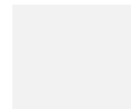


Nenana River Trails

Cultural Resource Report No. 2023-DENA-002

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ABSTRACT

Denali National Park and Preserve (DENA) is proposing an undertaking to improve existing, and create new, trails within Denali National Park & Preserve near the Nenana River. The Park is proposing a suite of trails to cater to different experiences in this non-wilderness park area, including a multiuse trail for both pedestrians and bicyclists. Up to 17 miles of trail could be constructed during this project from approximately mile post 231 to mile post 237 of the Parks Highway. The trails would provide additional recreational and interpretive opportunities and provide nonmotorized connections between heavily used activities areas within the Entrance Area of the Park. The trails would also mitigate resource damage from past and present hiker use in the area and would lessen safety concerns from visitor use of the Parks Highway shoulder. The Park has been experiencing increased visitation and the proposed trails would help to accommodate this increase.

The area of potential effect for the proposed has been surveyed and there are six cultural sites within the APE which are being treated as eligible for the National Register of Historic Places for the purpose of this determination of effect. Every effort will be made to avoid disturbing these cultural sites during the proposed undertaking. Proposed trail alignments that would impact any of the above sites, or other sites that may be discovered during trail construction would be rerouted to avoid disturbing the sites. The proposed project would increase human use of the area which in turn increases the potential for cultural resources sites to be disturbed, this disturbance will likely be minimal as trails will be placed out of site of cultural resources (such as cabins).

DENA is also proposing to name the Parks Highway Mile Post 231 Wayside that construction began on in 2022 after the Athna place name for the mouth of the Yanert River, Tl'ahwdicaaxi Caek'e (literal translation is "mouth of valuable headwaters"). It is possible that other parts of this proposed projects, such as trails or other infrastructure, may also be named, or co-named after this and other Native place names in and around the project area.

As designed, the project will not affect any historic properties. It is recommended that DENA approach National Historic Preservation Act, Section 106, consultation under 36 CFR Part 800.5(b) as "No Historic Properties Effected".

1 Description of Undertaking

Denali National Park and Preserve (DNA) is proposing an undertaking to improve existing, and create new, trails within Denali National Park & Preserve (the Park) near the Nenana River. The Park is proposing a suite of trails to cater to different experiences in this non-wilderness park area, including a multiuse trail for both pedestrians and bicyclists. Up to 16 miles of trail could be constructed during this project from approximately mile post 231 to mile post 237 of the Parks Highway. The trails would provide additional recreational and interpretive opportunities and provide nonmotorized connections between heavily used activities areas within the Entrance Area of the Park. The trails would also mitigate resource damage from past and present hiker use in the area and would lessen safety concerns from visitor use of the Parks Highway shoulder. The Park has been experiencing increased visitation and the proposed trails would help to accommodate this increase.

There are four proposed alternatives for the undertaking, and there are construction methods that would be common to all proposed alternatives. Construction of the trails would involve both hand crews and the use of mechanical equipment such as bulldozers, loaders, excavators, and material haulers. Borrow pits near the trail corridor would be used for aggregate when needed. Approximately one borrow pit would be needed for every mile of trail constructed, depending on the trail surface type and substrate material. Borrow pit locations would be restored to natural conditions when no longer needed for trail construction. When necessary, aggregate could be imported from sources outside of the Nenana River corridor.

Boardwalks would be used to cross wetland areas. On trails where only hiking is allowed, these boardwalks would be planks running between supports placed on top of the ground surface. For the multiuse trail, the boardwalk would be suspended above the wetland surface by helical piles driven into the ground. Helicopter use over one or two days could be required to transport boardwalk materials to difficult to reach sections of trail. This could be accomplished during low-visitation times of year and over non-wilderness areas of the park to minimize impacts from helicopter use.

Construction of a bridge over Riley Creek would require the use of heavy equipment. A total of two to three abutments would likely be needed to support the bridge. Construction access to the north abutment would be from the Riley Creek Picnic Area along an existing maintained service road. Construction access to the south abutment would be along the multiuse trail alignment from the Parks Highway bridge over Riley Creek.

When possible, equipment staging and construction activity would be focused away from developed visitor areas. Sections of trail would be opened to visitor use as they are completed to minimize overlap of construction activity and visitor use of the trails.

The four alternatives are as follows:

1.1 Alternative 1: No Action

Under the No Action alternative, no trails, overlooks, signs, bridges, or other facilities would be constructed in the project area. The area would remain open for off-trail day use throughout the year. No formalized winter trails or recreational opportunities would be created. Potential commercial use of the area would be evaluated and managed under existing laws, National Park Service (NPS) policies, park planning documents, and park compliance and commercial services processes.

1.2 Alternative 2: Construct Multiuse and Hiking Trails

The Proposed Action would create a total of approximately 17 miles of trail in the project area; this is the preferred alternative.

Of this total, approximately eight miles would be a multiuse trail designed for safe concurrent use by bicyclists and pedestrians. The multiuse trail would be approximately eight feet wide and would have a primarily crushed gravel surface. Trail location and design would create adequate sightlines, grades, and curves to reduce wildlife and user conflicts as well as encourage moderate cycling speeds.

An additional approximately nine miles of trail in the project area would be open to pedestrians only. The majority of these hiking trails would be approximately one to two feet wide with a primarily natural surface.

The southernmost mile of the hiking trails would form a universally accessible loop from the Mile 231 trailhead in conjunction with the southernmost mile of the multiuse trail. This mile of accessible pedestrians-only trail would be approximately 5 feet wide and would have a crushed gravel surface.

In addition to wayfinding signage on the trails, there may be other facilities constructed along the trails, including benches, interpretive signs, or overlook areas. These additional facilities would be concentrated near trailheads.

An approximately eight-foot-wide bridge allowing for safe concurrent use by pedestrians and cyclists would cross Riley Creek and connect the trail system to the Riley Creek day use area on the northern end of the project area. The bridge could be constructed as a single span of 250' or as two 125' segments. One 125' span would be sufficient to cross the stream channel, while a second 125' span would improve accessibility and keep the trail out of the floodplain on the north side of Riley Creek.

Ice jams on Riley Creek occasionally occur from freeze up to break-up, and evidence of ice pushing up and damaging trees is evident along upstream stretches of the creek's banks. An

overall bridge span of 250', in either one or two segments, would allow for water, ice, and debris to flow under the bridge during flood events. The bridge structure would also be located well above the 100-year flood level to minimize the potential for damage from moving ice floes and debris.

Each bridge span would be a prefabricated steel truss or similar design. If possible, the Riley Creek bridge would share design elements with the planned pedestrian crossing of the Nenana River at mile 231 to provide an iconic and consistent visitor experience.

Concrete abutments or driven piles would support the bridge. If two 125' spans were used, the concrete pier between the two segments would be located out of the stream channel.

No other facilities would be constructed on or near the trails under the proposed action.

All trails would be open for their respective uses year-round. Although the *2020 Winter and Shoulder Season Visitor Services EA* authorized motorized grooming of trails in this area, the NPS does not intend to formalize any winter recreational activities or trails in the project area as of 2023.

Commercial use would be allowed on the trails under existing laws, NPS policies, and park planning documents. Any novel commercial uses that might be proposed in the future would be evaluated by standard park compliance and commercial services processes.

1.1.1 Proposed Action and Alaska Railroad Realignment

The exact alignment of the multiuse trail in the Proposed Action from approximately mile 234 to 236 of the Parks Highway depends to an extent on whether the Alaska Railroad in this area is realigned to the west side of the Parks Highway. This realignment has been proposed several times in recent years but has not received funding or advanced from a concept to final engineering and design as of early 2023 (Alaska Railroad Corporation, 2018; Alaska Department of Transportation and Public Facilities, 2022).

If constructed prior to the realignment of the Alaska railroad in this area, the northern section of multiuse trail from approximately mile 234 to mile 236 of the Parks Highway would involve a crossing of the Alaska Railroad and would need to be in or close to the Alaska Department of Transportation & Public Facilities (DOT) right of way for approximately two miles. The crossing of the Alaska Railroad and use of the DOT right of way would require permits from both non-NPS agencies.

If the railroad were realigned in this area during or shortly after project initiation, the multiuse trail would occupy the former railroad alignment through the project area.

Construction of the proposed action would be phased to provide as much time as possible between project initiation and construction of this section of multiuse trail, allowing for more information to emerge about the possible railroad realignment while still ensuring that a multiuse trail, either in the DOT right of way or on the current railroad alignment, is built in the near future. Proposed phasing:

2023 Phase 1 = Hiking trail MP 231 to Yanert confluence

2024 Phase 2 = Hiking trail from Yanert confluence to MP 234

2025 Phase 3 = Bike path section (allowing only hikers to start with) from MP 234 to MP 231

2026 Phase 4 = Hiking trail from MP 234 to Riley Creek day use area

2027 Phase 5 = Hiking spur trails and multiuse trail from 234 to the entrance area, either using the DOT right of way if the railroad realignment is not definitive, or on the current railroad realignment if the realignment is imminent

1.3 Alternative 3: Postpone Project until after Railroad Realignment.

Alternative 3 would mirror Alternative 2 (the preferred alternative) except with respect to the multiuse trail.

Under Alternative 3, no section of the multiuse trail would be constructed unless the Alaska Railroad is rerouted to the west side of the Parks Highway from approximately highway mile 234 to 236. This railroad realignment was studied in the *2018 Denali Park Realignment Feasibility Study* conducted by the Alaska Railroad Corporation and was discussed in the *2022 Parks Highway Planning and Environmental Linkages Study* conducted by the Alaska Department of Transportation and Public Facilities in partnership with the NPS (Alaska Railroad Corporation, 2018; Alaska DOT, 2022). Although both the DOT and Alaska Railroad Corporation intend for this section of railroad to be realigned, no funding has been allocated for the project and substantial geotechnical, engineering, and administrative issues remain to be addressed.

If the railroad were realigned to the west side of the Parks Highway, the multiuse trail would be constructed. The multiuse trail would be the same as described in the proposed action except for the approximately two-mile section between Parks Highway mile 234 and 236. In this two-mile section, instead of crossing the Alaska Railroad and making use of the DOT right of way, the multiuse trail would use the former railroad alignment. If the railroad were not realigned, no section of the multiuse trail would be constructed.

If the railroad were realigned to the west side of the Parks Highway, the multiuse trail would be constructed under Alternative 3. The multiuse trail would be the same as described in the Proposed Action except for the approximately two-mile section between Parks Highway mile 234 and 236. In this two-mile section, instead of crossing the Alaska Railroad and making use of the DOT right of way, the multiuse trail would use the former railroad alignment.

If the railroad were not realigned, no section of the multiuse trail would be constructed under Alternative 3.

Although there would only be a hiking trail connecting to the Riley Creek day use area prior to the railroad realignment and construction of a multiuse trail, the bridge over Riley Creek would be constructed from the outset to accommodate both bicyclists and pedestrians in anticipation of eventual railroad realignment and multiuse trail construction. Doing so would eliminate the need to construct a hiking-specific bridge and replace it with a multiuse bridge when and if the railroad were to be realigned.

All other aspects of this alternative would be the same as described in Alternative 2.

1.4 Alternative 4: Trails and Campground.

Alternative 4 would be the same as Alternative 2 but would add two small walk-in campgrounds to the trail system.

One campground would be located just to the east of the former gravel pit near mile 234 of the Parks Highway and one campground would be located in the vicinity of the confluence of the Nenana River and the Yanert Fork of the Nenana. It could be possible to provide ADA access and ADA-compliant facilities in the campground near milepost 234. This would require an approximately 0.25-mile trail to access the campground from the trail network described in the proposed action.

Both campgrounds would be rustic and provide three to seven tent pads each. Additional facilities associated with the campgrounds could include cooking shelters with or without picnic tables, wildlife safe food storage lockers, water catchment systems as needed, and pit or composting toilets. Campgrounds would potentially require reservations and/or user fees and would not be available for use during winter months. The intent of the campgrounds would be to provide a visitor experience that is distinct from camping in a drive-up campground and from the trailless backpacking otherwise offered in Denali.

All other aspects of this alternative would be the same as described in Alternative 2.

1.5 Native Place Names

DENA is also proposing to name the Parks Highway Mile Post 231 Wayside that construction began on in 2022 after the Athna place name for the mouth of the Yanert River, Tl'ahwdicaaxi Caek'e (literal translation is "mouth of valuable headwaters"). It is possible that other parts of this proposed projects, such as trails or other infrastructure, may also be named, or co-named after this and other Native place names in and around the project area.

2 Legal location for the undertaking and Local Environment

The project area is located within the Healy C-4 USGS Quadrangle Map. The overall project area is located the north side of the Parks Highway from MP 231 to MP 239. The project area is located within sections 19 and 30 of T14S, R6W and sections 3, 10, 13-15, 23-25, 35, and 36 of T14S, R7W of the Fairbanks Meridian.

The project area is within a portion of the state Wahrhaftig (1965) characterized as the northern foothills of the Alaska Range. Wahrhaftig describes this area as flat-topped east-trending ridges 610-1,370 m (2,000-4,500 ft) in altitude, 4.8-11.2 km (three to seven mi) wide, and 8-32 km (5-20 miles) long, separated by rolling lowlands, 215-460 m (700-1500 feet) in altitude and 3.2-1.6 km- (two to ten mi) wide. The area is comprised of upland glacial topography (kettle and kame)

The overall project area is a spruce woodland with an understory of moss and lichen interspersed with thickets of rose and willow. The survey area has intermittent small stands of aspen along the south-facing small hillslopes. Other vegetation in the area includes fireweed, alder, dwarf birch, berries, and tall grasses.

3 Area of Potential Effect

The Area of Potential Effect (APE) encompasses a 40ft buffer from the centerline of the proposed trails and a 200ft buffer around the proposed campground locations. The APE for the undertaking is 86.8 acres.

4 Results of Inventory and Records Check

DENA cultural resource records, previous cultural resource survey reports from the area, GIS data as well, and the Alaska Heritage Resource Survey (AHRs) information were reviewed previous to this project. There have been many surveys within the project area beginning in the 1980s with the most recent survey concluding in 2022 (see Table 1). In total 916.2 acres have been surveyed in the project area, the majority of which has occurred in the last 10 years.

Table 1- Overview of Previous Surveys in Project Location

Report Name	Year	Reference	Method	Associated AHRS Site/ Local Resources
Denali National Park Survey	1981	Davis	Survey	HEA-00285
US Park Service Archeology Inventory Report 007-94-DENA	1994	NPS	Survey	HEA-00302
DOT Survey for the Riley Creek Bridge Replacement	2012	Story	Survey	N/A
2015 Archaeological Investigation Summary Report: Nenana River Proposed Trail Route Project Denali National Park and Preserve, Alaska	2015	Peterson	Survey	HEA-000666, HEA-00667, HEA-00668, HEA-00669, HEA-00671, HEA-00672, HEA-00673, HEA-00674, HEA-00677, HEA-00678, Local Resources: 15JP14, 15JP15, 15JP17, 15JP18, 15JP21, S31JP15
2016 Archaeological Investigation Summary Report: McKinley Village Wayside MP 231 Project Denali National Park and Preserve, Alaska	2016	Peterson, McCuiston, Gilbert	Survey	Local Resource: 16JP14
Parks Highway MP 231 Wayside, Trailhead, and Trail Connections	2017	Gilbert		N/A
2017 Archaeological Investigation Summary Report, Denali National Park and Preserve, Alaska	2017	Peterson, McCuiston, Gilbert	Survey	HEA-00688
2018 Archaeological Resources Summary Report: McKinley Village Wayside MP 231	2018	Fristoe, Gilbert	Survey	N/A
2019 Archaeological Resources Summary Report: Nenana River Bike Path	2019	Gilbert, DuVall	Survey	N/A
2020 Archaeological Investigation Summary Report: Proposed Nenana River Trail Route Project	2020	DuVall, Gilbert	Survey	N/A
2021 Determination of Eligibility for the Mile 234 (Not Eligible)	2021	Johnson	Research	HEA-00739
2022 Archaeological Investigation Summary Report: Proposed Nenana River Trail Route Project	2022	Gonzalez Negrete, et al.	Survey	HEA-00762, HEA-00763, HEA-00762, HEA-00763

4.1 Survey methodology description

An intensive pedestrian survey was completed of both surface and subsurface for this project. 15-20m transects were walked along the length of a polygon derived from flagged routes provided by the trail crew. Over 300 shovel test pits (STP) were excavated during survey for this project.

4.2 Cultural Context

The project area is surrounded by some of the most important cultural sites in central Alaska that provide evidence of some of the earliest human occupation of the New World as well as cultural continuity over the last 10,000 yrs. Of note there are multiple sites from the American Paleoarctic Tradition (dating to 10,600-7,000 yrs ago) along the Nenana River and surrounding the project area including Owl Ridge, Panguingue Creek, Carlo Creek, and the Erodaway Site. Additional sites dating to the Nenana Complex, Denali Complex, Northern Archaic Tradition, and Athapaskan Period are also found in close proximity to the project area. The presence of native place names in the project area also provides evidence of the long and rich cultural history of the area.

The more recent historic period of the area is also rich and is evidenced by the 18 recorded historic sites in the project area, including six which are located within the proposed trail alignments. There are an additional five cultural resource sites within the project area that may be historic in age, but further research is needed before that determination can be made. The historic sites include cabin sites, those associated with railroad construction and use, mining, road construction, trapping, hunting, exploration, and park development.

4.3 AHRS Sites located within the Project Area

The follow provides a short description of the 18 AHRA sites found within the overall project area. Of these 18 AHRS sites, five are located within the APE (HEA-00671, HEA-00672, HEA-00678, HEA-00762, and HEA-00763).

HEA-00671 (Located in the APE)

The site consists of five 55-gallon steel drums and several pieces of dimensional lumber within a disturbed area. Vegetation includes small black spruce, willow, and aspen. Initially this disturbed area was thought to be related to the Old Parks Highway route, but aerial imagery suggests it is outside of the original road corridor. Several diagnostic features on the steel drums provide a date range from the 1930s to 1950s. The five (5) steel drum features are described as followed: 1. 20/18 gauge walls/ends 55 gallon drum with blue paint remnants and two (2) closures on the upper end; 2. Marking read, "C 216 858" with a hex bolt on the top closure. There are yellow paint remnants present on the drum. Two (2) lower profile roller rings with ten (10) again lower profile rings on either side of the two (2) primary rings; 3. Markings read, "ACCO 18 55 34". Remnants of yellow paint are present. This barrel is constructed out of 18-gauge steel, was manufactured in 1934, and has two (2) closures on its upper end; 4. This barrel has two (2) closures with no paint or embossing visible; and 5. Markings read, "RHEEM 18 55 39". This barrel was produced in 1939 by Rheem out of 28-gauge steel. There are two (2) closures present on the upper end with no paint visible on the drum.

Drums 3 and 5 are both constructed out of 18-gauge steel and date to the mid-1930s. Drum 1 is a 20/18 drum; 20/18 drums have 20-gauge walls and 18-gauge ends. This type of drum was introduced in 1956.

HEA-00672 (Located in the APE)

This site consists of a historic wood scatter and dimensional lumber nailed together. Several pieces are nailed together to form a 17-foot-long segment, three (3) boards wide and one (1) board thick. Nailed perpendicular to this segment with four (4) wire nails are several 1 ½" x 1 ½' x 10' blocks. The blocks are irregularly spaced. The area is bouldered and well-vegetated with moss and black spruce boreal forest. The flood plain is vegetated by cottonwood, alder, aspen, and sparse spruce.

HEA-00678 (Located in the APE)

This site consists of lumber, 55-gallon fuel drums, a shovel, and a can scatter. One (1) can is an American Powder Mills can which likely dates to the 1920s, prior to the company's sale to American Cyanamid. An Edison Carbonaire battery was also noted, this battery type was introduced in 1953. Further documentation of the site is needed.

HEA-00762 (Located in the APE)

Site consists of a wooden ladder within a depression in relatively flat broadleaf woodland. The depression measures roughly 11ft north-south x 12ft 6in east-west x 2ft 4in deep. The wooden ladder is approximately 13 ½in wide and built out of 2x4s. The wooden ladder is approximately 13 ½in wide and built out of 2x4s. These 2x4s, due to manufacturing and weathering, now measure approximately 2in x 3 ½ in. There are at least four (4) machine-made nails in the ladder which protrudes about 11in from the ground.

HEA-00763 (Located in the APE)

Site consists of five (5) historic cans, mostly crushed, in relatively flat broadleaf woodland. Overall, the site is approximately 35ft north-south x 10ft east-west. One (1) shovel test.

Can #1 (CA#1) is crimped, machine-soldered with a key strip opening. Can is 3in in diameter and 3 1/8in tall.

Can #2 (CA#2) is crimped, machine-soldered, ribbed can that is now crushed. Can measures approximately 2 7/8in in diameter and 4 1/4in tall.

CA#3 is also crushed, crimped, machine-soldered, and ribbed. Can measures approximately 3 7/8in in diameter and 4 5/8in tall. The can lid is embossed with "2KDE4" (top row) and "4512" (bottom row)"

CA#4 is a crushed, machine-soldered can measuring 2 5/8in in diameter and 3 7/8in tall. There are three (3) lines of embossed text on the top of the can reading, "TOM/G8X LX/SH8 01"

CA#5) is crushed, crimped, and machine-soldered with three (3) lines of embossed text on top of the can. The text reads, "01/CEXLA/839" .(S11EGN22) was placed near the center of the site which yielded negative results. All five (5) cans have crimped sides with machine solder. Additionally, three (3) of the cans have embossed writing on the top/bottom.

HEA-00285

This site consists of cabin remains located about 30m east of an old road (that goes downhill towards the river, from between campsites 37 and 39 of the Riley Creek Campground), and 105m west of the old highway. In 1981, Davis noted a foundation, cans, and a 55-gallon drum as being present. Reconnaissance in 1991 noted that most evidence of the structure had been obliterated, one wall berm being all the structural remains immediately apparent. At the north end of the site a pile of debris, including a large barrel stove, stove parts, food cans, and rectangular 5-gallon oil cans, were noted. These are probably the remains of a one-room log cabin built and inhabited by W.A. Baker. Baker, who sometimes worked for NPS and for the Alaska Railroad, lived here beginning in 1930. (1994 Draft determination of eligibility).

HEA-00302

This cabin measures 2.57m x 3.72m and is outlined by pole fencing which provides support for earthen berms around the bldg. The structure is framed with log poles and covered with canvas, cardboard, and tarpaper siding. Three tall spruce tree stumps were left in place as support posts. There is a window in the N wall, and a door on the W side. It has a shed roof covered with flattened fuel cans and rust-colored, rolled asphalt roofing. Other features at the site include stacked spruce poles and cord wood, dumps, 2 rabbit hutches, artifact scatters and an interesting shovel display, probably created by recreational visitors.

HEA-00666

This is a component of the historic Riley Creek Bridge Pilings site, a previously noted but never registered site. Though more pilings debris is known to be located in the areas, at this time only a large metal object located on the north edge of Riley Creek has been documented (see Figure 15). It is partially buried in creek alluvium. It is made out two of "I"-beams or train rails welded to either side of a piece of sheet metal. The rails are not parallel but widen away from each other at the exposed end. The site datum is center point of object. This site has been determined Not Eligible for the National Register of Historic Places (NRHP).

HEA-00667: Oxbow trail cable

Site consists of a single piece of metal cable on a terrace above the Nenana River.

HEA-00668: Oh-Riley Auto Parts

This site consists of a historic artifact scatter of automotive parts and cans located in a gully north of Riley Creek in open spruce forest. Less than 5% of the ground is visible. Artifacts consist of a large sanitary can, a fragment of an automotive head or tail light, three cylinders with

holes in the sides (exhaust glasspacks), one of which is modified to act as a strainer and one of which is crushed and has both ends cut off, the lid to an oil drum or similar, metal cable, metal hoop, and oil filter. Moss is overgrowing the scatter and ground squirrels burrow nearby. A cleared path with axe-cut stumps, possibly a winter trail, is nearby.

HEA-00669: Riley Trail

Site is a cleared path with numerous axe-cut stumps in its boundaries, possibly a winter trail. The width of the path varies from 2m to 5.5m. The section recorded runs between Parks Highway and a dirt lot southeast of Riley Creek Campground, but may have connected with a cleared path on the west side of the dirt lot (the path on that side is heavily used and does not have cut stumps). Cut stumps are 1-2' tall and there are also numerous boulders within the path, indicating that is was likely not a road for cars.

HEA-00673

This shovel test was positive for cultural materials. Cut bone was located at an approximate depth of 13cmbs in the transition between loamy silt (10YR 4/3) with roots and sandy loamy silt (5YR 2.5/2) layers. Root burn was also noted. The bone is a rib from an unidentified species and appears to have one distinct cut end.

HEA-00674

This site consists of a fragment of a single historic can. Only the base of the can is present and has edges suggesting the can originally had lapped seams along the base. Two (2) STPs nearby were negative for cultural materials but there is a large, cleared area suggestive of a potential feature. Further testing should be conducted at this site.

HEA-00677

This site consists of a can scatter, a partial wooden crate with remnants of red paint, creosote-treated lumber and railroad ties, 55-gallon drums, a battery, and a kerosene Adams & Westlake Company lantern. The contents of this site likely date to the 1940s-50s railroad work. A Hills Bros. coffee tin dates from the 1940s-60s period. Other diagnostic artifacts are also present which may narrow down the dates for this site. Further documentation of the site is needed.

HEA-00679

This site consists of dimensional lumber, creosote-treated railroad ties, a can scatter, and Dietz brand lanterns (Blizzard and Crescent models). This site likely dates to railroad work in the area which occurred in the 1940s-50s

HEA-00688

The site consists of a pit measuring 55 by 36. It is lined with lumber on the east end with one upright post in the NE corner. The lumber measures 1 1/2 by 4 1/2.

HEA-00739: The Mile 234 Pit

Determined not eligible for the NRHP in 2021. The Mile 234 Pit is a roughly six-acre site that has served multiple purposes for the National Park Service (NPS) probably since the construction of the Denali Highway segment that connected Mount McKinley National Park to Cantwell.

Although the origin of the pit is unknown, it is speculated that the pit was originally developed by the Alaska Road Commission when the Denali Highway was being constructed in the early 1950s. The NPS started using the site as a dump in 1964. In 1980 it became a storage/holding area and then eventually a shooting range. The Mile 234 Pit is situated within a mosaic of mixed white spruce-deciduous forest, with an understory of willow and dwarf birch. More open areas of nearby vegetation (particularly to the west) are dominated by scrub-shrub seasonally saturated wetlands.

HEA-00756

Site is a historic scatter containing one glass bottle, one tin aerosol can, and two corrugated culvert sheets. The site is situated on a small, raised terrace overlooking Riley Creek and west of the former Riley Creek bridge and road. Brown glass bottle is circa ~1950-1960s Northwestern Glass Co. from Seattle, WA. One negative STP was conducted within the site near Site has potential for more buried historic artifacts. Vegetation consists of open spruce forest with open tall willow shrub along the creek side and an understory of moss and lichen.

4.4 Local Resources

Local resources are described as cultural components that do not meet the age threshold to be considered archeological resources, or whose age is uncertain. There are eight recorded local resources in the project area, and one of these is located within the APE (S31JP15).

S31JP15 (STP) (Located in the APE)

A fragment of bone was located in the O/A horizon at approximately 5cmbs just below roots. The bone is fractured but does not appear cut and it is unknown if it is naturally occurring or culturally modified.

15JP14- Local Resource

This site is a local resource consisting of a small rock ring with no surface artifacts. It is likely a fire ring, possibly modern. The rocks are overgrown with moss and lichen but clearly visible. No datable or diagnostic materials are present.

15JP15 Local Resource

This site is a local resource consisting of a rock ring with a modern or late historic sanitary can. The can has a random string of letters and numbers embossed on the base:

15JP17- Local Resource

This site is a local resource that consists of a series of five pits on top of a bluff overlooking the Nenana River. It is likely that these pits are collapsed burrows or related to treefall. Burned stumps and numerous deadfall trees were noted on the top of the bluff.

15JP18- Local Resource

This site is a local resource that consists of materials originally stored on NPS property now moved downstream due to an apparent flood event. Materials include lumber, cut logs, tires, wire, and assorted other debris within a small creek channel. The flood event pulled down a segment of fencing pushing trees and soil as well as the debris across the fence and out across a flood channel

15JP21, Local Resource

This site is a local resource consisting of several pieces of culvert, sheet metal, and lumber. This site appears to be a modern refuse scatter.

This site is a local resource, as such an AHRS number was not requested/assigned. A fragment of bone was located in the O/A horizon at approximately 5cmbs just below roots.

22EGN03, Local Resource

This local resource could potential be a stacked rock feature, but is most likely natural in origin. Two 2 x 2 ft. wide rocks appear to be stacked on top of each other to a height of approximately 1.5ft.

5 Recommendations

For the purposes of this report, the local resource S31JP15 (bone found in an STP) which is located within the APE will be treated as a cultural site. For the purposes of assessing the overall effect of this proposed undertaking on historic properties, the five AHRS sites ((HEA-00671, HEA-00672, HEA-00678, HEA-00762, and HEA-00763), as well as the local resource S31JP15 are being treated as historic properties and as eligible for the NRHP.

Development of trails and associated infrastructure, and the increase in visitation and use of the area may increase potential for looting or damage to the sites; however it is anticipated that this would be minimal as trails and associated infrastructure will be place out of site and away from historic properties. Construction may also impact previously undocumented cultural resources.

Every effort will be made to avoid disturbing know cultural sites during the proposed undertaking. Proposed trail alignments that would impact any of the above sites, or other sites that may be discovered during trail construction would be rerouted to avoid disturbing the sites and to remove them from the trail viewshed. If addition route changes are proposed, these routes would be surveyed prior to trail construction and any cultural resources avoided through additional realignments. Borrow pit locations will also be surveyed prior to construction and moved if any cultural resources are found within their footprints.

The railroad bed alignment has not been surveyed. If Alternative 3 is implemented the railroad alignment route will be surveyed prior to the implementation of construction of that part of the undertaking; if additional cultural resources are located during this or other surveys the trail routes will be moved to avoid impacting them.

Given the rich cultural history of the area and the presence of historic era sites within the project area and APE, periodic monitoring of ground disturbance is recommended for this project, especially in sections of the proposed trails where cultural sites have been located or in areas that have high potential for buried cultural remains.

If cultural resources or items protected by the Native American Graves Protection and Repatriation Act are discovered during project implementation, all project-related activities in the vicinity of the discovery will be stopped and the park archaeologist will be notified immediately. DENA in consultation with the State Historic Preservation Officer and other consulting parties would determine a course of action per 36 CFR Part 800.13.

Based on our review, as designed, the project the project will not affect any historic properties. It is recommended that DENA approach National Historic Preservation Act, Section 106, consultation under 36 CFR Part 800.5(b) as “No Historic Properties Effectuated”.

6 Maps & Figure

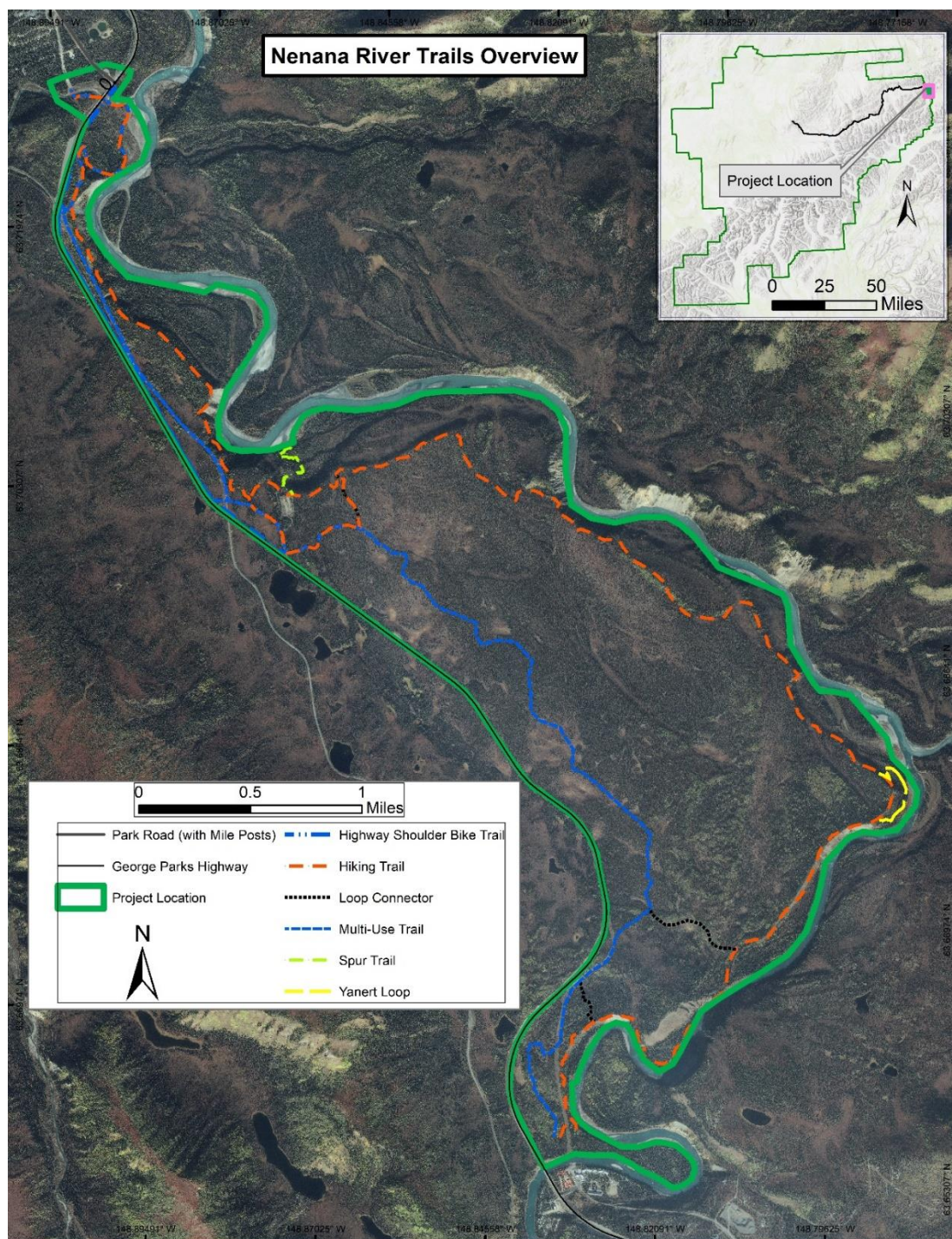


Figure 1- Overview of proposed undertaking project area.

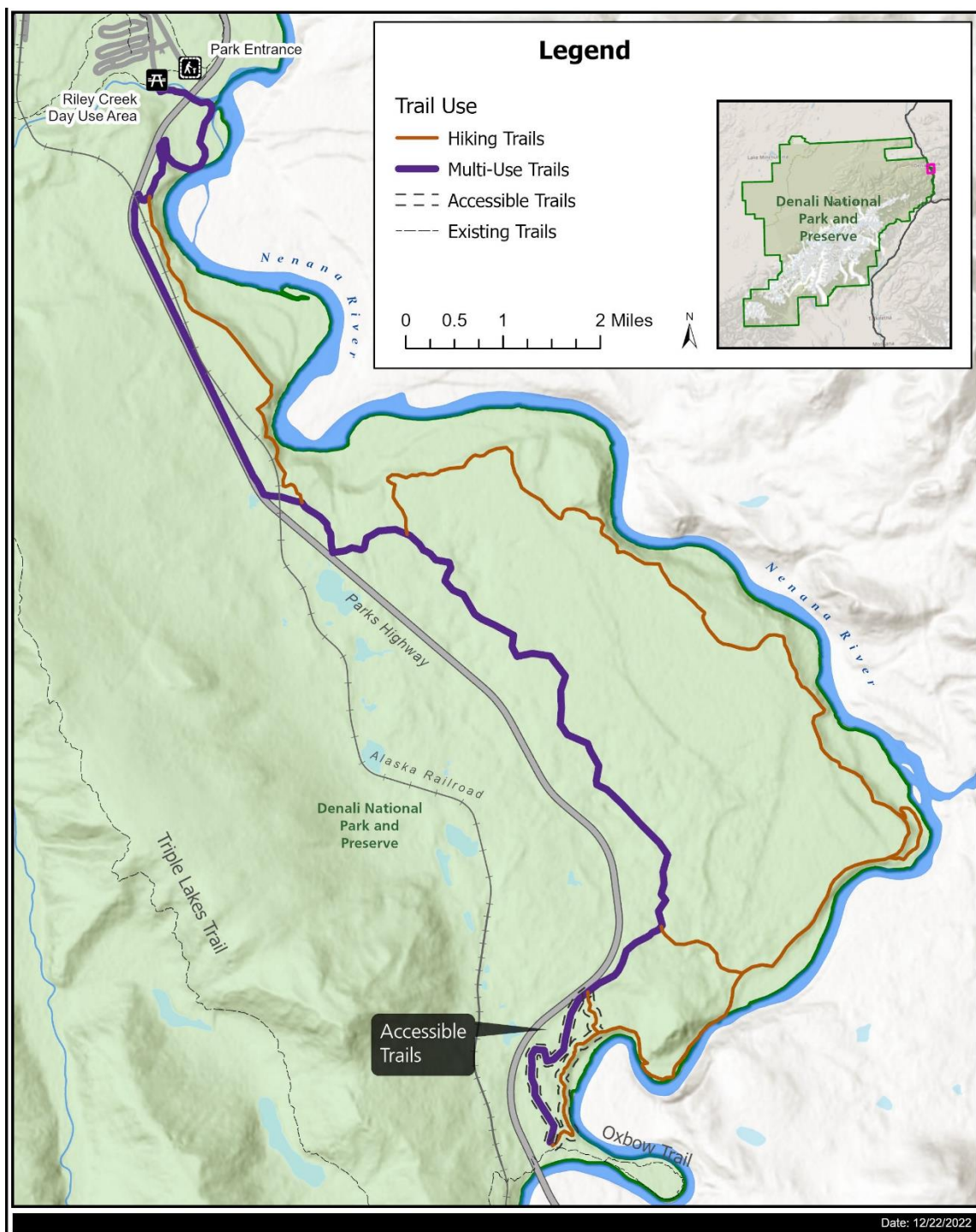


Figure 2- Alternative 2 Overview (Preferred Alternative)

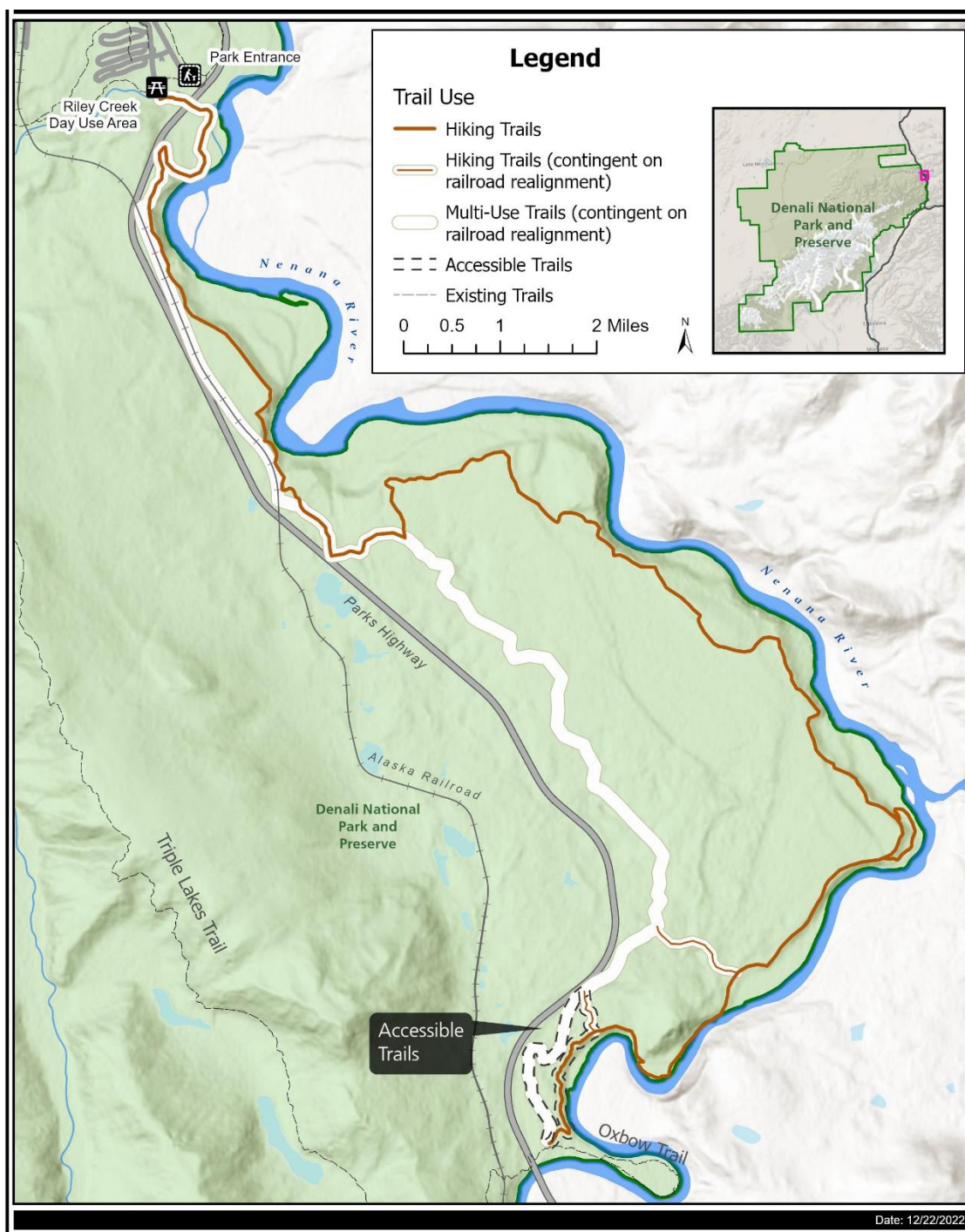


Figure 3-Alternative 3 Overview

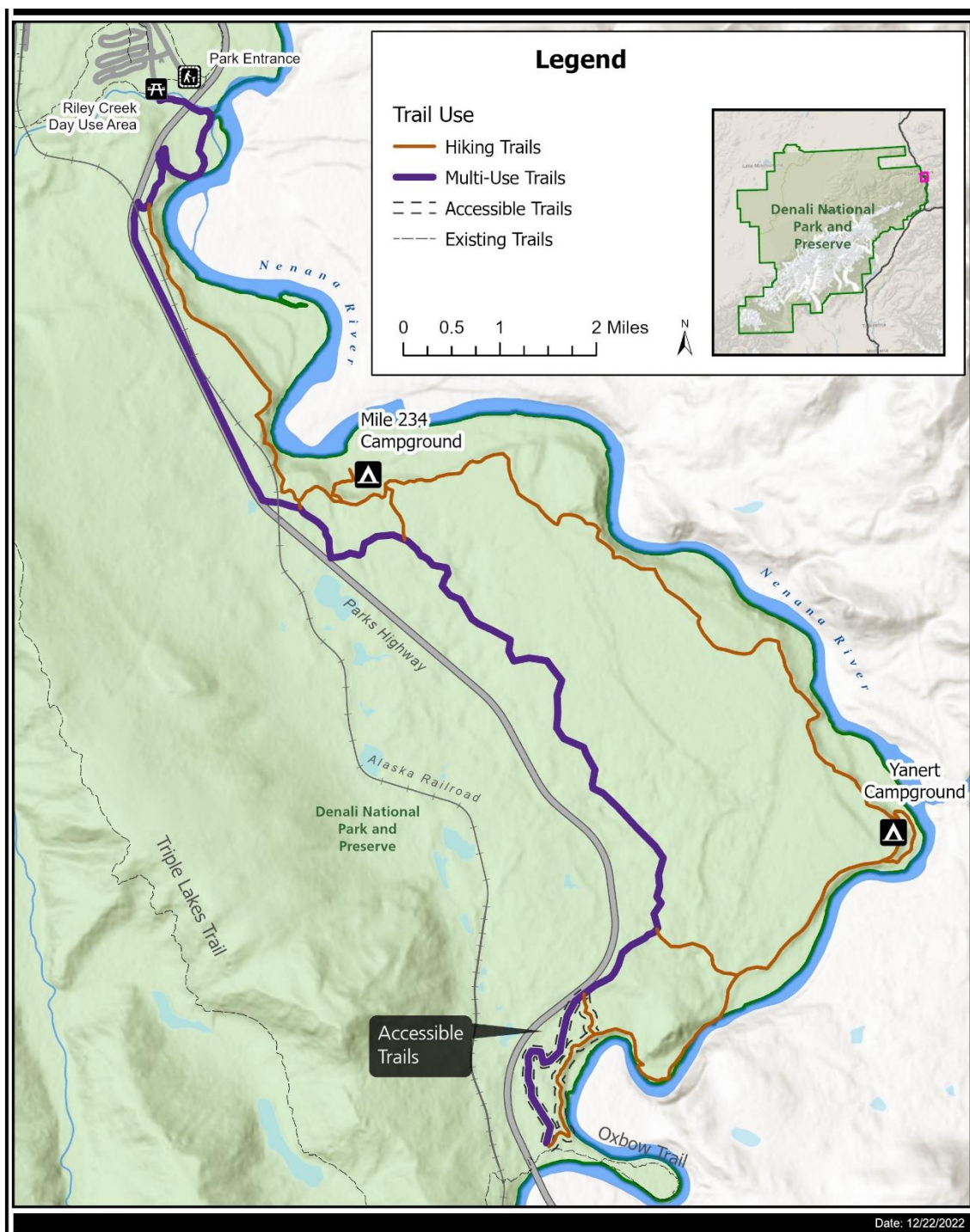


Figure 4- Alternative 4 Overview



Figure 5- Overview of Native Place Names in and around the Project Area.

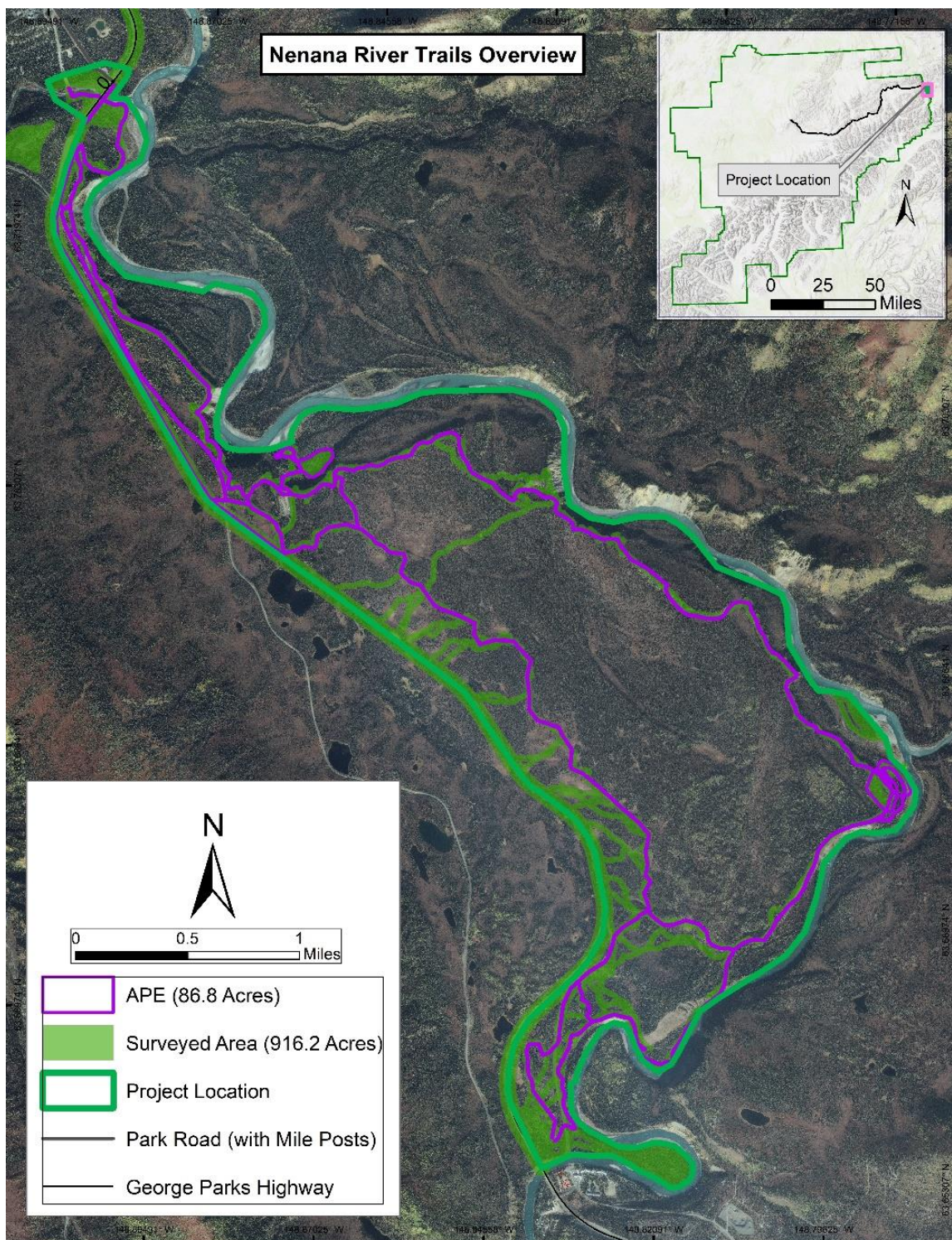


Figure 6- Overview of APE and Surveyed Areas.

7 References

Gonzalez Negrete, E., Phoebe Gilbert, Shina DuVall, P. Firstoe, A. Koscielniak, E. McCuistion and J. Peterson

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