SUMMARY

On December 5, 2008, Alaska Railroad Corporation (ARRC or the Applicant) filed a petition with the Surface Transportation Board (STB or the Board) pursuant to 49 United States Code (U.S.C.) 10502 for authority to construct and operate approximately 30 to 45 miles of rail line to connect the Port MacKenzie District in Matanuska-Susitna Borough (MSB) to a point on the existing ARRC main line between Wasilla and just north of Willow, Alaska. Referred to as the Port MacKenzie Rail Extension, the proposed rail line would provide a rail connection for freight services between Port MacKenzie and Interior Alaska.

Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations at 40 Code of Federal Regulations (CFR) 1501.6 emphasize agency cooperation early in the NEPA process and allow a lead agency (in this case, the STB) to request the assistance of other agencies with either jurisdiction by law or special expertise in matters relevant to the proposed action. Three Federal agencies are cooperating in the preparation of this Environmental Impact Statement (EIS). Table S-1 lists each cooperating agency and describes its roles and responsibilities.

Table S-1
Cooperating Agency Involvement in the Port MacKenzie Rail Extension EIS

Federal Railroad Administration	Could provide funding to ARRC for rail line construction or operations.
U.S. Army Corps of Engineers	Could grant a Section 404 Clean Water Act permit and/or a Section 10 Rivers and Harbors Act permit.
U.S. Coast Guard	Could issue bridge permits.

The Board's Section of Environmental Analysis (SEA) and the cooperating agencies (collectively the Agencies) prepared this Draft EIS in accordance with NEPA, CEQ regulations, and the Board's environmental regulations (49 CFR 1105) to provide the Board; the cooperating agencies; other Federal, state, and local agencies; Alaska Natives; and the public with clear and concise information on the potential environmental impacts of the proposed action and alternatives, including the No-Action Alternative. References to SEA in this Draft EIS reflect input from all three cooperating agencies.

The Agencies also prepared this Draft EIS in accordance with Federal Railroad Administration (FRA) NEPA guidance at 64 CFR 28545; U.S. Army Corps of Engineers NEPA-implementing regulations at 33 CFR 230; and U.S. Coast Guard COMDTINST M16475.1D—NEPA-Implementing Procedures and Policy for Considering Environmental Impacts.

SEA is issuing this Draft EIS for public review and comment. SEA will consider all timely submitted comments received on this Draft EIS and respond to all substantive comments in a Final EIS. The Final EIS will include final recommended environmental mitigation conditions, as appropriate. The Board will consider the entire environmental record, the Draft and Final EISs, all public and agency comments, and SEA's final environmental recommendations in making its final decision on the application to construct and operate the proposed rail line.

The construction and operation of rail lines require prior Board authorization either through issuance of a certificate under 49 U.S.C. 10901 or, as requested here, by granting an exemption under 49 U.S.C. 10502 from the formal application procedures of section 10901. Section 10901(c) as amended by the ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803 (1995) (ICCTA) is a permissive licensing standard. It now directs the Board to grant rail line construction proposals "unless" the Board finds the proposal "inconsistent with the public convenience and necessity [PC&N]." Thus, Congress made a presumption that rail construction projects are in the public interest unless shown otherwise. See Mid States Coalition for Progress v. STB, 345 F.3d 520, 552 (8th Cir. 2003); Alaska Railroad Corporation - Construction and Operation Exemption – Rail line Between North Pole and Delta Junction, Alaska, STB Finance Docket No. 34658 (STB served January 5, 2010),[1] slip op. at 5.

Under 49 U.S.C. 10502, the Board must exempt a proposed rail line construction from the detailed application procedures of 49 U.S.C. 10901 when it finds that: (1) those procedures are not necessary to carry out the rail transportation policy (RTP) of 49 U.S.C. 10101; and (2) either (a) the proposal is of limited scope, or (b) the full application procedures are not necessary to protect shippers from an abuse of market power.

In making its final decision here, the Board will decide whether to approve, approve with conditions (which could include conditions designed to mitigate potential impacts on the environment), or deny the Applicant's request for a license to construct and operate a proposed rail line from Port MacKenzie to the existing main line to the north. The cooperating agencies that could issue individual decisions concerning the proposed action intend to use information in this Draft EIS for their decisionmaking purposes under the statutes they administer.

S.1 Purpose and Need

The Applicant has stated that the purpose of the proposed rail line is to provide rail service to Port MacKenzie and connect the Port with the existing ARRC rail system, providing Port MacKenzie customers with rail transportation between Port MacKenzie and Interior Alaska.

According to the Applicant, Port MacKenzie is the closest deep-water port to Interior Alaska and has capacity to handle bulk commodities. The Port's market includes bulk commodities (e.g., wood chips, saw logs, sand/gravel, and cement), iron or steel materials (e.g., scrap metal), vehicles and heavy equipment, and mobile or modular buildings. The nearest other port in the area is the Port of Anchorage, which is an additional 35 highway/rail miles from the Alaska interior. The Applicant notes that the Port of Anchorage currently has no capacity for dry bulk materials export. The required room for bulk rail unloading (unit train rail loop arrangements) does not exist, nor does the Port of Anchorage presently have the capacity to handle the loading

[1] Congress had first relaxed the section 10901 standard in the Staggers Rail Act of 1980, Pub. L. No. 96-448, 96 Stat. 1895 (1980). Before 1980, the Interstate Commerce Commission (ICC),our predecessor, had been directed to scrutinize rail construction proposals closely to prevent excess rail capacity. The ICC was to issue a license only if it found that the PC&N "require" the construction. See former 49 U.S.C. 10901(a) (1978); see, e.g., Chesapeake & Ohio Ry. v. United States, 283 U.S. 35, 42 (1931). In the Staggers Act, Congress made it easier to obtain agency authorization for a new line by providing that the ICC need only find that the PC&N "permit," as opposed to "require" the proposed new line. See former 49 U.S.C. 10901(a) (1995); H.R. Rep. No. 1430, 96th Cong., 2d Sess. 115-16 (1980), reprinted in 1980 U.S.C.C.A.N. 4147-48. With the ICCTA, Congress completed its policy shift, directing that the Board "shall" issue construction licenses "unless" the agency finds a proposal "inconsistent" with the PC&N. See 49 U.S.C. 10901(c).

of dry bulk materials into ships. Available space for stockpile and handling of bulk materials is also limited.

In contrast to the limited available space and bulk handling capabilities at the Port of Anchorage, Port MacKenzie is situated on nearly 9,000 acres of land, and has existing dockside bulk materials loading capacity with a conveyor system to move materials from existing stockpile staging areas to the docks. The dredge-free draft of the port is in excess of 60 feet, providing the ability to load nearly any sized vessel. Unlike similar port facilities that serve large, ocean-bound vessels, Port MacKenzie does not have rail service. At present, freight truck is the only available mode of surface transportation for bulk materials and other freight to and from Port MacKenzie. Trucks, as compared to rail, are inefficient for bulk commodity movements and generally are used for short-haul movements in that context. Bulk commodity shippers, which already have access to the existing ARRC network, utilize a combination of rail and transload to truck 30 miles away for final delivery to Port MacKenzie. However, such intermediate movements and handling requirements are not efficient and impose increased costs to the shipper and consumer due to multiple handling of materials between transportation modes. The Applicant states that the cost for intermediate transloading from rail to truck, and the additional truck ton-mile cost for final delivery, actually places Port MacKenzie at a significant disadvantage to other regional ports with rail service. For example, a railroad can move one ton of freight 457 miles on a gallon of diesel fuel, compared to 133 miles for a truck.[2] Both efficiency in handling and efficiency in fuel use translate into substantial cost savings for freight shipped via rail transport rather than transport by truck over the highway.

Because of the economics and efficiencies offered by direct rail service, the Applicant anticipates that bulk commodity movements to and from the Port would likely be by rail if such an option were available. The proposed rail line would thus provide Port MacKenzie's customers with multi-modal options for the movement of freight to and from the Port similar to that offered by other ports handling large vessels. The proposed project would also support ARRC's statutory goal to foster and promote long-term economic growth and development in the State of Alaska.

S.2 Scoping and Public Involvement

On February 12, 2008, SEA published the Notice of Intent to Prepare an EIS, Draft Scope of Study, Notice of Scoping Meetings, and Request for Comments (73 *Federal Register [FR]* 8106). SEA distributed a letter to more than 7,700 citizens, elected officials, Federal, state, and local agencies, tribal organizations, and other potentially interested organizations to introduce the proposed action; announce SEA's intent to prepare an EIS; request comments; and give notice of six public scoping meetings. The distribution encompasses the communities surrounding the proposed action and alternatives and groups outside the project area that could have an interest in the Project. SEA also posted meeting notices in public locations (such as post offices, grocery stores, and restaurants) in the project area and initiated a toll-free project hotline. SEA also provided project information on the STB Web site at www.stb.dot.gov and on an STB-sponsored project Web site at www.stbportmacraileis.com. SEA placed notices of the scoping meetings in several newspapers, including the *Frontiersman*, the *Talkeetna Times*, and the *Anchorage Daily News*.

[2] http://www.aar.org/Environment/Environment.aspx.

SEA held public scoping meetings in Knik, Big Lake, Willow, Houston, Wasilla, and Anchorage, Alaska, on March 3, 4, 5, 6, 10, and 11, 2008, respectively. SEA used a workshop format to allow attendees to provide comments and ask questions of SEA. Approximately 146 citizens, representatives of organizations, elected officials, and officials from Federal, state, and local agencies attended the meetings. Some attendees submitted written comments during the meetings, and SEA received additional scoping comment letters during the scoping comment period, which closed on March 21, 2008.

SEA considered agency and public input received during the scoping process and on July 17, 2009 issued the final scope of study for this Draft EIS. SEA published the final scope of study in the *Federal Register* (74 FR 34859), placed it on the STB and project Web sites, and mailed an announcement listing the availability of the final scope of study to approximately 8,000 individuals, agencies, and other interested parties on the SEA project mailing list. The final scope of study summarized the comments received and potential impacts to be analyzed.

In short, as part of the environmental review process to date, SEA has conducted broad public outreach activities informing the public about the proposed action and facilitating public participation. SEA consulted with and will continue to consult with Federal, State of Alaska, and local agencies, tribal organizations, affected communities, and all interested parties to gather and disseminate information about the proposed project.

S.3 Alternatives Considered in the SEA Environmental Review

Under the proposed action, ARRC would construct and operate a single-track rail line from Port MacKenzie to a point on the existing ARRC main line between Wasilla and north of Willow, Alaska. ARRC proposes a right-of-way (ROW) of approximately 200 feet for the rail line. The ROW could contain a power line, buried utility lines, and an access road (this would be determined during final design). In addition, ARRC would construct one rail line siding within the existing main line ROW at the tie-in location with the rail extension. ARRC proposes to transport freight on the rail line and would construct and maintain the rail line to Class 4 standards[3] because of its desired 60 mile-per-hour operating speed for freight service. ARRC anticipates an average of two freight trains per day, one in each direction.

In addition to the proposed rail line, ARRC would construct operations support facilities. ARRC would construct a terminal reserve area along the southern terminus of the rail line. This area would eventually consist of yard sidings, storage areas, and a terminal building to support train maintenance. The locations of some of the facilities, such as construction staging areas and communication towers, would vary depending on which alternative segments the Board authorized. ARRC would also build temporary construction support facilities and would remove them after the completion of rail line and operations support facilities construction.

[3] The Federal Railroad Administration (FRA) establishes the standards for class of track and maximum operating speed for freight on each class of track (49 Code of Federal Regulations [CFR] 213). Design and construction of the proposed Port MacKenzie Rail Extension to Class 4 standards would be required for ARRC's desired operating speed for freight service.

The build alternatives considered in this Draft EIS are composed of alternative southern and northern segments, with possible connector segments between. The southern segments, Mac West and Mac East, would run either east or west of the Point MacKenzie Agricultural Project. There are three main segments north of the Point MacKenzie Agricultural Project – Willow, Houston, and Big Lake – with Houston having north and south variants. Connector segments would link the north and south segments to create eight possible alternatives for the proposed rail line, as listed below and depicted in Figure S-1.

- Mac West, Connector 1, and Willow. This route would be the longest, 46.0 miles long.
- Mac West, Connector 1, Houston, and Houston North. This route would be 34.9 miles long.
- Mac West, Connector 1, Houston, and Houston South. This route would be 35.6 miles long.
- Mac West, Connector 2, and Big Lake. This route would be 36.8 miles long.
- Mac East, Connector 3, and Willow. This route would be 44.9 miles.
- Mac East, Connector 3, Houston, and Houston North. This route would be 33.7 miles long.
- Mac East, Connector 3, Houston, and Houston South. This route would be 34.3 miles long.
- Mac East and Big Lake. This route would be the shortest, 31.4 miles.

S.3.1 Southern Segments

S.3.1.1 Mac West

The Mac West Segment would begin in the terminal reserve area and would proceed northwest across relatively flat terrain toward the southwest corner of the Point MacKenzie Agricultural Project. The segment would continue west of the agricultural area, traversing along the eastern boundary of Susitna Flats State Game Refuge. The terminal reserve area is proposed along the south side of Mac West.

S.3.1.2 Mac East

Alternatively, the Mac East Segment would begin in the terminal reserve area and would proceed north along the side of a ridge to the east of the Point MacKenzie Agricultural Project. Near Mile Post 4.7, the segment would cross a ravine and then curve to the northeast along the top of another ridge. North of Mile Post 6.0, the segment would follow the alignment of Point MacKenzie Road, offset 200 feet or more to the west. The segment would continue along undulating terrain before reaching its junction with the Big Lake Segment or Connector 3 Segment. The terminal reserve area is proposed along the north side of Mac East.

See Figure S-2 for a detailed map of the southern segments and the terminal reserve area.

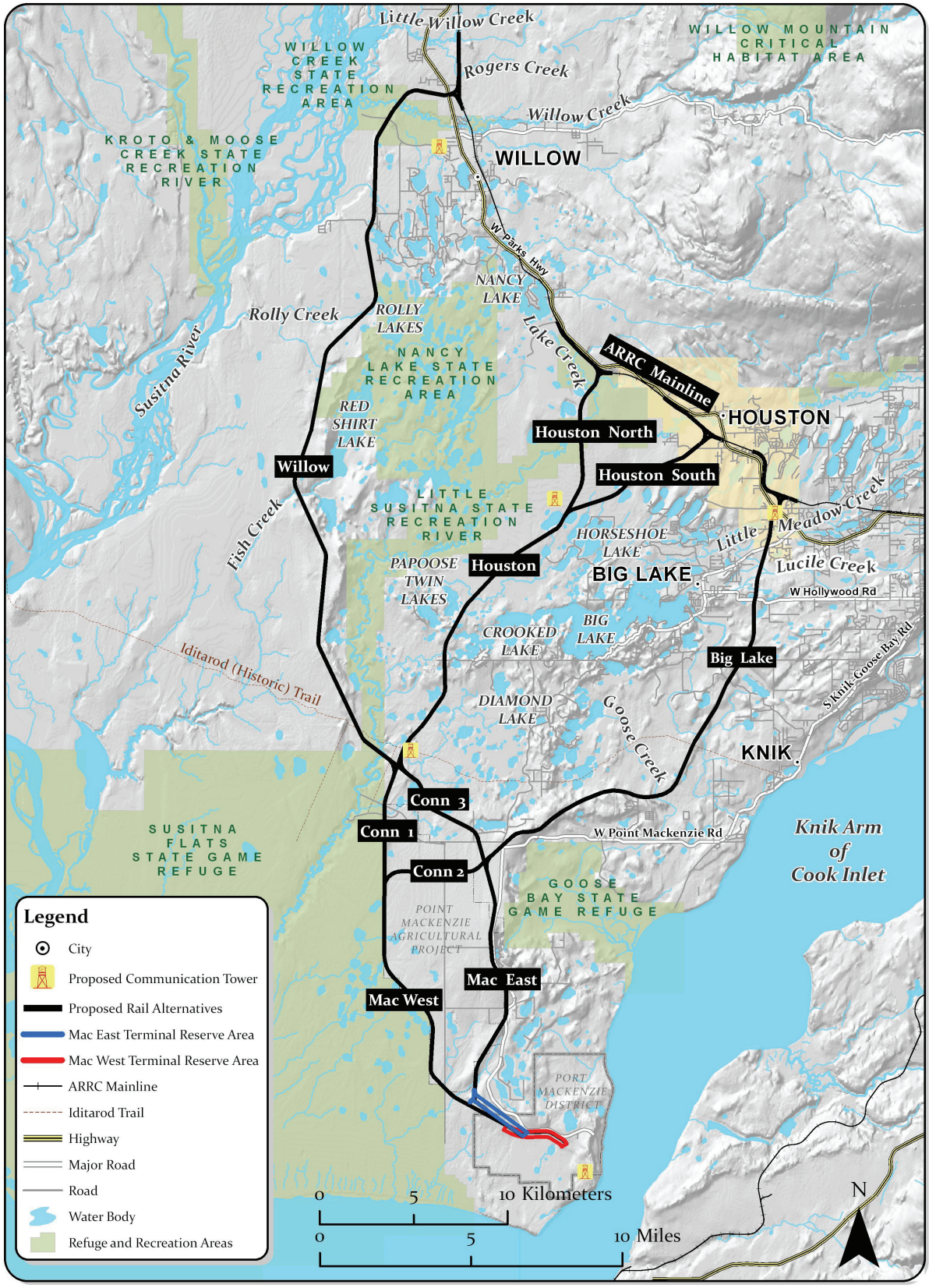

Figure S-1. Overview of Proposed Port MacKenzie Rail Extension Route Alternatives

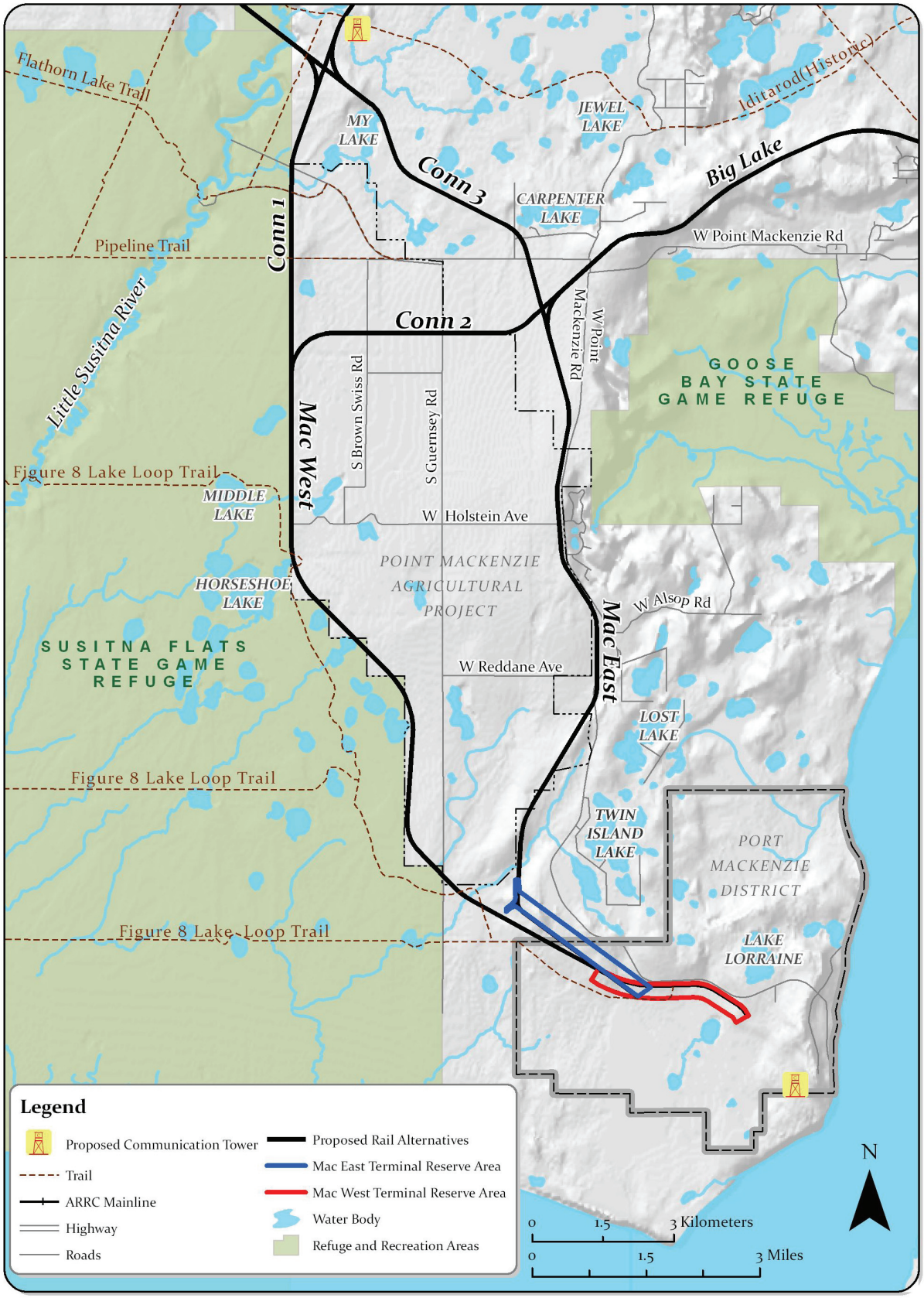

Figure S-2. Mac East, Mac West, and Connector Segments

S.3.2 Connector Segments

S.3.2.1 Connector 1

This 4.8-mile-long segment would connect the Mac West Segment to the Willow or Houston segment. From Mac West, this connector segment would continue north along the eastern boundary of Susitna Flats State Game Refuge on level terrain. The segment would cross a tributary of the Little Susitna River.

S.3.2.2 Connector 2

This 3.7-mile-long segment would connect the Mac West Segment to the Big Lake Segment. At the northwestern end of the Point MacKenzie Agricultural Project, this connector segment would turn due east and travel along the southern boundary of the Point MacKenzie Correctional Farm.

S.3.2.3 Connector 3

This 5.2-mile-long segment would connect the Mac East Segment to the Willow or Houston segment. At the northeastern end of the Point MacKenzie Agricultural Project, this connector segment would shift to the northwest and cross Ayrshire Avenue and Farmers Road. The segment would continue north of My Lake and cross an adjacent ravine. The remaining mile of the segment would be nearly level.

See Figure S-2 for a detailed map of the connector segments.

S.3.3 Northern Segments

S.3.3.1 Willow

From Connector 1 or 3 segments, the Willow Segment would continue northwest where it would cross a corner of Susitna Flats State Game Refuge, Little Susitna State Recreation River, and the Little Susitna River (see Figure S-3). Over the next 7 miles, the segment would continue north through rolling terrain. The segment would cross Fish Creek, the outlet for Red Shirt and Cow Lakes. It would then proceed north, generally following the west-facing slope of a glacial moraine west of Red Shirt Lake. It would continue north through Nancy Lake State Recreation Area for approximately 0.5 mile. The Willow Segment would cross the outlet for Vera Lake, continue over rolling terrain, and cross Willow Landing Road. The segment would then continue through Willow Creek State Recreation Area, where it would cross Willow Creek. The segment would curve to the east and cross Parks Highway with a grade separation, before connecting to the existing ARRC main line near Mile Post 188.9.

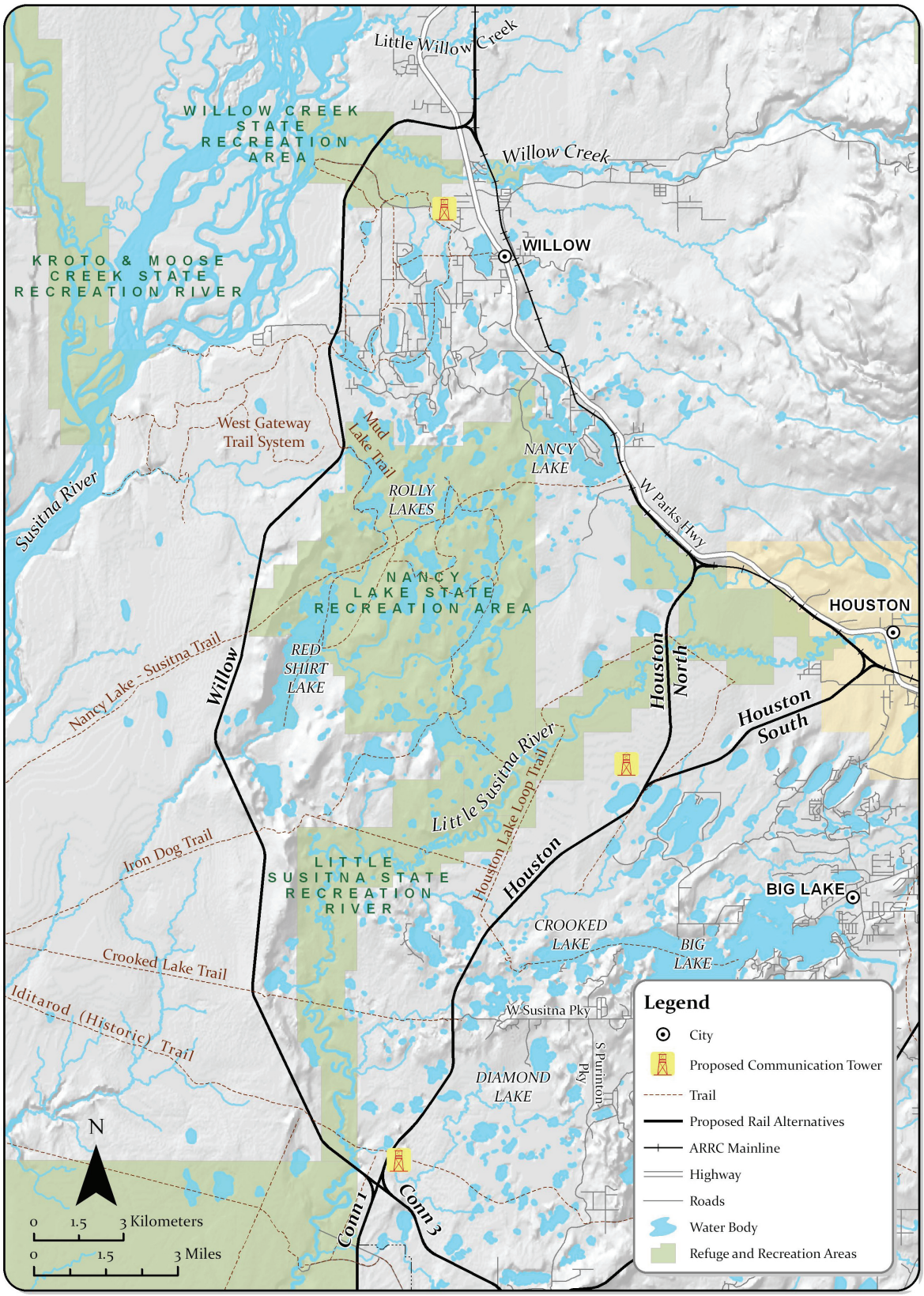

Figure S-3. Willow, Houston, Houston North, and Houston South Segments

S.3.3.2 Houston

From Connector 1 or 3 segments, the Houston Segment would proceed northeast, traveling through slightly undulating terrain with areas of wetland (see Figure S-3). The segment would pass between Papoose Twins Lakes and Crooked Lake, crossing an area of hilly terrain. The remaining 4 miles of the Houston Segment would be in a gradually rising wetland area to a point near Muleshoe Lake and Little Horseshoe Lake, where it would connect to either the Houston North Segment or the Houston South Segment.

S.3.3.3 Houston North

From the Houston Segment, the Houston North Segment would continue north (see Figure S-3), crossing over Castle Mountain Fault. The segment would cross Cow Lake Trail, which is part of Houston Lake Loop Trail. It would continue through Little Susitna State Recreation River, where it would cross the Little Susitna River. The segment would continue north on rolling terrain along the east side of Houston and Little Houston Lakes, descending gradually to lower terrain adjacent to Lake Creek. The Houston North Segment would tie into the existing ARRC main line near Mile Post 178.0 along the proposed rail line without crossing Parks Highway.

S.3.3.4 Houston South

Also beginning between Muleshoe Lake and Little Horseshoe Lake, this proposed segment would traverse northeast, passing just west of Pear Lake (Figure S-3). The segment would cross several gravel ridges that parallel the lakes in this area. The segment would tie into the existing main line near Mile Post 174.0 without crossing the Parks Highway.

S.3.3.5 Big Lake

From the Mac East Segment or Connector 2 Segment, the Big Lake Segment would run northeast for approximately 3 miles, crossing Burma Road (See Figure S-4). It would continue on rolling terrain, crossing over Goose Creek, Fish Creek, Lucile Creek, and tributaries of Lucile Creek and Little Meadow Creek. The segment would cross Burma Road and Big Lake Road, where it would be grade-separated above Big Lake Road. The Big Lake Segment would continue north through a residential area before crossing under Parks Highway with a grade-separated crossing.

See Figures S-3 and S-4 for a detailed map of the northern segments.

S.3.3.6 No-Action Alternative

The Draft EIS also considers a No-Action Alternative. Under the No-Action Alternative, ARRC would not construct an extension of the existing rail line to transport commercial freight, and freight truck would remain the only available mode of surface transportation to and from Port MacKenzie.

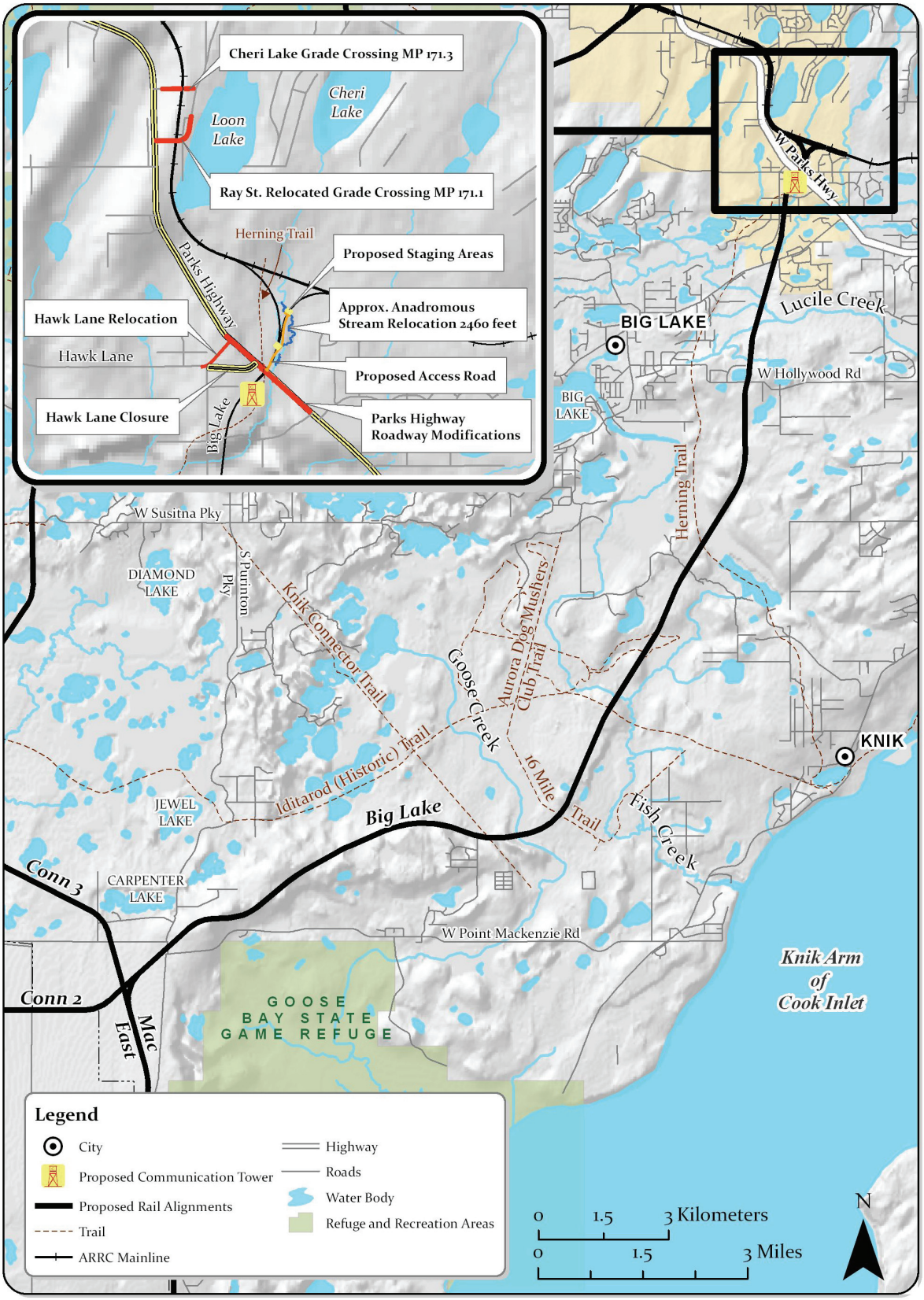

Figure S-4. Big Lake Segment

S.4 Alternatives Considered But Not Included for Detailed Study

SEA reviewed the alignments ARRC developed and analyzed in its Preliminary Environmental and Alternatives Report (ARRC, 2008) and reviewed the potential rail corridors identified in the previous MSB Rail Corridor Study (MSB, 2003). In April 2008, SEA asked ARRC to consider the feasibility of making adjustments to the Willow, Big Lake, Mac West, and Houston North segments, and to consider a new segment to reduce potential environmental impacts. ARRC responded that SEA's proposed refinements were infeasible or would result in increased environmental impacts. SEA reviewed the Applicant's responses to the suggested refinements and to the new segment SEA identified for consideration and concurred with the Applicant's findings. Based on the purpose and need for the proposed action and a review of ARRC's initial alignments and alignments proposed in scoping comments, SEA and the cooperating agencies determined that the alignments described in S.3 provided a reasonable set of feasible alternatives for detailed study.

S.5 Overview of Affected Environment

The project area is generally located north of Anchorage, Alaska, on the opposite side of the Knik Arm of the Cook Inlet. The proposed rail line would connect the Port MacKenzie District in the MSB to a point on the existing ARRC mainline between Wasilla and north of Willow, Alaska. The area is relatively rural, with a few recreational areas managed by the State of Alaska and the MSB located nearby. The area is within the MSB and Susitna River valley, bounded by the Susitna River on the west, Knik Arm of Cook Inlet on the south and east, and Parks Highway and the existing ARRC main line on the north. The project area would lie within Susitna Lowland, which is the landward extension of the Cook Inlet Depression. The depression is a structural basin that contains the lowland basins of the Susitna River, its tributaries, and several other rivers that flow directly into the head of Cook Inlet. The project area is located in the Cook Inlet Basin Ecoregion, a gently sloping lowland basin characterized by a variety of wetland and woodland habitats including evergreen, deciduous, and mixed forest stands. The area provides habitat for wildlife such as bear, moose, wolf, furbearers (like squirrels and wolverines), fish, and birds. Cultural and historic resources are found within the project area including cabins and trails. The study area includes several designated recreation areas, including Willow Creek State Recreation Area, Nancy Lake State Recreation Area, Little Susitna State Recreation River, and two state recreation sites on the northern and southern shores of Big Lake. The study area also includes the Susitna Flats and Goose Bay state game refuges.

S.6 Summary of Environmental Consequences

SEA performed an in-depth review of the Applicant's proposal, which included independent environmental analysis of potential project impacts and evaluation of issues raised by government agencies and the public. The following discussion provides an overview and comparison of the potential impacts of the alternative segments that have been considered. Table S-2 at the end of this Summary compares noteworthy impact variations among the alternatives.

S.6.1 Topography, Geology and Soils

Steeper terrain would require a greater amount of either fill or cut and fill during rail line construction than flatter terrain and would therefore have a greater impact on topography. With one exception, the Big Lake Segment, the existing terrain for all segments and segment combinations that have been considered would be relatively flat. The Big Lake Segment, however, would have approximately 20 percent of its length crossing ground with slope greater than 1 percent, with the remaining 80 percent relatively flat. This segment would cross the highest percentage of slopes between one and five percent, slopes greater than five percent, and would cross ground with the highest maximum slope (27 percent). The Mac East Segment has the second steepest conditions.

Although the construction of the proposed rail line would not result in any potential impacts to geological resources, construction activities would affect soils unsuitable for rail line construction, and these soils would need to be removed and replaced with imported, well-draining soils. In some locations, the railroad would be constructed on soils the MSB considers locally important for agricultural purposes, though some of these soils may not be in use for agricultural purposes. The Mac East-Connector 3-Willow Alternative would have the greatest impact to soils the MSB considers locally important for agricultural purposes. The Mac West-Connector 1-Houston-Houston North Alternative would have the least impact to soils the MSB considers locally important for agriculture. However, the Mac West-Connector 1-Houston-Houston North Alternative would contain both the greatest percentage of poor soils for construction and the greatest length of peat and organic soils. Soft, compressible organic and peat soils, present in wetland areas, would have to be compacted or removed and replaced.

The MSB is subject to seismic activity. The most likely impact on the rail line from seismic activity would be misalignment or damage to the tracks, railbed, or access road. This could be caused by ground shaking, offset lateral movement, or soil subsidence. If strong enough, ground shaking could also cause trains to derail. With the segments and segment combinations being relatively close to one another, the minor differences in distance between a segment and a seismic event would not have an appreciably different effect on the segments and segment combinations.

S.6.2 Water Resources

Potential impacts to water resources could result from clearing and grading; the excavation of fill material; construction of an unpaved access road, bridges, and culverts; and use of transportation and staging areas. The following paragraphs summarize the relevant effects of such project-related activities on surface water, groundwater, floodplains, and wetlands.

S.6.2.1 Surface Water

Construction of the proposed rail line and the unpaved access road could result in potential adverse impacts to water quality in areas were the rail line and access road would be near, adjacent to, or span waterbodies. In these areas, ROW clearing, grading, and construction of the rail line, staging areas, and access road could lead to impacts on surface waters from increased erosion and nutrient loading. If subballast and fill materials are obtained from borrow areas, this

could disrupt shallow-water areas (former borrow areas), including disturbing sediment, increasing turbidity, and generally degrading water quality; however, SEA expects no long-term water quality impacts from borrow areas located near shallow water areas because turbidity levels would return to normal after the disturbance ceased. New borrow areas might also be identified in surface-water areas. Depending on the annual and seasonal variation of flood stage and hydraulics of the waterbodies at the borrow areas, there could be impacts to water quality.

In areas where the proposed rail line and access road would be near waterbodies, the potential consequences to water quality during spring ice break-up, snowmelt, or rainstorms could include increased transport of fine-grained sediments that could alter waterbody chemistry and pH.

The Applicant would construct bridges and culverts to convey water under the proposed rail line and the access road. Potential impacts that could result from the culvert and bridge construction and installation along the ROW would include: degradation of steambanks and riparian areas; increased stages and velocities of floodwater; increased channel scour and downstream sedimentation; and changes to natural drainage. The presence of bridges and culverts in or over a channel could alter channel hydraulics, which could increase channel scour and erosion processes which could subsequently lead to an increase in sediment transport loads and downstream sedimentation. This impact, however, would generally be short-term and would end after ARRC finished construction.

In general, the more bridges or culverts that occur along a given segment, the greater the likelihood of potential impacts. However, the magnitude of potential effects at individual crossings also depends on site-specific factors. Bridges would generally be expected to result in fewer hydrologic impacts than culverts due to their ability to maintain stream structure and flow characteristics. The Mac East-Connector 3-Houston-Houston South Alternative would require the fewest crossings with the smallest number of drainage structures and culvert extensions, and one of the smallest numbers of culverts. The Mac West-Connector 1-Houston-Houston North Alternative would require the most crossings.

S.6.2.2 Groundwater

Construction of the proposed rail line, sidings, power lines, buried communications cables, access road, and other facilities could affect groundwater movement and quality. Groundwater movement could be altered by changes in infiltration and recharge rates due to compaction of the overlying soil. These effects would be limited to the footprint of the proposed rail line, facilities, access road, and staging areas, which represents a small fraction of the total area where water enters the ground and infiltrates to the water table. The extraction of materials from the borrow areas[4] could affect groundwater due to the changes in local hydrogeology that would result from the removal of saturated materials and the creation of new ponds that would serve as sources of groundwater discharge through evaporation during the summer and sources of groundwater during major rainstorms and the break-up of ice.

[4] Areas from which materials such as soil, rock, or gravel are excavated for a specific purpose.

S.6.2.3 Floodplains

Within the study area, there are 100-year floodplains along Willow Creek, Little Willow Creek, Lake Creek, Deception Creek, Lucile Creek, and the Little Susitna River. With the exception of the floodplain along Little Willow Creek, all of the proposed alternative rail line segments would cross all of these floodplains. The rail line and access road placed within the 100-year floodplain would require fill placement and could reduce floodplain volume, constrict flood flow paths, and increase floodwater elevation upstream of the restricted floodplain area. However, affected areas would be small compared to the total floodplain storage available, and SEA expects minimal impacts to floodplain storage from the placement of the proposed rail line and the access road. ARRC would size all water crossings to convey the 100-year flow event associated with local drainages as part of their voluntary mitigation measures. For larger stream and river crossings, ARRC would construct bridges as single- or multiple-span structures that would either completely or partially span (or clear) the existing active river channel. The Mac West-Connector 1-Willow and Mac East-Connector 3-Willow alternatives would impact the greatest amount of FEMA-designated floodplains, with approximately 8,065 feet (about 1.5 miles) of rail line crossing 37 acres of 100-year floodplain. The Mac West-Connector 1-Willow Alternative would also cross an additional eight streams, two more than the Mac East-Connector 3-Willow Alternative, that have a high potential for floodplains. The Mac West-Connector 2-Big Lake and the Mac East-Big Lake alternatives would impact the least acreage of floodplains with approximately 460 feet of rail line crossing 2.1 acres of 100-year floodplain; both of these alternatives would require only one waterbody crossing within a FEMA-designated floodplain.

S.6.2.4 Wetlands

Several wetland types were found within the wetland study area (500 feet on either side of the rail centerline). These include forested wetlands, scrub/shrub wetlands, emergent wetlands, and other waters and riverine wetlands. Rail line construction would directly affect wetlands within the 200-foot ROW and could also indirectly affect wetlands adjacent to the ROW by fragmenting wetland vegetation and hydrology. Rail line construction would require clearing, excavation, and placement of fill material in wetlands. The placement of fill would cause a permanent loss of wetland functions within the fill area and could result in additional impacts to adjacent wetland areas inside and outside the ROW. Because many wetland functions depend on the size of the wetland or the contiguous nature of the wetland with other habitats, clearing and filling a wetland could lower the ability of adjacent wetlands to perform functions that depend on size or an unfragmented connection to a waterbody.

Potential impacts to wetlands within the ROW from proposed rail line construction would vary by project alternative. Construction of the Mac East-Connector 3-Willow Alternative would impact 188 acres of wetlands, (comprising 15 percent of the ROW), the lowest impact to wetlands of all the alternatives. The Mac East-Connector 3-Willow Alternative would also have the lowest proportion of high-functioning wetlands. Construction of the Mac West-Connector 1-Houston-Houston North Alternative would impact 478 acres of wetlands; the greatest overall acreage of wetlands that would be affected by any of the alternatives. Although this alternative would occupy less overall acreage compared to the other alternatives, 45 percent of the alignment comprises wetlands, the highest of the alternatives. Many wetlands along this

alternative consist of bog wetlands that have diverse vegetation communities and are considered high-functioning wetlands.

Of the remaining alternatives, Mac West-Connector 1-Houston-Houston South would impact 424 acres, Mac West-Connector 1-Willow would affect 363 acres of wetlands and waters, Mac West-Connector 2-Big Lake would impact 347 acres, Mac East-Connector 3-Houston-Houston North would impact 301 acres, Mac East-Connector 3-Houston-Houston South would impact 248 acres, and Mac East-Big Lake would impact 209 acres. The Big Lake Segment would also impact 25 acres of a wetland mitigation bank[5], primarily composed of riverine wetlands (wetlands situated in a river channel that contain moving water, either continuously or periodically) and riparian wetlands (wetlands situated alongside a river), but also including scrub/shrub wetlands and uplands. Within this mitigation bank is the Goose Creek Fen, a floating mat fen system. A floating fen is an important ecological feature supporting diverse plant communities and providing high value rearing habitat for anadromous fish species. Goose Creek Fen would require draining or filling for construction of the Big Lake Segment. The wetlands in the mitigation bank are locally important to MSB and are highly valued. The impact would reach beyond the 200-foot ROW because, for the purposes of the mitigation bank, the value of the wetlands is based on their contiguous, unfragmented state.

S.6.3 Biological Resources

The proposed rail line and facilities construction and operations would impact biological resources. The following paragraphs summarize the relevant effects of this project on vegetation, fisheries, wildlife, birds, and threatened and endangered species.

S.6.3.1 Vegetation Resources

The primary impacts of the proposed rail line construction and operation to vegetation would be the destruction of vegetation cover and the replacement of some cover with gravel fill. Permanent impacts would include vegetation loss due to placement of gravel fill for the railbed, excavation of gravel, and construction of rail line support facilities. Other potential impacts would include the loss or alteration of forested habitat due to the removal of vegetation at temporary workplaces that would be restored after project construction. Potential operations impacts would include vegetation removal and control within the 200-foot ROW where necessary for safe operations. In addition, potential impacts to vegetation resources could include altered vegetation communities due to soil compaction and the spread of invasive plant species and altered vegetation succession caused by the interruption of natural wildland fire ecology. There are no known Federal- or state-protected threatened, endangered, or candidate plants species within the study area.

Of the build alternatives, the Mac West-Connector 1-Willow Alternative would result in the clearing of 1,272 acres of vegetation from the 200-foot ROW, the most of any alternative. The alternative with the second highest area of vegetation loss would be the Mac East-Connector 3-Willow Alternative, with 1,249 acres of vegetation cleared. Following in descending order of

[5] A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 Clean Water Act or a similar state or local wetland regulation.

area of vegetation cleared would be: Mac West-Connector 2-Big Lake Alternative (1,056 acres); Mac West-Connector 1-Houston-Houston North Alternative (1,038 acres); Mac West-Connector 1-Houston-Houston South Alternative (1,032 acres); Mac East-Connector 3-Houston-Houston North Alternative (1,010 acres); and Mac East-Connector 3-Houston-Houston South Alternative (1,003 acres). The Mac East-Big Lake Alternative would result in the fewest acres of vegetation loss of all the possible alternatives; 930 acres. Vegetation clearing would result in a long-term impact for forest communities, even with restoration, especially for late-succession forests and wetlands that would be slow to recover. Some cleared areas would likely be restored after construction; other areas would be covered by fill.

S.6.3.2 Wildlife Resources

A variety of wildlife species are known to inhabit the project area. These include: bears, moose, wolves, beaver, mink, muskrat, river otter, ermine, martens, wolverines, red fox, coyote, lynx, hares, mice, squirrels, bats, shrews, voles, lemmings, porcupine, and numerous avian species including 42 birds of conservation concern.[6] The potential impacts of the proposed rail line construction and operation to wildlife would be influenced by the animals' dependence on specific habitats, the availability of preferred and used habitats, the amount of preferred habitat the project would affect, ecology and life history, and past and present population trends. Because game mammal populations are managed for sustainable human harvest, project-related effects to population abundance and distribution, available habitat, and predator-prey relationships can also affect management of these game mammals. Potential construction impacts common to all segment combinations and alternatives could include habitat alteration and loss, disturbance and displacement of wildlife, and direct mortality from construction vehicles and equipment. Common potential impacts related to the operation of the proposed rail line could include moose-train collision mortality, bird-power line and communications tower collision mortality, habitat fragmentation, disturbances leading to reduced wildlife survival and productivity, potential exposure to spills of toxic materials, and potential changes in human disturbance and harvest patterns resulting from unauthorized access to the remote portions of the project area facilitated by the access road along the ROW.

The proposed rail line would result in the loss of wildlife habitat ranging from 930 acres to 1,272 acres depending on the alternative, which is less than one percent of the 435,895 acres of available habitat in the study area. The Mac West-Connector 1-Willow Alternative would result in the greatest amount of habitat loss and the Mac East-Big Lake Alternative would result in the least. Of the remaining alternatives, the Mac East-Connector 3-Willow Alternative would result in the greatest loss of wildlife habitat (1,249 acres) followed in descending order by Mac West-Connector 2-Big Lake Alternative (1,056 acres); Mac West-Connector 1-Houston-Houston North Alternative (1,038 acres); Mac West-Connector 1-Houston-Houston South Alternative (1,032 acres); Mac East-Connector 3-Houston-Houston North Alternative (1,010 acres); and Mac East-Connector 3-Houston-Houston South Alternative (1,003 acres). SEA's review and analysis indicates that the rail line would reduce the amount of available habitat, although across all alternatives, rail line construction would result in the loss of less than one percent of the total

[6] Birds of conservation concern include migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the highest conservation priorities of the U.S. Fish and Wildlife Service.

forested habitat available in the project area, as well as less than one percent of the total wetland habitat available in the project area.

The proposed rail line would also contribute to habitat fragmentation of core forested and wetland habitats. Habitat fragmentation occurs when large areas of contiguous core habitat are split into smaller pieces, thereby increasing the amount of habitat edge or the area where one habitat is bordered by a differing habitat. This can adversely affect wildlife by creating barriers to movement, leading to edge effects, reducing core areas of available habitats, facilitating predator movements, and by increasing the intrusion of invasive species and humans. The southern segments and segment combinations would contribute to fragmentation by crossing primarily agricultural and woody wetland core habitats, while the northern segments and segment combinations would contribute to fragmentation by crossing primarily forested and emergent wetland habitats. Of the rail line alternatives, the Mac West-Connector 1-Houston-Houston South Alternative would result in fragmentation by crossing the largest area of forest and wetland habitat (3,210 acres). Of the remaining alternatives, the Mac East-Connector 3-Houston-Houston South Alternative would result in fragmentation by crossing the second largest amount of forest and wetland habitat (3,038 acres) followed in descending order by Mac West-Connector 1-Willow (2,847 acres), Mac East-Connector 3-Willow (2,675 acres), Mac West-Connector 2-Big Lake (2,631 acres), Mac West-Connector 1-Houston-Houston North (2,592 acres), Mac East-Connector 3-Houston-Houston North (2,419 acres), and Mac East-Big Lake (1,725 acres).

S.6.3.3 Fisheries Resources

A variety of both resident and anadromous fish species are present in the project area. Resident fish species are those whose life cycle does not include migration into marine waters, and include lake trout, burbot, northern pike, sculpins, sticklebacks, suckers, and pond smelt in the project area. Anadromous fish species are those whose life cycle include migration into marine waters, and include all five Pacific salmon: Chinook (king), chum (dog), coho (silver), pink (humpy), and sockeye (red), as well as rainbow trout, Dolly Varden, and eulachon in the project area. Of the species that are present, Cook Inlet Salmon (Chinook (king), chum (dog), coho (silver), pink (humpy), and sockeye (red)) are federally-regulated and, as a result, the Federal resources these species use are protected under the Magnuson-Stevens Fishery Management and Conservation Act. Rail line construction would require multiple stream crossings at locations that have fish or fish habitat. Project construction methods and timing, the type of stream crossing structure installed, and daily operations procedures would influence the severity and types of potential impacts to fish and fish habitat at each stream crossing. The primary potential impacts of crossing structures to fish and fish habitat would be loss and degradation of instream habitats due to placement of structures, alteration of stream hydrology and water quality, and blockage of fish movements. Potential rail construction impacts common to all alternatives would include loss or alteration of instream and riparian habitats, mortality from instream construction, blockage of fish movement, degradation of water quality, alteration of stream hydrology and ice breakup, and noise and vibration impacts. Potential rail operations impacts common to all alternatives would include loss or alteration of instream and riparian habitats, blockage of fish movements, and degradation of water quality through sedimentation and turbidity.

All of the build alternatives would cross streams or waterbodies that provide habitat for fish and this habitat could be affected by rail line construction and operations. All crossings of fish-bearing streams would result in some loss or alteration of stream and riparian habitats. Bridged crossings would likely result in a smaller area of instream habitat loss compared to closed-bottomed culverts. In general, clear-span bridges (those without instream supports) would have less potential to create conditions that would cause loss of spawning habitats, blockage of fish movements, alteration of stream hydrology, and increased erosion and sedimentation. The proposed project alternatives would require a minimum of 10 and a maximum of 18 crossings of streams that have been documented to contain either fish or fish habitat. The alternatives requiring the minimum number of fish-bearing stream crossings (10) are Mac East-Big Lake and Mac East-Connector 3-Houston-Houston South. The alternative requiring the maximum number of crossings (18) is Mac West-Connector 1-Houston-Houston North. Of the remaining alternatives, the Mac West-Connector 1-Willow Alternative would cross the greatest number of fish-bearing waterbodies (16), followed by Mac East-Connector 3-Houston-Houston North (15) Mac West-Connector 1-Houston-Houston South and Mac East-Connector 3-Willow (13 crossing for each), and Mac West-Connector 2-Big Lake (12).

All of the build alternatives would cross waters important for sustaining recreational and commercial salmon fisheries, with the greatest number of important waters crossed by alternatives that include the Willow Segment and the smallest number crossed by alternatives that include the Houston-Houston South Segment Combination. The Houston-Houston South Segment Combination and the Willow Segment crossings of the Little Susitna River would require instream pilings and would affect spawning habitat for salmon species. Alternatives that include the Big Lake Segment would cross Goose Creek, a large unique fen system that would likely have to be drained or filled to provide an area for construction, resulting in the loss of about 4 acres within the 200-foot ROW and likely extending outward within the 19-acre high-value wetland and juvenile rearing habitat. Of the total 43 proposed fish-bearing stream crossings, 18 contain either sticklebacks, Pacific lamprey, or both. These two species are considered Species of Conservation Concern by ADF&G.

S.6.3.4 Threatened and Endangered Species

Through consultations with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service on potential threatened or endangered species that could be affected by the proposed project, SEA determined that the proposed project could indirectly affect the federally endangered Cook Inlet beluga whale (*Delphinapterus leucas*). SEA identified and evaluated potential indirect effects on beluga whale that included: 1) beluga whale forage fish in freshwater streams that support anadromous salmon and smelt and would be crossed by the proposed rail line and 2) induced noise and disturbance effects in the immediate vicinity of Port MacKenzie at the entrance of the Knik Arm, as a result of induced increases in vessel traffic to and from Port MacKenzie. SEA, in consultation with National Marine Fisheries Service, did not identify any direct impacts from the proposed project to the beluga whale or beluga whale habitats.

SEA completed a Biological Assessment (Appendix H) and determined that the proposed action, if authorized, may affect, but is not likely to adversely affect the Cook Inlet beluga whale. NMFS has stated they will review and comment on the Biological Assessment after the public

comment period for the designation of critical habitat for the Cook Inlet beluga whale closes on March 3, 2010.

S.6.4 Cultural and Historic Resources

Archaeological sites, historic sites (including historic trails), cultural landscapes (geographic areas, including both natural and cultural resources, associated with a historic event, activity, or person), and traditional cultural properties are likely to be found or have been found within the project area.

Archaeological sites that could not be avoided in the ROW could be inadvertently or purposefully destroyed through surface and subsurface disturbances, primarily during construction. Historic and potentially historic trails would be blocked in the case of unofficial trails. Officially recognized trails would be grade-separated or relocated, facilitating free passage; however, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects. The dog sledding cultural landscape would be adversely affected to varying degrees through loss of visual integrity.

The Mac East-Connector 3-Willow Alternative would potentially affect the most known cultural resources (51) and pass through areas with a high probability of having large numbers of undocumented cultural resources. The Mac West-Connector 1-Houston-Houston South Alternative would affect the fewest known cultural resources (20) and pass through areas with a low probability of having large numbers of undocumented cultural resources. Of the remaining alternatives, the Mac West-Connector 1-Willow alternative would potentially affect 46 cultural resources, followed in descending order by Mac East-Big Lake (39), Mac West-Connector 2-Big Lake (36), Mac East-Connector 3-Houston-Houston North (26), Mac East-Connector 3-Houston-Houston South (24), and Mac West-Connector 1-Houston-Houston North (22).

Adverse effects to cultural resources could be mitigated by minor rerouting of any alternative that may be authorized by the Board to avoid cultural resources identified within the ROW. If avoidance is not possible, mitigation could include data recovery for archaeological sites, maintaining accessibility of historic trail crossings, implementing noise and vibration reduction measures, and minimizing visual impacts.

Cultural resources listed on or determined eligible for listing on the National Register of Historic Places (NRHP) are subject to compliance with Section 106 of the National Historic Preservation Act (NHPA). Through the Section 106 process, the NHPA requires that agencies consult with the State Historic Preservation Office (SHPO) and other relevant consulting parties to develop a determination of the project's affect on cultural resources. Several consultation meetings to date regarding Section 106 and cultural resource issues have occurred with the SHPO, Matanuska-Susitna Borough Historic Preservation Commission and Knik Tribal Council. As a result, four potential cultural landscapes have been evaluated for eligibility to the NRHP and potential effects from the proposed action on eligible landscapes have been assessed for the EIS. A fifth potential cultural landscape has also been identified and an assessment of effects is ongoing.

Because all effects on historic properties cannot be fully determined prior to approval of this type of undertaking, SEA has developed a Draft Programmatic Agreement (PA) for the proposed

action that would govern the completion of the Section 106 process if the proposal before the Board is authorized and the rail line is built. The Draft PA provides for the completion of the Level 2 identification survey,[7] if the Board authorizes the project and the locations of associated facilities have been established. Additionally, the Draft PA establishes responsibilities for the treatment of historic properties, the implementation of mitigation measures, and ongoing consultation efforts. The draft PA is included as Appendix J to the Draft EIS and will be published for public review and comment with the Draft EIS.

S.6.5 Subsistence

Subsistence uses are customary and traditional uses of wild renewable resources for food, shelter, fuel, clothing, and other uses. The evaluation of potential subsistence impacts associated with the proposed action includes analyzing the impacts on the areas used for subsistence activities, access to those areas, availability of resources used for subsistence and changes in the degree of competition among harvesters for subsistence resources.

Because the entire project would be outside areas designated by the state as subject to subsistence regulations, and because there are no Federal public lands in the project area, there would be no direct impacts to subsistence in the project area; however, potential indirect impacts could occur. Certain subsistence resources that use Game Management Unit (GMU)[8] 16B, such as moose, bear and waterfowl, could migrate through the project area. Train-animal collisions could result in changes in distribution, abundance and health of resources migrating to and from GMU 16B. Migratory moose could experience a disproportionate level of mortality due to movements across the proposed rail line.

Construction activities in the proposed rail line ROW and operations of the rail line could reroute subsistence user access across project area lands into areas west of the Susitna River. Construction of the Mac East-Big Lake Alternative would affect the fewest users because all residents in the study area to the west of the alternative would have continued unobstructed access to lands west of the Susitna River. The Mac West-Connector 1-Willow Alternative could change access for the greatest number of subsistence users; the Mac East-Big Lake Alternative could change access for the fewest number of subsistence users. The farther west the alternative, the more users would be potentially affected; more communities would have to use rail line crossings to reach GMU 16B. Competition could be affected because changes in access created by the rail line could cause harvesters to begin using other communities' subsistence use areas, subsequently increasing the number of harvesters competing for resources in those places. Impacts to resource availability could most affect Beluga, Skwentna, and Tyonek because members of those communities harvest most of their subsistence resources in GMU 16B.

S.6.6 Climate and Air Quality

The U.S. Environmental Protection Agency (USEPA) national ambient air quality standards (NAAQS) regulations specify the maximum acceptable ambient concentration level for six

[7] Level of investigation required to evaluate the eligibility of a resource for the National Register.
[8] A Game Management Unit (GMU) is one of 26 geographical areas listed under game management units in the codified State of Alaska hunting and trapping regulations and the GMU maps of Alaska shown in the Alaska State Hunting Regulation book.

primary or "criteria" air pollutants – ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter (PM), and lead (Pb) – and ADEC has adopted the same standards for Alaska. MSB is currently in attainment of the standards for these six criteria pollutants. To evaluate the potential impacts of increased emissions of NAAQS air pollutants plus greenhouse gas emissions, SEA developed emissions estimates for the proposed rail line construction and operation. To be conservative, SEA estimated construction and operations emissions for the longest potential alternative, the 46-mile Mac West-Connector 1-Willow Alternative, and for the maximum average train length of 80 cars. SEA found that the estimated emissions of all criteria pollutants from construction and operation would be below the *de minimis* conformity thresholds established for each pollutant and, thus, the increase would be minimal in the context of existing conditions for all of the alternatives evaluated. To the extent that commodities that would be transported by truck were shifted to rail, and to the extent that commodities transported between the Interior of Alaska and the Ports of Anchorage or Seward were shifted to Port Mackenzie, at a shorter rail haul distance, reductions in air pollutant emissions from truck traffic or from rail to and from the Ports of Anchorage and Seward would decrease.

Greenhouse gas emissions associated with the proposed action would be primarily carbon dioxide (CO_2) emissions. SEA also estimated that operation of the proposed rail line would represent a two percent increase in Alaska rail CO_2 emissions and an increase in CO_2 emissions of less than 0.01 percent for the state as a whole. SEA concluded that estimated increases from proposed rail line construction or operations would be minimal and that any direct project-related impacts to climate would be low under any of the alternatives evaluated.

S.6.7 Noise and Vibration

SEA evaluated whether operation of the proposed rail line alternatives would result in noise levels (attributable to wayside noise and the locomotive warning horn) that would equal or exceed a 65 decibel day-night average noise level (DNL) or result in an increase of at least 3 decibels (dBA) or greater (SEA's noise analysis thresholds). SEA found no receptors for which both thresholds would be exceeded and, therefore, concluded that there would be no adverse noise impacts associated with operation of any of the build alternatives. SEA compared estimated noise levels during construction to Federal Transit Administration (FTA) construction noise criteria and found that the criteria would not be exceeded unless impact pile driving for bridge construction occurs during the nighttime hours. If nighttime pile driving would occur, SEA found that estimated noise levels from pile driving would exceed the criteria at three locations on the Big Lake Segment.

On behalf of FRA, SEA also analyzed the potential noise impacts on Section 4(f) properties using FRA/FTA methods.[9] All project alternatives that include the Willow Segment would result in potential noise impacts to the Little Susitna State Recreation River, the Susitna Flats State Game Refuge, the Willow Creek State Recreation Area, and the Nancy Lake State Recreation Area. None of these refuges and recreation areas are anticipated to experience noise impacts as a result of either the Mac East-Connector 3-Houston-Houston South or Mac East-Big Lake alternative. The estimated acreage of potential noise impacts within the Willow Creek

[9] Federal Railroad Administration. 2005. High-Speed Ground Transportation Noise and Vibration Impact Assessment

State Recreation Area is approximately 9 percent of the total acreage of the state recreation area, while the acreage of potential noise impacts within the Little Susitna Recreation River would range from 3 percent (for alternatives that include the Willow Segment) to 4 percent (for alternatives that include the Houston North Segment) of the recreation river. All other estimated potential noise impacts would affect less than 1 percent of the total acreage of the Nancy Lake State Recreation Area and the Susitna Flats State Game Refuge, although the total acreage potentially affected would be greatest within the Susitna Flats State Game Refuge, ranging from approximately 992 to 1762 acres, depending on the alternative.

SEA also evaluated whether vibration during construction and operation would exceed FTA fragile building damage criterion and found that estimated vibration levels would not exceed the criterion at any receptor locations. Similarly, SEA found that estimated vibration levels could be perceptible during construction activities such as pile driving, but would be temporary, and that vibration from operations at levels that could be annoying would not occur outside the ROW. Therefore, SEA anticipates no vibration impacts resulting from the proposed rail line.

S.6.8 Energy

Energy consumption during the construction period would be temporary and would place minimal additional demand on the local energy supply. During rail line operations, energy requirements would primarily be for operation of trains. The total demand for diesel generated by the proposed action would be a very small share of the annual statewide consumption of distillate fuel. SEA anticipates that there would be a diversion of freight from truck to rail transport, which is more fuel-efficient, decreasing fuel consumption.

S.6.9 Transportation Safety and Delay

S.6.9.1 Grade Crossing Safety

To enable comparison of alternatives between Port MacKenzie and the existing ARRC mainline at the point north of Willow where the Willow Segment would connect to the main line, SEA estimated predicted accident frequency for the existing at-grade crossings along the ARRC mainline between this connection point and the point where the Big Lake Segment would connect to the main line. SEA found that the added rail traffic (two trains per day) would have a small effect on the predicted accident frequency at the existing at-grade crossings. At the at-grade crossing with the highest predicted accident frequency for existing conditions, the predicted interval between individual accidents would decrease from 54 to 51 years (i.e., accidents would be predicted to occur slightly more often). To provide an approximate upper bound of predicted accident frequency for the new at-grade crossings, SEA estimated predicted accident frequency for the crossings with the highest annual average daily traffic (AADT) in two categories – those above 500 AADT and those below 500 AADT – and found that the predicted interval between accidents would be more than 100 years for all new at-grade crossings. The Mac West-Connector 1-Houston-Houston South alternative has the highest hazard index which is about 80 percent higher than the alternative with the lowest index, the Mac East-Connector 3-Willow.

SEA anticipates that the increased rail traffic for transport of equipment and materials during the construction period would be less than during operations (that is, less than 2 trains per day), and potential impacts on safety also would be less during construction.

S.6.9.2 Traffic Delay

Vehicle delay at grade crossings varies depending on roadway and rail traffic volumes, the number of roadway lanes, train length, and train speed. SEA anticipates that the effect of the proposed action on grade crossing delay would be minimal. All alternatives would have a very small impact on road delay at grade crossings, with a maximum increase of about 7 minutes of delay per day (total for all vehicles) for any of the alternatives. SEA anticipates that the increased rail traffic during the construction period, due to transport of construction material, would be less than during operations, and potential delay impacts would also be less.

S.6.9.3 Rail Safety

ARRC anticipates transporting bulk materials and containers on the proposed rail line and has not indicated any plans to carry hazardous materials. SEA has analyzed rail transport of hazardous materials in situations involving transportation of flammable and/or toxic materials in areas with relatively high population densities and overall train traffic, and found the potential impacts to be low. Thus, SEA concludes that potential impacts of transporting hazardous materials, even if it were it to occur, would be minimal.

S.6.10 Navigation

The proposed rail line alternatives include a total of 30 stream crossings that have been determined to be or that might be considered navigable waterways. Where an alternative would cross a navigable waterway, as designated by the U.S. Coast Guard and Alaska Department of Natural Resources, there could be small temporary effects to navigability due to temporary bridges and normal bridge construction activities. Impacts to navigation from each potential crossing would be negligible because structures crossing navigable streams are required to provide vertical and horizontal clearances adequate for watercraft to pass unimpeded.

Depending on the alternative, the proposed rail line ROW would intersect from 0 to 3 navigable waterways and from 5 to 12 possible navigable waterways. The Mac West-Connector 2-Big Lake and Mac East-Big Lake alternatives could be constructed without crossing a navigable stream. However, the Mac West-Connector 2-Big Lake Alternative would cross 12 possible navigable waterways and the Mac East-Big Lake Alternative would cross 11 possible navigable waterways. The Mac West-Connector 1-Willow Alternative and Mac East-Connector 3-Willow Alternative would each cross three navigable streams. The Mac West-Connector 1-Willow Alternative would also cross eight possible navigable waterways, and the Mac East-Connector 3-Willow Alternative would cross six possible navigable waterways.

S.6.11 Land Use

S.6.11.1 Land Use

Land owners in the study area include the State of Alaska, the Federal Government, the MSB, the Alaska Mental Health Trust, the University of Alaska, private citizens, and Native Alaskans/Native Alaskan Corporations. Land in the area is commonly used for sport hunting and fishing and for traditional hunting, fishing, and gathering. Recreational use of land in the area by MSB and Anchorage residents and tourists is high, and wildlife habitat and water features are extensive. Forestry and timber harvesting are some of the designated uses of state land. ARRC would acquire the land within the proposed rail line ROW from existing land owners.

The area in the ROW cleared for construction but not needed for permanent structures would be restored to conditions consistent with rail line maintenance requirements. Construction support facilities would be sited, where possible, within the 200-foot ROW. Potential impacts to land use from these staging and construction areas would be temporary because ARRC would remove them and rehabilitate the areas after completing construction of the rail line and operations support facilities. Operations of the new freight rail service as part of the proposed project are not expected to stimulate changes in existing land uses or shift development patterns along the rail line.

The Mac West-Connector 1-Houston-Houston North Alternative would impact the least amount of private land (210 acres). Overall, this alternative would impact the fourth lowest total number of acres (1,054 acres) after the Mac East-Big Lake Alternative (990 acres), the Mac East-Connector 3-Houston-Houston North Alternative (1,040 acres), and the Mac East-Connector 3-Houston-Houston South Alternative (1,053 acres). Of these four alternatives, Mac East-Big Lake Alternative would impact the most acres of private land (422 acres) and is the second highest of all alternatives. In comparison, the Mac West-Connector 1-Houston-Houston North Alternative would cross mostly undeveloped land. The Mac West-Connector 2-Big Lake Alternative would impact the greatest amount of private land (487 acres) and the sixth total number of acres overall (1,105 acres). The Mac East-Connector 3-Houston-Houston North Alternative would impact 228 acres of private land; Mac West-Connector 1-Willow would impact 244 acres of private property; Mac East-Connector 3-Willow would impact 262 acres; Mac West- Connector 1- Houston- Houston South would impact 317 acres; and Mac East-Connector 3-Houston-Houston South alternatives would impact 335 acres of private land. Alternatives with the Mac East Segment would affect fewer acres of land in agricultural use than alternatives with the Mac West Segment. The Mac West-Connector 2-Big Lake Alternative would affect the most acres of land in agricultural use. In the area of the Big Lake Segment, the proposed rail line extension would require taking 17 residences and three structures. The Connector 3 Segment would displace two non-residential structures and the Mac East Segment would displace one residential structure.

S.6.11.2 Parks and Recreational Resources

The project area includes several designated recreation areas, including Willow Creek State Recreation Area, Nancy Lake State Recreation Area, Little Susitna State Recreation River, and

two state recreation sites on the northern and southern shores of Big Lake. Many recreational trails cross the area, and there are varied recreation opportunities available to the public. The area is well suited for both winter and non-winter outdoor recreation activities.

Potential construction impacts common to all build alternatives would be temporary. These include: the obstruction of trails and waterways used to access recreation areas and resources; the generation of noise affecting hikers, boaters, and campers; increased dust and discordant visual elements in the landscape; impacts to water quality affecting recreational fishing; and alteration of local distribution of wildlife, which could affect the experience of users engaging in recreational hunting and wildlife viewing. Potential operations impacts common to all alternatives would include: loss of connectivity of unofficial trails crossed by the proposed rail line; the presence of communication towers that could permanently alter the localized movement of private aircraft; change in recreational access patterns to and along certain recreational waters; visual intrusion on the landscape that could affect the experience of recreationists. Where the proposed rail line would cross an officially recognized trail, ARRC proposed to provide public access by a grade-separated crossing. Alternatively, the trail could be relocated to avoid crossing the rail line. ARRC does not propose to provide crossings for unofficial trails. Unofficial trails would be blocked and ARRC's trespassing regulations would prohibit the public from crossing of the ROW without first obtaining approval from ARRC.

All of the alternatives would intersect the Iditarod National Historic Trail and all alternatives that include the Mac West Segment (four of the eight alternatives) would cross the Point MacKenzie Trailhead and Parking Area and the Figure 8 Lake Loop Trail. The Mac East-Connector 3-Houston-Houston South Alternative would not impact any recreation areas or refuges and would have the least effect on trails – intersecting four officially recognized trails. The Mac East-Big Lake Alternative also would not impact any recreation areas or refuges and would intersect five officially recognized trails. The Mac-West-Connector 1-Willow Alternative would impact four recreation areas/facilities and eleven named trails. The other six alternatives would result in impacts greater than the Mac East-Connector 3- Houston-Houston SouthBig Lake Alternative and less than the Mac West-Connector 1-Willow Alternative.

The U.S. Department of Transportation (USDOT) regulation known as "Section 4(f)" (see 23 CFR 774) mandates that the Secretary of Transportation shall not approve any transportation project requiring the use of publicly owned parks, recreation areas or wildlife and waterfowl refuges, or significant public or private historic sites, regardless of ownership, unless the impact would be *de minimis* or there is no prudent and feasible alternative to using that land, and the program or project includes all possible planning to minimize harm to the public park, recreation area, wildlife or waterfowl refuge, or significant site, resulting from that use. Section 4(f) resources affected by one or more alternatives include three recreation areas, one game refuge, and 13 officially recognized trails within the project area. A Programmatic Agreement (a draft is provided in Appendix J of this Draft EIS) would guide future efforts during final design and construction to identify and evaluate cultural resources including those that could be protected under Section 4(f) and would establish procedures for avoiding and mitigating impacts. There are only two alternatives that FRA and STB anticipate would result in *de minimis* impacts on Section 4(f) resources: the Mac East-Big Lake Alternative and the Mac East-Connector 3-Houston-Houston South Alternative. Of these two alternatives, the Mac East-Connector 3-Houston-Houston South Alternative would affect the fewest number (1) and length (204 feet) of

Section 4(f) trails, while the Mac East-Big Lake Alternative would affect the greatest number (4) and length (2,408 feet) of Section 4(f) trails. Neither of these alternatives would require use of or cause severe noise impacts, as defined by FRA, on the Susitna Flats State Game Refuge, the Little Susitna State Recreation River, the Nancy Lakes State Recreation Area, or the Willow Creek State Recreation Area. Additionally neither alternative would result in severe noise impacts, as defined by the FRA, to Section 4(f) properties. Of the remaining alternatives that would require the use of Section 4(f) resources, the Mac West-Connector 1-Willow Alternative would potentially affect the greatest number of recreational trails (10), the longest length of recreational trails (4,187 feet), and the ROW for this alternative would affect the greatest acreage of parks and recreation areas and the wildlife refuge (217 acres). The operation of trains along this alternative would result in severe noise impacts, as defined by the FRA, to approximately 2,765 acres of Section 4(f) properties. Of these remaining alternatives, the Mac East-Connector 3-Houston-Houston North would have the lowest impacts on number of trails (1), acreage of parks and recreational areas and the wildlife refuge affected by the ROW (69 acres), and length of trail crossed (204 feet). It would result in severe noise impacts, as defined by the FRA, to approximately 769 acres of Section 4(f) properties.

S.6.11.3 Hazardous Materials and Waste Sites

Potential safety or environmental impacts could result from proposed rail line construction activities as grubbing (clearing stumps and roots), filling, excavating, or related dewatering operations (removal of water from solid materials or removal of groundwater) in areas of contaminated soils or groundwater within the rail line ROW and other work areas during rail line construction. The Mac West, Mac East, Connector 1, Connector 2, Connector 3, and Big Lake segments would be located within the former Susitna Gunnery Range, a Formerly Used Defense site that could potentially contain munitions and explosives of concern. There are three known low-risk sites along the Houston South Segment that contain contaminated soils. There are no known sites of concern that present a potential for environmental consequences along the Willow, Houston, and Houston North segments. One low-risk site with petroleum-contaminated soil is known along the Connector 2 Segment. During construction, the Applicant would use information regarding the location of these sites to minimize any risks, and would follow applicable regulations to address sites identified. Routine rail line operations would not be expected to result in adverse impacts to hazardous waste sites.

S.6.12 Socioeconomics

As of 2007, the MSB had an estimated population of 82,668 and a labor force of 39,308 people. The southern segments of the proposed rail line are 36 miles away from the most populous area of the MSB, the area between Wasilla and Sutton. The MSB is part of the Anchorage Metropolitan Area and about a third of the employed residents of the Borough commute to Anchorage. Tourism and recreation are important economic sectors in the Borough and trails are often the main access available to recreational cabins and facilities.

Most socioeconomic impacts to the affected area are expected to be the same under all alternatives. The proposed action would result in a temporary stimulus to the Borough's economy and labor market. ARRC estimates it would employ 66 to 100 workers in the various phases of the 2-year construction period; however, the positive impact to employment would be

temporary because it would be limited to the construction period. The impact from direct expenditures in the project area and local employment would increase from local expenditures by employees and providers of services during the rail construction period. The operation of the proposed rail line is expected to provide Port MacKenzie with a transportation alternative to the existing truck access to the Port for the movement of bulk materials and to support the use of the Port as a general cargo port. The extent of the socioeconomic impact would depend on the extent to which the rail line was used and generated demand for services at the Port. Additionally, access to resources such as coal could attract new industries to the Port MacKenzie District.

Potential socioeconomic impacts that would differ by segment include displacement of residences, businesses, and agricultural land and potential impacts to economic activities related to the use of unofficial trails. Unofficial trails would be blocked, and ARRC's trespassing regulations would prohibit crossing of the ROW. While recreation and tourism activities that use unofficial trails would be blocked by the proposed rail line, they could potentially be diverted to officially recognized trails. This could have a potentially adverse effect on economic activities directly or indirectly related to the use of such trails. The southern rail line segments would cross agricultural parcels with the Mac West-Connector 2-Big Lake Alternative affecting the greatest number of acres. Alternatives with the Mac East Segment would affect the least number of acres of agricultural land. Some agricultural production would likely be lost. Given the small number of residential displacements, no difficulties in identifying and providing comparable nearby housing is expected.

S.6.13 Environmental Justice

SEA assessed whether any high and adverse impacts to human health or the environment would occur as a result of the proposed action. SEA expects no high and adverse human health or environmental effects from the proposed action. Therefore there would be no high and adverse impacts to environmental justice populations in the project area.

S.6.14 Cumulative Effects

SEA collected and reviewed information on relevant past, present, and reasonably foreseeable future projects and actions that could have effects that coincide in time and space with the potential effects from the proposed action. For those identified relevant projects, SEA identified where there could be cumulative impacts. Reasonably foreseeable activities within the project area could include: Cook Inlet Areawide Oil and Gas Lease Sale; Cook Inlet Ferry; Cook Inlet OCGen™ Power Project; Knik Arm Crossing; Knik-Willow Transmission; Goose Creek Correctional Center; MSB Regional Aviation System Plan; Natural Gas Pipeline: Beluga to Fairbanks; a suite of Port MacKenzie Development Projects;[10] Port of Anchorage (POA) Marine Terminal Redevelopment Project; a host of road projects in the MSB; South Wasilla Rail Line Relocation; the Su-Kink Wetland Bank – Umbrella Mitigation Bank Instrument – Big Lake South Individual Bank Plan; and the West Mat-Su Access Project. The effects of these projects in combination with the impacts of the proposed action could result in cumulative adverse effects

[10] These include the development of a bulk materials facility, gravel mining operations, deep draft dock expansion, and barge dock expansion.

to geology and soils, water resources, biological resources, cultural and historic resources, subsistence, climate and air quality, noise, energy, transportation safety and delay, and land use.

S.6.15 Comparison of Potential Impacts

Table S-2 highlights potential impacts for resource areas and topics for which there are noteworthy differences among the build alternatives. The largest impacts would occur to water, cultural and recreational resources. Alternatives that include the Mac West Segment would tend to require a greater number of water body crossings and impact a greater amount of floodplains and wetlands when compared with alternatives containing the Mac East Segment. Alternatives including the Big Lake Segment would impact 25 acres of a wetland mitigation bank. The dog sledding cultural landscape would be adversely affected by all build alternatives. Alternatives including the Big Lake and Willow segments would tend to impact a greater number of known cultural resources and have many medium to high level probability areas for encountering cultural resources. Alternatives including the Mac West – Connector 1 Segment Combination or the Willow Segment would tend to cross a greater number of trails and recreational areas. Although all of the proposed rail line segments are technically feasible to build, and any combination of the segments that would connect the existing main line to Port MacKenzie would satisfy the project's purpose and need, there are only two alternatives that FRA and STB anticipate would result in *de minimis* impacts on Section 4(f) resources: the Mac East-Big Lake Alternative and the Mac East-Connector 3-Houston-Houston South Alternative. Based on Section 4(f) provisions, the FRA would not be permitted to provide funding for any STB authorized alternative that would involve the use of a Section 4(f) property, unless the impacts would be *de minimis*, or there were no prudent and feasible alternatives that avoided Section 4(f) properties. Under the No-Action Alternative there would be no impacts from the proposed project.

S.7 Summary of SEA's Preliminary Recommended Mitigation Measures

Based on the information available to date, consultations with appropriate agencies, and the environmental analysis presented in this document, SEA has developed preliminary mitigation measures to address the environmental impact of the proposed action.

SEA encourages applicants in rail construction cases to propose voluntary mitigation to address concerns in ways that go beyond what the Board could unilaterally require. In this case, based on consultations with local communities and interested agencies, the Applicant has developed voluntary mitigation in an effort to address many of the concerns that have been raised. SEA intends to recommend that the Board impose the Applicant's proposed voluntary mitigation measures as a condition of petition approval.

Table S-2
Summary and Comparison of Potential Impacts (page 1 of 3)

	Mac West-Conn 1-Willow	Mac West-Conn 1-Houston-Houston North	Mac West-Conn 1-Houston-Houston South	Mac West-Conn 2- Big Lake	Mac East-Conn 3-Willow	Mac East-Conn 3-Houston-Houston North	Mac East-Conn 3-Houston-Houston South	Mac East- Big Lake
Topography, Geology, Soils	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, with some areas of rolling hills, greater need for cutting and filling expected	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, little need for cutting and filling expected	Topography relatively flat, with some areas of rolling hills, greater need for cutting and filling expected
	Locally important soil acres lost: 510	Locally important soil acres lost: 297	Locally important soil acres lost: 312	Locally important soil acres lost: 317	Locally important soil acres lost: 608	Locally important soil acres lost: 390	Locally important soil acres lost: 406	Locally important soil acres lost: 322
Water Resources	Crossings include 34 culverts, 3 culvert extensions, 4 drainage structures,[11] and 4 bridges	Crossings include 33 culverts, 13 culvert extensions, 4 drainage structures, and 1 bridge	Crossings include 34 culverts, 2 culvert extensions, 3 drainage structures, and 1 bridge	Crossings include 32 culverts, 3 culvert extensions, and 7 drainage structures	Crossings include 20 culverts, 3 culvert extensions, 3 drainage structures, and 4 bridges	Crossings include 19 culverts, 13 culvert extensions, 3 drainage structures, and 1 bridge	Crossings include 20 culverts, 2 culvert extensions, 2 drainage structures, and 1 bridge	Crossings include 16 culverts, 3 culvert extensions, and 7 drainage structures
	11 identified floodplain crossings and potential floodplain crossings	10 identified floodplain crossings and potential floodplain crossings	9 identified floodplain crossings and potential floodplain crossings	6 identified floodplain crossings and potential floodplain crossings	9 identified floodplain crossings and potential floodplain crossings	8 identified floodplain crossings and potential floodplain crossings	7 identified floodplain crossings and potential floodplain crossings	5 identified floodplain crossings and potential floodplain crossings
	Total wetland acres: 363 (Forested 148, Scrub/shrub 179, Emergent 32, Other waters 4)	Total wetland acres: 478 (Forested 169, Scrub/shrub 253, Emergent 50, Other waters 6)	Total wetland acres: 424 (Forested 153, Scrub/shrub 226, Emergent 41, Other waters 4)	Total wetland acres: 347 (Forested 135, Scrub/shrub 187, Emergent 24, Other waters 1)	Total wetland acres: 188 (Forested 94, Scrub/shrub 78, Emergent 13 Other waters 3)	Total wetland acres: 301 (Forested 116, Scrub/shrub 151, Emergent 30 Other waters 4)	Total wetland acres: 248 (Forested 100, Scrub/shrub 124, Emergent 21 Other waters 3)	Total wetland acres: 209 (Forested 88, Scrub/shrub 112, Emergent 8, Other waters 1)

[11] Drainage structures are defined as crossing structures whose structure would be determined by the Applicant during the final design process and could include multi-plate culverts, pre-cast arches, and single or multiple short-span bridges.

Table S-2
Summary and Comparison of Potential Impacts (page 2 of 3)

	Mac West-Conn 1-Willow	Mac West-Conn 1-Houston-Houston North	Mac West-Conn 1-Houston-Houston South	Mac West-Conn 2- Big Lake	Mac East-Conn 3-Willow	Mac East-Conn 3-Houston-Houston North	Mac East-Conn 3-Houston-Houston South	Mac East-Big Lake
Biological Resources	Total habitat acres lost: 1,272	Total habitat acres lost: 1,038	Total habitat acres lost: 1,032	Total habitat acres lost: 1,056	Total habitat acres lost: 1,249	Total habitat acres lost: 1,010	Total habitat acres lost: 1,003	Total habitat acres lost: 930
	Fragmentation of core habitats: 2,847 acres of forested and woody wetland habitat	Fragmentation of core habitats: 2,592 acres of primarily woody wetland and emergent wetland habitat	Fragmentation of core habitats: 3,210 acres of primarily woody wetland and emergent wetland habitat	Fragmentation of core habitats: 2,631 acres of forested and wetland habitat	Fragmentation of core habitats: 2,675 acres of forested and woody wetland habitat	Fragmentation of core habitats: 2,419 acres of emergent wetland, woody wetland, and forested habitat	Fragmentation of core habitats: 3,038 acres of emergent wetland, woody wetland, and forested habitat	Fragmentation of core habitats: 1,725 acres of forested and woody wetland habitat
	Moose foraging habitat acres lost: 326	Moose foraging habitat acres lost: 451	Moose foraging habitat acres lost: 506	Moose foraging habitat acres lost: 408	Moose foraging habitat acres lost: 224	Moose foraging habitat acres lost: 348	Moose foraging habitat acres lost: 403	Moose foraging habitat acres lost: 315
	Fish-bearing streams crossings: 16	Fish-bearing stream crossings: 18	Fish-bearing stream crossings: 13	Fish-bearing stream crossings: 12	Fish-bearing stream crossings: 13	Fish-bearing stream crossings: 15	Fish-bearing stream crossings: 10	Fish-bearing stream crossings: 10
	Anadromous Stream crossings: 7	Anadromous Stream crossings: 9	Anadromous Stream crossings: 6	Anadromous Stream crossings: 8	Anadromous Stream crossings: 6	Anadromous Stream crossings: 8	Anadromous Stream crossings: 5	Anadromous Stream crossings: 8
Cultural Resources	Total number of known cultural resources potentially affected: 46	Total number of known cultural resources potentially affected: 22	Total number of known cultural resources potentially affected: 20	Total number of known cultural resources potentially affected: 36	Total number of known cultural resources potentially affected: 51	Total number of known cultural resources potentially affected: 26	Total number of known cultural resources potentially affected: 24	Total number of known cultural resources potentially affected: 39
	Probability for cultural resources: low, medium and high level areas	Probability for cultural resources: low	Probability for cultural resources: low	Probability for cultural resources: low, medium and high level areas	Probability for cultural resources: many medium to high level areas	Probability for cultural resources: low, medium and high level areas	Probability for cultural resources: low, medium and high level areas	Probability for cultural resources: many medium to high level areas

Table S-2
Summary and Comparison of Potential Impacts (page 3 of 3)

	Mac West-Conn 1-Willow	Mac West-Conn 1-Houston-Houston North	Mac West-Conn 1-Houston-Houston South	Mac West-Conn 2- Big Lake	Mac East-Conn 3-Willow	Mac East-Conn 3-Houston-Houston North	Mac East-Conn 3-Houston-Houston South	Mac East-Big Lake
Land Use	244 acres private land	210 acres private land	317 acres private land	487 acres private land	262 acres private land	228 acres private land	335 acres private land	422 acres private land
	Structures in the 200-foot ROW: 0	Structures in the 200-foot ROW: 0	Structures in the 200-foot ROW: 0	Structures in the 200-foot ROW: 20 displaced most of which are residences	Structures in the 200-foot ROW: 3 (1 residence)	Structures in the 200-foot ROW: 3 (1 residence)	Structures in the 200-foot ROW: 3 (1 residence)	Structures in the 200-foot ROW: 21 displaced most of which are residences
	Acres in agricultural use lost: 66	Acres in agricultural use lost: 64	Acres in agricultural use lost: 64	Acres in agricultural use lost: 94	Acres in agricultural use lost: 94	Acres in agricultural use lost: 7	Acres in agricultural use lost: 5	Acres in agricultural use lost: 5
	Official trails crossed: 11	Official trails crossed: 8	Official trails crossed: 8	Official trails crossed: 6	Official trails crossed: 8	Official trails crossed: 4	Official trails crossed: 4	Official trails crossed: 5
	4 state recreation or refuge areas crossed	2 state recreation or refuge areas crossed	2 state recreation or refuge areas crossed	1 state recreation or refuge area crossed	4 state recreation or refuge areas crossed	1 state recreation or refuge area crossed	0 state recreation or refuge area crossed	0 state recreation or refuge areas crossed
	Adverse noise impact to 2,765 acres of Section 4(f) properties	Adverse noise impact to 2,258 acres of Section 4(f) properties	Adverse noise impact to 1,489 acres of Section 4(f) properties	Adverse noise impact to 992 acres of Section 4(f) properties	Adverse noise impact to 1,276 acres of Section 4(f) properties	Adverse noise impact to 769 acres of Section 4(f) properties	Adverse noise impact to 0 acres of Section 4(f) properties	Adverse noise impact to 0 acres of Section 4(f) properties

SEA specifically requests meaningful comments on the preliminary recommended mitigation identified in the Draft EIS (both the Applicant's voluntary mitigation and SEA's preliminary mitigation) and suggestions for potential additional mitigation measures. SEA will make its final recommendations on mitigation to the Board in the Final EIS after considering all public comments on the Draft EIS. The Board will then make its final decision regarding this project and any conditions it might impose.

S.8 Request for Comments on Draft EIS

SEA encourages the public and any interested parties to submit written comments on all aspects of this Draft EIS. SEA will consider all comments in preparing the Final EIS, which will include responses to all substantive comments, SEA's final conclusions on potential impacts, and SEA's final recommendations. All comments on the Draft EIS must be submitted within the prescribed comment period, which closes on May 10, 2010. When submitting comments on the Draft EIS, SEA encourages commenters to be as specific as possible and substantiate concerns and recommendations.

Mail written comments on the Draft EIS to:

David Navecky
Surface Transportation Board
395 E Street, SW
Washington, DC 20423
Attention: Environmental Filing
STB Finance Docket No. 35095

Commenters also may submit comments electronically. Comments submitted electronically will be given the same attention as mailed comments. Persons who submit comments electronically do not have to also send those comments by mail. Environmental comments may be filed electronically on the STB Web site at www.stb.dot.gov by clicking on the "E-FILING" link. By selecting "Environmental Comments" after the link, individuals will not be required to log in to submit their comments. Comments can be typed into the online form provided, or attached as Microsoft Word,® Corel Word Perfect,® or Adobe® Acrobat® files. Written comments on the Draft EIS, which was served March 16, 2010, must be postmarked by May 10, 2010. Electronically-filed comments must be received by May 10, 2010.

Please refer to STB Finance Docket No. 35095 in all correspondence addressed to the Board, including e-filings.

Additional information about the project can be obtained by calling the SEA toll-free number at 1-888-257-7560 (telecommunications device [TDD] for the hearing impaired is 1-800-877-8339).

This Draft EIS is also available on the STB Web site at www.stb.dot.gov and on the project Web site at www.stbportmacraileis.com.

S.9 Public Meetings

In addition to receiving written comments on the Draft EIS, SEA will host public meetings. SEA and the cooperating agencies are holding six public meetings on the Draft EIS during which interested parties may make oral comments in a formal setting and/or submit written comments. SEA will begin each meeting with a brief overview of the proposed action and environmental review process. The overview will be followed by a formal comment period during which each interested individual will be given several minutes to address the meeting participants and convey his or her oral comments. A court reporter will be present to record these oral comments. If time permits, the court reporter will be available at the conclusion of the formal segment of the meeting to record oral comments from individuals not interested in addressing the meeting as a whole. Meetings will be held at the following dates, times, and locations:

- April 6, 2010, 6:30-8:30 pm at Wilda Marston Theater, 3600 Denali Street, Anchorage, AK
- April 7, 2010, 6:30-8:30 pm at Big Lake Elementary School, 3808 South Big Lake Road, Big Lake, AK
- April 8, 2010, 6:30-8:30 pm at Menard Sports Center, 1001 S Mack Drive Wasilla, AK
- April 12, 2010, 6:30-8:30 pm at Houston Middle School, 12801 W. Hawk Lane, Houston, AK
- April 13, 2010, 6:30-8:30 pm, at Willow Community Center, Mile 70 Parks Highway, Willow, AK
- April 14, 2010, 6:30-8:30 pm, at Knik Elementary School Gym, 6350 Hollywood Boulevard, Wasilla, AK

Following the close of the comment period on the Draft EIS (May 10, 2010), SEA and the cooperating agencies will issue a Final Environmental Impact Statement (Final EIS) that considers comments on the Draft EIS. The Board will then issue a final decision based on the Draft and Final EISs and all public and agency comments in the public record for this proceeding. The final decision will address the transportation merits of the proposed project and the entire environmental record. That final decision will take one of three actions: approve the proposed project, deny it, or approve it with mitigation conditions, including environmental conditions.