



HERNING HISTORIC TRAIL

CONCEPT PLAN | APRIL 2017

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I. PROJECT BACKGROUND

CONTEXT

The Matanuska-Susitna Borough (Mat-Su or MSB) is the fastest-growing area in Alaska. Today, the Herning Trail crosses primarily private lands that are quickly becoming subdivided and developed, creating challenges for protecting access to and along the RS2477 right of way. The Herning Trail and other historic routes across the borough can serve as connectors of a trail network that provides a range of benefits to local residents and visitors. For this to happen, local communities, land owners, non-profits, and government agencies must work together to protect and enhance public access in a way that works for everyone. The Herning Trail project is intended to serve as a model for future projects.

VISION:

“The Herning Trail – connecting communities past and present.” The trail will celebrate the region’s rich history and improve access to healthy recreational and economic opportunities. Communities in the Matanuska-

Susitna Borough have been historically connected through a series of trails which became the cornerstone of social and economic growth. It is essential to preserve this history and provide education to residents and visitors, provide world class trails, and promote healthy outdoor recreation through community leadership and collaboration.

GOALS

The primary goal of this project is to re-establish the Herning Trail as **a safe multi-use winter recreation trail connecting Knik-Fairview, Big Lake and Houston**. Through re-establishing this trail, the Borough and partners seek to:

- » Create opportunities to **discover and celebrate the region’s rich history**, culture, and natural environment
- » Implement projects that are community-driven and that **respect private property**
- » **Protect and improve access** to and through public lands in a rapidly developing area
- » **Maximize the use of existing trails**, section

lines, and other easements where possible

- » **Reduce trespass and vandalism problems** associated with the current informal trail system
- » Serve as a **pilot project** and first step in a connected regional system of trails
- » Use a **community-based collaboration** approach

TRAIL HISTORY

Orville G. Herning arrived at Knik in the spring of 1898 representing the Klondike and Boston Mining Company and leading a group of men. They fought their way through unexplored territory to Grubstake Gulch where they discovered several other miners working sluice boxes. Herning and his men were quick to establish their own mining claims. Working with the other miners, they built cabins, more sluice boxes and recovered a modest amount of gold before leaving the soon to be declared mining district and setting up shop in Knik.

The easily recoverable gold dwindled after a few more years and, in the fall of 1900, Herning convinced investors in the Klondike and Boston Mining Company that hydraulic mining equipment was necessary to increase the volume of gold recovered. The hydraulic mining equipment arrived via boats and was staged in the town of Knik. The only summer trail to the Willow Mining District was a roundabout trail over Bald Mountain and not suitable for hauling wagons loaded with the heavy metal pipes. Herning determined that a new winter route from Knik to Grubstake Gulch was critical to transport the hydraulic mining equipment.

Sufficient ice and snow were present in January of 1902 for the commencement of trail construction. Herning and a small contingent of men and horses began clearing and packing the new winter trail. They encountered heavy snow fall, sub-zero temperatures as well as rain and overflowing creeks and lakes. Utilizing a go-devil and a sleigh outfitted with a plow, they packed the trail and hauled the pipe in stages.

At most, Herning was able to move 20 sticks of pipe at a time using a freight sled. Loads were moved a short distance to a staging area. Firewood was frequently back hauled from the staging area to Knik or the previous camp. The hydraulic mining equipment was transported during the winter of 1902 and 1903. The following account of the pioneer trail is taken from Herning's 1902 diary (1902:55-66,72-73,82-83):



Above: A go-devil sled.



Right: Horse and sleigh with plow.

Jan. 6 – Went out with guide Stephan to look up easier team trail from Knik Lake to this lake on summit.

Jan. 13 – With Stephan and Goosmar worked on leveling up team trail through timber north of Knik Lake.

Jan. 15 – Finished trail work by Knik Lake, 3 men 3 days to fill in holes and fix up trail across Knik Lake.

Jan. 30 – Got provisions ready for trip with full gang to swamp trail up to summit.

Feb. 1 – Left winter camp with team and 6 men to build half way camp on the Little Susitna and swamp out trail to summit of foothills near Willow Creek.

Feb. 3 – Left camp no. 9 at 9 AM, cut out of trail, reached Little Susitna 11 AM, went across river to open trail to 1st bench. Cut out trail 1/4 mile and established river camp on last bench.

Feb. 10 – Left Sushetna camp 10 AM, arrived 3 PM, did more smoothing up of trail on way to Knik.

Feb. 24 – Butler came down to my camp on river and reported trail cut through to Willow Creek.

Mar. 18 – 8 AM, with men, camp outfit, and provisions, left Sushitna camp for summit of mountains arrived 11:30. After dinner shoveled out trail 1/2 mile, on summit snow 3 feet deep and crusted from snow-shoeing.

Mar. 19 – With men shoveled out trail to small creek on summit.

Mar. 22 – Broke out trail from summit camp down to long hill between 12 and 11, also broke out trail 1 mile north of summit camp.

Mar. 24 – Broke out trail from Sushetna to summit. Hauled up 3 sks oats on Go-devil, men shoveled out trail.

Mar. 27 – Went over trail with go-devil and then moved summit camp to Ridge camp no. 14. PM, run trail line to small creek. After supper drove back to summit camp so team could have shelter, made a tent for self.

Mar. 28 – Drove both go-devils over trail from 12 to 14, drifted some on swamp. PM, broke down 1/2 mile of trail north of 14.

Apr. 18 – Thawing and warmer. Got up at 4:30, left R & L cabin at 6 with pack and 25 lb. coal on Indian sled. Trail very soft, had to wear snow-shoes.

Apr. 21 – Hauled 4 loads firewood up to the Gilbe
rt cabin and made sled trails up the bench to
Canyon falls.

Aug. 4 – Commenced building road off bench
down to Willow Creek.

Aug. 6 – Men at Willow Creek cutting hay,
swamping out roads.

Aug. 11 – Men graded road from bench down to
Willow Creek. Self-cut out road from OGH cabin
to new road {1000 ft.}.

Dec. 4 – Made go-devil for breaking out trail.

Dec. 6 – Drove over to Fish Creek, cleaned out
trail, swamped out short-cut and to avoid hill,
just below forks of K & B and Shushetna Trail.

Dec. 8 – Put pole in go-devil, made whifflettrue
draw strap and 2 draw rods for red sleigh.

Dec. 9 – Drove new go-devil over trail from Knik
to jumpoff place.

Dec. 14 – Left Knik at 9 AM for Shushetna with
camp outfit and go-devil on sled, drove Jo on
the lead. Fish Creek was overflowing, Meadow
Creek just froze enough to bear up team, broke
in places

Dec. 15 – With go-devil cleaned out trail from
camp no. 6 to Shushetna River, frozen over in
fine shape.

Dec. 17 - Drove go-devil over trail from Shushet-
na camp to the Bear's Den.

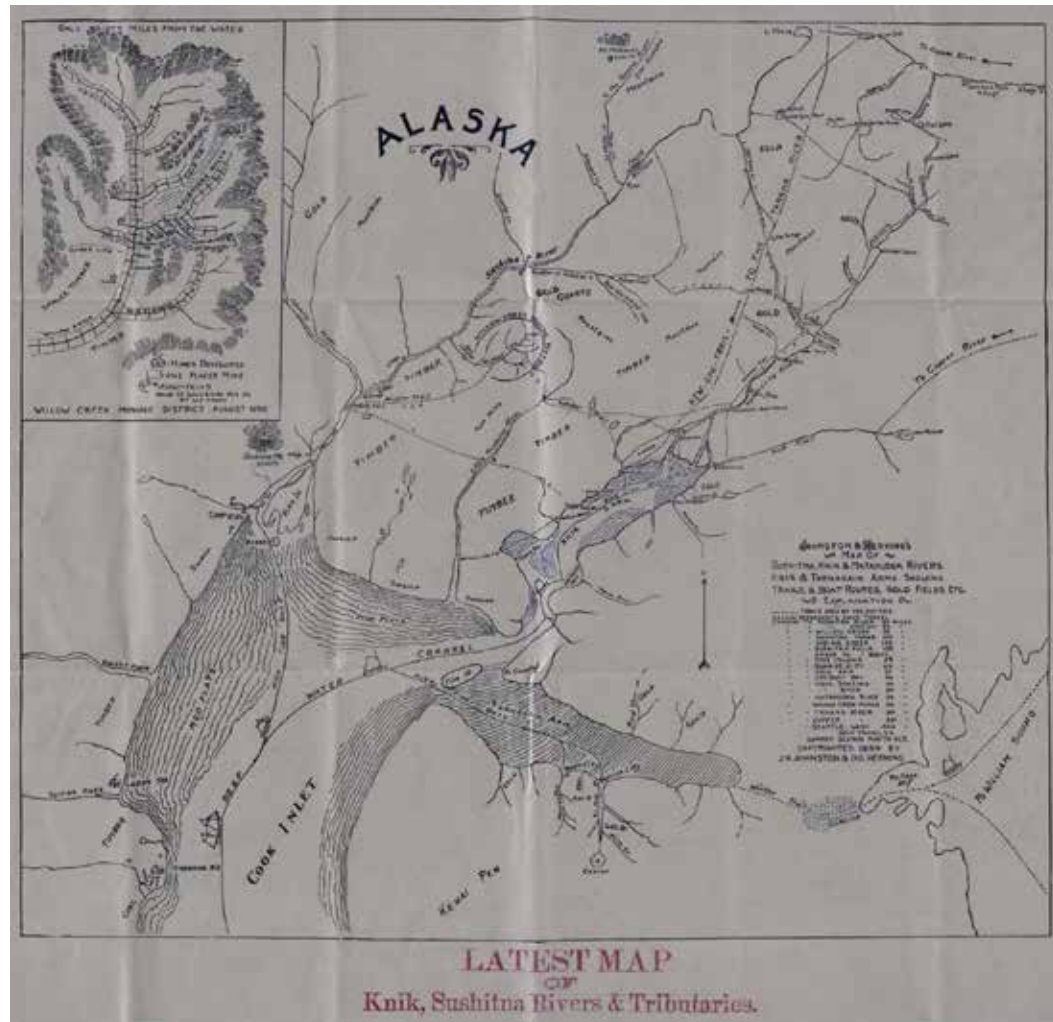
Dec. 18 – Broke out trail up to long grade on
ridge.

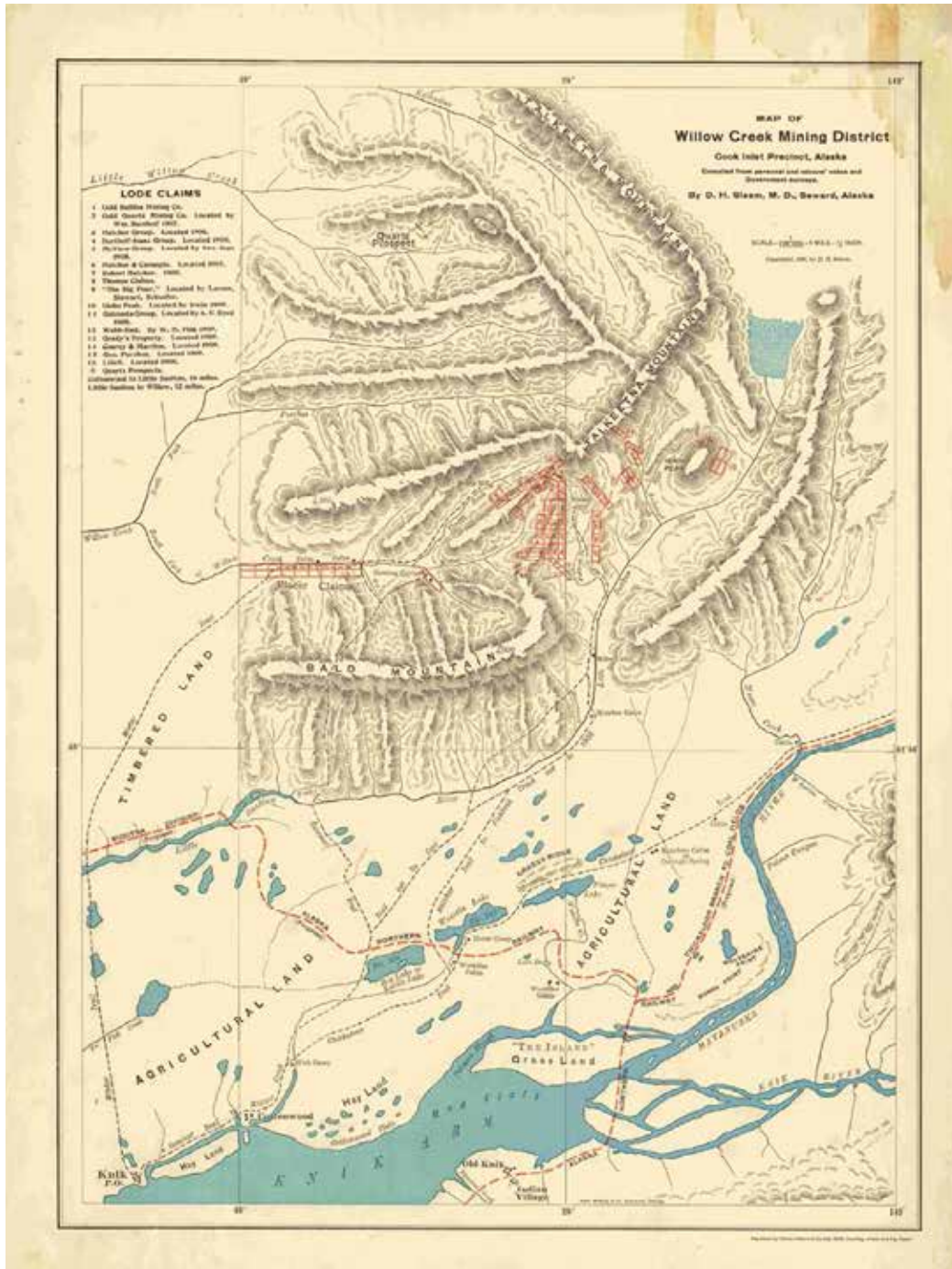
Dec. 27 – Drove go-devil over trail to Twin Lake:
a 11 grades from Knik to Shushetna now in A-1
order.

Herning worked the remainder of the winter on
keeping the trail open while shuttling loads of
pipe and gearing up for the upcoming mining
season. According to Herning's diary, preserved

in the Alaska Public Library System, hydraulic
mining did not begin until the summer of
1903.

1899 Map of Southcentral Alaska produced by O.G. Herning and J.N. Johnston
Showing the Herning Trail in the center trending northwest from the Knik Arm
as a Winter Trail. (reproduced from Louise Potter's Old Times on Upper Cook's
Inlet, courtesy The Book Cache, Anchorage)





Herning was responsible for constructing the trail from Knik to the Willow Creek Mining District for freighting and transportation. Along the way, Herning also staked his own mining claims and eventually owned as many as 33 sites in Willow Creek.

At the turn of the century, there were two principal routes from Knik -- the only town in the area -- to the mining district, and these had been developed mainly because of the placer operations around Grubstake Gulch in the western part of the district. One of these, used only in winter, went north from Knik, crossed the present line of the Alaskan Railroad at Houston, then went around the western end of Bald Mountain and up Willow Creek to approximately the mouth of Grubstake Gulch.

The route, not much more than a trail about thirty miles long, was undoubtedly used for the transportation of equipment and supplies for the hydraulic operations carried on by the Klondike Boston Mining Co. and later by Herning on his own in the Grubstake Gulch area. Horse-drawn sleds and pack horses were used after the freeze-up (Reeder 19~5:15-16).

The winter trail from Knik to the Willow Mining

Left: Map of the area attributed to Dr. D. H. Sleem, copyright 1910 and made available by the Palmer Historical Society in 2008, courtesy of Bob and Kay Pippel. Note that many of the lakes and creeks are misplaced. Knik, shown in the lower left was the major port of call at the time.

District is an approximate representation of the Herning Trail.

In the 1990s, the Alaska Department of Natural Resources (DNR) mapped numerous RS2477 rights of way throughout Alaska, including several in the Mat-Su Borough. According to the DNR website, “a RS2477 right of way comes into existence in Alaska automatically if a ‘public highway’ was established across public lands according to Alaska Law.” One of these rights of way is the Herning Trail, running from the historic town site of Knik to Houston (see map on page 6).

RELEVANT EXISTING PLANS

KNIK-FAIRVIEW COMMUNITY COMPREHENSIVE PLAN (1997)

Goal: Protect the important historical and recreational trails within the planning area with adequate legal rights-of-way.

Recommendations

- » The furtherance of trails should be encouraged in the Knik-Fairview Planning area.
- » Sufficient legal trails need to be established and trail rights of ways need to be preserved to support dog mushing and other recreational uses.
- » Subdividers should be encouraged to develop lots backing upon trails and dedicate trail rights of ways where appropriate.
- » The borough should seek to protect the use of the trails identified on the trails map.

BIG LAKE COMMUNITY COMPREHENSIVE PLAN (2009)

Community concerns

Recreational Access: Long established, traditional winter trails do not have designated easements and could be closed or lost due to future development.

Parks, Recreation, and Open Space Priority Goals

- » Identify and reserve a regional trail system.
- » There are not enough trailheads, markers, appropriate parking, and no handicapped accessible routes and maps to help guide users.
- » Railroad and highway development could block or partition trails.
- » Work with willing landowners to dedicate trails easements.

CITY OF HOUSTON COMPREHENSIVE PLAN (2016 UPDATE, PUBLIC REVIEW DRAFT)

The city’s origins began with natural resource development and the Herning Trail (now Willow Creek Sled Trail) for freighting supplies to the Willow Creek Mining District, according to the State of Alaska’s Community and Regional Affairs database. Most trails within the community are informal and do not have clearly dedicated public access. These trails are utilized as transportation corridors for snow machines, ATVs, dog sleds, bikers, horses, pedestrians, and skiers.

Community Development

The community of Houston wants to develop as a destination for tourism and recreation while maintaining a family friendly community that will encompass a future town center, designated trails, and community facilities.

Parks, Recreation, and Open Space Goal

To provide a wide range of year-round recreational opportunities for the community and its visitors.

Objective

Maintain existing trails, pathways and recreational opportunities for area residents and visitors.

Strategy

Work with the Mat-Su Trails and Parks Foundation to find projects that would qualify for community grants leveraged with volunteer participation.

II. COMMUNITY ENGAGEMENT STRATEGY

A successful trail system relies on public support and a unified vision. To develop a solid foundation for the plan and ensure a high level of project transparency, the project partners gathered feedback from as many residents and stakeholders as possible. The project team used a variety of activities to ensure participation from all of communities through which the trail runs, including various interest groups.

This strategy guided the core planning group's communications with, and outreach to, target audiences to increase support for and participation in Herning Trail project planning and implementation. Outreach efforts were focused and deliberate, and messages were delivered consistently and clearly throughout the life of the project. The Herning Trail project has been a community-driven effort. Active support and participation from key stakeholders including local government, trail groups, and adjacent property owners is required to make this project a success.

COMMUNICATION AND OUTREACH GOALS

TARGET AUDIENCES

- » Big Lake Community Council, Knik-Fairview Community Council, City of Houston Council
- » Big Lake Trails Inc. and the Knik Chapter, Iditarod Trail Blazers, Willow Trails Committee
- » General trail users, including dog mushers, snowmachiners, and winter bike enthusiasts
- » Property owners along the trail
- » MSB Assembly and Planning Commission; and
- » State of Alaska, Department of Natural Resources, and the Department of Transportation and Public Facilities

GOAL 1: A MAJORITY OF ADJACENT PROPERTY OWNERS ARE AWARE OF, PARTICIPATE IN, AND SUPPORT THE

HERNING TRAIL PROJECT PLAN PHASE.

- » OBJECTIVE 1: Develop project awareness through outreach to all adjacent property owners.
- » OBJECTIVE 2: Solicit input from adjacent property owners.
- » OBJECTIVE 3: Develop a community advisory group.
- » OBJECTIVE 4: Communicate with project detractors in a timely fashion.

GOAL 2: LOCAL GOVERNMENT BODIES ENDORSE AND APPROVE THE PROJECT, AND PARTICIPATE IN THE PLAN PHASE AS NEEDED

- » OBJECTIVE 1: Keep the assembly, planning commission, parks, trails, and recreation advisory board, community councils, Alaska DOT and DNR informed of progress during the project.
- » OBJECTIVE 2: Determine the appropriate level of approval from each level of government and prepare draft approval

documents in advance of project completion.

- » OBJECTIVE 3: Seek approval upon completion of this plan.

GOAL 3: LOCAL TRAIL GROUPS HELP SHAPE THE CONCEPT PLAN AND TAKE THE LEAD IN PROJECT IMPLEMENTATION

- » OBJECTIVE 1: Distribute project information to dog mushing groups.
- » OBJECTIVE 2: Distribute project information to snowmachine groups.
- » OBJECTIVE 3: Distribute project information to bicycling groups.

GOAL 4: BUILD A NETWORK OF TRAIL SUPPORTERS THAT WILL CONTINUE TO HELP MEET THE TRAIL GOALS

PUBLIC INVOLVEMENT STRATEGY

PHASE 1: VISION, ISSUES & OPPORTUNITIES

The purpose of the first phase was to introduce the project to the public and key stakeholders, and gather information on their vision and goals for the project and incorporate the public's input into the analysis of the project. This phase was essential to setting the foundation for the planning effort and sets the tone for the remaining project.

Actions

- » Go where the people are and take advantage of existing popular events, rather than hoping for attendance at a scheduled planning meeting. Intercepting the public

at events should include an education component (maps, displays, handouts, etc.) as well as an information gathering component (questionnaires, comment cards, posters to mark up, etc.).

- » Hold focus groups that bring together engaged members of the community, the general public, as well as partner organizations and agencies to discuss specific topics regarding the project.

PHASE 2: PLANNING, DESIGN & DEVELOPMENT

The second phase functioned as an opportunity to engage the public in making the project better. This phase provided opportunities for input on project alternatives and options. An honest accounting of the constraints and possibilities during this phase made for a stronger final product.

Actions

- » Held open houses that required extensive planning and preparation was a central focus for this phase. The open houses were scheduled when people are most able to attend (weekday evenings or weekends). The team held companion workshops at different times and in different locations to ensure a broad cross-section of participants. The open houses included a detailed discussion of the possible alternatives or concepts, cross-sections and drawings of the concept or design, a discussion or description of how they were developed, as well as scheduling an

extended period of time for discussion and feedback from the group.

PHASE 3: REVIEW & APPROVAL

The final phase of the outreach effort during the planning phase was focused on gathering input on the final designs or concept and ensuring that the public is educated about the decision.

Actions

- » Mailed notification to neighbors, Community Councils, and stakeholders informing them of the opportunity to review and comment on the draft Concept Plan;
- » Provided an overview of the draft Concept Plan at Community Council meetings;
- » Tabulated and responded to comments received during the review period;
- » Documented the public outreach effort. A good public involvement effort influences the planning and design effort, demonstrates to the public that their input has been heard.

PHASE 4: PROJECT IMPLEMENTATION

Once the plan is approved, supporting trail groups and other members of the public will help with the design phase, and will provide labor and fundraising support for the construction phase.

Potential Actions

- » Provide opportunities, at existing meetings and events, for the public to provide input on the design of the trail infrastructure.

- » Hold volunteer work days to construct or reconstruction segments of the trail.

SUMMARY: OUTREACH AND ENGAGEMENT ACTIVITIES

Partnered with the Mat-Su Trails and Parks Foundation throughout the project
Received resolutions of support from the Big Lake and Knik-Fairview Community Councils as well as the Houston City Council
Maintained the existing project team that includes representatives from each of the three communities, along with other stakeholders
Created and updated a project Facebook Page, with 110 followers as of 4/14/17
Held three public open houses, one each in Knik-Fairview, Big Lake, and Houston in April 2016
Presented project idea at community councils
Met with Girl Scouts of Alaska
Sent and letter and called Knikatnu, Inc.
Communicated regularly with State of Alaska DNR public access staff regarding the RS 2477 easement

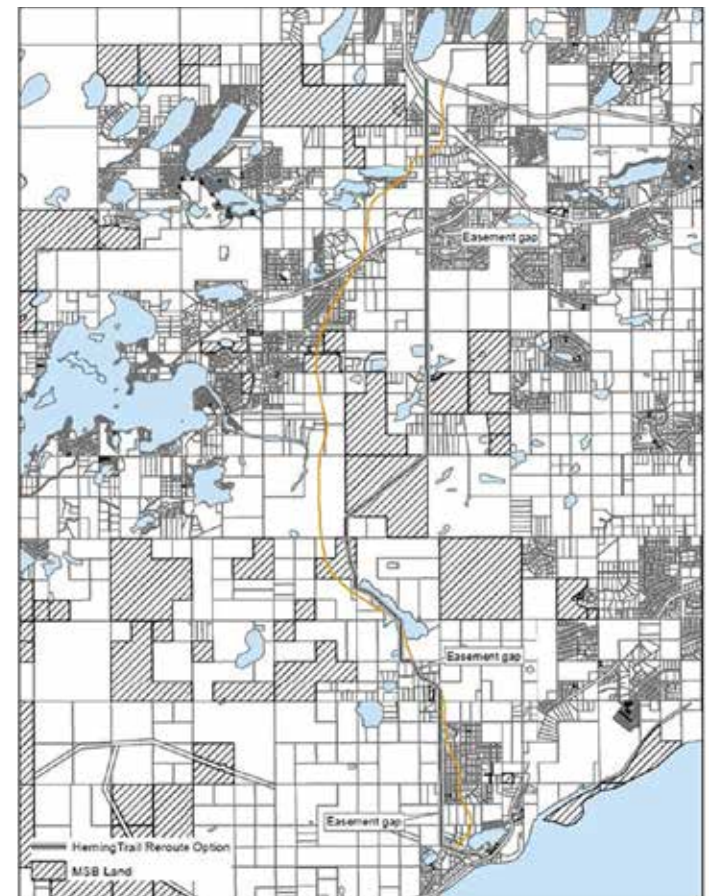
III. EXISTING CONDITIONS

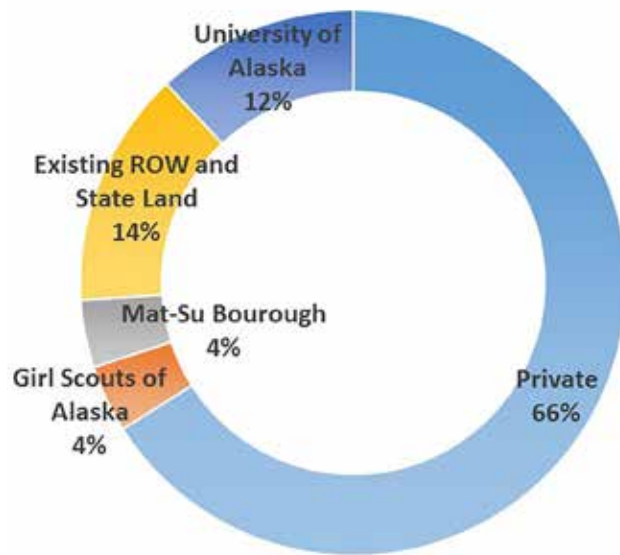
CURRENT ALIGNMENT

The Herning Trail (RST 1426) is located in Southcentral Alaska, approximately 30 miles north of Anchorage. It has been mapped by DNR Division of Land personnel on USGS 1:63, 360 Anchorage b-8 and c-8 quadrangle maps. From the historic town site of Knik on Knik-Goose Bay Road, the route heads north around the west side of Knik Lake, crossing Threemile Lake approximately two and a half miles further north. The route continues alongside a portion of Fish Creek and crosses Big Lake road at the point where the road crosses Lucille Creek. The trail continues north, crossing Little Meadow Creek and the Parks Highway approximately three quarters of a mile north of the Big Lake cutoff, and ends just north at the point where it meets the Alaska Railroad. The historic route recognized by the State of Alaska is 11 miles long.

One of the challenges recognized during the open houses held along the trail was that the current alignment crosses through 125

Right: The historic 11-mile alignment of the Herning Trail (RST 1426) recognized by the State of Alaska.





Left: Division of land ownership along the Herning Trail RS2477 easement.

private parcels, in some cases close to homes. Furthermore, the 11-mile stretch between Knik and Houston is low, swampy, boggy land, and practicable travel is only possible during the winter.

The historic alignment of the trail was legislatively recognized by the State of Alaska as set forth in AS19.30.400. This state recognition included designation of the Historic Herning Trail as an RS2477 easement. Revised Statute 2477 (RS 2477) was a congressional grant of rights-of-way which provided that “the right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted.”

LAND STATUS

The RST Herning Trail starting from Knik-Goose

Bay Road crosses about 139 parcels. The parcels range in size of less than one acre to more than 470 acres.

The area through which the RST passes is somewhat even mix of developed and undeveloped land. Of the 125 privately owned parcels crossed by the trail, about half of them have residential structures. The remainder are undeveloped.

NATURAL AND CULTURAL RESOURCE DESCRIPTION

WILDLIFE

Excluding the highly developed areas, the relatively undisturbed portions of the project area provide habitat for numerous mammal species, including a wide variety large and small mammals. The main large species found in the area include moose, black bear, and brown bear. Among others, the project area supports beaver, coyote, ermine, northern flying squirrel, river otter, lynx, mink, martin, muskrat, red fox, red squirrel, weasel, wolf, and wolverine. Most of these are found in riparian, wetland, or forested areas, which are abundant in the project area (KABATA 2006).

Freshwater bird habitats in the Mat-Su Borough portion of the project area include lakes and large ponds, small intermittent and perennial streams, and vegetated wetlands. These wetlands include sedge and grass bogs, and fens; shrub thickets, swamps, and bogs; and forested wetlands. Bird species that use these habitats in the project area include loons and grebes, Canada geese, several species of

dabbling and diving ducks, sandhill cranes, and migrant and summer resident shorebirds, such as greater and lesser yellowlegs, short-billed dowitchers, Wilson’s snipe, spotted sandpiper, and least sandpiper (KABATA 2006).

Terrestrial bird species include both resident and migrant species. Songbirds, or passerines, and neotropical migratory birds inhabit terrestrial habitats of the project area. Some of the common types include raptors (hawks and owls), woodpeckers, flycatchers, swallows, corvids (ravens, jay, magpies), chickadees and kinglets, thrushes, warblers, sparrows, and finches. The upland areas also are habitat for spruce grouse, and the ruffed grouse has been introduced to the Goose Bay area (KABATA 2006).

The project area hosts many species of both anadromous and freshwater fish, including all five species of Pacific salmon, Dolly Varden, eulachon, northern pike, rainbow trout, arctic char, arctic grayling, lake trout, burbot, and whitefish (KABATA 2006a). Herning Trail crosses a portion of Threemile Lake. Threemile Lake includes about 130 acres and has a maximum depth of about 15 feet. Alaska Department of Fish and Game has stocked the lake with rainbow trout. The trail also crosses Long Lake within the City of Houston. Long Lake includes about 44 acres with a maximum depth of 17 feet. Long Lake has been stocked with silver salmon by Fish and Game.

GEOLOGY AND SOILS

Soil deposits and landforms in the project area

have been affected by glacial advances. The most recent glacial advance in the area was the Naptowne Glaciation of approximately 47,500 to 10,000 years ago (USDA 1995). The Little Susitna River and associated tributaries have cut through these deposits and distributed fluvial sediments throughout the project area; in addition, wind and volcanic activity have added sediments to the region.

Surficial geology in the project area shows evidence of the landscape's glacial origin, with moraine and outwash features throughout the region. As a result, much of the area's near-surface sediments are reworked soils comprising silt loams, gravels, and sands. Near-surface soils are interspersed with peat bogs in lower lying areas. Underlying native soils consist largely of glacial till, which is typically very dense and poorly graded, or coarse, gravelly sand.

CULTURAL RESOURCES

The study area was transformed by glaciers that retreated approximately 12,000 years ago, leaving behind a landscape dominated by postglacial landforms including complex ridge systems, outwash gullies and lakes, kettle lakes, moraines, eskers, and streams. The ridge systems consist of resistant rock and are connected to a system of moraines, kames, and eskers (formations of gravel, silt, and sand formed by ice or water movement in a glacier and left behind when the ice melted and the glacier retreated) (Dilley and Dilley, 2000).

After the ice retreated, the area was likely a

desert-like zone with blowing dunes of glacially produced silt, large blocks of ice partially buried in glacial debris, and a landscape of exposed rock and gravel with windblown loess deposits in the lee of winds coming off the retreating glaciers and up the rapidly forming Cook Inlet. Soon, however, a succession of plant types already present in the region would colonize the desert-like area and stabilize the soils. It is likely that mosses and lichens first colonized the area, stabilizing the soils and drawing in animals that consume these primitive life forms. Later, willows, alders, and other woody shrubs became established, created wind blocks, and entrained soil beneath vegetation and in root mats (Reger and Bundtzen, 1990).

After plants pioneered the region, it is likely that a variety of mammals and fish colonized the land and waters. People followed the large animals into the area and hunted them on the margins of the retreating glaciers. These peoples were already accustomed to life in the glacial margins and arrived with a sophisticated suite of stone and organic tools, clothing, housing, social structure, and language (Reger and Bundtzen, 1990; Reger and Pinney, 1996). European contact in the project area began in the late 18th century. During this time, Upper Cook Inlet was occupied by the Dena'ina, a group of Athabascan-speaking people, related by language and lifeways to groups in Interior Alaska and more distantly to the Tlingit and Eyak of the northwest coast of North America (Townsend, 1981).

There are a number of Dena'ina trails and

numerous Dena'ina language place names in the project area. Place names indicate the history of Dena'ina land use for those who used the lands and survived to be interviewed by linguists (Kari and Kari, 1982; Kari and Fall, 2003). Trails in the study area also include later Euro-American trails, which often were based on Dena'ina trails that preceded them. Trails to mineral lodes and claims often branched off existing Dena'ina trails, but in some cases were completely new trails cut and improved by miners and explorers. It is possible that Herning used portions of Dena'ina trails when he cleared the trail from Knik to the Willow Mining District. Mr. Herning was known to hire Alaska Natives as guides when he arrived in 1898.

The region through which the Historic Herning Trail runs contains numerous cultural resources, including archaeological sites, historic structures, and traditional cultural properties. There are more than 100 recorded cultural sites in the region.

Areas of high probability for archaeological sites have been identified based on similarities to recorded sites (e.g., similar terrain, topography, and distance to water). The identification of high probability areas provides a basis for prioritizing further field survey and investigation. Areas identified with a high probability for containing archaeological sites include emphasis on the following features:

- » the confluence of a river with a lake;
- » the confluence of two rivers;
- » bluffs above major waterways;
- » promontories that may have provided good

- look-outs for prehistoric camps;
- » promontories near or adjacent to swamps
- » where water fowl might have congregated; and
- » bluffs surrounding inland lakes and streams.

RECREATION USE AND ACCESS

Local access to the Herning Trail is available along many of the existing rights-of-way and trails that the Herning Trail crosses. Evidence of residents accessing the trail for walking, snowshoeing, mushing, snowmachining and winter cycling can be observed by the tracks left in the snow and ice as well as in blogs.

There are very few places for visitors to park in order to access the Herning Trail. Limited parking is available at the Knik Museum. There is a short connector trail leading from the Museum parking area to the Herning Trail. It appears there is some overlap between the Herning Trail and the Iditarod Historic Trail. This portion of the trail tends to have heavy dog mushing traffic. No other nearby area was identified for public parking for trail access.



Left: A fat bike trip on Herning Trail in 2009.

Right: Dog sledding on the Herning Trail, which overlaps in some places with the Iditarod National Historic Trail.



IV. CONCEPT PLAN

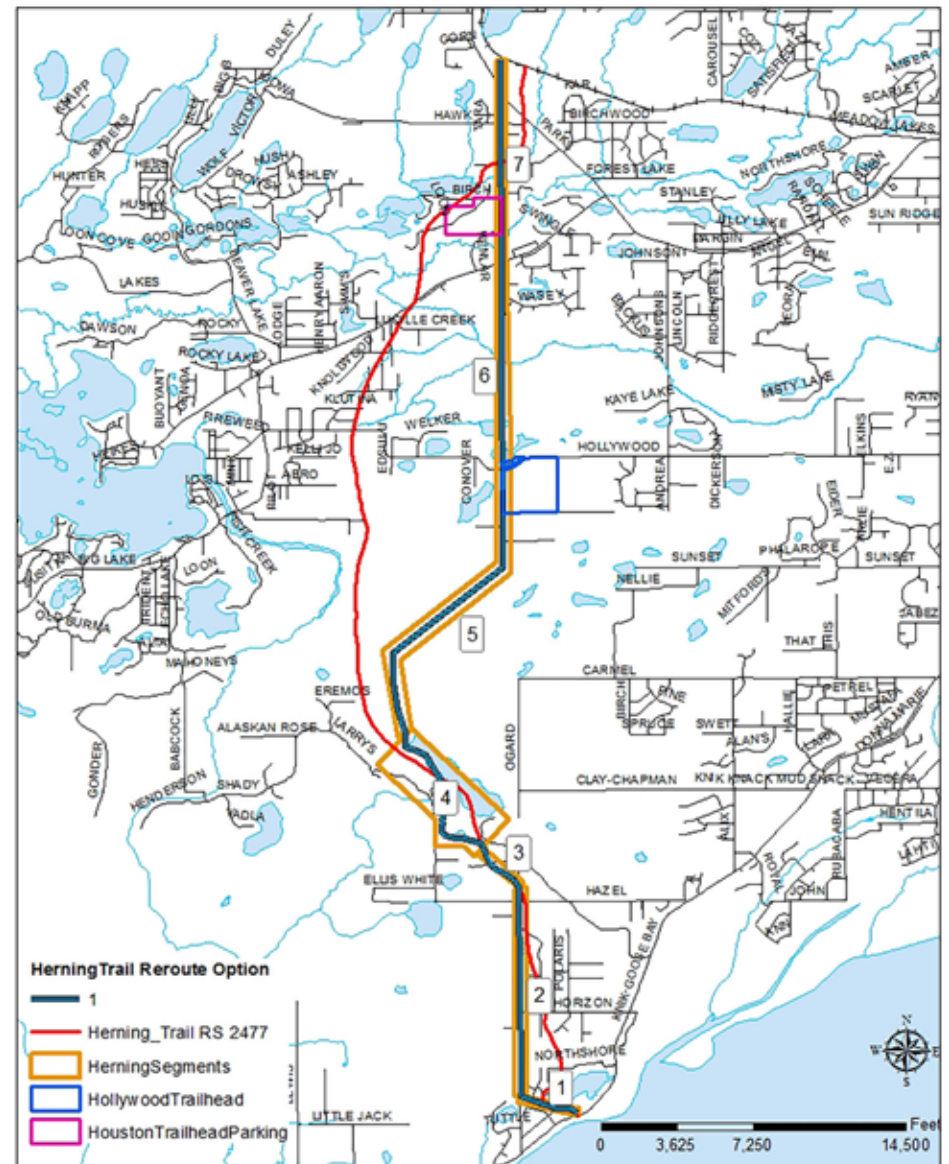
EXISTING SEGMENTS OF THE TRAIL

Portions of the RS2477 alignment are still viable. Re-route options considered by the project team focused on established section line easements, existing trails, and trails already proposed by the communities. Trail segments are shown on the following map that break up the trail based on physical attributes such as road crossings, overlap with existing trails, and terrain.

This Herning Trail Concept Plan seeks to establish a realistic, constructible, and useable winter route as a re-route of the Herning Trail RS2477 easement. Numerous conversations with property owners and residents along the existing RST alignment confirm that the alignment documented by the State in the mid -1990's is no longer a useable winter route. The Project Team, the communities of Knik-Fairview and Big Lake, the City of Houston, the Mat-Su Borough, as well as many of the property owners along the existing route support a realignment of the existing RST to the

Right: The Herning Trail Re-route shown in blue. The Herning Trail RS2477 easement is shown in red.

Herning Trail Reroute



one documented in this Plan.

PROPOSED RE-ROUTE

SEGMENT ONE

The first segment of the Herning Trail re-route follows the beginning of the RS2477 easement for the Herning Trail for approximately 1,570 feet before veering west along an existing trail recognized by the Knik-Fairview Community

Council and Big Lake Community Council as the Threemile Lake Trail. The trail crosses S. Malemute Run Drive, continuing for about 510 feet until it reaches the northern extent of S. Malemute Circle.

SEGMENT TWO

The second segment is about 9,920 feet long and trends due north, largely within section

line easements. This segment of the trail parallels the Knik-Fairview Community Council proposed Threemile Lake Trail. Segment Two begins where Big Lake Trail 7 (Knik Lake Trail) and the Knik Fairview Threemile Lake Trail split. Big Lake Trail 7 continues to the northwest along an existing clearing and aerial electrical transmission line.

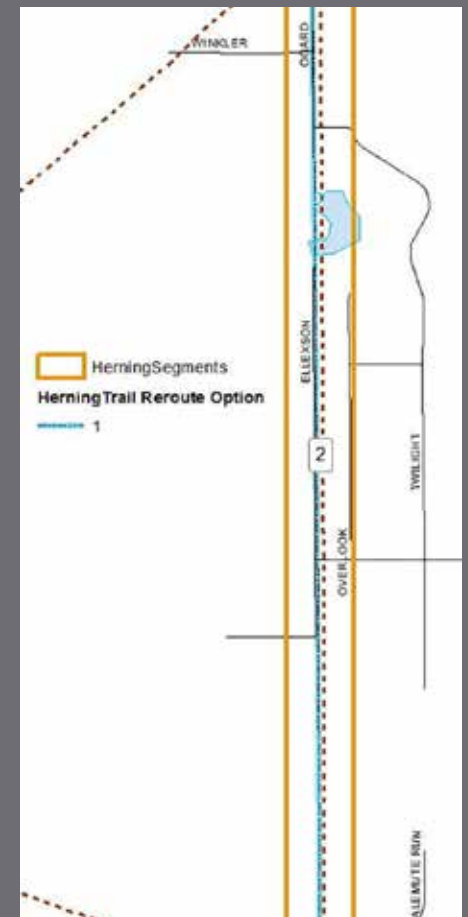


Left: Segment One.

Below left: Proposed trailhead for the Herning Trail reroute, taken from the parking lot of the Knik Museum. There could be room here for several trucks with trailers. The existing trail seen in the parking lot is represented by the blue line on the map at left. Snowmachines and dog sleds use this trail throughout the winter.

Below right: The existing trail along the proposed re-route is already used in winter. Additional signage could be posted at appropriate locations cautioning trail users to stay on the trail and off neighboring private property.

Right: Segment Two.



The first 1,320 feet of segment two is within a 40-foot section line easement. The following 1,320 feet will need to be included in a dedicated trail easement. There are two possible parcels which could support the trail easement. From there, the trail re-route parallels S. Ellexson Road and W. Ellexson Circle, about midway through segment two, for approximately 3,360 feet. S. Ellexson Circle runs within a 40-foot wide easement on the east side of the section line. S. Ellexson Road is within a 66-foot section line easement. There appears to be sufficient space within much of the right-of-way for a trail to co-locate.

SEGMENT THREE

Segment three runs about 2,710 feet long, running northwest along the dedicated RS2477 easement. This segment begins where the proposed re-route leaves Ogard Road and where the RST crosses Ogard. The existing RST is the preferred route for this segment of the trail. The Herning Trail was recognized during the platting process of the 100-acre woods subdivision. This segment of the trail is visible in both summer and winter.

SEGMENT FOUR

The fourth segment includes about 7,644 feet of trail. This portion of the trail crosses property owned by the Girl Scouts of Alaska and Threemile Lake. Segment 4 begins where the trail leaves the Shaw Subdivision and enters the Togo Woods Girl Scouts Camp. The existing RS2477 easement alignment passes through the middle of camp facilities near the shore of Threemile Lake. The RST crosses a very steep

bank as it drops down to the lake. The proposed re-route includes two options through the Togo Woods Camp. One option crosses a lake south of Threemile Lake locally known as Crane Lake. The second option passes to the south of Crane Lake. Both options then head due north to Threemile Lake. The re-route exits Threemile Lake onto another parcel owned by the Girl Scouts of Alaska where it heads north toward a borough owned parcel. The project team will need to coordinate with Girl Scouts of Alaska to determine which route is preferred.

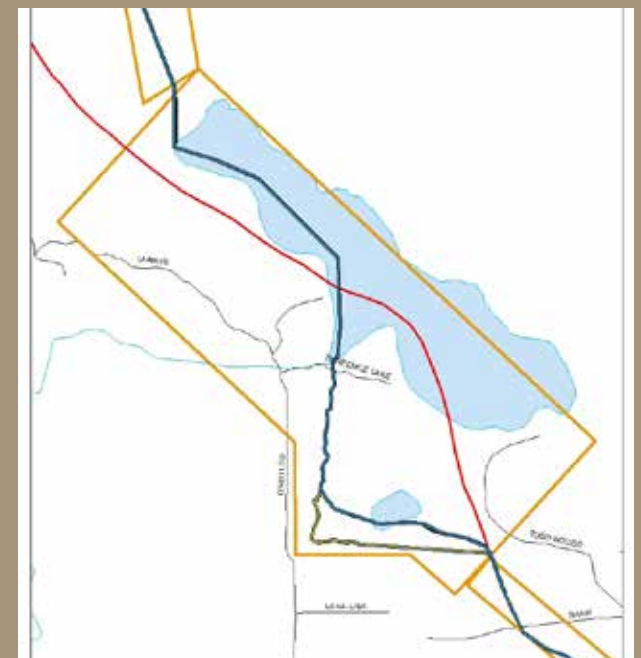
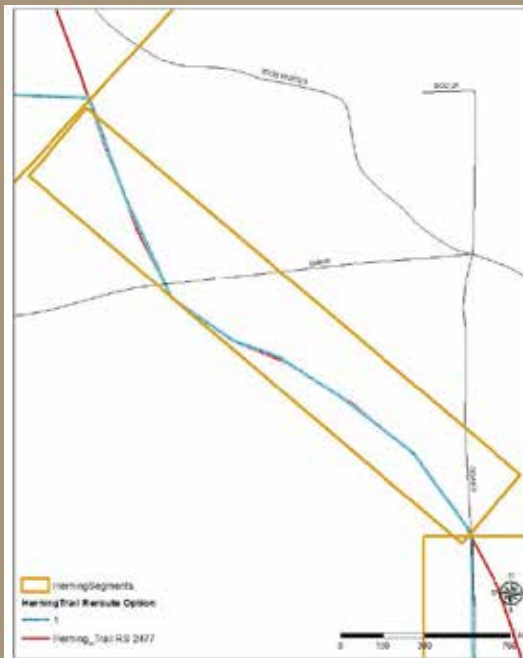
SEGMENT FIVE

This segment runs from Threemile Lake, approximately 15,170 feet across borough owned land and an existing easement ending at S. Hollywood Road. Several existing trails are crossed north of Threemile Lake before the trail merges with a north-south section line easement and Pond Lilly Drive.

The northern portion of segment five passes along two 33-foot section line easements until it encounters Pond Lily Road. At Pond Lily Road, the route runs along a 50-foot section line easement with an adjacent 33-foot easement to

Below Left: Segment Three.

Below Right: Segment Four, showing the two re-route options through Togo Woods Girl Scouts Camp.





Far above: Segment Five, including Hollywood Rd. Trailhead.

Above: Looking north from the end of Pond Lily Road across Hollywood Road.



Above: Looking South along Pond Lily Drive.

Right: Segment Six.

Hollywood Road. The proposed re-route should be developed along the western side of the existing easements and Pond Lily Road. There is more room for trail development along the western portion of the right-of-way and fewer road and driveway crossings. There is an existing winter trail running along the west side of Pond Lily Road.

A borough-owned parcel suitable for a trailhead and parking area is at the southeast corner of Pond Lily and Hollywood Road. A trail crossing Pond Lily from the west into the borough-owned parcel is recommended to be at least 150 feet from the intersection with Hollywood Road to decrease the likelihood of a traffic accident with turning street traffic. The re-route should cross Hollywood from the west side of Pond Lily. The speed limit along Hollywood Road should be decreased to 35mph due to the limited sight distances coming from either direction towards the trail crossing.

SEGMENT SIX

Segment six runs about 19,642 feet, between



Hollywood Road and Big Lake Road. From Hollywood Road the trail drops down to Whale Lake traveling along two 50-foot section line easements. The trail continues north across an unnamed lake and Lucille Creek.

The 33-foot section line easement to the west breaks from where the trail passes between Sections 13 and 14 (17N03WS.M.). The western section line easement resumes where the trail passes the Woody Lakes Subdivision. The high-mast electric transmission line crosses the trail at Lucille Creek and parallels the trail about 75 feet to the west. The proposed re-route may alleviate trespass occurring within the utility easement along the transmission line. This segment ends traveling along W. Wasey Way. Wasey Way is within a 33-foot easement. An

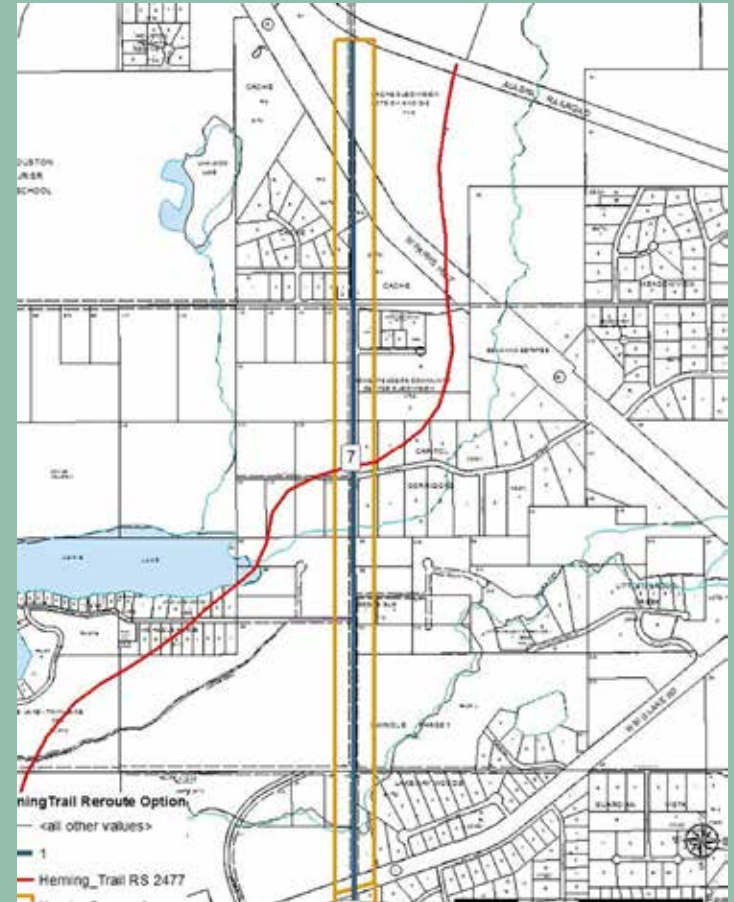


Left: Looking south along trail from Jeffery Lane



Below Left: Looking north along trail in section line easement by Woody Lakes Subdivision

Right: Segment Seven



additional 1,240 feet of trail easement may be required west of Wasey Way. Well-used winter trails exist along much of the proposed re-alignment of the Herning Trail. Jeffery Drive ends at the southwestern corner of the Woody Lakes Subdivision. The photograph below shows a trail heading south towards the Lucille Creek crossing and a high mast transmission line tower.

Topography along this segment of the trail may require some modest cuts and fills to reduce the grade of the trail to allow passage for dog mushers. The segment ends at Big Lake Road.

SEGMENT SEVEN

The last segment includes about 9,587 feet of trail between the railroad and Big Lake Road. The trail passes into the City of Houston at Big Lake Road. The speed limit on Big Lake Road

should be reduced to 45mph an appropriate distance on either wide of the trail crossing for safety. Easements run along the section line north of Big Lake Road with a total width of 85 feet. A driveway exists on the east side of the section line. Electric transmission lines are within a utility easement west of the section line easement. The trail crosses Little Meadow Creek about 670 feet north of Big Lake Road. The trail then crosses Kenlar Road about 1,185

feet north of the creek crossing.

An existing winter trail is well used along the west side of Kenlar Road, which appears to be constructed along the east side through much of the 83-foot section line easement. About 3,700 feet up Kenlar Road from Big Lake Road is a Public Safety Building driveway on a City of Houston parcel. The parcel is a good location for a trailhead.

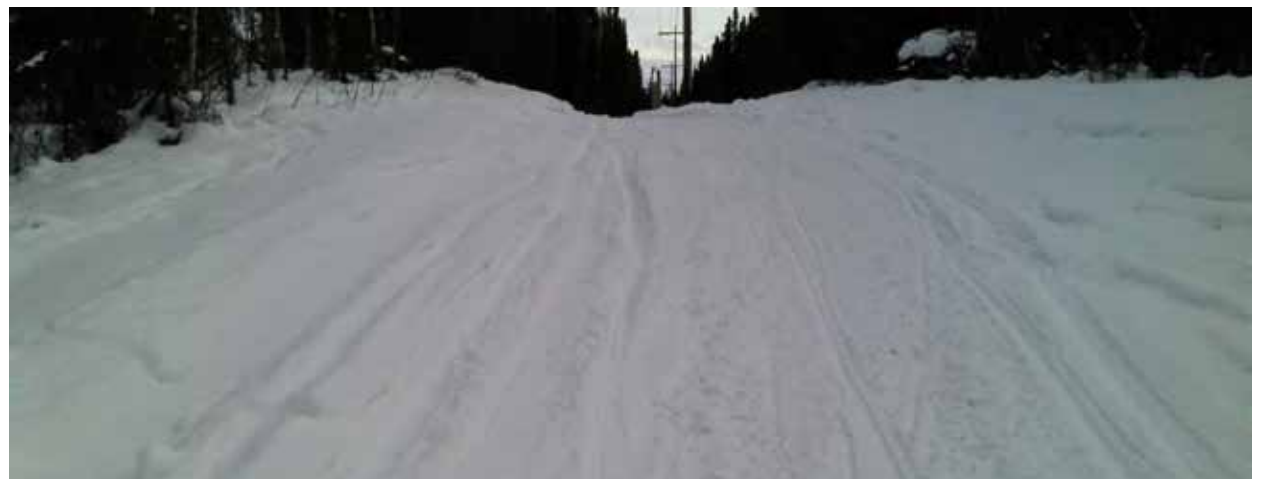
Most traffic on the trail along Kenlar appears to turn east and west at Hawk Lane. However, the aerial imagery shows an apparent trail continuing to the north along the 66-foot section line easements north of Hawk Lane. A possible obstruction appears to exist in the



western 33-feet of section line easement about 200-feet north of Hawk Lane.

The route continues north along the section line easements to the Parks Highway crossing about 1,650 feet northwest of the Herning RST crossing. An existing winter trail exists along the power lines south of the Parks Highway.

The proposed reroute of the Herning RS2477 crosses the Parks Highway at about milepost 53.6. This location has good sight distances and is relatively flat. It is a good location for an improved trail crossing. The speed limit should be reduced to 45mph for an appropriate distance on either side of the crossing. The route continues north past the Parks Highway within 66-feet of section line easements. A trail or road appears to have been constructed within the western side of the section line. The trail or road continues north along the section line easements to the railroad. It then trends northeast crossing the railroad with the Alaska Railroad right-of-way.



This is the end of the proposed re-route of the Herning RS2477 trail. However, given the end of the trail is near an existing railroad crossing, there is a possibility that the trail could continue north towards the Willow Mining District. The historic trail connected the town of Knik to the mining district. Segments of the Herning Trail are recognized by the City of Houston as well as the communities of Willow and Talkeetna and continue to the Willow Mining District and points beyond. The section line easement in which this portion of the trail terminates continues to the north where it ends at Loon Lake. A future effort to expand the Historic Herning Trail should evaluate route options to

Left: Looking south up trail along Hawk Lane.

Below left: Existing winter trail along west side of Kenlar Road.

Below: An existing winter trail exists along the power lines south of the Parks Highway.

connect the termination of this portion of the trail to the other recognized segments of the Herning Trail.

HERNING TRAIL DESIGN GUIDELINES

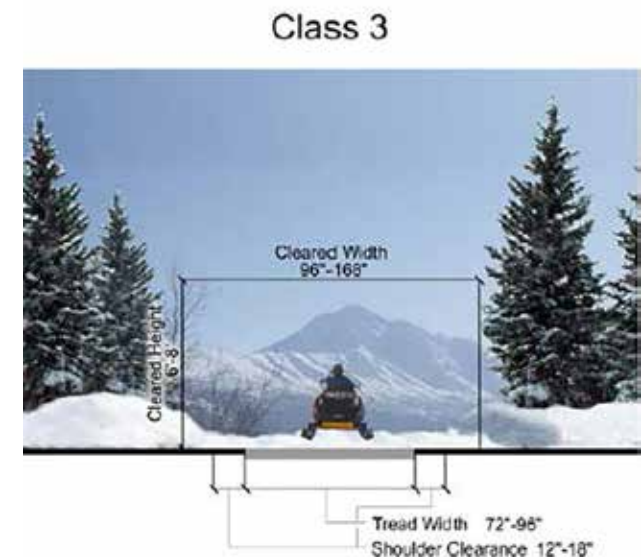
Trail design guidelines are based on the Alaska State Parks Trail Management Handbook (Alaska State Parks 2015).

Herning Trail was originally constructed to support horse drawn sleighs for freighting supplies from Knik to the Willow Creek Mining District. The historic trail has been used by dog mushers, snow machiners, skiers, and winter bikers and hikers. Trail design guidelines are generally developed to support the most restrictive user group of a trail. For instance, dog mushing trails require generally smoother trail treads and wider areas for passing when compared to snow machine trails. Skiers and snow machiners are accommodated by trails designed to support dog mushing.

The trail should be developed as a trail class 3, or a developed / improved winter trail with an obvious and continuous tread. The trail should be cleared of obstacles at least 10 feet in width and up to 14 feet for passing lanes. Maximum grade shouldn't exceed 20% for more than 200 feet with the target grade being no more than 10%. Turn should be constructed with at least a 15-20 foot radius.

SUMMARY: TRAIL MANAGEMENT OBJECTIVES (TMOS)

<i>Trail Class</i>	3, developed/improved trail
<i>Trail prescription</i>	Dog sledding
<i>Tread width</i>	8 ft
<i>Clearing width</i>	10 ft
<i>Managed for...</i>	Mushing, snowmachining, winter biking
<i>Prohibited uses</i>	Horseback riding
<i>Maintenance cycle</i>	Trail opening 1.0; brushing .125
<i>Trail features</i>	Water body and wetland crossings only safe with sufficient ice and snow cover; these segments may be unsafe during warm periods mid-winter
<i>Trailheads</i>	Knik Museum, Hollywood Road, Kenlar Road; primary trailhead may be best suited to Hollywood Road given the area available for parking
<i>Wayfinding</i>	Should be posted at all trail and road intersections; additional signage should be posted along trail segments passing through private property directing trail users to stay on trail; interpretive signs should be placed at trailheads
<i>Road crossings</i>	Hollywood Road, Big Lake Road, Hawk Lane, Parks Highway



V. HERNING TRAIL INTERPRETIVE PLAN

The Herning Trail Interpretive Plan will help realize the vision of the project and meet the goals developed by the planning team. Interpretation will show how the Herning Trail has “connected communities past and present,” and will create opportunities to discover and celebrate the Mat-Su’s rich history, culture, and natural environment.

It is important for Mat-Su residents and visitors to understand the history of the area because:

- » Understanding history increases the quality of life for children and adults alike by helping them connect more deeply with the place that they live – “preserving the past for the future.”
- » It motivates residents to be stewards of the land of the natural and cultural history.
- » Nearby landowners and other stakeholders will appreciate the value of the Herning Trail.
- » Sharing this history will add appeal to the project leading to more buy-in from locals, and can attract visitors to the area.

- » “Discover, Celebrate, Educate.”

VISITOR EXPERIENCE OBJECTIVES

Interpretation about the Herning Trail will offer trail users, including those seeking information about the history of the area, an opportunity to become connected to the place. By experiencing this interpretation, people will:

- » Understand the local mining history and its context in the larger Alaska gold rush during the early 1900s.
- » Support preserving historic trails and routes, and public access in general.
- » Appreciate the natural history and features that may be hard to see otherwise.
- » Expand understanding and appreciation of place names along the trail, and in local communities.
- » Show the value past and present – of winter travel by connecting trail user experiences with the past in the area and in Alaska in general.
- » Promote volunteerism to support the trail.

- » Promote appropriate and safe trail use.

AUDIENCE

We reviewed the list of potential audiences created during the first meeting, to try to focus on a few audiences to guide our theme and topic development. These included:

- » **Trail users,**
- » **Youth,**
- » Houston, Big Lake, and Knik-Fairview Community Councils,
- » Knikatnu and CIRI,
- » History enthusiasts and researchers,
- » **Local residents and landowners along the route,**
- » Local businesses, and
- » Tourists/visitors from out of state.

We initially highlighted trail users, local residents and landowners, and youth as potentially the most likely and key audiences for interpretation, and also identified the importance of community councils being

supportive of the project. After further discussion, the group decided that the theme and supporting topics will be flexible and broad enough to be relevant for all of these audiences, so we did not prioritize.

CENTRAL THEME

The Herning Trail was the primary winter connection between the mines of the Willow Creek District and the town of Knik, providing a lifeline for the miners.

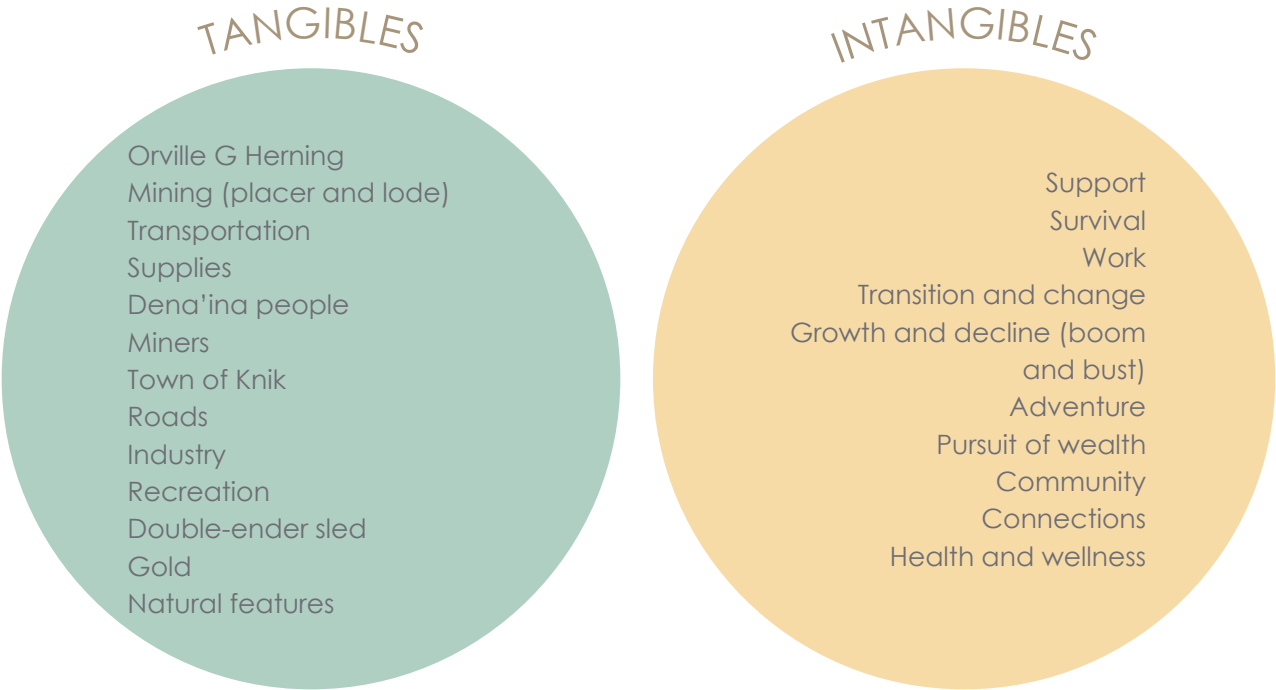
TOPICS (SUB-THEMES)

We then explored topics related to the primary theme, which will serve as the subjects for interpretation of the trail and its history. Instead of creating polished, finalized sub-themes, the concept plan will include the brainstormed list of tangibles and intangibles that the planning group created, depicted in the diagram at right. The plan will serve as a guide for those interested in developing interpretive products and programs by connecting these tangible assets with intangible meanings.

Further possible interpretive opportunities include:

- » An implementation and interpretive strategy – signs, educational programs, publications, online resources, etc.
- » Design guidelines (if not covered above)
- » Marketing and partnerships.

TOPICS



VI. REFERENCES

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