Appendix D – 69-kV Line Removal Special Conditions (Kenai National Wildlife Refuge)

Special Conditions

Retirement of 69-kV line and Removal of Associated Structures within the 69-KV ROW of E-48-KE Permit

Reporting / Notification Requirements

1. AEA, or its authorized contractor, shall notify the Kenai National Wildlife Refuge (Refuge) Authorized Representative (Authorized Rep.) Ms. Lynnda Kahn, via email (lynnda_kahn@fws.gov) or by phone (907-260-2818), at least 3 business days prior to travel onto the Refuge for the purpose of undertaking each phase of the 69-kV line removal.
2. AEA, or its authorized contractor, shall also notify the Refuge Authorized Rep. at least 3 days prior to mechanized equipment accessing the ROW(s) off the paved highway surface, in order to allow for visual inspection of the equipment.
3. Where helicopter access is deemed necessary, prior approval must be obtained from the Refuge Authorized Rep. AEA, or its authorized contractor, must notify Ms. Kahn by phone or email, at least 3 days prior to the aircraft landing, in order to alert appropriate Refuge Law Enforcement and State Parks staff of impending operations.
4. AEA, or its authorized contractor, shall notify Ms. Kahn via email no later than 2 business days following completion of each phase of the 69-kV structure removal effort.
5. Post-removal site investigations by the Refuge Authorized Representative shall be conducted within 10 days of completion of each project segment.
    a. In addition, weekly updates on project progress shall be provided to the Refuge Authorized Representative via email each Friday morning, to allow for scheduling of routine site inspections.
    b. If it is determined that unnecessary ground and/or vegetation disturbance impacts have occurred, timely erosion control and site restoration will be required, after consultation with the Refuge Manager.

Permit Requirements

6. All ROW Permit stipulations (E-48-KE) shall remain in full force and effect, and will be held as a valid part of this authorization.
7. AEA, and any authorized contractor, are responsible for ensuring all personnel, including those of its assigns conducting activities authorized by the Refuge, are familiar with and adhere to its General and Special Conditions.
8. A copy of these Conditions shall be in the possession of field crews at all times during work activities.
9. As indicated in the Vermont Oct. 2015 PCP Report and associated BMPs, wherever feasible and to the extent practicable, every reasonable attempt shall be made to remove structures entirely and fill the holes with clean fill material. Care shall be taken to limit soil disturbance around the poles.
10. Clean, washed rock shall be used to fill all holes where pole butts have been completely removed from below the ground surface.

11. If poles cannot be removed and pole butts remain below the ground surface, these locations must be adequately documented (using high sensitivity GPS) for inclusion in our Refuge database and for future reference. Existing GIS data is acceptable if locations are within 10-ft of the actual pole locations.

    a. GIS or GPS location data must be provided to the Refuge Authorized Rep. within 120 days of completion of each project phase.

    b. An aerial photo or Google Earth map showing the Pole numbers where pole butts remain below in place shall also be included.

12. Mechanized equipment may be used provided ground conditions are suitable to support the weight of the equipment without causing penetration of, or disturbance to, the soil surface or plant roots.

13. AEA, or its authorized contractor, shall, to the greatest extent practicable, avoid clearing vegetation along access trails as well as within the 69-kV ROW, which functions as a visual buffer adjacent to the Sterling Highway.

    a. While tracking through and over vegetation is preferred, "limited" clearing will be authorized to accommodate equipment access.

    b. Areas to be cleared shall be identified on an aerial photo, and pre- and post-clearing photos taken and submitted to the Refuge Authorized Rep. via email with the weekly progress reports.

14. **Sterling Highway Segment - MP 69 (QK-232) to MP 62.4 (QK-167)**
This segment runs along the north side of the highway from just west of Kelly Lake Road east to where the transmission line crosses the Sterling Highway at MP 62.4. The poles vary in distance from the highway from within 150 ft up to about 350 ft of the highway. Poles QK-188 and QK-187 have already been removed by the previous permit holder (Homer Electric Association).

    a. Poles in this section will be removed and backfilled due to the ROW being in close proximity to the highway and reasonably easy to access.

    b. Poles in wetlands (e.g., QK-217) shall remain in place until ground conditions are suitable for tracked equipment to attempt removal under frozen conditions. A reasonable attempt at complete removal of these poles (without excavation) will be made. Should removal not be possible, the poles will be cut off flush at the ground surface with the butts remaining below ground.

15. **Jean Lake Segment - MP 62.4 (QK-166) - MP 58.3 (QK-126)**
This segment runs along the south side of the highway, south of the Jean Creek valley and lake complex. Most of the poles are located about 1,200 to 1,800 feet away from the Sterling Highway.

    a. Poles in this section will primarily be cut off flush with the ground surface, with the pole butts being left in place, due to ROW distance from the Highway.

    b. Poles in close proximity to the Sterling Highway near MP 64.2 and 58.3 may be removed entirely.

    c. Poles in wetlands (potentially QK-127 and QK-126) shall remain in place until ground conditions are suitable for tracked equipment to attempt removal under frozen conditions. A reasonable attempt at complete removal of these poles (without excavation) will be made. Should removal not be possible, the poles

will be cut off flush at the ground surface with the butts remaining below ground.

d. Prior to work occurring within 100-ft of any anadromous water body (e.g., Jean Creek), AEA, or its authorized contractor, shall coordinate with and obtain approval from the Kenai Peninsula Borough (KPB). A copy of the KPB authorization shall be provided to the Refuge Authorized Rep.

14. **Fuller Creek Segment - MP 58.3 (QK-125) to MP 55.6 (QK-95)**
This segment runs along the north side of the highway through the Fuller Creek Trail area from MP 58.3 to MP 55.6. Most of the poles are located 1,000 to 1,800 feet from the highway in difficult to access steep terrain.

a. Poles between MP 58.3 and Fuller Creek (QK-125 to QK-111) may be accessed overland. Poles in this section will primarily be cut off flush with the ground surface, with the pole butts being left in place, due to ROW distance from the Highway and difficult access. Poles in close proximity to the Sterling Highway. may be removed entirely.
b. Poles between Fuller Creek and Fuller Canyon (QK-110 to QK-104) will require helicopter removal. Poles will be cut off flush with the ground surface, with the pole butts being left in place
c. Poles between Fuller Canyon and Sterling Highway MP 55.7 may require helicopter use as the terrain is challenging for overland equipment (Qk-103 to QK-95). Poles in this section will primarily be cut off flush with the ground surface, with the pole butts being left in place, due to ROW distance from the Highway and difficult access. Poles in close proximity to the Sterling Hwy. may be removed entirely.

15. **Kenai to Russian River Segment - MP 55.6 (QK-94) to Russian River (QK-77)**
This segment runs along the south side of the highway from the Kenai River to the eastern Refuge boundary at the Russian River. With the exception of QK-94, all of the poles lie south of the Kenai River.

a. All poles in this segment require helicopter removal. Poles in this section will be cut off flush with the ground surface, with the pole butts being left in place, due to helicopter-only access.
b. Work shall be performed at the Kenai River crossing (River Mile 73), and within the Kenai to Russian River Segment, consistent with the anadromous stream buffer requirements in Sec. 4.5.2.1, 4.5.2.2, and 4.5.2.3 of the Protocol.
c. Prior to work occurring within 100-ft of any anadromous water body, AEA, or its authorized contractor, shall coordinate with and obtain approval from KPB. A copy of the KPB authorization shall be provided to the Refuge Authorized Rep.

16. Duck ponds and/or catch tarps must be placed beneath any equipment utilized for the project while not actively being operated, through project duration, while on Refuge land.

Surface Use Requirements

17. All operations shall be conducted in a manner which maximizes preservation of the natural scene, minimizes unnecessary clearing, and avoids ground disturbance.

18. No ground surface disturbance, including blading, re-contouring, removal of the vegetative mat and/or rutting in uplands and/or wetlands is authorized.
19. When mechanical equipment is moved through any vegetative buffers, care will be taken to minimize vegetation damage (single-file, blade lifted on equipment, utilizing natural breaks and pushing through alders).
20. All pertinent visual and anadromous buffers must be maintained, consistent with the 'Exceptions to Standard Clearing Practices' in the Protocol.
21. All mechanized equipment and vehicles accessing the Refuge off the paved highway are required to be cleaned of any attached grease and residue on wheel tracks, undercarriage and engine. In addition, equipment shall be cleaned of all mud, dirt, and plant parts to reduce the potential for introduction of non- native and invasive plants. Cleaning shall occur at a vehicle washing station or steam cleaning facility (power or high-pressure wash) off of Refuge lands.

69kV Remaining Pole Location

Access Type

- Overland
- Heli
- Heli/Overland

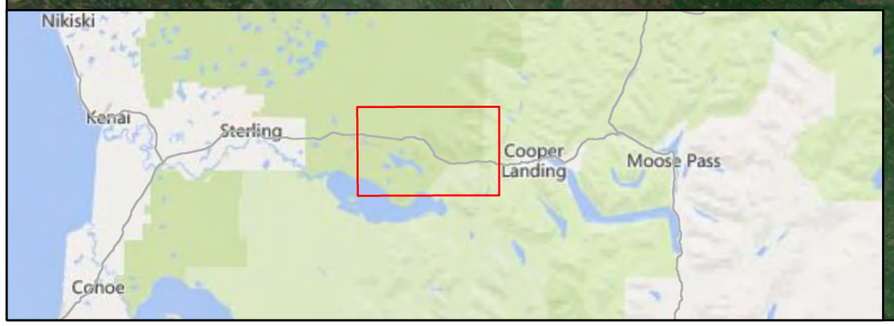
Heli Pad

KNWR 69kV Removal Access Point

N

Miles

0 1 2



Appendix F – Project Stipulations: Removal of 69kV Poles SEW764 (Chugach National Forest)

Homer Electric Association
Right of Way Re-Clearing Protocol

Homer Electric Association

And

US Fish and Wildlife Service, Kenai National Wildlife Refuge

Prelude
This document may be changed as needed with the concurrence of the Kenai National Wildlife Refuge Manager (Refuge Manager or USFWS) and Homer Electric Association (HEA). It is a working document that is both intended and expected by both parties to be updated with concurrence by both parties as any future changes are needed. This document describes in detail the agreed upon maintenance and clearing stipulations for work by HEA or subcontractors, within the Kenai National Wildlife Refuge (KENWR). It pertains to clearing activities within Rights-of-Way (ROW) permits: E-47-KE, E-48-KE, E-170-KE, E-205-KE and E-225-KE within the exterior boundaries of KENWR.

The intent of this working document is that, along with the ROW permits, it will be referenced in special use permits to ensure additional stipulations will not be necessary. The document will accomplish the goals set forth by providing a description of the standard access and clearing practices to be followed on all rights of way (ROW) within the KENWR under these permits and providing detailed descriptions of areas of exception as identified by the Refuge Manager and HEA. For each exception, special conditions to be followed will be described in detail.

HEA recognizes that the United States Fish & Wildlife Service (USFWS) is required to maintain habitat and wilderness values on the KENWR. HEA shall assist USFWS in meeting their requirements through the use of strategic clearing practices to include: re-clearing to historic widths, buffers, hand cutting, species specific clearing and re-planting of native species.

USFWS recognizes HEA's need to access the ROW to both maintain the lines and infrastructure and to remove vegetation that threatens the operation of the transmission lines or creates an un-safe environment for the public or creates a threat of fire.

1. CONSIDERATIONS:

1.1. HEA transmission lines covered by the above ROW permits carry power at voltages up to 115,000 volts (115kV). Because of this hazardous voltage, line, structure, guy and anchor maintenance activities and ROW re-clearing is used to prevent electrocution, fires and power outages that can impact the entire Alaska electrical system. .

HEA normal clearing procedures are derived from a variety of industry standards (National Electric Safety Code, U.S. Department of Agriculture Rural Utilities Service specifications, etc). The procedures have been tailored to minimize safety hazards within the smallest ROW possible for safe transmission line operation in the terrain, vegetation and subject to the weather conditions found on the Kenai Peninsula. Utility industry guidelines for re-clearing require single pole structures be -cleared to a minimum of 60 foot width and two pole ('H' type) structures be cleared to a minimum of 100 feet in

instances where movement of the conductors caused by wind loading (blowout, tree blowdown), snow loading (line sag, tree lean), icing (line sag) and thermal sag create safety hazards.

1.2. The USFWS is required to protect many values on the National Wildlife Refuge:
Anadromous streams by ensuring adequate vegetation buffers;
Wilderness values by minimizing tool use and minimizing visual impairments;
Habitat continuity by minimizing fragmentation;
Wildlife travel corridors;
Nesting raptors;
Human and animal life and property by minimizing wildlife vehicle collisions;
Biological integrity by reducing the introduction of invasive species;
Habitat conditions by minimizing illegal vehicle access;
Scenic values along designated Scenic Byway;

1.3. 'Danger' or 'Hazard' trees are those trees outside ordinary clearing limits or the ROW that could approach the closest conductor within five (5) feet if it should fall toward the lines. With prior, verbal Refuge Manager approval, these trees shall be removed on a case-by-case basis to the maximum extent possible to reduce the hazards discussed in 1.1 above.

2. PROCEDURES:

2.1. Planned Maintenance and Re-clearing

2.1.1. For re-clearing and planned maintenance, a minimum of 30 days in advance (45 days if pesticide or herbicides are involved), HEA will request a Special Use Permit from the Refuge Manager and the request shall include the following information:

Contact person for the work.
Work location(s).
Estimated start and completion dates.

2.1.2. The Refuge Manager shall notify HEA of the KENWR contact person for Special Use Permits. If necessary, the Refuge Manager may schedule a meeting with HEA to discuss details of the work to be completed and to determine if any on-site examinations are required prior to issuing a Special Use Permit.

2.1.3. Special use permits will specify the applicable ROW and/or work area access restrictions taken from Sections 3 and 4 below. HEA will be allowed reasonable access for necessary equipment to maintain transmission lines and for vegetation management during periods when surface conditions will minimize ground disturbance. If restrictions are not explicitly stated in the special use permit, HEA will use a route that minimizes impact to the area. Generally all equipment shall remain within the authorized ROW area unless necessary to avoid obstacles and/or to access other areas of the ROW. Obstacles could be muddy hillsides, wetlands, boulders or other obstacles. Should HEA need to divert around obstacles, vegetation clearing will not be performed outside of the ROW.

2.1.4. Maintenance re-clearing shall be performed to the full length and historic clearing width of the ROW to ground line. All exceptions to this section shall be identified in Section 4 of this document. This section and Section 4 will ensure both HEA and USFWS have easy access to clear and concise definition and mutual understanding of the re-clearing practices HEA or its delegates will utilize on the KENWR. "Danger trees", (see Section 1.3 above) within the ROW (100 feet), but outside

historic clearing limits may be removed by selective hand clearing during permitted clearing and maintenance projects without prior approval. Verbal notification of Refuge Manager should occur as soon as practical, typically once within a working day or when returning to an area with phone coverage, and to include information on the general working area where the danger trees are located. After work approval and issuance of a special use permit, HEA shall notify the Refuge Manager in writing or email at least five days prior to commencing work and within three days of completing the work.

2.2. Short Term Spot Re-clearing and Inspections

Short term spot re-clearing and Inspections are intended to be used if any items are identified that need to be quickly addressed but do not constitute an emergency item (no Special Use Permit required). This would typically be at a single work area, such as removal of windblown trees that are threatening, but not into, a conductor or repair of a damaged but still functional structure. This can also be used for inspection access.

2.2.1. HEA shall call the Refuge Manager to provide details of the situation. If they agree that the situation warrants prompt attention, the Refuge Manager will issue verbal permission to complete the work. HEA will contact the Refuge Manager when work has been completed and address USFWS concerns.

2.2.2. HEA and Refuge personnel shall work together to determine the access methods and types of equipment to be used to minimize impact to the Refuge.

2.3. Emergency Conditions

This is intended to be used for situations requiring immediate attention or for situations that occur outside normal working hours. Examples would be: removal of trees that have fallen into a conductor causing an immediate hazard or outage, lines that are down or below safe operating height, structure damage resulting in risk of a collapse, insulator arcing risking fire, line or structure damage or other situations which pose imminent safety risks. Under these conditions, HEA is authorized to immediately respond without a Special Use Permit.

2.3.1. HEA shall call the Refuge Manager as soon as practical to provide details of the emergency and the work area(s) involved.

2.3.2. HEA will follow-up with a written or emailed outline providing the following details: work location(s), access route(s) used and work completed as soon as practical.

3. MAINTENANCE AND RE-CLEARING SPECIAL PERMIT STIPULATIONS:

3.1. Special use permits shall reference section 3, TERMS AND CONDITIONS of the applicable ROW permit, and this document.

3.2. It is preferred that clearing activities occur when there is adequate snow cover and sufficient ground frost to prevent penetration of, or disturbance to, the soil surface or plant roots. Unless emergency conditions exist, equipment and vehicle operation during periods when the frost and snow conditions do not meet the above specifications will occur on uplands only and be limited to vehicles that exert a ground pressure equal to or less than three and one-half pounds per square inch (3.5 psi).

3.3. Under non-frozen conditions, equipment and vehicles will not be operated within wetlands or cross bodies of water. With sufficient frozen conditions, crossing bodies of water is allowed if it can support the weight-bearing load of the vehicle.

3.4. Blading, re-contouring, or removal of the vegetative mat are prohibited. The filling of low spots and smoothing using snow to facilitate equipment travel is allowed. Equipment and vehicles will be operated in a manner that does not result in undue disturbance of the vegetative cover or induce accelerated erosion.

3.5. If vegetative cover is disturbed in an area greater than 100 square feet, HEA will take action to reduce the chance of noxious weed infestation; and with the assistance of Refuge staff, will seed disturbed areas with native ground cover seeds. The preferred seed would be fireweed (Epilobium angustifolium) or Blue Joint Grass (Calamagrostis canadensis). Sources for these seeds can be obtained through the Alaska Plant Materials Center in Palmer, Alaska (907) 745-4469 **http://www.dnr.state.ak.us/ag/ag_pmc.htm**. Mulch, fertilizer, lime or similar products will not be used without prior Refuge approval. HEA and the Refuge will work cooperatively to monitor any disturbed areas for invasive infestations. In areas where there has not previously been invasive weeds, if invasive weeds are established as a result of HEA activities, HEA will be responsible for treatment.

3.6. Work camps for overnight use are not normally allowed, but may be authorized in case-specific situations. Equipment may be stored overnight within the Refuge, provided that drip pans and/or absorbent pads are utilized to contain any dripping of oil, gas, transmission or other fluids. Additionally, refueling in the field require the use of drip pans and/or absorbent pads. Overnight storage of food or food preparation items is prohibited

3.7 Any fluids that overflow the drip pans or pads will be immediately reported to the Refuge Manager. Additionally, large spills (as determined by the Refuge Manager) will be reported to the Alaska Department of Environmental Conservation at (907) 269-3063 or 1-800-478-9300. All waste materials generated during the clearing shall be controlled and removed from the work site daily. Cleared and/or chipped vegetation is not considered waste, and can be allowed to naturally decay.

3.7. Stump height within re-cleared areas shall be no greater than six (6) inches. For trees that are not chipped, spruce logs shall be cut into twenty four (24) inch maximum length sections. The sections shall be scattered (not piled) throughout the ROW and adjacent areas to permit rapid drying and eliminate spruce bark beetle host trees. For non-Spruce trees, logs shall be cut into ten (10) to fifteen (15) foot lengths and placed within the ROW and adjacent areas so they cannot roll. The log sections shall be scattered to make ground contact and not piled. There are two (2) allowable methods for the handling of other cleared vegetation and tree remnants:

Spreading and scattering in the ROW and adjacent area without damaging other trees.

Chipping and scattering in the ROW and adjacent area in such a way as to preclude the chips being washed into any watercourse.

3.8. For work within one hundred (100) feet of an anadromous body of water, HEA work shall be coordinated with and authorized by the Kenai River Center. The Kenai River Center is the central clearinghouse used on the Kenai Peninsula for this type of activity.

3.9. Raptor Nests.

3.9.1. To reduce disturbance near ROW to nesting raptors, non-emergency clearing activities shall be scheduled to be completed prior to April 15 or after August 1. In cases where active nests are found while work is taking place, a 100 yard disturbance-free buffer around the nest will be maintained unless doing so would pose an imminent safety hazard.

3.9.2. Nests found on utility structures within the Refuge will be reported to the Refuge manager with their coordinates or precise directions to their location. The site will be investigated by KENWR staff to determine whether or not it is active, the species involved and an appropriate course of action.

4. EXCEPTIONS TO STANDARD CLEARING PRACTICES ON KENWR

4.1. The USFWS desires to minimize habitat fragmentation by limiting ROW re-clearing to the width stated in Section 2.1.4 except as noted in the areas of special consideration that are detailed below. For sections of line that cross areas of the Refuge where visitors are concentrated, HEA shall use visual buffers, access barriers and selective cutting in cooperation with the Refuge Manager to mitigate visual impacts of transmission lines to visitors and help reduce ROW trespass by motorized vehicles.

Access barriers will be focused in areas where there is vehicular access to or near the Refuge. This includes areas developed to encourage visitation. Lines within the Refuge boundary that are not easily accessible by motorized vehicle and where there is less chance of visitors seeing the line, will not require visual or access barriers. Anadromous stream buffers may still be required. Anadromous stream buffers will be a minimum of one hundred (100) feet in length and span the entire width of the ROW per bank unless stated otherwise. When mechanical equipment is moved through vegetative buffers, care will be taken to minimize vegetation damage (single-file, blade lifted on the equipment). Within buffers, hazard vegetation will be selectively removed with the use of hand operated tools.

4.2. Common ROW deciduous species such as aspen and birch, have relatively high growth rates compared to other common ROW species such as spruce. To reduce both the cost and frequency of ROW disturbance deciduous trees shall be removed or significantly topped in areas where visual buffers and access barriers will contain enough remaining vegetation density to maintain an adequate buffer or barrier. Removing or topping deciduous trees will encourage growth of slower growing species and ground level vegetation that will maintain the general width and intent of the buffer while reducing the frequency of re-clearing disturbance.

4.3. As an alternative to vegetative buffers used as access barriers, items such as berms, rock, or gates may be used to help restrict ROW trespass.

4.4. Visual buffers, anadromous stream buffers and access barriers need be maintained only at the locations where listed below. Note: some locations were discussed and no special clearing requirements were prescribed, however the location description was retained for documentation. Vegetative buffers (other than anadromous streams) shall be a maximum of one hundred (100) feet in length and span the width of the ROW. They shall maintain a height of approximately ten (10) to fifteen (15) feet unless noted otherwise in the following sections. If the ground is not level such as a road crossing at a hillside, the ten (10) to fifteen (15) foot height of the uphill side of the buffer is the combined height of the ground and the vegetation above road grade.

4.5. All sections and coordinates listed below are based on the Seward Meridian (SM). Exceptions to standard clearing practices outlined in section 2.1.4 shall be agreed to by both HEA and USFWS and added, amended or deleted from this subsection. This subsection is expected to be a working section which will be modified as HEA and the USFWS work together henceforth to identify concerns as outlined in sections 1.1 and 1.2.

4.5.1. For **E-48 & E-225 Beaver Creek Segment (App-A)**, North to South .

4.5.1.1. Refuge boundary near Whitefish Avenue (NW ¼, Sec. 12, T6N-R11W). Section 14-9 Pole (for reference only.) No buffer necessary. Surrounding vegetation would render a buffer here ineffective. Refuge staff will develop a plan to address the trespass issue in cooperation with HEA.

4.5.1.2. Access buffer Marathon Road crossing, (Sec. 7, T6N-R10W). There are 69kV and 115kV lines that cross the Beaver Creek Road at this point. This area is inside a locked gate, and the road is used by the oil field operator only. While the public is allowed non-motorized access on this road, use is limited.

The 69 kV line runs along a buried gas line ROW that is cleared. Maintaining a buffer adjacent to the cleared pipeline serves no purpose.

For the 115 kV line, the North West side of the road HEA can clear as needed as there is a metal pipe railing along that entire side of the road. A lockable access gate may be placed in the pipe railing by HEA (must be coordinated with the Marathon Oil field operator). On the East side of the road a 50' selective spruce buffer will be maintained on the 115kV line. This can be accomplished by selective felling or topping of spruce, and removal of birch and similar of deciduous trees.

4.5.1.3. Maintain 100 foot anadromous buffer on either side of Beaver Creek. (Sec. 17/18, T6N-R10W). Hand clearing only within the 100’ buffers.

4.5.1.4. Access buffer ((SW corner section 21, T6N-R10W). Refuge boundary Northwest of Spirit Lake Road. Maintain existing buffer for 100 yards from refuge boundary. Refuge staff will develop a plan to address the trespass issue in cooperation with HEA.

4.5.2. For **E-47 & E-48 Sterling Hwy Segment (App-B)**, going East to West .

Note: for this Sterling Hwy segment only, E-47-KE is for the 69kV line and E-48 is for the 115kV line.

4.5.2.1. Maintain anadromous buffer: Russian River west shore buffer (Sec. 33, T5N-R4W.). 100’

4.5.2.2. No additional buffers or considerations. Between Sterling Highway and river mile 73, Kenai River (Sec. 29/32, T5N-R4W). This area is typically hand cleared due to inability to get machinery into the area. No additional buffers or considerations. The lines are high because they come down off the hill and do not impact the view. This area receives some use by anglers accessing the Kenai River from the Sterling Highway on foot and clearing complements this high recreational use area.

4.5.2.3. Maintain anadromous buffer: Kenai River crossing (Sec. 32, T5N-R4W).mile 73 Kenai River

4.5.2.4. Maintain visual buffer: Sterling Highway crossing (Sec. 29/32, T5N-R4W).

4.5.2.5. Maintain visual buffer. Fuller Lake Trail area and Fuller Lake Creek, creek and trail intersections and 150 yards of trail parallel to the overhead electrical transmission line route (Sec. 25, T5N-R5W). Hand cut taller trees that are a hazard to the line. Topping spruce trees within 20' of the trail is preferred method when this can be accomplished safely. Topping deciduous trees shall occur when they are the only buffer between the line and trail; otherwise removal of deciduous trees is preferred. Existing Alders are a good visual barrier and should be left un-cut to the extent practical. Hazard trees to be removed or topped will be cooperatively marked for removal by KENWR and HEA.

4.5.2.6. Maintain visual buffer: MP 58.4 Sterling Highway crossing West of Skilak Lake Road (Sec. 35, T5N-R5W). No special considerations for viewing rising terrain facing East as the area isn't readily viewable from the roadway.

4.5.2.7. Maintain anadromous buffer: Jean Lake Creek crossing (Sec. 34, T5N-R5W).

4.5.2.8. Vista from Jean Lake area facing west (Sections 20/21, T5N-R5W). Additional restrictions on clearing, will not noticeably impact view due to the distance involved. No special considerations.

4.5.2.9. Maintain visual buffer: Sterling Hwy crossing at MP 62.5 (Sec. 18, T5N-R6W). Has roadway to adjacent camera monitoring site.

4.5.2.10. Maintain access buffers: Sterling Highway MP 62.6 gravel borrow entrance road East of Mystery Creek Road (Sec. 13, T5N-R6W). Consider using a single gate to block main entrance off of Hwy.

4.5.2.11. Maintain visual buffer E-47-KE Only: Sterling Highway MP 63.3 Wayside East of Mystery Creek Road (Sec. 13, T5N-R5W.).

4.5.2.12. Maintain visual buffer. Mystery Creek Road is the access road for the area. Gate is locked for most of the year, this is a visual buffer. Hwy MP 63.5 (Sec. 13, T5N-R6W), fully clear 69kV West side of the road on hillside. Hand blend clearing for West side 115kV line.

4.5.2.13. Maintain visual buffer E-47-KE only: Mystery Creek Road to Watson Lake Road MPs 63.5-71.3 (various Sections of T5N-R6W and R7W). Reduced width clearing on the South side of the ROW. Remove only select danger trees that are growing into line conductor. Line runs parallel to the highway along this stretch. Retain buffer between lines.

4.5.2.14. Maintain access buffer E-47-KE only: Sterling Hwy MP 65.2, Sterling Highway pullout rehabilitated gravel borrow (Sec. 14, T5N-R6W). HEA will install dirt/rock berm East side and may fully clear buffer.

4.5.2.15. Maintain access buffer E-47-KE only: Watson Lake Road pullout Sterling Hwy MP 71.3 (Sec. 11/14, T5N-R7W). Clearing width should be increased on the west end of the buffer as

deciduous vegetation is directly under lines creating a safety concern. Remaining vegetation is not serving as an access buffer. On the east end of this crossing select danger trees need to be removed. This buffer may be reducing, but is not eliminating access by snowmobiles.

4.5.2.16. Maintain anadromous buffer: East Fork Moose River (Sec. 11, T5N-R7W).

4.5.2.17. Open wetland areas west of Watson Lake will be limited to hand clearing when needed because of wet ground.

4.5.2.18. E-47-KE only: North view from Lilly Lake Wayside on South side of Hwy MP 73 (Sec. 9, T5N-R7W). As this is down a steep hillside and is below the grade and views from the road, no special conditions. There is no need for a buffer in the 69KV ROW at this time at this location. Clearing on the 115 KV line across the wetlands shall be accomplished by hand clearing within one hundred (100) feet of standing water. Vegetation between highway and ROW is outside of the ROW and should not be cleared.

4.5.2.19. Maintain access buffer: Three Johns Road (Sec. 7, T5N-R7W). With USF&WS fire break clearing in 2016/17, this buffer is relocated to the west facing side of the hill ~200 ft east of the intersection of this street and the transmission lines. The buffer will start at the base of the hill and continue up the face to near the top of the hill. HEA uses a path for ROW maintenance access starting under the 115kV line and wrapping around to the south and east of the hillside. HEA will block this path using rock placement across the main width of the path. It is noted that there are multiple possible alternate routes available in this area due to terrain variations & vegetation, and HEA will only be blocking the maintenance access path.

4.5.3. For **E-47 & E-205 Soldotna Segment (App-C)**, going East to West .

4.5.3.1. Maintain visual buffer: Funny River Road Western Boundary (Sec. 4, T4N-R10W). Access point for several trails for sled dogs adjacent to airport, see http://www.psdra.org/. Maintain preferential fifty (50) foot Spruce buffer.

4.5.3.2. Access issues. (T4N-R10W Sec. 5&6); A dog leg in the electrical transmission line near the East edge of the Soldotna airport (PSDRA Access) and a subdivision near Humecky Circle, Misty Place, and Industrial Street. Also PSDRA trails along ROW. There is a gas line ROW that runs just exterior to the refuge boundary in this corridor and provides multiple access points. This is not an area used by the general public. No special considerations.

4.5.3.3. Maintain visual buffer: Ski Hill Road Northern crossing (Sec. 5, T4N-R10W). To encourage Spruce trees, deciduous vegetation can be removed. Refuge and HEA will work together to flag any trees for removal in this high visibility site. Deciduous growth, such as Red Willow which grows in more of a 'clump' vs. vertically should be preferentially left. HEA will also work with an arborist to propose transplanting some shorter trees from interior of the ROW, close to the road, to obscure two breaks in the visual buffer (not created by HEA). Buffer is not needed at the top of the Southern hillside due to its height above roadway.

4.5.3.4. Maintain visual buffer: Ski Hill Road Southern crossing (Sec. 6, T4N-R10W). Maintain existing fifty (50) foot buffers. To encourage Spruce trees, deciduous vegetation can be

removed. Refuge and HEA will work together to flag any trees for removal in this high visibility site. Deciduous growth, such as Red Willow which grows in more of a 'clump' vs. vertically should be preferentially left.

4.5.3.5. Where the Headquarters ski trail runs adjacent to the east side of the ROW (approximately 100 yards) HEA will hand clear from the eastern conductor to the edge of the ROW as needed. The remainder of this segment to where the ROW leaves the southern boundary of the Refuge can be hydro-axed.

4.5.3.6. Refuge South West boundary, south of Ski Hill Road (Sec. 7, T4N-R10W). This area is not easily accessed from public roads and a buffer at this location does not serve as an access or visual barrier. No physical barrier or buffer needed at this location.

4.5.4. For **E-170 Soldotna Segment (App-C)**, going East to West .

Note: This is a buried line.

4.5.4.1. Gate area near NE ¼ NE ¼ Sec 6, T4N-R10W, retain gate no screening required.
4.5.4.2. Refuge boundary East and West of Ski Hill Road (Sec 6, T4N-R10W), retain existing rock barrier at East side of Ski Hill Road crossing.

4.5.5. Non-Permit Areas **Eastern Half of Soldotna Segment (App-C)**, going East to West .

These areas are outside of E-47-KE & E-205-KE permit areas (see section 1 of both permits for details). These items have been retained for information only.

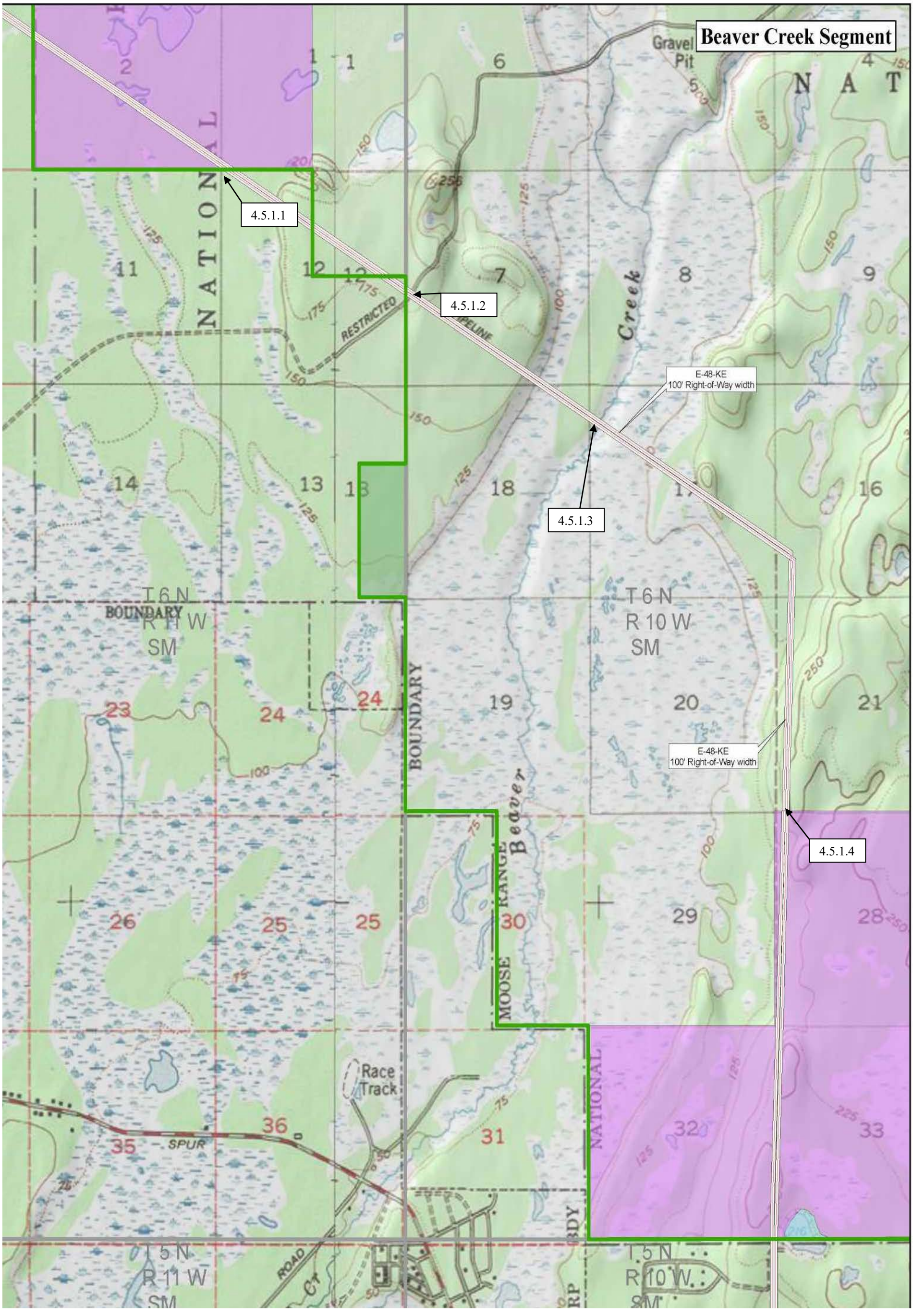
4.5.5.1. Maintain anadromous buffer. Bear Creek, (Sec. 5&6, T4N-R9W).
4.5.5.2. Maintain anadromous buffer. Kenai River crossing Mile 28.
4.5.5.3. Maintain anadromous buffer. Kenai River crossing Mile 25 and easement near Keystone Drive to Kenai River and Moose Range Meadows non-development easement (HEA owned lots). Maintain topping as done previously.

5. SIGNATURES

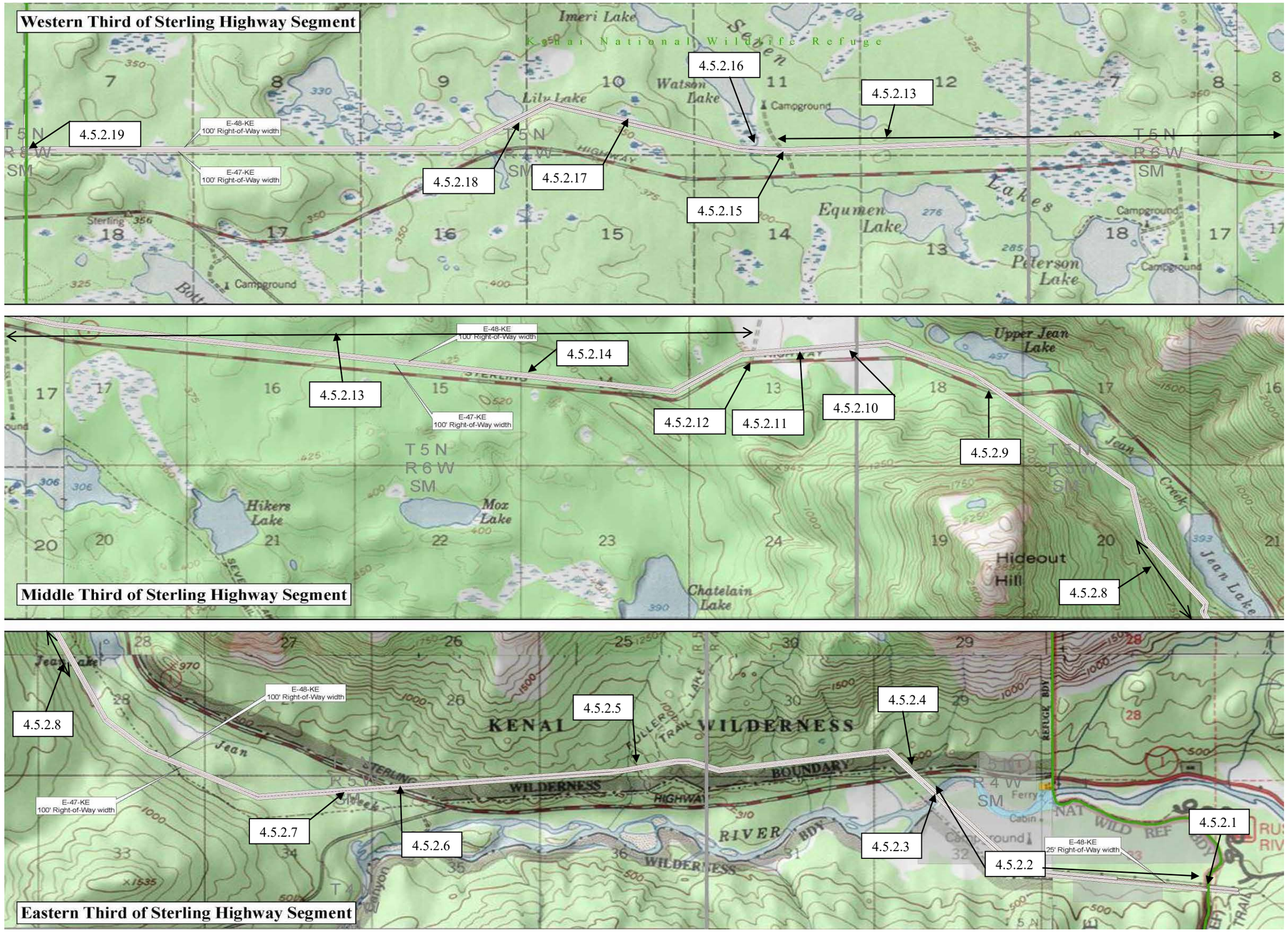
Mark A. Peery 3-10-17
Mark Peery, Director of Engineering / Date
Homer Electric Association

Andy Loraye / 3-15-17
~~Stephen Miller, Deputy~~ Refuge Manager / Date
Kenai National Wildlife Refuge

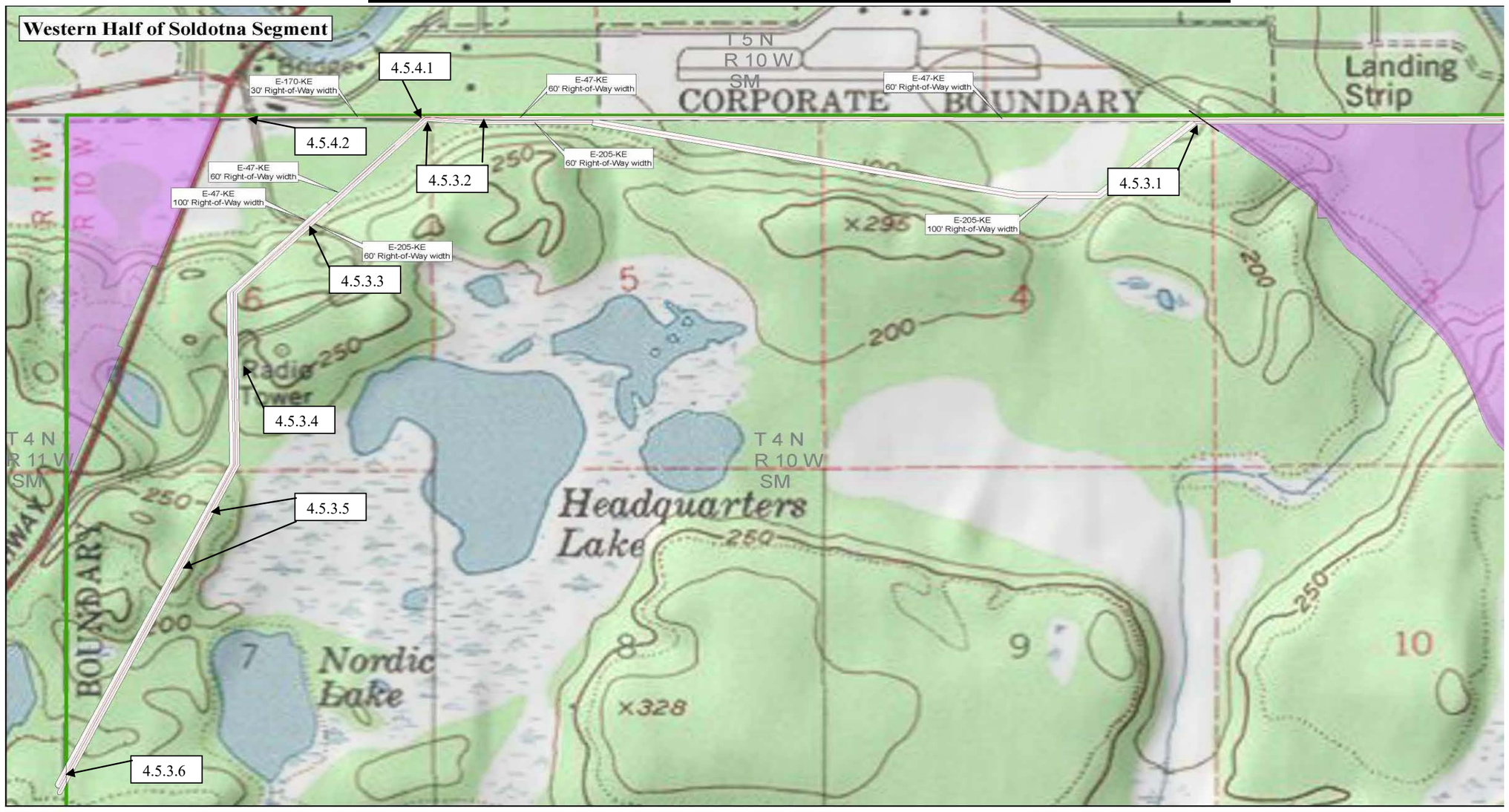
Appendix A, Beaver Creek Segment for Section 4.5.1



Appendix B, Sterling Highway Segments for Section 4.5.2



Appendix C, Soldotna Segments for Sections 4.5. 3, .4, & .5



Appendix F – Project Stipulations: Removal of 69kV Poles SEW764 (Chugach National Forest)

Project Stipulations
Removal of 69kV Poles
SEW764 – AEA

1. The Russian River Road, Russian River Campground and surrounding recreation area will be under the control of the USFS contractor completing road repairs. All access to the area shall be coordinated thru the USFS in advance. The expectation is there will be no road access into the Russian River Campground and the surrounding recreation area from mid-August thru May during this multi-year project (2022, 2023, 2024).

2. If the Russian River Road is accessible at the time of project, the holder shall not travel with tracked vehicles on the paved Russian River Campground Road.

3. Helicopter landings associated with the portion of the project located within the Kenai Peninsula Refuge shall not occur on National Forest System land.

4. When crossing trails with equipment, the holder shall make every attempt to prevent damage from occurring. Any damage to trails as a result of this project will be the responsibility of HEA to repair to acceptable Forest Service standards. The holder shall notify the permit administrator if/when damage occurs.

5. Reed canarygrass is present throughout the Russian River recreation complex and new patches are discovered every year. To help prevent the spread of this highly invasive plant, all work and access to the project area by tracked or wheeled equipment shall occur over snow/ice cover once the ground is completely frozen and when mechanized vehicles can operate without rutting.

6. All tools, vehicles and equipment used for this project shall be cleaned and free of soil, plant material, insects, or animals prior to entering USFS lands and before moving to any new site on USFS lands.
    a. All heavy equipment used for the project shall be inspected by a USFS employee prior to entry on USFS lands. The DOI Technical Memorandum No. 86-68220-07-05: Inspection and Cleaning Manual for Equipment and Vehicles to prevent the Spread of Invasive Species should be provided to contractors prior to implementation to provide clear guidance for equipment cleaning. Contact Forest Service ecologist, Peter Frank, at peter.frank@usda.gov or 907-280-9020 at least two weeks prior to mobilizing equipment to schedule inspections.

7. If spruce trees larger than 4 inches in diameter must be cut, the bark of each tree must be treated to prevent the spread of spruce bark beetles. If each tree cannot be chipped in its entirety, the bark shall be treated in the following manner:
    a. A strip of bark, a minimum of 2 inches wide, shall be removed along the length of the tree.
    b. The tree must be touching the ground at a minimum of every 6 feet.
    c. The logs must not be stacked on each other, to allow the inner bark to begin drying.

Spruce trees less than 4 inches in diameter and other brush and shrubs do not need to be treated other than spreading out the slash no higher than 16 inches above ground.

8. If any inadvertent archeological discoveries are made during the course of the project the permit administrator shall be notified immediately and all work must cease at that location until the discovery is identified and evaluated by a professional archaeologist.

9. If fill material is used to cover the cut poles, it shall come from the previously disturbed soils less than 1 meter from where the original poles were.

10. Human, pet food, garbage, and odorous attractants (fuel) shall be attended by humans or stored in a bear resistant manner when not being used (bear cans or lockers, containment barrels or inside of vehicles). Garbage shall be removed daily.

11. To prevent disturbance to reproductive bald eagles and northern goshawks, if a new or previously unknown nest is found within 660 feet of the project area during project activities, the Permit Administrator shall be notified as soon as possible, and the permit holder shall be given direction on how to proceed.

12. Oil pollution prevention and contingencies shall be in place. Equipment operators will carry absorbent pads and spill response kits, provide containment and cleanup for portable fuel tanks (including hose and nozzle), follow approved disposal methods for waste products and repair leaky equipment promptly.

13. Stage, refuel, and service equipment only in designated staging areas and well away from wetlands and waterbodies. Detailed equipment refueling plans shall be submitted and approved prior to work commencement.

14. Utilize all cleared vegetation as matting for access routes when applicable.

15. All poles on USFS lands shall be cut flush with the ground surface and be documented by a photo, after the work is completed, and GPS coordinates to be submitted to the USFS.

16. Prior to work commencing, the holder/contractor shall submit an operating plan to the USFS Permit Administrator for approval that includes timelines, work schedule, equipment to be used, haz mat plan, refueling plans, aviation plans if applicable and access routes.

Appendix G – Russian River Campground Area Closure (Chugach National Forest)

CHUGACH NATIONAL FOREST

Seward Ranger District

Order No. 10-04-30-22-12

FOREST ORDER

Russian River Campground Area Closure

Pursuant to 36 CFR § 261.50(a) and (b), and to provide for public health and safety, the following acts are prohibited within the Seward Ranger District of the Chugach National Forest. This Order is in effect from August 16, 2022 through and including May 29, 2023.

Going into or being upon the Russian River Campground Closure Area as shown on the attached map and described below. (36 CFR § 261.53(e))

Being on Russian River Campground Road within the Russian River Campground Closure Area as shown on the attached map and described below. (36 CFR § 261.54(e))

Being on a trail within the Russian River Campground Closure Area as shown on the attached map and described below. (36 CFR § 261.55(a))

> The Closure Area Boundary begins on Russian River Campground Road (RTE#6010270) at the intersection of the entrance and exit roads to the Sterling Highway. The Russian River Campground Road, Overflow Parking Lot, Upper and Lower Russian Lakes Trailhead Parking Lots, Pink Salmon Parking Lot, and Grayling Parking Lot are all closed. The Russian Lakes Trail will be closed from the Russian River Campground Road to the intersection of the Russian Lakes Trail Lower and Upper Parking Lot trails. All campground loops in the Russian River Campground and associated campground facilities will be closed. Access trails to the Russian River Campground from the Russian River Angler Trail will be closed at their intersections with the Angler Trail, as shown on the attached map.

Pursuant to Title 36 CFR 261.50(e) the following are exempt from this order:

1. Persons with a permit specifically authorizing the otherwise prohibited act or omission.

2. Any Federal, State, or local officer, or member of any organized rescue or fire fighting force in the performance of an official duty.

3. Persons who are employed, contracting with, or otherwise retained by Qayaq Construction LLC and are engaged in a business, occupation, or trade relating to the road construction project.

These prohibitions are in addition to the general prohibitions in 36 CFR Part 261, Subpart A.

Executed in Anchorage, Alaska, this 12th day of August 2022.

/s/ Jeff Schramm

August 12, 2022

Jeff Schramm
Forest Supervisor
Chugach National Forest

Date

A violation of these Prohibitions is punishable by a fine of not more than $5,000 for per individual or $10,000 for an organization, or imprisonment for not more than six months, or both.
[16 U.S.C. § 551, and 18 U.S.C. §§ 3559, 3571, and 3581.]

Russian River Campground Closure

Order # 10-04-30-22-12

Legend

- Parking
- Restroom
- Visitor Information
- Fee Station
- Wheelchair Accessible
- River Access
- Trailhead
- Hiking Trail
- Road
- Sterling Highway
- Mile Post
- Closed Area
- River
- Private Land
- Chugach National Forest
- Kenai National Wildlife Refuge