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# ROY'S REDWOODS RESTORATION PROJECT

## ROY'S REDWOODS OPEN SPACE PRESERVE

### MITIGATION MONITORING AND REPORTING PLAN

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Prepared 2023-06-02

#### INTRODUCTION

The following mitigation measures were approved as part of the Initial Study-Mitigated Negative Declaration for the Roy's Redwoods Restoration Project at Roy's Redwoods Open Space Preserve. This Mitigation Monitoring and Reporting Plan documents the implementation of the approved mitigation measures listed below:

- BIO-1: Identify and Protect Dusty-Footed Woodrat Nests
- BIO-2: Special-status and Common Bats
- BIO-3: Protect Native Trees

The MCOSD, as the CEQA Lead Agency, would be fully responsible for financing, scheduling, implementation responsibilities, and monitoring of these mitigation measures. None of the mitigation measures include requirements of other agencies.

#### Mitigation Measure BIO-1: Identify and Protect Dusty-Footed Woodrat Nests

The MCOSD shall survey for dusty-footed woodrat nests and protect or relocate all dusty-footed woodrat nests that cannot be avoided during project implementation. Biological information about the dusky-footed woodrat shall be included in the biological education materials provided for construction personnel prior to the start of construction. A biologist shall survey along the new Roy's Redwoods Loop Trail segments, along both the Ridge and Mossy Rocks trails, and any other location within the project site identified by a qualified biologist within 7 days prior to construction to determine if nests are present and to identify ones that cannot be avoided. The pre-construction survey shall assess nest activity and inhabitation based on guidance from the National Park Service, such as a cleared entrance or recently placed vegetation on the nest. If none are found, then no additional measures are necessary.

If a woodrat house is identified within a work area, an exclusion zone shall be erected around the existing woodrat houses using flagging or a temporary fence that does not inhibit the natural movements of wildlife, such as steel T-posts and a single strand of yellow rope or similar materials. The exclusion zone would be a 25-foot buffer area surrounding the woodrat house. The work area would be relocated as necessary to avoid removing woodrat houses. The orientation of the work area would allow for escape routes to nearby suitable habitat, meaning that the work area would not completely surround the protected woodrat house.

If project features and work areas do not provide sufficient room for a 25-foot exclusion zone around a woodrat house, the MCOSD would erect the exclusion zone to achieve the greatest area of exclusion zone feasible.

If a project feature would directly impact a woodrat nest, the MCOSD would take the following actions:

- 1) Evaluate the feasibility of relocating the project feature and/or work area to avoid the woodrat house by at least 10 feet, and then relocate the project feature and/or work area if feasible.
- 2) Contact CDFW for guidance if the project feature and/or work area cannot be relocated to avoid the woodrat house by at least 10 feet and implement the CDFW guidance, which may include:
  - Flushing and dismantling the woodrat house and then piling the materials in a nearby location outside of the work area for woodrats to use in reconstructing a house.
  - Dismantling a clearly unoccupied house in an area integral for construction during the routine construction period. Woodrat nest occupancy can be determined by whether the structure is maintained. Signs of an active woodrat nest include fresh vegetation, scat, tracks, cleared

excavated cavities, signs of teething, and sharp spiked branches. Signs of inactive nests are the absence of maintenance – including cobwebs across entrances, nest deterioration, and the absence of fresh cuttings and scat.

- 3) If the house appears to be occupied, it would not be dismantled until the non-breeding season of October-November, if feasible. If young are encountered during nest dismantling, the dismantling activity would cease and the material replaced back on the house. The house would be left alone and rechecked in 2 to 3 weeks to see if the young are out of the nest or capable of being out on their own, as determined by a qualified biologist. Once the young can fend for themselves, the house dismantling would continue.
- 4) Note: Due to the possibility of exposure to hanta virus (*Orthohantavirus*) known to be carried by woodrats, any dismantling or observations of the woodrat houses would be conducted only in a manner that fully protects the health of crews, equipment operators, or surveyors.<sup>1</sup>

### **Mitigation Measure BIO-2: Special-status and Nesting Birds Protection**

MCOSD shall implement the following seasonal restrictions to protect nesting birds. If work occurs outside the nesting bird window of January 1 to July 31, surveys and avoidance measures would not be necessary for special-status and nesting birds. The broadest nesting bird window based on Table 6 would be January 01 – October 31. The project area does not include habitat for double-crested cormorant, herons, egrets, bitterns, northern spotted owls and these species would not be affected by implementation of the proposed project; therefore, the nesting bird window of January 1 – July 31 is appropriate for the proposed project.

- Surveys shall be conducted within seven days of the start of active ground-disturbing activities within the general buffers identified in Table 3: Guideline Buffers by Species or Guild. If the work area is left unattended for more than seven days following the initial surveys, additional surveys shall be completed. This timing is standard protocol based on common knowledge of avian biology. Ongoing construction monitoring of active nests shall occur to ensure no nesting activity is disturbed.
- If the biologist finds no active nesting or breeding activity, work can proceed without restrictions.
- If active raptor or owl nests or active nests of other special-status birds are identified within the buffer area guidelines included in Table 3, a qualified biologist shall determine whether construction activities may impact the active nest or disrupt reproductive behavior. If the biologist determines construction would not affect an active nest or disrupt breeding behavior, construction can proceed without restrictions. The determination of disruption shall be based on the species' sensitivity to disturbance, which can vary among species; the level of noise or construction disturbance; and the line of sight between the nest and the disturbance. If the biologist determines activities would be detrimental to the species nest, the buffer area guidelines identified in Table 3: Guideline Buffers by Species or Guild would be established until the nest has been vacated, meaning that the chicks have fledged.
- If state and/or federally listed birds are found breeding within the construction area, activities shall be halted until the chicks have fledged. If construction activities must continue and would incur take of the listed species, MCOSD would consult with the CDFW and USFWS prior to the initiation of work that would result in take. If construction activities must continue and would not incur take of the listed species, MCOSD would establish the buffer area guidelines included in Table 3: Guideline Buffers by Species or Guild, until the nest has been vacated, meaning that the chicks have fledged.

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<sup>1</sup> [National Park Service. 2015. Redwood Creek Trail Realignment and Dias Ridge Trail Extension Project, March 2023.](#)

**Table 3: Guideline Buffer by Species or Guild**

<b>Species/Guild</b>	<b>Recommended Buffer meters/feet</b>	<b>Nesting Season</b>
Diurnal Raptors (i.e.: Cooper's hawk)	76 meters (250 feet)	January 01 – July 31
Owls (except northern spotted owl)	50 meters (160 feet)	January 01 – July 31
Northern Spotted Owl	402 meters (1,320 feet or ¼ mile)	February 01- July 31
Double-crested Cormorant	50 meters (160 feet)	March 01 – October 31
Herons/Egrets/Bitterns	100 meters (330 feet)	January 01 – September 30
Waterfowl (Ducks/Geese/Swans)	30 meters (100 feet)	March 01 – July 31
California black rail	213 meters (700 feet)	February 01 – August 31
Larger Passerines: Corvids (crows, jays), Thrushes	20 meters (65 feet)	March 01 – July 31
Most Songbirds	10 meters (30 feet)	March 01 – July 31
Hummingbirds	10 meters (30 feet)	January 01 – July 31
Woodpeckers	15 meters (50 feet)	March 01 – July 31
Band-tailed Pigeon (BTPI)	30 meters (100 feet)	March 01 – July 31
Pigeons/Doves (except BTPI)	20 meters (65 feet)	March 01 – July 31
Species of Special Concern (olive-sided flycatcher, grasshopper sparrow, San Pablo song sparrow)	22 meters (75 feet)	March 01 – July 31
Blackbirds (tri-colored and red-winged)	30 meters (100 feet)	March 01 – July 31
Turdidae (robins, thrushes)	20 meters (65 feet)	March 01 – July 31
Killdeer	22 meters (75 feet)	March 01 – July 31

**Timing:** Before construction

**Party Responsible for Implementation:** Qualified Biologist

**Party Responsible for Monitoring:** MCOSD Principal Resources Planner or as delegated

**Compliance Dates:**

**Signature:**

**Notes:**

### Mitigation Measure BIO-3: Protect Native Trees

MCOSD shall ensure that the following measures are implemented during project activities to protect native trees:

- Minimize pruning. Light pruning may occur at any time of year. Heavy pruning may cause problems due to vigorous sprouting and subsequent witches broom or powdery mildew diseases. Heavy pruning shall be done on deciduous trees in the winter.
- Minimize impacts within the Root Protection Zone (RPZ), which is defined as 1.5 times the dripline radius measured from the tree trunk and extends approximately three feet below the soil surface.
- Soil compaction within protected tree perimeters shall be avoided to the extent feasible.
- Heavy equipment, vehicles, and/or construction materials shall not be parked or stored beneath trees or operated within the delineated protected perimeter.
- Develop a tree replacement plan for any tree removed based on the ratios shown in Table 4.

*Table 4: Tree Replacement Ratios*

<b>Tree Type</b>	<b>Diameter DBH<sup>2</sup></b>	<b>Replacement Ratio</b>
Oaks	5-10 inches	4:1
Oaks	10-15 inches	5:1
Oaks	15 inches and above	15:1
Native trees	3-6 inches	3:1
Native trees	6 inches	6:1
Non-native trees	Any size	1:1

**Timing:** During construction and maintenance

**Party Responsible for Implementation:** Construction Manager

**Party Responsible for Monitoring:** MCOSD Principal Resources Planner or as delegated

**Compliance Dates:**

**Signature:**

**Notes:**

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<sup>2</sup> Diameter at breast height, or DBH, is the standard for measuring trees. DBH refers to the tree diameter measured at 4.5 feet above the ground.

### **Mitigation Measure TRA-1: Reduce Construction Traffic Risks**

The MCOSD shall require the construction contractor to implement measures to reduce traffic hazards along Nicasio Valley Road. The following construction-period measures shall be employed:

- Parking shall be prohibited in the construction loading/unloading areas and shall be clearly marked for No Parking.
- When construction vehicles are present in the shoulder staging areas, appropriate construction signing shall be provided in advance of the staging areas in both directions on Nicasio Valley Road. Signs shall indicate warning for construction ahead and shoulder closed ahead for direction where construction is occupying shoulder areas
- During the period where construction vehicles bring in large equipment, the contractor shall use warning flaggers on Nicasio Valley Road in both directions. Flaggers shall be active during the period until construction vehicles are completely off of the travel way.
- If construction loading/unloading activity requires vehicles to remain in the Nicasio Valley Road travelway, one lane road operation shall be used with flaggers provided in advance of both directions of travel.
- All construction related signs and use of traffic cones should meet standards and guidelines provided in the California MUTCD and/or local County standards.

**Timing:** During construction and maintenance

**Party Responsible for Implementation:** Construction Manager

**Party Responsible for Monitoring:** MCOSD Principal Resources Planner or as delegated

**Compliance Dates:**

**Signature:**

**Notes:**