

EQ-1339



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

June 12, 2009

To: Christy Everett, USACE
Gary Foreman, BLM
Linda Gehrke, FTA
James Helfinstine, USCG
Mark Hoffmeister, ALCOM
Malcolm Nason, USAF 354th Fighter Wing
Don Perrin, ADNR
John Winkle, FRA

Re: STB Finance Docket No. 34658, Alaska Railroad Corporation Construction and Operation of a Rail Line between North Pole and Delta Junction, Alaska; **Availability of Preliminary Final Environmental Impact Statement for Cooperating Agency Review**

Dear Cooperating Agency Lead Contacts:

Enclosed for your review and comment is the Preliminary Final Environmental Impact Statement (PFEIS) for Alaska Railroad Corporation's (ARRC) proposed Northern Rail Extension (NRE). **I ask that you submit your comments to us on or before Friday, July 17, 2009.** Please feel free to distribute a copy of this letter and the document to the appropriate reviewers within your agency, but be mindful that the document is administratively confidential and must not be made available to or discussed with any individuals outside your agency, including ARRC.

The PFEIS is organized consistent with Council on Environmental Quality (CEQ) regulations and is intended to be read in conjunction with the Draft EIS. Chapter 1 of the PFEIS reiterates project background, purpose and need, presents the Surface Transportation Board's (STB's) Preferred Alternative, summarizes public involvement activities conducted to date, and presents the primary modifications to the Draft EIS. Chapter 2 of the PFEIS presents the Section of Environmental Analysis' (SEA's) final recommended mitigation measures. Public and agency (non-cooperating agencies) comments on the Draft EIS are addressed in Chapter 3 of the PFEIS, and Chapter 4 presents errata and other changes to the Draft EIS.

Oral comments on the Draft EIS received during public meetings conducted in January 2009 are included as Appendix A of the PFEIS. Appendix B presents the written comments on the Draft EIS. Substantive comments are marked with sidebars and corresponding comment numbers. The comment tracking numbers correspond to Chapter 3 of the PFEIS and are listed in

Table 3-1. Appendix C includes agency correspondence that has occurred since publication of the Draft EIS. Appendix D and F are the final versions of the Essential Fish Habitat Assessment and the Section 4(f) Evaluation, respectively. However, the final Section 4(f) Evaluation is pending responses from land owning agencies regarding *de minimis* findings for impacts to Section 4(f) resources from the proposed NRE. Appendix E is the revised Draft Programmatic Agreement that reflects input from the Alaska State Historic Preservation Officer, Advisory Council on Historic Preservation and ARRC.

Cooperating agency comments on the Draft EIS are documented and responded to in the attached report, entitled, *NRE DEIS Cooperating Agency Comment Responses*. If a comment resulted in change being made to the Draft EIS, it is noted by a checked box in the right-hand corner of each individual comment block. You may also find changes to the Draft EIS documented in Chapter 4 of the PFEIS, Errata and Other Changes.

We would like to receive one set of comments, in tabular or letter form, per cooperating agency. The enclosed CD includes an optional template for comments. Please consolidate all comments from your agency and reconcile any conflicting comments within your agency before submitting your comments to SEA. Please submit your comments to Dave Navecky of my staff as an electronic attachment to an email (naveckyd@stb.dol.gov) on or before Friday, July 17, 2009.

Thank you for your continued input and cooperation in this case. If you have any questions, please do not hesitate to contact Dave Navecky, SEA's Project Manager, at 202-245-0294, or Alan Summerville, ICF's Project Manager, at 703-934-3616.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson".

Victoria Rutson
Chief
Section of Environmental Analysis

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers

Comment ID: 171

In general, many of our concerns raised in response to the preliminary DEIS remain. Many fundamental statements about environment and land use impacts are buried throughout the document and should be consolidated in the summary section.

Response

Because the Final EIS will be primarily a comment response document that will not include a summary, SEA does not plan to make the requested revision.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 172

Additional or amended mitigation measures as proposed by the ADNR Division of Mining Land and Water, ADNR Division of Forestry, and ADF&G are necessary to ensure continued access to state resources, trails, and to and along public and navigable waters.

Response

The comments regarding continued access to state resources, trails, and to and along public and navigable waters were considered and incorporated into the revised recommended mitigation measures 55 and 61 in the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 173

Consistent with its statutory mandates, ADF&G examined the DEIS for identification, evaluation, and mitigation of potential project effects on fish and wildlife resources, their habitats, and their uses. ADF&G found significant deficiencies, particularly in addressing the project impacts and mitigation measures for moose and fish that were identified in scoping comments previously submitted to the STB. ADF&G concerns can be viewed as focusing on passage for moose, passage for fish, and passage for users. Passage for moose includes not impeding their natural movement patterns to important habitats, and not striking them with railroad vehicles when they are crossing the NRE. Passage for fish includes installing crossing structures that do not impede fish movements, and building the project so it does not affect the quality or quantity of the water that facilitates such passage and provides important habitats. Passage for users includes accommodating safe transit across the NRE for all identified routes, and provision for future access to public trust resources including fish and wildlife.

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Response

SEA acknowledged and addressed the ADNR's comments (letter dated 19 September 2008) on the Preliminary Draft EIS regarding fish passage, moose migration, and public access as outlined under "General Comments" of the letter. Potential impacts to fisheries and fish passage are discussed and disclosed in the Draft EIS Section 5.4 Fisheries Resources. ARRC would obtain and comply with reasonable requirements of state permits and authorizations, such as the ADF&G Fish Habitat Permit. See voluntary mitigation measure VM-17 in the Draft EIS, which is included as a recommended mitigation measure VM-17 in the Final EIS. Crossings would be designed and constructed so as not to impede fish passage, impair hydrologic functioning, or water quality of the waterbody. While most moose would be able to migrate across the rail right-of-way, the Draft EIS does acknowledge the potential for mortality due to train collisions. Prior to construction and permitting, and as stated in Draft EIS preliminary mitigation measure 43, the Applicant would work with ADNR and ADF&G in designing, constructing, and operating all aspects of the rail line to minimize significant alterations of moose movement and migration patterns, and moose strikes. This mitigation measure is included with revisions as recommended mitigation measure 43 in Chapter 2 of the Final EIS. Impacts to public access and passage along trails are disclosed and discussed in Draft EIS Section 13.2.3, and the number of known crossings along the proposed rail line are listed in Draft EIS Table S-2. As stated in recommended mitigation measure 55 in Chapter 2 of the Final EIS, the Applicant would consult with ADNR, ADF&G, and other appropriate government agencies and user groups prior to completion of final engineering documents to determine the location of all established and recognized state trails, including a discussion of informal, legal trails on state land, and the pattern of recreation activities. Based on these consultations, the Applicant would develop a plan that designates an agreed-upon number and location of access points as determined during consultation with applicable agencies. This mitigation measure is slightly revised from the Draft EIS preliminary mitigation measure 55.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 174

An important weakness noted during our review is that the DEIS (such as in 13.1.3) does not accurately represent the significant land management and impacts differences between ARRC acquiring a right-of-way interest on BLM-managed federal lands and the ARRC acquiring title to state land under AS 42.40.460, and that it continues to confine its analyses of direct impacts to those strictly within the project area rather than identifying the full suite of potential project impacts that could directly result from the proposed changes to land use, land management authority, and land ownership. The result is that access to the full range of state resources (including fish and wildlife) could be compromised by the NRE.

The DNR is revising its Tanana Basin Area Plan and new settlement areas will be identified for offering over the next twenty years. Many of these settlement areas are adjacent to prior offerings, and there is interest in new areas. Typical Alaskan remote land purchasers use adjacent state land extensively for subsistence and recreation, and require practical legal access to and through this area. The DNR statewide land sales programs are very active, with many new subdivisions and

NRE DEIS Cooperating Agency Comment Responses

remote staking areas planned for the sale to the public in the next 5 years. Some of these projects, in various stages of development, may be located near the proposed routes, or will be accessed by roads and/or trails which have not yet been documented. It is imperative that the public be able to cross the ARRC right-of-way to access future land sale projects and other state lands.

The areas of primary concern within the proposed project area are those State lands south of the Tanana River, between the Tanana Flats Training Area and the Delta River. There are existing land disposal projects within this area, and the potential for future disposal areas. There are several serialized trails through the area, such as: ADL 409488, ADL 415320, ADL 415270, and RST 64. In addition to serialized trails, there are many trails established through traditional and generally allowed uses, which provide access to and through the area. It is important to protect the legal and practical use of these access routes. ADNR requires continued legal and practical access along these routes.

To avoid such impacts, accommodation must be made for all existing access across the NRE corridor (including both serialized and generally allowed use trails), and a mechanism such as retention of section line easements needs to be put in place to allow for future access across the corridor as appropriate. We recommend that the STB decision process incorporate the issue of continued legal and practical public access. This process should also incorporate provisions for access not yet associated with a specific route, and contain provisions for dealing with future road or trail construction.

Response

SEA considered ADNR's existing land disposal projects, including those state lands south of the Tanana River, between the Tanana Flats Training Area and the Delta River. Future disposal areas are currently in the planning stage of ADNR's Tanana Basin Area Plan decision process, and their location cannot be determined at this time. The Draft EIS takes a conservative approach to analyzing access impacts of the proposed action by determining the impacts associated with providing only two crossings of the ADNR Winter Trail, as proposed by the Applicant. Further, Chapter 20 of the Draft EIS and Chapter 2 of the Final EIS provide mitigation measures to ensure continuity of trails and requires coordination with usergroups and owning agencies regarding potential crossing locations to minimize impacts. ARRC and ADNR are presently discussing existing and proposed crossing locations and types. Public access could be altered, but it would not be blocked by the rail line. It is SEA's understanding that Alaska Statute 42.40.460 would provide accommodation for existing and future access across the proposed rail line. The Final EIS's recommended mitigation measures requires the Applicant to comply with all reasonable terms and conditions of Alaska Statute 42.40.460 as suggested by ADNR in comments on preliminary mitigation measure 55.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section: 5.4
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 175

The mainstem, side channels, and sloughs of the Tanana River provide important habitat for a

NRE DEIS Cooperating Agency Comment Responses

variety of anadromous fish species. In particular, work published by Barton (1992) and affirmed by several other ADF&G studies (including radio-tagged fish in the falls of 2007 and 2008) document the use of mainstem and side channel locations for spawning by fall chum salmon. To avoid and minimize NRE effects on these fish resources, ADF&G has consistently stated the need for maintenance of stream flows through, and bridge crossing structures over, the main side channels at both Tanana River crossing alternative locations. Filling these side channels would result in burial of habitat and at least partial dewatering of several side channels documented as used by salmon, and the ADF&G will be looking for alternative designs from the ARRC for the chosen crossing location during future permitting actions.

As described visually and orally to the ARRC and STB during initial meetings regarding the NRE, and as noted in scoping comments, "The greatest potential mitigation measure to reduce project effects on fish populations is to avoid the Tanana River floodplain because of its multiple highwater and clear runoff channels, spawning and rearing habitat, and tributaries systems." ADF&G stands by this position. Much of the ARRC's preferred alternative between Flag Hill and the Little Delta River crosses very important floodplain habitat, and ADF&G advocates for the alternative alignment on the bench for that reason. The alternatives chosen by the STB for analysis between Delta Creek and the Delta River do not provide for avoidance of important anadromous and resident fish habitat. ADF&G continues to advocate for the proposed alignment (old S 1b) up on the bench near the Delta Creek Road rather than the south common segments. The ARRC has said that geotechnical information leads them to question these alignments preferred by ADF&G but no data have been provided to date. Without availability of adequate geotechnical information (an adequate density of bore holes drilled to a depth well below those directly affected by construction), ADF&G cannot make an informed decision that balances the identified fish and fish habitat resources of the floodplain areas with the perceived difficulties of building beyond the floodplain.

Because of the incomplete resource survey information (particularly for rearing fish in smaller floodplain channels), and the paucity of geotechnical information available for the NRE project area, ADF&G believes that the time is not yet ripe for delineation and adjudication of a definitive alignment for those portions of the NRE east of Flag Hill. This is particularly true for the lowlands and benchlands near the Fivemile Clearwater and Richardson Clearwater rivers. ADF&G anticipates significant ongoing discussions, surveys, and information sharing with the ARRC before ADF&G can adequately evaluate and balance the potentially competing beneficial uses of these lands and concur with selection of a specific, binding alignment corridor.

Response

As indicated in Draft EIS Section 2.3.3, the proposed water crossing structures analyzed are based on preliminary design information. The potential impacts to fisheries resources are disclosed in the Fisheries section of the Biological Resources Chapter of the Draft EIS. Revisions to these preliminary crossing structures could occur during final design and permitting. As indicated in voluntary mitigation measure VM-17 in Draft EIS Section 20.2.3, which is included as recommended mitigation measure VM-17 in Chapter 2 of the Final EIS, the Applicant would obtain and comply with reasonable requirements of a fish habitat permit from ADF&G. Mitigation measures VM-9 and 38 in the Draft EIS, as revised and included as recommended mitigation measures VM-9 and 38 in the Final EIS, also address continued fish passage. As discussed in Draft EIS Section 2.2 and Draft EIS Appendix D, the Applicant considered a variety of factors, including

NRE DEIS Cooperating Agency Comment Responses

fisheries resources, in developing the location of proposed alignments, as required by AS 42.40.460(b). Geotechnical information was developed for the Applicant by Duane Miller Associates LLC (see reference to Miller, 2007 in the Draft EIS). SEA requested clarifications from the Applicant and in conjunction with the cooperating agencies, selected a reasonable range of alternatives for analysis in the Draft EIS. During selection of alternatives for analysis in the Draft EIS, SEA specifically added the one alternative segment requested by ADNR to the alternatives analysis in the Draft EIS. SEA continues to believe that an appropriate range of reasonable alternatives were analyzed in the Draft EIS to address the previously stated concerns of ADNR and other cooperating agencies. As indicated in the recommended mitigation measures referenced above, ADNR has permitting and statutory authority under AS 42.40.460 with which to address the location of the rail line and potential fisheries impacts.

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.5

DEIS Page Numbers

Comment ID: 176

The DEIS analyses of moose movements and use areas appear to rely upon short-term surveys and misunderstandings of the years of data collected and published by ADF&G wildlife biologists. ADF&G moose census and movement information continues to affirm the movement and density patterns presented by Gasaway et al. (1983). Approximately half of the moose in the project area are residents of the Tanana Flats, making relatively short seasonal movements near and along the west side of the NRE project area to allow access to a variety of habitats including emergent and aquatic summer feeding areas, woody thermal cover, and willow-rich winter feeding areas. The other half of the moose population overwinters in the Chena and Salcha river basins, and to a lesser extent the northern foothills of the Alaska Range, and migrates seasonally to the wetter portions of the flats for calving and summer feeding. Moose from the Salcha basin in particular would have to cross the NRE area twice annually to get between their summer and winter ranges. Although the primary calving area is slightly west of the project area, the potential for interactions between the NRE and both resident and migratory moose is quite significant, particularly since the moose population using the area is very high. Since this population is mandated by statute for intensive management including high productivity and high human use, every moose counts and a requirement to implement effective mitigation measures to avoid, minimize, rectify, reduce, and compensate for losses to moose habitat and moose lives must be incorporated into the final EIS.

Response

SEA applied the available data to estimate the potential impacts to moose. No information on current moose movements or local densities were available from ADF&G for the project area. Moose do not appear to use discrete migration corridors within the project area. See the discussion in the Draft EIS Appendix F.3.1 and F.3.2. The 58 miles of existing rail in GMU 20B crosses the Chena drainage (see Draft EIS Figure F-19) and likely intercepts migrant moose. This observation is supported by the high density of moose-vehicle collision mortality along the stretch of the Richardson Highway that crosses between Chena River valley and the Tanana Flats area. Moose-train collision timing was based on the existing pattern of moose-train collisions, which would reflect any increases to migration if these occurred. The Applicant, in consultation with the

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ADF&G and ADNR, would evaluate, implement, and monitor aspects of rail design, maintenance, and operations to document and reduce moose-train mortality. Measures to reduce mortality can be found in recommended mitigation measure 43 in Chapter 2 of the Final EIS, which was revised from preliminary mitigation measure 43 in the Draft EIS considering the comments received.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section: 5.3
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 177

Of the alternatives analyzed, the Salcha 1/Central Alternative 1/Donnelly 1 alignment route impacts the least amount of commercial forest land. The Salcha 2 Alternative passes through higher value spruce saw timber within the Tanana Valley State Forest and would be located on numerous actively eroding islands. The Donnelly 2 route would be located on higher value spruce saw timber on forest classified state lands and stands laid out for harvest.

DOF supports mitigation measures that provide crossings of trails as indicated in item 62 on page 20-21 of the DEIS.

The ADNR winter trail west of the Little Delta River is also used for commercial timber sale access. Crossings should be wide enough to accommodate commercial logging trucks.

Response

This comment was incorporated into the revised mitigation measure (see recommended mitigation measure 62) and is also addressed by recommended mitigation measures 55 and 61 in the Final EIS.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers 1-6

Resulted in a change to DEIS ☒

Comment ID: 178

Please note that though the information provided in the DEIS is useful, the DEIS is not a permit level document and additional information and process will be required for state permits as well as the ADNR process for implementing AS 42.40.460

Response

SEA has included a statement in Section 1.3.2 of the Draft EIS under Alaska Department of Natural Resources (see Chapter 4 of the Final EIS) that ADNR intends to use this EIS to help fulfill parts of its statutory review requirements in its review of any rail line identified by ARRC on state-owned land.

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Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.2

DEIS Page Numbers 5-6

Comment ID: 179

In the paragraph at top of page, include importance of some glacial rivers as migratory corridors, and for spawning by some species in nonturbid seasons. Arctic grayling spawn in the spring, so their eggs are not present in spring-fed areas over winter.

Response

SEA has revised the section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.4.1

DEIS Page Numbers 5-31

Comment ID: 180

Here and where else it occurs throughout the DEIS, change "recreational fisheries" to "sport fisheries" to be consistent with statute and other portions of the document.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers 5-33

Comment ID: 181

Correct the legend, changing 16.15.871 to 16.05.871.

Response

SEA revised the Draft EIS Figure 5-10 to correct the AK Statute reference. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.4.2

DEIS Page Numbers 5-35

Comment ID: 182

Discussions about hyporheic flow and sedimentation in the Alterations of Stream Hydrology and

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Breakup paragraph should include an explanation that the flow is necessary to maintain movements of oxygen to and waste products from developing egg and that filling in by sediments would suffocate eggs.

Response

SEA has revised the section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Subsistence
DEIS Section:
DEIS Page Numbers 7-5

Resulted in a change to DEIS ☒

Comment ID: 183

7-5 states "Alaska does not regulate the taking of non-game resources such as berries, medicinal plants, or wood." This is incorrect; DNR issues permits for non-timber forest products, and there is certainly wood and timber harvest regulation.

Response

The Draft EIS has been edited to reflect this comment. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Energy Resources
DEIS Section: 10.2.3
DEIS Page Numbers 10-3

Resulted in a change to DEIS ☐

Comment ID: 184

It states that in the Delta Junction area, the Alaska Railroad Corporation (ARRC) "would have to closely coordinate all construction activities with the Alyeska Pipeline Service Company (APSC) and would adhere to all industry standards to ensure safety and minimal disruption to pipeline operations"... The ARRC would have a "grade separate design of the pipeline crossings" to prevent impacts to TAPS. They don't anticipate any distribution disruption to TAPS or "long or short-term effects on pipeline safety as a result of proposed rail line construction or operation."

If this project is constructed with railroad crossings of TAPS, it will be the first time. We recommend that the ARRC acknowledge the need for close coordination with the Joint Pipeline Office and APSC during the planning, construction, and operation of the project. The current APSC contacts include the Agency Liaison - Joe Robertson (787-8061), the Gas Pipeline Coordinator - Nathan Brock (787-8996) and the Lands Manager - Peter Nagel (787-8170).

Response

As noted in Draft EIS Section 20.2.10, the Applicant's voluntary mitigation measure 48 states that the Applicant would consult with utility owners, such as the Aleyska Pipeline Service Company (APSC), during design and construction so that utilities are protected during project-related construction activities. The APSC would be notified of project-related construction activities, and ARRC would coordinate with APSC to minimize damage to utilities. This mitigation measure is included in the Final EIS as voluntary mitigation measure 48 in Chapter 2 Mitigation.

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Cooperating Agency ADNR
Topic: Navigation
DEIS Section: 12
DEIS Page Numbers 12-1

Resulted in a change to DEIS ☒

Comment ID: 185

Please note in this chapter that the State of Alaska owns the beds of navigable waterbodies.

Response

Chapter 12 of the Draft EIS has been updated in the Final EIS to reflect the State of Alaska's ownership of the beds of Navigable Waterbodies. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 186

See attached table of mitigation measures recommendations (Attachment A).

Response

The table of revisions was reviewed and incorporated into the revised Mitigation chapter, as discussed below.

Cooperating Agency ADNR
Topic: Proposed Action and Alternatives
DEIS Section: D.2.6
DEIS Page Numbers D-16

Resulted in a change to DEIS ☐

Comment ID: 187

It appears that the SEA retained only a portion of the S1/Donnelly Central alignment. ADF&G continues to prefer analysis and licensing of the S1b/South Segment alignment that parallels the Richardson Clearwater River up on the bench near the Delta Creek Road.

Response

As stated in this section, SEA retained the Donnelly Central Segment, which approximates the location of the relevant portion of the S1 alignment, for detailed analysis in the EIS.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section:
DEIS Page Numbers F-15

Resulted in a change to DEIS ☒

Comment ID: 188

Clarify that Chinook salmon in the Tanana River basin can rear for 1-3 years in fresh water. There is no documentation of lake type coho salmon in the Tanana River basin.

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Response

SEA has revised the Draft EIS Table F-8 to include information on chinook and to remove incorrect information on coho. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section: F.2.4
DEIS Page Numbers F-28

Resulted in a change to DEIS ☒

Comment ID: 190

In the bottom paragraph, the chum salmon spawning noted should be for fall chum rather than summer chum.

Response

SEA has revised the section to make this revision. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section:
DEIS Page Numbers G-5

Resulted in a change to DEIS ☒

Comment ID: 191

See comments on page F-15 Table F-8.

Response

SEA has revised the Final EIS Table D-3 to include information on chinook and to remove incorrect information on coho. See Appendix D of the Final EIS.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section: G.3.4
DEIS Page Numbers G-15

Resulted in a change to DEIS ☒

Comment ID: 192

The sentence preceding Table G-8 appears to be incomplete.

Response

SEA has revised Final EIS Section D.3.4 to include the missing text. See Appendix D of the Final EIS.

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section: G.3.4
DEIS Page Numbers G-15

Resulted in a change to DEIS ☒

Comment ID: 193

The sentence at the top of the page needs to be expanded to include mainstem spawning by fall

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chum salmon as documented by Barton (1992) and as shown by 2007 and 2008 radio-tag location data from an ongoing ADF&G Division of Commercial Fisheries project (for on-line maps see Tanana Chiefs Conference web sites <http://gis.tananachiefs.org/maps/fishmap2007/viewer.htm> or <http://gis.tananachiefs.org/maps/fishmap2008/viewer.htm>). Alternatively, delete this paragraph or combine it with the following paragraph.

Response

SEA has revised Final EIS Section D.3.4 to include this additional information. See Appendix D of the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: G.3.4

DEIS Page Numbers G-24

Comment ID: 194

See comment for page F-28 section F.2.4.

[F-28 Comment: In the bottom paragraph, the chum salmon spawning noted should be for fall chum rather than summer chum.]

Response

SEA has revised Final EIS Section D.3.4 to make this revision. See Appendix D of the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: I.2.7

DEIS Page Numbers I-12

Comment ID: 195

ADF&G annual salmon subsistence reports by Division of Commercial Fisheries are available. Salmon are listed in Table 1 of each report (or the historical table in the back of the latest report through 2005, draft numbers are available through 2007) by community and by district. Harvests are shown for Nenana, Minto, and other Tanana River communities. Some tables provide subsistence harvest of non-salmon species as well. Harvests in these communities is naturally diminished because the fish quality is lower during full maturation and spawning. However, the origin (spawning areas) of these fish, particularly fall chum and coho salmon, is within the project area and larger harvests are taken by residents all the way to the mouth of the Yukon River.

Response

Downstream effects on subsistence are discussed in the Draft EIS in Section 7.3.3. The data in the Alaska Subsistence Fisheries Annual Reports were not reported because while subsistence uses do occur in unit 6C, harvests of fish within the Fairbanks non-subsistence area are harvested under personal use fishery or sport regulations. Page 42 of the Alaska Subsistence Fisheries 2003 Annual Report states that the "Alaska Joint Board of Fisheries and Game has defined a portion of the Yukon River drainage as lying within the Fairbanks Nonsubsistence Area (5 AAC 99.015). Subsistence fisheries may not be authorized within non-subsistence areas; the harvest of fish for home use in these non-subsistence areas occurs under personal use and sport fishing regulations."

NRE DEIS Cooperating Agency Comment Responses

The tables showing estimated salmon harvests from the 2003 annual report include a footnote that these salmon harvests include subsistence, personal use, and commercial harvests retained for home use.

Cooperating Agency ADNR
Topic: Section 4(f) Resources
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 196

Please note that ADNR does not consider those state trails and lands listed in table M-1 to be 4(f) resources as they are not parks or refuges and are managed under the ADNR Tanana Area Basin Area Plan for multiple use, including economic purposes.

Response

SEA acknowledges ADNR's determination of the resources listed in Draft EIS Table M.1 as non-Section 4(f) resources per your understanding as the owning agency. The following trails and resources will no longer be considered Section 4(f) Resources for the reasons you listed: Twentythreemile Slough Area Trails (on ADNR land), Silver Fox Lodge Trail, Donnelly-Washburn Trail (on ADNR land), the ADNR Forestry Winter Road, Rainbow Lake Trail, Phillips Road/Delta Junction Area Trail Network, ADNR parcels in the Tanana Basin Area Plan management subunits 7F1 (Delta River from Tanana River south to Delta Junction), 7G2 (west of Delta River, north of Donnelly TA), 7G3 (Richardson Clearwater River area, east of Delta Creek and west of Delta River), and 7I2 (small parcels south of Delta Junction and east of Delta River. This information has been reflected in the revised Section 4(f) Evaluation in Appendix F in the Final EIS.

Cooperating Agency ADNR
Topic: Subsistence
DEIS Section:
DEIS Page Numbers O-11

Resulted in a change to DEIS ☒

Comment ID: 197

p. O-11, states that the proposed Alaska natural gas pipeline and Richardson Highway upgrades were "potential activities" that were considered in this DEIS but "were not analyzed in detail because they were not considered reasonably foreseeable at this time."

The ADNR/State Pipeline Coordination Office disagrees with this statement and believes that both an Alaska natural gas pipeline project and Richardson Highway upgrades are reasonable and foreseeable potential activities, although a specific gas pipeline route may not be available at this time. Additionally, another potential gas pipeline project along the Richardson Highway involves a Beluga to Fairbanks route, currently under consideration by the Alaska Natural Gas Development Authority (ANGDA). More information about this project is available at the ANGDA website at: <http://www.angda.state.ak.us/>

Response

Section O.2.4 of the Draft EIS states that the Alaska natural gas pipeline and Richardson Highway upgrades were considered in potential cumulative impacts as reasonably foreseeable projects.

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In December 2008, the Alaska Natural Gas Development Authority began preparing an Environmental Impact Statement, with the US Army Corps of Engineers as the lead agency, for a proposed pipeline that would run from Beluga to Fairbanks (B2F). The B2F pipeline route would generally parallel the proposed NRE project area between Delta Junction and Fairbanks. Approximately 90% of the proposed 489-mile pipeline is in existing right-of-ways and easements. Potential impacts from this would be similar to those of the other two included projects and thus are already captured in the cumulative impacts analysis of the Draft EIS. This information has been added to Section O.2.4 of the Draft EIS. See Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 198

ADF&G/ADNR-recommended actions on NRE DEIS Chapter 20 Mitigation Measures

ADF&G/ADNR-recommended actions on NRE DEIS Chapter 20 Mitigation Measures, including those proposed as voluntary measures (VM) by the applicant and those identified by the SEA (numerals only). Comments on VMs are offered as changes that could strengthen the VMs to better avoid, minimize, rectify, reduce, or compensate for anticipated projects impacts. Comments on SEA measures are recommended edits to achieve the same goals. Gray cells indicate measures in which ADF&G does not have direct responsibility.

Response

Comment noted. It is SEA's practice not to revise voluntary mitigation measures developed by the Applicant. If SEA finds that additional mitigation is warranted, SEA recommends additional mitigation measures to address SEA's concerns

Cooperating Agency ADNR
Topic: Biological Resources
DEIS Section: F.2.4
DEIS Page Numbers F-24

Resulted in a change to DEIS ☒

Comment ID: 199

The text in here and associated tables is too limited in its description of fish habitat in the Fivemile Clearwater River as a migratory corridor. The anadromous waters catalog specifies a significant area as coho salmon rearing, and a partially coincident large reach for Chinook salmon presence, with the particular reaches for Chinook rearing or spawning not currently delineated.

Response

After a review of the field data for the proposed crossing locations of the Fivemile Clearwater River, SEA has revised the following in the Draft EIS Section F.2.4 Fish-Bearing Stream Crossings Along Each Alternative Segment: Revised descriptions and Table F-17 for crossing 351 (the incorrect field site had been identified - Record 86, not Record 85). The description of Connector C was revised, Crossing 345 was incorrectly referred to as a tributary of the Fivemile Clearwater

NRE DEIS Cooperating Agency Comment Responses

River, but is in fact the mainstem Fivemile Clearwater River (Record 176). Of these three crossings only Crossing 351 had gravels that appeared suitable for spawning. Substrates at Crossing 86 were heavily armored, and substrates at Crossing 345 were heavily silted; however both sites were noted as providing juvenile rearing and summer foraging habitats - appropriate revisions completed. Final EIS Appendix D and Draft EIS Section 5.4.2 Environmental Consequences were also appropriately revised in the text and Table D-11 and Table 5-21. See Appendix D and Chapter 4 of the Final EIS.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 361

DOF requests the use of any service road and bridge access. If road access points are gated, DOF requests keys or lock combinations. Road and bridge access will facilitate fire suppression needs and/or timber harvest operations.

Response

The Applicant has indicated they would grant permission for use of the access roads for certain state business, including timber harvest, subject to specific conditions, including approval from the military where the rail line and road would cross Federal lands reserved for military use. The military has not currently decided whether to permit such uses.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 362

Salvage of commercial and personal use timber is addressed in Mitigation Measure 66. DNR has proposed additional language for this measure in Attachment 1. Un-merchantable timber should be properly processed to avoid potential spruce bark beetle infestations

Response

Preliminary mitigation measure 66 from the Draft EIS was revised to address this comment and is included as recommended mitigation measure 66 in the Final EIS.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 363

The DEIS states that sidings would be present at several locations. The Donnelly 1 route passes through and adjacent to numerous mixed spruce/hardwood stands between Five Mile Clearwater River and the Little Delta River. If a rail siding located was located in this area it could be utilized

NRE DEIS Cooperating Agency Comment Responses

for transporting wood products.

Response

The Applicant has proposed to construct rail sidings within the 200-foot ROW to allow trains to pass along the single track rail line. Such sidings are not intended for loading or unloading freight. Rail spurs could be used by shippers to load/unload freight; however none are proposed by the Applicant at this time. If a shipper requests access, a rail spur could be constructed in the future. Rail spurs are not part of the proposed action analyzed in this EIS because none have been proposed.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 364

Mitigation measures to be retained:

20.2.1 Topography, Geology, and Soils: VM-I

20.2.2 Water Resources: VM-4, VM-7, VM-10, VM-12, 5, 7, 8, 9, 11, 15, 17, 18, 19, 20

20.2.3 Biological Resources: VM-16, VM-17, VM-19, VM-20, VM-21, VM-22, VM-23, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48

20.2.9 Navigation: VM-36, VM-37, 53

20.2.10 Land Use: 56, 64, 65

Response

All measures were retained with the exception of 53. The Applicant stated that the extreme winter environment would substantially limit construction activity in the winter. Revised recommended mitigation measure 21 in the Final EIS addresses installing bridge piers during the winter when practicable.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 365

Mitigation measures to be amended:

20.2.1 Topography, Geology, and Soils: 1 - Recommend replacing "shall not" with "avoid" and adding "where feasible" to the end of this sentence to enable bridge piers to be placed beyond riparian thaw bulbs and minimize disturbance to stream beds and banks.

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Response

This mitigation measure was modified to state that the placement of bridge piers and abutments in permafrost would be avoided to the extent practicable; see recommended mitigation measure 1 in the Final EIS. The words "shall not" were replaced with "avoid" and "where practicable" was added.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 366

Mitigation measure to be amended:

20.2.1 Topography, Geology, and Soils: 2 - Delete second sentence. Amend first sentence to read, "Applicant shall obtain all necessary permits from appropriate agencies to ensure that features of the rail line that would occupy areas of permafrost..."

Response

This comment was incorporated into the recommended mitigation measure 2 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 367

Mitigation measure to be amended:

20.2.1 Topography, Geology, and Soils: 3 - Add "or specific requirements of the appropriate authorizing agencies"

Response

This comment was incorporated into the recommended mitigation measure 3 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 368

Mitigation measure to be amended:

20.2.2 Water Resources -VM-6 -An appropriate place to add avoidance of French draining as a goal to aid in maintaining natural flow and drainage patterns.

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Response

Preliminary mitigation measure 10 was expanded to address this concern and is included as recommended mitigation measure 10 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 370

Mitigation measure to be amended:

20.2.2 Water Resources - VM-8 - Appropriate to flag 100-year flow as design discharge.

Response

This comment is addressed by SEA's recommended mitigation measure 11 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 371

Mitigation measure to be amended:

20.2.2 Water Resources - VM-9 - Delete second-to-last sentence. Change "shall" to "may" in last sentence.

Response

The Applicant has revised voluntary mitigation measure 9 in the Draft EIS and Final EIS to reflect their intention to design culverts in anadromous waters according to the 2001 MOA between Alaska Department of Transportation and Alaska Department of Fish & Game.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 372

Mitigation measure to be amended:

20.2.2 Water Resources - VM-11 - Change "avoid" to "not."

Response

A new mitigation measure was added to address this comment, recommended mitigation measure 71 in the Final EIS. SEA is not including the Applicant's voluntary mitigation measure VM-11.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 373

Mitigation measure to be amended:

20.2.2 Water Resources - VM-13 - Delete "overly."

Response

The use of "overly" is appropriate in this measure. Preliminary Mitigation Measure 21 in the Draft EIS and recommended mitigation measure 21 in the Final EIS also addresses temporary crossings.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 374

Mitigation measure to be amended:

20.2.2 Water Resources - VM-14 - Should 2nd bullet include access road? Add to 3rd bullet material that is not acid-producing or with an elevated chemical oxygen demand.

Response

The access road will not be revegetated. However, as this measure is the Applicant's voluntary measure, it cannot be modified by SEA. Your suggestion that contaminant-free embankment and surface materials that are not acid-producing and do not have elevated chemical oxygen demand shall be used provides a level of specificity not reflected in other mitigation measures.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 375

Mitigation measure to be amended:

20.2.2 Water Resources - VM-15 - Delete clause beginning "for crossings within," and add "Permanent" in front of "drainage crossing."

Response

See SEA's recommended mitigation measure 11 in the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 376
Mitigation measure to be amended:

20.2.2 Water Resources - 4- Change 2nd bullet to allow for floodplain material sites if approved on a site-specific basis by ADNR and ADF&G.

Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.

Response

This measure was shortened in an effort to clarify that the specific measures would be developed in cooperation with appropriate agencies. The second bullet was deleted. New SEA recommended mitigation measure 75 was added to the Final EIS to state that all siting, design, and development of rail line facilities shall be coordinated and authorized according to the reasonable permitting requirements of the appropriate authorizing agencies. Such permitting requirements could result in site-specific practices or stipulations and such agency measures would supersede any mitigation measure that outlines general guidelines.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 377
Mitigation measure to be amended:

20.2.2 Water Resources - 6 - Add "or other specific practices/ requirements identified by DNR or appropriate authorizing agencies."

Response

The phrase "or specific requirements of appropriate authorizing agencies" was added to the revised measure -- recommended mitigation measure 6 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 378

Mitigation measure to be amended:

20.2.2 Water Resources - 10 - Apply 100-year discharge as design flow to all bridges and culverts.

Response

This comment was incorporated into SEA's recommended mitigation measure 11 in the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 379

Mitigation measure to be amended:

20.2.2 Water Resources - 16 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 380

Mitigation measure to be amended:

20.2.2 Water Resources - 21 - Revise first line to "Construction of temporary crossings shall be accomplished in a manner that minimizes disturbances to stream bed, banks, and flow. Measures to meet these goals could include installing bridge piers..."

Also see comment for mitigation measure #4 [Change 2nd bullet to allow for floodplain material sites if approved on a site-specific basis by ADNR and ADF&G.

Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

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Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 21 in the Final EIS. In addition, a new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 381

Mitigation measure to be amended:

20.2.2 Water Resources - 22 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 382

Mitigation measure to be amended:

20.2.2 Water Resources - 23 - See comment for mitigation measure #4 [Change 2nd bullet to allow for floodplain material sites if approved on a site-specific basis by ADNR and ADF&G.

Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 383

Mitigation measure to be amended:

20.2.2 Water Resources - 24 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 384

Mitigation measure to be amended:

20.2.2 Water Resources - 25 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 385

Mitigation measure to be amended:

20.2.2 Water Resources - 26 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 386
Mitigation measure to be amended:

20.2.3 Biological Resources - VM-18 - Change "where practicable" to "as permitted."

Response

The Applicant has agreed to incorporate timing windows because "as permitted" is implicit in the current text of the mitigation measure.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 387
Mitigation measure to be amended:

20.2.3 Biological Resources - 34 - See comment for mitigation measure #4 [Add a bullet noting that, notwithstanding the points noted above, all siting, design and development of railroad line facilities, staging areas, access roads, etc. must be coordinated and authorized according to the specific requirements of DNR or the appropriate authorizing agency. Such permitting may result in site-specific practices or stipulations which vary from the general guidelines noted here.]

Response

A new recommended mitigation measure (75 in the Final EIS) was added to address this comment.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 388
Mitigation measure to be amended:

20.2.3 Biological Resources - 43 - Change the text before the bullets to "The Applicant, in consultation with the Alaska Department of Fish and Game and the Alaska Department of Natural Resources, shall evaluate, implement, and monitor aspects of rail design, maintenance, and operations to document and reduce moose-train mortality. Such measures may include:"

Response

This comment was incorporated into the revised measure -- recommended mitigation measure 43 in the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 389

Mitigation measure to be amended:

20.2.5 - Subsistence - 50 - Winter use is not necessarily the lowest for a particular area. Consider changing to "...trails and waterways to occur during times of limited use or when alternate routes are most available."

Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 50 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 390

Mitigation measure to be amended:

20.2.9 - Navigation - 54 - Add "and travel by winter modes of transportation (snow machine, dogsled, etc.)" after "recreational boat users."

Response

Winter modes of transportation are now addressed in recommended mitigation measure 60 in the Final EIS. The rest of this comment was adopted in the revised mitigation measure -- recommended mitigation measure 54 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 391

Mitigation measure to be added:

20.2.9 - Navigation - The Applicant shall ensure that bridges and culverts placed on navigable or public waters, as determined by the Alaska Department of Natural Resources, are designed and installed to accommodate public access and use of the statutory (AS 38.05.127) easements.

Response

SEA's recommended mitigation measures 54 and 60 (as revised) in the Final EIS address this comment.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 392
Mitigation measure to be amended:

20.2.10 Land Use - 55 - Add "the Applicant's final plan shall comply with all requirements and conditions as determined by DNR through the process and decision under state statute, AS 42.40.460."

Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 55 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 393
Mitigation measure to be added:

20.2.10 Land Use - In design and use of rail access and maintenance roads, the Applicant shall consolidate such routes with other resource development roads to the extent feasible, in order to avoid creating a network of parallel transportation routes.

Response

The only access roads that the Applicant proposes to construct outside of the ROW are roads to communication towers. These new roads would be limited in length and would run from a convenient existing route to a tower. Given this context, SEA is not aware of any substantial opportunity for consolidation of routes.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 394
Mitigation measure to be amended:

20.2.10 Land Use - 57- Delete "use caution to" from last sentence.

Response

The term "use caution to" was replaced with "strive to."

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 395

Mitigation measure to be amended:

20.2.10 Land Use - 58 - Include effects on stocked fish in these water bodies and future ADF&G stocking plans. Add "and appropriate mitigation measures" to end of 1st sentence.

Response

The phrase "and planned uses" addresses future ADF&G stocking plans. Other measures adequately address mitigation for fish habitat.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 396

Mitigation measure to be amended:

20.2.10 Land Use - 59- Include effects on stocked fish in these water bodies and future ADF&G stocking plans.

Response

The phrase "and planned uses" addresses future ADF&G stocking plans. Other measures adequately address mitigation for fish habitat.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 397

Mitigation measure to be amended:

20.2.10 Land Use - 60 - Change the first sentence to, "...consult with the appropriate management agencies, including the Alaska Department of Natural Resources and the Alaska Department of Fish and Game, to provide..."

Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 60 in the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 398
Mitigation measure to be amended:

20.2.10 Land Use - 61 - Add Alaska Department of Fish and Game to the list of agencies to be consulted. Delete "legal" from the sentence.

Response

The word "legal" was deleted and ADF&G was added to the revised mitigation measure -- recommended mitigation measure 61 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 399
Mitigation measure to be amended:

20.2.10 Land Use - 62 - Change beginning to "The Applicant shall, in collaboration with applicable resource management agencies, provide crossings ..."

Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 62 in the Final EIS.

Cooperating Agency ADNR
Topic: Mitigation
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☒

Comment ID: 400
Mitigation measure to be amended:

20.2.10 Land Use - 63 - Begin the sentence with "The Applicant shall, in collaboration with applicable resource management agencies, make provision for crossings of the following trails: ..." and end it with "...; and the 'Important Trails in the Planning Area' listed in the Tanana Basin Area Plan."

Response

This comment was incorporated into the revised mitigation measure -- recommended mitigation measure 63 in the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 401

Mitigation measure to be amended:

20.2.10 Land Use - 66 - On state and private land, the ARR shall consult with the Division of Forestry to determine commercial and personal use timber within the right-of-way for salvage or disposal per the Forest Practices Act and the Tanana Valley State Forest Management Plan objectives. Timber salvaged or disposed of must comply with AS 41.17.082 Control of Infestations and Disease.

Response

This comment was adopted as the revised mitigation measure -- recommended mitigation measure 66 in the Final EIS.

Cooperating Agency ADNR

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers

Comment ID: 402

Mitigation measure to be amended:

20.2.11 Visual Resources - 69 - Modify the 3rd bullet to apply only when appropriate given access and safety considerations.

Response

The third bullet is modified as recommended.

Cooperating Agency ADNR

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section:

DEIS Page Numbers

Comment ID: 403

Please see the attached map and shapefile showing road crossings that would be required if the rail road is constructed. In a 37 mile rail road segment between the Little Delta and Delta River. There would be 8-9 all-season road crossings, depending upon which route is selected. These proposed crossings would accommodate existing and future development for logging, mining, agriculture and other potential traffic. I did notice that the crossings happened to fall on bends in the rail road. If the crossings need to be changed please consult with our office.

Response

Chapter 20 of the Draft EIS and Chapter 2 of the Final EIS provide mitigation measures to ensure provision of crossings in compliance with all reasonable requirements of AS 42.40.460, Extension

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of the Alaska Railroad (preliminary mitigation measure 55 in the Draft EIS and recommended mitigation measure 55 in the Final EIS). Further, preliminary mitigation measure 61 in the Draft EIS, and recommended in the Final EIS as mitigation measure 61, the Applicant is required to consult with resource management agencies, including ADNR regarding provision, access, and design of trail crossings that intersect with the proposed rail line. The Applicant has indicated that at-grade crossings may be more appropriate for crossings with heavy vehicular usage.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 404

We would like to see rail road sidings located in the area that could be used to load logs, coal, and other resources. The Delta Area exported thousands of logs on the rail road through North Pole and Fairbanks in the past, we hope to export logs and manufactured products in the future. There are large coal deposits in the Delta Area; several are located south of the proposed rail alignment in the Little Delta River and Delta Creek drainages. Please see the attached map showing a proposed rail road siding near the Delta River. We would like to see additional sidings for timber in the future at Delta Creek and Little Delta River.

Response

SEA acknowledges this comment. The Applicant has indicated that it intends to construct sidings to allow for meet and pass of trains along the single-track rail line but the locations of these sidings have not been identified at this time. Rail sidings would be placed within the 200-foot ROW of the rail line. Rail spurs could be used by shippers to move freight; however none are proposed by the Applicant at this time. If a shipper requests access, a rail spur could be constructed in the future. Rail spurs are not part of the proposed action analyzed in this EIS because none have been requested and are therefore, not reasonably foreseeable.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 405

Our agency would like to get permission to utilize any service roads or bridges for state business to include commercial timber sales and wildland fire suppression. We are especially interested in getting all-season access across the Delta River. Single lane roads and bridges with locked gates would be acceptable.

Response

As discussed in Draft EIS Section 2.3.3, the Applicant does not propose to construct a vehicle bridge over the Delta River because it would not be necessary based on the purpose and need for the project. A vehicle bridge is proposed across Delta Creek as part of the planned access road. The Applicant has indicated they would grant permission for use of the access road for certain state business, including timber harvest, subject to specific conditions, including approval from the

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military where the rail line and road would cross Federal lands reserved for military use. The military has not currently decided whether to permit such uses.

Cooperating Agency ADNR
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 406

There is a significant amount of hunting and trapping in the area and it would be necessary to allow pedestrian and light all terrain vehicles to have unrestricted access to cross the rail road.

Response

SEA acknowledges that hunting and trapping are recreational activities that take place within the study area. Unrestricted access to cross the rail line would not be possible. ARRC would provide the public with crossing access at designated locations along the rail line. Crossing the rail line at locations outside of designated crossings would be strictly prohibited. The locations of trail crossings is part of ongoing discussions between ADNR and ARRC with respect to the AS 42.40.460 process applicable to state-owned lands. In addition, SEA presented preliminary mitigation measures 61 through 65 in the Draft EIS and recommended mitigation measures 61 through 64 in the Final EIS that require ARRC to provide crossings for specific trails, consider effects to user groups, coordinate with land management agencies and usergroups regarding access restrictions and timing of construction activities. Preliminary mitigation measure 65 was deleted and incorporated into recommended mitigation measure 55 in the Final EIS.

Cooperating Agency ADNR
Topic: Proposed Action and Alternatives
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 407

Please let our office know of any adjustments to the final alignment located east of the Little Delta River. Based upon the final rail road alignment there may be adjustments to proposed crossings as well as additional comments or recommendations.

Response

No adjustments are contemplated at this time. Adjustments could occur as part of final design and permitting.

Cooperating Agency ALCOM
Topic: Biological Resources
DEIS Section:
DEIS Page Numbers 4-25

Resulted in a change to DEIS ☒

Comment ID: 163

Last sentence on page states thirteen culvert crossings. Should be forty-four.

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Response

SEA has revised Draft EIS Section 4.2.2 Environmental Consequences Text to correct this discrepancy. See Chapter 4 of the Final EIS.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers 5-2

Comment ID: 164

AR 200-3 has been incorporated into AR 200-1, Environmental Protection and Enhancement, dated 13 Dec 2007. Description remains the same.

Response

SEA has revised the Draft EIS Table 5-1 to include this information. See Chapter 4 of the Final EIS.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers 5-46

Comment ID: 165

South Common Segment: Since construction at these 3 crossings would lead to the removal of some of the few remaining trees that line these streams, would it be possible to add a mitigation to save as many trees as feasible here? ie, not clear the entire ROW width?

Response

As indicated in preliminary mitigation measure 33 in the Draft EIS, as revised and included as recommended mitigation measure 33 of the Final EIS, the Applicant would minimize the project footprint, amount of ground disturbance, and clearing of established vegetation as much as practicable. This mitigation measure could be implemented along the rail line and at the three water crossings of the South Common Segment. The Applicant would minimize vegetation impacts as much as practicable while ensuring safe rail construction and operations.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section:

DEIS Page Numbers 7-3

Comment ID: 166

Section 7.2. Please use the abbreviation, USAG Alaska instead of USAG-AK in the text (is ok to use for the citation abbreviation).

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does

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not include the suggested edit.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers 7-5

Comment ID: 167

Toward the end of 7.2.2: states that "Alaska does not regulate the taking of ... wood." This is probably not entirely accurate, as I am fairly sure they want people to have (and in most cases pay a small fee for) wood-cutting permits for state lands, as do BLM and the military.

Response

SEA has revised the Draft EIS Section 7.2.2 Resource Availability to remove the word wood. See Chapter 4 of the Final EIS.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers 13-6

Comment ID: 168

The EIS seems to gloss over the timber salvage issue. Relying on applicable land management plans is probably fine. I would prefer to see the volume of commercial timber quantified if there is time, or at least state that it would be completed prior to construction. Would timber useable for firewood be considered "commercial" or not? Depending on the price of fuel oil, that can be in high demand. Lastly, I looked for some mention of timber salvage in 5.3 Vegetation Resources, and recommend at least a reference to this section (13). It could also be appropriate to mention it in Chapter 7, subsistence resources.

Response

As stated in the Draft EIS Section 13.1.3 Environmental Consequences under the Timber Resources section, timber resources within the project area have commercial value as saw logs, poles and firewood. SEA has revised Draft EIS section 5.3.2 Environmental Consequences to include a Timber Resources reference to Chapter 13. The Draft EIS Section 7 Subsistence references Draft EIS Section 5.3 Vegetation for additional information on non-game resources. See Chapter 4 of the Final EIS.

Cooperating Agency ALCOM

Resulted in a change to DEIS ☒

Topic: Mitigation

DEIS Section:

DEIS Page Numbers 20-22

Comment ID: 169

Mitigation 66. Please add something to the effect of timber being salvaged according to applicable land management plans/policies/regulations already in place. So it is more concrete than, "Where

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feasible and prudent”

Response

This comment was incorporated into the revised mitigation measure; see recommended mitigation measure 66 in the Final EIS.

Cooperating Agency FTA

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers

Comment ID: 1

in addition to impacts as presented in the DEIS for the entire alignment, FTA would also need to evaluate impacts specifically related to the passenger terminal components. Although the chapters of the DEIS discuss impacts associated with both Delta Segment alternatives (in which the FTA funded components of the extension would occur), specific impacts associated with the passenger terminal and related facilities are not clearly defined.

Response

The Applicant has proposed to construct a passenger terminal in Delta Junction at one of the two locations shown in Draft EIS Figures 2-21 and 2-22. The components of the facility would be determined during final design. Analysis of potential impacts in the Draft EIS was based on the anticipated footprint of the facility and the general activities anticipated to occur at the facility.

Cooperating Agency FTA

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section:

DEIS Page Numbers

Comment ID: 2

If future funding requests are submitted to FTA for this project, FTA will need to review the noise impacts as they relate to FTA guidance. Therefore additional information regarding the specific noise receptors and the associated land use categories, as listed in the FTA Transit Noise and Vibration Impact Assessment guidance, might be requested to better illustrate compliance with FTA requirements.

Response

In 2007, SEA circulated a draft noise and vibration analytical methodology based on SEA's noise analysis criteria to the cooperating agencies for review. SEA did not receive any comment indicating that a different approach was needed. The approach used did not involve land use categories for receptors and so SEA did not collect this information.

Cooperating Agency FTA

Resulted in a change to DEIS ☒

Topic: Noise and Vibration

DEIS Section:

DEIS Page Numbers

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 3

Chapter 20 states that all adverse noise impacts would result from "locomotive horn sounding"; however this is not made clear in Chapter 9. In order for FTA to determine the appropriate level of mitigation for noise and vibration, more information would need to be provided. This issue could be addressed once FTA funding is requested.

Response

SEA has made a revision to Table 9-4 of the Draft EIS to clarify with a footnote that for all receptors counted, noise levels would equal or exceed 65 DNL as a result of horn sounding. See Chapter 4 of the Final EIS.

Cooperating Agency FTA

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers

Comment ID: 4

Please provide FTA with a copy of the following documents referenced in these sections:
(1) the 2006 Alternatives Analysis Study; and
(2) the 2007 Preferred Route Alternative Report.

Response

SEA sent the requested documents to FTA.

Cooperating Agency FTA

Resulted in a change to DEIS ☐

Topic: Section 4(f) Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 5

FTA advises that coordination with the jurisdictional agencies begin in order to effectively identify Section 4(f) resources and potential impacts and mitigation measures. If it is anticipated that FTA will need to make a future 4(f) determination, it would be beneficial to keep FTA informed during the Section 4(f) evaluation process.

Response

SEA coordinated with FTA and other applicable agencies in developing the Section 4(f) analysis in the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.3.3

DEIS Page Numbers 8-9

Comment ID: 6

Please summarize the effects on Fairbanks North Star Borough or Interior Alaska emissions too.

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Response

An inventory of CO2 emissions for the Fairbanks North Star Borough area has not been assembled by local, state or Federal agencies, so the data are not available to develop the requested summary.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.3.3

DEIS Page Numbers 8-9

Comment ID: 7

Please present data demonstrating a substantial enough reduction in the number of cars and trucks on the highway that would then result in a measurable decrease in CO2. (Also see your discussion of energy resources and transportation in Chapter 10.2.2, pages 10-2 thru 10-3).

Response

Projected information on ridership on the proposed rail line is not available so calculation of reduced CO2 emissions associated with potential reductions in vehicle traffic would be speculative. Elimination of all traffic on the Richardson Highway would not result in a measurable change in CO2 levels.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Noise and Vibration

DEIS Section: 9.2

DEIS Page Numbers 9-2

Comment ID: 8

In Delta Junction and along much of the route west of the Tanana River, current noises include those associated with nearby military training.

Response

SEA has made a revision to Draft EIS Section 9.2 in response to the comment. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section: 9.3.1

DEIS Page Numbers 9-4

Comment ID: 9

Did noise models and noise exposure estimates take into account differences between summer and winter? In very cold still air, sounds (especially low frequency sounds) can travel further and be more impactful. Also, in winter, there is little vegetation to buffer noise effects.

Response

The operations noise analysis and noise contours presented in the Draft EIS were based on annual railroad operations data, taking into account all seasons. Seasonal variations may occur in how noise travels from the noise source, but seasonal variations due to vegetation or atmospherics

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(temperature, humidity, etc.) are generally only relevant over relatively long distances. For example, a 100-foot depth of tall thickly vegetated trees would provide approximately 5 dBA of noise attenuation. A 3 dBA change in noise level is barely perceptible to the human ear. Consequently, seasonal variations in propagation of noise associated with the proposed rail line would be minor due to the lack of very large intervening areas of trees between the noise sources and listener locations. Further, the noise analysis in the Draft EIS did not include any differentiation due to vegetation, so to the extent that vegetation would result in noise reduction, it would reduce the estimated noise levels presented in the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section: 9.3.2

DEIS Page Numbers 9-5

Comment ID: 10

Would like text to better explain “estimated distances to the 65 DNL noise contour” as shown in Table 9-3. Not clear how to interpret the contours identified in the table. Needs to be written for the lay person. It would help to include the definition of “noise contour” here, even though it is in the Glossary. It might also be helpful to move Table 9-3 until after the explanation of the contour maps that currently is in the first paragraph on page 9-6.

Response

Because the Final EIS is primarily a comment response document, SEA plans to include only substantive changes in the errata to the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section: 9.3.2

DEIS Page Numbers 9-7 to 9-12

Comment ID: 11

Yellow noise receptor locations very hard to see except on Figures 9-5 and 9-6. Please make color stronger and/or select a different color.

Response

Because the Final EIS is primarily a comment response document, SEA plans to include only substantive changes in the errata to the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section: 9.3.2

DEIS Page Numbers 9-14

Comment ID: 12

Recommend including Table J-3 from Appendix J, so that readers may easily compare estimated noise to FRA guidelines.

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Response

Because the Final EIS is primarily a comment response document, SEA plans to include only substantive changes in the errata to the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Energy Resources

DEIS Section: 10.2

DEIS Page Numbers 10-1 to 10-3

Comment ID: 13

No mention of construction-related impacts on energy resources, e.g., increased fuel consumption due to construction vehicles/equipment/machinery/trains

Response

SEA based its calculations of fuel usage for construction of NRE on fuel consumed by construction vehicles and equipment over the lifetime of the construction project. Fuel usage estimates were based on the assumption that construction would last for three years and that construction would take place during only seven months of each year. Calculations were based on fuel consumed during construction of a similar project, the Eielson Branch Realignment (Sierra Research Inc., 2007). Fuel consumption for diesel engines was calculated based on the hours worked at a certain engine load factor with diesel combustion providing energy at a rate of 1 bhp-hr [brake horsepower per hour] from the combustion of 0.367 pound of diesel. Fuel consumption for gasoline vehicles was calculated assuming an average fuel economy for a mix of trucks of 10 miles per gallon. Using these estimates, total fuel consumed over the lifetime of NRE construction would be 920,777 gallons of diesel fuel and 134,910 gallons of gasoline. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: 11.2.3

DEIS Page Numbers 11-5

Comment ID: 14

Please include a brief parenthetical definition of LOS D in this paragraph (even though it is defined in the Glossary).

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Land Use

DEIS Section: 11.3.2

DEIS Page Numbers 11-7 to 11-8

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 15

Would ARRC be required to develop a hazardous material spill operation plan? While we agree that the consequences of a release would depend on the material, the location, the amount of release, weather, etc., please outline any general procedures ARRC would be required to follow. Of particular concern would be hazardous materials entering streams or rivers. How would these spills be contained and then cleaned up?

Response

Draft EIS Section 11.3.2 has been expanded to include language referring to Voluntary Mitigation Measure 30, which clarifies that the new rail line would be incorporated into the Applicant's existing Emergency Response process and that the Applicant would update its Oil Spill Contingency Plan. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: 11.3.3

DEIS Page Numbers 11-8 to 11-9

Comment ID: 16

Make sure this section (or somewhere in Chapter 11) addresses the effects of new roads built to access staging areas, construction camps, borrow areas and communications towers.

Response

SEA is not aware of any new roads that would be constructed that would be available for public use. Some existing roads would be improved (e.g., widened) to support construction activities and construction traffic that would use public roads. Draft EIS Section 11.3.3 discusses the potential road traffic safety impacts from the proposed rail line extension and concludes that the potential impacts on roadway safety would be small. Draft EIS Section 11.3.4 discusses potential road delay impacts and concludes that roadways in the vicinity of NRE are generally free flowing and not near capacity, but temporary increases in delay could occur during construction. Potential impacts other than safety and delay are addressed in the appropriate chapter of the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: 11.3.5

DEIS Page Numbers 11-14

Comment ID: 17

While the values cited in this table are small, the percent change for many of these crossings appears large (e.g., Old Steese Highway would have a 53% increase, and Laurence Road would have more than a 200% increase). Were statistical analyses performed on these data? Which of these crossings would have a statistically significant change? The reader needs more information with which to interpret the data in this table.

Response

SEA believes that the estimated accident frequency at crossings generated by the Personal Computer Accident Prediction System (PCAPS), rather than a percentage change, is the appropriate

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basis for comparison of potential impacts among the alternatives because the FHWA guidelines are based on accident frequency.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: K.3

DEIS Page Numbers K-4

Comment ID: 18

Potential typo in last sentence: "that-grade" should read "that at-grade"?

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: K.3

DEIS Page Numbers K-5

Comment ID: 19

Potential typo in second sentence "that-grade" should read "that grade"?

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Transportation Safety and Delay

DEIS Section: K.4 and K.2

DEIS Page Numbers K-8 to K-9 a

Comment ID: 20

Why are the data in the "Average daily traffic in both directions" column in Table K-4 different from the data presented in the "2008 AADT" column in Table K-2? Without additional explanation, it would appear the data should be identical.

Response

Table K-2 (Draft EIS Section K.2) provides AADT for 2008, while Table K-4 (Draft EIS Section K.4) provides estimated AADT for 2012, the year of the analysis. An explanation has been added to the paragraph that cites Table K-4 (see Chapter 4 of the Final EIS).

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Cooperating Agency USACE
Topic: Navigation
DEIS Section: 12.3.3
DEIS Page Numbers 12-5 to 12-8

Resulted in a change to DEIS ☒

Comment ID: 21

In the text describing bridge crossings within Salcha Alternative Segment 2 (referring to the Salcha River crossing), Donnelly Alternative Segments 1 and 2 and Delta Alternative Segments 1 and 2, you state bridges would be the length needed to span the 100-year floodplain. Was the 100-year floodplain considered for any of the other bridge crossings discussed in this chapter? Why or why not? ☐ Recommend that discussion clearly state river stage used to design crossing structures to allow passage of types of vessels currently capable of navigating the waterway (e.g. ordinary high water, bank full, etc.).

Response

SEA has revised Section 2.3.3 of the Draft EIS to clarify that for preliminary design purposes, conveyance structures were sized to equal or exceed the measured channel width or 90 percent bank full width, which would meet or exceed the Alaska Department of Fish and Game [ADF&G]/Alaska Department of Transportation and Public Facilities [ADOT&PF] fish passage requirements for all sites, even those where fish presence is undetermined. See Chapter 4 of the Final EIS. The crossing sizes for the conveyance structures provided in the Draft EIS are based on preliminary design; the actual types and sizes of conveyance structures will be determined during final design and permitting. Chapter 12 of the Draft EIS has been revised to remove statements that indicate that bridges would span the 100-year floodplain, rather, Section 12.3.3 of the Draft EIS has been edited to state that minimum crossing distances would be determined during final design and would depend on engineering and other considerations. See Chapter 4 of the Final EIS. SEA's preliminary mitigation measures 10 and 11 (Final EIS recommended mitigation measures 10 and 11) have also been edited to reflect this change, and go further to indicate that the rail line and associated facilities, including bridge abutments, would be designed, constructed, and operated to maintain existing water patterns and flow conditions by conforming to the natural stream gradients and stream channel alignment and to avoid French draining, as practicable. The Applicant's voluntary mitigation measure VM-37 in the Draft EIS (recommended mitigation measure VM-37 in the Final EIS) indicates that adequate clearances for navigation of recreational boats on navigable rivers shall be provided in coordination with the U.S. Coast Guard. Further, SEA's preliminary mitigation measure 54 (recommended mitigation measure 54 in the Final EIS) indicates that the Applicant shall ensure that bridges and culverts placed on navigable or public waters, as determined by the Alaska Department of Natural Resources, are designed and installed to accommodate navigation by recreational boat users in a manner that shall not impede existing uses, to the extent practicable.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-4

Resulted in a change to DEIS ☒

Comment ID: 22

Be specific – how would ARRC acquire rail line ROW? Would the method of acquisition vary

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dependent on whether lands are government-owned or privately owned or in a trust? What is the range of techniques available for acquisition: administrative, purchase, forced acquisition? What happens if a property owner refuses to grant the ROW? Include info on the Uniform Act and/or cross-reference Chapter 15.3.3.

Please prepare the reader for the segment by segment discussion in this chapter: What is meant by direct effects to lands? What is meant by direct effects to residences? What is meant by indirect effects to lands/residences?

Response

Federal funds would be involved and therefore ROW acquisition for the proposed rail line would be conducted in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 et seq.), regulations promulgated pursuant to that statute (49 CFR Part 24), and Alaska Statutes 34.60.010 through 34.60.150. The Applicant does have the authority under AS 42.40.385 to acquire property for railroad transportation purposes by eminent domain. However, only ARRC's Board can authorize acquisition by eminent domain through approval of a decisional document detailing that action. Separate from AS 42.40.385, any Board licensing as a common carrier line would also give the Applicant condemnation authority. If the Applicant chose to exercise this authority, any condemnation proceedings would need to occur pursuant to state condemnation laws.

In addition, as detailed in SEA's recommended mitigation measure 55 in the Final EIS, the Applicant would comply with all reasonable terms and conditions determined by ADNR of AS 42.40.460, Extension of the Alaska Railroad, for acquisition of ADNR lands; and per SEA recommended mitigation measure 68 in the Final EIS, the Applicant would coordinate with BLM, ALCOM, and USAF during the ROW permitting process on military and Federal lands.

Direct effects are those effects of the proposed action related to the physical siting of the rail line. For example, a direct effect to land use would mean the proposed rail line would change the use of the land, or would require "taking" property or a structure and property. Indirect effects are defined as effects caused by the project, but occurring later in time or farther removed in distance than direct impacts. An example of an indirect effect would be a shipper building a facility in the future that would change land use, or induce development. An explanation of direct and indirect effects and the fact that ROW acquisition for the proposed rail line would be conducted in conformance with federal and state guidelines has been added to Section 13.1.3 of the Draft EIS, under Methodology (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-6

Resulted in a change to DEIS ☒

Comment ID: 23

What about material/borrow sites, staging areas and construction camps? While these may not be permanent ancillary facilities, they would occur (at least in part) outside of the ROW. How would these facilities affect land use?

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Response

Chapter 2, Section 2.3.3 of the Draft EIS, under Rail Construction, discusses material/borrow areas. Generally, ARRC anticipates borrow areas would occur at approximately 3 to 5-mile intervals along the rail line, each covering approximately 17 acres and reach excavation depths up to 20 feet. The exact locations of borrow areas outside the ROW would be determined during final design. SEA has revised Section 13.1.3 of the Draft EIS, under Construction Impacts to Land Use to include a discussion of impacts that could result from construction camps, construction staging areas, and armor rock staging areas that would be established during construction (see Chapter 4 of the Final EIS). The exact locations of construction staging areas and construction camps would depend on which alternative is selected. Land use in these areas would be directly affected converting them from their current use to rail line use. Original land use could be reestablished after construction is complete.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-8

Resulted in a change to DEIS ☒

Comment ID: 24

You do not disclose land use impacts from the potential armor rock staging area or alternate material staging areas along the existing Eielson Branch as depicted in Figures 2-13 and 2-14.

Response

As explained in the response to comment number 23 from USACE, SEA has revised Section 13.1.3 of the Draft EIS, under Construction Impacts to Land Use to include a discussion of impacts that could result from construction camps, construction staging areas, and armor rock staging areas that would be established during construction. Land use at the armor rock staging area in the vicinity of the Eielson mainline would be converted from its current use to temporarily house armor rock for construction of the proposed rail line. Original land use could be reestablished after construction is complete. This edit is included in Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-8

Resulted in a change to DEIS ☒

Comment ID: 25

The Moose Creek Bluff Tower and the Eielson Construction Staging Area are not shown in Figure 2-6, but rather in Figure 4-3. Recommend adding them to Figure 2-6.

It is not clear whether the Eielson Construction Staging Area would be wholly within the USACE-managed CRLFCP. Please clarify if other land owners would be impacted by the staging area.

Response

Temporary construction facilities and ancillary facilities associated with the proposed rail line, such as the Moose Creek Bluff Tower and the Eielson Construction Staging Area, have been added to Figures 2-6 through 2-11 of the Draft EIS (see Figures 1-2 through 1-7 in Chapter 1 of the Final

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EIS). Approximately 85 acres of the Eielson Construction Staging Area would be located within the USACE-managed CRLFCP, with 55 acres of the 140-acre staging area located outside the CRLFCP. In addition to USACE, portions of the 55 acre parcel outside the CRLFCP are also owned by BLM and ADNR, and therefore these landowners could also be impacted by the staging area while construction occurs.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-8

Resulted in a change to DEIS ☒

Comment ID: 26

This alternative would "directly affect two to three residences." What are the direct effects? Acquisition? Demolition? Be specific.

Response

Section 13.1.3, Eielson Alternative Segment 1 has been revised to indicate these residences lie within the 200-foot ROW; therefore, they would be acquired by the Applicant and converted to rail line use (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section: 13.1.3
DEIS Page Numbers 13-9

Resulted in a change to DEIS ☐

Comment ID: 27

Would it be possible to move the alignment slightly so that the Salcha airstrip would not be affected?

Response

The approach to the Tanana River bridge on Salcha Alternative Segment 1 requires an approach that would cross the airstrip. For Salcha Alternative Segment 2, with the limited land area available between the Old Richardson Highway and the Tanana River, it would not be possible to avoid the airstrip without increasing the overall effects on private property in the vicinity.

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section: 13.1.3
DEIS Page Numbers 13-10

Resulted in a change to DEIS ☐

Comment ID: 28

Would it be possible to move the alignment slightly so that the Salcha airstrip would not be affected? It would seem the Richardson Highway could be moved such that the Salcha School building and grounds would not have to be relocated.

Response

See response to comment ID # 27. ARRC did not propose relocating Richardson Highway in a

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manner that would avoid relocating the school because moving the road north of the school would increase impacts on the adjacent trails and nearly double the project footprint (as it would require a second cut through the large bluff for the roadway east of the school).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-10 to 13-

Resulted in a change to DEIS ☒

Comment ID: 29

"Land use would be affected by rail line construction in the ROW." Be specific. How would land use be affected?

Response

Section 13.1.3 of the Draft EIS, under Construction Impacts to Land Use by Alternative Segment, describes land use impacts both inside and outside the ROW for each of the alternative segments. Impacts vary from changing the land use to rail from land that is presently undeveloped, while other property would need to be acquired that is under military, private residence or commercial land use. General statements, such as the one the commenter has pointed out, have been removed from this section or more details on the nature of the impact to land use were provided (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-11

Resulted in a change to DEIS ☒

Comment ID: 30

"Recreational land use would be affected by rail line construction in the ROW." Be specific – how would recreational land be affected?

Response

Recreational land would be displaced by rail line construction within the ROW. This sentence has been modified for clarity (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-12

Resulted in a change to DEIS ☒

Comment ID: 31

In the second paragraph you state: "Use of these facilities and residences would likely be affected by disturbance during construction." What disturbances? Construction closures? Detours? Noise? Dust? Be specific.

In the third paragraph you state: "Approximately five nearby residences could be indirectly adversely affected by construction activities associated with the tower upgrade." What adverse

NRE DEIS Cooperating Agency Comment Responses

effects? Please fully disclose/describe impacts.

Response

The discussion of common construction impacts in Section 13.1.3 of the Draft EIS has been revised to indicate that construction disturbances could include temporary access changes and temporary increases in noise, dust, and disturbance generated by construction activities (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-13

Resulted in a change to DEIS ☒

Comment ID: 32

If the parcel to be used for the terminal is mostly privately owned, what is ARRC's alternate plan in case they cannot acquire these lands? What would be the "temporary adverse effects" that could be experienced by the 10 residences or businesses?

Response

Federal funds would be involved and therefore ROW acquisition for the proposed rail line would be conducted in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 et seq.), regulations promulgated pursuant to that statute (49 CFR Part 24), and Alaska Statutes 34.60.010 through 34.60.150. As explained in the response to comment number 22 by USACE, the Applicant does have the authority under AS 42.40.385 to acquire property for railroad transportation purposes by eminent domain, if acceptable negotiations cannot be reached between the Applicant and the property owner. Separate from AS 42.40.385, any Board licensing as a common carrier line would also give the Applicant condemnation authority. If the Applicant chose to exercise this authority, any condemnation proceedings would need to occur pursuant to state condemnation laws.

Section 13.1.3 of the Draft EIS has been revised to include temporary changes in access and an increase in noise, dust, and disturbance generated by construction activities (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.2.1
DEIS Page Numbers 13-15

Resulted in a change to DEIS ☐

Comment ID: 33

How will section line easements be handled should the project be constructed? During the January 2009 public meetings, STB asked the public to identify traditional access routes, but no mention was made of section line easements. Would section line easements be vacated under the terms of AS 42.40.460? Could section line easements be included to provide regularly distributed access points along the rail line (especially on the west side of the Tanana River)?

NRE DEIS Cooperating Agency Comment Responses

Response

ARRC and ADNR are having ongoing discussions regarding access; however Alaska Statute 42.40.460 states that grant of ROW by ADNR would be subject to "valid existing rights." The Final EIS's recommended mitigation measures requires the Applicant to comply with all reasonable terms and conditions of Alaska Statute 42.40.460, Extension of the Alaska Railroad.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.2.3
DEIS Page Numbers 13-23

Resulted in a change to DEIS ☒

Comment ID: 34

There is no mention of any potential effects of borrow areas/material sites, staging areas, or construction camps on recreation.

Response

SEA has revised Section 13.2.3 of the Draft EIS, under Construction Impacts to Recreation to include a discussion of impacts that could result from construction camps, construction staging areas, and armor rock staging areas that would be established during construction (see Chapter 4 of the Final EIS). Recreational resources in proximity to these temporary construction facilities could experience temporary closure of trails or other recreational access; however, original land use and access could be reestablished after construction is complete. SEA preliminary mitigation measure 55 in the Draft EIS, and recommended mitigation measure 55 in the Final EIS presents provisions to ensure construction activities occur during the most appropriate timeframe to limit potential impacts on recreation activities.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.2.3
DEIS Page Numbers 13-24

Resulted in a change to DEIS ☐

Comment ID: 35

Possible typo or missing word in first sentence. Sentence awkward, especially "...locations of the trail crossings conditions of the issuance..."

If ARRC thinks grade separation is preferable to allow vehicles safe passage, how is it that they have not proposed any specific grade-separated crossings? Are specific proposals forth-coming?

Response

The first sentence does not contain a typo; however, for clarification, the sentence conveys the fact that as part of the ROW permit and land conveyance process to the Applicant, ADNR and BLM would determine the locations of trail crossings. Chapter 20 of the Draft EIS includes SEA recommended mitigation measures 55, 57, 58, 60, 61, 62, 63, 64, and 65 that address impacts to recreational resources, such as trails and require the Applicant to consult with affected user groups and agencies regarding the provision of crossings, types of crossings, and require the provision of specific trail crossings. Preliminary mitigation measures 55, 57, 58, 60, 61, 62, 63, and 64 are included as recommended mitigation measures in the Final EIS. Preliminary mitigation measure 65

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was deleted and incorporated into recommended mitigation measure 55 in the Final EIS.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.2.3
DEIS Page Numbers 13-25

Resulted in a change to DEIS ☐

Comment ID: 36

This section states that not all of the proposed small bridges would be passable, yet ADNR requires safe boat, pedestrian, etc. passage and/or the provision for alternate public access. Have specific sites been identified where there is potential conflict, and how will ARRC address the conflict? Perhaps a mitigation measure needs to be added to ensure recreational access conflicts are adequately addressed before transfer of the ROW.

Response

SEA's Preliminary Mitigation Measures 54 and 60 in the Draft EIS and recommended mitigation measures 54 and 60 in the Final EIS address this comment.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.2.3
DEIS Page Numbers 13-25

Resulted in a change to DEIS ☒

Comment ID: 37

Missing word in first sentence.

Response

This sentence has been deleted because it was not clear and is related to mitigation (see Chapter 4 of the Final EIS). SEA's preliminary mitigation measures 55 through 68 in the Draft EIS, and Final EIS recommended mitigation measures 55 through 68, are intended to address the issue of presenting a systematic approach for the provision of trail crossings of the rail line for recreational use.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 13.2.3
DEIS Page Numbers 13-27

Resulted in a change to DEIS ☒

Comment ID: 38

Please further explain construction-related impacts to water quality in ADF&G-stocked lakes within Eielson AFB.

Response

SEA has revised Draft EIS Section 4.4.2, Environmental Consequences, to include construction related impacts of Eielson Alternative Segment 3 to Scout Lake. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: 13.2.3

DEIS Page Numbers 13-31

Comment ID: 39

The word "adverse" should be changed to "adversely" in last sentence.

Response

The word "adverse" does not appear in the last paragraph on page 13-31. It is not clear what the commenter is asking. No changes were made.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Section 4(f) Resources

DEIS Section: 13.2.4

DEIS Page Numbers 13-39

Comment ID: 40

Confused by why this chapter mentions only 2 sites (XBD-293 and XBD-294) that could warrant preservation in place. Table 6-1 (pages 6-8 thru 6-10) identifies 3 sites (XBD-293, XBD-294, and XBD-295), all associated with Salchaket, for which additional data would be needed to determine National Register Listing eligibility. Is there something about XBD-295 that does not fit Section 4(f)?

Response

Section 4(f) applies to archaeological sites that are on or eligible for inclusion in the NRHP and that warrant preservation in place. It does not apply to sites that are eligible only for their research potential. Two sites were identified in the APE that may be eligible under criteria A and B, and that could warrant preservation in place (sites XBD-293 and XBD-294). Site XBD-295 is an abandoned truck, probably dating to the 1940s. It is outside the Area of Potential Effects and is a moveable structure, which would not warrant preservation in place.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: 13.3

DEIS Page Numbers 13-40 to 13-

Comment ID: 41

Not sure why the Hazardous Materials section is included in the Land Use Chapter. It may serve better as a stand-alone chapter, with cross-reference to Appendix L.

Response

The Hazardous Materials/Waste Sites section is included in the Land Use chapter because it relates to present uses or conditions of the land and how the proposed action would affect them. Moving the Hazardous Materials/Waste Sites section elsewhere in the EIS is a formatting request and would not change the information presented, thus, this edit has not been incorporated into the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.3.2
DEIS Page Numbers 13-43

Resulted in a change to DEIS ☒

Comment ID: 42

Please provide a brief explanation as to what criteria were used to determine low risk versus high risk hazardous material sites.

Are there any known hazardous sites within the existing Eielson Branch alignment that could be affected by the preferred and alternate staging areas (see Figures 2-13 and 2-14)?

Response

Section 13.3.3 explains the methodology used to assess the impacts of known hazardous materials/waste sites in proximity to the proposed rail line. Those sites that were considered high risk were situated in proximity to the proposed rail line where contaminant characteristics and regulatory status of the site present potentially higher probability to encounter hazardous materials and that could involve excavation or disturbance by intrusive actions associated with proposed rail line construction. SEA's research did not identify any known hazardous waste sites that are sites of concern that could be affected by the potential locations for the armor rock staging areas (as depicted in Figure 13-10, 13-11 and Table L-1 in Appendix L of the Draft EIS). The closest hazardous materials site to the proposed Alternative Transload and Staging Site depicted on Figure 2-14 of the Draft EIS is Site number 6, identified in Table L-1 as the Moose Creek General Store. This is an active site with ADEC institutional controls (ICs) in place; however, this is not a site of concern because there is no excavating or ground disturbance associated with a potential staging area for rock revetment. This information has been added to Table L-1 for clarity in the description of Site number 6 (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.3.3
DEIS Page Numbers 13-55

Resulted in a change to DEIS ☐

Comment ID: 43

Please define what constitutes a low risk versus high risk hazardous material site.

Response

As explained in the response to comment 42 from USACE, and under Methodology in Section 13.3.3 of the Draft EIS, those sites that were considered high risk were situated in proximity to the proposed rail line where contaminant characteristics and regulatory status of the site present potentially higher probability to encounter hazardous materials and that could involve excavation or disturbance by intrusive actions associated with proposed rail line construction. Figures 13-10 through 13-20 in the Draft EIS illustrate the locations of known hazardous materials sites. The 11 sites of concern identified in Table 13-5 are labeled on these figures as "high risk" and the remaining sites are labeled as "low risk."

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.3.3
DEIS Page Numbers 13-56

Resulted in a change to DEIS ☒

Comment ID: 44

This entire paragraph should be added as a mitigation measure.

Response

This paragraph was added as a new SEA recommended mitigation measure 78 in the Final EIS.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.3.3
DEIS Page Numbers 13-56

Resulted in a change to DEIS ☐

Comment ID: 45

This paragraph states there are no known sites of concern on any of the Eielson Segments, other than orphan sites associated with ALCAN Highway construction camps. Yet Figure 13-13 shows site 58 being on Eielson 3 segment. Why would construction of Eielson 3 not affect (or be affected by) this hazardous material site?

Response

Hazardous materials/waste site 58 is not within the ROW of Eielson Segment 3. As explained in Table L-1 of the Draft EIS, given the nature of the site (battery shop) solvents possibly drained to leachfields. Eielson Air Force Base site institutional controls are in place and long-term monitoring has been established) it is not anticipated to be a site of concern for construction of the proposed action.

Cooperating Agency USACE
Topic: Socioeconomics
DEIS Section: 14.2
DEIS Page Numbers 14-2

Resulted in a change to DEIS ☒

Comment ID: 46

Clarify that settlements and developments are primarily on the east side (north) of the Tanana River.

Response

SEA has revised this section of the Draft EIS to provide clarification on the location of settlements. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Visual Resources
DEIS Section: 14.3.1
DEIS Page Numbers 14-3

Resulted in a change to DEIS ☐

Comment ID: 47

It would be helpful to have a copy of Figure N-5 inserted into Chapter 14, after Section 14.3.1.

NRE DEIS Cooperating Agency Comment Responses

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Visual Resources
DEIS Section: 14.3.2
DEIS Page Numbers 14-6

Resulted in a change to DEIS ☐

Comment ID: 48

Surprised by the statement that neither Tanana River crossing would be visible from the Richardson Highway or other land-based KOPs. Does this mean that the bridges could not be seen anywhere from existing roadways, neighborhoods, etc.? This statement also made us want to see where the KOPs were, thus we recommend adding a figure depicting KOPs (see comment above). Would the bridges be visible from any commonly used waterway? This paragraph never really discloses the visual contrast a bridge would have over the undisturbed character of the Tanana River.

Response

Contrast of bridges over the Tanana River and other rivers is addressed on page N-22 in the section "Bridges over Rivers and Streams" of the Draft EIS. The bridges in the Salcha Alternatives spanning the Tanana River would be visible for all boaters on the Tanana River but are not expected to be visible from existing roadways. SEA has revised this paragraph of Chapter 14 to note that bridges spanning the Tanana River would be visible to boaters. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Visual Resources
DEIS Section: 14.3.2
DEIS Page Numbers 14-6

Resulted in a change to DEIS ☐

Comment ID: 49

You state at the end of this paragraph that the Tanana River bridge crossings create strong contrast to some landscape elements and that mitigation would be needed. While intuitively we agree with this statement, we don't understand how this conclusion is drawn given the statement in the previous paragraph that the bridges can't be seen from land-based KOPs. The effects of the Tanana River bridges on visual resources need to be better explained.

Response

SEA has revised Draft EIS Section 14.3.2 to add that the strong visual contrast would be apparent to boaters on the Tanana. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Socioeconomics
DEIS Section: 15.3.2
DEIS Page Numbers 15-5

Resulted in a change to DEIS ☒

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 50

While construction costs and employment estimates for the Port MacKenzie Rail Extension may represent the best available data, we recommend adding a statement as to how these estimates might vary for a project in Interior Alaska (e.g., transportation costs higher, employment costs higher or lower, etc.).

Response

SEA has revised Draft EIS Section 15.3.2 to provide clarification. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Socioeconomics

DEIS Section: 15.3.2

DEIS Page Numbers 15-6

Comment ID: 51

Please define "IMPLAN."

Response

IMPLAN is a widely-used software package and database for estimating local economic impacts. This definition has been added to the EIS text upon first mention of IMPLAN. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Socioeconomics

DEIS Section: 15.3.2

DEIS Page Numbers 15-9 to 15-1

Comment ID: 52

No mention of the military as a regional entity and what construction and operation of the rail might mean. If the NRE would increase Fort Greely expansion, that could have a residual effect on the socioeconomics of the Delta Region.

Response

Fort Greely representatives were engaged during the early stages of the Draft EIS and expressed no interest in using the proposed rail extension.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Socioeconomics

DEIS Section: 15.3.3

DEIS Page Numbers 15-11

Comment ID: 53

Be specific: what is meant by a permanent effect on a residence; what is meant by a temporary residential effect.

Response

SEA has revised Draft EIS Section 15.3.3 to better define what is meant by a permanent versus a

NRE DEIS Cooperating Agency Comment Responses

temporary effect on a residence. See Chapter 4 of the Final EIS. Temporary effects could occur if the residence were located on or in proximity to construction workspace, staging areas, temporary access roads, or construction easements, while permanent impacts would occur if the affected structure were located within the 200-foot ROW, i.e., the property would be purchased and structures would be destroyed.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Cumulative Impacts

DEIS Section: 17.2

DEIS Page Numbers 17-1

Comment ID: 54..

In the last sentence, is reference to "the river" the Tanana River, or did you mean to say "there is recreational boating on rivers"?

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Cumulative Impacts

DEIS Section: 17.4

DEIS Page Numbers 17-2 to 17-6

Comment ID: 55

No mention of the Richardson Highway/ARRC grade separation, including the Chena Lakes Recreation Area/DOT/ADF&G borrow pit project near the start of the NRE.

No mention of the proposal to increase Tanana Valley State Forest lands near Flag Hill.

Response

The Tanana Valley State Forest lands near Flag Hill were discussed in Draft EIS Section 13.1.2 under Alaska State Lands, and in Draft EIS Section 13.1.3 under Donnelly Alternative Segment 2. The proposed land additions were effective July 1, 2008, the start of the State's fiscal year. Section 13.1.3 of the Draft EIS was revised to reflect that the additions to the state forest would occur in the location of Donnelly Alternative Segment 2. There is no resulting change to Chapter 17- Cumulative Impacts. See Chapter 4 of the Final EIS.

Alaska Department of Transportation and Public Facilities (ADOT&PF) has proposed a grade separation at Moose Creek between the existing ARRC rail line and Richardson Highway (at MP 345). The separation would be approximately 0.25 mile west of the Chena Flood Road crossing. As of April 2009, the grade separation project has been designed, but lacks funding for construction. Previously, a tentative agreement was negotiated between USACE, the Alaska Department of Transportation, and ARRC for USACE to provide gravel for construction of the Moose Creek grade separation. The resulting gravel pit would be filled with water, stocked by ADF&G with gamefish, and a boat launch would be constructed that would include access to Piledriver Slough and

NRE DEIS Cooperating Agency Comment Responses

subsequently to the Tanana River. As of April 2009, the gravel pit that would provide materials for the Moose Creek grade crossing has not been constructed due to a lack of funding for the overall project. (Allison Stork (ICF), pers. comm. with Jerry Rafson (ADOT&PF, 907-451-5150) 4/9/09) However, SEA has considered the Moose Creek grade separation impacts and developed preliminary mitigation measure 56 in the Draft EIS which would require that the Applicant consult with the USACE, ADNR, and ADF&G regarding the potential impacts to Moose Creek and mitigation. This mitigation measure was revised and is present as recommended mitigation measure 56 in Chapter 2 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Cumulative Impacts

DEIS Section: 17.4.1

DEIS Page Numbers 17-3

Comment ID: 56

Delete one of the "and upgrade" phrases.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Cumulative Impacts

DEIS Section: 17.4.2

DEIS Page Numbers 17-6

Comment ID: 57

Recently (February 2009), the discovery of one of the largest gold sources in the world was announced. It is situated near the town of Livengood, north of Fairbanks. Development of this gold mine would have considerable impacts on the city of Fairbanks and the Fairbanks North Star Borough, and be cumulative to impacts from the NRE. Not certain if it qualifies as reasonably foreseeable, but should be considered for inclusion in the FEIS.

Response

SEA has noted recent information about the possible viability of a gold mine in Livengood, Alaska, located approximately 70 miles north of Fairbanks. Given International Tower Hill Mines Ltd's (the project proponent) statements that additional exploratory drilling is necessary to determine the economic potential of this facility and potential recovery methods, and as yet undetermined partnering plans, SEA does not consider this project to be reasonably foreseeable. SEA has revised the Draft EIS Section 17.4.2, Projects Considered but not Analyzed in Detail, to add a discussion of the potential gold mine project. See Chapter 4 of the Final EIS.

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Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Cumulative Impacts

DEIS Section: 17.5.5

DEIS Page Numbers 17-8

Comment ID: 58

There should be mention of non-moose subsistence uses.

Response

Draft EIS section 17.5.5 has been revised to include non-moose subsistence uses. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 17.5.6

DEIS Page Numbers 17-8

Comment ID: 59

Effects on CO2 emissions should include Interior Alaska or the Fairbanks North Star Borough/Delta Region – the projects included in the cumulative effects analysis have a narrower impact on emissions than statewide.

Response

The IPPC study upon which the impact conclusions are based did note greater warming in the interior of Alaska. Further details on specific impacts are beyond the current state of the science.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Energy Resources

DEIS Section: 17.5.8

DEIS Page Numbers 17-9

Comment ID: 60

Discuss construction-related impacts on energy uses, not just operational impacts.

Response

SEA has revised Draft EIS Section 17.5.8 to include construction-related impacts. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Cumulative Impacts

DEIS Section: 17.5.11

DEIS Page Numbers 17-10

Comment ID: 61

Need to disclose cumulative effects to recreational access – more than 4(f).

Response

SEA has revised the Draft EIS to add a discussion of impacts to recreational resources in Section

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17.5.11, under Land Use. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 18.2.3

DEIS Page Numbers 18-3

Comment ID: 62

Should be some discussion of project effects on fisheries.

Response

The section briefly mentions localized impacts on fish populations during the construction period. In addition, these impacts would be short term, and mitigation measures outlined in Draft EIS Section 20.2.3 Biological Resources would minimize and reduce potential impacts on fisheries. ARRC would obtain and comply with reasonable requirements of state permits and authorizations, such as the Alaska Department of Fish and Game fish habitat permit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Land Use

DEIS Section: 19.2.6

DEIS Page Numbers 19-3

Comment ID: 63

Need to address access issues – to private and public lands.

Response

Section 19.2.6 of the Draft EIS has been revised to state that access to land within the rail line ROW is prohibited except by permission from ARRC or at designated public crossing locations (see Chapter 4 of the Final EIS). Section 20.2.10 of the Draft EIS presents mitigation measures to maintain continuity of trails and access roads in order to minimize access impacts. Chapter 1 of the Final EIS discusses public access and trails.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Mitigation

DEIS Section: 20.1.2

DEIS Page Numbers 20-2 and thro

Comment ID: 64

Regulatory and legal requirements should not be included in the “Voluntary Mitigation” category (e.g., NPDES construction permit and SWPP requirements, obtaining required Federal and State permits, etc.)

Response

Voluntary measures are provided by the applicant, and in some cases, are regulatory in nature.

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Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-4 and 20-

Resulted in a change to DEIS ☐

Comment ID: 65

These statements could be combined into one VM.

Response

The Applicant provides voluntary measures, which, for the most part, are not edited by SEA.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-5

Resulted in a change to DEIS ☒

Comment ID: 66

How would soil compaction be addressed?

Response

Soil compaction is addressed by new recommended mitigation measure 72 in the Final EIS.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 20.2.2
DEIS Page Numbers 20-7

Resulted in a change to DEIS ☐

Comment ID: 67

Bridges and culverts need to be properly sized to pass the 100-year flood not only to meet FEMA regulations but to ensure channels are not constricted and natural drainage and flood patterns are maintained.

Response

Bridges and culverts would be designed to be consistent with FEMA regulations for the protection of floodplains. Bridges and culverts would also be designed to maintain existing natural water patterns and flow conditions as practicable. In Draft EIS Section 20.2.2, Water Resources, see the Applicant's voluntary mitigation measures VM-6, VM-8, VM-15, and SEA's preliminary mitigation measure 5. These mitigation measures are recommended in the Final EIS as mitigation measures VM-6, VM-8, VM-15, and 5 in Chapter 2 Mitigation. In addition, see new mitigation measures 73 and 74 in the Final EIS Section 2.2.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-7

Resulted in a change to DEIS ☐

Comment ID: 68

USACE is not familiar with Post 1996. Are these techniques proven and accepted? USACE might

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consider adding this as a special condition to a permit application, but we are not certain of this statement's suitability as a preliminary mitigation measure.

Response

Preliminary mitigation measure 14 in the Draft EIS was not included in the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-8

Resulted in a change to DEIS ☒

Comment ID: 69

Recommend adding to this mitigation measure: "Bridge abutments should be situated far enough back from the channel as to not be restrictive."

Response

This comment is addressed in SEA's recommended mitigation measure 10 in the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-8

Resulted in a change to DEIS ☒

Comment ID: 70

Add: "and within 50 feet of non-fish-bearing water bodies and emergent wetlands"

Response

The suggested revision was made and is incorporated into recommended mitigation measure 20 in the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.2
DEIS Page Numbers 20-9

Resulted in a change to DEIS ☒

Comment ID: 71

The first sentence is a statement of impacts, not mitigation. Make sure the first sentence is included in Chapter 4 and then delete it from mitigation statement 25. Thus statement 25 would begin with: "Geotechnical boreholes shall be..."

Response

The first sentence was removed and placed in Section 4.3.2 of the Draft EIS. See Chapter 4 of the Final EIS.

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Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.3
DEIS Page Numbers 20-11

Resulted in a change to DEIS ☐

Comment ID: 72

ARRC is proposing a 13-foot wide road on the east side of the Tanana River and a 24-foot wide road on the west side. Recommend adding: "Access road shall be the minimum width practicable."

Response

This comment was addressed with the phrase "shall minimize the project footprint." See recommended mitigation measure 33 of the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.3
DEIS Page Numbers 20-12

Resulted in a change to DEIS ☒

Comment ID: 73

Recommend additional equipment cleaning measures to prevent transport of non-native species across Tanana and Delta Rivers to areas where occurrence is currently very low.

Response

This measure was retained with the addition of a statement regarding that pressure-washing would occur before crossing the Tanana and Delta Rivers; see recommended mitigation measure 36 in the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.3
DEIS Page Numbers 20-10 to 20-

Resulted in a change to DEIS ☐

Comment ID: 74

Recommend adding an additional mitigation measure requiring compacted soils to be scarified, lifted, or otherwise de-compacted, in advance of seeding with native species. ☐ Recommend adding a mitigation measure regarding chemical spills and hazardous waste clean-up

Response

SEA's recommended mitigation measure 4 in the Final EIS addresses this comment.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.3
DEIS Page Numbers 20-13

Resulted in a change to DEIS ☐

Comment ID: 75

Need to emphasize retention of late-successional stage closed needle-leaf forest within the ROW.

NRE DEIS Cooperating Agency Comment Responses

Retention would be beneficial to many birds, furbearers, and non-game species without increasing the potential for moose-train collisions. Current mitigation statement is so focused on management of early seral stages, the importance of retaining late-seral forested vegetation is lost. Give it equal weight. Perhaps split the early and late-seral vegetation retention/management concepts into two bullets under mitigation measure 43.

Response

This mitigation measure addresses moose strikes, not retention of forest. Preliminary mitigation measure 31 (recommended mitigation measure 31 in the Final EIS) addresses the Applicant, in consultation with U.S. Fish and Wildlife Service and Alaska Department of Fish and Game, making refinements to the proposed alternatives to avoid destruction or fragmentation of these areas. Late-succession forests are included as sensitive areas that could be avoided.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.3
DEIS Page Numbers 20-13

Resulted in a change to DEIS ☒

Comment ID: 76

Mitigation measure is vague and not measurable. Perhaps include some examples of what can be done (or considered) in design, construction, and operation, to minimize impacts to wildlife movement and migration (analogous to what was done re: bird strikes in mitigation measure 32).

Response

Specific measures have not yet been determined. The mitigation measure was revised to state that, "The Applicant, in consultation with the Alaska Department of Fish and Game and the Alaska Department of Natural Resources, shall evaluate, implement, and monitor aspects of rail design, maintenance, and operation to document and reduce moose-train mortality."

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.6
DEIS Page Numbers 20-15

Resulted in a change to DEIS ☐

Comment ID: 77

A mitigation measure could be added to address operational impacts on air quality:

Response

There is minimal impact on air quality, so SEA does not think that mitigation is warranted.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.8
DEIS Page Numbers 20-17

Resulted in a change to DEIS ☐

Comment ID: 78

Much of the proposed NRE would pass through unincorporated areas and would not be near any

NRE DEIS Cooperating Agency Comment Responses

public service groups. What would happen in the case of injury, derailment, or hazardous material releases in areas not serviced by public emergency response teams?

Response

The State Emergency Response Commission (SERC) is responsible for designating and revising the boundaries of Local Emergency Planning Districts (LEPDs), establishing a Local Emergency Planning Committee (LEPC) for each LEPD, and facilitating the preparation and implementation of emergency response plans. The State of Alaska currently has nineteen LEPDs. The entire proposed rail alignment would be within LEPDs.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.10
DEIS Page Numbers 20-20 to 20-

Resulted in a change to DEIS ☒

Comment ID: 79

Add as a mitigation measure all of paragraph 2 on page 13-56.

Response

This text was added as a new mitigation measure under Land Use; see recommended mitigation measure 78 in the Final EIS.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: 20.2.11
DEIS Page Numbers 20-22 to 20-

Resulted in a change to DEIS ☐

Comment ID: 80

These mitigation measures, especially those referring to colors, may be appropriate during summer, but not winter. Color choices should consider all seasons. While we agree that hill cuts should be stabilized with native vegetation, hill cuts would be quite obvious when coated with winter snow, unless and until tall shrubs and trees become established.

Response

Materials would be selected as part of final design. SEA anticipates that steel would be galvanized or self-weathering.

Cooperating Agency USACE
Topic: Purpose and Need
DEIS Section: D.1.1
DEIS Page Numbers D-1

Resulted in a change to DEIS ☐

Comment ID: 81

This is not the same purpose statement as included in Chapter 1.2. This statement of purpose appears to better fit the background statement (Chapter 2.1) and the range of alternatives.

NRE DEIS Cooperating Agency Comment Responses

Response

The section referenced in the comment describes the identification of the study area and alignment development. The section contains a half sentence about the purpose of the project. The half sentence is consistent with the purpose and need statement in Chapter 2 of the Draft EIS, but was not to intended fully describe it.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: D.2.2

DEIS Page Numbers D-9

Comment ID: 82

Even though the single-span bridge would be more expensive, it does not mean it isn't a reasonable alternative meriting NEPA analysis.

Response

A reasonable range of alternatives was selected for analysis, as required by NEPA. A cost-prohibitive alternative is not a reasonable and feasible alternative.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: D.2.3

DEIS Page Numbers D-12

Comment ID: 83

This alternative should be depicted in Figure D-1. ☐ Rejecting this alternative makes sense with the purpose statement provided in Appendix D, but does not make sense with the purpose statement in Chapter 1.2

Response

Draft EIS Figure D-1 provides an overview of specific alignments developed by ARRC. Concepts for alignments without specific locations are not included because the information about the location is insufficient for mapping. The purpose and need has been edited for clarity and to reflect input from the military. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: E.1.1

DEIS Page Numbers E-1

Comment ID: 84

Climate data for North Pole or Eielson AFB would provide a comparison to the data presented for Big Delta and would give information for both ends of the project.

Response

Draft EIS Section 8.2 provides climate data for Fairbanks.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.1.2

DEIS Page Numbers E-1

Comment ID: 85

End of sentence awkward – may be missing a word.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.1.2

DEIS Page Numbers E-3

Comment ID: 86

Start of sentence awkward – may be missing a word.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.2.2 and 4.2

DEIS Page Numbers E-4 and 4-2

Comment ID: 87

It would be helpful to have a duplicate of Figure 4-1 in Appendix E. Also, use of physiographic regions does not seem to be consistent throughout the DEIS. For instance, the regions used here (as described by Wahrhaftig(1965)) are not the same as in Chapter 5 (as described by Nowacki et.al (2001)). Please explain or edit for consistency.

Response

Draft EIS Section 4.2.1, Affected Environment, and Table 4-1 present physiographic regions, while Section 5.2 Project Area Overview presents ecoregions. These are defined differently and are used appropriately in the water resources (physiographic regions) and vegetation (ecoregions) sections. For Draft EIS Figure 4-1, only substantive changes are being made to the Draft EIS for the Final, so a duplicate of Figure 4-1 will not be added to Draft EIS Appendix E.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.2.2

DEIS Page Numbers E-4

Comment ID: 88

The document states the Salcha and Little Salcha rivers are the only two rivers to drain from the Yukon-Tanana region. First, recommend adding "in the project area" (clearly other streams drain the region, because it is so vast.) Second, Figure 4-1 shows Moose Creek and an unnamed creek just north of the Little Salcha River also draining from the Yukon-Tanana region in the northern half of the project area, along with Shaw Creek and an unnamed creek near Tenderfoot Creek in the southern half of the project area. Please clarify.

Response

SEA has revised this section to clarify that the streams mentioned are in the project area. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.2.2

DEIS Page Numbers E-4

Comment ID: 89

"...while sediments with instream channels..." seems to be a typo. Should probably be "while sediments within stream channels..."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.2.2

DEIS Page Numbers E-6

Comment ID: 90

Since the water color and turbidity are discussed for the glacially dominated stream flow, it should also be discussed for the breakup stream flow, especially since it is significantly different (clear), and affects fish habitat issues, as well as construction impacts.

Response

SEA has revised Draft EIS Sections E.1.2 and E.2.2 to include additional information on turbidity and breakup streamflow. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.3.1

DEIS Page Numbers E-18, E-21,

Comment ID: 91

A footnote should be added to these tables explaining that the project would not cross any streams in the Yukon-Tanana Uplands, and therefore no crossings needed to be assessed. This is recommended because a cursory review of the table might lead someone to think that no crossings were assessed for the entire Salcha 2 alternative (not just that portion within the Yukon-Tanana uplands), making it appear that the alternatives were not given equal consideration.

A similar footnote should be added to Delta 1 and Delta 2 under Lower Foothills.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.3.1

DEIS Page Numbers E-27

Comment ID: 92

Add footnote explaining "Disc" means discontinuous.

Response

SEA has revised the Draft EIS Table E-8 to clarify "Disc." See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.3.1

DEIS Page Numbers E-32

Comment ID: 93

Summarize the results of these studies in a table, or explain why these data are not being included in the EIS.

Response

The data presented in Anderson (1970) reflects water quality of some of the same stations or on the same river, which allows for a general characterization of the water quality in the large river systems in the project area. This data was already summarized and readily available. The historical USGS data is not readily available in the same format. Summarizing this additional data would not provide any additional insight into understanding effects from the proposed project and would not enable the decision maker and the public to distinguish among alternatives. SEA has revised the Draft EIS Section E.3.1 Surface Water to clarify this information. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.4

DEIS Page Numbers E-43

Comment ID: 94

Correct second shaded header row. Should read "Crossings Common with the Eielson Alternative Segment 2."

Response

SEA has revised the Draft EIS Table E-19 with updated header row. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.4

DEIS Page Numbers E-51

Comment ID: 95

Missing Header Rows: Type of Waterbody and Name of Large Waterbody (if applicable),

Response

SEA has revised the Draft EIS Table E-22c to update header rows. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: E.4

DEIS Page Numbers E-52 and E-5

Comment ID: 96

How are channel plugs and channel modifications addressed in this table, especially those needed to train the Tanana River for the bridge? The unnamed sloughs that would be plugged or modified should be identified and the impacts of these actions disclosed in Table E-25a..

Response

Impacts from channel plugs and channel modifications from the "Tanana River" crossing are included under the Tanana River Bridge crossing column of Table E-25a where various activities/structures associated with the bridge crossing are assessed as a whole. The river crossing was estimated to have a "high" impact on altered flood hydraulics and increased bank scour, erosion, and channel aggradation. In Section 4.2.2 Environmental Consequences under the Salcha Alternative Segments discussion of the Draft EIS, a "high" impact is defined as an activity/structure that would most likely cause negative impacts under normal construction or operational activities.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: E.5
DEIS Page Numbers E-105

Resulted in a change to DEIS ☐

Comment ID: 97
Change "hydrology patters" to "hydrology patterns."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: E.5.1
DEIS Page Numbers E-106

Resulted in a change to DEIS ☒

Comment ID: 98
Define "histic epipedons"

Response

SEA has revised this section to include this definition. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: E.5 and E.5.3
DEIS Page Numbers E-105 and E-

Resulted in a change to DEIS ☐

Comment ID: 99
It is not clear the different methodologies used to characterize wetland types and functions in areas 500-feet from the alternative segments (other than ancillary facilities) versus those methods used within the 200-foot ROW. Were field data collected in both the 200 and 500-foot distances? Was computer mapping completed for both the 200 and 500-foot distances? Please clarify the methodology.

Response

Methodologies for wetland identification, establishment of wetland boundaries, and wetland functional assessments within the 1,000-foot study area (500 feet on either side of the rail centerline) and 200-foot ROW are exactly the same because the 200-foot ROW wetlands are a subset of wetlands within the 1,000-foot study area. The wetland delineation was based on: 1) preliminary mapping using NWI data, 2) a field verification that consisted of wetland data collection and completion of standard Corps wetland determination forms for formal wetland/upland data plots, and 3) a final GIS wetland mapping that reconciled the NWI and field efforts.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.53

DEIS Page Numbers E-111

Comment ID: 100

Since values are between 0 and 1, it is difficult to discern the significance of small variations in numbers. How are we to interpret these data? Please clarify.

Response

SEA has revised Draft EIS Section E.5.2 to clarify the functional assessment method and how to interpret the results. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.53

DEIS Page Numbers E-112 to E-1

Comment ID: 101

Add footnote explaining how acreages were derived (i.e., from the relative proportion of each wetland type within the project area, and not from actual data at specific locations within the project area).

Response

SEA has revised Draft EIS Section E.5.3, Wetland Assessment Methodology, to clarify the method of how wetland acreages were derived. See Chapter 4 of the Final EIS. Wetland impact acreages for each segment's 200-foot ROW were not determined through relative proportions of wetlands within the 1,000-foot wetland study area. The relative proportion methodology was only conducted for project elements that have not been sited yet, such as borrow areas and communication towers.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: E.53

DEIS Page Numbers E-113 to E-1

Comment ID: 102

Are "regions" equivalent to the number of GIS polygons of a particular wetland type within an Alternative Segment? Please add a footnote explaining this.

Response

SEA has revised the Draft EIS Tables E-53 through E-63 to clarify the term "region." See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.1.3

DEIS Page Numbers F-7 to F-8

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 103

Would the fire protection class change to protect the NRE? In other words, if the NRE were to pass through an area of "limited" protection, would the presence of the NRE itself require the fire plan to be changed to "modified" or "full" protection? What would be the implications of such a change (e.g., increased fire suppression costs)?

What effect would a fire have on construction or operation of the NRE (e.g., temporary delays)?

Response

See Draft EIS Section 5.3.2 Environmental Consequences where the Wildland Fire and Fire Management sub heading states that wide-scale changes in fire management for the area surrounding the rail line would be unlikely. SEA has revised Draft EIS Appendix F to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.1.3

DEIS Page Numbers F-8

Comment ID: 104

Recommend deleting (see comment for Chapter 5.3.2, page 5-12, above).

Response

SEA has revised the section to remove this information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.2.4

DEIS Page Numbers F-19

Comment ID: 105

See comment for Chapter 5.4.2, Table 5-18, crossing 105, above.

Comment: Table 5-18 (and in Appendix F, Table F-10) states crossing 105 is 20 feet wide, yet in Chapter 4.2.2, page 4-13 (second to last paragraph), says the channel is 35 feet wide. Which is correct?

Response

The "channel width" of "35 feet" is the maximum bank full width based on field data for site N2-1.3. The "20 feet" in Draft EIS Tables 5-18 and F-10 is average wetted channel width during the same site visit. The apparent discrepancy is due to the differing focus of the hydrologic and fisheries habitat assessments. The 35 feet width is valid for high flow conditions.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.2.4

DEIS Page Numbers F-20

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 106

See comment for Chapter 5.4.2, Table 5-19, crossing 13, above.

Comment: Crossing 13 is 80 feet wide, yet the bridge would only be 60 feet. Bridges should be appropriately sized for the stream channel (at least as long as the channel width).

Response

Proposed structures crossing smaller streams as presented in the Draft EIS represent initial estimates based upon information available at the time. The crossing #13 arrangement, as well as all project crossings, would be revisited during final design and permitting, fully taking into account environmental and hydraulic concerns, to reduce the adverse impacts described in the Draft EIS. Further, it is standard railroad design practice to maintain existing flow patterns and to pass the modeled 100-year flow event.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.2.4

DEIS Page Numbers F-20 to F-21

Comment ID: 107

There appears to be missing text between the end of page F-20 and the start of page F-21.

Response

SEA has revised the section to include the missing text. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.2.4

DEIS Page Numbers F-25

Comment ID: 108

See comment for Chapter 5.4.2, Table 5-21, crossings 85 and 396, above. ☐ Comment: Crossings 85 and 396 appear to be in the same location (if they are different crossings, a magnified view should be added to Figure 5-13). Are they one and the same?

The table states the channel width is 80 feet, yet the bridge crossing size would be 40 feet. This appears to be undersized, unless the two 40-foot crossings combine to form the needed 80 feet. Please clarify or correct.

Response

Crossings 85 and 396 are two separate crossings. Crossing 85 is along Connector A while crossing 396 is along Connector C as indicated in Table 5-21. If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit. Proposed structures crossing smaller streams as presented in the Draft EIS represent initial estimates based upon information available at the time. The arrangement for crossings #85 and #396, as well as all crossings for the project, would be revisited during final design and permitting, taking into account environmental and hydraulic concerns, to reduce the adverse impacts described in the Draft EIS.

NRE DEIS Cooperating Agency Comment Responses

Further, it is standard railroad design practice to maintain existing flow patterns and to pass the modeled 100-year flow event.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.3

DEIS Page Numbers F-30 to F-53

Comment ID: 109

Again, no mention of non-game species. Would like to see a section devoted to non-game resources.

Response

The scope of the analysis for biological resources was focused on the resources determined to be greatest importance with the highest potential for impact by the NRE project. Those resources were determined to be vegetation, fisheries, game mammals, and game and protected birds as described in Draft EIS Section 5.0 Biological Resources. Some non-game species are covered in Draft EIS Appendix F, for example, while the red squirrel is technically considered a furbearer it is generally not trapped or hunted within the project area (see Draft EIS Table F-32). Aquatic animals of conservation concern are discussed in Draft EIS Section F.2.3 and supporting discussions and analysis of impacts to birds of conservation concern is presented in Draft EIS Section F.4.4. No other non-game species of conservation concern were identified during scoping as important to address in the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.3.1

DEIS Page Numbers F-39

Comment ID: 110

This is a more thorough description of moose migration – summarize these paragraphs in Chapter 5.5.1 (see comment on 5.5.1, above).

Response

SEA has revised Draft EIS Section 5.5.1 to include the moose migration information from Draft EIS Appendix F. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-41 to F-46

Comment ID: 111

The document does not disclose habitat loss impacts within the North Common Segment, for borrow sites, or for construction/staging areas. Please include.

Response

Habitat loss impacts for the North Common Segment, for borrow sites, and for construction staging

NRE DEIS Cooperating Agency Comment Responses

areas are summarized in Draft EIS Table 5-27 as North Common and Common Facilities. Habitat loss for borrow areas was estimated based on the proportion of vegetation types within the project area as footprints for these locations were not located or are subject to change. SEA has revised the Draft EIS to add a column for North Common segment impacts to Table F-25, and a column for borrow pit and common staging area impacts to Table F-26. Construction staging areas specific to alternative segments are included in the totals for the alternative segments as described in the table titles within this section. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-47

Comment ID: 112

What would be the impacts of borrow sites and construction/staging areas on habitat fragmentation? ☐ Not clear what is meant by "analysis block" in the 4th paragraph. Please use different term or define term before using.

Response

Because the locations of the borrow pits are unknown, their contribution to habitat fragmentation is unknown. The construction staging areas did not contribute to fragmentation of large core habitat areas as identified during the analysis. Habitat impacts for the construction staging areas are identified in Draft EIS Table 5-4. Blocks used to summarize road and trail densities are defined in Draft EIS Section 5.5.2 Environmental Consequences under the Methodology section. SEA revised the noted section in the Draft EIS Appendix F to include additional information on blocks. The revised sentence indicates 2 of 33 blocks crossed by the proposed rail line; the 33 blocks were the "analysis blocks". In addition, the term "analysis" was removed from Draft EIS text and Figure F-16 title. Blocks are illustrated in Draft EIS Figure F-16. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-52

Comment ID: 113

Why 40 percent higher? Explain upon what data this figure is based.

Response

The 40 percent increase is based on information provided by ARRC. The proposed NRE traffic rate would be four round-trip passenger trains and one round-trip freight train for a total of 10 trains per day. This traffic rate is about 40 percent higher than the traffic rate on the existing 58 miles of rail line at the western end of the project area.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-52 to F-53

Comment ID: 114

What impact would the NRE have on established migratory moose corridors, and would moose-train collisions be expected to be higher in the areas of the migratory corridors? Were migration dates considered in the dates of moose-train collisions cited in this section? The established migration routes are somewhat unique to the NRE, and the full impacts of the NRE on migrating moose and moose migratory corridors need to be disclosed.

Response

Moose do not appear to use discrete migration corridors within the project area. Please see discussion in Draft EIS Section F.3.1 Affected Environment and F.3.2 Environmental Consequences. The 58 miles of existing rail line in GMU 20B crosses the Chena drainage (see Draft EIS Figure F-19) and likely intercepts migrant moose. This observation is supported by the high density of moose-vehicle collision mortality along the stretch of the Richardson Highway that crosses between the Chena River valley and the Tanana Flats area (Draft EIS Figure F-19). Moose-train collision timing was based on the existing pattern of moose-train collisions, which would reflect any increases due to migration if these occurred. The best available data was used to estimate the magnitude of impacts to moose. No information on current moose movements or local densities were available from ADF&G for the project area.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-51

Comment ID: 115

What is the scale of each of the analysis blocks – a square mile? Scale not clear from Figure or caption.

Response

This issue was clarified with revisions in response to comment 112. Blocks are 9.5 square miles (25 square kilometers). See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.3.2

DEIS Page Numbers F-54

Comment ID: 116

Figure hard to read. Might be easier if displayed on white background, similar to Figures F-20 and F-21.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit.

NRE DEIS Cooperating Agency Comment Responses

However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.4.1

DEIS Page Numbers F-57

Comment ID: 117

Any population/harvest data from Interior Alaska or within the FNSB? Would be more relevant to have local and/or regional data than statewide harvest data.

Response

Harvest summaries available from U.S. Fish and Wildlife Service provide only state-wide totals. Information was requested from the ADF&G regional waterfowl coordinator, and SEA was informed that region-specific waterfowl harvest data are not collected (Tom Rothe, ADF&G Waterfowl Coordinator, pers. comm., February, 27 2009).

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.4.2

DEIS Page Numbers F-57

Comment ID: 118

If most eagles are gone by mid-to-late September, are the eagles seen in midwinter along the Delta River a non-migratory population? If so, what is the estimated size of this population?

Response

Most eagles in Interior Alaska migrate, however, a few may remain in Interior Alaska, especially in places where waterfowl may remain over winter in areas with open water - such as the upwelling area at the confluence of the Delta River and the Tanana River. SEA has revised this section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: F.4.2

DEIS Page Numbers F-60 and F-6

Comment ID: 119

Grey dots are hard to see. Recommend using a different color, such as yellow or orange.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: F.4.2
DEIS Page Numbers F-63 to F-64

Resulted in a change to DEIS ☒

Comment ID: 120

If there are 9 known red-tailed hawk nests, the estimated project area population would be 18 (unless we know they weren't all active at the same time).

If there are 6 known great-horned owl nests, the estimated project area population would be 12 (unless we know they weren't all active at the same time).

Many raptor species have floater populations – non-nesting, non-territorial birds that live within the home range of breeding pairs. Should a mate be lost, the replacement mate often comes from the floater population. Recommend adding a footnote that project area population estimates derived from nest counts are of breeding individuals only, and that there may be additional non-breeding individuals within the project area.

Response

The impact assessment is based on nesting birds only, clarified within the title for the stated table. The evaluation considered the number of probable nesting pairs based on repeated years of surveys over different sections of the alternatives. SEA has revised the table to reflect the commenter's suggestions related to bird numbers and nests affected. Impact assessments were correct. The impact description for South Common Alternative was revised in Draft EIS Section 5.6.2 Environmental Consequences to reflect the correct number of red-tailed hawk nests affected. No change was made to footnotes concerning non-nesting birds - clarified impacts to nesting birds in table title. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: F.4.2
DEIS Page Numbers F-66

Resulted in a change to DEIS ☐

Comment ID: 121

Suggest using three sizes of circles to denote nests: raven would be smallest, northern goshawk and red-tail hawk would be largest, with an intermediate-sized circle for great gray and great horned owls. This is because in the current figure, great horned owl and red-tail hawk bullets are too similar.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: F.4.2

DEIS Page Numbers F-67 to F-68

Comment ID: 122

Recommend adding the definition of "BCR4" to footnote "d."

Response

SEA has revised the Draft EIS Table F-35 to include the definition of BCR4. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: G.3.4

DEIS Page Numbers G-11, G-14,

Comment ID: 123

Recommend using a thicker and/or differently patterned line for anadromous streams – hard to see them against the rail line segments, especially Piledriver Slough in Figure G-4.

Gray circles depicting culverts are hard to see; recommend using a different color (perhaps yellow or orange).

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: G.3.4

DEIS Page Numbers G-17

Comment ID: 124

See comment for Chapter 5.4.2, Table 5-21, crossings 85 and 396, above.

Comment: Crossings 85 and 396 appear to be in the same location (if they are different crossings, a magnified view should be added to Figure 5-13). Are they one and the same?

The table states the channel width is 80 feet, yet the bridge crossing size would be 40 feet. This appears to be undersized, unless the two 40-foot crossings combine to form the needed 80 feet. Please clarify or correct.

Response

Crossings 85 and 396 are two separate crossings. See response to comment ID 108.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: G.3.4
DEIS Page Numbers G-29

Resulted in a change to DEIS ☐

Comment ID: 125

Add to this mitigation measure something like: "River crossings shall have a final design and shall be constructed to minimize changes to Tanana River hydraulics per the results of these analyses."
This will provide mitigation instead of just additional information.

Response

This comment pertains to the fifth bullet in Section G.4.2 in the Draft EIS, which is the same as Preliminary Mitigation Measure 8 in the Draft EIS. Appendix G in the Draft EIS mirrors Chapter 2 in the Final EIS and will be edited to reflect any changes made to Chapter 2.

Cooperating Agency USACE
Topic: Cultural Resources
DEIS Section: Appendix H
DEIS Page Numbers H-1 to H-25

Resulted in a change to DEIS ☐

Comment ID: 126

The Corps of Engineers will not be a signatory to this agreement because it does not satisfy our responsibility under Appendix C of 33 CFR 325.

Response

SEA understands that the USACE chooses not to be a signatory to the Programmatic Agreement for reasons specific to USACE agency policy and explained during a conference call with SEA on March 20, 2009. SEA has removed USACE as an invited signatory to the PA in Appendix E of the Final EIS.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: I.1.4
DEIS Page Numbers I-2

Resulted in a change to DEIS ☐

Comment ID: 127

Rather than requiring the public to identify specific access routes and trails within the NRE project area, perhaps ARRC should be required to provide public crossings of the rail every certain distance. This would allow for a balance between ARRC's right to restrict access with the public's recreational and subsistence use of the area.

Response

The Applicant has volunteered and SEA has proposed mitigation measures to address continuity of trails and access roads, as detailed in Section 20.2.10 of the Draft EIS, and Section 2.10 of the Final EIS. The mitigation measures require the Applicant to consult with user groups and affected agencies to provide trail crossings and access in appropriate locations frequented by recreationalists.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: I.2.5
DEIS Page Numbers I-10

Resulted in a change to DEIS ☐

Comment ID: 128

Please depict the SRB&A 2002 contemporary use areas for Healy Lake, Lake George, Delta Junction, and Shaw Creek Flats areas in a Figure so project-area overlap can be seen.

Response

The figure the commenter is referring to is unavailable for use in the EIS and is from a baseline report prepared by SRB&A for the Pogo Gold Mine Project EIS (EPA 2003). EPA held the subsistence baseline document confidential based on their understanding that the tribes in the area wanted it to remain confidential. However, this map was reproduced in the US EPA, USACE, ADNR 2003 Pogo Gold Mine EIS. Because this information was considered confidential by EPA and because the information is available in hardcopy only and therefore not easily reproduced such that the information is visually clear, the commenter is referred to Figure 3.18.1 from USEPA, USACE, ADNR 2003.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: I.2.9
DEIS Page Numbers I-16

Resulted in a change to DEIS ☒

Comment ID: 129

This section states that there are no subsistence harvest data available for Salcha. ADFG Sport Fish Division has subsistence salmon harvest data for Salcha (and other communities).

Response

We are unclear which report the commenter is referring to. We could not find ADF&G Sport Fish Division subsistence salmon harvest data for Salcha. However, ADF&G Division of Subsistence published an Alaska Subsistence Fisheries 2003 Annual Report. Draft EIS Table I-1 is a table reporting per capita harvest levels. Salmon harvests from the Alaska Subsistence Fisheries 2003 Annual Report do not reflect community per capita data for all resources and would not be an accurate comparison with the other communities. The Draft EIS text was changed to reflect this. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Noise and Vibration
DEIS Section: Appendix J
DEIS Page Numbers J-1 to J-5

Resulted in a change to DEIS ☐

Comment ID: 130

Disclose if and how models accommodated noise and vibration differences for summer and winter (see Chapter 9.3.1 comment, above).

Response

See response to ID 9 above.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Land Use
DEIS Section: L.1
DEIS Page Numbers L-1

Resulted in a change to DEIS ☒

Comment ID: 131

It is not clear what maps you are referencing in this paragraph and in Table L-1, nor does the reader know where to find these maps. Cross reference Figures 13-9 thru 13-20.

Response

SEA has revised this paragraph to refer the reader to Figures 13-10 through 13-20 of the Draft EIS for the locations of the sites described in Draft EIS Table L-1, as suggested by the commenter (see Chapter 4 of the Final EIS).

Cooperating Agency USACE
Topic: Land Use
DEIS Section: L.1
DEIS Page Numbers L-1 and L-16

Resulted in a change to DEIS ☒

Comment ID: 132

On page L-1 you state asterisks in Table L-1 identify "sites of concern that could present environmental consequences." Yet in the footnotes to Table L-1, you state asterisks identify "sites that present a high risk of environmental consequences." First, what are these concerns and risks? Second, we interpret "high risk" differently than "concern." Please select the appropriate descriptor for the risks associated with these hazardous material sites.

Response

The footnote to Draft EIS Table L-1 and the explanation in Draft EIS Section L.1 is intended to explain that an asterisk represents sites that, if encountered during construction excavation activities, could affect construction workers, the natural environment, or the construction process. The last sentence in the paragraph under Section L.1 has been revised for clarity (see Chapter 4 of the Final EIS). The footnote to Table L-1 in the Draft EIS is accurate as written.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: L.1
DEIS Page Numbers L-14

Resulted in a change to DEIS ☒

Comment ID: 133

Please explain the difference between "Closed" and "Cond. closure" in the footnote of Table L-1

Response

A footnote has been added to define "conditional closure" at the location of the first appearance in Draft EIS Table L-1 (see Chapter 4 of the Final EIS). Conditional Closure is the regulatory status of a site where there are conditional activities that must occur in order for the site to be considered closed; presenting negligible risk for contaminants that could affect the proposed rail project.

NRE DEIS Cooperating Agency Comment Responses

Closed sites are those in which remediation activities have been completed to the satisfaction of the regulating agency such that they present a negligible risk for contaminants.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Purpose and Need

DEIS Section: M.1

DEIS Page Numbers M-2

Comment ID: 134

This section provides a variant on the purpose and need statements presented in Chapter 1.2 and Appendix D Section D.1.1. Please be consistent. The M.1 purpose statement does not include access military lands as part of the purpose, but rather that it would be a secondary effect of the project.

Response

Draft EIS Appendix M has been revised and will be re-printed in the FEIS with a consistent Purpose and Need statement to that found in Draft EIS Chapter 1. See Appendix F of the Final EIS, which is the new Section 4(f) Report.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Section 4(f) Resources

DEIS Section: M.3.1

DEIS Page Numbers M-7

Comment ID: 135

If ARRC acquires ROW from USACE, is ARRC under any obligation to participate in flood control?

What steps would ARRC take to ensure the NRE does not adversely affect operation of the flood control project or affect flood waters within the flood control channel?

Response

The Applicant has volunteered and SEA has proposed preliminary mitigation measures to address flood control. The Applicant's voluntary mitigation measures that address flood control include VM-6 and SEA preliminary mitigation measure 10 in the Draft EIS (Final EIS recommended mitigation measures VM-6 and 10), which indicate the new rail line would be designed and constructed in such a way as to maintain natural water flow and drainage patterns to the extent practicable. Voluntary mitigation measure VM-15 in the Draft EIS (Final EIS recommended mitigation measure VM-15) indicates the Applicant would coordinate with the local FNSB Floodplain Administrator to ensure that new project-related stream and floodplain crossings were appropriately designed, and SEA's preliminary mitigation measure 11 in the Draft EIS (Final EIS recommended mitigation measure 11) states that the Applicant would design all bridge structures and culverts to pass the 100-year flood event and comply with all relevant FEMA guidance, regulations, and procedures in the design and permitting of the crossings of waterbodies and floodplains with established floodway models maintained by FEMA. Further, the Applicant would abide by all reasonable requirements and conditions of the Section 404 permit.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Section 4(f) Resources

DEIS Section: M.3.1

DEIS Page Numbers M-10

Comment ID: 136

How does recognition in the FNSB Comprehensive Recreational Trails Plan affect ROW acquisition?

Response

The text in question is not found on page M-10, Section M.3.1 of the Draft EIS. However, the commenter may be referring to text on page M-7, under Ownership and Type of Section 4(f) Property. The ROW acquisition process is not affected by the trail's recognition in the FNSB Comprehensive Recreational Trails Plan; however, SEA preliminary mitigation measures 63 and 64 in the Draft EIS (Final EIS recommended mitigation measures 63 and 64) include consideration of trails designated on the FNSB Recreational Trails Map for crossings, and consultation with appropriate agencies and usergroups to determine the location of crossings and the appropriate timing for construction.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: M.3.1

DEIS Page Numbers M-17

Comment ID: 137

Where is the reserved 300-foot ROW relative to Donnelly Alternative Segments 1 and 2 and the South Common Segment? Was the location of the ROW reservation considered when developing alternatives for the NRE?

Response

As required by AS 42.40.460 and discussed in Draft EIS Section 2.3.1, ARRC would obtain a 500-foot corridor from ADNRR and following construction the width reserved for ARRC use would be reduced to 200 feet.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: M.3.1

DEIS Page Numbers M-18

Comment ID: 138

Where is the reserved 300-foot ROW relative to the South Common Segment? Was the location of the ROW considered when developing alternatives for the NRE?

Response

As required by AS 42.40.460 and discussed in Draft EIS Section 2.3.1, ARRC would obtain a 500-foot corridor from ADNRR and following construction the width transferred to ARRC would be reduced to 200 feet.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Cultural Resources

DEIS Section: M.3.3

DEIS Page Numbers M-21

Comment ID: 139

Confused why only 2 sites (XBD-293 and XBD-294) are identified that could warrant preservation in place. Table 6-1 (pages 6-8 thru 6-10) identifies 3 sites (XBD-293, XBD-294, and XBD-295), all associated with Salchaket, for which additional data would be needed to determine National Register Listing eligibility. Is there something about XBD-295 that does not fit Section 4(f)?

Response

Site XBD-295 is an abandoned truck, probably dating to the 1940s. It is outside the Area of Potential Effects and is a moveable structure, which would not warrant preservation in place.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Noise and Vibration

DEIS Section: M.4.1

DEIS Page Numbers M-22

Comment ID: 140

What about the effects of noise and vibrations on recreation?

Response

Draft EIS Section 13.2.3 discusses potential noise impacts associated with recreation. No vibration impacts associated with recreation would be anticipated.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: M.4.1

DEIS Page Numbers M-23

Comment ID: 141

Why not move the rail line slightly to avoid filling any portion of Scout Lake?

Response

As shown in Figure 13-3 in the Draft EIS, a portion of Scout Lake would need to be filled to avoid filling or crossing Piledriver Slough.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: M.4.1

DEIS Page Numbers M-23 to M-2

Comment ID: 142

Again, why would the highway be re-routed through the school and not completely avoid it? Are there grade or curvature issues that could not be met by moving the highway further to the east? Are

NRE DEIS Cooperating Agency Comment Responses

there local regulations that would prohibit a school and its associated play areas to be sandwiched between a railroad and a highway?

Response

See response to comment ID #28.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Section 4(f) Resources

DEIS Section: M.4.3

DEIS Page Numbers M-27 to M-2

Comment ID: 143

Need more information on "Feasible and Prudent Alternative." The table's footnote explains when no analysis is done, but does not explain what "yes" and "no" mean.

Response

"Yes" and "no" in Draft EIS Table M.2 answer the questions of whether or not the alternative segment meets the criteria for a feasible and prudent alternative. Federal Highway Administration provides guidance for determining whether an alternative is considered feasible and prudent. According to FHWA's Policy Paper, "an alternative is feasible if it is technically possible to design and build that alternative. An alternative may be rejected as not prudent for any of the following reasons: it does not meet the project purpose and need; it involves extraordinary operational or safety problems; there are unique problems or truly unusual factors present with it; it results in unacceptable and severe adverse social, economic, or other environmental impacts; it would cause extraordinary community disruption; it has additional construction costs of an extraordinary magnitude; or if there is an accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes. Where sufficient analysis demonstrates that a particular alternative is not feasible and prudent, the analysis or consideration of that alternative as a viable alternative comes to an end. If all alternatives use land from 4(f) resources, then an analysis must be performed to determine which alternative results in the least overall harm to the 4(f) resources. If the net harm to 4(f) resources in all the alternatives is equal, then FHWA may select any one of them. In other words, if the project proposes to use similar amounts of similar 4(f) resources, there is no alternative that would cause the least overall harm. In either situation, it is essential that the agency having jurisdiction over the 4(f) resource be consulted."

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: M.6.1

DEIS Page Numbers M-31

Comment ID: 144

Why not move the rail line slightly to avoid filling any portion of Scout Lake?

Response

As shown in Figure 13-3 in the Draft EIS, a portion of Scout Lake would need to be filled to avoid filling or crossing Piledriver Slough.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: Appendix N

DEIS Page Numbers N-1 to N-38

Comment ID: 145

The entire analysis assumes a summer setting when vegetation is green, water is blue, and trees provide visual screening. The analysis should also assess visual effects during winter. For example, what would Figure N-10 look like during winter? Since winter is 7 months long, and summer is just 3 months, winter analysis is important.

Response

The winter months are expected to result in weaker contrast rating (particularly in color contrast), so contrast rating is assessed for the summer months when the strongest visual contrast would result.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: N.1.1

DEIS Page Numbers N-12

Comment ID: 146

Very hard to see Class II colors when adjacent to the Richardson Highway (similar shading) and when in small polygons (such as around Harding Lake). Recommend using a contrasting color to depict Class II.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: N.1.2

DEIS Page Numbers N-13

Comment ID: 147

What were the specific criteria used to establish the 29 KOPs? What specific criteria were used to narrow the 29 KOPs to just 8? Might want to move this paragraph to be the 3rd paragraph in this section. That would provide general information about KOPs first, followed by the details of this analysis.

Response

See paragraph 2 on page N-14 for a description of how the 29 KOPs and 8 analyzed KOPs were chosen. If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft

NRE DEIS Cooperating Agency Comment Responses

EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: N.1.2

DEIS Page Numbers N-14

Comment ID: 148

Recommend adding to this figure the other KOPs that were established but not used for detailed analysis. Use a different icon/color than for those KOPs that were retained.

Response

Adding KOPs that were not analyzed in detail to this figure would likely confuse the reader. SEA prefers to keep the focus of the figure on the KOPs that were analyzed in detail.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: N.1.2

DEIS Page Numbers N-16

Comment ID: 149

What do the dots in the table mean (e.g., KOP 1, North Common and Eielson 1)? It appears that the dots should be checkmarks...

Response

The dots were an error; as no alternative is visible from these locations, the points are not KOPs for any alternative. If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Visual Resources

DEIS Section: N.1.2

DEIS Page Numbers N-19

Comment ID: 150

Please cross-reference Figures N-8, N-9, N-10, and N-11.

Response

If we were reprinting the entire document we would include the commenter's suggested edit, however, per CEQ regulations at 40 CFR 1503.4, the Final EIS is primarily a comment response document addressing substantive comments, therefore this edit is not included in Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: N.1.3
DEIS Page Numbers N-22 to N-24

Resulted in a change to DEIS ☐

Comment ID: 151

Consider adding a mitigation measure that would require additional visual resource assessments once locations and detailed plans are developed for permanent and temporary ancillary features.

Response

If all currently recommended mitigation measures are followed as prescribed, there are few additional mitigation measures that would safely and reasonably reduce visibility.

Cooperating Agency USACE
Topic: Visual Resources
DEIS Section: N.1.3
DEIS Page Numbers N-23

Resulted in a change to DEIS ☐

Comment ID: 152

Culverts would be set into fill discharged into waterways. While culverts might not be visible from ground level, they would be highly visible from the waterways themselves. Thus for those waters that have snowmachine and especially boat use, culverts would have a moderate visual impact.

Response

As indicated in the text, most culverts would not be visible from "frequently utilized travel areas", although they would be visible to the infrequent snowmachine or other user of the waterways.

Cooperating Agency USACE
Topic: Visual Resources
DEIS Section: N.1.3
DEIS Page Numbers N-23

Resulted in a change to DEIS ☐

Comment ID: 153

Borrow and material sites (as well as towers, access roads, and power lines) could have visual impacts to passengers on the rail line itself. Please disclose these impacts.

Response

The types of visual impacts described in the text apply to train passengers as well as viewers from any other vantage point.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: O.2.1
DEIS Page Numbers O-5

Resulted in a change to DEIS ☒

Comment ID: 154

You state that direct effects are most likely to occur for Delta Junction (among other communities),

NRE DEIS Cooperating Agency Comment Responses

yet later in the paragraph you state there are no subsistence use data available for Delta Junction. Please clarify.

Response

While subsistence use area data are not available for Delta Junction, moose harvests by Delta Junction residents within Unit 20A minor drainages overlapping the project area have been recorded. The Draft EIS has been edited. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: O.2.1
DEIS Page Numbers O-6

Resulted in a change to DEIS ☐

Comment ID: 155

Please have a figure depicting "Healy Lake lifetime use areas show considerable use of the project area." Include this figure in Appendix I.

Response

The figure is unavailable for use in the EIS. If USACE would like to review a copy, you may wish to contact EPA to ascertain the availability of SRB&A (2002).

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: O.2.1
DEIS Page Numbers O-6

Resulted in a change to DEIS ☐

Comment ID: 156

Another important effect of the NRE on biological resources is barrier or obstacle to animal movements (moose, furbearers, non-game, fish resources, etc.).

Response

Potential obstruction of fish movement is noted in the last paragraph on Page 0-6. Chapter 5 Biological Resources indicates that land animals, with the exception of small cubs, would be able to cross the rail line.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: O.2.1 and O.2.4
DEIS Page Numbers O-7 and O-1

Resulted in a change to DEIS ☒

Comment ID: 157

Since you don't have a good handle on informal traditional or recreational access routes (hence this information was asked for during the January 2009 public meetings), how can you count the number of recreation access routes per segment? What recreation access routes are you counting – established BLM trails, 4-wheeler routes, RS2477 trails, 4(f) resources? Please clarify and/or cross reference where in the EIS trails information and definitions are presented.

NRE DEIS Cooperating Agency Comment Responses

Response

The definitions of recreational resources for affected agencies are found in the Draft EIS in Section 13.2.1. The analysis of impacts to recreational resources presented in Chapter 13 of the Draft EIS utilized recreational data available from ADNR, ADF&G, and the military, as described in Section 13.2.3, under Methodology. Recreation access route intersections are identified in Table S-2 (seventh column, Land Use) in the Draft EIS. A reference to Table S-2 has been added to Section O.2.4 for clarity (see Chapter 4 of the Final EIS). Section 20.2.10 of the Draft EIS presents mitigation measures to maintain continuity of trails and access roads in order to minimize access impacts. Chapter 1 of the Final EIS discusses public access and trails.

Cooperating Agency USACE
Topic: Mitigation
DEIS Section: O.2.1
DEIS Page Numbers O-7

Resulted in a change to DEIS ☐

Comment ID: 158

This paragraph states that "Effects on subsistence access could be mitigated by placing grade crossings at appropriate intervals," yet this is not included as a mitigation measure in Chapter 20. Recommend addition of this measure.

Response

Specific suggestions for mitigation related to grade crossings at access routes are found in Section 2.10 of the Final EIS.

Cooperating Agency USACE
Topic: Purpose and Need
DEIS Section: O.2.1, O.2.3, and O.2
DEIS Page Numbers O-7, O-8, O-

Resulted in a change to DEIS ☒

Comment ID: 159

These sections provide additional variants on the purpose and need statements presented in Chapter 1.2 and Appendix D, Section 1.1. Please be consistent. In Appendix O, no mention is made of the need to access military lands, which again raises questions as to the real purpose and need for the work and the range of alternatives to meet the purpose and need.

Response

Draft EIS Appendix O has been revised with a consistent Purpose and Need statement to that found in Chapter 1. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: O.2.1 and O.2.3
DEIS Page Numbers O-8 and O-1

Resulted in a change to DEIS ☐

Comment ID: 160

Recommend reversing the two paragraphs explain the BLM policy first, then disclose the effects of

NRE DEIS Cooperating Agency Comment Responses

the proposed action using that policy.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: O.2.4
DEIS Page Numbers O-12

Resulted in a change to DEIS ☐

Comment ID: 161

Add that the NRE could act as a barrier or obstacle to the movements of some animals.

Response

Potential obstruction of fish movement is noted in the last paragraph on Page 0-6 of the Draft EIS. Draft EIS Chapter 5 Biological Resources indicates that land animals, with the exception of small cubs, would be able to cross the rail line.

Cooperating Agency USACE
Topic: Purpose and Need
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 201

We do still have substantial concerns about the description of the purpose and need, the apparent combination of two distinct projects in this analysis, the lack of non-rail alternatives, and the lack of information about projected use of the rail line, bridge design, and trail access. These concerns will have to be addressed prior to any decision regarding permit issuance under Section 404 of the Clean Water Act, and/or Section 10 of the Rivers and Harbors Act.

Response

The Northern Rail Extension involves an application by a common carrier, the Alaska Railroad Corporation (ARRC or the Applicant), for a license or approval. It is not a government-proposed or sponsored action. In cases like this, courts have held that project goals are to be determined by applicants, not the regulatory agencies preparing the EISs. [see *Roosevelt Campobello Int'l Park Comm'n v. EPA*, 684 F.2d 1041, 1046-47 (1st Cir. 1982) - EPA's choice of alternative sites for an oil refinery and deep water port was "focused by the primary objectives of the permit applicant."] In this project, ARRC has stated that the purpose of the project is to provide freight and passenger rail service to the region south of North Pole, Alaska.

As part of its review of the application, the STB will consider the transportation-related merits of ARRC's proposal along with the environmental record. The Board does not require that economic feasibility be demonstrated. Indeed, the Board's founding statute (the ICC [Interstate Commerce Commission] Termination Act of 1995) sets railroad policy and states that it is the policy of the U.S. Government to (49 United States Code [U.S.C.] 10101(4)):

NRE DEIS Cooperating Agency Comment Responses

"...ensure the development and continuation of a sound rail transportation system with effective competition among rail carriers and with other modes, to meet the needs of the public and national defense."

Under 49 U.S.C 10901(c), the Board must authorize a rail line construction project "unless the Board finds that such activities are inconsistent with the public convenience and necessity." This permissive licensing policy establishes a clear presumption in favor of rail construction proposals and conforms to the broader congressional policies mentioned above.

Regarding the comment that this is two separate projects, the rail bridge over the Tanana River has always been part of ARRC's proposed action. The Tanana River bridge would need to accommodate limited vehicular use to facilitate construction, maintenance, and emergency response for the railroad on the south side of the Tanana River. Regarding the lack of a non-rail alternative, as mentioned above, SEA has added a new row to Table 2-1 and a new discussion in Appendix D of the Draft EIS that describes the non-rail alternative (see Chapter 4 of the Final EIS). These additions describe the non-rail alternative as considered but dismissed from detailed analysis in the EIS. ARRC has not provided commuter or tourist ridership data for its proposed passenger service, but has indicated that it anticipates operating an average of four round-trip passenger trains per day between Fairbanks Intermodal Center and Delta Junction. ARRC has not indicated differences in the level of service between summer and winter. The daily traffic predictions are an annual average and allow for seasonal fluctuations and changes in demand. ARRC has indicated likely freight operations would consist of an average of one round-trip freight train per day with approximately 13,000 loaded freight cars per year. Products that could be transported by the common-carrier service include fuel, military equipment, agricultural products and equipment, mineral resource equipment, and consumer goods. The Applicant has stated that the rail line would provide an alternative to Richardson Highway as a means of transportation. Final bridge design would be conducted at a later stage in the process. Trail access comments are addressed in responses to Land Use comments. SEA received many comments on the access issue.

Cooperating Agency USACE
Topic: Summary
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 202

Summary should summarize major direct and indirect impacts for all resource areas.

Response

ADNR raised a similar comment on the Preliminary Draft EIS and SEA took measures to address the comment. The intent of the Summary is to summarize the main impacts of the Proposed Action and Alternatives. Additional information on important impacts of the project was added to the Summary in response to ADNR's comment. In light of CEQ's guidance that suggests keeping the Summary to about 15 pages, SEA tried to be concise in presenting information while being sure to include impacts that will be important to the decision-maker and the public. Most of the impact information appears in a table in the Summary to allow alternatives to be compared and to succinctly present information.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Water Resources
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 204

USACE finds the analysis of project effects at the Tanana River Bridge crossing to be insufficient. We recommend an appendix be added to the EIS in which the hydrology and hydraulic analyses (even if preliminary) for all large bridges be disclosed and discussed. The appendix could have a similar section for small bridges, if data and analyses are available.

Response

Impacts from the Tanana River crossing are included under the Tanana River Bridge crossing column of Draft EIS Table E-25a and are included in the large-bridge crossing impact discussions in Draft EIS Section 4.2.2, Environmental Consequences, under Salcha Alternative Segments. The river crossings as a whole (bridge, channel plugs, revetments, etc.) were estimated to have a "high" impact on altered flood hydraulics and increased bank scour, erosion, and channel aggradation. In Draft EIS Section 4.2.2, Environmental Consequences, a "high" impact is defined as an activity/structure that would most likely cause negative impacts under normal construction or operational activities. As stated in Draft EIS Section 4.2.2, Environmental Consequences, under Salcha Alternative Segments, detailed analyses of the Tanana River crossing has been conducted on only a preliminary level and effects to hydraulics are unknown, and it should be noted that the impact designations for the Tanana River crossings were conservatively considered "high." However, as indicated in Draft EIS Section 20.2.2, Water Resources, SEA's preliminary mitigation measure 8 indicates that prior to permitting, the Applicant would conduct detailed site-specific hydraulic analyses and modeling for the Tanana River crossings to predict changes to flow paths, velocity profiles, and scour at high-flow discharges. This mitigation measure is included in the Final EIS as recommended mitigation measure 8 in Chapter 2 Mitigation. During the permitting process the Applicant would work with the agencies on all crossing structure designs to comply with all reasonable requirements of state and federal permits.

Cooperating Agency USACE
Topic: Land Use
DEIS Section:
DEIS Page Numbers

Resulted in a change to DEIS ☐

Comment ID: 205

In general it would appear ARRC has done an incomplete job assessing trails and access, especially on the west side of the Tanana River. There are obvious conflicts between ADNR public use requirements and ARRC's management of the proposed ROW. Further, ARRC has not identified any grade-separated crossings for recreation along the entire NRE. ARRC needs to do more to assess recreational access and put forward proposed resolutions rather than just closing access. If ARRC is not able to rectify access concerns prior to the FEIS, then mitigation measures need to be included to require resolution prior to taking ownership of the ROW and prior to construction. [Note: SEA preliminary mitigation measures 55, 60, 61, and 62 in section 20.2.10, pages 20-20 and 20-21, appear to satisfy many of these concerns.]

NRE DEIS Cooperating Agency Comment Responses

Response

SEA acknowledges this comment. SEA preliminary mitigation measures 60, 61, and 62 in section 20.2.10 and recommended mitigation measures 60, 61, and 62 in the Final EIS address this concern. SEA's preliminary mitigation measure 55 in the Draft EIS has been revised in the Final EIS to include reference to AS 42.40.460 as suggested by ADNR in their comment letter on the Draft EIS (see Chapter 2 and Chapter 4 of the Final EIS).

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: S.6.1

DEIS Page Numbers S-12

Comment ID: 206

Details of overburden removal/stockpiling are needed for DA permit

Response

Comment noted. This information would be developed during final design and permitting.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Summary

DEIS Section: S.6.1

DEIS Page Numbers S-12

Comment ID: 207

These are effects on the proposed project, not impacts of the project. Throughout the document, we recommend adding sub-headings to distinguish paragraphs that discuss impacts of the environment on the project (such as failure during an earthquake or flood). These paragraphs then need to disclose what effect the environment might potentially have on the project (e.g., failure), as well as the resultant impacts to the environment (e.g., portions of the rail line falling into a waterway, which could result in contamination, fill, altered stream flow, etc.)

Response

SEA is not intending on re-printing the entire EIS, but indicating edits using an errata sheet. The suggested edit would not be meaningful in this Final EIS format.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: S.6.2

DEIS Page Numbers S-13

Comment ID: 208

Culvert impacts include most of the same impacts as bridges, as well as the additional ones listed here.

Response

This section has been revised as requested and the revisions are included in Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: S.6.2

DEIS Page Numbers S-13

Comment ID: 209

Groundwater contamination could occur from borrow areas that intercept groundwater, as well as boreholes.

Response

SEA has revised this section to include borrow areas. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: S.6.3

DEIS Page Numbers S-15

Comment ID: 210

Vegetation resources would incur secondary impacts of dust and sedimentation, which could result in additional loss; this should be included in the Summary.

Response

SEA has revised the section to include this additional potential impact information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Summary

DEIS Section: S.6.3

DEIS Page Numbers S-15

Comment ID: 211

Last sentence, use commas instead of periods between phrases.

Response

The edit has been made as suggested. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: S.6.3

DEIS Page Numbers S-15

Comment ID: 212

What about non-game wildlife?

Response

The scope of the analysis for biological resources was focused on the resources determined to be

NRE DEIS Cooperating Agency Comment Responses

greatest importance with the highest potential for impact by the NRE project. Those resources were determined to be vegetation, fisheries, game mammals, and game and protected birds as described in Draft EIS Section 5.0 Biological Resources. Some non-game species are covered in Draft EIS Appendix F, for example, while the red squirrel is technically considered a furbearer it is generally not trapped or hunted within the project area (see Draft EIS Table F-32). Aquatic animals of conservation concern are discussed in Draft EIS Section F.2.3 and supporting discussions and analysis of impacts to birds of conservation concern is presented in Draft EIS Section F.4.4. No other non-game species of conservation concern were identified during scoping as important to address in the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Summary

DEIS Section: S.6.4

DEIS Page Numbers S-17

Comment ID: 213

Add (PA) behind Programmatic Agreement if this is the first location mentioned.

Response

SEA is not intending on re-printing the entire EIS, but indicating edits using an errata sheet. The suggested edit would not be meaningful in this Final EIS format.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: S.6.5

DEIS Page Numbers S-17

Comment ID: 214

Yukon River Fisheries Management Unit 6C includes the Tanana River from Nenana to Salcha and subsistence fish harvests are reported from this unit between 1975 and 2008. The Summary (and Chapter 7) does not adequately explain/disclose why these subsistence fisheries data are collected even though they are from the Fairbanks non-subsistence area. There is almost no mention of non-moose subsistence uses/resource. Section S.6.5 seems biased towards moose.

Response

These data were not reported because while subsistence uses do occur in unit 6C, harvests of fish within the Fairbanks non-subsistence area are harvested under personal use fishery or sport regulations. Page 42 of the Alaska Subsistence Fisheries 2003 Annual Report states that the "Alaska Joint Board of Fisheries and Game has defined a portion of the Yukon River drainage as lying within the Fairbanks Nonsubsistence Area (5 AAC 99.015). Subsistence fisheries may not be authorized within non-subsistence areas; the harvest of fish for home use in these non-subsistence areas occurs under personal use and sport fishing regulations." The tables showing estimated salmon harvests from the 2003 annual report include a footnote that these salmon harvests include subsistence, personal use, and commercial harvests retained for home use.

Additional information regarding residents' berry picking, fish harvests, trapping etc., are presented in Draft EIS Appendix I. Moose was chosen as a representative subsistence species to characterize

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the affected environment variables of competition and use areas because moose harvest and locational data exist for all but one study community, it is a high profile resource, it is likely to experience many of the impacts from the NRE, and some moose migrate outside of the project area to areas where subsistence harvest may occur. This information has been added to Draft EIS Section O.2.4. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Summary
DEIS Section: S.6.6
DEIS Page Numbers S-18

Resulted in a change to DEIS ☐

Comment ID: 215

Would be more relevant to compare to CO2 emissions in FNSB, than in entire state, if data available.

Response

An inventory of CO2 emissions for the Fairbanks North Star Borough area has not been assembled to date.

Cooperating Agency USACE
Topic: Summary
DEIS Section: S.6.6
DEIS Page Numbers S-18

Resulted in a change to DEIS ☒

Comment ID: 216

In the 14th line in this paragraph, missing the word "to" in "...greatest increase compared the existing..."

Response

The edit has been made as suggested. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Summary
DEIS Section: S.6.7
DEIS Page Numbers S-18

Resulted in a change to DEIS ☒

Comment ID: 217

Not clear whether the noise receptors would experience an increase due to construction or rail operation or both. Final sentence in paragraph does not seem to agree with text earlier in paragraph.

Response

SEA has revised Draft EIS section S.6.7 on page S-18 to provide the requested clarification. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Transportation Safety and Delay

DEIS Section: S.9

DEIS Page Numbers S-19

Comment ID: 218

This paragraph states that 63 railcars of hazardous material would be hauled on the NRE annually. Please briefly disclose what material would be hauled. Also, please cross-reference where in the document hazardous materials are further discussed.

Where in the document are impacts incurred from leakage or spills discussed?

Response

Section 11.3.2 of the Draft EIS presents information on the types of hazardous materials that the Applicant anticipates would be hauled on the NRE: 42 railcars per year containing fuel (mix of gasoline and diesel fuel), 16 railcars per year containing propane, and 5 railcars per year containing chemicals (e.g., fertilizers). The potential consequences of a release are discussed under operations impacts in section 11.3.2 of the Draft EIS, and the potential effects of accidental leakage to biological and water resources are discussed under environmental consequences in Draft EIS Chapters 4 and 5.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: S.6.11

DEIS Page Numbers S-21

Comment ID: 219

Would there be a similar decrease or denial of access to subsistence users? Decreased access to hunting or other recreational activities on public lands would be a major change. What steps are being taken to ensure public notification of this pending change?

Response

Yes, there would be a similar impact to access for subsistence users, as discussed in Section S.6.11 and Chapter 7 of the Draft EIS. SEA preliminary mitigation measure 50 in the Draft EIS, as revised and included as recommended mitigation measure 50 in the Final EIS, requires the Applicant to schedule certain construction activities that could temporarily affect access to trails and waterways to occur during times of limited use or when alternative routes are most available, to the extent practicable.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: S.6.11

DEIS Page Numbers S-21

Comment ID: 220

Impacts to trails should be discussed in DEIS. How many trails? How big an impact?

Response

Impacts to trails and other recreational resources are discussed in Section 13.2.3 of the Draft EIS.

NRE DEIS Cooperating Agency Comment Responses

Draft EIS Table S-2 includes the number of trail crossings of the proposed rail line.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: S.6.13

DEIS Page Numbers S-22

Comment ID: 221

Why would Salcha Elementary have to be moved? It seems the highway could be relocated to the other side of the existing school.

Response

See response to comment ID #28.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: S.6.13

DEIS Page Numbers S-22

Comment ID: 222

Would the project have any effect on commercial fisheries?

Response

No commercial fishing occurs in the project area, but there are three commercially harvested salmon within the project area - chinook, coho, and chum. Potential impacts to these fish are disclosed in the Draft EIS Section 5.4 Fisheries and Draft EIS Appendix G Essential Fish Habitat Assessment. The primary management concern for these salmon in the Tanana River basin is maintenance and adequate returns of spawning adults to provide for commercial fisheries. To maintain maintenance and adequate returns of spawning adults, the Applicant would design and construct stream crossings so as not to impede fish passage or impact hydrologic functioning of the water body. The Applicant's voluntary mitigation measure VM-17 in the Draft EIS Section 20 Mitigation states that all permits and authorizations would be secured and reasonable requirements complied with, including the ADF&G Fish Habitat Permit. This mitigation measure continues to be recommended as mitigation measure VM-17 in Chapter 2 of the Final EIS. With this mitigation measure and design/permit requirements, the project is not expected to affect commercial fisheries.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section:

DEIS Page Numbers S-24 to S-39

Comment ID: 223

Throughout table, include as a potential impact those instances when the alignment would be inside the 100-year floodplain rather than noting when the alignment would be outside of it (e.g., page S-29).

NRE DEIS Cooperating Agency Comment Responses

Response

Draft EIS Table S-2 focuses on noteworthy differences as stated in Draft EIS Section S.6.15, Cumulative Effects. Nearly all alignments are within the floodplain, and stating this would not be consistent with the rest of the table.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers S-24 to S-39

Comment ID: 224

When quantifying impacts to raptors, state "known pair". For example on page S-31, you state "1 pair great horned owls affected." It would be more accurate to state "1 known pair great horned owls affected." We do not have reliable enough data to state that one and only one pair of great horned owls would be affected by an entire segment.

Response

SEA has revised the Draft EIS Table S-2 to include "identified" pairs of raptors to clarify impacts. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section:

DEIS Page Numbers S-24 to S-39

Comment ID: 225

Recommend adding a footnote explaining assumptions used to calculate acres of impacts to wetlands, vegetation, habitat, etc. For example: Assumed the rail would be centered in the ROW and would be x feet wide with x-foot long by x-foot wide sidings placed every x miles, that the maintenance road would parallel the entire extent of the new line, would be x feet away from it, and x feet wide and....

Response

SEA has revised the Draft EIS Section S.6.15 Cumulative Impacts to explain the ROW impact area. Some areas might not required full use of the ROW, and those lands would be restored after construction of left undisturbed if not needed. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 226

Recommend adding the following terms: "Section 4(f)," "Aggradation," "Wetland Flow-way," "Culvert Battery," "Channel Planform," and "Hyporheic Zone."

NRE DEIS Cooperating Agency Comment Responses

Response

SEA has revised the Draft EIS Glossary to include these terms. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 227

Do not use the term "fluvial" in the definition of alluvial – if someone doesn't know alluvial, they won't know fluvial either.

Response

SEA has revised the Draft EIS Glossary to include the term fluvial. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 228

Is this term a typo? The definition seems valid, but not the term being defined.

Response

SEA acknowledges this comment. The term "consist" is not a typo.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section:

DEIS Page Numbers

Comment ID: 229

Recommend deleting this term from the Glossary, and simply defining wapiti in the text when it is used (as was done in Chapter 6.2.1 on page 6-1).

Response

SEA has revised the Draft EIS Glossary deleting this term. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Purpose and Need

DEIS Section: 1.3.2

DEIS Page Numbers 1-5

Comment ID: 232

Recommend changing this sentence to read "USACE may use this EIS to fulfill its NEPA requirements...".

NRE DEIS Cooperating Agency Comment Responses

Response

Text edited to reflect comment, please see Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Purpose and Need

DEIS Section: After section 1.5

DEIS Page Numbers 1-10

Comment ID: 233

Recommend table be moved to end of Section 1.4.2 on page 1-9.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Purpose and Need

DEIS Section: 1.5

DEIS Page Numbers 1-9 to 1-10

Comment ID: 234

Add a sentence explaining how direct, indirect, and cumulative effects are handled within the document.

Response

SEA has revised the text to explain how impacts are evaluated and assessed within the document. (See Chapter 4 of the Final EIS.) The EIS describes the proposed action and alternatives, existing environmental conditions, and potential environmental impacts associated with the proposed action and alternatives. Environmental impacts are evaluated and assessed by resource category (e.g., water resources, biological resources, etc.) and are discussed in the impact section of each affected resource chapter. Cumulative environmental impacts for each affected resource are evaluated and assessed collectively in the Cumulative Impacts Chapter.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.1

DEIS Page Numbers 2-1

Comment ID: 235

Discussion on the need for the rail extension for expanded use of military training lands seems overemphasized.

This document does not adequately address the existing need for rail service to Delta (especially business, industry, and community need and passenger/tourism need). At a minimum, equal discussion should be provided on the two aspects of the project purpose: access to military training

NRE DEIS Cooperating Agency Comment Responses

areas, and providing rail service between North Pole and Delta Junction.

Response

According to ARRC, the purpose of the rail line is to provide a ground transportation alternative to the Richardson Highway between Fairbanks and Delta Junction for commercial freight and passenger service for businesses, the military, and communities. The rail line would provide access to military training areas by enabling year-round access to the Tanana Flats and Donnelly training areas on the southwestern side of the Tanana River. The rail line would also make passenger service available from Fairbanks to Delta Junction for residents, military personnel and their families, and contractors. Passenger service would facilitate travel in the area for work, shopping, medical, educational, or other reasons. In addition, the new rail line would enable transport of freight which could include aggregate, agricultural products, building supplies, fertilizer, forest products, petroleum products, equipment, food supplies, and vehicles. SEA believes the background discussion about military activities is appropriate to put the potential military use of the rail line in context for the reader.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.1

DEIS Page Numbers 2-1

Comment ID: 236

Recommend a more equal discussion of the dual-modal bridge over the Tanana and the 80-miles of rail extension, in accordance with the stated purpose of the proposed project. Also, need to discuss why dual-modal bridge is proposed only for Tanana bridge. Wouldn't same purpose (year-round access to Donnelly and Tanana Training Areas) be served by dual-modal bridges across Delta River and Delta Creek? Would the footprint of the dual-modal bridge be any different than a purely rail bridge?

Response

In general, dual-modal bridges are avoided by ARRC due to the strict safety and operating regulatory environment under which the ARRC is subject. A dual-modal bridge is proposed for the Tanana River Bridge as a result of several specific factors, which include available utilities for required monitoring systems, immediate access to a maintenance facility, availability of personnel staffing, constructability in relation to anadromous fish passage, the hydraulic considerations of the river, flood water, bed load, ice and debris loads, and the need to use the bridge during project construction. As a result of the conditions present at the Delta River and Delta Creek crossings, dual-modal bridges at these locations are not feasible, practicable or advisable. The footprint of the dual-modal bridge would not be any different than a purely rail bridge. The controlling foundation design criteria is the railroad loading.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.1

DEIS Page Numbers 2-7

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 237

Further discussion of the differences between Class 5 and other class standards would be helpful in determining alignment flexibility.

Response

The Applicant has proposed to construct the rail line to Class 5 standards. It is not SEA's roll to change the Applicant's stated goal of providing a transit time between Fairbanks and Delta Junction that would be equal to or less than the drive time on the Richardson Highway. This transit time goal would require a Class 5 rail line.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-8

Comment ID: 238

Since there is an ADOT project for a grade separation of the Richardson Hwy from the ARRC crossing, practicability of this alternative should not be based on the current grade crossing.

Response

Draft EIS Table 2-1 has been revised to eliminate mention of the Richardson Highway grade crossing. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-8

Comment ID: 239

Access to military lands is not required under the purpose statement of rail service to Delta from North Pole. This argument does not seem to be a valid reason for dismissing the alternative (hilly topography is, however).

Response

As indicated in Section 1.2 of the Draft EIS, the Applicant proposes to extend freight and passenger rail service to Delta Junction. Potential customers include the Tanana Flats Training Area and the Donnelly Training Area. The discussion in Section 1.2 has been revised in Chapter 4 of the Final EIS to incorporate military input.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-9

Comment ID: 240

Recommend "Non-Rail" alternative be listed separately. While non-rail does not meet the stated purpose of providing common carrier rail service, the Corps would need to consider such an

NRE DEIS Cooperating Agency Comment Responses

alternative if a permit application is received.

Response

Draft EIS Table 2-1 and Draft EIS Section D.2 have been revised to list a non-rail alternative separately. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 2.3.1
DEIS Page Numbers 2-7

Resulted in a change to DEIS ☐

Comment ID: 241

Why would there not be vehicle access over the Salcha and Delta Rivers? Would rail line maintenance access be provided by existing roads?

Response

Vehicle access is not proposed over the Salcha and Delta Rivers because it would not be necessary based on the purpose and need for the project. Further, vehicle access over rivers east of the Tanana is not necessary because there is sufficient existing access to accommodate construction and operation in these areas. As described in Section 2.3.3 of the Draft EIS, rail line maintenance access would be provided via the rail line access road that parallels the rail line.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 2.3.1
DEIS Page Numbers 2-7

Resulted in a change to DEIS ☒

Comment ID: 242

Recommend cross-referencing the section in the EIS where private land acquisition is discussed in more detail.

Response

Section 2.3.1 of the Draft EIS has been clarified to indicate that ARRC's acquisition would be subject to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 for all displacement and relocation activities (see Chapter 4 of the Final EIS). The Applicant does have the authority under AS 42.40.385 to acquire property for railroad transportation purposes by eminent domain. However, only ARRC's Board can authorize acquisition by eminent domain through approval of a decisional document detailing that action. Separate from AS 42.40.385, any Board licensing as a common carrier line would also give the Applicant condemnation authority. If the Applicant chose to exercise this authority, any condemnation proceedings would need to occur pursuant to state condemnation laws.

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section:
DEIS Page Numbers 2-10

Resulted in a change to DEIS ☐

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 243

Why does the typical cross section differ between one side of the Tanana and the other? The development plan depicted in the bottom section (i.e., "West Side") would appear to have a larger footprint (thus more direct impacts) than would occur on the "East Side." Under Section 404 of the CWA, the footprint needs to be the smallest practicable.

Response

The differences between the ROW facilities anticipated on the east and west sides of the Tanana River are explained in Section 2.3.3 of the Draft EIS. A wider road with greater separation from the rail line is required west of the Tanana River to provide for material transport along the long linear ROW during construction and subsequent safe use by non-rail utility vehicles and military vehicles.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.2

DEIS Page Numbers 2-22

Comment ID: 244

The last sentence under Central Alternative Segment 1 states that Central Alternative Segment 1 would not connect to Donnelly Alternative Segment 2 due to "terrain considerations." These considerations are not readily apparent or otherwise discussed. Since this significantly affects the range of alternatives, a more complete explanation is required, and should be provided in the Summary, Section 2.2.2, and Appendix D.

Response

Connecting Central Alternative Segment 1 to Donnelly Alternative Segment 2 would require the rail line to climb 75 to 100 feet in elevation from the Salcha segment only to return to river elevation. As this would substantially increase the foot print of the project and energy use during operation, it would not be a practicable alternative that would warrant detailed analysis.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 2.3.2

DEIS Page Numbers 2-20

Comment ID: 245

The discussion of the Delta Creek paleochannel implies that the channel could only become active during periods of high flow. In braided glacial streams such as this waterway, there is also a relatively high likelihood of avulsion into the paleochannel.

Response

SEA has revised the Draft EIS Section 2.3.2 to include this additional information. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-22

Comment ID: 246

Recommend adding a sentence or two about Delta Alternative Segment 2 – where it would cross the river and whether it would impact private lands. Treat each alternative equally.

Response

A revised discussion of Delta Alternative Segment 2 has been included for this section in Chapter 4 of the Final EIS. Potential land use impacts are addressed in Chapter 11 of the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: 2.3.3

DEIS Page Numbers 2-22

Comment ID: 247

“The access road would be constructed before the rail line.” The entire access road would be built in advance? Or would segments of the access road be built in advance of segments of rail line? How would the project be phased? We wouldn’t want funds expended on a road without assurance of the rail line.

Response

As discussed in Section 2.3.3 of the Draft EIS, under Construction Schedule, the exact phasing of construction is not known at this time. In their letter to SEA dated February 20, 2009, Applicants have stated that due to the need to move all traffic over a long linear corridor, the only safe course is to separate the traffic into two separate one-way lanes. East-bound traffic would utilize the proposed separate access road, and west- bound traffic would utilize the proposed railroad grade. The access road and the rail bed would be constructed concurrently, as both routes would be utilized for construction traffic.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: 2.3.3

DEIS Page Numbers 2-22

Comment ID: 248

It is not clear why a 13-foot road is acceptable on the east side of the river but a 24-foot wide road is needed on the west. If the road needs to be wider to accommodate construction equipment, that should be stated.

Response

Section 2.3.3 of the Draft EIS explains that the east side of the Tanana River is currently improved with multiple existing roadway access points, and so would only require the addition of a 13-foot-wide gravel road to accommodate the proposed action. This section also explains that the west side of the Tanana River is a remote area with difficult terrain that is not improved with any road

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infrastructure, and would require the addition of a 24-foot-wide permanent all season access road to overcome the difficult terrain to accommodate the proposed action and to accommodate two-way construction traffic (as described in response to USACE comment 247 above and in ARRC's letter to SEA dated February 20, 2009).

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-23

Comment ID: 249

Correct typo: "the military could also sue the road" should read "use the road."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers

Comment ID: 250

Why would the offset be 40 feet or greater? Would there be places where the offset would be less? If no offset is needed on the east side of the river, why would it be needed on the west side? This is not adequately explained.

Response

The differences between the ROW facilities anticipated on the east and west sides of the Tanana River are discussed in Section 2.3.3 of the Draft EIS. A wider road with greater separation from the rail line is required west of the Tanana River to provide for material transport along the long linear ROW during construction and subsequent safe use by non-rail utility vehicles and military vehicles. ARRC anticipates using large (~ 20 feet wide) construction equipment. The discussion in this section has been revised for clarification. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-23

Comment ID: 251

In some areas (e.g., permafrost-laden soils), excavating and backfilling would not be recommended. This should be disclosed here.

NRE DEIS Cooperating Agency Comment Responses

Response

This section has been revised under Acquisition of Materials for Rail Line Construction. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-23 to 2-24

Comment ID: 252

How was the optimum distance between material sites (3-5 miles) determined? How was the maximum depth of 20' determined? Material sites in the Fairbanks area are frequently excavated to depths of 40-60'. Were existing material sites investigated for the North Common, Eielson and Salcha alternatives? Why or why not? Recommend further discussion. Does the applicant have any existing information to ensure the correct types and volumes of material are present along the rail line? Even if specific borrow areas have not been identified, is it reasonable to presume the requisite material exists and that these sites could be developed with success? Without any additional information, this seems overly speculative. Does the Curry quarry have sufficient volume of armor rock/shot rock to complete any one of the four Tanana River bridge crossing alternatives? If not, are there other sources of the material? Would the lack of material preclude any of the crossing options? Please disclose out-of-project-area borrow and quarry site development impacts, e.g., at the Curry quarry.

Response

The Applicant indicated that ADOT&PF typically locates borrow sites at intervals of five miles or less, but given the abundant granular material suitable for subgrade construction (based on geotechnical review prepared by Duane Miller & Associates for ARRC), ARRC anticipates a more frequent spacing to reduce haul distances. ARRC indicated that the anticipated borrow site excavation depth of 20 feet was based on ADOT&PF typical practice. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-24

Comment ID: 253

Please include and reference a Figure(s) showing the locations of the Eielson Construction Staging Area and Delta Construction Staging Area.

How were the sizes of the staging areas and construction camps determined? Are these minimum or maximum potential areas?

Response

The Eielson staging area is shown in Figure 4-3 of the Draft EIS and the Delta staging area is shown in Figure 4-7 of the Draft EIS. ARRC estimated the area required and indicated that actual area required could be less.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-25

Comment ID: 254

Potential construction of the Tanana River bridge prior to any rail line implies independent utility. If the bridge is a stand-alone project, or has the potential to be a stand-alone project, then it may require its own environmental analysis.

Response

The Eielson staging area is shown in Figure 4-3 of the Draft EIS and the Delta staging area is shown in Figure 4-7 of the Draft EIS. ARRC estimated the area required and indicated that actual area required could be less.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-25

Comment ID: 255

Please include a Figure(s) showing the proposed locations of these camps, and cross-reference the figure(s) in the text. If the precise location has not been identified, the general location should be depicted.

Response

The general location of potential construction camps is described in the Draft EIS. Please note that construction camps would not be sited until an alternative has been selected. As such, the figures can not be changed to accommodate this request.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-28

Comment ID: 256

This paragraph states that in general, conveyances were sized to equal or exceed the measured channel width or 90% of bank full width. However, on page 2-33, paragraph 7, and throughout Chapter 4, the discussion indicates that both bridges and culverts were designed to convey 100-year flows, and that the majority of the channel would be filled. This should be reconciled. The Corps supports the design criteria used in this paragraph, rather than the 100-year flow conveyance standard.

Response

As stated in Section 2.3.3 of the Draft EIS, for preliminary design purposes, ARRC generally proposed conveyances, using the information available at the time, to meet or exceed the measured channel width or 90% of bank full width. In some cases, such as larger bridges, alternative designs

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were developed. Regardless, all structures would convey a 100-year flood event. The exact design of these conveyances would be determined during final design and permitting, as indicated on page 2-28 of the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-28

Comment ID: 257

Do these numbers reflect just the bridges and culverts for the rail line, or both the rail line and the access road? The numbers of additional crossings for the access road should be disclosed in this table or in a similar table at this location in the document.

Response

As indicated in the title of Table 2-3 in the Draft EIS, the numbers reflect just rail crossings. The sentence immediately above the Table 2-3 in the Draft EIS indicates that bridges and culverts would also be constructed for vehicles for alternative segments on the west side of the Tanana River.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-29

Comment ID: 258

Was a full span of the entire river channel considered? If so, why was it rejected? Reasons for rejection should be clearly explained. What cost threshold was used to eliminate the alternative, and why? Would a cost difference of \$50 million be practicable? If cost alone was the reason for rejection, a full-span bridge would still be a reasonable alternative that should be analyzed in the EIS. Other constructability constraints (e.g., grade) could remove it from consideration.

Response

A reasonable range of alternatives was selected for analysis, as required by NEPA. A cost-prohibitive alternative is not a reasonable and feasible alternative.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-29

Comment ID: 259

Although the 6100 foot span would be more expensive, it still appears to be a reasonable alternative that should be analyzed under NEPA, unless there are other constructability constraints (e.g., grade).

Response

A reasonable range of alternatives was selected for analysis, as required by NEPA. A cost-prohibitive alternative is not a reasonable and feasible alternative.

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Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-33

Comment ID: 260

It seems that the dual modal design proposed for the Tanana River crossing could be utilized for all bridge crossings, thus greatly minimizing the impacts to waterbodies. Please discuss why this would not be a practicable alternative for construction and maintenance of the rail line west of the Tanana River.

Response

The Applicant intends to provide for directional traffic along the long linear ROW west of the Tanana during construction, with vehicles traveling in one direction on the road in the other direction on the rail bed. During operation, use of multiple road-rail bridges by non-rail vehicles would create a safety hazard.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-37

Comment ID: 261

If the Tanana River Bridge is constructed "years" in advance of the rail line, then there appears to be a separate purpose and need for the bridge and its impacts and permits should be analyzed and considered separately.

Response

The Eielson staging area is shown in Figure 4-3 of the Draft EIS and the Delta staging area is shown in Figure 4-7 of the Draft EIS. ARRC estimated the area required and indicated that actual area required could be less.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.3

DEIS Page Numbers 2-38

Comment ID: 262

What are the design/footprint implications for grade separations at trail crossings? Why are grade separations not proposed for other crossings?

What are the estimated sizes of the additional staging areas for grade separation projects?

Response

The Applicant anticipates that grade separations at trail crossings would typically be accomplished using a culvert under the rail line, which would not increase the project footprint. To be conservative, the analysis of potential impacts assumes that the entire 200-foot ROW would be

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disturbed, and SEA believes this is sufficient to address grade separation.

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Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.4

DEIS Page Numbers 2-39

Comment ID: 263

Difficult to read – recommend improving colors, contrast, and/or scale.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.4

DEIS Page Numbers 2-41

Comment ID: 264

Please define the term "Section Facilities" in the text and/or in the glossary. What would be the estimated sizes of these facilities? Please add figures showing their proposed locations.

Response

A Section Facility is a maintenance facility. If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested definition. ARRC has not indicated the size or exact location of the anticipated facilities, which would be determined during final design. Figures have been revised to show available information on ancillary facilities. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.4

DEIS Page Numbers 2-41

Comment ID: 265

Please add figures showing the proposed locations of these sites. If specific locations are not known, the figures should depict the general area under consideration for the sites.

What would be the estimated widths of any newly constructed access roads to communications sites?

Response

Draft EIS Figures 4-3, 4-4, and 4-7 show the anticipated location of new communication towers.

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The footprint of access roads would be determined during final design.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 2.3.4
DEIS Page Numbers 2-1

Resulted in a change to DEIS ☐

Comment ID: 266

Would the ADNR winter trail be upgraded to an access road? If not, how would access be obtained outside winter months?

Response

The Applicant does not anticipate upgrading the ADNR winter trail even if the ADNR winter trail were incorporated into access plans. The Applicant does not anticipate access being hindered during the summer months without the trail upgrade based on experience in other remote areas along ARRC's system.

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section: 2.3.4
DEIS Page Numbers 2-41 to 2-42

Resulted in a change to DEIS ☒

Comment ID: 267

What does "in-clear length" mean?
Provide drawings of a typical siding.

Response

"In clear" siding length is the length of the train that the siding can accommodate without interfering with operations on the main line. A drawing showing a siding would not look appreciably different than Figure 2-4 in the Draft EIS. An explanation of "in clear" sidings has been added to this section. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section: 2.3.4
DEIS Page Numbers 2-42

Resulted in a change to DEIS ☐

Comment ID: 268

If the need for military offloading facilities is not certain, how is it that the purpose and need and background statements in the EIS discuss military activities and growth as if there is need? Is the military on board with this project or not? Disclose the extent of expressed (not presumed) military need.

Response

The military has not developed plans for exactly what it would ship using the rail line and so does not currently know what type of facilities could be required or where they would be located.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Proposed Action and Alternatives

DEIS Section: 2.3.4

DEIS Page Numbers 2-42

Comment ID: 269

Please disclose from what data the estimates of freight and passenger train frequency were derived.

Would train frequency expect to vary by season? For example, it would seem passenger demand might be lower in winter than in summer (when we have an influx of tourists), resulting in the need for fewer trains.

Response

ARRC based the passenger traffic estimate on an assumption of 4 round trips per day out and back (two in the morning and two in the evening), which represents the base minimum practicable passenger service to provide any certainty of ridership. This level of passenger service totals 1,460 round trips per year, or 2,920 one way train passes. ARRC based the commercial freight estimate on data maintained by the railroad that indicates that annually, approximately 750 carloads of commercial freight is taken to Fairbanks by ARRC and then trucked to the Delta Junction area. Therefore, it is reasonable to assume that if rail service were available to Delta Junction, this freight would instead be taken by rail instead of by truck. The freight traffic would generally be going twice (two round trips) per week or 4 train passes per week. This would amount to 104 round trips per year (208 train passes per year). In addition, ARRC estimated 77 round trips (154 train passes) per year for military deployments, for a total of, on average 9 train passes per day. The 10 train passes per day presented in the Petition for Exemption provides a conservative projection of rail traffic.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section: 2.4.1

DEIS Page Numbers 2-43

Comment ID: 270

Add sentence or two about earthquake-induced impacts

Response

This section has been revised as requested and the revisions are included in the Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 2.4.2

DEIS Page Numbers 2-44

Comment ID: 271

Discussion on water quality is very cursory. Would fill and other materials introduced from material sites and quarries (some quite far from the project site) have the potential to introduce contaminants? Would there be any potential impacts to water quality from petrochemicals, de-icing

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compounds, etc. during rail construction and/or operations? Would there be any potential effects on the temperatures of surface waters?

Response

Draft EIS Section 2.4 briefly summarizes potential impacts identified in the resource chapters. For additional information on potential water quality impacts see Draft EIS Section 4.4, Water Quality, and Section 5.4, Fisheries.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 2.4.2
DEIS Page Numbers 2-45

Resulted in a change to DEIS ☐

Comment ID: 272

Describe the nature of the wetland impacts, in addition to the acreages.

Response

The nature of wetland impacts are discussed in the Draft EIS Section 4.5, Wetlands. Because we are not reprinting the Summary in the Final EIS, SEA is not expanding the Summary discussion for inclusion in the Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 2.4.3
DEIS Page Numbers 2-45 to 2-46

Resulted in a change to DEIS ☐

Comment ID: 273

Any potential for fragmentation of vegetative communities?
Additional losses of plants and plant communities could be incurred through dust deposition.

Response

Fragmentation of vegetation communities is discussed in Draft EIS Section 5.3.2 Environmental Consequences; dust deposition is also discussed here. Fragmentation is addressed primarily as a wildlife habitat impact in Draft EIS Section 5.5.2 Environmental Consequences; Section 5.6.2 Environmental Consequences; and Appendix F.3.2 Environmental Consequences.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 2.4.3
DEIS Page Numbers 2-46

Resulted in a change to DEIS ☐

Comment ID: 274

Impacts to non-game species should also be discussed.
Noise and other effects of construction and operation activities (e.g., human presence) could disturb or displace individuals.
The rail line and access road could act as a barrier, limiting or altering movement

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Response

The scope of the analysis for biological resources was focused on the resources determined to be of greatest importance with the highest potential for impact by the NRE project. Those resources were determined to be vegetation, fisheries, game mammals, and game and protected birds as described in the Draft EIS Section 5.0 Biological Resources. Some non-game species are covered in the Draft EIS Appendix F, for example, while the red squirrel is technically considered a furbearer it is generally not trapped or hunted within the project area (see Draft EIS Table F-32). Aquatic animals of conservation concern are discussed in Draft EIS Section F.2.3 and supporting discussions and analysis of impacts to birds of conservation concern is presented in Draft EIS Section F.4.4. No other non-game species were identified during scoping as important to address in the Draft EIS. In general, all large mammals and birds would be expected to successfully cross the rail line unless they were hit by a train or collided with a power line (Draft EIS Sections 5.5.2 and 5.6.2). Some small mammals could be blocked from crossing the rail line, but movements of small mammals through culverts and under bridges across streams would be expected. Draft EIS Section 20.2.3 describes SEA's preliminary mitigation measures to minimize potential impacts on animal movements, including a measure within #32 (use marking techniques such as balls or flappers to increase the visibility of transmission lines, especially in areas where sandhill cranes and bald eagles would be likely to roost, forage, or nest) and within #43 (designing, constructing, and operating all aspects of the rail line to minimize significant alteration of moose and other wildlife movement and migration patterns). See recommended mitigation measures 32 and 43 in Chapter 2 of the Final EIS.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 2.4.3
DEIS Page Numbers 2-46 to 2-47

Resulted in a change to DEIS ☒

Comment ID: 275

Recommend using the word "known" when discussing raptor nests; our data set is not good enough to be confident these are the only nesting pairs – they are the only known nesting pairs. Carry "known" throughout document, especially Chapter 5.6.
Noise and other effects of construction and operation activities (e.g., human presence) could disturb or displace individuals or breeding pairs.

Response

SEA has revised the Draft EIS Table 2-5 to clarify impacts to raptors by noting "identified" bird pairs and Section 2.4.3 to include potential noise impacts. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: 2.4.5
DEIS Page Numbers 2-48

Resulted in a change to DEIS ☐

Comment ID: 276

This paragraph is confusing. If the entire project area is within the Fairbanks non-subsistence area and any harvests within the area do not qualify as subsistence, then how could there be impacts on subsistence? Perhaps "subsistence" needs to be defined here in the text. Are there differences

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between State and Federal lands? Are subsistence activities occurring even if they are technically not counted as subsistence because they occur in the Fairbanks non-subsistence area?

Response

As stated in Section 7.2 of the Draft EIS all harvest of wildlife and fish in the project area do not qualify as subsistence activities and are instead managed under general sport hunting regulations or by personal use or sport fishing regulations because the project is in a nonsubsistence area. However, subsistence users may harvest subsistence resources that migrate through or use the project area from locations outside of the state-designated nonsubsistence area. A further explanation of the difference between state and Federal lands can also be found in this Chapter 7 of the Draft EIS.

Cooperating Agency USACE
Topic: Navigation
DEIS Section: 2.4.10
DEIS Page Numbers 2-50

Resulted in a change to DEIS ☒

Comment ID: 277

Include the potential for closure or limited access to navigable waters as a temporary impact during construction.

Response

Section 2.4.10 of the Draft EIS, Navigation, includes a statement characterizing temporary construction impacts. The Draft EIS has been updated to include changes to access as follows, "Any temporary, construction-related impacts on commercial or personal navigation in these waterways, such as changes to access, would depend on the types of crafts using the waterway and the timing of bridge construction." See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Proposed Action and Alternatives
DEIS Section: 2.4.10
DEIS Page Numbers 2-50

Resulted in a change to DEIS ☐

Comment ID: 278

"ADF&W" should read ADF&G"

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Section 4(f) Resources
DEIS Section: 2.4.11
DEIS Page Numbers 2-51

Resulted in a change to DEIS ☒

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 279

Insert "U.S. Department of Transportation Act" before first mention of Section 4(f)

Response

The first sentence in this section under Section 4(f) Resources in the Draft EIS has been edited as suggested. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Land Use

DEIS Section: 2.4.11

DEIS Page Numbers 2-51

Comment ID: 280

Would any hazardous materials be transported via the rail or access road during construction or operation? If so, disclose the type, amount, source, and potential impacts.

Response

Transportation of hazardous materials on the rail extension is addressed in Section 11.3 of the Draft EIS. SEA is not aware of any specific plans to transport hazardous materials on the access road, but assumes that fuel for construction vehicles could be transported on the access road during construction. Potential impacts from hazardous materials spills also are discussed in Chapters 4 and 5 of the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Proposed Action and Alternatives

DEIS Section:

DEIS Page Numbers 2-53 to 2-63

Comment ID: 281

Same three comments as for Table S-2, above

Response

(1) Indicating when a segment would be in the floodplain would contradict the statement introducing Draft EIS Table 2-5 that indicates the purpose of the table is to highlight differences, not present every impact. (2) added "identified pair" as appropriate to Draft EIS Table 2-5 (see Chapter 4 of the Final EIS). (3) Added footnote to Table 2-5 from the Draft EIS to explain basis for acreage calculation (see Chapter 4 of the Final EIS).

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Topography, Geology, and Soils

DEIS Section: 3.4

DEIS Page Numbers 3-6 to 3-9

Comment ID: 282

Would appreciate a Figure showing mapped soil series in the project area.

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Response

Because the Final EIS will be primarily a comment response document, SEA plans to include only substantive changes in the errata to the Draft. In addition, SEA does not have the soils information available in an electronic form that would facilitate development of figures showing soils. Draft EIS Table 3-2 describes the soil units, and soil units traversed by alternative segments are listed under Construction Impacts by Alternative Segment.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Topography, Geology, and Soils

DEIS Section: 3.4.2

DEIS Page Numbers 3-7

Comment ID: 283

Equipment maneuvering in temporary work areas could compact soils. Since temporary work areas are to be restored, how would soil compaction be addressed?

What are the estimated acreages of impacts by soil type per rail segment?

Response

Methods of restoring compacted soils in temporary work areas would be determined during final design. SEA does not have soils information in an electronic form that would allow a calculation of acreages of impacts by soil type per rail segment.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Topography, Geology, and Soils

DEIS Section: 3.5.2

DEIS Page Numbers 3-10 to 3-11

Comment ID: 284

Should overburden be removed, where would it go? In other words, what are the indirect impacts of overburden removal.

Response

ARRC does not anticipate a need to dispose of overburden outside the ROW or disturbed areas, such as materials sites. The analysis assumes that these sites would be disturbed by construction of the rail line, with or without the disposal of excess overburden.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Topography, Geology, and Soils

DEIS Section: 3.5.2

DEIS Page Numbers 3-11

Comment ID: 285

The header over the column on the right should be edited for clarity – recommend removing the phrase “(ice content)”.

Response

SEA has revised Draft EIS Table 3-4 to remove the phrase "ice content." See Chapter 4 of the Final

NRE DEIS Cooperating Agency Comment Responses

EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Topography, Geology, and Soils

DEIS Section: 3.6.2

DEIS Page Numbers 3-15

Comment ID: 286

What effects would an earthquake have on the large bridges, especially that across the Tanana River?

Is ARRC required to engineer the rail line, bridges, and/or access road to meet a maximum potential or a design-standard earthquake?

Response

ARRC has stated in its voluntary mitigation measures (preliminary mitigation measure VM-2 in Chapter 20 of the Draft EIS, which is included as recommended mitigation measure VM-2 in the Final EIS) that the rail line would be designed in accordance with engineering criteria related to seismic events and other geological hazards to comply with applicable design codes. ARRC has stated that the project would be designed in accordance with the latest applicable seismic codes, taking into account the region's potential earthquake activity, and to mitigate potential damage to bridges and tracks.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Topography, Geology, and Soils

DEIS Section: 3.6.2

DEIS Page Numbers 3-15

Comment ID: 287

In the 7th line, missing a word in "...Alternative Segment 2, which would within the Salcha..."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4

DEIS Page Numbers 4-1

Comment ID: 288

In the first line, missing the word "to" in "...impacts to water resources due proposed..."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as

NRE DEIS Cooperating Agency Comment Responses

required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.1.1

DEIS Page Numbers 4-1

Comment ID: 289

Clarify that the two Executive Orders are not administered by the US Army Corp of Engineers, but are independently required for federally funded, managed, or permitted actions.

Response

SEA has revised this section to clarify the Corps role with these Executive Orders. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.1

DEIS Page Numbers 4-1 to 4-2

Comment ID: 290

Distinguish the roles of these two agencies re: Section 402 CWA roles and responsibilities.

Response

SEA has revised the Draft EIS Section 4.1.1, Federal Agency Regulations to clarify the role of the EPA and the USACE. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.2

DEIS Page Numbers 4-3

Comment ID: 291

Recommend darkening the hatched lines depicting "Tanana River Valley and Major Tributaries" because it is hard to see the pattern where it is adjacent to the Tanana River.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.2
DEIS Page Numbers 4-4

Resulted in a change to DEIS ☒

Comment ID: 292

It would seem feasible to estimate drainage areas for all major streams and rivers, using available data and GIS. Recommend replacing ND with estimates for Piledriver Slough, Moose Creek, Twenty-three Mile Slough, Providence Creek and Jarvis Creek, or provide explanation why data is not available.

Response

SEA has revised Draft EIS Section 4.2.1, Affected Environment, to include estimated drainage areas (see Chapter 4 of the Final EIS). Drainage areas for these rivers/creeks were not determined by ARRC. The drainage areas for Piledriver and Twentythree Mile sloughs are not readily determined as they both sometimes receive overflows from the Tanana River during break-up and/or seasonally high flows. Providence Creek, Moose Creek and Jarvis Creek would not be crossed by any of the alternatives, so it is not necessary to estimate the drainage areas for these creeks. We estimate Moose Creek's drainage area at approximately 57 square miles, Jarvis Creek's at 204 square miles, and Providence at 6 square miles (although the watershed is difficult to delineate in the Tanana River floodplain).

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.2.1
DEIS Page Numbers 4-5

Resulted in a change to DEIS ☐

Comment ID: 293

Typo in middle of paragraph: "Lakes and ponds are found...for to supply water." Delete either "for" or "to."

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.2.1
DEIS Page Numbers 4-5

Resulted in a change to DEIS ☒

Comment ID: 294

These oxbow ponds usually transition to wetlands as they accumulate organics and sediment. This should be mentioned here.

Response

SEA has revised Draft EIS Section 4.2.1, Affected Environment, to include this information. See

NRE DEIS Cooperating Agency Comment Responses

Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-9

Comment ID: 295

Wells would be a more likely source of potable water at camps than rivers, lakes, and ponds.

Response

SEA acknowledges this comment. The Applicant has not indicated whether surface or ground water sources would be used, so the potential impacts of both are discussed.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-12

Comment ID: 296

Not clear why the footnote for Wetland Flow-way is necessary or useful. Recommend removal.

Response

The definition of wetland presented in these tables is not the same as the definition of National Wetland Inventory (NWI) wetlands that are presented and discussed in Draft EIS Section 4.5, Wetlands. SEA wanted to make sure this was clear in order to avoid confusion with the types of waterbodies presented in both sections.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-13

Comment ID: 297

Were other design considerations given to this crossing that would result in fewer impacts? Why restrict flow from 35 to 20 feet?

"The proposed battery culvert would cause some construction at the crossing site because the bankfull width of the channel would be reduced from 35 feet to less than 20 feet by the use of two 10-foot-diameter culverts." "...could cause backwaters to form upstream, which would increase the potential for flooding and sediment deposition upstream, and/or channel scour downstream..."

In instances like this, it seems battery culverts are inadequate and not the best design. Need to find out why other crossing designs were not proposed at this and other locations of similar impact. See also comment regarding Bridges and Culverts in Section 2.3.3, above.

Response

Proposed structures crossing smaller streams as presented in the Draft EIS represent initial estimates based upon information available at the time of preliminary design. These crossing arrangements

NRE DEIS Cooperating Agency Comment Responses

would be revisited during final design and permitting, fully taking into account environmental and hydraulic concerns, to reduce the adverse impacts described in the Draft EIS. Further, it is standard railroad design practice to maintain existing flow patterns and to pass the modeled 100-year flood event.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-16

Comment ID: 298

It appears from Figure 4-3 that a minor relocation of this alignment (Eielson Alt. 3) could substantially reduce the number of crossings. Please discuss.

Response

The precise location would be subject to final design and permitting. The location of Eielson Alternative Segment 3 is limited to the east by Eielson AFB and Richardson Highway, and shifting the segment to the west could result in additional crossings of Piledriver Slough.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-16 to 4-20

Comment ID: 299

Need to disclose the impacts of channel plugs, channel modifications, and revetments that would be constructed as part of either Tanana River bridge location – both during construction and long-term.

Response

Impacts from channel plugs and channel modifications from the Tanana River crossing are included under the Tanana River Bridge crossing column of Draft EIS Table E-25a where various activities/structures are assessed and are included in the large-bridge crossing impact discussions in Draft EIS Section 4.2.2, Environmental Consequences, under Salcha Alternative Segments. Even though there is no specific impact discussion of channel plugs, the river crossings as a whole (bridge, channel plugs, revetments, etc.) were estimated to have a "high" impact on altered flood hydraulics and increased bank scour, erosion, and channel aggradation. In the Draft EIS Section 4.2.2, Environmental Consequences, a "high" potential impact is defined as an activity/structure that would most likely cause negative impacts under normal construction or operational activities. As stated in Draft EIS Section 4.2.2, Environmental Consequences under Salcha Alternative Segments, detailed analyses of the Tanana River crossing has been conducted on only a preliminary level and effects to hydraulics are unknown, and it should be noted that the impact designations for the Tanana River crossings were conservatively considered "high." However, as indicated in Draft EIS Section 20.2.2, Water Resources, SEA's preliminary mitigation measure 8 states that prior to permitting, the Applicant would conduct detailed site-specific hydraulic analyses and modeling for the Tanana River crossings to predict changes to flow paths, velocity profiles, and scour at high-flow discharges. This analysis would account for the channel plugs, revetments, and channel modifications. SEA's preliminary mitigation measure 8 is included in the Final EIS as

NRE DEIS Cooperating Agency Comment Responses

recommended mitigation measure 8 in Chapter 2 Mitigation.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.22

DEIS Page Numbers 4-33

Comment ID: 300

Jarvis Creek overflows often run north through the town of Delta. How would Delta 1 Segment construction impact these flows? How would these flows impact the rail line?

Response

Flooding from Jarvis Creek through the town of Delta occurs upstream of the terminus of Delta Alternative Segment 1, and therefore the segment would not be affected by or cause a change in the flood flows through Delta.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.3.2

DEIS Page Numbers 4-39 to 4-40

Comment ID: 301

Disclose the effects the proposed channel plugs and channel modifications associated with the Tanana River bridges would have on groundwater. The modified side channels are at least partially groundwater driven.

Response

SEA has revised Draft EIS Section 4.3.2, Environmental Consequences under Salcha Alternative Segments, to disclose the potential effects of the proposed channel plugs on groundwater. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.3.2

DEIS Page Numbers 4-43

Comment ID: 302

Section 4.4 does not appear to disclose operations impacts to groundwater, just to surface water and water quality.

Response

SEA has revised Draft EIS Section 4.4, Water Quality, to include groundwater. See Chapter 4 of the Final EIS.

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Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.4.1

DEIS Page Numbers 4-43

Comment ID: 303

Please clarify: no current water quality data from established USGS sites. The sites are established but are not actively collecting data, are collecting data other than water quality data, are not being monitored, are abandoned, or...?

Response

SEA has revised Draft EIS Section 4.4, Water Quality, to clarify the lack of USGS water quality data. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.4.2

DEIS Page Numbers 4-44 and 4-4

Comment ID: 304

Degradation of permafrost could also result in lowered dissolved oxygen levels, especially in stagnant or slow-moving water bodies.

Response

SEA has revised this section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.4.2

DEIS Page Numbers 4-47

Comment ID: 305

Sediment loads in the Tanana vary widely over the year, so the statement that impacts would be low due to high sediment loads is not necessarily accurate. Timing of work would be important to determine potential impacts.

Response

SEA has revised this section under Salcha Alternative Segments to clarify the discussion of sediment loads and impacts in the Tanana River. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.4.2

DEIS Page Numbers 4-48

Comment ID: 306

Missing the word "in": "...to water quality the long-term."

NRE DEIS Cooperating Agency Comment Responses

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.42
DEIS Page Numbers 4-48 to 4-50

Resulted in a change to DEIS ☐

Comment ID: 307

Surface run-off could transport gravel and/or other sediment to nearby water bodies.

Response

The potential for sediment laden runoff affecting waterbodies is disclosed in Draft EIS Section 4.4, Water Quality under Common Construction Impacts. This potential is the same for all alternative segments. This potential impact would be minimized with recommended mitigation measures presented in Final EIS Section 2.2 Water Resources.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.5
DEIS Page Numbers 4-51

Resulted in a change to DEIS ☒

Comment ID: 308

There are no USGS or State of Alaska wetland data in Appendix E. There are some USFWS data, however. Please correct.

Response

SEA has revised this sentence. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.5.1
DEIS Page Numbers 4-51

Resulted in a change to DEIS ☒

Comment ID: 309

Either delete the last sentence or add: "USACE is responsible for determining the jurisdictional status of these potentially isolated wetlands and other waters." Recommend deletion, since these wetlands are subject to EO 11990, whether they are jurisdictional under USACE regulations or not.

Response

SEA has revised this section to clarify the USACE's role in jurisdictional determinations of isolated waters. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-55

Comment ID: 310

Riparian habitats also provide food, shelter, breeding sites, and travel corridors for a variety of terrestrial wildlife and bird species. This discussion would also be appropriate in the Vegetation section of Chapter 5.

Response

SEA has revised this section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-57

Comment ID: 311

The values in the "Wetland Proportion" column of Table 4-13 do not match those in the first column of Table 4-11. Why or why not? They are closer to, but not identical, to the values in Chapter E.5, page E-105. Please clarify the differences between the data sets or correct any errors.

Response

SEA has revised the Draft EIS to make the appropriate revisions for consistency between Table 4-11 and Appendix E.5. See Chapter 4 of the Final EIS. No change required to Draft EIS Table 4-13.

The wetland proportions for Forested Wetlands, Scrub/Shrub Wetlands and Other Waters are consistent between Draft EIS Table 4-11 and Table 4-13. The subtypes for forested wetlands, scrub/shrub wetlands, and other waters are presented as the proportion of wetland area by category within Draft EIS Table 4-11 and are presented as the proportion of wetland area in Draft EIS Table 4-13, such that needleleaf forests are described as 96 percent of all forested wetlands in Draft EIS Table 4-11, and needleleaf forests are described as 33 percent of all wetlands in Draft EIS Table 4-13.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-57 to 4-58

Comment ID: 312

Access roads and the rail line could be a source of noxious weeds that could compete with native wetland plants, thus changing the character and/or functions of affected wetlands.

Response

SEA has revised this section to include this additional impact information. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-59

Comment ID: 313

Awkward sentence: Is it saying the water quality of ROW wetlands and Tanana River riparian communities could be affected?

Response

SEA has revised this section to clarify this sentence. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-64

Comment ID: 314

Placement of riprap could also affect the flooding regimes that recharge wetlands within the floodplain. This could affect wetlands outside the ROW. When using the term "rip rap" are you referring to the "shot rock revetments" identified in Figures 2-15, 2-16, and 2-17? If so, use consistent terminology. If not, then discuss impacts of the proposed revetments. Disclose impacts from the proposed channel plugs (Salcha Alt 1) and channel modifications (both Salcha Alts). Changes in flow" should be discussed in more detail in Chapter 4.2.2, Environmental Consequences to Surface Water.

Response

SEA has revised this section to clarify the term riprap, and to include the potential for impacts outside of the ROW due to riprap placement. See Chapter 4 of the Final EIS. SEA has also revised Draft EIS Section 4.2.2, Environmental Consequences under Salcha Alternative Segment 1, to include a discussion of channel plugs and channel modification. See Chapter 4 of the Final EIS. During final design and permitting, the Applicant would work with Federal and state regulator agencies to reduce and minimize impacts at this crossing. The Applicant would abide by all reasonable requirements of Federal and state permits that would be required for this crossing.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-64

Comment ID: 315

Which side of the Tanana River is the "north bank"? Earlier in the document, reference is to the east and west sides of the river – be consistent.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does

NRE DEIS Cooperating Agency Comment Responses

not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-65

Comment ID: 316

Please explain how the glacial nature of the Little Delta River and Delta Creek could negate water quality and especially habitat impacts. Water quality impacts would be dependent on the time of year, but habitat impacts would not seem to be dependent on turbidity and sediment loads.

Response

SEA has removed the sentence describing the impacts related to the glacial nature of Little Delta River and Delta Creek. See Chapter 4 of the Final EIS. The sentence does not pertain to wetlands and is not accurate for stream systems along the Donnelly Alternative.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-70

Comment ID: 317

Change "southern bank" to "western bank" to be consistent with the rest of the document.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-58 to 4-73

Comment ID: 318

Under each alternative, the sentence, "The direct loss of wetlands would occur as a result of excavation, filling, or other construction activities" (or something very similar) is repeated. Recommend adding a sentence such as: "Disturbances to wetland hydrology and the clearing of wetland vegetation could also directly impact wetland functions, as discussed on page 4-56." Otherwise the EIS emphasizes complete loss and de-emphasizes the loss of functions – both of which are important project impacts.

Response

SEA has revised this section to include the additional suggested language. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-73

Comment ID: 319

Section 4.4 does not describe operations impacts to wetlands. It describes impacts to water quality. Rather Section 4.5.2, Operations Impacts to Wetlands (pages 4-57 to 4-58) describes operations impacts to wetlands.

Response

SEA has revised this section under Operations Impacts to clarify this statement. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.5.2

DEIS Page Numbers 4-75 to 4-76

Comment ID: 320

What is "+ Extra" in this table? It is not explained in the text or in the footnotes. Recommend removing the word "Vegetated" from the label on the last column (redundant, since wetlands are vegetated by definition).

Response

Extra consists of any staging areas, gravel extraction sites, access roads, highway relocations, levees, or riprap areas that may be associated with the alternative segment. SEA has revised the Draft EIS Table 4-25 to add the footnote and to remove the vegetation label. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.6.1

DEIS Page Numbers 4-78

Comment ID: 321

First sentence is grammatically incorrect – there is an extra word. Last sentence should say "Census Area" instead of "Borough".

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.6.2

DEIS Page Numbers 4-78 to 4-79

Comment ID: 322

The rail line itself is a linear feature, and as such it can inhibit the flow of floodwaters to portions of the floodplain. Disclose and discuss here. Is ARRC required to have an engineer-of-record certify the project would not have an adverse impact on flood elevations? Bridge crossings and culverts are designed to the 100-year flood, but in 1967 there was a 333-year recurrence interval flood. Thus floods larger than 100-year are possible. Impacts of the project on larger flood events should be disclosed. Also, the impacts these flood waters would expect to have on the project.

Response

The final design of the rail line and access road located in 100-year floodplains would allow for the flow of floodwaters to floodplain storage areas by incorporating sufficient number and size of culverts or bridges. This would ensure floodplain connectivity as well as maintaining the structural integrity of the rail line and access road. Bridges and culverts shall be designed, constructed, and operated to maintain existing water patterns and flow conditions as practicable. To minimize stream bank erosion at water crossings, bridges and culverts would be designed and constructed in such a way as to maintain natural water flow, drainage patterns, and flow conditions to the extent practicable. This would include installing equalization culverts through the embankment as necessary, preventing impoundment of water or excessive drainage, and maintaining the connectivity of floodplains. Crossing of waterbodies would also be aligned perpendicular or near perpendicular, as practicable, to watercourses to minimize bank disturbance. The Applicant would conduct site-specific analyses that incorporate flood conveyance and hydraulics and flood storage requirements of the 100-year flood as part of the design. The Applicant would comply with all relevant FEMA guidance, regulations, and procedures in the design and permitting of water crossings and floodplains with established floodway models maintained by FEMA. It is recognized that flood events greater than the 100-year flood could occur. However, according to FEMA, the 100-year flood is the standard used by Federal and state agencies for floodplain management.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Water Resources

DEIS Section: 4.6.2

DEIS Page Numbers 4-79

Comment ID: 323

Indicates flooding upstream as a result of ice jams from slow melt of ice roads/bridges would be a low impact. If homes/property flooded, impacts would appear to be moderate at best. Incomplete disclosure/discussion of river training and channel plugs on floodplains. They "stabilize the river from lateral migrations and/or avulsions" –what does this mean? How would flood waters behave if the structures contain the flood? Would the floodplain narrow in the vicinity of the river training? If so, what are the environmental effects of a narrowed floodplain? Would flood waters of a certain level overcome these structures? If so, what would be the anticipated effects, at the site and downstream? Salcha Alternative Segment 2 would also cross the 100-year floodplains of streams tributary to the Tanana River, such as the Salcha River. Disclose and discuss impacts to these

NRE DEIS Cooperating Agency Comment Responses

floodplains.

Response

SEA has revised Draft EIS Section 4.6.2 to include an additional impact discussion of ice jams on homes and personal property. The project would be designed to avoid an increase in ice jams. River training works, which in this case consist of large scale rip-rap revetments, are typically designed to prevent lateral corrosion by streams, thereby maintaining the location of the main channel. They may be less successful in preventing avulsions, which could occur upstream of the revetment. In these cases, detailed analysis of potential avulsion locations would also be evaluated as part of design. In general, if flood waters are contained by river training structures, then flows and stage may increase, which could cause increases in velocity and subsequent increases in scour. It is also possible that flood waters contract and expand through the affected reach scour and fill could cause changes in channel geometry, which may lead to upstream and downstream effects on the location of the main channel. These dynamics are typical of the Tanana River system, and the effects of the river training and plugs could be difficult to discern or measure. River training structures and plugs would be designed (i.e., height) to pass the 100-year flood, which includes the increase in stage due to floodplain narrowing. The Salcha River would be crossed by a major bridge structure, which would be designed to pass the 100-year flood plus any navigation requirements. The Applicant would comply with all relevant FEMA guidance, regulations, and procedures in the design and permitting of the crossings of waterbodies and floodplains with established floodway models maintained by FEMA. SEA has revised Draft EIS Section 4.6.2 to include this additional impact discussion for the Salcha 1 and 2 Alternative segment crossings of the Tanana River. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Water Resources
DEIS Section: 4.6.2
DEIS Page Numbers 4-80

Resulted in a change to DEIS ☐

Comment ID: 324

Central Alternative Segment 1 may be outside the 100-year floodplain of the Tanana River, but it does cross the 100-year floodplains of minor streams tributary to the Tanana River. Disclose and discuss the impacts on these floodplains. Similarly, the five Connector Segments and both Donnelly Alternative Segments also appear to cross the 100-year floodplains of minor streams. Disclose and discuss project impacts on these floodplains.

Response

During final permitting and design, culvert and bridge crossings would be designed to pass the 100-year flood event and comply with all relevant FEMA guidance, regulations, and procedures in the design and permitting of the crossings with established floodway models maintained by FEMA. Thus, significant potential effects to floodplains would be mitigated by design. There may be minimal reductions in flood conveyance on the floodplain; these would be mitigated by including cross-flow culverts systems as needed (See recommended mitigation measure 11 in the Final EIS).

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Water Resources

DEIS Section: 4.6.2

DEIS Page Numbers 4-80 and 4-8

Comment ID: 325

Discussion of floodplain impacts very general. More detail on specific impacts to floodplains would be helpful

Response

Analysis of floodplain impacts in the Draft EIS are general due to the preliminary nature of crossing design information. In general, impacts can be categorized by how the process (streamflow conveyance) could be affected by bridges, culverts and the rail line. Cross-flow culverts would be utilized to convey flood flows through the rail line embankments, as needed. During final permitting and design, the Applicant would design all permanent bridges and culverts to pass the 100-year flood event. The Applicant would comply with all relevant FEMA guidance, regulations, and procedures in the design and permitting of the crossings of waterbodies and floodplains with established floodway models maintained by FEMA.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5

DEIS Page Numbers 5-1

Comment ID: 326

Impacts to non-game species should also be disclosed.

Response

The scope of the analysis for biological resources was focused on the resources determined to be of greatest importance with the highest potential for impact by the NRE project. Those resources were determined to be vegetation, fisheries, game mammals, and game and protected birds as described in Draft EIS Section 5.0 Biological Resources. Some non-game species are covered in the Draft EIS Appendix F, for example, while the red squirrel is technically considered a furbearer it is generally not trapped or hunted within the project area (see Draft EIS Table F-32). Aquatic animals of conservation concern are discussed in Draft EIS Section F.2.3 and supporting discussions and analysis of impacts to birds of conservation concern is presented in Draft EIS Section F.4.4. No other non-game species were identified during scoping as important to address in the Draft EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.2

DEIS Page Numbers 5-6

Comment ID: 327

To what region are the first two words on this page referring? The Tanana-Kuskokwim Lowlands eco-region?

NRE DEIS Cooperating Agency Comment Responses

Response

SEA has revised the section to clarify this sentence. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-11

Comment ID: 328

What will happen to cleared and felled trees in the large needle-leave and broad-leave forest areas? Will they be salvaged? Stockpiled? Burnt? Windrowed?

Response

Please see Draft EIS Section 13.1.3 Timber Resources for a discussion of needle-leaf and broad-leaf timber salvage.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-12

Comment ID: 329

Please provide data substantiating beneficial impact. Alaska has a let-it-burn policy (limited protection) where there are no private lands or structures and we are not aware of a fire protection plan for late-succession riparian forests. Private property is primarily restricted to the east side of the Tanana River, where numerous roads already provide fire protection for private property. It would seem the NRE would provide little additional benefit on the east side. There are few private properties proximate to the NRE on the west side of the Tanana River, so any fire protection the NRE would provide to private lands would be minimal.

Response

SEA has revised the section to remove the incorrect statement on beneficial protection. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-12 to 5-13

Comment ID: 330

Recommend adding: Ongoing maintenance activities could further compact soils and/or compact soils in new areas.

Response

SEA has revised the section to include this potential impact. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Topography, Geology, and Soils

DEIS Section: 5.3.2 and 3.4

DEIS Page Numbers 5-13 and 3-6

Comment ID: 331

Recommend adding the effects of chemical spills and pH to Chapter 3.4, Soils.

Response

SEA has revised Draft EIS Section 3.4.2 to add potential chemical spill impacts. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-14

Comment ID: 332

Borrow areas may convert to ponds, depending on depth of excavation, soils and groundwater levels. However, borrow areas may also remain dry unvegetated scars, unless rehabilitated. Please clarify.

Response

SEA has revised the section to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-14

Comment ID: 333

Add footnote explaining how acreages were derived (i.e., from the relative proportion of each vegetation type within the project area, and not from actual data at specific locations within the project area).

Do impacts include any off-site impacts, e.g., at the Curry quarry or at other quarries or material sites that may be used to generate the volume of materials needed for the project? Recommend disclosing these impacts somewhere in the EIS, perhaps in a new paragraph after the final paragraph on page 5-14.

Response

SEA has revised the table to clarify how acreages were derived. No off-site areas for materials that would require vegetation clearing have been proposed. Materials from the Curry site would be within permitted areas. See Chapter 4 of the Final EIS.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-17

Comment ID: 334

This section states that the potential to spread invasive plants would be low on the west side of the Tanana River. USACE disagrees. Since trains and construction equipment are coming from the east side of the river where there are, relatively-speaking, many invasive species, trains and construction equipment themselves are the vectors by which invasives would be dispersed to the west side. Newly introduced invasive species would become established in disturbed soils associated with NRE, and would have many miles over which to spread. This is not a minor effect of the proposed project.

Response

SEA has revised the section to clarify that localized spreading would be of lower potential for Salcha Alternative Segment 1. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-20, 5-23, a

Comment ID: 335

Same comment as above, although dispersion would be expected to be less in the short-term (due to distance from current sources). However, as invasives become established along the west side of the Tanana River along the NRE ROW, every segment would be expected to be impacted over the long-term.

The Delta community is an important source of non-native species. It would be reasonable to expect these to spread along the NRE on the east side of the Delta River, and then these would be expected to be introduced to the South Common Segment, even though this segment is "remote."

Response

Draft EIS Section 5.3.3 states that loss of vegetation cover, soil disturbance, and the use of fill materials and seed sources contaminated with invasive plant seeds would contribute to the spread of weed species. Because all alternatives would involve construction of a rail line through relatively undeveloped habitats on the west side of the Tanana River, the purpose of the discussions of the potential to spread weeds was focused on which alternatives would have the greatest exposure to weed sources. The summary acknowledges that weeds would be spread along all alignments.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.3.2 and 5.3.3

DEIS Page Numbers 5-12 to 5-30

Comment ID: 336

Acres of vegetation impacts would be much less if the project plan were the same on the west side

NRE DEIS Cooperating Agency Comment Responses

of the Tanana River as on the east side. Currently ARRC is proposing a much larger footprint on the west side. The footprint should be the minimum size necessary to accomplish the project.

Response

Vegetation impacts would be unavoidable for all alternative segments. STB will take into consideration the entire environmental record, including potential vegetation impacts of all the alternative segments, when making their final decision on the project. STB also has to consider the impacts to other resources when making its final decision. The magnitude of impacts to other resources along alternative segments may or may not depend on the size and length of the alternative segments. In addition, recommended mitigation measure VM-1 in the Final EIS indicates the Applicant would abide by the reasonable requirements of the NPDES permit, which typically includes minimizing clearing and disturbance in the ROW to only those areas necessary for project construction, and revegetating any temporarily disturbed areas.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.3.2

DEIS Page Numbers 5-28

Comment ID: 337

Add a comment about invasive species (i.e., process would expect to continue on east side of Tanana River, but no measurable impact on west side).

Response

SEA has revised the Draft EIS Section 5.3.3 Summary of Impacts to Vegetation to include this additional information. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.4.1

DEIS Page Numbers 5-32

Comment ID: 338

There is no mention of either Central Alternative Segment in the combination of segments with the least number of fish or fish habitat stream crossings. Please correct.

Response

SEA has revised the Draft EIS Section 5.4.1 Affected Environment to include the appropriate Central alternative segment. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.4.2

DEIS Page Numbers 5-38

Comment ID: 339

Table 5-18 (and in Appendix F, Table F-10) states crossing 105 is 20 feet wide, yet in Chapter

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4.2.2, page 4-13 (second to last paragraph), says the channel is 35 feet wide. Which is correct?

Response

The "channel width" of "35 feet" is the maximum bank full width based on field data for site N2-1.3. The "20 feet" in Draft EIS Tables 5-18 and F-10 is average wetted channel width during the same site visit. The apparent discrepancy is due to the differing focus of the hydrologic and fisheries habitat assessments. The 35-foot width is valid for high-flow conditions.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 5.4.2
DEIS Page Numbers 5-38

Resulted in a change to DEIS ☐

Comment ID: 340

Crossing 13 is 80 feet wide, yet the bridge would only be 60 feet. Bridges should be appropriately sized for the stream channel (at least as long as the channel width).

Response

Proposed structures crossing smaller streams as presented in the Draft EIS represent initial estimates based upon information available at the time. The crossing #13 arrangement, as well as all project crossings, would be revisited during final design and permitting, taking into account environmental and hydraulic concerns, to reduce the adverse impacts described in the Draft EIS. Further, it is standard railroad design practice to maintain existing flow patterns and to pass the modeled 100-year flood event.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 5.4.2
DEIS Page Numbers 5-39 to 5-48

Resulted in a change to DEIS ☐

Comment ID: 341

Recommend changing color of gray circles depicting culvert crossings – hard to see.

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 5.4.2
DEIS Page Numbers 5-44 and 5-4

Resulted in a change to DEIS ☐

Comment ID: 342

Crossings 85 and 396 appear to be in the same location (if they are different crossings, a magnified view should be added to Figure 5-13). Are they one and the same?

NRE DEIS Cooperating Agency Comment Responses

The table states the channel width is 80 feet, yet the bridge crossing size would be 40 feet. This appears to be undersized, unless the two 40-foot crossings combine to form the needed 80 feet. Please clarify or correct.

Response

Crossings 85 and 396 are two separate crossings. See response to comment ID 108.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 5.5
DEIS Page Numbers 5-52 to 5-74

Resulted in a change to DEIS ☐

Comment ID: 343

There should also be a section on non-game species. There may not be a lot of data to discuss, but impacts to prey species and those that are not typically harvested should be disclosed. Some non-game species are highly localized in their movements and do not range far. Thus, local populations could be impacted by the project through habitat loss or alteration, disturbance, movement barriers, train or vehicle collisions, etc.

Impacts to prey species are briefly discussed under the Central, Donnelly, and Delta Alternative Segments write-ups on pages 5-67 and 5-71, and in Table 5-26 on page 5-28.

Response

The scope of the analysis for biological resources was focused on the resources determined to be greatest importance with the highest potential for impact by the NRE project. Those resources were determined to be vegetation, fisheries, game mammals, and game and protected birds as described in the Draft EIS Section 5.0 Biological Resources. Some non-game species are covered in the Draft EIS Appendix F, for example, while the red squirrel is technically considered a furbearer it is generally not trapped or hunted within the project area (see Draft EIS Table F-32). Aquatic animals of conservation concern are discussed in the Draft EIS Section F.2.3 and supporting discussions and analysis of impacts to birds of conservation concern is presented in the Draft EIS Section F.4.4. No other non-game species of conservation concern were identified during scoping as important to address in the Draft EIS. Increases in potential predators and predator movements are disclosed under the Common Construction Impacts and Common Operations Impacts sections of Draft EIS Section 5.5.2 Environmental Consequences. Impacts to prey species along Central, Donnelly, and Delta alternative segments are more notable based on habitat characteristics along those segments.

Cooperating Agency USACE
Topic: Biological Resources
DEIS Section: 5.5.1
DEIS Page Numbers 5-55 and 5-5

Resulted in a change to DEIS ☒

Comment ID: 344

Write-up does not adequately address the moose migration arrows depicted in Figure 5-17. Female moose migrate across the Tanana twice each year. The first is a migration to the west side to reach their calving grounds and the second is in fall/early winter with their calves, to reach willow shrub and warmer winter habitats in the hills on the east side. The migration is tied to forage availability and quality. Are there differences between male and female moose migrations? Also, the write-up

NRE DEIS Cooperating Agency Comment Responses

should disclose/discuss the calving area in GMU 20A.

Response

SEA has revised Draft EIS Section 5.5.2, Environmental Consequences, to include migration information from Draft EIS Appendix F (See Chapter 4 of the Final EIS). See Draft EIS Appendix F.3.1, Affected Environment, for additional moose migration information. Seasonal movements are triggered by different factors - in general fall movements are primarily triggered by snow depth which in turn is related to forage availability. Movements to calving areas in GMU 20A is discussed in Draft EIS Section F.3.1 Affected Environment.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.5.2

DEIS Page Numbers 5-62 to 5-63,

Comment ID: 345

The importance of the migratory corridors is not adequately addressed in these analyses. If the majority of females migrate to and from the calving ground, they will cross the NRE, along with their calves. These migration corridors are important and heavily used. Thus the potential for construction and operation-related disturbances and moose-train collisions would be higher in that portion of the NRE in GMU 20A than along other segments of the NRE or elsewhere on the Alaska Railroad where migration routes would not be bisected (such as in GMU 20B). Annual moose-train collision rates from GMU 20B may not accurately estimate moose-train collisions in GMU 20A.

Response

Moose do not appear to use discrete migration corridors within the project area. Please see discussion in the Draft EIS Appendix F.3.1, Affected Environment, and F.3.2, Environmental Consequences. The proportion of the population that migrates to and from the Tanana Flats is 40 to 50 percent (Rodney Boertje, ADF&G, personal communication, February 14, 2008), and of these, only a portion of the animals coming from the Salcha and Chena drainages and portions of GMU 20D would potentially cross the proposed rail line. An estimate of 30 percent was used for calculations. The 58 miles of existing rail line in GMU 20B crosses the Chena drainage (see Draft EIS Figure F-19) and likely intercepts migrant moose. This observation is supported by the high density of moose-vehicle collision mortality along the stretch of the Richardson Highway that crosses between the Chena River valley and the Tanana Flats area (see Draft EIS Figure F-19). Limitations of the estimated mortality are clearly defined in Draft EIS Appendix F.3.2, Environmental Consequences, under the Moose-Train Collision Mortality sub heading. The best available data was used to estimate the magnitude of potential impacts to moose. No information on current moose movements or local densities were available from ADF&G for the project area. The structure of the Draft EIS is such that the reader needs to refer to the Appendix to find supporting data for analyses presented in Draft EIS Section 5, Biological Resources.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.5.2

DEIS Page Numbers 5-66

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 346

By "bank armament" are you referring to the shot-rock revetments? If not, please discuss the impacts of the revetments on mammalian movement/habitat.

Response

SEA has revised the section to clarify this sentence. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Biological Resources

DEIS Section: 5.6.2

DEIS Page Numbers 5-78

Comment ID: 347

Increased edge effects could have a beneficial effect on some avian species.

Response

SEA has revised the section to recognize the potential beneficial edge effects to avian species. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.6.3

DEIS Page Numbers 5-82 to 5-83

Comment ID: 348

Are there confidence intervals associated with the estimated number of displaced birds? It would help to have some idea as to how accurate these estimates are.

Response

Confidence intervals - if available - would be wide as densities are annually variable, and variable due to the methods used to generate the densities - especially the extent of the survey area compared to the extrapolation area. Numbers are generated to give the reader a sense of scale and are rough estimates based on the best available information on nesting bird abundance within the project area.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Biological Resources

DEIS Section: 5.6.3

DEIS Page Numbers 5-84 to 5-85

Comment ID: 349

Too many commas. Information in the "Habitat Impact Description" column would be easier to read if semi-colons (;) were placed between phrases, e.g., "300 acres shrub habitat removed, fragmented; power line, communication tower collision mortality"

Response

If SEA were reprinting the entire document, it would include the commenter's suggested edit. However, this Final EIS is primarily intended to address substantive comments on the Draft EIS, as

NRE DEIS Cooperating Agency Comment Responses

required by CEQ NEPA implementing regulations at 40 CFR 1503.4. Therefore, Chapter 4 does not include the suggested edit.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Cultural Resources

DEIS Section: 6.3.5

DEIS Page Numbers 6-14

Comment ID: 350

This is the only chapter in which it is disclosed the no-action alternative would have effects on a resource. We recommend deleting reference to highway widening unless this is a reasonably foreseeable action (in which case other resources, such as vegetation and game mammals, would also incur impacts and descriptions of impacts under the no-action alternative would need to be revised). We also recommend dropping reference to "increased traffic" since no data have been provided to indicate this would be an outcome of the no-action alternative.

Response

The commenter is correct in that highway widening is not part of the No Action scenario. The Draft EIS has been revised in Chapter 4 of the Final EIS to indicate that if this project is not constructed, there would be no related impacts on cultural resources.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: 7

DEIS Page Numbers 7-1 to 7-11

Comment ID: 351

Chapter 7 seems to be highly moose-biased and does not disclose much about other forms of subsistence such as berry picking, resident and anadromous fish harvest, trapping, game mammals other than moose, non-game species, birds, wood-gathering, etc. Subsistence fish data are available. Are data available for other subsistence resources? If no data are available, this should be stated. If there are data, the data should be presented.

Response

Additional information regarding residents' berry picking, fish harvests, trapping etc., are presented in Draft EIS Appendix I. Moose was chosen as a representative subsistence species to characterize the affected environment variables of competition and use areas because moose harvest and locational data exist for all but one study community, it is a high profile resource, it is likely to experience many of the impacts from the NRE, and some moose migrate outside of the project area to areas where subsistence harvest may occur.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: 7.2

DEIS Page Numbers 7-3

NRE DEIS Cooperating Agency Comment Responses

Comment ID: 352

Yet ADFG tracks subsistence fish harvests even within their sport fishing regulations. Why?

Response

This comment is not clear. The commenter may be referring to their previous reference under ID 129 that ADF&G Sport Fish Division has subsistence salmon harvest data. ADF&G tracks subsistence fish harvest through the subsistence division.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: 7.3.2
DEIS Page Numbers 7-9

Resulted in a change to DEIS ☒

Comment ID: 353

The first paragraph states that no data are available for Delta Junction or Salcha. However, the third paragraph says direct effects would have the greatest chance of affecting Delta Junction and Salcha. Please clarify if the greater effects are assumed based on use areas or if it is known from data on specific uses or specific subsistence resources.

Response

The Draft EIS was edited to reflect this comment. See Chapter 4 of the Final EIS.

Cooperating Agency USACE
Topic: Subsistence
DEIS Section: 7.3.3
DEIS Page Numbers 7-9

Resulted in a change to DEIS ☐

Comment ID: 354

At the public meetings you held in January 2009, you asked people to identify access routes along the NRE. Has any effort been made to obtain subsistence routes? As discussed in Section S.6.11 regarding recreation resources, would subsistence access be denied or decreased as a result of the NRE?

Response

At this time SEA has not identified subsistence routes, however recreational trails could be used to reach harvest areas. User access would be limited due to the proposed rail line and this could affect subsistence use. SEA preliminary mitigation measure 50 in the Draft EIS, as revised and included as recommended mitigation measure 50 in the Final EIS, requires the Applicant to schedule certain construction activities that could temporarily affect access to trails and waterways to occur during the times of limited use or when alternate routes are most available, to the extent practicable. Information on recreation access routes are available in Chapter 13 and descriptions of impacts on subsistence user access are available in Chapter 7.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Subsistence

DEIS Section: 7.3.4

DEIS Page Numbers 7-11

Comment ID: 355

What effects would operations have on subsistence fisheries and other subsistence uses (e.g., trapping)?

Response

In general, construction and operations impacts discussed in Chapter 7 are referring to all subsistence resources. Impacts on individual resources, including moose, furbearers, and fish, are also addressed. For example, Sections 7.3.2, 7.3.3, 7.3.4 address the impacts to trapping.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Climate and Air Quality

DEIS Section: 8.1.1

DEIS Page Numbers 8-2

Comment ID: 356

This section adequately explains why there is no need for a Class I analysis, but please include some statement of expected effects on Denali Park based on the amount and frequency of emissions and prevailing winds/climate.

Response

A sentence was added to the paragraph about Denali National Park indicating that if SEA assessment of the potential impact on Denali National Park, SEA anticipates that the impact would be significantly below the significance level of 1 ug/m3 for either NO2, PM10 and PM2.5. See Chapter 4 of the Final EIS.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.1.2

DEIS Page Numbers 8-3

Comment ID: 357

Please disclose any secondary impacts the project might have on the North Pole and Fairbanks maintenance areas.

Response

No adverse secondary impacts are anticipated. As discussed in Draft EIS section 8.3.2, beneficial impacts could result if current highway traffic would decrease as a result of the passenger and freight service on the proposed rail line.

NRE DEIS Cooperating Agency Comment Responses

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.2

DEIS Page Numbers 8-5

Comment ID: 358

Are there no more current data than 2003-4?

Response

No. One year monitoring was done in support of a construction project at Ft. Wainwright and that monitoring was discontinued after the one year period.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.3.3

DEIS Page Numbers 8-9

Comment ID: 359

Please summarize the effects on Fairbanks North Star Borough or Interior Alaska emissions too.

Response

An inventory of CO2 emissions for the Fairbanks North Star Borough area has not been assembled by local, state or Federal agencies, so the data are not available to develop the requested summary.

Cooperating Agency USACE

Resulted in a change to DEIS ☐

Topic: Climate and Air Quality

DEIS Section: 8.3.3

DEIS Page Numbers 8-9

Comment ID: 360

Please present data demonstrating a substantial enough reduction in the number of cars and trucks on the highway that would then result in a measurable decrease in CO2. (Also see your discussion of energy resources and transportation in Chapter 10.2.2, pages 10-2 thru 10-3).

Response

Projected information on ridership on the proposed rail line is not available so calculation of reduced CO2 emissions associated with potential reductions in vehicle traffic would be speculative. Elimination of all traffic on the Richardson Highway would not result in a measurable change in CO2 levels.

Cooperating Agency USACE

Resulted in a change to DEIS ☒

Topic: Land Use

DEIS Section: 13.1.3

DEIS Page Numbers 13-9

Comment ID: 408

You state that 25-30 residences "would be affected by the staging area and access road" and that

NRE DEIS Cooperating Agency Comment Responses

“effects to several residences within the ROW would be permanent.” Be specific: what is the nature of the permanent effects?

Response

This Section of the Draft EIS, under common construction impacts, has been revised to specify that construction activities in proximity to the residences could result in temporary increases in noise and dust; and changes in access patterns as a result of construction activities and use of the staging areas and access road on the east side of the Tanana River (see Chapter 4 of the Final EIS). The land and structures within the ROW would be acquired by ARRC, resulting in a permanent change to ownership and land use.

Cooperating Agency USACE
Topic: Land Use
DEIS Section: 13.1.3
DEIS Page Numbers 13-10

Resulted in a change to DEIS ☒

Comment ID: 409

The access road to the Flag Hill Tower “would affect less than one quarter of an acre of private land” – affect how?

Response

This Section of the Draft EIS, titled Salcha Alternative Segment 2 has been revised to specify that the Flag Hill Tower upgrade would require conversion of less than 1/4 of an acre of private land from its current use to rail support facility use. See Chapter 4 of the Final EIS.
