

**East Fork Area Improvements and Use,
Denali National Park and Preserve**

Cultural Resource Report No. 2022-DENA-002

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Abstract

Denali National Park and Preserve is anticipating not being able to open the Denali Park Road beyond mile 43 while addressing geohazards in the Polychrome area on the Park Road in 2022 and 2023. As such, DENA is proposing an undertaking to turn traffic around at the East Fork of the Toklat Bridge and to use the East Fork Cabin site for interpretation. The Denali Park Road, the East Fork Bridge, and the East Fork Cabin Site are all historic properties listed on the National Register of Historic Places.

The use of the East Fork Cabin Site for interpretation would be temporary (until the Park Road reopens past the East Fork Bridge). No ground disturbance is planned at the site, and any changes to the area would be temporary. As designed, this portion of the proposed undertaking would not adversely affect the East Fork Cabin Site.

To be able to turn busses around, DENA is proposing an undertaking to widen the road on the east side of the East Fork Bridge for busses to safely turn around without executing a three-point turn. This is being approached as a permanent change and would adversely affect the Park Road Historic District and the Cultural Landscape; the East Fork Bridge would not be affected.

As designed, the project will result in the adverse effect to historic properties. It is recommended that DENA approach National Historic Preservation Act, Section 106, consultation under 36 CFR Part 800.5(a) as “Historic Properties Adversely Affected”.

1 Description of Undertaking

Denali National Park and Preserve (DENA) is anticipating not being able to open the Denali Park Road beyond mile 43 next year due to projects to address a rock glacier at mile 45 (known as the Pretty Rocks landslide) and other geohazards in Polychrome Pass making the road impassible. DENA is working on a long term solution to provide access across this area, and it will likely be several years before a proposed solution is in place. In the interim, DENA is proposing an undertaking to turn traffic around at the East Fork of the Toklat Bridge (East Fork Bridge) at mile 43 and to use the East Fork Cabin Site for interpretation.

1.1 East Fork Bridge Turnaround and Use

The East Fork bridge area would be used as a turnaround location for Transit buses operated by Doyon/Aramark Joint Venture (JV) and other traffic during the period when access along the road is closed at mile 43; this closure is anticipated to be several years long. JV busses require an 85 foot diameter turning area to turn busses around without executing a three point turn. DENA is proposing to permanently widen the road on the east side of the East Fork Bridge to an 85 foot diameter area so that buses could safely turn around; vegetation would be removed, and ground disturbance would take place. The ground on the south side of the road at this location drops precariously down to the river and the larger turn around would avoid busses having to backup close to this drop off.

In addition to the proposed permanent widening of the road at this location, DENA is proposing a number of temporary above ground installations to facilitate this location for visitor and JV use. These include parking a JV transit bus at the location to be used for dispatch and visitor shelter, installation of a temporary shelter on the west side of the bridge for DENA staff use, marking an accessible parking spot somewhere in the project area (potentially on the bridge) to offer an accessible surface for wheelchairs, and installation of porta potties (near the dispatch bus and DENA staff shelter).

An additional proposed temporary installation that would involve ground disturbance would be a temporary staircase from the west side of the bridge down to the East Fork of the Toklat River. This proposed staircase would provide safe visitor access to the river and its flood plain. These stairs would likely be made of stone and would be designed to blend with the natural setting. The steps would be removed at the conclusion of the undertaking.

1.2 East Fork Cabin Site Use

The East Fork Cabin would be used as an interpretive stop for Tundra Wilderness Tours (TWT's) operated by JV while the road closure past mile 43 is in effect. A Certified Interpretive Guide/driver of the TWT would provide an interpretive experience that would incorporate

themes appropriate for the area such as the history of Adolph Murie, wolf studies, dog mushing, and climate change.

The interpretive stop would last approximately twenty minutes with visitors looking at the cabin from the outside. Visitors will not be allowed to enter the cabin or access the historic outhouse located at the site. The interpretive stop would be similar to how the interpretive stop is done at the Savage River Cabin where the guide is standing on the porch of the cabin looking out facing the visitors and the visitors will be facing the cabin so they can see the cabin as they are learning about the significance of the cabin and area. The maximum number of visitors using the East Fork Cabin Site at one time would be 48 which equals the occupancy of one tour bus.

TWT busses would travel down the access road to the East Fork Cabin and park in an established parking area. No ground disturbance or changes to the East Fork Cabin Site or access road would need to take place to facilitate this beyond potential light brushing to ensure line of site for bus drivers.

Two to six portable toilets would be placed near the cabin for emergency restroom use. The JV believes this would adequately meet demand as the drivers will inform the visitors on tour logistics when they board the bus and at the Teklanika Rest Area.

Additional JV or DENA above ground equipment (such as an emergency cache or ambulance) may be staged at this location temporarily if needed.

2 Legal location for the undertaking and Local Environment

The project area is located in Section 1, T15S, R12W, within the Fairbanks Meridian within the in USGS quadrangle HEALY C-6 topographic map area. The project area, located at an elevation of approximately 3,000 ft. above sea level, lies within the northern boreal forest biome (taiga).

3 Area of Potential Effect

The Area of Potential Effect (APE) is 150ft buffer around the centerline of the park road and the East Fork Cabin access road and Site. The APE includes 25.45 acres where potential physical effects are likely to occur.

4 Results of Inventory and Records Check

DENA cultural resource records, AHRS records, and GIS data were reviewed previous to this project. The footprint of the proposed 85' turnaround was surveyed in September of 2021 (Holloway 2021). Portions of Mount McKinley Park Road Historic District and Cultural and the East Fork Patrol Cabin Site and Cultural Landscape (CL) (HEA-00218, HEA- 00485) are in the

physical APE. Contributing resources of the PRHD include the East Fork Patrol Cabin Site and the East Fork Toklat River Bridge.

4.1 Mount McKinley Park Road Historic District and Cultural Landscape (HEA-00429/MMK-00171, HEA-00517/MMK-00195)

The 92-mile Mount McKinley Park Road Historic District and Cultural Landscape (PRHD&CL) runs east to west in the foothills north of the Alaska Range in DENA. The road extends from mile 237.3 of the George Parks Highway across several low passes and glacier-fed rivers to the historic mining district of Kantishna, which was incorporated into the park by the Alaska National Interest Lands Conservation Act in 1980. The road was originally constructed from 1922 to 1938 by the Alaska Road Commission (ARC). The ARC and the NPS collaborated on the road design. The road is historically significant for its association with the period of scenic road development in national parks in the 1920s and 1930s, as well as for its association with the Mission 66 park development program in the 1950s and 1960s (Criterion A). The road is also a rustic example of landscape engineering combining NPS aesthetic road design principles with the ARC's experience constructing roads in northern environments (Criterion C).

The areas of significance are Entertainment/Recreation and Transportation for its relation to automobile tourism and Landscape Architecture for its aesthetically oriented design. The period of significance begins in 1922 when the route was originally cleared. It extends to 1972, when the Park Road shuttle bus system was implemented. The PRHD&CL is significant at a national level because it serves as one of the most important corridors for tourism in a national park in Alaska.

The PRHD&CL retains integrity in the areas of significance of entertainment/recreation, transportation, and landscape architecture for the period of significance (1922 to 1972). Overall, the PRHD&CL conveys its historical significance through its location, setting, design, materials, workmanship, feeling, and association. Despite several minor realignments along the road, including a 0.2-mile reroute beginning at mile 4, most of the alignment of the Park Road has not been altered by the NPS or ARC since the period of significance. Consequently, most of the road remains in its original location. Development in the PRHD&CL and its viewshed is minimal. The federally designated DENA wilderness that surrounds the district ensures the preservation of the biotic communities and undeveloped nature of the setting.

Overall, the material associated with the road structure reflects the conditions during the period of significance. Primarily native materials continue to be used, with an earthen roadbed and gravel surface material. Pavement is limited from mile 1.8 to 15, which conveys the feeling and association with the mid-twentieth century use of the road and its association with the Mission 66 era.

The PRHD&CL retains integrity of design by exhibiting characteristics of a NPS scenic road with alignments associated with the Mission 66 era (particularly between mile 1.8 to 30) that do not detract from the feeling of isolation and wilderness. The preservation of the road alignment, which provides views of the landscape and access to wilderness, and the control of expansion of the road footprint are the most significant elements of the district's integrity. Aspects that allow the road to convey the aesthetic and historic feeling of the historic period include the relatively low design speed, the curvilinear alignment of the road, the exposure of the landscape

unprotected by guardrails on the slopes of Polychrome Mountain and between Stony Creek and Grassy Pass, and the panoramic views that result from minimal obstructions.

Prior to the opening of the Denali Highway (Alaska Route 8) in 1957, there were very few private vehicles anywhere on the Park Road, and traffic decreased farther west. Because most of the visitor and vehicular activity originates at the eastern end of the road (near the Alaska Railroad and the George Parks Highway) plans to improve the road have typically been based on a telescoping approach; the road becomes more primitive traveling west. The Mission 66 proposal of 1956-1966 to pave the road to mile 31 and to make it a uniform width (and “oiled”) from there to the Eielson Visitor Center at mile 66 was halted due to a national outcry over excessive improvements to a wilderness road.

In addition to the East Fork Patrol Cabin Site and Cultural Landscape (detailed below), the East Fork Toklat River Bridge (East Fork Bridge) is a contributing feature of the PRHD&CL and is located in the APE. This three-span, four-beam steel bridge is at mile 43.5 and was constructed in 1956 with a cast-in-place concrete deck, concrete piers, and concrete abutments; it is 283 feet long and 28.5 feet wide. This bridge is a contributing feature of the PRHD&CL and is considered part of the Mission 66 program. Although the bridge replacement program began before Mission 66 in the park, the Mission 66 program addressed overall development in parks and often accelerated projects initiated prior to Mission 66 (Wackrow et al. 2020). Historic and existing condition photographs of the PRHD&CL are shown in Figure 7 through Figure 28.

4.2 East Fork Patrol Cabin Site and Cultural landscape (HEA-00218, HEA-00485) (East Fork Cabin & CL)

The East Fork Cabin & CL is a contributing feature of the PRHD&CL. Constructed between 1929 and 1930, this site is approximately 0.25-mile south of mile 42.8 (Wackrow et al. 2020). The East Fork Cultural Landscape includes both the Cabin Site (HEA-00218) and the East Fork Coal Mine (HEA-00485).

The ARC used the site as a base camp for road construction in the late 1920s and 1930s. The East Fork Cabin served as a cook house and food storage for ARC employees who lived in multiple canvas tents. The camp extended from the East Fork Cabin toward the East Fork of the Toklat River. Even before the Park Road was completed in 1938, the NPS used the ARC cabin for winter dogsled patrols. After the road was complete, the cabin served as a summer base camp for wildlife researchers (Welzenbach 2017).

The East Fork Cabin was the fourth ARC cabin to be built. This cabin served as the base for road construction crews working on the East Fork Bridge and Polychrome Pass. The crews positioned their white canvas tents in the area between the cabin, Coal Creek to the south, and the East Fork River to the west (Welzenbach 2017).

The East Fork ARC Camp likely operated from 1929 through 1938. By 1985 the cabin maintained its ongoing use as summer quarters for a backcountry ranger and during the winters by NPS dogsled patrols and the Denali Dog Tours concessioner (Evans 1985).

Wildlife biologist Adolph Murie and botanist Louise Murie lived in the East Fork Cabin for eight summers between 1939 and 1970, including consecutive summers from 1939 to 1941 (Evans 1985, 1986; Bryant 2011). From the East Fork and Igloo Cabin base camps, Adolph studied wolves, birds, grizzly bears, and other wildlife. Adolph’s book *The Wolves of Mount McKinley* was published in 1944.

Adolph and Louise, along with Olaus and Margaret Murie, are renowned in the NPS and conservation communities for their scientific research and successful advocacy for wildlands. Based on his research in Yellowstone National Park and DENA, Adolph was an early advocate for the role of predators in an ecosystem and successfully promoted the elimination of wolf eradication. He also strongly opposed additional development of DENA and persuasively argued for the retention of the gravel surface on the western portions of the Park Road when paving was proposed in the 1950s. The Murie Science and Learning Center at Denali is dedicated to the Murie family's research and conservation efforts.

The East Fork site's scientific legacy was continued with the installation of the Dean Cabin. The cabin has provided a base for research operations since 1975. Housing in DENA's interior has allowed scientists more direct and regular access to their research subjects. Ultimately, multi-year studies based out of the site—including those done by the Muries—provided a greater understanding of the park's ecosystems.

The Dean Cabin is a noncontributing resource in the East Fork Patrol Cabin Cultural Landscape. A different wood building appears in some historic photographs west of the East Fork Cabin, but that building has a gable roof and is much closer to the East Fork Cabin. The Dean Cabin was built in 1975 and is not contributing to the East Fork Cabin Site or Cultural Landscape as it was constructed after the period of significance.

The East Fork Cabin is meaningful to the state of Alaska because of its association with two historical themes; the development of a transportation system in remote areas on interior Alaska, and the early efforts of the NPS to practice wildlife conservation in the first national park in Alaska. It is eligible under Criterion A for transportation and conservation.

5 Recommendations

The proposed permanent widening of the Park Road to an 85' diameter on the at the east end of the East Fork Bridge will adversely affect the Park Road HD & CL as it will depart from the narrow design of the road. The other installations, including the staircase, porta-potties, temporary shelters, and accessible parking place are all temporary and would not adversely affect the Park Road HD & CL, or any of its contributing features. The proposed location for the staircase is on an old roadbed which has been previously disturbed and should not disturb any cultural resources.

The archeological survey conducted in September of 2021 did not locate any cultural material. The shovel tests indicated that the ground was previously disturbed throughout the proposed 85' turn around area. Snow cover was in place by the time the survey was conducted, and so it is recommended that all ground disturbance be monitored by a qualified archeologist to ensure that no cultural remains are disturbed. Based on the survey the entire area of proposed ground disturbance has been previously disturbed.

The project, should not adversely affect the East Fork Cabin Site and CL. No ground disturbance is planned for this portion of the project, and the minor brushing that may be needed should not affect this historic property. The change in use of this resource will provide an opportunity to

share its history with park visitors. Chance for disturbance of any archeological features or cultural items at the Cabin Site and CL is low as visitors will be kept on existing paths and will not have time to explore the area after the interpretive visit (which lasts the majority of the 20 minute stop). DENA staff will periodically monitor the site to ensure it is not being impacted by visitation and interpretive use.

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 will adversely affect the Park Road HD & CL. It is recommended that DENA approach National Historic Preservation Act, Section 106, consultation under 36 CFR Part 800.5(a) as “Historic Properties Adversely Effected”. DENA will consult with the Alaska State Historic Preservation Officer, Tribes, and other consulting parties to resolve adverse effects through an agreement document. This will likely occur through an amendment to the existing “Programmatic Agreement Between the National Park Service, Denali National Park and Preserve and the Alaska State Historic Preservation Officer Regarding Routine Maintenance, Repair, Operations, Bridge and Culvert Replacements, Geohazard Monitoring, and Emergency Maintenance on the Denali Park Road Corridor.”

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6 Maps

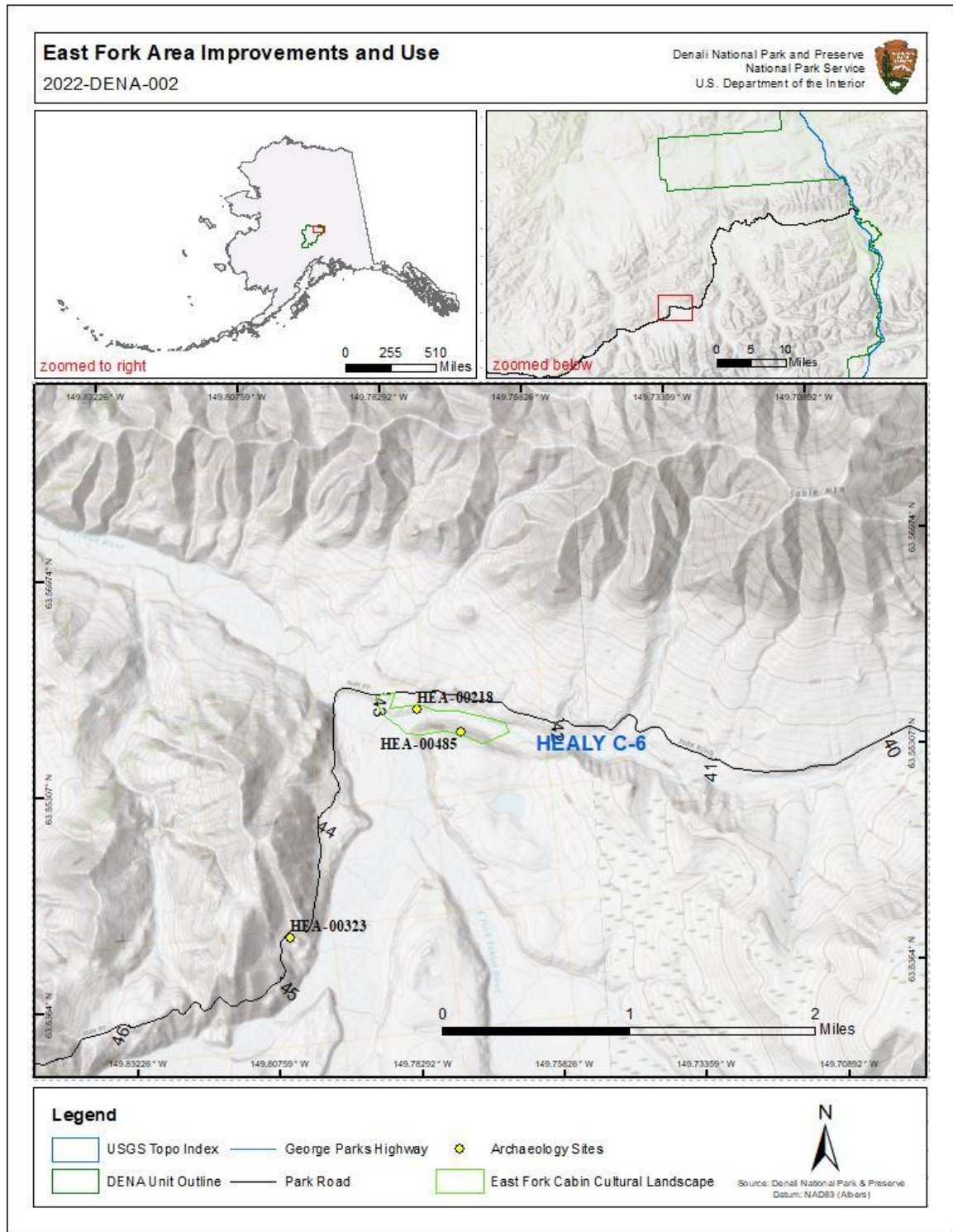


Figure 1- Overview of proposed undertaking project area.

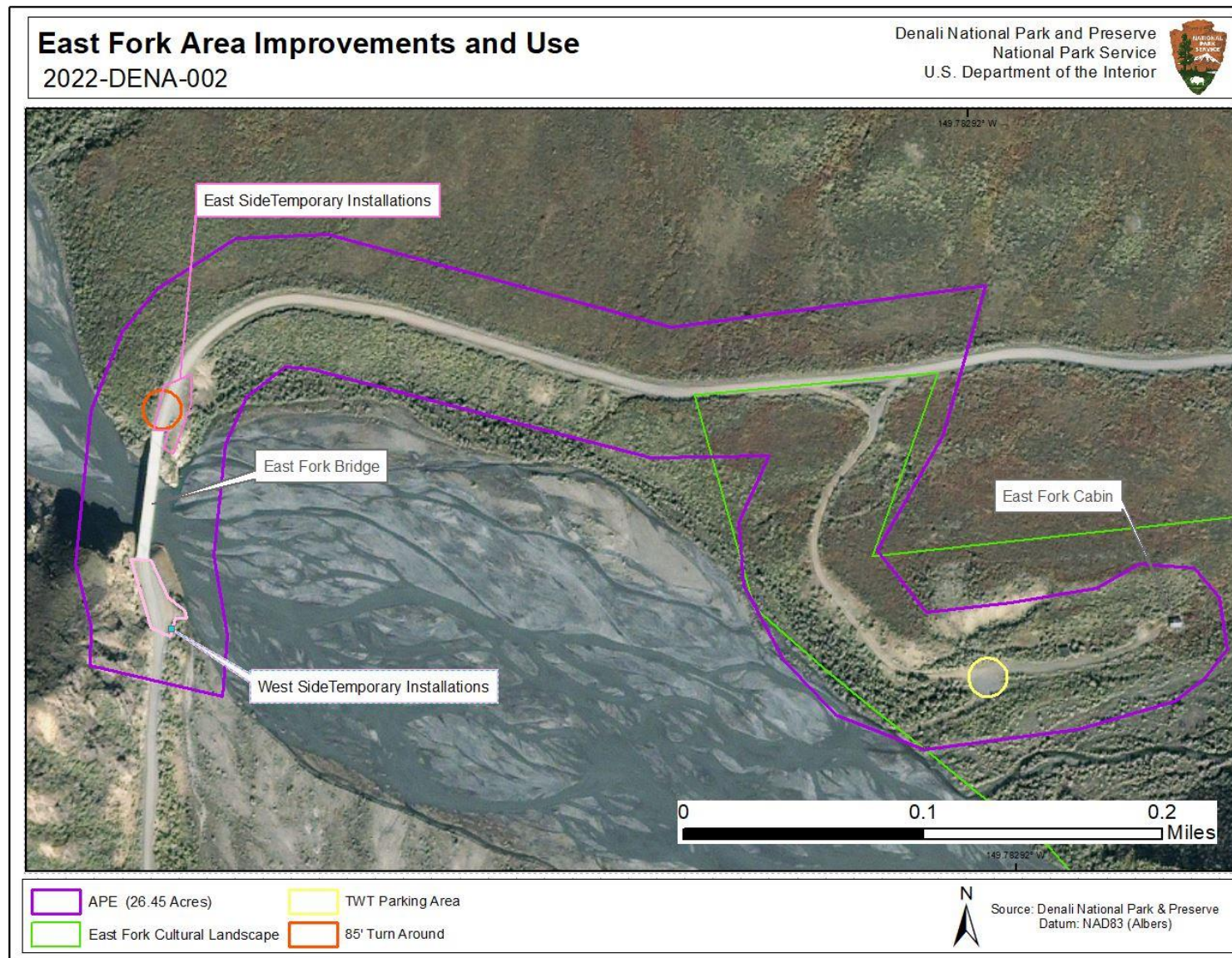


Figure 2- Area of Potential Effect



Figure 3- East Fork Cabin, 1928 (Alaska State Library, Alaska Road Commission Collection).

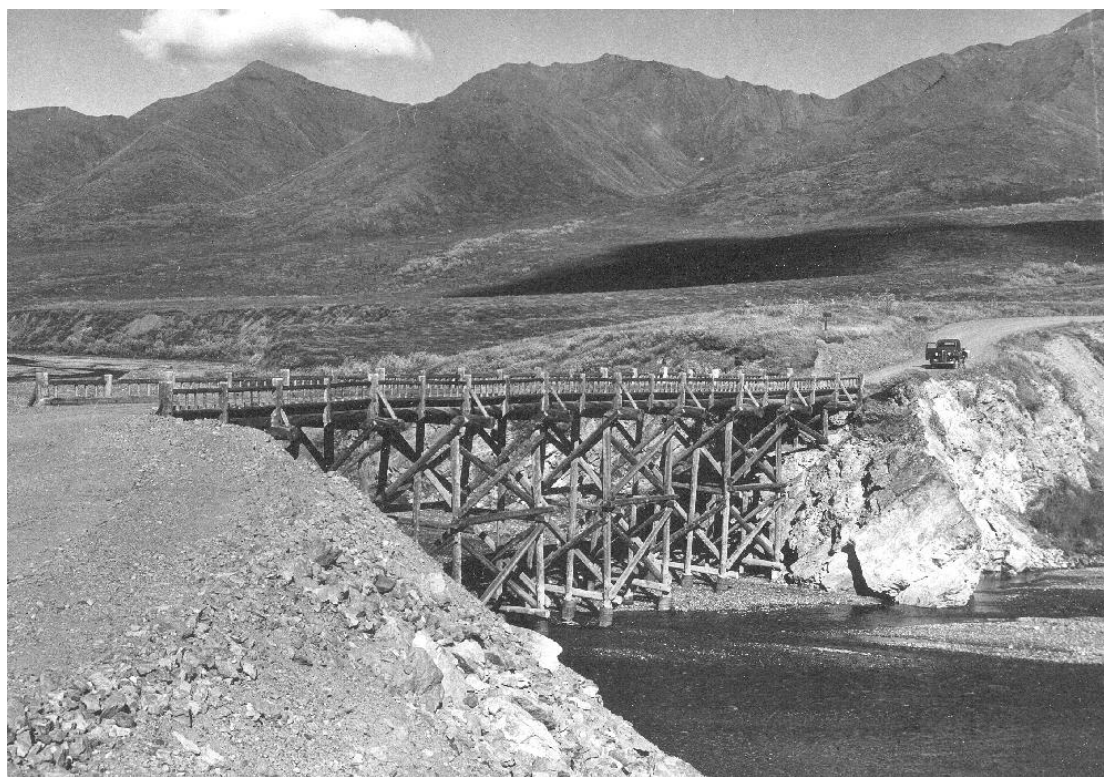


Figure 4- Original Toklat East Fork Toklat Bridge, September 1949. The current bridge is located just north (downstream) of this location.



Figure 5- East Fork cabin and camp, August 1958 (NPS photo).



Figure 6- Adolph and Louise Murie at the East Fork Cabin, 1965 (NPS photo).



Figure 7- East Fork Cabin, August 2006 (NPS photo).



Figure 8- East Fork Cabin with Dog team, 2009 (NPS Photo).



Figure 9- East Fork Bridge looking North (downstream), August 2020 (NPS Photo)

7 References

Holloway, Caitlin R., Gonzalez Negrete, Elizabeth

2021 Proposed East Fork Bus Turnaround Archeological Survey. Denali National Park and Preserve, Alaska.