# Migratory Landbird Conservation on the Lake Tahoe Basin Management Unit and the Tahoe National Forest

## CalPeco 625 and 650 Electrical Line Upgrade Project

Under the National Forest Management Act (NFMA), the Forest Service is directed to "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." (P.L. 94-588, Sec 6 (g) (3) (B)). The January 2000 USDA Forest Service (FS) Landbird Conservation Strategic Plan (USFS 2000), followed by Executive Order 13186 in 2001, in addition to the Partners in Flight (PIF) specific habitat Conservation Plans for birds (CalPIF 2002, 2004) and the January 2004 PIF North American Landbird Conservation Plan (Rich et al. 2004) all reference goals and objectives for integrating bird conservation into forest management and planning.

In late 2008, a *Memorandum of Understanding between the USDA Forest Service and the US Fish and Wildlife Service to Promote the Conservation of Migratory Birds* was signed (USFS, USFWS 2008). The intent of the MOU is to strengthen migratory bird conservation through enhanced collaboration and cooperation between the Forest Service and the Fish and Wildlife Service as well as other federal, state, tribal and local governments. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales and ensuring that bird conservation is addressed when planning for land management activities.

The Lake Tahoe Basin Management Unit (LTBMU) and the Tahoe National Forest (TNF) are proposing to manage lands on the LTBMU and the Truckee Ranger District located in the Tahoe North Shore and Middle Truckee River fifth field watersheds respectively. Proposed management is intended to implement direction contained within the LTBMU Land and Resource Management Plan (LRMP; USFS 1988, as amended) and the Tahoe National Forest Land and Resource Management Plan (USFS 1990). Opportunities to promote conservation of migratory birds and their habitats in the project area were considered during development and design of the CalPeco 625 and 650 Electrical Line Upgrade Project (MOU Section C: items 1, 8, and 11 and Section D: items 1 and 3).

Please refer to the *CalPeco 625 and 650 Electrical Line Upgrade Project Environmental Impact Statement* (*TRPA*)/*Environmental Impact Statement* (*NEPA*)/*Environmental Impact Report* (*CEQA*) (EIS/EIS/EIR) for a description of the project Purpose and Need, the four action alternatives being evaluated (Alternatives 1, 2, 3, and 4), and the no action alternative (Alternative 5).

### **Project Design Features for Migratory Landbirds**

The following Applicant Proposed Measures (APMs) have been incorporated into the project design to minimize, avoid, and reduce potential adverse effects on migratory birds and other biological resources. Additional APMs are also part of the project; however, for purposes of this report, only those APMs relevant to migratory birds that may occur on National Forest System (NFS) lands, their habitats, or other resources and issues that could affect migratory bird habitats are listed below. Descriptions and rationale of all APMs are provided in Section 3.7, Applicant Proposed Measures, of the EIS/EIS/EIR.

• **APM BIO-1:** Prior to construction, all CalPeco, contractor, and subcontractor project personnel will receive training from a qualified resource specialist regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations,

including appropriate wildlife avoidance measures, impact minimization procedures, the importance of sensitive resources, and the purpose and methods for protecting such resources. Among other topics, the training will also include a discussion of BMPs to reduce the potential for erosion and sedimentation during construction. Additionally, CalPeco and designated environmental monitors for project construction will coordinate with the applicable public land owners/managers on communication, documentation and reporting, and data submittal protocols.

- APM BIO-2: CalPeco will conduct a complete floristic survey, including surveys for all special-status botanical species and invasive plants, during a time that coincides with the greatest number of blooming periods for target species. This survey will be conducted no more than one year prior to the start of construction. Occurrences of special-status botanical species and weed-infested areas will be flagged or fenced no more than 30 days prior to the start of construction. Flagging and fencing will be refreshed and maintained throughout construction. Implementation of this measure will occur in coordination with USFS
- APM BIO-3: CalPeco will complete an invasive plant risk assessment for all ground-disturbing activities.
- APM BIO-4: Before construction activities begin, CalPeco will treat invasive plant infestations where feasible. Treatments will be selected based on each species ecology and phenology. All treatment methods—including the use of herbicides—will be conducted in accordance with the law, regulations, and policies governing the land owner (e.g., TRPA in the Lake Tahoe Basin; LTBMU Forest Supervisor and Tahoe National Forest Supervisor on NFS lands). Land owners will be notified prior to the use of herbicides. In areas where treatment is not feasible, CalPeco will clearly flag or fence infested areas in order to clearly delineate work exclusion. Appropriate treatments will also be incorporated into tree removal and construction activities, such as a requirement that all cut live conifer stumps greater than 6 inches in diameter be treated with Sporax or an EPA-registered borate compound to prevent the spread of Annosus root disease.
- **APM BIO-5:** Vehicles and equipment will arrive at the project area clean and weed-free and will be inspected by the on-site environmental monitor for mud or other signs that weed seeds or propagules could be present prior to use in the project area. If the vehicles and equipment are not clean, the monitor will deny entry to the ROW and other work areas.
- **APM BIO-6:** Vehicles and equipment will be cleaned using high-pressure water or air at designated weedcleaning stations after exiting an infested area. Cleaning stations will be designated by a botanist or invasive plant specialist and located away from aquatic resources.
- **APM BIO-7:** Only certified weed-free construction materials, such as sand, straw, gravel, seed, and fill, will be used throughout the project.
- APM BIO-8: If invasive plant-infested areas are unavoidable, invasive plants will be cut, if feasible, and disposed of in a landfill in sealed bags or disposed of or destroyed in another manner acceptable to the USFS, TRPA, USACE, or other agency as appropriate. If cutting is not feasible, layers of mulch, degradable geotextiles, or similar materials will be placed over the infestation area to minimize the spread of propagules by equipment and vehicles during construction. These materials will be secured so they are not blown or washed away.
- APM BIO-9: Exclusion zones will be established around any identified special-status botanical species. In consultation with a qualified biologist, CalPeco will first attempt to avoid effects of project implementation on special-status plants and protect occurrences *in situ*. In the event that a special-status plant occurrence cannot be avoided by construction activities, CalPeco will notify CPUC, CDFW, TRPA, and/or USFS, as applicable depending on the species regulatory status. CalPeco will consult with CDFW, TRPA, and/or

USFS in order to establish appropriate mitigation measures. If seed collection or transplantation are selected as appropriate mitigations, then the following measures will apply: a) CalPeco will collect any mature seeds from the affected plants and store them at an appropriate native plant nursery or comparable facility; b) upon the completion of work, CalPeco will redistribute the seeds within the original location of the occurrence; c) CalPeco will establish performance standards for survivorship and will also monitor and document the success rate of the transplanted individuals for three consecutive growing seasons; d) if performance standards are not met, corrective measures will be implemented and monitoring and adaptive management continued until success criteria are met. Specifically for Plumas ivesia: if, through consultation with an occurrence's land manager, it is determined that Plumas ivesia individuals. Plants that cannot be avoided during construction will be relocated to suitable habitat surrounding the 650 Line. If relocation is unsuccessful, CalPeco will consult with the CDFW and USFS in order to determine the cause of relocation failure and to establish appropriate corrective remedial measures.

- **APM BIO-10:** Any special-status botanical species identified during the floristic surveys will be documented, photographed, and submitted to the CNDDB. CalPeco will notify and provide documentation to CPUC, CDFW, TRPA, and/or USFS, as applicable depending on the species listing status.
- APM BIO-11: CalPeco will conduct protocol-level surveys during the appropriate season prior to construction in a particular area to determine whether northern goshawks or California spotted owls are nesting in planned work areas within suitable habitat along the new 625 Line, existing 625 Line, and 650 Line, including USFS-designated PACs or Home Range Core Areas.
- APM BIO-12: No vegetation management or treatment or other construction activities, other than vehicle passage on existing roadways, will occur within 0.25 mile of active California spotted owl nests during the breeding season (March 1 to August 31) or within 0.50 mile of active northern goshawk nests during the breeding season (February 15 to September 15), unless protocol-level surveys confirm that the birds are not nesting. A qualified biologist will have the ability to amend the start and end dates of these breeding seasons with concurrence from appropriate agencies if it can be determined that breeding has not started or that fledglings have left the nest. If the location of a nest site within a PAC is unknown, either surveys are required to locate the nest stand and determine nesting status or, as an alternative to surveys, an activity buffer will be applied to the 0.25-mile area surrounding the PAC. The activity buffer may be waived for activities of limited scope and duration, when a biological evaluation determines that such projects are unlikely to result in breeding disturbance considering their intensity, duration, timing, and specific location. Where a biological evaluation concludes that a nest site will be shielded from planned activities by topographic features that will minimize disturbance, the buffer distance may be modified in coordination with the USFS.
- APM BIO-13: To offset permanent removal of suitable habitat within designated PACs and HRCAs, CalPeco will assist the USFS in locating additional suitable habitat immediately adjacent to the PAC or HRCA removed to form a new PAC to support the USFS's goal of establishing additional PACs and maintaining specific acreages of California spotted owl and northern goshawk PACs and HRCAs. The amount of suitable habitat designated as a PAC or HRCA for each species is as follows: a spotted owl PAC is 300 acres, a northern goshawk PAC is 200 acres, and a spotted owl HRCA is 1,000 acres. CalPeco will coordinate with the USFS to identify areas of interest and understand the desirable components or key criteria of suitable habitat used for PAC and HRCA designation. As an alternative to assisting USFS in locating additional suitable habitat adjacent to a PAC or HRCA, CalPeco will provide monitoring support for new PAC or HRCA areas established by USFS as a result of the project. The specific objectives, timing, and duration of monitoring will be agreed upon by CalPeco and USFS.

- **APM BIO-18:** For bird species not specifically addressed in other APMs, nesting bird surveys will be conducted no more than 30 days prior to construction activities if work is scheduled to occur during the breeding season—March to September. Exclusionary buffer zones (to be determined based on species-specific needs) will be created surrounding any active nests along the project alignment. Buffers will be established by a qualified biologist prior to the start of construction. If an area is given clearance to proceed with construction and nesting subsequently occurs, it will be assumed that the individuals are acclimated to the ongoing disturbance of construction. If circumstances exist such that future activities may result in the abandonment or failure of the nest, as determined by a qualified biologist, an appropriate exclusionary buffer will be established by CalPeco in coordination with the CDFW, USFS, and/or USACE.
- **APM BIO-19:** Power poles will be constructed to conform to the practices described in the Suggested Practices for Avian Protection on Power Lines Manual developed by the Avian Power Line Interaction Committee (2006).
- APM BIO-21: Qualified environmental monitors will be present with each crew during all vegetationremoval activities to help ensure that impacts to biological resources are minimized to the extent possible. For all other construction activities, monitors will be allowed to cover up to 5 miles of the project area at once to allow multiple crews to work in close proximity to each other at the same time. Environmental monitors will have the authority to stop work or direct work in order to help ensure the protection of resources and compliance with all permits.
- APM BIO-22: An environmental monitor will inspect all pole excavations and areas of active construction on a daily basis for trapped wildlife. Wildlife found in active construction areas will be allowed to passively leave the site. If necessary, wildlife may be relocated by a qualified biologist. The construction foreman will notify the environmental monitor immediately if any wildlife enters or becomes trapped in the work area.
- **APM BIO-23:** Topsoil, where present, will be salvaged in areas that will be graded or excavated. Topsoil will be segregated, stockpiled separately from subsoil, and covered. These soil stockpiles, as well as any others created by the proposed project, shall have the proper erosion control measures applied until they are removed. The topsoil will then be replaced to the approximate location of its removal after project construction has been completed to facilitate revegetation of disturbed areas. Top soil will not be salvaged from areas infested with invasive plants.
- **APM BIO-24:** If invasive plant infestations are later identified throughout the course of construction in staging areas, parking areas, or access routes, they will be treated according to APM BIO-4 & BIO-8.
- **APM BIO-26:** Work areas will be clearly marked with fencing, staking, flagging, or another appropriate material. All project personnel and equipment will be confined to delineated work areas. In the event that work must occur outside of the work area, approval from lead and other agencies with jurisdiction over the property will be obtained prior to the commencement of activities.
- **APM BIO-28:** CalPeco will minimize vegetation and tree removal to only the areas necessary for construction, with particular attention given to minimizing effects on riparian areas and preserving trees greater than 30 inches diameter at breast height (dbh).
- APM BIO-29: Skidding of trees will not be permitted in waters of the United States or waters of the State, including wetlands. Within these waters tree removal may be conducted by hand, use of cable systems, helicopter yarding, or use of ground based equipment when determined suitable for ground based mechanical harvest. Any work conducted in the vicinity of waters of the United States, waters of the State,

and wetlands will have an environmental monitor present, consistent with the requirements of APM WQ-4. Other APMs applicable to the protection of aquatic resources will also be implemented.

- **APM BIO-30:** Prior to commencing construction in any area containing aquatic resources or potential wetlands, a qualified biologist will conduct a delineation of waters of the United States according to methods established in the USACE wetlands delineation manual (Environmental Laboratories 1987) and Western Mountains, Valleys, and Coast Region Supplement (Environmental Laboratories 2010). The delineation will map and quantify the acreage of all aquatic habitats on the project site and will be submitted to USACE for verification. CalPeco will determine, based on the verified wetland delineation and the project design plan, the acreage of impacts on waters of the United States and waters of the state that will result from project implementation. Impacts will be avoided to the extent practicable through the siting of poles and other facilities outside of delineated waters of the United States and waters of the state. Work in wetlands or wet meadow habitats with saturated soil conditions will be scheduled when soils are dry to the extent possible. If soils become saturated, timber mats will be installed along all vehicle and equipment access routes to minimize rutting. Prior to disturbance of waters of the United States or waters of the state, an environmental monitor will record via photographs and field notes the pre-disturbance condition of the water. Disturbed waters will be restored to preconstruction conditions and seeded with a native species, consistent with the vegetation community present prior to disturbance, to stabilize the soils and minimize the introduction of invasive plants, as specified by the USACE and RWOCB. In accordance with the USACE "no net loss" policy, all permanent wetland impacts will be mitigated at a minimum of a 1:1 ratio. This mitigation will come in the form of either contributions to a USACE-approved wetland mitigation bank or through the development of a Compensatory Mitigation and Monitoring Plan aimed at creating or restoring wetlands in the surrounding area (although creation is not authorized by TRPA in their jurisdiction).
- **APM BIO-33:** All trash and food will be removed from the site at the end of each workday in order to deter wildlife from entering the site.
- APM BIO-34: No pets or firearms will be allowed in the project area.
- **APM BIO-35:** No harm, harassment, or collection of plant and wildlife species will be allowed. Feeding of wildlife will be prohibited.
- APM BIO-36: Prior to construction, CalPeco will develop a Restoration Plan that will address final cleanup, stabilization, and revegetation procedures for areas disturbed by the project. The plan will be consistent with, and implement related commitments and requirements included in the EIS/EIS/EIR project description, other APMs, mitigation measures, and agency permit requirements. The Restoration Plan will address loosening of any compacted soil, restoration of surface residue, and reseeding. If existing unpaved roads require modification to temporarily allow passage of construction equipment during the construction period, these roads will be returned to their original footprint after construction is complete. On NFS lands, restoration activities will be designed and implemented to meet invasive plant management guidelines and Visual Quality Objectives (VQO) for the area. Areas temporarily disturbed by cut and fill activities will be re-graded to blend with the natural topography. On public land, CalPeco will coordinate with the land management agency to determine an appropriate seed mix or tree planting plan as well as other elements of the plan applicable to lands managed by the agency. On private land, CalPeco will coordinate with the landowner and/or provide the landowner with a suggested seed mix based on consultation with the agency of jurisdiction. The plan will include approved seed mixes, application rates, application methods, methods to record pre-disturbance conditions, success criteria for vegetation growth, monitoring and reporting protocols, and remedial measures if success criteria are not met. If broadcast seeding is determined to be the most feasible application method, seeding rates will be doubled relative to the standard seeding rate and the seeding method rationale will be explained. The plan will also include long-term erosion and sediment

control measures, slope stabilization measures, criteria to determine the success of these measures, remedial actions if success criteria are not met, and monitoring and reporting procedures. As part of normal equipment inspections during project operation, an evaluation of access ways will be conducted to confirm that use has not resulted in compaction that will result in "coverage" per TRPA standards.

- APM BIO-37: Decommissioning the existing 625 Line ROW and allowing natural regeneration of coniferous forest and other native vegetation types will assist in offsetting or reducing the permanent loss of trees and other vegetation along the new 625 Line ROW. Prior to the removal of poles and conductor, a qualified biologist or soil scientist will identify areas of the abandoned ROW that contain unnaturally compacted soil (resulting from unauthorized public use, development of user-created trails, or other factors) that could limit the natural reestablishment of vegetation and assess whether local treatments will be needed to facilitate native vegetation recruitment and development. CalPeco will consult with the applicable land owner/manager to verify that areas identified for treatments are appropriate (e.g., not part of a system road, authorized trail network, or other desired use) and secure approval for restoration. Restoration of these sites will be overseen by a qualified biologist and will likely consist of a combination of the following.
- Barricade existing access points and post appropriate signage to discourage use. Also incorporate into restoration actions minimizing the visibility of potential access points from intersecting roadways.
- Loosen compacted soil to a depth of 6 to 8 inches.
- Incorporate logs, boulders, mulch and other materials into the disturbed area to discourage use.
- Apply appropriate erosion control BMPs (e.g., installation of check dams, mulch, log and/or rock stabilization) in areas where evidence of sheet, rill, or gully erosion exists.
- Seed with a certified weed-free seed mix, approved by the applicable land owner/manager, containing native, site-appropriate species.
- Apply 1 to 2 inches of locally obtained mulch such as pine needles, wood chips, or tub grindings.
- Monitor for new invasive plant invasions and expansion of existing weed populations following treatments, and implement weed control measures where needed. Post-treatment monitoring for invasive plants will be conducted annually for up to three years, similar to the frequency and duration specified for USFS land in the USFS Invasive Plant Risk Assessment prepared for the project.
- Conduct post-treatment monitoring and reporting every two years for up to 10 years, to evaluate success of restoration treatments. The details of the monitoring and reporting program, including identification and implementation of potential adaptive management actions based on monitoring results, will be developed jointly by CalPeco, TRPA, and the land owner/manager.
- APM WQ-4: When working near aquatic resources, poles and trees will be cut by hand and felled away from such features (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding coarse woody debris to a stream to enhance fish habitat). The skidding of poles and trees through aquatic resources will not be permitted. Within Stream Environment Zones (SEZs) poles and trees will be removed by hand, by cable system, or by helicopter. No mastication will occur in SEZs and no chip material will be left in SEZs unless approved for erosion control. Vehicles and equipment will be staged away from aquatic features, along designated access routes or within staging areas. If there are circumstances where disturbance to the bank or channel of an aquatic feature is unavoidable, CalPeco will restore the banks and channels to preconstruction conditions immediately afterwards. An environmental monitor will be present in all instances where disturbance to an aquatic

feature may occur to ensure conditions of this APM and any other applicable APMs, permit conditions, and mitigation measures are complied with.

- **APM WQ-5:** When construction activities are required adjacent to flowing streams or rivers, work will be conducted during low-flow conditions (i.e., when surface flow is restricted to the low-flow channel, as confirmed by the environmental monitor).
- APM WQ-7: CalPeco will minimize vehicle and equipment usage within and crossing of stream channels and other aquatic resources consistent with the requirements of other APMs. If vehicles and equipment must cross stream channels or other aquatic resources, CalPeco will construct shoo-fly access roads, install culvert crossings, or use other methods to access either side of the resource or utilize existing bridges, where feasible, in order to minimize the need to install temporary bridges. Limit crossings to no more than one for every 800 feet of channel. If there are no existing crossings and the construction of shoo-fly roads or other crossing methods may cause greater resource impact, CalPeco will install timber mats, slash mats, or other materials suitable for a temporary bridge. If bridges are installed over streams with discernible flow, all attempts will be made to span the channel. Temporary crossings on ephemeral or intermittent drainages will be constructed and removed, to the maximum extent feasible, when the channels are dry and will be removed before the winter season begins. These crossings will be designed to not obstruct water flow and fish passage and to accommodate flows from a 1 inch or greater precipitation event.
- APM WQ-8: CalPeco will obtain permits from appropriate regulatory agencies prior to commencing work in waters of the United States or waters of the state. Following construction, CalPeco will restore any impacted waterbodies and wetlands to pre-project conditions and compensate for any permanent wetland impacts in accordance with the US Army Corps of Engineer's "no net loss" policy.
- APM AQ-2: Unpaved areas subject to vehicle access will be stabilized using water at least two times daily, or as needed to control fugitive dust. On NFS lands, unpaved roads will be watered at least as often as specified in Forest Service Handbook 2409.15 (USFS 1992). A locally approved chemical dust palliative, applied according to the manufacturer's recommendations, may be substituted for watering with approval from the applicable land owner/manager.
- **APM AQ-4:** Prior to any ground disturbance, sufficient water will be applied to the area to be disturbed in order to control fugitive dust emissions.
- APM AQ-7: Traffic speeds on unpaved roads and the ROW will be limited to 15 miles per hour.
- **APM AQ-10:** Trucks transporting bulk materials off-site will be maintained such that no spillage can occur from holes or other openings in the cargo compartments. Loads will be completely covered or the bulk material will be wetted and loaded to maintain 6 inches of freeboard from the top of the container.

### **Forest-wide Protections**

In addition, management direction from the Tahoe National Forest Land and Resource Management Plan (USFS 1990) and LTBMU Land and Resource Management Plan (USFS 1988), as amended by the Sierra Nevada Forest Plan Amendment (USFS 2004), contributes to migratory bird conservation. Key forest-wide protections applicable to migratory birds and their habitats (e.g. Standards and Guidelines (S&G) from the SNFPA Record of Decision (ROD)) are presented below.

LTBMU:

- "Maintain or improve wildlife (all species) habitat through non-structural means." LRMP practice p. IV-26
- "Protect or improve habitat through coordination with other management activities." LRMP S&G p. IV-26
- [Retain snags and down woody material on an individual project basis for wildlife.] ROD S&G #'s 10-11 and LRMP S&G p. IV-26
- "Require non-degradation of existing deciduous tree types, wetland, and meadow habitat. Increase the acreage in these riparian associations where opportunities are present." LRMP S&G p. IV-26
- "Identify potential bald eagle nesting sites and manage to encourage [re-establishment] of four pairs." LRMP S&G p. IV-26
- "Prohibit rock climbing on [peregrine falcon] nesting cliffs between April 1 and July 31. Construct no trails to the top or base of nesting cliffs." LRMP S&G p. IV-27
- "Manage wetlands suitable for waterfowl nesting for low level human disturbance from March 1 to June 30 [...]." LRMP S&G p. IV-27
- [Provide habitat for species dependent on early successional vegetation and old growth forest.] LRMP practices p. IV-27

TNF:

- "Manage for viable populations of all fish and wildlife as prescribed in Appendix D [of the LRMP]." LRMP S&G 24, p. V-28
- "Old-growth values shall be considered in designing the dispersion of old growth, which may range from areas of old-growth lands for wildlife habitat (e.g., spotted owls and furbearers) to areas designated for public visitation (special interest areas)." LRMP S&G 25, p. V-28 and 29
- "Consider the following actions that benefit wildlife: 1) leave all snags and down logs in riparian areas where consistent with safety and fishery needs; 2) leave all soft snags where possible, as long as safety needs are met; 3) Save live culls for future snags where consistent with stand management objectives; 4) in firewood areas, designate snags in inaccessible terrain; and 5) in snag deficient areas, cut only hazardous snags." LRMP S&G 26, p. V-29
- [Retain snags and down woody material on an individual project basis for wildlife.] ROD S&G #'s 10-11
- "Manage hardwood stands to provide desirable wildlife habitat." LRMP S&G 28, p. V-30
- "Improve the habitat capability for riparian and meadow-associated wildlife." LRMP S&G 29, p. V-31

#### LTBMU/TNF:

- [Manage for willow flycatchers and their habitats in occupied and historically occupied sites. Consider this species when management actions may affect suitable habitats within five miles of occupied habitats.] ROD S&G #'s 56-63
- "Minimize old forest habitat fragmentation." [Manage for forested linkages and connectivity of old forest habitats for associated species.]" ROD S&G #'s 27-29

### **Project Effects on Migratory Landbirds**

Potential impacts to habitats and select migratory bird populations, including special-status bird species and Forest Service Management Indicator Species (MIS) habitats, resulting from the CalPeco 625 and 650 Electrical Line Upgrade Project have been assessed in detail in the following documents prepared for the proposed project, and are summarized below:

- CalPeco 625 and 650 Electrical Line Upgrade Project Environmental Impact Statement (TRPA)/Environmental Impact Statement (NEPA)/Environmental Impact Report (CEQA) (EIS/EIS/EIR),
- Biological Assessment (BA),
- Biological Evaluation for Aquatic and Terrestrial Species (Animal BE), and
- Management Indicator Species Report (MIS Report).

Implementing the APMs listed in "Project Design Features for Migratory Landbirds" would protect active nests and specific habitat features for migratory birds, avoid or minimize impacts to Forest Service sensitive and other special-status species, and minimize environmental effects on Forest Service MIS.

Implementing any of the action alternatives (Alternative 1, 2, 3, or 4) could disturb the foraging and movement patterns of individuals, affect breeding activities and reproductive success, cause direct mortality or injury, and disturb or remove suitable habitat for some migratory bird species. Additionally, project implementation would result in the loss of some Forest Service MIS habitats. Please refer to the project EIS/EIS/EIR, BA, Animal BE, and MIS Report for a detailed discussion of potential impact mechanisms, biological effects, and anticipated magnitude of effects that relate to landbirds, including the types and acreages of habitats temporarily and permanently affected.

With implementation of APMs to avoid, minimize, and compensate for impacts to wildlife resources generally and several landbird species specifically, none of the action alternatives are expected to substantially affect the distribution, breeding productivity, population viability, or the regional population of any common or special-status landbird species; or cause a change in species diversity locally or regionally. Habitat loss for any migratory bird species would occur mostly along a narrow linear corridor, and would be minor relative to the total amount available in the area. Additionally, APMs incorporated into the action alternatives include conducting focused preconstruction surveys for nesting birds and establishing protective buffers during sensitive nesting periods (APM BIO-11, 12, and 18), which would avoid the loss of individuals or nests of these species during construction. To help prevent accidental injury or mortality as a result of electrocution, APM BIO-19 requires incorporation of avian protection measures into the project design.

In sum, because the wildlife habitat types that would be affected are abundant and widely distributed locally and regionally, and the project is not expected to cause substantial changes to habitat structure or composition, implementing Alternative 1, 2, 3, or 4 would not threaten, regionally eliminate, or contribute to a substantial reduction in the distribution or abundance of habitat for common or special-status landbird species. Additionally, disturbances to breeding activities, effects on reproductive success, and the potential for direct mortality or injury to landbirds would be avoided or minimized through implementation of the applicable APMs. Therefore, the CalPeco 625 and 650 Electrical Line Upgrade Project is not expected to substantially affect the distribution, breeding productivity, local abundance, or regional population size and viability of any migratory bird species.

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USFS. See US Forest Service.

USFS, USFWS. See US Forest Service, US Fish and Wildlife Service.