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COMMUNITY WILDFIRE PROTECTION PLAN

Kenny Lake

VALDEZ - COPPER RIVER
DIVISION OF FORESTRY & FIRE PROTECTION

ALASKA DIVISION OF FORESTRY & FIRE PROTECTION

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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. While fires in the wildlands of Alaska can be beneficial, 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 Kenny Lake community planning area and mitigation efforts to reduce future wildland fire hazards.

The community risk/hazardous fuels assessment confirmed that the fuel accumulation and threat of danger from wildland fire to Kenny Lake is high. This rating is due to vegetative fuel types and configuration in and outside the community. 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 Alaska 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. These conditions set the stage for a catastrophic wildland fire event if efforts are not taken to reduce the risk.

Other hazards in the Kenny Lake planning area include roads lacking adequate signage and clearance from surrounding vegetation to provide safe access and egress in the event of a wildland fire and updated mapping. Many homes do not have adequate defensible space and are surrounded by hazardous debris, including inoperable vehicles, uninhabitable trailers, and buildings. The Kenny Lake planning area also has a deficiency in subsurface water sources. The Copper River Basin experiences a large influx of tourists during the summer months participating in recreational activities which leads to an increased risk of accidental wildfire starts.

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Based on community input from the 2021/2022 survey results, top hazards Kenny Lake residents identified include homes and businesses need to be Firewised, lack of clear road signage, unsafe burning practices, needs for equipment and training for the Kenny Lake Volunteer Fire Department, long response times for first responders, and no site for woody debris disposal.

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 within the community and the residential developments to include high concentration of 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 to the edge of the planning area by road and 30+ minutes by helicopter.

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Background

The Kenny Lake Community Wildfire Protection Plan (CWPP) is a collaborative effort that has been 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 wildfire 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 creation of a dedicated website
- Address priorities through stake holder meetings and opportunity for public input.
- Development an action plan and task matrix
- Finalization of the plan with a total of three public community meetings throughout the process.

This Community Wildfire Protection Plan will be the first for Kenny Lake. Creating a cost share program that can be implemented in the following years to assist homeowners with costs that they encounter to create defensible space around their homes is a goal outlined in the Action Plan. This type of program was developed for the Glennallen and McCarthy communities in 2009 and 2011 and was a highly successful program that resulted in many homeowners clearing trees and creating adequate defensible space around their residences. The natural conditions surrounding Kenny Lake remain equally concerning, with areas of beetle killed trees and fuel loading of dead and down trees, that pose a threat to the wildland urban interface.

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

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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)**
- **Fjørdland Fire Solutions LLC.**
- **Kenny Lake Volunteer Fire Department**
- **Local landowners, business owners, and community members**
- **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 Kenny Lake 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 Kenny Lake (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.

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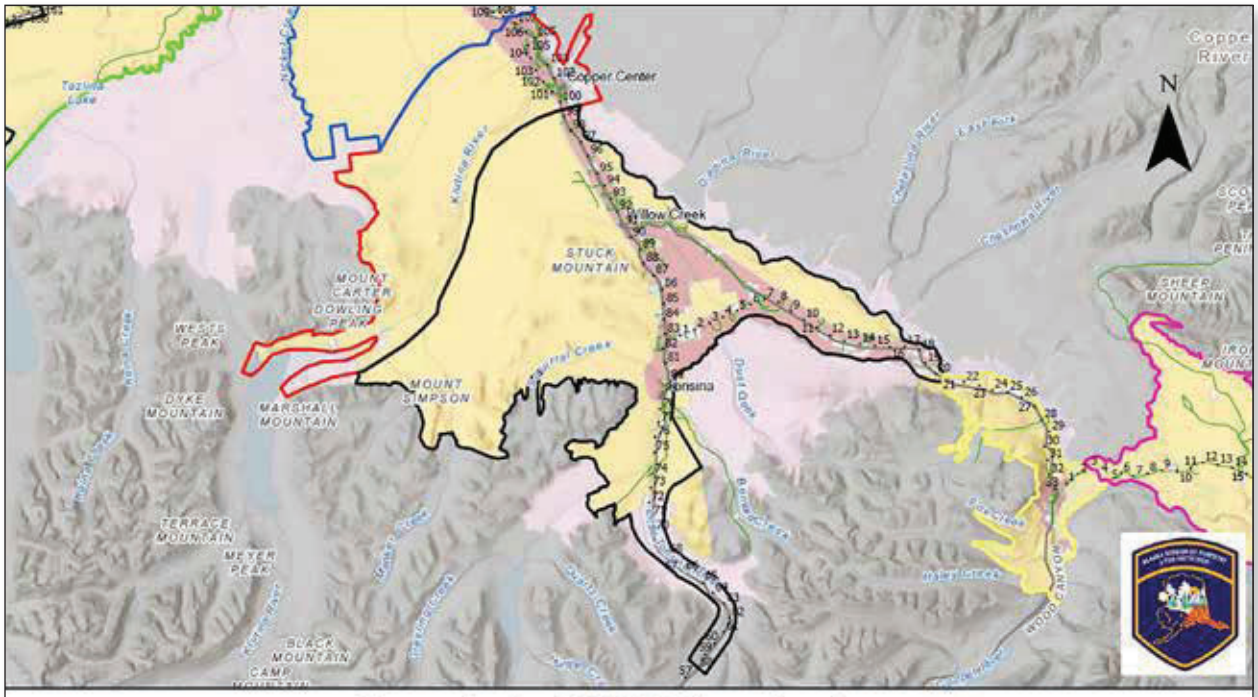
Critical-Fire-Management option is defined by the State of Alaska and Alaska Fire Service as “The highest priority for suppression actions. Lands in wildland urban interface and other densely populated areas where there is an immediate threat to human life, primary residences, inhabited property, community-dependent 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."

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 paleontological sites, developed recreational facilities, physical developments, administrative sites and cabins, structures, high-value natural resources, and other high-value areas.”

The Kenny Lake Community Wildfire Protection Planning area covers from mile 58 to mile 99 of the Richardson Highway, west to include Mount Simpson, Mount DuRelle, Stuck Mountain and Willow Mountain. The boundary line then follows east to include mile 0 to 20.5 of the Edgerton Highway. The Kenny Lake planning area follows the west side of the Copper River and Old Edgerton Highway.



Kenny Lake CWPP Planning Area

CWPP Planning Area
- Tazlina
- Copper Center Area
- Kenny Lake
- Lake Louise
- Mendeltna-Nelchina
- Strelna
- Chitina

Fire Management Options
- Critical
- Full

- Modified (Jul 10)
- Modified (Aug 10)
- Modified (Aug 20)
- Modified (Aug 30)
- Modified (Sep 30)
- Limited
- Unplanned
- Milepost
- Local_Roads

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Community Profile

Kenny Lake is located on the west bank of the Copper River. It lies outside the western boundaries of the Wrangell - St. Elias National Park and Preserve. The Ahtna people occupied this region historically. The community of Kenny Lake became a trading post when the Kennicott Copper Mine was in operation. After the mine closed in 1938, the Kenny Lake area transformed into an agricultural community, due to the fertile soil and the Alaska Homestead Act. There are still four original homesteads that have not been subdivided in Kenny Lake. This community was one of the last communities in the United States to be homesteaded. The Kenny Lake planning area has businesses ranging from stores, gas stations and both seasonal and full time accommodations. .

This planning area also includes the Old Edgerton Highway, Willow Creek and the surrounding area, consisting of a network of non-maintained roads and houses on the east side of the Richardson Highway between mile 93–89. Agricultural parcels lie east of the Richardson Highway, reached by a gravel Trans-Alaska Pipeline Road at mile 94. Trans-Alaska Pipeline Pump Station 12, Ernestine DOT Camp, and Surprise Lake Subdivision at mile 68 of the Richardson Highway are notable infrastructure and values at risk in the southern portion of the planning area. Emergency repeaters and communication towers are located on top of Willow Mountain.

During the summer, subsistence fishing for salmon in the world-famous Copper River brings large numbers of Alaskans and tourists through the Kenny Lake 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 Kenny Lake consist of subsistence fishing, hunting, forest foraging, berry picking and personal use firewood timber harvesting.

LOCATION

The Community of Kenny Lake is in the Copper River Basin in South Central Alaska. Their general geographic location is approximately 61.42° north latitude, -144.5° west longitude, township 1 south, range 5 west, section 14, Copper River Principal Meridian. The community lies just west / northwest, outside the boundary of the Wrangell - St. Elias National Park and Preserve.

POPULATION

According to the 2020 census data the population of Kenny Lake is 289 people.

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CRITICAL FACILITIES (INFRASTRUCTURE)

According to 2020 Census Data, there are a total number of 325 homes in the Kenny Lake area; 140 are occupied and 185 are vacant or uninhabitable homes. Other community buildings in Kenny Lake include the VFD & EMS building, two stores, two gas pump facilities, a fairground and a community hall, K-12 school and public library, and Wrangell Institute for Science and Environment (WISE) a nonprofit organization. Seasonally inhabited structures and businesses for the Kenny Lake planning area consists of bed and breakfast establishments, a hotel, campgrounds, and eateries. There are two community wells located in Kenny Lake, one operated by the Kenny Lake VFD and a smaller well operated by the Kenny Lake Community League. The Kenny Lake Community League is a nonprofit organization that manages the Community hall, fairgrounds, and other community events.

Kenny Lake has limited infrastructure. All roads in Kenny Lake, aside from the Richardson and Edgerton Highways, are gravel or dirt. Industry sources for the Kenny Lake planning area include agriculture, farming, tourism, fishing, Kenny Lake School and local private businesses and nonprofits. The closest landfill is in Glennallen about 50-miles from the community, this facility serves the entire Copper River Basin.

SEASONAL FACTORS

Spring pre-green up grass poses a wildland fire threat, commonly found around structures and previously cleared areas to include agricultural fields, particularly if they were not cut the previous season. Summer thunderstorms bring frequent lightning from mid-June to mid-August and the potential of lightning caused fires. During the summer, subsistence dip netting for salmon in the Copper River brings a large number of Alaskans from all over the state through the Kenny Lake area increasing the risk of wildland fire within the WUI.

WILDLAND FIRE HISTORY

Large fire history in the surrounding area:

- **2019** Chetaslina Fire burned 2,130 acres northeast of the Copper River east of the Kenny Lake planning area.
- **2019** Long Fire burned over 207 acres northeast of the Copper River east of the Kenny Lake planning area.
- **2016** Tiekel River #1 Fire burned over 52 acres south of the Kenny Lake planning area.
- **2016** Tiekel River #2 Fire burned over 916 acres south of the Kenny Lake planning area.

- **1994** Rainbow Fire burned over 299 acres west of the Kenny Lake planning area.
- **1969** Edgerton Fire burned 3,744 acres within the Kenny Lake planning area on the southwest side of the Copper River.
- **From 1940 to the present,** numerous human caused fires can be found in the Alaska Fire History Location database within Kenny Lake'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.

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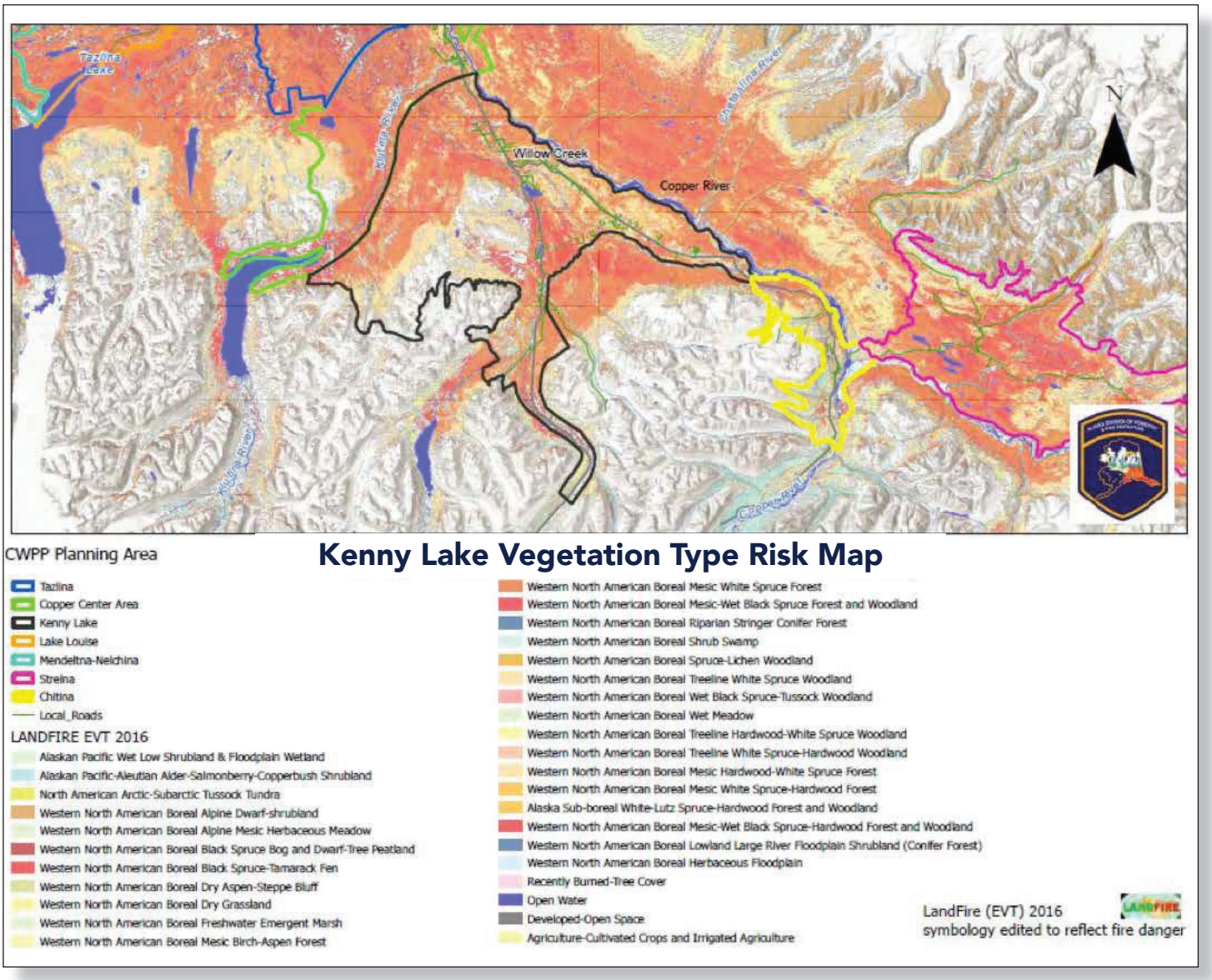

Kenny Lake Vegetation Type Risk Map

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

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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 Kenny Lake planning area.

Other areas of concern include spring pre-green up conditions, where tall and matted dry grass is abundant in Kenny Lake around homes and the community to include farms.

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,** natural and man-made
4. **FIRE PROTECTION RESOURCE AVAILABILITY**
5. **COMMUNITY FIREWISE RATING**
6. **OVERALL COMMUNITY RATING**

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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 and road system 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 and uncut agriculture fields which can rapidly carry fire if ignited. Additionally, debris, trash, and inoperable vehicles are prevalent within the community boundary, creating a hazard. 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 Kenny Lake in all directions, north, east, west, and south 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

The potential for large fires to impact values within the Kenny Lake Planning Area is high. The prevalence and high concentrations of spruce (black spruce, white spruce, spruce/hardwood mix), insect (beetle-kill), and disease in mixed boreal forest and grass (seasonal cured tall standing or matted), are very receptive to wildland fire in high fire danger conditions. In addition to the influx of recreational users in the spring, summer, and fall, thunderstorms and associated lightning strikes are a frequent cause for wildland fire concern during the summer.

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3. BARRIERS:

This includes water, natural and human-made features

Rating: **High–Moderate**

The community has significant waterways spanning the eastern and southern sides of the largest WUI concentration and higher terrain to the south with sparse vegetation that provides protection from large scale wildland fires greater than 1 mile away in at least two cardinal directions. The Copper River provides protection from a large-scale wildland fire to the northeast and the Tonsina River as well as high elevation terrain to the south, provides large-scale barrier protection along the Edgerton Highway. Traveling south from Copper Center into the Kenny Lake Planning Area on the Richardson Highway, extends a continues corridor of spruce forest parallel to the Copper River. Residential development is extensive in the Willow Creek, Willow Lake and Old Edgerton Hwy corridor which lies in this continuous spruce forest parallel to the Copper River, leaving the infrastructure unprotected in between the large natural barriers. The only barriers within these continuous fuels where residents lie are road and utility easements with an occasional clearing. These manmade features and other natural water and rock features can provide an anchor point for firefighting resources to engage a fire or lessen fire intensity.

Areas of continuous fuels surrounding infrastructure with minimal barriers are the greatest concern for this planning area.

4. FIRE PROTECTION RESOURCE AVAILABILITY:

Includes local and agency resources

Rating: **Moderate**

A rating of moderate for resource availability criteria states that adequate initial attack resources are potentially 30–75 minutes away and adequate extended attack resources 8–12 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 45+ 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. During the peak fire season a helitack crew and helicopter capable of bucket drops is available locally from May 10th to August 31st. The Kenny Lake Volunteer Fire Department (VFD) response area is from Mile 92–46 of the Richardson Highway and includes the Old Edgerton Highway to Mile 22 of the Edgerton Highway. Kenny Lake VFD is registered with the Fire Marshall's Office and receive notification from Matcom 911 dispatch. Gakona

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Volunteer Fire Department and Glenn Rich Volunteer Fire Department have mutual aid agreements to assist the Kenny Lake area in the event of a fire; however, they have longer response times. Equipment and training are needs of the Kenny Lake VFD.

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 uninhabitable 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 Kenny Lake VFD operates the community well.

ACCESS: The only road access routes that is at least 2 lanes wide and clearly marked are the Richardson and Edgerton Highways. The old Edgerton Highway is 2 lanes wide along most of the road, however, it is a dirt road that is susceptible to flooding, washboard and large potholes. 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 or road closures, there exists more than one escape route and safety zone.

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Escape Routes:

1. Old Edgerton Highway to the east and west
2. Edgerton Highway to the east and west
3. Richardson Highway to the north and south

Safety Zones:

1. Kenny Lake K-12 School - Mile 5 Edgerton Highway
2. Kenny Lake Fairgrounds - Mile 7.5 Edgerton Highway
3. Tonsina Gravel Pit - Mile 78.5 Richardson Highway

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**	HIGH
4. **FIRE PROTECTION RESOURCE AVAILABILITY**	MODERATE
5. **COMMUNITY FIREWISE RATING**	HIGH

The overall assessment, based off the findings, shows the threat of danger from wildland fire for the Kenny Lake Planning Area is high.

Wildland fire risk to the Kenny Lake community using Wildfirerisk.org is very high. Kenny Lake is higher than 93% 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 www.wildfirerisk.org.

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Action Plan

The Kenny Lake Community Wildfire Protection Plan (CWPP) aims to address the wildland fire risks in the Kenny Lake 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 fires pose 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 this area.

The plan assesses various risk factors including the types of vegetation that can fuel fires, 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 to include the Copper River, Tonsina River and high elevation terrain provide some protection, but there are significant gaps, especially to the residential developments within Willow Creek, Willow Lake, and the Old Edgerton corridor which lie in continuous fuels parallel to the Copper River. The local volunteer fire department (VFD) faces challenges due to limited resources, and inadequate training and equipment. 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 the Kenny Lake Planning Area, making it safer for residents and preserving its natural and cultural resources.

PRIORITIZED ASSESSMENT FINDINGS

1. Homes and businesses not being “Firewise”
2. Dry grasses especially around structures
3. Community roads do not have clear road signs
4. Driveways inaccessible to emergency vehicles
5. Unsafe burning practices
6. Public wildland fire education
7. Long response times for first responders
8. VFD training and equipment needs
9. Lack of adequate radio communications
10. Lack of subsurface water sources
11. Shaded fuel break from Willow Lake to Copper River bluff
12. Identity other fuel reduction projects
13. Standing dead timber mitigation
14. Community woody mass disposal site
15. Protection of Native heritage sites
16. Create an evacuation plan
17. Fire safety signage at public use areas
18. Support local fuels crew
19. Biomass viability

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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. Ensuring proper risk mitigation and potential entities that may address these tasks.

ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
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 mass byproduct. 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 Homeowners Kenny Lake Community League Kenny Lake Volunteer Fire Department State of Alaska Department of Environmental Conservation State of Alaska Division of Forestry & Fire Protection
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.	Homeowners 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.	Local Emergency Planning Committee State of Alaska Department of Transportation State of Alaska Division of Forestry & Fire Protection
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 Kenny Lake Community League Kenny Lake Volunteer Fire Department State of Alaska Department of Transportation State of Alaska Division of Forestry & Fire Protection
Unsafe burning practices (Implementation) (Planning)	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.	Kenny Lake Volunteer Fire Department State of Alaska Division of Forestry & Fire Protection

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ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
Public wildland fire education (Implementation) (Planning)	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 Kenny Lake Volunteer Fire Department State of Alaska Division of Forestry & Fire Protection
Long response times for first responders / firefighters (Implementation) (Planning)	1. Advertise for recruitment of new VFD members. 2. Support VFD training needs. 3. Update equipment. 4. Consider building additional stations in coverage area.	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.	Kenny Lake Volunteer Fire Department State of Alaska Division of Forestry & Fire Protection
Lack of adequate radio 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
Lack of subsurface water source (Implementation)	1. Identify additional subsurface water sources. 2. Apply for a grant to fund the project.	Copper River Development Association Kenny Lake Volunteer Fire Department
Shaded fuel break from Willow Lake to Copper River bluff (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.	Ahtna Inc. Bureau of Indian Affairs Bureau of Land Management State of Alaska Division of Forestry & Fire Protection
Identity other fuel reduction projects and retreatment of existing projects (Implementation) (Planning)	1. Determine areas where spring pre-green up grasses 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 Bureau of Land Management Chitina Native Corporation State of Alaska Division of Forestry & Fire Protection

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ASSESSMENT FINDING	ASSOCIATED TASK	RESPONSIBLE ENTITIES
Standing dead timber mitigation (Implementation)	1. Determine areas in which 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.	Ahtna Inc. Alyeska Pipeline Bureau of Indian Affairs Bureau of Land Management Chitina Native Corporation 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 mass byproduct.	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 Know Sites Database.	Ahtna Inc. Bureau of Indian Affairs Bureau of Land Management Chitina Native Corporation State of Alaska Division of Forestry & Fire Protection
Create an evacuation plan (Planning)	1. Create a centralized community contact list with names and phone numbers. 2. Create maps that include road names and resident locations. 3. Label roads with proper signage. 4. Have residents put house identifiers on their homes. 5. Identify and mitigate communication issues within the planning area. 6. Adopt Alaska Ready, Set, Go standards.	Kenny Lake Community League Kenny Lake Volunteer Fire Department Local Emergency Planning Committee State of Alaska Division of Forestry & Fire Protection
Fire safety signage at public use areas (Implementation)	1. Identify locations of high public use. 2. Obtain signage pertaining to fire safety and other responsible use of natural resources.	State of Alaska Division of Forestry & Fire Protection
Support local fuel crews (Implementation)	1. Coordinate with fuels crews, VFDs and DOF for training. 2. Work with crews to prioritize community projects.	Ahtna Inc. Bureau of Indian Affairs State of Alaska Division of Forestry & Fire Protection
Biomass viability (Implementation)	1. Continually reevaluate the viability of biomass solutions.	Copper River Development Association State of Alaska Division of Forestry & Fire Protection

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Summary, Review, and Updating Process

The community of Kenny Lake has a high risk of wildland fire potential and impact. Due to the type of fuels both inside and outside of the community, natural and man-made barriers, 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 fire protection resource availability, Kenny Lake's overall assessment findings show a high threat of danger from wildland fire.

Wildfirerisk.org outlines Kenny Lake's wildland fire risk of 93% higher than other communities throughout the United States. (July 2024)

Through collaboration on this CWPP, community members and organizations, Native entities, and the Kenny Lake 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 efforts that are consistent with the Alaska Firewise program.

This is a living document, where changes can be discussed and made at any time. A review and updating process for this CWPP is recommended to happen every three (3) years, not to extend past five (5) years. The Community Risk Assessment and Action Plan needs to 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 Kenny Lake 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

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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)
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State of Alaska Forestry & Fire Protection, Deputy Director (Fire)

X JOSHUA SCOTT Digitally signed by JOSHUA SCOTT Date: 2026.01.09 13:10:30 -09'00' Date_____

Wrangell - St. Elias National Park and Preserve

X William M. Dunk Jr. Digitally signed by WILLIAM DUNK Date: 2026.01.14 13:38:42 -09'00' Date_____

Bureau of Land Management

X JOLENE JOHN Digitally signed by JOLENE JOHN Date: 2026.01.16 12:00:57 -09'00' Date_____

Bureau of Indian Affairs

X_____ Date_____

Ahtna Inc.

X Jeff Ramsthel Date February 2026

VFD Community Representative

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Appendix A

The Kenny Lake 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 (Community Wildfire Protection Plan Guidance, 2023). 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 *(H.R.1904 - Healthy Forests Restoration Act of 2003, 2003).*

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. (*Alaska Interagency Wildland Fire Management Plan*, 2024).

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

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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.

Furthermore, future conditions for wildland fire hazards, including climate change; an intensified pattern of wildland fire 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 (State of Alaska State Hazard Mitigation Plan, 2023).

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.

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.

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) (*Alaska Master Cooperative Wildland Fire Management and Standford Act Response Agreement*, 2020).

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 (*2020 Forest Action Plan*, 2020)

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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 (Wildland Fire Leadership Council, 2023).

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 referencing Fire Management Response Guidance from the AIWFMP, Stafford Act and SHMP. This collaborative planning 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:

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.

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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.

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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		

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Narrative description of natural barriers.

Narrative description of constructed (human-made) 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.

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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)	

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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**

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Appendix C

Fjørdland Fire Solutions

C.1 — RISK ASSESSMENT AND ACTION PLAN

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CONTENTS

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COMMUNITY CONCERNS

- Community access during wildfire event (ingress/egress)
- Need for defensible space around structures
- Need for fuel breaks
- Fuel mapping made available to public
- Expressed desire for byproduct of fuels projects to be made public for individual household burning
- Request for funding solutions for the individual homeowner to acquire defensible space equipment i.e. exterior sprinklers
- Inadequate road signage
- Private roads structurally inadequate or otherwise inaccessible to EMS vehicles
- Communication difficulties during wildfire operations/lack of repeater
- Lack of community water source
- Increase in lightning
- Risk of tourist/hunter/recreation fires
- Beetle killed spruce contributing to dead fuel loading
- Need for additional VFD Wildland training
- Need for additional/enhanced VFD Equipment
- Need for homeowner burning 'good practice' education
- Need for community woody debris disposal location
- Need for general community-aimed wildfire training
- Nearly half of households in community without a plan in place to save themselves in the event of a wildfire

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1

Establish Exposure Model Map

Associated Tasks

1. Create mapping system of Kenny Lake Community to determine which structures are most at risk of wildfire exposure
   a. Metrics should include fuels, topography and terrain-driven wind influences
   b. Use exposure model mapping system to establish community defensible space priorities
2. Coordinate public outreach to inform homes/neighborhoods of their risk determinations

Additional Notes

Exposure Model Mapping to be made public so-as to encourage a sense of individual homeowner responsibility for the Firewising of their own homes.

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2

Community Firewise/Defensible Space

Associated Tasks

1. Educate public in the fundamental need for Escape Routes and Safety Zones for every household/business
2. Reinstitute WUI Grant Cost Share Incentive Program for private/homeowner fuels reduction around structures
3. 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. If escape routes/safety zones are not viable, construct them
    b. Firewise should include evacuation plan for all pets and livestock
    c. Widen overgrown escape routes and establish ample ingress, egress, structural road capacities, and turnarounds for Emergency Vehicles
4. Post clear signage throughout community
5. Create system of structure mapping (including Firewise ratings) for land manager/emergency responder use
6. Pursue available funding pathways to the offsetting of homeowner cost of defensible space equipment i.e. exterior sprinklers
7. Provide community Firewise outreach and education
8. Institute program to remove junk vehicles and other hazmat

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.

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3

Strategic Community Water Fill Sites

Associated Tasks

1. Map existing fill sites and provide public outreach to make them known
2. Identify strategic sites to improve/construct so-as to spread water access evenly throughout the community
3. Identify funding to implement water sites for Emergency Services/Agency Firefighters/community members and develop the preferred infrastructure

4

VFD Training & Funding

Associated Tasks

1. Apply for Federal/State Grants to bolster VFD with improved infrastructure, equipment and training
    a. Frequent training and standardization of Standard Operating Procedures between VFD, DOF and Park Service employees
    b. Increased Wildfire training and equipment

Additional Notes

Emphasis on Wildfire Training for VFD including but not limited to FFT2. Emphasis should be placed on equipment that benefits both the VFD and DOF/Agency Firefighters i.e. Water Tenders.

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5

Create Community Emergency Plan

Associated Tasks

1. Create Community Emergency Plan
    a. Include updated and centralized community contact list
    b. Include maps with road signage and house identifiers (in conjunction with community Firewise mapping)
2. Identify and mitigate all communication issues that could arise during an emergency situation

Additional Notes

One available template for small community emergency planning is the S.C.E.R.P. model.

6

Local Fuels Crew

Associated Tasks

1. Form local Fuels Crew
2. Attain funding to form Fuels Crew to assist in fuels reduction projects, Native Allotment protection, Heritage Site protection, community Firewise, helispot construction
3. Prioritize Wildfire training for Fuels Crew
4. Prioritize close working relationship/overlap with VFD, as well as DOF and other Wildfire agencies

Associated Tasks

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

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7 Protection of Native Heritage Sites and Allotments

Associated Tasks

1. Identify heritage sites/allotments to be protected and implement appropriate measures
    a. Create improved mapping of heritage sites and allotments so that agency firefighters can locate and protect.

Additional Notes

Special attention/evaluation should be devoted to the allotments located to the East of the Copper River as continuous spruce and difficult access make them more difficult to defend.
Provide public outreach to inform Native Allotment holders of the funding sources available to pre-treat allotment boundaries in anticipation of wildfire.

8 Fuel Break from Willow Lake to Copper River Bluff

Associated Tasks

1. Examine the viability of a West to East fuel break from Willow Lake to Old Edgerton Highway to Copper River Bluff
2. If viable, construct fuel break with emphasis on agency firefighter access
3. If possible, include construction of a designated helispots within fuel break to deploy agency resources
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.

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9 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
   b. Allow community access to repurpose woody mass accumulation for firewood, biomass, etc.

10 Biomass Viability

Associated Tasks

1. Continually reevaluate the viability of biomass solutions in Kenny Lake and outlying communities, including the viability of cooperating with other communities' programs
2. Explore the possibility of biomass utilization of byproducts of the mitigation of community firewise efforts

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MITIGATION PRIORITIES

11

Standing Dead Timber Mitigation

Associated Tasks

1. Determine areas in which 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

11

Public Wildfire Education

Associated Tasks

1. Explore the viability of teaching general wildfire knowledge to the community with emphasis on basic wildfire behavior
2. Reinstitute/continue wildfire education outreach in schools
3. Special emphasis on safe homeowner burning practices

Additional Notes

Emphasis in education should be placed foremost on the need for Primary and Secondary Escape Routes and Safety Zones for every household.

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C.2 — MAPS

MAPS APPENDIX

KENNY LAKE 11 FJØRDLAND FIRE SOLUTIONS

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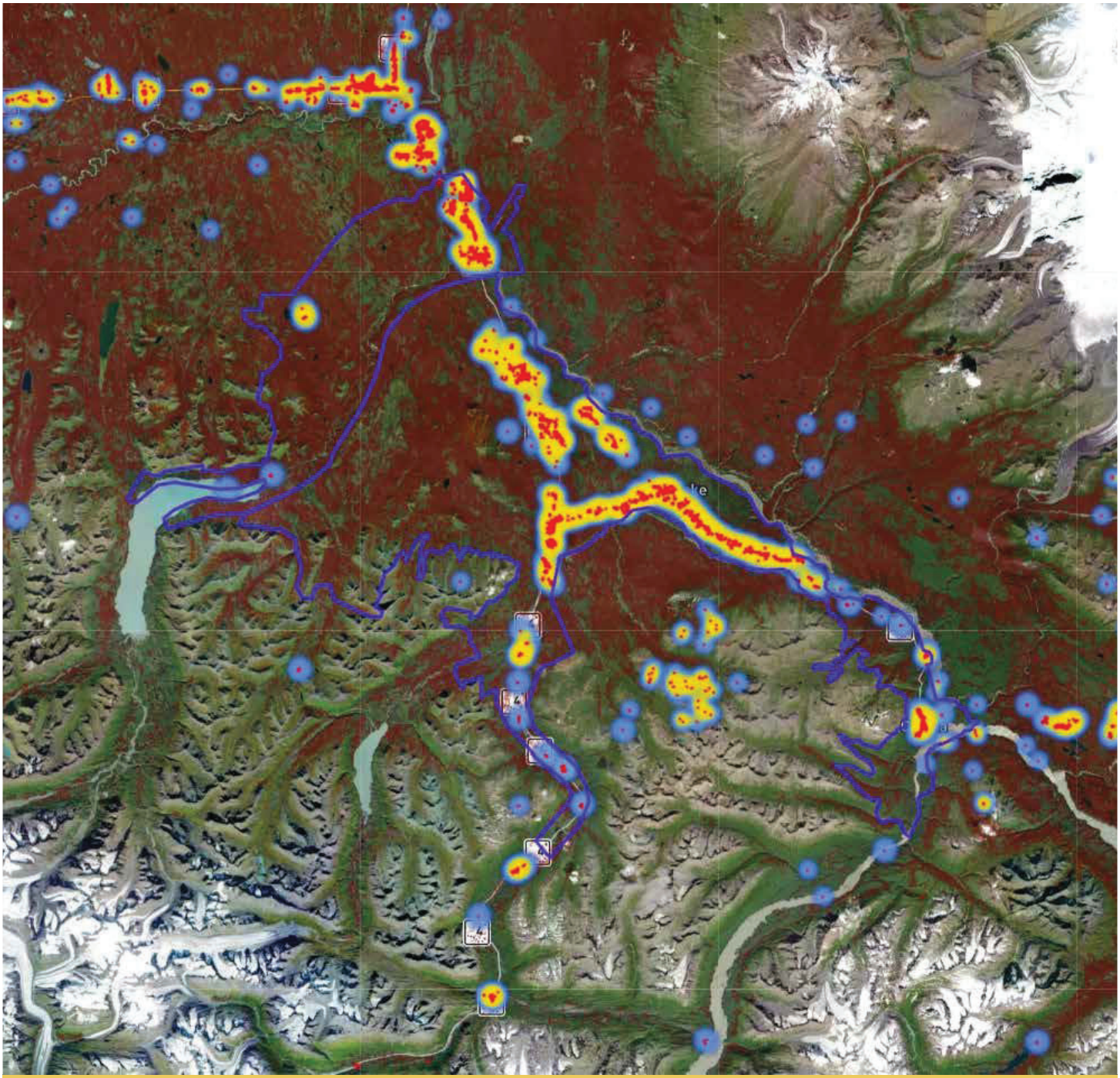

STRUCTURE DENSITY MAP WITH SPRUCE IN RED

KENNY LAKE 12

FJØRDLAND FIRE SOLUTIONS

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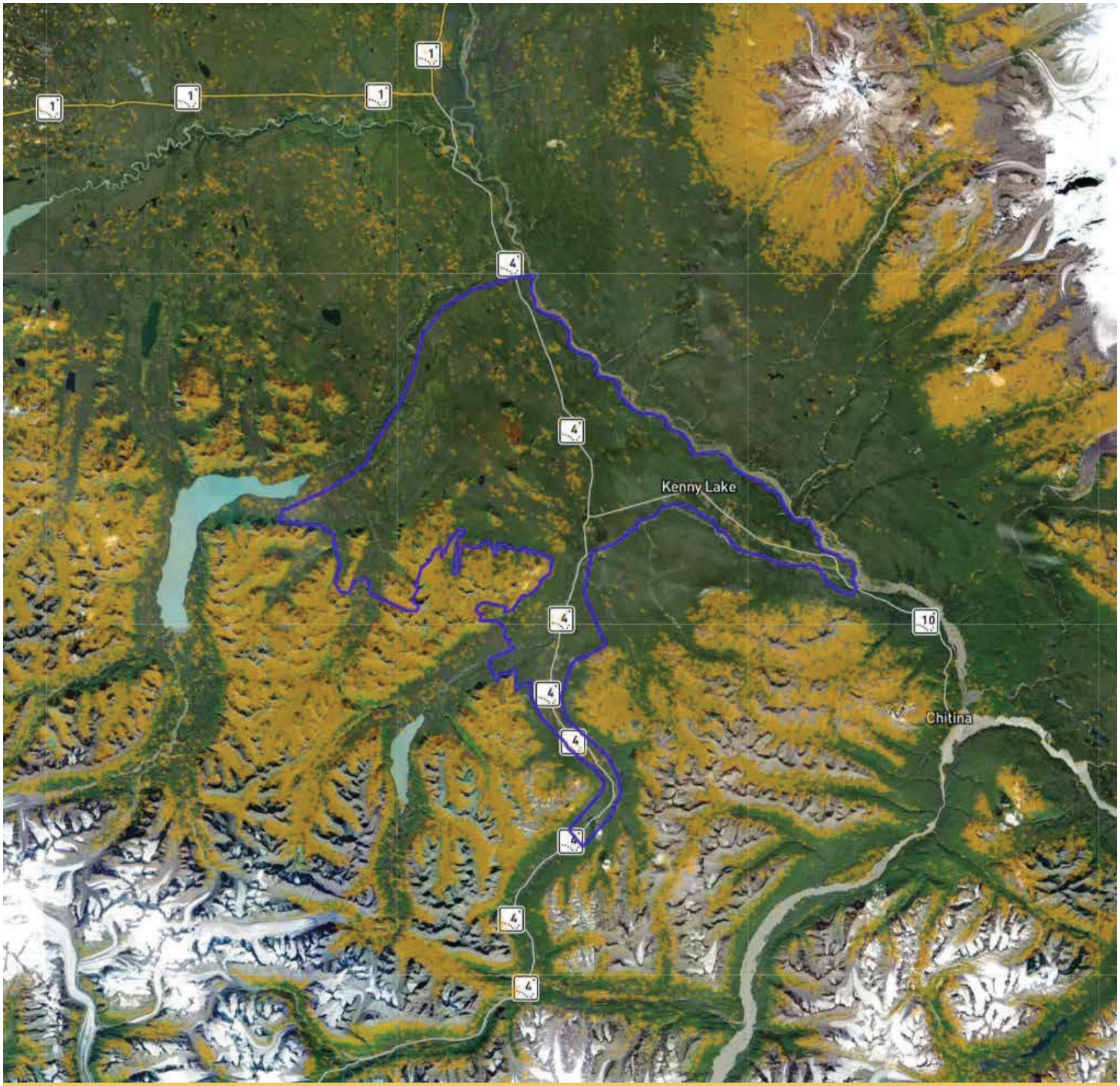

GRASSES IN GOLD

KENNY LAKE 13

FJØRDLAND FIRE SOLUTIONS

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Assessment of Fuels Risk/Hazard, Barriers, Fire Protection Resources, and Firewise

Community: **Kenny Lake**

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

Risk/Hazard Analysis, Available Fuels

The Copper River Basin is classified as Fire Regime 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	Refer to Maps Appendix for all relevant fuel types
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	

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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	

Notes on fuels within one mile of community:

Due to the prevalence and various concentrations of spruce (Black Spruce all types, White Spruce, Spruce/Hardwood mix), Insect and Disease in Mixed Boreal Forest (beetle-kill), and Grass (seasonal cured tall standing or matted), Kenny Lake is determined to be in the Risk/Hazard Analysis category of: HIGH

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	Refer to Maps Appendix for all relevant fuel types
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*	MEDIUM	

Notes on fuels 1-10 miles from community:

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Due to the prevalence and various concentrations of spruce (Black Spruce all types, White Spruce, Spruce/Hardwood mix), Insect and Disease in Mixed Boreal Forest (beetle-kill), and Grass (seasonal cured tall standing or matted), Kenny Lake is determined to be in the Risk/Hazard Analysis category of: HIGH

3. Barriers

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

Low Fire Danger: The community has 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	Major river	Spanning majority of Eastern side of Kenny Lake Wildland Urban Interface
Other Natural Features	River	Adjacent to majority of Southern side of Kenny Lake Wildland Urban Interface
Constructed (Human-made) Features	None	
Overall Community Barrier Rating	**MODERATE**	

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Notes on natural and constructed (human-made) barriers:

Kenny Lake has significant waterways spanning the Eastern and Southern sides of its largest Wildland Urban Interface concentrations. There are a number of assets that are outside of the protection of these barriers, including allotments to the East of the Copper River. Due to the prevalence of tall, pre-greenup dry grasses and mixed Spruce/hardwood between the waterways and the community, and due to the structures outside of the waterways, Kenny Lake is determined to be in the Risk/Hazard Analysis category of: MODERATE

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	**MODERATE**	

Notes on fire protection resources:

Due to the availability of adequate initial attack resources within 30-75 minutes and extended attack resources between 8-12 hours away, Kenny Lake is determined to be in the Risk/Hazard Analysis category of: MODERATE

5. Community Firewise Rating

Alaska Firewise Standards for Creating Defensible Space

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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.

Suggested Kenny Lake Community Escape Routes and Safety Zones:

(To be ultimately determined by Agency Personnel)

Safety Zone: Community Hall Area (or maintained fields in vicinity)

Escape Routes: Edgerton Highway

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			X

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Construction			X
Water Supply			X
Access Guidelines/ Combustibles			X
Overall Rating			**HIGH**

Notes on defensible space within this community:

Due to inadequate defensible space around more than 65% of structures/allotments, non-fire-hardened construction methods of more than 65% of structures, inadequate water supply to more than 65% of structures/allotments, and inadequate access to more than 65% of structures/allotments (including inadequate access due to various combustibles/HAZMAT), Kenny Lake is determined to be in the Risk/Hazard Analysis category of: HIGH

6. Overall Community Rating

OVERALL RATING CHART SUMMARY

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

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Notes on other contributing factors to risk and mitigation of wildland fire in this community:

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

Kenny Lake, through the Overall Rating Chart Summary, has received an overall rating of: HIGH

Per wildfirerisk.org, Kenny Lake has also received a rating of VERY HIGH in the category of Vulnerable Populations due to the fact that people of this community may be disproportionately impacted by wildfire because of social or economic factors.

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Appendix D

Wildland Fire Community Risk Assessment

Planning Area: Kenny Lake	

Overall Rating

Category	Rating
Fuels Risk/Hazard inside community	Moderate
Fuels Risk/Hazard outside community	High
Barriers	Moderate
Fire Protection	High
Community Firewise Rating	Moderate
NFRC Database-Wildfire Likelihood	High 74th Percentile
Final Rating:	**High**

Background/History

Current Population: 234 (Population Year: 2020)

Kenny Lake lies off of the Richardson Highway, between mile 1 and 17 on the Edgerton Highway, and between mile 1 and 8 of the Old Edgerton Highway. It is along the preferred route into the Wrangell-St. Elias National Park. It lies at approximately 61° 43' N Latitude, 144° 56' W Longitude (Sec. 31, T001S, R003E, Copper River Meridian). The community is located in the Chitina Recording District. The area encompasses 111 sq. miles of land and 1 sq. miles of water.

The Ahtna people have occupied the region historically. The area was settled in the 1960s by a number of homesteaders due to the rich fertile soil and agricultural potential. However, a number of homesteaders cleared 20 acres of land, built a cabin and lived there for 6 months of every year for five years as required to obtain ownership, then subdivided and sold the property. There are still four original homesteaders farming their land. Until the 1970s the Old Edgerton Highway was the only road into Kenny Lake

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Overview / Values

Location/Ownership Map:

Community Areas of Concern:

Most of the infrastructure directly adjacent to the Edgerton highway corridor within the Community have good defensible space. The old Edgerton is more variable, most of the remaining infrastructure has little to no defensible space and have flammable materials directly adjacent to them. Again, the community is highly variable, some structures are good while other adjacent properties have done little. Structure and vegetation fires within the community have the potential to spread into the wildland, and fires in the wildland have a high potential to enter parts of the community.

Community Overview / Values Map:

Fuels Assessment

Risk/Hazard Analysis (Inside and with-in 1 mile of the community)

FUEL Types (predicted fire behavior based on historic summertime weather with hot, dry conditions)	Wildland Fire Hazard	Percent of Area
Black Spruce Boreal Forest (CFFDRS=C2) *rate of spread: high / intensity: high / spotting potential: high*	High	**20%**
Black Spruce Lichen Woodland (CFFDRS=C1) *rate of spread: moderate /intensity: moderate / spotting potential: high*	High	**15%**
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) *rate of spread: high / intensity: moderate / spotting potential: low*	Moderate	**35%**
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	**10%**
Insect and Disease in Mixed Boreal Forest (may include white or black spruce, aspen and/or birch. CFFDRS=M4 30%) rate of spread: moderate / intensity: high / spotting potential: moderate	Moderate	**0%**
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) *rate of spread: low / intensity: low / spotting potential: low*	Low	**10%**
Deciduous Brush (includes willow & alder) *rate of spread: low / intensity: low / spotting potential: low*	Low	**10%**

Keep in mind this is a general overview of the fuels within and up to 1 mile outside the community. For some small areas near subdivisions, near riverbanks, and near other manmade or natural features this rating may not be representative. It is however just meant to be an overview of the area described.

Risk / Hazard Analysis (1 -10 miles outside community that can impact community)

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FUEL Types (predicted fire behavior based on historic summertime weather with hot, dry conditions)	Wildland Fire Hazard	Percent of Area
Black Spruce Boreal Forest (CFFDRS=C2) *rate of spread: high / intensity: high / spotting potential: high*	High	**25%**
Black Spruce Lichen Woodland (CFFDRS=C1) *rate of spread: moderate /intensity: moderate / spotting potential: high*	High	**25%**
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) *rate of spread: high / intensity: moderate / spotting potential: low*	Moderate	**15%**
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	**10%**
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: moderate CFFDRS=M4 30%)	Moderate	**10%**
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) *rate of spread: low / intensity: low / spotting potential: low*	Low	**5%**
Deciduous Brush (includes willow & alder) *rate of spread: low / intensity: low / spotting potential: low*	Low	**10%**

Keep in mind this is a general overview of the fuels within 1 and up to 10 miles outside the community. For some small areas near subdivisions, near riverbanks, and near other manmade or natural features this rating may not be representative. It is however just meant to be an overview of the area described.

Fuels Map:

Barrier(s) Assessment

Natural: The Community is located on the west side of the Copper River and along and north of the Tonsina River. Other various riparian features are consistent throughout the area including small lakes, creeks, and rivers. The areas in the far south of the community are very close to the Chugach Mountains, these areas have the additional natural break of the high elevation where there is little or no continuous vegetation. Hardwood stands and hardwood brush can slow fire spread under certain conditions. With wind and dry fuel sources many of these natural barriers are ineffective.

Constructed: The Richardson highway runs north to south, and the Edgerton and old Edgerton run east to west through the area. The Trans-Alaska Pipeline also runs north to south, west of the Richardson highway. Many of the properties along the Edgerton highway have large areas of land cleared for agricultural use. There are other agricultural clearings in the area but are more widely scattered outside of the Edgerton corridor. There are also several smaller paved and gravel roads in subdivisions, business districts and other populated areas throughout the area. Some Gravel Roads and other human made openings are present throughout the area, some of these openings could be affective in slowing fire growth or be incorporated into fuel breaks.

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Barrier Rating Chart

Barrier Type (list specific type under excellent, fair or poor)	*Rating
Water (may include lakes, rivers, streams and sloughs)	Moderate
Natural features (may include barren landscape, rock, topographic features)	Moderate
Human-made features (may include airstrips or other clearings)	Moderate
Overall Rating	**Moderate**

Barrier Rating Chart Key:

Low Fire Danger: The community has a barrier(s) that provides thorough protection from fuels less than one mile away in at least three 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 a barrier(s) that provides thorough protection from fuels less than one 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 certain vegetation types or some communities situated on major rivers.

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

Fire History Map:

Depending on the severity/consumption of the burn, fuels remaining, time of year, and current conditions, fires may or may not carry through old burn scars. In general, burn scars older than 15 years will not significantly hinder the ability for a fire to carry through the burn scar (unless the severity of the burn was high, the tundra mat was consumed, and birch saplings or willow/alder regrew). Resistance to control will be lessened, and the probability of a running/spotting head fire will be dramatically reduced.

Firewise Assessment

Community Firewise Rating for Defensible Space Assessment
(Overall Community Assessment Not Individual Structures)

Alaska Firewise Standards	Low Over 65% of homesites and community buildings meet standard	Moderate 35-65% of homesites and community buildings meet standard	High 35% or less of homesites and community buildings meet standard
Landscaping		Moderate	
Construction			High
Water Supply			High

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Access		Moderate	
Clear of Flammables/ Refuse/Debris (flammables stored properly & area cleared)			High
Overall Rating			**High**

Alaska Firewise Rating Chart Key:

Landscaping: 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 feet 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 two 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.

Fire Protection Resources

The community rates Moderate based on limited wildland fire capabilities, including trained personnel and equipment available. Wildland fire response is the responsibility of the state of Alaska Department of Forestry and Fire and local volunteer departments, based out of Tazlina and Glennallen, neighboring communities also have some volunteer resources available. Local resources are primarily Type 6 fire engines and water tenders. With a response time of about 30 minutes. Fire retardant is available from Palmer with a response time of about 60 minutes, and from Fairbanks with a response time of about 90 minutes. During the primary fire season May-July there could also be a helicopter capable of bucket drops available locally depending on fire danger and availability. Smokejumpers are also available from Fairbanks with a response time of about 90 minutes. There could also be Crews available from Palmer and Fairbanks with a minimum response time of 6-12 hours and up to 48 hours depending on availability and other fire activity across the state. One of the biggest concerns is number of resources available. Although most of the communities in the area have some form of fire protection resources, most if not all do not have and adequate number of resources immediately available to assist with anything but small initial attack fires. Due to this situation all communities in the area will be rated as High Risk. Some communities are somewhat better off than others due to location along the road system. However, the region (Alaska) as a whole lacks adequate numbers of fire protection resources.

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Fire Protection Resources Response Chart

Response Time	Kind of Resource (initial and extended attack)	Risk	Overall Risk
Initial attack resources are more than 75 minutes away and adequate extended attack resources are more than 12 hours away.	Hand Crews, Engines, Incident Command Teams, and Air resources.	High	High
Adequate initial attack resources are 30-75 minutes away and adequate extended attack can be in place in 8-12 hours.	Smoke Jumpers, Air Tankers, Air Attack.	Moderate	
Adequate initial attack resources are less than 30 minutes away and adequate extended attack can be in place in less than 8 hours.	Local Volunteer Fire Department Engine, personnel, Water Tender and Dozers.	Low	

Possible mitigation measures:

- **Fuel Breaks**: There are many opportunities for fuel breaks in the area such as widening road and river corridors, connecting segments of existing man made and natural breaks in the fuel, widen or improve the pipeline corridor, maintain and improve existing previously constructed fuel breaks, coordinate with surrounding communities for construction of large multi community breaks, and construct small scale breaks around specific subdivisions and population clusters that are in need of improvement. It is very important fuel breaks be maintained to ensure they remain effective.

- **Fire Wise Communities**: Some areas have done a very good job of creating defensible space and doing what is necessary to make their area resistant to wildfire, others have done little or no work and pose a significant risk to fire in the wildland urban interface (WUI). It is important to educate and assist communities and doing what is necessary to mitigate fire risks in the WUI. Creating a cost share options to assist homeowners is one way to help them to complete projects that will create a safer community.

- **Increase Fire Protection Resources:** The region (Alaska) as a whole does not have adequate fire protection resources during times of high fire danger. Increasing the capacity of federal, state and local resources would help the communities reduce the potential damage caused by wildfire to area communities.

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Kenny Lake

COMMUNITY WILDFIRE PROTECTION PLAN