

**SACRAMENTO MUNICIPAL UTILITY DISTRICT'S  
UPPER AMERICAN RIVER PROJECT  
(FERC NO. 2101)**

**SUPPLEMENTAL  
PRELIMINARY DRAFT  
ENVIRONMENTAL ASSESSMENT**

**SECTION 5.3.6 – FEDERALLY LISTED THREATENED  
AND ENDANGERED SPECIES**

Sacramento Municipal Utility District  
Sacramento, California

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### 5.3.6 Federally Listed Threatened and Endangered Species

SMUD analyzed the potential of the Agency Alternative to affect federally listed threatened and endangered species. This section compares these potential effects to both baseline conditions and the Proposed Action.

Five species listed as threatened or endangered could be affected by the Proposed Action. These include two endemic Pine Hill plant species listed as endangered (Pine Hill ceanothus [*Ceanothus roderickii*] and Pine Hill flannelbush [*Fremontodendron decumbens*]), one plant species listed as threatened (Layne's butterweed [*Senecio Layneae*]), and two animal species listed as threatened (Valley Elderberry Longhorn Beetle [VELB] and bald eagle).

The Agency Alternative effects on threatened and endangered botanical and wildlife species are similar to the Agency Alternative's effects on other botanical and wildlife species. Thus, the following analysis largely reiterates the discussions in chapter 5.3.4 (Botanical Resources) and chapter 5.3.5 (Wildlife Resources).

#### 5.3.6.1 Environmental Effects of the Agency Alternative

##### Pine Hill Endemic Plants and VELB

Although the PDEA discussed the effects of the Proposed Action on the three threatened and/or endangered Pine Hill endemic plants separately from the effects on VELB, the following discussion addresses the environmental effects of the Agency Alternative on all four species. This combined discussion minimizes redundancy, as the Agency Alternative's effects on Pine Hill endemic plants and VELB are similar given that both Pine Hill endemic plants and the elderberry plants that host VELB grow only in the upland areas of the UARP, primarily in the vicinity of transmission lines, and are adversely affected by similar types of activities (License Application, PDEA, p. 5-287).

The Agency Alternative includes the following measures potentially pertaining to the Pine Hill endemic plants and/or VELB:

- "Wildlife and Plant Protection Measures" (Biological Evaluations for New as Well as Ongoing Construction and O&M) (Agency Alternative, p. 49);
- "Wildlife and Plant Protection Measures" (Maintenance in the Pine Hill Rare Plant Preserve) (Agency Alternative, p. 49);
- "Noxious Weeds" (Agency Alternative, p. 49);
- "Annual Review of Ecological Conditions" (Agency Alternative, p. 51); and
- "Vegetation Management Plan" (Agency Alternative, p. 105).

The Agency Alternative cumulative effects are evaluated in Chapter 7. This SPDEA does not evaluate the environmental effects of Agency Alternative measures specific to the threatened and endangered species resources of the Chili Bar Project (Agency Alternative, Appendix B).

To determine the environmental effects of the Agency Alternative on Pine Hill endemic plants and VELB, SMUD compared the Agency Alternative's effects on these species within the FERC Project Boundary against baseline conditions and the Proposed Action. We considered the Agency Alternative to have a significant effect if it: 1) results in significant losses of important botanical resources; or 2) contributes to the spread of noxious and invasive weeds.

However, the pertinent Agency Alternative measures' absence of detail make it impossible to conclude whether the Agency Alternative results in beneficial or adverse effects, if any at all, compared to the baseline conditions and the Proposed Action. In comparison, the Proposed Action provides concrete and specific commitments that adequately protect Pine Hill endemic plants and VELB.

5.3.6.2 Agency Alternative Measure – Wildlife and Plant Protection Measures  
(Biological Evaluations for New as Well as Ongoing Construction and O&M)

Biological Evaluations for New or Ongoing Construction and O&M Are Unnecessary and Lack the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Pine Hill Endemic Plants or VELB

The Agency Alternative requires a biological evaluation of the potential effects of any new construction or maintenance authorized by the new license on National Forest System lands if the new construction or maintenance could affect a USFS sensitive plant or its habitat. In consultation with FERC, the USFS may require mitigation measures (Agency Alternative, p. 49). The Agency Alternative also requires preparation of a Biological Assessment (BA) prior to SMUD's commencing any UARP construction, operation, or maintenance activities that may affect an ESA listed species (or species proposed for listing) or its critical habitat. The BA must be reviewed by the USFS prior to submittal to USFWS or NMFS for consultation or conference (Agency Alternative, p. 49).

The Agency Alternative also requires notifying the USFS if a USFS sensitive plant or wildlife species is detected prior to or during ongoing construction, operations, or maintenance. "USFS sensitive plant or wildlife species" is a category including but not limited to species listed under the ESA. If the USFS determines UARP-related activities are adversely affecting the sensitive species, SMUD must develop and implement appropriate protection measures in consultation with the USFS and the USFWS (Agency Alternative, p. 49).

The results of an evaluation/assessment could support one or more undefined actions that might affect Pine Hill endemic plants and VELB. However, the Agency Alternative's lack of detail

precludes any determination of the likelihood such effects might occur, and if they do occur, whether they are beneficial or adverse.

By comparison, the Proposed Action provides specific commitments that provide adequate protection for Pine Hill endemic plants and VELB. Both the PDEA and Biological Assessment (Appendix D) address effects of proposed new construction and continuing O&M. In addition, SMUD will implement an Annual Employee Environmental Awareness Program to ensure compliance with area restrictions and with procedures for protecting plants in sensitive areas (License Application, PDEA, p. 3-15 to 3-16). SMUD and ENF will conduct an annual review of species that are listed or formally proposed for listing under the ESA and/or CESA, and that are listed by the ENF as USFS Sensitive Species or Watch List species. SMUD will prepare a study plan for each of these species that has a reasonable potential to occur within the FERC Project Boundary. In addition, the Proposed Action requires development of a Vegetation Management Plan to specifically address special-status plants within the FERC Project Boundary. Thus, unlike the Agency Alternative measure, which is too vague to support a determination regarding its effect on Pine Hill endemic plants or VELB, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that provide adequate protection for these species.

This measure is also unnecessary measure because it concerns activities “authorized by the license” (Agency Alternative, p. 49). These effects will be fully analyzed in FERC’s NEPA document and addressed, as appropriate, in ESA consultation, before FERC issues the license. This measure implies that after FERC completes its NEPA review and any ESA consultation, SMUD would be required to begin yet another cycle of environmental analysis. Such additional environmental review is excessive.

It should be noted that FERC as the lead federal agency has ultimate responsibility for compliance with Section 7 consultation requirements of the ESA, including preparation of a BA. SMUD, as FERC’s designated non-federal representative, may prepare a draft BA for submittal to FERC but responsibility for distribution of the BA resides with FERC.

#### 5.3.6.3 Agency Alternative Measure – Plant Protection Measures (Maintenance Activities in the Pine Hill Rare Plant Preserve)

##### The Agency Alternative’s Consultation Process Is Unnecessary and Lacks the Detail Necessary to Demonstrate the Agency Alternative Reduces the Effects on Pine Hill Endemic Plants or VELB

Before undertaking maintenance under transmission lines within the Pine Hill Rare Plant Preserve, the Agency Alternative requires SMUD to consult with BLM, USFWS, and CDFG to “develop and implement appropriate protection measures” (Agency Alternative, p. 49). This measure lacks sufficient detail to determine whether it has any effect on Pine Hill endemic plants or VELB, and if it does have an effect, whether that effect is beneficial or adverse. Moreover,

there is little likelihood that the measure results in any effect on VELB because elderberry bushes have not been located in the Pine Hill Rare Plant preserve.

By comparison, the Proposed Action provides specific commitments to protect Pine Hill endemic plants. To protect these and other special-status plants within the greater Pine Hill area (including but not limited to the Pine Hill Rare Plant Preserve), the Proposed Action requires SMUD to undertake PM&E measures including a Vegetation Management Plan, an Invasive Weeds Management Plan, Annual Employee Environmental Awareness Program, an annual review of special-status plant lists (with preparation of study plans as necessary), and implementation of the existing Pine Hill cooperative management agreement (License Application, PDEA, p. 5-236, 5-291). These measures will adequately protect botanical resources throughout the Pine Hill Rare Plant Preserve and beyond. Thus, unlike the Agency Alternative consultation measure, which is too vague to support a determination regarding its effect on Pine Hill endemic plants, the Proposed Action provide a beneficial effect compared to baseline conditions by including specific commitments that adequately protect these species.

#### 5.3.6.4 Agency Alternative Measure – Noxious Weed Management Plan

##### The Agency Alternative’s Noxious Weed Management Plan May Result in an Environmental Benefit Compared to Baseline Conditions but Not Compared to the Proposed Action

The Agency Alternative requires SMUD, within six months of license issuance, to file with FERC a USFS-approved plan to prevent and control “Project-related” noxious weeds. Although the Agency Alternative Noxious Weed Plan will provide an environmental benefit compared with baseline conditions, the Agency Alternative will not provide a benefit beyond what SMUD has already provided under the Proposed Action. The Proposed Action requires SMUD to develop and implement an Invasive Weeds Management Plan to limit the spread of noxious and invasive weeds (License Application, PDEA, p. 5-238 to 5-239). The two plans include similar management goals and methods, and will therefore yield similar benefits.

#### 5.3.6.5 Agency Alternative Measure – Annual Review of Ecological Conditions

##### The Annual Review of Ecological Conditions Is Unnecessary and Lacks the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Pine Hill Endemic Plants or VELB

The Agency Alternative requires an annual review of ecological conditions. However, the measure lacks sufficient detail to determine whether it has any effect on Pine Hill endemic plants or VELB, and if it does have an effect, whether that effect is beneficial or adverse. For example, the measure states that the consultation is “to review and discuss the results of implementing these conditions, as well as to discuss other issues related to preserving and protecting ecological values affected by the Project”) (Agency Alternative, p. 51). The measure provides no further detail regarding the substance of the consultation.

By comparison, the Proposed Action provides specific commitments to protect Pine Hill endemic plants and VELB. SMUD will implement an Annual Employee Environmental Awareness

Program to ensure compliance with area restrictions and with procedures for protecting plants in sensitive areas (License Application, PDEA, p. 3-15 to 3-16). SMUD and ENF will conduct an annual review of species that are listed or formally proposed for listing under the ESA, CESA, or the California Native Plant Protection Act, as well as species listed by the ENF as USFS Sensitive Species or Watch List species. SMUD will prepare a study plan for each of these species having a reasonable potential to occur with the FERC Project Boundary. In addition, the Proposed Action requires development of a Vegetation Management Plan to specifically address special-status plants within the FERC Project Boundary. These Proposed Action measures adequately protect Pine Hill endemic plants as well as elderberry plants. Thus, unlike the Agency Alternative annual review, which is too vague to support a determination regarding its effect on Pine Hill endemic plants or VELB, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that adequately protect these species.

#### 5.3.6.6 Agency Alternative Measure – Vegetation Management Plan

##### The Vegetation Management Plan Is Unnecessary and Lacks the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Pine Hill Endemic Plants or VELB

The Agency Alternative requires SMUD to file, within two years of license issuance or prior to any ground-disturbing activities, a USFS–approved vegetation management plan. At a minimum, the plan must: 1) identify and prioritize all inadequately vegetated areas to be re-vegetated or rehabilitated, along with an implementation schedule; 2) list the species to be re-vegetated along with planting locations, methods, and densities, emphasizing the use of seed from certified weed-free and local sources; and 3) address “vegetation management under existing UARP-associated distribution and transmission lines on” ENF lands (Agency Alternative, p. 105).

The measure is unnecessary as it focuses primarily on re-vegetation or rehabilitation of “inadequately vegetated” areas. Not only have the extensive relicensing studies identified no areas that were “inadequately vegetated” (although many parts of the UARP transmission corridor are sparsely vegetated), it is unlikely that any such areas would include the Pine Hill endemic plants or elderberry bushes.

In addition, the measures’ requirement to address “vegetation management under existing UARP-associated distribution and transmission lines” lacks sufficient detail to determine whether it has any effect on Pine Hill endemic plants or VELB, and if it does have an effect, whether that effect is beneficial or adverse.

By comparison, the Proposed Action provides specific commitments to protect Pine hill endemic plants and VELB. The Proposed Action includes a Vegetation Management Plan, Annual Employee Environmental Awareness Program, and compliance with USFWS Conservation Guidelines for VELB to reduce the effects of UARP-associated disturbances to below the level of significance (License Application, PDEA, p. 5-237 to 5-238). By including substantive requirements, the Proposed Action likely provides greater environmental benefits than the less

detailed Agency Alternative measure. Thus, unlike the Agency Alternative Vegetation Management Plan, which is too vague to support a determination regarding its effect on Pine Hill endemic plants or VELB, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that provide adequate protection for these species.

### Bald Eagle

The Agency Alternative includes the following measures pertaining to bald eagles:

- “Biological Monitoring” (Bald Eagle Monitoring) (Agency Alternative, p. 43);
- “Wildlife and Plant Protection Measures” (Biological Evaluations for New as Well as Ongoing Construction and O&M) (Agency Alternative, p. 49);
- “Wildlife and Plant Protection Measures” (Avian Protection Plan) (Agency Alternative, p. 50);
- “Annual Review of Ecological Conditions” (Agency Alternative, p. 51);
- “Terrestrial Resources” (Agency Alternative, p. 139); and
- “Specific Recreation Measures” (Agency Alternative, p. 54 to 85).

The Agency Alternative’s cumulative effects are evaluated in Chapter 7. This SPDEA does not evaluate the environmental effects of Agency Alternative measures specific to the threatened and endangered species resources of the Chili Bar Project (Agency Alternative, Appendix B).

To determine the environmental effects of the Agency Alternative on bald eagles, SMUD compared the Agency Alternative’s effects on bald eagles within the UARP boundary against baseline conditions and the Proposed Action. We considered the Agency Alternative to have a significant effect if it changed the quantity or quality of habitat in the UARP area in such a way as to result in a significant adverse effect to bald eagles.

However, the pertinent Agency Alternative measures’ absence of detail make it impossible to conclude whether the Agency Alternative results in beneficial or adverse effects, if any at all, compared to the baseline conditions and the Proposed Action. In comparison, the Proposed Action provides a beneficial effect compared to baseline conditions by including concrete and specific commitments that adequately protect bald eagles.

#### 5.3.6.7 Agency Alternative Measure – Monitoring Program (Bald Eagle Monitoring)

##### The Monitoring Program Is Unnecessary and Lacks the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Bald Eagles

The Agency Alternative requires SMUD to coordinate annually with the USFS and USFWS to continue annual monitoring of bald eagle nest sites to ensure the nests are not being affected by UARP-related activities (Agency Alternative, p. 43). The measure includes no further specifics and therefore lacks sufficient detail to determine whether it has any effect on bald eagles, and if it does have an effect, whether that effect is beneficial or adverse.

The Agency Alternative also does not provide any evidence to support the conclusion that the monitoring is warranted. In fact, the two-year bald eagle study undertaken as part of the relicensing does not indicate UARP O&M activities are affecting eagle viability or overall eagle behavior patterns, and the Proposed Action imposes substantive and procedural requirements to ensure UARP O&M activities will have no adverse effect on eagles. Potential effects on eagles from inclement weather are beyond SMUD's control, and SMUD has no authority to control the actions of recreationists in the ENF.

UARP reservoirs have increased the distribution and amount of potential foraging and nesting habitat for bald eagles throughout the watershed (Bald Eagle and Osprey Technical Report, DTA 2004a, p. 1). A bald eagle nesting territory was first established at Union Valley Reservoir in 1986. A second nesting pair was discovered at Loon Lake Reservoir in 2003 (License Application, PDEA, p. 5-288).

The bald eagle relicensing study was designed to determine habitat utilization patterns of bald eagles in the UARP study area and the effect of UARP-related O&M activities and recreation on bald eagles (Bald Eagle and Osprey Study Plan, DTA 2004a, p. 3). After extensive monitoring of bald eagle nesting and foraging behavior, the study resulted in a detailed Technical Report analyzing the effects of the UARP and various non-UARP conditions and activities on bald eagles (see DTA, 2004a). The Terrestrial Resources Technical Working Group (TWG) determined the study's objectives were adequately addressed by the Technical Report, and the methods employed were adequate to address those objectives (DTA 2004a, p. 6).

After two years of study, UARP O&M activities do not appear to be negatively affecting eagle viability or contributing to significant changes in overall eagle behavior patterns. Reservoir operations and eagles are generally compatible (Jackman et al. 2001; Hunt et al., 2002), and the majority of eagles in California nest alongside reservoirs (License Application, PDEA, p. 5-293). The Terrestrial Resources TWG determined that UARP "[r]eservoir fluctuations do not appear to be a limiting factor in bald eagle/osprey nesting success" (DTA 2004a, p. 6). Further, the "patterns of bald eagle habitat utilization at Union Valley Reservoir, Loon Lake Reservoir, and other UARP features, suggests a level of habituation to normal operation and maintenance activities with birds demonstrating little or no response to such activities during relicensing studies" (License Application, Appendix D, p. D83). Further, fish, birds, small mammals, and carrion provide an abundant year-round food supply for eagles in the UARP (Bald Eagle and Osprey Technical Report, DTA 2004a, p. 22-27, 39).

The relicensing study and the Terrestrial Resources TWG identified inclement weather as a probable primary limiting factor on bald eagle nesting productivity in past years at Union Valley Reservoir (Bald Eagle and Osprey Technical Report, DTA 2004a, p. 6). The relicensing study also noted that actions of recreationists and other non-UARP related activities (e.g., timber harvest) had a substantial influence on eagle nesting and wintering behavior (DTA, 2004a, p. 46). Weather is beyond SMUD's control, and SMUD has no authority over the actions of recreationists and other non-UARP related activities in the ENF. The USFS is exercising its

statutory authority to control potential impacts from recreationists (License Application, PDEA, p. 5-296 to 5-297). Thus, there is no evidence that monitoring the UARP's effect on bald eagles is warranted.

In 1999, the ENF adopted a Bald Eagle Management Plan to ensure compliance with the Federal Endangered Species Act and the Pacific Bald Eagle Recovery Plan (PBERP). The PBERP identified Union Valley Reservoir as a recovery territory for the bald eagle. The Pacific Ranger District of the ENF is meeting or exceeding all objectives in the PBERP, including the objective of establishing one breeding territory at Union Valley (Bald Eagle Management Plan, Unpublished, ENF, 1999, p. 3). ENF and the Pacific Ranger District have also implemented specific measures to safeguard bald eagles and ensure recovery in the ENF (and the UARP) by, for example, imposing seasonal closures in nesting areas (License Application, PDEA, p. 5-296 to 5-297).

Compared to the lack of detail in the Agency Alternative's monitoring requirement, the Proposed Action includes specific commitments to ensure the continued adequate protection of bald eagles. The Proposed Action requires SMUD to comply with any restrictions imposed by the ENF Bald Eagle Management Plan, to advise all UARP-related helicopter flights to provide a one-mile avoidance zone around eagle nest sites, and to implement a special-status species awareness program. These measures are intended to "preclude the potential for adverse effects on bald eagle due to future operation and maintenance of the UARP" (License Application, PDEA, p. 5-297). Thus, unlike the Agency Alternative Bald Eagle Monitoring, which includes no detail to support a determination regarding its effect on bald eagles, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that provide adequate protection for these species

#### 5.3.6.8 Agency Alternative Measure – Wildlife and Plant Protection Measures (Biological Evaluations for New as Well as Ongoing Construction and O&M)

##### The Wildlife and Plant Protection Measures Are Unnecessary and Lack the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Bald Eagles

The Agency Alternative requires a biological evaluation of the potential effects of any new construction or maintenance authorized by the new license on National Forest System lands if the new construction or maintenance could affect a USFS sensitive animal or its habitat. In consultation with FERC, the USFS may require mitigation measures (Agency Alternative, p. 49). The Agency Alternative also requires preparation of a Biological Assessment (BA) prior to SMUD commencing any construction, operation, or maintenance activities that may affect an ESA listed species (or species proposed for listing) or its critical habitat. The BA must be reviewed by the USFS prior to submittal to USFWS or NMFS for consultation or conference (Agency Alternative, p. 49).

The Agency Alternative also requires notifying the USFS if a USFS sensitive wildlife species is detected prior to or during ongoing construction, operations, or maintenance. If the USFS

determines UARP-related activities are adversely affecting the sensitive species, SMUD must develop and implement appropriate protection measures in consultation with the USFS and the USFWS (Agency Alternative, p. 49).

The results of an evaluation/assessment could support one or more undefined actions that might affect bald eagles. However, the Agency Alternative's lack of detail precludes any determination of the likelihood such effects might occur, and if they do occur, whether they are beneficial or adverse.

By contrast, the Proposed Action provides specific commitments that provide adequate protection for bald eagles. Both the PDEA and Licensee-prepared Biological Assessment address effects of proposed new construction and continuing O&M. In addition, SMUD will comply with any restrictions imposed by the ENF Bald Eagle Management Plan, and will implement an Annual Employee Environmental Awareness Program to ensure compliance with area restrictions and with procedures for protecting bald eagles (License Application, PDEA, p. 3-15). SMUD and ENF will conduct an annual review of, and SMUD will prepare a study plan for bald eagles. Thus, unlike the Agency Alternative measure, which is too vague to support a determination regarding its effect on bald eagles, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that provide adequate protection for the species.

This measure is also unnecessary measure because it concerns activities "authorized by the license" (Agency Alternative, p. 49). These effects will be fully analyzed in FERC's NEPA document and addressed, as appropriate, in ESA consultation, before FERC issues the license. This measure implies that after FERC completes its NEPA review and any ESA consultation, SMUD would be required to begin yet another cycle of environmental analysis. Such additional environmental review is excessive.

Finally, it should be noted that FERC as the lead federal agency has ultimate responsibility for compliance with Section 7 consultation requirements of the ESA, including preparation of a BA. SMUD, as FERC's designated non-federal representative, may prepare a draft BA for submittal to FERC but responsibility for distribution of the BA resides with FERC.

#### 5.3.6.9 Agency Alternative Measure – Wildlife and Plant Protection Measures (Avian Protection Plan)

##### Broad-Scale Retrofitting of Transmission Line Structures Is Unwarranted

The Agency Alternative requires SMUD, within 1 year of license issuance, to: 1) retrofit all transmission lines to meet design and siting specifications established by the Avian Powerline Interaction Committee (APLIC) to avoid or minimize bird electrocutions (APLIC 1996) and collisions (APLIC, 1994); or 2) develop an Avian Protection Plan (APP) approved by the USFWS.

SMUD's evaluation of the UARP electric transmission system suggests the risk to birds and other wildlife is minimal based on the existing design and location of the facilities, avian flight patterns in the vicinity, and the absence of *any* recorded fatalities. Moreover, broad-scale retrofitting of all non-conforming transmission line structures in the UARP system is unwarranted based on APLIC guidelines. APLIC recommends utilities instead focus efforts to reduce the risk of bird electrocution and collision mortality on areas of concern or "problem poles" (e.g., areas with documented fatalities, problem nests, or high risk of mortality). A risk assessment can determine the extent of avian use, known mortality, problems with nesting on structures, proximity of established flyways, adjacent wetlands, prey populations, and perch availability within the UARP (APLIC and USFWS, 2005). In practice, APLIC acknowledges the unacceptable cost-benefit ratio associated with retrofitting a utility's entire electrical system.

Rather than retrofitting a utility's entire electrical system, many utilities have addressed APLIC guidelines by implementing an Avian Protection Program (APP) that includes the following measures:

- a structured program for monitoring and reporting bird-caused outages, bird mortality, problem poles/structures/lines, and problem nests;
- an Employee Awareness Program to ensure compliance with the APP;
- a requirement to construct all new or rebuilt lines to comply with APLIC standards and guidelines;
- a requirement to retrofit or modify all poles that have contributed to an avian/wildlife fatality; and
- participation in utility-wide programs and research for reducing adverse effects of bird-powerline interactions.

The Proposed Action implements the APLIC guidelines by developing the components of an APP. Given the Proposed Action's implementation of these guidelines and considering the minimal risk of avian electrocution or collision on the UARP transmission system, the Agency Alternative requirement to complete broad-scale retrofitting of all non-conforming UARP structures is not warranted.

#### 5.3.6.10 Agency Alternative Measure – Annual Review of Ecological Conditions

##### The Annual Review of Ecological Conditions Is Unnecessary and Lacks the Detail Necessary to Demonstrate the Agency Alternative Reduces Effects on Bald Eagles

The Agency Alternative requires an annual review of ecological conditions. However, the measure lacks sufficient detail to determine whether it has any effect on bald eagles, and if it does have an effect, whether that effect is beneficial or adverse. For example, the measure states that the consultation is "to review and discuss the results of implementing these conditions, as well as to discuss other issues related to preserving and protecting ecological values affected by the Project" (Agency Alternative, p. 51). The measure provides no further detail regarding the substance of the consultation.

By contrast, the Proposed Action includes specific commitments that provide adequate protection for bald eagles. In the License Application, both the PDEA and Licensee-prepared Biological Assessment address effects of proposed new construction and continuing O&M. In addition, SMUD will comply with any restrictions imposed by the ENF Bald Eagle Management Plan, and will implement an Annual Employee Environmental Awareness Program to ensure compliance with area restrictions and with procedures for protecting bald eagles (License Application, PDEA, p. 3-15). SMUD and ENF will conduct an annual review of, and SMUD will prepare a study plan for bald eagles. Thus, unlike the Agency Alternative measure, which is too vague to support a determination regarding its effect on bald eagles, the Proposed Action provides a beneficial effect compared to baseline conditions by including specific commitments that provide adequate protection for the species.

#### 5.3.6.11 Agency Alternative Measure – Specific Recreation Measures

##### Development, Expansion, and Improvement of Recreation Facilities May Have an Adverse Effect on Bald Eagles

The Agency Alternative requires development, expansion, improvement, relocation, or other modification of recreation facilities at over 60 sites. These actions and associated increases or redistribution of recreation use may degrade bald eagle habitat and cause increased disturbance to bald eagles.

The Proposed Action includes specific commitments such as the Employee Environmental Awareness Program and the Annual Review of Special Status Species to reduce UARP-related recreation effects on bald eagles to a less-than-significant level. In addition, a key component of the Proposed Action is the concept of four-year cycles, whereby SMUD and the ENF will, through the next license term, regularly revisit and update plans for reconstruction, construction and engineering solutions. This adaptive plan will ensure flexibility in recreation planning and development with consideration given to avoiding sensitive habitats and responding to changing distributions of special-status species, including bald eagles. To the extent the Agency Alternative's recreation measures result in more recreation traffic than occurs under either baseline conditions or under the Proposed Action's measures, the Agency Alternative's recreation measures may result in an adverse effect on bald eagles compared to either baseline conditions or the Proposed Action.