Community Wildfire Protection Plan

2025 Delta Junction & Greater Delta Area

Alaska Venture Partnerships

Plan prepared by Alaska Venture Partnerships

On behalf of:
State of Alaska
Department of Natural Resources
Division of Forestry & Fire Protection

December 17, 2025

Cover Photo: 2024 Bison Burn being conducted to mitigate wildfire risk, maintain a healthy habitat, and provide early-season training to wildland firefighters. Photographer: Dane Smigleski

2. SIGNATURE PAGE

This Community Wildfire Protection Plan has been prepared for the Delta Junction and Greater Delta Area of Alaska in accordance with the following principles:

- It was developed through a collaborative and inclusive process.
- It identifies and prioritizes areas for hazardous fuel reduction and recommends mitigation strategies to enhance the wildfire resilience of people, property, and the environment in the Delta Junction and Greater Delta Area.
- It provides recommendations to reduce the ignitability of structures across the area addressed by the plan.

By signing below, the undersigned entities affirm that these standards have been met and express mutual agreement with the content and recommendations of this Community Wildfire Protection Plan. Signing organizations are in alphabetical order.

Signed by:
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3. INTRODUCTION

3.1 Acknowledgements

In 2024, the Alaska Division of Forestry & Fire Protection (DFFP) received a USDA Community Wildfire Defense Grant (CWDG), established under the Bipartisan Infrastructure Law, to update the thirteen-year-old Delta Junction and the Greater Delta Area (*hereinafter referred to as the Delta Response Area*) Community Wildfire Protection Plan. Through a contract by DFFP the Delta Response Area Community Wildfire Protection Plan was developed by the Alaska Venture Partnerships and its sub-contracted partners, with valuable guidance and ongoing input from local community members. The planning process adhered to the guidelines outlined in *"Preparing a Community Wildfire Protection Plan — A Handbook for Wildland-Urban Interface Communities,"* as published on the State of Alaska's website. In support of transparency and public engagement, an interactive website was also established to provide open access to resources and updates throughout all phases of the project's development.

Land Acknowledgement

The Delta Response Area Community Wildfire Protection Plan respectfully acknowledges that the planning area for this Community Wildfire Protection Plan is located on the traditional and ancestral homelands of the Mendas Cha'ag and their descendants. This plan honors the Naltsiin Clan; who offer a rich cultural heritage and reflects the tribe's deep cultural ties and connection to the natural environment and who continue to be stewards of Mendas Cha'ag air, lands, and waters from time immemorial; and to the Elders who lived here before, and the Mendas Cha'ag of today and future generations.

3.2 About This Plan

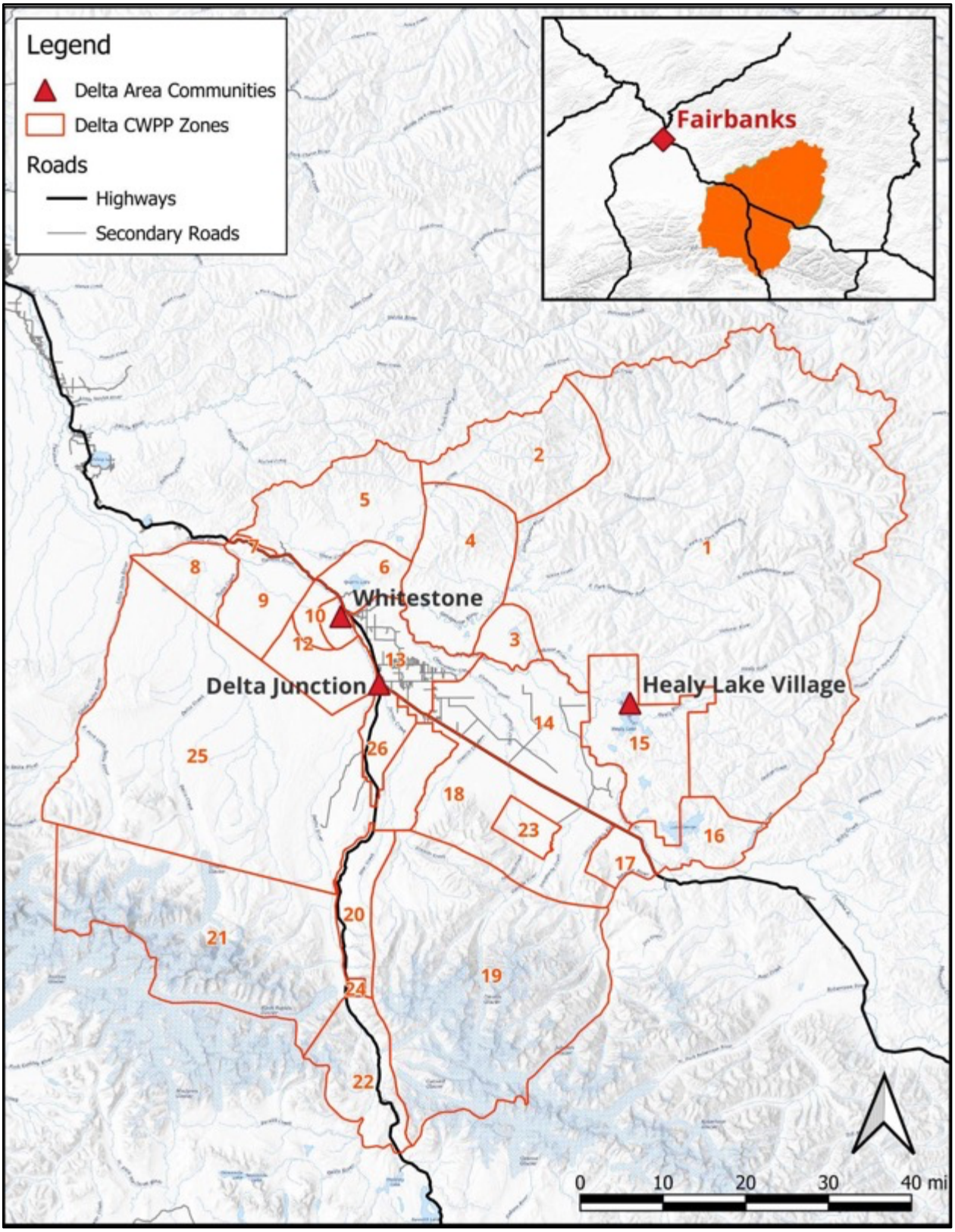
What is a Community Wildfire Protection Plan (CWPP)?

A Community Wildfire Protection Plan (CWPP) helps the Delta Response Area assess its local wildfire hazards and identify strategic actions to reduce risk and strengthen preparedness. For Delta Junction and nearby communities, including the agricultural corridor, rural subdivisions, and the surrounding forested landscape, the CWPP provides a framework for aligning local knowledge with state and federal wildfire management priorities.

A CWPP is more than a document, it is a collaborative process that brings together residents, landowners, fire service organizations, land management agencies, and tribal and city leaders to clarify and refine priorities for protecting life, property, and critical infrastructure within the wildland–urban interface (WUI). Through this process, participants evaluate fuel conditions, fire response capacity, and community vulnerabilities to identify effective, locally supported mitigation projects.

The planning area for this CWPP is the DFFP Delta Area Response Boundary. This planning area encompasses multiple communities to include private, city, industrial, state, federal, military and Tribal lands. Within the DFFP Delta Area Response Boundary, the CWPP divides the region into 26 planning zones (“Areas”), each evaluated for housing and infrastructure density, fuel types and proximity, ignition history, and overall risk.

This zonal approach allows the community and its partners to target mitigation and preparedness efforts where they will be most effective. Within the zones, three of the most populated residential areas were identified as Delta Junction, Whitestone, and Healy Lake Village.



Map 1. Delta Response Area CWPP Zones within the DFFP Delta Response Area

The Delta Response Area CWPP process prioritized public input and community involvement, offering an opportunity for residents to engage directly with wildfire specialists, planners, and emergency managers. These discussions helped identify local concerns, set project priorities, and improve coordination among the Alaska Division of Forestry & Fire Protection (DFFP), the City of Delta Junction, Delta Junction Volunteer Fire Department, Rural Deltana Volunteer Fire Department, Fort Greely Fire & Emergency Services, and federal land management partners.

A CWPP can also help unlock funding opportunities. Many federal and state grants for fuels (any material capable of burning) reduction, defensible space, and fire-adapted community projects require an approved CWPP.

The foundation for CWPPs was established under the Healthy Forests Restoration Act (HFRA) of 2003, which directs the U.S. Forest Service and Bureau of Land Management to collaborate with local communities in developing and implementing hazardous fuel reduction projects. To qualify for these opportunities, a community must have an approved CWPP that includes three key components:

- Collaboration: The CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and with input from the public.
- Prioritized Fuel Reduction: The plan must identify and prioritize areas for hazardous fuel reduction treatments and recommend methods to protect at-risk communities and essential infrastructure.
- Structural Ignitability: The plan must recommend actions that residents and communities can take to reduce the ignitability of structures within the planning area.

CWPPs can also be used as a tactical tool for wildfire prevention and management, as it provides a roadmap for how a community can reduce its wildfire risk and improve its resiliency in the face of wildfire events. The Delta Response Area CWPP builds on these principles to create a shared, actionable vision for living safely with wildfire, with the ultimate goals of protecting lives, livelihoods, and landscapes across the region.

State and Federal CWPP Guidelines

The Delta Response Area Community Wildfire Protection Plan (CWPP) aligns with both federal and state guidance to ensure consistency with national wildfire mitigation and

hazard planning standards. This approach supports integration with the Federal Emergency Management Agency (FEMA) framework for local hazard mitigation planning, while also adhering to the intent of the National Fire Plan and the Healthy Forests Restoration Act (HFRA, 2003).

This CWPP has been prepared in accordance with the following key policies and guidance documents:

- The National Fire Plan: *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment – 10-Year Comprehensive Strategy Implementation Plan* (December 2006).
- Healthy Forests Restoration Act (HFRA, 2003): Establishes statutory incentives for collaboration among federal agencies, states, and local communities to reduce hazardous fuels and protect at-risk areas.
- Federal Emergency Management Agency (FEMA): *Region 10 Guidelines for Local Hazard Mitigation Plans* (44 Code of Federal Regulations (CFR) Parts 201 and 206), as related to the fire mitigation planning components of a multi-hazard mitigation plan.
- National Association of State Foresters (2003): *Field Guidance for Identifying and Prioritizing Treatments Between Communities* to promote consistent risk assessment and project prioritization.

The objective of integrating these complementary frameworks is to produce a coordinated, risk-informed wildfire mitigation plan that identifies priority fuel reduction areas, recommends site-specific mitigation actions, and supports protection of people, structures, critical infrastructure, and natural resources in and around the Delta region.

By meeting these guidelines, the Delta Response Area CWPP also positions the community to access federal and state funding for pre-disaster mitigation projects through FEMA, the Alaska Division of Forestry & Fire Protection, and other cooperating agencies.

CWPP Priorities - Life and Property

Fire Adapted Communities

- People and communities are prepared to receive, respond to and recover from wildfire.

Safe, Effective Wildfire Response

- All jurisdictions coordinate to implement safe, effective, risk-based management decisions.

Resilient Landscapes

- Landscapes are resilient to fire, insect, and disease disturbances, regardless of jurisdictional boundaries.

Post-Fire Recovery

- Preparing communities for inevitable fire effects, through pre-fire planning for post-fire response.

Why Is this CWPP Relevant to Me?

Living safely with wildfire in the Delta Region requires a shared and ongoing effort from everyone: residents, landowners, farmers, business owners, fire service personnel, and land managers alike. The Delta Region faces many of the same risk factors seen in other wildfire-prone parts of Alaska and the broader boreal forest; dry summers, abundant fine fuels, and increasing development in and around wildland areas.

This Community Wildfire Protection Plan (CWPP) outlines strategies and actions that local, state, and federal agencies, community organizations, and residents can pursue over the next decade to reduce wildfire risk. It also provides practical guidance for individuals to help protect homes, families, and properties such as creating and maintaining defensible space, managing vegetation in the home ignition zone, and developing personal evacuation and communication plans.

The steps you take on your property make a difference. When neighbors work together to reduce fuels, maintain defensible space, and stay prepared, the entire community becomes more resilient and safer for firefighters and residents alike.

This CWPP serves as a call to action—a reminder that wildfire preparedness starts at home but depends on collaboration across the whole community. This plan serves as a commitment by the Alaska Division of Forestry & Fire Protection, Delta Junction Volunteer Fire Department, Rural Deltana Volunteer Fire Department, Fort Greely Fire & Emergency Services, the City of Delta Junction, and other local partners to support residents through education, planning, and resources to reduce wildfire risk and protect the landscapes, livelihoods, and natural resources that define the Delta Response Area. Individual community member ownership of this plan and its recommendations are vital to its success.

3.3 Plan Alignment

The Delta Response Area CWPP is designed to integrate existing local, state, and federal planning frameworks so mitigation actions, emergency response, and funding requests are coordinated, consistent, and defensible. The CWPP intentionally aligns with: (1) the State of Alaska Hazard Mitigation Plan to ensure consistency with statewide mitigation priorities and FEMA eligibility; (2) FEMA mitigation planning requirements and guidance under 44 CFR and the latest Local Mitigation Planning guidance; (3) the Alaska Interagency Wildland Fire Management Plan that sets statewide management options and coordination protocols; and (4) national strategies, such as the National Cohesive Wildland Fire Management Strategy, that provide the all-lands objectives (Restore, Maintain, Adapt, and Respond) used to prioritize cross-jurisdictional work.

Aligning the Delta Response Area CWPP with these plans improves multi-agency coordination during incidents (including military lands adjacent to Delta Junction), increases the CWPP's utility for operational decision-making, and strengthens eligibility for federal and state mitigation grants that require conformity with FEMA and state mitigation planning requirements. The Delta Response Area CWPP also builds from previous local planning products (including the 2012 Delta Junction and the Greater Delta Area CWPP and borough/jurisdictional hazard plans) to preserve institutional knowledge, track progress on recommended projects, and update priorities based on new science and community input.

Please review *Appendix L: Plan Alignment Summary* which identifies the relevant provision, goal, or action in each cited plan and describes how Delta CWPP goals and recommended actions support, implement, or expand those provisions.

3.4 CWPP Development Process

In 2024, the Alaska Division of Forestry & Fire Protection received a USDA Community Wildfire Defense Grant (CWDG) to update the thirteen-year-old Delta Community Wildfire Protection Plan. These funds were contingent on using a multi-level, community-engaged process to guide issue identification and strategic planning.

A 12-month timeline was established for writing this CWPP with key milestones at each stage. The below timeline provides a balanced, step-by-step approach to ensure the CWPP is comprehensive, community-driven, and ready for implementation within a year of its publication.

Month	Milestone
1-3	Planning team formation, role assignments, and set communication/decision-making processes. (January–March 2025)
4	Begin community engagement, gather initial input, prepare for risk assessment. (April 2025)
5-6	Conduct wildfire risk assessment, finalize data collection and mapping. (May & June 2025)
7-8	Define CWPP goals, identify priority project areas, engage the community for input. (July & August 2025)
9	Develop detailed action plans and strategies for each project area. (September 2025)
10	Draft the CWPP document, review with the team, and prepare for community feedback. (October 2025)
11	Public review of the draft CWPP, incorporate revisions, finalize with the core team. (November 2025)
12	Finalize and adopt the CWPP, begin implementation planning. (December 2025)

Table 1. Summary of Project Milestones from January–December 2025

Community Engagement

Throughout 2025, outreach for the Delta Response Area CWPP focused on building awareness, encouraging public participation, and ensuring the process reflected local priorities. The effort began with an Initial Planning Meeting for Community Leaders on March 7, 2025, which introduced the CWPP update process, outlined objectives, and invited input from city, tribal, and agency representatives. This was followed by a Core

Team and Community Outreach Meeting on May 7, 2025, which refined community engagement strategies and identified outreach channels to reach a wider audience across the Delta Response Area.

Public engagement took place over the summer through multiple community events and broad promotion efforts. Outreach tactics included sharing through local Facebook groups, the Delta radio station, community event listings in the *Delta Wind* newspaper, direct email invitations, flyers posted around town, and word-of-mouth conversations to encourage residents to attend meetings and complete the CWPP community survey. At the Delta Farmer's Market on June 18, 2025, partners distributed printed flyers and QR-code surveys to introduce the CWPP update and gather early feedback from residents. The outreach effort grew during the Deltana Fair on August 8–10, 2025, where a dedicated booth, shared with the Alaska Division of Forestry & Fire Protection, provided educational materials, children's fire-safety activities, and information on wildfire prevention and home hardening. Hundreds of community members participated in conversations about wildfire risk, filled out surveys, and learned how to become more involved. Flyers with survey QR codes were distributed throughout the fairgrounds, and follow-up engagement revealed that many residents were unaware that a CWPP existed but expressed strong interest in protecting homes and improving local response capacity.

Based on community feedback, fall meetings were scheduled during a less busy time for residents. The Core Team and Community CWPP Review meetings on October 2, 2025, allowed partners to review preliminary findings and draft recommendations, while the Community CWPP Review Meeting on October 29, 2025, provided a final opportunity for public input before completion. In addition, the CWPP team met with Mendas Cha'ag Native Corporation in Fairbanks on November 15, 2025, to share the plan and gather feedback specific to Healy Lake Village, ensuring that unique local concerns and traditional knowledge were incorporated into the CWPP. Collectively, these outreach activities built strong local participation and established a foundation for a community-driven CWPP that reflects shared values, practical needs, and collaborative wildfire resilience goals.

Survey Summary

A survey[1] was conducted to gather local perspectives on wildfire awareness, preparedness, and priorities for the Delta Response Area CWPP. Responses reflected a strong level of concern about wildfire smoke, home and property damage, and the

[1] Please refer to *Appendix I – Resident Survey Results* for details on all responses.

community's overall readiness to respond to a major fire. The most common experiences with wildfire involved smoke exposure, past evacuations, and nearby fire events, with many residents noting health effects and anxiety during fire season. When asked about top concerns, smoke and air quality were cited most frequently, followed by damage to homes and property, and the need for improved preparedness and notification systems. Many participants emphasized the importance of stronger local coordination and communication, as well as better access to information about CWPP activities and wildfire safety programs. Respondents also identified emergency services, utilities, and schools as critical infrastructure that should be prioritized for protection. While some residents reported taking steps to reduce fire risk around their properties, others noted barriers such as lack of time, resources, or awareness of effective mitigation actions. Overall, the survey revealed both a deep concern about wildfire risk and a willingness among residents to participate in planning and preparedness efforts, highlighting the importance of ongoing outreach and collaboration to strengthen community resilience.

Image 1. Community Survey Poster and DFFP Cabin, Deltana Fair, Photo Credit: Lisa Shield

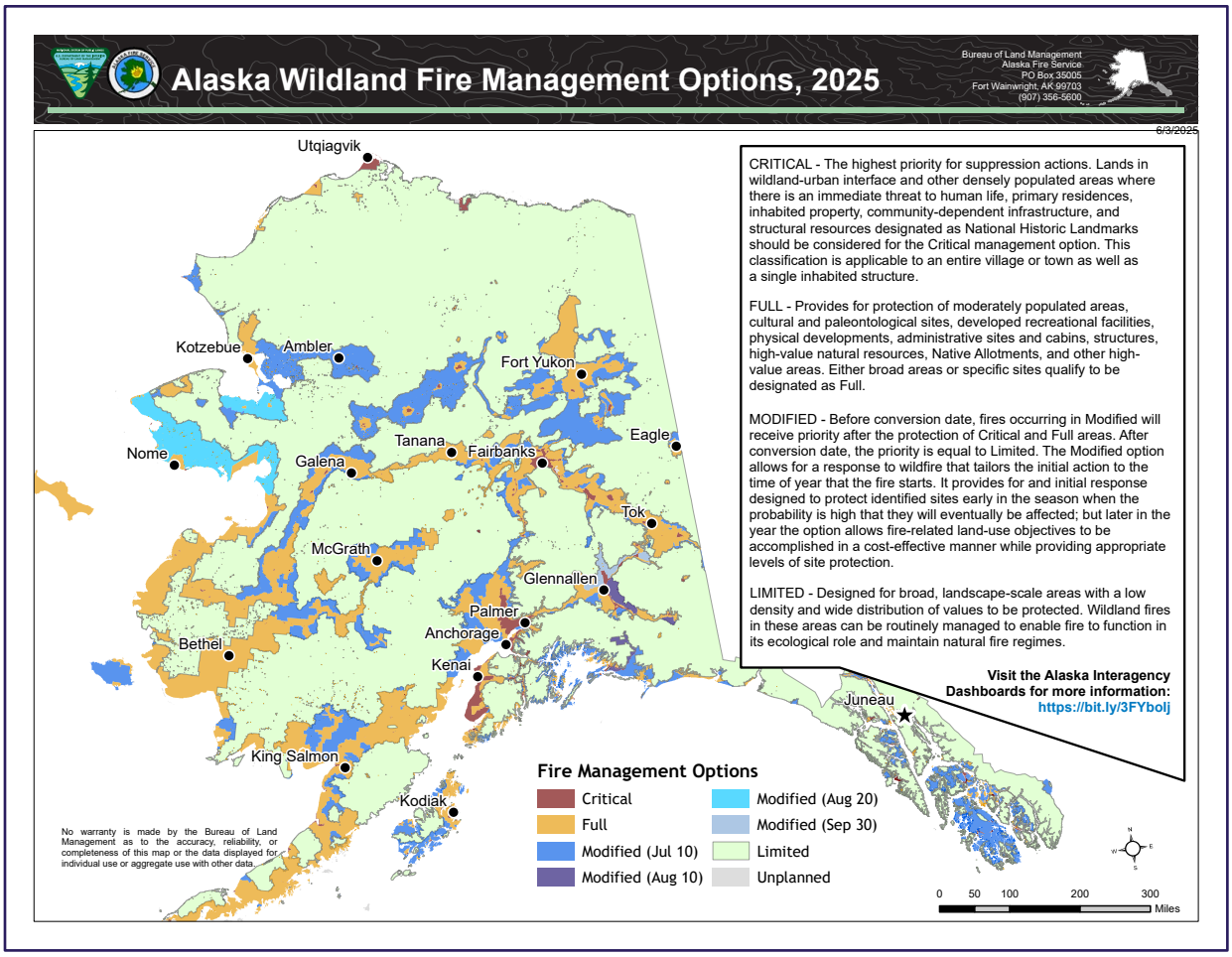
Recommendations & Best Practices

To ensure that the Delta Response Area CWPP stays aligned with national goals and Alaska-specific Fire Adapted Communities principles, below are some general recommendations:

1. Update the CWPP regularly with a review and revision every 3 years and a renewal every 5 years to reflect changes in housing, land ownership, fuels, climate and risk.
2. Strengthen building/home hardening and defensible space programs, especially in zones with direct exposure.
3. Use fuel treatment prioritization informed by the zonal risk rankings to target high threat/high asset zones first.
4. Engage the public continuously, both in awareness and in maintaining responsibilities (e.g. vegetation around homes).
5. Coordinate among jurisdictions and agencies to ensure resources are shared, roles defined, and response is integrated.
6. Integrate response and evacuation planning explicitly, ensuring that high risk zones consider escape routes, safe zones, and communication systems.
7. Monitor results of mitigation actions, share lessons learned, and adjust strategies adaptively.

Alaska Wildland Fire Management Options

The Alaska Interagency Wildland Fire Management Plan recognizes that Federal and State agencies and Alaska Native Claims Settlement Act Corporations have distinct missions and objectives for their lands, and effective wildfire management requires balancing suppression, monitoring, and natural fire spread. To guide decisions, nearly all lands in Alaska are assigned to one of four wildfire management options (Critical, Full, Modified, or Limited) through a collaborative process among jurisdictional and protecting agencies. These designations enable fire managers to prioritize protection efforts, allocate resources efficiently, integrate fire management with broader land-use goals, and ensure suppression costs align with the values at risk.



Map 2. Alaska Wildland Fire Management Options, 2025

While management options establish default initial responses based on a fire's point of origin, they do not account for incident-specific conditions and may be overridden using a decision support process that incorporates risk analysis and situational assessment. Flexibility is central to the system, as agencies may adjust management designations annually to reflect changes in objectives, fire conditions, land use, or available technologies. Revisions require collaboration and consensus among all affected parties, with the Alaska Wildland Fire Coordinating Group (AWFCG) serving as the final decision-maker in cases of disagreement. For more information on fire management options, please visit the Alaska Wildland Fire Management Plans page. For fire management option change procedures, see the Alaska Interagency Wildland Fire Management Plan in *Appendix D: Response Jurisdiction & Protection Level Changes*.

The table below and the map on the next page display the entire response area boundary and the distribution of fire management options in the Delta Response Area CWPP.

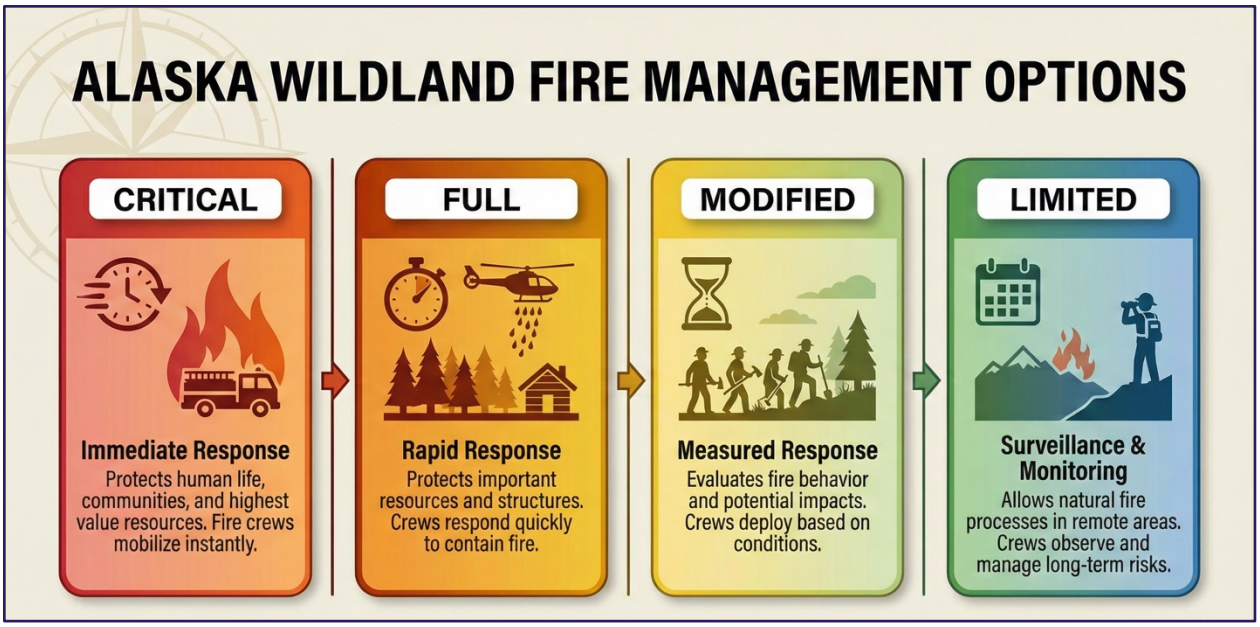
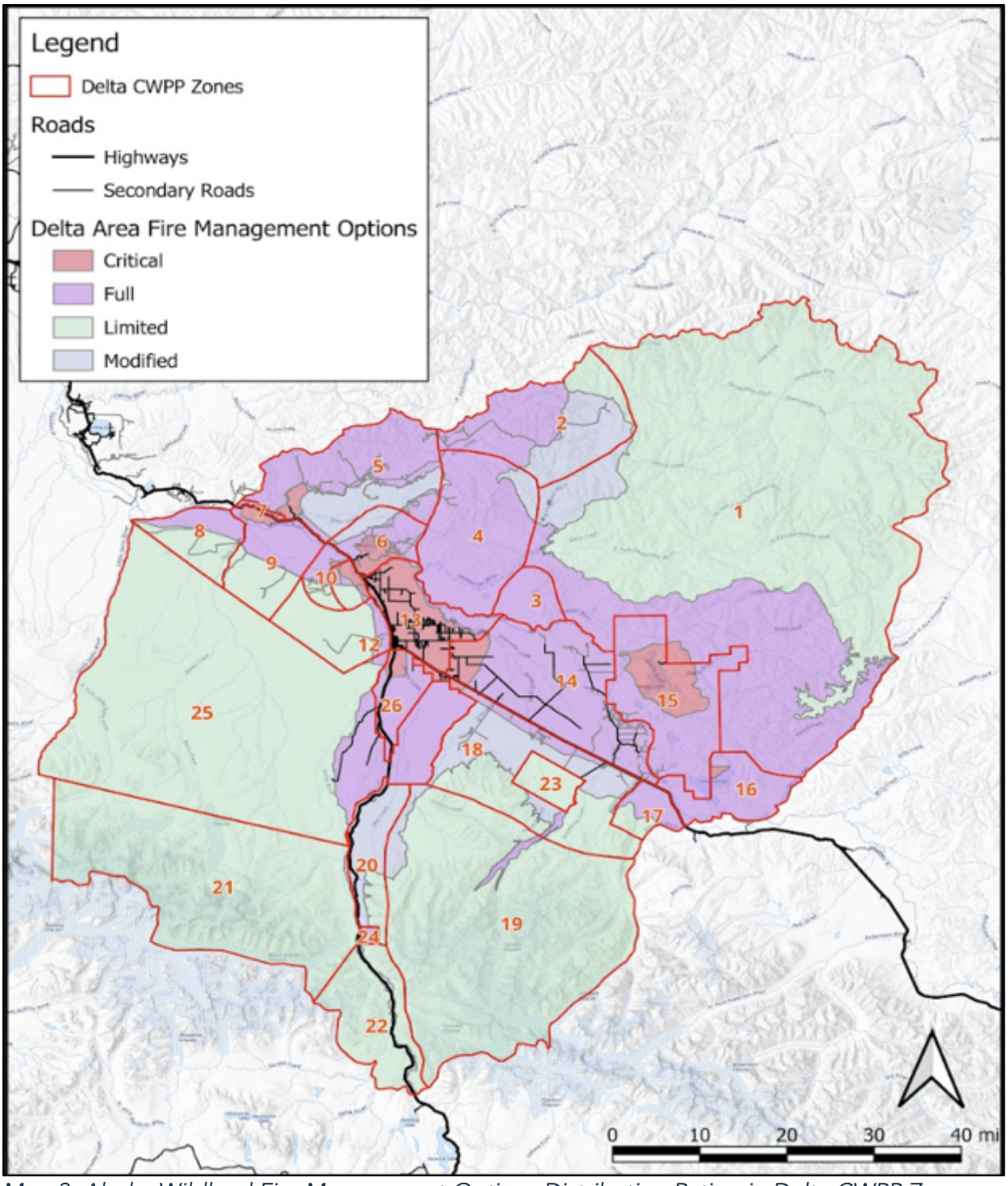


Image 2. Alaska Fire Management Options

Management Option	Acres of Land Area	Percentage of Land Area
Critical	138,231	3.5%
Full	1,106,895	27.9%
Modified (July 10)	263,717	6.7%
Limited	2,451,929	61.9%
Total Acres	**3,960,772**	**100.00%**

Table 2. Alaska Wildland Fire Management Options Distribution Rating Chart



Map 3. Alaska Wildland Fire Management Options Distribution Rating in Delta CWPP Zones

4. BACKGROUND

4.1 Geography and Location

The City of Delta Junction and the Greater Delta Area are in Interior Alaska at the confluence of the Delta and Tanana Rivers, approximately 95 miles southeast of Fairbanks. The area is defined by broad river valleys, extensive agricultural lands, boreal forests dominated by black and white spruce, birch, and aspen, and nearby Fort Greely and Donnelly Training Area managed by U.S. Army Garrison Alaska. The Richardson Highway serves as the area's main transportation corridor, connecting it north to Fairbanks and south to the Alaska Highway system.

Delta Junction is the largest populated community in this region, home to roughly 1,150 residents within city limits. An estimated 5,000–6,000 people live in the surrounding Greater Delta Area. The Delta region has a diverse economy anchored by agriculture, military operations, small businesses, and seasonal tourism. The region is known as Alaska's "breadbasket" due to extensive grain and hay farming. Land ownership is a patchwork of State lands, Alaska Native corporation holdings, private parcels, and large tracts managed by the military.

Wildfire is a recurring and significant concern for the Delta region. The combination of strong summer winds, highly flammable black spruce forests, and cured agricultural fields contributes to high fire danger each year. The Greater Delta Area has experienced multiple large fires in recent decades, including the 1998 Carla Lake Fire, 1999 Donnelly Flats Fire, the 2004 Taylor Complex, and the 2023 Pogo Mine Road Fire. Fires have threatened homes, farms, recreation cabins, and military facilities, underscoring the importance of community preparedness.

The Delta region's values at risk include residential neighborhoods, farms, schools, health facilities, transportation routes, critical infrastructure such as electrical transmission lines and fuel storage facilities, and cultural and subsistence resources. Local fire protection is provided by volunteer fire departments and supported by the Alaska Division of Forestry & Fire Protection. The region is highly engaged in wildfire preparedness due to its exposure and past experiences.

The Delta Response Area represents a classic Wildland-Urban Interface (WUI) setting in Alaska; a mosaic of farms, homes, forests, and military lands where people and property are directly adjacent to wildland fuels. This CWPP aims to strengthen local resilience by identifying risks, coordinating stakeholders, and advancing Fire Adapted Community principles in line with the National Cohesive Wildland Fire Management Strategy.

4.2 Land Management History

In the 1950s–1960s, much of Alaska's wildland fire protection on public lands was handled by federal agencies (BLM, USFS) or by contract. After Alaska became a state in 1959, the State of Alaska gradually started contracting with federal agencies for fire protection of State lands.

From the mid-1970s to mid-1980s the Alaska State Legislature and state records indicate that in the mid-1970s through to the mid-1980s, responsibility for fire protection was gradually transferred from the BLM to the Alaska Division of Forestry. The Delta Area Forestry office was established during this time. The State of Alaska Division of Forestry & Fire Protection continues to be the wildland fire suppression agency for Delta Junction and the Great Delta Area.

Please review Section 6: Fire History for more specific fire information.

4.3 Demographics

CWPP Planning Considerations

The Greater Delta Area is geographically dispersed, with many homes on farms, homesteads, or subdivisions outside city limits. This creates challenges for wildfire protection, emergency response, and outreach. The presence of Fort Greely and other state and federal land managers also make interagency coordination critical. Cultural and language differences, including Indigenous and immigrant communities, underscore the importance of locally trusted messengers and tailored outreach in fire planning.

Population & Setting

Delta Junction serves as the regional hub with approximately 1,150 residents, centralized services, schools, and local commerce. The surrounding Greater Delta Area consists of smaller and more dispersed communities, like Deltana, Big Delta, and Healy Lake Village. These communities are low-density, mostly rural or subsistence-based, with a mix of river, lake, and boreal forest landscapes. Healy Lake Village is remote and primarily accessible by air or water. Fort Greely, a military installation with no official population count, adds an approximate few hundred more residents, most tied to military service. Across the wider Southeast Fairbanks Census Area, there are roughly 7,000 people, giving the Greater Delta Area a population of about 8,000 when surrounding rural households are included.

Age & Households

Delta Junction has a median age of approximately 36 years old, reflecting a working-age family population, with an average household size of 3.0. The surrounding rural communities tend to have older populations (median ages 40–59) and smaller households, with Healy Lake Village skewing oldest (~54) and smallest with approximately 16 total households. Household composition across the rural areas includes single residents, elder households, and seasonal occupancy for recreation or subsistence cabins. Homeownership is common with about 70% of housing units being owner-occupied.

Economy & Livelihoods

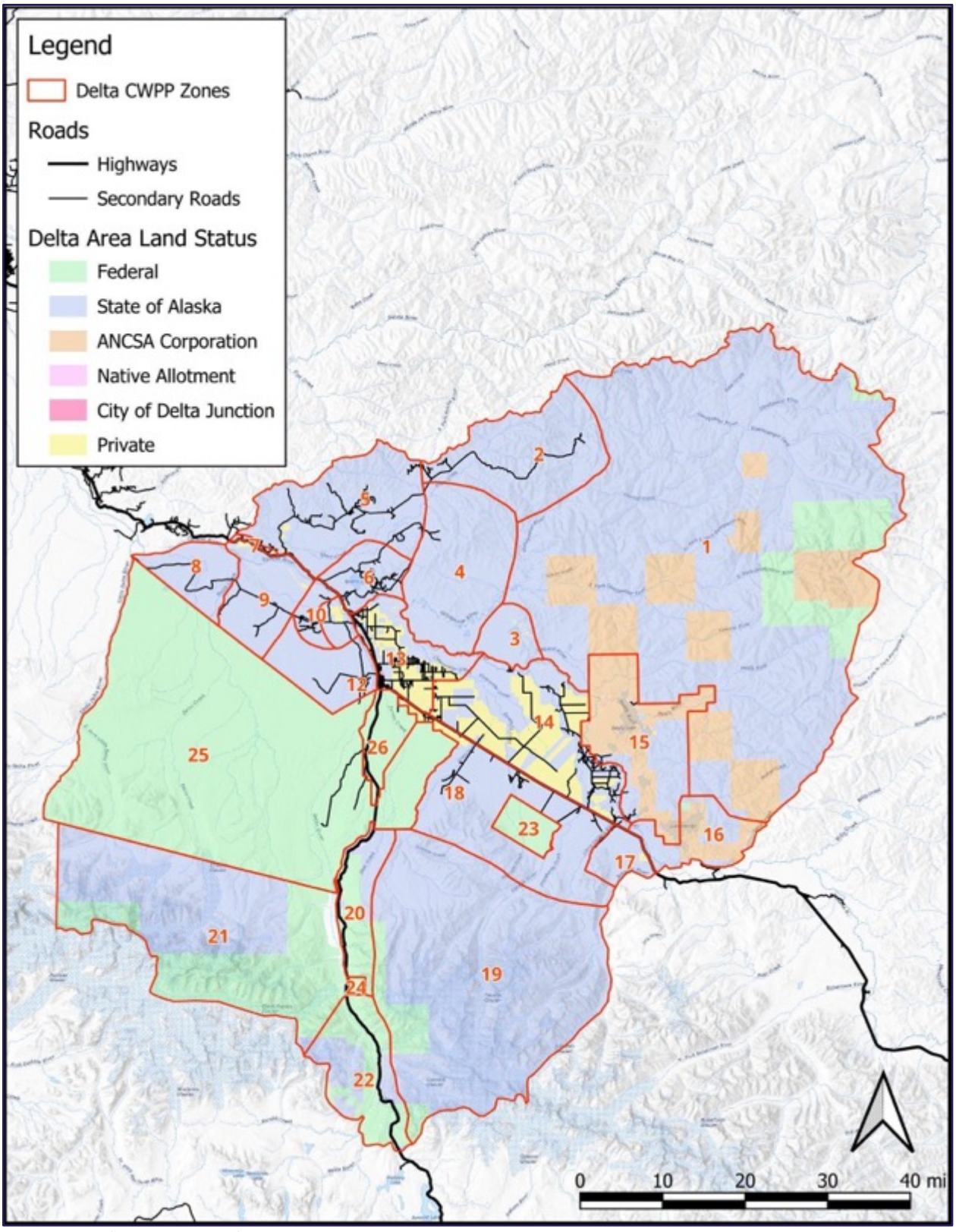
Delta Junction's economy centers on agriculture, services, and military support (Fort Greely), with median household income that mirrors the State of Alaska median. In contrast, the combined rural communities have limited economic opportunities: small businesses, trades, subsistence hunting/fishing, and seasonal tourism dominate. For example, Healy Lake Village faces extreme economic challenges, with median household income of $13,750 and a higher-than-average poverty rate of 71%.

Image 3. Delta Junction, Photo credit: DFFP

4.4 Landownership

Ownership/ Management	Acres of Land Area	Examples
City of Delta	645 (<1%)	City owned lands: parks and recreation lands, greenbelts, public facilities, etc.
State of Alaska	2,498,291(63.1%)	Alaska State Parks, state forests, state trust lands, highway corridors, airports, etc.
Federal Government	1,039,743 (26.2%)	Fort Greely and Donnelly Training Area managed by U.S. Army Garrison Alaska, BLM parcels
Native Corporations/ Tribal	294,572 (7.4%)	Doyon, Mendas Cha'ag (Healy Lake Village), Native allotments, and associated tribal lands
Private Landowners	118,133 (3%)	Residential subdivisions, commercial districts, industrial areas
Undetermined	9,566 (0.2%)	Lands not determined, in probate, etc.
Total Acres	**3,960,950**	

Table 3. Landownership Distribution in the Planning Area, Source: Bureau of Land Management. (n.d.). Alaska administered lands, SDMS.



Map 4. Delta Area Land Status

4.5 Transportation

Delta Junction serves as a key transportation hub in Alaska's Interior, connecting rural and urban areas across the Tanana Valley.

- Highways: The town sits at the junction of the Alaska Highway (AK-2) and the Richardson Highway (AK-4), providing critical access for commercial traffic, tourism, and emergency evacuation.
- Air: Delta Junction has a small municipal airport capable of supporting general aviation and small cargo aircraft; nearby Fairbanks International Airport (approximately 100 miles) provides regional air connectivity.
- Public and Local Roads: The community's internal street network, along with rural access roads to agricultural lands and military lands (Fort Greely and Donnelly Training Area), is essential for daily mobility and emergency response.

The Greater Delta Area is more remote, and some areas are much more difficult to travel to. For example, Healy Lake Village is an exceptionally remote community located deep within the Interior, accessible only by small plane or boat, with no connecting road system linking it to the state's highway network. Similarly, the community of Whitestone can only be reached by air or water, underscoring its geographic isolation from larger service hubs. This limited transportation access not only challenges the delivery of supplies and emergency services but also heightens each community's vulnerability to natural hazards, particularly wildfires. When wildfires occur, the absence of road access complicates evacuation, restricts firefighting response, and delays recovery efforts, leaving remote villages like Healy Lake Village and Whitestone more susceptible to severe and prolonged wildfire impacts.

4.6 Electrical Power Distribution

Golden Valley Electric Association (GVEA) provides electricity to the Greater Delta Area. GVEA supplies power to 2,392 meters through 1,804 transformers. There are 381 miles of total distribution conductor (wire): 316 miles of primary distribution wire and 65 miles of secondary wire—services from transformers to structures.

There are two substations in the Delta area, Pogo Tap off Shaw Creek Road and Jarvis Creek at mile 264.5 Richardson Highway. At Jarvis Creek Substation there is a backup powerplant that can feed the Community of Delta if the transmission line goes down.

The transmission line was affected in 2023 by the Pogo Mine Road Fire, which burned up some power poles.

See *Appendix C: Outreach and Education Resources* for more information on protecting the powerlines on private property.

See *Appendix G: Planning Zone Summaries* for specific powerline information in each Planning Zone.

4.7 Industry

The Delta Junction's economy is largely shaped by agriculture, military support, and energy/logistics sectors:

- Agriculture: The surrounding Tanana Valley agricultural area produces hay, small grains, and livestock. Farms in the region are critical for local food supply and economic activity.
- Military Support: Proximity to Fort Greely creates significant employment and economic activity, including construction, logistics, and services supporting the base.
- Energy and Utilities: Local energy infrastructure includes diesel and natural gas distribution, electricity transmission, and heating fuel supply.
- Tourism and Services: Seasonal tourism along the Alaska Highway, combined with small-scale retail, lodging, and service businesses, contributes to the local economy.

Outside of Delta Junction, the greater Delta area has a largely small-scale and resource-based economy. Subsistence activities such as hunting, fishing, and trapping remain central, particularly in remote villages where residents often supplement limited cash income with food and materials from the land. Small-scale agriculture and homesteading occur in Deltana and Big Delta, primarily for local consumption rather than commercial production. Seasonal tourism, including recreational fishing, hunting, and cabin rentals, provides employment opportunities in Big Delta and other wilderness areas, with lodging, guiding, and small service businesses active during the summer months.

Construction and other trades also contribute to the local economy, as residents work in home maintenance, cabin building, road projects, and utility services. Government and public service roles, including positions in local offices, schools, and health care, provide additional employment. Overall, the economy outside Delta Junction is highly decentralized, combining subsistence, seasonal employment, small-scale agriculture, and limited government or military-related work, with no major industrial base in the rural communities.

4.8 Natural Resources & Forest Health

The natural resources of Delta Response Area are diverse and closely tied to the boreal forest and riverine ecosystems of interior Alaska. The region is dominated by forests of spruce, birch, and aspen, which provide timber, wildlife habitat, and forage for subsistence hunting. Extensive wetlands, lakes, and rivers, like the Delta and Tanana Rivers, support fishing, waterfowl, and aquatic ecosystems, as well as offering potential water resources for domestic and emergency use.

Wildlife is abundant, with populations of moose, caribou, black and brown bears, beavers, and numerous bird species, which are important both for subsistence and recreational hunting. The soil and river valleys in areas like Deltana and Big Delta support small-scale agriculture, including hay, grains, and vegetable cultivation. Additionally, the region’s minerals and gravel deposits provide construction materials for roads, airfields, and infrastructure projects.

Healy Lake Village and other remote villages also rely heavily on local renewable resources for daily subsistence, such as berries, firewood, and fish. Overall, the natural resources of the area support a mixed-use economy, combining subsistence, small-scale agriculture, recreational tourism, and limited commercial development, while also creating significant wildfire risk due to the dense boreal forests and dry summer conditions.

The Tanana Valley State Forest

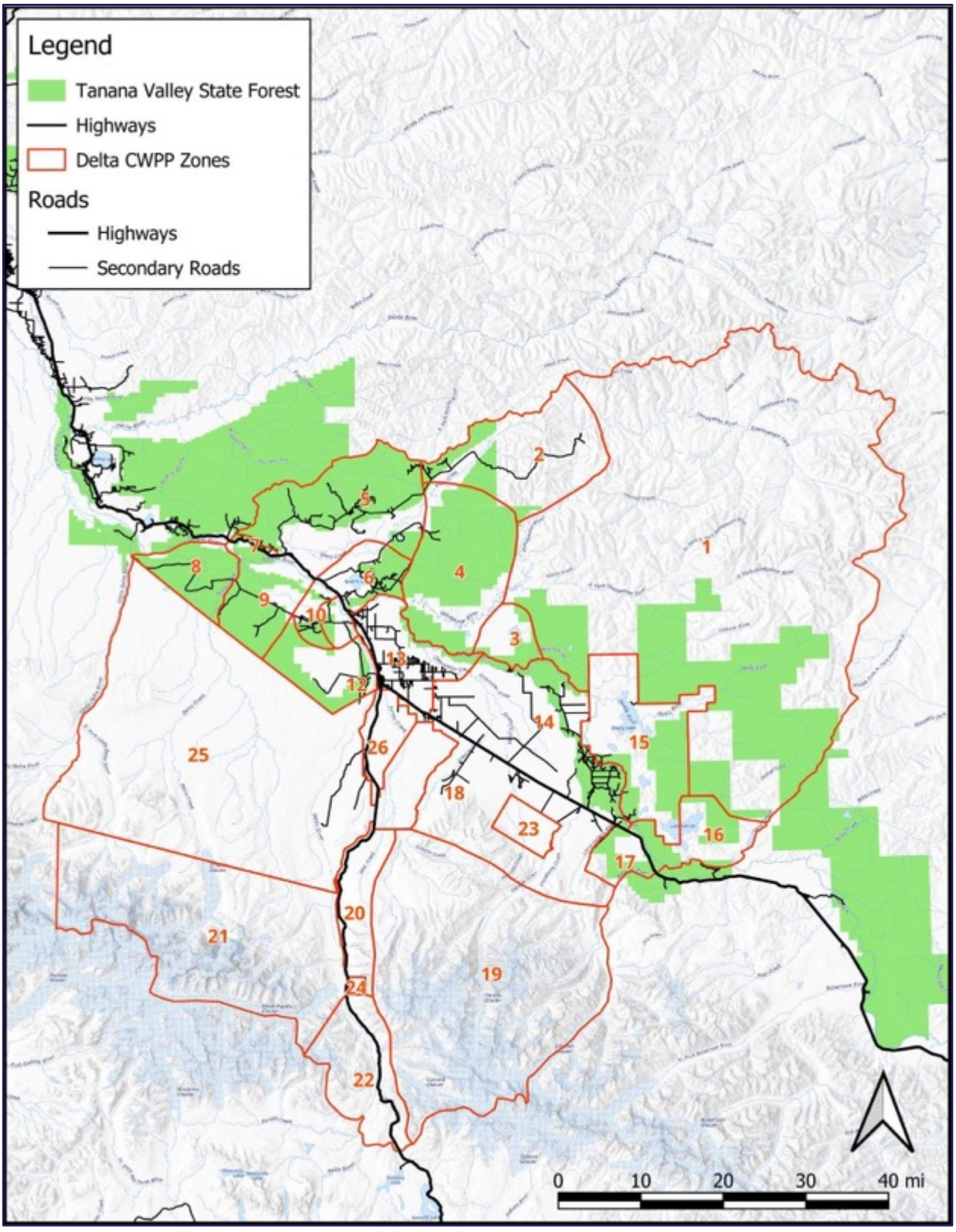
The Tanana Valley State Forest (TVSF) is the largest of Alaska's state forests, encompassing approximately 1.8 million acres of boreal forest. While its central location is in Interior Alaska, it stretches roughly 265 miles from near Tok in the east to Manley Hot Springs in the west and is near the Delta Junction area.

- Purpose: TVSF is managed for multiple uses under the sustained yield principle, with a primary focus on timber management, which encompasses production,

utilization, and replenishment of timber resources, while also supporting other beneficial uses like wildlife management, recreation, and mining.

- Vegetation: TVSF is primarily boreal, with significant stands of white spruce, black spruce, paper birch, quaking aspen, and balsam poplar.
- Output: Timber production is the major commercial activity.
    - The former forest management plan allowed for an estimated allowable harvest of 5.88 million board feet per year over approximately 42,000 acres of managed land designated for timber harvest.
    - Commercial timber sales vary annually but have historically included white spruce sawtimber, supporting local businesses like sawmills, house log manufacturers, and pellet mills.
- Recreation and Other Uses: TVSF provides important opportunities for public access, including hunting, fishing, camping, and other outdoor recreational activities.

The Tanana Valley State Forest is a massive, multi-use boreal forest managed for sustainable timber production and a host of other public benefits, located centrally in Interior Alaska along the Tanana River.



Map 5. Tanana Valley State Forest and the Delta Response Area CWPP Zones

Spruce Bark Beetle Activity and Wildfire Risk

The Spruce Bark Beetle (*Dendroctonus rufipennis*) is the most damaging native forest insect in Alaska, with outbreaks historically concentrated in Southcentral regions like the Kenai Peninsula and Matanuska-Susitna Borough. While *Ips* beetles (*Ips perturbatus* is the northern spruce engraver) also exist, the Spruce Bark Beetle is the primary driver of large-scale spruce mortality.

Impact on Forest Health

- Tree Mortality: The beetles burrow into the phloem (the inner bark layer) to lay eggs, disrupting the tree's ability to transport nutrients from the needles to the roots. This effectively "girdles" and starves the tree, often resulting in death.
- Scale of Infestation: Alaska has a long history of major outbreaks. The 1990s outbreak affected over 2 million acres, and a more recent outbreak starting around 2016 has impacted over 2.25 million acres. In heavily infested stands, mortality rates can exceed 80-90% of susceptible spruce trees (typically white, Sitka, and Lutz spruce greater than 12 inches in diameter).
- Contributing Factors: Outbreaks are exacerbated by warmer temperatures and drought conditions associated with climate change. Increased temperatures shorten the beetle's life cycle from two years to one, allowing for faster population growth and wider damage. Stressed or damaged trees are also more susceptible to attack.

Impact on Wildfire Potential

Spruce beetle-killed trees significantly alter forest fuels and structure, increasing the overall wildfire risk to communities.

Fuel Loading

- Crown Fuels (Initial Phase): Immediately following a mass attack (the "red stage" with reddish-brown needles), the standing dead trees have dry, fine needles that remain attached for a time. This can increase the potential for crown fires (fire spreading through the treetops) because the dead, dry needles ignite easily.
- Surface and Ladder Fuels (Later Phase): As time passes (typically 2+ years), the needles fall and dead limbs break off, accumulating as heavy woody debris on the forest floor. This increases the total amount of fuel available to burn, which can lead to greater fire intensity.

- Greater Fire Intensity: A fire burning through this heavy fuel load will release more heat, resulting in higher intensity fires that are more difficult to control.
- Increased Ignition Risk: The dead, dry wood is more susceptible to ignition.
- Understory Changes: Increased sunlight reaching the forest floor due to the lack of tree canopy can promote the growth of fine fuels like grasses and shrubs, creating a continuous layer of highly flammable fuel near the ground, which further increases the likelihood of fire ignition and rapid spread.

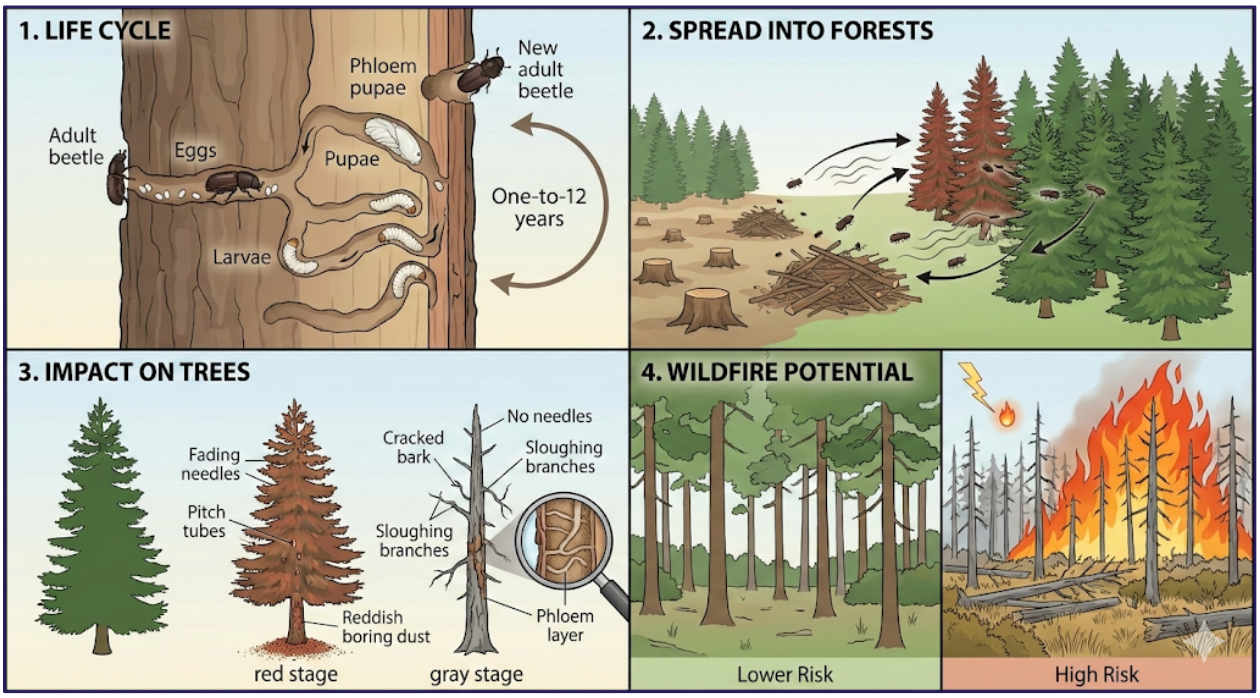


Image 4. Spruce Bark Beetle Impact and Wildfire Risk

The mass mortality caused by the Spruce Bark Beetle creates a significant and prolonged wildfire hazard. The combination of dry, dead material in the canopy (initially) and the eventual heavy accumulation of debris and growth of fine understory fuels on the ground makes infested areas more vulnerable to high intensity, rapidly spreading wildfires. This necessitates strategic fuel reduction and defensible space measures in community wildfire protection planning.

For more information on Spruce Beetle Mitigation and Prevention Strategies see *Appendix C - Outreach and Education Resources*.

4.9 Tribal Activities and Entities

Tribal Presence and Governance

- The Delta region is part of the traditional lands of Interior Alaska Native groups, primarily the Dene Athabascan and more specifically, the Tanana Athabascan Peoples.
- Tribal organizations play a key role in governance, resource management, cultural preservation, and community services. While Delta Junction itself is not a primary village site, several nearby communities have tribal councils or village corporations that influence land use and fire management practices.
- Key tribal entities in the region include:
    - Healy Lake Village Council - the governing body of the Healy Lake Village tribal community in Interior Alaska, working to support health, education, housing, and cultural preservation for tribal members.
    - Mendas Cha'ag Native Corporation - the Alaska Native Claims Settlement Act (ANCSA) village corporation for shareholders associated with Healy Lake Village, managing land, resources, and shareholder affairs for descendants of original enrollees. Mendas Cha'ag Native Corporation governs all village corporation lands including the landfill and airport.
    - Tanana Chiefs Conference (TCC) - represents Interior Alaska tribes by providing health services, social services, and emergency preparedness support, including wildfire planning resources.
    - Doyon Limited - the Alaska Native Regional Corporation under ANCSA which owns and manages land that may intersect with wildfire-prone areas and infrastructure corridors near Delta Junction.

Tribal Activities Relevant to the CWPP

- Land Management and Subsistence Practices:
    - Tribes maintain subsistence lands for hunting, fishing, and berry gathering. Wildfire impacts on these lands can threaten food security and cultural practices.
- Cultural and Environmental Stewardship:
    - Tribes engage in cultural resource protection, ensuring that archaeological and historic sites are considered in fire mitigation and landscape management.

    - Many tribal programs integrate traditional ecological knowledge (TEK) into land management, including fire-adapted practices.

Collaboration in Wildfire Planning

- The CWPP process recognizes tribal sovereignty and consultation requirements, ensuring that tribal perspectives are incorporated into planning and mitigation strategies.
- Tribal entities contributed to:
    - Mapping high-priority cultural and subsistence areas
    - Advising on acceptable fuel reduction and prescribed burning practices
    - Supporting community engagement and public education campaigns to increase wildfire awareness and preparedness.

4.10 Fire Response Overview

Under the Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement (the "Master Agreement"), the Alaska Division of Forestry & Fire Protection (DFFP) is the state agency that holds primary responsibility for wildland fire suppression on state-managed lands. This agreement is a formal pact among the State of Alaska and various federal agencies (e.g. U.S. Forest Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs) to coordinate fire management efforts, share resources, and define roles when fires cross jurisdictional lines.

Under this arrangement, if a wildfire occurs on federal, state, or mixed ownership lands, the DFFP may act as the jurisdictional agency, that is, the lead agency responsible for directing suppression operations, while relying on cooperation from federal partners under the Master Agreement. The Master Agreement also allows "cooperator" fire departments to enter into local Cooperative Fire Protection Agreements with DFFP, meaning local fire departments can be formally integrated into state responses when activated.

The Delta Junction Volunteer Fire Department, Rural Deltana Volunteer Fire Department, and the Fort Greely Fire Department provide fire protection and emergency response services within the Delta-Greely area. Their primary focus is on structural firefighting, responding to fires involving homes, buildings, and vehicles, along with general emergency assistance. When it comes to wildland or wildland–urban interface (WUI) fires, where wildland fuels such as trees and grasses burn near

homes and infrastructure, both departments have very limited capacity for initial attack, which refers to the first efforts to control or contain a new wildfire. Their personnel are primarily trained and equipped for structural firefighting, and they lack specialized engines, portable pumps, hand tools, and protective gear required for sustained wildland fire suppression. While some members have completed basic wildland training, neither department maintains the equipment, staffing, or logistical capability to independently suppress wildfires beyond small grass or brush fires. In most wildfire situations, they rely on the Alaska Division of Forestry & Fire Protection and interagency partners to lead suppression operations, while local departments focus on structure protection and public safety.

The nearby communities of Healy Lake Village and Whitestone currently have no formal fire departments or organized fire response resources. Residents rely on informal community efforts and assistance from regional responders based in Delta Junction, Fort Greely, or the Alaska Division of Forestry & Fire Protection. Due to the absence of trained personnel, equipment, and water infrastructure, both communities have little to no capacity for fire suppression or coordinated emergency response. This lack of local fire protection significantly increases their vulnerability to wildfires and other emergencies, especially given their remote locations and limited access to external assistance.

Fire Protection for Alaska Native Allotments

Alaska Native allotments are parcels of land, totaling up to 160 acres, conveyed to an Alaska Native individual by a restricted deed under the Alaska Native Allotment Act of 1906, its 1956 amendment, or the Alaska Native Veteran Allotment Act of 1998.

For the purpose of fire protection, restricted-title Alaska Native allotments are treated as Federally Administered Indian Trust Lands.

Responsibility and Service Provision

- Jurisdictional Agency: The Bureau of Indian Affairs (BIA) serves as the Jurisdictional Agency for all Indian Trust lands in Alaska, including restricted-title Native allotments. The BIA Regional Fire Management Officer is the primary notification point-of-contact for all trust lands threatened by wildfire.

- Suppression Services: Wildland fire suppression services are delegated to the Bureau of Land Management (BLM) by the Department of the Interior Manual (620 Chapter 5.3). These services are provided by the BLM Alaska Fire Service (BLM AFS) and by the State of Alaska and the US Forest Service (USFS) through the Alaska Master Cooperative Wildland Fire Management Agreement.
- Cost: While not explicitly stated for allotments in the same section as ANCSA lands, BLM provides cost-effective wildland fire suppression services on DOI administered lands (which includes trust lands).

Tribal Government Involvement

Some of the 229 federally recognized Tribes in Alaska have compacted with the BIA to become service providers for allotment owners who are Tribal members. These compacted Tribal governments and consortiums (like Tanana Chiefs Conference, Chugachmiut, and AVCP) serve an important role, including:

- Serving as an additional point of contact (a resource advisor) for the Protecting Agencies regarding fire management concerns.
- Maintaining site-specific information for the allotments in their service area.
- Assisting the Protecting Agency in the protection of trust lands during an ongoing incident.

The BIA remains the Jurisdictional Agency and never relinquishes its trust responsibility for these restricted-title lands, even when a Tribe compacts services.

Please review the Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement, 2025 Alaska Statewide Operating Plan, Attachment 10 Alaska Native Organizations and Land located here; https://fire.ak.blm.gov/administration/asma.php for more information.

5. WILDLAND FIRE HISTORY

The Delta Response Area is located within Interior Alaska's naturally fire-dependent ecosystem. Prolonged, dry summer conditions, an abundance of black spruce and mixed hardwood fuels, and frequent lightning events contribute to regular wildfire occurrences, posing an ongoing risk to the community. Over the past 25 years, several large fire seasons and notable incidents have shaped local readiness, response patterns, and land-management practices.

One of the first modern reminders of large-fire potential near Delta Junction was the Carla Lake Fire of 1998. Burning approximately 40,000 acres on and around Fort Greely military lands, the Carla Lake Fire required a significant interagency response and highlighted the unique hazards of suppression in military training areas where unexploded ordnances can complicate operations. The fire left a lasting landscape footprint and underscored the need for coordination between state, federal, and military fire managers.

The 2004 fire season marked a statewide turning point. More than 6.6 million acres burned across Alaska, including the Taylor Complex, which alone burned over a million acres, directly affecting the Delta Area. Multiple lightning ignitions merged into a massive complex that strained suppression resources, disrupted transportation corridors, and demonstrated how quickly fire can spread across large landscapes. The nearby Camp Creek Fire also tested structure-protection strategies and reinforced the importance of fuel breaks and pre-planned defenses. Across the Delta Area, large lightning-ignited runs and multiple simultaneous ignitions are recurring themes. Local incident reports from 2004 through the mid-2010s document numerous fires, several in the tens of thousands of acres, that stressed suppression resources and underscored the importance of interagency coordination and community preparedness.

In 2021, Delta experienced several small-to-medium lightning fires. Rapid initial attack kept these fires from becoming large, highlighting the effectiveness of local readiness and aggressive suppression strategies.

The 2023 season produced two of the largest Delta-area incidents in recent memory. The Pogo Mine Road Fire burned roughly 90,000 acres and threatened Pogo Mine access, highways, and nearby structures. The Mount Hayes/Delta Fire, at approximately 50,000 acres, triggered evacuations and required major suppression operations. Both fires illustrate how clusters of lightning ignitions combined with drought can produce fast-moving fires in areas with critical infrastructure.

Historical Prescribed Burning in the Delta Junction Training Area (Pre-1990s to Present)

The history of prescribed burning near Delta Junction, Fort Greely, and the Donnelly Training Area (DTA) is strongly linked to both military land management and wildlife habitat enhancement.

Early History: Wildlife Habitat and Limited Management (Pre-2000s)

While comprehensive records detailing annual acreage on military lands are most abundant starting in the early 2000s, the use of prescribed fire in the local area began earlier, particularly for wildlife management:

- Delta Junction Bison Range (1980s onward): The Alaska Department of Fish and Game (ADF&G) began using tools like mowing, tilling, and prescribed fire in the mid-1980s to maintain the grasslands of the Delta Junction Bison Range. These burns were crucial for resetting vegetative succession, stimulating fresh grass regeneration, and maintaining habitat for the introduced plains bison herd.
- Initial Military Goals (Pre-2000): Prior to the 2000s, fire management on military lands focused primarily on suppression. However, the high incidence of fires sparked by training activities, combined with massive wildfires like the 1999 Donnelly Flats Fire, demonstrated the urgent need for a more proactive fuel management strategy. The 1999 event, which involved highly erratic fire behavior and fire whirlwinds, highlighted the extreme hazard posed by the unmanaged fuels in the region.

Modern Program: Hazardous Fuels Reduction (2000s–Present)

Starting in the early 2000s, the partnership between the Bureau of Land Management Alaska Fire Service (BLM AFS) and U.S. Army Alaska (USARAK) formalized an aggressive and high-volume prescribed fire program:

- Hazardous Fuels Reduction: The main and consistent goal has been to reduce the risk of large, uncontrollable wildfires caused by military training (live fire) by annually burning the massive accumulation of dead, cured grass (fine fuels) that quickly emerges in the spring.
- Annual Spring Operations: Prescribed burning in the DTA, including the Oklahoma Impact Area, became an annual spring tradition (April–May). This

timing is critical, as it targets the dry grass before the surrounding spruce and deciduous forest fuels dry out, allowing for greater control and safer implementation.

- Large-Scale Treatment: The program treats thousands of acres annually. In a single year, the DTA often sees tens of thousands of acres treated, with total Interior military lands exceeding 60,000 acres in some years (e.g., 2020).
- Debris and Slash Burning: In addition to grassland burns, crews routinely burn woody debris and slash piles created by mechanical fuel reduction (often involving beetle-killed spruce and brush) to mitigate heavier fuel loads and further protect training targets and infrastructure.

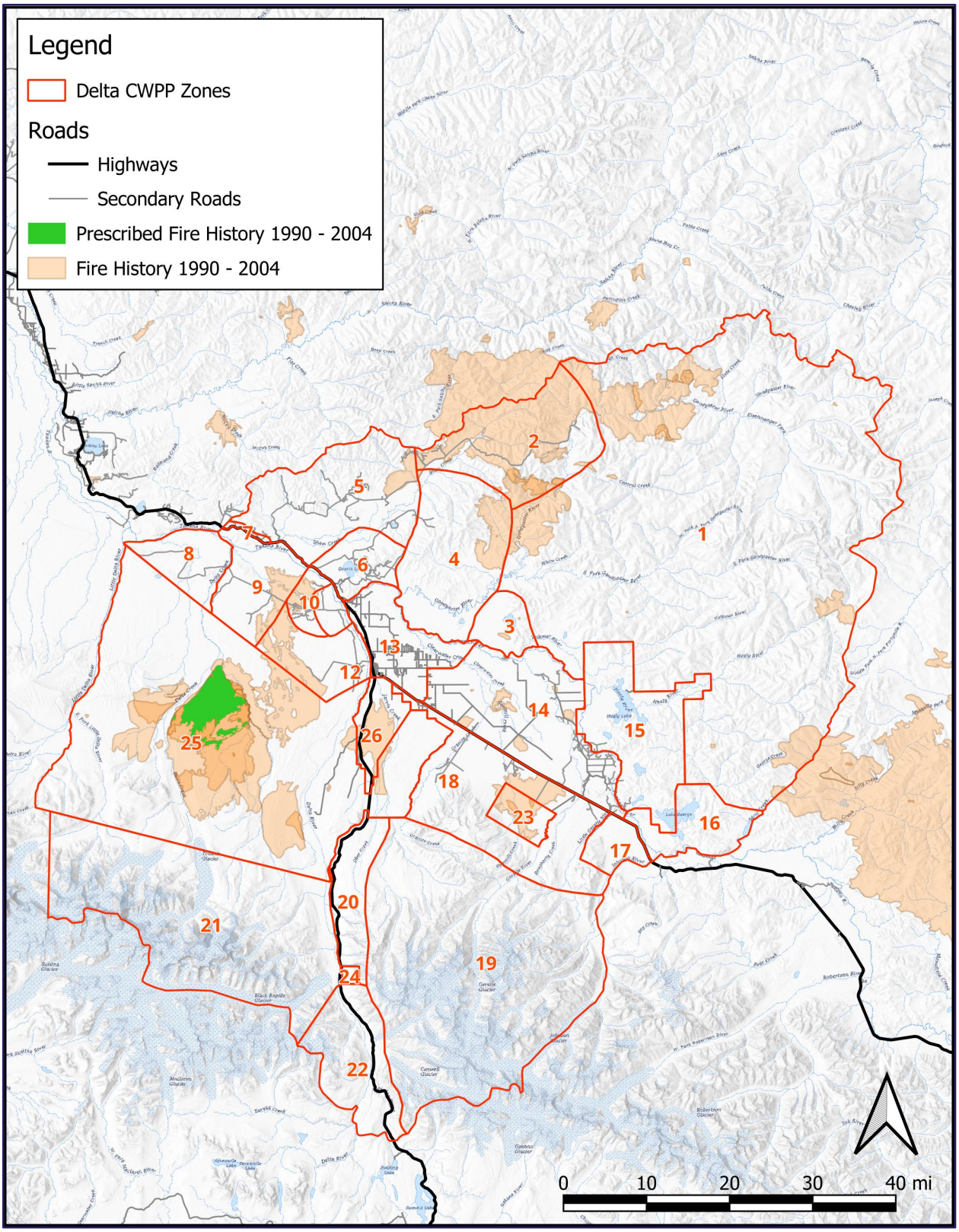
The prescribed fire program in the Delta Junction area has evolved from targeted ecological burns in the 1980s to a large-scale, annual operational requirement essential for mitigating the severe and frequent wildfire risk posed by military activities and natural fuel loading in this high-hazard region of the Interior.

Reflecting on the fire history of the Delta Area, four key lessons consistently stand out:

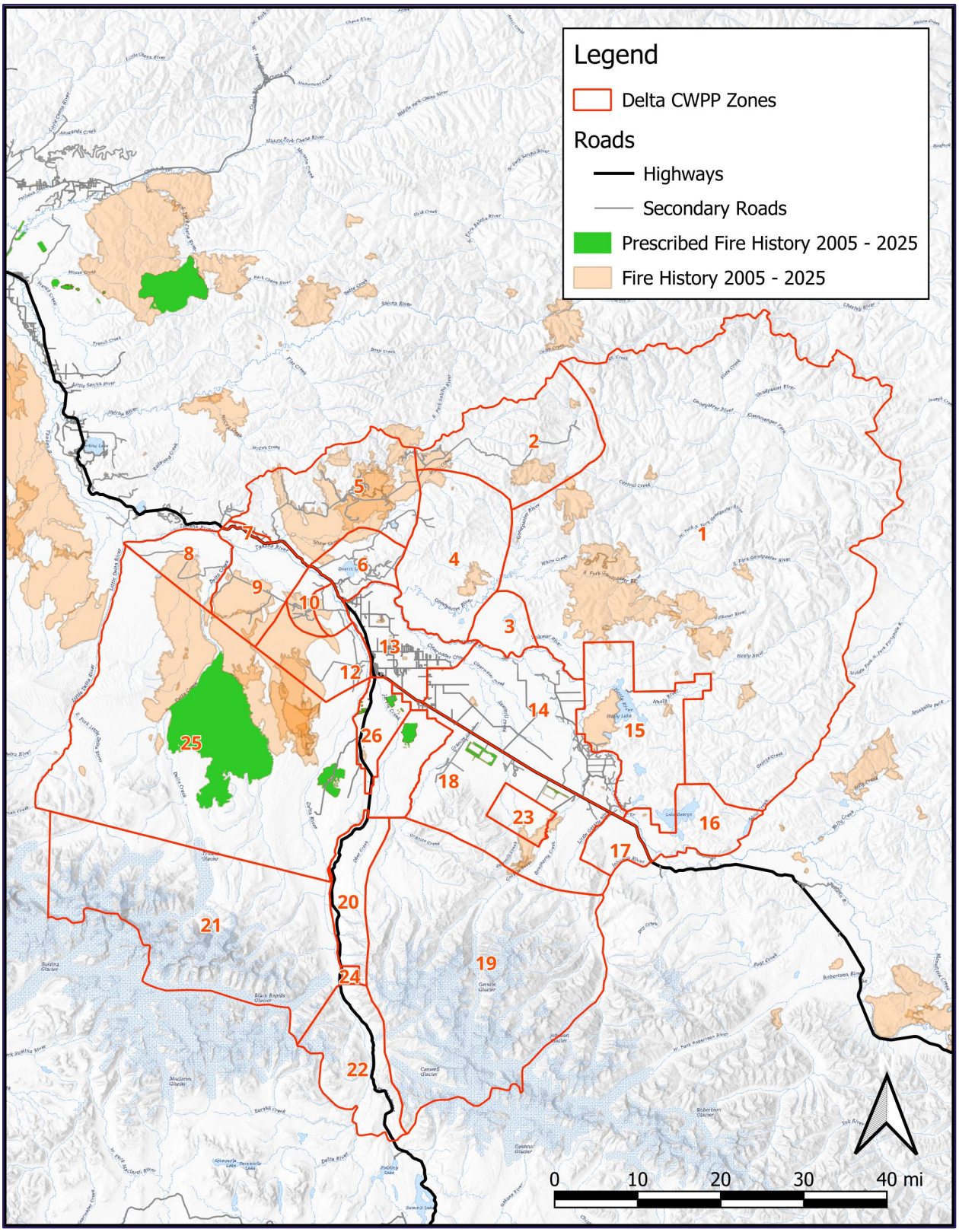
1. Lightning outbreaks can generate multiple, simultaneous fires, requiring both strong initial attack and long-duration response planning.
2. Many of the fires over 100 acres are wind-driven.
3. Infrastructure and military lands concentrate values at risk, from pipelines and highways to training ranges, all with unique hazards.
4. Preparedness is essential. While not every year is extreme, hot/dry summers can produce rapid fire growth with little warning.

Together, these events underscore the importance of coordinated planning, fuels management and community readiness as the Delta Area continues to adapt to its fire-prone environment.

The two maps below reflect the fire history within and around the Delta Response Area CWPP zones. The lighter orange displays fire burned areas. The darker orange color signifies fires that have burned in the same location multiple times.



Map 6. Delta Area Fire History, 1990-2004



Map 7. Delta Area Fire History, 2005-2025

Fire Name (Year)	Approx. Acreage	Location / Context	Key Impacts
Bolio Fire (1981)	~10,000 acres	South of Delta Junction, on Fort Greely lands	Mid-March, 70-mile-per-hour wind, 10k+ acres in 2 days
Carla Lake Fire (1998)	~40,000 acres	Southwest of Delta Junction, on Fort Greely lands	Hazards from unexploded ordinances complicated firefighting efforts
Donnelly Flats Fire (1999)	~18,000 acres	Southeast of Delta Junction, on military land near Fort Greely	Crown fire, deep burning and threatened Fort Greely housing
Taylor Complex (2004)	~1.3 million acres	Part of Alaska's record 6.6-million-acre fire season	Heavy smoke, highway closures, and major suppression costs
Camp Creek Fire (2004)	~92,000 acres	Delta Area	Lightning-caused; tested structure-protection strategies
Pogo Mine Road Fire (2023)	~90,000 acres	Near mine access routes, highways, and nearby communities	Threatened transportation corridors and nearby structures
Mount Hayes/ Delta Fire (2023)	~50,000 acres	Delta Area during lightning outbreak	Triggered evacuations; rapid fire growth challenged suppression efforts

Table 4. Significant Fires in the Delta Area

5.1 Weather

Delta Junction, Alaska, has a unique or special description for its Red Flag Warning criteria primarily due to its specific regional weather and unique exposure to high winds.

The National Weather Service (NWS) works with local fire management agencies to tailor Red Flag Warning criteria for different geographic zones based on local topography, vegetation, and historical fire weather patterns.

Delta Junction's Unique Red Flag Criteria

While many Interior Alaska zones use a set of criteria that includes a sustained wind speed of ≥15 mph, the criteria for the Delta Junction zone (NWS Zone 937) are significantly different, specifically regarding wind.

The criteria are adjusted to account for the naturally stronger wind environment in Delta Junction, reserving the Red Flag Warning for conditions that are genuinely extreme and critical for fire control in this specific locale.

Criterion	Interior Alaska Zones (Normal Criteria)	Delta Junction (Zone 937) (Unique Criteria)
Temperature	≥ 75 F	No Temperature Criteria
Relative Humidity (RH)	≤ 25 %	≤ 25%
Sustained Wind	≥ 15 mph	≥ 30 mph

Table 5. Delta Junction Red Flag Criteria

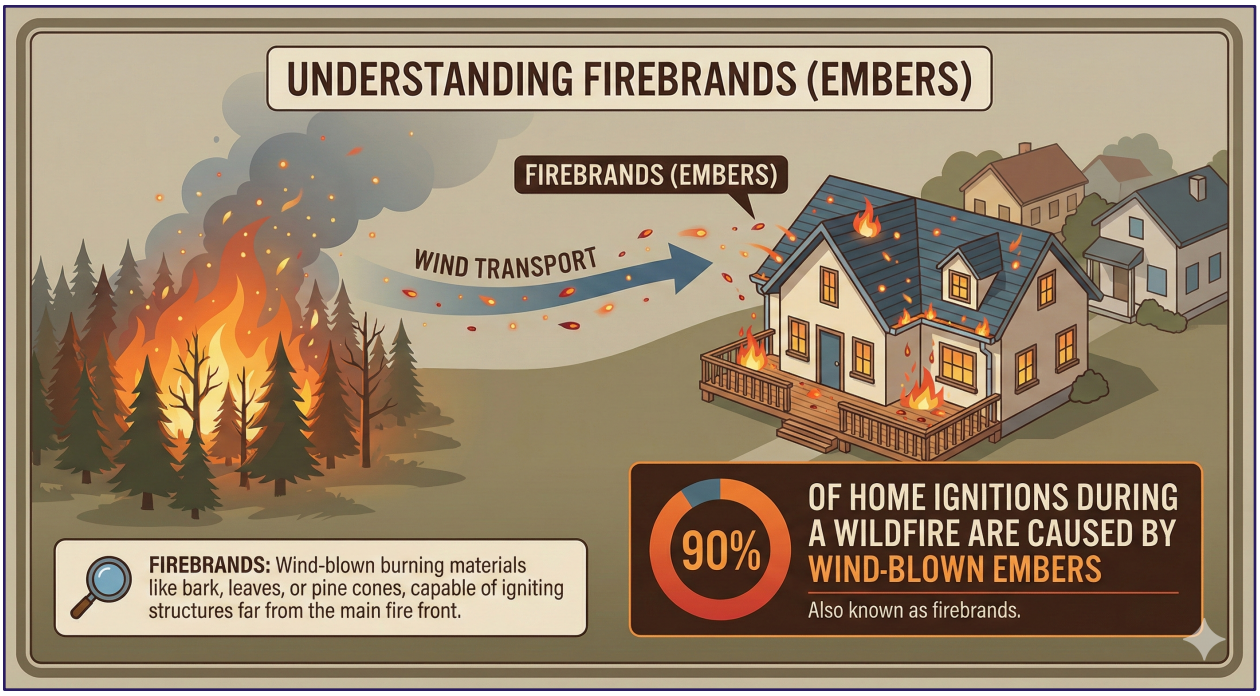


Image 5. Understanding Firebrands

Why the Higher Wind Threshold?

The most striking difference is the requirement for sustained winds of ≥ 30 mph, which is double the wind speed threshold for many other zones. This is due to the following factors:

1. Strong Chinook Winds: Delta Junction is in an area where it is frequently affected by Chinook winds (a warm, dry, downslope wind) as air flows over the Alaska Range. These winds are known to be much stronger and drier than typical winds in other parts of the Interior.
2. Topography and Funneling: The local topography, including river drainages and proximity to the Alaska Range, can effectively funnel and accelerate these strong winds over the Delta Junction flats. A 15-mph wind event might be a daily norm that the landscape is already adapted to, requiring a much higher threshold to signal a truly "critical" fire weather event.
3. Historical Fire Behavior: The 30-mph sustained wind threshold reflects the conditions historically required for extreme fire growth and erratic behavior in the Delta Junction area, particularly with the wind-driven nature of fire spread, which dramatically increases the threat from embers.

Agriculture and Fire in the Delta Area

Since the 1970s, Delta Region has supported one of Alaska's largest farming regions. Land clearing and spring debris burning remain part of local agricultural practices. While most of these spring debris burns are permitted and managed, escaped agricultural burns have occasionally threatened nearby lands, adding to fire risk. Continued collaboration between farmers and the Alaska Division of Forestry & Fire Protection helps balance agricultural needs with wildfire safety.

Image 6. Schultz Farm off Sawmill Road south of Delta Junction. Photo Credit: Mike Shultz

Unlike much of Interior Alaska, the Delta Region has significant agricultural activity, and that history intersects with fire in a few ways:

1. Land Clearing with Fire (1970s–1990s):
   - When the Delta Agricultural Project opened in the 1970s, thousands of acres of boreal forest were cleared for grain and hay production.
   - Many farmers used dozer-piled slash burning and broadcast burning to remove woody debris. These burns were usually conducted in spring under Alaska Division of Forestry & Fire Protection oversight, but some escaped, contributing to local fire risk.

2. Spring Burn Permits & Stubble Burning (Ongoing):
   - Farmers in the Delta region still use controlled burning in the spring to remove crop stubble, clean ditches, or dispose of slash from land clearing.
   - The Alaska Division of Forestry & Fire Protection issues burn permits and conducts public outreach each spring to manage this risk.
   - Escaped agricultural burns have occasionally contributed to local wildfires, though most are quickly contained.
3. Prescribed Fire (Limited, Targeted Use):
   - Prescribed fire is used sparingly in Interior Alaska.
   - Around Delta, prescribed burns have been conducted for habitat improvement (moose browse) and fuel reduction near critical infrastructure, but on a much smaller scale than the agricultural burns.
4. Current Context:
   - While lightning remains the dominant ignition source for large fires in the Delta Area, human-caused ignitions from agricultural burning are a persistent springtime concern.
   - These burns add to smoke impacts and resource demand, especially when they coincide with early-season lightning or drought.
   - Education campaigns (e.g., the Learn Before You Burn program) and permit enforcement have reduced but not eliminated the problem.

What Wildfire History Means for Delta Area Residents

Wildfire is part of living in Interior Alaska. Black spruce and various hardwood trees make up most of the forest, and these woods are highly flammable when lightning hits. In the past 25 years, Delta has experienced both active and quiet fire seasons. Historically, we know that:

- Dangerous Local Conditions: Firefighters faced hazards from unexploded ordinances on military training lands in the 1998 Carla Lake Fire, showing how local conditions can make firefighting especially dangerous. Strong general and local winds create conditions for large fire growth.
- Lightning is the main cause of fire: Many of the largest Delta Area fires — like the 2004 Taylor Complex and the 2023 Pogo Mine Road Fire — started with summer lightning storms.
- Critical infrastructure is at risk: Highways, pipelines, powerlines and mine access roads all run through fire-prone areas. Protecting them is a top priority.
- Fires can move fast: In 2023, local fires forced evacuations and put firefighters into structure-protection mode within hours of ignition.

- Not every year is extreme: Some years are less active, but that doesn't mean the risk is gone. A few hot, dry weeks can change everything.

The main takeaway is that fire can happen unexpectedly, and residents need to be prepared. Residents can prioritize fire preparation by maintaining the Home Ignition Zone (HIZ) through keeping grass cut, clearing brush and spruce from around homes, being aware of, making, or following community evacuation plans, and staying informed when smoke is in the air by being "smoke ready." For more information on how to be "smoke ready," see *Appendix E – Public Health Resources*. Fires are a natural part of our landscape, but preparation makes the difference between risk and resilience.

6. AREA OVERVIEW/ZONE IDENTIFICATION

6.1 Description of Zone Area

The Delta Response Area is 3,960,950 acres and was created through the collaborative interagency effort of several state and federal agencies, including the Alaska Division of Forestry & Fire Protection (DFFP), the Bureau of Land Management Alaska Fire Service (BLM AFS), and local volunteer fire departments. The area's specific boundaries are based on geographical and jurisdictional parameters, not a single historical event.

The Delta Response Area CWPP provides a framework for reducing wildfire risk in the Delta region by identifying community assets, wildfire hazards, and priority actions. The plan divides the region into 26 planning zones ("Areas"), each evaluated for housing and infrastructure density, fuel types and proximity, ignition history, and overall risk. This zonal approach allows the community and its partners to target mitigation and preparedness efforts where they will be most effective.

- These areas are defined based on geography, landownership, and risk-factors.
- Some special zones are set apart, like Fort Greely and the Donnelly Training Area, the federal military areas of the region. The Alaska Fire Service Military Zone and USAG Alaska manage the fire and forestry planning and operations for these zones and minimal data is publicly available.
- For each of the 26 zones, the CWPP collects data on: number of structures or "Known Sites;" businesses and critical infrastructure; fuel type & fuel density; proximity of fuels to assets; threat to assets; and recorded ignitions. These attributes are used to assign a risk or threat ranking for each zone.

Thus the "planning zones" are those 26 "areas" differentiated by geography, land ownership, fire management options, density of assets, fuel threat, etc.

Please view *Appendix G – Planning Zone Summaries* for more information on each zone.

6.2 Description of the Wildland Urban Interface (WUI) Boundary

The Wildland-Urban Interface (WUI) is the area where homes, communities, and other human development meet or are close to wildland vegetation. These are the places most at risk from wildfire. A WUI can include:

- Areas identified in the CWPP

- Areas within about a half mile of a community, or up to a mile and a half of steep slopes, ridges, or heavy fuels that increase wildfire danger
- Areas along community evacuation routes where fuel reduction is needed to improve safety

In short, the WUI is where people and wildlands come together—and where wildfire risk to life, property, and infrastructure is highest. In Alaska, the WUI is where communities, homes, and vital infrastructure border wildlands, often along limited roads or evacuation routes, making them especially vulnerable to wildfire.

The Delta Response Area WUI Category

The WUI is often further categorized into two types:

- Interface WUI: Areas where there is a clear line of demarcation, with high-density development adjacent to wildland vegetation.
- Intermix WUI: Areas where human development (often lower-density housing) and wildland fuels intermingle, meaning there is no clear boundary.

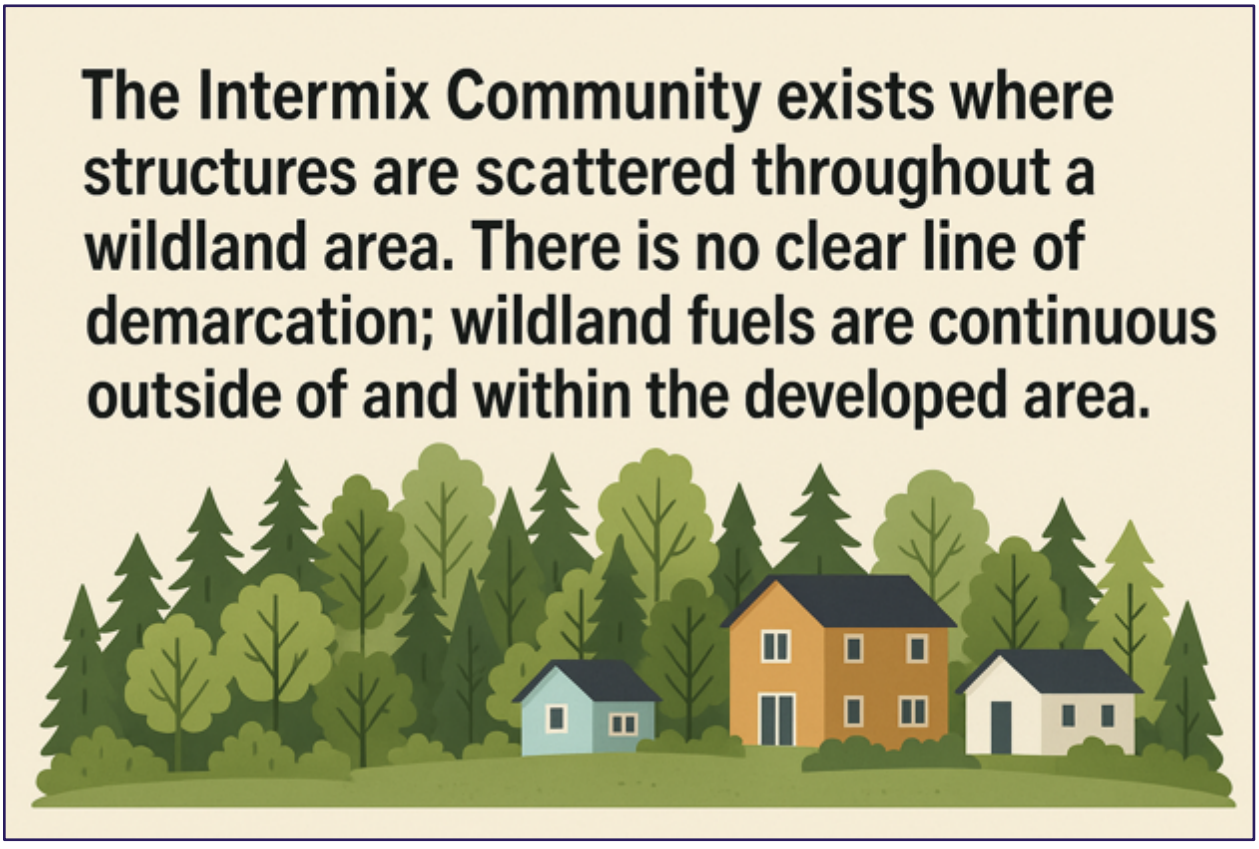
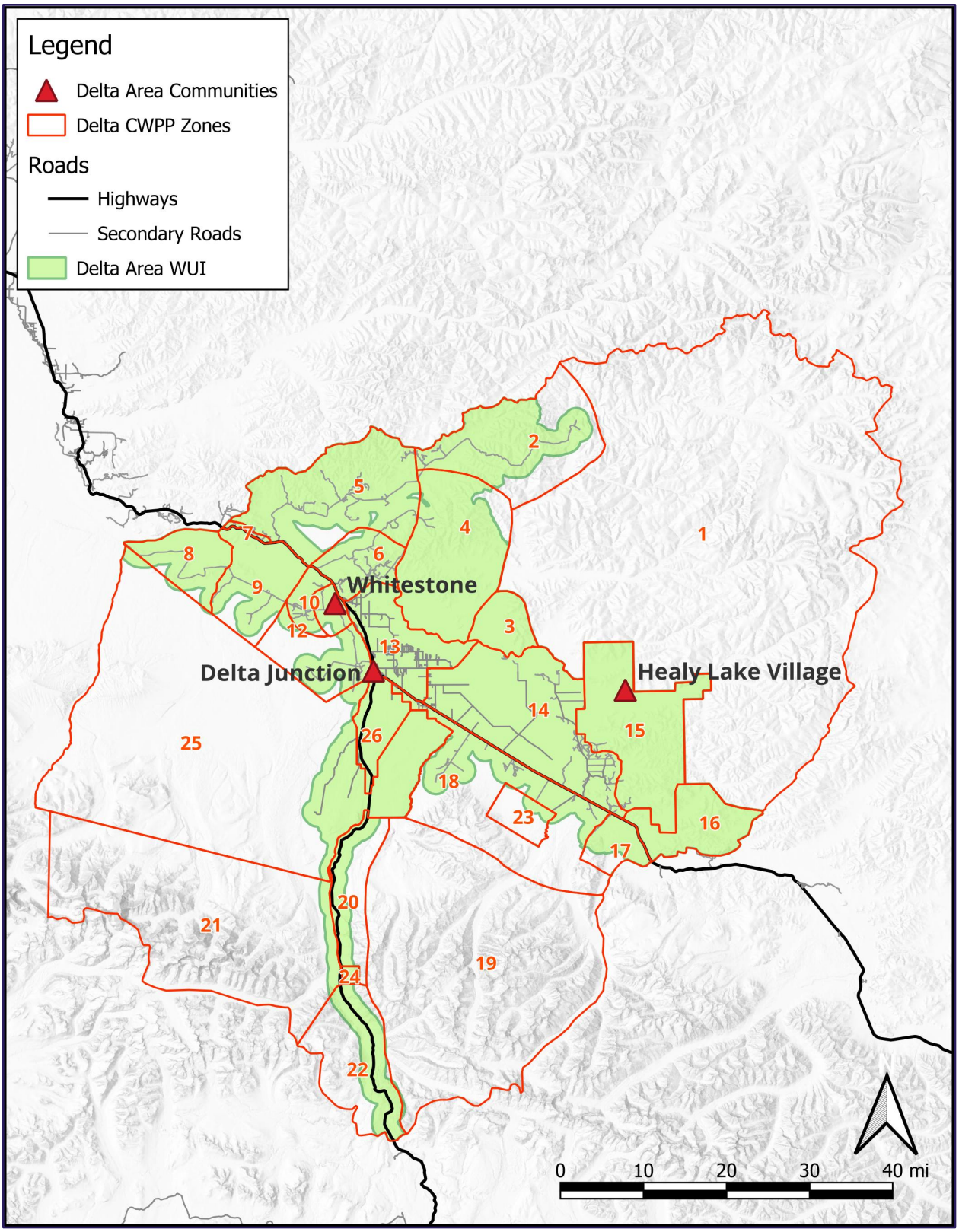


Image 7. Intermix WUI Community

Most of the Delta Response Area is categorized as Intermixed WUI.



Map 8. Delta Area Wildland Urban Interface Boundary

7. RISK ASSESSMENT

7.1 Understanding Wildfire Risk in the Delta Response Area

The Risk Assessment for the Delta Response Area is focused on impacts to life, safety and property. It looks at all the ways in which a wildfire could threaten areas where thick boreal forest, open grass, and farmland all come together.
To determine the total wildfire risk, the assessment looks at four main factors and how they interact:

1. Wildfire Fuels: Things that can burn (the hazards).
2. Barriers: Things that slow down or stop a fire.
3. Community Exposure: How vulnerable people and buildings are.
4. Response Capacity: How ready the local fire teams are.

The Delta region is a tough place to fight fire, because it is often dry and windy and has a history of large fires. Plus, homes are spread out, and important roads run through the area. All of this means we need to deeply understand the risk.

Two Types of Hazards

This assessment breaks down fire danger into two categories:

1. Objective Hazards (The Facts): These are the physical things we can measure that make a fire bigger or faster. This includes:
   - The type and condition of the fuel—is it dry grass or thick spruce?
   - Vegetation patterns—how plants are spread out.
   - Terrain—hills and valleys.
   - Weather—how hot, dry, or windy it is?
   - How close buildings are to the wildlands.

Fire models, fuel maps, and old fire records were utilized to study these facts and find the areas with the highest potential danger.

2. Subjective Hazards (The People Factor): These are human and social factors that are harder to measure but are just as important. This includes:
   - How much residents know about fire danger.
   - How ready people are to clear defensible space around their homes.
   - How easy it is to access firefighting resources.
   - How well local agencies and landowners work together.

These things often determine how quickly a community can react to and recover from a fire.

Defining Risk and Planning Zones

When you combine both the Objective Facts and the Subjective People Factors, you get the full definition of wildfire risk. Risk is simply the chance of a fire happening and the potential damage it could cause to people, property, and nature.

By figuring out all these hazards, this assessment helps the community decide what actions to take first to prevent fires and become a more "fire-adapted community."

Because the Delta Response Area is so large and complex, the planning area is divided into 26 smaller Planning Zones.

- 19 of these zones are considered Wildland Urban Interface (WUI) zones. This is the place where flammable vegetation meets buildings or infrastructure. These WUI zones are where most people and property are at risk. Section 8: Overall Zone Ratings, displays these findings.
- The other 7 zones were also studied, and due to the limited values at risk, only fuels, barriers and response capacity were assessed and rated.

Special Note: *Planning Zone 25: Military Zone West* is a weapons impact area with varying levels of residual depleted uranium. If a fire occurs in this area requiring wildfire response, firefighters **will not** enter the impact area, but will instead wait around the perimeter and fight fire if/when it reaches their location.

Further details and scientific analysis can be found in *Appendix H – Risk Assessment Methodology.*

7.2 Risk Assessment Criteria

The risk assessment for the Delta Response Area looks at four main ways to figure out how likely and how damaging wildfire could be. There are four elements that were assessed and if changed, can enhance a community's safety against fire:

1. Fuels (Wildfire Hazards)

What it means: "Fuels" are all the things that can burn in a wildfire, like trees, grass, brush, and even cars and buildings. This part of the assessment checks how much fuel is around and how easily it will catch fire and spread.

Fire and the Boreal Forest

The vast northern forests of Interior Alaska, including the Greater Delta Area, are naturally controlled by fire. This region is known for a few specific fire regimes, or fire patterns:

- The forest is mainly shaped by fires that happen infrequently, sometimes only every 35 years and sometimes over 200 years. When these fires do happen, they are usually high severity, meaning they are very hot and intense.
- These intense fires are often stand-replacing events. This means the fire burns down most or all the trees in some areas, leaving a mosaic pattern of burned and unburned landscape. Historically, these big, hot fires were what kept the forest healthy, maintaining the natural structure and ecological balance—the way plants and animals live together.

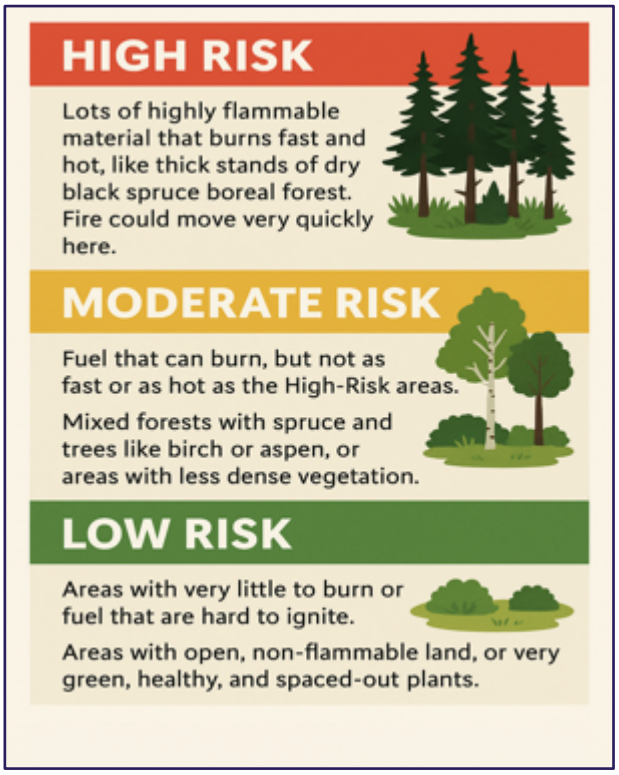


Image 8. Fuels Rating Chart

In short, the Greater Delta Area's forest is designed by nature to burn big, but not often. This makes understanding and managing wildfire risk even more critical.

2. Barriers to Fire Spread

What it means: Barriers are anything that can stop or slow down wildfire from spreading into or through the community. They can be natural or constructed. The ratings are different for this category. Excellent, Fair and Poor are used to describe the effectiveness of barriers in each planning zone.

The chart below displays the rating of fire breaks in communities and examples of these breaks.

	Description	Examples
Excellent	The community is well-protected in most directions by a strong barrier.	A large river, lake, major highway, or an airstrip that completely separates the community from thick fuels.
Fair	The community has a barrier, but it might not be as wide, or it only protects in a few directions.	A smaller river, a wide clearing, or a change in vegetation to less flammable types.
Poor	Any barriers that exist are very small and would not stop a fire from spreading easily.	Small streams, narrow roads, or a thin strip of clear land surrounded by very flammable forest.

Table 6. Fire Break Rating

Roads and defensible space can slow and sometimes stop surface fire spread.

Image 9. Home and wildfire

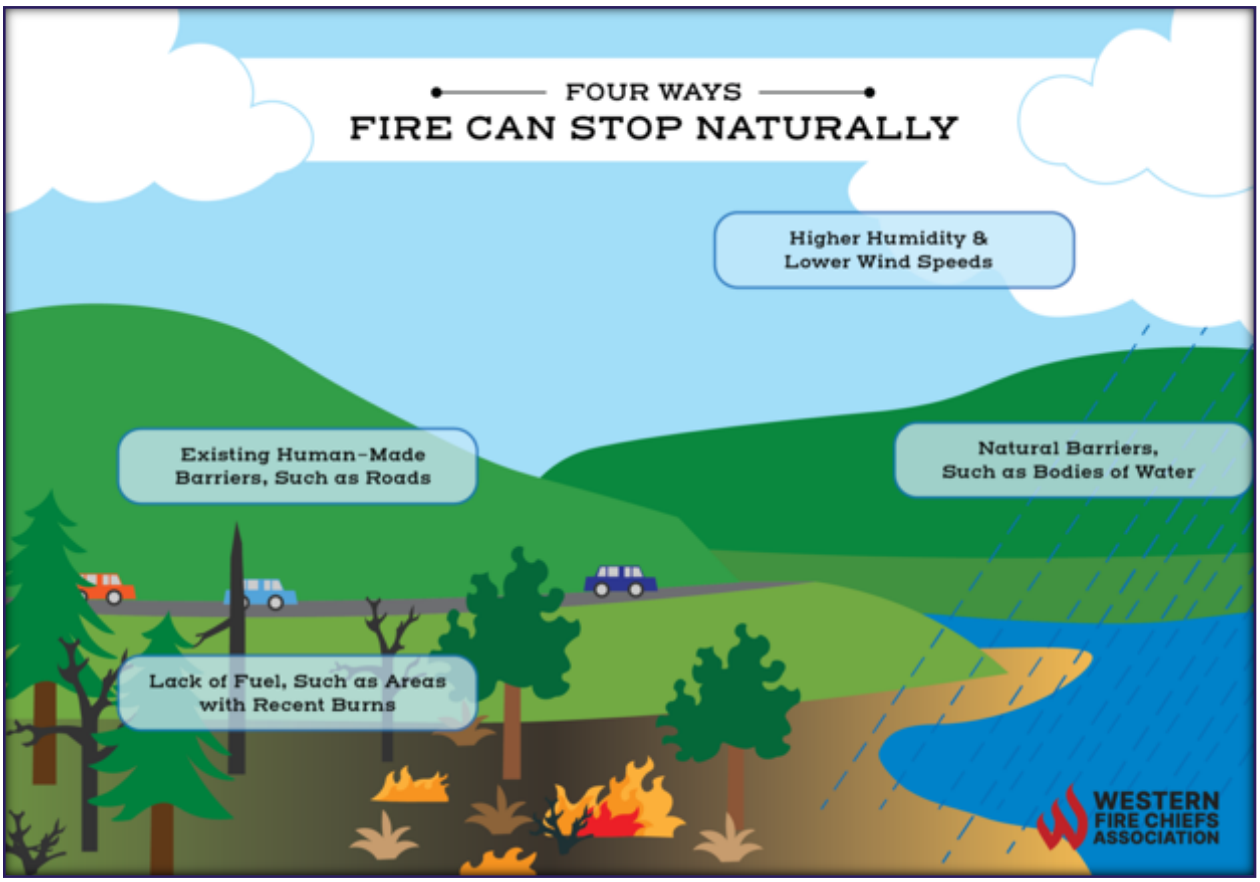


Image 10. Natural Fire Breaks, Source: Western Fire Chiefs Association

3. Firewise Rating (Community & Structure Exposure)

What it means: This rating checks how prepared the community is to survive a fire, focusing on homes and the areas right around them. The Alaska Firewise Program has standards for how people can make their property safer called "defensible space."

The table below shows that the Firewise Rating is mostly about the actions people take to create a buffer zone around their homes and work together as a community.

Rating	Description	What It Means for the Community
High Risk *(Poor Firewise Rating)*	Little or no preparation. Most homes have major fire hazards right next to them. People have not created much, if any, defensible space. Coordination among neighbors and fire departments is weak.	Homes are at a very high risk of catching fire from flames or embers. The community is not well-organized for a wildfire event.

Moderate Risk *(Fair Firewise Rating)*	Some preparation, but more work is needed. Many homes have started to create defensible space, like clearing brush, but flammable materials are still too close to some structures. There is some planning and awareness, but it's not consistent across the whole community.	Homes have a better chance of surviving a fire, but key areas of vulnerability still exist. Continued work and organization are necessary to lower the risk.
Low Risk *(Excellent Firewise Rating)*	A high level of preparation and organization. Most homes meet or exceed the defensible space standards. The community has a strong Firewise plan, works closely with the fire department, and neighbors are well-educated on fire danger.	Homes have the best chance of surviving wildfire. The entire community is organized, ready to respond, and has taken steps to protect structures from embers and flames.

Table 7. Firewise Rating Scale

4. Response Capacity

What it means: This looks at how well DFFP, the local fire department, and emergency services can respond to wildfires. It's about having the right people, equipment, and plans ready to go.

Factor	Description
Equipment & Staff	Does the community have trained firefighters, working fire engines, and reliable ways to get water (like hydrants or water tanks)?
Access	Are the roads clear, wide enough, and easy for fire trucks to drive on, especially during an emergency?
Coordination	Do the local fire crews, police, and other agencies work well together and have strong communication with larger state/federal fire crews?
Evacuation	Are there clear, safe routes for people to leave the area quickly if a fire is coming?

Table 8. Response Factors

This rating checks how well the local fire department and emergency services can react to a wildfire event. It measures the strength of their personnel, equipment, and access, further showing that good response capacity isn't just about the fire truck, it's about the training, the planning, and the access needed to use that equipment effectively.

Rating	Description	What It Means for Fire Suppression
High Risk	Limited or weak ability to fight fires. The community may have few or no trained firefighters, very old or unreliable equipment, and poor ways to get water. Roads might be narrow or overgrown, making it hard for fire trucks to enter and turn around quickly.	The community would rely almost completely on outside help (like state or federal crews). Protecting homes during a fast-moving fire would be extremely difficult.
Moderate Risk	Basic ability to handle smaller fires but quickly overwhelmed by large ones. The community has some trained volunteers and working equipment, and there are some reliable water sources. Access is okay for main roads, but tricky in some neighborhoods. Planning and coordination exist but need improvement.	Local teams can slow down small fires and protect initial structures, but a large, intense wildfire would quickly exceed their limits, requiring major outside support.
Low Risk	Strong ability to fight fires and protect the community. The local fire department has enough trained staff, modern and reliable equipment, and multiple, easy-to-reach water sources. Roads are clear and wide for emergency vehicles. There is a strong, organized plan for how to work with state and federal agencies.	The community has the best chance of quickly containing a fire and protecting homes and property, even under challenging conditions, by combining local power with outside resources.

Table 9. Response Capacity Rating Scale

These four parts (Fuels, Barriers, Response Capacity, and Firewise Rating) are all put together to give a full picture of a community's wildfire risk.

8. OVERALL ZONE RATINGS

The zone rating tables below show each planning zone along with its ranking for Fuels, Barriers, Response Capacity, and Firewise Rating. The overall rating range is Poor, Moderate, and High. The Overall Rating represents the average of these four categories. Unlike the federal risk ratings, very high is not used in these charts.

WUI Planning Zone Risk Ratings (19 Zones)

Planning Zone	Fuels	Barriers	Response	Firewise Rating	Overall Rating
Delta Junction (PZ 13)	High	Fair	Moderate	High	High
Barley Project (PZ 14)	High	Fair	Moderate	High	High
Healy Lake Village (PZ 15)	High	Poor	High	High	High
Quartz Lake (PZ 6)	High	Poor	Moderate	High	High
Whitestone (PZ 11)	Moderate	Poor	High	Moderate	High
Ft Greely (PZ 26)	Moderate	Fair	Moderate	Moderate	Moderate
Pogo (PZ 2)	Moderate	Fair	Moderate	Moderate	Moderate
Volkmar (PZ 3)	High	Poor	High	High	High

Planning Zone	Fuels	Barriers	Response	Firewise Rating	Overall Rating
Goodpaster (PZ 4)	High	Poor	High	High	High
Shaw Creek (PZ 5)	Moderate	Fair	Moderate	High	Moderate
Richardson/ Clearwater (PZ 9)	High	Poor	High	High	High
South Bank (PZ 10)	High	Poor	High	High	High
George Lake (PZ 16)	High	Poor	High	High	High
Craig Lake (PZ 17)	High	Poor	High	High	High
Bison Range (PZ 18)	High	Fair	Moderate	High	High
Donnelly Creek (PZ 20)	High	Poor	Moderate	High	High
Tenderfoot (PZ 7)	Moderate	Fair	Moderate	High	Moderate
Miller Creek (PZ 22)	Moderate	Fair	Moderate	High	Moderate

Military Zone South (PZ 24)	Moderate	Fair	Moderate	High	Moderate

Table 10. WUI Planning Zone Risk Ratings

Additional Planning Zone Risk Ratings (7 Zones)

There are minimal or no structures or infrastructure in these zones and the Firewise rating was not assessed.

Planning Zone	Fuels	Barriers	Response	Overall Rating
Northeast Limited (PZ 1)	High	Poor	High	High
West Limited (PZ 8)	High	Poor	High	High
West Delta (PZ 12)	High	Poor	High	High
Southeast Limited (PZ 19)	Moderate	Poor	High	High
Southwest Limited (PZ 21)	Moderate	Poor	High	High
Military Zone East (PZ 23)	High	Poor	High	High
Military Zone West (PZ 25)	High	Poor	High	High

Table 11. Additional Planning Zone Risk Ratings

8.1 National Wildfire Risk to Communities Rating

To obtain a national rating for the Delta Response Area, the *Wildfire Risk to Communities* website was utilized. This free, easy-to-use tool was created by the USDA Forest Service to help community leaders understand and explore wildfire risk through interactive maps, charts, and resources.

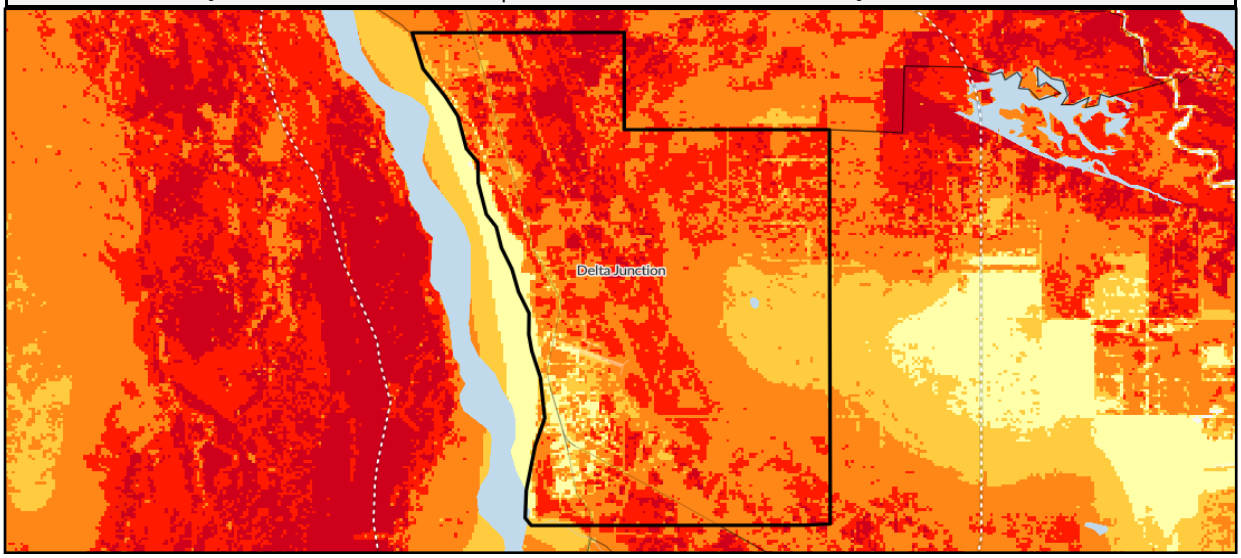
For this plan, Delta Junction and Healy Lake Village were selected as example communities to demonstrate how the platform's data can be applied at the local level. While these two communities are highlighted here, the website allows users to input and explore wildfire risk information for many of the communities in the Delta Response Area, supporting broader planning and mitigation efforts across the region.

Delta Junction

Delta Junction has a very high risk of wildfire—higher than 97% of communities in the U.S.

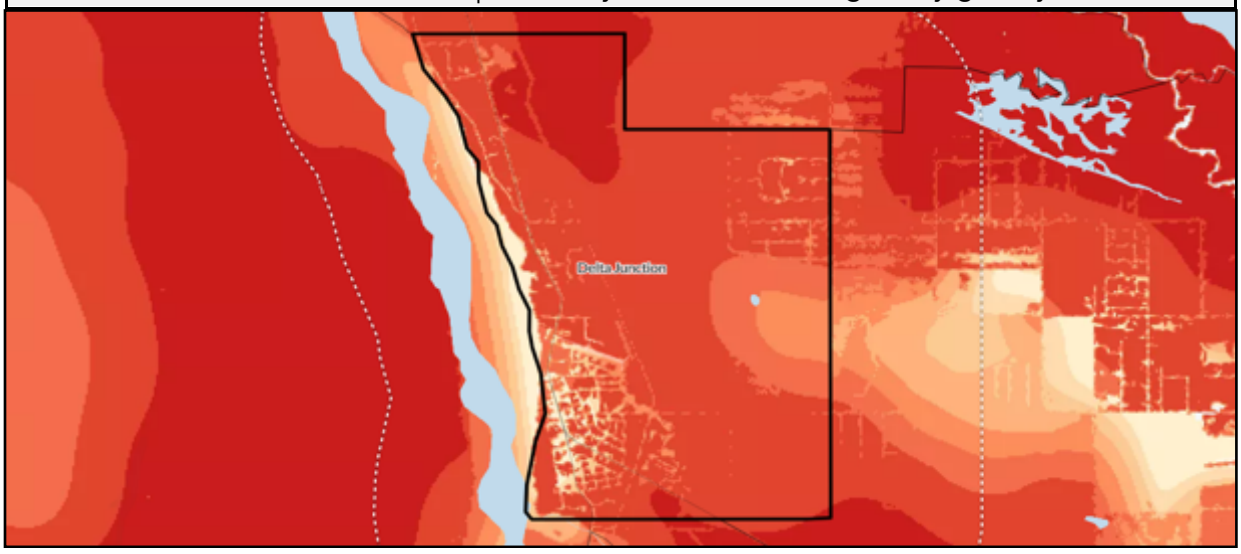
Risk to Homes

VERY HIGH	Homes in Delta Junction have, on average, greater risk than 97% of communities in the U.S. Risk to homes measures the relative wildfire danger for residential structures everywhere on the landscape, whether a home actually exists there or not.



Wildfire Likelihood

VERY HIGH	Delta Junction has, on average, greater wildfire likelihood than 96% of communities in the U.S. Wildfire likelihood is the probability of wildfire burning in any given year.

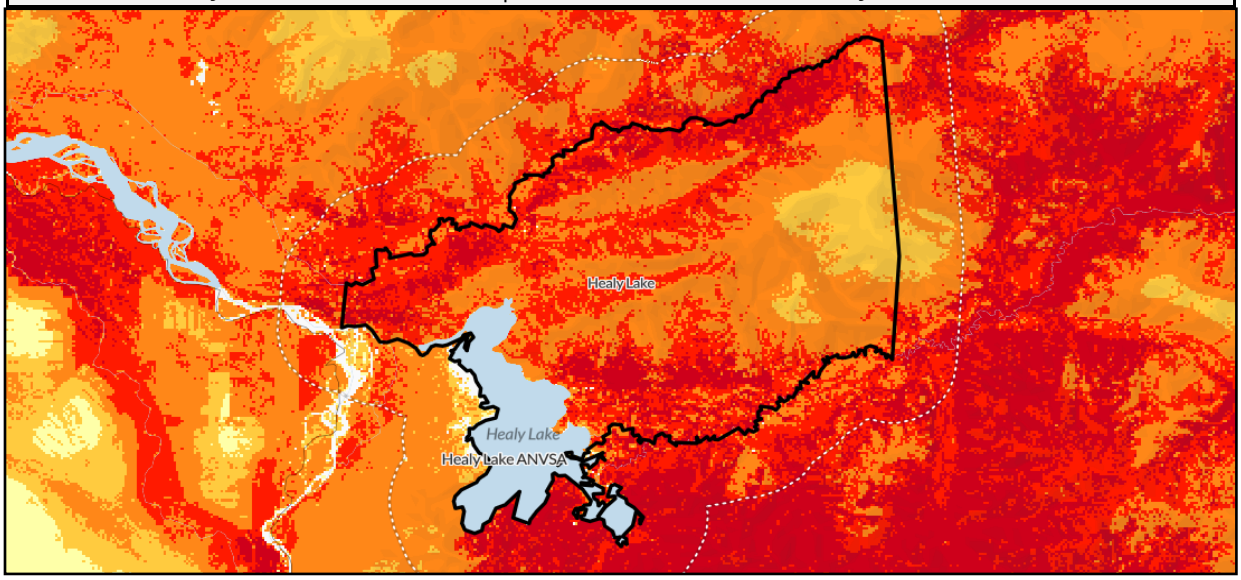


Healy Lake Village

Healy Lake Village has a very high risk of wildfire—higher than 96% of communities in the U.S.

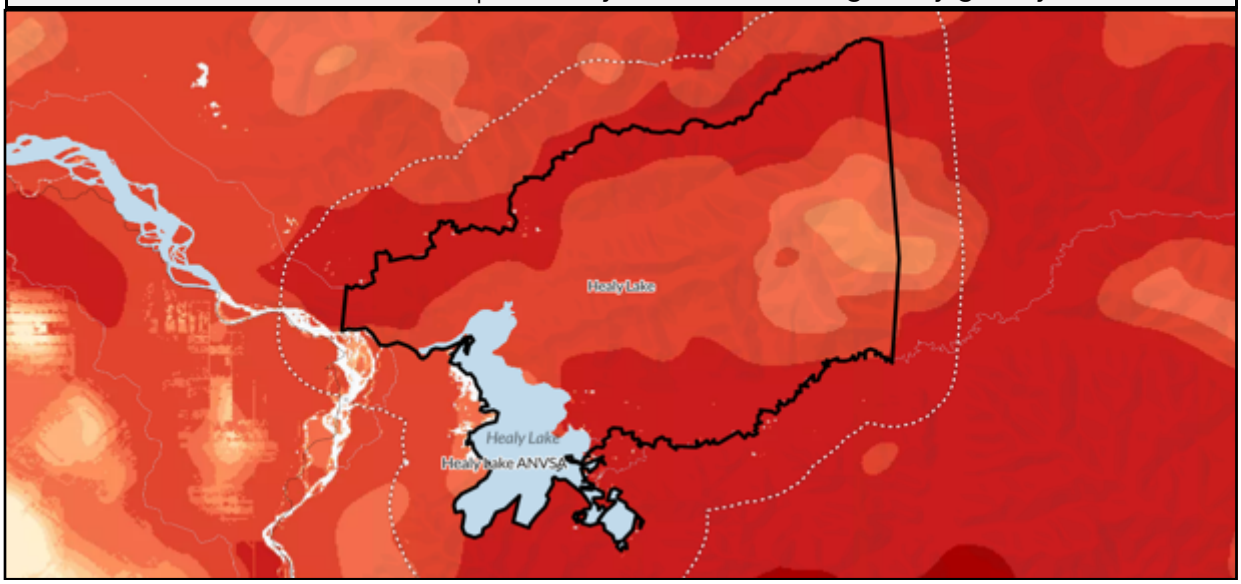
Risk to Homes

VERY HIGH	Homes in Healy Lake Village have, on average, greater risk than 96% of communities in the U.S. Risk to homes measures the relative wildfire danger for residential structures everywhere on the landscape, whether a home actually exists there or not.



Wildfire Likelihood

VERY HIGH	Healy Lake Village has, on average, greater wildfire likelihood than 95% of communities in the U.S. Wildfire likelihood is the probability of wildfire burning in any given year.



8.2 Summary

In summary, of the 26 planning zones evaluated within the Delta Response Area CWPP, only six zones were classified as ***Moderate Risk***, while the majority, including the most densely populated residential areas, were rated as ***High Risk***. These findings highlight the concentration of wildfire exposure in the very zones where people, homes, and infrastructure are most vulnerable.

This underscores the need for targeted mitigation efforts and coordinated preparedness actions. The following section, Community Action Plan, builds on this assessment by outlining actionable solutions and recommended strategies to address these elevated risk levels and improve community resilience.

9. COMMUNITY ACTION PLAN

The Delta Response Area CWPP Community Action Plan (CAP) outlines coordinated actions to reduce wildfire risk, protect lives and property, and strengthen community resilience across the highest risk WUI Planning Zones. This plan aligns with the National Cohesive Wildland Fire Management Strategy through three interrelated goals:

1. Resilient Landscapes – managing fuels and vegetation to restore ecological balance.
2. Fire Adapted Communities – helping residents and organizations coexist safely with fire.
3. Safe and Effective Response – ensuring responders have access, training, and coordination.

The priorities reflect current wildfire risk conditions in Alaska's Interior boreal forest where high-severity, stand-replacing fires are natural but increasingly frequent due to higher temperatures, longer periods of drying, high winds, lightning, and human ignitions.

9.1 Priority Actions

Priority 1: Emergency Planning & Public Education (Life–Safety)

Goal: Strengthen preparedness and community resilience.

Key Actions:

- Educate the public in the fundamental need for Escape Routes and Safety Zones for every household/business.
- Reinforce public wildfire education through schools, workshops, and community events.
- Update Community Emergency Plans for communities in the region to include evacuation routes, contact lists, and where needed, livestock evacuation plans.
- Emphasize fire behavior awareness, grass-fire safety, and personal evacuation readiness.
- Develop clear public information messaging including an alert and warning plans for residents on when and how to evacuate or shelter in place.

Priority 2: Community Firewise & Defensible Space (Property)

Goal: Increase structure survivability and homeowner preparedness.

Key Actions:

- Conduct Firewise education and structure assessments anywhere spruce is prevalent, with a focus on the following priority neighborhoods: Richardson Clearwater, Hammond Road, Eielson Avenue Loop, Reeve Road, Lake George, Sand Lake, and Healy Lake Village, as well as structures in Zone 9, 10,11,13,14, and 18.
- Reinstate cost-share incentives for homeowners conducting fuels reduction.
- Remove or reduce spruce near homes and along roads; focus equally on pre-green up and cured grasses, which pose fast-moving ignition risks.
- Improve escape routes, signage, and turnarounds for emergency vehicles.
- Develop a community-wide structure and risk mapping system for use by responders.
- Remove abandoned vehicles and hazardous materials near homes.

Priority 3: Fuel Break Construction and Maintenance

Goal: Create strategic barriers that protect communities and improve suppression safety.

Key Actions:

- Construct and maintain shaded fuel breaks around Healy Lake Village and between the Landfill and Airport Road, incorporating hardwoods as natural buffers.
- Widen road corridors along Hammond Road, Reeve Road, and Jack Warren Road to improve defensible space and emergency access.
- Maintain the Richardson Clearwater fuel breaks and extend them where needed.
- Maintain the Whitestone mechanical fuel break and explore expansions toward agricultural zones and the Delta River West fuel break.
- Evaluate Alaska Native allotments and construct fuel breaks on property boundaries.
- Identify cultural sites to be protected and implement appropriate measures.
- Connect all fuel breaks into natural or constructed barriers and develop a 3–5-year maintenance plan.

Priority 4: Emergency Infrastructure & Access

Goal: Improve safety and response efficiency in remote or single-access areas.

Key Actions:

- Identify or develop helicopter landing spots in Healy Lake Village, Sand Lake, Lake George, Quartz Lake, and Whitestone for rapid aerial access.
- Identify and construct additional community water sources and fill sites near Saw Mill Creek Road and other strategic locations.
- Ensure access roads meet width and load standards for firefighting equipment.
- Evaluate signage and naming conventions to improve navigation during incidents.

Priority 5: Local Response Capacity & Training

Goal: Strengthen local and interagency firefighting capability.

Key Actions:

- Increase training for Volunteer Fire Departments (VFDs) and local crews, prioritizing NWCG-recognized wildfire qualifications (FFT2, FFT1).
- Secure funding for critical equipment such as tenders and portable water systems.
- Coordinate standard operating procedures between VFDs, DFFP, BIA and the Military for consistent operations.
- Explore partnerships with Golden Valley Electric and private landowners to integrate utility corridors into suppression planning.

Priority 6: Biomass & Woody Debris Utilization

Goal: Convert fuel reduction byproducts into community value.

Key Actions:

- Designate a community woody debris site for safe disposal and reuse of vegetation cleared through Firewise projects.
- Evaluate biomass opportunities that complement agricultural activity, including biochar and local energy initiatives.
- Explore cooperative biomass projects with other Interior Alaska communities to promote long-term fuel management and economic co-benefits.

9.2 Fuel Breaks

Fuel breaks[2] are strategically located areas where vegetation (fuel) is modified, reduced, or removed to diminish fire spread and intensity, giving firefighters safer access and a tactical advantage. In Alaska, where the Wildland-Urban Interface (WUI) often features highly flammable black spruce forests, fuel breaks are essential for community protection. Recommendations for Delta Junction and Healy Lake Village are below.

Recommendation: Delta Junction Primary and Secondary Roads

Using existing constructed barriers (like roads) and/or powerline right of ways can slow and potentially stop surface fire spread. Additionally, reducing or removing fuel along roadways, driveways and trails increases survivability during evacuations. There is no published or agreed on width for fuel breaks using existing roads or other right of ways.

Generally, a reduction or removal of all flammable vegetation 30 feet from the edge of both sides of the road for access and egress is recommended and 150-feet-wide shaded fuel break with 10–15 feet of space between tree canopies to reduce crown fire risk and intensity and a significant reduction in fuels available to burn on the surface is recommended. The 150 feet can incorporate the road and fuel reduction should be completed on the side of the road opposite the values to protect, i.e. homes or other structures. Even further distances should be considered if there is >30% slope and/or dense fuel—like spruce, along roadways.

Recommendation: Alaska Native Allotments

Remove all ladder fuels and surface debris within 150 feet of the perimeter to create a shaded fuel break. Prune tree limbs 6–8 feet high. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.

Adjacent Landowner Collaboration

Collaboration is critical for a continuous, effective protective barrier. The Alaska Native Allotment owner must coordinate with Federal Agencies (BIA, BLM, NPS) and/or the Alaska Division of Forestry & Fire Protection that often manage adjacent lands. This

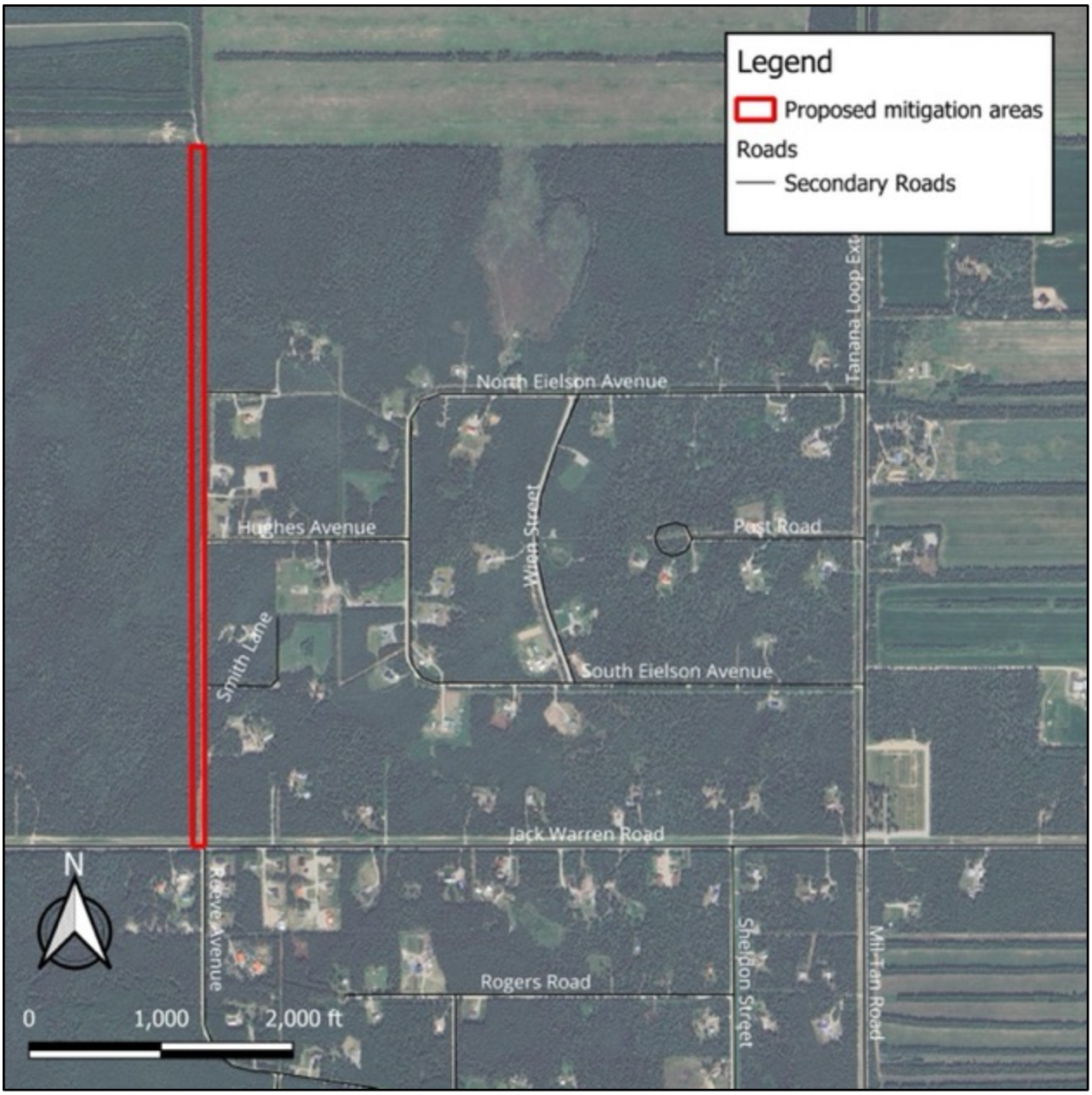
[2] For more information on Fuel Breaks see *Appendix C - Outreach and Education Resources.*

ensures the fuel break is strategically located, aligns with interagency plans, and secures necessary resources or funding (like BIA's Hazardous Fuels Reduction or NRCS programs) to complete the treatment on both sides of the boundary.

Recommendation: Reeve Road

This road is a single access/egress road for property along the east side of the road. For improving survivability during an evacuation, we recommend the following:

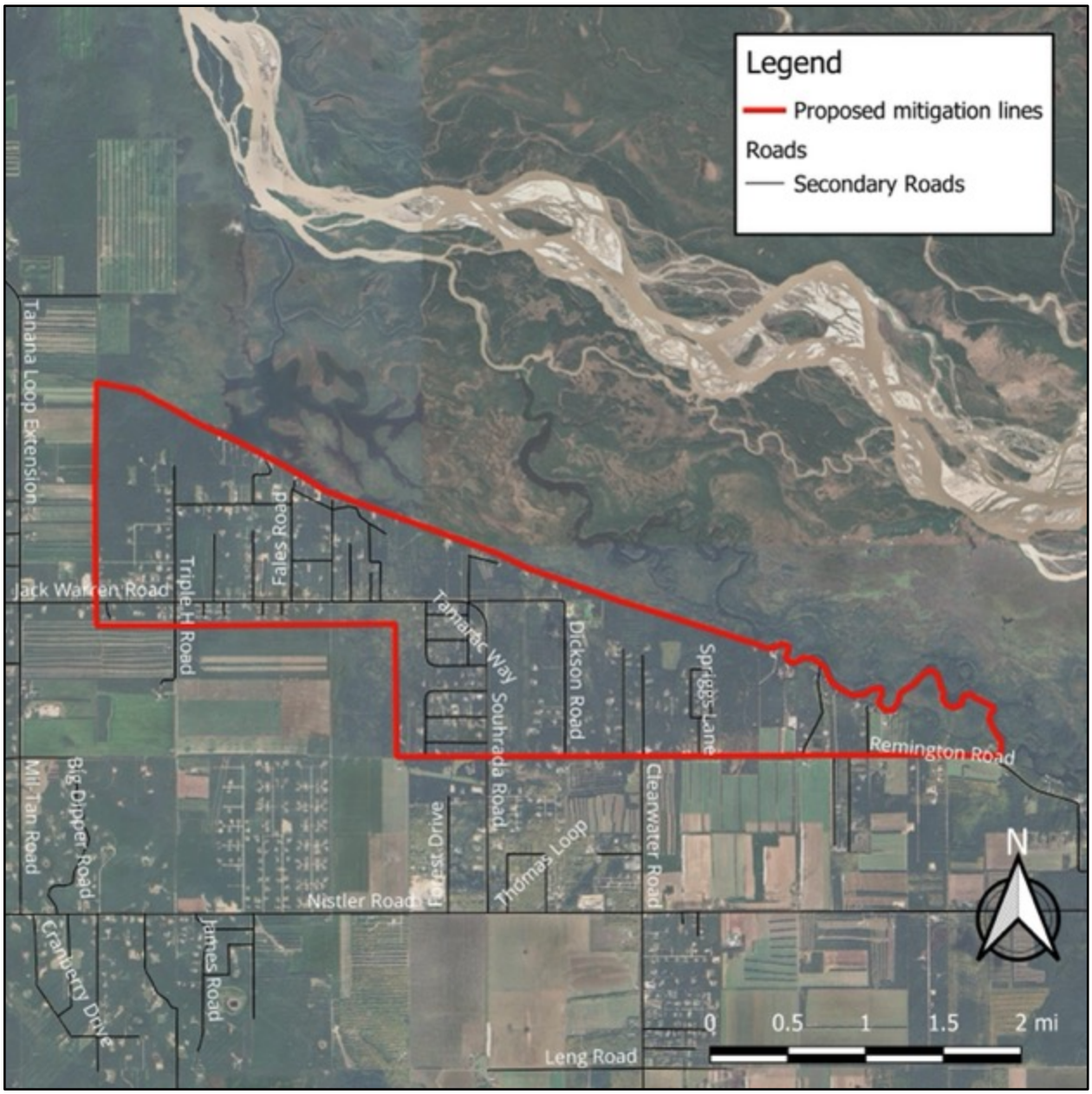
- Removal of all flammable vegetation 30 feet from the edge of both sides of the road for access and egress is recommended and 150-feet-wide shaded fuel break with 10–15 feet of space between tree canopies to reduce crown fire risk and intensity and a significant reduction in fuels available to burn on the surface is recommended.
    - The 150 feet can incorporate the road and fuel reduction should be completed on the side of the road opposite the values to protect, i.e. homes or other structures.



Map 9. Reeve Road

Recommendation: Jack Warren Road Area

1. Removal of all flammable vegetation 30 feet from the edge of both sides of the roads for access and egress is recommended.
2. Powerline right of ways could also be looked at for widening, in conjunction with Golden Valley Power. Historically, firefighters do not like to fight fire in proximity to powerlines, specifically high-tension powerlines, but with a good relationship with Golden Valley and a prompt communication channel, these powerline ROWs could serve as a last resort effort to thwart an Urban Conflagrations scenario.



Map 10. Jack Warren North

Recommendation: Healy Lake Village

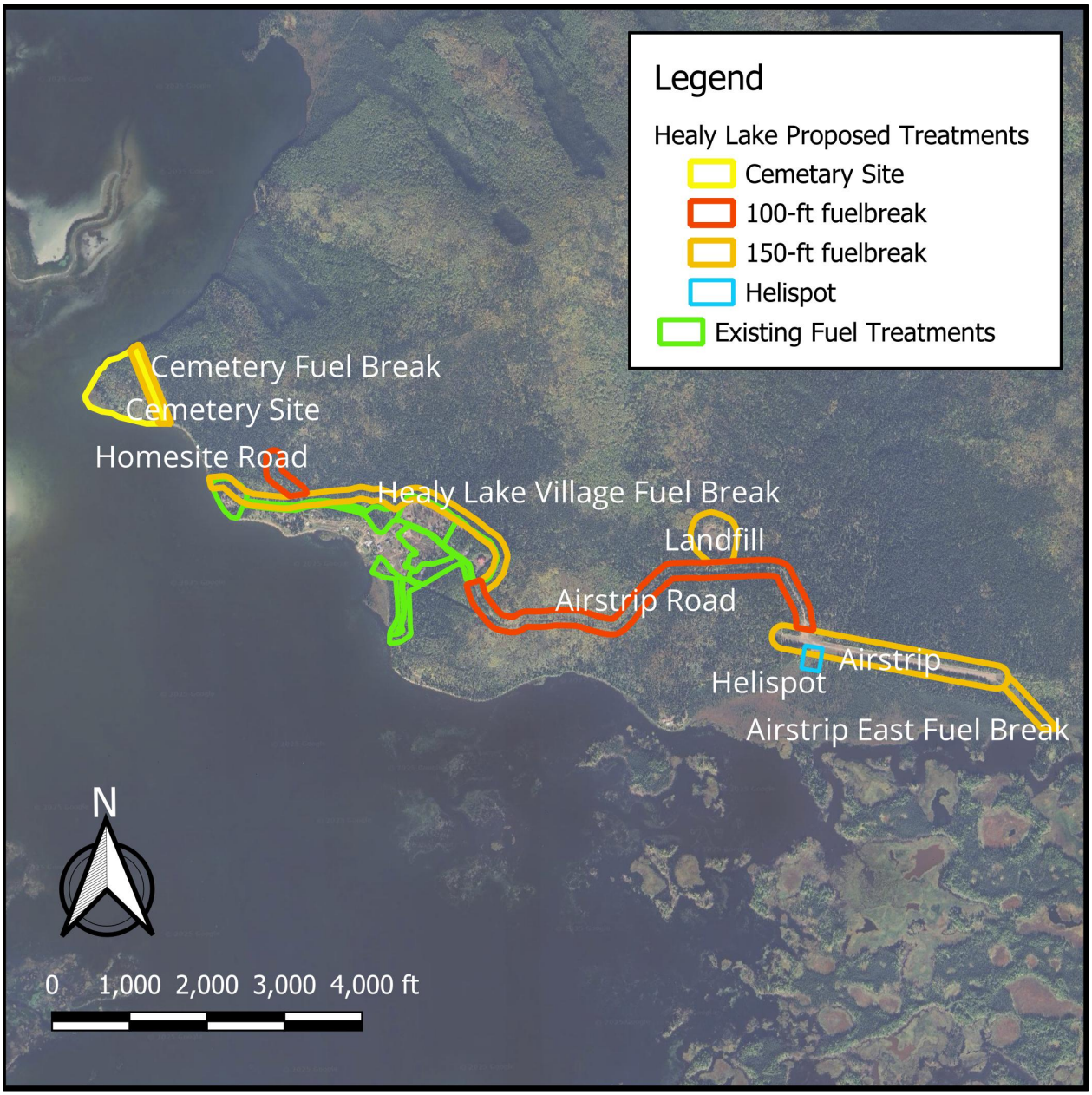
Given the remote location, lack of responders and equipment and the amount of flammable vegetation, we recommend the following fuels treatments in the Healy Lake Village area:

1. Cemetery Site
    a. Complete fuels treatments using hand-thinning techniques in and surrounding the legacy cemetery. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees.
    b. Note: there is a significant potential for unmarked graves and the likelihood of shallow depth graves.
    c. No digging, no heavy machinery in or adjacent to the area; minimize all ground disturbance.
    d. To protect known or unknown archeological resources, use hand thinning of trees as best practice. All woody vegetation should be stump cut flush to the ground. No root pulling is permitted. Distribute all felled materials outside the site to avoid accumulation and fuel loading on edges/adjacent areas.
    e. All fire and fuels management activities should be designed to reduce wildfire risk to cultural resources.
    f. Suppression notes: Utilize structure wrap and sprinkler kits, when possible, to mitigate impacts and flame impingement on any wooden or natural materials.
2. Cemetery Fuel Break
    a. Construct a 150-foot-wide shaded fuel break using hand-thinning techniques in and surrounding the legacy cemetery. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.
3. Homesite Road
    a. Reduce and remove flammable vegetation 50 feet from the road centerline to create a 100-foot-wide shaded fuel break. Remove any dead or dying spruce trees. Thin remaining tree crowns, especially black

spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.

4. Healy Lake Village Fuel Break
    a. Construct a 150-foot-wide shaded fuel break using hand-thinning techniques on the north side of the community. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.
5. Airstrip Road
    a. Construct a 100-foot-wide shaded fuel break using hand-thinning techniques on the north side of the road. Remove all flammable vegetation 30 feet from the edge of both sides of the road for access and egress. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.
    b. Ensure communication with DFFP state foresters (Northern Region Office) to identify direction for mitigating around values of risk on and adjacent to state lands.
6. Landfill Road
    a. Construct a 150-foot-wide shaded fuel break around the landfill perimeter to include the access road. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.
7. Heli-spot
    a. Construct an approximately 1.5-acre helicopter landing spot (250 feet x 250 feet) for landing emergency response rotor wing aircraft. Locate the spot south of the airstrip on the most level spot on the west end of the airstrip. This spot can also serve as a logistics or staging area during wildfire. Remove any dead or dying trees on the perimeter and flush cut stumps to the ground.

8. Airstrip
    a. Reduce and remove flammable vegetation 75 feet from the airstrip centerline to create a 150-foot-wide shaded fuel break. Remove any dead spruce trees. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.
9. Airstrip East Fuel Break
    a. Construct a 150-foot-wide shaded fuel break using hand-thinning techniques on the north side of the trail. Reduce surface fuels, limb trees to no lower than 6 feet and remove dead and dying spruce trees. Thin remaining tree crowns, especially black spruce, to maintain 10–15 feet of space between canopies to reduce crown fire risk and intensity.

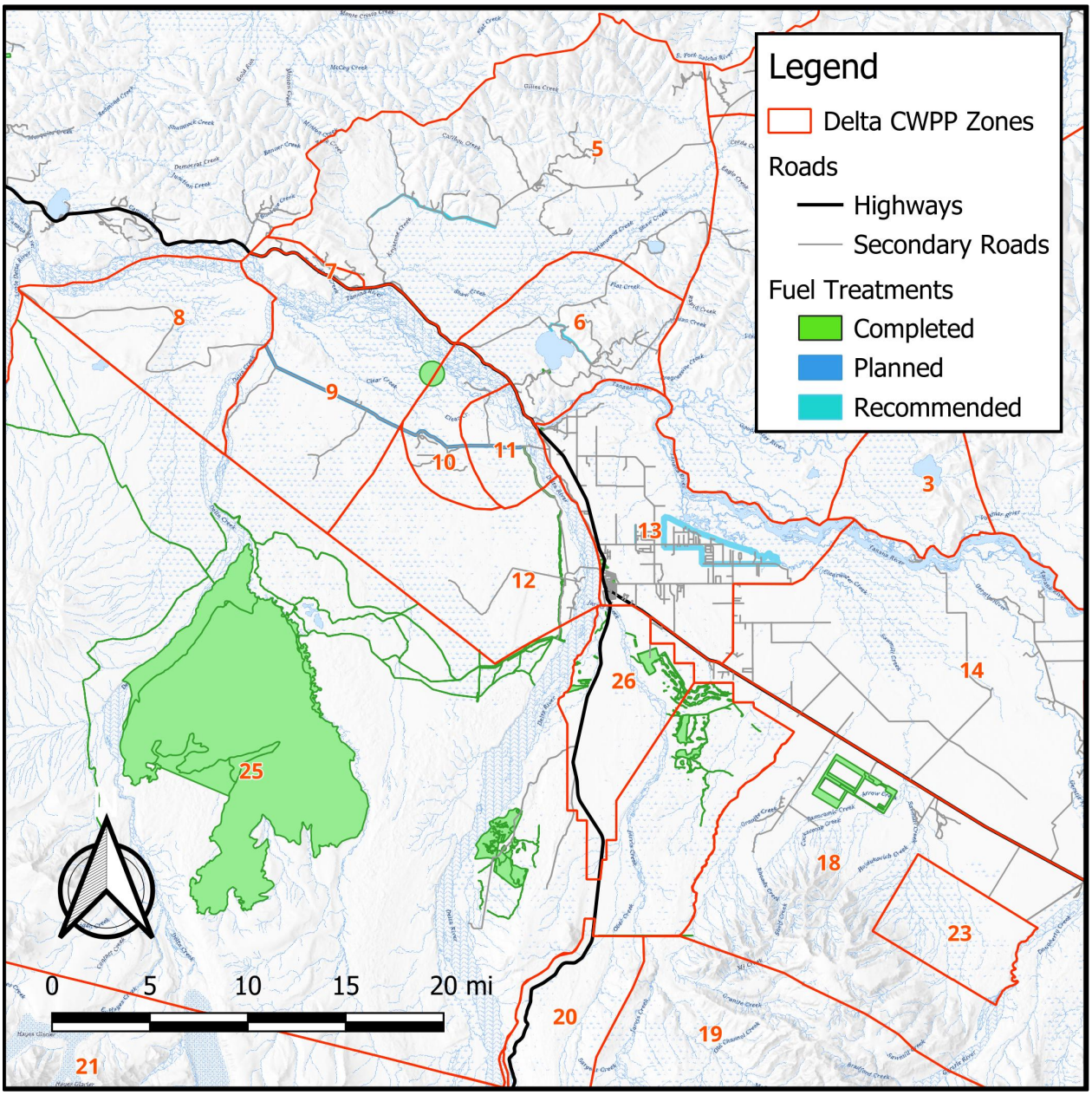


Map 11. Healy Lake Village

Completed & Planned Fuel Breaks

The map below shows completed, planned, and recommended fuel breaks on private, state, and federal lands.

All existing or planned fuel breaks should be monitored and maintained at intervals appropriate for the regrowth of vegetation. Grass and brush could be 3-5 years, and spruce could be 8-10 years between retreatments.



Map 12. Completed, Planned, and Recommended Delta Area Fuel Breaks

For more information please visit:
State of Alaska, Division of Forestry & Fire Protection

- Fuel Treatment Database: https://data-soa-dnr.opendata.arcgis.com/datasets/fuel-treatments-public-view/explore?location=64.107776%2C-146.021032%2C10.56

University of Alaska, Institute of Social and Economic Research

- Alaska Fuel Treatment Database (1961-2025): https://experience.arcgis.com/experience/c76cbdf0fbac4e9c8c3ca9562a6c699c

9.3 Summary

The Delta Response Area faces high wildfire potential due to dense spruce fuels, seasonally dry grasses, drying organic layers, and expanding development in historically fire-driven ecosystems.

Implementing this Action Plan will:

- Reduce ignition potential and fire spread near structures and along travel corridors.
- Strengthen local firefighting capacity and interagency coordination.
- Improve emergency planning, communication, and public awareness.
- Support long-term landscape resilience through fuel reduction, biomass use, and community stewardship.

Together, these priorities advance the goals of the National Cohesive Strategy and the Fire Adapted Communities framework, ensuring that the Delta region is safer, more self-reliant, and better prepared to coexist with wildfire.

For more information, please review the detailed Community Action Plan (CAP) spreadsheet in *Appendix J*. The CAP spreadsheet is meant to be a living document, used as a tool for land managers for adaptation of community needs.

9.4 CAP Project Implementation Priorities

The table below is a legend for the Community Action Plan spreadsheet, outlining selections that can be included in the spreadsheet.

Priority Category	Initiation Target	Funding & Capacity Needs	Partner Coordination	Community Engagement	Notes / Key Features
Immediate Action	Begin by 2026	Can be financed within existing capacity of CWDG and partner organizations; supported by grants within 12–18 months.	Uses existing relationships with emergency response, land management, and non-profit partners.	Minimal additional engagement needed.	Offers greatest potential for immediate ROI; can proceed with current staff levels.
Short-term Priority	Begin by 2027	Requires moderate increase in financial and implementation capacity.	Establish new partnerships and improve coordination among existing ones.	Higher community involvement in decision-making.	Builds on existing capacity while expanding collaboration.
Mid-term Priority	Begin by 2028	Requires multi-year planning and significant grant funding.	Demands extensive coordination among all partners.	Robust engagement throughout project lifecycle.	Major investment in capacity growth for Delta Response Area partners.
Long-term Projects	Beyond 5 years from CWPP adoption	Funding and staffing increases not anticipated in current cycle.	Partnerships may evolve over time.	Minimal engagement until project initiation.	Serve as foundation for next CWPP Action Plan; lower near-term impact.

Table 12. CAP Spreadsheet Legend

10. MONITORING PLAN

The mitigation measures described in the Community Action Plan are not one-time efforts. Some treatments will take years to complete, and most will require annual maintenance to remain effective. For this reason, Delta Area communities, along with supporting agencies and partners, should work together to maintain a clear monitoring plan.

A strong monitoring and maintenance plan should include:

Tracking progress – Document projects with photos, maps, and written updates, showing measurable outcomes such as acres treated or structures prepared.
Updating timelines – Keep timetables current and review them annually to reflect progress and next steps.
Evaluating results – Review completed treatments to ensure they are meeting the goals and objectives of the mitigation plan.
Planning maintenance – Schedule upkeep at least one year before vegetation regrows or conditions change.
Identifying new risks and opportunities – Stay alert to emerging threats and potential funding sources to address them.
Setting future priorities – Establish clear priorities and timeframes for upcoming projects to keep momentum moving forward.

In addition, Community Wildfire Protection Plans (CWPPs) must be reviewed every three years, updated every five years, and expires after ten years unless renewed.

Review: 3 years	Update: 5 years	Expires: 10 years
1/1/2029	1/1/2031	1/1/2036

Table 13. Delta CWPP Review Timeline

11. LIST OF TABLES, MAPS AND IMAGES

TABLES

MAPS

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