

Ruby Community Wildfire Protection Plan

Ruby Community Wildland Fire
Protection Plan
2022



Photo: Zachariah Hughes.

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BACKGROUND

The Community Wildfire Protection Plan (CWPP) addresses elements of community wildfire protection. Through discussion among interested parties about wildfire protection, communities develop, clarify, and refine their priorities for the protection of life, property, and critical infrastructure in the wildland urban interface (WUI).

Minimum requirements for a CWPP; include: (1) collaboration, (2) prioritizing areas for treatment, and (3) recommended measures to reduce structure ignitibility. Three elements are addressed in this process the risk/hazard assessment, mitigation plan, and monitoring.

EXECUTIVE SUMMARY

A hazardous fuels assessment was conducted for Ruby during the summer of 2022. The majority (over 75%) of the structures within the town were rated poor for landscaping clearance, construction materials, flammable materials/debris present, water resource available, and adequate access. Most of the structures within the community are void of defensible space and have flammable debris in proximity. The dump is on the hill near the airstrip. Trash is regularly burned and there are frequent escapes from the dump. There is one fire truck in town with a 300-gallon tank and pump.

Hazardous fuel accumulation and fire risk adjacent to the town was rated high due to large areas of untreated black spruce and the potential for fire moving through these stands into the town. The community has a fuel break that was put in place in 2015. However, the lines are getting overgrown with brush. A concern to the community is that a fire within the fuel break could be difficult to suppress. Thinning around the community—particularly between the airport and town—and brushing out around homes and offices would significantly mitigate wildfire threat. The community would also like to add an additional fuel break adjacent to the core Ruby area.

Collaboration among interested parties now spans multiple decades. Interested parties included the Ruby Tribal Council, City of Ruby, Ruby Fire Department, AFS/BLM, BIA, U.S. Fish & Wildlife Service, Tanana Chiefs, and Dineega Corp. This group will henceforth be referred to as the planning team.

Areas of concern were field verified during the summer of 2022 in a Risk Assessment conducted by Tasha Shields, AFS Tanana Zone Lead Fire Specialist. This field assessment provided the information needed to refine the initial list of areas of concern. The planning team then decided which areas to pursue in terms of treatment, as outlined in this document's Mitigation Plan.

COLLABORATION

The Ruby CWPP involved key decision makers, the local, state and federal agencies, as well as other interested parties. The key decision makers include the Ruby Tribal Council, City of Ruby, and Alaska Fire Service/BLM. Other important players are the Ruby Fire Department, Dineega Corp., Tanana Chiefs, BIA, and US Fish and Wildlife Service. The collaborative process has

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been an integral part of this project and is what keeps this project moving forward.

This risk assessment process provides information about four primary elements that either contribute to or mitigate wildfire danger within or near Ruby. The elements of the risk assessment include:

- Risk(s)/Hazard(s)
- Barriers
- Fire Protection Response
- Community Firewise Rating

ASSESSMENT TO PRIORITIZE AREAS FOR FUEL REDUCTION

Introduction:

A list of areas of concern and priority treatment areas were identified by the field assessment conducted during the summer of 2022. The planning team agreed upon a final list of areas of concern and potential treatment areas. The treatment areas include brushing out 2015's human-made fuel break, as well as additional thinning around the community and around homes and offices, as well as an additional fuel break adjacent to downtown, to mitigate wildfire threat. Areas of high priority include: the Ruby Cemetery, the ridgeline to the west of the Poorman Hwy., the area adjacent to the south side of town, the ridgeline between the school and the airstrip, and the area around the landfill.

Identification and Description of Community and Area:

Ruby is located on the south bank of the Yukon River, in the Kilbuck-Kuskokwim Mountains. It is about 50 air miles east of Galena and 230 air miles west of Fairbanks. Ruby's remoteness is a critical detail regarding its community wildfire defense needs. The response time from Fairbanks is 60-90 minutes depending on the aircraft responding. Resources responding from Galena would be quicker, at 30-45 minutes. There is no local organized fire response, (a volunteer fire department is just forming) although the village does have an engine with a 300-gallon tank. To staff a fire in Ruby, water handling equipment would need to be flown from the Fairbanks/Galena warehouse. Personnel would need to be flown from Fairbanks. Extended attack resources are more than 12 hours away.

Ruby lies adjacent to the Nowitna National Wildlife Refuge. It lies at approximately 64.739440° North Latitude and -155.486940° West Longitude (Sec. 04, T009S, R017E, Kateel River Meridian.)

The area experiences a cold, continental climate with extreme temperature differences. The average daily high temperature during July is in the low 70s; the average daily low temperature during January ranges from 10 to below zero. Sustained temperatures of -40 degrees are common during winter. Extreme temperatures have been measured from -53 to 98. Annual precipitation is 17 inches, with 66 inches of snowfall annually. The Yukon River is ice-free from mid-May through mid-October.

Ruby's current residents are Koyukon Athabascans of the Nowitna-Koyukuk band, a nomadic

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group who followed game with the changing seasons. There were 12 summer fish camps located on the Yukon River between the Koyukuk River and the Nowitna River. Ruby developed as a supply point for gold prospectors. It was named after the red- colored stones found on the riverbank which were thought by prospectors to be rubies. A gold strike at Ruby Creek in 1907, and another at Long Creek in 1911, attracted hundreds of prospectors to the area. At one time, over 1,000 non-native miners lived in Ruby and the nearby creeks. Placerville, Poorman, Sulatna Crossing, Kokrines and Long Creek were some of the area's boom settlements. A post office was established in 1912, and Ruby incorporated as a city in 1913. Initially, the City was governed by miner's meetings, then later by Pioneer Igloo Number 5. After the gold rush, the population declined rapidly. By 1939, there were only 139 residents. During World War II the mining operations were shut down and most of the non-native residents left. After the war, the remaining residents of nearby Kokrines relocated to Ruby, and the population began to increase. Ruby incorporated as a second class city in 1973. A clinic, watering point, and school were constructed in the 1970s. During the 1980s, telephones and television services were provided. Today there are 12 commercial buildings and 69 occupied homes in Ruby.

- The WUI boundary includes the Town of Ruby and extends five miles out from Ruby proper. This delineation was based on direction from AFS.
- This CWPP covers only the town of Ruby.
- Location: Ruby is located on the south bank of the Yukon River – 230 air miles west of Fairbanks.
- General Geographic Location: 64.739440° North Latitude, -155.486940° West Longitude. Section 04, Township 009S, Range 017E, Kateel River Meridian
- Population: 139 (2020 Census)
- Structures:
 - Homes: 117 (69 occupied)
 - Community buildings: 6
 - Commercial: 12
 - Outbuildings: approximately 100
- Infrastructure: The city operates the electrical power generating plant and is served by commercial telephone utilities. Approximately 85% of residents haul water from the washeteria and approximately 15% have their own individual wells. Approximately 70% of residents have their own septic systems, with the remainder using honey buckets or outhouses. The school operates on its own septic system and water well.
- The Marilyn A. Kangas School provides education K-12 and serves 35-40 students. Health care is provided by a health aide at the Ruby Health Clinic. The village has a community meeting hall, tribal offices, Post Office and one commercial store.
- Ruby is accessible by air and water. A State-owned 4,000' long by 100' wide lighted gravel airstrip is available. There are two commercial air travel/delivery services. There are no docking facilities, but a boat launch and barge off-loading area are available. Barges make several deliveries each summer. The fuel storage facility is owned by the city and operated by Dineega Corp. Float planes land on the Yukon River. Trucks, snowmachines, ATVs and riverboats are

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used for local transportation. Numerous trails and the 35-mile road to Long Creek Mine to the south are used for subsistence and wood cutting.

- **Industry:** The City, school, tribal council, Dineega Corp. and clinic are the largest employers. Ruby also has a number of family-operated businesses, wildland firefighting, construction work, Native handicrafts and trapping are part-time cash sources. Subsistence activities provide some food; salmon, whitefish, moose, bear, ptarmigan, waterfowl, and berries are utilized. Eight residents hold commercial fishing permits.
- **Natural Resource Values:** The Yukon River and the surrounding plant and animal habitat are critical to supporting traditional subsistence activities.
- **Cultural Sites:** There are no known registered historic sites, landmarks, or cultural sites present.
- **Dumps:** the landfill is located approximately 1.5 miles south of the city. The landfill material is burned periodically. Fires escapes the landfill several times a year.
- **Hazards:** (a) homes built in areas of dense white and black spruce and without adequate clearing, (b) proximity of flammable materials (gasoline, fuel oil, and propane) around homes, and (c) accumulations of other flammable materials around and under homes.
- **Fire Equipment:** wildland fire suppression falls under the Alaska Fire Service which has the headquartered in Fairbanks. Galena is a remote station that is staffed during the fire season. During the active fire season, AFS provides a wide range of firefighting equipment and personnel including air tankers, two helicopters (light and medium), Smoke jumpers, Emergency Firefighters, and miscellaneous equipment to support the suppression efforts.
- **The Ruby Volunteer Fire Department (VFD)** provides fire protection for the city. The Department is currently being formed and recently acquired a new Type 6 engine which is housed in a heated building. The Department is in need of portable pumps, additional hose, nozzles and hardware, and additional structural and wildland fire training for its' members. It also needs additional training. The VFD aspires to provide public Firewise trainings for community members.

Areas or Values to be Protected:

The highest risk of wildland fire in Ruby is from lightning or human-caused fire starting within the town, or a nearby wildland fire burning into the black spruce fuel type adjacent to town, which could cause a fire to spread into Ruby.

Critical areas to be protected include the fuel storage facility along the shore of the Yukon River; the water well facility and power generating plants in the middle of the village; and the school facilities along the eastern ridgeline. Damage to any of these sites would create a tremendous financial impact to this small community.

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

Fire Regime and Condition Class: IV: 35 to 200 year frequency and high severity.

Risk/Hazard Analysis Charts

- 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.
- 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 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) <i>rate of spread: high / intensity: high / spotting potential: high</i>	High	30%
Black Spruce Lichen Woodland (CFFDRS=C1) <i>rate of spread: moderate / intensity: moderate / spotting potential: high</i>	High	10%
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) <i>rate of spread: high / intensity: moderate / spotting potential: low</i>	Moderate	5%
Mixed Boreal Forest (may include white or black spruce, aspen and/or birch; CFFDRS=M1) <i>rate of spread: moderate / intensity: moderate / spotting potential: moderate</i>	Moderate	40%
Insect and Disease in Mixed Boreal Forest (may include white or black spruce, aspen and/or birch. CFFDRS=M4 30%) <i>rate of spread: moderate / intensity: high / spotting potential: moderate</i>	Moderate	0%
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) <i>rate of spread: low / intensity: low / spotting potential: low</i>	Low	10%
Deciduous Brush (includes willow & alder) <i>rate of spread: low / intensity: low / spotting potential: low</i>	Low	5%

Risk / Hazard Analysis 1 -10 miles outside community that can impact 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) <i>rate of spread: high / intensity: high / spotting potential: high</i>	High	40%
Black Spruce Lichen Woodland (CFFDRS=C1) <i>rate of spread: moderate / intensity: moderate / spotting potential: high</i>	High	5%
Grass (cured tall standing or matted; CFFDRS = O1a/O1b) <i>rate of spread: high / intensity: moderate / spotting potential: low</i>	Moderate	5%
Mixed Boreal Forest (may include white or black spruce, aspen and/or birch; CFFDRS=M1) <i>rate of spread: moderate / intensity: moderate / spotting potential: moderate</i>	Moderate	40%
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	0%
Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2) <i>rate of spread: low / intensity: low / spotting potential: low</i>	Low	5%

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Deciduous Brush (includes willow & alder) <i>rate of spread: low / intensity: low / spotting potential: low</i>	Low	5%
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Barrier(s) Assessment

Natural: The Yukon River provides a natural barrier to Ruby on the north side of town. There is a large rock feature on the river on the west side of Ruby. There is also a bluff on the east side of town.

Constructed: The village has an airport on the southeast side of town. There is a fuel break on the west, south and east sides of town. The fuel break is regenerating, so it needs to be thinned out and potentially widened. There is also community desire to add an additional fire break immediately around the village, closer to existing structures.

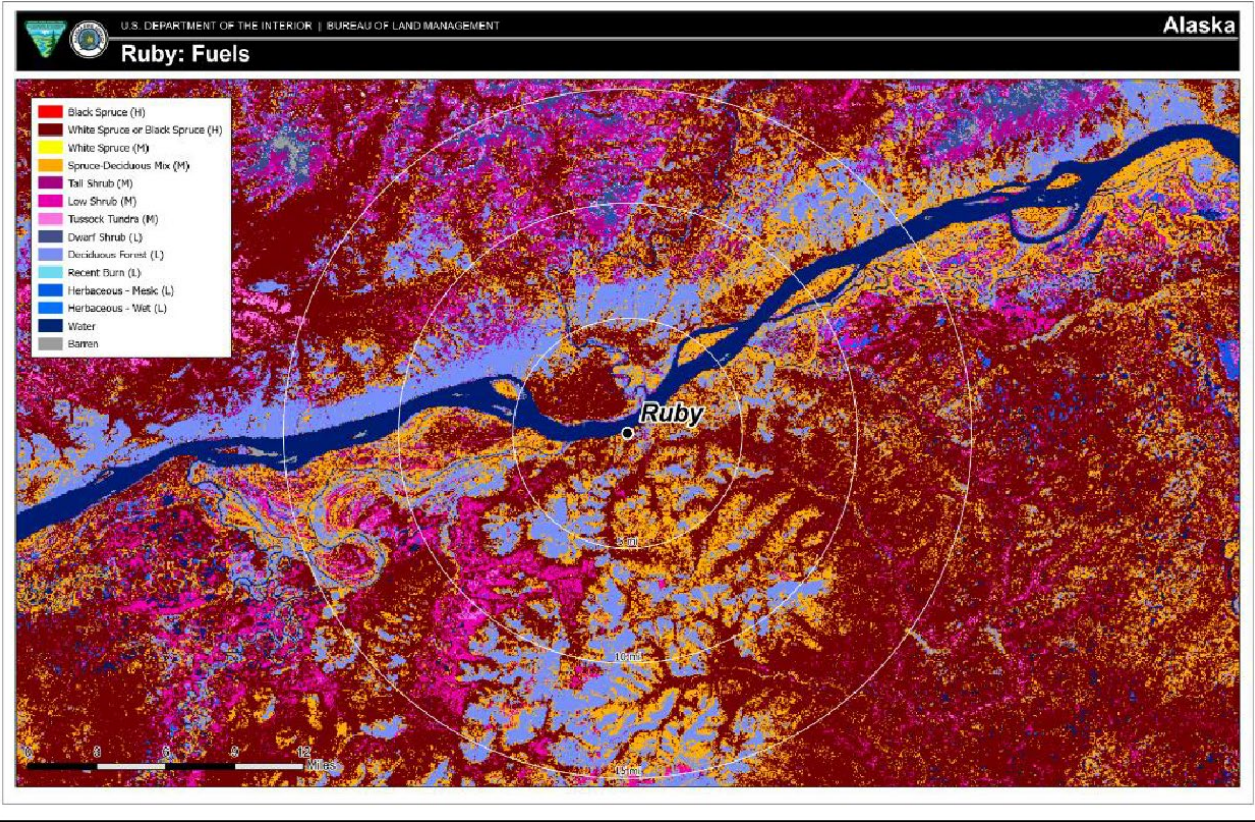
Barrier Type (list specific type under excellent, fair or poor)	*Rating
Water (may include lakes, rivers, streams, and sloughs)	Moderate
Natural features (may include barren landscape, rock, topographic features)	Moderate
Human-made features (may include airstrips or other clearings)	Moderate
Overall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

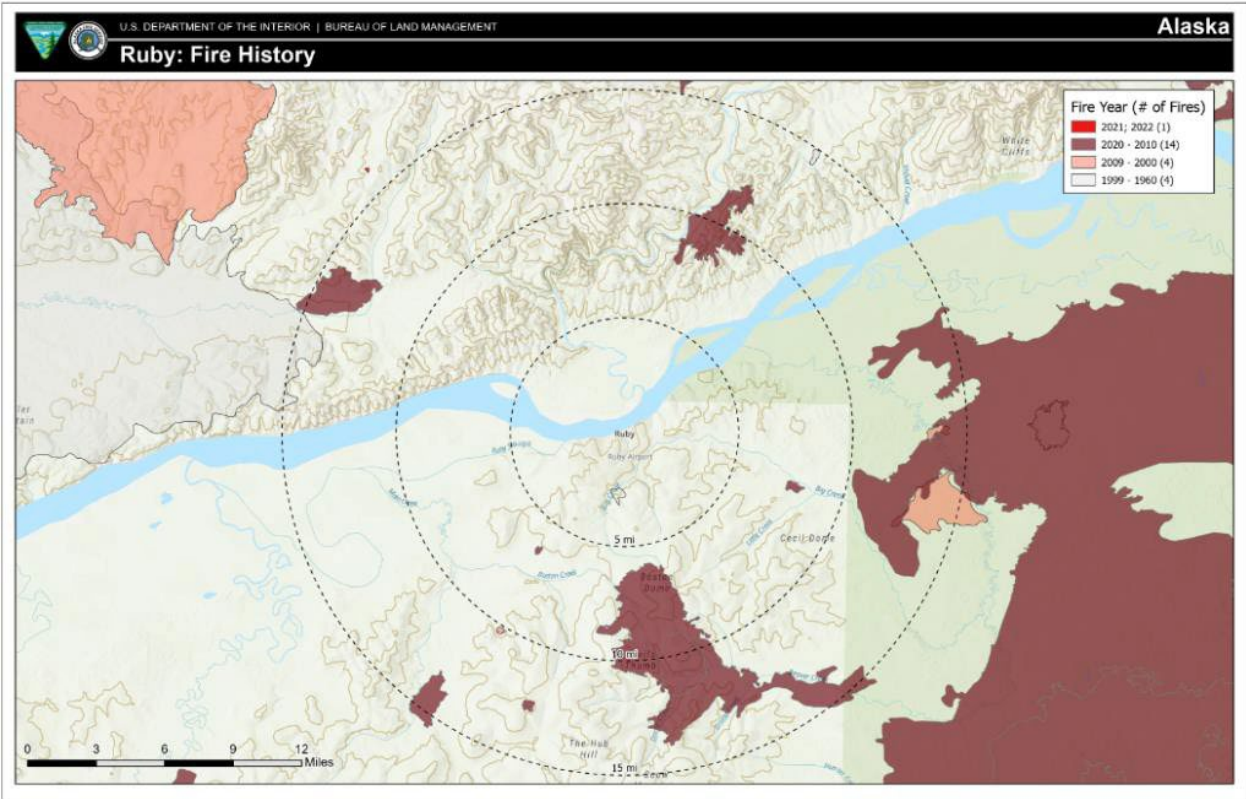
Fuels Map:

Ruby is located in the heart of Alaska’s boreal forest. The fuels within the community are predominantly a mixed hardwood forest. There are several pockets and stringers of black spruce. Black spruce is Alaska’s problem fuel, with high potential for extreme fire behavior and resistance to control during periods of drying and high danger. Further away from the community there are large areas of decadent black and white spruce.
(map on next page)

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Fire History Map:



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Fire History Assessment:

The majority of the fuels surrounding the town of Ruby are Boreal Spruce (Fuel Type C-2), with some areas of Boreal Mixedwood (Fuel Type M-1&2). The fire regime within the Boreal Spruce is: IV- 35 to 200-year frequency and high severity.

There have been numerous wildland fires that have burned in the immediate vicinity of Ruby. The Big Creek fire burned 3,416 acres in 2007, approximately 12 miles ESE of town. In 2015 there were two large wildfires adjacent to Ruby. The first was the Big Creek 2 fire which burned 312,000 acres, and the second was the Bruno Creek fire to the south which burned 15,000 acres. The town dump has also burned and had minor escapes numerous times due to the cured out dead grass around its perimeter.

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 establish). 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			High
Construction			High
Water Supply			High
Access			High
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

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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 high risk, based on limited wildland fire capabilities, including trained personnel and equipment available. Wildland fire response is the responsibility of the BLM Alaska Fire Service's Tanana Zone, based out of Fairbanks or Galena. Ruby is located approximately 50 miles east of Galena and 230 miles west of Fairbanks. The response time from Fairbanks is 60-90 minutes depending on aircraft responding. Resources responding from Galena would be much quicker 30-45 minutes. The initial attack resources responding from Fairbanks/Galena include smokejumpers, helicopters, air attack and water or retardant-dropping airtankers. There is no local organized fire response, the village does have an engine with a 300-gallon tank. To staff a fire in Ruby, water handling equipment would need to be flown from the Fairbanks/Galena warehouse. Personnel would need to be flown from Fairbanks. Extended attack resources (crews) are more than 12 hours away. A staging area set up at the Ruby airport could support fires in the area, but logistics is challenging due to the remoteness of the area. Smoke conditions could limit response to wildfires.

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	Moderate
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	

Local Firefighting Equipment and Contacts

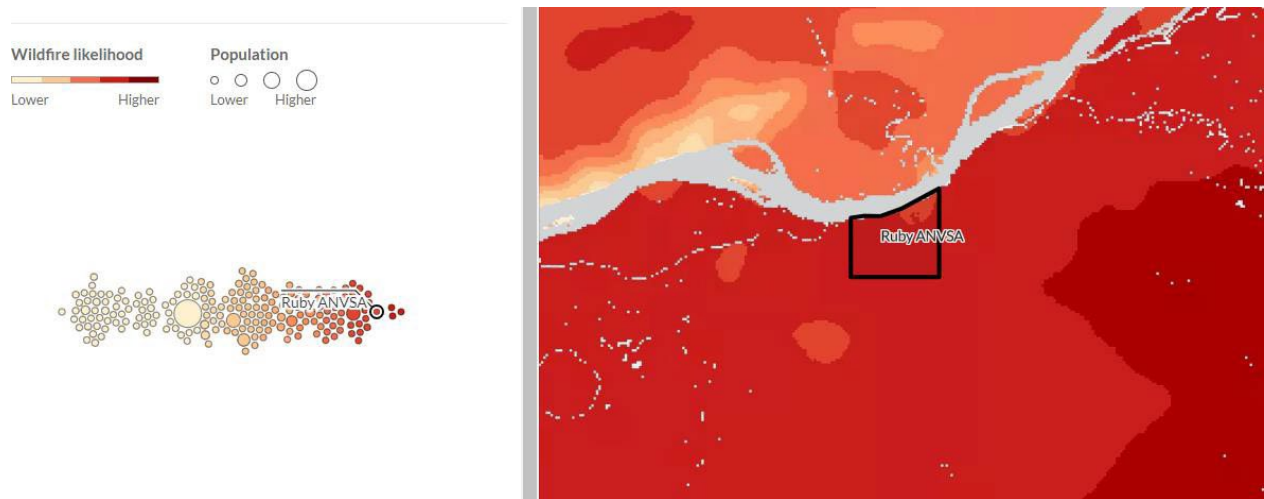
Type of Equipment	Name/Organization	Contact Information
1 Type 6 engine	Ruby Tribal office	907-468-4479

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National Wildfire Risk Database- Wildfire Likelihood



The USDA National Wildfire Risk to Communities Database places the likelihood of a wildfire around Ruby in the 95th percentile for Alaska communities.



[Document prepared by Tasha Shields: Alaska Fire Service, BLM, Tanana Zone Fuels Specialist.]

SUMMARY:

Based on the 2022 Risk Assessment, there is a definite need to decrease Ruby’s vulnerability to wildland fires. Currently, the city is vulnerable to fire from outside the city as well as from within the city because of natural fuel conditions and lack of good Firewise habits. Ruby would benefit by: (1) performing hazardous fuels reduction work immediately around homes and adjacent areas, (2) maintaining and adding additional fuel breaks, (3) purchase of new/additional equipment to support the local VFD, (4) continued collaboration among stakeholders, (5) increasing the awareness of Firewise principles among residents.

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MITIGATION PLAN

Executive Summary

The mitigation plan for the Village of Ruby Community Wildland Fire Protection (CWPP) includes recommendations for the community and individual homeowners on how to lower their risk from wildland fire. Ruby is at moderate to high risk from wildland fire. The Village has prioritized areas to protect based on cultural, historical and ecological importance. This has provided the basis for the placement and type of hazard fuel reduction efforts (including mechanical treatments and fuel breaks) and helped identify opportunities for education/outreach in Firewise principals. The implementation of hazard fuel treatment techniques will be further guided by the alignment with the community priorities, locations, aesthetics, landownership, and fuel types.

Background

Ruby is located on the Yukon River 230 air miles west of Fairbanks and 50 miles east of Galena. The population of Ruby is 139 (2020) and there are 117 housing units in Ruby, 69 are occupied and 48 are unoccupied. Historically, the area has been prone to large, lightning-caused fires that have encroached upon the area from the wildlands. There is also concern of new fire starts from within the community.

Goals and Objectives

- A. The goal of this plan is to increase Firewise education, wildfire prevention, large-scale wildfire defensibility, and wildland fire response capabilities in the community of Ruby.
- B. Objectives:
 - 1. Educate and assist in implementing Alaska Firewise starts within the Village of Ruby's Wildland Urban Interface (WUI) boundary. This includes promoting defensible space around individual structures and other Firewise principles.
 - 2. Recommend potential locations for the construction of large-scale hazardous fuels reduction areas to prevent the spread of wildfire into the community. This results in breaking up the continuity of fuels adjacent to and within the community and creating operational areas of defense.
 - 3. Increase the local wildland fire response capabilities with additional wildfire response/initial attack (IA) equipment and tools.
- C. **Strategic Plan/Desired Condition:** *The priority values to be protected are life, property, infrastructure, and cultural resources.*
- 1) **Objective #1: Educate and assist in implementing Alaska Firewise standards within the village of Ruby, Wildland Urban Interface (WUI) boundary. This includes promoting defensible space around individual structures and implementing other Firewise principles.**
 - a) Implementation of Alaska Firewise standards can be achieved through community involvement and assistance from state and federal agencies. Starting in the spring of 2023, BLM Alaska Fire Service (AFS) personnel will complete a comprehensive

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structure assessment of the village of Ruby WUI boundary and can, as requested, advise individual landowners on specific mitigation measures for their individual properties.

- b) Successful implementation of the Firewise program begins with individual landowners becoming familiar with Alaska Firewise standards. Each community may apply/request financial and/or implementation assistance through the programs and grant opportunities listed below:

- *USDA Wildland Defense Grants*
- *BLM- Good Neighbor Authority Agreement*
- *BIA- Reserved Treaty Rights (RTRL) program*
- *State of Alaska- Alaska Firewise Community Program*

- 2) **Objective #2: Provide location recommendations for the construction of large-scale hazardous fuel reduction areas to prevent the spread of wildfire into the community. This results in breaking up the continuity of fuels adjacent to and within the communities and creates operational areas of defense.**

Note: The following recommendations are based on the potential threat from wildfire. Recommended treatments and exact locational placement, based on CWPP prioritization efforts, will be contingent upon landowner(s) approval.

- a) A risk assessment, completed in August 2022 by AFS personnel, identified areas of moderate to high threat from wildfire spread both inside and out of the Village of Ruby. Within 1 mile of the Village of Ruby WUI boundary continuous, fire-prone landscape of black spruce exists. This dangerous fuel situation can be mitigated through various techniques of thinning and tree removal. Additionally, overgrown hazardous fuel breaks that were created in 2015 can be strengthened/improved (See MAP, p.17)
- b) The mitigation plan prioritizes areas within the WUI boundary as priority and moderate. There are different mitigation recommendations for each area and funding opportunities differ depending on landownership and community jurisdiction. Various treatments may be subject to National Environmental Policy Act (NEPA) analysis/review or other specific landowner policies and directives.

- (1) A shaded fuel break includes the removal of all dead trees, standing or on the ground, plus the creation of 8-10 foot spacing between life-standing black spruce. All remaining trees are limbed by removing and lower branches (ladder fuels) up to 5-6 feet off the ground. Any suitable firewood (> 4 inches in diameter) may be stacked in lengths and available per landowners' policies. All other material/woody debris is stacked to burn, away from standing timber to reduce mortality and scorch. These debris burns will occur as a prescribed burn, likely later, and under a certain prescription for safe burning conditions. The shaded fuel break technique not only reduces the fuel loading, it discourages growth of grasses which are also prone to fire spread, and potentially keeps permafrost from thawing.

- (2) Mechanical treatments may include, but are not limited to, mastication, shear

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blading and/or roller drum applications.

c) Priority Areas of Concern

- (1) Life and safety for the community of Ruby.
- (2) Protect critical infrastructure, such as: washateria, fuel storage, powerplant, school, and homes.
- (3) Protect cultural sites such as the cemetery.
- (4) Protect the community from an escaped dump fire.

d) Recommended Projects

- (1) Reinforce the existing fuel break around the Village of Ruby.
- (2) Establish a new fuel break closer to the structures in the Village of Ruby. Specific fuel break locations will be assessed by AFS fire/fuels personnel in the spring of 2023.

e) Moderate Areas of Concern

- (1) Firewise the Village of Ruby.
- (2) Improve the fuel break around the Ruby Dump; develop a plan for fire mitigation at dump, such as cleared gravel shoulder surrounding site.

3) Objective #3: Increase the local wildland fire response capabilities via an increase in initial attack (IA) equipment.

- a) The Village of Ruby has limited equipment available for wildland fire initial attack. The AFS initial attack resources have a 1-hour response time from when a fire is reported. During the initial risk assessment, community members, the local volunteer fire department and AFS personnel identified equipment need as follows:

(1) Wildland Fire Equipment Needs:

- (a) Trailer with > 500-gallon tank, pump and hose complement, that can be hitched up to an available truck for wildland fire response.
- (b) High-pressure pumps with hose/sprinkler
- (c) UTV with a slip in water tank with a pump and hose.
- (d) Brush cutters
- (e) Chainsaws

(2) Wildland Fire Tools/PPE:

- (a) Backpack pumps
- (b) Pulaskis/shovels/beaters
- (c) Nomex pants/shirt or overalls
- (d) Leather gloves
- (e) Eye protection/hardhats

b) Funding Opportunities:

- *USDA Wildland Defense Grants*
- *State of Alaska- Volunteer Fire Assistance (VFA)*
- *FEMA Fire Prevention and Safety Grants (FP&S)*

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I. Roles and Responsibilities

This mitigation plan sets forth the goals and objectives for both the City and the Village to mitigate the risk of wildland fire per the risk assessment and CWPP planning effort completed by AFS personnel. Landownership of proposed treatment areas suggested by AFS personnel will determine which funding opportunities are available for each project, which agencies will assist in the procurement of funds, and which entities will provide support in their implementation.

Table 1: Roles and Responsibility Matrix

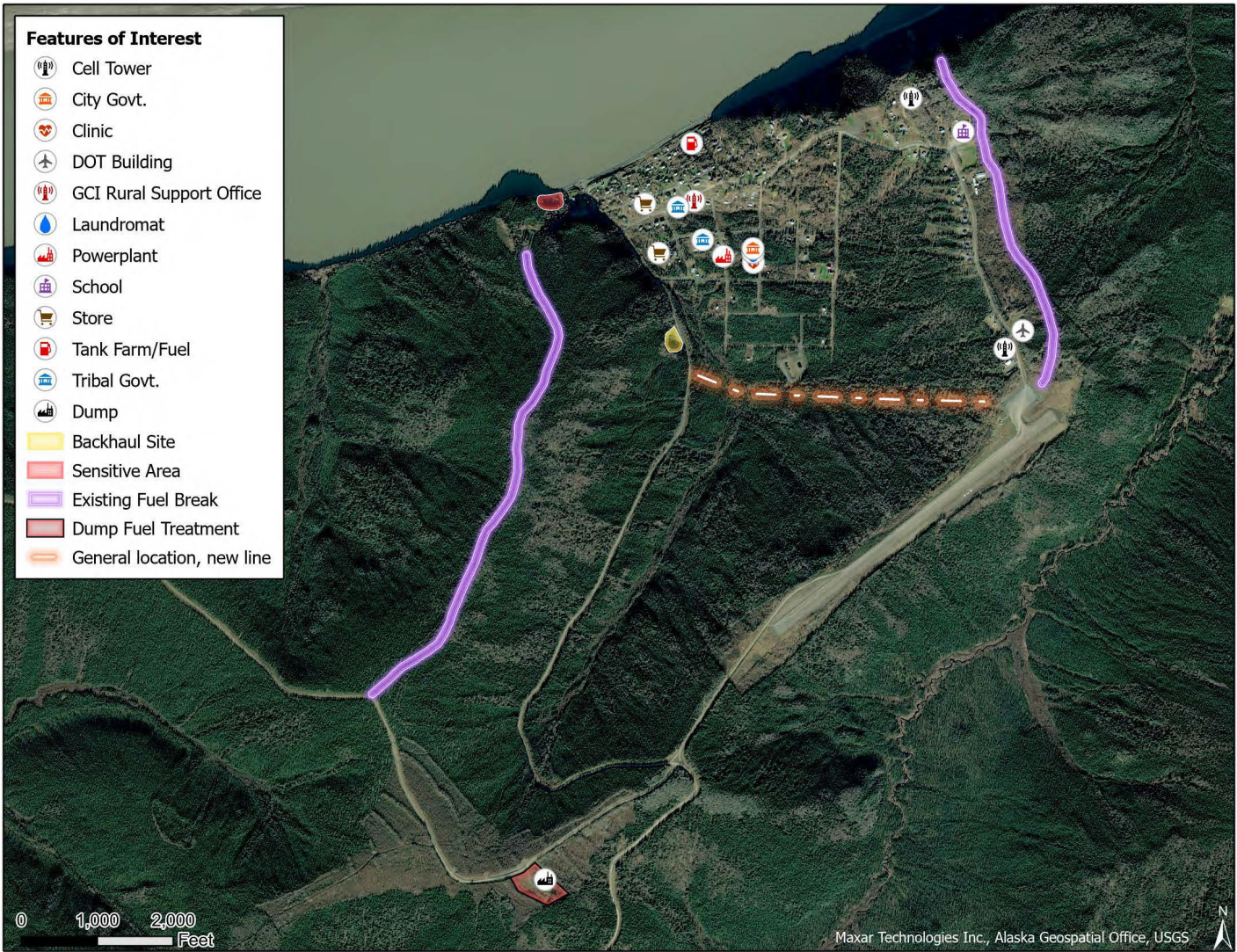
Primary Areas of Concern:				
Proposed Treatment Area/ Document reference	Responsible Community	Landowner	Assisting Agency	Funding
Reinforce the existing fuel break around the Village of Ruby	Ruby	Dineega Corp	-AFS -BLM -BIA -TCC	USDA- Wildland Defense Grants BIA-Reserved Treaty Rights BLM- Good Neighbor Authority
City Fuel Break	Ruby	City of Ruby	AFS -BLM -BIA -TCC	USDA- Wildland Defense Grants BIA-Reserved Treaty Rights BLM- Good Neighbor Authority
Moderate Areas of Concern :				
Firewise Ruby	Ruby	City of Ruby	AFS -BLM -BIA -TCC	USDA- Wildland Defense Grants BIA-Reserved Treaty Rights BLM- Good Neighbor Authority
Dump improvement	Ruby	Dineega Corp	AFS -BLM -BIA -TCC	USDA- Wildland Defense Grants BIA-Reserved Treaty Rights BLM- Good Neighbor Authority

Monitoring Plan

- a. This plan is multi-jurisdictional, utilizing different funding mechanisms depending on the location of each treatment. Recognizing this is a multi-year endeavor, the council should evaluate the plan annually until the above projects are completed.
- c) Treatments will be monitored by the community of Ruby and AFS.
- d) It is a goal to create a long-term plan for regular maintenance of the fuel breaks.

Ruby Community Wildfire Protection Plan

Maps



Ruby Community Wildfire Protection Plan

Signatures

This plan has been reviewed and approved by the following:

City of Ruby:

DocuSigned by:

Signature

Kathryn Kangas

0C42C4D1EFCF448...

Name/Position: Kathryn Kangas City of Ruby Mayor

Date: 10/3/2022

Ruby Tribal Council

DocuSigned by:

Signature

Patrick McCarty

0C42C4D1EFCF448...

Name/Position: Patrick McCarty 1st Chief of Native village of Ruby

Date: 10/3/2022

Dineega Corp.

DocuSigned by:

Signature

Paul John Jr

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Name/Position: Paul John Jr

Date: _____

BLM/AFS

DocuSigned by:

Signature

Branden Petersen

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Name/Position: Branden Petersen, Tanana
Zone FMO

10/3/2022

Date: _____

USFWS

DocuSigned by:

Signature

Benjamin Pratt

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Name/Position: Benjamin Pratt
FWS FMO

Date: 10/5/2022

Ruby Community Wildfire Protection Plan

Alaska DOF

Signature _____

DocuSigned by:
Jeremy Douse
F569CB8C833C460...

Name/Position: Northern Region Forester

Date: 9/30/2022

BIA

Signature _____

DocuSigned by:
Thomas St. Clair
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Name/Position: Thomas St. Clair Alaska Region FMO

Date: 10/3/2022