



Dept of Interior - USWFS  
Alaska Fire Service

# Community Wildfire Protection Plan

Kaltag 2025



*Figure 1: Village of Kaltag*

## Contents

|                                                                                                                                                                                                                                                                                   |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| BACKGROUND .....                                                                                                                                                                                                                                                                  | 3                            |
| COLLABORATION.....                                                                                                                                                                                                                                                                | 3                            |
| Fuels .....                                                                                                                                                                                                                                                                       | 8                            |
| <b>Barrier Type (list specific type under excellent, fair or poor) .....</b>                                                                                                                                                                                                      | <b>10</b>                    |
| <b>Overall Rating .....</b>                                                                                                                                                                                                                                                       | <b>10</b>                    |
| <b>Overall Rating .....</b>                                                                                                                                                                                                                                                       | <b>12</b>                    |
| <b>SUMMARY:.....</b>                                                                                                                                                                                                                                                              | <b>15</b>                    |
| RISK ASSESSMENT TO PRIORITIZE AREAS FOR FUEL REDUCTION.....                                                                                                                                                                                                                       | 16                           |
| MITIGATION PLAN .....                                                                                                                                                                                                                                                             | 17                           |
| <b>Executive Summary .....</b>                                                                                                                                                                                                                                                    | <b>17</b>                    |
| Background .....                                                                                                                                                                                                                                                                  | 17                           |
| Goals and Objectives .....                                                                                                                                                                                                                                                        | 17                           |
| Monitoring Plan .....                                                                                                                                                                                                                                                             | 20                           |
| Signatures.....                                                                                                                                                                                                                                                                   | 22                           |
| <br>                                                                                                                                                                                                                                                                              |                              |
| <a href="#"><u>Figure 1: Village of Kaltag.....</u></a>                                                                                                                                                                                                                           | <a href="#"><u>1</u></a>     |
| <a href="#"><u>Figure 2:Village of Kaltag (Google Earth).....</u></a>                                                                                                                                                                                                             | <a href="#"><u>4</u></a>     |
| <a href="#"><u>Figure 3: Land ownership around Kaltag..</u></a>                                                                                                                                                                                                                   | <a href="#"><u>6</u></a>     |
| <a href="#"><u>Figure 4:Community Overview .....</u></a>                                                                                                                                                                                                                          | <a href="#"><u>7</u></a>     |
| <a href="#"><u>Figure 5: Area Fuels/Vegetation types Map.....</u></a>                                                                                                                                                                                                             | <a href="#"><u>9</u></a>     |
| <a href="#"><u>Figure 6: Map of fire history from the past 20 years.....</u></a>                                                                                                                                                                                                  | <a href="#"><u>12</u></a>    |
| <a href="#"><u>Figure 7,8,9: National Wildfire Risk Database Assessment of the village of Kaltag. The USDA National Wildfire Risk to Communities Database places the likelihood of a wildfire around Kaltag in the 84<sup>rd</sup> percentile for Alaska communities.....</u></a> | <a href="#"><u>13-14</u></a> |
| <a href="#"><u>Figure 10: Map of Kaltag with potential fuel breaks.....</u></a>                                                                                                                                                                                                   | <a href="#"><u>21</u></a>    |
| <br>                                                                                                                                                                                                                                                                              |                              |
| Table 1: Overall risk assessment [rated as High].....                                                                                                                                                                                                                             | 4                            |
| Table 2: Fuels Assessments [both rated as Moderate].....                                                                                                                                                                                                                          | 9                            |
| Table 3: Barrier rating chart [rated as Moderate]. .....                                                                                                                                                                                                                          | 10                           |
| Table 4: Firewise assessment [rated as High].....                                                                                                                                                                                                                                 | 12                           |
| Table 5: Fire protection resources [rated as High]: . .....                                                                                                                                                                                                                       | <b>13</b>                    |

# BACKGROUND

A Community Wildfire Protection Plan (CWPP) is a community-based plan focused on identifying and addressing local hazards and risk associated with wildfires. Through collaboration among stakeholders the CWPP identifies the values within the community, assesses the risk of wildfire and develops strategies to make the community more resilient to wildfire.

## EXECUTIVE SUMMARY

Collaboration among interested parties is crucial to the success of this plan. Interested parties include the Kaltag Tribal Council, the Alaska Fire Service (AFS), Bureau of Indian Affairs (BIA), and Gana-A'Yoo Corporation.

A risk assessment was conducted for Kaltag during the winter of 2022-2023 by the AFS Galena Zone. The community benefits from having some natural barriers to East and North of town. A good airstrip and road system also are present. The community is disadvantaged by the long flight time from Fairbanks for ground resources and no organized fire department. The structures within the town were rated poor for landscaping clearance with flammable materials/debris present, wooden construction materials, lack of water resources available and inadequate access. For these reasons the community has an overall wildfire rating of High.

Thinning around the community could create defensible space around homes and offices resulting in significant reduction from the wildfire threat. Some roadside thinning has occurred in the past; however, maintenance is needed due to willow and brush regeneration. Additional fuel breaks should be constructed closer to the community to reduce the risk of infrastructure loss from a wildfire within the immediate vicinity. The area around the landfill should be thinned or mowed and gravel applied to reduce the risk of an escaped fire from the landfill, and the area around the AVEC substation also is a priority fuels reduction area. These improvements would create a more resilient community against the catastrophic effects of a wildland fire.

With the completion of this CWPP the community will have a plan for mitigation efforts and be able to apply for grants to employ residents, increase awareness and establish a community more resilient to wildfire.

## COLLABORATION

The Kaltag CWPP involved key decision makers at the local, state, and federal levels, as well as other interested parties. The key decision makers include the Kaltag Tribal Council and AFS. Other important players are the Gana-A'Yoo Corporation and the BIA. The collaborative process is an integral part of this project and is what keeps this project moving forward.

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

- Risk(s)/hazard(s)
- Barriers
- Fire protection Response
- Community Firewise Rating



## Wildland Fire Risk Assessment *Alaska Fire Service- Galena Zone*



|                                                                                                                                            |                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Community/Value Name:</b> Kaltag                                                                                                        | <b>Date Completed:</b> February 2023 |
| <b>Assessment Completed By:</b> Kim Wong – Wildland Fire Operations Specialist BLM/AFS<br>Evan Karp – Galena Zone Fuels Specialist BLM/AFS |                                      |
| <b>Overall Rating</b>                                                                                                                      |                                      |
| <b>Category</b>                                                                                                                            | <b>Rating</b>                        |
| Fuels Risk/Hazard inside community                                                                                                         | High                                 |
| Fuels Risk/Hazard outside community                                                                                                        | High                                 |
| Barriers                                                                                                                                   | Moderate                             |
| Fire Protection                                                                                                                            | High                                 |
| Community Firewise Rating                                                                                                                  | High                                 |
| NFRC Database-Wildfire Likelihood                                                                                                          | High 84 <sup>th</sup> Percentile     |
| <b>Final Rating:</b>                                                                                                                       | <b>High</b>                          |



*Fig 2: Village of Kaltag*

# Wildland Fire Risk Assessment



## *Alaska Fire Service Galena Zone*



### Background/History

**Current Population:** 158 (Population Year: 2020)

**Native Community Name:** *Ggaat Doh* (Language: Koyukon)

Kaltag was named by Russians for a Koyokon man named Kaltaga.

Kaltag is located on an old portage trail that leads west through the mountains to Unalakleet. The Athabascans had seasonal camps in the area and moved as the wild game migrated. The area was a Koyokon Athabaskan area used as a cemetery for surrounding villages. There were 12 summer fish camps located on the Yukon between the Koyukuk and Nowitna Rivers.

After the Alaska Purchase, a military telegraph line was constructed along the north side of the Yukon River. A trading post opened around 1880, shortly before the gold rush of 1884-85. Steamboats ran up and down the Yukon supplying prospectors before and after 1900, with 46 boats in operation at the height in 1900. A measles epidemic and food shortages during 1900 reduced the population in the area by one-third. The village of Kaltag was established after the epidemic when survivors from three villages moved to the area. In 1919 the Galena lead mines began operating upriver, and Kaltag grew as a point on the transportation route for the mines. Mining declined in the 1940's. An airport and clinic were constructed during the 1960's.

Kaltag has a weeklong Stick Dance (memorial Potlatch) every two years that draws visitors from many neighboring villages. This Potlatch is sponsored by relatives of the recently deceased, in appreciation of those who helped during their time of mourning.

Most of the economy around Kaltag is based on subsistence hunting and fishing. Salmon, whitefish, moose, bear, waterfowl, and berries are all elements of the subsistence economy.

Kaltag is located on the west bank of the Yukon River, 61 miles southwest of Galena and 328 miles west of Fairbanks. The Innoko Wildlife Refuge lies to the east of Kaltag, across the Yukon River. The Kaltag Mountains lie to the west.

The Climate is transitional between coastal and interior Alaska, with temperatures ranging from 95 degrees during the summer to -60 degrees during the winter.

### Contacts

| Name/Title                 | Contact Information |
|----------------------------|---------------------|
| Kaltag Traditional Council | 907-534-2224        |
| City of Kaltag             | 907-534-2301        |
| AFS-Galena Zone FMO        | 907-356-5626        |



## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*



### Overview / Values

#### Location/Ownership Map:

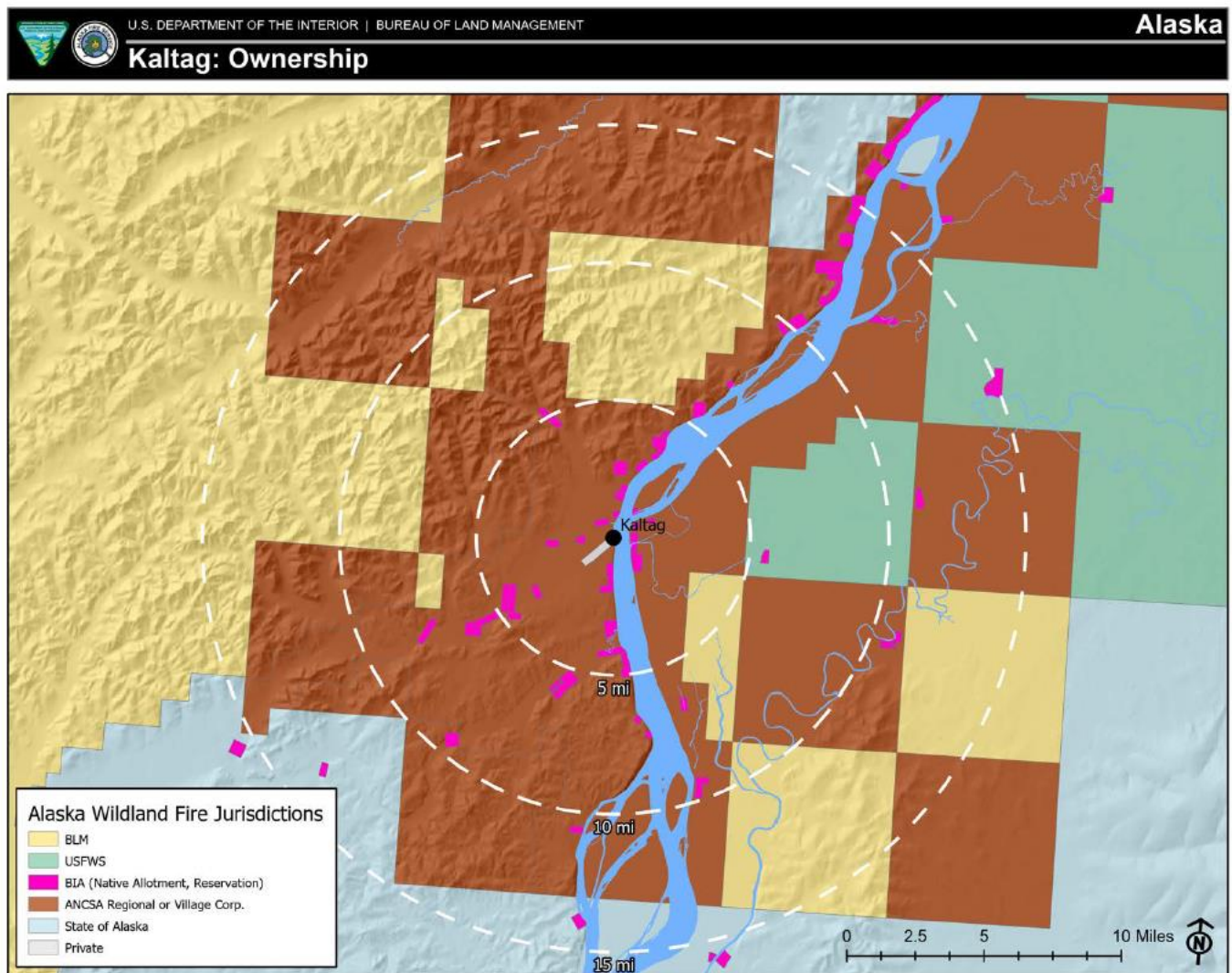


Fig. 3



## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*

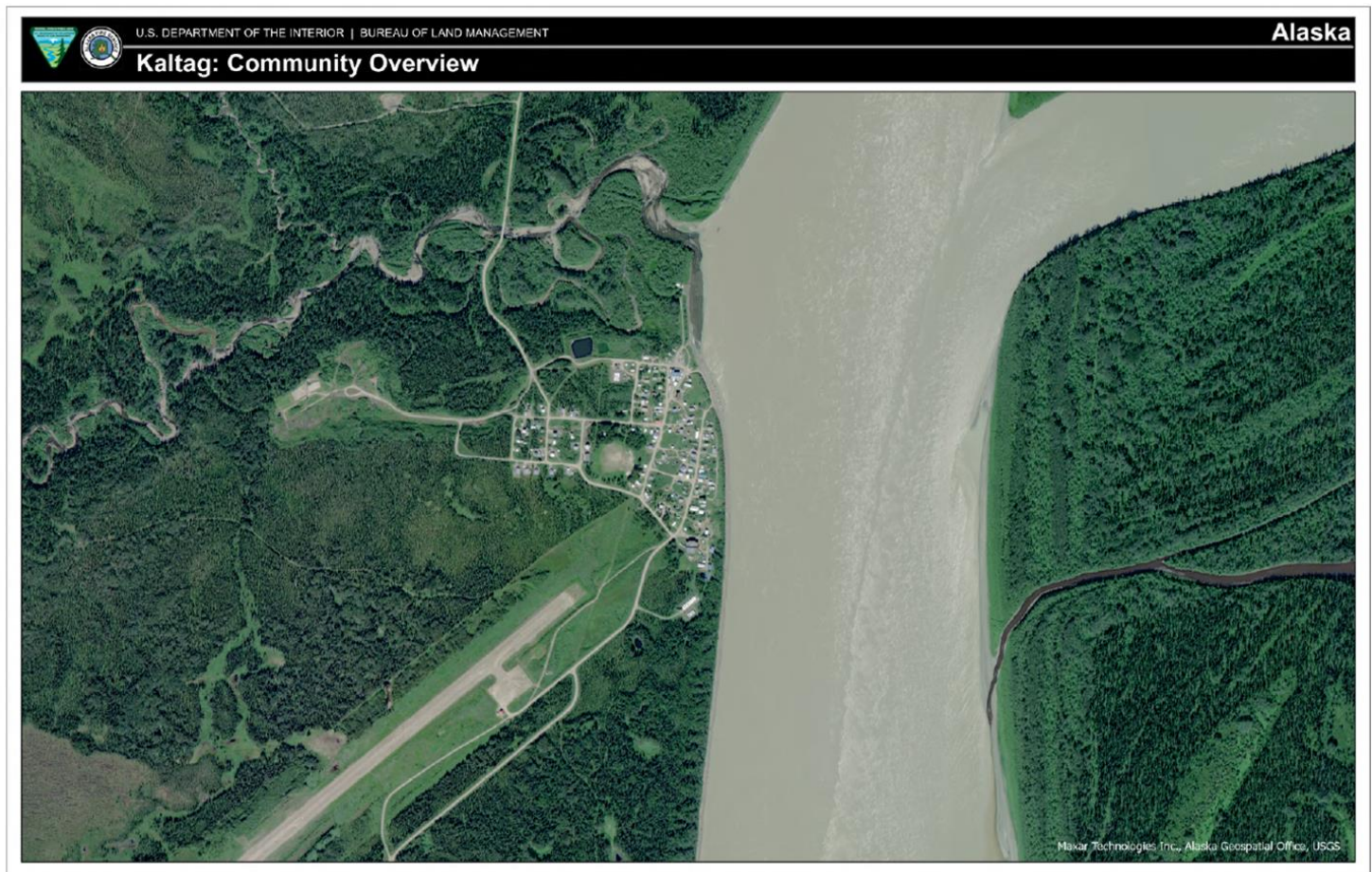


Kaltag's major means of transportation are by barge, plane, small boat, and snow machine. There are no roads linking the village to other parts of the state. A state-owned lighted, gravel airstrip is located a half mile from the city. Barges provide fuel and supplies to Kaltag each summer. Boats are used for inter-village travel and subsistence activities. ATVs and snow machines are commonly used in winter. Values at Risk include homes, school, church, city/tribal buildings, fuel tanks, and other various infrastructure.

### **Community Areas of Concern:**

Most of the infrastructure within the Community are devoid of defensible space and have flammable materials directly adjacent to them. Burning of the land fill which is within proximity to the community is also a concern. Structure Fires within the Community have the potential to spread into the Wildland.

### **Community Overview / Values Map:**



*Fig. 4*



## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*



### Fuels

Kaltag is in the heart of Alaska's boreal forest. The fuels within the community are predominantly a spruce-deciduous mix. 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 fire danger. There are large areas of decadent black and white spruce farther away from the community.

#### Fuels Map:

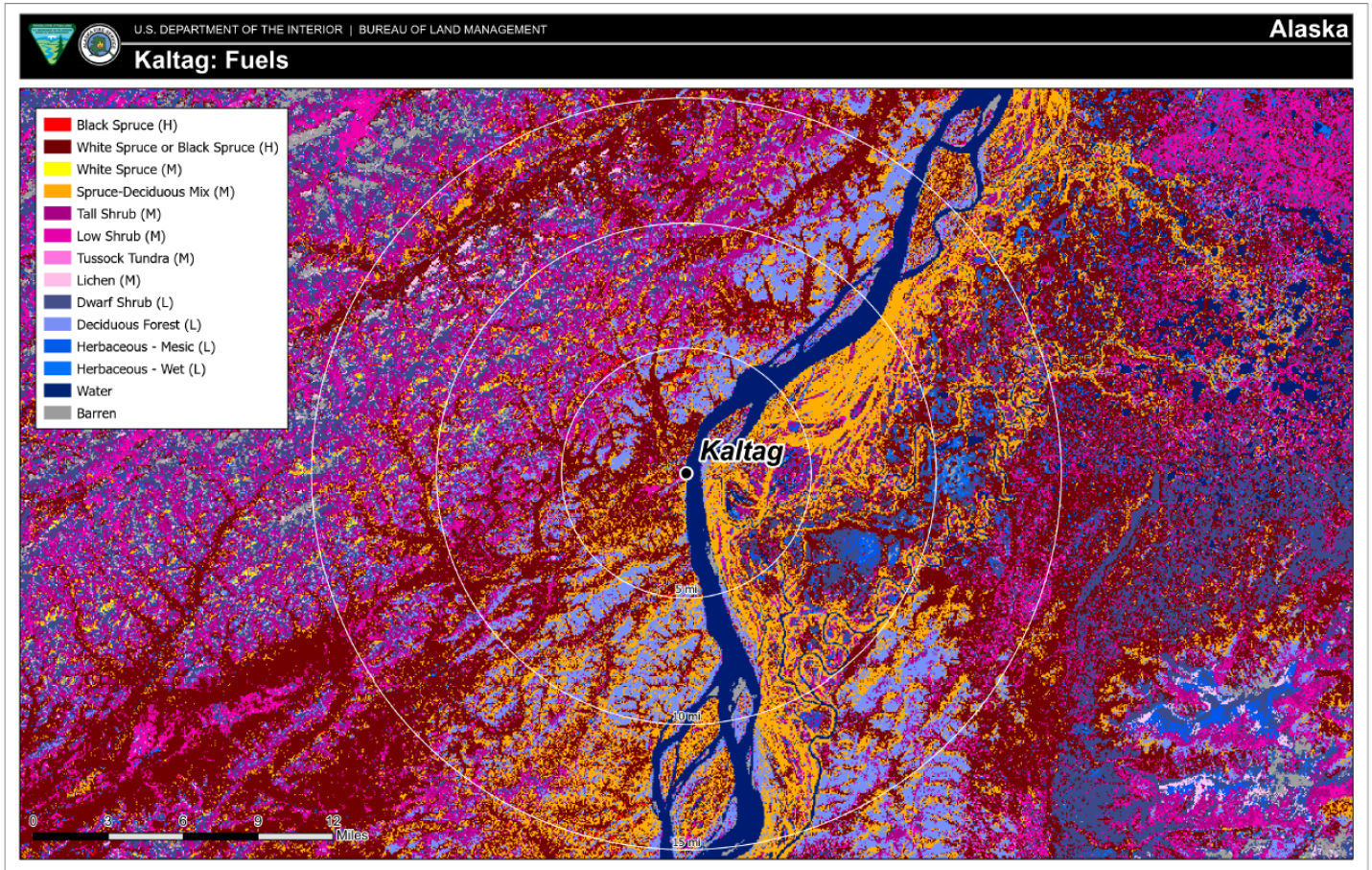


Fig. 5



## Wildland Fire Risk Assessment Alaska Fire Service Galena Zone



### 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)<br><i>rate of spread: high / intensity: high / spotting potential: high</i>                                                                                   | High                 | 60%             |
| Black Spruce Lichen Woodland (CFFDRS=C1)<br><i>rate of spread: moderate / intensity: moderate / spotting potential: high</i>                                                                         | High                 | 5%              |
| Grass (cured tall standing or matted; CFFDRS = O1a/O1b)<br><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)<br><i>rate of spread: moderate / intensity: moderate / spotting potential: moderate</i>                       | Moderate             | 10%             |
| Insect and Disease in Mixed Boreal Forest (may include white or black spruce, aspen and/or birch. CFFDRS=M4 30%)<br><i>rate of spread: moderate / intensity: high / spotting potential: moderate</i> | Moderate             | 5%              |
| Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2)<br><i>rate of spread: low / intensity: low / spotting potential: low</i>                                                           | Low                  | 5%              |
| Deciduous Brush (includes willow & alder)<br><i>rate of spread: low / intensity: low / spotting potential: low</i>                                                                                   | Low                  | 10%             |

#### *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)<br><i>rate of spread: high / intensity: high / spotting potential: high</i>                                                                         | High                 | 25%             |
| Black Spruce Lichen Woodland (CFFDRS=C1)<br><i>rate of spread: moderate / intensity: moderate / spotting potential: high</i>                                                               | High                 | 10%             |
| Grass (cured tall standing or matted; CFFDRS = O1a/O1b)<br><i>rate of spread: high / intensity: moderate / spotting potential: low</i>                                                     | Moderate             | 10%             |
| Mixed Boreal Forest (may include white or black spruce, aspen and/or birch; CFFDRS=M1)<br><i>rate of spread: moderate / intensity: moderate / spotting potential: moderate</i>             | Moderate             | 35%             |
| 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             | 5%              |
| Hardwood Forest (includes aspen & birch; CFFDRS use D1 or M1, M2)<br><i>rate of spread: low / intensity: low / spotting potential: low</i>                                                 | Low                  | 5%              |
| Deciduous Brush (includes willow & alder)<br><i>rate of spread: low / intensity: low / spotting potential: low</i>                                                                         | Low                  | 10%             |



## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*



### **Barrier(s) Assessment**

**Natural:** The Community is located on the west side of the Yukon River. Other various barrier features are consistent throughout the area including creeks, and riparian areas. 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:** Some Gravel Roads and an Airstrip are present in the community. Under certain conditions, the human made barriers can be effective control lines against advancing wildfire. Other human made openings are present throughout the area, some of these openings can be effective in slowing fire growth.

### ***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        |
| <b>Overall Rating</b>                                                       | <b>Moderate</b> |

**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.





## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*



### Firewise Assessment

**Firewise is a cooperative effort among local, state, federal and private agencies, and organizations to promote fire safety in the wildland urban interface. Firewise principals help property owners take steps to minimize property loss due to a wildfire before a fire occurs.**

<https://forestry.alaska.gov/fire/firewise>

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

|                                                                                | Low                                                         | Moderate                                                  | High                                                           |
|--------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------|
| <b>Alaska Firewise Standards</b>                                               | Over 65% of homesites and community buildings meet standard | 35-65% of homesites and community buildings meet standard | 35% or less of homesites and community buildings meet standard |
| Landscaping                                                                    |                                                             |                                                           | High                                                           |
| Construction                                                                   |                                                             |                                                           | High                                                           |
| Water Supply                                                                   |                                                             | Moderate                                                  |                                                                |
| Access                                                                         |                                                             | Moderate                                                  |                                                                |
| Clear of Flammables/ Refuse/Debris (flammables stored properly & area cleared) |                                                             |                                                           | High                                                           |
| <b>Overall Rating</b>                                                          |                                                             |                                                           | 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.



## Wildland Fire Risk Assessment Alaska Fire Service Galena Zone



### Fire Protection Resources

The community rates high based on limited wildland fire capabilities, including trained personnel and equipment available. Wildland fire response is the responsibility of the Alaska Fire Service's Galena Zone, based out of Fairbanks (328 miles away) and Galena (61 miles away) during the core fire season.

#### *Fire Protection Resources Response Chart*

| Response Time                                                                                                                      | Kind of Resource<br>(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 personnel, Water Tender and Dozers.        | Low      |              |

#### Wildfire Risk Database – Wildfire Likelihood

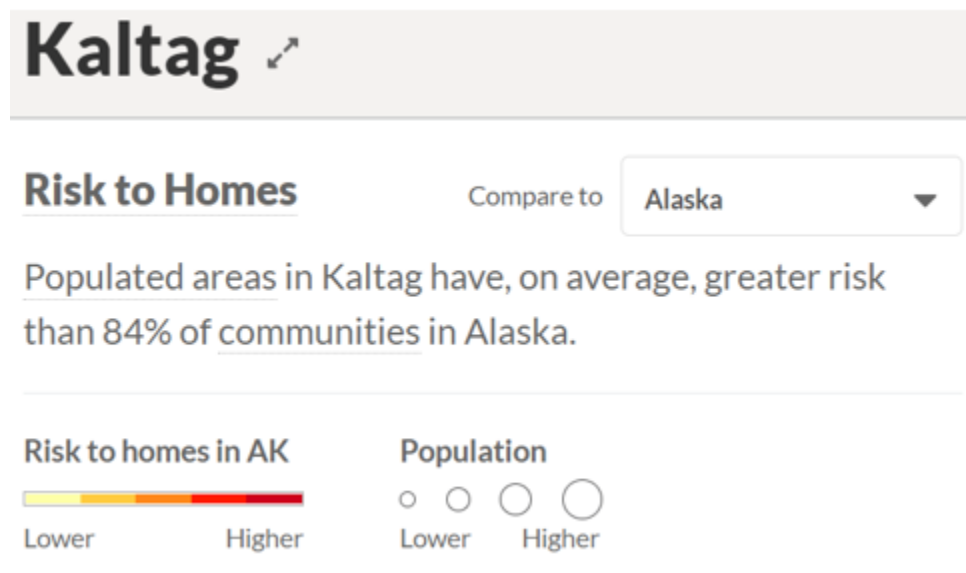


Fig. 7



## Wildland Fire Risk Assessment *Alaska Fire Service Galena Zone*



### Wildland Fire Likelihood vs. Consequence graph

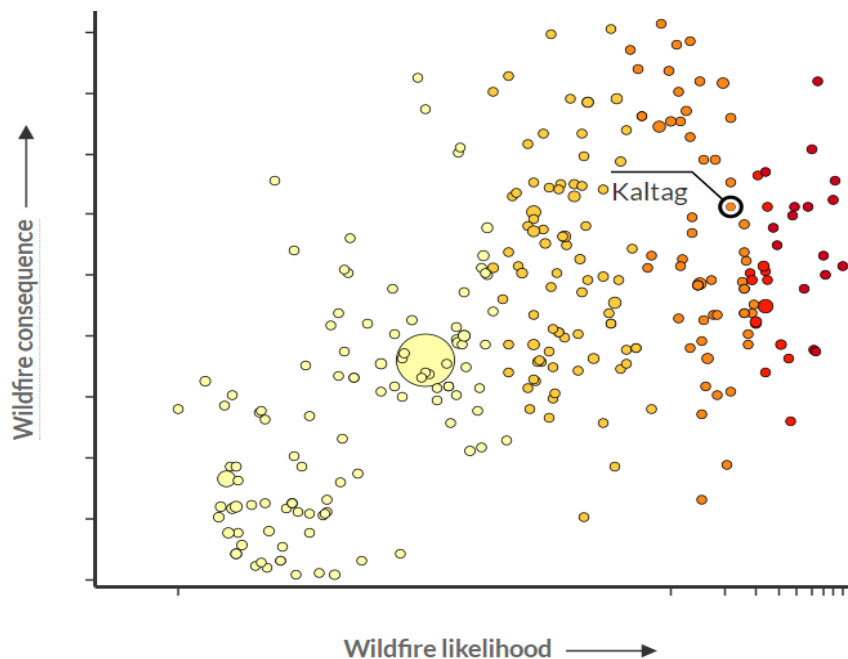


Fig. 8

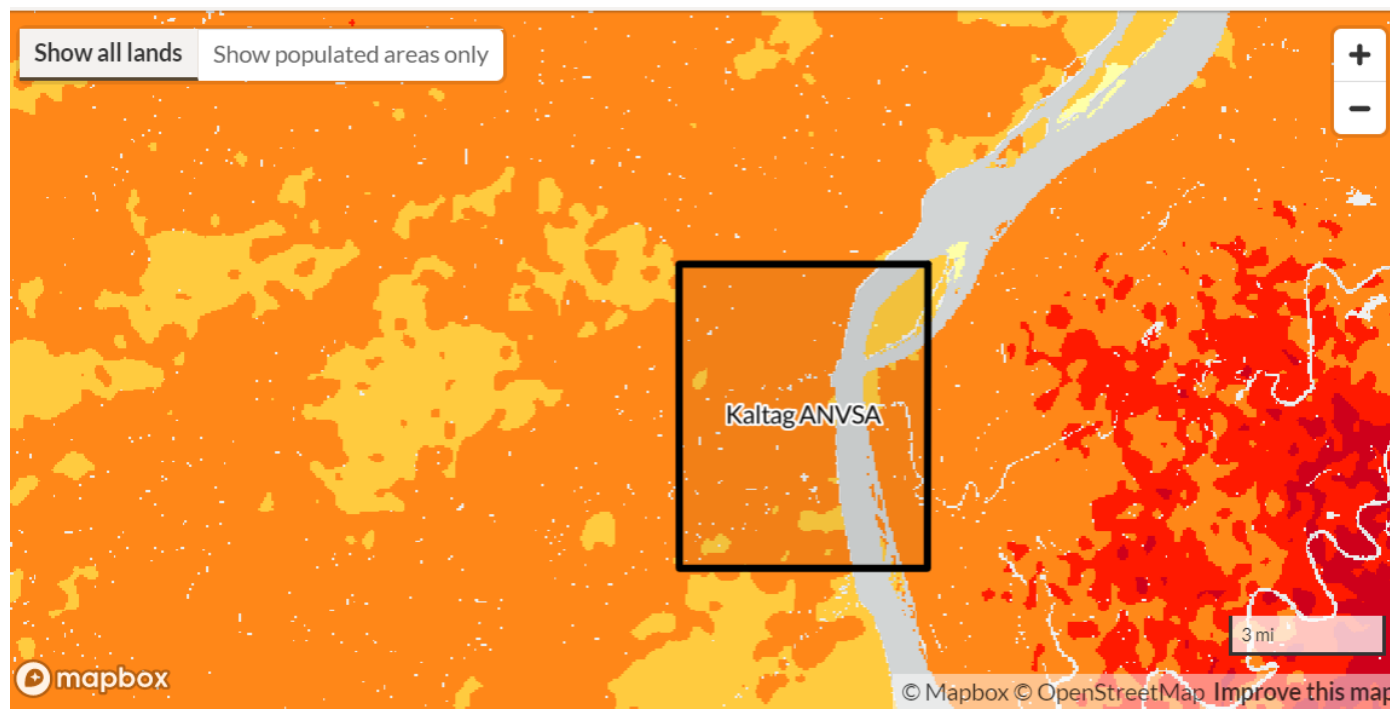


Fig. 9

# SUMMARY:

Based on the 2023 Risk Assessment, Kaltag is vulnerable to fire from outside the city as well as from within because of natural fuel conditions and lack of substantial Firewise treatments to protect infrastructure from the threat of a wildfire.

Kaltag would benefit by:

- Performing hazardous fuels reduction immediately around homes and adjacent areas.
- Constructing and maintaining additional and existing fuel breaks.
- Thinning spruce fuel loading and laying gravel around the landfill.
- Thinning spruce fuel loading and creating a fuel break around the Power Station.
- Thinning spruce fuel loading and creating a fuel break around the cemeteries.
- Purchase of new or additional equipment to support a local volunteer fire department.
- Continued collaboration among stakeholders.
- Increasing awareness of Firewise principles among residents to make their property more resistant to a wildfire.

# **RISK ASSESSMENT TO PRIORITIZE AREAS FOR FUEL REDUCTION**

## **Identification and Description of Community and Area:**

### **Structures:**

- Homes: approximately 100
  - Community Buildings: 15
  - Commercial: 2
  - Outbuildings: approximately 25
- **Infrastructure:**
  - The village operates an electrical power generating plant with bulk storage facilities.
  - Water Treatment Plant.
  - Kaltag School: The school provides K-12 education and serves about 50 students.
  - Health Center.
  - Community Hall.
  - Post Office.
  - Kaltag Store.
- **Transportation:** Kaltag is located on the west bank of the Yukon River. Kaltag has a state-maintained public airport with a gravel runway in good condition. The Yukon River provides boat access to communities up and down river. Trucks, cars, snowmachines, ATVs, and riverboats are used for transportation, recreation, and subsistence purposes.
- **Industry:** Subsistence, Tribal office, Yukon-Koyukuk School District, Power Plant, Water Treatment Plant
- **Natural Resource Values:** The Yukon River and the surrounding plant and wildlife habitat are
- critical to supporting traditional subsistence and recreational activities.
- **Cultural Sites:** The cemeteries and ancient burial grounds.
- **Dump:** The landfill is located off Airport Road.
- **Hazards:** (a) Homes are built in areas of dense white and black spruce and without adequate clearing. (b) Proximity of flammable materials (gasoline, fuel, oil, propane, firewood) around homes. (c) Accumulations of other flammable materials around and under homes (woody debris).
- **Fire Equipment:** Wildland fire suppression falls under AFS, headquartered in Fairbanks. During the active fire season, AFS provides a wide range of firefighting equipment and personnel including airtankers, helicopters, smokejumpers, crews, and miscellaneous equipment to support the suppression efforts. There is no organized fire department in Kaltag.

# MITIGATION PLAN

## Executive Summary

Kaltag is at **HIGH** risk for future impacts from wildfire. When fuel loading and fire weather conditions align, catastrophic wildland fires can occur in this area. In 2015 a fire 33 miles to the north in Nulato demonstrated how vulnerable villages in this area can be to the threat of wildfire. This Wildfire Mitigation Plan aims to provide recommendations to the community of Kaltag which will allow them to improve their ability to withstand a catastrophic wildfire occurring near their community and limit the impacts of a fire starting within their community.

The mitigation plan for the Village of Kaltag CWPP includes recommendations for the community and individual homeowners on how to lower their 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 and 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

Historically, the area has been prone to large, lightning- caused wildfires that could encroach upon the community from the wildlands. There is also concern of new fire starts from within the community.

## Goals and Objectives

- The goal of this plan is to increase Firewise education to make properties resistant to wildfires, wildfire prevention, large-scale wildfire defensibility, and wildland fire response capabilities in the Village of Kaltag.
- Objectives:
  1. Educate and assist in implementing Alaska Firewise standards within the Village of Kaltag's WUI boundary. This includes promoting defensible space around individual structures and other Firewise principles.
  2. Recommend locations for 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 from wildfires.
  3. Increase the local wildland fire response capabilities with additional wildfire response/initial attack (IA) equipment and tools.
  4. Reduce the incidence and threat of fires originating from the landfill. Wildfires originating from landfills in rural Alaskan communities are a continuing problem every year. Landfills are typically located relatively close to communities so fires originating there can quickly threaten a community.

Strategic Plan/Desired Condition: *The priority values to be protected are life, property, infrastructure, and cultural resources.*

**Objective #1: Educate and assist in implementing Alaska Firewise standards within the Village of Kaltag's WUI boundary. This includes promoting defensible space around community and individual structures and other Firewise principles.**

- Implementation of Alaska Firewise standards can be achieved through community involvement, with assistance from state and federal agencies if requested, to access and provide recommendations to achieve Firewise standards.
- Successful implementation of the Firewise program begins with individual landowners becoming familiar with Alaska Firewise standards.

Details of the areas recommended for Firewise treatment are as follows:

- Kaltag Village Firewise Area:** This area encompasses the complete residential area of Kaltag and includes community buildings, store, residences, elder's homes, post office, school, power substation and fuel depot. Recommend that all properties throughout the area be treated in accordance with Firewise specifications. Any large stands of black spruce should also be thinned, along with black spruce adjacent to structures as outlined on map.
- Cemetery Firewise Areas:** These areas are located north of town along the Yukon River & south of town along the Yukon River as identified on the Mitigation options map. Recommend the areas are thinned and cleared of burnable material as much as acceptable and encircled by a fireline.

**Objective #2: Recommend locations for 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.**

*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 risk assessment, completed in the winter of 2022-2023 by AFS personnel, identified areas of moderate and high threat from wildfire spread both inside and out of the Village of Kaltag. Fire-prone landscape of pockets and stringers of black spruce are present within a 1-mile radius of the Village of Kaltag's WUI boundary. Various techniques of thinning and tree removal can mitigate this adverse fuel situation. Additionally, roadside thinning that has occurred in the past need maintenance.
- The mitigation plan prioritizes areas within the WUI boundary. There are different mitigation recommendations for each area. Funding opportunities differ depending on landownership and community jurisdiction.

**Construction Methods:** Fuel breaks can be produced using handcrews with chainsaws, machinery, or a combination of the two. Mechanical treatments may include, but are not limited to, mastication, shearblading and/or roller drum applications. This most closely mimics the large, severe, stand replacement fire regime without the safety risk of a severe fire near a community.

- Clear-cut Fuel Break Recommended Specifications: All trees and brush would be cut and removed within the fuel break 50-100 ft wide. 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.

- Shaded fuel break Recommended Specifications: Includes the removal of all dead trees, standing or on the ground, plus the creation of 8-15 foot spacing between live-standing black spruce. All remaining trees are limbed by removing the 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' preference. All other 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 specific environmental condition for safe burning conditions. The shaded fuel break technique not only reduces the fuel loading, but also discourages growth of grasses which are prone to fire spread, and potentially keeps permafrost from thawing.
- Mechanical treatments to create or improve lines 50-200' feet-wide fuel breaks adjacent to the community. Heavy equipment type may vary and is not limited to mastication. The intent of all mechanical treatments is to limit the disturbance to the tundra mat. Treatments will be implemented depending on seasonality (frozen ground).
- **Recommended Projects:**
  - **Fire Break #1**: Construct clear-cut (50'+) fuel break from Dump Road south & east to Yukon River to provide protection to Power Station and town. See specs below.
  - **Fire Break #2**: Construct clear-cut fuel break from western area of road system of Kaltag southeast to northern edge of airstrip. This break ideally would be a 50+ foot wide clearing of brush & black spruce trees. See Specifications below.
  - **Fire Break #3**: Begins from cemetery to the north, runs the road southwest where thinning could occur on the north side 50+ ft, then extends west before tying into Kaltag River. South of the river the Fire Break continues south to the airstrip. On the East side of the airstrip the break extends east to the Yukon River. 50+ft wide Fire Break throughout, avoiding low lying wet areas if possible. See Specifications below.
  - **Fire Break #4**: Runs from southern end of the Airstrip southeast to Yukon River. Utilizes the road for southern half of the line. See Specifications below.

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

The Village of Kaltag has minimal equipment available for initial response to a wildland fire. The AFS initial attack resources have a 45–70-minute response time from when a wildfire is reported. During the initial risk assessment, community members and AFS personnel identified equipment needs as follows:

**Wildland Fire Equipment Needs:**

- Trailer with <500-gallon tank, pump and hose complement that could hitch to an available truck for wildland fire response.
- High-pressure pumps with hose and sprinklers.
- Utility terrain vehicle with a slip in water tank with a pump and hose.
- Brush cutters.
- Chainsaws.

## Wildland Fire Tools/PPE

- Backpack pumps.
- Pulaskis, shovels and beaters.
- Nomex pants, shirt, or overalls.
- Leather gloves.
- Eye protection, hardhats, and ear protection.

**Objective #4. Reduce the incidence and threat of fires originating from the landfill. Wildfires originating from landfills in rural Alaskan communities are a continuing problem every year. Landfills are typically located relatively close to communities so fires originating there can quickly threaten a community.**

- **Recommendation:** Improve/create a fuel break around the current landfill by removing all trees and brush 100 feet around the landfill perimeter. Surround landfill with gravel barrier a minimum of 10 feet wide to prevent fires from creeping out of the landfill into adjacent vegetation.

## Roles and Responsibilities

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

## Monitoring Plan

- 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.
- Treatments will be monitored by the Village of Kaltag and AFS if needed.
- It is a goal to create a long-term plan for regular maintenance of the fuel breaks.

## Funding Opportunities

- USDA Wildland Defense Grants
- State of Alaska-Volunteer Fire Assistance (VFA)
- FEMA Fire Prevention and Safety Grants
- [USDA Wildland Defense Grants](#)
- Good Neighbor Authority Agreement (GNA)
- BIA Reserved Treaty Rights (RTRL) Grants



## Kaltag: Fuel Break Options

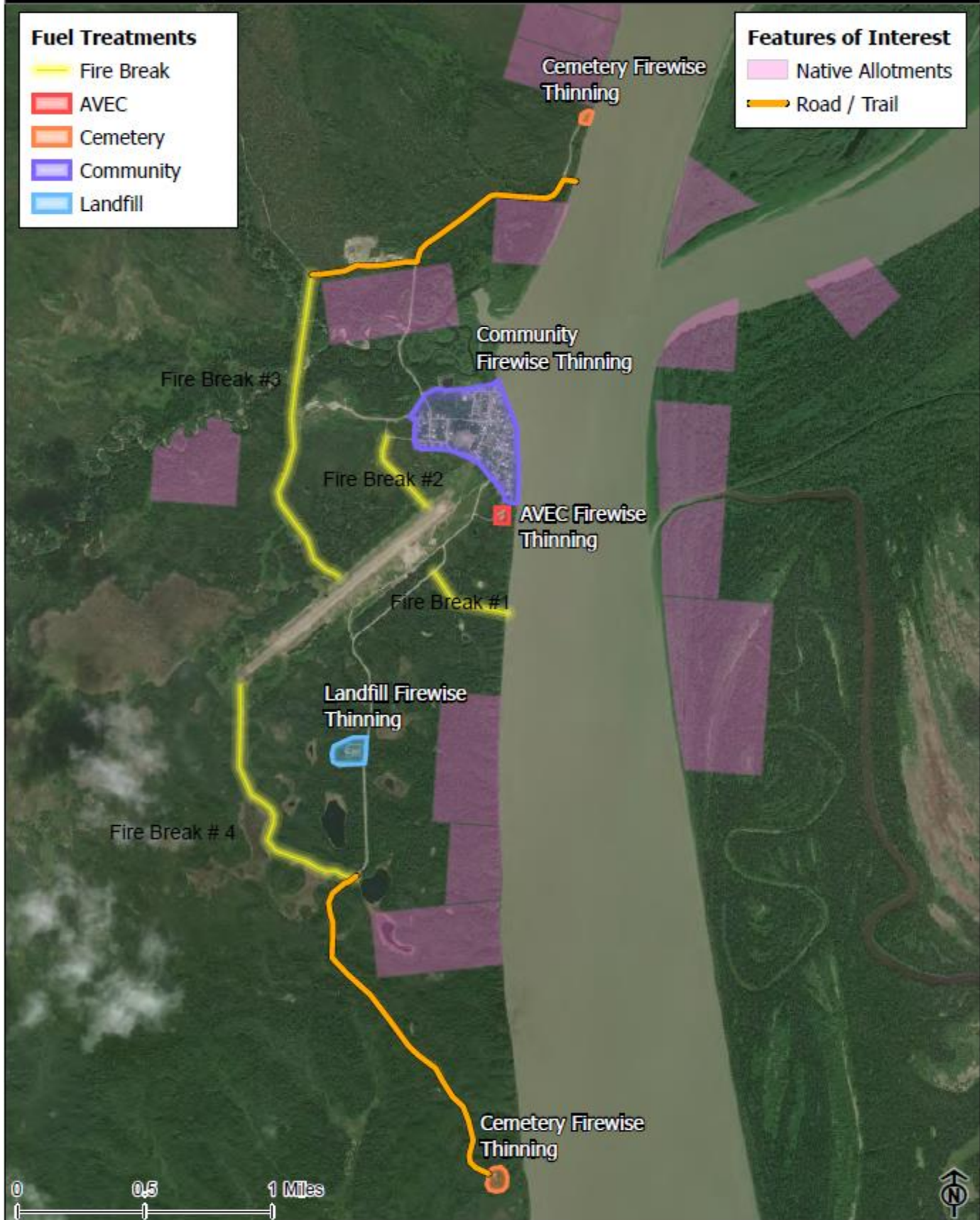
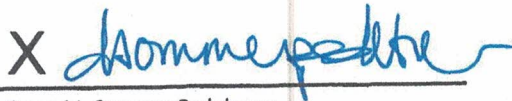


Figure 10

# Signatures

X   
Georgianna Madrus  
1st Chief of Kaltag

X   
Dena M. Sommer-Pedebone  
~~Gana-A'Yoo Corp. President~~  
GANA-A'YOO, LTD., CEO

X JOSHUA  
TURNBOW  
Digitally signed by  
JOSHUA TURNBOW  
Date: 2026.06.02  
15:34:33 -08'00'  
Joshua Turnbow  
Galena Zone FMO USWFS

X BRIAN  
HAUGEN  
Digitally signed by BRIAN  
HAUGEN  
Date: 2026.03.19 13:38:26  
-08'00'  
Brian Haugen  
Fish & Wildlife Service FMO

X ROSALIE  
DEBENHAM  
Digitally signed by ROSALIE  
DEBENHAM  
Date: 2026.03.13 11:42:34  
-08'00'  
Rosalie Debenham  
Acting Superintendent, Fairbanks Agency BIA

