

3.25 Short-Term Uses versus Long-Term Productivity

This section discusses, in general terms, the relationship of local, short-term impacts and uses of resources, and the maintenance and enhancement of long-term productivity (FHWA 1987). Short-term uses of the environment generally are understood to be the impacts of the project, including the project's essentially permanent impacts, compared to long-term productivity of various resources in a timeframe that in some cases could extend to millennia (e.g., habitat for wildlife).

Transportation improvements in Alaska are generally based on State and local comprehensive planning, which considers the need for present and future transportation within the context of present and future land uses. For this project, the impacts associated with transportation improvements are considered relative to the present and future uses and subsequent long-term productivity of natural and recreational resources.

3.25.1 Environmental Consequences

3.25.1.1 No Build Alternative

Direct and Indirect Impacts

Under the No Build Alternative, a minor amount of new right-of-way would likely be required for the planned reconstruction of the Cooper Landing, Cooper Creek, and Schooner Bend bridges. This use of land for transportation improvement would be negligible in comparison to the productive land within the project area. These anticipated improvements are discussed further under Cumulative Impacts (Section 3.27). The No Build Alternative is consistent with the various land use plans developed for the project area (see Section 3.2, Land Use Plans and Policies). The No Build Alternative would have no adverse effect on the long-term productivity of the renewable resources in the area.

3.25.1.2 Issues Applicable to the Build Alternatives

Direct and Indirect Impacts

Each of the build alternatives would involve varying degrees of the short-term uses of resources through the conversion of natural areas to roadway right-of-way. Long-term productivity of the land as a natural and recreational resource would be lost in the constructed roadway footprint of the proposed build alternatives as part of a transportation facility for the life of the proposed project and for the foreseeable future beyond 2043. However, timber harvest and agricultural production are not occurring on these lands; therefore, these types of long-term production would not be affected. The use of the land, in general, as a dispersed recreation resource (not including developed trails) is minor in comparison to the land available for this use. Use (crossing) of trails by each alternative would affect recreation, changing the character of the trail and recreation experience. Overall productivity of the recreation resource may increase, particularly under the Juneau Creek alternatives in the Juneau Falls area, as more people may be drawn to the trails. But long-term productivity of backcountry or primitive recreation in the Juneau Falls area would decrease because the area no longer would have the same backcountry character.

The wetland, vegetation, and habitat resources used would not recover. The project area contains substantial amounts of wetland and vegetative resources, and uses of these resources for the project would have modest effects on long-term productivity or variety of vegetation and habitat. Most animal species likely would adapt under any alternative to the loss of habitat. Brown bears in particular, as well as wolves, lynx, and moose, may be sensitive to long-term cumulative losses and fragmentation of habitat as well as barriers to movement. Short-term uses of the environment to construct any of the alternatives, but particularly the Juneau Creek alternatives, could affect the long-term productivity of brown bears.

Balancing this, many comments received on the Draft Supplemental Environmental Impact Statement expressed concern about effects to riparian habitat from a highway and its associated traffic located close to the Kenai River. The Cooper Creek and G South alternatives would retain all traffic adjacent to the river for long distances, while the Juneau Creek alternatives would relocate 70 percent of traffic to areas farther from the river over long distances. These differences under the Juneau Creek alternatives would help to maintain the long-term productivity of the fish and recreation resources associated with the Kenai River, including campgrounds and fishing access, and would reduce the risk of catastrophic spills directly into the Kenai River and its riparian margins. While the risk of spills on any given day would be low, the potential for serious long-term harm to the aquatic environment and essential fish habitat (salmon habitat) and to human use of the river and of fish produced in the watershed, could be substantial if a spill into or adjacent to the river did occur.

There would be some reduction in property tax revenues as a result of right-of-way acquisitions of private property, particularly under the Cooper Creek Alternative.

Short-term uses of the environment by implementation of the proposed project alternatives would be consistent with local land use plans. The long-term benefits of the improvements are recognized in State and local comprehensive planning for the region. Improving surface transportation in the region is consistent with these plans. The project would result in a more efficient and safer transportation network and would enhance economic productivity of the local area and Kenai Peninsula.

Considering the overall abundance of naturally productive land in the project area and the project's consistency with local land use plans, the project build alternatives would mostly be consistent with maintaining and enhancing the long-term productivity of the area.