

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