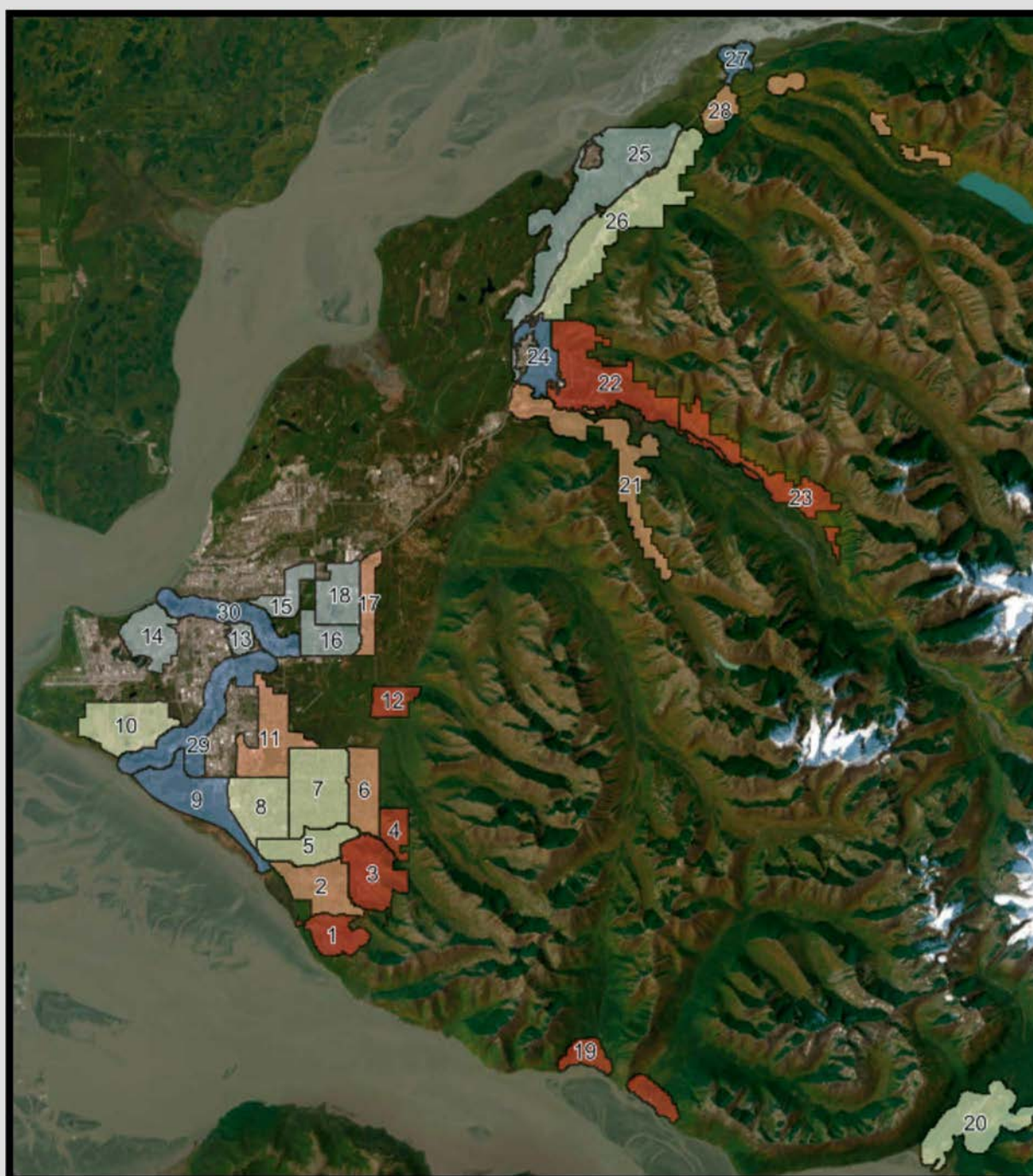
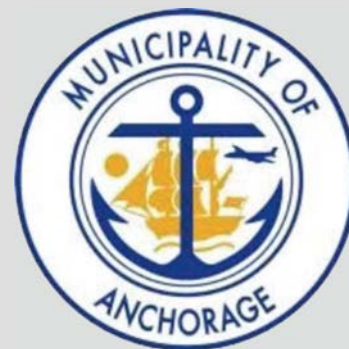




## Community Wildfire Protection Plan

# Municipality of Anchorage



## Appendix A: Suppression Planning Units

# Appendix A – SPU Ignitability Analysis

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# Appendix A – SPU Ignitability Analysis

## SUPPRESSION PLANNING UNITS

### Introduction

The municipality has been divided into thirty Suppression Planning Units (SPUs). The purpose of establishing SPUs is to group the most heavily populated residential areas of the Wildland-Urban Interface (WUI) into hazard categories. These hazard categories provide a data-driven method that support the multiple variables that affect prioritization of mitigation recommendations. Not every property within the WUI falls within the boundaries of the SPUs. This does not diminish the importance of those properties to the Municipality or the value of continued wildfire mitigation efforts in those areas.

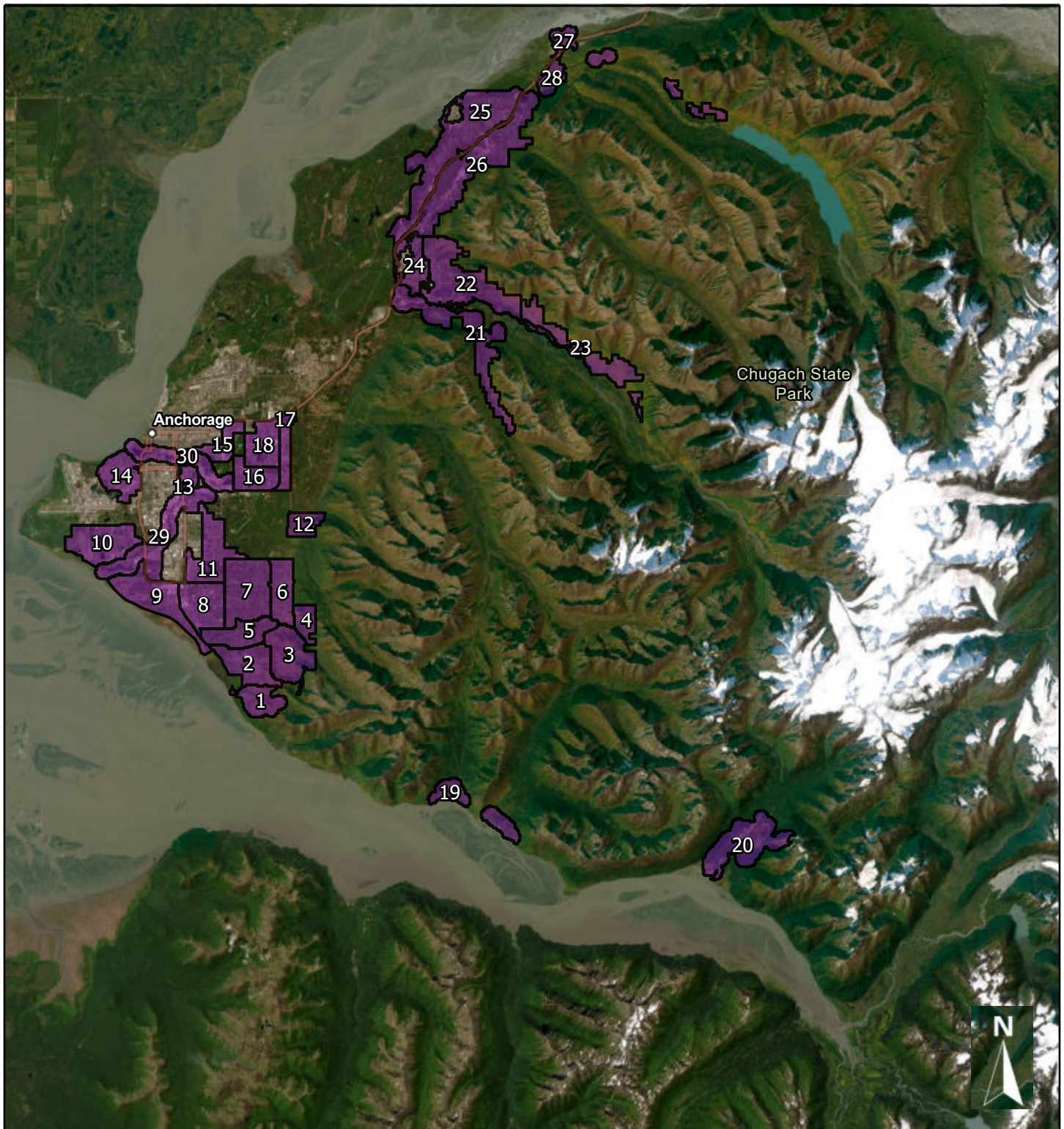
SPU Hazard Rating (SPUHR) scores have been used to sort the SPUs into five adjective rating categories: Low, Moderate, High, Very High, and Extreme. The SPU boundaries and ratings are shown in Figure 2Figure 1 and Table 1.

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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Dr. Jen Schmidt of the UAA Institute of Social and Economic Research collaborated closely with the Anchorage Fire Department (AFD) Wildfire Division, AK-DOF, Bintel, and multiple interagency partners to co-develop the rating methodology explained in Appendix C. The Anchorage Fire Department Wildfire Division reviewed and approved the hazard ratings found within this document and should be consulted if there are questions. For a more detailed discussion of the methodology behind these ratings, see Appendix C - Methodology.

The following SPU descriptions provide an overview of the general characteristics of each area. They focus on factors influencing structural ignitability and HIZ hazards (both natural and human caused) based on field observations, fire behavior modeling, and GIS-based zonal analysis. These summaries are not intended to describe every individual property or street but rather to reflect the average or typical conditions within each SPU.

# Anchorage Suppression Planning Units



1 Potter Heights  
2 South Rabbit Creek  
3 Bear Valley  
4 Glen Alps  
5 DeArmoun  
6 Upper Hillside  
7 Birch  
8 Lower Hillside  
9 Oceanview  
10 Kincaid

11 Abbott/Elmore  
12 Stuckagain  
13 Lake Otis  
14 Turnagain  
15 Merrill  
16 Baxter  
17 East Muldoon  
18 West Muldoon  
19 Rainbow  
20 Girdwood

21 Hiland  
22 Lower Eagle River  
23 Upper Eagle River  
24 Eagle River Loop  
25 West Chugiak  
26 East Chugiak  
27 Eklutna Village  
28 Eklutna Lake  
29 Campbell Creek  
30 Chester Creek

## Appendix A – SPU Ignitability Analysis

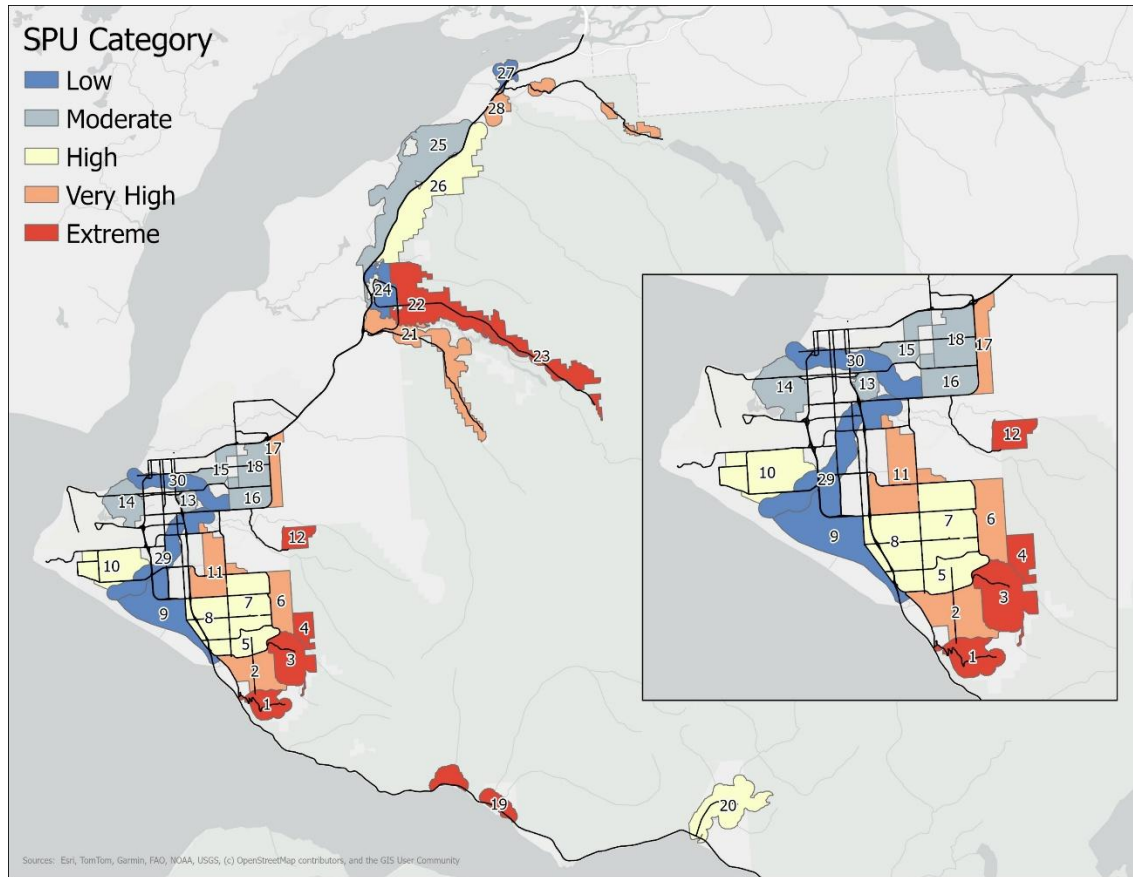


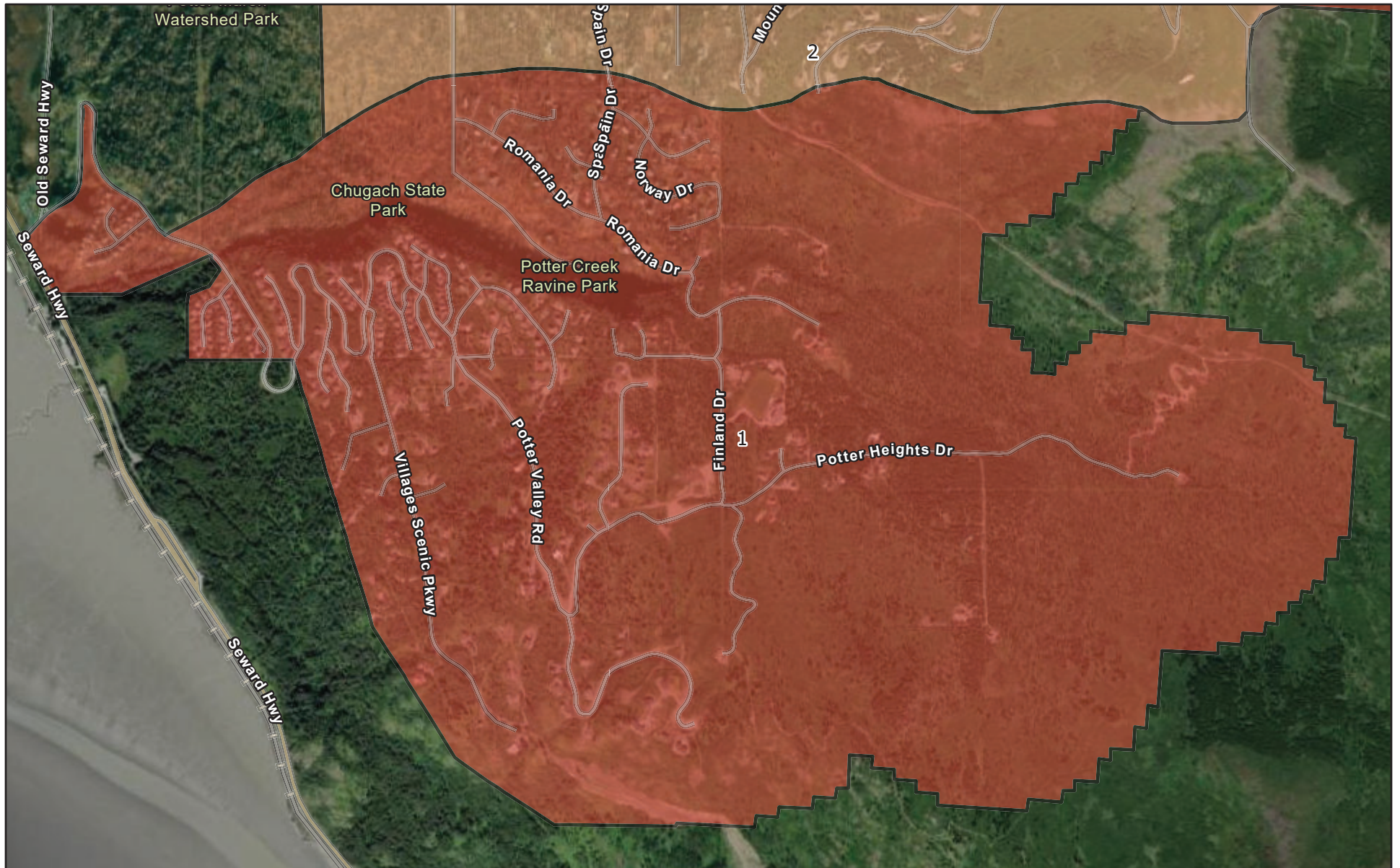
Figure 2 – Municipality of Anchorage SPU Hazard Ratings Map

Table 1 – SPU Hazard Ratings

SPU No.	Name	Rating	SPU No.	Name	Rating
1	Potter Heights	Extreme	16	Baxter	Moderate
2	South Rabbit Creek	Very High	17	East Muldoon	Very High
3	Bear Valley	Extreme	18	West Muldoon	Moderate
4	Glen Alps	Extreme	19	Rainbow	Extreme
5	DeArmoun	High	20	Girdwood	High
6	Upper Hillside	Very High	21	Hiland	Very High
7	Birch	High	22	Lower Eagle River	Extreme
8	Lower Hillside	High	23	Upper Eagle River	Extreme
9	Oceanview	Low	24	Eagle River Loop	Low
10	Kincaid	High	25	West Chugiak	Moderate
11	Abbott/Elmore	Very High	26	East Chugiak	High
12	Stuckagain	Extreme	27	Eklutna Village	Low
13	Lake Otis	Moderate	28	Eklutna Lake	Very High
14	Turnagain	Moderate	29	Campbell Creek	Low
15	Merrill	Moderate	30	Chester Creek	Low



# SPU 1: Potter Heights



# Appendix A – SPU Ignitability Analysis

## SPU 1: Potter Heights

Low	Moderate	High	Very High	Extreme
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Potter Heights is the southernmost SPU in the Anchorage Bowl treatment region. It lies mid-slope along the northwest face of McHugh Peak with Potter Creek bisecting residential areas. Topography becomes more complex near the steep Potter Ravine, which otherwise rises through sub-Alpine to Alpine slopes that are greater than 30 degrees in some areas. Local weather patterns are influenced by the Knik and Turnagain Arms which extend northeast and southeast from Cook Inlet, and by several deep mountain drainages that climb roughly 2,500 feet from the water's edge, producing orographic effects.

Primary access to the community is from the Seward Highway via Potter Valley Road. Housing consists of single-family residences built from the 1990s to the present. Building materials vary, but most homes are wood frame with decks, open eaves, and other flammable projections. Most roof materials are ignition resistant; however, some homes have shake roofing. Heating is provided mostly by electricity, natural gas, and wood stoves. Structural separation ranges from 10 feet to greater than 50 feet.

Some properties maintain defensible space, but compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Vegetative fuels are composed of dense boreal forest at lower elevations, transitioning to continuous, high-density woody shrub and grass in the upper elevations. Primary access on Potter Valley Road is encroached by vegetation in many areas with less than five feet of clearance from the roadway.

Residences are situated on bluffs above major roadways, within steep creek drainages, and on steep slopes where fuels transition to shrubs and grass. Streets in the lower portion of the SPU are paved, adequately sized, and well-marked; however, some roads are unpaved outside of the Anchorage Fire Service Area. Evacuation may be challenging, as the SPU has only one primary egress route. A secondary route exists, but is mid-slope above a steep ravine, is narrow, and prone to congestion. Several sections of roadway include sharp, narrow turns, posing considerable challenges for fire apparatus access and operations.

Road markers along Potter Valley Road are adequate, but side street and address markers are often overgrown, non-reflective, difficult to see, or missing. Electric utilities are distributed through elevated lines on wooden power poles adjacent to dense fuels, increasing potential ignition risk.

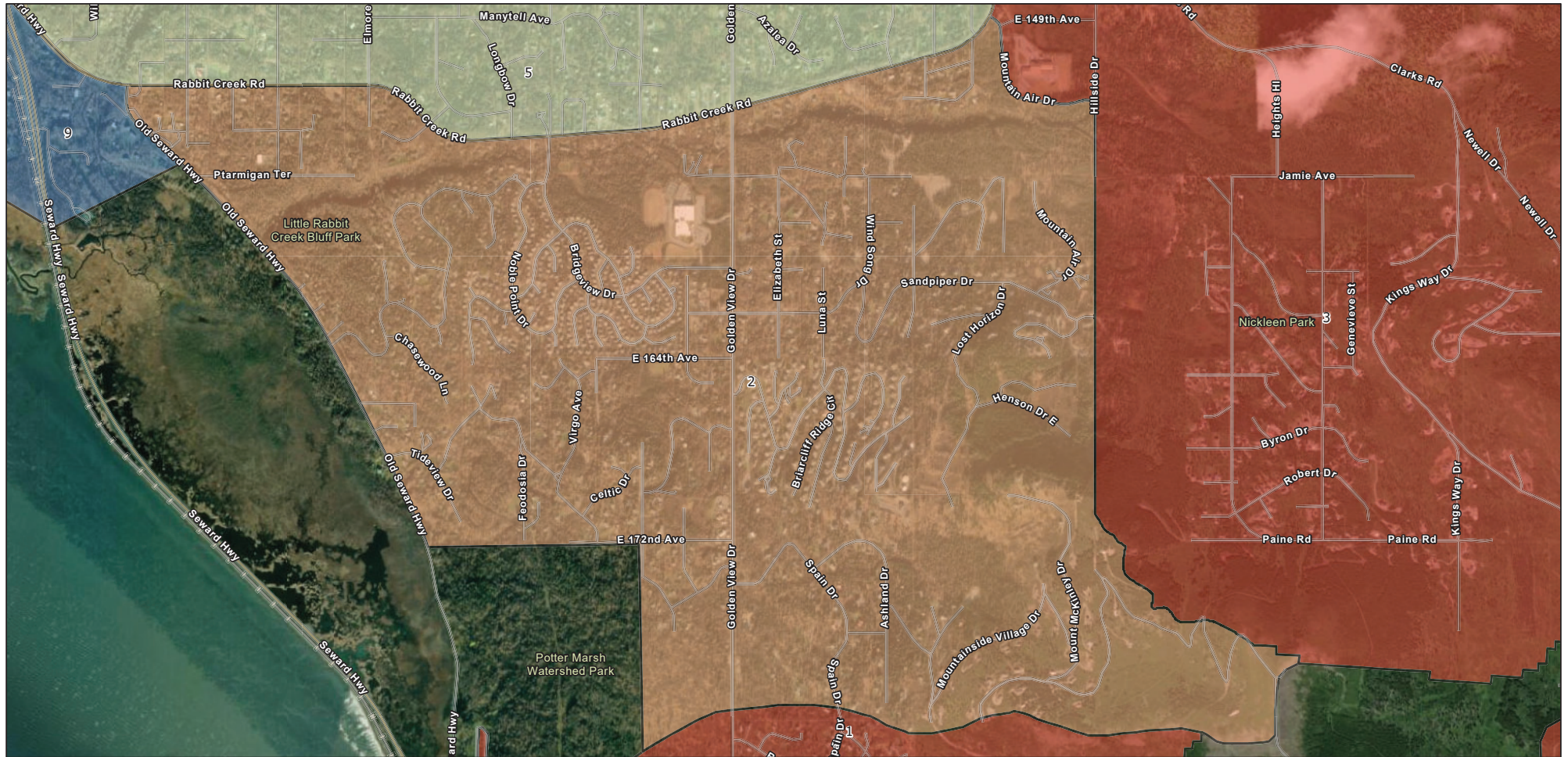
## Appendix A – SPU Ignitability Analysis

In areas without hydrants, water for firefighting will be delivered by water tenders, while another concern in this area is the potential ignition source posed by the train tracks, they are buffered by the Seward Highway.

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## SPU 2: South Rabbit Creek



# Appendix A – SPU Ignitability Analysis

## SPU 2: South Rabbit Creek



South Rabbit Creek sits at the base of the northwest slope of McHugh Peak and extends from marshy lowlands to the alpine. Little Rabbit Creek runs along the north boundary of the unit, while several other drainages create fuel-laden greenbelts that connect numerous neighborhoods. Local weather patterns are influenced by the Knik and Turnagain Arms. Multiple deep mountain drainages that rise more than 2,500 feet from the water's edge produce local orographic effects.

The South Rabbit Creek SPU is accessed via the Seward Highway and contains several well-marked routes that support emergency access in different directions; however, many neighborhoods have only a single egress route. The SPU consists of single-family housing, mostly built in the early 2000's with some newer construction. Homes are primarily of wood-frame construction with decks and other flammable projections. Roof materials are mostly ignition resistant. Heating is provided by electricity, natural gas, and wood stoves. Structural separation distances range from 20 feet to more than 50 feet. While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Fuels consist of dense boreal forest at lower elevations, transitioning to continuous high-density shrub and grass fuels upslope. Vegetation encroaches along Rabbit Creek Road, with less than five feet of clearance in many sections, and most residential streets are overgrown.

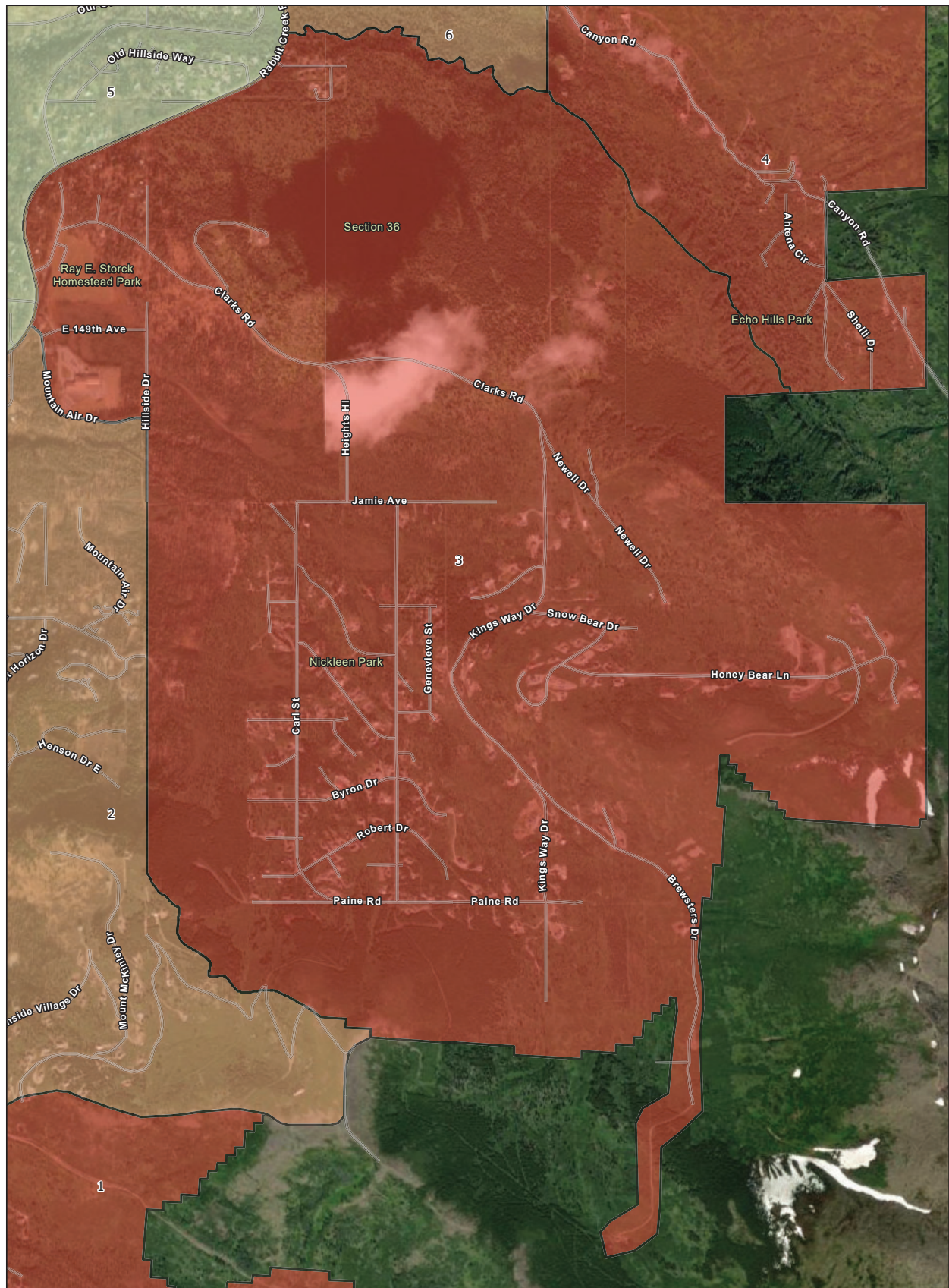
Homes are situated in the foothills at the base of steep mountain peaks, within steep creek drainages, and on steep slopes as fuels transition to decadent woody shrubs and grasses. Streets in the lower part of the SPU are paved, adequately sized, and well-marked. Some roads transition to unpaved surfaces, and some residences are outside the Anchorage Fire Service Area. Away from main roadways, streets are well defined but may offer limited egress due to winding roads that end in cul-de-sacs or dead ends.

Electric utilities are distributed through elevated lines on wooden power poles adjacent to dense fuels.

The hydrant system serves two neighborhoods and is maintained by Anchorage Water & Wastewater Utility (AWWU). In areas where hydrants are not available, water for fire suppression will be delivered by water tenders.



# SPU 3: Bear Valley





# Appendix A – SPU Ignitability Analysis

## SPU 3: Bear Valley

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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The Bear Valley SPU occupies a mountain valley on the northwest slope of McHugh Peak, characterized by steep and complex topography where multiple ridges and drainages converge. The headwaters of Little Rabbit Creek run through the middle of the SPU, and dense pockets of boreal forest on north-facing slopes link fuels from lower elevations up to treeline. A few properties are located near the flats where water and muskeg accumulate; however, the majority are in the thick brush, mid-slope on the sidewalls of the valley.

Primary road access to this SPU is via Rabbit Creek Road. While it is adequately marked, it is one way in and out. Housing consists of single-family residences, mostly 1980s–1990s era construction with some newer construction. A large portion of this SPU remains platted for future residential construction, though water and wastewater utilities have not yet extended to most of those parcels. Construction includes a full range of types, with concentrations of wooden homes in various states of maintenance. Heating is provided mostly by electricity, natural gas, and wood stoves.

Spacing is generally greater than 50 feet between residences, though outbuildings and sheds are often situated in between. Only a few properties maintain defensible space, and compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Yard debris, to include vehicles and equipment in various states of disrepair, were noted in some yards during the field study.

Hazard fuels consist of dense boreal forest at lower elevations transitioning to continuous high-density shrub and grass fuels upslope. Primary access roads are encroached by vegetation in many areas, with less than five feet of clearance. Residential streets are often overgrown with vegetation, and where present, provide minimal clearance.

Homes are situated on steep slopes and in saddles of high-elevation mountain valleys as fuels transition from marshy muskeg to decadent woody shrubs and grasses. Primary access to Bear Valley is paved and well-marked, while residential streets are mostly unpaved, narrow, and with variable signage.

Clarks Road serves as the only route available for access and egress. Critical infrastructure includes AFD Station 10 and Bear Valley Elementary School. Both are surrounded by fuels and may be affected by traffic congestion during an evacuation.

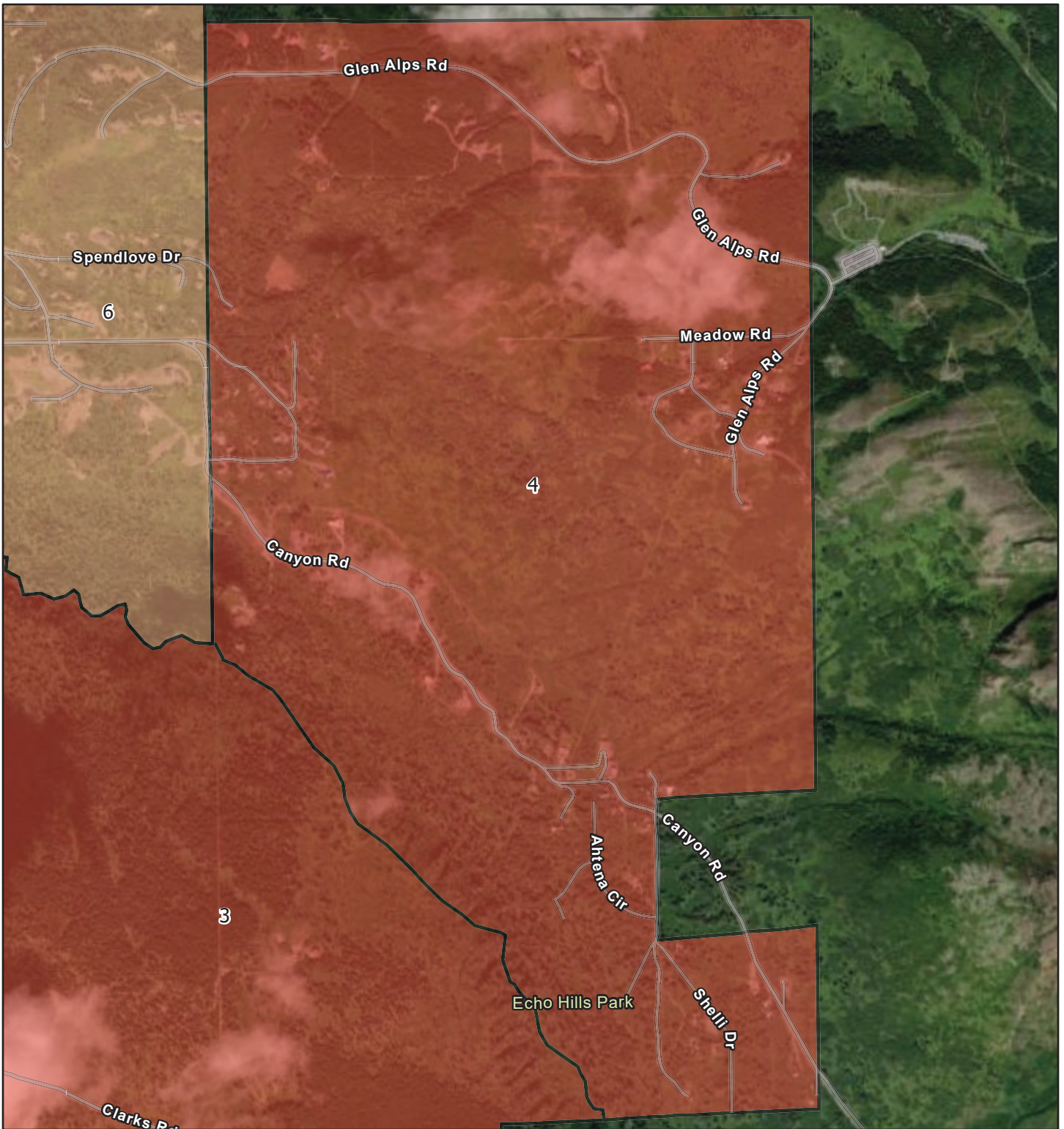
Electric utilities are distributed through elevated lines on wooden power poles adjacent to dense fuels.

## Appendix A – SPU Ignitability Analysis

No fire hydrants are available in Bear Valley. In areas without hydrants, water for firefighting will be delivered by water tenders.

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# SPU 4: Glen Alps





# Appendix A – SPU Ignitability Analysis

## SPU 4: Glen Alps

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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Homes in the Glen Alps SPU are found mid-slope near the valley bottom in stands of deciduous hardwoods with continuous dense grass and woody shrub understory. Residences along the ridgeline face a more northerly aspect and are situated in dense spruce stands. The SPU is entirely outside the Anchorage Fire Service Area, and its most vulnerable homes are surrounded by dense stringers of spruce.

Glen Alps is composed of two main roads that contain clusters of homes. Canyon Road is partially paved and built mid-slope in the valley bottom, while Glen Alps Road is paved and follows the ridgeline at the confluence of multiple large mountain valleys. Both are accessed through the Upper Hillside SPU via Hillside Road. Residential side streets are mostly unpaved and dead end with inadequate turnarounds for apparatus. Road markers along primary access routes are generally adequate; however, address markers are often overgrown, non-reflective, poorly placed, or missing altogether.

Residences here are well built, well maintained, relatively new, with general spacing greater than 50 feet. Most are wood-frame construction with wood siding and ignition resistant roofing. Decks and other flammable projections are common. Heating is provided mostly by electricity, natural gas, and wood stoves.

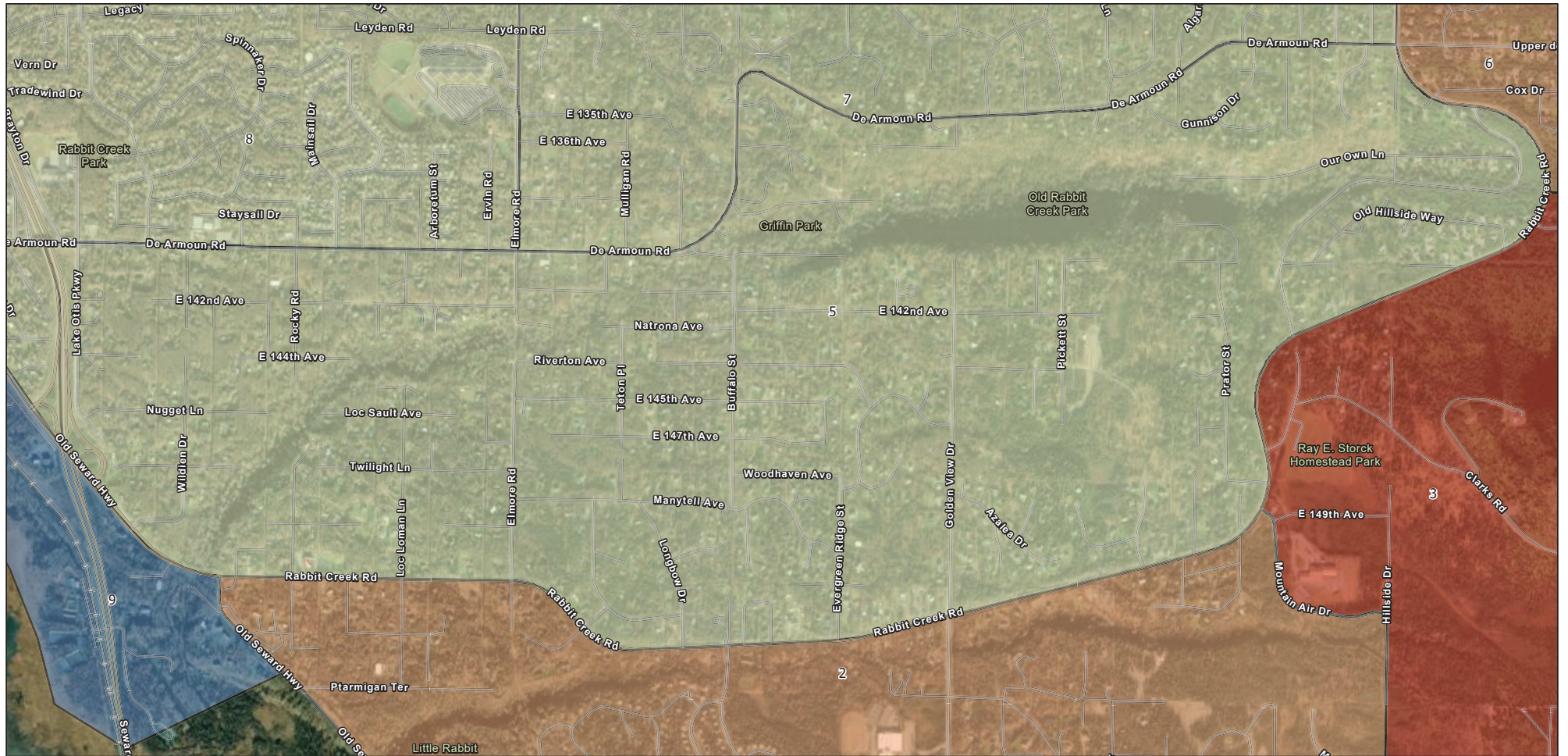
Many properties maintain defensible space, but compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Yard debris, to include vehicles and equipment in various states of disrepair, were noted in some yards during the field study.

Vegetative fuels include medium-density deciduous forest with continuous woody shrubs in the understory along valley bottoms, transitioning to dense boreal forest on northerly ridgeline slopes. Primary access roads are encroached by vegetation in many areas with less than five feet of clearance from the roadway.

Electric utilities are distributed through elevated lines on wooden power poles adjacent to dense fuels.

In areas without hydrants, water for firefighting will be delivered by water tenders.

## SPU 5: DeArmoun



# Appendix A – SPU Ignitability Analysis

## SPU 5: DeArmoun



DeArmoun features homes spaced greater than 50 feet apart on lots under one acre. Land use is mixed, with residential properties interspersed with schools, businesses, and small industrial sites in varying states of maintenance. The SPU extends from its western boundary of Old Seward Highway and Seward Highway eastward to the foothills in a combination of mixed hardwood canopy and boreal forest. Topography is generally flat to rolling, with steeper banks around creek drainages. Access to and through the area is generally good, though isolated chokepoints around residential intersections exist.

Housing consists of 1990s–early 2000s era construction. Structures are finished with metal, wood, or vinyl siding, and ignition resistant roofing. Many properties have outbuildings or supply caches that are vulnerable to fire, along with decks, stairs, and other flammable projections. Heating is provided by electricity, natural gas, and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Woody-shrub understory is largely cleared along roadways and appears managed in most treated patches. Dead spruce trees have largely been removed from most main roadways but persist in small, isolated clusters. Fuels are used as sight and sound barriers between neighboring properties, which could potentially provide pathways for wildfire and link several different neighborhoods. Some homes are situated in creek drainages surrounded by dense fuels.

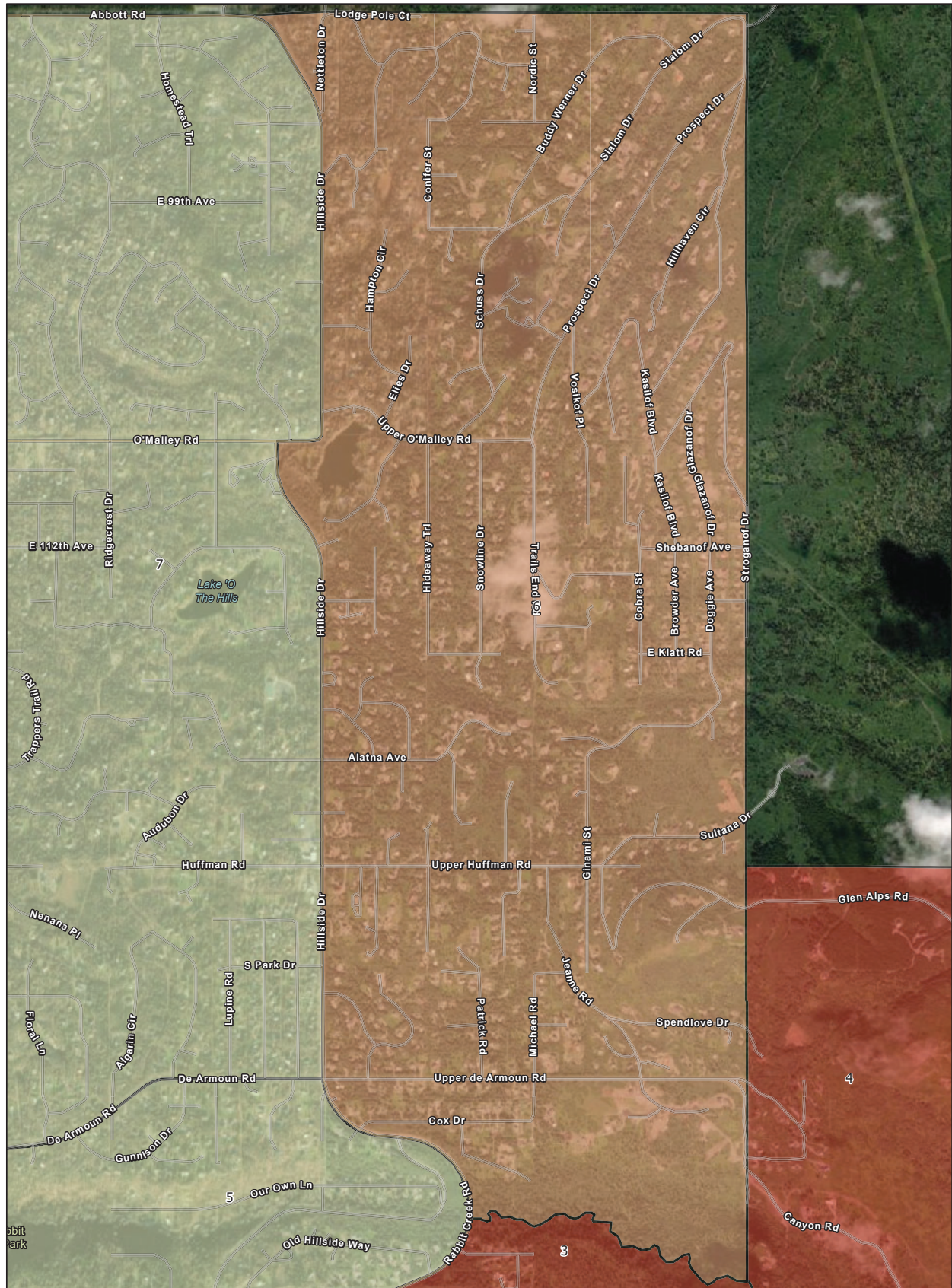
Primary access roads are paved while residential streets are largely unpaved. Many streets dead-end in heavy vegetation and provide limited or no turnarounds for apparatus. Multiple evacuation routes are available and travel in different directions exist in this community.

Road markers are adequately placed and clear of brush in most areas, however no evacuation signage exists on a road system that may be confusing to visitors. Electric utilities are distributed through elevated lines on wooden power poles.

The few hydrants that exist throughout the SPU are operated by AWWU. In areas without hydrants, water for firefighting will be delivered by water tenders.



# SPU 6: Upper Hillside



# Appendix A – SPU Ignitability Analysis

## SPU 6: Upper Hillside



The Upper Hillside SPU extends from Rabbit Creek drainage to the south and Hilltop Ski Area to the north. Homes are moderately sized on mid-sized lots, interspersed with upscale rental properties and small horse farms. The SPU is bordered by wildland fuels on three sides and spreads across the base of the foothills with varying topographical complexity.

Access to and through the SPU is tedious and runs mid-slope through dense fuels that encroach roadways. The community includes a mix of 1990s–early 2000s era construction. The predominant construction type is metal, wood, or vinyl siding with mostly ignition resistant roof types. Many properties have outbuildings or supply caches that are vulnerable to fire. Many also feature flammable decks, stairs, and other projections.

Spacing is generally greater than 50 feet between residences, with outbuildings and sheds in between. Heating is provided by electricity, natural gas, and wood stoves.

While a variable number of properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Concentrations of spruce stringers are present in the SPU with otherwise moderate to heavy loads of woody-shrub understory. Bands of hardwoods are maintained along roadways; however dense patches of black spruce are present.

Homes are situated mid-slope among continuous fuels. Primary access roads stemming from Hillside Road are paved, while residential streets and secondary roads are unpaved. Many streets dead-end in heavy vegetation, providing limited or no turnarounds for apparatus.

Evacuation routes from residential areas are limited, narrow, surrounded by dense fuels, and travel through other neighborhoods. Road markers can be difficult to see because of overgrown vegetation crowding roadways and intersections.

Electric utilities are distributed through elevated lines on wooden power poles. There are no fire hydrants in the SPU, so water for firefighting will be delivered by water tenders.



# SPU 7: Birch





# Appendix A – SPU Ignitability Analysis

## SPU 7: Birch



The Birch SPU consists of a range of suburban and rural neighborhoods bordered by Elmore Road, DeArmoun Road, Hillside Drive, and Abbot Road. This SPU is mostly residential, with a few schools, and areas of industrial businesses and equestrian properties. Home and lot sizes range widely.

Access to and through the SPU is mostly paved and well-marked, however many narrow residential streets dead-end in heavy fuels and continuous spruce stands. The area consists of a mix of older and newer construction. The predominant construction types are metal, wood, or vinyl siding with mostly ignition resistant roofs. Most properties feature flammable decks, stairs, and other projections and some are situated within dense spruce stands. Spacing between homes ranges from 30 to greater than 50 feet. Outbuildings or supply caches are found on many properties.

Heating is provided by electricity, natural gas, and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Vegetation within the SPU consists of a large component of black spruce, along with hardwoods, and spruce stands in lowland marsh. These fuels along with topography and wind can pose significant wildfire hazard.

Primary access roads are paved, while some residential streets are unpaved. Many streets dead-end in heavy vegetation, providing limited or no turnarounds for apparatus.

Multiple evacuation routes exist in this SPU. Road markers can be difficult to see due to overgrown vegetation crowding roadways and intersections. Electric utilities are distributed through elevated lines on wooden power poles. Critical infrastructure includes the Anchorage Zoo and AFD Station 8.

There are less than fifteen fire hydrants serviced by AWWU within the boundaries of the SPU; water for firefighting will mostly be delivered by water tenders.

# SPU 8: Lower Hillside





# Appendix A – SPU Ignitability Analysis

## SPU 8: Lower Hillside

Low	Moderate	High	Very High	Extreme
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The Lower Hillside SPU is bordered by Old Seward Highway, DeArmoun Road, Elmore Road, and O'Malley Road. West of Seward Highway, a combination of residential and industrial structures is present. The remainder of the SPU consists mostly of residences and a few schools. Homes are small to medium in size on small, uniformly-sized lots.

Access to and through the SPU is mostly paved and well-marked, however residential streets are narrow and tightly packed by cars. Some residential streets dead-end in cul-de-sacs and are illegally used as overflow parking by residents. Housing in the SPU was constructed mostly in the early 2000s to the present.

The predominant construction type is wood with vinyl siding and mostly ignition resistant roofs. Property spacing ranges from 20 to 40 feet, with outbuildings, sheds or supply caches on many properties. Most properties feature flammable decks, stairs, and other projections.

Heating is provided by electricity, natural gas, and wood stoves. While most properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Fuels are a mix of hardwoods and spruce, with stringers and clusters of black spruce intermixed throughout. Homes are situated in continuous fuel beds with heavy components of spruce. Primary access roads and streets are mostly paved; however, roads are encroached by vegetation in many areas with less than five feet of clearance from the roadway. Residential streets are variably overgrown with vegetation.

Multiple evacuation routes traveling in different directions exist in this SPU. Large schools, churches, and sports complexes break up the landscape. Parcels are multiple acres in size and mostly cleared of hazardous brush but are otherwise surrounded by dense fuels.

Road markers are adequate. Electric utilities are distributed through elevated lines on wooden power poles. Hydrants are available for half of the SPU and are in the more recently developed and more dense neighborhoods. In areas without hydrants, water for firefighting will be delivered by water tenders.

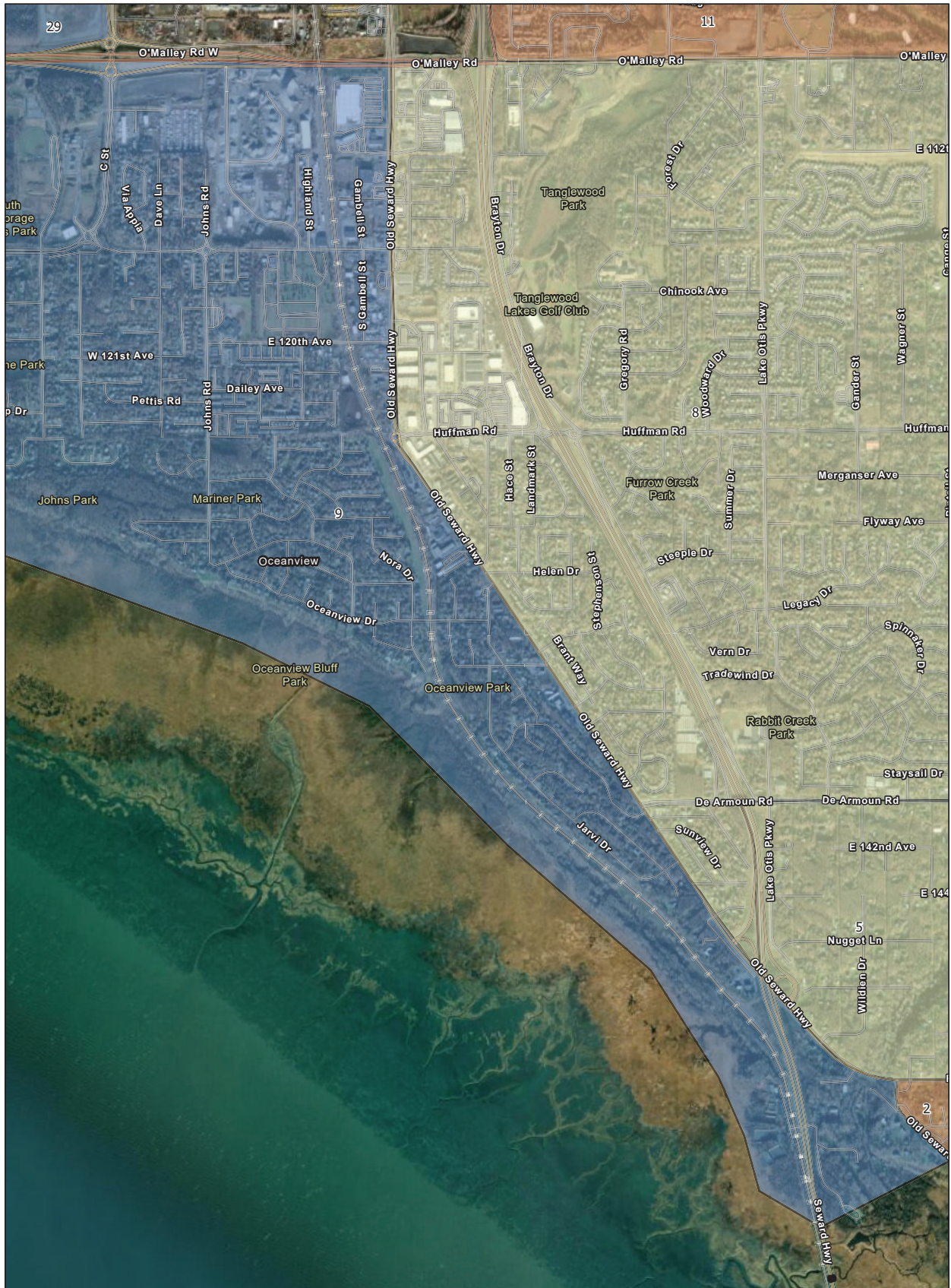


# SPU 9: Oceanview Map 1 of 2





# SPU 9: Oceanview Map 2 of 2



# Appendix A – SPU Ignitability Analysis

## SPU 9: Oceanview



The Oceanview SPU is comprised of dense and well-established residential neighborhoods sandwiched between the Turnagain Arm shoreline and industrial corridor adjacent to Old Seward Highway.

Access to and through the SPU is generally paved and well-marked; however, some tertiary streets and alleys between rows of townhomes are narrow, frequently congested with parked vehicles, and form large, non-concentric loops. Many secondary streets terminate in dead-ends or cul-de-sacs adjacent to dense stands of black spruce, limiting egress and increasing potential exposure during a wildfire event. Housing in the SPU was mostly constructed in the early 2000s and newer in well-established neighborhoods.

The predominant construction type is wood with mostly ignition resistant roofs. Many properties feature flammable decks, stairs, and other projections, and share HIZ with neighboring properties. Spacing ranges from less than 10 feet to 30 feet. Heating is provided by electricity and natural gas.

While a moderate number of properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Large stands of black spruce exist just beyond bands of hardwoods and landscaping that is maintained along the roadways. Fuels are a mix of hardwoods and lowland marsh with dense stringers of dead black spruce and continuous ladder fuels running between neighborhoods. Dense concentrations of homes are situated in continuous fuel beds with heavy components of spruce.

Within the SPU boundary is the Rabbit Creek Shooting Park. The activities that happen on this property combined with fuels surrounding the ranges create the potential for fire starts.

Primary access roads and streets are 20–40 feet wide, paved, adequately marked, and mostly clear of vegetation five feet from the road. Streets, however, can be narrow through individual neighborhoods, wind through multiple dense neighborhoods in non-concentric loops, and may be confusing to visitors.

Evacuation from this area may be difficult due to the large number of people needing to travel through other neighborhoods that are also aligned with fuel, wind, and topography. Road markers are adequate. Electric utilities are distributed through elevated lines on wooden power poles.



## Appendix A – SPU Ignitability Analysis

Hydrants are available and adequately spaced for the entirety of the SPU. Water is provided by AWWU.

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## SPU 10: Kincaid



## Appendix A – SPU Ignitability Analysis

### SPU 10: Kincaid

Low	Moderate	High	Very High	Extreme
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Kincaid consists primarily of dense, tightly spaced homes on small to midsize lots, with a mix of well-established and newly constructed neighborhoods, businesses, and industrial facilities. Areas of new development are pushing west into dense and unmanaged wildland fuels. This SPU is bordered by the Ted Stevens International Airport to the north, Kincaid Park to the west, Turnagain Arm shoreline to the south, and dense residential/industrial to the east. Kincaid Park borders this SPU and is a popular and highly visited destination for both visitors and locals alike, hosting a network of forested trails, day-use areas, sports fields, and critical infrastructure.

Access to and through the SPU is generally paved and well-marked, although signage for some neighborhoods are overgrown with vegetation and difficult to locate. Primary roads are 20-40 feet wide and bordered by sidewalks in most areas, however secondary streets are narrow, winding, often choked with vehicles, and sometimes dead end without adequate space for firefighting apparatus.

Housing in the SPU was built mostly in the 1990s to early 2000s. The predominant construction type is wood with vinyl siding and mostly ignition resistant roofing materials, with few shake roofs interspersed throughout. Many properties feature flammable decks, stairs, and other projections.

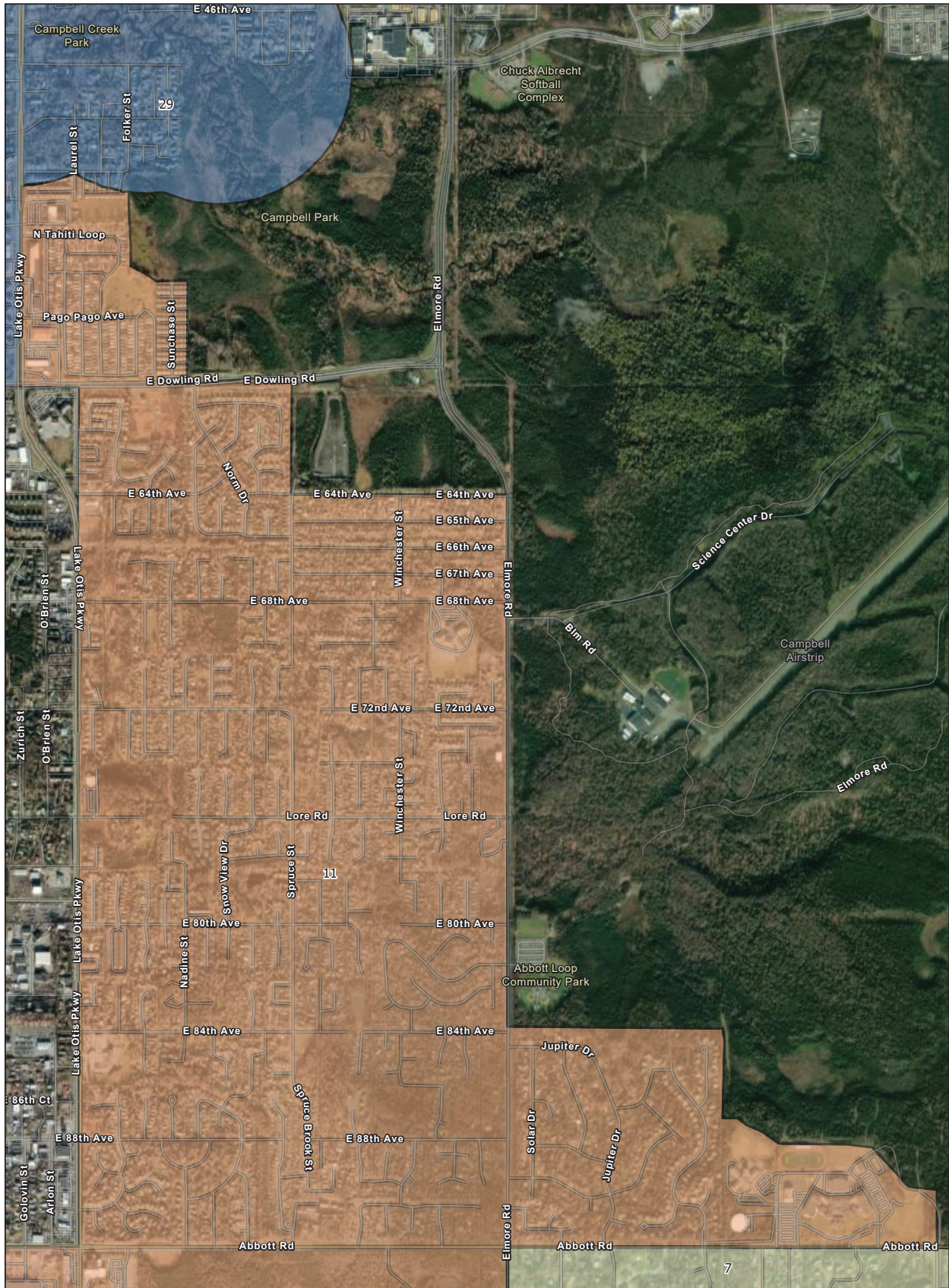
Spacing between homes ranges from less than 10 feet to greater than 50 feet. Heating is provided by electricity, natural gas, and wood stoves. While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Open spaces and parks within the neighborhoods are bordered by dense and overgrown fuels that are linked between neighborhoods, parks, and residences.

This SPU has a heavy concentration of spruce stands spread throughout neighborhoods over generally flat topography. This heavy spruce component and frequent high winds increase the chances of a large, wind-driven wildfire. Although fuels are overgrown and highly susceptible to fire in many areas, house-to-house transmission could potentially be limited to neighborhoods immediately surrounding large spruce stands greater than 40 acres.

Electric utilities are distributed through elevated lines on wooden power poles. This area is scattered with communication infrastructure. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.



# SPU 11: Abbott/Elmore



# Appendix A – SPU Ignitability Analysis

## SPU 11: Abbott/Elmore



The Abbott/Elmore SPU is diverse, containing a mix of residential, commercial, industrial, and parkland areas spread over a generally flat topography. Home and lot sizes vary considerably, with critical infrastructure sites interspersed throughout. High concentrations of hazardous fuels are present, particularly along the SPU's eastern border, which adjoins extensive MOA and BLM-managed wildlands.

The predominant construction type is wood with vinyl siding and ignition resistant roofs. Additionally, there are modular homes that abut to parklands. Many properties feature flammable decks, stairs, and other projections. Spacing between homes is generally 10 to 30 feet, with outbuildings and yard clutter on limited lot space. Heating is provided by electricity, natural gas, and wood stoves.

Few properties maintain defensible space, and compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

This SPU has a heavy concentration of spruce stands spread throughout neighborhoods, including alongside primary roads. This heavy spruce component and frequent high winds increase the chances of a large, wind-driven wildfire. Fuels are overgrown and highly susceptible to fire in many areas, and house-to-house transmission could be difficult to control if such a fire were to occur.

Primary roads are 20-40 feet wide, adequately marked, and bordered by sidewalks in most areas, however neighborhood streets are narrow, winding, often choked with vehicles, and sometimes dead end without adequate space for firefighting apparatus.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.



## SPU 12: Stuckagain





# Appendix A – SPU Ignitability Analysis

## SPU 12: Stuckagain

Low	Moderate	High	Very High	Extreme
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The Stuckagain SPU consists of a single, isolated neighborhood that sits in a convergence of mountain valleys from alpine peaks above and is bordered by steep creek drainages and unmanaged fuels. Homes are generally large and are situated on large lots with adequate spacing between residences. They are built mid-slope in deciduous hardwood stands with stringers of black spruce, along with small, isolated clusters of dead spruce and continuous woody shrub understory. The neighborhood is surrounded by wildland fuels.

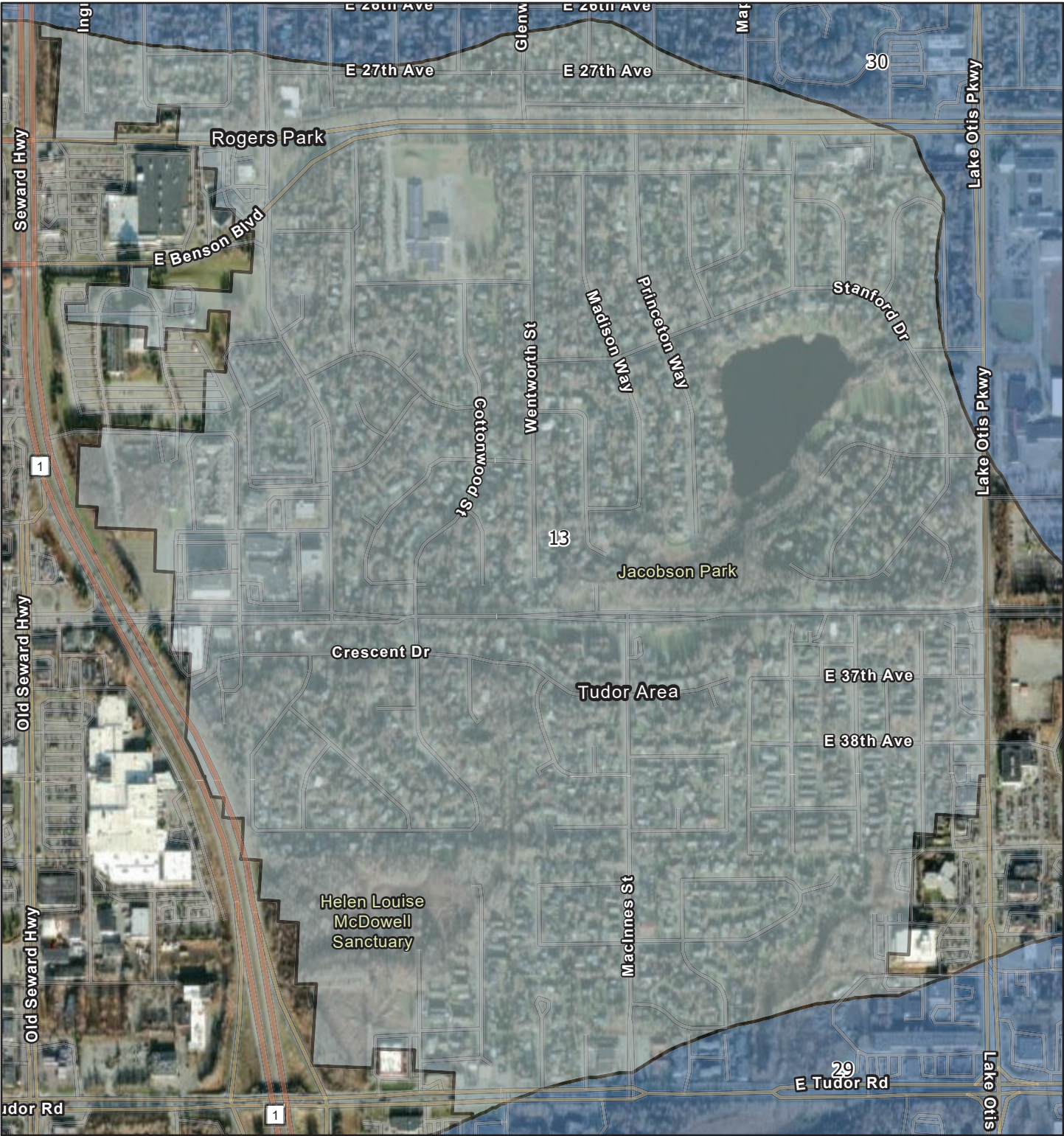
Campbell Airstrip Road provides the only means of access and egress and cuts through dense boreal forest. The road is paved, greater than 40 feet wide, adequately marked, and within a 300-foot-wide shaded fuel break. It runs along the edge of a lowland drainage in very dense fuels and travels mid-slope into more complex topography where the neighborhood is situated. Streets are inadequately marked, and vegetation provides less than five feet of clearance in many areas. Some driveways are long, and some are gated.

Homes date from the 1970s to the present and are well-maintained. Construction type is variable, but mostly wood construction with high-quality materials. Most homes are equipped with ignition resistant roofs; however, a few homes with shake roofs exist. Many properties feature wood decks, stairs, covered patios, and other projections that could serve as receptacles for embers and firebrands.

Heating is provided by electricity, natural gas, and wood stoves. Some properties maintain defensible space, but compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Electric utilities are distributed through elevated lines on wooden power poles and adjacent to dense wildland fuels. There are no fire hydrants in the SPU, so water for firefighting will be delivered by water tenders.

# SPU 13: Lake Otis





## Appendix A – SPU Ignitability Analysis

### SPU 13: Lake Otis



Lake Otis is a collection of small, tightly packed neighborhoods situated amongst hardwoods and spruce trees. Large pockets of black spruce are found in multiple parks. Industrial development and critical infrastructure are woven amongst the neighborhoods.

Access throughout the entire SPU is 20-40 feet wide, adequately marked, and paved. Secondary streets are narrow and often choked with vehicles and sometimes dead end without adequate space for firefighting apparatus.

Housing consists of 1980s to 1990s era single-family homes. The predominant construction type is wood with vinyl siding and mostly ignition resistant roofs, with shake roofs interspersed throughout. Many properties feature flammable decks, stairs, and other projections.

Spacing between homes is generally 20 to 30 feet. Heating is provided by electricity, natural gas, and wood stoves. While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

# SPU 14: Turnagain





# Appendix A – SPU Ignitability Analysis

## SPU 14: Turnagain



The Turnagain SPU contains a collection of densely packed suburban neighborhoods. The area hosts schools, churches, sports complexes, and commercial areas that break up the landscape and presence of fuels. The SPU is bordered by the Ted Stevens International Airport to the south and west, the shoreline of the Knik Arm to the north, and Minnesota Drive to the east.

Roads leading to and throughout the SPU are 20-40 feet wide, paved, and adequately marked. They are mostly clear of vegetation, with greater than five feet of clearance from the roadway. Many streets dead end in cul-de-sacs. Homes range in age between the 1950s to present and are mostly single-family. The predominant construction type is wood with vinyl siding and ignition resistant roofs. Many properties feature flammable decks, stairs, and other projections.

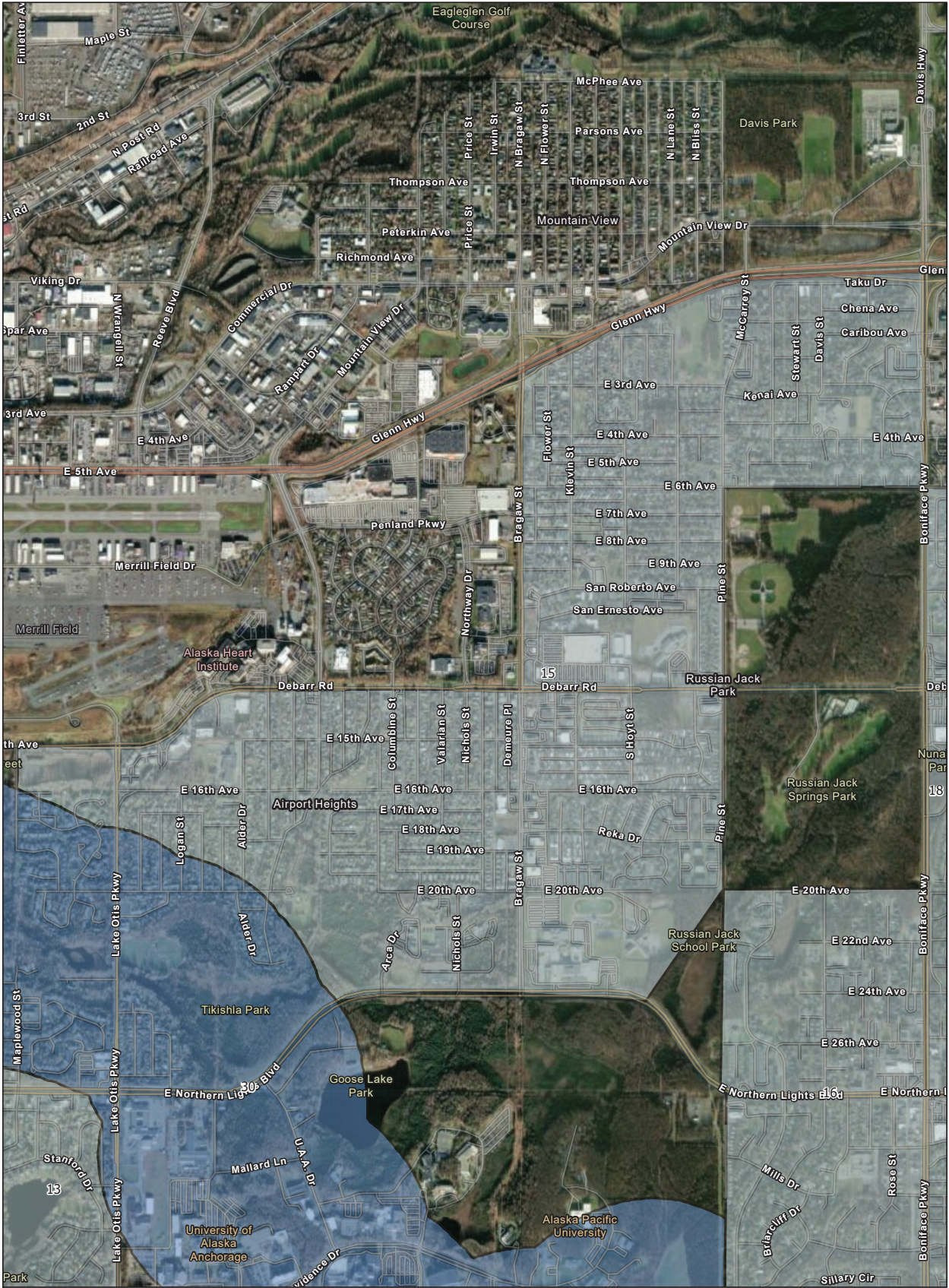
Spacing between homes is generally less than 30 feet. Heating is provided by electricity, natural gas, and wood stoves. While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Fuels adjacent to primary roads are mixed hardwood canopy and non-native ornamental vegetation.

The northwest corner of the SPU is adjacent to the Kincaid / TSAIA ASI. This represents the most significant concern for the Turnagain SPU, as it borders an area with substantially higher hazardous fuel loading and elevated fire spread potential. Vegetation within the SPU consists mainly of low-density hardwoods with isolated pockets of black spruce. While some dead spruce have been removed along primary access routes, small clusters remain near some homes. The SPU is prone to high-wind conditions which can rapidly influence fire behavior and direction.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

Railroad tracks run through the eastern side of the SPU, which contains areas of dense and overgrown fuels that could present ignition hazards.

SPU 15: Merrill





## Appendix A – SPU Ignitability Analysis

### SPU 15: Merrill



Residences in the Merrill SPU are mostly surrounded by built urban environment and consist of a variable range of densely packed single-family homes. Large schools, commercial districts and industrial complexes. The SPU is bordered by open expanses of continuous fuels with large clusters of black spruce to the south and east.

Wildfire ignitions in this area have been linked to illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels. This location is a known congregation point for transient individuals, resulting in ongoing public safety concerns and an elevated ignition risk requiring continued monitoring and enforcement presence.

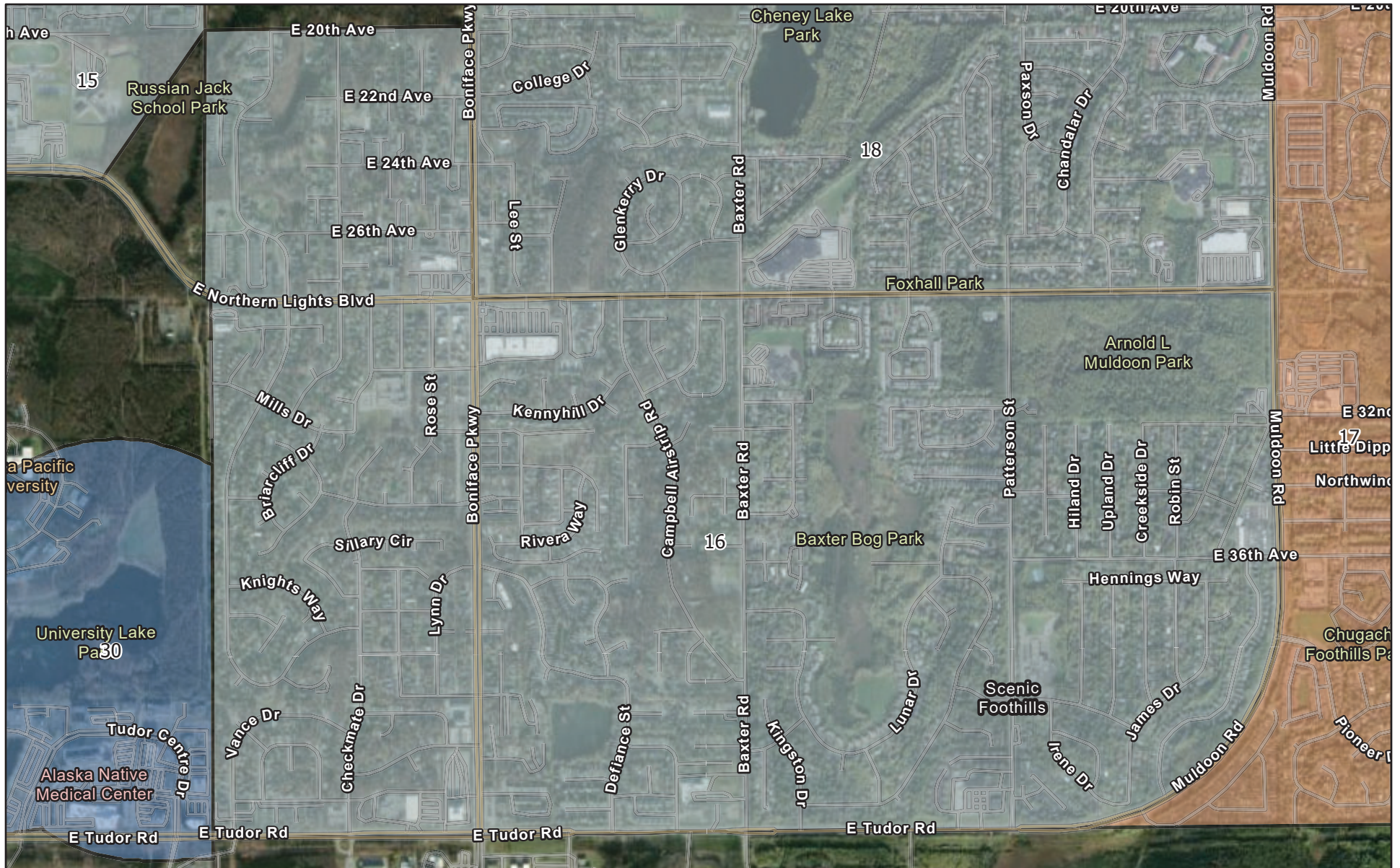
Housing consists of single-family and multifamily homes constructed mostly from the 1960s through the 1990s. The predominant construction type is wood with vinyl siding and ignition resistant roofs. Many properties feature flammable decks, stairs, and other projections. Spacing between homes is generally less than 30 feet, increasing the risk of house-to-house ignition. Heating is provided by electricity, natural gas, and wood stoves.

Few properties maintain defensible space and compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Fuels adjacent to primary roads are mixed hardwood canopy and non-native ornamental vegetation.

Primary access roads and streets are 20–40 feet wide, paved, adequately marked, and mostly clear of vegetation five feet from the road. Side streets, however, can be narrow through individual neighborhoods and choked with vehicles, which could complicate emergency response.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

# SPU 16: Baxter





# Appendix A – SPU Ignitability Analysis

## SPU 16: Baxter



The Baxter SPU is host to a combination of high-density suburban neighborhoods and small commercial areas. The area is surrounded by and includes broad stretches of continuous fuels interspersed with dense stands of black spruce. An electric transmission line corridor managed by Chugach Electric Association (CEA) is situated along the southern boundary and acts as a fuel break between hazardous fuels and residential areas.

Wildfire ignitions in this area have been linked to illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels. This location is a known congregation point for transient individuals, resulting in ongoing public safety concerns and an elevated ignition risk requiring continued monitoring and enforcement presence.

Access to and through the SPU via Tudor Road, Boniface Parkway and Baxter Road are wide, paved, adequately marked, and clear of vegetation. Fuels adjacent to primary roads are mixed hardwood canopy and non-native ornamental vegetation. Side streets, however, can be narrow through individual neighborhoods and choked with vehicles.

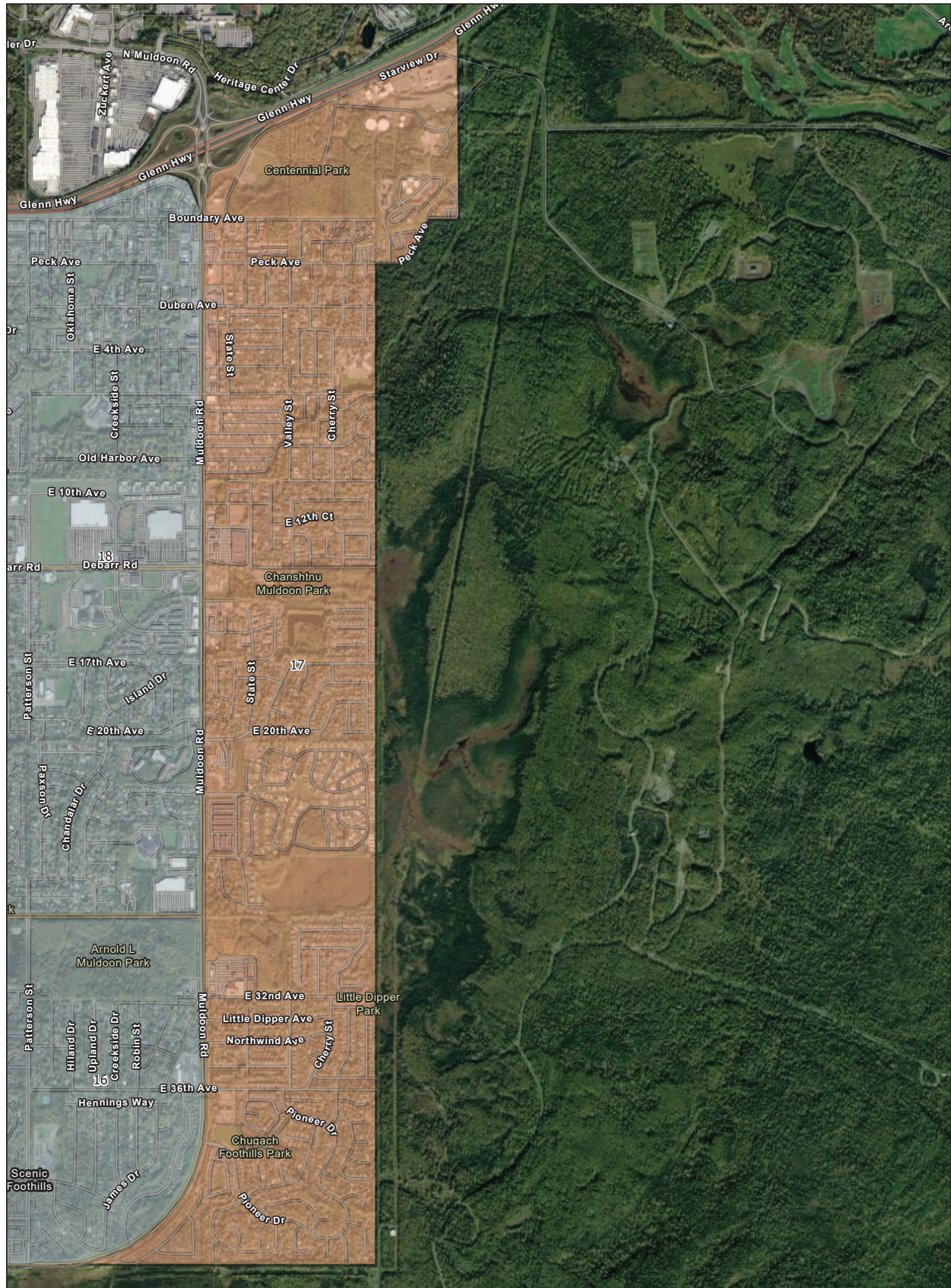
A diverse mix of residential types, ranging from multi-family condominiums to single-family homes were built mostly through the early 1970s to the 2000s. The predominant construction type is wood with vinyl siding and ignition resistant roofs. Many properties feature flammable decks, stairs, and other projections. Spacing between homes is generally less than 15 feet, contributing to high potential for structure-to-structure ignition. Heating is provided by electricity and natural gas.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

This community has a moderate concentration of spruce stands spread throughout neighborhoods over a generally flat topography. This spruce component and semi-frequent high winds increase the chances of a large, wind-driven wildfire. Fuels are overgrown and highly susceptible to fire in many areas, and house-to-house transmission could be difficult to control if such a fire were to occur.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

# SPU 17: East Muldoon





# Appendix A – SPU Ignitability Analysis

## SPU 17: East Muldoon



The East Muldoon SPU is a strip of tightly packed, primarily residential, neighborhoods and is surrounded by dense stands of hazardous fuels on three sides. The SPU also features some lowland, marshy and wet areas. Positioned at the base of mountainous foothills, the SPU's topography is generally flat and sits in the transition between wildland vegetation and built urban environment. Most homes are within 3,000 feet of hazardous fuels where pre-heating, radiant heat, and energy release of an oncoming wildfire could be most extreme.

The JBER ASI borders the East Muldoon SPU, where warfighter training and munitions use increase the likelihood of fire ignition. Suppression operations can be challenging due to access limitations and active range constraints. In addition, wildfire starts in the SPU have been associated with illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels.

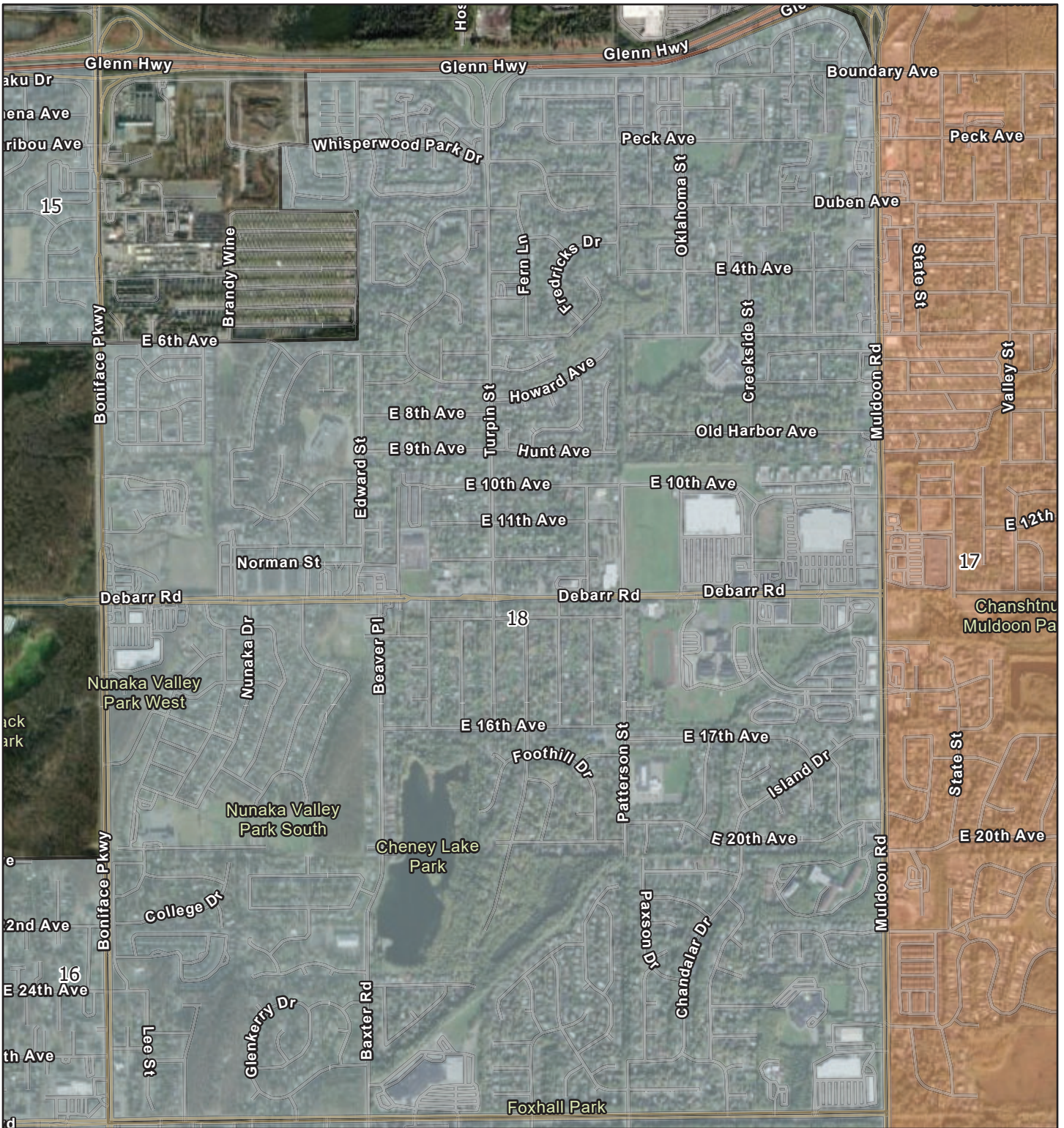
Primary access roads and streets are 20–40 feet wide, paved, adequately marked, and mostly clear of vegetation. The primary means of egress from all neighborhoods, Muldoon Road, is along the SPU's western border. Residential streets can be narrow and sometimes crowded with vehicles, which could complicate evacuation.

A diverse mix of residential types, ranging from multi-family condominiums to single-family homes, were built mostly in the 1970s. This SPU also features assisted living areas that may require additional consideration during an evacuation. The predominant construction type is wood with vinyl siding and mostly ignition resistant roofs. Many properties feature flammable decks, stairs, and other projections. Spacing between homes is generally less than 15 feet, raising concern for structure-to-structure ignition. Heating is provided by electricity and natural gas.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

# SPU 18: West Muldoon





# Appendix A – SPU Ignitability Analysis

## SPU 18: West Muldoon



The West Muldoon SPU is a well-established area with dense residential neighborhoods, large shopping areas, commercial districts, and critical infrastructure. The SPU is mostly urban and buffered from wildland fuels except for Russian Jack Springs Park to the west. The area is generally flat but positioned at the base of mountainous foothills and in alignment with larger topographical features and waterways that may influence fire behavior.

Wildfire ignitions in this area have been linked to illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels. Multiple locations in this SPU are known congregation points for transient individuals, resulting in ongoing public safety concerns and an elevated ignition risk requiring continued monitoring and enforcement presence.

Access to and through the SPU via Glenn Highway, Muldoon Road, and Northern Lights Boulevard are wide, paved, adequately marked, and clear of vegetation with more than five feet of clearance from the road. Certain sections of Boniface Parkway are adjacent to heavy and continuous fuels; however, the roadway itself is two lanes in each direction with an 8–10 foot median, sidewalks, and brush management 15 feet or more in some places. Neighborhood streets, however, can be narrow and crowded with vehicles, which could complicate evacuation.

A diverse mix of residential types, ranging from multi-family condominiums to single-family homes were built from the 1950s to the present. Construction type is variable throughout the SPU with materials ranging from river rock and large-log to wood with vinyl siding, and mostly ignition resistant roofs. This SPU features assisted living areas that may require additional considerations during an evacuation. Many properties feature flammable decks, stairs, fences, and other projections. Spacing between homes is generally less than 15 feet, elevating structure-to-structure ignition risk. Heating is provided by electricity, natural gas, and wood stoves.

This community has some concentrated spruce stands spread throughout neighborhoods. While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

## SPU 19: Rainbow





# Appendix A – SPU Ignitability Analysis

## SPU 19: Rainbow

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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The Rainbow SPU along Turnagain Arm includes the Bird and Indian communities and is comprised of residences, small businesses, and campgrounds. While the nearby Rainbow residential area is referenced in the SPU name, those homes are not included within the mapped boundary because they do not meet the exposure value threshold criteria. The name is retained to ensure the area remains recognized in planning efforts.

The SPU falls outside the fire service area, with pockets of the area experiencing unreliable radio and cellular communications.

Residences are built along the lower hillsides and valley bottom. Their age varies widely, dating back to the 1950's through the present. Construction type is variable, as well, with materials ranging from river rock and large-log to wood with vinyl siding. Most roofs are ignition resistant. Many properties feature flammable decks, stairs, fences, and other projections. Space between homes is generally more than 50 feet, though some properties include outbuildings and sheds. Heating is provided by wood stoves, electricity, and some off-grid systems. Road and address markers are sometimes situated in or directly adjacent to overgrown brush and are difficult to locate.

Only a few properties maintain defensible space, and compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

The only means of egress from these communities is the Seward Highway. During peak tourism, and when impingements such as rockslides and vehicle accidents occur, this two-lane highway can halt to a standstill. Previous wildfire incidents have demonstrated logistical challenges for evacuation, fire suppression access, and full closure of this heavily traveled road.

Vegetation within the SPU consists of heavy concentrations of spruce periodically intermixed with mixed hardwoods. High winds are prevalent and unpredictable. Additionally, the campgrounds in the SPU, when combined with vegetation and winds, increase the risk for a catastrophic, wind-driven wildfire.

Electric utilities are distributed through elevated lines on wooden power poles. Transmission line clearance has been increased to 50 feet from centerline to account for fuel conditions and the risk of them striking the lines.

The Rainbow SPU is not equipped with hydrants. Some privately maintained water systems exist; however, responding fire resources may not be able to access them. Water for firefighting will be delivered by water tenders.

SPU 20: Girdwood





# Appendix A – SPU Ignitability Analysis

## SPU 20: Girdwood

Low	Moderate	High	Very High	Extreme
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Girdwood is a dynamic mountain resort community located in the temperate rainforest zone near the southern end of Turnagain Arm. While the historic Crow Creek Mine area is referenced in planning discussions, it is not included within the mapped boundary due to its lower exposure value and separation from dense residential development. The SPU is in a complex mountain zone that acts as a “catcher’s mitt” for weather flowing off the Turnagain Arm. The meeting of shoreline and forest at the community’s entrance creates conditions where cool, damp, and overcast weather dominate, though small changes in this sensitive environment could have detrimental wildfire effects.

Utilities and infrastructure continue to be in development and have not kept pace with new construction. Year-round populations rely on limited water, hydrants, waste, and emergency services. Hydrants are limited to the townsite nearest to the Alyeska Resort and are not found along the Alyeska Highway. The resort’s hotel maintains a private hydrant system and reserve cistern. Fire response is performed primarily by Girdwood Fire and Rescue. A large airfield bordering Glacier Creek exists in northern part of this SPU.

The SPU contains a mix of single- and multi-family residences built in the 1980’s with many being remodeled or rebuilt. Additionally, commercial development is present throughout the community. Some homes constructed within the past five years feature flame-resistant materials, but most homes are of wood-frame construction with wood siding. Roofing materials are shake or ignition resistant. Spacing between homes ranges from less than 15 feet to over 30 feet. Many properties include sheds, wood piles, and other outbuildings that increase the likelihood of ignition from ember cast. Heating sources are wood stoves, electricity, and off-grid systems.

While a few properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

The entrance to the SPU along Alyeska Highway is lined with neighborhoods accessed via narrow, unpaved driveways. Primary roads are 20-40 feet wide and adequately marked; however, secondary streets are narrow, winding, often choked with vehicles, and sometimes dead end without adequate space for firefighting apparatus. Some secondary streets are unpaved, and road and address markers are often obscured by vegetation or difficult to see. Many secondary roads, such as Hottentot Mine Road and Jewel Mine Road, are surrounded by dense fuels in varying states of health. Road conditions vary seasonally with “mud season”

## Appendix A – SPU Ignitability Analysis

creating additional hazards during spring melt. Finally, Crow Creek Road is heavily lined with hazardous fuels and equipment, creating potential obstacles for access and egress.

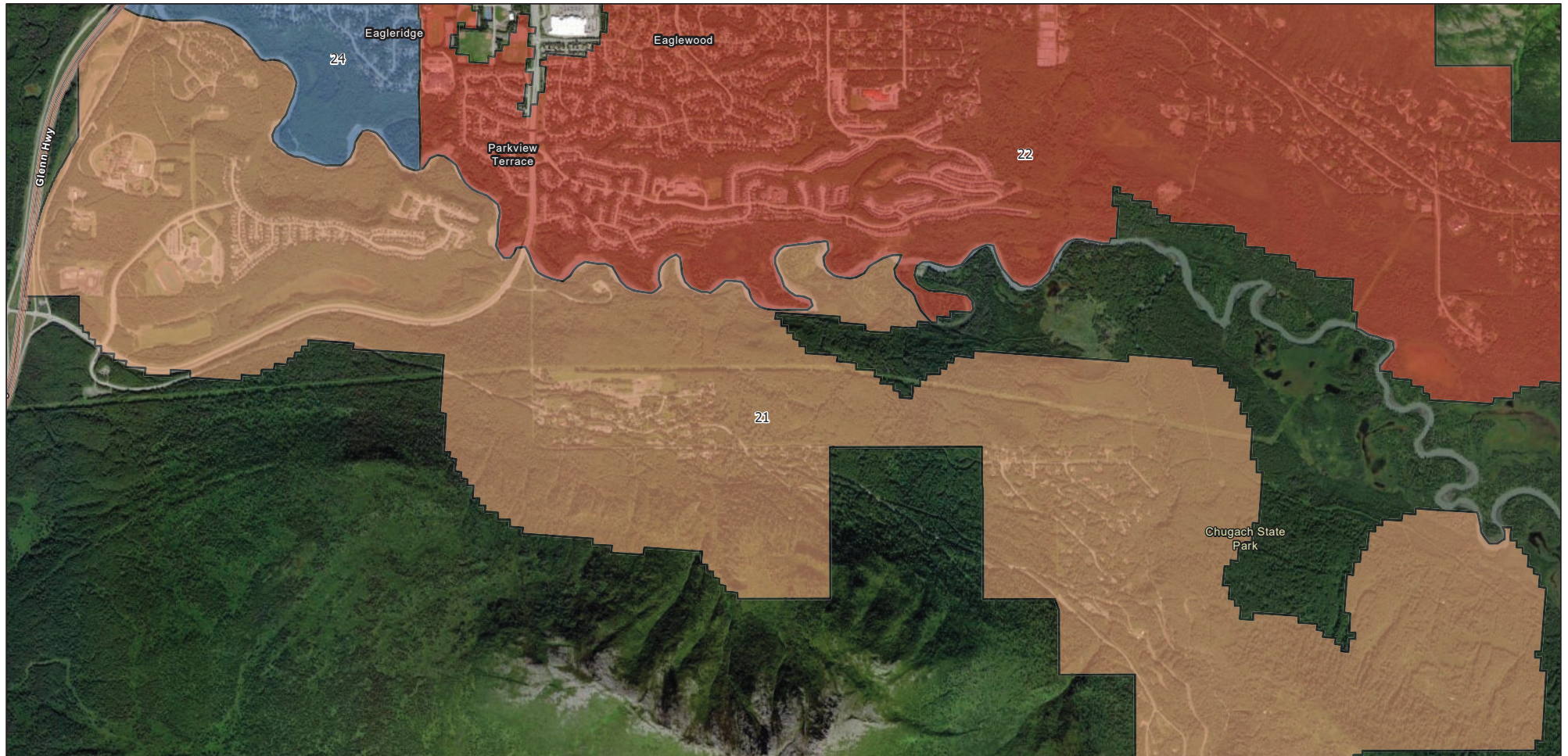
Many residential areas are entirely surrounded by wildland fuels. Open spaces and parks are bordered by dense and overgrown vegetation that creates fuel continuity between homes, parks, and commercial construction. A large component of fuels is in decline, with patches of spruce covering significant portions of the landscape. Fir and hemlock also dominate the area, along with continuous woody-herbaceous understory. Development is encroaching on sensitive borders, increasing wildfire vulnerability.

Girdwood sees a large number of local and international visitors each year, with events bringing in up to 8,000 visitors over single weekends. This has the potential to overwhelm resources, such as water, waste, and emergency services. Visitors are not often educated on wildfire risk; they light campfires, sometimes abandoning them, even on high fire danger days. They also commonly use fireworks, which are illegal year-round. Parked vehicles create access and egress challenges. Evacuations are challenging due to limited means of transportation, as visitors often arrive via trains and buses. Additionally, the international tourism market results in the high potential of some visitors not understanding English or evacuation procedures.

Railroad tracks run through the mouth of the valley at the community's entrance, creating an additional ignition source.

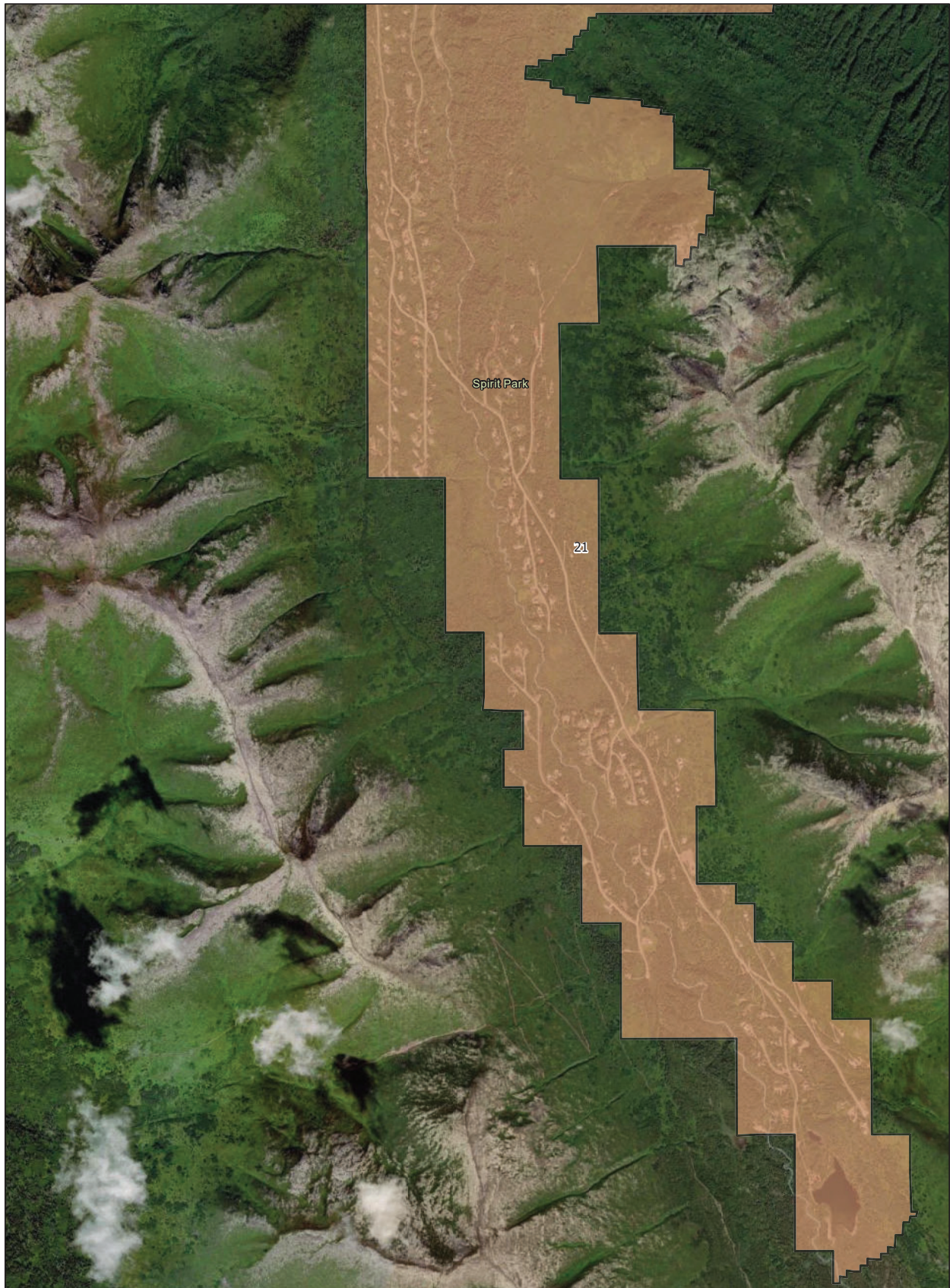


## SPU 21: Hiland Map 1 of 2





# SPU 21: Hiland Map 1 of 2





# Appendix A – SPU Ignitability Analysis

## SPU 21: Hiland

Low	Moderate	High	Very High	Extreme
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The Hiland SPU is part of the narrow glacial drainage of South Fork Eagle River and consists of residences situated in medium- to low-density clusters on medium-sized lots. Hiland Road is the only means for access and egress. It is eight miles long, greater than 20 feet wide, paved, adequately marked, and mostly clear of overhanging and encroaching vegetation. Side road markers are sometimes situated in or directly adjacent to overgrown brush and are difficult to locate. Address markers are variably placed and displayed. Homes are situated mid-slope in transition between mixed hardwood and spruce, or in riparian areas with continuous woody-shrubs growing taller than eight feet in some areas. Roads traverse through mostly riparian and mixed hardwood; downslope contains a heavy concentration of spruce.

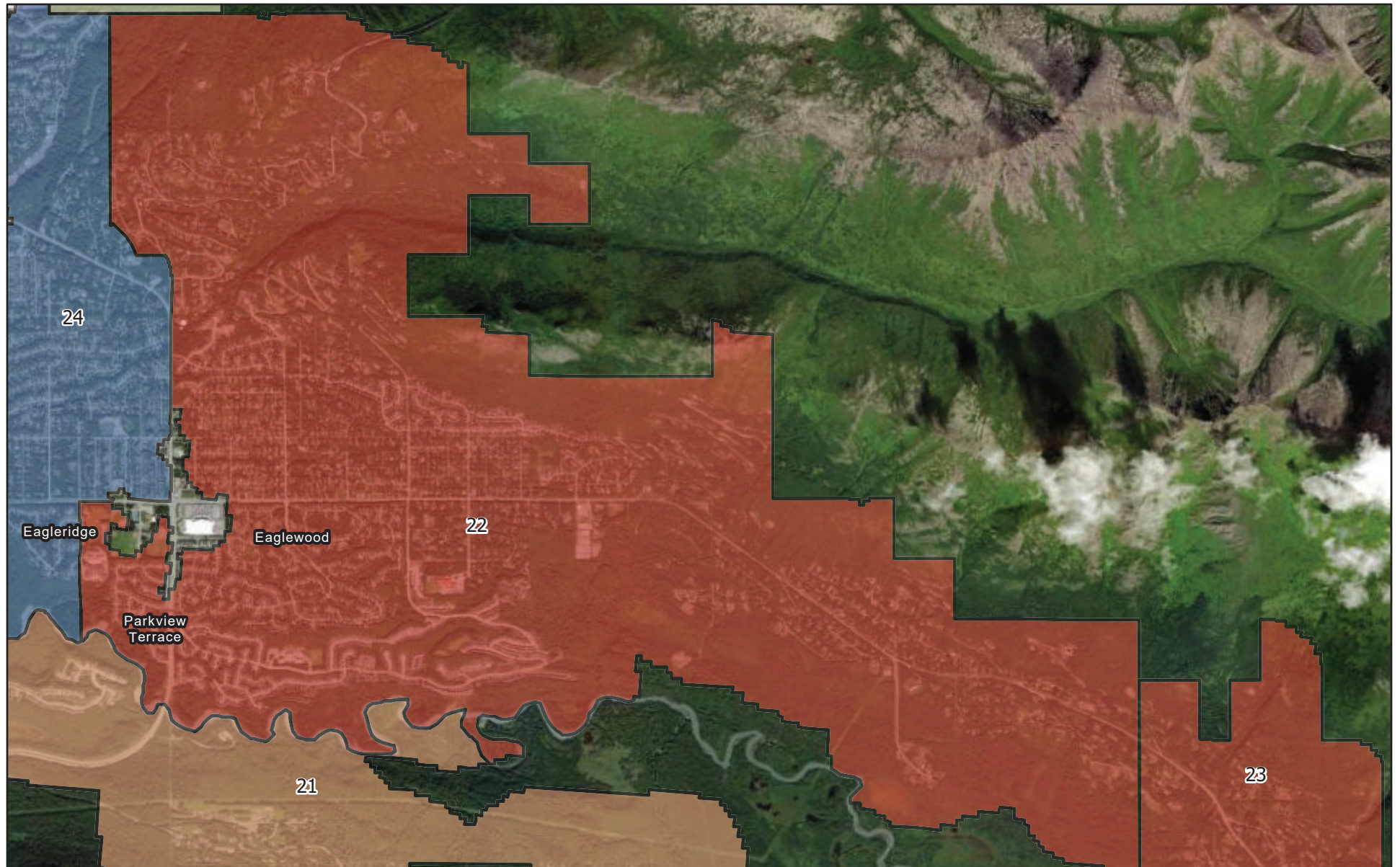
Residential development began in the 1970s and extends to the present. Homes are predominantly wood-frame construction with ignition resistant roofs. Some properties at the north end of the SPU are in various states of maintenance and contain overgrown brush and hazardous debris within the HIZ. Residences up-drainage are generally well-constructed and well maintained. Many properties feature flammable decks, stairs, fences, and other projections. Spacing between homes is generally greater than 50 feet. Heating is provided by electricity and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Dense boreal forest covers some of the SPU, with heavy concentrations of spruce stands distributed throughout. This heavy spruce component and frequent, multidirectional high winds through the narrow valley increase the chances of a large, wind-driven wildfire.

Electric utilities are distributed through elevated lines on wooden power poles. This SPU is within the fire response area; however, it does not feature any hydrants for firefighting. Water for fire suppression will be delivered via water tenders.

## SPU 22: Lower Eagle River





# Appendix A – SPU Ignitability Analysis

## SPU 22: Lower Eagle River

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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The Lower Eagle River SPU is situated at the intersection of the Eagle River Valley and the Meadow Creek Drainage. The SPU features schools, churches, sports complexes, and a large shopping center. Residences and lots vary in size, and construction eras range from the 1970s to the present. Access to and through the SPU via Eagle River Road and Eagle River Loop Road are wide, well-paved, adequately marked, and clear of vegetation. Secondary roads and streets in the urbanized portion of the SPU are constructed in a grid-like pattern or in large non-concentric loops, with very few actual dead-ends. However, many other roads in the SPU are steep and narrow, with hairpin turns. Unlike the neighboring Upper Eagle River SPU, this SPU is fully within the fire service area.

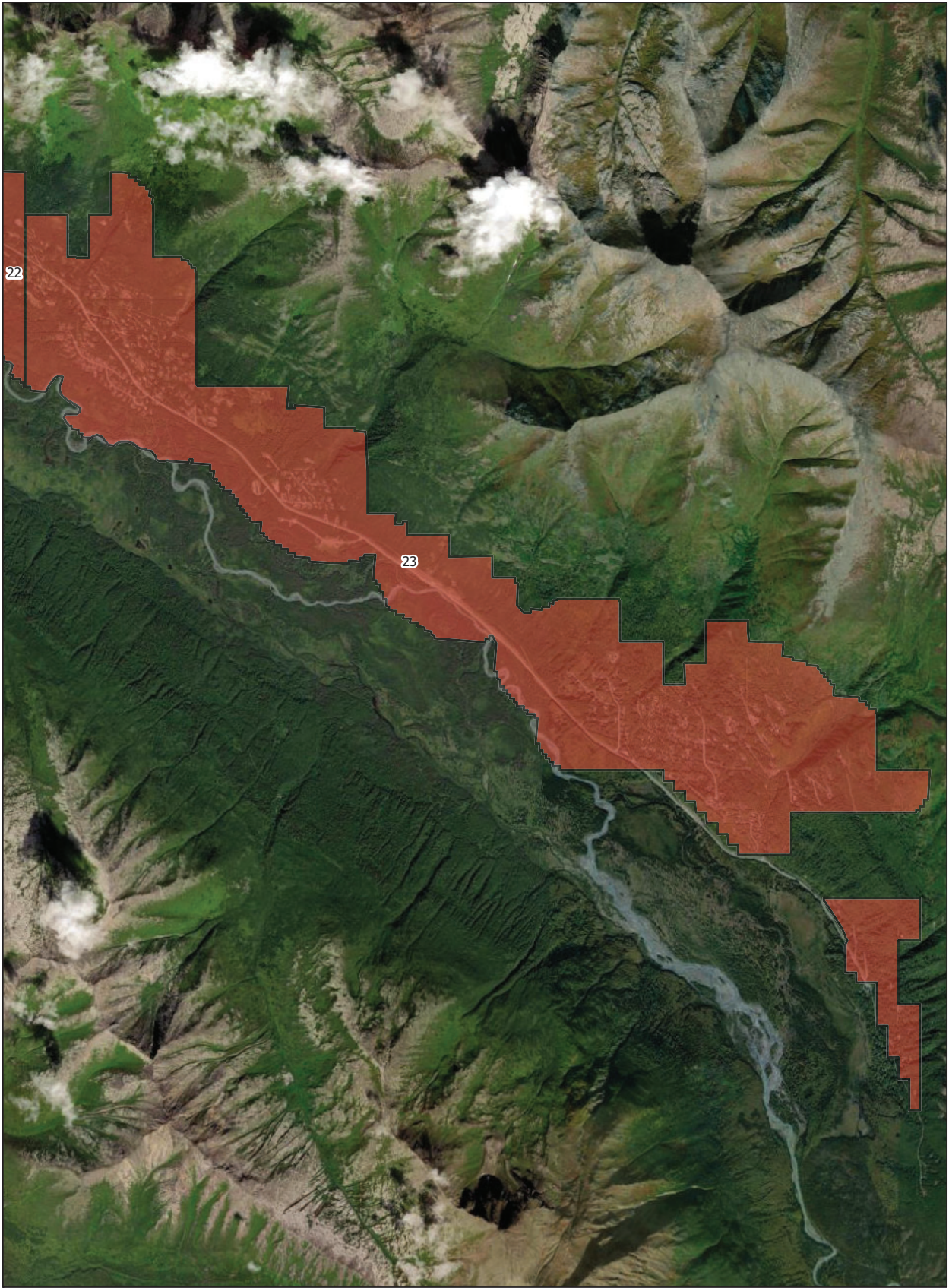
The predominant construction type is wood frame with ignition resistant roofs. Many properties feature flammable decks, stairs, fences, and other projections. Structural spacing ranges from less than 15 feet to more than 50 feet. Heating is provided by electricity, natural gas, and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

The SPU hosts a heavy concentration of spruce along low-lying and marshy riparian areas in the drainage bottoms, and on north-facing creeks and riverbanks. Otherwise, fuels exhibit a combination of mixed-hardwood and deciduous stands with isolated patches of black spruce, transitioning to tundra at higher elevations on the valley walls. Due to the terrain, wind speed and direction are highly variable and funneled by multiple inputs, complicating fire spread prediction.

Electric utilities are distributed through elevated lines on wooden power poles. Hydrants are not available in all locations of the SPU and do not extend up Eagle River Road past Eagle River Lane. In areas without hydrants, water for firefighting will be delivered by water tenders.

SPU 23: Upper Eagle River





# Appendix A – SPU Ignitability Analysis

## SPU 23: Upper Eagle River

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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The Upper Eagle River SPU begins at the end of the fire service area and extends seven miles up the valley to the Eagle River Nature Center. It consists of residences grouped in medium to moderate density clusters ranging from the valley floor to mid hillside.

Eagle River Road is the only means of access and egress, and travels through dense concentrations of spruce and mixed hardwoods.

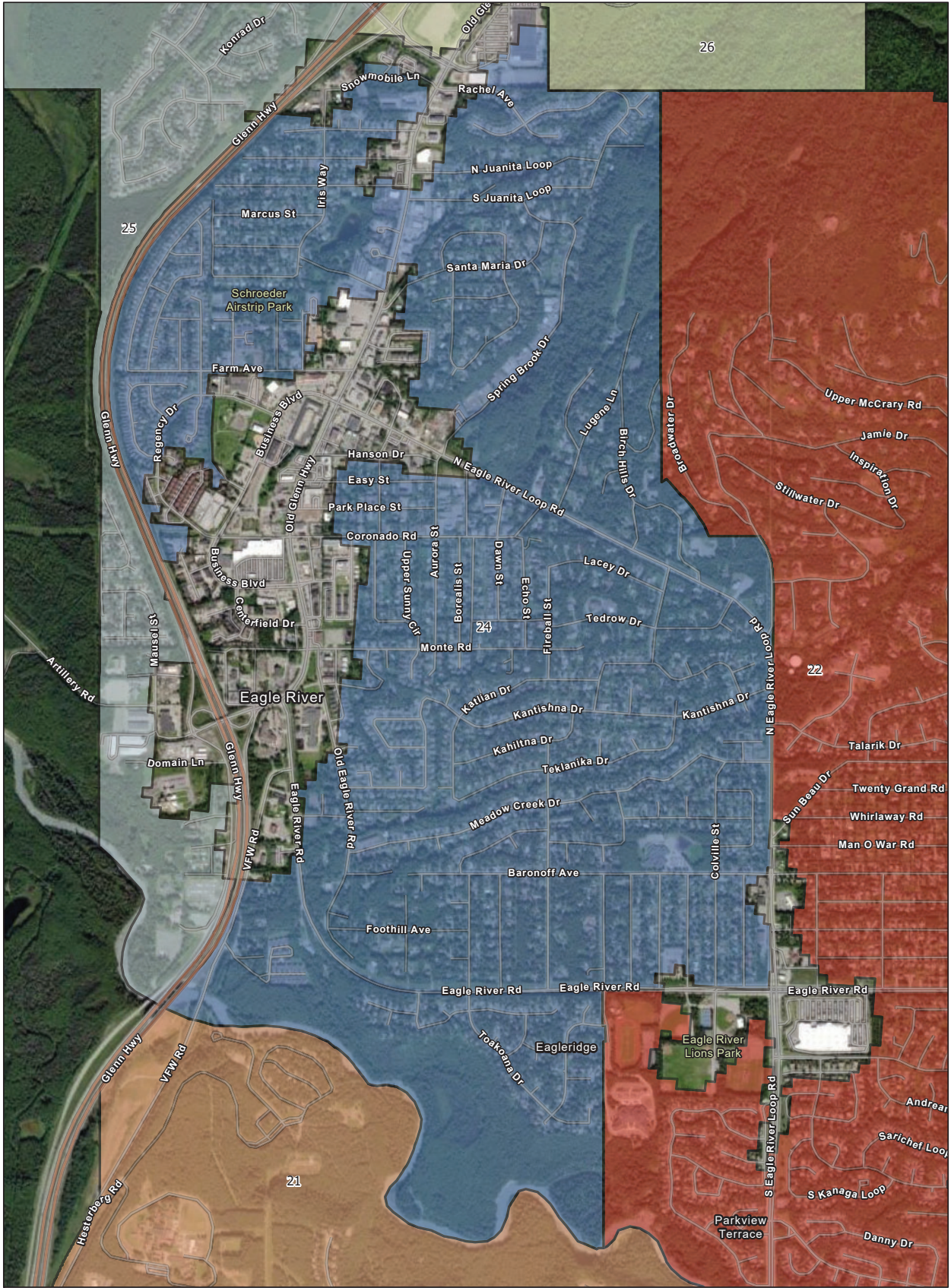
Residential development dates from the 1970s to the present. Comprised of mostly single-family residences, the predominant construction type is wood frame with ignition resistant roofs. Many properties feature flammable decks, stairs, fences, and other projections. Structural spacing is greater than 50 feet in some areas. Heating is provided by electricity, gas (including natural gas tanks), and wood stoves.

Only a few properties maintain defensible space, and compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

This SPU has a heavy concentration of spruce stands, interspersed with mixed hardwoods and lowland spruce marshes, form a continuous and highly flammable fuel bed across much of the landscape. The SPU is situated within a broad glacial valley where converging ridges and drainages funnel shifting winds, resulting in highly variable wind speed and direction that make fire behavior and direction of spread difficult to predict.

Many roads in the SPU are steep and narrow, and road and address markers are sometimes situated in or directly adjacent to overgrown brush. Electric utilities are distributed through elevated lines on wooden power poles. This SPU is not equipped with hydrants, so water for firefighting will be delivered by water tenders.

## SPU 24: Eagle River Loop





## Appendix A – SPU Ignitability Analysis

### SPU 24: Eagle River Loop



The Eagle River Loop SPU is a collection of moderate-density residential neighborhoods situated east of the Glenn Highway and mostly within the urban and commercial center of Eagle River.

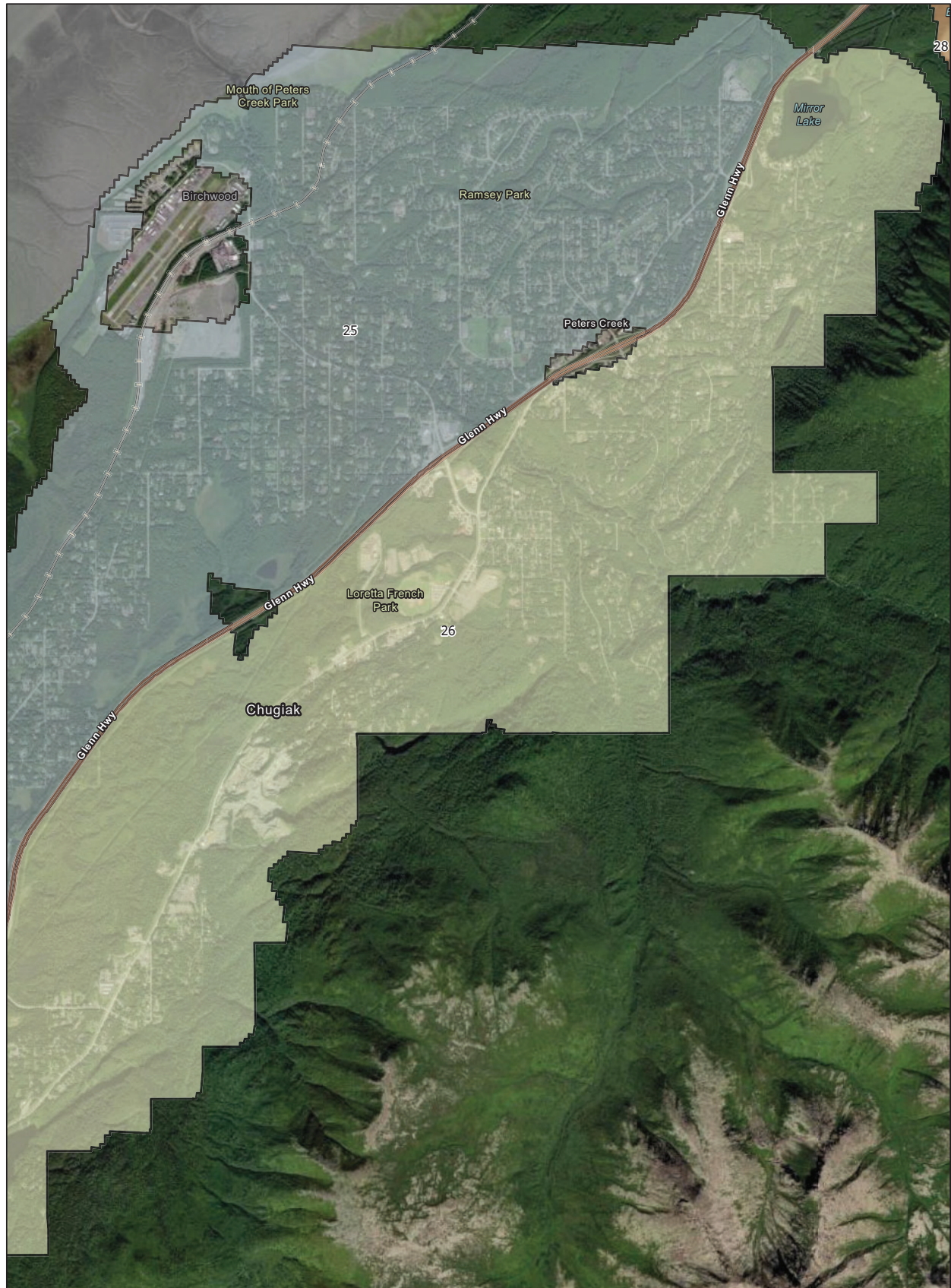
Primary access to neighborhoods is wide, paved, adequately marked, and clear of vegetation with more than five feet of clearance from the road. Residential development began in the 1970's and continues today. It consists mostly of midsize single-family homes. The predominant construction type is wood frame with ignition resistant roofs. Many properties feature flammable decks, stairs, fences, and other projections. Structural spacing ranges from less than 15 feet to more than 50 feet. Heating is provided by electricity, natural gas, and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

This SPU has a heavy concentration of spruce along low-lying and marshy riparian areas. Otherwise, fuels exhibit a combination of mixed-hardwood and deciduous stands with isolated patches of black spruce.

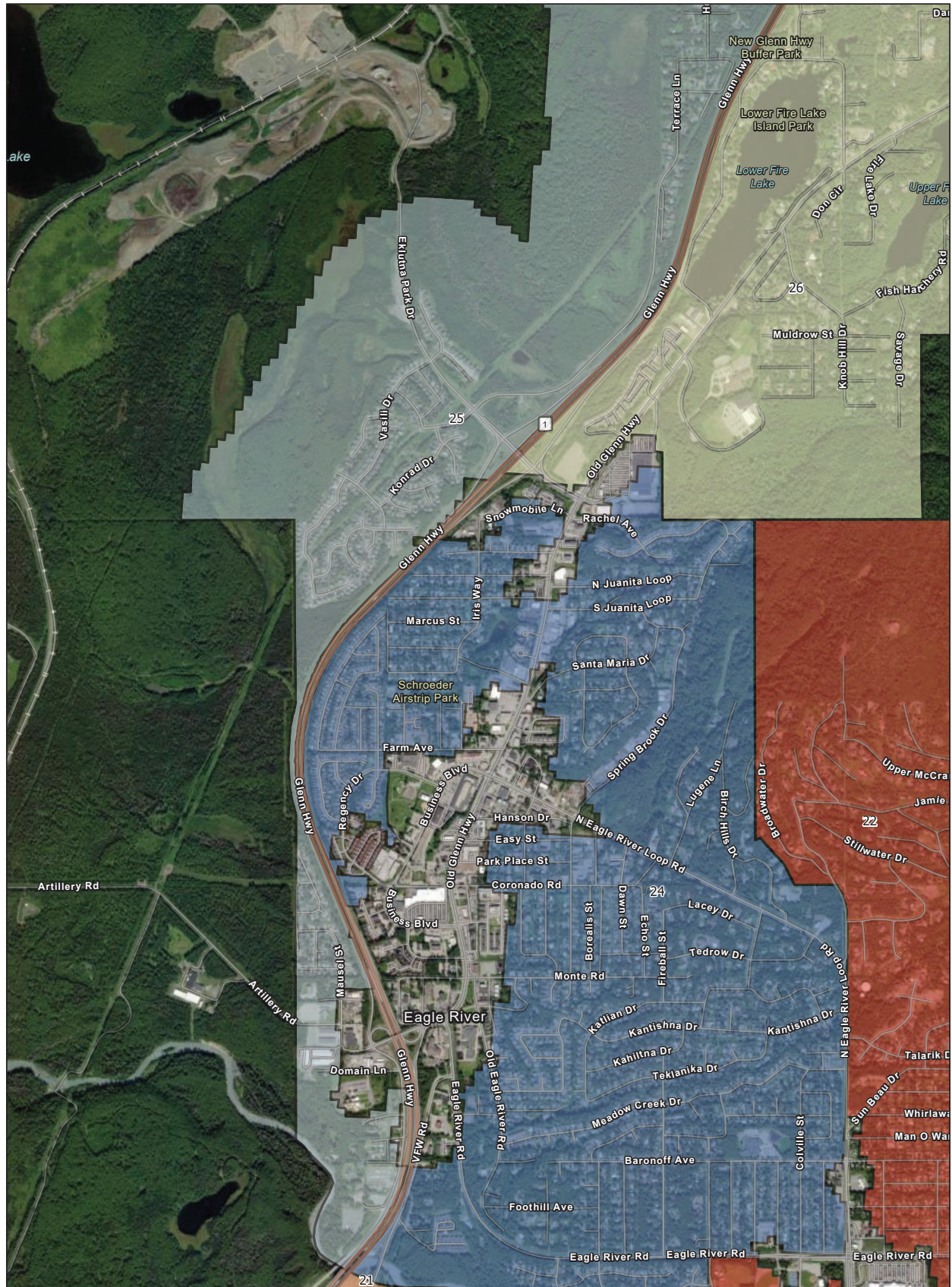
Electric utilities are distributed through elevated lines on wooden power poles. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

# SPU 25 & 26: East & West Chugiak Map 1





# SPU 25 & 26: East & West Chugiak Map 2



# Appendix A – SPU Ignitability Analysis

## SPU 25: West Chugiak



The West Chugiak SPU is a moderately dense residential area located on the western side of the Glenn Highway. The area is characterized by suburban-style neighborhoods interspersed with small commercial parcels and community amenities. Fuels and vegetation transition quickly from residential landscaping to boreal forest and shrub-dominated fuel in surrounding undeveloped tracts, producing mixed wildfire risk .

Primary access to the community is via paved arterial roads that connect to the Glenn Highway and local road systems. Many roads are inadequately marked. They are generally clear of vegetation within five feet of the roadway, though smaller residential streets may be narrow and crowded with parked vehicles.

Residential development is primarily single-family homes built from the 1960s, with pockets of newer construction. The predominant construction type is wood with vinyl siding and ignition resistant roofs. Many properties feature flammable decks, stairs, fences, and projections. Structural spacing varies but averages between 20 and 50 feet, with some neighborhoods exhibiting tighter layouts. Heating is provided by electricity, natural gas, and wood stoves.

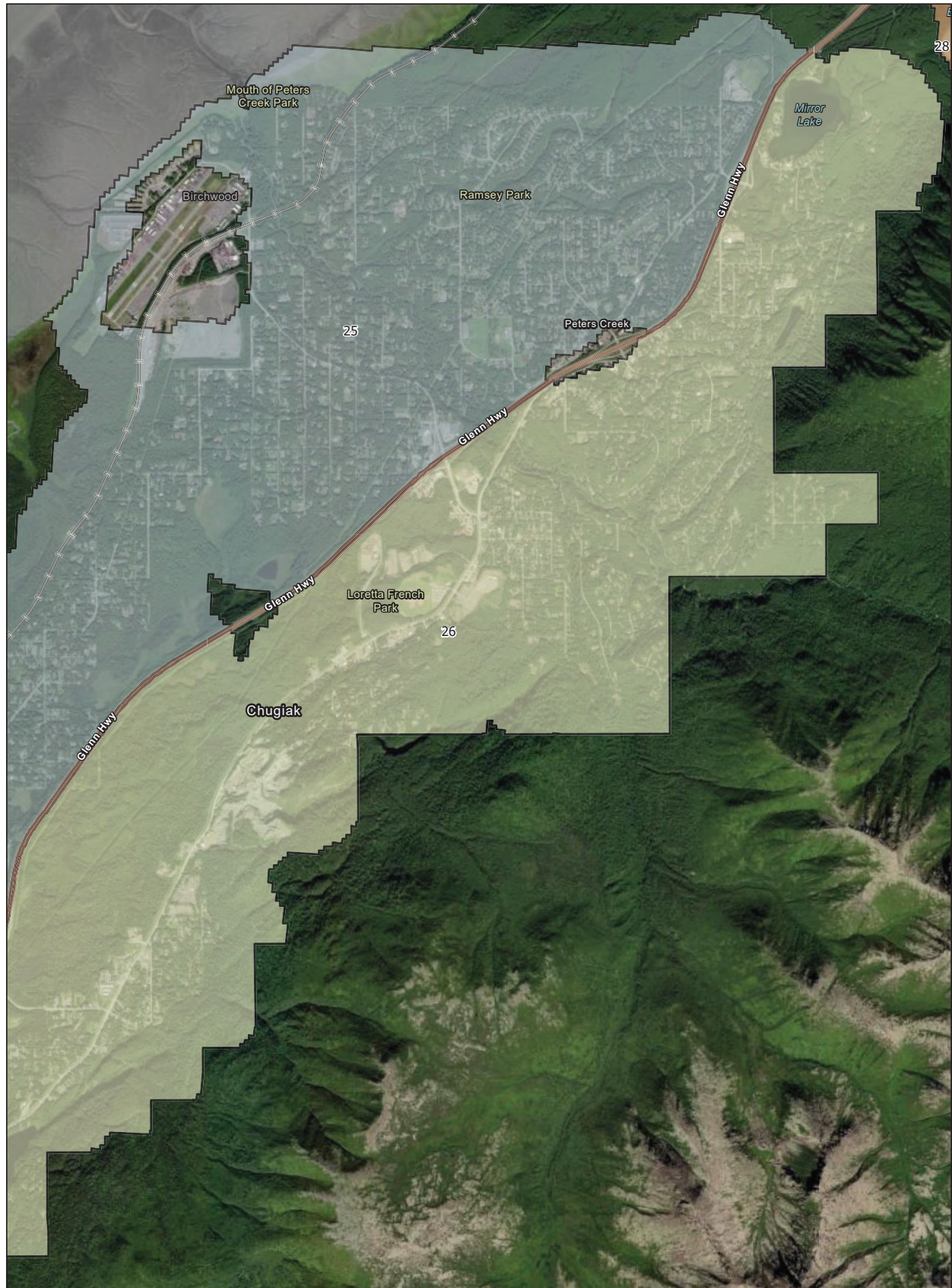
Only a few properties maintain defensible space, and compliance is limited in some cases due to the presence of hazardous fuels on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

The surrounding vegetative fuel types are dominated by boreal forest interspersed with hardwoods and woody shrub understory. In certain neighborhoods, dense black spruce patches remain in lowland marshy areas and adjacent tracts. Topography is generally flat to rolling, but alignments with valleys and waterways can create fire spread pathways under the right wind conditions.

Electric utilities are distributed through elevated lines on wooden poles, often adjacent to dense fuels. Very few hydrants, serviced by AWWU, are available in the northernmost segment of this SPU. In areas without hydrants, water for firefighting will be delivered by water tenders.

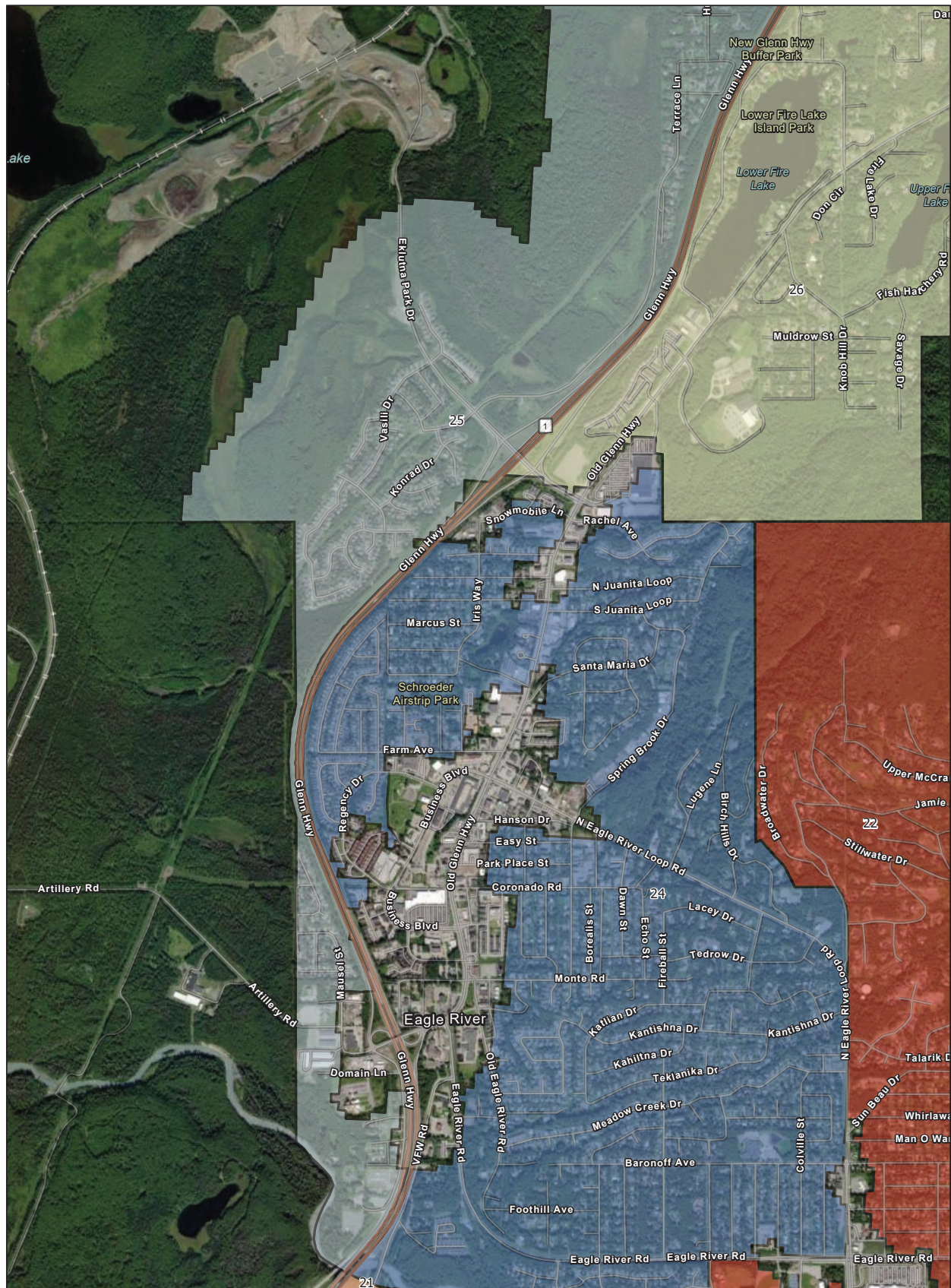


# SPU 25 & 26: East & West Chugiak Map 1





## SPU 25 &amp; 26: East &amp; West Chugiak Map 2





# Appendix A – SPU Ignitability Analysis

## SPU 26: East Chugiak



The East Chugiak SPU is comprised of neighborhoods that are surrounded by continuous boreal forest and intermixed wildland fuels. The SPU is situated near the transition between developed areas and expansive wildland vegetation, creating conditions where fuels and residences are directly interwoven.

Most homes were built in the 1960s, but new houses continue to be built. The predominant construction type is wood frame with vinyl siding and ignition resistant roofs. Many properties feature flammable decks, stairs, fences, and other projections. Spacing between homes is variable but often less than 30 feet, with some outbuildings and sheds increasing ignition risk. Heating is provided by electricity, natural gas, and wood stoves.

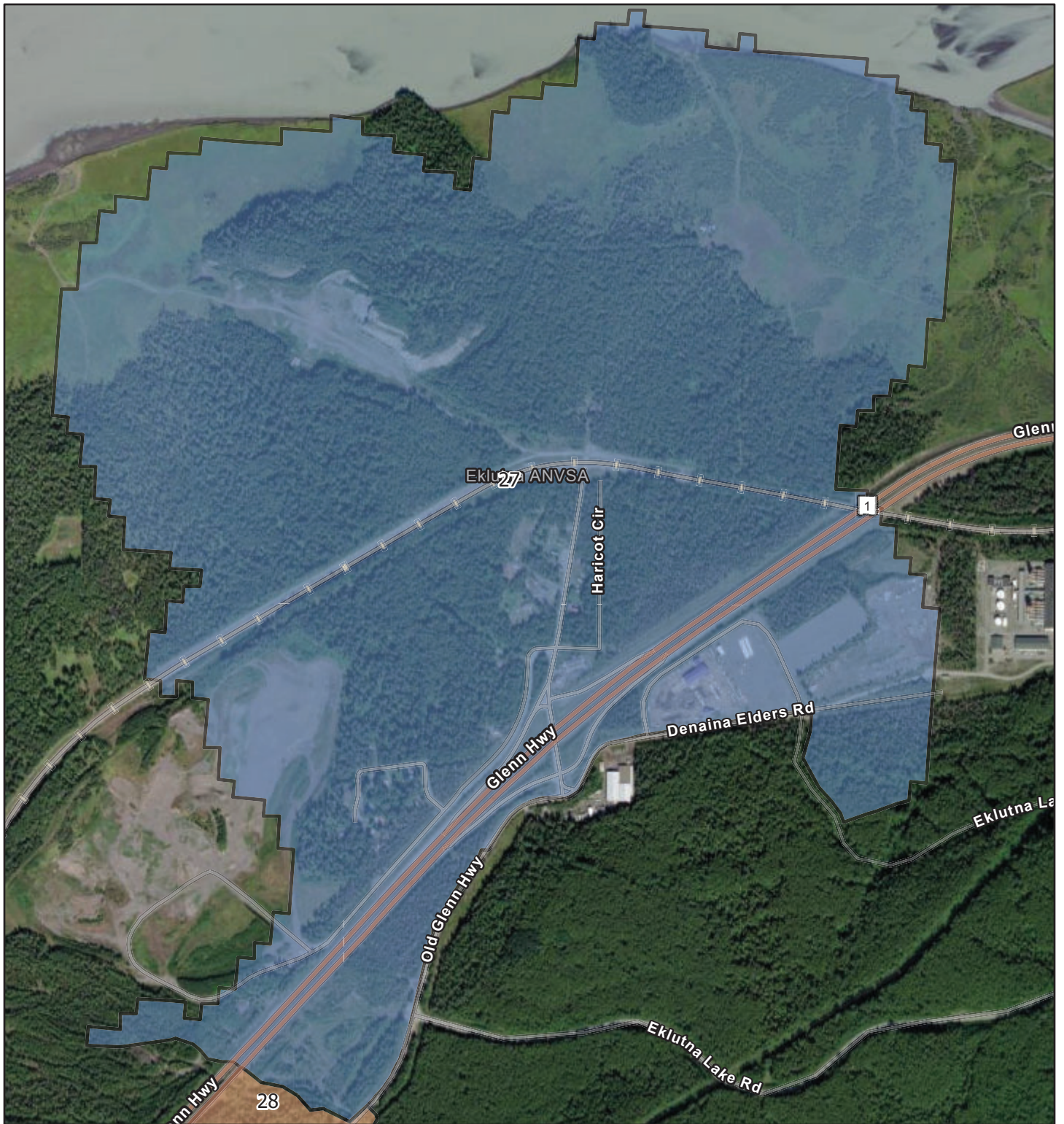
While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Black spruce extends through neighborhoods, aligning with topography. Although patches of dead spruce have been removed from some access roads, fuels remain continuous and highly susceptible to fire spread. This heavy spruce component and frequent high winds increase the chances of a large, wind-driven wildfire.

Primary access roads are 20–40 feet wide, paved, adequately marked, and mostly clear of vegetation with more than 5 feet of clearance. However, residential streets within neighborhoods can be narrow, crowded with vehicles, and often dead-end in cul-de-sacs or limited turnarounds for apparatus. Evacuation challenges are heightened by the fact that some neighborhoods terminate in dead ends and are interwoven with dense fuels, making rapid evacuation difficult.

Electric utilities are distributed through elevated lines on wooden power poles adjacent to dense fuels. Minimal hydrants are available within the SPU. In areas without hydrants, water for firefighting will be delivered by water tenders.

# SPU 27: Eklutna Village





# Appendix A – SPU Ignitability Analysis

## SPU 27: Eklutna Village

<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>	<b>Extreme</b>
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The Eklutna Village SPU consists mostly of the Native Village of Eklutna, which “is the only continuously inhabited original Dena’ina village within the Municipality of Anchorage... is home to over 500 who are either Eklutna, Inc. Shareholders or Native Village of Eklutna.”<sup>1</sup> It is situated along the Knik Arm shoreline with residential areas intermixed with cultural sites, community buildings, and natural fuel beds.

Housing is primarily single-family, with a mix of older and newer construction. The predominant building type is wood frame with ignition resistant roofs. Many properties feature flammable decks, fences, stairs, and other projections. Spacing between homes varies from 20 to 50 feet, with some outbuildings increasing fire exposure potential. Heating sources are electricity, natural gas, and wood stoves.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Vegetative fuels in and around the community are boreal forest, dominated by black spruce with interspersed hardwoods. Fuels remain largely continuous across the landscape and are aligned with topography and wind in certain conditions. Riparian vegetation along streams contributes to fuel continuity into developed areas.

Primary access roads are paved, adequately marked, and greater than 20 feet wide. However, residential side streets may be narrow and dead end, providing limited turnaround space for apparatus. Evacuation may be complicated by limited road redundancy and the presence of cultural sites, where populations gather for events. Side street signage is variably maintained, with some address markers obscured by vegetation.

Electric utilities are distributed through elevated lines on wooden poles adjacent to dense fuels. This SPU is not equipped with hydrants, so water for firefighting will be delivered by water tenders.

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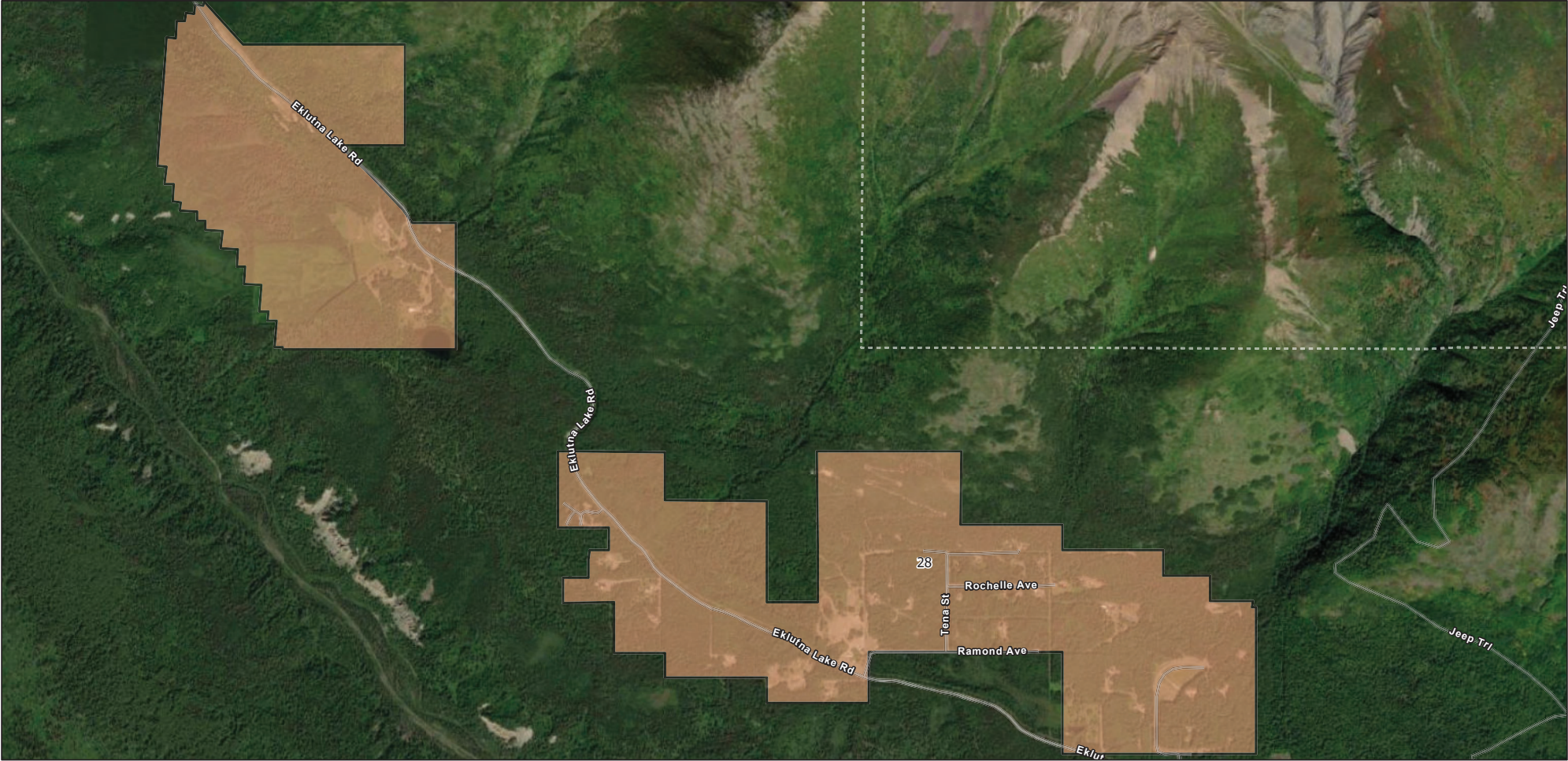
<sup>1</sup> <https://eklutna-nsn.gov/departments/housing/>

SPU 28: Eklutna Lake Map 1 of 2





SPU 28: Eklutna Lake Map 2 of 2



## Appendix A – SPU Ignitability Analysis

### SPU 28: Eklutna Lake



The Eklutna Lake SPU consists of widely dispersed neighborhoods along Eklutna Road, a narrow and winding single egress route. In the event of wildfire, this road could be compromised, trapping residents and visitors. The area is heavily forested and characterized by continuous fuels extending from the river and lakeshore into steep mountainous terrain. Campgrounds exist and can present evacuation challenges along with potential ignitions.

Homes are single-family residences and recreational cabins, built from the 1970s to the present. Building materials are wood, with flammable decks, stairs, and projections common throughout. Roof materials are variable, with some homes featuring metal and others shake. Spacing between structures is generally greater than 50 feet, although many parcels contain sheds, fuel storage, or outbuildings. Heating is through electricity, gas (including propane), and wood stoves.

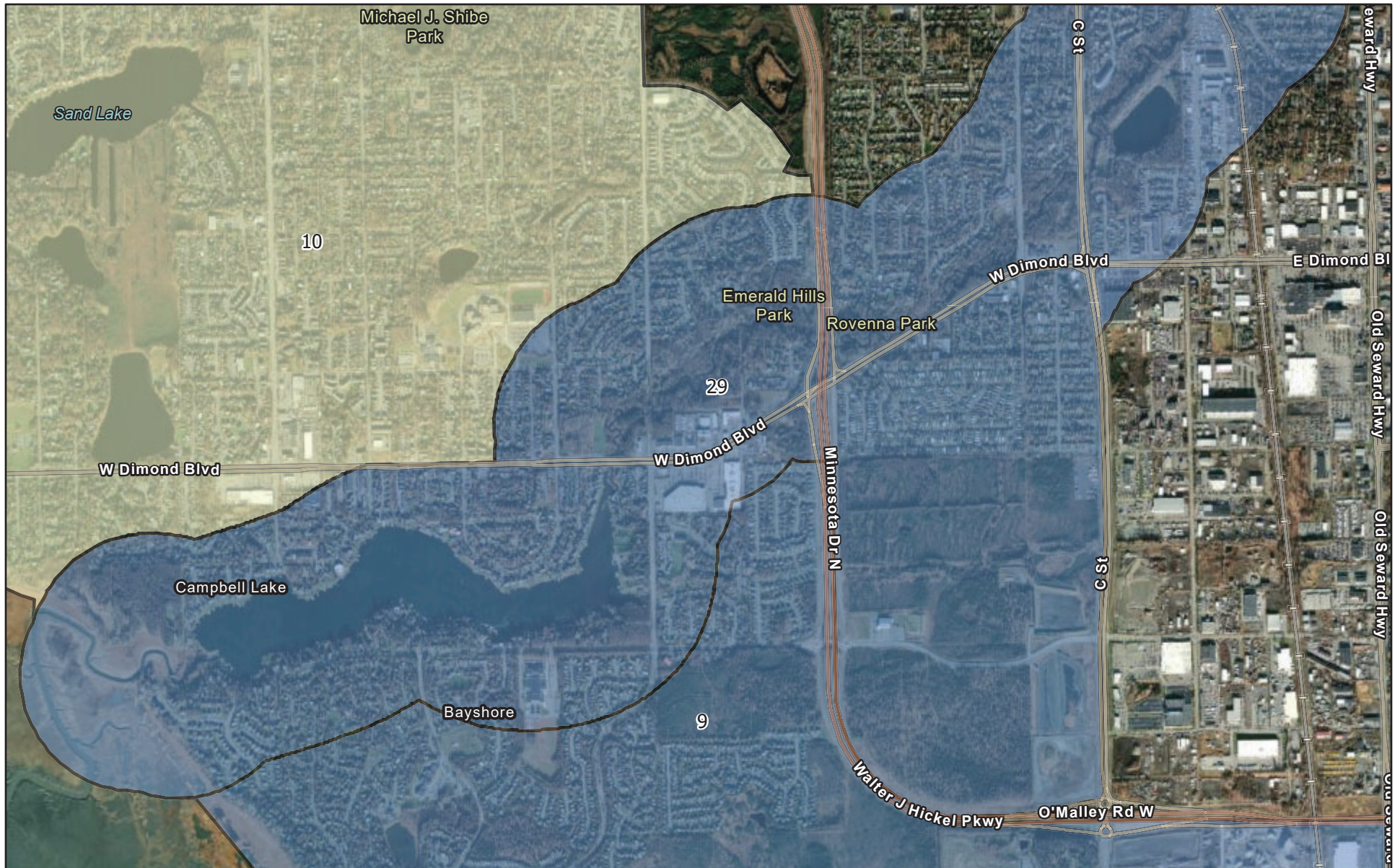
While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience. Wood piles, propane tanks, and fuel storage are frequently located near homes, increasing ignition potential.

Vegetative fuels are dense, with black spruce dominating much of the landscape and forming continuous fuel beds from valley bottoms to alpine areas. The combination of heavy fuels and steep slopes creates potential for rapid fire spread. Homes are situated in drainages and along steep slopes adjacent to continuous fuel, increasing exposure to fast-moving fire behavior.

Side street signage is limited, and address markers are inconsistent or missing. Utilities are minimal, with some homes relying on off-grid power systems. There are no hydrants in this SPU. Water supply for firefighting will need to be drafted directly from Eklutna Lake or transported by water tenders, though accessibility may be challenging.

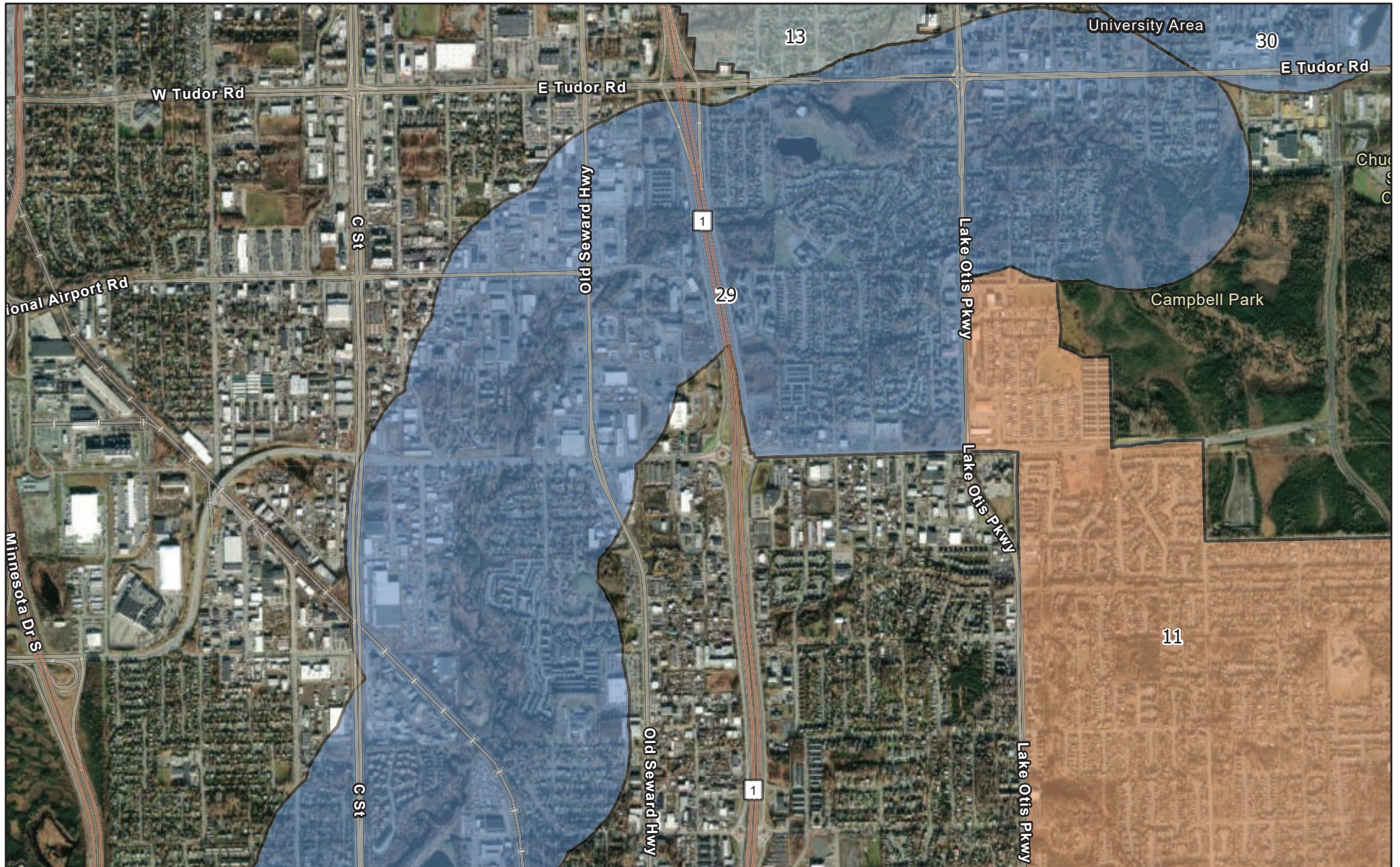


## SPU 29: Campbell Creek Map 1 of 2





## SPU 29: Campbell Creek Map 2 of 2





# Appendix A – SPU Ignitability Analysis

## SPU 29: Campbell Creek



The Campbell Creek SPU is a dense urban neighborhood network that surrounds Campbell Creek, a heavily vegetated corridor that runs northeast to southwest through the Anchorage Bowl. While surrounded by built urban environment, this SPU has direct connections to continuous wildland fuels through the creek corridor. These fuels include dense riparian brush, black spruce clusters, and accumulations of dead woody material.

Wildfire ignitions in this SPU have been linked to illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels. The greenbelt is a known congregation point for transient individuals, resulting in ongoing public safety concerns and an elevated ignition risk requiring continued monitoring and enforcement presence.

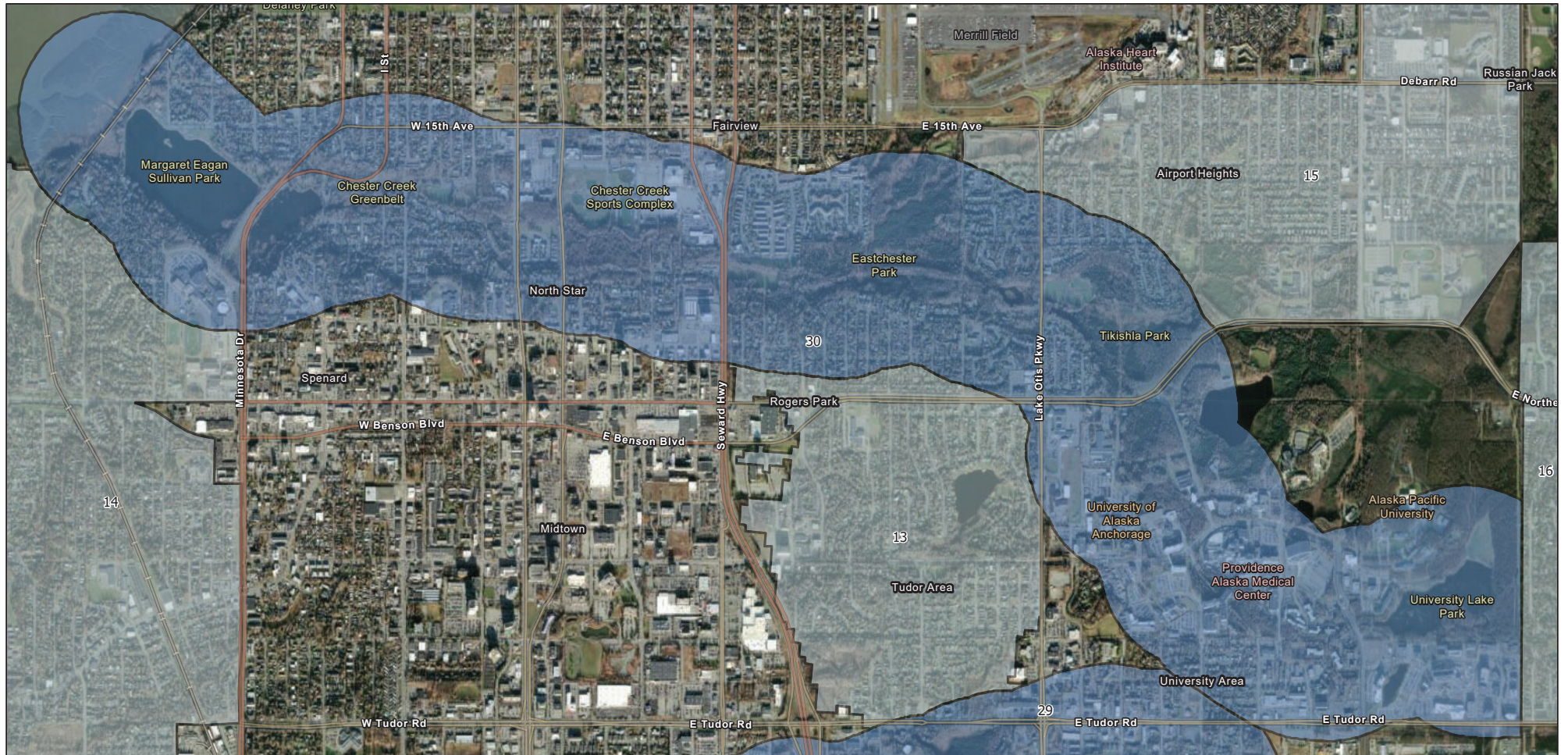
Roads are paved, wide, and adequately marked, but neighborhoods include many cul-de-sacs and dead ends, limiting apparatus maneuverability.

Housing construction ranges from the 1950's through the present and is made of both single-family and multi-family residences. Wood frame construction with vinyl siding and ignition resistant roofs are predominant. Many structures include flammable decks, balconies, and projections. Spacing between homes ranges from less than 20 feet to 40 feet. Heating is provided by electricity and natural gas.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Utilities are distributed through elevated power lines. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.

## SPU 30: Chester Creek





## Appendix A – SPU Ignitability Analysis

### SPU 30: Chester Creek



The Chester Creek SPU is a dense urban neighborhood network that surrounds Chester Creek, a heavily vegetated corridor that runs east-west through the Anchorage Bowl. While surrounded by built urban environment, this SPU has direct connections to continuous wildland fuels through the creek corridor. These fuels include dense riparian brush, black spruce clusters, and accumulation of dead woody material.

Wildfire ignitions in this SPU have been linked to illegal campfires and unauthorized campsite activity occurring within dense, overgrown fuels. The greenbelt is a known congregation point for transient individuals, resulting in ongoing public safety concerns and an elevated ignition risk requiring continued monitoring and enforcement presence.

Roads are paved, wide, and adequately marked, but neighborhoods include many cul-de-sacs and dead ends, limiting apparatus maneuverability.

Housing construction ranges from the 1950's through the present and is made of both single-family and multifamily residences. Wood frame construction with vinyl siding and ignition resistant roofs are predominant. Many structures include flammable decks, balconies, and projections. Spacing between homes ranges from less than 20 feet to 40 feet. Heating is provided by electricity and natural gas.

While some properties maintain defensible space, compliance is limited where hazardous fuels are present on adjacent parcels under separate ownership. Nonetheless, these individual efforts remain worthwhile, as they reduce structure ignition potential and contribute to overall neighborhood resilience.

Utilities are distributed through elevated power lines. Hydrants, serviced by AWWU, are available and adequately spaced for the entirety of the SPU.