

3.11 Utilities

3.11.1 Affected Environment

Cooper Landing and the surrounding area are rural and do not have a highly developed utility infrastructure.

No natural gas lines are located in Cooper Landing or the surrounding area.

Two-thirds of homes in the Cooper Landing area, as well as the school, use individual water wells and septic tank systems, and are completely plumbed. Residents of the remaining homes haul water or have it delivered and use privies (outhouses). The Kenai Peninsula Borough provides a transfer site for garbage and trash along the Sterling Highway at Milepost (MP) 44.

Chugach Electric Association is the local power service provider in the project area, and Homer Electric Association owns and maintains the power transmission line that traverses through the project area (see Map 3.11-1). TelAlaska maintains the telephone lines within the project area, which are currently strung on the power distribution poles, and both copper and fiber optic communication lines exist within the corridor. During the summer of 2005, TelAlaska replaced the telephone lines (copper and fiber) between the Cooper Landing Bridge and the community of Sunrise and placed these lines underground within the same corridor as the power poles.

3.11.2 Environmental Consequences

3.11.2.1 No Build Alternative

Direct and Indirect Impacts

Under the No Build Alternative, there would be no direct or indirect impacts on utilities located within the project area. There are no plans to relocate, raise, upgrade, or add utilities unless further residential or commercial development occurs.

3.11.2.2 Issues Applicable to the Build Alternatives

Construction Impacts

Under the build alternatives, relocation and/or installation of local power distribution, and telephone poles and lines would occur within each proposed alternative's right-of-way. The construction activities for these actions have very small and localized ground disturbance. Overhead power line crossings would require minor relocation and/or raising of power poles. The relocation of underground copper and fiber optic communication lines would require linear trenching along the right-of-ways. Changes or temporary disruptions to utility services such as power and communication lines during construction would be planned to avoid or minimize interruption of service to customers. These disruptions are typically a few hours at a time, not days or weeks.

Specific discussion about the temporary impacts to utilities for each of the build alternatives appears in the sections below. The *Preliminary Engineering Report* (HDR 2014a) provides additional information about utility requirements and specific pole and line needs by alternative.

Mitigation

Notification would be given to users of the services that experience temporary, short-term interruption in service.

3.11.2.3 Cooper Creek Alternative

Direct and Indirect Impacts

The Cooper Creek Alternative would cross the existing Homer Electric transmission line twice south of MP 49.0 of the existing highway (see Map 3.11-1). These crossings would require the high voltage power lines to be raised and one of the transmission towers to be relocated.

New power poles and service connections would be required to light seven intersections as proposed under the Cooper Creek Alternative (see Section 3.16.2.3). No power lines or other utilities are anticipated to be extended along the Cooper Creek Alternative segment built on new alignment.

Construction Impacts

Road construction activities would require temporary closures of the Cooper Lake Dam Road. The construction contractor would be required to coordinate temporary closures with the USFS and Chugach Electric Association. Temporary closures would be timed to avoid conflicts with maintenance of the Cooper Lake Hydroelectric Facility.

Transmission line interruptions have the potential to disrupt service on a regional scale. Construction activities to move the transmission tower and raise the power lines would be coordinated with Homer Electric Association to avoid or minimize interruption of service to customers.

From approximately MP 46.0 to MP 46.5 of the existing highway, eight Chugach Electric Association power poles (and associated telephone service line) would need to be relocated. Underground copper and fiber optic communication lines would need to be relocated from approximately MP 46.0 of the existing highway to Snug Harbor Road. At Snug Harbor Road (approximately MP 48.0 of the existing highway), one Chugach Electric Association power pole (and associated telephone service line) would need to be raised. Near MP 51.0 of the existing highway, five Chugach Electric Association power poles and associated telephone service line would need to be relocated. One Chugach Electric Association distribution power pole (and associated telephone service line) realignment would be required at approximately MP 53.5, where the power lines cross the Kenai River. The alternative would be designed to accommodate the line.

Mitigation

Notification would be given to users of the services that experience temporary, short-term interruption in service. Construction activities would be coordinated with Chugach Electric Association and Homer Electric Association to minimize service disruptions.

3.11.2.4 G South Alternative

Direct and Indirect Impacts

New power poles and service connections would be required to light six intersections as proposed under the G South Alternative (see Section 3.16.2.4). No power lines or other utilities are anticipated to be extended along the G South Alternative segment built on new alignment.

Construction Impacts

From approximately MP 46.0 to MP 46.75 of the existing highway, 12 Chugach Electric Association power poles (and associated telephone service lines) would need to be relocated. Underground copper and fiber optic communication lines would need to be relocated from approximately MP 46.0 to MP 47.0 of the existing highway. One Chugach Electric Association distribution power pole (and associated telephone service line) realignment would be required at approximately MP 53.5, where the power lines cross the Kenai River.

Mitigation

Notification would be given to users of the services that would have temporary, short-term interruption in service.

3.11.2.5 Juneau Creek and Juneau Creek Variant Alternatives

Direct and Indirect Impacts

New power poles and service connections would be required to light four intersections as proposed under the Juneau Creek or Juneau Creek Variant alternatives (see Section 3.16.2.5). No power lines or other utilities are anticipated to be extended along the segment built on new alignment for either alternative.

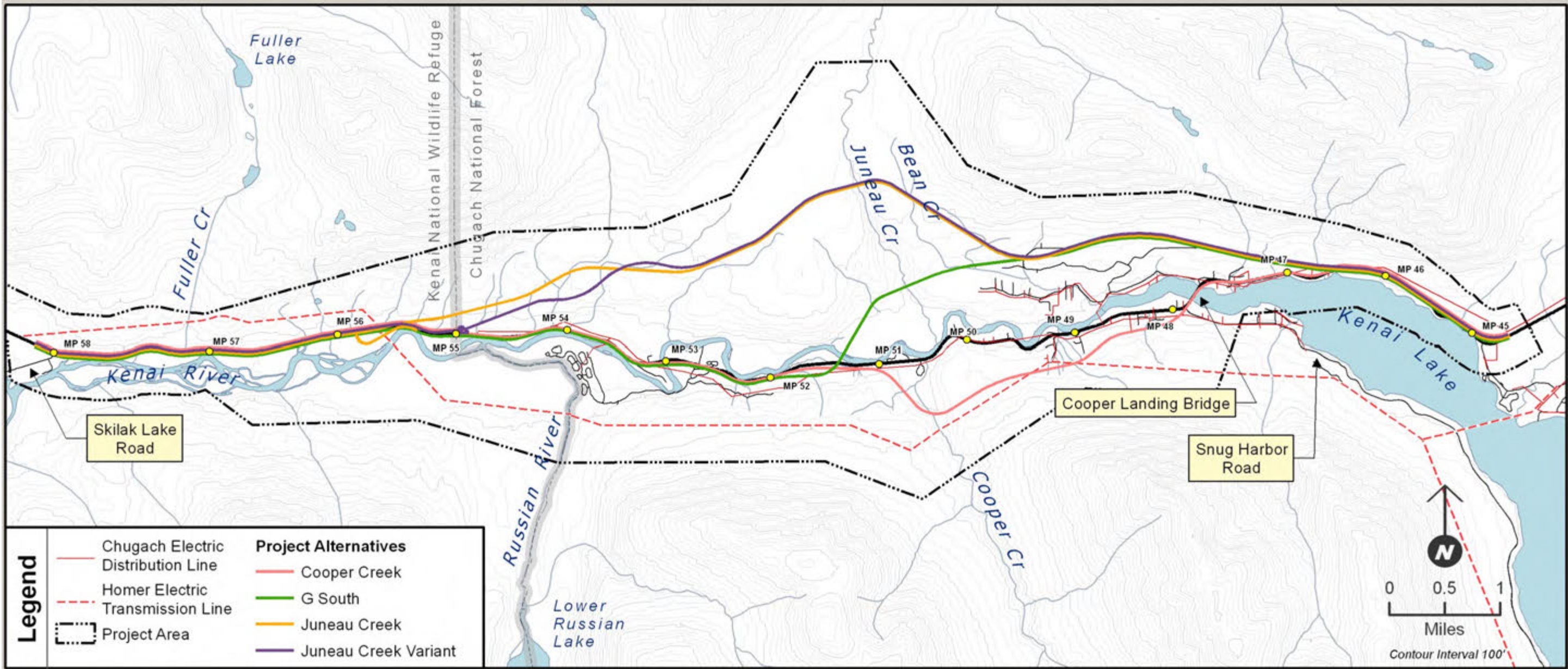
Construction Impacts

From approximately MP 46.0 to MP 46.75 of the existing highway, 12 Chugach Electric Association power poles (and associated telephone service line) would need to be relocated. Underground copper and fiber optic communication lines would need to be relocated from approximately MP 46.0 to MP 47.0 of the existing highway.

Mitigation

Notification would be given to users of the services that experience temporary, short-term interruption in service.

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Map 3.11-1. Utilities in the project area

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