

Appendix B
Final Mitigation, Monitoring & Reporting Program

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Introduction

Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the State CEQA Guidelines require a lead agency that adopts an environmental impact report (EIR) to establish a program to monitor and report on the adopted mitigation measures in order to ensure that approved mitigation measures are implemented subsequent to project approval. Specifically, the lead agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation. As stated in Public Resources Code Section 21081.6(a)(1):

The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

This mitigation monitoring and reporting program (MMRP) is designed to meet that requirement. As lead agency for this project, Alameda County will use this MMRP to ensure compliance with mitigation measures associated with implementation of the conditional use permit modifications. Under each identified resource, the MMRP provides the adverse impact(s), its corresponding mitigation measure(s), and the implementation and monitoring requirements, defined as follows.

- **Impact:** Identifies the impact number and statement as shown in the final EIR.
- **Mitigation Measure(s):** Provides full text of the mitigation measure as shown in the final EIR.
- **Timing:** Defines the phase of the project when a specific mitigation action will be taken.
- **Implementing Party(s):** Designates the party or parties responsible for implementing the mitigation measure.
- **Monitoring:** Identifies the party responsible for review of the mitigation measure's implementation, and the action and criteria necessary for ensuring implementation.

Mitigation is required to address significant or potentially significant impact(s) on the following resources.

- Biological Resources
- Noise

A sample mitigation monitoring compliance form is provided at the end of this document. For detailed information regarding environmental resource impact methodology and analysis, please see the draft EIR and final EIR.

Table 1. Final Mitigation, Monitoring & Reporting Program

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
Biological Resources				
<p>Impact BIO-1: Potential to cause a substantial adverse effect, either directly or through habitat modifications, on a special-status species.</p>	<p>Mitigation Measure BIO-1: Implement General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources</p> <p>The following EACCS general AMMs will be implemented prior to, during, and following decommissioning and reclamation activities to ensure that sensitive biological resources (i.e., special-status species, waters of the United States, waters of the state, and sensitive natural communities) are not adversely affected by project implementation.</p> <p>Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.</p> <p>Environmental tailboard trainings will take place on an as-needed basis in the field. These trainings will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning and reclamation activities. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.</p> <p>Contracts with contractors, construction management firms, and subcontractors will obligate them to comply with these requirements and AMMs.</p> <p>The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets (except for safety in remote locations).</p> <p>Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.</p> <p>Offroad vehicle travel will be avoided.</p> <p>Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.</p> <p>Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed.</p> <p>Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.</p> <p>To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.</p> <p>Pipes, culverts, and similar materials greater than 4 inches in diameter will be stored so as to prevent wildlife species from using these as temporary refuges, and these materials will be inspected each morning for the presence of animals prior to being moved.</p> <p>Erosion control measures will be implemented to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.</p> <p>Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.</p> <p>Grading will be restricted to the minimum area necessary around each turbine to accomplish the restoration goals.</p> <p>Within 48 hours prior to ground-disturbing activities in sensitive habitats, decommissioning and reclamation activity boundaries and access areas will be flagged and temporarily fenced during those activities to reduce the potential for vehicles and equipment to stray into adjacent habitats.</p>	<p>Flagging of activity boundaries and access areas within 48 hours prior to ground-disturbing activities in sensitive habitats; daily search of trenches left open overnight during decommissioning and reclamation activities; following decommissioning and reclamation activities</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check where vehicles are parked to ensure there is no additional disturbance • Check that wetlands/culverts are bermed • Check to ensure that straw used is either rice or weed-free • Check that materials are not stockpiled in areas where animals will find use • Review and assess erosion control measures are being implemented • Check to ensure that grading is kept to a minimum <p>Monitoring Action</p> <p>Review measures during plan check and verify periodically during and after decommissioning/reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to decommissioning and reclamation activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.</p> <p>These measures will be incorporated into contract specifications and implemented by the program contractor. In addition, AWI will ensure that the contractor incorporates all permit conditions into construction specifications.</p>			
	<p>Mitigation Measure BIO-2: Restore Disturbed Annual Grasslands</p> <p>Within 30 days prior to any ground disturbance, a qualified biologist will prepare a Grassland Restoration Plan in coordination with CDFW (Danielle Roach or Craig Weightman at 916-944-5500) and subject to CDFW approval, to ensure that temporarily disturbed annual grasslands and areas planned for the removal of permanent roads and turbine pad areas are restored to pre-project conditions. The Grassland Restoration Plan will include but not be limited to the following measures.</p> <ul style="list-style-type: none"> • Gravel shall be removed from areas proposed for grassland restoration. • To the maximum extent feasible, topsoil shall be salvaged from within onsite work areas prior to construction. Imported fill soils shall be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference site. • Where appropriate, restoration areas will be seeded (hydroseeding is acceptable) to ensure erosion control. Seed mixes shall be tailored to closely match that of reference site(s) within the study area and should include native or naturalized, non-invasive species sourced within the project or within 50 miles of the project area. • Reclaimed roads shall be restored in such a way as to permanently prevent vehicular travel. <p>The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70% absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5% relative cover of the vegetation in the restoration areas shall consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long term success criteria. Monitoring may be extended for 2 additional years if necessary to achieve the success criteria. Other performance standards may also be required as they relate to special-status species habitat; these will be identified in coordination with CDFW and included in the plan. AWI will provide evidence that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, AWI will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).</p>	<p>Preparation of Grassland Restoration Plan within 30 days prior to ground disturbance; after ground-disturbing activities for Restoration Plan implementation; annual monitoring between March and May for at least 3 years and up to 5 years after restoration</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party CDFW, County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check to ensure that disturbed grasslands have been restored within 3 years • Confirm provision of annual monitoring report from AWI by August 1 of each year <p>Monitoring Action Review measures prior to decommissioning and restoration activities and verify after restoration</p>
	<p>Mitigation Measure BIO-3: Conduct Preconstruction Surveys for Potentially Sensitive Habitat</p> <p>Within no more than 3 years and no less than 1 year prior to ground-disturbing decommissioning activities and during the appropriate identification periods for special-status plants and wildlife listed in Tables 3.2-1 and 3.2-2, a qualified biologist (as determined by Alameda County) will conduct field surveys within decommissioning work areas and the immediately adjacent areas to determine the presence of habitat for special-status plant and wildlife species. AWI will submit a report documenting the survey results to Alameda County for review and approval, no less than 1 year prior to conducting any decommissioning activities. The report will include the location and description of all proposed work areas (such as whether or not landowners have chosen to retain roads on their lands), the location and description of all suitable habitat for special-status plant and wildlife species,</p>	<p>Within 3 years but no less than 1 year prior to ground-disturbing decommissioning and reclamation activities</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Ensure that report documenting identification efforts is submitted <p>Monitoring Action Review measure and report prior to ground-disturbing decommissioning and reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>and the location and description of other sensitive habitats (e.g., vernal pools or wetlands). Additionally, the report will outline where additional species and/or habitat-specific mitigation measures (as required under Mitigation Measures BIO-4 through BIO-15) are required. This report will provide the basis for any applicable permit applications where incidental take may occur.</p>			
	<p>Mitigation Measure BIO-4: Install Temporary Flagging or Barrier Fencing to Protect Sensitive Biological Resources Adjacent to the Work Area If required pursuant to Mitigation Measure BIO-3, a qualified biologist (as determined by Alameda County) will identify and flag or fence sensitive biological habitat onsite to ensure it is avoided during decommissioning and reclamation activities. Sensitive resources that occur in and adjacent to the decommissioning and reclamation area may include sensitive natural communities, aquatic resources (which also provide suitable habitat for federally listed invertebrates and amphibians), special-status species populations, burrows that could be used by special-status wildlife, special-status plants, and active bird or raptor nests</p>	<p>Prior to and during decommissioning and reclamation activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda Criteria <ul style="list-style-type: none"> • Check to ensure flagging is intact and sensitive areas are avoided Monitoring Action Review measures during plan check</p>
	<p>Mitigation Measure BIO-5: Retain a Biological Monitor during Ground Disturbing Activities within Environmentally-Sensitive Habitat Areas If required pursuant to Mitigation Measure BIO-3, AWI will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and reclamation activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that AWI or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources-related mitigation measures.</p>	<p>During ground-disturbing activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda Criteria <ul style="list-style-type: none"> • Assess feasibility of avoidance measures • Check that a qualified biologist instructs construction personnel on sensitivity of area • Check that ground-disturbing activities are compliant with sensitive-species regulations Monitoring Action Review measures during plan check and verify periodically during and after ground-disturbing activities</p>
	<p>Mitigation Measure BIO-6: Retain Qualified Botanists to Conduct Floristic Surveys for Special-Status Plants during Appropriate Identification Periods If required pursuant to Mitigation Measure BIO-3, and within 3 years prior to ground disturbance associated with decommissioning activities (consistent with the EACCS), qualified botanists (i.e., botanists with prior experience conducting floristic surveys and approved by Alameda County) will survey areas proposed for ground disturbance and an additional 100 feet surrounding the areas proposed for ground disturbance, to document the presence of special-status plants. In the event that reclamation of one or more foundation sites does not include removal of tower foundations or other ground-disturbing activities, no floristic surveys will be necessary for those individual sites. The botanists will conduct floristic surveys that follow the CDFW botanical survey guidelines (California Department of Fish and Game 2009). All plant species observed will be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The field surveys are to be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the blooming period. To account for different special-status plant identification periods, one or more series of field surveys will be required in spring and summer preceding decommissioning activities.</p>	<p>Within 3 years prior to and during ground-disturbing decommissioning and reclamation activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda Criteria <ul style="list-style-type: none"> • Assess feasibility of avoidance measures • Check that a qualified biologist instructs construction personnel on sensitivity of area • Check that ground-disturbing activities are compliant with sensitive-species regulations Monitoring Action Review measures during plan check and verify periodically during and after ground-disturbing activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>If any special-status plants are identified during the surveys, the botanist will photograph and map locations of the plants, document the location and extent of the special-status plant population on a CNDDDB Survey Form, and submit the completed survey form to the CNDDDB. Mitigation Measures BIO-1 (general protection measures), BIO-2 (restoration of annual grassland), BIO-4 (exclusion zones), BIO-5 (biological monitoring), and BIO-7 (avoid special-status plants) will be implemented as necessary to avoid and minimize impacts on special-status plants.</p>			<p>Confirm completion/submittal of CNDDDB Survey Form if any special-status plants are identified during the surveys</p>
	<p>Mitigation Measure BIO-7: Avoid and Minimize Potential Impacts on Special-Status Plants If necessary pursuant to the results of surveys conducted under Mitigation Measure BIO-6, AWI will modify the work area to the extent feasible to avoid indirect or direct impacts on special-status plants. If complete avoidance of special-status plants is not feasible, disturbance within the work area will be limited to the minimum area necessary to perform required activities and a qualified biologist will monitor decommissioning and reclamation activities to ensure that the contractor is implementing general protection measures (Mitigation Measure BIO-1), restoration of annual grassland (Mitigation Measure BIO-2), and maintaining exclusion zones (Mitigation Measure BIO-4) to minimize impacts on the species.</p>	<p>During decommissioning activities if necessary pursuant to results of MM BIO-6 surveys</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda Monitoring Action Verify prior to issuing grading or building permits; periodically check during decommissioning/reclamation activities</p>
	<p>Mitigation Measure BIO-8: Avoid Disturbance of Vernal Pool Fairy Shrimp and Longhorn Fairy Shrimp If required pursuant to Mitigation Measure BIO-3, and where suitable habitat for vernal pool fairy shrimp and/or longhorn fairy shrimp is identified near proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on vernal pool fairy shrimp and longhorn fairy shrimp. These measures are consistent with the EACCS and are in addition to any conservation measures or conditions of approval identified in applicable project permits (i.e., incidental take permits under CESA and/or ESA).</p> <ul style="list-style-type: none"> • Ground disturbance will be avoided from the first day of the first significant rain (1 inch or greater) until June 1, or until pools remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance. • If vernal pools, clay flats, alkaline pools, ephemeral stock tanks, sandstone pools, or roadside ditches are present within the work area or within 250 feet of the work area, a qualified biologist will stake and flag an exclusion zone prior to decommissioning and reclamation activities. The exclusion zone will be fenced with orange construction and erosion control fencing. • The exclusion zone will encompass the maximum practicable distance from the worksite and at least 250 feet from the aquatic feature wet or dry. • No herbicide will be applied within 100 feet of exclusion zones, except when applied to cut stumps or frilled stems or injected into stems. No broadcast applications will be applied. • Avoid modifying or changing the hydrology of the habitat. 	<p>Prior to and during decommissioning and reclamation activities if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-8 implementation necessary • Check that ground-disturbing activities are compliant with vernal pool and sensitive-species regulations <p>Monitoring Action Verify prior to issuing grading or building permits; periodically check during decommissioning/reclamation activities</p>
	<p>Mitigation Measure BIO-9: Avoid Disturbance of California Tiger Salamander, California Red-legged Frog, and Foothill Yellow-legged Frog. If required pursuant to Mitigation Measure BIO-3, and where suitable upland or aquatic habitat for California tiger salamander, California red-legged frog, and/or foothill yellow-legged frog is identified within proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on California tiger salamander, California red-legged frog, and/or foothill yellow-legged frog. Based on the extent of known occurrences for these species throughout the APWRA and presence of upland annual grassland habitat throughout the study area that is used by dispersing California red-legged frogs and by California tiger salamanders as underground refugia</p>	<p>Immediately prior to and during ground-disturbing activities if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party USFWS/CDFW/County of Alameda Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-9 implementation necessary • Assess feasibility of avoidance measures

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>during most of their life span, it is assumed that the majority of decommissioning activities will occur in suitable habitat for these species.</p> <p>The following measures are consistent with the EACCS and are in addition to any conservation measures or conditions of approval identified in applicable project permits (i.e., incidental take permits under CESA and/or ESA).</p> <ul style="list-style-type: none"> • A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing activities (including equipment staging, vegetation removal, grading) associated with decommissioning. The biologist will survey the work area and all suitable habitat within 300 feet of the work area. If individuals (including adults, juveniles, larvae, or eggs) are found, work will not begin until USFWS and/or CDFW is contacted to determine if moving these life-stages is appropriate. If relocation is deemed necessary, a USFWS and/or CDFW-approved relocation site will be identified and a relocation plan developed. • Where applicable, barrier fencing will be installed around the worksite to prevent amphibians from entering the work area. Barrier fencing will be removed within 72 hours of completion of work. • No monofilament plastic will be used for erosion control. • Ground-disturbing activities shall be limited to dry weather between April 15 and October 31. No ground-disturbing work shall occur during wet weather. Wet weather is defined as when there has been 0.25 inch of rain in a 24-hour period. Ground disturbing activities halted due to wet weather may resume when precipitation ceases and the National Weather Service 72-hour weather forecast indicates a 30% or less chance of precipitation. No ground-disturbing work shall occur during a dry-out period of 48 hours after the above referenced wet weather. • All project activity shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise during the migration/active season from November 1 to June 15. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located. • To prevent inadvertent entrapment of special-status amphibians during construction, all excavated, steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected by a qualified biologist prior to being filled. • Work crews or onsite biological monitor will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for amphibians that may have become trapped or are seeking refuge. • A qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or who is USFWS-approved under an active biological opinion, will be contracted to trap and to move California tiger salamanders or California red-legged frogs to nearby suitable habitat if individuals of these species are found onsite (including animals trapped in a trench) and cannot or do not move offsite on their own. 			<ul style="list-style-type: none"> • Check that a qualified biologist instructs construction personnel on sensitivity of area • Check that ground-disturbing activities are compliant with sensitive-species regulations <p>Monitoring Action</p> <p>Review measures during plan check and verify periodically during and after ground-disturbing activities</p>
	<p>Mitigation Measure BIO-10: Avoid Disturbance of Alameda Whipsnake</p> <p>If required pursuant to Mitigation Measure BIO-3, and in areas determined by the preconstruction surveys as likely to contain suitable habitat for Alameda whipsnake near proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on Alameda whipsnake. These measures are consistent with the EACCS and are in addition to any conservation measures or conditions of approval identified in applicable project permits (i.e., incidental take permits under CESA and/or ESA).</p>	<p>Immediately prior to and during ground-disturbing activities if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party</p> <p>USFWS/CDFW/County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-10 implementation necessary • Assess feasibility of avoidance measures

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<ul style="list-style-type: none"> • A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing activities (including equipment staging, vegetation removal, grading) associated with decommissioning and reclamation. If individuals are found, work will not begin until they are moved out of the decommissioning and reclamation activities zone to a USFWS/CDFW-approved relocation site. • No monofilament plastic will be used for erosion control. • Where applicable, barrier fencing will be used to exclude snakes from the work area. Barrier fencing will be removed within 72 hours of completion of work. • Work crews or on-site biological monitor will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for reptiles that may have become trapped or are seeking refuge. • Ground disturbance in suitable habitat will be minimized. • Vegetation within the proposed work area shall be removed prior to grading. Prior to clearing and grubbing operations, a qualified biologist shall clearly mark vegetation within the work area that shall be avoided. Vegetation outside the work area shall not be removed. Where possible hand tools (e.g., trimmer, chain saw, etc.) shall be used to trim or remove vegetation. All vegetation removal shall be monitored by the qualified biologist to minimize impacts to Alameda whipsnake. • A qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or who is USFWS-approved under an active biological opinion, and approved by CDFW will be contracted to trap and to move Alameda whipsnake to nearby suitable habitat if individuals of the species are found onsite (including animals trapped in a trench) and cannot or do not move offsite on their own. 			<ul style="list-style-type: none"> • Check that a qualified biologist instructs construction personnel on sensitivity of area • Check that ground-disturbing activities are compliant with sensitive-species regulations <p>Monitoring Action Verify prior to issuing grading or building permits; periodically check during ground-disturbing activities</p>
	<p>Mitigation Measure BIO-11: Avoid Disturbance of Coast Horned Lizard, San Joaquin Whipsnake, and Western Pond Turtle</p> <p>If required pursuant to Mitigation Measure BIO-3, any reptile found within the active work area will be avoided and allowed to passively move out of the active decommissioning and reclamation zone. Implementing general protection measures (Mitigation Measure BIO-1) and AMMs for Alameda whipsnake (Mitigation Measure BIO-10) will ensure that the project does not result in adverse impacts on coast horned lizard, San Joaquin whipsnake, and western pond turtle.</p>	<p>Prior to ground-disturbing activities; during ground-disturbing activities</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party USFWS/CDFW/County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-11 implementation necessary • Assess feasibility of avoidance measures • Check that a qualified biologist instructs construction personnel on sensitivity of area • Check that ground-disturbing activities are compliant with sensitive-species regulations <p>Monitoring Action Verify prior to issuing grading or building permits; periodically check during decommissioning and reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>Mitigation Measure BIO-12: Avoid Disturbance of San Joaquin Kit Fox</p> <p>If required pursuant to Mitigation Measure BIO-3, and in areas determined by the preconstruction surveys as likely to contain suitable habitat for San Joaquin kit fox near proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on San Joaquin kit fox. These measures are consistent with the EACCS and are in addition to any conservation measures or conditions of approval identified in applicable project permits (i.e., incidental take permits under CESA and/or ESA).</p> <ul style="list-style-type: none"> • A qualified USFWS- and CDFW-approved biologist will conduct a preconstruction survey no more than 30 days before the beginning of ground disturbance or any activity likely to impact San Joaquin kit fox. Surveys will follow USFWS’s 1999 <i>San Joaquin Kit Fox Survey Protocol for the Northern Range</i>. Written results of the surveys will be submitted to CDFW and USFWS within 1 week of the completion of surveys and prior to the beginning of ground disturbance and/or decommissioning activities likely to affect San Joaquin kit fox. This measure will be implemented in all offroad work areas. The biologist will survey the proposed work area and a 200-foot buffer around the work area to identify suitable dens. The biologist will conduct den searches by systematically walking transects spaced 30–100 feet apart through the survey area. Transect distance should be determined based on the height of vegetation such that 100 percent visual coverage of the project area is achieved. If dens are found during the survey, the biologist will map the location of each den and record the size and shape of the den entrance; the presence of tracks, scat, and prey remains; and if the den was recently excavated. The biologist will also record information on prey availability (e.g., ground squirrel colonies). The status of the den as defined by USFWS should also be determined and recorded. Dens will be classified in one of the following four den status categories. <ul style="list-style-type: none"> ○ Potential den: Any subterranean hole within the species’ range that has entrances of appropriate dimensions for which available evidence is sufficient to conclude that it is being used or has been used by a San Joaquin kit fox. Potential dens comprise: (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, or ground squirrel) that otherwise has appropriate characteristics for San Joaquin kit fox use. ○ Known den: Any existing natural den or artificial structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records; past or current radio telemetry or spotlighting data; San Joaquin kit fox signs such as tracks, scat, and/or prey remains; or other reasonable proof that a given den is being or has been used by a San Joaquin kit fox. ○ Natal or pupping den: Any den used by San Joaquin kit fox to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more San Joaquin kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which San Joaquin kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two; therefore, for purposes of this definition either term applies. ○ Atypical den: Any artificial structure that has been or is being occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings. 	<p>No more than 30 days prior to ground-disturbing activities, and during ground-disturbing activities if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-12 implementation necessary • Assess feasibility of avoidance measures • Check that a qualified biologist instructs construction personnel on sensitivity of area • Ensure adequate flagging is used to delineate sensitive areas • Check that ground-disturbing activities are compliant with sensitive-species regulations and designed to minimize rodent burrows <p>Monitoring Action</p> <p>Verify prior to issuing grading or building permits; periodically check during decommissioning and reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<ul style="list-style-type: none"> • After preconstruction den searches and before the commencement of decommissioning and reclamation activities, exclusion zones will be established as measured in a radius outward from the entrance or cluster of entrances of each den. Decommissioning activities will be prohibited or greatly restricted within these exclusion zones. Only essential vehicular operation on existing roads and foot traffic should be permitted. All other decommissioning and reclamation activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited in the exclusion zones. Barrier fencing will be removed within 72 hours of completion of work. Exclusion zones will be established as follows: <ul style="list-style-type: none"> ○ Potential and atypical dens: A total of four or five flagged stakes will be placed 50 feet from the den entrance to identify the den location. ○ Known den: Orange construction barrier fencing will be installed between the decommissioning and reclamation work area and the known den site at a minimum distance of 100 feet from the den. The fencing will be maintained until all decommissioning- and reclamation-related disturbances have ceased. At that time, all fencing will be removed to avoid attracting subsequent attention to the den. ○ Natal/pupping den: USFWS will be contacted immediately if a natal or pupping den is discovered at or within 200 feet from the boundary of the decommissioning and reclamation area. ○ In cases where avoidance is not a reasonable alternative, limited destruction of potential San Joaquin kit fox dens will be allowed as follows. Potential dens can be removed by careful hand excavation by a USFWS-approved biologist or under the supervision of a USFWS-approved biologist, after the dens have been monitored for 3 days with tracking medium or a remote sensor camera and determined to be vacant of San Joaquin kit foxes. If, during excavation or monitoring, a potential den is determined to be currently or previously used (e.g., San Joaquin kit fox sign found inside) by San Joaquin kit fox, then destruction of the den or decommissioning and reclamation activities in that area will cease and USFWS will be notified immediately. • Vehicle traffic will be restricted to established roads, decommissioning and reclamation areas, and other designated areas. <p>Grading activities will be designed to minimize or eliminate effects on rodent burrows. Areas with high concentrations of burrows and large burrows suitable for San Joaquin kit fox dens will be avoided by grading activities to the maximum extent possible. In addition, when concentrations of burrows or large burrows are observed within the site, these areas will be staked and flagged to ensure work crew personnel are aware of their location and to make sure they avoid these areas.</p>			
	<p>Mitigation Measure BIO-13: Avoid Disturbance of American Badger</p> <p>If required pursuant to Mitigation Measure BIO-3, and where suitable habitat for American badger is identified near proposed work areas, preconstruction surveys will be conducted in conjunction with the San Joaquin kit fox preconstruction surveys (Mitigation Measure BIO-12). Any occupied or potentially occupied badger den will be avoided by establishing an exclusion zone consistent with a San Joaquin kit fox potential burrow (i.e., four or five flagged stakes will be placed 50 feet from the den entrance).</p>	<p>No more than 30 days prior to ground-disturbing activities, and during ground-disturbing activities if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Based on results of MM BIO-3 surveys, confirm if MM BIO-13 implementation necessary • Assess feasibility of avoidance measures • Check that a qualified biologist instructs construction personnel on sensitivity of area

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
				<ul style="list-style-type: none"> Check that ground-disturbing activities are compliant with sensitive-species regulations <p>Monitoring Action Verify prior to issuing grading or building permits; periodically check during decommissioning and reclamation activities</p>
	<p>Mitigation Measure BIO-14: Avoid Disturbance of Burrowing Owl If required pursuant to Mitigation Measure BIO-3, and in areas determined by the preconstruction surveys as likely to contain suitable habitat for burrowing owls near proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on burrowing owls.</p> <ul style="list-style-type: none"> A qualified biologist will conduct preconstruction nesting bird and raptor survey within 7 days prior to ground-disturbing activities. The survey area should encompass a 500-foot buffer around the proposed work area. Avoid all occupied burrowing owl burrows. If an active burrow is identified near a proposed work area and work cannot be conducted outside of the nesting season (March 15 to September 1), a no-activity zone will be established by a qualified biologist. The no-activity zone will be large enough to avoid nest abandonment and will at a minimum cover a 250-foot radius from the burrow. If burrowing owls are present at the site during the non-breeding season (September 2 through March 14), a qualified biologist will establish a no-activity zone of at least 150 feet. If the designated no-activity zone for either breeding or non-breeding owls cannot be established, an experienced burrowing owl biologist will evaluate site-specific conditions to develop a minimum buffer that minimizes the potential to affect the reproductive success of the owls. The site-specific buffer will consider the type and extent of the proposed activity occurring near the occupied burrow, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity to background activities. <p>For buffers that are less than the recommended no-activity zones, an experienced burrowing owl biologist will monitor work within the no-activity zone to ensure that owls do not exhibit stress that could cause them to abandon their burrow or affect their reproductive success. If the biologist determines that the birds are being stressed, activities within the no-activity zone will cease until juvenile owls have fledged and/or owls have moved out on their own.</p>	<p>Prior to ground-disturbing activities, and during ground-disturbing activities, if necessary pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> Check for presence of burrowing owl nests within 500 feet of the project impact zone over four separate site visits If ground-disturbing activities will occur during breeding season, retain the services of a qualified biologist. Check that a burrowing owl survey is conducted within 7 days prior to ground-disturbing activities Check that a qualified biologist instructs construction personnel on sensitivity of area Ensure that ground-disturbing activities comes to a halt if burrowing owls are found to be present on the site and begin passive relocation <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning and reclamation activities</p>
	<p>Mitigation Measure BIO-15: Avoid Disturbance of Nesting Migratory Birds and Raptors If required pursuant to Mitigation Measure BIO-3, and in areas determined by the preconstruction surveys as likely to contain tree- and ground-nesting migratory birds and raptors near proposed work areas, the following AMMs will be implemented to ensure that the project does not have an adverse impact on nesting migratory birds and raptors, including special-status birds with potential to occur in the study area (Table 3.2-2).</p> <ul style="list-style-type: none"> A qualified biologist will conduct a preconstruction nesting bird and raptor survey within 7 days prior to ground-disturbing activities. The survey area should encompass a 1,000-foot buffer around the proposed work area. 	<p>Prior to ground-disturbing activities; during ground-disturbing activities</p>	<p>Project Applicant/Qualified Biologist/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> Check whether grading and removal of vegetation occurs during the non-breeding season If decommissioning or reclamation activities will occur during the breeding season, retain the services of a qualified biologist

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<ul style="list-style-type: none"> If an active nest is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1 to September 1), a no-activity zone will be established by a qualified biologist. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity zone will be developed based on the type and extent of the proposed activity in proximity to the nest, the duration and timing of the activity, the sensitivity and habituation of the species nesting, and the dissimilarity of the proposed activity to background activities. The no-activity zone will be large enough to avoid nest abandonment and will range between 50 feet and 1,00 feet from the nest. 			<ul style="list-style-type: none"> Check that weekly bird surveys are conducted 30 days prior to the initiation of decommissioning or reclamation work If a protected bird is found nesting, check that clearance/disturbance activities are delayed within range determined by biologist until nest(s) are vacated Check that raptor nesting areas are properly buffered and flagged and that decommissioning/reclamation activities avoids the flagged areas Check that a qualified biologist instructs construction personnel on sensitivity of area Check to ensure compliance with native raptor protection regulations <p>Monitoring Action Verify prior to issuing grading or building permits; periodically check during decommissioning and reclamation activities</p>
	<p>Mitigation Measure BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities</p> <p>In order to reduce the potential impacts of the project on avian species, AWI will implement seasonal shutdowns on all turbines for the remaining operational period, and hazardous turbine removals on a subset of turbines. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify Alameda County each year when turbines have been shut down, and again when they have resumed operating.</p>	November 1 to February 15 of each year	Project Applicant	<p>Reviewing Party County of Alameda, SRC</p> <p>Criteria</p> <ul style="list-style-type: none"> Verify that seasonal shutdowns have been implemented <p>Monitoring Action Verify each year between November 1 and February 15</p>
	<p>Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles by Retrofitting Offsite Electrical Facilities</p> <p>AWI will mitigate for the approved project’s additional contribution to golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. The mitigation must occur within 140 miles of the project, the area typically defined by the USFWS as the “local population,” and must occur in an area with eagles at risk from electrocutions as determined through coordination with the USFWS. The project, as approved, when compared to the existing avian baseline condition (the No Project Alternative), and based on the range of golden eagle mortality rates identified in the final EIR, is projected to result in an increase in eagle fatalities of 0.12–0.16 eagles (cumulatively and statistically). Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Scaling the mitigation effort to match the expected eagle mortality rate for the project as approved, AWI will therefore retrofit 5 utility poles as mitigation for the expected level of eagle fatality from the project. AWI may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion</p>	Prior to decommissioning and reclamation activities; after decommissioning and reclamation activities	Project Applicant	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> Check to ensure retrofitting of electrical poles has been conducted <p>Monitoring Action Require measure as part of issuing grading/building permits. Verify compensation after decommissioning and reclamation activities.</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>of the retrofits must be provided to the County. USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute \$37,500 (\$7,500 x 5 poles) to a third party mitigation account (approved by Alameda County) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County within 1 year of project approval.</p>			
<p>Impact BIO-2: Potential substantial adverse effects on any riparian habitat or other sensitive natural communities.</p>	<p>Mitigation Measure BIO-1: Implement General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources</p> <p>The following EACCS general AMMs will be implemented prior to, during, and following decommissioning and reclamation activities to ensure that sensitive biological resources (i.e., special-status species, waters of the United States, waters of the state, and sensitive natural communities) are not adversely affected by project implementation.</p> <p>Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.</p> <p>Environmental tailboard trainings will take place on an as-needed basis in the field. These trainings will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning and reclamation activities. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.</p> <p>Contracts with contractors, construction management firms, and subcontractors will obligate them to comply with these requirements and AMMs.</p> <p>The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets (except for safety in remote locations).</p> <p>Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.</p> <p>Offroad vehicle travel will be avoided.</p> <p>Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.</p> <p>Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed.</p> <p>Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.</p> <p>To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.</p> <p>Pipes, culverts, and similar materials greater than 4 inches in diameter will be stored so as to prevent wildlife species from using these as temporary refuges, and these materials will be inspected each morning for the presence of animals prior to being moved.</p> <p>Erosion control measures will be implemented to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.</p> <p>Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.</p>	<p>Flagging of activity boundaries and access areas within 48 hours prior to ground-disturbing activities in sensitive habitats; daily search of trenches left open overnight during decommissioning and reclamation activities, following decommissioning and reclamation activities</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Checking where vehicles are parked to ensure there is no additional disturbance • Check that wetlands/culverts are bermed • Check to ensure that straw used is either rice or weed-free • Check that materials are not stockpiled in areas where animals will find use • Review and assess erosion control measures are being implemented • Check to ensure that grading is kept to a minimum <p>Monitoring Action</p> <p>Review measures during plan check and verify periodically during and after decommissioning/reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>Grading will be restricted to the minimum area necessary around each turbine to accomplish the restoration goals.</p> <p>Within 48 hours prior to ground-disturbing activities in sensitive habitats, decommissioning and reclamation activity boundaries and access areas will be flagged and temporarily fenced during those activities to reduce the potential for vehicles and equipment to stray into adjacent habitats.</p> <p>Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to decommissioning and reclamation activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.</p> <p>These measures will be incorporated into contract specifications and implemented by the program contractor. In addition, AWI will ensure that the contractor incorporates all permit conditions into construction specifications.</p>			
	<p>Mitigation Measure BIO-4: Install Temporary Flagging or Barrier Fencing to Protect Sensitive Biological Resources Adjacent to the Work Area</p> <p>If required pursuant to Mitigation Measure BIO-3, a qualified biologist (as determined by Alameda County) will identify and flag or fence sensitive biological habitat onsite to ensure it is avoided during decommissioning and reclamation activities. Sensitive resources that occur in and adjacent to the decommissioning and reclamation area may include sensitive natural communities, aquatic resources (which also provide suitable habitat for federally listed invertebrates and amphibians), special-status species populations, burrows that could be used by special-status wildlife, special-status plants, and active bird or raptor nests</p>	<p>Prior to and during decommissioning and reclamation activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check to ensure flagging is intact and sensitive areas are avoided <p>Monitoring Action Review measures during plan check</p>
<p>Impact BIO-3: Potential substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.</p>	<p>Mitigation Measure BIO-1: Implement General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources</p> <p>The following EACCS general AMMs will be implemented prior to, during, and following decommissioning and reclamation activities to ensure that sensitive biological resources (i.e., special-status species, waters of the United States, waters of the state, and sensitive natural communities) are not adversely affected by project implementation.</p> <p>Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.</p> <p>Environmental tailboard trainings will take place on an as-needed basis in the field. These trainings will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning and reclamation activities. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.</p> <p>Contracts with contractors, construction management firms, and subcontractors will obligate them to comply with these requirements and AMMs.</p> <p>The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets (except for safety in remote locations).</p> <p>Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.</p> <p>Offroad vehicle travel will be avoided.</p>	<p>Flagging of activity boundaries and access areas within 48 hours prior to ground-disturbing activities in sensitive habitats; daily search of trenches left open overnight during decommissioning and reclamation activities; following decommissioning and reclamation activities</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Checking where vehicles are parked to ensure there is no additional disturbance • Check that wetlands/culverts are bermed • Check to ensure that straw used is either rice or weed-free • Check that materials are not stockpiled in areas where animals will find use • Review and assess erosion control measures are being implemented • Check to ensure that grading is kept to a minimum <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning/reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.</p> <p>Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed.</p> <p>Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.</p> <p>To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.</p> <p>Pipes, culverts, and similar materials greater than 4 inches in diameter will be stored so as to prevent wildlife species from using these as temporary refuges, and these materials will be inspected each morning for the presence of animals prior to being moved.</p> <p>Erosion control measures will be implemented to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.</p> <p>Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.</p> <p>Grading will be restricted to the minimum area necessary around each turbine to accomplish the restoration goals.</p> <p>Within 48 hours prior to ground-disturbing activities in sensitive habitats, decommissioning and reclamation activity boundaries and access areas will be flagged and temporarily fenced during those activities to reduce the potential for vehicles and equipment to stray into adjacent habitats.</p> <p>Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to decommissioning and reclamation activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.</p> <p>These measures will be incorporated into contract specifications and implemented by the program contractor. In addition, AWI will ensure that the contractor incorporates all permit conditions into construction specifications.</p>			
	<p>Mitigation Measure BIO-4: Install Temporary Flagging or Barrier Fencing to Protect Sensitive Biological Resources Adjacent to the Work Area</p> <p>If required pursuant to Mitigation Measure BIO-3, a qualified biologist (as determined by Alameda County) will identify and flag or fence sensitive biological habitat onsite to ensure it is avoided during decommissioning and reclamation activities. Sensitive resources that occur in and adjacent to the decommissioning and reclamation area may include sensitive natural communities, aquatic resources (which also provide suitable habitat for federally listed invertebrates and amphibians), special-status species populations, burrows that could be used by special-status wildlife, special-status plants, and active bird or raptor nests</p>	<p>Prior to and during decommissioning and reclamation activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check to ensure flagging is intact and sensitive areas are avoided <p>Monitoring Action Review measures during plan check</p>
	<p>Mitigation Measure BIO-5: Retain a Biological Monitor during Ground Disturbing Activities within Environmentally-Sensitive Habitat Areas</p> <p>If required pursuant to Mitigation Measure BIO-3, AWI will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and reclamation activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring</p>	<p>During ground-disturbing activities if required pursuant to MM BIO-3</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Assess feasibility of avoidance measures • Check that a qualified biologist

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>that AWI or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources-related mitigation measures.</p>			<p>instructs construction personnel on sensitivity of area</p> <ul style="list-style-type: none"> • Check that ground-disturbing activities are compliant with sensitive-species regulations <p>Monitoring Action Review measures during plan check and verify periodically during and after ground-disturbing activities</p>
	<p>Mitigation Measure BIO-18: Identify and Delineate Waters of the United States and Waters of the State (including Wetlands)</p> <p>Prior to decommissioning activities and siting of individual work areas, AWI will retain a qualified wetland ecologist (i.e., a wetland ecologist with previous experience conducting wetland delineations in the region) to identify areas that could qualify as waters of the United States and waters of the state, including wetlands, assuming such features exist within or adjacent to work areas identified for each project element. Wetlands will be identified using both the USACE and USFWS/CDFW definitions of wetlands. USACE jurisdictional wetlands will be delineated using the methods outlined in the 1987 Corps of Engineers <i>Wetlands Delineation Manual</i> (Environmental Laboratory 1987) and where appropriate, using the updated methods in the Arid West Supplement (USACE 2008) to the 1987 manual. The jurisdictional boundary of other waters of the United States will be identified based on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]).</p> <p>This information will be mapped and documented in a wetland delineation report and submitted to USACE. Mitigation Measures BIO-1 (general protection measures), BIO-3 (exclusion zones), BIO-4 (biological monitoring), and BIO-18 will be implemented during decommissioning and reclamation activities that could impact waters of the United States and state.</p>	<p>Prior to decommissioning activities and siting of individual work areas; during decommissioning and reclamation activities</p>	<p>Project Applicant/Qualified Biologist</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check wetland delineation report is completed with sensitive areas mapped and documented <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning and reclamation activities</p> <p>Confirm preparation and submittal to USACE of wetland delineation report</p>
	<p>Mitigation Measure BIO-19: Avoid and Minimize Disturbance of Waters of the United States, including Wetland Communities</p> <p>To the extent possible, the applicant will avoid and minimize impacts on wetlands and other waters of the United States (creeks and streams) by implementing the following measures.</p> <ul style="list-style-type: none"> • Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats, if feasible. • Protect wetland habitats that occur near the project site by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. • Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that 	<p>Prior to and during decommissioning and reclamation activities</p>	<p>Project Applicant/Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> • Check to ensure flagging is intact and sensitive areas are avoided <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning and reclamation activities</p>

Table 1. Continued

Impact	Mitigation Measure(s)	Timing	Implementing Party	Monitoring
	<p>encourages vegetation to re-establish to its pre-program condition and that reduces the effects of erosion on the drainage system.</p> <ul style="list-style-type: none"> In highly erodible stream systems, stabilize banks using a non-vegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more-aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products. During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the OHWM of drainages in a manner that minimizes disturbance of the drainage bed and bank. 			
Noise				
<p>Impact NOISE-1: Exposure of residences to increased wind turbine noise</p>	<p>Mitigation Measure NOISE-1: Repair or remove turbines that are determined to increase the daily L_{dn} value at a residence by more than 5 dB.</p> <p>Within 60 days of project approval, the applicant will retain a qualified acoustic consultant to conduct a noise monitoring survey to quantify existing noise conditions at residential receptors whose presence pre-dates operation of the project turbines and which are located within 500 feet of an operating turbine. This will include measurement of the daily A-weighted and C-weighted L_{dn} values over a 1-week period and concurrent logging of wind speeds at the nearest meteorological station. Not later than 2 months from the time of project approval, the applicant will submit a report documenting the results of the survey to the County for review and approval.</p> <p>In the event that a resident at one of the measured locations reports that wind turbine noise has substantially increased, the County will review the situation to determine if additional measurements are warranted. If they are, the applicant will conduct a similar 1-week measurement at that location and report the measurement results to the County. If the County determines that the daily L_{dn} value has increased by more than 5 dB, the County will direct the applicant to repair or remove the turbines that are determined to be the cause of the increase.</p>	<p>Within 60 days of project approval</p>	<p>Project Applicant</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> Review noise monitoring survey report Ensure applicant conduct additional noise measurements, if deemed necessary <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning and reclamation activities</p>
<p>Impact NOISE-2: Exposure of residences to noise during decommissioning activities</p>	<p>Mitigation Measure NOISE-2: Employ Noise-Reducing Practices during Decommissioning</p> <p>The project applicant will employ a combination of the following noise-reducing construction practices so that construction noise does not exceed Alameda County property line noise ordinance standards. Measures that can be used to limit noise include, but are not limited to:</p> <ul style="list-style-type: none"> Prohibit noise-generating decommissioning activities before 7 a.m. and after 7 p.m. on any day except Saturday or Sunday, and before 8 a.m. and after 5 p.m. on Saturday or Sunday. Locate equipment as far as practical from noise sensitive uses. Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation. Use noise-reducing enclosures around noise-generating equipment where practicable. Implement other measures with demonstrated practicability in reducing decommissioning noise, upon prior approval by the County. <p>In no case will the applicant be allowed to use gasoline or diesel engines without muffled exhausts.</p>	<p>Prior to and during decommissioning activities</p>	<p>Project Applicant Project Engineer; Contractor</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria</p> <ul style="list-style-type: none"> Inspect construction equipment to ensure mitigation measures are implemented prior to approval <p>Monitoring Action Review measures during plan check and verify periodically during and after decommissioning and reclamation activities</p>

**ALTAMONT WINDS INC.
PERMIT MODIFICATION PROJECT**

MITIGATION MEASURE MONITORING COMPLIANCE FORM

Reporting Period:

Pre-construction

Decommissioning/Reclamation

Post-reclamation

Report Date: _____

Mitigation Measure:

Has the mitigation measure been implemented?

Yes

No

Notes:

Is further action or monitoring required?

Yes

No

If yes, describe:

Is consultation with outside agencies required?

Yes

No

If yes, identify agency: _____

Has consultation with outside agency been completed?

Yes

No

Monitoring verified by: _____ **Date:** _____