
APPENDIX C: Biological Resources Standard Project Requirements (Revised)



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REVISIONS TO BIOLOGICAL RESOURCES STANDARD PROJECT REQUIREMENTS

Appendix C, *Biological Resources Standard Project Requirements (Revised)*, contains a clean, revised version of Appendix C, *Biological Standard Project Requirements*, of the Draft Supplemental EIR. Revisions were made in response to comments from agencies, organizations, and the public, as well as staff-directed changes.

This cover sheet shows the revisions made to the Standard Project Requirements (SPR). Double underlined text represents language that has been added to the SPRs; text with ~~striketrough~~ represents language that has been deleted from the SPRs. Following the revisions is a clean list of every biological resource-related SPR.

BIO-23: To improve habitat conditions for marbled murrelet, appropriate management activities such as the Crumb Clean Campaign and improved waste patrol and cleanup in visitor-use areas will continue to be implemented by DPR to control corvid food sources and the risks these species pose to marbled murrelet breeding success. Consistent with the recommendations for best management practices from the 2017 *Marbled Murrelet Landscape Management Plan for Zone 6*, this should include the following:

- Reduce/Eliminate Food and Trash Subsidies
 - All trash receptacles should be animal proof.
 - Trash receptacles should not be allowed to overflow (emptied regularly).
 - Garbage trucks will be housed where animals cannot gain access.
 - Animal-proof food storage lockers will be installed in all campsites.
 - Dishwashing stations will be installed in all campgrounds.
 - Water spigots will have grates installed which allow food to fall out of reach of predators.
 - Water spigots will have a “no dishwashing” sign on them.
 - The “camp dishes 101” sign will be placed throughout the campground.
- Enforcement
 - Campgrounds will be patrolled by park rangers first thing in the morning for enforcement.
 - Campgrounds will be patrolled by interpretive rangers in the evening cooking hour for interpretive education.
- Active Corvid Removal
 - Ravens, crows, and in some circumstances possibly Steller’s jays, may be removed to reduce predation pressure.
- Forest Management
 - Prescribed fires will be planned and conducted as possible.

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- Second-growth forest management will be part of managing forests for murrelets.
- Noise Management
 - Adhere to latest USFWS standards for noise reduction for projects within a quarter mile of occupied habitat during the breeding season while studies to refine the standard are conducted.
- Outside of Parks
 - Work with the surrounding community to implement actions to reduce availability of food subsidies

BIO-24: Interpretive programs to educate visitors about the threatened status of marbled murrelet and why they should not feed wildlife will continue. Consistent with recommendations for best management practices from the 2017 Marbled Murrelet Landscape Management Plan for Zone 6, this should include the following:

- Interpretive Messaging
 - Campers will sign the Crumb Clean Commitment during campsite check-in.
 - All food lockers will have the “Keep it Crumb Clean” sign on them.
 - All trail heads will have the “Keep it Crumb Clean” sign at their entrance.
 - All kiosks will have the “Keep it Crumb Clean” sign on them.
 - The Crumb Clean Campaign will be used at all park facilities.
 - All campers will watch the marbled murrelet video prior to securing a reservation.
 - Strengthen the Crumb Clean Campaign by integrating outreach materials into parking and shuttle reservation websites and documentation and verbally communicating the importance of the Campaign to visitors when arriving at parking areas, visitor facilities, and campgrounds.
 - Train all Park docents to help with public outreach and education regarding the Crumb Clean Campaign as an important conservation message.
 - Each picnic table will have the “Keep it Crumb Clean” sign.
 - The marbled murrelet will be mentioned during every campfire talk.
 - The marbled murrelet will be mentioned during all junior ranger programs, interpretive walks/talks and interactions.
 - Marbled murrelet materials such as stickers and magnets will be given out to help raise awareness and support for the marbled murrelet.

BIO-25: Trees determined to have suitable elements for nesting by marbled murrelet and screen trees important for nest protection will be retained. These will include all mature and old-growth trees in occupied habitat that are suitable as nesting or screen trees unless they are considered a Hazard Tree that poses an immediate threat to visitors or facilities, in which case they will be assessed for suitability as

nesting or screen trees for marbled murrelet. Based on the 2024 Pacific Seabird Group protocols, suitable habitat characteristics for nesting by marbled murrelet are trees in mature and old-growth coniferous forest stands, and younger coniferous forest stands having platforms with a relatively flat surface at least 10 centimeters in diameter and 10 meters high in the live crown of a coniferous tree. Platforms can be created by a wide bare branch, moss or lichen covering a branch, mistletoe, witches' brooms, and other deformities, or structures such as squirrel nests. For Hazard Trees being evaluated for removal, options for addressing the risk will be considered such as whether the resource at risk can be relocated or removed to allow for retention of the tree or large branches pruned off rather than felling the tree. This could include consideration of a temporary closure of campsites or facilities in proximity to a potential Hazard Tree. The evaluation of possible Hazard Tree removal for potential nest or screen trees will include the following:

- Ensure that a DPR-approved biologist participates in the design, implementation, and monitoring of proposed Hazard Tree activities in marbled murrelet habitat.
- Require that all trees proposed to be removed or pruned in or adjacent to marbled murrelet habitat be inspected by a qualified forest health protection pathologist, certified arborist, certified DPR Tree Hazard Inspector, or Registered Professional Forester to determine whether they are truly Hazard Trees.
- Avoid the removal of active or historical marbled murrelet nest trees.
- Avoid and/or minimize the removal of large trees or large branches that may later support nests or potential nest locations, or contribute to suitable habitat characteristics.
- Impacts to surrounding trees when felling a Hazard Tree(s) will be avoided or minimized.
- All visual disturbance, sudden noises, novel noises, and noises louder than 90 dB associated with Hazard Tree activities will be avoided near active nest sites throughout the breeding season.

BIO-26: DPR will continue to support and participate in marbled murrelet research that contributes to the conservation of this species, making every effort to obtain funding for and continue ongoing monitoring, management, and studies. The CZU fire significantly changed the vast majority of marbled murrelet habitat in Big Basin Redwoods State Park. Much of this habitat burned at high intensity and is currently no longer suitable or occupied as it lacks the large limbs required for nesting. DPR will continue to assess the effects of the CZU fire on marbled murrelet habitat to document post-fire habitat conditions and monitoring marbled murrelet presence or absence, effectiveness of predator control programs, and suitability as marbled murrelet nesting habitat as old-growth forest cover regenerates and suitable nesting substrate returns through limb growth, protective canopy development, and creation of broken top platforms. A particular focus will be placed on areas of unburned and lightly burned habitat in old growth forest in Big Basin Redwoods State Park, which

will be mapped and monitored closely. Appropriate restrictions will be developed and implemented where monitoring identifies a risk to an active marbled murrelet nest. This could include temporary restrictions on public access to campgrounds, picnic areas, staging areas, trails, and other facilities. Long-term monitoring of habitat conditions will be used to inform the need for adaptive management over time and additional controls on visitor use and access in occupied habitat, if appropriate.

To determine occupancy of potential habitat stands (trees) within a quarter mile of areas mapped as old-growth redwood forest, DPR will follow the latest Pacific Seabird Group (PSG 2024) protocols and direction obtained through coordination with CDFW and USFWS. If the stand is not occupied, noisy construction activities may occur during the marbled murrelet breeding season. If the stand is occupied, activities will occur as spelled out in BIO-28. In addition to in person Audio-Visual (AV) surveys, DPR will use Audio Recording Units to passively monitor marbled murrelet presence in stands that have marginal habitat to confirm lack of occupancy.

Focused studies will be conducted by DPR to examine movements and use of anthropogenic food subsidies by common raven, American crow, and jays at these locations to evaluate the potential conflict these uses may have to long-term viability of nesting habitat for marbled murrelet in the surrounding area. The results of these surveys on nest occupation and food subsidy studies will be used to inform the need for adaptive management over time.

BIO-28: ~~DPR will coordinate with CDFW and USFWS prior to initiating construction activities that may affect marbled murrelet and/or their nesting habitat.~~ Prior to initiating any project activity occurring during the marbled murrelet breeding season that will affect this species and/or their nesting habitat, consultation with CDFW and USFWS will be required to review and approve proposed survey methodologies, habitat assessments, and avoidance measures. Based on site-specific conditions, if construction work must occur within a quarter mile of occupied habitat during the marbled murrelet breeding season (March 24–September 15), the latest USFWS’s “Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California” (dated October 1, 2020) may be used by a DPR-approved biologist to allow limited construction activities that do not create noise disturbance that could result in inadvertent take of this species. Alternatively, DPR will adhere to guidance and requirements developed in consultation with and approved by CDFW and USFWS for any work during the breeding season within a quarter mile of assumed occupied habitat.

If limited activities are allowed during the marbled murrelet breeding season in occupied habitat, work activities will not begin until two hours after sunrise and will cease two hours before sunset each day. Appropriate worker training, vehicle access

restrictions, maintenance of a clean site through daily trash removal, and other BMPs will be used to minimize disturbance and avoid attracting corvids and other predatory species.

Biological Resources Standard Project Requirements

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California Department of Parks and Recreation Resource Services
BIOLOGICAL RESOURCES STANDARD PROJECT REQUIREMENTS

Construction Standard Project Requirements

- BIO-1:** New facilities will preferably be located in prior disturbed areas or in areas of relatively low resource value to minimize disturbance to higher value habitat areas.
- BIO-2:** As part of planning for new facilities or expanding existing ones, site-specific surveys/mapping of sensitive biological resources (such as special-status species, sensitive natural communities, regulated waters, and active nests or roosts) will be performed by a California Department of Parks and Recreation (DPR)-approved biologist and the location and extent of these resources will be taken into consideration during the planning and design process. Sensitive biological resources will be avoided during planning, design, and construction to the minimum needed to meet project purpose and goals. Where disturbance is to occur within sensitive natural community types such as old-growth redwood forest and riparian woodland, grading and other modifications will be designed to avoid dominant characteristics of the habitat, including mature trees and sensitive root zones. Wildlife-friendly fencing and other methods may be used to exclude public access into environmentally sensitive areas, as necessary. Worker environmental awareness training will be conducted for construction personnel before construction is initiated and appropriate construction restrictions and monitoring provided as necessary to ensure avoidance of sensitive biological resources.
- BIO-3:** In the event that impacts on a sensitive biological resource are unavoidable, disturbance will be limited to the minimum area necessary to achieve the project purpose. Measures will be identified and implemented to offset impacts in consultation with a DPR-approved biologist and the appropriate resource agencies (e.g., CDFW, USFWS, USACE, and the RWQCB) where warranted, depending on the listing or protection status of the resource, magnitude of the impact, and other factors.
- BIO-4:** Prior to the start of on-site construction activities, the project manager and DPR-approved biologist will determine the minimum area required to complete the work (project footprint) and define the boundaries of the work area on the project drawings and with flagging or fencing on the ground, as appropriate.
- BIO-5:** At the discretion of a DPR-approved biologist, project activities will be monitored to ensure that impacts to sensitive resources are minimized.
- BIO-6:** State-of-the-art science and ecological knowledge will be applied to the management of natural communities and associated habitat functions. Management strategies will take current science and results from ongoing management and

research into consideration. DPR will continue to work with the academic community in researching sensitive biological resources and applying knowledge gained to site-specific resource management.

BIO-7: All construction activities that could spread non-native, invasive plant and animal species to new locations will be subject to the latest best management practices particular to each species, where available. Prior to mobilization of equipment, necessary precautions will be taken to avoid introducing invasive species. These will include the following:

- Any equipment from off-site shall be free of mud and vegetation before transport to the site. (Example: Vehicle and equipment tires, tread, feet, undercarriage, wheel wells, steps and bucket/attachments to equipment that contacted dirt, etc.)
- Tools such as chainsaws, hand clippers, pruners, etc. shall be washed and free of mud and vegetation before entering the work location.
- Waders, puddle boots, and other footwear or equipment contacting a water source will be cleaned appropriately between uses to avoid introduction of aquatic invasives across watersheds.
- Fill or imported aggregate must be screened for organic materials and weeds.

BIO-8: New lighting will be limited to the minimum necessary for critical security and safety needs to avoid disrupting natural conditions and wildlife habitat. Where night-time lighting is determined to be necessary, it will be shielded, cast downward, and designed to not spill onto surrounding areas or upwards into the night sky. Permanent structures will be equipped with outdoor light shields that concentrate the illumination downward to reduce direct and reflected light pollution to avoid disrupting natural conditions and wildlife habitat. The direct source of the lighting (bulb, lens, filament, tube, etc.) will not be visible off site and the lighting will be installed as low as possible on poles and/or structures to minimize light pollution of the night sky. The candle power of the illumination at ground level will not exceed what is required by any safety or security regulations of any government agency with regulatory oversight.

Plant-Related Standard Project Requirements

BIO-9: Protocol-level surveys for special-status plants and sensitive natural communities will be conducted by a DPR-approved botanist at locations of proposed new facilities or expansion of existing facilities where suitable habitat remains to confirm their presence or absence. The surveys will be conducted during the blooming season for all potentially occurring special-status plant species according to the most current methodology recommended by CDFW and USFWS. The results of the surveys will be documented in a written report, together with a map showing the survey limits and the location and extent of all occurrences of special-status plant species and sensitive natural communities encountered, which will be maintained in the DPR Geographic Information System database. If construction of proposed facilities is delayed by more than five years at that location, additional focal surveys for special-status plants will be conducted to ensure that data are current and account for long-term and seasonal variation in population distribution.

BIO-10: No state or federally listed rare or endangered species will be cut, pruned, pulled back, removed or damaged in any way without prior coordination with the appropriate resource agencies (e.g., CDFW, USFWS).

BIO-11: Occurrences of special-status plant species will be avoided and disturbance minimized in siting new facilities or expansion of existing facilities. If special-status plant species are within 50 feet of a proposed project footprint or limits of grading, these locations will be flagged by the DPR-approved biologist, fenced off prior to the start of on-site construction activities, and avoided.

Essential habitat components of sensitive natural communities will be avoided as part of rebuilding and relocating facilities in old-growth and riparian woodlands. Facility improvements such as trails, picnic areas and creek crossings in redwood forest and riparian woodland will be designed to minimize tree removal and protect essential habitat elements of these sensitive natural community types.

BIO-12: Best management practices (BMPs) to avoid creation of dust will be used during all construction activities within 50 feet of special-status plant species occurrences. These may include periodic dust control using water truck spraying, hydromulching, installing straw or jute netting, and other methods.

BIO-13: Locations of native trees with a trunk greater than 24 inches diameter at breast height (DBH) will be considered as part of planning for new facilities or expansion of existing facilities and avoided to the extent possible. At both new and existing facilities, adverse direct and indirect effects on native trees to be retained will be avoided, such as root compaction and physical damage.

BIO-14: To minimize disturbance to tree root zones, no grading, staging, or other activities that could damage the trees to be retained will be allowed within a distance of 5

times the DBH, unless approved in advance by a DPR-approved biologist, forester, or certified arborist.

- BIO-15:** All herbicides will be handled, applied, and disposed of in accordance with the Material Safety Data Sheet (MSDS Fact Sheet) and all local, State, and federal laws.
- BIO-16:** To maintain genetic integrity, only plant stock collected within the local region will be used for revegetation.
- BIO-17:** Contractors will employ best management practices (BMPs) for erosion control to avoid runoff of project-related sediments, vehicle fluids, and other liquids into occurrences of special-status plants, sensitive natural communities, and regulated waters.
- BIO-18:** Percolation testing, boring for soil investigations or other borings, and trenching will be restricted a distance of five times the DBH of trees to be retained unless performed under the supervision of a DPR-approved biologist, forester, or certified arborist to ensure no major roots are damaged in the process. Excavations will be completed by hand where necessary to avoid damage to larger roots.

Wildlife-Related Standard Project Requirements

- BIO-19:** New facilities and expansion of existing facilities will avoid known breeding locations and essential habitat of special-status animal species, such as ponds, streams, and trees known for active nesting and roosting.
- BIO-20:** In addition to controls related to marbled murrelet in BIO-23 to BIO-28, construction-related vegetation clearing and tree removal will be prioritized to occur between September and February to avoid disturbances to other nesting native birds.
- BIO-21:** If work is required during the nesting season (March–August), a DPR-approved biologist will conduct a preconstruction survey to identify nests within the project area. The survey will be conducted no more than seven calendar days prior to the beginning of construction. The survey will be completed if construction is not initiated within this seven-day period to confirm that no new nests have been established.
- BIO-22:** For any bird nests in active use encountered during the preconstruction survey in BIO-21, an appropriate no-disturbance buffer zone will be established to protect the nest from construction activities as determined necessary by a DPR-approved biologist. Construction will be restricted within this no-disturbance buffer zone until any young birds have fledged or the nest is no longer in use, as confirmed by the DPR-approved biologist. The no-disturbance buffer will be flagged or fenced as determined necessary by the DPR-approved biologist, depending on type of

proposed construction activities, scheduling, and other factors. Typical setbacks for nests to be used in establishing the no-disturbance buffer consist of 100 feet from the nest passerines, and 500 feet for raptors from the project footprint, although this may be adjusted by the DPR-approved biologist based on topography, existing structures, and other variables. Setbacks related to active marbled murrelet nests and occupied habitat will be established based on coordination with the CDFW and USFWS.

BIO-23: To improve habitat conditions for marbled murrelet, appropriate management activities such as the Crumb Clean Campaign and improved waste patrol and cleanup in visitor-use areas will continue to be implemented by DPR to control corvid food sources and the risks these species pose to marbled murrelet breeding success. Consistent with the recommendations for best management practices from the 2017 *Marbled Murrelet Landscape Management Plan for Zone 6*, this should include the following:

- Reduce/Eliminate Food and Trash Subsidies
 - All trash receptacles should be animal proof
 - Trash receptacles should not be allowed to overflow (emptied regularly)
 - Garbage trucks will be housed where animals cannot gain access
 - Animal-proof food storage lockers will be installed in all campsites
 - Dishwashing stations will be installed in all campgrounds
 - Water spigots will have grates installed which allow food to fall out of reach of predators
 - Water spigots will have a “no dishwashing” sign on them
 - The “camp dishes 101” sign will be placed throughout the campground
- Enforcement
 - Campgrounds will be patrolled by park rangers first thing in the morning for enforcement
 - Campgrounds will be patrolled by interpretive rangers in the evening cooking hour for interpretive education
- Active Corvid Removal
 - Ravens, crows, and in some circumstances possibly Steller’s jays, may be removed to reduce predation pressure
- Forest Management
 - Prescribed fires will be planned and conducted as possible
 - Second-growth forest management will be part of managing forests for marbled murrelets
- Noise Management

- Adhere to latest USFWS standards for noise reduction for projects within a quarter mile of occupied habitat during the breeding season while studies to refine the standard are conducted
- Outside of Parks
 - Work with the surrounding community to implement actions to reduce availability of food subsidies

BIO-24: Interpretive programs to educate visitors about the threatened status of marbled murrelet and why they should not feed wildlife will continue. Consistent with recommendations for best management practices from the *2017 Marbled Murrelet Landscape Management Plan for Zone 6*, this should include the following:

- Interpretive Messaging
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 - All food lockers will have the “Keep it Crumb Clean” sign on them.
 - All trail heads will have the “Keep it Crumb Clean” sign at their entrance.
 - All kiosks will have the “Keep it Crumb Clean” sign on them.
 - The Crumb Clean Campaign will be used at all park facilities.
 - All campers will watch the marbled murrelet video prior to securing a reservation.
 - Strengthen the Crumb Clean Campaign by integrating outreach materials into parking and shuttle reservation websites and documentation and verbally communicating the importance of the Campaign to visitors when arriving at parking areas, visitor facilities, and campgrounds.
 - Train all Park docents to help with public outreach and education regarding the Crumb Clean Campaign as an important conservation message.
 - Each picnic table will have the “Keep it Crumb Clean” sign.
 - The marbled murrelet will be mentioned during every campfire talk.
 - The marbled murrelet will be mentioned during all junior ranger programs, interpretive walks/talks and interactions.
 - Marbled murrelet materials such as stickers and magnets will be given out to help raise awareness and support for the marbled murrelet.

BIO-25: Trees determined to have suitable elements for nesting by marbled murrelet and screen trees important for nest protection will be retained. These will include all mature and old-growth trees in occupied habitat that are suitable as nesting or screen trees unless they are considered a Hazard Tree that poses an immediate threat to visitors or facilities, in which case they will be assessed for suitability as nesting or screen trees for marbled murrelet. Based on the 2024 Pacific Seabird

Group protocols,¹ suitable habitat characteristics for nesting by marbled murrelet are trees in mature and old-growth coniferous forest stands, and younger coniferous forest stands having platforms with a relatively flat surface at least 10 centimeters in diameter and 10 meters high in the live crown of a coniferous tree. Platforms can be created by a wide bare branch, moss or lichen covering a branch, mistletoe, witches' brooms, and other deformities, or structures such as squirrel nests. For Hazard Trees being evaluated for removal, options for addressing the risk will be considered such as whether the resource at risk can be relocated or removed to allow for retention of the tree or large branches pruned off rather than felling the tree. This could include consideration of a temporary closure of campsites or facilities in proximity to a potential Hazard Tree. The evaluation of possible Hazard Tree removal for potential nest or screen trees will include the following:

- Ensure that a DPR-approved biologist participates in the design, implementation, and monitoring of proposed Hazard Tree activities in marbled murrelet habitat.
- Require that all trees proposed to be removed or pruned in or adjacent to marbled murrelet habitat be inspected by a qualified forest health protection pathologist, certified arborist, certified DPR Tree Hazard Inspector, or Registered Professional Forester to determine whether they are truly Hazard Trees.
- Avoid the removal of active or historical marbled murrelet nest trees.
- Avoid and/or minimize the removal of large trees or large branches that may later support nests or potential nest locations, or contribute to suitable habitat characteristics.
- Impacts to surrounding trees when felling a Hazard Tree(s) will be avoided or minimized.
- All visual disturbance, sudden noises, novel noises, and noises louder than 90 dB associated with Hazard Tree activities will be avoided near active nest sites throughout the breeding season.

BIO-26: DPR will continue to support and participate in marbled murrelet research that contributes to the conservation of this species, making every effort to obtain funding for and continue ongoing monitoring, management, and studies. The CZU fire significantly changed the vast majority of marbled murrelet habitat in Big Basin Redwoods State Park. Much of this habitat burned at high intensity and is currently no longer suitable or occupied as it lacks the large limbs required for nesting. DPR will continue to assess the effects of the CZU fire on marbled murrelet habitat to document post-fire habitat conditions and monitoring marbled murrelet presence or absence, effectiveness of predator control programs, and suitability as marbled

¹ Pacific Seabird Group. 2024. A revised protocol for surveying Marbled Murrelets in Forests. *Pacific Seabird Group Technical Publication Number 6*. <https://pacificseabirdgroup.org/psg-publications/technical-publications/>.

murrelet nesting habitat as old-growth forest cover regenerates and suitable nesting substrate returns through limb growth, protective canopy development, and creation of broken top platforms. A particular focus will be placed on areas of unburned and lightly burned habitat in old growth forest in Big Basin Redwoods State Park, which will be mapped and monitored closely. Appropriate restrictions will be developed and implemented where monitoring identifies a risk to an active marbled murrelet nest. This could include temporary restrictions on public access to campgrounds, picnic areas, staging areas, trails, and other facilities. Long-term monitoring of habitat conditions will be used to inform the need for adaptive management over time and additional controls on visitor use and access in occupied habitat, if appropriate.

To determine occupancy of potential habitat stands (trees) within a quarter mile of areas mapped as old-growth redwood forest, DPR will follow the 2024 Pacific Seabird Group protocols² and direction obtained through coordination with CDFW and USFWS. If the stand is not occupied, noisy construction activities may occur during the marbled murrelet breeding season. If the stand is occupied, activities will occur as spelled out in BIO-28. In addition to in person Audio-Visual (AV) surveys, DPR will use Audio Recording Units to passively monitor marbled murrelet presence in stands that have marginal habitat to confirm lack of occupancy.

Focused studies will be conducted by DPR to examine movements and use of anthropogenic food subsidies by common raven, American crow, and jays at these locations to evaluate the potential conflict these uses may have to long-term viability of nesting habitat for marbled murrelet in the surrounding area. The results of these surveys on nest occupation and food subsidy studies will be used to inform the need for adaptive management over time.

BIO-27: During the marbled murrelet breeding season (March 24–September 15), project activities will minimize human-generated disturbances, trail building, tree removal, and maintenance activities, including the use of loud motorized equipment within a quarter mile of occupied habitat. This may include seasonal closure of trails and other visitor access controls where monitoring and scientific studies indicate a risk for disturbance to an active marbled murrelet nest.

BIO-28: Prior to initiating any project activity occurring during the marbled murrelet breeding season that will affect this species and/or their nesting habitat, consultation with CDFW and USFWS will be required to review and approve proposed survey methodologies, habitat assessments, and avoidance measures. Based on site-specific conditions, if construction work must occur within a quarter mile of occupied habitat during the marbled murrelet breeding season (March 24–

² Pacific Seabird Group. 2024. A revised protocol for surveying Marbled Murrelets in Forests. *Pacific Seabird Group Technical Publication Number 6*. <https://pacificseabirdgroup.org/psg-publications/technical-publications/>.

September 15), the latest USFWS's "Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California" (dated October 1, 2020) may be used by a DPR-approved biologist to allow limited construction activities that do not create noise disturbance that could result in inadvertent take of this species. Alternatively, DPR will adhere to guidance and requirements developed in consultation with and approved by CDFW and USFWS for any work during the breeding season within a quarter mile of assumed occupied habitat.

If limited activities are allowed during the marbled murrelet breeding season in occupied habitat, work activities will not begin until two hours after sunrise and will cease two hours before sunset each day. Appropriate worker training, vehicle access restrictions, maintenance of a clean site through daily trash removal, and other BMPs will be used to minimize disturbance and avoid attracting corvids and other predatory species.

BIO-29: If construction activities are planned within suitable upland habitat for special-status amphibians such as California red-legged frog, appropriate measures will be developed and implemented to avoid or compensate for potential direct and indirect impacts of project-specific activities. Avoidance and minimization measures may include, but not be limited to, worker training, installation of temporary exclusion fencing, biological monitoring during construction, and restrictions on timing of construction. As necessary, these avoidance and minimization measures will be developed in consultation with CDFW and USFWS to ensure compliance with applicable regulations.

BIO-30: Active bat roosts will be avoided for both special-status and common species. Where suitable habitat for roosting bats is present (i.e., large trees with cavities, exfoliating bark, rock outcrops, and unsealed attics) a DPR-approved biologist will conduct a preconstruction survey within 50 feet of the project footprint to confirm presence or absence of any active roosts. The survey will be conducted no more than seven calendar days prior to the beginning of proposed tree removal or construction. The survey will be repeated if construction is not initiated within this seven-day period to confirm that no new roosts have been established, unless no suitable roost habitat was encountered. Where an active roost is detected, appropriate avoidance and minimization measures will be developed by the DPR-approved biologist based on guidance from the CDFW, the best-available science, and status of the species before conducting any construction activity within 50 feet of the roost location. If an active maternity roost is encountered during the maternity season (April 15 to August 31), the CDFW will be contacted for direction on how to proceed and an appropriate exclusion zone established around the occupied roost until young bats are old enough to leave the roost without jeopardy. The size of the buffer would take into account the proximity and noise level of project activities; distance and amount of

vegetation or screening between the roost and construction activities; and species-specific needs, if known, such as sensitivity to disturbance.

- BIO-31:** Prior to the start of on-site construction activities, a DPR-approved biologist will train on-site construction personnel on the life history of special-status wildlife and commonly occurring wildlife, work constraints, and any other pertinent information related to the species.
- BIO-32:** Immediately prior to the start of work each morning, a DPR-approved biologist or trained project foreman will conduct a visual inspection of the construction zone to confirm that no common or special-status wildlife are present within the project footprint.
- BIO-33:** If wildlife is found on the project site, work in the vicinity of the animal will be delayed until the species moves out of the site on its own accord or is relocated by a DPR-approved biologist and released in suitable habitat, where appropriate to avoid injury to the animal.
- BIO-34:** To prevent trapping of wildlife, all holes and trenches will be covered at the end of each working day with plywood or similar materials or will include escape ramps constructed of earth fill or wooden planks; all pipes will be capped. A DPR-approved biologist or trained project foreman will inspect trenches and pipes for wildlife at the beginning of each workday. If a trapped animal is discovered, they will be relocated by the DPR-approved biologist and released in suitable habitat away from the project footprint.

Wetlands and Regulated Waters-Related Standard Project Requirements

- BIO-35:** Wetlands and regulated waters such as creeks, ponds, and riparian habitat will be identified and avoided as part of planning for new facilities or expanding existing ones. Where indications of regulated waters are present in the vicinity of proposed improvements, a wetland assessment or delineation will be conducted by a DPR-approved biologist to identify the extent of any state and/or federally regulated waters.
- BIO-36:** During construction, the contractor will avoid or minimize impacts to regulated waters to the extent practicable by conducting work in upland areas. In the event that disturbing regulated waters is unavoidable, the disturbance will be minimized to the minimum area necessary to achieve the project purpose. Measures will be identified and implemented to offset those unavoidable impacts as defined in consultation with a DPR-approved biologist and the appropriate regulatory agencies (e.g., CDFW, USFWS, USACE, and the RWQCB) where required.
- BIO-37:** Where impacts to regulated waters are unavoidable, authorizations will be secured from the appropriate regulatory agencies (e.g., CDFW, USFWS, USACE, and the

RWQCB). When necessary, compensatory mitigation will be provided through creation and/or enhancement of regulated habitats. Any created or enhanced regulated habitats provided as part of required compensatory mitigation will be monitored and maintained to ensure successful establishment in accordance with the regulatory agency authorizations.

BIO-38: Best management practices (BMPs) will be identified and implemented for all grading within 50 feet of regulated waters. These may include restrictions on the timing of grading to occur outside the typical wet season from October 31 to April 15, installation of temporary silt fencing and/or straw wattles at the limits of grading, and other methods.

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