United States Department of Agriculture

Kake to Petersburg Transmission Line Intertie Project, Tongass National Forest

Final Record of Decision

Forest Service
Alaska Region

Tongass National Forest
Petersburg Ranger District

R10-MB-765d

November 2016

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Acronyms and Abbreviations

AAC	Alaska Administrative Code
ACHP	Advisory Council on Historic Preservation
ADOT&PF	Alaska Department of Transportation and Public Facilities
AFRPA	Alaska Forest Resources and Practices Act
AGL	Above Ground Level
ANILCA	Alaska National Interest Lands Conservation Act
APLIC	Avian Power Line Interaction Committee
BA	Biological Assessment
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DEC	Department of Environmental Conservation
DNR	Department of Natural Resources
DP	Dynamic Positioning
DPS	Distinct Population Segment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESU	Evolutionary Significant Unit
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy and Management Act
FSH	Forest Service Handbook
HDD	Horizontal Directionally Drilled
IDT	Interdisciplinary Team
KPI	Kake to Petersburg Transmission Line Intertie
kV	kilovolt
LUD	Land Use Designation
MBF	thousand board feet
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFS	National Forest System
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NRHP	National Register of Historic Places
NTP	Notice to Proceed
PCE	Power Cost Equalization
POG	Productive Old Growth
R10	USDA Forest Service Region 10
RN	Roaded Natural
RM	Roaded Modified
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEAPA	Southeast Alaska Power Agency
SHPO	State Historic Preservation Officer
SOPA	Schedule of Proposed Actions
SPM	Semi-Primitive Motorized
SPNM	Semi-Primitive Non-Motorized
TUS	Transportation and Utility System
USC	United States Code
VCU	Value Comparison Unit

USDA United States Department of Agriculture
Forest Service
Tongass National Forest
Alaska Region
648 Mission Street
Ketchikan, AK 99901
907-225-3101

File Code: 1950
Date: November 30, 2016

Dear Planning Participant:

I am pleased to announce the Final Record of Decision (ROD) for the Kake to Petersburg Transmission Line Intertie Project (KPI Project) on the Petersburg Ranger District, Tongass National Forest has been signed. The Final ROD is available for review at the Petersburg Ranger District Office, and online at http://www.fs.usda.gov/project/?project=31761. Hardcopies and CDs of the document are available upon request.

This decision authorizes the project applicant to construct an electric transmission line between Petersburg on Mitkof Island and the city of Kake on Kupreanof Island. The transmission line would be approximately 60 miles long and follow existing roads for 34 miles. Access for construction along the remaining sections of the route would be via shovel trails supported by temporary matting panels.

The Final Environmental Impact Statement (Final EIS) and Draft ROD were available for public review prior to this final decision, pursuant to the pre-decisional administrative review process (objection process) under 36 CFR 218, subparts A and B, and one objection was received during the 45-day objection filing period under 36 CFR 219 subpart B. The Reviewing Officer has reviewed the draft decision, in accordance with 36 CFR 218.3(a) and 219.56(g), and provided instructions. I have complied with the instructions from the Reviewing Officer prior to signing the Final ROD. Project implementation may commence immediately after the decision is signed.

Copies of this letter have been directly mailed or emailed to those who have expressed interest in the project through scoping, comments, consultation, or requests to be on the mailing list. This Final ROD and the Final EIS are also available for review at the Ketchikan Forest Supervisor's Office and Petersburg District Office, and online at http://www.fs.usda.gov/project/?project=31761. For additional information, please contact Tom Parker, Petersburg Ranger District, at (907) 772-3871.

As the Forest Supervisor, I am responsible for this decision. Your interest in the KPI Project and management of the Tongass National Forest is appreciated.

Sincerely,

M. EARL STEWART

Forest Supervisor, Tongass NF

Kake to Petersburg Transmission Line Intertie Project

Final Record of Decision

United States Department of Agriculture
Forest Service Alaska Region

Lead Agency: USDA Forest Service
Tongass National Forest

Responsible Official: Earl Stewart, Forest Supervisor
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Abstract:

The Responsible Official has selected Alternative 2 from the Kake to Petersburg Transmission Line Intertie Project (KPI Project) Final Environmental Impact Statement (Final EIS). This decision authorizes the project applicant to construct an electric transmission line between Petersburg on Mitkof Island and the city of Kake on Kupreanof Island. The transmission line will be approximately 60 miles long and follow existing roads for 34 miles. Access for construction along the remaining sections of the route will be via shovel trails supported by temporary matting panels.

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Introduction

The Forest Service has prepared the Final Environmental Impact Statement (Final EIS) to analyze the potential impacts of authorizing the construction, operation, and maintenance of the proposed Kake to Petersburg Transmission Line Intertie (KPI) Project across National Forest System (NFS) lands. The Final EIS is in compliance with the National Environmental Policy Act 42 U.S. Code (USC) 4321 et seq. (NEPA), the Alaska National Interest Lands Conservation Act (16 USC 431 note) (ANILCA), and all other applicable Federal and State laws and regulations. This final Record of Decision (ROD) describes the Responsible Official's decision to authorize the KPI Project. The decision is based on the EIS and the entire project record.

Decision

This ROD documents my decision to implement Alternative 2, hereafter referred to as the Selected Alternative, from the KPI Project Final EIS.

In making this decision I considered:

- How best to meet the purpose and need for this project.
- The need to provide the community of Kake with a reliable, lower-cost source of energy.
- Issues raised during scoping.
- The relative environmental effects and outputs of the No Action Alternative and all three action alternatives described in the Final EIS.
- Public comments received for the project.
- Consistency with the 2008 Tongass National Forest Land and Resource Management Plan (Forest Plan).

Selected Alternative

The Selected Alternative authorizes the Southeast Alaska Power Agency (SEAPA), the project applicant, to construct, operate, and maintain an electric transmission line that will extend from Petersburg on Mitkof Island to Kake on Kupreanof Island (Figure R-1). Originating at the existing SEAPA substation south of Petersburg, the transmission line would cross Frederick Sound and the mouth of the Wrangell Narrows via a horizontal directionally drilled (HDD) bore or buried submarine cable, and continue above ground north along Frederick Sound, and then west to Kake where it would terminate at a new substation located near the existing powerhouse. The transmission line right-of-way will be nominally 100 feet (50 feet either side of the center line) and trees within this area will be cleared. Trees located outside the right-of-way with the potential to strike the line were they to fall will also be removed. In locations where trees are 100 feet to 150 feet tall, trees could be cleared up to 150 feet from the transmission line center line. As a result, the 20-year special use permit issued for this project will be for a 300 feet right-of-way (150 feet either side of the center line).

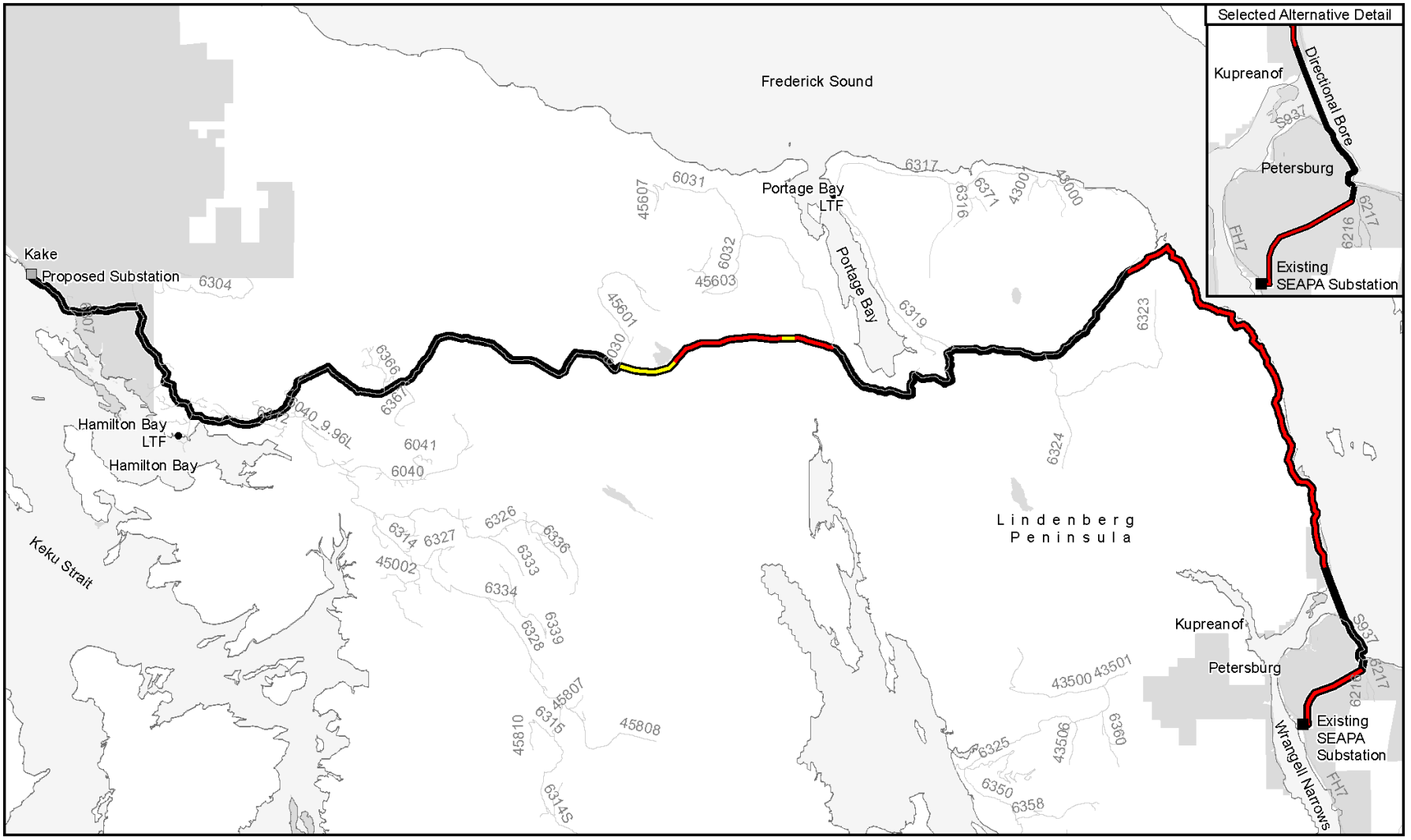

Figure R-1. Selected Alternative

Kake to Petersburg Transmission Line Intertie Project

Built to transmit power at either 69 or 138 kV, the proposed transmission line will consist of three wires that carry electrical current (known as conductors) and a 24-strand fiber optic communication cable. The conductors and communication cable will be strung between single wood-pole structures with an average above-ground height of 55 feet, and an average span length between structures of 350 to 400 feet. Construction access will be via existing roads, temporary shovel trails, temporary access spurs, and helicopter.

The transmission line will be approximately 60 miles long, with approximately 34 miles following existing roads. In locations where poles will be located off the road by more than 20 feet, an access work pad will be created by extending the road fill to the site. Where the distance from the road makes this impractical, temporary matting will be used to gain access to the site during construction. The Selected Alternative will involve the use of an estimated 7.6 miles of these types of access work pads and/or temporary matting, referred to as "temporary access spurs" in this document.

Access for construction along the remaining 23.6 miles (41 percent) of the overhead portion of the route will be via shovel trails supported by temporary matting panels. Shovel trails will be used for an estimated 21.6 miles, with temporary matting used for 2.0 miles. Helicopters will be used to support construction activities, especially in areas without roads. Helicopter pads will be located about every 0.25 mile along the 23.6 miles of the alternative when unable to be located adjacent to an existing road. Following construction, routine annual inspections and maintenance will be conducted via helicopter and existing access roads.

The project applicant will determine the Wrangell Narrows crossing type (HDD boring or buried submarine cable) following the completion of a thorough submarine topographical survey and subsurface profile that will be completed to inform this decision and identify the best crossing route and associated terminal locations. This is discussed further in the *Process for Implementation* section below.

Rationale for the Decision

The Selected Alternative will enable the construction of a new electric transmission line that will connect the existing isolated electric system in Kake with SEAPA's existing network and provide access to relatively low cost electricity.

In making my decision, I considered the objectives to meet the purpose and need for this project as well as the issues and concerns that arose during scoping and comments on the Draft EIS, both in support of and opposition to this project. Public scoping and internal review identified three potentially significant issues for evaluation in the EIS. These issues were resolved through the alternative development process by modifying the alternatives carried forward for detailed evaluation and dropping the Northern Alternative, Option 2 from further consideration.

I considered Forest Plan direction relevant to this project and the competing interests and values of the public. I considered all viewpoints and incorporated them where feasible and consistent with the purpose and need of the project.

I evaluated the trade-off between resource protection and social values. The detailed resource-specific analyses presented in the EIS found that the overall magnitude and types of impact are broadly similar with no significant impacts expected under the Selected Alternative or Alternatives 3 and 4. My decision was also influenced by the fact that the Selected Alternative was the project proposed by the project applicant. The effects of the action alternatives would, as noted above, be broadly similar and directing the project applicant to construct the project along an alternate route (Alternative 4 from the Final EIS) would not result in substantially lower environmental impacts.

My decision to implement the Selected Alternative is consistent with the Forest Plan. The following subsections provide the context for my decision and discuss the purpose and need for the project, significant issues, environmental effects, public comments, and consistency with the Forest Plan.

Purpose and Need

Authorization of the Selected Alternative responds to the Forest Service's purpose and need for the KPI Project by responding to SEAPA's application under Title V of the Federal Land Policy and Management Act (FLPMA) (43 United States Code [USC] § 1701) for a right-of-way grant to construct, operate, maintain, and terminate a 69-kV or 138-kV electric transmission line and other appurtenant facilities on public lands in compliance with FLPMA, Forest Service Manual 2700, the 2008 Forest Plan, and other applicable Federal laws.

The community of Kake is presently served by an isolated electric system that depends upon high-cost diesel generation, resulting in a full retail cost of power in 2011 that was more than five times the corresponding rate in the communities of Petersburg, Ketchikan, and Wrangell (Fay et al. 2012a, 2012b). The cost of electricity in Kake is currently subsidized for residential customers and public facilities through the State of Alaska's Power Cost Equalization (PCE) program. Even after the receipt of PCE payments, residential and public facility rates are still twice as high in Kake as the corresponding rates in Petersburg, Ketchikan, and Wrangell, and disbursements are limited to 500 kWh per month for residential customers and 70 kWh per resident for community facilities. These factors combined result in average residential consumption levels that are significantly below regional averages (Fay et al. 2012b).

Commercial customers are not eligible to participate in the PCE program and there is no comparable program for commercial customers, who pay the full retail cost for power in Kake. The high cost of electricity is not conducive to economic growth and may in fact impede economic development in Kake because the availability of reliable low-cost power strongly influences decisions to locate new commercial and industrial developments in Southeast Alaska (Alexander et al. 2010, Black & Veatch 2012, Hittle 2014).

The Selected Alternative will enable the project applicant to build a new electric transmission line that will connect the existing isolated electric system in Kake with SEAPA's network and provide access to relatively low cost electricity.

Significant Issues

As discussed in the *Significant Issues* section in Chapter 1 of the Final EIS, there were no significant issues evaluated in the Final EIS. Three significant issues with the potential to drive an alternative were identified during public scoping for the Project and are summarized as follows:

- **Inventoried Roadless Areas** – Access road construction in inventoried roadless areas (IRAs) would reduce roadless acres within the project area and could affect roadless values.
- **Unroaded Character of the City of Kupreanof** – Residents of the city of Kupreanof expressed concern about an earlier alternative (identified as the Northern Alternative, Option 2 in the Public Scoping notice) that crossed Petersburg Creek and passed behind the city of Kupreanof. Many of the comments received from the public during scoping for the project were from Kupreanof residents concerned about the potential impact of the Northern Alternative, Option 2 on their community, as well as potential impacts to Petersburg Creek.
- **Petersburg Creek** – As noted above, concern was expressed about potential impacts to Petersburg Creek, an important resource for fish and wildlife, recreation and tourism, and subsistence.

These issues were addressed through the alternative development process, as follows:

- **Inventoried Roadless Areas** – The alternatives as initially proposed all included construction of a pioneer road along those sections of the proposed transmission line that do not follow existing roads, including locations within IRAs. The alternatives were modified during the

alternative development process and pioneer roads are no longer proposed under any of the action alternatives, including the Selected Alternative.

- **Unroaded Character of the City of Kupreanof** – The Northern Alternative, Option 2 was eliminated from further consideration, as discussed in the *EIS Public Scoping* section in Chapter 2 of the Final EIS. None of the action alternatives considered in this EIS pass behind or near the city of Kupreanof.
- **Petersburg Creek** – As noted above, the Northern Alternative, Option 2 has been eliminated from further consideration. None of the action alternatives considered in this EIS cross Petersburg Creek.

No other potentially significant issues were identified. More general concerns were expressed during public scoping about potential impacts to other resources, but these concerns were resolved or addressed through one or more of the following ways:

- Already addressed by the Forest Plan and Forest Plan Land Use Designations (LUDs)
- Addressed through implementation of Forest Plan Standards and Guidelines or best management practices (BMPs)
- Can be resolved through project-specific mitigation
- Can be addressed during processes or impact analyses routinely conducted by the Interdisciplinary Team (IDT)
- Can be addressed through spatial modification of actions during alternative design
- Used to drive or partially drive an alternative
- Beyond the scope of the project
- Comment or opinion
- Other request

Under NEPA, the potential significance of the environmental effects of a proposed action determines whether an EIS must be prepared. In this case, preliminary analysis indicated the potential for significant effects on the environment, so we published a Notice of Intent (NOI) to prepare an EIS and conducted public scoping. Public scoping identified three significant issues that were all addressed through the alternative development process, as explained above. In cases where no significant issues are identified for a project, we would typically prepare an Environmental Assessment (EA) rather than an EIS, with the findings documented in a Finding of No Significant Impact (FONSI), rather than a ROD. In this case, given how far along we were in the EIS process, we had completed public scoping and prepared draft Resource Reports, we chose to continue with the EIS process that was already underway, rather than revise the process and prepare an EA and FONSI. Continuing with the EIS process also allowed us to present more detailed resource information for internal and external review and also entails a more rigorous public comment and review process.

Environmental Effects

The environmental effects of the Selected Alternative are summarized along with the other alternatives in Table R-1 below. The evaluation of potential environmental effects presented in the Final EIS indicates that the effects of the action alternatives would be broadly similar. The impacts for the Selected Alternative and Alternative 3 are almost identical in most cases, as both alternatives follow the same route corridor (the "Northern" route) for the majority of their lengths. The Selected Alternative and Alternative 3 are very similar in length, 59.9 miles versus 60.3 miles (Table R-1). The only difference between the two alternatives is the location of their approach to crossing Frederick Sound and the Wrangell Narrows. The Selected Alternative involves a 1.2-mile-long HDD bore or

buried submarine cable that extends from Outlook Park on Mitkof Island to Prolewy Point on Kupreanof Island, passing beneath the mouth of the Wrangell Narrows. Alternative 3 proposed to cross Frederick Sound by placing a submarine cable on the floor of Frederick Sound across the entrance to the Wrangell Narrows. As proposed, the cable would have originated at Sandy Beach Park on Mitkof Island, extending 3 miles to come ashore near Prolewy Point on Kupreanof Island. The proposed crossing approaches for the Selected Alternative—the HDD bore or buried submarine crossing—are both less expensive than the 3.1-mile-long submarine cable proposed as part of Alternative 3. Further, the Wrangell Narrows entrance is a busy channel with potential issues related to anchor areas, fishing grounds, and dredging activities.

Alternative 4, which followed the other route corridor (the "Center-South" route), was 8 miles shorter than the Selected Alternative, 51.9 miles versus 59.9 miles, and followed about 3 more miles of existing road (36.6 miles of existing roads compared to 33.7 miles) (Table R-1). As a result, Alternative 4 has a smaller overall footprint than the Selected Alternative and results in fewer impacts for most of the selected environmental metrics summarized in Table R-1. However, shovel trails and/or temporary matting panels would cross more Class I and Class II streams under Alternative 4 than under the Selected Alternative (and Alternative 3). Under Alternative 4, shovel trails and/or temporary matting panels would be required to cross 28 Class I streams and 14 Class II streams, compared to 10 Class I and 20 Class II streams that will be crossed by the Selected Alternative (Table R-1). While impacts are not expected to be significant under Alternative 4, higher numbers of stream crossings typically indicate a higher potential for short-term sedimentation effects due to construction near a stream.

Alternative 4 would affect fewer overall acres of wetlands, but this alternative is expected to require the use of substantially more temporary matting panels, with panels needed to support shovel trail access for an estimated 7.3 miles compared to 2.0 miles for the Selected Alternative (and Alternative 3). Temporary matting panels would be installed in wetland areas where sufficient native materials (logs and slash) are not available for use as an underlayment to allow for the passage of wide tracked equipment. The 7.3 miles of temporary matting panels identified for Alternative 4 would be required to cross an extensive muskeg area west of the Duncan Canal crossing, with about 6 miles of panels required in a single continuous stretch (see Figure 2-3 in Chapter 2 of the Final EIS). The use of panels to span this type of distance is reportedly consistent with past uses, but more technically and logistically challenging than the type of use anticipated under the Selected Alternative.

Alternative 4 would also involve two marine crossings compared to one under the Selected Alternative (and Alternative 3). Viewed in terms of total marine crossing miles, the Selected Alternative requires the shortest marine crossing distance (1.2 miles) and Alternative 3 requires the most (3.1 miles), with Alternative 4 requiring a combined total of 1.5 miles of marine crossing. Alternative 4 involves two proposed submarine cable or HDD crossings at Wrangell Narrows and Duncan Canal. Alaska DNR commenting on the Draft EIS identified the presence of a commercial beam fishery in Duncan Canal that could potentially damage the proposed submarine crossing under Alternative 4. They also noted the potential for construction to overlap with the commercial Dungeness crab fishery in Wrangell Narrows and Duncan Canal.

One concern raised during scoping and public comment on the Draft EIS that pertains to the Selected Alternative (and Alternative 3) and not Alternative 4, is the potential visual impact of the portion of the transmission line that will extend north-northwest aboveground along the shoreline of Frederick Sound. Commenters felt that development of a new section of transmission line in this area would negatively affect the quality of the recreation and tourism experience for visitors. Based on the analysis presented in the Final EIS, parts of the single-pole wood structures that support the line will be visible from selected locations, with the proposed transmission line also likely visible as a linear break in the forest pattern when viewed from Frederick Sound, and where it would span the larger creeks that incise this stretch of shoreline. Views of the proposed project for ferry and cruise ship

passengers will, however, likely be limited in duration as their respective vessels pass these specific locations. With this in mind, impacts will be limited and further minimized through the site-specific application of Forest Plan Standards and Guidelines and the project-specific mitigation measures identified in Table 2-3 in Chapter 2 of the Final EIS.

Another identified concern that relates specifically to the Selected Alternative (and Alternative 3), involves the narrow area of land between Portage Bay and Duncan Canal that would be crossed by the Selected Alternative (and Alternative 3). This area, which separates the Lindenberg Peninsula from the rest of Kupreanof Island, has been identified as a pinch point that may restrict dispersal or migration of some land-based wildlife species. Old-growth forest in the vicinity of this area is naturally fragmented because it is interspersed between extensive areas of muskeg and other wetland complexes. Fragmentation has also occurred as a result of past timber harvest and to a lesser extent road development. Public comment on the Draft EIS also identified this area as an important flyway for migratory and resident waterfowl. The Selected Alternative is expected to have a moderate effect to connectivity in this area, with potential impacts reduced because the transmission line follows an existing road in this area. Potential risks of bird collision will be reduced through the application of the project-specific mitigation measures identified in Table 2-3 in Chapter 2 of the Final EIS.

Alternatives

Alternatives Considered in Detail

Four alternatives were considered in detail in the EIS released for public comment. All alternatives, with the exception of Alternative 1, respond to the purpose and need. The Final EIS analyzed the following alternatives in detail:

Alternative 1 – No Action

Alternative 1 is the No Action Alternative and is analyzed to provide a baseline for evaluation of the impacts associated with the action alternatives. Under this alternative, the Forest Service would not provide authorization for the proposed project and a new electric transmission line would not be built. The city of Kake would continue to be served by the existing, isolated electric system, which depends upon high-cost diesel generation. In the absence of the KPI Project, future efforts to reduce the cost of electricity would be limited to relatively small-scale renewable energy projects in the immediate vicinity and distributed power options, such as solar panels.

Alternative 2 – Proposed Action

Alternative 2 is the Selected Alternative. This alternative is summarized above in the *Selected Alternative* section.

Alternative 3 – Northern Route with Submarine Cable

Alternative 3 is very similar to the Selected Alternative and slightly longer, 60.3 miles long versus 59.9 miles long. Both alternatives originate at the existing SEAPA substation south of Petersburg, and staying south of Petersburg, follow an existing gravel road 3.5 miles east-northeast to Frederick Sound. The only difference between the two alternatives is their approach to crossing Frederick Sound and the Wrangell Narrows. Alternative 3 would cross Frederick Sound via a 3.1-mile-long submarine cable that would originate near Sandy Beach Park on Mitkof Island and come ashore near Prolewy Point on the eastern shore of Kupreanof Island.

From Prolewy Point, Alternative 3 would continue above ground following the same route as Alternative 2, north along Frederick Sound, and then west to Kake where it would terminate at a new substation located near the existing powerhouse.

Alternative 4 – Center-South Route

Alternative 4 is 51.9 miles long. The majority of the transmission line (50.4 miles) would be above ground, with the remaining 1.5 miles located under Wrangell Narrows and Duncan Canal in two separate submarine cable or HDD crossings. The transmission line would have the same capacity and design features under all three action alternatives, including Alternative 4. Alternative 4, as proposed, would connect with the existing Tyee-Wrangell-Petersburg transmission line approximately 8 miles south of Petersburg, via a new tap or small switchyard that would be constructed at the selected connection location. Proceeding west, the proposed transmission line would cross the Wrangell Narrows and Duncan Canal via submarine cable or HDD crossings, approximately 0.6 mile and 0.9 mile in length, respectively. Once across Duncan Canal, the transmission line route would continue across the South Lindenberg IRA to connect with existing Forest Roads, which it paralleled to Kake.

Like Alternatives 2 and 3, this alternative would follow existing roads where possible (36.6 miles) and require the use of temporary access spurs (6.2 miles), shovel trails (6.5 miles), and temporary matting panels in some wetland areas (7.3 miles), with helicopters used to support construction activities, especially in areas without roads.

Comparison of Alternatives

Table R-1 provides a summary of the proposed alternatives and the associated environmental effects assessed in the Final EIS. The effects are summarized from Chapter 3 of the Final EIS, which should be consulted for a full understanding of these and other environmental consequences.

Table R-1. Comparison of Alternatives

	Alternative			
Unit of Measure	**1 - No Action**	**2 – Selected Alternative**	**3 – Northern Route with Submarine Cable**	**4 – Center-South Route**
Project Description				
Total Length (miles)	0	59.9	60.3	51.9
Miles on NFS Lands	0	48.9	50.6	45.9
Voltage	0	69 or 138 kV	69 or 138 kV	69 or 138 kV
Primary Structure Type	0	Single wood pole	Single wood pole	Single wood pole
Average Structure Height (feet)	0	55	55	55
Estimated Number of Structures	0	813	813	748
Average Span Length Between Structures (feet)	0	350 to 400	350 to 400	350 to 400
Overhead Length (miles)	0	57.3	57.3	50.4
- Length along Existing Roads (miles)	0	33.7	33.7	36.6
- Length along Existing Roads (%)	0	59%	59%	73%
Marine Crossings (miles)	0	1.2	3.1	1.5
- Submarine Cable (miles)[1/2/]	0	*1.2*	3.1	*1.5*
- HDD Bore (miles)[1/2/]	0	*1.2*	--	*1.5*
Underground Length (miles)	0	1.4	--	--
Environmental Effects				
Soils and Geology				
New Detrimental Soil Disturbance:				
- On NFS Lands (acres)	0	110	110	89
Cumulative Detrimental Soil Disturbance:				
- On NFS Lands (acres)	0	159	159	170

Table R-1. Comparison of Alternatives (continued)

Unit of Measure	Alternative			
	1 - No Action	**2 – Selected Alternative**	**3 – Northern Route with Submarine Cable**	**4– Center- South Route**
Aquatic Resources				
Subwatersheds with more than 20% of basin area harvested since 1984 (number)[3/]	0	0	0	0
Number of Proposed Stream Crossings by Shovel Trail/Matting Panel:				
- Class I	0	10	10	28
- Class II	0	20	20	14
- Class III	0	16	16	4
Number of Proposed Stream Crossings by Temporary Access Spur:				
- Class I	0	6	6	0
- Class II	0	5	5	6
- Class III	0	0	0	1
Timber				
Total Productive Forest Land Disturbed (acres)	0	358	358	496
Total Suitable Forest Land Disturbed (acres)[4/]	0	135	135	253
Removal of Timber from the Regional Timber Base (net sawlog volume) (MBF)	0	1,524	1,524	1,693
Botany - Rare Plants				
Sensitive Plants with Potential to Occur (risk)[5/]				
- Large yellow lady's slipper orchid	0	Low to Moderate	Low to Moderate	Low to Moderate
- *Lobaria amplissima*	0	Low to Moderate	Low to Moderate	Low to Moderate
- Alaska rein orchid	0	Low to Moderate	Low to Moderate	Low to Moderate
- Lesser round-leaved orchid	0	Low to Moderate	Low to Moderate	Low to Moderate
Invasive Plants				
Total Acres Disturbed	0	891	873	739
Risk of Spread (Relative)[6/]	0	Highest	Second Highest	Lowest
Wetlands				
Project-Related Disturbance to Wetlands (acres):				
- Forested Wetlands	0	166	157	106
- Emergent Short-sedge Wetlands	0	4	4	4
- Moss Muskegs	0	95	93	67
- Forested Wetland/Emergent Sedge Complex	0	238	238	116
Total Wetland Disturbance (acres)[7/]	0	502	491	293
Wildlife and Subsistence				
Impacts to Total POG (acres)	0	327	324	296
Impacts to High-Volume POG (acres)	0	99	97	51
Impacts to Large-Tree POG (acres)	0	12	12	3
POG affected within Beach Fringe and Riparian Buffers (acres)	0	182	178	130
Impacts to Deep Snow Winter Range for Deer (acres)	0	15	10	7
Deer Habitat Capability as Percent of 1954 Values	0	84	83	83

Table R-1. Comparison of Alternatives (continued)

Unit of Measure	Alternative			
	1 - No Action	2 – Selected Alternative	3 – Northern Route with Submarine Cable	4– Center- South Route
Transportation				
Total Unroaded Length (miles)	0	23.6	23.6	13.8
- Length of Shovel Trails (miles)	0	21.6	21.6	6.5
- Length of Temporary Matting (miles)	0	2.0	2.0	7.3
Length of Temporary Access Spurs (miles)	0	7.6	7.6	6.2
Number of Helicopter Pads	0	83	83	47
Scenery				
Total Disturbance (acres) in:				
- Distinctive Scenic Attractiveness Class	0	0	0	0
- Foreground Distance Zone	0	325	307	132
- Areas with Very High Existing Scenic Integrity	0	309	309	222
Recreation				
Net change from SPNM, SPM, or RN ROS settings to RM (acres)	0	417	417	241
Inventoried Roadless Areas				
Total Disturbance by IRA (acres):				
- North Kupreanof (211)	0	157.3	157.3	0
- Missionary (212)	0	5.2	5.2	0
- Five Mile (213)	0	233.8	233.8	0
- South Kupreanof (214)	0	0	0	279.1
- Total IRA Disturbance	0	396.3	396.3	279.1
Cultural Resources				
Effects on NRHP Eligible Cultural Resource Sites	None	None	None	None

Notes:
HDD = horizontal directionally drilled; MBF = thousand board feet; POG = Productive Old-Growth; ROS = Recreation Opportunity Spectrum; SPNM = Semi-Primitive Non-Motorized; SPM = Semi-Primitive Motorized; RN = Roaded Natural; RM = Roaded Modified; NRHP = National Register of Historic Places

1/ The Selected Alternative would cross Frederick Sound and the mouth of the Wrangell Narrows via HDD bore or buried submarine cable depending on geophysical survey results.
2/ Alternative 4 would cross Wrangell Narrows and Duncan Canal using a buried submarine cable or HDD bore depending on geophysical survey results. Different approaches could be used for each crossing depending on geophysical conditions.
3/ Estimates since 1984 include estimated disturbance by alternative.
4/ Totals include both old-growth and young-growth suitable forest land.
5/ A low to moderate rating here means that the action alternatives may adversely impact individuals, but are not likely to result in a loss of viability of these plant species in the analysis area, nor cause a trend toward Federal listing. None of the alternatives would have direct or indirect effects on known populations of sensitive plant species. This rating is based on potential effects to undetected populations and potential habitat.
6/ Risk of invasive plant spread is directly related to total acres disturbed, which is reflected in the relative ranking in this table.
7/ Project disturbance totals include potential right-of way clearing. Totals may not sum due to rounding.

Alternatives Considered but Eliminated from Detailed Study

A transmission line that would connect Kake with Petersburg has been discussed for many years, with related studies dating back to the 1970s. The alternatives considered as part of these studies and the process that led to the identification of the "northern" and "center-south" routes are discussed in the *Alternatives Considered but Eliminated from Detailed Study* section in Chapter 2 of the Final EIS.

Alternative sources of energy are also discussed in the *Alternatives Considered but Eliminated from Detailed Study* section in Chapter 2 of the Final EIS.

Comments on the Draft ROD noted that development of a Gunnuk Creek hydroelectric project has progressed since preparation of the Final EIS, and was identified in a recent report prepared for the Alaska Energy Authority as a top priority for the community of Kake (McDowell Group 2016, p. 8). The same report also noted that the Inland Passage Electric Cooperative, the proponent for the Gunnuk Creek project, is currently working on the final design and permitting stages, as well as raising funds for project construction (McDowell Group 2016). However, the project as currently proposed would only meet half of Kake's current energy needs (HDR Alaska, Inc. 2015) and would not support increased commercial demand in the future.

Environmentally Preferred Alternative

Under Alternative 1 – No Action, the Forest Service would not authorize the KPI Project and a new electric transmission line would not be built. Alternative 1 would result in no project-related environmental disturbance and is, therefore, the environmentally preferred alternative from a ground disturbance perspective. However, as noted above, under Alternative 1, the city of Kake would continue to be dependent on fossil fuel generation, which is less preferable than renewable energy sources, which could be used following completion of the KPI Project.

Public Involvement

To seek input on the KPI Project, the Forest Service employed public meetings, Federal Register notices, newspaper ads, government-to-government consultation, group and individual meetings, and the Tongass National Forest Schedule of Proposed Actions (SOPA).

The Notice of Intent (NOI) to prepare an EIS for the KPI Project was published in the Federal Register on May 7, 2010. A corrected NOI (following changes to the Proposed Action) to prepare an EIS was published on July 28, 2014. The Draft EIS was published in December 2014, followed by a 45-day public comment period. A complete list of all members of the public, groups, and agencies that received a copy of the Draft EIS is located in Chapter 4 of the Final EIS. Responses to comments on the Draft EIS are in Appendix A of the Final EIS.

Chapter 1 of the Final EIS provides more detailed information concerning public involvement, timing of activities, and consultation with Federal, State, and tribal entities.

Public Comments

Scoping Comments: The Forest Service received 88 unique written comment letters during public scoping for this proposed project. These letters combined included more than 280 individual comments. Many of these comments were from Kupreanof residents concerned about the potential impact of the Northern Alternative, Option 2 on their community, as well as potential impacts to Petersburg Creek. Other concerns raised during public scoping are summarized in the *Summary of Public Concerns* section in Chapter 1 of the Final EIS.

Draft EIS Comments: A total of 20 unique written comment letters were received from individuals, organizations, and government agencies during the 45-day comment period for the KPI Project Draft EIS. These letters combined included 144 individual comments. These comments are categorized, summarized, and addressed in Appendix A to the Final EIS. As indicated in Appendix A, some of these comments were related to environmental issues, others were concerned with broader procedural concerns. Two themes raised during public scoping relate to the potential development of localized alternative energy sources and the Kake Access Project.

In making my decision, I recognize that potential localized sources of renewable energy, such as small-scale hydropower, wind, and solar energy continue to be explored as alternate sources of energy for the community of Kake. I understand that some members of the public would have liked to see one or more of these initiatives evaluated as a separate action alternative in the KPI Project EIS. A range of different renewable energy options have been suggested for Kake with varying degrees of feasibility analysis conducted to date. One or more of these options may be practical or feasible from a technical and economic standpoint, but this is not known based on the work conducted to date. From my perspective, the No Action Alternative is an alternative that would emphasize the development of alternative energy sources in place of the proposed transmission line. Under the No Action Alternative, future efforts to provide access to relatively low cost energy would be limited to alternative energy development in the immediate vicinity of Kake, with no opportunity for access to electricity generated elsewhere in the region. By authorizing the Selected Alternative, I expect that technical and economic feasibility of localized sources of energy will continue to be explored, but the option to develop the KPI Project and gain access to regional lower cost energy resources will also be available.

Many of the concerns raised during public scoping for this project in 2010 were related to the possibility of a year-round road being constructed in conjunction with the KPI Project. Concern was expressed that a year-round road was either necessary for the construction of the KPI Project to move forward or would be facilitated by development of an electric transmission line. Much of this concern focused around the Northern route, which was identified as potential route for a year-round road. In January 2013, the Western Federal Lands Highway Division of the Federal Highway Administration (FHWA) and the Alaska Department of Transportation and Public Facilities (ADOT&PF) initiated the Kake Access Project EIS, which was intended to evaluate alternatives that would provide additional public access to Kake. As discussed in the EIS, there were some commonalities between the KPI Project and the Kake Access Project, with both projects evaluating the potential use of the Northern Route and Center-South route corridors, but the Kake Access Project also included other potential road locations, as well an alternative that would improve ferry service only. As a result, it was recognized that the best solution for each project may not involve action taken at the same place, and the two projects have been pursued independently.

Since the Draft EIS for the KPI Project was published, FHWA and ADOT&PF have conducted additional studies to gauge support for the project, and solicited public input to help refine the Purpose and Need statement for the Kake Access Project EIS (FHWA 2015). However, in February 2016, citing a lack of Federal funding and the high cost of operating and maintaining a shuttle ferry service across the Wrangell Narrows, the ADOT&PF formally notified the City of Kake and other communities via letter of their decision to "close-out the Kake Access federal project in order to investigate a more cost-effective project" (Luiken 2016). FHWA subsequently published a Notice to rescind the NOI for the KAP in the Federal Register on April 7, 2016 (Volume 81, Number 71).

ADOT&PF has indicated that they plan to provide road access to Kake following the State's 300-foot-wide right-of-way easement from Kake to Petersburg (ADOT&PF 2016). In a letter dated May 16, 2016, ADOT&PF stated that "[u]nder the authorities of Section 4407 of Public Law 109-59 and the subsequent Memorandum of Understanding (MOU) dated September 29, 2006 between the State of Alaska and the Forest Service, the ADOT&PF has received a 'D-1' planning easement from the Forest Service. This easement is for the planning and engineering of a proposed road and utility corridor connecting Kake and Petersburg. ... ADOT&PF is currently in the planning stages of designing a road alignment along this corridor. … It is anticipated that much of the final roadway will be aligned in substantial proximity to existing logging road centerlines, when available." The Forest Service believes that a Kake road project along this easement is reasonably foreseeable for the purposes of the cumulative effects analysis for KPI.

Mitigation

The analysis documented in the Final EIS discloses the possible adverse effects of implementing the actions proposed under each alternative. Mitigation measures are guided by Forest-wide goals and objectives, applicable LUD management prescriptions, and Forest Plan Standards and Guidelines. Site-specific measures designed to avoid or minimize adverse impacts are summarized in Table 2-3 in Chapter 2 of the Final EIS. These measures address activities associated with structure installation, shovel trails, use of matting, temporary access spurs, helicopter pads, right-of-way clearing, and system operation and maintenance. In addition to the mitigation measures included in Table 2-3, all appropriate Forest Service R10 BMPs, updated Forest Service National Core BMPs (USDA Forest Service 2012a), and State of Alaska BMPs (Alaska Department of Environmental Conservation [DEC] 2011) will apply and are further described in Chapter 2 of the Final EIS. These measures are included as Exhibit R-1 to this ROD.

Monitoring

Monitoring is a tool that involves gathering data and information and observing the results of management activities as a basis for evaluation. Monitoring activities can be divided into project-specific monitoring and Forest Plan monitoring. The National Forest Management Act (NFMA) requires national forests to monitor and evaluate their Forest Plans (36 CFR 219.110). Chapter 6 of the Forest Plan includes the monitoring activities to be conducted as part of the Forest Plan implementation. Monitoring of the Selected Alternative will be done during implementation. Specific monitoring items are outlined in the *Monitoring* section in Chapter 2 of the Final EIS and included in Exhibit R-1 to this ROD. These monitoring items a will be included in the construction stipulations that are part of the special use permit. The project applicant will be required to comply with all terms and conditions of the permit.

Project Record

The project record includes the Draft EIS and Final EIS, Forest Plan, all material incorporated by reference, and other critical materials produced during the environmental analysis of this project. The project record is available for review at the Forest Service, Petersburg Ranger District in Petersburg, Alaska.

Map and Number Disclaimer

All map products in this document are reproduced from geospatial information prepared by the Forest Service. Geographic information system (GIS) data and product accuracy may vary. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. For more information, contact the Petersburg Ranger District.

In addition, the accuracy of calculations made from GIS layers varies with the quality of the mapping itself. Numbers presented in tables in this document may not sum correctly due to rounding. Other slight anomalies due to rounding may also occur. Therefore, all numbers should be considered as approximate.

Consistency with the Forest Plan and other Applicable Laws and Regulations

This decision and the KPI Project Final EIS are consistent with the 2008 Forest Plan. The Selected Alternative follows a route that is identified as a Potential Power Transmission Corridor on the Land Use Designation (LUD) map that accompanied the ROD for the 2008 Forest Plan. Potential Power Transmission Corridor is one of four categories that comprise the Transportation and Utility System (TUS) LUD. The goal of the TUS LUD is to "provide for, and/or facilitate the development of, existing and future major public Transportation and Utility Systems, including those identified by the State of Alaska and the Alaska Energy Authority."

The KPI Project Final EIS and this decision are in compliance with NEPA, ANILCA, and all other applicable Federal and State laws and regulations. This ROD describes my decision to authorize the KPI Project, which is based on the EIS and the entire project record.

Findings Required by Law

Alaska National Interest Lands Conservation Act

Subsistence Evaluation and Findings (Section 810)

A subsistence evaluation was conducted in accordance with ANILCA Section 810. Based on this evaluation, the EIS concluded that none of the proposed alternatives would present "a significant possibility of a significant restriction" of subsistence uses for any subsistence resources (fish and marine invertebrates, food plants, personal use timber, upland game birds and waterfowl, furbearers, big game, and marine mammals).

Bald and Golden Eagle Protection Act of 1940 (as amended)

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. Eighteen known (active and historical) bald eagle nests were identified along Frederick Sound, using the most current U.S. Fish and Wildlife Service information, within 600 feet of the right-of-way. Timing restrictions for right-of-way clearing will be implemented if a nest is found to be active to comply with the Bald and Golden Eagle Protection Act. Bald eagle surveys will occur prior to any clearing or construction activities. Should an active nest be found adjacent to any proposed activity, appropriate nest site buffers and timing restrictions will be implemented. Bald eagles are managed by the U.S. Fish and Wildlife Service under the National Bald and Golden Eagle Protection Act and through the Bald Eagle Take Permit Program.

Clean Air Act of 1970 (as amended)

Emissions from implementation of the Selected Alternative will be of short duration and are not expected to exceed State of Alaska ambient air quality standards (18 Alaska Administrative Code [AAC] 50).

Clean Water Act of 1977 (as amended)

Project activities meet all applicable State of Alaska Water Quality Standards. Congress intended the Clean Water Act of 1972 (Public Law 92-500) as amended in 1977 (Public Law 95-217) and 1987 (Public Law 100-4) to protect and improve the quality of water resources and maintain their beneficial uses. Section 313 of the Clean Water Act and Executive Order 12088 of January 23, 1987 address Federal agency compliance and consistency with water pollution control mandates. Agencies must be consistent with requirements that apply to "any governmental entity" or private person. Compliance is

to be in line with "all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution."

The Clean Water Act (Sections 208 and 319) recognized the need for control strategies for nonpoint source pollution. The National Nonpoint Source Policy (December 12, 1984), the Forest Service Nonpoint Strategy (January 29, 1985), and the U.S. Department of Agriculture (USDA) Nonpoint Source Water Quality Policy (December 5, 1986) provide a protection and improvement emphasis for soil and water resources and water-related beneficial uses. Soil and water conservation practices (also called BMPs) are recognized as the primary control mechanisms for nonpoint source pollution on NFS lands (USDA Forest Service 2006, 2012). The U.S. Environmental Protection Agency (EPA) supports this perspective in their guidance, "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987).

Endangered Species Act of 1973 (as amended)

There are 16 species identified as potentially occurring in the project area, 14 of which are fish species. All 16 of these species are addressed in the Biological Assessment (BA) prepared for this project (Tetra Tech, Inc. 2015). None of the listed fish species occur in the project area, and the project would not adversely affect listed wildlife species or their habitats, nor would they be likely to result in a trend toward Federal listing or a loss of viability for any sensitive species. The BA prepared for the project was sent to the NOAA Fisheries as part of Section 7 consultation under the Endangered Species Act. On January 4, 2016, NOAA Fisheries concurred with the finding of "not likely to adversely affect" humpback whales, the western Distinct Population Segment (DPS) of the Steller sea lion, six Chinook salmon Evolutionary Significant Units (ESUs), five ESUs of steelhead trout, Snake River sockeye salmon ESU, Hood Canal summer-run chum salmon ESU, or Lower Columbia River coho salmon ESU. Mitigation measures outlined in their concurrence letter have been incorporated into the ROD. The BA is included in the project record.

Magnuson-Stevens Fishery Conservation and Management Act of 1996

The potential effects of the project on Essential Fish Habitat (EFH) were evaluated in the *Aquatic Resources* section in Chapter 3 of the Draft EIS. This discussion includes reference to the Magnuson-Stevens Fisheries Conservation Act that requires the Forest Service to consult with the National Marine Fisheries Service (NMFS) on projects that may affect EFH. The assessment also described the proposed action and assessed the potential effects of the action alternatives on freshwater and marine EFH. The Forest Service determined that the KPI Project may adversely affect EFH because fish streams are directly or indirectly affected by forest clearing and disturbance, timber transport and processing, and submarine cable crossings. The Selected Alternative will result in minor effects on water quality and aquatic habitat. By following the standards and guidelines in the Forest Plan, all appropriate R10 BMPs, updated Forest Service National Core BMPs (USDA Forest Service 2012), State of Alaska BMPs (Alaska Department of Environmental Conservation [ADEC] 2011), and the project-specific mitigation measures outlined in Exhibit R-1, the effects on EFH will be minimized.

The Draft EIS was provided to the National Marine Fisheries Service to formally initiate the consultation process according to the agreement dated June 26, 2007 between the Forest Service and NMFS. NMFS did not provide any comments.

Information on the mitigation measures and applicable Forest Plan Standards and Guidelines to minimize effects to EFH are discussed in Chapter 2 of the Final EIS. A copy of the Final EIS and ROD were sent to NMFS. This satisfies the EFH consultation requirement based on the 2007 agreement with NMFS.

Marine Mammal Protection Act of 1972

Actions authorized as part of the Selected Alternative will adhere to the requirements of the Marine Mammal Protection Act. Marine mammal viewing guidelines administered by NMFS and enforced by the Coast Guard are sufficient for their protection. Contractors and employees will be required to follow provisions on marine wildlife guidelines, including special prohibitions on approaching humpback whales in Alaska as defined in 50 CFR 224.103. NMFS administers the Marine Mammal Protection Act, which prohibits "take" of all marine mammal species in U.S. waters. "Take" is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is defined as "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal stock in the wild by causing disruption of behavior patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

2008 Tongass National Forest Land and Resource Management Plan

This decision and the KPI Project Final EIS are consistent with the 2008 Forest Plan. The Selected Alternative follows a route that is identified as a Potential Power Transmission Corridor on the LUD map that accompanied the ROD for the 2008 Forest Plan. Potential Power Transmission Corridor is one of four subcategories that comprise the TUS LUD. The goal of the TUS LUD is to "provide for, and/or facilitate the development of, existing and future major public Transportation and Utility Systems, including those identified by the State of Alaska and the Alaska Energy Authority."

National Historic Preservation Act of 1966 (as amended)

Cultural resource surveys of various intensities were conducted in the analysis area to ensure that the procedural requirements of 36 CFR 800 were met and in accordance with the Programmatic Agreement (2010) among the Forest Service Alaska Region, the Advisory Council on Historic Preservation (ACHP), and the State Historic Preservation Officer (SHPO). A finding of "no historic properties affected" was recommended for all alternatives for the KPI Project. Under the terms of the existing Programmatic Agreement with the Alaska State Historic Preservation Officer and the Advisory Council on Historic Preservation (USDA Forest Service 2002, as amended 2010) "the Forest may proceed with the undertaking in lieu of a consensus determination of eligibility pursuant to 36 CFR 800.4." The Forest Service engaged in consultation regarding our determination recommendations with the Alaska State Historic Preservation Officer and received concurrence with our finding of no historic properties affected determination in September 2015.

Executive Orders

Executive Order 11593 (Cultural Resources)

Executive Order 11593 directs Federal agencies to inventory cultural resources under their jurisdiction, to nominate to the National Register of Historic Places (NRHP) all Federally owned properties that meet the criteria, to use due caution until the inventory and nomination processes are completed, and to assure that Federal plans and programs contribute to the preservation and enhancement of properties not Federally owned. This project considered impacts to historic properties as part of the National Historic Preservation Act compliance and thus satisfies the requirements of Executive Order 11593.

Executive Order 11988 (Floodplains)

Executive Order 11988 directs Federal agencies to take action to avoid, to the extent possible, the long- and short-term adverse effects associated with the occupancy and modification of floodplains.

The numerous streams in the KPI Project area make it essentially impossible to avoid crossing all floodplains. Site-specific mitigation measure RMA 1 (see Table 2-3 in Chapter 2 of the Final EIS) requires that transmission line structures be sited to avoid floodplains to the extent possible. The measure continues that where this is not possible, BMPs and Forest Plan Standards and Guidelines will be implemented to reduce overall disturbance.

Executive Order 11990 (Wetlands)

Executive Order 11990 requires Federal agencies to avoid, to the extent possible, the long- and short-term adverse effects associated with the destruction or modification of wetlands. Due to the extensive nature of wetlands and the interspersed nature of wetlands with uplands in the KPI project area, complete avoidance of all wetlands is not possible under any of the action alternatives. The Selected Alternative will permanently affect an estimated 86 acres of wetlands due to structure installation. The use of temporary access spurs and temporary shovel trails and matting panels will affect approximately 28 more acres. Right-of-way clearing could also potentially affect wetland acres in cases where ground disturbance is required. An estimated 388 acres of the right-of-way for the Selected Alternative consist of wetlands that could be affected by the Selected Alternative. The effects of the project on wetlands will adhere to State of Alaska BMPs (ADEC 2011) which include, at a minimum, the Federal baseline provisions in 33 CFR 323, application of Standards and Guidelines in the Forest Plan, and the project-specific mitigation measures outlined in Exhibit R-1 for RMA 2.

Executive Order 12898 (Environmental Justice)

Executive Order 12898 directs Federal agencies to address whether a disproportionately high and adverse human health or environmental impact on minority populations, low-income populations, or Indian tribes is likely to result from the proposed action and any alternatives. Kake meets the White House's Council on Environmental Quality's (CEQ's) definition of a minority community. Efforts were made during the public participation process to inform all parties of the project and its possible effects through notices in local papers, local meetings, and tribal government correspondence. No disproportionately high and adverse human health or environmental impacts were identified.

Executive Order 12962 (Aquatic Systems and Recreational Fisheries)

Executive Order 12962 requires Federal agencies to evaluate the effects of proposed activities on aquatic systems and recreational fisheries. The Selected Alternative minimizes the effects on aquatic systems through project design, application of Forest Plan Standards and Guidelines, BMPs, and site-specific mitigation measures. Under the Selected Alternative, recreational fishing opportunities will remain essentially the same as the current condition because aquatic habitats are protected through implementation of R10 BMPs (12.6, 12.6a, and 13.16) and project-specific mitigation measures outlined in Exhibit R-1; particularly F1-F18.

Executive Order 13007 (Indian Sacred Sites)

Executive Order 13007, Indian Sacred Sites, provides presidential direction to Federal agencies to give consideration to the protection of American Indian sacred sites and allow access where feasible. In a government-to-government relationship, the tribal government is responsible for notifying the agency of the existence of a sacred site. A sacred site is defined as a site that has sacred significance due to established religious beliefs or ceremonial uses, and which has a specific, discrete, and delineated location that has been identified by the tribe. Tribal governments or their authorized representatives have not identified any specific sacred site locations in the project area.

Executive Order 13112 (Invasive Species)

Executive Order 13112 requires Federal agencies (in part) to evaluate whether the proposed activities will affect the status of invasive species, and to not carry out activities that promote the introduction or

spread of invasive species unless the agency has determined that the benefits of such action outweigh the potential harm caused by invasive species, and that all feasible and prudent measure to minimize risk of harm will be taken in conjunction with the actions. The Selected Alternative implements specific measures to minimize the introduction and spread of invasive species.

Executive Order 13175 (Government-to-Government Consultation)

Executive Order 13175 directs Federal agencies to respect tribal self-government, sovereignty, and tribal rights, and to engage in regular and meaningful government-to-government consultation with tribes on proposed actions with tribal implications. The Forest Service conducted government-to-government consultation with the Organized Village of Kake, Kake Tribal Corporation, and the Petersburg Indian Association. Input was sought from additional tribal groups that had the potential to be culturally affiliated with the project area. These groups include the Wrangell Cooperative Association, Sealaska Corporation, Sealaska Heritage, and the Central Council of the Tlingit and Haida Indian Tribes of Alaska. Tribal governments and organizations did not express any concerns about the KPI Project during initial consultation and discussions. Regular consultation will continue during the planning of this proposed project and beyond. Tribal consultation does not imply that the tribes endorse the Selected Alternative or any of the alternatives.

Executive Order 13186 Migratory Birds

The Migratory Bird Treaty Act of 1918 (amended in 1936 and 1972) prohibits the taking of migratory birds, unless authorized by the Secretary of Interior. The law provides the primary mechanism to regulate waterfowl hunting seasons and bag limits, but its scope is not just limited to waterfowl. The migratory species that may stay in the area utilize most, if not all, of the habitats described in the analysis for breeding, nesting, and raising their young. The effects on these habitats were analyzed for this project. The decision will not have a significant direct, indirect, or cumulative effect on any migratory bird species in the project area. The migratory bird species most likely to be adversely affected by the project are those that primarily nest in old-growth forests. Migratory birds would be most susceptible to impacts from vegetation removal occurring in suitable nesting habitat during the nesting/fledging period. The transmission line would be built to Avian Power Line Interaction Committee (APLIC) standards, thereby minimizing the risk of migratory birds potentially colliding with the transmission line and being electrocuted (APLIC 2006).

Executive Order 13443 (Hunting Heritage and Wildlife Conservation)

Executive Order 13443 directs Federal agencies to facilitate the expansion and enhancement of hunting opportunities and the management of game species and their habitat. The analysis considered and disclosed the effects on hunting activities. The Selected Alternative will maintain current hunting opportunities by adhering to the Forest Plan Standards and Guidelines that maintain habitat for hunted species.

Federal and State Permits

Permits necessary to implement the authorized activities are listed at the end of Chapter 1 in the Final EIS.

Results of the Objection Process pursuant to 36 CFR 218

A Legal Notice was published June 28, 2016 that began a 45-day objection period for the Draft ROD, and one objection was filed by Mr. Paul Olson on behalf of the City of Kupreanof and received on August 10, 2016. I, the Responsible Official, met with Mr. Olson on September 20, 2016 to discuss objection points and possible remedies. The information discussed during this meeting was also shared with the City of Kupreanof. On September 26, 2016, the City indicated they would not request an objection resolution meeting. While discussions did not result in the resolution of the objections, these

discussions have helped further the relationship between the parties and I encourage the dialogue to continue. On October 11, 2016, the Reviewing Officer issued a written response detailing how the points raised in this objection have been addressed, which also included eight specific instructions to me, the Responsible Official, pursuant to 36 CFR 218.11(b). The written response to the objection and my response to the eight specific instructions [Kake to Petersburg Transmission Line Intertie Project Response to Reviewing Officer's Instruction for Required Further Action] have been added to the Project Record (see PR 765-1901 and 765-1902, respectively). This document is attached to this ROD as Exhibit R-2. The Reviewing Officer's response indicated I could move forward with this decision to authorize the Selected Alternative for the KPI Project.

Process for Implementation

Under Title V of FLPMA, the Forest Service is responsible for processing right-of-way applications to determine whether, and under what terms and conditions, to authorize proposed transmission line projects on NFS land.

My decision authorizes the right-of-way through issuance of a 20-year special use permit, which includes terms and conditions based on the Final EIS, and other rules and regulations applicable to Federal lands.

Before the Forest Service issues a construction permit, the project applicant must prepare, among other items, a Plan of Development that includes final engineering and design drawings. The Plan of Development will present the results of the submarine topographical survey and subsurface profile that will be completed to inform the decision about the type of crossing that will be employed HDD boring or buried submarine cable) and determine the best crossing route and associated terminal locations.

Other Federal and State permits, licenses and certificates that are required are identified in the *Federal and State Permits, Licenses and Certificates* section in Chapter 1 of the Final EIS. If the project applicant does not obtain these approvals, the Forest Service will not issue the construction permit. This includes obtaining a utility permit from ADOT&PF where the Selected Alternative enters into easements granted to ADOT&PF under Section 4407 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The ROD and issuance of a 20-year special use permit will not infringe on the rights of ADOT&PF offered under said granted easements. It is assumed that the Project will apply for a utility permit under the State process for easement outlined under Alaska Statute 38.05.

Proposed changes to the authorized project actions or new information will be subject to the requirements of NEPA, NFMA, Section 810 of ANILCA, and other laws concerning such changes. Any proposed changes to the design, location, Forest Plan Standards and Guidelines, or other mitigation measures for the project will also be documented at the time of implementation. The Responsible Official will determine whether the proposed change is a substantial change to the Selected Alternative as planned and already approved, and whether the change is relevant to environmental concerns. Connected or interrelated changes to particular areas or specific activities will be considered in making this determination. The cumulative impacts of these changes will also be considered. In determining if any NEPA action is required for changes during implementation, the Responsible Official will consider the criteria in 40 CFR 1502.0(c) and Forest Service Handbook (FSH) 1909.15, Section 18.

Adjustments are expected during final engineering design for the purpose of improving structure locations and to better meet on-site resource management objectives. These adjustments are not expected to represent substantial changes to environmental concerns or require additional NEPA analysis. However, changes made during implementation will be reviewed, documented, and approved by the Responsible Official through the Tongass Change Analysis process (Tongass National Forest Supplement FSH 1909.15-2009-1).

Implementation Date

Implementation of decisions subject to the objection process may commence immediately after a final decision is signed. There is no requirement to publish notification of the decision.

Contact Information

For additional information concerning this decision, contact: Tom Parker, Supervisory Resource Staff, Tongass National Forest, Petersburg Ranger District, P.O. Box 1328, Petersburg, AK 99833 or via phone at (907)-772-5974.

Responsible Official

30 Nov 2016

M. EARL STEWART
Forest Supervisor
Tongass National Forest

Date

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Exhibit R-1
Mitigation and Monitoring Measures

Mitigation Measures

The EIS discloses possible adverse impacts and measures to mitigate these impacts. Mitigation measures are guided by Forest-wide goals and objectives, applicable LUD management prescriptions, and Forest Plan Standards and Guidelines. Specific mitigation measures, designed to avoid or minimize adverse impacts, were incorporated into the preliminary Project design, and will be included in the final design and implementation. These site-specific mitigation measures are found in Table 2-3 in Chapter 2 of the Final EIS (and below in Table R.1-1) and address activities associated with structure installation, shovel trails, use of matting, temporary access spurs, helicopter pads, right-of-way clearing, and system operation and maintenance. In addition to the mitigation measures displayed in Table R-1-1, all appropriate R10 BMPs, Forest Service National Core BMPs (USDA Forest Service 2012), and State of Alaska BMPs (ADEC 2011) will apply. These BMPs are described below.

Table R-1-1. Site-specific Mitigation Measures for Clearing and Construction-related Activities

Mitigation Measure	Description
General Mitigation Measures	
G1	Conduct environmental staff review of final construction drawings and specifications prior to the package being sent out to bidding contractors to ensure that the package reflects and adheres to the mitigation measures outlined in this NEPA process. This effort will include Project Engineer, Project Manager, and Forest Service or approved third-party Environmental Compliance Monitor.
G2	Prior to construction, review plans for the clearing required for the transmission line right-of-way for conformance with permits and mitigation measures outlined during the NEPA process. This effort will include Project Engineer, Project Manager, and Forest Service or approved third-party Environmental Compliance Monitor.
G3	Prior to construction, inspect areas marked for clearing to determine conformance with agreed upon plans, and the need for adjustments based on special site conditions. Any changes or potential realignments will follow additional review requirements as outlined in Mitigation Measure S1.
Soils/Aquatic Resources	
F1	Minimize clearing in areas with high or very high mass movement potential.
F2	Suspension cable logging systems or other low impact system will be required in areas with high mass movement potential or on McGilvery soils.
F3	Required split yarding and directional felling along all streams that cannot be avoided or spanned (R10 BMPs 12.6, 12.6a, and 13.16).
F4	Span, without clearing, steep v-notch streams with high erosion potential.
F5	Establish timing restrictions for any instream activities in fish-bearing streams and streams with a downstream influence on fish habitat (R10 BMP 14.6 and Fish Standards and Guidelines). Locations and operating plans for heavy equipment placed in the right-of-way must be specified to ensure that all necessary stream crossings are specified and mitigated.
F6	Develop and implement an erosion control and sediment plan that covers all disturbed areas, including borrow, stockpile, fueling, and staging areas used during construction activities (Fac-2, USDA Forest Service 2012). Measures will be developed to reestablish vegetation or otherwise stabilize soils (R10 BMPs 14.8 and 14.14).
F7	Remove construction slash in streams to ensure that debris generated during construction is prevented from obstructing channels or encroaching on streams. Right-of-way slash must not be left or placed below the high water mark at power line stream crossings (R10 BMP 14.19)
F8	Avoid construction in areas with high mass movement potential, when possible, by limiting the number the structures and by spanning areas of concern. Structure locations should incorporate site-specific geotechnical investigations to ensure location at stable sites
F9	To the extent practicable, implement feathering of edges where right-of-way clearing approaches within 100 feet of a temperature sensitive stream.

Table R-1-1. Site-specific Mitigation Measures for Clearing and Construction-related Activities (continued)

Mitigation Measure	Description
F10	Instream protection notwithstanding, where clearing is necessary within 100 feet of anadromous streams and their resident fish tributaries (Class I and II) leave felled trees in place but not blocking stream channel.
F11	Prepare a Stream Course Protection Plan for all Class I streams and Class II streams flowing directly into Class I streams where the power line crosses and/or parallels the stream within 100 feet (R10 BMP 13.16).
F12	If blasting is required, a blasting plan will be supported by site-specific geotechnical investigations showing blasting as a suitable and prudent practice. Blasting operations will be designed to reduce the risk of mass failure on potentially unstable or saturated soils. Use current regional specifications where mass wasting due to blast vibration is likely. Blasting plan will address corrective actions and contingencies for restoring resources damaged by overshot rock or mass wasting (R10 BMP 14.7).
F13	All ground disturbing support facilities (i.e., staging areas, barge locations, etc.); will require site-specific erosion control and restoration plans prior to construction commencement and will be addressed in any required permits. These facilities will be designed to minimize the total area disturbed, and their locations will be selected to minimize the number of required roads and landings necessary.
F14	Implement measures to minimize the use of the corridor by unauthorized vehicle use and prevent soils from being exposed to increased erosion risk.
F15	Routinely inspect disturbed areas to verify that erosion and stormwater controls are implemented and functioning as designed, and are suitably maintained.
F16	Design and locate skid trails and skidding operations to minimize soil disturbance to the extent practicable. Provide breaks in grade and avoid long runs on steep slopes.
F17	Use low ground pressure equipment when practicable, particularly on equipment traveling over large portions of units with sensitive soils or site conditions. On sites having soils with low bearing strength, tracks need to be supported by logging slash, shrubs, other woody material, or pads to prevent rutting. This mattress material should be removed where necessary to restore the natural drainage pattern.
F18	Prior to final selection of submarine crossing locations and marine-associated logging operations, field verification will be undertaken to ensure avoidance of sensitive areas including estuaries, anadromous fish streams, eelgrass beds, and important fish aggregating areas.
Wetlands, Floodplains, and Riparian Management Areas (R10 BMP 12.5)	
RMA 1	To the extent practicable, avoid siting transmission line structures in wetlands, floodplains, and riparian areas. Where this is not possible, BMPs and Forest Plan Standards and Guidelines will be implemented to reduce overall disturbance.
RMA 2	Construction techniques used to cross wetlands must have minimal effects on wetland hydrology, chemistry, or biology, and meet all 33 CFR BMPs. A 404 permit will be applied for in the event that the project does not fall under a nationwide permit.
Vegetation and Timber	
T1	Where practicable, locate right-of-way edges perpendicular to the prevailing winds to minimize windthrow.
T2	Use feathered right-of-way edges to minimize vegetation removal, windthrow, and visual impacts.
T3	Where feasible, merchantable timber felled during right-of-way clearing will be removed in accordance with specifications outlined in an approved Timber Settlement Agreement. The approved Timber Settlement Agreement will identify the timber required to be removed and specify how it will be removed and transported.

Table R-1-1. Site-specific Mitigation Measures for Clearing and Construction-related Activities (continued)

Mitigation Measure	Description
T4	Develop and implement a post-construction site revegetation plan. Use suitable species and establishment techniques to cover or revegetate disturbed areas in compliance with local direction and requirements per FSM 2070 and FSM 2900 for vegetation ecology, and prevention and control of invasive species.
T5	Use ground-based yarding systems only where physical site characteristics are suitable to avoid or minimize potential impacts to vegetation and soils.
T6	Proposed shovel yarding on slopes greater than 35 percent should undergo interdisciplinary review before being approved. Areas with broken, uneven topography, or an area dissected by numerous incised drainages may not be suitable for shovel yarding. Harvesting in areas with hydric soils will be limited to areas with slopes $\leq$ 25% (R10 BMP 13.9).
T7	Spur roads for shovel access should be minimized and/or obliterated after use. The number of turns on shovel trails should be limited, depending on soil type and vegetative cover. Wide arc turns can be used to reduce soil disturbance on shovel trails (R10 BMP 13.9).
T8	All ground-based construction equipment and temporary matting panels will be cleaned prior to implementation and mobilization to the right-of-way and before equipment is transported to another area (e.g., between Kupreanof and Mitkof islands). On NFS lands, cleaning will be done according to Tongass National Forest requirements (see Forest Service Manual 2900-Invasive Species Management [USDA Forest Service 2011]).
T9	Should rock be needed, a quarry development plan will be reviewed prior to use of existing quarries or development of new rock quarries, and reviewed and approved by resource specialists and the District Ranger. Forest Plan Standards and Guidelines and BMPs will apply to reduce risk of increasing invasive plant species.
Wildlife	
W1	Provide line markers on the transmission line to minimize the risk of bird collision at any known areas of concern.
W2	Provide for snag retention and structural diversity by leaving non-hazard snags within the cleared right-of-way. Leave non-danger trees and snags along the right-of-way boundaries. Where possible, allow the size and density of snags to be dictated by Forest Plan Standards and Guidelines for cavity-nesting species. Non-hazard snags may be retained in clumps away from conductors and in protected draws to minimize blowdown effects and conflicts with safety standards.
W3	To minimize restriction of wildlife movements, pile heavy (more than 18 inches deep) slash, or create openings through slash at regular intervals (every 100 yards and/or at identified game trail crossings), unless specifically waived by the Forest Service.
W4	Maintain a 330-foot forested radius around any bald eagle nest identified within the Project Area. Between March 1 and August 31, restrict controlled blasting on all transmission line sites within a 0.5 mile radius of a bald eagle nest site, and restrict all helicopter logging and/or flight paths within one-quarter mile of a nest. These restrictions may be lifted after June 1 if the nest is found to be unoccupied. All activities will be consistent with Forest-wide Standards and Guidelines, National Bald Eagle Management Guidelines, and the National Bald and Golden Eagle Protection Act unless a variance is granted from the U.S. Fish and Wildlife Service (USFWS).
W5	If a wolf den site is found in the right-of-way, restrict clearing construction within 0.5 mile during wolf mating, denning, and rearing periods, from February 1 to July 30. Timing restrictions may be lifted after April 30 if the den is determined to be unoccupied.
W6	Inform all construction personnel concerning laws restricting the use of aircraft, especially helicopters, for hunting and harassment of wildlife.
W7	Do not allow hunting activities by construction crews while they are using project housing, vehicles, or other project-related transportation.
W8	Follow USFWS recommendations for transmission conductor separation and height to prevent eagle electrocutions.

Table R-1-1. Site-specific Mitigation Measures for Clearing and Construction-related Activities (continued)

Mitigation Measure	Description
W9	Inform contract personnel and other persons in the area that bald eagles could potentially be present and that they are protected by law. Instruct all personnel about the proper procedures for reporting suspected sightings or signs of threatened, endangered or sensitive plant and animal species.
W10	Conduct goshawk surveys on route if not conducted previously. Follow the Tongass National Forest Project-level Goshawk Inventory Protocol (Stangl 2009), if required. If a goshawk nest is discovered, it shall be reported to the Forest Service, and current Forest Plan direction will be followed to ensure protection of the nest and surrounding area.
W11	The timing of geophysical surveys and the installation of a cable either through an HDD bore or buried cable approach will be conducted during the winter months (late October through March) when humpback whales are less likely to be in the area.
W12	Limit project-related boat traffic and aircraft flights if humpback whales or Steller sea lions are observed migrating through or near the Project Area. Humpback whales will not be approached within 100 yards by boats less than 100 feet in length or within 0.25 mile by boats over 100 feet in length. As safety allows, avoid aircraft flights below 1,000 feet above sea level within 0.3 mile of a whale. Hauled out marine mammals will not be approached by boat within 100 yards. Sightings of humpback whales or Steller sea lions will be recorded and submitted to the Forest Service.
W13	All onsite vessel operations along the cable alignment will be conducted at speeds of 10 knots or less.
W14	Dynamic Positioning (DP) will not be used during cable installation if other methods are possible to reduce noise propagation in the marine environment. If the use of DP cannot be avoided, the applicant shall reduce the DP thruster to 50 percent power or less as feasible during cable-laying operations.
W15	A 500-meter marine mammal exclusion zone will be established if bubble pulser and airgun operation cannot be avoided. If bubble pulser or airgun operation occurs, the ramp-up, power down, and shutdown procedures identified in NOAA Fisheries' January 4, 2016 concurrence letter will be followed. If bubble pulser or airgun operation occurs, a trained marine mammal observer will be present on the vessel during related in-water activities to ensure the ramp-up, power down, and shutdown procedures are followed and record all marine mammal sightings within the exclusion zone.
W16	Noise from any above ground drilling activities will be mitigated (sound panels/screening) as necessary to maintain daytime and nighttime levels required by City and Borough Ordinances.
Visual Resources	
V1	Use non-reflective and non-refractive insulators if glass is not required for safety and reliability; and use non-specular conductors.
V2	At the time of delivery, inspect all line construction materials (poles and other structure elements, insulators, and conductors) for conformance with specifications related to color and reflectivity.
V3	In key viewshed areas, to the extent possible, feather visible right-of-way cuts by leaving the smaller vegetation and narrow the right-of-way near the structures.
V4	Develop and apply measures to restore and revegetate LTF sites and staging areas if using areas that are not already disturbed.
V5	Helipads and other structures will be painted to blend in with the surrounding environment. Paint colors will be approved by the Forest Service.
Recreation	
R1	Keep all permitted outfitters/guides in the area informed of construction schedule. Provide advance notice to allow outfitters/guides to plan trips around construction activities.

Table R-1-1. Site-specific Mitigation Measures for Clearing and Construction-related Activities (continued)

Mitigation Measure	Description
Cultural Resources	
C1	Avoid right-of-way clearing and construction of transmission line structures at known cultural sites where practicable. If avoidance of cultural sites is not feasible or practicable, the project applicant's cultural resource contractor will develop a data recovery plan to mitigate the effects on those sites in accordance with Forest Service guidelines and involve the State of Alaska and the appropriate Native tribes.
C2	Exposure of previously unknown cultural properties during construction will be reported by the project environmental compliance monitor to the project applicant's cultural resource contractor and the Forest Service. The cultural resource contractor in consultation with the Forest Service archaeologist will determine if it is appropriate for the unknown properties to be recorded and evaluated for National Register eligibility.
Site-Specific Rerouting Considerations	
S1	During final design, field check locations that have specific resource concerns and make minor adjustments to routes or structure placement where practicable if it would result in a reduction of environmental impacts.

Best Management Practices

The following BMPs will be employed to avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources during the construction and maintenance of powerlines and transmission facilities (Fac-9, USDA Forest Service 2012):

- Limit corridor disturbance, particularly in or near riparian areas, surface waters, shallow groundwater, unstable areas, hydric soils, or wetlands.
- Consider temporary road location and standards for shovel trail and access spurs, type of construction equipment (wheeled, tracked, and helicopter), size and location of footings and guy anchors, and revegetation requirements during project design.
- Use applicable R10 and National Core BMPs for Mechanical Vegetation Management Activities when using mechanical treatments to remove or manage vegetation from the project corridor.
- Aggressively address unauthorized uses of the corridor, such as motorized vehicle use, that are exposing soils, increasing erosion, or damaging the facilities.

Apply measures to avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources by implementing measures to control surface erosion, gully formation, mass slope failure, and resulting sediment movement before, during, and after mechanical vegetation treatments (Veg-2, USDA Forest Service 2012):

- Establish designated areas for equipment staging, stockpiling materials, and parking to minimize the area of ground disturbance (Fac-2, USDA Forest Service 2012).
- Locate landings, skid trails, and slash piles in suitable sites to avoid, minimize, or mitigate potential for erosion and sediment delivery to nearby waterbodies.
- Develop an erosion control and sediment plan that covers all areas disturbed during transmission line construction
- Apply soil protective cover on disturbed areas where natural revegetation is inadequate to prevent accelerated erosion before the next growing season.
- Divert surface runoff around bare areas with appropriate energy dissipation and sediment filters.

- Use suitable species and establishment techniques to cover or revegetate disturbed areas in compliance with local direction and requirements per FSM 2070 and FSM 2900 for vegetation ecology and prevention and control of invasive species
- Install sediment and stormwater controls before initiating surface-disturbing activities to the extent practicable.
- Operate equipment when soil compaction, displacement, erosion, and sediment runoff would be minimized.
- Avoid ground equipment operations on unstable, wet, or easily compacted soils and on steep slopes unless operation can be conducted without causing excessive rutting, soil puddling, or runoff of sediments directly into waterbodies.
- Routinely inspect disturbed areas to verify that erosion and stormwater controls are implemented and functioning as designed and are suitably maintained.
- Maintain erosion and stormwater controls as necessary to ensure proper and effective functioning.
- Implement mechanical treatments on the contour of sloping ground to avoid or minimize water concentration and subsequent accelerated erosion.

Apply applicable measures to avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources during ground-based skidding and yarding operations by minimizing site disturbance and controlling the introduction of sediment, nutrients, and chemical pollutants to waterbodies (Veg-3, USDA Forest Service 2012):

- Use ground-based yarding systems only where physical site characteristics are suitable to avoid, minimize, or mitigate adverse effects to soil, water quality, and riparian resources.
- Design and locate skid trails and skidding operations to minimize soil disturbance to the extent practicable. Provide breaks in grade and avoid long runs on steep slopes concentrating runoff.
- Use suitable measures during felling and skidding operations to avoid or minimize disturbance to soils and waterbodies to the extent practicable.
- Perform skidding or yarding operations when soil conditions are such that soil compaction, displacement, and erosion would be minimized.
- Directionally fell trees to facilitate efficient removal along predetermined yarding patterns with the least number of passes and least amount of disturbed area (e.g., felling-to-the-lead).
- Use low ground pressure equipment when practicable, particularly on equipment traveling over large portions of units with sensitive soils or site conditions.
- Use suitable measures to stabilize and restore skid trails after use and promote rapid revegetation.
- Use cable or aerial yarding systems on steep slopes where ground-based equipment cannot operate without causing unacceptable ground disturbance (Veg-5, USDA Forest Service 2012).
- Locate cable corridors to efficiently yard materials with the least soil damage (Veg-5, USDA Forest Service 2012).
- Use suitable measures to minimize soil disturbance when yarding over breaks in slope (Veg-5, USDA Forest Service 2012).
- Locate landings to minimize the number of required skid roads and minimize the size and number of landings as practicable to accommodate safe, economical, and efficient operations (Veg-6, USDA Forest Service 2012).

- Establish and maintain construction area limits to the minimum area necessary for completing the project and confine disturbance to within this area (Fac-2, USDA Forest Service 2012).
- Develop and implement an erosion control and sediment plan that covers all disturbed areas, including borrow, stockpile, fueling, and staging areas used during construction activities (Fac-2, USDA Forest Service 2012).
- Apply soil protective cover on disturbed areas where natural revegetation is inadequate to prevent accelerated erosion during construction or before the next growing season. (Fac-2, Veg-2; USDA Forest Service 2012).
- Develop and implement a post-construction site vegetation plan using suitable species and establishment techniques to revegetate the site (Fac-2, USDA Forest Service 2012).
- Install sediment and stormwater controls before initiating surface-disturbing activities to the extent practicable (Fac-2, USDA Forest Service 2012).
- Limit the amount of exposed or disturbed soil at any one time to the minimum necessary to complete construction operations (Fac-2, USDA Forest Service 2012).
- Limit operation of equipment when ground conditions could result in excessive rutting, soil puddling, or runoff of sediments directly into waterbodies (Fac-2, USDA Forest Service 2012).
- Proposed shovel yarding on slopes greater than 35 percent should undergo interdisciplinary review before being approved. Areas with broken, uneven topography, or an area dissected by numerous incised drainages may not be suitable for shovel yarding. Harvesting in areas with hydric soils will be limited to areas with slopes less than 25 percent (R10 BMP 13.9, USDA Forest Service 2006).
- Areas with broken, uneven topography, or an area dissected by numerous incised drainages may not be suitable for shovel yarding (R10 BMP 13.9, USDA Forest Service 2006).
- On sites having soils with low bearing strength, tracks need to be supported by logging slash, shrubs, other woody material, or pads to prevent rutting. This mattress material should be removed where necessary to restore the natural drainage pattern (R10 BMP 13.9, USDA Forest Service 2006).
- Live streams will not be crossed without the use of a temporary structure, such as a log mat (R10 BMP 13.9, USDA Forest Service 2006).
- Temporary spur roads for shovel access should be minimized and/or obliterated after use (R10 BMP 13.9, USDA Forest Service 2006).
- The number of turns on shovel trails should be limited, depending on soil type and vegetative cover. Wide arc turns can reduce soil disturbance on shovel trails (R10 BMP 13.9, USDA Forest Service 2006).
- Minimize clearing in areas with high or very high mass movement potential.
- Required split yarding and directional felling along all streams that cannot be avoided or spanned (R10 BMPs 12.7 and 13.16, USDA Forest Service 2006).
- Span, without clearing, steep v-notch streams with high erosion potential.

Monitoring

Implementation monitoring assesses whether the project was implemented as designed and whether or not it complies with the Forest Plan. The Forest Service preparation of the Special Use Authorization permit for this project will incorporate an interdisciplinary review to ensure that all mitigation measures are included in the permit. Periodic interdisciplinary review of design plans and documents

will also ensure that mitigation is implemented as intended on a site-specific basis. Forest Service permit administration, including field inspections and inspection documents, will ensure that mitigation is applied as intended during right-of-way clearing, powerline construction, operation, and maintenance activities.

The Forest Service will work with the project applicant to develop a clearing and construction plan; part of that plan will include implementation monitoring. The project administrators ensure that mitigation measures are incorporated into permit documents and then monitor performance relative to permit requirements. The project applicant will be required to have a third-party Environmental Monitor on-site during the clearing and construction period. The Environmental Monitor will be approved by the Forest Service. The Environmental Monitor will ensure that the terms and conditions in the permit are followed during clearing and construction-related activities. One of the Environmental Monitor's duties will be to train and work with the construction contractor’s personnel (both management and labor) to ensure that they understand and follow the environmental requirements.

Exhibit R-2

Kake to Petersburg Transmission Line Intertie Project Response to Reviewing Officer's Instruction for Required Further Action

Kake to Petersburg Transmission Line Intertie Project
Response to Reviewing Officer's Instructions for Require Further Action

On October 11, 2016, Rebecca Nourse, Deputy Regional Forester for the Alaska Region of the USDA Forest Service, provided a response to the objection filed by Paul Olson, Attorney at Law, on behalf of the City of Kupreanof regarding the Kake to Petersburg Transmission Line Intertie (KPI) Project draft Record of Decision (ROD) and Final Environmental Impact Statement (Final EIS). Deputy Regional Forester Nourse concluded in her response that, overall, the Final EIS and supporting Project Record provided the necessary effects disclosure and supporting evidence needed to inform the responsible official's decision rationale for this project and support the ROD.

As part of this response, the Deputy Regional Forester included instruction under some of the responses to specific objection points for the responsible official to provide additional clarification, rationale, and/or references to support the decision rationale and conclusions. Instructions for the provision of additional information were provided for eight of the responses to specific objection points. The following sections list these instructions, summarize the related background, and provide the responsible official's response to these instructions. In some cases, this involves additional information provided below; in other cases, the response refers the reader to the appropriate location elsewhere (primarily the ROD or Project Record) where additional supporting information has been added.

1. The Cumulative Effects of the Kake Road Project

Background: "The FEIS and record provide only conclusory statements and generalized information about the cumulative impact of the KPI and Kake road project. Details and analysis are lacking that would provide an understanding of cumulative impacts. A separate analysis should have been done for the alternatives." (Objection pgs. 39-43)

The objectors allege that the FEIS failed to evaluate cumulative adverse environmental impacts associated with road density increases that will occur as a result of the Kake road project.

Instructions: I am instructing you to provide an explanation (rationale) for the finding of cumulative impacts to MIS, RFSS, and other special status wildlife based on data currently available. This explanation needs be alternative specific and focused on the impacts of fragmentation and loss of connectivity, as well as the potential impacts from increased road densities.

The explanation needs to include a clear rationale showing how the findings were reached from the analysis. The explanations should also be species specific, and although law, regulation, and policy (MBTA, B&GEPA, MMPA, forest plan standards and guides, subsistence regulations, ADFG regulations), may provide some level of management guidance and species protections, lawful and incidental take and related displacement and disturbance needs to be better acknowledged (clarified). The finding needs to include cumulative road densities where those densities are of concern, such as potential sediment source and deposition areas, increased fragmentation or loss of connectivity, increased loss of OGR habitat and so on.

Response:

Various analyses were conducted to assess potential impacts to Forest Service Management Indicator Species (MIS), Forest Service Sensitive (FSS), and other species of concern. The level of information used included Project-specific field surveys conducted along each of the proposed route corridors, existing Forest Service geographic information system (GIS) layers, aerial photo interpretation, interagency habitat capability models, and best available science to address species and their habitat. The Project Record contains the supporting Excel spreadsheets, wildlife data forms, maps, and reference documents used to assess impacts to wildlife and subsistence resources. The Wildlife and Subsistence

Resource Report and the EIS section define the analysis area used for each species as well as important habitat components on various landscape scales as they provide a consistent approach for analyzing impacts based on the Forest Plan. For the analysis of cumulative effects, unless otherwise noted, the analysis areas are the same as those used to assess direct and indirect effects because these areas already extend beyond the project-related effects (Final EIS p. 3-110).

The methodology used to assess potential impacts to wildlife and their habitat is described in the Final EIS in the section titled *Methodology* (pp. 3-110 to 3-112). The *Analyzing Effects* section at the beginning of Chapter 3 in the Final EIS describes the overall EIS approach to evaluating cumulative effects and provides a list of ongoing and reasonably foreseeable projects (pp. 3-2 to 3-6). Actions that the Forest Service identified as reasonably foreseeable for the purposes of this analysis included timber harvesting, young-growth treatments on National Forest System (NFS) lands, road activities (including a potential Kake road project), and ongoing or proposed restoration activities. The level of cumulative effects that may occur in the future due to these activities will depend on the rate at which new projects are implemented and the rate at which disturbances from past and present activities recover. Furthermore, if and when the reasonably foreseeable projects considered in this document are implemented is heavily dependent on future levels of available funding.

Old-Growth Forest Ecosystem and Landscape Connectivity and Fragmentation

Potential impacts to fragmentation and loss of connectivity are assessed in the Final EIS in the section titled *Old-growth Forest Ecosystem and Landscape Connectivity and Fragmentation* (pp. 3-129 to 3-135). These potential impacts are analyzed at a broader scale than the project and in conjunction with the Forest Plan conservation strategy. Specific areas of concern such as the narrow land base between Duncan Canal and Portage Bay, beach fringe, and small Old-growth Reserves (OGRs) are assessed in more detail. Potential impacts to fragmentation and loss of connectivity, including cumulative effects, are assessed by alternative in this section. Potential impacts to OGRs are evaluated by alternative in the Final EIS in the *Old-growth Reserves* section (pp. 3-133 to 3-136). These sections assess the potential impact to habitat, which in turn have the potential to affect sensitive species (see the following section). Cumulative impacts to OGRs are discussed below in response to Item 3.

All of the identified wildlife species are associated with the old-growth forest ecosystem in Southeast Alaska. The amount of productive old-growth (POG) and its distribution across the landscape is used as a measure of the effects of the project on the old-growth forest ecosystem. Potential direct, indirect, and cumulative impacts to the old-growth forest ecosystem and landscape connectivity and fragmentation are discussed in the Final EIS in separate alternative-specific subsections (pp. 3-129 to 3-133). As discussed in the Final EIS, the analysis includes past harvest in the existing environment so all action alternatives would maintain at least 97 percent of the existing POG in each of the analysis area value comparison units (VCUs) at time of project implementation and would affect less than 1 percent of the total, high-volume, or large-tree POG within the analysis area as a whole (Table WILD-12). Alternatives that remove the most POG are assumed to have the greatest adverse effects to the old-growth forest ecosystem. Alternatives that remove the most POG within beach fringe, riparian buffers, and other corridors are assumed to have the greatest effects to landscape connectivity. All action alternatives would contribute to the cumulative loss of POG forest and fragmentation within the analysis area VCUs. However, because less than 1 percent of the existing POG forest would be impacted under any action alternative when viewed by VCU and the analysis area as a whole, incremental additions to cumulative impacts would be minor under all alternatives. The Selected Alternative would affect a total of 327 acres of POG (Table WILD-12).

The effects analyses for Alternatives 2 and 3 also address potential reductions to the amount of POG forest adjacent to the shoreline of Frederick Sound; impacts to one of the remaining POG corridors across the northern end of the Lindenberg Peninsula that connects Frederick Sound and Portage Bay; and

impacts to the pinch point between the Lindenberg Peninsula and the rest of Kupreanof Island. With respect to the latter, the Final EIS concludes that Alternatives 2 and 3 would follow an existing road in this area, therefore resulting in moderate effects to connectivity (Final EIS, p. 3-132). Alternative 4 would cross one of the remaining POG corridors across the southern end of the Lindenberg Peninsula, and a corridor across Kupreanof Island connecting Duncan Canal with Hamilton and Big John Bays. The Final EIS concluded that east-west connectivity would be maintained in these areas but through narrower corridors.

The cumulative effects analyses for Alternatives 2 and 3 assessed the potential impacts of a Kake road project in conjunction with the KPI Project and other reasonably foreseeable actions, based on the very limited information that is currently available for this possible road project. This analysis estimated that 120 acres of land outside the 300-foot-wide KPI corridor would be disturbed, including 114 acres of NFS lands. An estimated 38 acres of the disturbed area is classified as POG forest, with 12 acres identified as high-volume POG and 6 acres identified as large-tree POG. A similar and separate analysis was conducted for Alternative 4. These findings form the basis of the species-specific cumulative effects analyses for those species that would be affected by a reduction in POG acres and fragmentation of large blocks of POG. The removal of POG acres is one of the main measures used to assess potential species-specific direct, indirect, and induced impacts (see Table 1, below).

Species- and Alternative-Specific Cumulative Effects Analysis

Species-specific assessments follow the habitat effects section in the Final EIS (starting with Black Bear on p. 3-136), and evaluate the potential direct, indirect, and cumulative effects to the following species:

- Forest Service MIS – 13 wildlife species were identified as MIS in the Forest Plan (USDA Forest Service 2008c). The Final EIS for the KPI Project assesses the potential impacts to 11 of these species in detail and explains why these species were selected for evaluation.[1] The remaining two MIS – mountain goat and brown bear – do not have the potential to occur on Kupreanof or Mitkof Islands and are therefore excluded from the analysis.

- Threatened, endangered, and sensitive species (Queen Charlotte Goshawk)

Impacts are also assessed for migratory birds and endemic species (insular dusky shrew), which is consistent with the treatment of these species in the Forest Plan and related analyses. With the exception of the sections that address hairy woodpecker, red-breasted sapsucker, and brown creeper and migratory birds, separate cumulative effects analyses are presented for each species.

Impacts for each analysis category, including each species-specific analysis, are alternative-specific. Each section follows the same general format, starting with two sections: (1) *Effects Common to All Alternatives*, and (2) *Cumulative Effects Common to All Alternatives*. These sections are then followed by an alternative-specific evaluation, which consists of two parts: (1) *Direct and Indirect Effects*, and (2) *Cumulative Effects*. For most species, the alternative-specific assessments for Alternatives 2, 3, and 4 are presented in a combined section to avoid unnecessary. Although presented in one section, these analyses highlight and discuss the differences between alternatives, where applicable.

The following table (Table 1) lists the species assessed in the Final EIS and identifies the key measures used to evaluate direct and indirect effects and cumulative effects for each species, and provides a summary of and rationale for the cumulative effects findings for each species.

[1] Note: Three of the species – Hairy Woodpecker, Red-breasted Sapsucker, and Brown Creeper – were selected as MIS to represent old-growth-associated and snag-dependent species and are, therefore, discussed together in the Final EIS.

Cumulative Changes in Road Densities

No roads would be built or decommissioned as part of the KPI Project and, therefore, the Project would not change road densities in the Project area or contribute to the effects of other past, present, or reasonably foreseeable projects on road density. Estimating changes in metrics (i.e., road densities) that would not be affected by the KPI Project is outside the scope of the cumulative effects analysis for the KPI Project. Impacts that may occur as a result of a Kake road project are evaluated in the Final EIS at a level commensurate with the information available for this project, with the emphasis placed on those impacts that would be cumulative when viewed in conjunction with the KPI Project. Both projects would, for example, involve removal of POG, with both projects adding incrementally to the amount of POG removal.

Potential impacts to Sitka Black-tailed Deer were addressed through modeling, with deer winter habitat capability used to analyze potential impacts. Table WILD-6 in the Final EIS summarizes existing deer habitat capability in terms of modeled deer densities in the analysis area WAAs, where between 72 and 97 percent of the 1954 deer habitat capability remains. Existing road densities were calculated by WAA and found to average 0.4 mile per square mile within the analysis area (Table WILD-7). As discussed in the Final EIS, implementation of the Kake road project would increase road densities and add to the cumulative reduction in deer habitat capability, but none of the KPI Project alternatives would incrementally contribute to these expected changes in road densities.

Table 1. Direct and Indirect Measures, Cumulative Measures, and Cumulative Effect Findings and Rationale by Species

Species	Direct and Indirect Measures	Cumulative Measures	Cumulative Effect Findings and Rationale
Forest Service Management Indicator Species (MIS)			
Black Bear	• Removal of POG (acres) • Class I salmon stream crossings • Changes in hunter access	• Removal of POG (acres) • Class I salmon stream crossings • Changes in hunter access	All three action alternatives would make a minor contribution to the reduction in black bear habitat associated with ongoing and foreseeable timber harvest and road development projects. As noted with respect to direct and indirect effects, none of the alternatives would contribute substantially to increased harvest of black bears due to improved access. The effect of the foreseeable Kake road project could increase hunter access and result in increased hunter success, and therefore more pressure on the bear population on Kupreanof Island. As stated on page 3-137 of the FEIS, "Other timber harvest projects on NFS and state lands that involve road construction have the potential to result in road-related effects to black bears. Hunter access would also increase as a result of the Kake road project. The 2015 Kake Access Transportation Needs Assessment conducted as part of the KAP found that the primary use of a road connecting Kake and Petersburg, were one to be constructed, would be for "partial use trips" for recreation and subsistence (FHWA 2015). This finding would likely also apply to the Kake road project."
Sitka Black-tailed Deer	• Deer habitat capability as a % of 2013 values	• Deer habitat capability as a % of 1954 values	All three action alternatives would make very minor contributions to reductions in deer habitat capability and loss of deer habitat. Implementation of the Kake road project would add to the cumulative reduction in deer habitat capability. Hunter access would also increase as a result of the Kake road project and could result in increased pressure on the deer population on Kupreanof Island. The FEIS states that "Additional timber harvest on NFS lands and other lands would further reduce the deer habitat capability, as would construction of the Kake road project" if and or when the state should complete this project.
Alexander Archipelago Wolf	• Reduction in deer habitat capability	• Reduction in deer habitat capability	See above. In addition, roads proposed in association with ongoing and foreseeable timber harvest projects would increase analysis area road densities providing hunters and trappers with greater access to unroaded areas. Hunter and trapper access would also increase as a result of the Kake road project and could result in increased pressure on the wolf population on Kupreanof Island and a potential reduction in deer as prey for wolves.

Table 1. Direct and Indirect Measures, Cumulative Measures, and Cumulative Effect Findings and Rationale by Species

Species	Direct and Indirect Measures	Cumulative Measures	Cumulative Effect Findings and Rationale
American Marten	• Changes in Marten deep snow habitat [1/] • Fragmentation of larger blocks of POG • Changes in hunter access	• Changes in Marten deep snow habitat • Fragmentation of larger blocks of POG • Changes in hunter access	All three action alternatives would make a minor contribution to the reduction in deep snow marten winter habitat in the analysis area. None of these alternatives would be expected to contribute substantially to increased trapping pressure because new access resulting from the action alternatives would be limited. "Roads proposed in association with ongoing and reasonably foreseeable timber harvest projects, including the Kake road project, would, however, increase analysis area road densities and contribute to potential issues associated with human access and overexploitation of marten along the road system. The KPI Project would not contribute to these potential changes in road densities."
River Otter	• Acres of POG affected within beach fringe and riparian buffers	• Acres of POG affected within beach fringe and riparian buffers	All of the action alternatives would make a minor contribution to the loss of beach fringe and riparian buffer habitats in the analysis area. Given the implementation of Forest Plan Standards and Guidelines, including construction BMPs, these alternatives in combination with past, ongoing, and foreseeable projects would all be expected to maintain the river otter population.
Red Squirrel	• Removal of POG (acres)	• Removal of POG (acres)	All of the action alternatives would make a minor contribution to the reduction in red squirrel habitat within the analysis area (less than 1 percent of existing habitat). Past timber harvest has reduced the amount of red squirrel nesting and foraging habitat available in the Analysis area. Ongoing and foreseeable timber harvest on forest, state and private lands would result in additional habitat loss, as would construct of the Kake road project. However, given the implementation of Forest Plan Standards and Guidelines, including construction BMPs, these alternatives in combination with past, ongoing, and foreseeable projects would all be expected to maintain the red squirrel population.
Vancouver Canada Goose	• Removal of forested wetlands	• Removal of forested wetlands	The cumulative disturbance of the KPI Project in conjunction with the Kake road project would still represent a small share of the total forested wetlands in the analysis area for Vancouver Canada geese. Further, all activities on NFS lands would implement Forest Plan standard and guidelines which maintain habitat for this species.

Table 1. Direct and Indirect Measures, Cumulative Measures, and Cumulative Effect Findings and Rationale by Species

Species	Direct and Indirect Measures	Cumulative Measures	Cumulative Effect Findings and Rationale
Bald Eagle	• Removal of POG (acres) • Removal of high-volume POG (acres) • Acres of POG affected within beach fringe and riparian buffers	• Temporary localized noise	Alternatives 2, 3, and 4 would make negligible contributions to cumulative effects to bald eagles associated with temporary, localized noise. All project activities would be implemented in accordance with the Bald and Golden Eagle Protection Act. It is assumed that ongoing and foreseeable actions in the analysis area would also be conducted accordingly. Thus, the proposed alternatives in combination with ongoing and foreseeable activities would have negligible cumulative effects to bald eagles.
Hairy Woodpecker, Red-breasted Sapsucker, and Brown Creeper	• Removal of POG (Fragmentation)	• Removal of POG (Fragmentation)	All of the action alternatives would make a minor contribution to the reduction in habitat for the hairy woodpecker, red-breasted sapsucker, and brown creeper within the analysis area (less than 1 percent of existing habitat). However, given the implementation of Forest Plan Standards and Guidelines, including construction BMPs, these alternatives in combination with past, ongoing, and foreseeable projects would all be expected to maintain populations of these species.
Threatened, Endangered, and Sensitive Species			
Queen Charlotte Goshawk	• Noise and other temporary disturbance • Removal of POG (acres)	• Noise and other temporary disturbance • Removal of POG (acres)	All of the action alternatives have the potential to result in a local reduction in goshawk nesting and foraging habitat, due to the removal of POG forest. A Kake road project would add to this disturbance. However, given the amount of remaining POG forest within the analysis area, including high volume POG (Final EIS Table WILD-12), none of the alternatives would be expected to result in a reduction in the density of goshawks using the analysis area or in impacts to goshawk prey populations. Given that goshawks are highly mobile and that habitat is protected under the Forest Plan conservation strategy, the effects of the proposed project in combination with past, present, and foreseeable activities may adversely impact individuals, but are not likely to result in a loss of viability in the Planning Area, nor cause a trend toward Federal listing.
Other			
Migratory Birds	• Removal of POG (Fragmentation)	• Removal of POG (Fragmentation)	All of the action alternatives would contribute to the reduction in habitat for migratory bird species associated with POG habitats and increase fragmentation. However, effects would be localized and would not preclude migratory birds from using the analysis area. Species associated with early successional and scrub habitats would benefit from clearing of the right-of-way. Birds may be displaced if project activities occur during the nesting season.

Table 1. Direct and Indirect Measures, Cumulative Measures, and Cumulative Effect Findings and Rationale by Species

Species	Direct and Indirect Measures	Cumulative Measures	Cumulative Effect Findings and Rationale
Endemics (insular dusky shrew)	• Acres of riparian habitat affected	• Acres of riparian habitat affected	All the action alternatives would make a minor contribution to the loss of riparian habitat in the analysis area. Given the implementation of Forest Plan Standards and Guidelines, including construction BMPs, the proposed alternatives in combination with past, ongoing, and reasonably foreseeable projects would be expected to result in minor impacts to the insular dusky shrew.

1/ High volume POG (SD 5S, 5N, 6/7) at or below 800-foot elevation

2. Cumulative Effects of Future Logging

Background: The Objectors allege that the FEIS failed to provide detailed information about the cumulative effects of future logging, specifically the Portage Bay timber sale.

Instructions: I am instructing the Forest to add the above cited document (U.S. Senate Committee on Energy and Natural Resources Hearing on March 8, 2016: The U.S. Forest Service's Budget Request for FY2017 Questions for the Record Submitted to Chief Thomas Tidwell) which clearly demonstrates that the Portage Bay timber sale is not a reasonably foreseeable project to the record. Include the most recent version of the Tongass Five Year Schedule and the current, unsigned Tongass Five Year Schedule that was provided to Senator Murkowski (U.S. Senate Committee on Energy and Natural Resources Hearing on March 8, 2016: The U.S. Forest Service's Budget Request for FY2017 Questions for the Record Submitted to Chief Thomas Tidwell) in the project record.

Response: The Portage Bay timber sale does not meet the definition of a reasonably foreseeable future action as it is not currently part of the schedule and no proposal has been developed that would provide the kind of detailed information the objectors feel should be included in the cumulative effects analysis. In accordance with the above instruction, we have supplemented the Project Record with two documents: 1) U.S. Senate Committee on Energy and Natural Resources Hearing on March 8, 2016: The U.S. Forest Service's Budget Request for FY2017 Questions for the Record Submitted to Chief Thomas Tidwell (PR 765-413); and 2) a copy of the most recent version of the Tongass Five-Year Planning Schedule (PR 765-414). Both documents support the fact that the Portage Bay Timber Sale is no longer reasonably foreseeable.

3. Old-growth Reserves

Background: The Objectors allege that the FEIS relied exclusively on whether or not the OGRs would continue to meet minimum acreage requirements without considering other important OGR qualities such as fragmentation. (Objection pgs. 62-63).

Instruction: Provide an explanation of the impacts that may occur in the OGRs. Consideration needs to be given to the potential fragmentation of OGRs including the direct impacts of the proposed project on the current OGRs and the cumulative impacts from past, present, and foreseeable future projects on historic OGRs.

Response: As stated in the Final EIS (p. 3-134), the Selected Alternative (Alternative 2 in the Final EIS) would cross small OGRs in VCUs 4440 and 4460, resulting in the conversion of 42 acres and 24 acres, respectively (Table WILD-14). The Selected Alternative would also result in a minor reduction in the amount of POG forest within these OGRs (13 acres in 4440 and 6 acres in 4460). Both small OGRs would continue to meet minimum Forest Plan acreage requirements under the Selected Alternative. The Forest-wide interagency small OGR review conducted for the 2008 Forest Plan amendment did include an evaluation of small OGRs 4440 and 4460. Neither OGR was recommended for additional project-level review. This process is documented in the planning record for the 2008 Forest Plan EIS, which includes a list of interagency meetings.

The Final EIS (p. 3-136) concluded that the cumulative effects "of ongoing or foreseeable development projects, including the Kake road project, that might involve small OGR modifications are expected to be within the limits allowed by the Forest Plan and would be analyzed as they are proposed." The effects analysis presented in the Final EIS uses the existing acres in each OGR to assess the potential impacts of the Selected Alternative, and, therefore, incorporates the effects of past projects on these OGRs. There are no known present projects with the potential to affect small OGRs 4440 and 4460.

The Kake road project is a reasonably foreseeable project that has the potential to affect these OGRs. However, while the Forest Service believes the Kake road project is reasonably foreseeable, very limited information is available on this project and no formal proposal has been submitted to the Forest Service. The Alaska Department of Transportation and Public Facilities (ADOT&PF) has indicated that the goal of a revised Kake road project would be "to connect the Kake logging road system with the Portage Bay logging road system and to extend the road system to the State Dock on Wrangell Narrows following the state's 4407 easement", noting, however, that the available funding may not enable them to reach this goal (Hughes 2016). The state also indicated that they were in the process of evaluating alignment options and identifying how far they may be able to extend the road system based on the available funding (Hughes 2016).

If a Kake road project were to follow the centerline of the state's 4407 easement, it could potentially cross small OGRs 4440 and 4460. In the absence of a formal proposal and Forest Service review of a road project, it is unknown whether this would be the case, but it does seem reasonable to assume, as stated in the Final EIS, that if a proposed road project were to cross OGRs that the Forest Service would require the project proponent to minimize impacts to the affected OGRs in accordance with the Forest Plan. Further, in the event that a road project were constructed in these OGRs, the associated impacts would be the same regardless of whether the Selected Alternative for the KPI Project were built. In other words, the Selected Alternative would not add incrementally to these potential impacts.

4. Reasoned Explanation for the Decision

Background: The Objectors allege that the DRAFT ROD violated NEPA by failing to supply a reasoned explanation for the decision. (Objection p. 7)

Instruction: Because of the above confusion, I am instructing the Responsible Official to ensure that when the final ROD compares alternatives, it only address those resources where there are clear differences.

Response: The Rationale for the Decision section of the ROD has been revised to reduce potential confusion.

5. Overly Narrow Purpose and Need and Range of Alternatives

Background: The project's purpose and need originally targeted reducing energy costs in Kake as evidenced by scoping notices, but then the DEIS and FEIS arbitrarily narrowed the purpose and need to issuing a special use permit for the KPI. This action resulted in a failure to consider a reasonable range of alternatives, including alternatives identified in the planning record that are practicable in terms of supplying lower cost energy to Kake.

The Objectors allege that the FEIS failed to consider reasonable alternatives (p. 26). The objector further asserts "the FEIS failed to consider a reasonable, small scale renewable energy alternative that would present significantly fewer adverse environmental impacts than the KPI".

The Objectors further elaborate "progress toward licensing the Gunnuck Creek project, as well as other local efforts to reduce energy costs clearly shows that non-Intertie options are viable alternatives that would reduce or minimize adverse impacts on the environment relative to the KPI. The Draft ROD is arbitrary because it relied on a flawed FEIS that failed to consider reasonable alternatives that could function independently or cumulatively to reduce energy costs" (p. 27 to 28).

Instruction: Put the most recent information about Gunnuk Creek in the Record.

The language in the ROD needs to be updated in the Alternatives Considered but Eliminated from Detailed Study to reflect the most recent information about Gunnuk Creek and include that this project would not provide for the power needs of Kake.

Response: The Alternatives Considered but Eliminated from Detailed Study section in the ROD has been revised to include the following information:

Comments on the Draft ROD noted that development of a Gunnuk Creek hydroelectric project has progressed since preparation of the Final EIS, and was identified in a recent report prepared for Alaska Energy Authority as a top priority for the community of Kake (McDowell Group 2016, p. 8). The same report also noted that the Inland Passage Electric Cooperative, the proponent for the Gunnuk Creek project, is currently working on the final design and permitting stages, as well as raising funds for project construction (McDowell Group 2016). However, the project as currently proposed would only meet half of Kake's current energy needs (HDR Alaska, Inc. 2015), and would not support increased commercial demand in the future .

The following references have been added to the Project Record as PR 765-1539 and PR 765-1540, respectively.

HDR Alaska, Inc. 2015. Gunnuk Creek Hydroelectric Project Reconnaissance Report. Prepared for Inland Passage Electric Cooperative, Auke Bay, Alaska. September.

McDowell Group. 2016. Southeast Alaska Energy Update and Profile. Prepared for Alaska Energy Authority. June.

6. Queen Charlotte Goshawk Nest Buffers

Background: "There was a known presence of QCG nesting habitat directly along KPI alternative routes, making it clear that the FEIS should have provided a more detailed analysis of specific habitat features for QCGs. The analysis needed to consider additional measures, including increased and enduring buffers for nests and ways to avoid disturbances associated with construction and right-of-way clearing in order to provide greater protection to the Scott Peak, Mitchell Creek and newly documented nest areas." (Objection pgs. 51-53)

The Objectors allege that the Final EIS failed to consider the temporal inadequacy of the nest buffers.

Instruction: It appears that the BE was using old forest plan language; although this doesn't change the analysis and correct language is used in the FEIS and Draft ROD, the BE language needs to be updated to include current forest plan language.

Response: The BE in the Project Record was updated with the language used in the Final EIS and is now consistent. The updated document has a revised date of October 2016 and has been maintained as PR 765-1203.

7. Impacts to Bald Eagle

Background: The Objectors allege that the FEIS failed to fully disclose KPI risks to bald eagles or discuss mitigation measures in sufficient detail (Objection pgs. 54-57) and that the FEIS needed to examine whether or not the Proposed Action would violate the Bald and Golden Eagle Protection Act (BGEPA), and demonstrate compliance the National Bald Eagle Management Guidelines.

Instruction: The ROD identifies one nest within 660 feet of proposed harvest unit. This does not agree with the findings of two nests within 600 feet of the northwest end of the transmission line

corridor. Correct the document with the errors including location, number of nests, and buffer distance that must be applied.

Response: The text in the ROD was incorrect. This text has been updated to match the findings reported in the Final EIS.

8. Independent Evaluation of the Contractor-Prepared EIS

Background: The objectors allege that the Forest Service must independently review the outside assessment and verify its data (Objection pp. 10-12). Examples of the lack of review included:

- No BE in the record
- There is no record evidence to verify that any such review actually occurred after the November 2014 preparation of the resource reports, and before the release of the DEIS.

Instruction: Place communications indicating the independent review occurred into the project record including:

- NEPA checkpoint approvals by the responsible official
- Emails, phone logs of conversations, reviews, etc. with the contractor

Response: We have added 36 communication records to the Project Record that demonstrate that the Forest Service directed and participated in the preparation of the EIS for the KPI Project. These records also demonstrate that Forest Service staff independently evaluated the EIS and other work products, providing detailed comments and requests for additional information throughout the NEPA process. These documents have been added to Schema Folder 3.5 of the Project Record and spans from 2010 (when the project was first proposed) through 2016.

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9 Nov 2016

Date

Cover Photo: Kake, Alaska

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